Drainage Services Department

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

Monthly EM&A Report
March 2020

(Version 1)

Certified By 

(Environmental Team Leader:
Mr. K.S Lee)

REMARKS:

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

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

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17 April 2020

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

Monthly EM&A Report for March 2020

Reference is made to the Environmental Team's submission of Monthly EM&A Report for March 2020 (Version 1) certified by the ET Leader and provided to us via e-mail on 17 March 2020.

Please be informed that we have no adverse comments on the captioned submission. We write to verify the captioned submission in accordance with Condition 3.4 of FEP-02/474/2013.

The ET Leader is reminded that it is the ET's responsibility to ensure the report be timely submitted to the Director of Environmental Protection and the reported information be true, valid and correct as per Conditions 3.4 and 3.5 of the FEP-02/474/2013 respectively.

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

Ray Yan
Independent Environmental Checker

c.c.

DSD	Attn.: Ms Konica Cheung	(By Fax: 3104 6420)
Cinotech	Attn.: Mr K. S. Lee	(By Fax: 3107 1388)

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EXECUTIVE SUMMARY

Introduction

1. This is the 3rd EM&A 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". This report summarized the monitoring results and audits findings of the EM&A programme under the issued further EP No. FEP-02/474/2013 and in accordance with the Updated EM&A Manual during the reporting month of March 2020.

Summary of Main Works Undertaken and Key Measures Implemented

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

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

Contract No.	Contract Title	Site Activities
DC/2018/06	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sludge Treatment Facilities and 132kV Primary Substation	• Underground utility detection • H-piles installation • Sheet piling installation • Drainage diversion work
DC/2018/07	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sewage Treatment Facilities	• Site daily cleaning tidy up and clearance • Pre-drilling works • Demolition works • Drainage and underground utilities • Sheet pile construction
DE/2018/03	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Sidestream Treatment Facilities and E&M Works for Sluge Treatment Faciliteis	No construction activities in the reporting month.
DE/2018/04	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - E&M Works for Sewage Treatment Facilities	No construction activities in the reporting month.

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

Air Quality
- Water spraying on haul road was done to minimize dust generation.
- Stockpiles were covered by impervious sheets.
- The public road was kept free from dust and soil.

Water Quality
- Ponding water was pumped and collected in the sedimentation tank.
- Manholes were covered by impervious sheets to prevent muddy water flowing into the drainage system.

Waste Management
- General refuse was removed to avoid waste accumulation.

Summary of Exceedances, Investigation and Follow-up

4. Exceedance of Action/Limit levels during the reporting month (March 2020) and the investigation results and/or follow-up actions:

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

Construction Noise Monitoring
- No Action/Limit Level exceedance for day time construction noise monitoring was recorded in the reporting month.

Ecological Monitoring
- 1 Action Level and no Limit Level was triggered.

Complaint Handling, Prosecution and Public Engagement

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

Event	Event Details		Follow-up/ Remedial Actions	Status/ Remarks
	Number	Brief Description		
Complaints Received	1	Muddy water was suspected to be discharged from the expansion site of SWHSTP to Shek Sheung River, manholes and foul drains nearby	• Employed suction truck and dump truck to clear the silt and mud at Shek Sheung River • Arranged to repair the wastewater treatment system • Installed additional sedimentation tanks and wastewater treatment system to increase the on-site treatment capacity	Investigation undergoing
Notification of Summons and Prosecutions Received	0	-	-	-
Public Engagement Activities	0	-	-	-

Reporting Changes

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

Future Key Issues

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

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

Contract No.	Contract Title	Site Activities
DC/2018/06	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sludge Treatment Facilities and 132kV Primary Substation	• Underground utility detection • H-piles installation • Sheet piling installation • Drainage diversion work
DC/2018/07	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sewage Treatment Facilities	• Site daily cleaning tidy up and clearance • Pre-drilling works • Demolition works • Drainage and underground utilities • Sheet pile construction
DE/2018/03	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Sidestream Treatment Facilities and E&M Works for Sluge Treatment Faciliteis	• Site clearance and fencing work
DE/2018/04	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - E&M Works for Sewage Treatment Facilities	• Preparation work of E&M installation at temporary filtrate lifting well and equalization tank. • Preparation work of 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 93,000m^2/day at average dry weather flow (ADWF). After the Resource Allocation Exercise 2017, the existing SWHSTW is proposed to be upgraded from secondary to tertiary treatment level as the new SWHEPP at 3 stages: Main Works Stage 1, Stage 2 and Stage 3.

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

1.4 Cinotech Consultants Ltd. was designated as the Environmental Team (ET) to undertake the EM&A works for "Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1" (hereinafter called the "Project").

Purpose of the Report

1.5 This is the 3rd Monthly EM&A Report which summarises the impact monitoring results and audit findings for the EM&A programme during the reporting period in March 2020.

Project Organizations

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

- Permit Holder – Drainage Service 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)

1.7 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	Ms. Konica Cheung	2594 7463
AECOM	Supervisor Representative	Mr. Henry Tai	3792 0580
Cinotech	Environmental Team	Mr. KS Lee (ET Leader)	2151 2091
		Ms. Betty Choi	2151 2072
Ramboll	Independent Environmental Checker	Mr. Ray Yan	3465 2836
KLCWJV	Contractor (DC/2018/06)	Mr. Yip Yun Lam	9532 7174
KLCWJV	Contractor (DC/2018/07)	Mr. Karsten Kwong	9771 0059
JEC	Contractor (DE/2018/03)	Mr. Lau Kim Hung	2947 1125
Bestwise	Contractor (DE/2018/04)	Mr. Albus Cheung	9731 0831

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

Construction Activities undertaken during the Reporting Month

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

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

Contract No.	Contract Title	Site Activities
DC/2018/06	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sludge Treatment Facilities and 132kV Primary Substation	• Underground utility detection • H-piles installation • Sheet piling installation • Drainage diversion work
DC/2018/07	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sewage Treatment Facilities	• Site daily cleaning tidy up and clearance • Pre-drilling works • Demolition works • Drainage and underground utilities • Sheet pile construction
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DE/2018/04	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - E&M Works for Sewage Treatment Facilities	No construction activities in the reporting month.

Summary of EM&A Requirements

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

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

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

1.12 This report presents the monitoring results, observations, locations, equipment, period, methodology and QA/QC procedures of the monitoring parameters of the required environmental monitoring works and audit works for the Project in March 2020.

Statues of Environmental Licensing and Permitting

1.13 All permits/licenses obtained for the Project are summarized in **Table 1.3**.

Table 1.3 Summary of Environmental License and Permit

Contract No.	Permit / License No.	Valid Period		Status
		From	To	
Environmental Permit (EP)				
All	FEP-02/474/2013	15 Feb 2018	N/A	Valid
All	EP-474/2013	21 Nov 2013	N/A	Valid
Notification of Construction Works under Air Pollution Control Ordinance (APCO)				
DC/2018/06	449210 (Portion A & C)	23 Sep 2019	11 Mar 2024	Valid
DC/2018/06	449211 (WM1)	23 Sep 2019	11 Mar 2024	Valid
DC/2018/07	N/A	11 Nov 2019	31 Dec 2024	Valid
Billing Account for Construction Waste Disposal				
DC/2018/06	7035390	11 Oct 2019	N/A	Valid
DC/2018/07	7035985	9 Dec 2019	N/A	Valid
DE/2018/03	7035700	6 Nov 2019	N/A	Valid
DE/2018/04	703621912	2 Jan 2020	N/A	Valid
Registration of Chemical Waste Producer				
DC/2018/06	5213-624-K3371-01	14 Nov 2019	N/A	Valid
DC/2018/07	5213-624-K3371-02	6 Jan 2020	N/A	Valid
Effluent Discharge License				
DC/2018/06	WT00035431-2019 (Portion C)	20 Jan 2020	31 Jan 2025	Valid
Construction Noise Permit (Water Pump)				
DC/2018/06	GW-RN0044-20	15 Feb 2020	14 Apr 2020	Valid

2 AIR QUALITY

Monitoring Requirement

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

Monitoring Locations

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

Table 2.1 Air Quality Monitoring Locations

Monitoring Stations	Location	Location of Measurement
AM1(1)	Wai Loi Tsuen	Ground Level
AM2(1)	Fu Tei Au	Ground Level
AM1a(2)	Site Boundary of the Shek Wu Hui STW (East)	Ground Level
AM2a(2)	Site Boundary of the Shek Wu Hui STW (North)	Ground Level

Remarks: (1) For 1-hour TSP monitoring; (2) For 24-hour TSP monitoring

Monitoring Parameters and Frequency

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

Table 2.2 Frequency and Parameters of Air Quality Monitoring

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

Monitoring Equipment

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

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

2.6 **Table 2.3** summarizes the equipment to be used for air quality monitoring. Copies of calibration certificates are attached in **Appendix C**.

Table 2.3 Air Quality Monitoring Equipment

Equipment	Model and Make	Quantity
1-hour TSP Dust Meter	Sibata Model No.: LD-5R	2
HVS Sampler	GMW Model: GS 2310	1
	TISCH Model: TE 5170	1
Calibrator	TISCH Model: TE-5025A	1
Wind Anemometer	Global Water Instrumentation WE800	1

Monitoring Methodology

1-hour TSP Monitoring

Measuring Procedures

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

(Sibata Model No.: LD-5R)

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

Maintenance/Calibration

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

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

24-hour TSP Monitoring

Instrumentation

2.9 High volume samplers (HVS) (TISCH Model: TE-5170) complete with appropriate sampling inlets was employed for 24-hour TSP monitoring. The sampler was composed of a motor, a filter holder, a flow controller and a sampling inlet and its performance specification complied with that required by USEPA Standard Title 40, Code of Federation Regulations Chapter 1 (Part 50). Moreover, the HVS also met all the requirements in Section 2.2 of the Annex II Specification.

2.10 The positioning of the HVS samplers are as follows:

- A horizontal platform with appropriate support to secure the samplers against gusty wind shall be provided;
- No two samplers shall be placed less than 2 meter apart;
- The distance between the sampler and an obstacle, such as buildings, must be at least twice the height that the obstacle protrudes above the sampler;
- A minimum of 2 metres of separation from walls, parapets and penthouses is required for rooftop samplers;
- A minimum of 2 metres of separation from any supporting structure, measured horizontally is required;
- No furnace or incinerator flue is nearby;
- Airflow around the sampler is unrestricted;
- The sampler is more than 20 metres from the dripline;
- Any wire fence and gate, to protect the sampler, shall not cause any obstruction during monitoring;
- Permission must be obtained to set up the samplers and to obtain access to the monitoring stations; and
- A secured supply of electricity is needed to operate the samplers.

Operating/analytical procedures for the operation of HVS

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

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

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

Maintenance/Calibration

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

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

Results and Observations

2.13 Impact air quality monitoring was conducted at four monitoring stations as scheduled. The monitoring schedule is shown in **Appendix B**.

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

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

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

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

2.18 According to our field observations, the major dust source identified at the designated air quality monitoring stations are as follows:

Table 2.4 Major Dust Source during Air Quality Monitoring

Monitoring Stations	Major Dust Source
AM1 - Wai Loi Tsuen	Road Traffic at Sheung Shui Tung Hing Road
AM2 - Fu Tei Au	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

Comparison of EM&A Result with EIA Prediction

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

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

Monitoring Stations	ASR ID	Predicted 1-hr TSP Concentration in EIA Report (as Approved in 2013), dB(A), µg/m^3	Reporting Month (March 2020), µg/m^3
AM1 - Wai Loi Tsuen	N/A	N/A(1)	12.0 - 142.1
AM2 - Fu Tei Au	FLN-E28	255	30.0 - 113.1

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

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

Monitoring Stations	Predicted 24-hr TSP Concentration in EIA Report (as approved in 2013), dB(A), µg/m^3	Reporting Month (March 2020), µg/m^3
AM1a - Site Boundary of the Shek Wu Hui STW (East)	N/A(1)	37.5 - 83.7
AM2a - Site Boundary of the Shek Wu Hui STW (North)	N/A(1)	31.9 - 84.2

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

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

3 NOISE

Monitoring Requirements

3.1 According to the Updated EM&A Manual, construction noise monitoring was conducted to monitor the construction noise arising from the construction activities. The regular monitoring frequency for each monitoring station shall be on a weekly basis and conduct one set of measurements between 0700 and 1900 hours on normal weekdays. **Appendix A** shows the established Action and Limit Levels for the environmental monitoring works.

Monitoring Locations

3.2 Noise monitoring was conducted at three designated monitoring stations in the reporting period. **Table 3.1** and **Figure 3** show the locations of these stations.

Table 3.1 Noise Monitoring Stations

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

Monitoring Parameters, Frequency and Duration

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

Table 3.2 Frequency and Parameters of Noise Monitoring

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

Monitoring Equipment

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

Table 3.3 Noise Monitoring Equipment

Equipment	Model and Make	Quantity
Integrating Sound Level Meter	BSWA 308	2
	SVAN 957	1
Calibrator	ST-120	1

Monitoring Methodology and QA/QC Procedure

3.5 The monitoring procedures are as follows:

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

Maintenance and Calibration

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

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

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

Results and Observations

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

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

3.11 The major noise sources identified at the noise monitoring stations are shown in **Table 3.4**.

Table 3.4 Other Noise Source Identified during Noise Monitoring

Monitoring Stations	Major Noise Source
NM1	Railway Noise and Road Traffic at Sheung Shui Tung Hing Road
NM2	N/A
NM3	Road traffic at Po Wan Road

3.12 All the Construction Noise Levels (CNLs) reported in this report were adjusted with the corresponding baseline level (i.e. Measured Leq – Baseline Leq = CNL), in order to facilitate the interpretation of the noise exceedance. The baseline noise level and the Noise Limit Level at each designated noise monitoring station are presented in **Table 3.5**.

Table 3.5 Baseline Noise Level and Noise Limit Level for Monitoring Stations

Monitoring Stations	Baseline Noise Level, dB (A) (at 0700 – 1900 hrs on normal weekdays)	Noise Limit Level, dB (A) (at 0700 – 1900 hrs on normal weekdays)
NM1	63.4	75
NM2	58.0	
NM3	63.4	

Comparison of EM&A Result with EIA Prediction

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

Table 3.6 Comparison of Noise Monitoring Data with Predictions in EIA Report (as approved in 2013)

Monitoring Stations	NSR ID	Predicted Mitigated Construction Noise Levels in EIA Report (as Approved in 2013), dB(A)	Reporting Month (March 2020), Leq (30min) dB(A)
NM1 - Wai Loi Tsuen	N/A	N/A(1)	54.3 – 61.0
NM2 - Fu Tei Au	N/A	N/A(1)	60.6 - 65.7
NM3 – Man Kok Village	FN-18	66-75	56.7 - 62.6

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

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

4 ECOLOGY

Monitoring Requirements

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

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

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

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

Monitoring Locations

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

Table 4.2 Ecological Monitoring Stations

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

Monitoring Parameters, Frequency and Duration

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

Monitoring Methodology

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

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

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

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

Analytical Methodology

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

Table 4.3 Representative Waterbirds

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

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

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

Results

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

Table 4.4 Total Bird Species and Abundance in the Reporting Month

	Number of Species	Abundance
All Avifauna	52	806
Waterbirds	18	365

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

Table 4.5 Abundance of Representative Waterbirds in the Reporting Month

Species Name	Common Name	Chinese Name	Abundance
Egretta garzetta	Little Egret	小白鷺	79
Ardea cinerea	Grey Heron	蒼鷺	29
Ardeola bacchus	Chinese Pond Heron	池鷺	27
Phalacrocorax carbo	Great Cormorant	普通鸕鷀	9
Ardea alba	Great Egret	大白鷺	19
Bubulcus coromandus	Eastern Cattle Egret	牛背鷺	139

Analysis

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

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

T-values of Data in Reporting Month			Confidence Level (Critical Value)	
			95% (-2.132)	99% (-3.747)
Abundance	Monthly	2.227	✔	✔
	Seasonal	0.971	✔	✔

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

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

Common Name of Representative Waterbird	T-value	Confidence Level (Critical Value)		T-value	Confidence Level (Critical Value)		Overall
	Monthly	95% (-2.132)	99% (-3.747)	Seasonal	95% (-2.132)	99% (-3.747)	
Little Egret	-3.978	✖	✖	1.347	✔	✔	✔
Grey Heron	0.611	✔	✔	-1.374	✔	✔	✔
Chinese Pond Heron	-2.543	✖	✔	-2.548	✖	✔	Action Level
Great Cormorant	-1.179	✔	✔	-7.251	✖	✖	✔
Great Egret	-0.152	✔	✔	-2.586	✖	✔	✔
Eastern Cattle Egret	3.008	✔	✔	3.833	✔	✔	✔

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.

4.15 The t-test concluded that the abundance for Chinese Pond Heron was significantly lower than the baseline monitoring result for March and winter at 95% confidence level, 1 Action Level was triggered for ecological monitoring in the reporting month. No Limit Level was triggered.

4.16 Despite a drop in Chinese Pond Heron abundance, the average number of all waterbirds recorded in March 2020 (73 nos.) was higher than those in the same month and season in baseline period (48 and 62 nos. respectively). Table V of **Appendix I** shows a notable increase in Eastern Cattle Egret abundance (28 nos. versus 9 nos. for the same month). Also, no significant change was observed for Grey Heron (6 nos. versus 3 nos. for the same month). As both species shares similar niche as Chinese Pond Heron, it is unlikely that project activity (e.g. noise) will affect one species only. As the decline was considered non-project related, no remedial measure for the project is proposed. The monitoring work will continue next month to evaluate any construction impact on waterbirds.

Observations

4.17 Waterbird behaviour observed during ecological monitoring are listed below:

- Flying
- Foraging
- Soaring
- Resting
- Fighting

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

Table 4.8 Observations during Ecological Monitoring in the Reporting Month

Location	Observations	
	Project Related	**Non-project Related**
T1 (PC1, PC2)	Excavator	Fishing, dogs, dump truck
T2 (PC3, PC4)	Vibration hammer, breaker, excavation, pre-boring, sheet-piling	Fishing
PC5	Muddy water	N/A
T3 (PC6, PC7)	Vibration hammer	Fishing

5 WATER QUALITY

Monitoring Requirement

5.1 According to the Updated EM&A Manual, no water monitoring is required before the commencement of outfall construction at Ng Tung River.

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

6 WASTE MANAGEMENT

Monitoring Requirement

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

Waste Management Status

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

6.3 The amount of wastes generated by the major site activities of this Project during the reporting month is shown in **Appendix L**.

7 LANDSCAPE AND VISUAL

Audit Requirement

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

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

8 ENVIRONMENTAL AUDIT

Site Audits

8.1 Site audits were carried out on a weekly basis to monitor the timely implementation of proper environmental management practices and mitigation measures in the Project site. The summaries of site audits are attached in **Appendix K**.

8.2 Site audits were conducted on 3, 12, 17, 24 & 31 March 2020 in the reporting month. Joint site inspection with the representative of IEC was conducted on 17 March 2020. No non-compliance was observed during the site audit.

Implementation Status of Environmental Mitigation Measures

8.3 According to Environmental Permits, the approved EIA Report (Register No.: AEIAR-175/2013), and the Updated EM&A Manual of the Project, the mitigation measures detailed in the documents are recommended to be implemented during the construction phase. An Environmental Mitigation Implementation Schedule (EMIS) is provided in **Appendix N**.

8.4 The ET weekly site inspections were carried out during the reporting month and the observations and recommendations are summarized in **Tables 8.1 and 8.2**. Refer to **Appendix K** for the site inspection summary reports in the reporting month.

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

Parameters	Date	Observations and Recommendations	Follow-up
Water Quality	25 Feb 2020	Muddy water was accumulated at the eastern side of Portion C. It should be removed or pumped through the sedimentation tank to prevent leaking into the river nearby.	The condition was observed to be improved/rectified by the contractor during the audit session on 12 Mar 2020.
	24 Mar 2020	Ponding water accumulated at Portion A should be removed or pumped through the sedimentation tank.	The condition was observed to be improved/rectified by the contractor during the audit session on 31 Mar 2020.
	31 Mar 2020	Leakage of water pump drainage was observed at several locations of Portion C. The Contractor should repair the water pump drainage as soon as possible to prevent water accumulation.	Follow-up actions will be reported in the next month.
Air Quality	25 Feb 2020	The haul road appeared to be dry and dirty at Portion A. The Contractor should clean the haul road to prevent excessive dust generation.	The condition was observed to be improved/rectified by the contractor during the audit session on 3 Mar 2020.

Parameters	Date	Observations and Recommendations	Follow-up
	12 Mar 2020	Dusty materials were generated on the haul road when truck drove by at Portion C. Contractor is reminded to conduct water spraying more frequently to avoid dust emission.	The condition was observed to be improved/rectified by the contractor during the audit session on 17 Mar 2020.
	17 Mar 2020	The top of the cement mixing facility was not covered at Portion A. The Contractor should entirely cover the cement mixing to avoid dust generation.	The condition was observed to be improved/rectified by the contractor during the audit session on 24 Mar 2020.
Noise	N/A	There was no observation in the reporting period.	N/A
Waste / Chemical Management	24 Mar 2020	Waste deposited at the eastern side of Portion C should be cleared as soon as possible.	The condition was observed to be improved/rectified by the contractor during the audit session on 31 Mar 2020.
Ecology and Fisheries	N/A	There was no observation in the reporting period.	N/A
Visual and Landscape	N/A	There was no observation in the reporting period.	N/A
Permits /Licences	N/A	There was no observation in the reporting period.	N/A

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

Parameters	Date	Observations and Recommendations	Follow-up
Water Quality	17 Mar 2020	The gully at Portion B should be covered by impervious sheets to prevent muddy water and soil flowing into the drainage system.	The condition was observed to be improved/rectified by the contractor during the audit session on 24 Mar 2020.
Air Quality	3 Mar 2020	The haul road was dirty and dry at Portion B. The Contractor should clean the road to prevent excessive dust.	The condition was observed to be improved/rectified by the contractor during the audit session on 12 Mar 2020.
	3 Mar 2020	Stockpile should be covered by impervious materials to avoid dust generation at Portion B.	The condition was observed to be improved/rectified by the contractor during the audit session on 12 Mar 2020.
	24 Mar 2020	The haul road at Portion B was dirty and dusty. The Contractor should clean and wet the haul road as soon as possible to prevent dust generation.	The condition was observed to be improved/rectified by the contractor during the audit session on 31 Mar 2020.

Parameters	Date	Observations and Recommendations	Follow-up
Noise	N/A	There was no observation in the reporting period.	N/A
Waste / Chemical Management	25 Feb 2020	Waste stockpile accumulated should be removed at Portion B.	The condition was observed to be improved/rectified by the contractor during the audit session on 3 Mar 2020.
Ecology and Fisheries	N/A	There was no observation in the reporting period.	N/A
Visual and Landscape	N/A	There was no observation in the reporting period.	N/A
Permits /Licences	N/A	There was no observation in the reporting period.	N/A

8.5 Environmental observations were made by IEC during the auditing of ecological monitoring on 10 March 2020. The related findings and follow-up actions are summarized in **Table 8.3**.

Table 8.3 Observations and Recommendations of Contract No. DC/2018/06 Made by IEC on 10 March 2020

Parameters	Observations	Follow-up and Action Taken
Air Quality	Fugitive dust was observed emitting from the stockpile of dusty materials at Portion C.	The stockpile at Portion C was covered by impervious sheets during the audit session on 12 Mar 2020.
	Mud trails were observed being left on the public road opposite to the site entrance/exit in the vicinity of Chuk Wan Street at which a truck (vehicle plate no. RY2039) leaving from the site passed by.	The public road near the entrance of the Site was cleaned and wheel washing was provided at the entrance of Portion C during the audit session on 12 Mar 2020.
Water Quality	Silty water was observed flowing from culvert to Shek Sheung River and dried silt was observed being left on the pathway within Shek Sheung River leading to Ng Tung River.	No direct discharge from the Site to Shek Sheung River was observed during the audit session on 12 Mar 2020. Contractor was removing the silt from the river bank. Suction truck, dump truck and additional AquaSed were employed to clear the sediment in Shek Sheung River.

Implementation Status of Event and Action Plans

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

Air Quality Monitoring

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

Construction Noise Monitoring

- No documented complaint on construction noise was received; no Action Level exceedance for day time construction noise monitoring was recorded.
- No Limit Level exceedance for day time construction noise monitoring was recorded in the reporting month.

Ecological Monitoring

- 1 Action Level and no Limit Level was triggered.

Landscape and Visual Monitoring

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

9 ENVIRONMENTAL NON-CONFORMANCE

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

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

9.2 1 environmental complaint regarding muddy water discharge near SWHEPP was received and referred the ET Leader (ETL) on 19 March 2020. Complaint investigation was carried out and the details of the complaint are provided in **Table 9.1**.

Table 9.1 Summary of Complaint in the Reporting Month

Received Date	Referred to the ETL	Date of Incident / Location	Summary	Follow-up/ Remedial Actions	Status/ Remarks
18 March 2020	19 March 2020	Mid-February – March 2020 / Expansion Site of SWHSTP	Muddy water was suspected to be discharged from the expansion site of SWHSTP to Shek Sheung River, manholes and foul drains nearby	• Employed suction truck and dump truck to clear the silt and mud at Shek Sheung River • Arranged to repair the wastewater treatment system • Installed additional sedimentation tanks and wastewater treatment system to increase the on-site treatment capacity	Investigation undergoing

Summary of Exceedance

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

10 FUTURE KEY ISSUES

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

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

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

Contract No.	Contract Title	Site Activities
DC/2018/06	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sludge Treatment Facilities and 132kV Primary Substation	• Underground utility detection • H-piles installation • Sheet piling installation • Drainage diversion work
DC/2018/07	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sewage Treatment Facilities	• Site daily cleaning tidy up and clearance • Pre-drilling works • Demolition works • Drainage and underground utilities • Sheet pile construction
DE/2018/03	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Sidestream Treatment Facilities and E&M Works for Sluge Treatment Faciliteis	• Site clearance and fencing work
DE/2018/04	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - E&M Works for Sewage Treatment Facilities	• Preparation work of E&M installation at temporary filtrate lifting well and equalization tank • Preparation work of modification of existing emergency generator electrical works

10.3 Key environmental issues in the coming months include:

- Stockpile accumulation on-site;
- Water spraying for dust generating activities and on haul road;
- Wastewater and runoff discharge from site;
- No disposition of slurry at the existing Shek Wu Hui Sewage Treatment Works
- Coverage of open manholes to avoid dirty runoff to drainage system;
- Appropriate design of drainage system in order to facilitate storm flow;
- Control of sediment runoff after rainstorms;
- Minimization of soil excavation works during rainstorms to prevent dirty runoff flowing into surrounding waters;
- Noise from operation of the equipment, especially for excavation works and machinery onsite;
- Accumulation of general refuse and construction waste on-site;
- Proper storage of construction materials on-site; and
- Storage of chemicals/fuel and chemical waste/waste oil on-site.

Monitoring Schedule

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

11 CONCLUSIONS AND RECOMMENDATIONS

Conclusions

11.1 This is the 3rd Monthly EM&A Report which presents the EM&A works undertaken during the reporting month in accordance with the Updated EM&A Manual and the requirement under EP.

Air Quality Monitoring

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

Construction Noise Monitoring

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

Ecology

11.4 1 Action Level and no Limit Level was triggered for all ecological monitoring in the reporting month. The analysis concluded that the decline in Chinese Pond Heron abundance is not project related.

Site Audit

11.5 5 ET joint weekly environmental site inspections were conducted in the reporting month.

Complaint, Notification of Summons and Successful Prosecution

11.6 1 environmental complaint and no notifications of summons as well as successful prosecutions were received in the reporting month.

Recommendations

11.7 According to the environmental audit performed in the reporting month, 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.
- The public road should keep free from dust and soil.

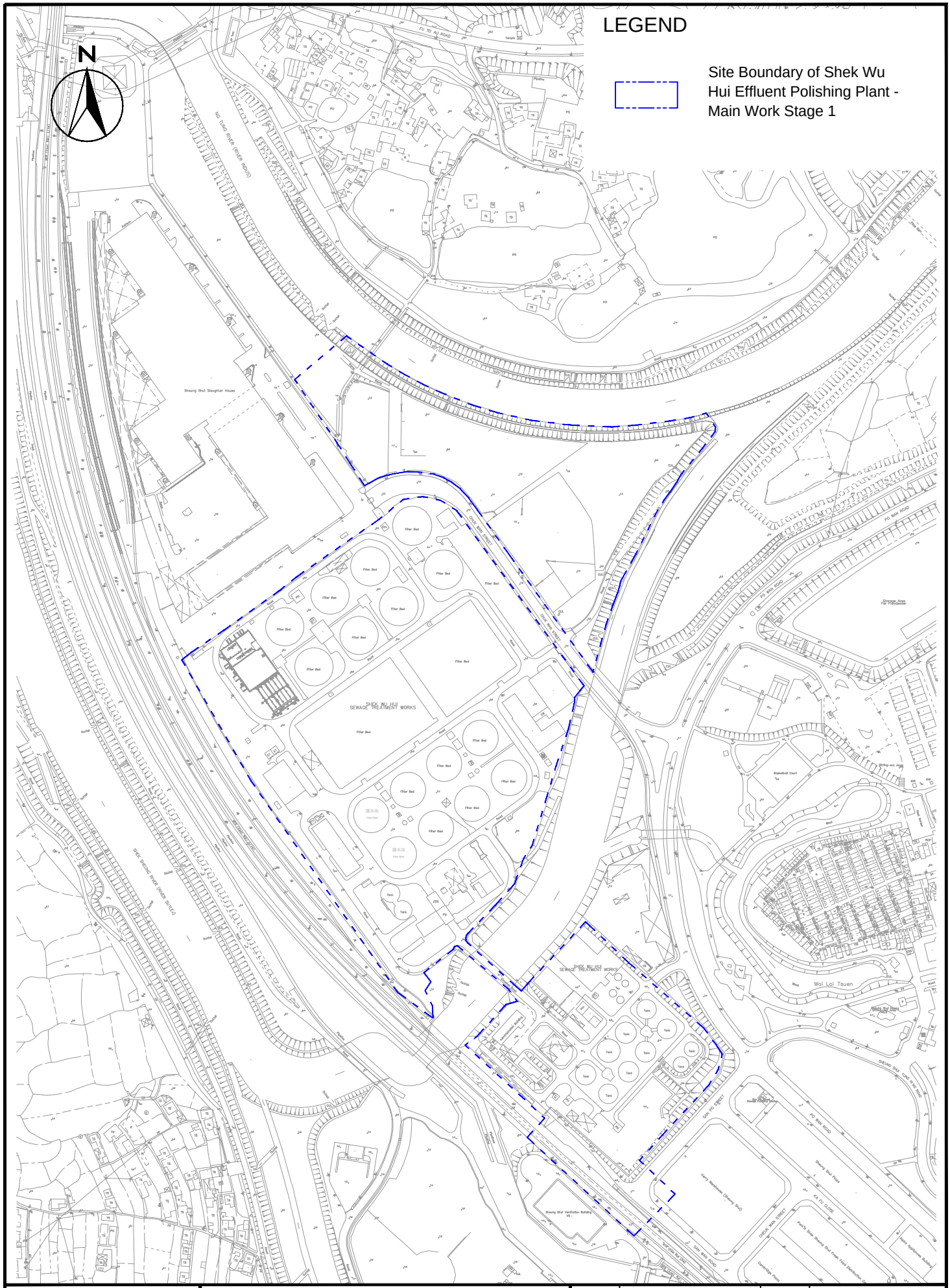
Water Quality

- Ponding water should be removed.
- Muddy water should pump through the sedimentation tank.
- Water from road washing should not fall into the manholes and drainage system.
- 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

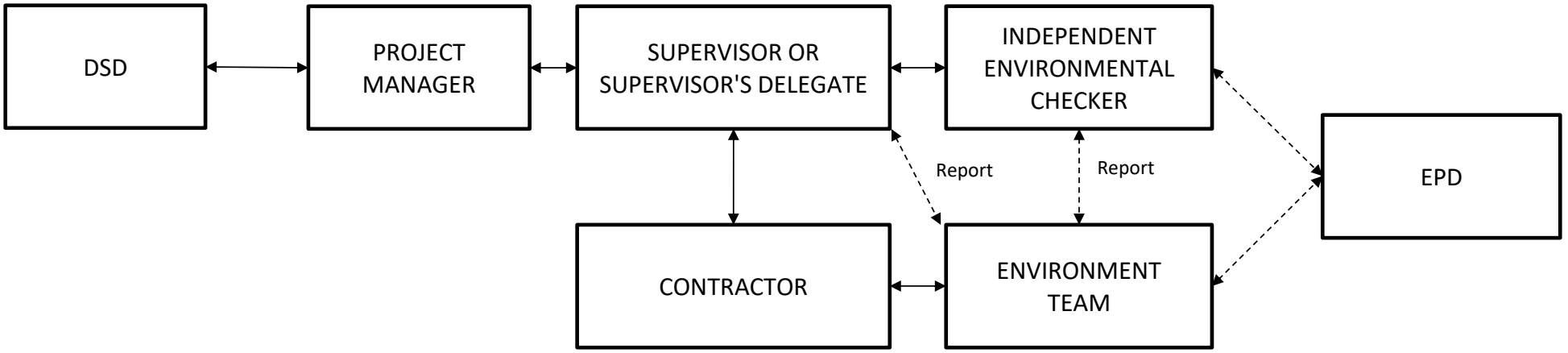
- Waste accumulation should be avoided.

FIGURES



Cinotech Consultants Limited	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: -

F:/Project_drawings

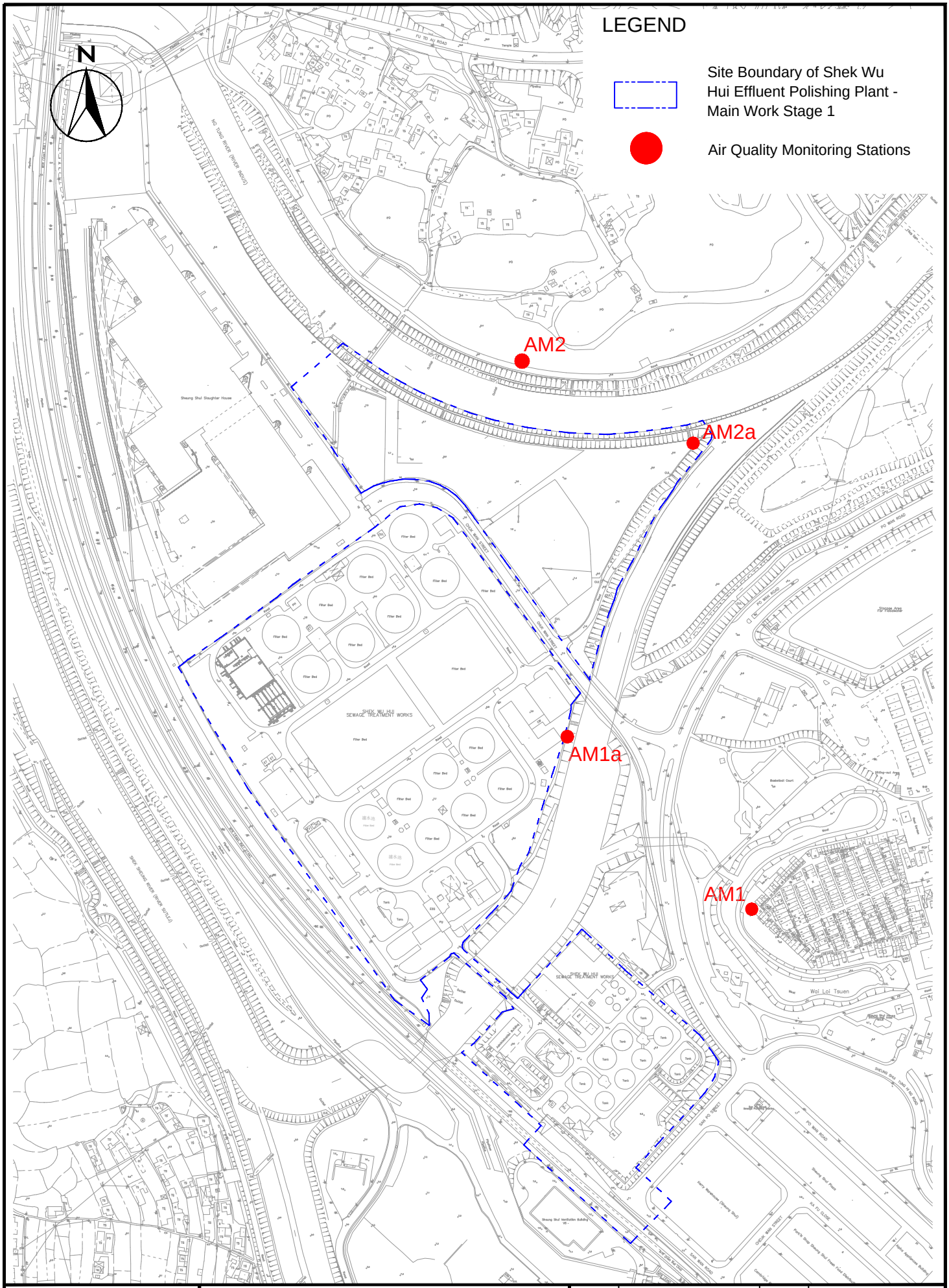


CINOTECH

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

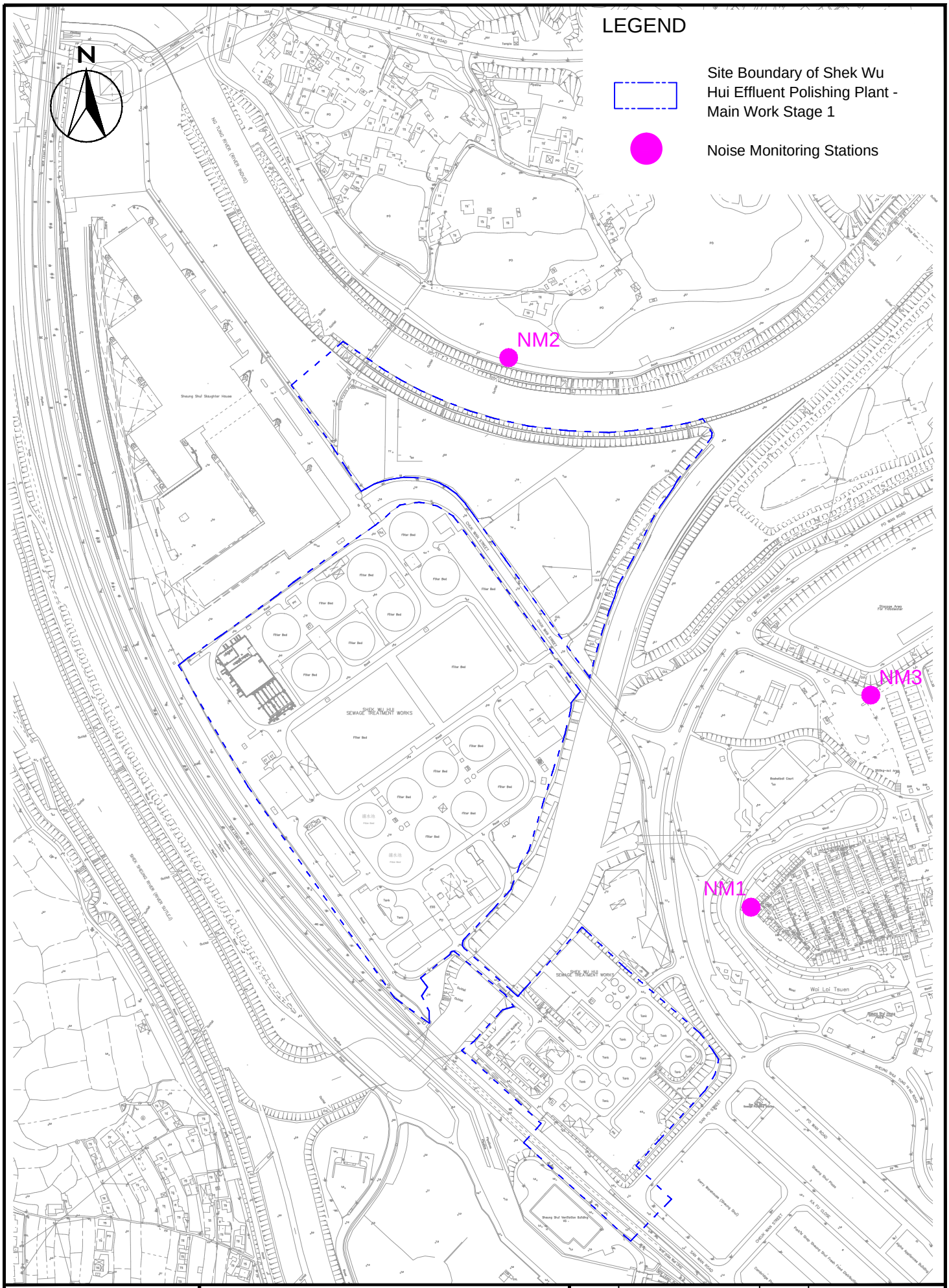
Project Organisation For Environmental Monitoring and Audit

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



CINOTECH Cinotech Consultants Limited	Agreement No. SPW07/2019 Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 Location of Air Quality Monitoring Stations	SCALE: 1:4000@A4	DATE: OCT 2019
		CHECK: JM	DRAWN: SY
		JOB No.: MA19019	FIGURE NO.: 2 / REV: -

F:/Project_drawings



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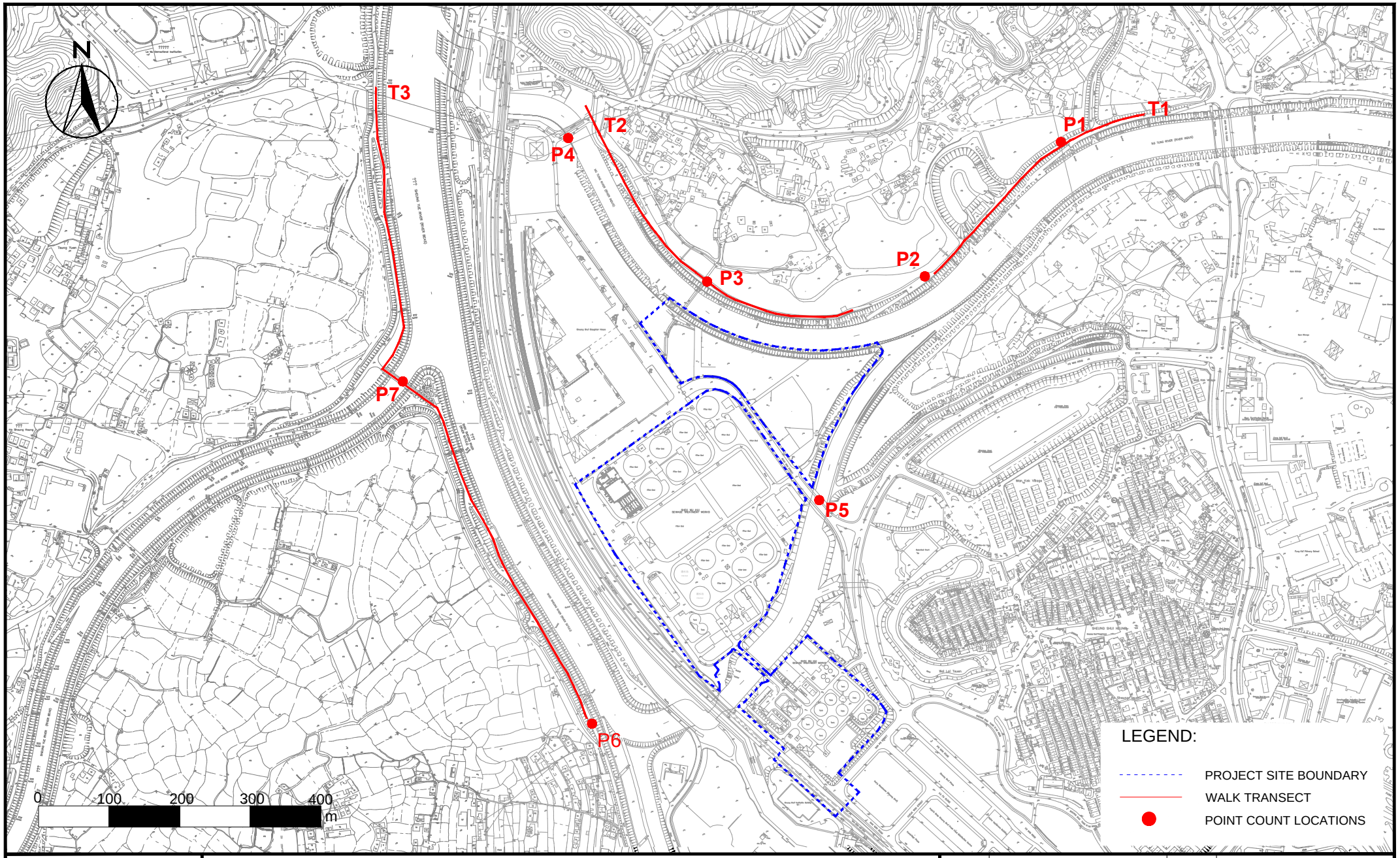
Agreement No. SPW07/2019
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1

Location of Noise Monitoring Stations

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

F:/Project_drawings



CINOTECH
Cinotech Consultants Limited

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
ACTION AND LIMIT LEVELS

Appendix A - Action and Limit Levels

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

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

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

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

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

Time Period	Action Level	Limit Level
0700-1900 hrs on normal weekdays	When one documented complaint is received	75 dB(A)[(1)]

Note:
(1) If works are to be carried out during restricted hours, the conditions stipulated in the Construction Noise Permit (CNP) used by the Noise Control Authority have to be followed.

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

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

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

APPENDIX B
ENVIRONMENTAL MONITORING SCHEDULES

Agreement No. SPW07/2019
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Impact Air, Noise and Ecology Monitoring Schedule (March 2020)

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

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

Air Quality Monitoring Station
1-hr TSP
AM1 - Wai Loi Tsuen
AM2 - Fu Tei Au

24-hr TSP
AM1a - Site Boundary of the Shek Wu Hui STW (East)
AM2a - Site Boundary of the Shek Wu Hui STW (North)

Noise Monitoring Station

NM1 - Wai Loi Tsuen
NM2 - Fu Tei Au
NM3 - Man kok Village

Agreement No. SPW07/2019
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Tentative Impact Air, Noise and Ecology Monitoring Schedule (April 2020)

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

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

Air Quality Monitoring Station
1-hr TSP
AM1 - Wai Loi Tsuen
AM2 - Fu Tei Au

24-hr TSP
AM1a - Site Boundary of the Shek Wu Hui STW (East)
AM2a - Site Boundary of the Shek Wu Hui STW (North)

Noise Monitoring Station

NM1 - Wai Loi Tsuen
NM2 - Fu Tei Au
NM3 - Man kok Village

APPENDIX C
COPIES OF CALIBRATION CERTIFICATES FOR AIR QUALITY MONITORING

Cerificate of Calibration

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

Description: Digital Dust Indicator
Date of Calibration 6-Feb-20
Manufacturer: Sibata Scientific Technology LTD.
Validity of Calibration Record 6-Apr-20
Model No.: LD-5R
Serial No.: 972778
Equipment No.: SA-01-07
Sensitivity 0.001 mg/m3
High Volume Sampler No.: A-01-01A
Before Sensitivity Adjustment 735 CPM
Tisch Calibration Orifice No.: 3607
After Sensitivity Adjustment 735 CPM

Calibration of 1 hr TSP		
Calibration Point	**Laser Dust Monitor**	**HVS**
	Mass Concentration (µg/m3) **X-axis**	Mass concentration (µg/m^3) **Y-axis**
1	48.0	112.5
2	38.0	108.0
3	27.0	102.5
Average	**37.7**	**107.7**

By Linear Regression of Y on X

Slope , mw = **0.4766** **Intercept, bw =** **89.7153**

Correlation coefficient* = **0.9995**

Set Correlation Factor	
Particaulate Concentration by High Volume Sampler (µg/m^3)	107.7
Particaulate Concentration by Dust Meter (µg/m^3)	37.7
Measureing time, (min)	60.0

Set Correlation Factor , SCF

SCF = [K=High Volume Sampler / Dust Meter, (µg/m3)] **2.9**

In-house method in according to the instruction manual:
The Dust Monitor was compared with a calibrated High Volume Sampler and The result was used to generate the Correlation Factor (CF) between the Dust Monitor and High Volume Sampler.

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

Calibrated by: .Wong Shing Kwai

Approved by: Henry Leung

Cerificate of Calibration

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

Description: Digital Dust Indicator
Date of Calibration 6-Feb-20
Manufacturer: Sibata Scientific Technology LTD.
Validity of Calibration Record 6-Apr-20
Model No.: LD-5R
Serial No.: 972779
Equipment No.: SA-01-08
Sensitivity 0.001 mg/m3
High Volume Sampler No.: A-01-01A
Before Sensitivity Adjustment 744 CPM
Tisch Calibration Orifice No.: 3607
After Sensitivity Adjustment 744 CPM

Calibration of 1 hr TSP		
Calibration Point	**Laser Dust Monitor** Mass Concentration (µg/m3) **X-axis**	**HVS** Mass concentration (µg/m^3) **Y-axis**
1	52.0	112.5
2	36.0	108.0
3	19.0	102.5
Average	**35.7**	**107.7**

By Linear Regression of Y on X

Slope , mw = **0.3032** **Intercept, bw =** **96.8510**

Correlation coefficient* = **0.9992**

Set Correlation Factor	
Particaulate Concentration by High Volume Sampler (µg/m^3)	107.7
Particaulate Concentration by Dust Meter (µg/m^3)	35.7
Measureing time, (min)	60.0

Set Correlation Factor , SCF

SCF = [K=High Volume Sampler / Dust Meter, (µg/m3)] **3.0**

In-house method in according to the instruction manual:
The Dust Monitor was compared with a calibrated High Volume Sampler and The result was used to generate the Correlation Factor (CF) between the Dust Monitor and High Volume Sampler.

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

Calibrated by: Wong Shing Kwai

Approved by: Henry Leung

TISCH Environmental

RECALIBRATION DUE DATE:
January 17, 2021

Certificate of Calibration

Calibration Certification Information				
Cal. Date:	January 17, 2020	**Rootsmeter S/N:** 438320	**Ta:** 295	°K
Operator:	Jim Tisch		**Pa:** 744.2	mm Hg
Calibration Model #:	TE-5025A	**Calibrator S/N:** **3746**		

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	1.4340	3.2	2.00
2	3	4	1	1.0180	6.4	4.00
3	5	6	1	0.9080	7.9	5.00
4	7	8	1	0.8700	8.7	5.50
5	9	10	1	0.7150	12.6	8.00

Data Tabulation

Vstd (m3)	Qstd (x-axis)	$\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}$ (y-axis)	Va	Qa (x-axis)	$\sqrt{\Delta H\left(Ta/Pa\right)}$ (y-axis)
0.9849	0.6868	1.4066	0.9957	0.6944	0.8904
0.9807	0.9633	1.9892	0.9914	0.9739	1.2592
0.9787	1.0779	2.2240	0.9894	1.0896	1.4078
0.9776	1.1237	2.3325	0.9883	1.1360	1.4765
0.9724	1.3601	2.8131	0.9831	1.3749	1.7808
QSTD	**m=**	**2.09221**	**QA**	**m=**	**1.31010**
	b=	**-0.02779**		**b=**	**-0.01759**
	r=	**0.99994**		**r=**	**0.99994**

Calculations

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

For subsequent flow rate calculations:

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

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

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

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

RECALIBRATION

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

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

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

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET

File No. MA19019/17/0002

Project No. AM1a - Site boundary of the Shek Wu Hui STW (East)

Date: 6-Jan-20 Next Due Date: 5-Mar-20 Operator: SK

Equipment No.: A-01-17 Model No.: GS2310 Serial No. 3460

Ambient Condition			
Temperature, Ta (K)	294	Pressure, Pa (mmHg)	764.3

Orifice Transfer Standard Information					
Serial No.	3607	Slope, mc	0.0588	Intercept, bc	-0.02422
Last Calibration Date:	8-Jan-19	**mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$**			
Next Calibration Date:	8-Jan-20	**Qstd = {[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ -bc} / mc**			

Calibration of TSP Sampler

Calibration Point	Orfice			HVS	
	ΔH (orifice), in. of water	[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$	Qstd (CFM) **X - axis**	ΔW (HVS), in. of water	[ΔW x (Pa/760) x (298/Ta)]$^{1/2}$ **Y-axis**
1	16.3	4.08	69.73	10.3	3.24
2	12.5	3.57	61.12	7.8	2.82
3	9.2	3.06	52.49	6.2	2.51
4	5.6	2.39	41.04	4.0	2.02
5	3.3	1.83	31.60	2.5	1.60

By Linear Regression of Y on X

Slope , mw = **0.0424** **Intercept, bw =** **0.2651**

Correlation coefficient* = **0.9993**

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

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

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

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

Therefore, Set Point; W = (mw x Qstd + bw)^2 x (760 / Pa) x (Ta / 298) = **4.29**

Remarks:

Conducted by: SK Wong Signature: Date: 6 January 2020

Checked by: Henry Leung Signature: Date: 6 January 2020

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET

File No. MA19019/17/0003

Project No. AM1a - Site boundary of the Shek Wu Hui STW (East)

Date: 5-Mar-20 Next Due Date: 5-May-20 Operator: SK

Equipment No.: A-01-17 Model No.: GS2310 Serial No. 3460

Ambient Condition			
Temperature, Ta (K)	291.2	Pressure, Pa (mmHg)	764.4

Orifice Transfer Standard Information					
Serial No.	3746	Slope, mc	0.0592	Intercept, bc	-0.02740
Last Calibration Date:	17-Jan-20	**mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$**			
Next Calibration Date:	17-Jan-21	**Qstd = {[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ -bc} / mc**			

Calibration of TSP Sampler

Calibration Point	Orfice			HVS	
	ΔH (orifice), in. of water	[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$	Qstd (CFM) **X - axis**	ΔW (HVS), in. of water	[ΔW x (Pa/760) x (298/Ta)]$^{1/2}$ **Y-axis**
1	16.0	4.06	69.01	10.4	3.27
2	12.5	3.59	61.05	7.8	2.83
3	9.2	3.08	52.44	6.2	2.53
4	5.5	2.38	40.65	4.0	2.03
5	3.2	1.81	31.12	2.4	1.57

By Linear Regression of Y on X

Slope , mw = **0.0436** **Intercept, bw =** **0.2268**

Correlation coefficient* = **0.9984**

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

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

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

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

Therefore, Set Point; W = (mw x Qstd + bw)^2 x (760 / Pa) x (Ta / 298) = **4.30**

Remarks:

Conducted by: SK Wong Signature: Date: 05 March 2020

Checked by: Henry Leung Signature: Date: 05 March 2020

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET

File No. MA19019/24/0002

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

Date: 6-Jan-20 Next Due Date: 5-Mar-20 Operator: BF

Equipment No.: A-01-24 Model No.: TE 5170 Serial No. 1659

Ambient Condition			
Temperature, Ta (K)	294	Pressure, Pa (mmHg)	764.3

Orifice Transfer Standard Information					
Serial No.	3607	Slope, mc	0.0588	Intercept, bc	-0.02422
Last Calibration Date:	8-Jan-19	**mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$**			
Next Calibration Date:	8-Jan-20	**Qstd = {[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ -bc} / mc**			

Calibration of TSP Sampler

Calibration Point	Orfice			HVS	
	ΔH (orifice), in. of water	[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$	Qstd (CFM) **X - axis**	ΔW (HVS), in. of water	[ΔW x (Pa/760) x (298/Ta)]$^{1/2}$ **Y-axis**
1	13.7	3.74	63.97	9.6	3.13
2	10.7	3.30	56.58	7.6	2.78
3	7.9	2.84	48.67	6.0	2.47
4	4.9	2.23	38.42	4.3	2.09
5	3.0	1.75	30.15	3.0	1.76

By Linear Regression of Y on X

Slope , mw = **0.0399** **Intercept, bw =** **0.5480**

Correlation coefficient* = **0.9993**

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

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

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

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

Therefore, Set Point; W = (mw x Qstd + bw)^2 x (760 / Pa) x (Ta / 298) = **5.03**

Remarks:

Conducted by: SK Wong Signature: Date: 6 January 2020

Checked by: Henry Leung Signature: Date: 6 January 2020

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET

File No. MA19019/24/0003

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

Date: 5-Mar-20 Next Due Date: 5-May-20 Operator: SK

Equipment No.: A-01-24 Model No.: TE 5170 Serial No. 1659

Ambient Condition			
Temperature, Ta (K)	291.2	Pressure, Pa (mmHg)	764.4

Orifice Transfer Standard Information					
Serial No.	3746	Slope, mc	0.0592	Intercept, bc	-0.02740
Last Calibration Date:	17-Jan-20	**mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$**			
Next Calibration Date:	17-Jan-21	**Qstd = {[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ -bc} / mc**			

Calibration of TSP Sampler

Calibration Point	Orfice			HVS	
	ΔH (orifice), in. of water	[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$	Qstd (CFM) **X - axis**	ΔW (HVS), in. of water	[ΔW x (Pa/760) x (298/Ta)]$^{1/2}$ **Y-axis**
1	14.5	3.86	65.72	9.9	3.19
2	11.0	3.36	57.30	7.6	2.80
3	8.1	2.89	49.24	6.1	2.51
4	5.1	2.29	39.16	4.3	2.10
5	3.2	1.81	31.12	3.1	1.79

By Linear Regression of Y on X

Slope , mw = 0.0402 **Intercept, bw = 0.5261**

Correlation coefficient* = 0.9993

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

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

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

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

Therefore, Set Point; W = (mw x Qstd + bw)^2 x (760 / Pa) x (Ta / 298) = **4.94**

Remarks:

Conducted by: SK Wong Signature: Date: 05 March 2020

Checked by: Henry Leung Signature: Date: 05 March 2020

Cerificate of Calibration - Wind Monitoring Station

Description: BM3 - Control Room at SWHSTW

Manufacturer: Global Water Instrumentation

Model No.: WE800 Weather Station

Serial No.: 1517001963

Equipment No.: SA-03-01

Date of Calibration 30-Oct-2019

Next Due Date 30-Apr-2020

1. Performance check of Wind Speed

Wind Speed, m/s		Difference D (m/s)
Wind Speed Reading (V1)	Anemometer Value (V1)	D = V1 – V2
0.0	0.0	0.0
1.5	1.5	0.0
2.5	2.7	-0.2
4.0	4.3	-0.3

2. Performance check of Wind Direction

Wind Direction (^{o})		Difference D (^{o})
Wind Direction Reading (V1)	Marine Compass Value (V1)	D = W1 - W2
0	0	0.0
90	90	0.0
180	180	0.0
270	270	0.0

Test Specification:

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

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

Calibrated by: _____ Wong Shing Kwai

Approved by: _____ Henry Leung

APPENDIX D
WEATHER INFORMATION

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

I. General Information from Hong Kong Observatory

Date	Mean Air Temperature (°C)	Mean Relative Humidity (%)	Precipitation (mm)
1-Mar-20	22.8	82	0
2-Mar-20	20.1	84	Trace
3-Mar-20	19.4	81	Trace
4-Mar-20	19.9	84	3.1
5-Mar-20	18.2	85	0.4
6-Mar-20	18.3	80	Trace
7-Mar-20	20.6	88	Trace
8-Mar-20	22.1	92	Trace
9-Mar-20	23.4	89	Trace
10-Mar-20	23.4	67	Trace
11-Mar-20	19.2	72	Trace
12-Mar-20	19.2	89	Trace
13-Mar-20	21.4	91	0
14-Mar-20	21.6	78	0.4
15-Mar-20	20.2	70	0
16-Mar-20	20.3	75	0
17-Mar-20	20.3	79	0
18-Mar-20	20.5	86	10.7
19-Mar-20	21.1	88	0.8
20-Mar-20	21.2	87	0.4
21-Mar-20	21.2	94	0.2
22-Mar-20	24.2	84	0
23-Mar-20	24.6	81	0
24-Mar-20	22.8	82	Trace
25-Mar-20	22.8	83	Trace
26-Mar-20	23.3	90	1
27-Mar-20	24.4	86	Trace
28-Mar-20	22.8	91	9.8
29-Mar-20	20.2	91	2.2
30-Mar-20	20.4	95	6.5
31-Mar-20	20.3	95	5.8

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

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
1-Mar-20	1:00	216.8	0.1
1-Mar-20	2:00	239.7	0.1
1-Mar-20	3:00	179.6	0.1
1-Mar-20	4:00	135.5	0.1
1-Mar-20	5:00	6.5	0.1
1-Mar-20	6:00	225.2	0.1
1-Mar-20	7:00	132.0	0.1
1-Mar-20	8:00	206.8	0.1
1-Mar-20	9:00	128.5	0.2
1-Mar-20	10:00	185.6	0.1
1-Mar-20	11:00	53.1	0.5
1-Mar-20	12:00	311.9	0.5
1-Mar-20	13:00	257.6	2.9
1-Mar-20	14:00	237.5	1.6
1-Mar-20	15:00	249.9	0.7
1-Mar-20	16:00	294.1	0.1
1-Mar-20	17:00	146.2	0.3
1-Mar-20	18:00	170.1	0.1
1-Mar-20	19:00	78.4	0.1
1-Mar-20	20:00	78.4	0.1
1-Mar-20	21:00	67.8	0.1
1-Mar-20	22:00	69.7	0.1
1-Mar-20	23:00	49.7	0.1
2-Mar-20	0:00	81.4	0.1
2-Mar-20	1:00	70.3	0.1
2-Mar-20	2:00	64.3	0.1
2-Mar-20	3:00	78.4	0.1
2-Mar-20	4:00	87.4	0.1
2-Mar-20	5:00	79.0	0.1
2-Mar-20	6:00	73.6	0.1
2-Mar-20	7:00	73.1	0.1
2-Mar-20	8:00	100.9	0.5
2-Mar-20	9:00	104.0	0.5
2-Mar-20	10:00	114.3	0.2
2-Mar-20	11:00	207.8	0.1
2-Mar-20	12:00	75.4	0.7

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
2-Mar-20	13:00	109.1	0.1
2-Mar-20	14:00	113.3	0.1
2-Mar-20	15:00	109.9	0.1
2-Mar-20	16:00	72.3	0.6
2-Mar-20	17:00	127.3	0.2
2-Mar-20	18:00	106.3	0.1
2-Mar-20	19:00	116.8	0.5
2-Mar-20	20:00	88.4	0.2
2-Mar-20	21:00	96.9	0.2
2-Mar-20	22:00	37.6	0.5
2-Mar-20	23:00	81.4	0.4
3-Mar-20	0:00	90.4	0.1
3-Mar-20	1:00	107.5	0.1
3-Mar-20	2:00	113.6	0.1
3-Mar-20	3:00	89.6	0.1
3-Mar-20	4:00	62.9	0.1
3-Mar-20	5:00	81.1	0.1
3-Mar-20	6:00	77.5	0.1
3-Mar-20	7:00	116.7	0.1
3-Mar-20	8:00	111.8	0.1
3-Mar-20	9:00	84.5	0.3
3-Mar-20	10:00	138.6	0.4
3-Mar-20	11:00	51.3	1.0
3-Mar-20	12:00	200.1	0.1
3-Mar-20	13:00	170.0	0.4
3-Mar-20	14:00	185.8	0.2
3-Mar-20	15:00	118.0	0.2
3-Mar-20	16:00	127.3	0.1
3-Mar-20	17:00	114.7	0.1
3-Mar-20	18:00	141.0	0.1
3-Mar-20	19:00	101.6	0.1
3-Mar-20	20:00	100.4	0.1
3-Mar-20	21:00	92.7	0.1
3-Mar-20	22:00	91.1	0.1
3-Mar-20	23:00	105.7	0.1
4-Mar-20	0:00	81.9	0.1

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
4-Mar-20	1:00	82.8	0.1
4-Mar-20	2:00	77.7	0.1
4-Mar-20	3:00	68.6	0.1
4-Mar-20	4:00	77.6	0.1
4-Mar-20	5:00	68.8	0.1
4-Mar-20	6:00	66.6	0.1
4-Mar-20	7:00	86.6	0.1
4-Mar-20	8:00	88.0	0.1
4-Mar-20	9:00	47.0	0.1
4-Mar-20	10:00	61.3	0.1
4-Mar-20	11:00	83.9	0.4
4-Mar-20	12:00	70.1	0.2
4-Mar-20	13:00	92.5	0.1
4-Mar-20	14:00	68.4	0.2
4-Mar-20	15:00	164.2	0.1
4-Mar-20	16:00	137.3	0.1
4-Mar-20	17:00	156.1	0.1
4-Mar-20	18:00	49.4	0.8
4-Mar-20	19:00	41.0	0.1
4-Mar-20	20:00	71.3	0.1
4-Mar-20	21:00	68.3	0.4
4-Mar-20	22:00	61.4	0.3
4-Mar-20	23:00	67.1	0.1
5-Mar-20	0:00	109.6	0.1
5-Mar-20	1:00	103.2	0.1
5-Mar-20	2:00	43.4	0.1
5-Mar-20	3:00	73.7	0.1
5-Mar-20	4:00	97.7	0.1
5-Mar-20	5:00	187.8	0.2
5-Mar-20	6:00	121.6	0.1
5-Mar-20	7:00	21.2	0.3
5-Mar-20	8:00	70.5	0.2
5-Mar-20	9:00	45.7	0.3
5-Mar-20	10:00	193.0	0.4
5-Mar-20	11:00	81.1	0.6
5-Mar-20	12:00	93.3	0.8

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
5-Mar-20	13:00	90.3	0.6
5-Mar-20	14:00	121.1	0.4
5-Mar-20	15:00	58.6	0.4
5-Mar-20	16:00	71.5	0.3
5-Mar-20	17:00	73.0	0.3
5-Mar-20	18:00	94.4	0.2
5-Mar-20	19:00	93.3	0.2
5-Mar-20	20:00	75.3	0.1
5-Mar-20	21:00	89.4	0.2
5-Mar-20	22:00	84.6	0.2
5-Mar-20	23:00	142.0	0.2
6-Mar-20	0:00	124.3	0.1
6-Mar-20	1:00	124.1	0.1
6-Mar-20	2:00	61.3	0.1
6-Mar-20	3:00	81.2	0.2
6-Mar-20	4:00	125.2	0.2
6-Mar-20	5:00	98.5	0.2
6-Mar-20	6:00	169.6	0.1
6-Mar-20	7:00	86.2	0.1
6-Mar-20	8:00	120.5	0.2
6-Mar-20	9:00	111.0	0.9
6-Mar-20	10:00	98.4	0.8
6-Mar-20	11:00	84.5	0.3
6-Mar-20	12:00	103.8	0.2
6-Mar-20	13:00	113.1	0.9
6-Mar-20	14:00	142.3	0.4
6-Mar-20	15:00	109.3	0.4
6-Mar-20	16:00	120.1	0.1
6-Mar-20	17:00	110.5	0.1
6-Mar-20	18:00	126.0	0.1
6-Mar-20	19:00	80.6	0.1
6-Mar-20	20:00	135.3	0.1
6-Mar-20	21:00	151.5	0.1
6-Mar-20	22:00	68.2	0.1
6-Mar-20	23:00	145.6	0.1
7-Mar-20	0:00	79.0	0.1

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
7-Mar-20	1:00	67.6	0.1
7-Mar-20	2:00	64.0	0.1
7-Mar-20	3:00	99.6	0.1
7-Mar-20	4:00	81.5	0.1
7-Mar-20	5:00	98.7	0.1
7-Mar-20	6:00	101.1	0.2
7-Mar-20	7:00	126.9	0.1
7-Mar-20	8:00	83.9	0.1
7-Mar-20	9:00	124.6	0.1
7-Mar-20	10:00	92.3	0.1
7-Mar-20	11:00	79.1	0.1
7-Mar-20	12:00	69.0	0.2
7-Mar-20	13:00	175.6	0.1
7-Mar-20	14:00	120.9	0.2
7-Mar-20	15:00	70.5	0.1
7-Mar-20	16:00	163.4	0.2
7-Mar-20	17:00	167.9	0.4
7-Mar-20	18:00	67.0	0.1
7-Mar-20	19:00	98.4	0.1
7-Mar-20	20:00	130.9	0.1
7-Mar-20	21:00	82.6	0.1
7-Mar-20	22:00	97.5	0.1
7-Mar-20	23:00	82.0	0.1
8-Mar-20	0:00	91.9	0.1
8-Mar-20	1:00	50.6	0.1
8-Mar-20	2:00	85.8	0.1
8-Mar-20	3:00	73.6	0.1
8-Mar-20	4:00	97.9	0.1
8-Mar-20	5:00	55.6	0.1
8-Mar-20	6:00	68.3	0.1
8-Mar-20	7:00	93.2	0.1
8-Mar-20	8:00	114.3	0.2
8-Mar-20	9:00	67.1	0.1
8-Mar-20	10:00	120.2	0.1
8-Mar-20	11:00	122.5	0.1
8-Mar-20	12:00	138.4	0.1

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
8-Mar-20	13:00	95.0	0.3
8-Mar-20	14:00	74.4	0.1
8-Mar-20	15:00	169.2	0.1
8-Mar-20	16:00	115.9	0.1
8-Mar-20	17:00	129.9	0.1
8-Mar-20	18:00	162.7	0.1
8-Mar-20	19:00	139.5	0.1
8-Mar-20	20:00	146.5	0.1
8-Mar-20	21:00	122.5	0.1
8-Mar-20	22:00	151.3	0.2
8-Mar-20	23:00	52.6	0.1
9-Mar-20	0:00	35.1	0.4
9-Mar-20	1:00	69.8	0.4
9-Mar-20	2:00	80.8	0.2
9-Mar-20	3:00	98.1	0.2
9-Mar-20	4:00	95.2	0.1
9-Mar-20	5:00	120.8	0.1
9-Mar-20	6:00	70.2	0.1
9-Mar-20	7:00	212.3	0.1
9-Mar-20	8:00	65.9	0.3
9-Mar-20	9:00	118.4	0.2
9-Mar-20	10:00	154.4	0.2
9-Mar-20	11:00	162.5	0.2
9-Mar-20	12:00	161.1	0.1
9-Mar-20	13:00	229.2	2.1
9-Mar-20	14:00	259.8	0.7
9-Mar-20	15:00	223.2	1.3
9-Mar-20	16:00	219.5	0.4
9-Mar-20	17:00	231.7	0.1
9-Mar-20	18:00	141.7	0.2
9-Mar-20	19:00	81.3	0.1
9-Mar-20	20:00	87.0	0.1
9-Mar-20	21:00	80.7	0.2
9-Mar-20	22:00	91.2	0.3
9-Mar-20	23:00	94.1	0.2
10-Mar-20	0:00	85.5	0.1

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
10-Mar-20	1:00	64.1	0.1
10-Mar-20	2:00	79.9	0.1
10-Mar-20	3:00	218.9	0.1
10-Mar-20	4:00	184.7	0.2
10-Mar-20	5:00	39.2	0.1
10-Mar-20	6:00	107.7	0.3
10-Mar-20	7:00	58.8	0.3
10-Mar-20	8:00	86.8	0.4
10-Mar-20	9:00	73.5	0.4
10-Mar-20	10:00	119.1	0.8
10-Mar-20	11:00	160.7	0.7
10-Mar-20	12:00	20.8	0.9
10-Mar-20	13:00	183.1	0.2
10-Mar-20	14:00	209.5	0.3
10-Mar-20	15:00	32.0	0.4
10-Mar-20	16:00	226.9	0.3
10-Mar-20	17:00	38.4	1.2
10-Mar-20	18:00	97.3	0.3
10-Mar-20	19:00	76.8	0.2
10-Mar-20	20:00	71.6	0.1
10-Mar-20	21:00	67.0	0.3
10-Mar-20	22:00	70.5	0.7
10-Mar-20	23:00	40.8	1.5
11-Mar-20	0:00	71.3	0.7
11-Mar-20	1:00	74.3	0.7
11-Mar-20	2:00	69.9	0.1
11-Mar-20	3:00	48.0	0.2
11-Mar-20	4:00	78.1	0.1
11-Mar-20	5:00	35.1	0.3
11-Mar-20	6:00	81.1	0.1
11-Mar-20	7:00	109.4	0.1
11-Mar-20	8:00	75.2	0.1
11-Mar-20	9:00	83.0	0.1
11-Mar-20	10:00	75.6	0.1
11-Mar-20	11:00	69.7	0.2
11-Mar-20	12:00	72.9	0.2

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
11-Mar-20	13:00	146.0	0.2
11-Mar-20	14:00	98.0	1.0
11-Mar-20	15:00	68.3	0.2
11-Mar-20	16:00	105.9	0.2
11-Mar-20	17:00	48.8	0.2
11-Mar-20	18:00	127.0	0.2
11-Mar-20	19:00	81.7	0.1
11-Mar-20	20:00	110.3	0.5
11-Mar-20	21:00	101.7	2.4
11-Mar-20	22:00	102.8	0.1
11-Mar-20	23:00	81.6	0.2
12-Mar-20	0:00	119.2	1.8
12-Mar-20	1:00	135.6	1.1
12-Mar-20	2:00	160.4	0.1
12-Mar-20	3:00	104.9	0.1
12-Mar-20	4:00	94.2	0.1
12-Mar-20	5:00	150.1	0.2
12-Mar-20	6:00	94.3	0.1
12-Mar-20	7:00	131.6	0.2
12-Mar-20	8:00	98.5	0.4
12-Mar-20	9:00	108.9	0.1
12-Mar-20	10:00	122.8	0.3
12-Mar-20	11:00	95.1	1.0
12-Mar-20	12:00	121.3	0.2
12-Mar-20	13:00	136.2	0.2
12-Mar-20	14:00	222.9	0.1
12-Mar-20	15:00	205.8	0.1
12-Mar-20	16:00	146.1	0.1
12-Mar-20	17:00	173.3	0.6
12-Mar-20	18:00	129.6	0.1
12-Mar-20	19:00	115.6	0.1
12-Mar-20	20:00	100.2	0.4
12-Mar-20	21:00	46.1	0.1
12-Mar-20	22:00	80.8	0.1
12-Mar-20	23:00	83.6	0.1
13-Mar-20	0:00	81.8	0.1

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
13-Mar-20	1:00	61.7	0.1
13-Mar-20	2:00	81.8	0.1
13-Mar-20	3:00	86.4	0.1
13-Mar-20	4:00	69.9	0.1
13-Mar-20	5:00	91.6	0.1
13-Mar-20	6:00	78.6	0.1
13-Mar-20	7:00	81.7	0.1
13-Mar-20	8:00	88.0	0.1
13-Mar-20	9:00	107.2	0.1
13-Mar-20	10:00	206.4	0.2
13-Mar-20	11:00	80.1	0.1
13-Mar-20	12:00	151.4	0.3
13-Mar-20	13:00	120.0	0.7
13-Mar-20	14:00	134.7	0.6
13-Mar-20	15:00	111.0	0.6
13-Mar-20	16:00	131.9	0.1
13-Mar-20	17:00	95.3	0.2
13-Mar-20	18:00	150.6	0.2
13-Mar-20	19:00	81.6	0.1
13-Mar-20	20:00	137.8	0.1
13-Mar-20	21:00	199.6	0.1
13-Mar-20	22:00	47.2	0.1
13-Mar-20	23:00	79.2	0.2
14-Mar-20	0:00	82.2	0.2
14-Mar-20	1:00	79.8	0.2
14-Mar-20	2:00	10.4	0.1
14-Mar-20	3:00	46.0	0.7
14-Mar-20	4:00	72.8	0.1
14-Mar-20	5:00	66.2	0.3
14-Mar-20	6:00	92.3	0.5
14-Mar-20	7:00	75.8	0.6
14-Mar-20	8:00	79.7	0.6
14-Mar-20	9:00	16.1	1.4
14-Mar-20	10:00	75.0	2.1
14-Mar-20	11:00	93.5	0.2
14-Mar-20	12:00	167.4	0.2

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
14-Mar-20	13:00	60.4	0.2
14-Mar-20	14:00	46.9	0.2
14-Mar-20	15:00	66.0	0.2
14-Mar-20	16:00	33.4	0.4
14-Mar-20	17:00	51.7	0.4
14-Mar-20	18:00	116.1	0.2
14-Mar-20	19:00	109.9	0.9
14-Mar-20	20:00	78.5	0.1
14-Mar-20	21:00	119.4	0.2
14-Mar-20	22:00	123.2	0.1
14-Mar-20	23:00	88.6	0.1
15-Mar-20	0:00	60.9	0.1
15-Mar-20	1:00	62.4	0.1
15-Mar-20	2:00	75.9	0.1
15-Mar-20	3:00	68.5	0.1
15-Mar-20	4:00	65.2	0.5
15-Mar-20	5:00	214.6	0.2
15-Mar-20	6:00	24.7	0.1
15-Mar-20	7:00	74.1	0.1
15-Mar-20	8:00	42.1	0.1
15-Mar-20	9:00	72.2	0.1
15-Mar-20	10:00	92.6	0.1
15-Mar-20	11:00	120.3	0.1
15-Mar-20	12:00	208.7	0.1
15-Mar-20	13:00	108.7	0.3
15-Mar-20	14:00	112.4	0.1
15-Mar-20	15:00	170.7	0.1
15-Mar-20	16:00	100.4	0.3
15-Mar-20	17:00	154.2	0.1
15-Mar-20	18:00	88.6	0.1
15-Mar-20	19:00	108.9	0.1
15-Mar-20	20:00	82.0	0.2
15-Mar-20	21:00	157.5	0.3
15-Mar-20	22:00	102.5	0.7
15-Mar-20	23:00	86.7	1.3
16-Mar-20	0:00	84.3	0.4

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
16-Mar-20	1:00	72.3	0.2
16-Mar-20	2:00	101.8	0.1
16-Mar-20	3:00	109.8	0.2
16-Mar-20	4:00	101.2	0.2
16-Mar-20	5:00	84.9	0.1
16-Mar-20	6:00	112.0	0.2
16-Mar-20	7:00	70.0	0.1
16-Mar-20	8:00	66.4	0.2
16-Mar-20	9:00	56.1	0.5
16-Mar-20	10:00	124.4	1.6
16-Mar-20	11:00	123.8	0.4
16-Mar-20	12:00	136.0	0.4
16-Mar-20	13:00	144.2	0.9
16-Mar-20	14:00	91.0	0.2
16-Mar-20	15:00	171.6	0.1
16-Mar-20	16:00	152.5	0.5
16-Mar-20	17:00	173.0	0.2
16-Mar-20	18:00	95.2	0.1
16-Mar-20	19:00	87.0	0.1
16-Mar-20	20:00	122.8	0.4
16-Mar-20	21:00	99.3	0.1
16-Mar-20	22:00	119.9	0.7
16-Mar-20	23:00	90.0	0.2
17-Mar-20	0:00	101.9	0.1
17-Mar-20	1:00	112.5	0.2
17-Mar-20	2:00	83.6	0.3
17-Mar-20	3:00	96.5	0.1
17-Mar-20	4:00	106.4	0.1
17-Mar-20	5:00	79.5	0.1
17-Mar-20	6:00	117.7	0.3
17-Mar-20	7:00	61.5	0.1
17-Mar-20	8:00	65.3	0.1
17-Mar-20	9:00	70.8	0.2
17-Mar-20	10:00	81.5	0.2
17-Mar-20	11:00	145.1	0.2
17-Mar-20	12:00	74.3	0.1

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
17-Mar-20	13:00	68.0	0.1
17-Mar-20	14:00	76.8	0.4
17-Mar-20	15:00	98.1	0.2
17-Mar-20	16:00	103.7	0.1
17-Mar-20	17:00	125.4	0.1
17-Mar-20	18:00	93.7	0.1
17-Mar-20	19:00	80.4	0.1
17-Mar-20	20:00	86.9	0.1
17-Mar-20	21:00	74.8	0.1
17-Mar-20	22:00	90.8	0.1
17-Mar-20	23:00	71.6	0.1
18-Mar-20	0:00	112.3	0.1
18-Mar-20	1:00	54.5	0.1
18-Mar-20	2:00	93.4	0.1
18-Mar-20	3:00	86.9	0.1
18-Mar-20	4:00	77.3	0.1
18-Mar-20	5:00	115.5	0.1
18-Mar-20	6:00	88.9	0.1
18-Mar-20	7:00	68.4	0.1
18-Mar-20	8:00	87.0	0.1
18-Mar-20	9:00	115.0	0.1
18-Mar-20	10:00	82.9	0.6
18-Mar-20	11:00	190.5	0.4
18-Mar-20	12:00	142.4	0.1
18-Mar-20	13:00	188.0	0.1
18-Mar-20	14:00	168.2	0.2
18-Mar-20	15:00	99.7	0.3
18-Mar-20	16:00	114.5	0.2
18-Mar-20	17:00	95.5	0.3
18-Mar-20	18:00	93.0	0.2
18-Mar-20	19:00	69.0	0.1
18-Mar-20	20:00	211.7	0.1
18-Mar-20	21:00	79.3	0.1
18-Mar-20	22:00	115.8	0.1
18-Mar-20	23:00	86.7	0.1
19-Mar-20	0:00	59.7	0.1

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
19-Mar-20	1:00	93.0	0.1
19-Mar-20	2:00	57.4	0.1
19-Mar-20	3:00	79.6	0.1
19-Mar-20	4:00	87.9	0.1
19-Mar-20	5:00	53.0	0.1
19-Mar-20	6:00	81.4	0.1
19-Mar-20	7:00	88.8	0.1
19-Mar-20	8:00	78.2	0.2
19-Mar-20	9:00	118.5	0.2
19-Mar-20	10:00	74.8	0.2
19-Mar-20	11:00	93.6	0.1
19-Mar-20	12:00	70.7	0.1
19-Mar-20	13:00	81.2	0.1
19-Mar-20	14:00	89.4	0.2
19-Mar-20	15:00	48.3	0.2
19-Mar-20	16:00	75.3	0.2
19-Mar-20	17:00	187.9	0.3
19-Mar-20	18:00	123.2	0.3
19-Mar-20	19:00	134.2	0.4
19-Mar-20	20:00	99.8	0.4
19-Mar-20	21:00	81.5	0.4
19-Mar-20	22:00	79.7	0.4
19-Mar-20	23:00	76.6	0.4
20-Mar-20	0:00	73.7	0.5
20-Mar-20	1:00	81.3	0.5
20-Mar-20	2:00	92.3	0.4
20-Mar-20	3:00	26.1	0.4
20-Mar-20	4:00	102.7	0.4
20-Mar-20	5:00	82.6	0.4
20-Mar-20	6:00	57.7	0.3
20-Mar-20	7:00	57.8	0.3
20-Mar-20	8:00	69.0	0.3
20-Mar-20	9:00	247.1	0.3
20-Mar-20	10:00	107.8	0.3
20-Mar-20	11:00	74.8	0.4
20-Mar-20	12:00	135.5	0.8

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
20-Mar-20	13:00	93.9	0.5
20-Mar-20	14:00	75.0	0.3
20-Mar-20	15:00	91.4	0.3
20-Mar-20	16:00	87.3	0.3
20-Mar-20	17:00	71.5	0.2
20-Mar-20	18:00	160.7	0.2
20-Mar-20	19:00	99.3	0.2
20-Mar-20	20:00	194.2	0.2
20-Mar-20	21:00	75.1	0.2
20-Mar-20	22:00	88.9	0.2
20-Mar-20	23:00	92.8	0.2
21-Mar-20	0:00	128.1	0.2
21-Mar-20	1:00	111.7	0.1
21-Mar-20	2:00	83.9	0.2
21-Mar-20	3:00	98.4	0.3
21-Mar-20	4:00	98.3	0.3
21-Mar-20	5:00	70.3	0.3
21-Mar-20	6:00	92.3	0.3
21-Mar-20	7:00	148.3	0.3
21-Mar-20	8:00	161.9	0.3
21-Mar-20	9:00	105.0	0.3
21-Mar-20	10:00	54.5	0.3
21-Mar-20	11:00	107.5	0.3
21-Mar-20	12:00	72.3	0.3
21-Mar-20	13:00	122.7	0.4
21-Mar-20	14:00	138.6	0.3
21-Mar-20	15:00	140.6	0.4
21-Mar-20	16:00	63.7	0.4
21-Mar-20	17:00	131.3	0.3
21-Mar-20	18:00	111.8	0.2
21-Mar-20	19:00	117.6	0.2
21-Mar-20	20:00	104.7	0.2
21-Mar-20	21:00	132.2	0.1
21-Mar-20	22:00	81.0	0.1
21-Mar-20	23:00	81.8	0.1
22-Mar-20	0:00	69.7	0.1

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
22-Mar-20	1:00	72.6	0.1
22-Mar-20	2:00	27.6	0.1
22-Mar-20	3:00	50.0	0.1
22-Mar-20	4:00	68.9	0.1
22-Mar-20	5:00	66.0	0.1
22-Mar-20	6:00	92.7	0.1
22-Mar-20	7:00	36.1	0.1
22-Mar-20	8:00	112.9	0.1
22-Mar-20	9:00	130.8	0.2
22-Mar-20	10:00	139.6	0.3
22-Mar-20	11:00	289.8	1.5
22-Mar-20	12:00	288.3	1.2
22-Mar-20	13:00	303.1	1.2
22-Mar-20	14:00	266.1	1.1
22-Mar-20	15:00	276.4	2.0
22-Mar-20	16:00	264.6	0.8
22-Mar-20	17:00	278.9	0.6
22-Mar-20	18:00	286.4	0.4
22-Mar-20	19:00	100.4	0.1
22-Mar-20	20:00	116.8	0.1
22-Mar-20	21:00	105.2	0.1
22-Mar-20	22:00	88.4	0.1
22-Mar-20	23:00	110.4	0.1
23-Mar-20	0:00	31.1	0.1
23-Mar-20	1:00	121.4	0.1
23-Mar-20	2:00	59.7	0.1
23-Mar-20	3:00	76.8	0.1
23-Mar-20	4:00	173.7	0.1
23-Mar-20	5:00	245.5	0.1
23-Mar-20	6:00	240.5	0.1
23-Mar-20	7:00	298.8	0.1
23-Mar-20	8:00	129.2	0.1
23-Mar-20	9:00	99.0	0.1
23-Mar-20	10:00	264.1	0.3
23-Mar-20	11:00	286.3	0.4
23-Mar-20	12:00	259.2	0.1

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
23-Mar-20	13:00	298.2	0.5
23-Mar-20	14:00	249.2	2.0
23-Mar-20	15:00	254.7	2.5
23-Mar-20	16:00	279.9	0.7
23-Mar-20	17:00	314.7	0.6
23-Mar-20	18:00	168.1	0.3
23-Mar-20	19:00	73.4	1.1
23-Mar-20	20:00	109.2	0.4
23-Mar-20	21:00	102.7	0.3
23-Mar-20	22:00	121.5	0.1
23-Mar-20	23:00	108.1	0.1
24-Mar-20	0:00	215.6	0.1
24-Mar-20	1:00	72.5	0.4
24-Mar-20	2:00	110.1	0.2
24-Mar-20	3:00	53.8	1.5
24-Mar-20	4:00	112.2	0.6
24-Mar-20	5:00	97.9	1.8
24-Mar-20	6:00	115.6	0.6
24-Mar-20	7:00	81.0	0.1
24-Mar-20	8:00	151.1	0.2
24-Mar-20	9:00	82.5	0.1
24-Mar-20	10:00	82.8	0.2
24-Mar-20	11:00	83.7	1.1
24-Mar-20	12:00	101.1	0.3
24-Mar-20	13:00	122.9	0.2
24-Mar-20	14:00	177.1	0.1
24-Mar-20	15:00	114.1	0.1
24-Mar-20	16:00	95.7	0.2
24-Mar-20	17:00	77.5	0.3
24-Mar-20	18:00	163.7	0.2
24-Mar-20	19:00	122.5	0.1
24-Mar-20	20:00	101.2	0.1
24-Mar-20	21:00	71.3	0.4
24-Mar-20	22:00	108.4	0.1
24-Mar-20	23:00	163.7	0.1
25-Mar-20	0:00	60.2	0.1

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
25-Mar-20	1:00	217.9	0.2
25-Mar-20	2:00	119.1	0.3
25-Mar-20	3:00	104.1	1.1
25-Mar-20	4:00	118.3	0.4
25-Mar-20	5:00	123.8	0.2
25-Mar-20	6:00	91.9	0.2
25-Mar-20	7:00	97.4	0.2
25-Mar-20	8:00	80.1	0.3
25-Mar-20	9:00	64.6	0.4
25-Mar-20	10:00	80.4	0.2
25-Mar-20	11:00	93.4	0.2
25-Mar-20	12:00	77.9	0.1
25-Mar-20	13:00	134.7	0.8
25-Mar-20	14:00	208.0	0.1
25-Mar-20	15:00	112.1	0.5
25-Mar-20	16:00	150.3	0.2
25-Mar-20	17:00	88.1	0.3
25-Mar-20	18:00	75.2	0.1
25-Mar-20	19:00	94.4	0.5
25-Mar-20	20:00	106.5	0.1
25-Mar-20	21:00	151.8	0.3
25-Mar-20	22:00	96.2	0.1
25-Mar-20	23:00	80.2	0.1
26-Mar-20	0:00	89.5	0.1
26-Mar-20	1:00	63.6	0.1
26-Mar-20	2:00	82.1	0.2
26-Mar-20	3:00	86.2	0.1
26-Mar-20	4:00	79.5	0.1
26-Mar-20	5:00	126.9	0.1
26-Mar-20	6:00	95.0	0.4
26-Mar-20	7:00	168.6	0.1
26-Mar-20	8:00	101.9	0.2
26-Mar-20	9:00	86.3	0.1
26-Mar-20	10:00	74.8	0.6
26-Mar-20	11:00	73.0	0.1
26-Mar-20	12:00	68.5	0.2

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
26-Mar-20	13:00	76.9	0.2
26-Mar-20	14:00	113.5	0.1
26-Mar-20	15:00	78.2	0.1
26-Mar-20	16:00	93.9	0.5
26-Mar-20	17:00	96.6	0.1
26-Mar-20	18:00	90.7	0.1
26-Mar-20	19:00	169.6	0.1
26-Mar-20	20:00	69.0	0.1
26-Mar-20	21:00	78.9	0.2
26-Mar-20	22:00	110.5	0.3
26-Mar-20	23:00	76.9	0.1
27-Mar-20	0:00	89.9	0.1
27-Mar-20	1:00	78.9	0.1
27-Mar-20	2:00	88.8	0.1
27-Mar-20	3:00	75.2	0.2
27-Mar-20	4:00	146.0	0.1
27-Mar-20	5:00	75.1	0.1
27-Mar-20	6:00	86.7	0.1
27-Mar-20	7:00	85.7	0.1
27-Mar-20	8:00	59.9	0.1
27-Mar-20	9:00	101.6	0.1
27-Mar-20	10:00	137.9	0.2
27-Mar-20	11:00	114.4	0.2
27-Mar-20	12:00	144.0	0.2
27-Mar-20	13:00	137.9	0.1
27-Mar-20	14:00	175.4	0.2
27-Mar-20	15:00	238.2	0.2
27-Mar-20	16:00	167.0	0.1
27-Mar-20	17:00	188.3	0.4
27-Mar-20	18:00	80.9	0.2
27-Mar-20	19:00	78.7	0.5
27-Mar-20	20:00	72.4	0.3
27-Mar-20	21:00	92.2	0.1
27-Mar-20	22:00	80.2	0.1
27-Mar-20	23:00	67.0	0.1
28-Mar-20	0:00	52.9	0.2

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
28-Mar-20	1:00	71.3	0.2
28-Mar-20	2:00	84.5	0.2
28-Mar-20	3:00	205.5	0.2
28-Mar-20	4:00	45.7	0.2
28-Mar-20	5:00	66.2	0.4
28-Mar-20	6:00	52.3	0.3
28-Mar-20	7:00	40.7	0.2
28-Mar-20	8:00	257.4	0.3
28-Mar-20	9:00	38.1	0.2
28-Mar-20	10:00	73.4	0.2
28-Mar-20	11:00	324.7	0.3
28-Mar-20	12:00	196.3	0.2
28-Mar-20	13:00	37.0	0.3
28-Mar-20	14:00	63.5	0.2
28-Mar-20	15:00	85.9	0.3
28-Mar-20	16:00	109.1	0.2
28-Mar-20	17:00	79.4	0.3
28-Mar-20	18:00	220.1	0.2
28-Mar-20	19:00	58.8	0.2
28-Mar-20	20:00	63.9	0.2
28-Mar-20	21:00	83.8	0.5
28-Mar-20	22:00	49.2	0.1
28-Mar-20	23:00	63.2	0.2
29-Mar-20	0:00	81.8	0.1
29-Mar-20	1:00	64.9	0.3
29-Mar-20	2:00	80.4	0.3
29-Mar-20	3:00	130.2	0.2
29-Mar-20	4:00	104.6	0.5
29-Mar-20	5:00	107.0	0.3
29-Mar-20	6:00	80.5	0.2
29-Mar-20	7:00	117.4	0.3
29-Mar-20	8:00	133.0	0.4
29-Mar-20	9:00	91.3	0.6
29-Mar-20	10:00	152.5	0.2
29-Mar-20	11:00	117.8	0.3
29-Mar-20	12:00	116.3	0.5

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
29-Mar-20	13:00	111.9	0.4
29-Mar-20	14:00	156.5	0.4
29-Mar-20	15:00	93.1	0.4
29-Mar-20	16:00	155.0	0.3
29-Mar-20	17:00	128.4	0.3
29-Mar-20	18:00	115.3	0.2
29-Mar-20	19:00	153.3	0.4
29-Mar-20	20:00	71.0	0.3
29-Mar-20	21:00	147.1	0.2
29-Mar-20	22:00	135.8	0.15
29-Mar-20	23:00	110.25	1.3
30-Mar-20	0:00	94.85	0.65
30-Mar-20	1:00	116.7	0.3
30-Mar-20	2:00	101	0.1
30-Mar-20	3:00	101.25	0.9
30-Mar-20	4:00	88.1	0.3
30-Mar-20	5:00	77.7	0.2
30-Mar-20	6:00	57.15	0.15
30-Mar-20	7:00	93.9	0.1
30-Mar-20	8:00	102.1	0.1
30-Mar-20	9:00	63.45	0.1
30-Mar-20	10:00	108.5	0.1
30-Mar-20	11:00	81.9	0.15
30-Mar-20	12:00	66.6	0.15
30-Mar-20	13:00	66.7	0.1
30-Mar-20	14:00	91.35	0.2
30-Mar-20	15:00	68.1	0.2
30-Mar-20	16:00	79.05	0.25
30-Mar-20	17:00	72.8	0.2
30-Mar-20	18:00	86.15	0.2
30-Mar-20	19:00	86.3	0.2
30-Mar-20	20:00	34.4	0.2
30-Mar-20	21:00	71.55	0.2
30-Mar-20	22:00	66.4	0.2
30-Mar-20	23:00	59.35	0.2
31-Mar-20	0:00	66.3	0.25

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
31-Mar-20	1:00	62.8	0.2
31-Mar-20	2:00	65.55	0.2
31-Mar-20	3:00	49.95	0.2
31-Mar-20	4:00	46.6	0.2
31-Mar-20	5:00	65.65	0.2
31-Mar-20	6:00	67.2	0.2
31-Mar-20	7:00	30.75	0.2
31-Mar-20	8:00	75.85	0.25
31-Mar-20	9:00	288.55	0.2
31-Mar-20	10:00	57.45	0.2
31-Mar-20	11:00	103.55	0.2
31-Mar-20	12:00	141.2	0.35
31-Mar-20	13:00	91.3	0.2
31-Mar-20	14:00	88.45	0.2
31-Mar-20	15:00	74.65	0.2
31-Mar-20	16:00	175.15	0.25
31-Mar-20	17:00	227.7	0.2
31-Mar-20	18:00	228.5	0.3
31-Mar-20	19:00	292.5	0.45
31-Mar-20	20:00	291.9	0.25
31-Mar-20	21:00	147.35	0.3
31-Mar-20	22:00	35.35	0.25
31-Mar-20	23:00	35.9	0.3

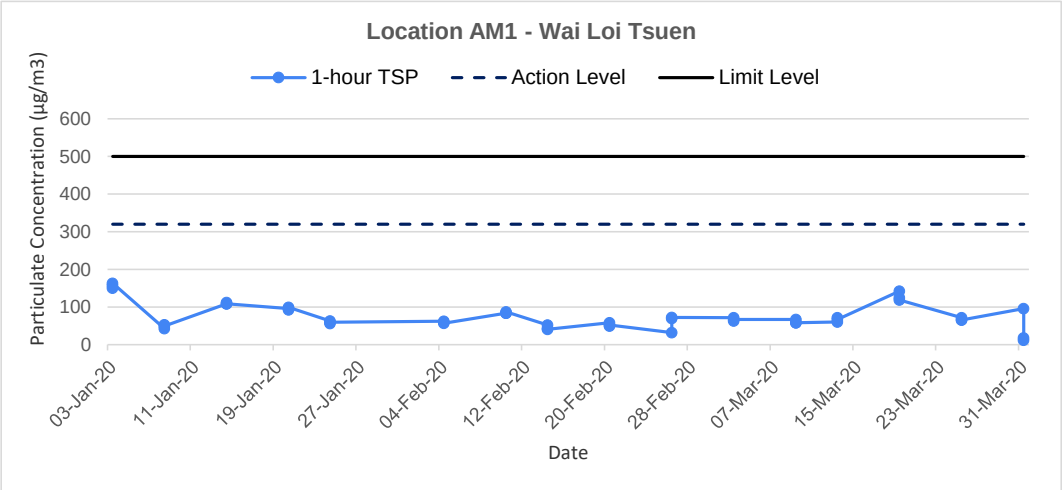
APPENDIX E
1-HOUR TSP MONITORING RESULTS AND GRAPHICAL PRESENTATIONS

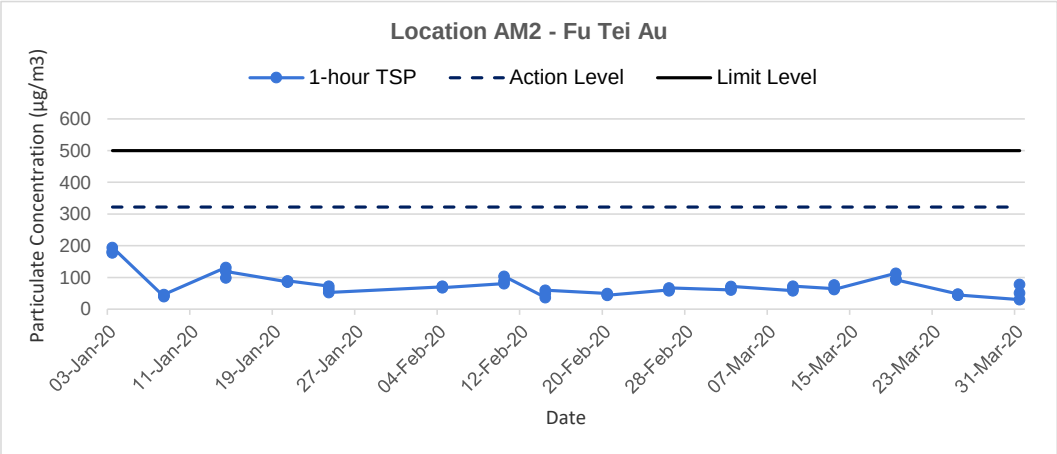
Appendix E - 1-hour TSP Monitoring Results

Location AM1 - Wai Loi Tsuen			
Date	Time	Weather	Particulate Concentration (μg/m^3)
3-Mar-20	9:00	Fine	71.4
3-Mar-20	10:00	Fine	63.0
3-Mar-20	11:00	Fine	67.2
9-Mar-20	9:00	Cloudy	66.7
9-Mar-20	10:00	Cloudy	58.0
9-Mar-20	11:00	Cloudy	58.0
13-Mar-20	9:00	Fine	60.0
13-Mar-20	10:00	Fine	72.0
13-Mar-20	11:00	Fine	67.2
19-Mar-20	9:00	Cloudy	142.1
19-Mar-20	10:00	Cloudy	124.7
19-Mar-20	11:00	Cloudy	118.9
25-Mar-20	9:00	Sunny	72.0
25-Mar-20	10:00	Sunny	66.0
25-Mar-20	11:00	Sunny	66.0
31-Mar-20	9:00	Cloudy	96.0
31-Mar-20	10:00	Cloudy	18.0
31-Mar-20	11:00	Cloudy	12.0
		Average	72.2
		Maximum	142.1
		Minimum	12.0

Location AM2 - Fu Tei Au			
Date	Time	Weather	Particulate Concentration (μg/m^3)
3-Mar-20	13:00	Fine	60.9
3-Mar-20	14:00	Fine	65.1
3-Mar-20	15:00	Fine	71.4
9-Mar-20	13:00	Cloudy	58.0
9-Mar-20	14:00	Cloudy	63.8
9-Mar-20	15:00	Cloudy	72.5
13-Mar-20	13:00	Fine	64.8
13-Mar-20	14:00	Fine	76.8
13-Mar-20	15:00	Fine	62.4
19-Mar-20	13:00	Rainy	113.1
19-Mar-20	14:00	Rainy	95.7
19-Mar-20	15:00	Rainy	92.8
25-Mar-20	13:00	Sunny	48.0
25-Mar-20	14:00	Sunny	45.0
25-Mar-20	15:00	Sunny	45.0
31-Mar-20	13:00	Cloudy	30.0
31-Mar-20	14:00	Cloudy	51.0
31-Mar-20	15:00	Cloudy	78.0
		Average	66.4
		Maximum	113.1
		Minimum	30.0

1-hr TSP Concentration Levels





Title: Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1	Date: Mar 2020	Project No.: MA19019	CINOTECH
Graphical Presentation of 1-hour TSP Monitoring Results		Appendix: E	

APPENDIX F
24-HOUR TSP MONITORING RESULTS AND GRAPHICAL PRESENTATIONS

Appendix F - 24-hour TSP Monitoring Results

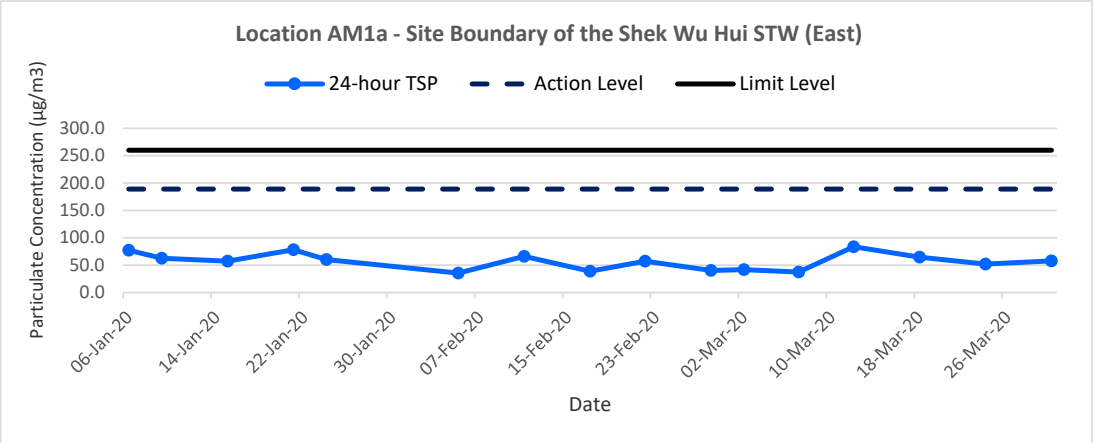
Location AM1a - Site Boundary of the Shek Wu Hui STW (East)

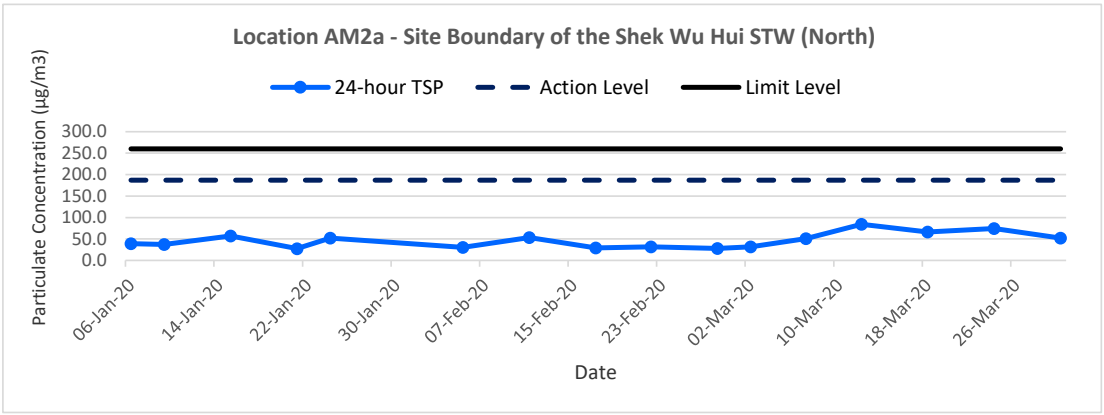
Start Date	Weather Condition	Air Temp. (K)	Atmospheric Pressure, Pa (mmHg)	Filter Weight (g)		Particulate weight (g)	Elapse Time		Sampling Time (hrs.)	Flow Rate (m^3/min.)		Av. Flow (m^3/min)	Total vol. (m^3)	Conc. (µg/m^3)
				Initial	Final		Initial	Final		Initial	Final			
2-Mar-20	Fine	292.8	764.4	3.5198	3.5931	0.0733	8298.6	8322.6	24.0	1.22	1.22	1.22	1759.5	41.7
7-Mar-20	Cloudy	294.4	760.3	3.5586	3.6238	0.0652	8322.6	8346.6	24.0	1.21	1.20	1.21	1738.5	37.5
12-Mar-20	Fine	293.3	762.8	3.5440	3.6900	0.1460	8346.6	8370.6	24.0	1.21	1.21	1.21	1745.3	83.7
18-Mar-20	Cloudy	293.8	762.4	3.4592	3.5716	0.1124	8370.6	8394.6	24.0	1.21	1.21	1.21	1743.1	64.5
24-Mar-20	Sunny	295.8	762.1	3.5499	3.6403	0.0904	8394.6	8418.6	24.0	1.21	1.21	1.21	1736.0	52.1
30-Mar-20	Cloudy	293.4	760.5	3.4873	3.5882	0.1009	8418.6	8442.6	24.0	1.21	1.21	1.21	1742.1	57.9
													Min	37.5
													Max	83.7
													Average	56.2

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

Start Date	Weather Condition	Air Temp. (K)	Atmospheric Pressure, Pa (mmHg)	Filter Weight (g)		Particulate weight (g)	Elapse Time		Sampling Time (hrs.)	Flow Rate (m^3/min.)		Av. Flow (m^3/min)	Total vol. (m^3)	Conc. (µg/m^3)
				Initial	Final		Initial	Final		Initial	Final			
2-Mar-20	Fine	292.8	764.4	3.5242	3.5802	0.0560	18516.9	18540.9	24.0	1.22	1.22	1.22	1758.1	31.9
7-Mar-20	Cloudy	294.4	760.3	3.5343	3.6223	0.0880	18540.9	18564.9	24.0	1.21	1.20	1.20	1734.1	50.7
12-Mar-20	Fine	293.3	762.8	3.5806	3.7273	0.1467	18564.9	18588.9	24.0	1.21	1.21	1.21	1741.9	84.2
18-Mar-20	Cloudy	293.8	762.4	3.5081	3.6230	0.1149	18588.9	18612.9	24.0	1.21	1.21	1.21	1739.5	66.1
24-Mar-20	Sunny	295.8	762.1	3.4587	3.5869	0.1282	18612.9	18636.9	24.0	1.20	1.20	1.20	1731.2	74.1
30-Mar-20	Cloudy	293.4	760.5	3.4624	3.5527	0.0903	18636.9	18660.9	24.0	1.21	1.21	1.21	1738.3	51.9
													Min	31.9
													Max	84.2
													Average	59.8

24-hr TSP Concentration Levels





Title	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1	Date	Project No.	CINOTECH
		Mar 2020	MA19019	
	Graphical Presentation of 24-hour TSP Monitoring Results		Appendix F	

APPENDIX G
COPIES OF CALIBRATION CERTIFICATES FOR NOISE MONITORING

Equipment no.: N-12-02

Calibration Certificate

0022522

Customer : Cinotech Consultants Limited RM 1710, Technology Park, 18 On Lai Street, Shatin, N.T. Hong Kong Customer Code : SVEC09005	Object 1 : BSWA 308 SLM Serial No. /Ref. No. : 570187 / 550841 Object 2 : Serial No. /Ref. No. : Manufacturer : BSWAtech
Date of calibration: 23/09/2019 Date of the recommended re-calibration: 23/09/2020	Certificate No.: 0022522 Handle by: E0002

Measuring results

Reference value	Indication value	Deviation	Allowed deviation	Object
94.0dB	94.0dB	0.0dB	+/- 1.5dB	1
114.0dB	113.9dB	-0.1dB	+/- 1.5dB	1

Measuring equipment

index	Calibrator / Master	Traceability
1	Master Sound Meter, SVAN949,sn:8571	IEC61672
2	Sound Calibrator, SV30A sn:32580	IEC60942

Ambient conditions

Temperature (20...26)°C Humidity (20...60)%RH

Measuring procedure

Calibrated by Type 1 Sound Calibrator with Master Sound Level Meter under 1kHz Frequency.

Uncertainty

+/- 0.2 dB for probability not less than 95%.

Conformity

1.The resulted values were those obtained at the time of test and applies only to the item calibrated.
2.The measurement uncertainty was calculated according to the regulations of GUM with the coverage factor k=2 and contains the uncertainty of the measuring procedure and the uncertainty of the measuring system.
3.The equipment being used in this calibration are regularly calibrated by laboratory according to ISO/IEC17025.
4.HKAS has accredited this laboratory (HOKLAS 267) for specific calibration activities as listed in the HOKLAS directory of accredited laboratories.
5.The calibrations certificate may not be reproduced.

Measured value(s) within **the allowable deviation.**

Performed by

Calibration Technician

Approved by

Quality Manager

Equipment no.: N-12-03

Calibration Certificate

0022523

Customer : Cinotech Consultants Limited RM 1710, Technology Park, 18 On Lai Street, Shatin, N.T. Hong Kong Customer Code : SVEC09005	Object 1 : BSWA 308 SLM Serial No. /Ref. No. : 570188 / 550850 Object 2 : Serial No. /Ref. No. : Manufacturer : BSWAtech
Date of calibration: 23/09/2019 Date of the recommended re-calibration: 23/09/2020	Certificate No.: 0022523 Handle by: E0002

Measuring results

Reference value	Indication value	Deviation	Allowed deviation	Object
94.0dB	94.0dB	0.0dB	+/- 1.5dB	1
114.0dB	114.0dB	0.0dB	+/- 1.5dB	1

Measuring equipment

index	Calibrator / Master	Traceability
1	Master Sound Meter, SVAN949,sn:8571	IEC61672
2	Sound Calibrator, SV30A sn:32580	IEC60942

Ambient conditions

Temperature (20...26)°C Humidity (20...60)%RH

Measuring procedure

Calibrated by Type 1 Sound Calibrator with Master Sound Level Meter under 1kHz Frequency.

Uncertainty

+/- 0.2 dB for probability not less than 95%.

Conformity

1.The resulted values were those obtained at the time of test and applies only to the item calibrated.
2.The measurement uncertainty was calculated according to the regulations of GUM with the coverage factor k=2 and contains the uncertainty of the measuring procedure and the uncertainty of the measuring system.
3.The equipment being used in this calibration are regularly calibrated by laboratory according to ISO/IEC17025.
4.HKAS has accredited this laboratory (HOKLAS 267) for specific calibration activities as listed in the HOKLAS directory of accredited laboratories.
5.The calibrations certificate may not be reproduced.

Measured value(s) **within** **the allowable deviation.**

Performed by

Calibration Technician

Approved by

Quality Manager

Calibration Certificate

0022999

Customer : Cinotech Consultants Limited RM 1710, Technology Park, 18 On Lai Street, Shatin, N.T. Hong Kong Customer Code : SVEC09005	Object 1 : SVAN957 SLM Serial No. /Ref. No. : 23851 / N-08-12 Object 2 : Microphone Serial No. /Ref. No. : 43676 Manufacturer : Svantek
Date of calibration: 19/12/2019 Date of the recommended re-calibration: 19/12/2020	Certificate No.: 0022999 Handle by: E0002

Measuring results

Reference value	Indication value	Deviation	Allowed deviation	Object
94.0dB	94.0dB	0.0dB	+/- 1.5dB	1
114.0dB	114.0dB	0.0dB	+/- 1.5dB	1

Measuring equipment

index	Calibrator / Master	Traceability
1	Master Sound Meter, SVAN949,sn:8571	IEC61672
2	Sound Calibrator, SV30A sn:32580	IEC60942

Ambient conditions

Temperature (20...26)°C Humidity (20...60)%RH

Measuring procedure

Calibrated by Type 1 Sound Calibrator with Master Sound Level Meter under 1kHz Frequency.

Uncertainty

+/- 0.2 dB for probability not less than 95%.

Conformity

1.The resulted values were those obtained at the time of test and applies only to the item calibrated.
2.The measurement uncertainty was calculated according to the regulations of GUM with the coverage factor k=2 and contains the uncertainty of the measuring procedure and the uncertainty of the measuring system.
3.The equipment being used in this calibration are regularly calibrated by laboratory according to ISO/IEC17025.
4.HKAS has accredited this laboratory (HOKLAS 267) for specific calibration activities as listed in the HOKLAS directory of accredited laboratories.
5.The calibrations certificate may not be reproduced.

Measured value(s) within **the allowable deviation.**

Performed by

Calibration Technician

Approved by

Quality Manager

Appleone Calibration Laboratory Ltd. Rm1309, 13/F, No.77 Wing Hong St, Kln, HKSAR Tel: +852 2370 4437 Fax: +852 2114 0393

Calibration Certificate

0022675

Customer : Cinotech Consultants Limited RM 1710, Technology Park, 18 On Lai Street, Shatin, N.T. Hong Kong Customer Code : SVEC09005	Object 1 : ST-120 sound calibrator Serial No. /Ref. No. : 181001637 Object 2 : Serial No. /Ref. No. : Manufacturer : Soundtek
Date of calibration: 24/10/2019 Date of the recommended re-calibration: 24/10/2020	Certificate No.: 0022675 Handle by: E0002

Measuring results

Reference value	Indication value	Deviation	Allowed deviation	Object
94.0dB	94.0dB	0.0dB	+/- 0.3dB	1
114.0dB	114.0dB	0.0dB	+/- 0.5dB	1

Measuring equipment

index	Calibrator / Master	Traceability
1	Master Sound Meter, SVAN949,sn:8571	IEC61672
2	Sound Calibrator, SV30A sn:32580	IEC60942

Ambient conditions

Temperature (20...26)°C Humidity (20...60)%RH

Measuring procedure

Calibrated by Type 1 Sound Level Meter and 1kHz Sound Source .

Uncertainty

+/- 0.2 dB for probability not less than 95%.

Conformity

1.The resulted values were those obtained at the time of test and applies only to the item calibrated.
2.The measurement uncertainty was calculated according to the regulations of GUM with the coverage factor k=2 and contains the uncertainty of the measuring procedure and the uncertainty of the measuring system.
3.The equipment being used in this calibration are regularly calibrated by laboratory according to ISO/IEC17025.
4.HKAS has accredited this laboratory (HOKLAS 267) for specific calibration activities as listed in the HOKLAS directory of accredited laboratories.
5.The calibrations certificate may not be reproduced.

Measured value(s) within **the allowable deviation.**

Performed by

Calibration Technician

Approved by

Quality Manager

Appleone Calibration Laboratory Ltd. Rm1309, 13/F, No.77 Wing Hong St, Kln, HKSAR Tel: +852 2370 4437 Fax: +852 2114 0393

APPENDIX H
NOISE MONITORING RESULTS AND GRAPHICAL PRESENTATIONS

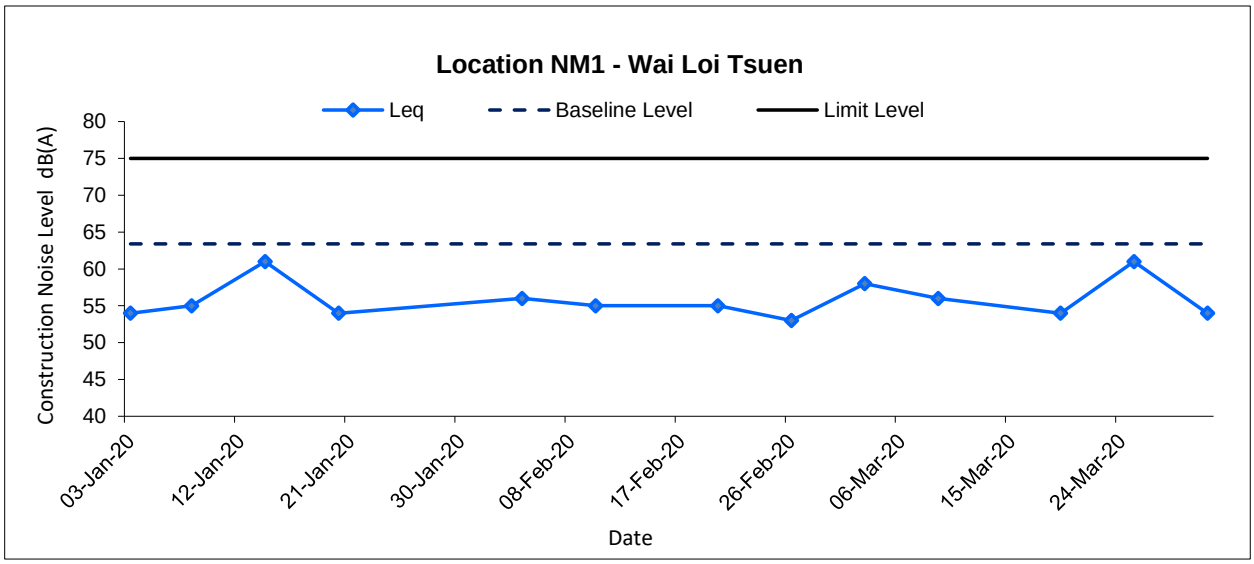
Appendix H - Noise Monitoring Results

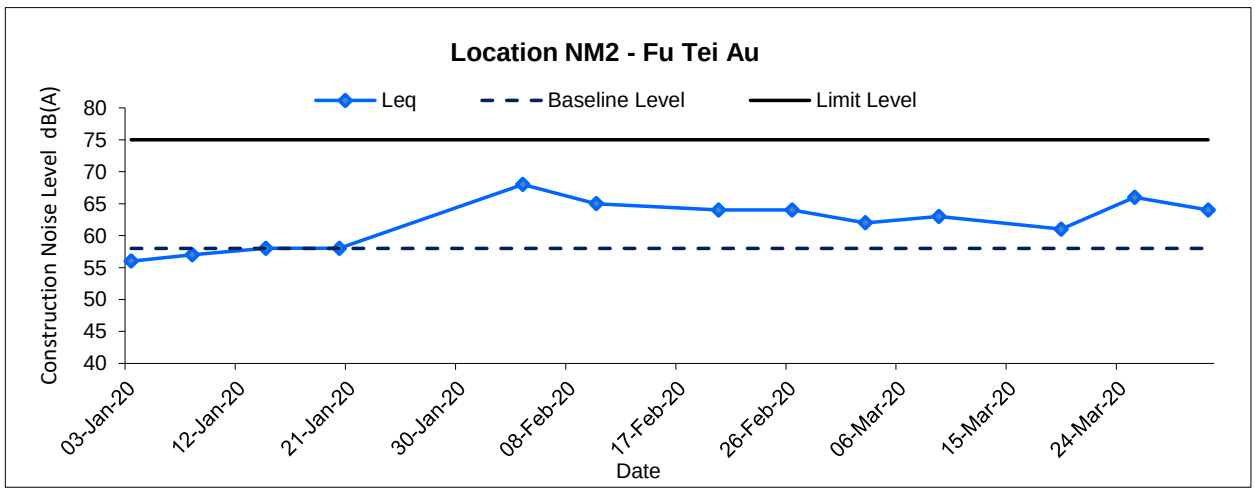
Location NM1 - Wai Loi Tsuen							
Date	Time	Weather	Unit: dB (A) (30-min)				
			Measured Noise Level			Baseline Level	Construction Noise Level
			L_{eq}	L_{10}	L_{90}	L_{eq}	L_{eq}
3-Mar-20	9:00	Fine	58.2	61.3	57.1	63.4	58.2 Measured ≦ Baseline
9-Mar-20	15:30	Cloudy	55.6	57.5	53.0	63.4	55.6 Measured ≦ Baseline
19-Mar-20	10:00	Cloudy	54.3	56.1	51.5	63.4	54.3 Measured ≦ Baseline
25-Mar-20	10:00	Sunny	61.0	63.1	60.0	63.4	61 Measured ≦ Baseline
31-Mar-20	9:30	Rainy	54.3	55.6	51.3	63.4	54.3 Measured ≦ Baseline

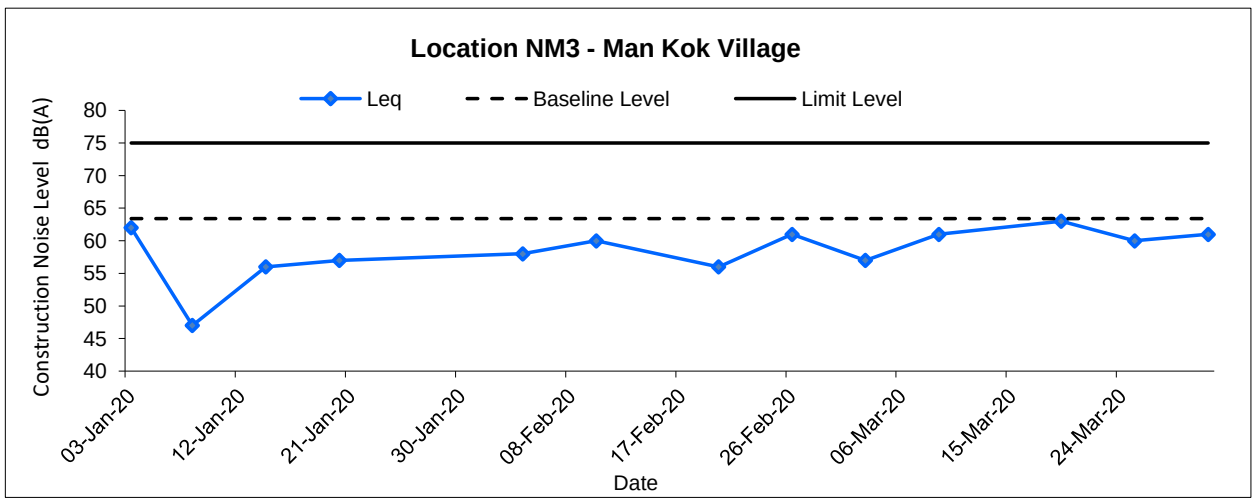
Location NM2 - Fu Tei Au							
Date	Time	Weather	Unit: dB (A) (30-min)				
			Measured Noise Level			Baseline Level	Construction Noise Level
			L_{eq}	L_{10}	L_{90}	L_{eq}	L_{eq}
3-Mar-20	10:00	Fine	63.4	65.5	61.8	58.0	61.9
9-Mar-20	13:30	Cloudy	64.1	66.3	59.9	58.0	62.9
19-Mar-20	14:30	Rainy	62.5	63.7	60.5	58.0	60.6
25-Mar-20	14:00	Sunny	66.4	68.5	62.1	58.0	65.7
31-Mar-20	11:15	Rainy	64.6	67.3	60.5	58.0	63.5

Location NM3 - Man Kok Village							
Date	Time	Weather	Unit: dB (A) (30-min)				
			Measured Noise Level			Baseline Level	Construction Noise Level
			L_{eq}	L_{10}	L_{90}	L_{eq}	L_{eq}
3-Mar-20	11:00	Fine	56.7	58.2	55.2	63.4	56.7 Measured ≦ Baseline
9-Mar-20	14:40	Cloudy	60.7	61.7	53.5	63.4	60.7 Measured ≦ Baseline
19-Mar-20	11:20	Cloudy	62.6	65.4	51.7	63.4	62.6 Measured ≦ Baseline
25-Mar-20	11:00	Sunny	60.1	62.9	58.2	63.4	60.1 Measured ≦ Baseline
31-Mar-20	10:20	Rainy	60.7	63.4	53.6	63.4	60.7 Measured ≦ Baseline

Noise Levels







Title	Date	Project
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 Graphical Presentation of Construction Noise Monitoring Results	Mar 2020	No. MA19019 Appendix H

CINOTECH

APPENDIX I
ECOLOGICAL MONITORING RESULTS AND ANALYSIS

Table I: Recorded Bird Species and their Abundance in the Reporting Month					
Scientific Name	**Common Name**	**Chinese Name**	**Waterbird[(1)]**	**Point Count Abundance**	**Transect Abundance**
Acridotheres cristatellus	Crested Myna	八哥		49	+++++
Actitis hypoleucos	Common Sandpiper	磯鷸	*	7	+
Alcedo atthis	Common Kingfisher	普通翠鳥	*	1	+
Anthus hodgsoni	Olive Backed Pipit	樹鷚		36	+++
Anthus richardi	Richard's Pipit	理氏鷚		0	+
Apus nipalensis	House Swift	小白腰雨燕		43	++
Ardea alba	Great Egret	大白鷺	*	19	++
Ardea cinerea	Grey Heron	蒼鷺	*	29	+++
Ardeola bacchus	Chinese Pond Heron	池鷺	*	27	+++
Bubulcus coromandus	Eastern Cattle Egret	牛背鷺	*	139	+++++
Centropus sinensis	Greater Coucal	褐翅鴉鵑		4	+
Ceryle rudis	Pied Kingfisher	斑魚狗	*	3	+
Copsychus saularis	Magpie Robin	鵲鴝		1	+
Corvus macrorhynchus	Jungle Crow	大嘴烏鴉		12	+
Corvus torquatus	Collared Crow	白頸鴉	*	1	+
Dicrurus macrocercus	Black Drongo	黑卷尾		0	+
Egretta garzetta	Little Egret	小白鷺	*	79	+++++
Eudynamys scolopacea	Common Koel	噪鵑		21	+++
Gallinula chloropus	Common Moorhen	黑水雞	*	0	+
Garrulax perspicillatus	Masked Laughing Thrush	黑臉噪鶥		25	+++++
Glareola maldivarum	Oriental pratincole	普通燕鴴	*	1	+
Hierococcyx sparverioides	Large Hawk Cuckoo	大鷹鵑		15	+
Hirundo rustica	Barn Swallow	家燕		61	+++++
Lonchura punctulata	Spotted Munia	斑文鳥		0	++
Milvus migrans	Black Kite	黑鳶	*	17	+
Motacilla alba	White Wagtail	白鶺鴒		31	++++
Motacilla cinerea	Grey Wagtail	灰鶺鴒		0	+
Myophonus caeruleus	Blue Whistling Thrush	紫嘯鶇		0	+
Orthotomus sutorius	Common Tailorbird	長尾縫葉鶯		9	++
Parus cinereus	Cinereous Tit	蒼背山雀		3	+
Passer montanus	Eurasian Tree Sparrow	樹麻雀		1	+
Phalacrocorax carbo	Great Cormorant	普通鸕鷀	*	9	++
Phoenicurus auroreus	Daurian Redstart	北紅尾鴝		2	+
Phylloscopus borealis	Arctic Warbler	極北柳鶯		0	+
Phylloscopus fuscatus	Dusky Warbler	褐柳鶯		6	+
Phylloscopus inornatus	Yellow-browed Warbler	黃眉柳鶯		26	++
Phylloscopus proregulus	Pallas's Leaf Warbler	黃腰柳鶯		3	+
Pica pica	Magpie	喜鵲		11	++
Prinia flaviventris	Yellow-bellied Prinia	黃腹鷦鶯		4	+
Prinia inornata	Plain Prinia	純色鷦鶯		1	+
Pycnonotus jocosus	Crested bulbul	紅耳鵯		17	++
Pycnonotus sinensis	Chinese Bulbul	白頭鵯		3	+
Saxicola stejnegeri	Stejneger's Stonechat	黑喉石鴝		2	+
Spilornis cheela	Crested Serpent Eagle	蛇鵰	*	2	+
Streptopelia chinensis	Spotted Dove	珠頸斑鳩		20	++++
Sturnus nigricollis	Black-necked Starling	黑領椋鳥		24	++
Tachybaptus ruficollis	Little Grebe	小鸊鷉	*	3	+
Tringa glareola	Wood Sandpiper	林鷸	*	13	+
Tringa nebularia	Common Greenshank	青腳鷸	*	4	+
Tringa ochropus	Green Sandpiper	白腰草鷸	*	2	+
Urocissa erythrorhyncha	Red-billed Blue Magpie	紅咀藍鵲		6	+
Zosterops japonicus	Japanese White-eye	暗綠繡眼鳥		1	+++
			Total Point Count Abundance	806	
			Total Waterbirds	365	

*For waterbird

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

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

MA19019 - Ecological Monitoring Results

Monitoring Month Mar
Season Winter

Table II : Total Bird Abundance from Point Count						
Survey Information				Total Bird Abundance from Point Count		
No.	Date	Time	Tide Level	Individuals Recorded	Total	Species Recorded
#1	2 Mar 2020	14:30	High	133	**233**	25
		10:00	Low	100		23
#2	10 Mar 2020	12:30	High	94	**158**	25
		9:30	Low	64		19
#3	17 Mar 2020	13:00	High	57	**149**	18
		9:00	Low	92		23
#4	24 Mar 2020	11:00	High	60	**100**	24
		7:30	Low	40		14
#5	30 Mar 2020	10:30	High	65	**168**	20
		8:00	Low	103		28
				Overall Total	**808**	

Table III: Total Waterbird Abundance from Point Count					
Survey Information				Numbers of Waterbirds	
No.	Date	Time	Tide Level	Individuals Recorded	Total
#1	2 Mar 2020	14:30	High	64	**110**
		10:00	Low	46	
#2	10 Mar 2020	12:30	High	57	**90**
		9:30	Low	33	
#3	17 Mar 2020	13:00	High	20	**66**
		9:00	Low	46	
#4	24 Mar 2020	11:00	High	28	**54**
		7:30	Low	26	
#5	30 Mar 2020	10:30	High	17	**45**
		8:00	Low	28	
				Overall Total	**365**
				Average	**73**

Table IV: T-Test Analysis for All Waterbirds

Baseline Data
Monthly Average Abundance (Mar) 48.13
Seasonal Average Abundance (Winter) 62.15

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

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

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

If t-test value is smaller than the critical value, then rejects H_0.

For the data in the reporting month, the critical values are:
Crit. Value = -2.132 (95% Confidence Level)
Crit. Value = -3.747 (99% Confidence Level)

			Confidence Level	
T-values of Data in Reporting Month			95%	99%
Abundance	Monthly	2.227	✓	✓
	Season	0.971	✓	✓
		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.

MA19019 - Ecological Monitoring Results

Monitoring Month Mar
Season Winter

Table V: Abundance of Representative Waterbirds from Point Count

Representative Species			Recorded Abundance							Baseline Data	
Species Name	**Common Name**	**Chinese Name**	**2 Mar 2020**	**10 Mar 2020**	**17 Mar 2020**	**24 Mar 2020**	**30 Mar 2020**	**Total**	**Average**	**Avg (Mar)**	**Avg (Winter)**
Egretta garzetta	Little Egret	小白鷺	17	15	18	16	13	79	16	19	15
Ardea cinerea	Grey Heron	蒼鷺	27	0	2	0	0	29	6	3	13
Ardeola bacchus	Chinese Pond Heron	池鷺	11	4	3	3	6	27	5	9	9
Phalacrocorax carbo	Great Cormorant	普通鸕鷀	4	1	1	3	0	9	2	3	7
Ardea alba	Great Egret	大白鷺	5	5	2	4	3	19	4	4	5
Bubulcus coromandus	Eastern Cattle Egret	牛背鷺	35	44	33	16	11	139	28	9	4

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

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

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

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

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

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

Crit. Value = -2.132 (95% Confidence Level)

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

Representative Species			T-value	Confidence Level		T-value	Confidence Level		Overall
Species Name	Common Name	Chinese Name	Monthly	95%	99%	Seasonal	95%	99%	
Egretta garzetta	Little Egret	小白鷺	-3.978	✕	✕	1.347	✓	✓	✓
Ardea cinerea	Grey Heron	蒼鷺	0.611	✓	✓	-1.374	✓	✓	✓
Ardeola bacchus	Chinese Pond Heron	池鷺	-2.543	✕	✓	-2.548	✕	✓	Action Level
Phalacrocorax carbo	Great Cormorant	普通鸕鷀	-1.179	✓	✓	-7.251	✕	✕	✓
Ardea alba	Great Egret	大白鷺	-0.152	✓	✓	-2.586	✕	✓	✓
Bubulcus coromandus	Eastern Cattle Egret	牛背鷺	3.008	✓	✓	3.833	✓	✓	✓

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 J
PHOTO RECORDS OF ECOLOGICAL MONITORING

Appendix J - Photo Records of Ecological Monitoring

Part A - Conditions of Rivers

Sheung Yue River (Taken on 2 Mar 20)

Ng Tung River (Taken on 2 Mar 20)

Shek Sheung River (Taken on 10 Mar 20)

Part B – Waterbird Species

	
Actitis hypoleucos (Taken on 24 Mar 20)	*Ardea alba* (Taken on 10 Mar 20)
	
Ardea cinerea (Taken on 2 Mar 20)	*Ardeola bacchus* (Taken on 2 Mar 20)
	
Bubulcus coromandus (Taken on 2 Mar 20)	*Buteo japonicas* (Taken on 24 Mar 20)

	
Corvus torquatus (Taken on 2 Mar 20)	*Egretta garzetta* (Taken on 2 Mar 20)
	
Gallinula chloropus (Taken on 16 Mar 20)	*Glareola maldivarum* (Taken on 24 Mar 20)
	
Milvus migrans (Taken on 2 Mar 20)	*Phalacrocorax carbo* (Taken on 10 Mar 20)

	
Spilornis cheela (Taken on 25 Mar 20)	*Tachybaptus ruficollis* (Taken on 2 Mar 20)
	
Tringa nebularia (Taken on 2 Mar 20)	

Part C – Human Activities & Site Conditions

	
Fishing (Taken on 24 Mar 20)	Dump trucks (Taken on 10 Mar 20)
	
Excavation (Taken on 24 Mar 20)	Dogs (Taken on 10 Mar 20)
	
Muddy water (Taken on 10 Mar 20)	Vibration Hammer (Taken on 2 Mar 20)

APPENDIX K
SITE AUDIT SUMMARY

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	200303
Date	3 March 2020
Time	14:15 – 15:40

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Water Quality	
200225-R2	• Muddy water was accumulated at the eastern side of Portion C. It should be removed or pumped through the sedimentation tank to prevent leaking into the river nearby.	B8
	C. Air Quality	
	• No environmental deficiency was identified during site inspection.	
	D. Noise	
	• No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during site inspection.	
	F. Ecology and Fisheries	
	• No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during site inspection.	
	H. Permits /Licences	
	• No environmental deficiency was identified during site inspection.	
	I. Others	
	Following up on the previous site inspection (ref no.: 200225): Item 200225-R1 was rectified/improved by the Contractor.	

	Name	Signature	Date
Recorded by	Miss Echo Hung		3 March 2020
Checked by	Miss Jennifer Mok		4 March 2020

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	200312
Date	12 March 2020
Time	14:00 – 15:00

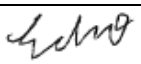
Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Water Quality	
	• No environmental deficiency was identified during site inspection.	
	C. Air Quality	
200312-R1	• Dusty materials were generated on the haul road when truck drove by at Portion C. Contractor is reminded to conduct water spraying more frequently to avoid dust emission.	C5
	D. Noise	
	• No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during site inspection.	
	F. Ecology and Fisheries	
	• No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during site inspection.	
	H. Permits /Licences	
	• No environmental deficiency was identified during site inspection.	
	I. Others	
	Following up on the previous site inspection (ref no.: 200303): Item 200225-R2 was rectified/improved by the Contractor.	

	Name	Signature	Date
Recorded by	Miss Echo Hung		12 March 2020
Checked by	Miss Jennifer Mok		13 March 2020

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	200317
Date	17 March 2020
Time	14:00 – 15:30

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Water Quality	
	• No environmental deficiency was identified during site inspection.	
	C. Air Quality	
200317-R1	• The top of the cement mixing facility was not covered at Portion A. The Contractor should entirely cover the cement mixing to avoid dust generation.	C11
	D. Noise	
	• No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during site inspection.	
	F. Ecology and Fisheries	
	• No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during site inspection.	
	H. Permits /Licences	
	• No environmental deficiency was identified during site inspection.	
	I. Others	
	Following up on the previous site inspection (ref no.: 200312): Item 200312-R1 was rectified/improved by the Contractor.	

	Name	Signature	Date
Recorded by	Miss Echo Hung		17 March 2020
Checked by	Miss Jennifer Mok		18 March 2020

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	200324
Date	24 March 2020
Time	14:00 – 15:45

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Water Quality	
200324-R1	• Ponding water accumulated at Portion A should be removed or pumped through the sedimentation tank.	B8
	C. Air Quality	
	• No environmental deficiency was identified during site inspection.	
	D. Noise	
	• No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
200324-R2	• Waste deposited at the eastern side of Portion C should be cleared as soon as possible.	E2iii
	F. Ecology and Fisheries	
	• No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during site inspection.	
	H. Permits /Licences	
	• No environmental deficiency was identified during site inspection.	
	I. Others	
	Following up on the previous site inspection (ref no.: 200317): Item 200317-R1 was rectified/improved by the Contractor.	

	Name	Signature	Date
Recorded by	Miss Echo Hung		24 March 2020
Checked by	Miss Jennifer Mok		25 March 2020

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	200331
Date	31 March 2020
Time	14:00 – 16:00

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Water Quality	
200331-R1	• Leakage of water pump drainage was observed at several locations of Portion C. The Contractor should repair the water pump drainage as soon as possible to prevent water accumulation.	B2
	C. Air Quality	
	• No environmental deficiency was identified during site inspection.	
	D. Noise	
	• No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during site inspection.	
	F. Ecology and Fisheries	
	• No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during site inspection.	
	H. Permits /Licences	
	• No environmental deficiency was identified during site inspection.	
	I. Others	
	Following up on the previous site inspection (ref no.: 200324): Items 200324-R1 & 200324-R2 were rectified/improved by the Contractor.	

	Name	Signature	Date
Recorded by	Miss Echo Hung		31 March 2020
Checked by	Mr. Samson Yuen		1 April 2020

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	200303
Date	3 March 2020
Time	14:15 – 15:40

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Water Quality	
	• No environmental deficiency was identified during site inspection.	
	C. Air Quality	
200303-R1	• The haul road was dirty and dry at Portion B. The Contractor should clean the road to prevent excessive dust.	C5
200303-R2	• Stockpile should be covered by impervious materials to avoid dust generation at Portion B.	C1
	D. Noise	
	• No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during site inspection.	
	F. Ecology and Fisheries	
	• No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during site inspection.	
	H. Permits /Licences	
	• No environmental deficiency was identified during site inspection.	
	I. Others	
	Following up on the previous site inspection (ref no.: 200225): Item 200225-R1 was rectified/improved by the Contractor.	

	Name	Signature	Date
Recorded by	Miss Echo Hung		3 March 2020
Checked by	Miss Jennifer Mok		4 March 2020

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	200312
Date	12 March 2020
Time	14:00 – 15:00

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Water Quality	
	• No environmental deficiency was identified during site inspection.	
	C. Air Quality	
	• No environmental deficiency was identified during site inspection.	
	D. Noise	
	• No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during site inspection.	
	F. Ecology and Fisheries	
	• No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during site inspection.	
	H. Permits /Licences	
	• No environmental deficiency was identified during site inspection.	
	I. Others	
	Following up on the previous site inspection (ref no.: 200303): Items 200303-R1 & 200303-R2 were rectified/improved by the Contractor.	

	Name	Signature	Date
Recorded by	Miss Echo Hung		12 March 2020
Checked by	Miss Jennifer Mok		13 March 2020

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	200317
Date	17 March 2020
Time	14:00 – 15:30

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Water Quality	
200317-R1	• The gully at Portion B should be covered by impervious sheets to prevent muddy water and soil flowing into the drainage system.	B7
	C. Air Quality	
	• No environmental deficiency was identified during site inspection.	
	D. Noise	
	• No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during site inspection.	
	F. Ecology and Fisheries	
	• No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during site inspection.	
	H. Permits /Licences	
	• No environmental deficiency was identified during site inspection.	
	I. Others	
	No follow-up items from the previous site inspection (ref no.: 200312).	

	Name	Signature	Date
Recorded by	Miss Echo Hung		17 March 2020
Checked by	Miss Jennifer Mok		18 March 2020

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	200324
Date	24 March 2020
Time	14:00 – 15:45

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Water Quality	
	• No environmental deficiency was identified during site inspection.	
	C. Air Quality	
200324-R1	• The haul road at Portion B was dirty and dusty. The Contractor should clean and wet the haul road as soon as possible to prevent dust generation.	C5
	D. Noise	
	• No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during site inspection.	
	F. Ecology and Fisheries	
	• No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during site inspection.	
	H. Permits /Licences	
	• No environmental deficiency was identified during site inspection.	
	I. Others	
	Following up on the previous site inspection (ref no.: 200317): Item 200317-R1 was rectified/improved by the Contractor.	

	Name	Signature	Date
Recorded by	Miss Echo Hung		24 March 2020
Checked by	Miss Jennifer Mok		25 March 2020

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	200331
Date	31 March 2020
Time	14:00 – 16:00

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Water Quality	
	• No environmental deficiency was identified during site inspection.	
	C. Air Quality	
	• No environmental deficiency was identified during site inspection.	
	D. Noise	
	• No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during site inspection.	
	F. Ecology and Fisheries	
	• No environmental deficiency was identified during site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during site inspection.	
	H. Permits /Licences	
	• No environmental deficiency was identified during site inspection.	
	I. Others	
	Following up on the previous site inspection (ref no.: 200324): Item 200324-R1 was rectified/improved by the Contractor.	

	Name	Signature	Date
Recorded by	Miss Echo Hung		31 March 2020
Checked by	Mr. Samson Yuen		1 April 2020

APPENDIX L
WASTE FLOW TABLE

Name of Department: DSD

Contract No. DC/2018/06

Monthly Summary Waste Flow Table for 2020 (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	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 '000m^3)	(in '000m^3)
Jan	0.376	0.000	0.000	0.000	0.376	0.000	0.000	0.000	0.000	0.000	0.040
Feb	1.122	0.000	0.000	0.250	0.872	0.000	0.000	0.000	0.000	0.000	0.082
Mar	2.289	0.000	0.000	0.350	1.939	0.000	0.000	0.000	0.000	0.000	0.057
Apr											
May											
Jun											
Sub-total	3.787	0.000	0.000	0.600	3.187	0.000	0.000	0.000	0.000	0.000	0.179
Jul											
Aug											
Sep											
Oct											
Nov											
Dec											
Total	3.787	0.000	0.000	0.600	3.187	0.000	0.000	0.000	0.000	0.000	0.179

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 mixed rock and soil is 1.9 ton/m3.
4. Assume the density of slurry and bentonite is 2.8 ton/m3.
5. The slurry and bentonite are disposed at Tseung Kwan O Area 137 Fill Bank.
6. The non-inert C&D wastes are disposed at NENT.

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**	**Diposal as Public Fill**	**Imported Fill**	**Metals**	**Paper/card board packaging**	**Plastics (see Note 2)**	**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 '000m^3)**	**(in '000m^3)**
26.2	0.0	6.3	0.0	20.0	1.5	50.0	50.0	20.0	0.1	0.4

Notes:

(1) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.

(2) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material.

(3) 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 if equal to or exceed 50,000 m^3.

(4) The density of soil fill is 2.24 ton/m^3.

0

SUMMARY TABLE FOR WORK PROCESSES OR ACTIVITIES REQUIRING TIMBER FOR TEMPORARY WORKS

Contract No.: DC/2018/06

Contract Title: Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1 Civil Works for Sludge Treatment Facilities and 132kV Primary Substation

Item No.	Month.	Description of Works Process or Activity [see note (a) below]	Justifications for Using Timber in Temporary Construction Works	Est. Quantities of Timber Used (m^3)	Est. Quantities of Timber reused (m^3)	Actual Quantities Used (m^3)	Remarks
1	Oct-19	N/A	N/A	0	0	0	N/A
2	Nov-19	N/A	N/A	0	0	0	N/A
3	Dec-19	N/A	N/A	0	0	0	N/A
4	Jan-20	N/A	N/A	0	0	0	N/A
5	Feb-20	N/A	N/A	0	0	0	N/A
6	Mar-20	N/A	N/A	0	0	0	N/A
			Total Estimated Quantity of Timber Used	0			

Notes: (a) The Contractor shall list out all the work items requiring timber for use in temporary construction works. Several minor work items may be grouped into one for ease of updating.

Name of Department: DSD

Contract No. DC/2018/07

Monthly Summary Waste Flow Table for 2020 (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	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 kg)	(in '000kg)
Jan	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.760
Feb	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.490
Mar	150.170	0.000	0.000	0.000	150.170	0.000	0.000	0.000	0.000	0.000	0.000
Apr											
May											
Jun											
Sub-total	150.170	0.000	0.000	0.000	150.170	0.000	0.000	0.000	0.000	0.000	10.250
Jul											
Aug											
Sep											
Oct											
Nov											
Dec											
Total	150.170	0.000	0.000	0.000	150.170	0.000	0.000	0.000	0.000	0.000	10.250

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 mixed rock and soil is 1.9 ton/m3.
4. Assume the density of slurry and bentonite is 2.8 ton/m3.
5. The slurry and bentonite are disposed at Tseung Kwan O Area 137 Fill Bank.
6. The non-inert C&D wastes are disposed at NENT.

Environmental Aspect Evaluation Form

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

Monthly Summary Waste Flow Table for 2020 (year)

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly				
	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 3)	Chemical Waste	Others, e.g. general refuse
	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m^3)
Jan	0	0	0	0	0	0	0	0	0	0	0
Feb	0	0	0	0	0	0	0	0	0	0	0
Mar	0	0	0	0	0	0	0	0	0	0	0
Apr	-	-	-	-	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-	-	-	-	-
June	-	-	-	-	-	-	-	-	-	-	-
Sub-total	0	0	0	0	0	0	0	0	0	0	0
July	-	-	-	-	-	-	-	-	-	-	-
Aug	-	-	-	-	-	-	-	-	-	-	-
Sept	-	-	-	-	-	-	-	-	-	-	-
Oct											
Nov											
Dec											
Total	0	0	0	0	0	0	0	0	0	0	0

Environmental Aspect Evaluation Form

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 m^3. (PS Clause 6.21.7(4)(b) refers)

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

Monthly Summary Waste Flow Table for 2020 (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 '000m^3)	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m^3)
Jan	0	0	0	0	0	0	0	0	0	0	0
Feb	0	0	0	0	0	0	0	0	0	0	0
Mar	0	0	0	0	0	0	0	0	0	0	0
Apr											
May											
June											
Sub-total	0	0	0	0	0	0	0	0	0	0	0
July											
Aug											
Sept											
Oct											
Nov											
Dec											
Total	0	0	0	0	0	0	0	0	0	0	0

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
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APPENDIX M
EVENT AND ACTION PLANS

Appendix M - Event Action Plans

Table M-1 Event/Action Plan for Air Quality

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

Appendix M - Event Action Plans

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

Appendix M - Event Action Plans

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

Appendix M - Event Action Plans

Table M-2 Event/Action Plan for Construction Noise

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

Appendix M - Event Action Plans

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

Appendix M - Event Action Plans

Table M-3 Event/Action Plan for Ecology

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

Appendix M - Event Action Plans

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

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

Appendix M - Event Action Plans

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

APPENDIX N
ENVIRONMENTAL MITIGATION IMPLEMENTATION SCHEDULE (EMIS)

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

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

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	What requirements or standards for the measure to achieve	Status
Noise Impact							
S3.2.1.1	Use of movable barrier, enclosure, acoustic mat and quiet plant. Use of wooden frames barrier with a small-cantilevered upper portion of superficial density not less than 14kg/m² on a skid footing with 25mm thick internal sound absorptive lining.	To minimize construction noise impact arising from the Project at the affected noise sensitive receivers (NSRs)	Contractor	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	EIAO-TM, Noise Control Ordinance (NCO)	N/A
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 bunded. Stockpiles should be properly covered by impermeable sheeting to reduce dust emission during dry season or contaminated run-off during rainy season. Watering should be avoided on stockpiles of contaminated soil to minimize contaminated runoff and construction materials should be properly covered and located away from nearby water bodies; and						*
	Supply of suitable clean backfill material after excavation, if required.						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	Portable chemical toilets and sewage holding tanks should be provided for handling the construction sewage generated by the workforce. A licensed Contractor should be employed to provide appropriate and adequate portable toilets and be responsible for appropriate disposal and maintenance.	Handling of site sewage	Contractors	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	EIAO-TM, WPCO, EIAO	^
	Notices should be posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the nearby environment during the construction phase of the Project. Regular environmental audit on construction site should be conducted in order to provide an effective control of any malpractices and achieve continual improvement of environmental performance on site. It is anticipated that sewage generation during the construction phase of the Project would not cause water quality impact after undertaking all required measures						^

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	What requirements or standards for the measure to achieve	Status
Waste Management							
S6.2.2.1	Nomination of an approved person, such as a site manager, to be responsible for the implementation of good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site;	Minimize waste generation during construction	Contractor	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	Waste Disposal Ordinance (WDO)	^
	Training of site personnel in site cleanliness, appropriate waste management procedures and concepts of waste reduction, reuse and recycling;						^
	Provision of sufficient waste disposal points and regular collection for disposal;						^
	Appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers;						^
	Regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors;						^
	An Environmental Management Plan (EMP) should be prepared by the contractor and submitted to the Supervisor for approval.						N/A
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	For areas unavoidably disturbed by the Project on a short term basis e.g. works areas, the general principle to try and restore these to their former state to suit future land use, should be adhered to.	Minimize the impact to the landscape and visual	Contractor	Work Sites	Prior to construction and construction phase		N/A
	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.						N/A
S7.3.2.1	MM4 – Tree Protection & Preservation Existing trees to be retained within the Project Site should be carefully protected during construction. In particular Old and Valuable Trees (OVTs) will be preserved according to ETWB TC (Works) No. 29/2004. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in Contractor's works areas. A detailed tree survey will be carried out for the Tree Removal Application (TRA) process which will be carried out at the later detailed design stage of the Project. The detailed tree survey will propose which trees should be retained, transplanted or felled and will include details of tree protection measures for those trees to be retained.	Protect and Preserve Trees	Designer / Contractor	Work Sites	Prior to construction and construction phase	ETWB TCW No. 29/2004 and DEVB TC(W) No.7/2015	^

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	What requirements or standards for the measure to achieve	Status
S7.3.2.1	MM5 - Tree Transplantation Trees unavoidably affected by the Project works should be transplanted where practical. Trees should be transplanted straight to their final receptor site and not held in a temporary nursery as far as possible. A detailed Tree Transplanting Specification shall be provided in the Contract Specification, where applicable. Sufficient time for necessary tree root and crown preparation periods shall be allowed in the project programme. A detailed transplanting proposal will be submitted to relevant government departments for approval in accordance with ETWBTC No. 2/2004 and DEVB TC(W) No. 7/2015 and final locations of transplanted trees should be agreed prior to commencement of the work. For trees associated with highways e.g. roadside planting along highways, that are unavoidably affected and should be transplanted, HyD HQ/GN/13 'Interim Guidelines for Tree Transplanting Works under Highways Department's Vegetation Maintenance Ambit' should be referred to.	Transplant Trees where suitable for transplantation	Designer / Contractor	Work Sites where possible. Otherwise consider offsite locations	Prior to construction, construction phase and operation phase	DEVB TC(W) No. 7/2015 and ETWB TCW No.2/2004 HyD HQ/GN/13 Interim Guidelines for Tree Transplanting Works under Highways Department's Vegetation Maintenance Ambit	N/A
S7.3.2.1	MM6 - Slope Landscaping Site formation should be reduced as far as possible. Hydroseeding of modified slopes should be done as soon as grading works are completed to prevent erosion and subsequent loss of landscape recourses and charter. Woodland tree seedings and/or shrubs should be planted where slope gradient and site conditions allow.	To avoid substantial slope cutting and fill slopes. To prevent erosion and subsequent loss of landscape resources and character. To ensure man-made slopes are as visually amenable as possible.	Designer / Contractor	Work Sites	Prior to construction, construction phase and operation phase	GEO Publication (1999) - Use of Vegetation as Surface Protection on Slope; GEO Publication No. 1/2011-Technical Guidelines on Landscape Treatment for Slopes	N/A
	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.						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	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 *Melastoma malabathricum, Diospyros vaccinioides, Gardenia jasminoides, Ixora chinensis, Ligustrum sinense, Litsea rotundifolia, Melastoma dodecandrum, Atalantia buxifolia, Rhodomyrtus tomentosa, Rhaphiolepis indica,* and *Rhododendron simsii* are suggested.						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 N/A(1)	Not applicable at this stage; Not observed;
*	Recommendation was made during site audit but improved/retified by the contractor;
#	Recommendation was made during site audit but not yet improved/retified by the contractor;
X	Non-compliance of mitigation measure;
●	Non-compliance but rectified by the contractor.

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

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

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

Reporting Month: March 2020

Log Ref.	Location	Received Date	Details of Complaint/Warning/Summon and Prosecution	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	• 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	Investigation undergoing

Remarks: 1 environmental complaint was received in the reporting period. No warning/summon and prosecution was received in the reporting period.

APPENDIX P
SUMMARY OF EXCEEDANCE

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

Appendix P – Summary of Exceedance

Reporting Month: March 2020

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

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

(C) Exceedance Report for Ecology
One (1) Action Level of ecological monitoring was triggered in the reporting month.
No Limit Level of ecological monitoring was triggered in the reporting month.

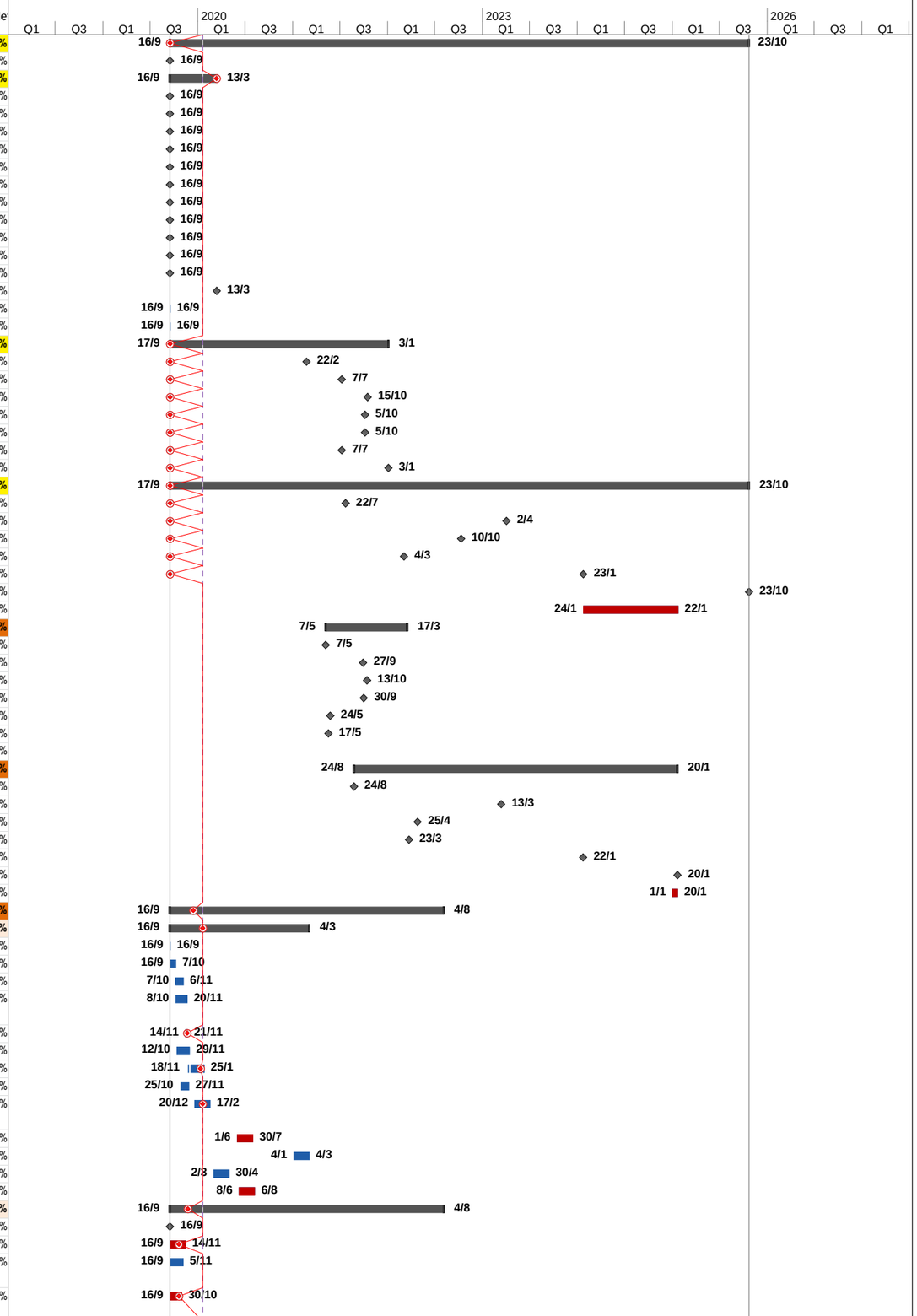
APPENDIX Q
TENTATIVE CONSTRUCTION PROGRAMME

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

Revised Works Programme (Status Date: 20/01/2020)

群利－俊和聯營體
KL－CW JV

ID	KD	Task Name	Duration	Start	Finish	Actual Start	Actual Finish	Total Slack	Predecessors	Successors	% Comple
1		**Contract Dates**	**2229.2 da**	**Mon 16/9/19**	**Thu 23/10/25**	**Mon 16/9/19**	**NA**	**0 days**			**0%**
2		Starting Date	0 days	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	0 days		4,5FS+180 days,6,7,8,9,11,12,1	100%
3		**Access Date (cal. day)**	**180 days**	**Mon 16/9/19**	**Fri 13/3/20**	**Mon 16/9/19**	**NA**	**0 days**			**99%**
4		Portion A-1	0 days	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	0 days	2		100%
5		Portion A-2	0 days	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	0 days	2FS+180 days		100%
6		Portion C-1A	0 days	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	0 days	2		100%
7		Portion C-1B	0 days	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	0 days	2		100%
8		Portion C-2A	0 days	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	0 days	2		100%
9		Portion C-2B	0 days	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	0 days	2		100%
10		Portion C-2C	0 days	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	0 days	2		100%
11		Portion C-2D	0 days	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	0 days	2		100%
12		Portion C-3	0 days	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	0 days	2		100%
13		Portion C-4	0 days	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	0 days	2		100%
14		Portion C-5	0 days	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	0 days	2		100%
15		Portion C-6	0 days	Fri 13/3/20	Fri 13/3/20	NA	NA	0 days	2FS+180 days	311,303	0%
16		Works Area WA1	1 day	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	0 days	2		100%
17		Works Area WA2-A	1 day	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	0 days	2		100%
18		**Key Date (cal. day)**	**840 days**	**Tue 17/9/19**	**Mon 3/1/22**	**NA**	**NA**	**0 days**			**0%**
19		KD1A (525 days after starting date)	525 days	Tue 17/9/19	Mon 22/2/21	NA	NA	0 days			0%
20		KD2A (660 days after starting date)	660 days	Tue 17/9/19	Wed 7/7/21	NA	NA	0 days			0%
21		KD3A (760 days after starting date)	760 days	Tue 17/9/19	Fri 15/10/21	NA	NA	0 days			0%
22		KD3B (750 days after starting date)	750 days	Tue 17/9/19	Tue 5/10/21	NA	NA	0 days			0%
23		KD3C (750 days after starting date)	750 days	Tue 17/9/19	Tue 5/10/21	NA	NA	0 days			0%
24		KD3D (660 days after starting date)	660 days	Tue 17/9/19	Wed 7/7/21	NA	NA	0 days			0%
25		KD3E (840 days after starting date)	840 days	Tue 17/9/19	Mon 3/1/22	NA	NA	0 days			0%
26		**Completion Date (cal. day)**	**2228.2 da**	**Tue 17/9/19**	**Thu 23/10/25**	**NA**	**NA**	**0 days**			**0%**
27		Section 1 of Works (675 days after starting date)	675 days	Tue 17/9/19	Thu 22/7/21	NA	NA	0 days			0%
28		Section 2 of Works (1,295 days after starting date)	1294 days	Tue 17/9/19	Sun 2/4/23	NA	NA	0 days			0%
29		Section 3 of Works (1,120 days after starting date)	1120 days	Tue 17/9/19	Mon 10/10/22	NA	NA	0 days			0%
30		Section 4 of Works (900 days after starting date)	900 days	Tue 17/9/19	Fri 4/3/22	NA	NA	0 days			0%
31		Section 5 of Works (1,590 days after starting date)	1590 days	Tue 17/9/19	Tue 23/1/24	NA	NA	0 days		32,33	0%
32		Defect Liability Period	365 days	Wed 24/1/24	Thu 23/10/25	NA	NA	0 days	31		0%
33		Soft Landscape Establishment Works	365 days	Wed 24/1/24	Wed 22/1/25	NA	NA	0 days	31		0%
34	*	**Planned Completion - Key Date (cal. day)**	**314 days**	**Fri 7/5/21**	**Thu 17/3/22**	**NA**	**NA**	**-74.8 days**			**0%**
35	KD1A	KD1A (525 days after starting date)	0 days	Fri 7/5/21	Fri 7/5/21	NA	NA	-74.8 days	140FF,138FF,330,		0%
36	KD2A	KD2A (660 days after starting date)	0 days	Mon 27/9/21	Mon 27/9/21	NA	NA	-83 days	366FF		0%
37	KD3A	KD3A (760 days after starting date)	0 days	Wed 13/10/21	Wed 13/10/21	NA	NA	0 days	180FF,181FF		0%
38	KD3B	KD3B (750 days after starting date)	0 days	Thu 30/9/21	Thu 30/9/21	NA	NA	4 days	198FF,199FF		0%
39	KD3C	KD3C (750 days after starting date)	0 days	Mon 24/5/21	Mon 24/5/21	NA	NA	133 days	210FF,211FF		0%
40	KD3D	KD3D (660 days after starting date)	0 days	Mon 17/5/21	Mon 17/5/21	NA	NA	50 days	236FF,237FF		0%
41	KD3E	KD3E (840 days after starting date)	0 days	Thu 17/3/22	Thu 17/3/22	NA	NA	-73.8 days	253FF,248FF,284F		0%
42	*	**Planned Completion - Section of the Works (cal. day)**	**1245.2 da**	**Tue 24/8/21**	**Mon 20/1/25**	**NA**	**NA**	**-33.8 days**			**0%**
43	SW1	Section 1 of Works (675 days after starting date)	0 days	Tue 24/8/21	Tue 24/8/21	NA	NA	-33.8 days	142FF,309FF,141F		0%
44	SW2	Section 2 of Works (1,295 days after starting date)	0 days	Mon 13/3/23	Mon 13/3/23	NA	NA	20 days	371FF,368FF,370F		0%
45	SW3	Section 3 of Works (1,120 days after starting date)	0 days	Mon 25/4/22	Mon 25/4/22	NA	NA	167 days	212FF,213FF,238F		0%
46	SW4	Section 4 of Works (900 days after starting date)	0 days	Wed 23/3/22	Wed 23/3/22	NA	NA	-20 days	269FF,273FF,304F		0%
47	SW5	Section 5 of Works (1,590 days after starting date)	0 days	Mon 22/1/24	Mon 22/1/24	NA	NA	0 days	341FF,339FF,340F		0%
48		Defect Liability Period	0 days	Mon 20/1/25	Mon 20/1/25	NA	NA	0 days	343FF		0%
49		Soft Landscape Establishment Works	20 days	Wed 1/1/25	Mon 20/1/25	NA	NA	0 days	343FF		0%
50		**Submissions (cal. day)**	**1054 days**	**Mon 16/9/19**	**Thu 4/8/22**	**Mon 16/9/19**	**NA**	**20 days**			**62%**
51		**Subletting Package**	**536 days**	**Mon 16/9/19**	**Thu 4/3/21**	**Mon 16/9/19**	**NA**	**63.8 days**			**52%**
52		Prepare & Submit Subletting Procedures	1 day	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	0 days	2	53	100%
53		PM Review & Accept Subletting Procedures	21 days	Mon 16/9/19	Mon 7/10/19	Mon 16/9/19	Mon 7/10/19	0 days	52	55,57,54,56	100%
54		Subletting for Preliminary Works (Instrumentation Monitoring etc.)	30 days	Mon 7/10/19	Wed 6/11/19	Mon 7/10/19	Wed 6/11/19	0 days	53	311	100%
55		Subletting for Drainage Diversion Works for UV System no.1& Effluent Pumping Station No.1	44 days	Tue 8/10/19	Wed 20/11/19	Tue 8/10/19	Wed 20/11/19	0 days	53	308	100%
56		Subletting for the Temporary Site accommodation (On hold)	8 days	Thu 14/11/19	Thu 21/11/19	Thu 14/11/19	NA	32 days	53	111	99%
57		Subletting for Pre-drilling Works	49 days	Sat 12/10/19	Fri 29/11/19	Sat 12/10/19	Fri 29/11/19	0 days	53	58SS+15 days,59SS+15 days,1	100%
58		Subletting for Pre-bored Socketed Steel H-Pile	45 days	Mon 18/11/19	Sat 25/1/20	Mon 18/11/19	NA	7.25 days	57SS+15 days	355,150,191,207,220,230,245,1	90%
59		Subletting for Contractor's Designer for Temporary Works	32 days	Fri 25/10/19	Wed 27/11/19	Fri 25/10/19	Wed 27/11/19	0 days	57SS+15 days	61,60,74,62,63,64	100%
60		Subletting for ELS Works	60 days	Fri 20/12/19	Mon 17/2/20	Fri 20/12/19	NA	105 days	59	127,154,160,166,172,179,193,2	80%
61		Subletting for R.C Works	60 days	Mon 1/6/20	Thu 30/7/20	NA	NA	-4 days	59	128,194,210,223,359,272,252,2	0%
62		Subletting for ABWS & BS Works	60 days	Mon 4/1/21	Thu 4/3/21	NA	NA	63.8 days	59	142,184,201,213,224,239,254,2	0%
63		Subletting for Pipeworks, Utilities, and Roadworks	60 days	Mon 2/3/20	Thu 30/4/20	NA	NA	227 days	59	336,333,334,335,332	0%
64		Subletting for Hard Landscape, Soft Landscape, and others	60 days	Mon 8/6/20	Thu 6/8/20	NA	NA	0 days	59	339,340,341,343	0%
65		**Statutory Submission, Submission & Approval**	**1054 days**	**Mon 16/9/19**	**Thu 4/8/22**	**Mon 16/9/19**	**NA**	**20 days**			**82%**
66		Prepare and Submit Subcontractor Management Plan (SMP)	0 days	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	0 days	2		100%
67		Prepare and Submit Interface Management Plan	60 days	Mon 16/9/19	Thu 14/11/19	Mon 16/9/19	NA	0 days	2		58%
68		Prepare TTA Plan, submit & approve for footpath for Stage 1 - Drainage Diversion	51 days	Mon 16/9/19	Tue 5/11/19	Mon 16/9/19	Tue 5/11/19	0 days	2	308,70	100%
69		Prepare TTA Plan, submit & approve for carriageway at Chuk Wan Road for CLP 13kV substation	45 days	Mon 16/9/19	Wed 30/10/19	Mon 16/9/19	NA	0 days	2		78%



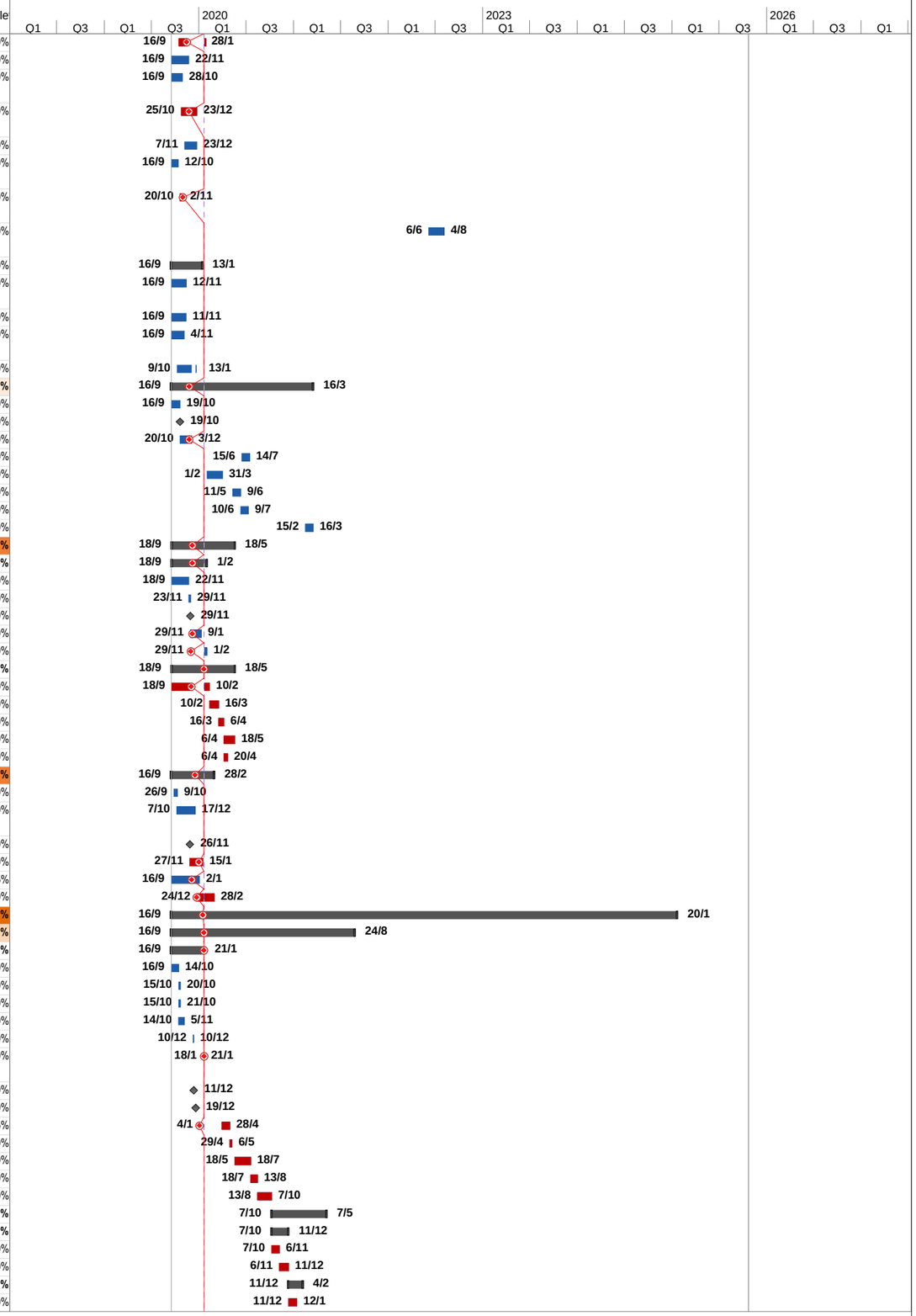
Task ▬ Milestone ◆ Summary ▬ Critical ▬

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

Revised Works Programme (Status Date: 20/01/2020)

群利－俊和聯營體
KL－CW JV

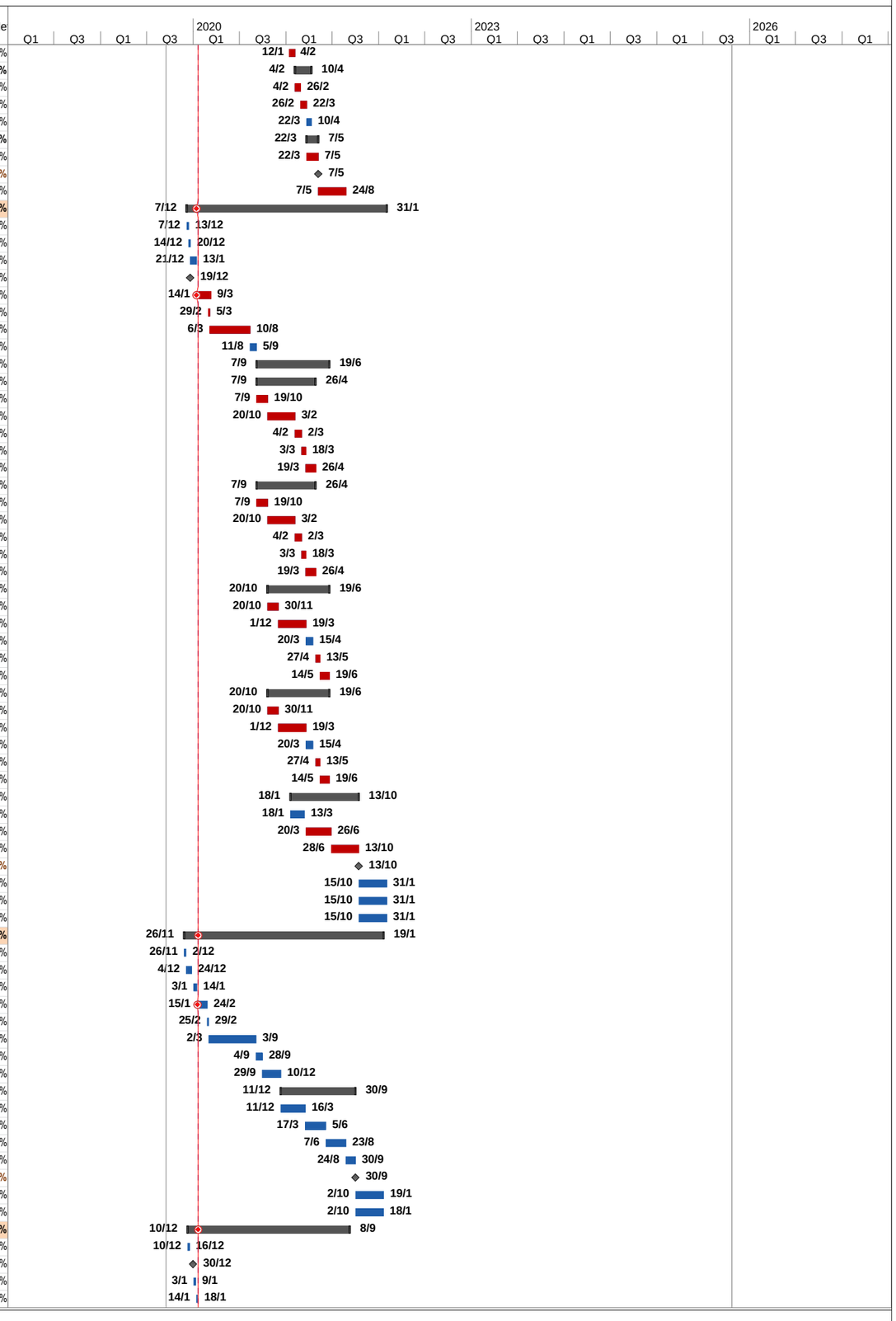
ID	KD	Task Name	Duration	Start	Finish	Actual Start	Actual Finish	Total Slack	Predecessors	Successors	% Complete
70		Excavation Permit Application	38 days	Mon 16/9/19	Tue 28/1/20	Mon 16/9/19	NA	-88.6 days	68	374FS+60 days,373FS+60 days	80%
71		Approval for Lighting Removal at Portion C-1A of the Site from Hyd	68 days	Mon 16/9/19	Fri 22/11/19	Mon 16/9/19	Fri 22/11/19	0 days	2	120	100%
72		Prepare, submit & approve for commencement of Works near MTRCL protection zone at Sun Wan Road from MTRCL	43 days	Mon 16/9/19	Mon 28/10/19	Mon 16/9/19	Mon 28/10/19	0 days	2	353,350	100%
73		Prepare, submit & approve the layout plan of the Temporary Site accommodation (PPMI no.001) (On hold)	60 days	Fri 25/10/19	Mon 23/12/19	Fri 25/10/19	NA	0 days	2	111	50%
74		Prepare, submit & approve the ELS design for deep excavation	47 days	Thu 7/11/19	Mon 23/12/19	Thu 7/11/19	Mon 23/12/19	0 days	59	127,154,160,166,172,179,193,2	100%
75		Prepare, submit & approve the Method Statement for Drainage Diversion Works	27 days	Mon 16/9/19	Sat 12/10/19	Mon 16/9/19	Sat 12/10/19	0 days	2	308,76	100%
76		PM approve the Method Statement for Drainage Diversion Works	14 days	Sun 20/10/19	Sat 2/11/19	Sun 20/10/19	NA	0 days	75		80%
77		Prepare, submit & approve for the FSD submissions for CLP 132kV Substation	60 days	Mon 6/6/22	Thu 4/8/22	NA	NA	20 days		371	0%
78		Environmental Aspect Submissions	120 days	Mon 16/9/19	Mon 13/1/20	Mon 16/9/19	Mon 13/1/20	0 days	2		100%
79		Prepare, submit & approve Site Management Plan for Trip Tricket System	58 days	Mon 16/9/19	Tue 12/11/19	Mon 16/9/19	Tue 12/11/19	0 days	2		100%
80		Prepare, submit & approve Waste Management Plan	57 days	Mon 16/9/19	Mon 11/11/19	Mon 16/9/19	Mon 11/11/19	0 days	2		100%
81		Prepare, submit & approve Environmental Management Plan	50 days	Mon 16/9/19	Mon 4/11/19	Mon 16/9/19	Mon 4/11/19	0 days	2		100%
82		Notification to EPD for Works Commencement	55.44 days	Wed 9/10/19	Mon 13/1/20	Wed 9/10/19	Mon 13/1/20	0 days		308,329	100%
83		**Procurement**	**548 days**	**Mon 16/9/19**	**Tue 16/3/21**	**Mon 16/9/19**	**NA**	**51.8 days**			**27%**
84		Prepare and submit the Procurement Procedure	34 days	Mon 16/9/19	Sat 19/10/19	Mon 16/9/19	Sat 19/10/19	0 days		85	100%
85		PM Review & Accept Procurement Procedure	0 days	Sat 19/10/19	Sat 19/10/19	Sat 19/10/19	Sat 19/10/19	0 days	84	86,87,88	100%
86		Prepare, submit and approve the pipe works material	45 days	Sun 20/10/19	Tue 3/12/19	Sun 20/10/19	NA	44.1 days	85	305	80%
87		Prepare, submit and approve the water proofing material	30 days	Mon 15/6/20	Tue 14/7/20	NA	NA	12 days	85	128,194,210,223,359	0%
88		Prepare, submit and approve the concrete mix	60 days	Sat 1/2/20	Tue 31/3/20	NA	NA	57 days	85	128,194,210,223,359,89	0%
89		Prepare, submit and approve the rebar material	30 days	Mon 11/5/20	Tue 9/6/20	NA	NA	17 days	88	90,128,194,210,223,359	0%
90		Prepare, submit and approve the metal works material	30 days	Wed 10/6/20	Thu 9/7/20	NA	NA	17 days	89	91,128,194,210,223,359	0%
91		Prepare, submit and approve the ABWF works material	30 days	Mon 15/2/21	Tue 16/3/21	NA	NA	51.8 days	90	142,184,201,213,224,239,254,2	0%
92		**Preparation of Cost Saving Design**	**243.8 days**	**Wed 18/9/19**	**Mon 18/5/20**	**Wed 18/9/19**	**NA**	**-77.8 days**			**48%**
93		**Prepare, submit and approve CSD package no.1**	**136.2 days**	**Wed 18/9/19**	**Sat 1/2/20**	**Wed 18/9/19**	**NA**	**10.8 days**	**2**	**150,191**	**65%**
94		Prepare and submit CSD proposal	66 days	Wed 18/9/19	Fri 22/11/19	Wed 18/9/19	Fri 22/11/19	0 days	2	95	100%
95		PM review and approval of CSD	7 days	Sat 23/11/19	Fri 29/11/19	Sat 23/11/19	Fri 29/11/19	0 days	94	96	100%
96		Obtain AIP	0 days	Fri 29/11/19	Fri 29/11/19	Fri 29/11/19	Fri 29/11/19	0 days	95	98,97	100%
97		PM review and approval of CSD	42 days	Fri 29/11/19	Thu 9/1/20	Fri 29/11/19	NA	33 days	96	150,191	20%
98		Obtain DDA	14 days	Fri 29/11/19	Sat 1/2/20	Fri 29/11/19	NA	10.8 days	96	150,191	20%
99		**Prepare, submit and approve CSD package no.2**	**243.8 days**	**Wed 18/9/19**	**Mon 18/5/20**	**Wed 18/9/19**	**NA**	**-77.8 days**	**2**	**125,220**	**37%**
100		Prepare and submit CSD proposal	95 days	Wed 18/9/19	Mon 10/2/20	Wed 18/9/19	NA	-77.8 days	2	101	80%
101		PM review and approval of CSD	35 days	Mon 10/2/20	Mon 16/3/20	NA	NA	-77.8 days	100	102	0%
102		Obtain AIP	21 days	Mon 16/3/20	Mon 6/4/20	NA	NA	-77.8 days	101	104,103	0%
103		PM review and approval of CSD	42 days	Mon 6/4/20	Mon 18/5/20	NA	NA	-77.8 days	102	125,220	0%
104		Obtain DDA	14 days	Mon 6/4/20	Mon 20/4/20	NA	NA	-49.8 days	102	125,220	0%
105		**Site Preliminary Works**	**166 days**	**Mon 16/9/19**	**Fri 28/2/20**	**Mon 16/9/19**	**NA**	**0 days**			**68%**
106		Initial Tree survey and report submission	14 days	Thu 26/9/19	Wed 9/10/19	Thu 26/9/19	Wed 9/10/19	0 days	2	108	100%
107		Prepare and submit and approve the Method Statement of Tree felling & Prunning works	72 days	Mon 7/10/19	Tue 17/12/19	Mon 7/10/19	Tue 17/12/19	0 days	2	108	100%
108		Mobilization for Hoarding	0 days	Thu 21/11/19	Tue 26/11/19	Thu 21/11/19	Tue 26/11/19	0 days	2,116,106,107	109	100%
109		Hoarding Erection at Portion C	40 days	Wed 27/11/19	Wed 15/1/20	Wed 27/11/19	NA	0 days	108	121	70%
110		Utility applications and Connection	89 days	Mon 16/9/19	Thu 2/1/20	Mon 16/9/19	NA	46 days	2	111FF	75%
111		Construction of Site Accommodation in Works Area (On hold)	52 days	Tue 24/12/19	Fri 28/2/20	NA	NA	0 days		73,110FF,56	0%
112	*	**Construction Works of Portion C of the Site**	**1954 days**	**Mon 16/9/19**	**Mon 20/1/25**	**Mon 16/9/19**	**NA**	**0 days**			**1%**
113	*	**UV System No. 1 & Effluent Pumping Station No. 1**	**575.8 days**	**Mon 16/9/19**	**Tue 24/8/21**	**Mon 16/9/19**	**NA**	**0 days**			**12%**
114		**Preliminary Works**	**105 days**	**Mon 16/9/19**	**Tue 21/1/20**	**Mon 16/9/19**	**Tue 21/1/20**	**0 days**			**100%**
115		Site Clearance & Site Set Up	23 days	Mon 16/9/19	Mon 14/10/19	Mon 16/9/19	Mon 14/10/19	0 days	2	116,117,118	100%
116		Tree Felling Works	5 days	Tue 15/10/19	Sun 20/10/19	Tue 15/10/19	Sun 20/10/19	0 days	115	108	100%
117		Trial Pit Excavation & UU Detection Works	6 days	Tue 15/10/19	Mon 21/10/19	Tue 15/10/19	Mon 21/10/19	0 days	115		100%
118		Temporary Footpath Diversion	20 days	Mon 14/10/19	Tue 5/11/19	Mon 14/10/19	Tue 5/11/19	0 days	115	120FS-15 days,119	100%
119		Temporary diverted foorpath open to public	1 day	Tue 10/12/19	Tue 10/12/19	Tue 10/12/19	Tue 10/12/19	0 days	118	308	100%
120		Removal of Existing Street light and Provision of Temporary Street light	3 days	Sat 18/1/20	Tue 21/1/20	Sat 18/1/20	Tue 21/1/20	0 days	71,118FS-15 days	308FS-5 days	100%
121		Predrilling Works (8no, 1rig, 4days/drillhole/rig)	0 days	Tue 3/12/19	Wed 11/12/19	Tue 3/12/19	Wed 11/12/19	0 days	308,331,330,57,10	122FS+14 days	100%
122		Installation of Monitoring Points	0 days	Thu 19/12/19	Thu 19/12/19	Thu 19/12/19	Thu 19/12/19	0 days	121FS+14 days	123	100%
123		Sheetpile Installation (FSP IV, 2200sq.m, 2 Rig, 50sqm/rig/day)	22 days	Sat 4/1/20	Tue 28/4/20	Sat 4/1/20	NA	-51 days	122,308,329	124	5%
124		Setting up plant for pre-bored socked H-pile Installation	5 days	Wed 29/4/20	Wed 6/5/20	NA	NA	-51 days	123	125	0%
125		Pre-bored Socketed H-Pile Installation (34 Nos, 2 Rig, 3days/rig/pile)	51 days	Mon 18/5/20	Sat 18/7/20	NA	NA	-60.8 days	58,124,99,104,103	126	0%
126		Pile Loading Test	26 days	Sat 18/7/20	Thu 13/8/20	NA	NA	-72.8 days	125	127	0%
127		ELS Works (incl. Strut (4-layers) Installation & Excavation (3,700 cu.m)	45 days	Thu 13/8/20	Wed 7/10/20	NA	NA	-60.8 days	74,60,126	130	0%
128		**R.C. Structure (370sq.m)**	**171 days**	**Wed 7/10/20**	**Fri 7/5/21**	**NA**	**NA**	**-60.8 days**	**87,88,89,90,61**		**0%**
129		**Below Ground Level Stage no.1 @ -1.10mPD**	**55 days**	**Wed 7/10/20**	**Fri 11/12/20**	**NA**	**NA**	**-60.8 days**			**0%**
130		Base slab Construction (162 sq.m)	25 days	Wed 7/10/20	Fri 6/11/20	NA	NA	-60.8 days	127	131	0%
131		Walls and Slabs Construction @-1.10mPD to +2.50mPD	30 days	Fri 6/11/20	Fri 11/12/20	NA	NA	-60.8 days	130	133	0%
132		**Below Ground Level Stage no.2 @ +1.50mPD**	**44 days**	**Fri 11/12/20**	**Thu 4/2/21**	**NA**	**NA**	**-60.8 days**			**0%**
133		Base slab Construction (170sq.m)	24 days	Fri 11/12/20	Tue 12/1/21	NA	NA	-60.8 days	131	134	0%



Task ▬ Milestone ◆ Summary ▬ Critical ▬

Revised Works Programme (Status Date: 20/01/2020)

ID	KD	Task Name	Duration	Start	Finish	Actual Start	Actual Finish	Total Slack	Predecessors	Successors	% Comple
134		Walls and Slabs Construction @+1.5mPD to +4.9mPD	20 days	Tue 12/1/21	Thu 4/2/21	NA	NA	-60.8 days	133	136	0%
135		**Below Ground Level Stage no.3 @ +3.80mPD**	**50 days**	**Thu 4/2/21**	**Sat 10/4/21**	**NA**	**NA**	**-60.8 days**			**0%**
136		Base slab Construction (15 sq.m + 40 sq.m)	16 days	Thu 4/2/21	Fri 26/2/21	NA	NA	-60.8 days	134	137	0%
137		Walls and Slabs Construction @+3.80mPD to +7.4mPD	20 days	Fri 26/2/21	Mon 22/3/21	NA	NA	-60.8 days	136	138,140	0%
138		Extraction of Sheetpiles	14 days	Mon 22/3/21	Sat 10/4/21	NA	NA	22 days	137	35FF	0%
139		**Above Ground Level @ +7.4mPD**	**36 days**	**Mon 22/3/21**	**Fri 7/5/21**	**NA**	**NA**	**-60.8 days**			**0%**
140	KD1A	Walls, Slabs and staircase Construction @+7.4mPD to 16.4mPD	36 days	Mon 22/3/21	Fri 7/5/21	NA	NA	-60.8 days	137	35FF,141,142,282	0%
141		**Allow access to Contarctor DE/2018/03 for E&M Installation**	**0 days**	**Fri 7/5/21**	**Fri 7/5/21**	**NA**	**NA**	**90 days**	**140**	**43FF**	**0%**
142	SW1	ABWF Works + BS Works	90 days	Fri 7/5/21	Tue 24/8/21	NA	NA	0 days	91,62,140	43FF	0%
143	*	**Sludge Digesters and Distribution Chamber**	**638 days**	**Sat 7/12/19**	**Mon 31/1/22**	**Sat 7/12/19**	**NA**	**201 days**			**2%**
144		Site Clearance & Site Set Up	6 days	Sat 7/12/19	Fri 13/12/19	Sat 7/12/19	Fri 13/12/19	0 days	145SF		100%
145		Trial Pit Excavation & UU Detection Works	6 days	Sat 14/12/19	Fri 20/12/19	Sat 14/12/19	Fri 20/12/19	0 days	146SF	144SF	100%
146		Predrilling Works (23no., 3rig, 4days/drillhole/rig)	17 days	Sat 21/12/19	Mon 13/1/20	Sat 21/12/19	Mon 13/1/20	0 days	57FS+14 days	147,145SF,148	100%
147		Installation of Monitoring Points	0 days	Thu 19/12/19	Thu 19/12/19	Thu 19/12/19	Thu 19/12/19	0 days	146	150	100%
148		Sheet Pile Installation	45 days	Tue 14/1/20	Mon 9/3/20	NA	NA	0 days	146	150FS-23 days,178	0%
149		Setting up plant for pre-bored socked H-pile Installation	5 days	Sat 29/2/20	Thu 5/3/20	NA	NA	-20 days		150	0%
150		Pre-bored Socketed H-Pile Installation (127nos, 3 Rig, 3days/rig/pile)	127 days	Fri 6/3/20	Mon 10/8/20	NA	NA	-20 days	58,147,148FS-23 d	151,303	0%
151		Pile Load Test (2no.)	26 days	Tue 11/8/20	Sat 5/9/20	NA	NA	1 day	150	154,160,153,159,165,171	0%
152		Construction of Digestors	231 days	Mon 7/9/20	Sat 19/6/21	NA	NA	0 days			0%
153		Digester No. 1	187 days	Mon 7/9/20	Mon 26/4/21	NA	NA	0 days	151		0%
154		ELS Works (incl. Strut (3-layers) Installation & Excavation (4,440 cu.m))	35 days	Mon 7/9/20	Mon 19/10/20	NA	NA	0 days	74,60,151	166,155	0%
155		Construction of Digesters	88 days	Tue 20/10/20	Wed 3/2/21	NA	NA	0 days	154	156,179,167FS-58 days	0%
156		Water Test	20 days	Thu 4/2/21	Tue 2/3/21	NA	NA	0 days	155	157	0%
157		Apply Internal Anti-corrosion Protective Lining	14 days	Wed 3/3/21	Thu 18/3/21	NA	NA	0 days	156	158	0%
158		Construction of Roof Slab	30 days	Fri 19/3/21	Mon 26/4/21	NA	NA	0 days	157	169	0%
159		Digester No. 2	187 days	Mon 7/9/20	Mon 26/4/21	NA	NA	0 days	151		0%
160		ELS Works (incl. Strut (3-layers) Installation & Excavation (4,440 cu.m))	35 days	Mon 7/9/20	Mon 19/10/20	NA	NA	0 days	74,60,151	172,161	0%
161		Construction of Digesters	88 days	Tue 20/10/20	Wed 3/2/21	NA	NA	0 days	160	162,179,173FS-58 days	0%
162		Water Test	20 days	Thu 4/2/21	Tue 2/3/21	NA	NA	0 days	161	163	0%
163		Apply Internal Anti-corrosion Protective Lining	14 days	Wed 3/3/21	Thu 18/3/21	NA	NA	0 days	162	164	0%
164		Construction of Roof Slab	30 days	Fri 19/3/21	Mon 26/4/21	NA	NA	0 days	163	175	0%
165		Digester No. 3	196 days	Tue 20/10/20	Sat 19/6/21	NA	NA	0 days	151		0%
166		ELS Works (incl. Strut (3-layers) Installation & Excavation (4,440 cu.m))	35 days	Tue 20/10/20	Mon 30/11/20	NA	NA	0 days	74,60,154	167,332,333,334,336,335	0%
167		Construction of Digesters	88 days	Tue 1/12/20	Fri 19/3/21	NA	NA	0 days	166,155FS-58 days	168,179	0%
168		Water Test	20 days	Sat 20/3/21	Thu 15/4/21	NA	NA	9 days	167	169	0%
169		Apply Internal Anti-corrosion Protective Lining	14 days	Tue 27/4/21	Thu 13/5/21	NA	NA	0 days	168,158	170	0%
170		Construction of Roof Slab	30 days	Fri 14/5/21	Sat 19/6/21	NA	NA	0 days	169		0%
171		Digester No. 4	196 days	Tue 20/10/20	Sat 19/6/21	NA	NA	0 days	151		0%
172		ELS Works (incl. Strut (3-layers) Installation & Excavation (4,440 cu.m))	35 days	Tue 20/10/20	Mon 30/11/20	NA	NA	0 days	74,60,160	173,332,333,334,336,335	0%
173		Construction of Digesters	88 days	Tue 1/12/20	Fri 19/3/21	NA	NA	0 days	172,161FS-58 days	174,179,180	0%
174		Water Test	20 days	Sat 20/3/21	Thu 15/4/21	NA	NA	9 days	173	175	0%
175		Apply Internal Anti-corrosion Protective Lining	14 days	Tue 27/4/21	Thu 13/5/21	NA	NA	0 days	174,164	176	0%
176		Construction of Roof Slab	30 days	Fri 14/5/21	Sat 19/6/21	NA	NA	0 days	175		0%
177		Construction of Distribution Chamber	219 days	Mon 18/1/21	Wed 13/10/21	NA	NA	0 days			0%
178	SP	Sheet Pile Installation	45 days	Mon 18/1/21	Sat 13/3/21	NA	NA	5 days	148	179	0%
179		ELS Works (incl. Strut (3-layers) Installation & Excavation (8,880 cu.m))	79 days	Sat 20/3/21	Sat 26/6/21	NA	NA	0 days	167,173,161,155,7	180,275	0%
180	KD3A	Construction of Distribution Chamber	90 days	Mon 28/6/21	Wed 13/10/21	NA	NA	0 days	179,173	184,181,37FF,183,182	0%
181	KD3A	**Allow access to Contarctor DE/2018/03 for E&M Installation**	**0 days**	**Wed 13/10/21**	**Wed 13/10/21**	**NA**	**NA**	**0 days**	**180**	**37FF**	**0%**
182		Drainage System (within Bldg/ Structure) Installation	90 days	Fri 15/10/21	Mon 31/1/22	NA	NA	201 days	180	45FF	0%
183		FRP Walkway & Miscellanous Installation	90 days	Fri 15/10/21	Mon 31/1/22	NA	NA	201 days	180	45FF	0%
184	SW3	ABWF Works & BS Works, incl. External Linning	90 days	Fri 15/10/21	Mon 31/1/22	NA	NA	201 days	180,91,62	45FF	0%
185	*	**Sludge Dewatering Building**	**638 days**	**Tue 26/11/19**	**Wed 19/1/22**	**Tue 26/11/19**	**NA**	**211 days**			**5%**
186		Site Clearance & Site Set Up	6 days	Tue 26/11/19	Mon 2/12/19	Tue 26/11/19	Mon 2/12/19	0 days	2	187	100%
187		Predrilling Works (39no.4rig, 4days/drillhole/rig))	18 days	Wed 4/12/19	Tue 24/12/19	Wed 4/12/19	Tue 24/12/19	0 days	57FS+14 days,186	188	100%
188		Installation of Monitoring Points	10 days	Fri 3/1/20	Tue 14/1/20	Fri 3/1/20	Tue 14/1/20	0 days	187	189	100%
189		Sheet Pile Installation	30 days	Wed 15/1/20	Mon 24/2/20	Wed 15/1/20	NA	3 days	188	191,303,190	10%
190		Setting up plant for pre-bored socked H-pile Installation	5 days	Tue 25/2/20	Sat 29/2/20	NA	NA	3 days	189	191,302SS-14 days	0%
191		Pre-bored Socketed H-Pile Installation (202 Nos, 4 Rig, 3days/rig/pile)	152 days	Mon 2/3/20	Thu 3/9/20	NA	NA	3 days	189,58,190,93,98,9	219,192	0%
192		Pile Loading Test	25 days	Fri 4/9/20	Mon 28/9/20	NA	NA	4 days	191	193	0%
193		ELS Works (incl. Strut (3-layers) Installation & Excavation (25,000 cu.m))	60 days	Tue 29/9/20	Thu 10/12/20	NA	NA	2 days	74,60,192	194,195,332,333,334,336,335	0%
194		R.C. Structure	238 days	Fri 11/12/20	Thu 30/9/21	NA	NA	2 days	87,88,89,90,61,193	201,200,199	0%
195		Basement Consturction @	76 days	Fri 11/12/20	Tue 16/3/21	NA	NA	2 days	193	196	0%
196		Ground Floor Construction @ +7.55mpD	65 days	Wed 17/3/21	Sat 5/6/21	NA	NA	2 days	195	197	0%
197		1/F Construction @ +15.3m mPD	65 days	Mon 7/6/21	Mon 23/8/21	NA	NA	2 days	196	198	0%
198	KD3B	Roof Construction @ +25.65mPD	32 days	Tue 24/8/21	Thu 30/9/21	NA	NA	2 days	197	38FF,286	0%
199	KD3B	**Allow access to Contarctor DE/2018/03 for E&M Installation**	**0 days**	**Thu 30/9/21**	**Thu 30/9/21**	**NA**	**NA**	**2 days**	**194**	**38FF**	**0%**
200		Drainage System (within Bldg/ Structure) Installation	90 days	Sat 2/10/21	Wed 19/1/22	NA	NA	211 days	194	45FF	0%
201	SW5	ABWF Works & BS Works	89 days	Sat 2/10/21	Tue 18/1/22	NA	NA	212 days	194,91,62	45FF	0%
202	*	**Combined Heat Power Building**	**518 days**	**Tue 10/12/19**	**Wed 8/9/21**	**Tue 10/12/19**	**NA**	**319 days**			**4%**
203		Site Clearance & Site Set Up	6 days	Tue 10/12/19	Mon 16/12/19	Tue 10/12/19	Mon 16/12/19	0 days	2,204SF		100%
204		Predrilling Works (15no. 2rig, 4days/drillhole/rig)	0 days	Tue 17/12/19	Mon 30/12/19	Tue 17/12/19	Mon 30/12/19	0 days	57FS+28 days	205,203SF	100%
205		Installation of Monitoring Points	6 days	Fri 3/1/20	Thu 9/1/20	Fri 3/1/20	Thu 9/1/20	0 days	204	207	100%
206		Setting up plant for pre-bored socked H-pile Installation	5 days	Tue 14/1/20	Sat 18/1/20	Tue 14/1/20	Sat 18/1/20	0 days		207	100%



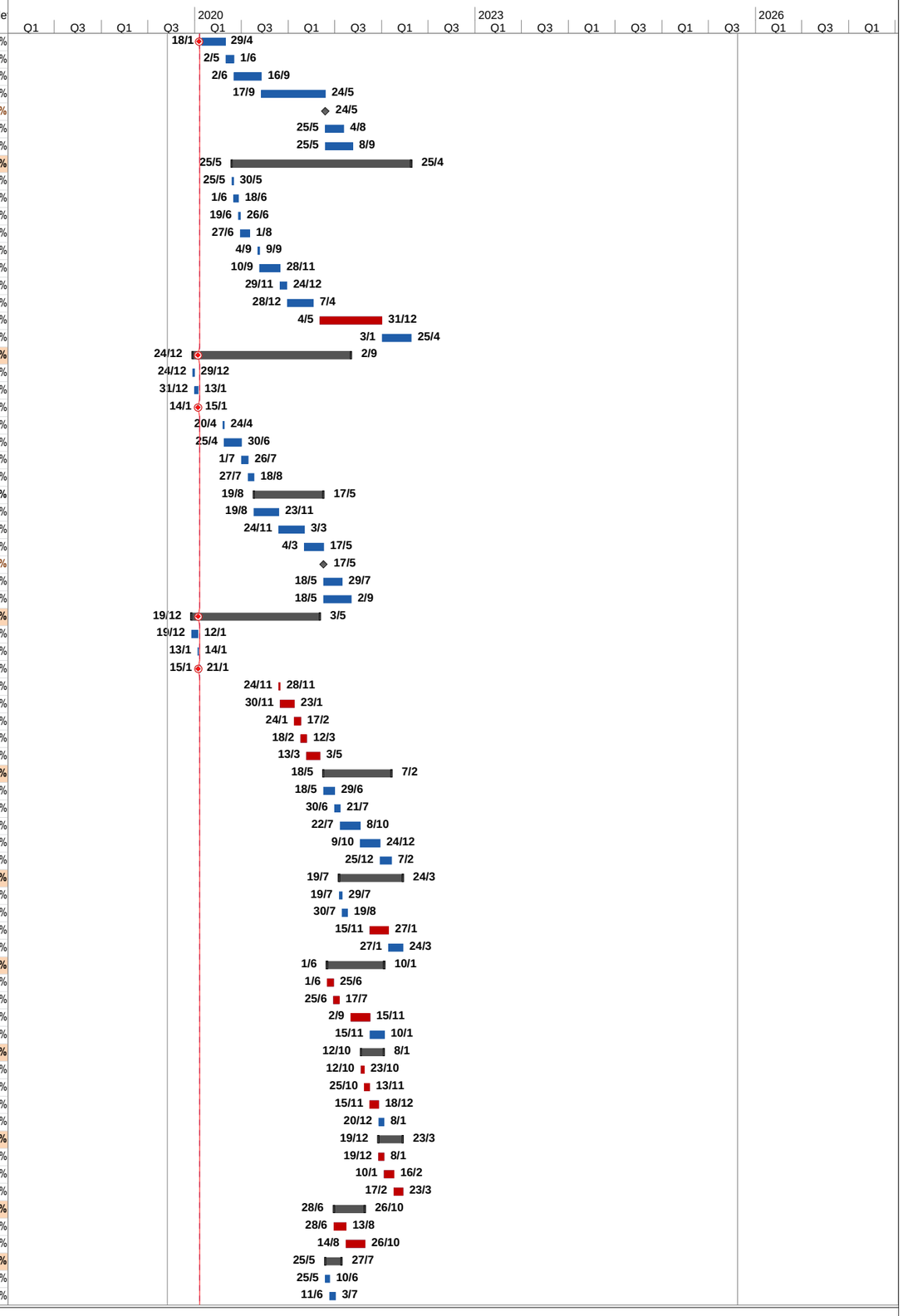
Task Milestone Summary Critical

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

Revised Works Programme (Status Date: 20/01/2020)

群利－俊和聯營體
KL－CW JV

ID	KD	Task Name	Duration	Start	Finish	Actual Start	Actual Finish	Total Slack	Predecessors	Successors	% Comple
207		Pre-bored Socketed H-Pile Installation (50 Nos, 2 Rig 3days/rig/pile)	75 days	Sat 18/1/20	Wed 29/4/20	Sat 18/1/20	NA	110 days	58,205,206	208	5%
208		Pile Loading Test	26 days	Sat 2/5/20	Mon 1/6/20	NA	NA	110 days	207	209	0%
209		Excavation for Pile Cap (2,060 cu.m)	90 days	Tue 2/6/20	Wed 16/9/20	NA	NA	110 days	74,60,208	210	0%
210	KD3C	R.C. Structure	200 days	Thu 17/9/20	Mon 24/5/21	NA	NA	110 days	87,88,89,90,61,209	39FF,212,213,211,278	0%
211	**KD3C**	**Allow access to Contarctor DE/2018/03 for E&M Installation**	**0 days**	**Mon 24/5/21**	**Mon 24/5/21**	**NA**	**NA**	**110 days**	**210**	**39FF**	**0%**
212		Drainage System (within Bldg/ Structure) Installation	60 days	Tue 25/5/21	Wed 4/8/21	NA	NA	349 days	210	45FF	0%
213	SW3	ABWF Works & BS Works	90 days	Tue 25/5/21	Wed 8/9/21	NA	NA	319 days	210,91,62	45FF	0%
214	*	**Sewage Pumping Station**	**570 days**	**Mon 25/5/20**	**Mon 25/4/22**	**NA**	**NA**	**55 days**			**0%**
215		Site Clearance & Site Set Up	6 days	Mon 25/5/20	Sat 30/5/20	NA	NA	55 days	2	216	0%
216		Predrilling Works (4no.1rig, 4days/drillhole/rig)	16 days	Mon 1/6/20	Thu 18/6/20	NA	NA	55 days	57FS+14 days,215	217	0%
217		Installation of Monitoring Points	6 days	Fri 19/6/20	Fri 26/6/20	NA	NA	55 days	216	218	0%
218		Sheet Pile Installation	30 days	Sat 27/6/20	Sat 1/8/20	NA	NA	55 days	217	220	0%
219		Setting up plant for pre-bored socked H-pile Installation	5 days	Fri 4/9/20	Wed 9/9/20	NA	NA	22 days	191	220	0%
220		Pre-bored Socketed H-Pile Installation (22 Nos, 1 Rig, 3days/rig/pile)	66 days	Thu 10/9/20	Sat 28/11/20	NA	NA	22 days	58,218,219,99,104	221	0%
221		Pile Loading Test	26 days	Sun 29/11/20	Thu 24/12/20	NA	NA	28 days	220	222	0%
222		ELS Works (incl. Strut (3-layers) Installation & Excavation (1,440 cu.m))	80 days	Mon 28/12/20	Wed 7/4/21	NA	NA	21 days	74,60,221	223	0%
223	KD3E	R.C. Structure	200 days	Tue 4/5/21	Fri 31/12/21	NA	NA	0 days	87,88,89,90,61,248	41FF,224	0%
224	SW3	ABWF Works & BS Works	90 days	Mon 3/1/22	Mon 25/4/22	NA	NA	136 days	91,62,223	45FF	0%
225	*	**Workshop No. 2**	**501 days**	**Tue 24/12/19**	**Thu 2/9/21**	**Tue 24/12/19**	**NA**	**324 days**			**3%**
226		Site Clearance & Site Set Up	3 days	Tue 24/12/19	Sun 29/12/19	Tue 24/12/19	Sun 29/12/19	0 days	2	227	100%
227		Predrilling Works (10no.1rig, 4days/drillhole/rig)	11 days	Tue 31/12/19	Mon 13/1/20	Tue 31/12/19	Mon 13/1/20	0 days	57,226	228	100%
228		Installation of Monitoring Points	2 days	Tue 14/1/20	Wed 15/1/20	NA	NA	77 days	227	230,229	0%
229		Setting up plant for pre-bored socked H-pile Installation	5 days	Mon 20/4/20	Fri 24/4/20	NA	NA	3 days	228	230	0%
230		Pre-bored Socketed H-Pile Installation (36 Nos, 2 Rig, 3days/rig/pile)	54 days	Sat 25/4/20	Tue 30/6/20	NA	NA	3 days	58,228,229	231	0%
231		Pile Loading Test	26 days	Wed 1/7/20	Sun 26/7/20	NA	NA	4 days	230	232	0%
232		Excavation for Pile Cap (1,800 cu.m)	20 days	Mon 27/7/20	Tue 18/8/20	NA	NA	4 days	74,60,231	234,332,333,334,336,335	0%
233		**R.C. Structure**	**220 days**	**Wed 19/8/20**	**Mon 17/5/21**	**NA**	**NA**	**4 days**			**0%**
234		Ground Floor Construction @ +6.30mpD	80 days	Wed 19/8/20	Mon 23/11/20	NA	NA	4 days	232	235	0%
235		First Floor Construction @ +13.50mpD	80 days	Tue 24/11/20	Wed 3/3/21	NA	NA	4 days	234	236	0%
236	KD3D	Roof Construction @+19.00mPD	60 days	Thu 4/3/21	Mon 17/5/21	NA	NA	4 days	235	238,239,40FF,237,250	0%
237	**KD3D**	**Allow access to Contarctor DE/2018/03 for E&M Installation**	**0 days**	**Mon 17/5/21**	**Mon 17/5/21**	**NA**	**NA**	**40 days**	**236**	**40FF**	**0%**
238		Drainage System (within Bldg/ Structure) Installation	60 days	Tue 18/5/21	Thu 29/7/21	NA	NA	354 days	236	45FF	0%
239	SW3	ABWF Works & BS Works	90 days	Tue 18/5/21	Thu 2/9/21	NA	NA	324 days	91,62,236	45FF	0%
240	*	**Thermal Hydrolysis Pretreatment**	**403 days**	**Thu 19/12/19**	**Mon 3/5/21**	**Thu 19/12/19**	**NA**	**0 days**			**11%**
241		Site Clearance & Site Set Up	16.12 day	Thu 19/12/19	Sun 12/1/20	Thu 19/12/19	Sun 12/1/20	0 days	2	242	100%
242		Predrilling Works (3no.1rig, 4days/drillhole/rig)	2 days	Mon 13/1/20	Tue 14/1/20	Mon 13/1/20	Tue 14/1/20	0 days	57FS+24 days,241	243	100%
243		Installation of Monitoring Points	6 days	Wed 15/1/20	Tue 21/1/20	NA	NA	254 days	242	245	0%
244		Setting up plant for pre-bored socked H-pile Installation	5 days	Tue 24/11/20	Sat 28/11/20	NA	NA	0 days		245	0%
245		Pre-bored Socketed H-Pile Installation (15 Nos, 1 Rig, 3days/rig/pile)	45 days	Mon 30/11/20	Sat 23/1/21	NA	NA	0 days	58,243,244	246	0%
246		Pile Loading Test	25 days	Sun 24/1/21	Wed 17/2/21	NA	NA	0 days	245	247	0%
247		Excavation for Pile Cap (160 cu.m)	20 days	Thu 18/2/21	Fri 12/3/21	NA	NA	0 days	74,60,246	248	0%
248	KD3E	R.C. Plinth	40 days	Sat 13/3/21	Mon 3/5/21	NA	NA	0 days	247	41FF,223	0%
249	*	**Ferric Chloride Dosing Facilities**	**216 days**	**Tue 18/5/21**	**Mon 7/2/22**	**NA**	**NA**	**4 days**			**0%**
250		Excavation for Raft Footing (105 cu.m)	35 days	Tue 18/5/21	Tue 29/6/21	NA	NA	4 days	2,236	251	0%
251		Plate Load Test	18 days	Wed 30/6/21	Wed 21/7/21	NA	NA	4 days	250	252	0%
252		R.C. Structure	66 days	Thu 22/7/21	Fri 8/10/21	NA	NA	4 days	251,61	253	0%
253	KD3E	Steel Roof Structure (On-site Fabrication)	65 days	Sat 9/10/21	Fri 24/12/21	NA	NA	4 days	252	41FF,254	0%
254	SW3	ABWF Works & BS Works	45 days	Sat 25/12/21	Mon 7/2/22	NA	NA	244 days	253,91,62	45FF	0%
255	*	**Fire Hydrant and Booster Pump Room**	**204.8 day**	**Mon 19/7/21**	**Thu 24/3/22**	**NA**	**NA**	**11 days**			**0%**
256		Excavation for Raft Footing (160 cu.m)	10 days	Mon 19/7/21	Thu 29/7/21	NA	NA	11 days	2,261	257,294	0%
257		Plate Load Test	18 days	Fri 30/7/21	Thu 19/8/21	NA	NA	11 days	256	258	0%
258	KD3E	R.C. Structure	60 days	Mon 15/11/21	Thu 27/1/22	NA	NA	-60.8 days	257,61,263	259,41FF,296FS-1 day	0%
259	SW3	ABWF Works & BS Works	45 days	Thu 27/1/22	Thu 24/3/22	NA	NA	159.2 days	258,91,62	45FF	0%
260	*	**Transformer and Switchroom**	**183 days**	**Tue 1/6/21**	**Mon 10/1/22**	**NA**	**NA**	**-20.8 days**			**0%**
261		Excavation for Raft Footing (310 cu.m)	20 days	Tue 1/6/21	Fri 25/6/21	NA	NA	-20.8 days	2,282	262,256	0%
262		Plate Load Test	18 days	Fri 25/6/21	Sat 17/7/21	NA	NA	-20.8 days	261	263	0%
263	KD3E	R.C. Structure	60 days	Thu 2/9/21	Mon 15/11/21	NA	NA	-60.8 days	262,61,284	264,41FF,258	0%
264	SW3	ABWF Works & BS Works	45 days	Mon 15/11/21	Mon 10/1/22	NA	NA	219.2 days	263,91,62	45FF	0%
265	*	**Water Meter Cabinet**	**73 days**	**Tue 12/10/21**	**Sat 8/1/22**	**NA**	**NA**	**-20 days**			**0%**
266		Excavation for Raft Footing (6 cu.m)	10 days	Tue 12/10/21	Sat 23/10/21	NA	NA	-20 days	2,304	267	0%
267		Plate Load Test	18 days	Mon 25/10/21	Sat 13/11/21	NA	NA	-20 days	266	268	0%
268		R.C. Structure	30 days	Mon 15/11/21	Sat 18/12/21	NA	NA	-20 days	267,61	269,271	0%
269	SW4	ABWF Works & BS Works	15 days	Mon 20/12/21	Sat 8/1/22	NA	NA	43 days	268,91,62	46FF	0%
270	*	**Guard House**	**75 days**	**Sun 19/12/21**	**Wed 23/3/22**	**NA**	**NA**	**-20 days**			**0%**
271		Excavation to Formation	21 days	Sun 19/12/21	Sat 8/1/22	NA	NA	-23 days	2,268	272	0%
272		R.C. Structure	30 days	Mon 10/1/22	Wed 16/2/22	NA	NA	-17 days	61,271	273	0%
273	SW4	ABWF Works & BS Works	30 days	Thu 17/2/22	Wed 23/3/22	NA	NA	-17 days	272,91,62	46FF	0%
274	*	**Coolers Pumping Station**	**100 days**	**Mon 28/6/21**	**Tue 26/10/21**	**NA**	**NA**	**0 days**			**0%**
275		Excavation for Raft Footing (185 cu.m)	40 days	Mon 28/6/21	Fri 13/8/21	NA	NA	0 days	2,179	276,290	0%
276	SW4	R.C. Structure	60 days	Sat 14/8/21	Tue 26/10/21	NA	NA	0 days	275,61	41FF,292	0%
277	*	**Waste Gas Buner**	**53 days**	**Tue 25/5/21**	**Tue 27/7/21**	**NA**	**NA**	**110 days**			**0%**
278		Excavation for Raft Rooting (75cu.m)	15 days	Tue 25/5/21	Thu 10/6/21	NA	NA	110 days	2,210	279,298	0%
279		Plate Load Test	18 days	Fri 11/6/21	Sat 3/7/21	NA	NA	110 days	278	280	0%



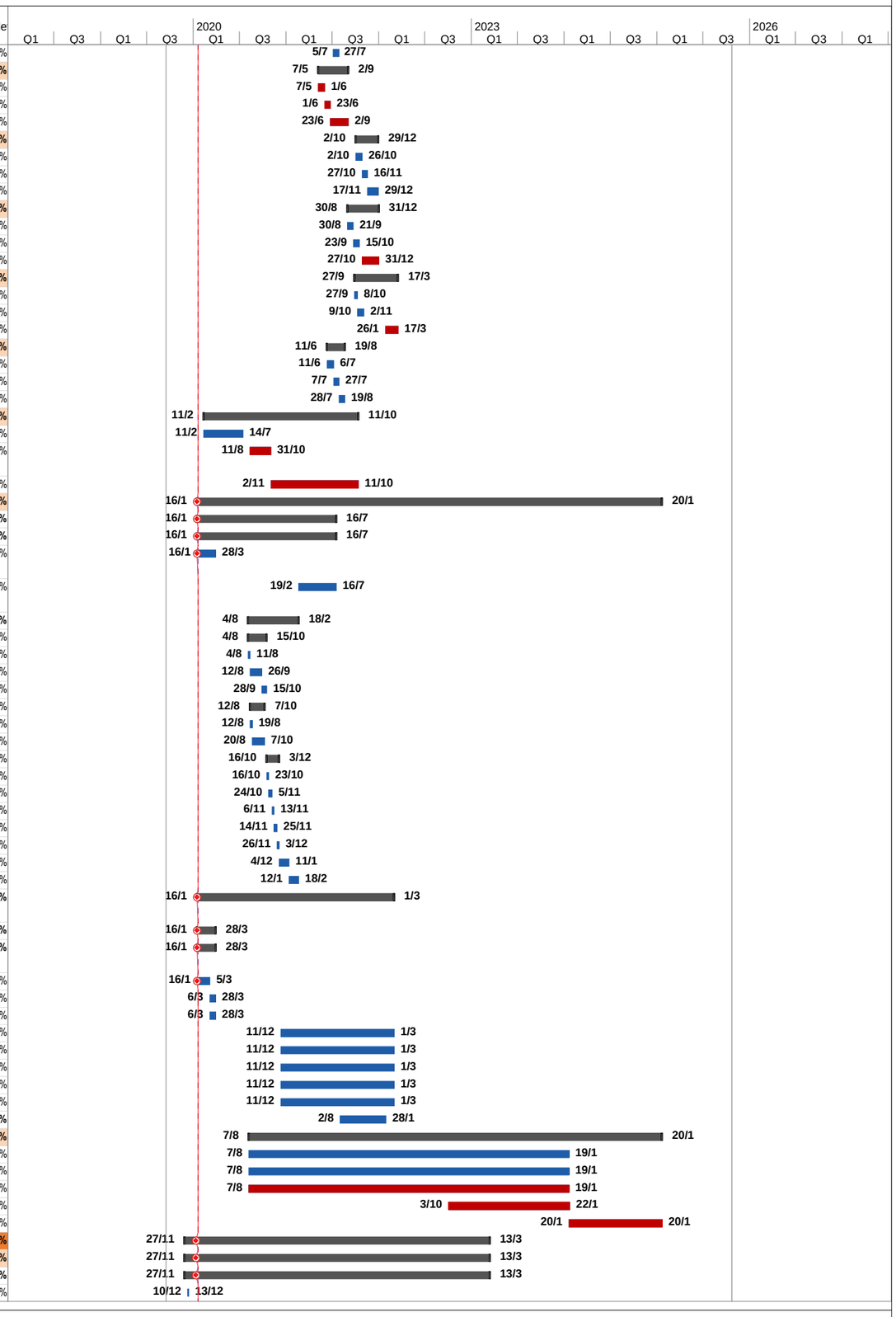
Task ▬ Milestone ◆ Summary ▬ Critical ▬

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

Revised Works Programme (Status Date: 20/01/2020)

群利－俊和聯營體
KL－CW JV

ID	KD	Task Name	Duration	Start	Finish	Actual Start	Actual Finish	Total Slack	Predecessors	Successors	% Comple
280	KD3E	R.C. Plinth	20 days	Mon 5/7/21	Tue 27/7/21	NA	NA	110 days	279,61	41FF,300	0%
281	*	**Plant Services Water System**	**98 days**	**Fri 7/5/21**	**Thu 2/9/21**	**NA**	**NA**	**-60.8 days**			**0%**
282		Excavation for Raft Footing (800 cu.m)	20 days	Fri 7/5/21	Tue 1/6/21	NA	NA	-60.8 days	2,140	283,261	0%
283		Plate Load Test	18 days	Tue 1/6/21	Wed 23/6/21	NA	NA	-60.8 days	282	284	0%
284	KD3E	Basement Construction @+1.20mPD	60 days	Wed 23/6/21	Thu 2/9/21	NA	NA	-60.8 days	283,61	41FF,263	0%
285	*	**Deodorization System No. 11**	**73 days**	**Sat 2/10/21**	**Wed 29/12/21**	**NA**	**NA**	**2 days**			**0%**
286		Excavation for Raft Footing (1,280 cu.m)	20 days	Sat 2/10/21	Tue 26/10/21	NA	NA	2 days	2,198	287	0%
287		Plate Load Test	18 days	Wed 27/10/21	Tue 16/11/21	NA	NA	2 days	286	288	0%
288	KD3E	R.C. Plinth	35 days	Wed 17/11/21	Wed 29/12/21	NA	NA	2 days	287,61	41FF	0%
289	*	**Biogas Holder**	**102 days**	**Mon 30/8/21**	**Fri 31/12/21**	**NA**	**NA**	**0 days**			**0%**
290		Excavation for Raft Footing (1,120 cu.m)	20 days	Mon 30/8/21	Tue 21/9/21	NA	NA	9 days	2,275	291	0%
291		Plate Load Test	18 days	Thu 23/9/21	Fri 15/10/21	NA	NA	9 days	290	292	0%
292	KD3E	R.C. Plinth	55 days	Wed 27/10/21	Fri 31/12/21	NA	NA	0 days	291,61,276	41FF	0%
293	*	**H2S Removal System**	**139.8 day**	**Mon 27/9/21**	**Thu 17/3/22**	**NA**	**NA**	**-60.8 days**			**0%**
294		Excavation for Raft Footing (396 cu.m)	10 days	Mon 27/9/21	Fri 8/10/21	NA	NA	9 days	2,256	295	0%
295		Plate Load Test	20 days	Sat 9/10/21	Tue 2/11/21	NA	NA	9 days	294	296	0%
296	KD3E	R.C. Plinth	40 days	Wed 26/1/22	Thu 17/3/22	NA	NA	-60.8 days	295,61,258FS-1 da	41FF	0%
297	*	**Deodorization System No. 12**	**58 days**	**Fri 11/6/21**	**Thu 19/8/21**	**NA**	**NA**	**110 days**			**0%**
298		Excavation to Formation	20 days	Fri 11/6/21	Tue 6/7/21	NA	NA	110 days	2,278	299	0%
299		Plate Load Test	18 days	Wed 7/7/21	Tue 27/7/21	NA	NA	110 days	298	300	0%
300	KD3E	R.C. Plinth	20 days	Wed 28/7/21	Thu 19/8/21	NA	NA	110 days	299,61,280	41FF	0%
301	*	**Underpass**	**496 days**	**Tue 11/2/20**	**Mon 11/10/21**	**NA**	**NA**	**-20 days**			**0%**
302		Temporary Storage for H pile works and access for DSD	155 days	Tue 11/2/20	Tue 14/7/20	NA	NA	3 days	190SS-14 days	303	0%
303		Sheet Pile Installation + ELS Works (incl. Strut (2-layers) Installation & Excavation (300 cu.m))	68 days	Tue 11/8/20	Sat 31/10/20	NA	NA	-20 days	15,189,150,302	304	0%
304	SW4	R.C. Structure	280 days	Mon 2/11/20	Mon 11/10/21	NA	NA	-20 days	303,61	46FF,266	0%
305	*	**Pipe Works and Utility Installation**	**1832 day**	**Thu 16/1/20**	**Mon 20/1/25**	**NA**	**NA**	**0 days**	**86**		**0%**
306		**Pipe Works At Chuk Wan Street**	**548 days**	**Thu 16/1/20**	**Fri 16/7/21**	**NA**	**NA**	**1.1 days**			**0%**
307		**Drainage Diversion (Existing Drainage Culvert)**	**443 days**	**Thu 16/1/20**	**Fri 16/7/21**	**NA**	**NA**	**1.1 days**			**0%**
308	KD1A	Stage 1 - Drainage Diversion of Drainage b/w Reconstructed Storm Water Manhole SMH1003177A and Reconstructed Storm Water Manhole MHD22	60 days	Thu 16/1/20	Sat 28/3/20	NA	NA	1.1 days	68,55,75,120FS-5 days,82,119	121,329SS,123	0%
309	KD1A	Stage 2 - Drainage Diversion of Drainage b/w MHD26 and SMHH1003177A, to Abandon of Exisitng Drainage Culvert (1 Cell, 1000mm x 1150mm)	120 days	Fri 19/2/21	Fri 16/7/21	NA	NA	32.8 days	325	43FF	0%
310	SW4	**Trenchless Work for Pipe Installation**	**162 days**	**Tue 4/8/20**	**Thu 18/2/21**	**NA**	**NA**	**32.8 days**			**0%**
311		**Construction of Temporary Jacking Pit**	61 days	Tue 4/8/20	Thu 15/10/20	NA	NA	32.8 days	15,54		0%
312		Trial Pit Excavation & UU Detection Works	7 days	Tue 4/8/20	Tue 11/8/20	NA	NA	32.8 days	2FS+210 days	313,316	0%
313		Pit Construction (11m x 9m)	40 days	Wed 12/8/20	Sat 26/9/20	NA	NA	32.8 days	312	314	0%
314		Setting up of Entrance Ring and Gantry	14 days	Mon 28/9/20	Thu 15/10/20	NA	NA	32.8 days	313	319	0%
315		**Construction of Temporary Receiving Pit**	47 days	Wed 12/8/20	Wed 7/10/20	NA	NA	56.8 days			0%
316		Trial Pit Excavation & UU Detection Works	7 days	Wed 12/8/20	Wed 19/8/20	NA	NA	56.8 days	312	317	0%
317		Pit Construction (6m x 9m)	40 days	Thu 20/8/20	Wed 7/10/20	NA	NA	56.8 days	316	320FF	0%
318		**Pipe Jacking Operation**	41 days	Fri 16/10/20	Thu 3/12/20	NA	NA	32.8 days			0%
319		Setting Up of Trenchless Equipment	7 days	Fri 16/10/20	Fri 23/10/20	NA	NA	32.8 days	314	320	0%
320		Pipe Jacking Operation (30m, 3m/day)	10 days	Sat 24/10/20	Thu 5/11/20	NA	NA	32.8 days	319,317FF	321	0%
321		Installation of grouting pipe and rail	7 days	Fri 6/11/20	Fri 13/11/20	NA	NA	32.8 days	320	322	0%
322		Pipe Laying Works	10 days	Sat 14/11/20	Wed 25/11/20	NA	NA	32.8 days	321	323	0%
323		Formwork Erection and grouting works	7 days	Thu 26/11/20	Thu 3/12/20	NA	NA	32.8 days	322	324	0%
324		Reinstatement of Temporary Launching Pit	30 days	Fri 4/12/20	Mon 11/1/21	NA	NA	32.8 days	323	325	0%
325		Reinstatement of Temporary Receiving Pit	30 days	Tue 12/1/21	Thu 18/2/21	NA	NA	32.8 days	324	309	0%
326		**Process Pipeworks, All Sewerage, Utilities & Roadworks in Portion C of the Site**	**629 days**	**Thu 16/1/20**	**Tue 1/3/22**	**NA**	**NA**	**19 days**			**0%**
327		**Process Pipeworks**	**60 days**	**Thu 16/1/20**	**Sat 28/3/20**	**NA**	**NA**	**21.1 days**			**0%**
328	KD1A	**Connection pipe at UV System no.1 & Effluent Pumping Stataion no.1**	**60 days**	**Thu 16/1/20**	**Sat 28/3/20**	**NA**	**NA**	**21.1 days**			**0%**
329		Effluent Pipe (aprox. 70m, dia 300 - 1600)	40 days	Thu 16/1/20	Thu 5/3/20	NA	NA	21.1 days	308SS,82	331,330,123	0%
330		Effluent Pipe Flowmeter Chamber (3.8mx3.95mx3.42m(D))	20 days	Fri 6/3/20	Sat 28/3/20	NA	NA	265 days	329	121,35	0%
331		Plant Services Water Pipe (approx. 15m, dia 150-350)	20 days	Fri 6/3/20	Sat 28/3/20	NA	NA	265 days	329	121,35	0%
332	SW4	Remaining Effluent Pipes	360 days	Fri 11/12/20	Tue 1/3/22	NA	NA	19 days	63,166,172,193,23	46FF	0%
333	SW4	Stormdrain Pipeworks	360 days	Fri 11/12/20	Tue 1/3/22	NA	NA	2 days	63,166,172,193,23	46FF	0%
334	SW4	Seawage Pipeworks	360 days	Fri 11/12/20	Tue 1/3/22	NA	NA	2 days	63,166,172,193,23	46FF	0%
335	SW4	Watermain Pipeworks	360 days	Fri 11/12/20	Tue 1/3/22	NA	NA	2 days	63,166,172,193,23	46FF	0%
336	SW4	Cable & Other Underground Utility Pipeworks	360 days	Fri 11/12/20	Tue 1/3/22	NA	NA	2 days	63,166,172,193,23	46FF	0%
337	SW4	**Pipe Bridge No.1**	**180 days**	**Mon 2/8/21**	**Fri 28/1/22**	**NA**	**NA**	**54 days**	**2**	**46FF**	**0%**
338	*	**Remaining Pipe Works & Lanscape Works**	**1316 day**	**Fri 7/8/20**	**Mon 20/1/25**	**NA**	**NA**	**0 days**			**0%**
339	SW5	Irrigation System	1025 day	Fri 7/8/20	Fri 19/1/24	NA	NA	2 days	64,2FS+231 days	47FF	0%
340	SW5	Hard Landscape Works	1025 day	Fri 7/8/20	Fri 19/1/24	NA	NA	2 days	64,2FS+235 days	47FF	0%
341	SW5	Soft Landscape Works	1025 day	Fri 7/8/20	Fri 19/1/24	NA	NA	0 days	64,2FS+235 days	343,47FF	0%
342	SW5	Outfall and River Embankment works & Retaining Wall	388 days	Mon 3/10/22	Mon 22/1/24	NA	NA	0 days		47FF	0%
343		Establishment Works (365 Calendar Days)	291 days	Sat 20/1/24	Mon 20/1/25	NA	NA	0 days	341,64	48FF,49FF	0%
344	*	**Construction of Portion A of the Site**	**1203 day**	**Wed 27/11/19**	**Mon 13/3/23**	**Wed 27/11/19**	**NA**	**20 days**			**4%**
345	*	**CLP 132kV Substation**	**975 days**	**Wed 27/11/19**	**Mon 13/3/23**	**Wed 27/11/19**	**NA**	**17 days**			**4%**
346		**Internal Works**	**1203 day**	**Wed 27/11/19**	**Mon 13/3/23**	**Wed 27/11/19**	**NA**	**20 days**			**5%**
347		Site Clearance & Site Set Up	4 days	Tue 10/12/19	Fri 13/12/19	Tue 10/12/19	Fri 13/12/19	0 days	2	348	100%



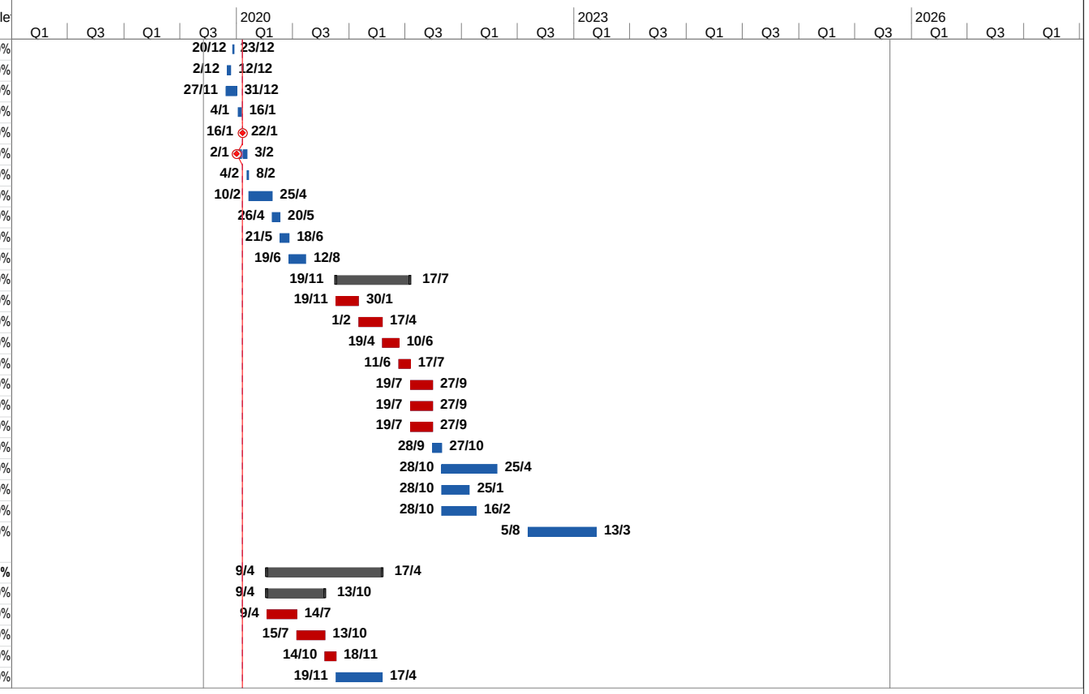
Task ▬ Milestone ◆ Summary ▬ Critical ▬

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

Revised Works Programme (Status Date: 20/01/2020)

群利－俊和聯營體
KL－CW JV

ID	KD	Task Name	Duration	Start	Finish	Actual Start	Actual Finish	Total Slack	Predecessors	Successors	% Comple
348		Additional tree felling works (NCE no. xx)	4 days	Fri 20/12/19	Mon 23/12/19	Fri 20/12/19	Mon 23/12/19	0 days	347	350,349	100%
349		Trial Pit Excavation & UU Detection Works	10 days	Mon 2/12/19	Thu 12/12/19	Mon 2/12/19	Thu 12/12/19	0 days	348	351	100%
350		Additional demolition of existing warehouse structures (NCE no. xx)	27 days	Wed 27/11/19	Tue 31/12/19	Wed 27/11/19	Tue 31/12/19	0 days	72,348	353,351	100%
351		Predrilling Works (11no., 1rig, 4days/drillhole/rig)	10 days	Sat 4/1/20	Thu 16/1/20	Sat 4/1/20	Thu 16/1/20	0 days	57,350,349	352	100%
352		Instsallation of Monitoring Points	5 days	Thu 16/1/20	Wed 22/1/20	Thu 16/1/20	NA	16 days	351	354	70%
353		Demolition of Existing Boundary Wall for Temproary Access	25 days	Thu 2/1/20	Mon 3/2/20	NA	NA	9 days	72,350	354	0%
354		Setting up plant for pre-bored socked H-pile Installation	5 days	Tue 4/2/20	Sat 8/2/20	NA	NA	9 days	352,353	355	0%
355		Pre-bored Socketed H-Pile Installation (41 Nos, 2 Rig, 3days/rig/pile)	62 days	Mon 10/2/20	Sat 25/4/20	NA	NA	9 days	58,354	356	0%
356		Pile Load Test	25 days	Sun 26/4/20	Wed 20/5/20	NA	NA	13 days	355	357	0%
357		Additional Sheetpile Installation (NCE no.xx)	25 days	Thu 21/5/20	Thu 18/6/20	NA	NA	11 days	356	358	0%
358		ELS Works (incl. Strut (3-layers) Installation & Excavation (NCE no.xx)	45 days	Fri 19/6/20	Wed 12/8/20	NA	NA	11 days	357	359	0%
359		R.C. Structure (880 sq.m)	194 days	Thu 19/11/20	Sat 17/7/21	NA	NA	-70 days	87,88,89,90,61,376		0%
360		Basement	60 days	Thu 19/11/20	Sat 30/1/21	NA	NA	-70 days		361	0%
361		Ground Floor	60 days	Mon 1/2/21	Sat 17/4/21	NA	NA	-70 days	360	362	0%
362		First Floor	44 days	Mon 19/4/21	Thu 10/6/21	NA	NA	-70 days	361	363	0%
363		Roof Floor (461sq.m)	30 days	Fri 11/6/21	Sat 17/7/21	NA	NA	-70 days	362	364,366	0%
364		ABWF Works & BS Works	60 days	Mon 19/7/21	Mon 27/9/21	NA	NA	0 days	363,91,62	365SS	0%
365		Installation of telephone line/ direct link for FSD Inspection	60 days	Mon 19/7/21	Mon 27/9/21	NA	NA	0 days	364SS		0%
366	KD2A	Architectual Works	60 days	Mon 19/7/21	Mon 27/9/21	NA	NA	-70 days	363	367,36FF	0%
367		**Handover to CLP for Electrical System Installation**	30 days	Tue 28/9/21	Wed 27/10/21	NA	NA	301 days	366	368,370,371,369	0%
368		**E&M Installation, Testing & Commissioning by CLP**	180 days	Thu 28/10/21	Mon 25/4/22	NA	NA	342 days	367	44FF	0%
369		Testing & Commissioning of the E&M Works	90 days	Thu 28/10/21	Tue 25/1/22	NA	NA	432 days	367	44FF	0%
370		ABWF Works - External Finishing & BS Works	90 days	Thu 28/10/21	Wed 16/2/22	NA	NA	334 days	367,91,62	44FF	0%
371	SW2	Building Services Installation Works (incl. Fire Services, Plumbing, Drainage, etc.) & FS Inspection	180 days	Fri 5/8/22	Mon 13/3/23	NA	NA	17 days	367,77	44FF	0%
372		**External Works**	**302 days**	**Thu 9/4/20**	**Sat 17/4/21**	**NA**	**NA**	**-70 days**			**0%**
373		**Road Widening Works**	152 days	Thu 9/4/20	Tue 13/10/20	NA	NA	-70 days	70FS+60 days		0%
374		Drainage Works	76 days	Thu 9/4/20	Tue 14/7/20	NA	NA	-70 days	70FS+60 days	375	0%
375		Road Works	76 days	Wed 15/7/20	Tue 13/10/20	NA	NA	-70 days	374	376	0%
376		Temporary Site Access	30 days	Wed 14/10/20	Wed 18/11/20	NA	NA	-70 days	375	377,359	0%
377	SW2	Construction of New Boundary Wall	120 days	Thu 19/11/20	Sat 17/4/21	NA	NA	582 days	376	44FF	0%

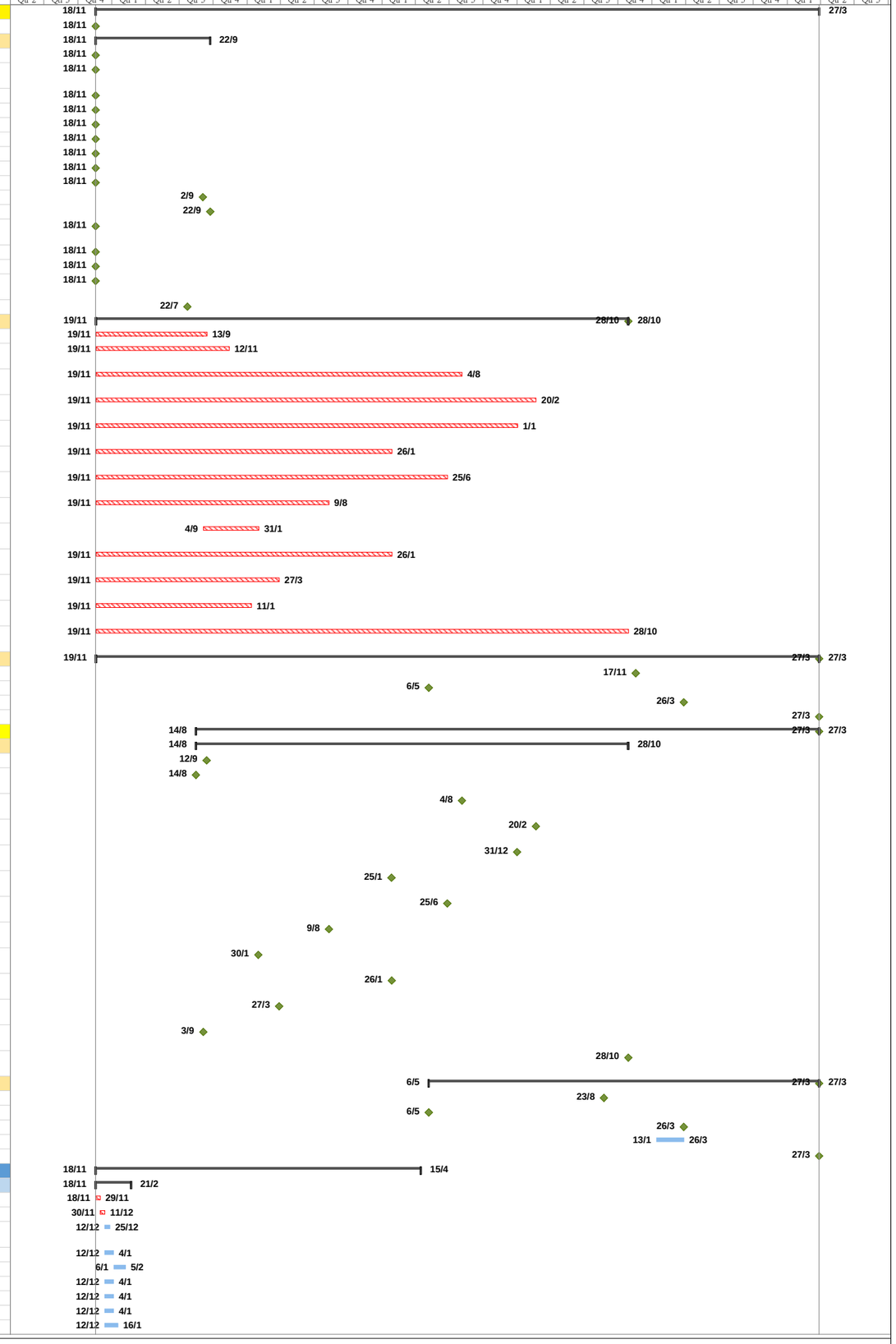


Task Milestone ◆ Summary Critical

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

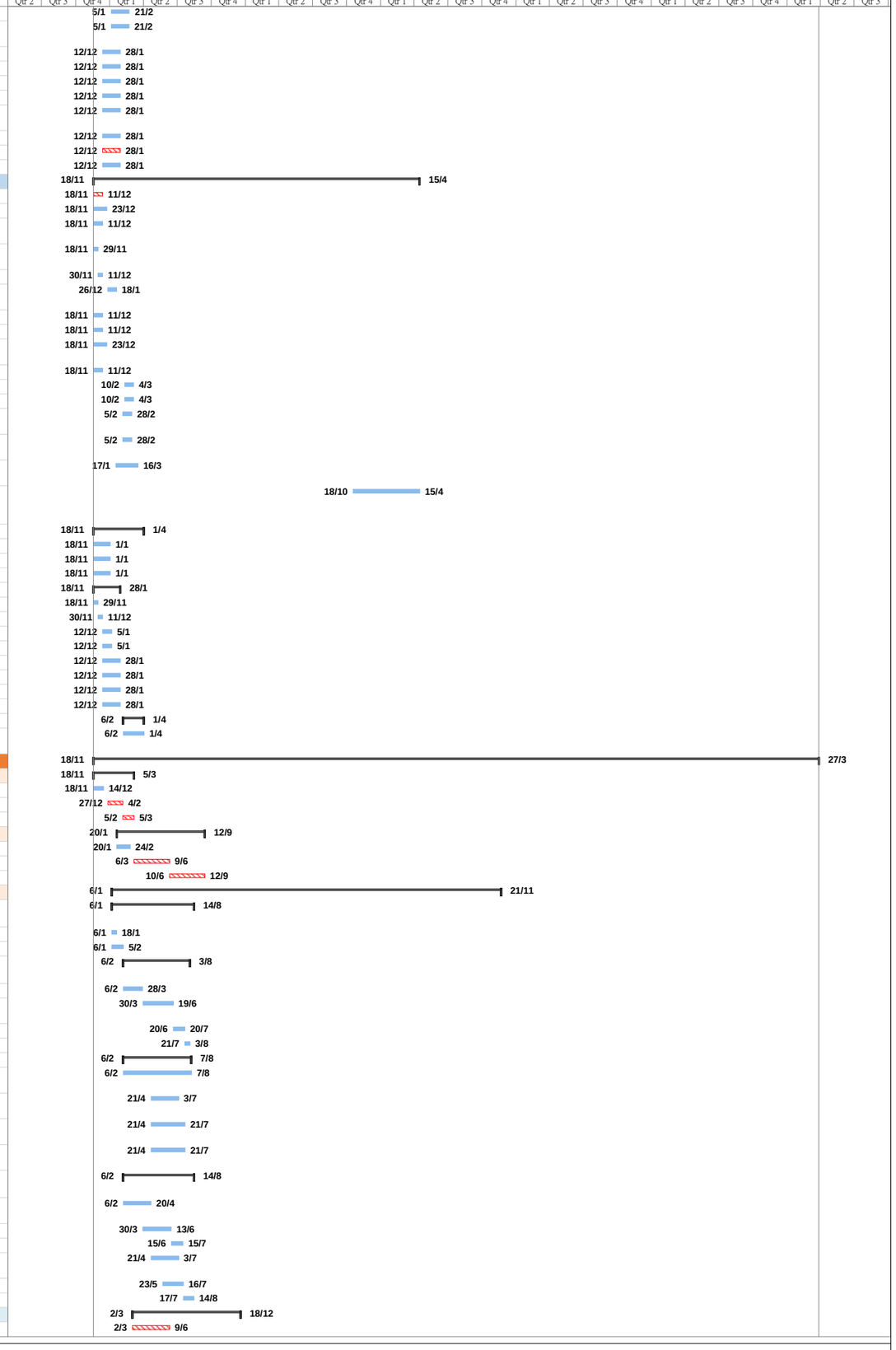
First Programme

ID	Key Date	Task Name	Duration	Start	Finish	Predecessors	Successors	Total Slack	Task Calendar	trade
1		**Contract Dates**	**1585 days**	**Mon 18/11/19**	**Thu 27/3/25**			**0 days**	**None**	
2		Starting Date	0 days	Mon 18/11/19	Mon 18/11/19		35FS+1 day,36FS+1 day,3	0 days	Calendar Day	
3		**Access Dates (cal. day)**	**310 days**	**Mon 18/11/19**	**Tue 22/9/20**			**0 days**	**Calendar Day**	
4		Portion B-1 (Access Road AR3)	0 days	Mon 18/11/19	Mon 18/11/19	2	118	77 days	Calendar Day	
5		Portion B-1A (Area for the works for Sidestream Treatment Facilities by Others	0 days	Mon 18/11/19	Mon 18/11/19	2		1957 days	Calendar Day	
6		Portion B-2 (Inlet Works No.1)	0 days	Mon 18/11/19	Mon 18/11/19	2	122,143,148	105 days	Calendar Day	
7		Portion B-2A (Area for the pipe-jacking works by others)	0 days	Mon 18/11/19	Mon 18/11/19	2		1957 days	Calendar Day	
8		Portion B-3 (Primary Sedimentation Tanks No. 1-4)	0 days	Mon 18/11/19	Mon 18/11/19	2	177	0 days	Calendar Day	
9		Portion B-4 (Bioreactor No. 2A & 2B)	0 days	Mon 18/11/19	Mon 18/11/19	2	189	0 days	Calendar Day	
10		Portion B-5 (Membrane Facilities Building No.2)	0 days	Mon 18/11/19	Mon 18/11/19	2	203	49 days	Calendar Day	
11		Portion B-6 (SAS Pumping Station)	0 days	Mon 18/11/19	Mon 18/11/19	2	224	184 days	Calendar Day	
12		Portion B-7 (Ancillary structures)	0 days	Mon 18/11/19	Mon 18/11/19	2	233	299 days	Calendar Day	
13		Portion B-7A (Alternation works for existing Power House)	0 days	Wed 2/9/20	Wed 2/9/20	2FS+290 days	280,29FS+1 day	0 days	Calendar Day	
14		Portion B-8 (Alternation for existing Membrane Facilities Building No.1)	0 days	Tue 22/9/20	Tue 22/9/20	2FS+310 days	281	838 days	Calendar Day	
15		Portion B-8A (Alternation of air supply main for existing Air Blower House No.2)	0 days	Mon 18/11/19	Mon 18/11/19	2	279	72 days	Calendar Day	
16		Portion B-9 (remainder works in Zone B)	0 days	Mon 18/11/19	Mon 18/11/19	2	282,290	98 days	Calendar Day	
17		Portion B-9A (Area for the pipe-jacking works by others)	0 days	Mon 18/11/19	Mon 18/11/19	2		1957 days	Calendar Day	
18		Portion B-9B (Area for underground pipework modification and connection works by others)	0 days	Mon 18/11/19	Mon 18/11/19	2		1957 days	Calendar Day	
19		Portion B-9C (Area for the works for pipeworks)	0 days	Wed 22/7/20	Wed 22/7/20	2FS+248 days		1709 days	Calendar Day	
20		**Key Dates (cal. day)**	**1440 days**	**Tue 19/11/19**	**Sat 28/10/23**			**0 days**	**Calendar Day**	
21	KD1A	KD1A completion of AR3 in Portion B-1 (300days after starting date)	300 days	Tue 19/11/19	Sun 13/9/20	2FS+1 day,41FF		0 days	Calendar Day	
22	KD1B	KD1B completion of utilities diversion for commencement of Inlet Works No.1 in Portion B-2 (360days after starting date)	360 days	Tue 19/11/19	Thu 12/11/20	2FS+1 day,42FF		0 days	Calendar Day	
23	KD1C	KD1C completion of civil and structural works of Inlet Works No.1 in Portion B-2 (990days after starting date)	990 days	Tue 19/11/19	Thu 4/8/22	2FS+1 day,43FF		0 days	Calendar Day	
24	KD1D	KD1D completion of civil and structural works of Primary Sedimentation Tanks in Portion B-3 (1190days after starting date)	1190 days	Tue 19/11/19	Mon 20/2/23	2FS+1 day,44FF		0 days	Calendar Day	
25	KD1E	KD1E completion of civil and structural works of Bioreactor in Portion B-4 (1,140days after starting date)	1140 days	Tue 19/11/19	Sun 1/1/23	2FS+1 day,45FF		0 days	Calendar Day	
26	KD1F	KD1F completion of civil and structural works of MFB from B2 floor to 1st floor level in Portion B-5 (800days after starting date)	800 days	Tue 19/11/19	Wed 26/1/22	2FS+1 day,46FF		0 days	Calendar Day	
27	KD1G	KD1G completion of civil and structural works of MFB in Portion B-5 (950days after starting date)	950 days	Tue 19/11/19	Sat 25/6/22	2FS+1 day,47FF		0 days	Calendar Day	
28	KD1H	KD1H completion of civil and structural works of SAS Pumping Station in Portion B-6 (630days after starting date)	630 days	Tue 19/11/19	Mon 9/8/21	2FS+1 day,48FF		0 days	Calendar Day	
29	KD1I	KD1I completion alternation works for existing Power House in Portion B-7A (150days after access date of B-7A)	150 days	Fri 4/9/20	Sun 31/1/21	13FS+1 day,49FF		0 days	Calendar Day	
30	KD1J	KD1J completion of auxiliary facilites in Portion B-7 (800days after starting date)	800 days	Tue 19/11/19	Wed 26/1/22	2FS+1 day,50FF		0 days	Calendar Day	
31	KD2A	KD2A completion of effluent pipes to UV system and connection to its downstream in Portion B-9 (495days after starting date)	495 days	Tue 19/11/19	Sat 27/3/21	2FS+1 day,51FF		0 days	Calendar Day	
32	KD2B	KD2B completion of air supply main alternation to existing air blower house No.2 in Portion B-8A (420days after starting date)	420 days	Tue 19/11/19	Mon 11/1/21	2FS+1 day,52FF		0 days	Calendar Day	
33	KD3A	KD3A completion of all utilities and road works (1440days after starting date)	1440 days	Tue 19/11/19	Sat 28/10/23	2FS+1 day,53FF		0 days	Calendar Day	
34		**Completion Date (cal. Day)**	**1956 days**	**Tue 19/11/19**	**Thu 27/3/25**			**0 days**	**Calendar Day**	
35	SW1	Section 1 of the Works (1,460 after starting date)	1460 days	Tue 19/11/19	Fri 17/11/23	2FS+1 day,55FF		0 days	Calendar Day	
36	SW2	Section 2 of the Works (900 after starting date)	900 days	Tue 19/11/19	Fri 6/5/22	2FS+1 day,56FF		0 days	Calendar Day	
37	SW3	Section 3 of the Works (1,590 after starting date)	1590 days	Tue 19/11/19	Tue 26/3/24	2FS+1 day,57FF	38FS+1 day	0 days	Calendar Day	
38	DLP	Defects Liability Period and Landscape Establishment Works	365 days	Thu 28/3/24	Thu 27/3/25	37FS+1 day,59F		0 days	Calendar Day	
39		**Planned Completion**	**1686 days**	**Fri 14/8/20**	**Thu 27/3/25**			**0 days**	**Calendar Day**	
40		**Planned Completion - Key Dates (cal. day)**	**1170 days**	**Fri 14/8/20**	**Sat 28/10/23**			**0 days**	**Calendar Day**	
41	KD1A	KD1A completion of AR3 in Portion B-1 (300days after starting date)	0 days	Sat 12/9/20	Sat 12/9/20	121FF	21FF	0 days	Calendar Day	
42	KD1B	KD1B completion of utilities diversion for commencement of Inlet Works No.1 in Portion B-2 (360days after starting date)	0 days	Fri 14/8/20	Fri 14/8/20	123FF	22FF	90 days	Calendar Day	
43	KD1C	KD1C completion of civil and structural works of Inlet Works No.1 in Portion B-2 (990days after starting date)	0 days	Thu 4/8/22	Thu 4/8/22	175FF,174FF	23FF	0 days	Calendar Day	
44	KD1D	KD1D completion of civil and structural works of Primary Sedimentation Tanks in Portion B-3 (1190days after starting date)	0 days	Mon 20/2/23	Mon 20/2/23	186FF,185FF	24FF	0 days	Calendar Day	
45	KD1E	KD1E completion of civil and structural works of Bioreactor in Portion B-4 (1,140days after starting date)	0 days	Sat 31/12/22	Sat 31/12/22	197FF,198FF	25FF	0 days	Calendar Day	
46	KD1F	KD1F completion of civil and structural works of MFB from B2 floor to 1st floor level in Portion B-5 (800days after starting date)	0 days	Tue 25/1/22	Tue 25/1/22	219FF,220FF	26FF	0 days	Calendar Day	
47	KD1G	KD1G completion of civil and structural works of MFB in Portion B-5 (950days after starting date)	0 days	Sat 25/6/22	Sat 25/6/22	221FF,222FF	27FF	0 days	Calendar Day	
48	KD1H	KD1H completion of civil and structural works of SAS Pumping Station in Portion B-6 (630days after starting date)	0 days	Mon 9/8/21	Mon 9/8/21	231FF,230FF	28FF	0 days	Calendar Day	
49	KD1I	KD1I completion alternation works for existing Power House in Portion B-7A (150days after access date of B-7A)	0 days	Sat 30/1/21	Sat 30/1/21	280FF	29FF	0 days	Calendar Day	
50	KD1J	KD1J completion of auxiliary facilites in Portion B-7 (800days after starting date)	0 days	Wed 26/1/22	Wed 26/1/22	276FF,275FF,27	30FF	0 days	Calendar Day	
51	KD2A	KD2A completion of effluent pipes to UV system and connection to its downstream in Portion B-9 (495days after starting date)	0 days	Sat 27/3/21	Sat 27/3/21	283FF	31FF	0 days	Calendar Day	
52	KD2B	KD2B completion of air supply main alternation to existing air blower house No.2 in Portion B-8A (420days after starting date)	0 days	Thu 3/9/20	Thu 3/9/20	279FF	32FF	130 days	Calendar Day	
53	KD3A	KD3A completion of all utilities and road works (1440days after starting date)	0 days	Sat 28/10/23	Sat 28/10/23	289FF	33FF	0 days	Calendar Day	
54		**Planned Completion Date (cal. Day)**	**1056 days**	**Fri 6/5/22**	**Thu 27/3/25**			**0 days**	**Calendar Day**	
55	SW1	Section 1 of the Works (1,460 after starting date)	0 days	Wed 23/8/23	Wed 23/8/23	277FF,271FF,2	35FF	86 days	Calendar Day	
56	SW2	Section 2 of the Works (900 after starting date)	0 days	Fri 6/5/22	Fri 6/5/22	284FF,287FF,2	36FF	0 days	Calendar Day	
57	SW3	Section 3 of the Works (1,590 after starting date)	0 days	Tue 26/3/24	Tue 26/3/24	281FF,291FF,2	37FF,58FF	0 days	Calendar Day	
58		Planned Time Risk Allowance (14days per 365day)	60 days	Sat 13/1/24	Tue 26/3/24	57FF		294 days	None	
59	DLP	Defects Liability Period and Landscape Establishment Works	0 days	Thu 27/3/25	Thu 27/3/25	294FF	38FF	0 days	Calendar Day	
60		**Submissions (cal.day)**	**880 days**	**Mon 18/11/19**	**Fri 15/4/22**			**0 days**	**Calendar Day**	
61		**Subletting Package**	**96 days**	**Mon 18/11/19**	**Fri 21/2/20**			**0 days**	**Calendar Day**	
62		Prepare & submit subletting procedure	12 days	Mon 18/11/19	Fri 29/11/19	2	63	0 days	Calendar Day	
63		PM review and accept subletting procedure	12 days	Sat 30/11/19	Wed 11/12/19	62	64,65,68,69,70,71,72,73,7	0 days	Calendar Day	
64		Subletting for Preliminary Works (surveying, condition survey, site clearacne etc)	14 days	Thu 12/12/19	Wed 25/12/19	63,82	87,116	1 day	Calendar Day	
65		Subletting for Contractor desinger for temporary works and ICE	24 days	Thu 12/12/19	Sat 4/1/20	63,82	71,72,66	212 days	Calendar Day	
66		Subletting for independent BIM consultant	24 days	Mon 6/1/20	Wed 5/2/20	65	112	1474 days	None	
67		Subletting for demolition works	24 days	Thu 12/12/19	Sat 4/1/20	82,63	179,191,234,143,204,207,2	1 day	Calendar Day	dem
68		Subletting for AR3 access road and UU diversion for Inlet Works No.1	24 days	Thu 12/12/19	Sat 4/1/20	63,82	119	29 days	Calendar Day	
69		Subletting for pre-drilling works	24 days	Thu 12/12/19	Sat 4/1/20	63,82	225,150,180,192,208	136 days	Calendar Day	pd
70		Subletting for pre-bored H pile works	36 days	Thu 12/12/19	Thu 16/1/20	63,82	151,181,193,209,226	143 days	Calendar Day	hp



Critical Task Milestone Summary

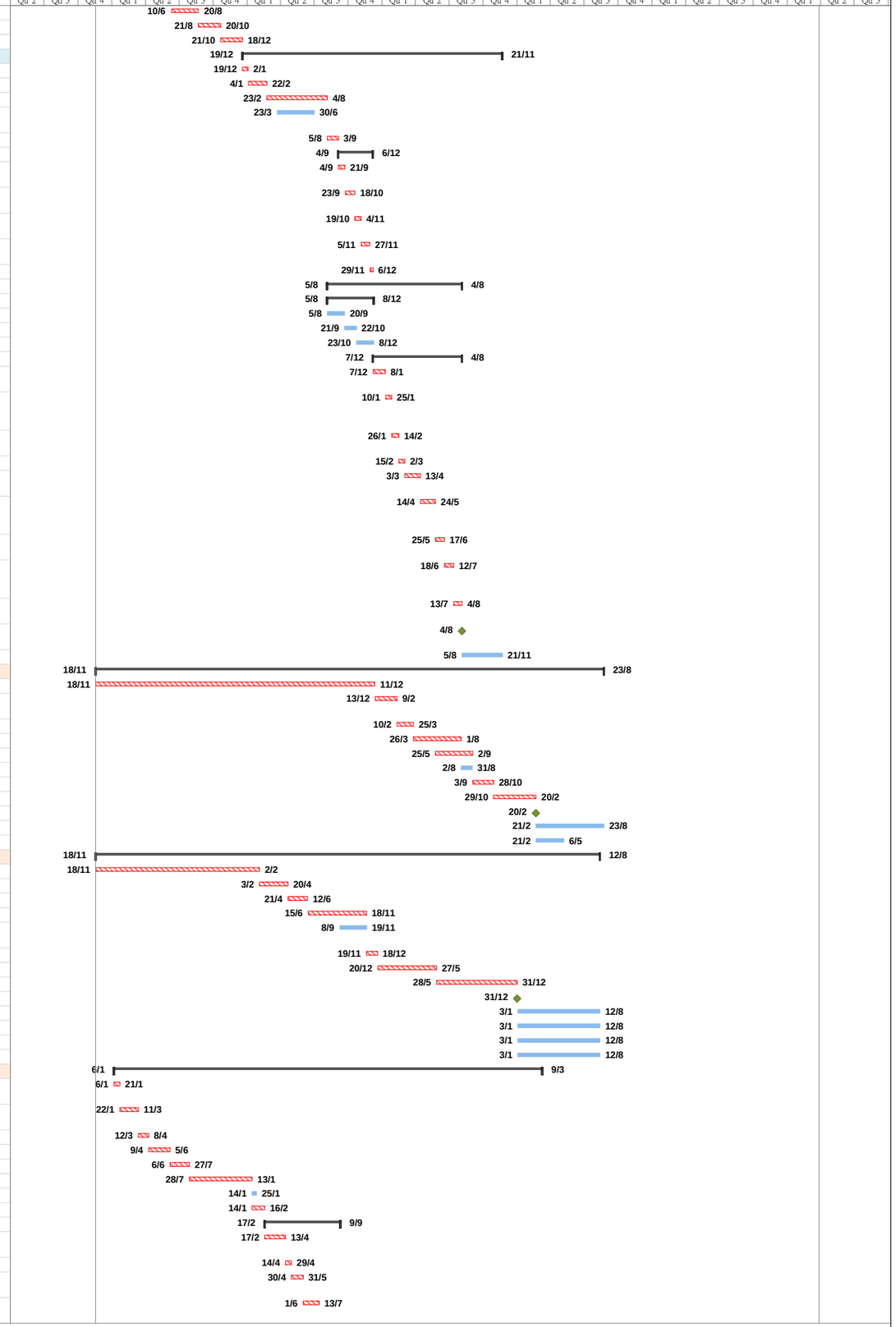
ID	Key Date	Task Name	Duration	Start	Finish	Predecessors	Successors	Total Slack	Task Calendar	trade
71		Subletting for ELS works for Inlet Works No.1	48 days	Sun 5/1/20	Fri 21/2/20	63,65,82	154	560 days	Calendar Day	ex
72		Subletting for ELS works for Membrance Facilities Building and other buildings	48 days	Sun 5/1/20	Fri 21/2/20	63,65,82	184,196,213,229	212 days	Calendar Day	ex
73		Subletting for structural works for Inlet Works Building	48 days	Thu 12/12/19	Tue 28/1/20	63,82	160	635 days	Calendar Day	rc
74		Subletting for structural works for Primary Sedimentation Tanks	48 days	Thu 12/12/19	Tue 28/1/20	63,82		1885 days	Calendar Day	rc
75		Subletting for structural works for Bioreactors	48 days	Thu 12/12/19	Tue 28/1/20	63,82	197	850 days	Calendar Day	rc
76		Subletting for structural works for Membrance Facilities Building	48 days	Thu 12/12/19	Tue 28/1/20	63,82	219	590 days	Calendar Day	rc
77		Subletting for structural works for SAS pumping house and ancillary structures	48 days	Thu 12/12/19	Tue 28/1/20	63,82	230	327 days	Calendar Day	rc
78		Subletting for ABWF works	48 days	Thu 12/12/19	Tue 28/1/20	63,82	176,187,202,223,232,240,2	1132 days	Calendar Day	abwf
79		Subletting for Process Pipeworks, Utilities and Roadworks	48 days	Thu 12/12/19	Tue 28/1/20	63,82	279,283FS+22 days	0 days	Calendar Day	uu
80		Subletting for Landscape Hardworks and Softworks	48 days	Thu 12/12/19	Tue 28/1/20	63,82	292,293,294	978 days	Calendar Day	land
81		**Statutory Submission, Submission and Approval**	**880 days**	**Mon 18/11/19**	**Fri 15/4/22**			**0 days**	**Calendar Day**	
82		Prepare and submit Subcontractor Management Plan (SMP)	24 days	Mon 18/11/19	Wed 11/12/19	2	64,65,67,68,69,70,71,72,7	0 days	Calendar Day	
83		Prepare and submit Interface Management Plan	36 days	Mon 18/11/19	Mon 23/12/19	2		1921 days	Calendar Day	
84		Prepare and submit the TTA plans inside Treatment Plant for UU diversion and buildings construction	24 days	Mon 18/11/19	Wed 11/12/19	2	118	53 days	Calendar Day	
85		Prepare and submit method statement for UU diversion for Inlet Works No.1	12 days	Mon 18/11/19	Fri 29/11/19	2	86	116 days	Calendar Day	
86		PM review and accept the method statement	12 days	Sat 30/11/19	Wed 11/12/19	85	124,125	116 days	Calendar Day	
87		Prepare and submit combine underground services drawing for PM's review the alignment	24 days	Thu 26/12/19	Sat 18/1/20	64	118	15 days	Calendar Day	
88		Prepare and submit method statement for demolition existing structures	24 days	Mon 18/11/19	Wed 11/12/19	2	204,179,191,234,143,207,2	25 days	Calendar Day	dem
89		Prepare and submit method statement for structural works for buildings	24 days	Mon 18/11/19	Wed 11/12/19	2		1933 days	Calendar Day	rc
90		Prepare and submit method statements to MTRC regarding the works within railing protection boundary	36 days	Mon 18/11/19	Mon 23/12/19	2	179,191,234,143,204,207,2	13 days	Calendar Day	dem
91		Prepare and submit & approve Safety Management Plan	24 days	Mon 18/11/19	Wed 11/12/19	2		1933 days	Calendar Day	
92		Prepare and submit Excavation and lateral support (ELS) proposal	24 days	Mon 10/2/20	Wed 4/3/20	2	206	7 days	Calendar Day	ex
93		Prepare and submit Dewatering proposal for basement construction	24 days	Mon 10/2/20	Wed 4/3/20	2	206	7 days	Calendar Day	ex
94		Prepare and submit Pre-construction condition survey of existing structures/ services	24 days	Wed 5/2/20	Fri 28/2/20	116		1854 days	Calendar Day	
95		Prepare and submit Settlement and movement monitoring proposal of existing structures/ services	24 days	Wed 5/2/20	Fri 28/2/20	116		1854 days	Calendar Day	
96		Prepare and submit design of structure elements of the temporary activated carbon deodourization unit	60 days	Fri 17/1/20	Mon 16/3/20	2FS+60 days		1837 days	Calendar Day	
97		Prepare of RSE and structural design for alternation and additional (A&A) works at Membrane Facilities Building No.1 and Main Power House	180 days	Mon 18/10/21	Fri 15/4/22		223	324 days	Calendar Day	
98		**Environmental Aspect Submissions**	**136 days**	**Mon 18/11/19**	**Wed 1/4/20**			**23 days**	**Calendar Day**	
99		Prepare, submit & approve Site Management Plan for Trip Tricket System	45 days	Mon 18/11/19	Wed 1/1/20	2		1912 days	Calendar Day	
100		Prepare, submit & approve Waste Management Plan	45 days	Mon 18/11/19	Wed 1/1/20	2		1912 days	Calendar Day	
101		Prepare, submit & approve Environmental Management Plan	45 days	Mon 18/11/19	Wed 1/1/20	2		1912 days	Calendar Day	
102		**Procurement**	**72 days**	**Mon 18/11/19**	**Tue 28/1/20**			**23 days**	**Calendar Day**	
103		Prepare and submit the Procurement Procedure	12 days	Mon 18/11/19	Fri 29/11/19	2	104	23 days	Calendar Day	
104		PM Review & Accept Procurement Procedure	12 days	Sat 30/11/19	Wed 11/12/19	103	105,106,107,108,109,110	23 days	Calendar Day	
105		Prepare, submit and approve the pipe works material	25 days	Thu 12/12/19	Sun 5/1/20	104	123,279,285,286,288,287,2	23 days	Calendar Day	uu
106		Prepare, submit and approve the pipe water proofing material	25 days	Thu 12/12/19	Sun 5/1/20	104	123,279,285,286,288,287,2	23 days	Calendar Day	uu
107		Prepare, submit and approve the concrete mix material	48 days	Thu 12/12/19	Tue 28/1/20	104	160,197,219,230	327 days	Calendar Day	rc
108		Prepare, submit and approve the rebar material	48 days	Thu 12/12/19	Tue 28/1/20	104	160,197,219,230	327 days	Calendar Day	rc
109		Prepare, submit and approve the metal works material	48 days	Thu 12/12/19	Tue 28/1/20	104		1885 days	Calendar Day	
110		Prepare, submit and approve the ABWF works material	48 days	Thu 12/12/19	Tue 28/1/20	104	176,187,202,223,232,240,2	1132 days	Calendar Day	abwf
111		**BIM**	**48 days**	**Thu 6/2/20**	**Wed 1/4/20**			**1474 days**	**None**	
112		Prepare, submit and approve the proposal of details of Common data environment (CDE)	48 days	Thu 6/2/20	Wed 1/4/20	66		1474 days	None	
113		Construction Works	1957 days	Mon 18/11/19	Thu 27/3/25			0 days	Calendar Day	
114		**Preliminary Works**	**109 days**	**Mon 18/11/19**	**Thu 5/3/20**			**0 days**	**Calendar Day**	
115		Initial Survey	24 days	Mon 18/11/19	Sat 14/12/19	2	116	8 days	Normal Working Hours	
116		Condition Survey	30 days	Fri 27/12/19	Tue 4/2/20	64,115	117,94,95	0 days	Normal Working Hours	
117		Installation of Monitoring Markers	26 days	Wed 5/2/20	Thu 5/3/20	116	120	0 days	Normal Working Hours	
118		**Access Road (AR3), B-1**	**193 days**	**Mon 20/1/20**	**Sat 12/9/20**	**4,84,87**		**0 days**	**Normal Working Hou**	
119		Site setup and clearance wroks	28 days	Mon 20/1/20	Mon 24/2/20	68	120	9 days	Normal Working Hours	
120		Drainage and Utilities Works	76 days	Fri 6/3/20	Tue 9/6/20	119,117	121	0 days	Normal Working Hours	
121	KD1A	Roadworks	80 days	Wed 10/6/20	Sat 12/9/20	120	41FF	0 days	Normal Working Hours	
122		**Inlet Works No.1, B-2**	**854 days**	**Mon 6/1/20**	**Mon 21/11/22**	**6**		**45 days**	**Normal Working Hou**	
123		**Diversion Works (1. Inlet Truck Sewer, Leachate Rising Mains, Sludge Pipes, Tank Drains and Pipelines near Primary Sludge Thinkeners)**	**180 days**	**Mon 6/1/20**	**Fri 14/8/20**	**105,106**	**42FF**	**74 days**	**Normal Working Hours_20190924**	
124		Utilities scanning to idenify existing UU arrangement	12 days	Mon 6/1/20	Sat 18/1/20	86	125SS	74 days	Normal Working Hours	
125		Trial pits to locate the collection points	24 days	Mon 6/1/20	Wed 5/2/20	86,124SS	127,133,137,134,135,132	74 days	Normal Working Hours	
126		**Diversion of Inlet Truck Sewer (approx. 40m 1800mm dia concrete pipe, 4 deep manholes and Inlet Reception Chamber)**	**146 days**	**Thu 6/2/20**	**Mon 3/8/20**			**84 days**	**Normal Working Hours_20190924**	
127		Trench Excavation for 1800mm dia pipeline and manholes	45 days	Thu 6/2/20	Sat 28/3/20	125	128	84 days	Normal Working Hours	uu
128		Construct M/H MHA01, MHA02, MHA03, MHA04 and Inlet Reception Chamber	65 days	Mon 30/3/20	Fri 19/6/20	127	129	84 days	Normal Working Hours_20190924	uu
129		Lay 1800mm dia concretre pipe	24 days	Sat 20/6/20	Mon 20/7/20	128	130	84 days	Normal Working Hours	uu
130		Collection to existing Inlet Chamber	12 days	Tue 21/7/20	Mon 3/8/20	129		84 days	Normal Working Hours	uu
131		**Diversion of Leachate Rising Main, Sludge Pipes and Tank Drain**	**150 days**	**Thu 6/2/20**	**Fri 7/8/20**			**80 days**	**Normal Working Hou**	
132		Diversion of tank drain, approx. 70m 675mm dia conrete pipe and 2 manholes MHD8.5 & MHD9.5)	150 days	Thu 6/2/20	Fri 7/8/20	125	135SS+60 days,134SS+60	80 days	Normal Working Hours_20190924	uu
133		Diversion of leachate rising main, CHLC, approx. 24m DN250 DI	60 days	Tue 21/4/20	Fri 3/7/20	125,132SS+60 days		110 days	Normal Working Hours_20190924	uu
134		Diversion of sludge pipe, CHES1 approx. 154m DN250 CI	75 days	Tue 21/4/20	Tue 21/7/20	125,132SS+60 days		95 days	Normal Working Hours_20190924	uu
135		Diversion of sludge pipe, CHES2 approx. 106m DN250 CI	75 days	Tue 21/4/20	Tue 21/7/20	125,132SS+60 days		95 days	Normal Working Hours_20190924	uu
136		**Diversion of pipelines near Primary Sludge Thickeners (approx. 180m long 150mm to 375mm concrete pipes)**	**156 days**	**Thu 6/2/20**	**Fri 14/8/20**			**74 days**	**Normal Working Hours_20190924**	**uu**
137		Trench Excavation from M/H MHD1E to MHD5 (approx. 90m long with M/Hs MHD1A, 1B, 1C, 1D & 1E)	60 days	Thu 6/2/20	Mon 20/4/20	125	138SS+45 days,140	74 days	Normal Working Hours_20190924	uu
138		Manholes construction and Pipe laying	60 days	Mon 30/3/20	Sat 13/6/20	137SS+45 days	139	100 days	Normal Working Hours	uu
139		Backfilling	25 days	Mon 15/6/20	Wed 15/7/20	138		100 days	Normal Working Hours	uu
140		Trench Excavation from MHD5 to MHD9.5 (approx. 90m long with M/Hs MHD5A & 5B)	60 days	Tue 21/4/20	Fri 3/7/20	137	141SS+26 days	74 days	Normal Working Hours_20190924	uu
141		Manholes construction and Pipe laying	45 days	Sat 23/5/20	Thu 16/7/20	140SS+26 days	142	74 days	Normal Working Hours	uu
142	KD1B	Backfilling	25 days	Fri 17/7/20	Fri 14/8/20	141		74 days	Normal Working Hours	uu
143		**Decommission and Demolition of Existing Faciliates and Structures**	**240 days**	**Mon 2/3/20**	**Fri 18/12/20**	**6,67,88,90**	**149**	**0 days**	**Normal Working Hou**	
144		Primary Sludge Thickening Tank No.1 and No.2	80 days	Mon 2/3/20	Tue 9/6/20		145	0 days	Normal Working Hours	dem



Critical Task Milestone Summary

First Programme

ID	Key Date	Task Name	Duration	Start	Finish	Predecessors	Successors	Total Slack	Task Calendar	trade
145		Primary Sludge Pump Pit	60 days	Wed 10/6/20	Thu 20/8/20	144	146	0 days	Normal Working Hours	dem
146		Septic Tank	50 days	Fri 21/8/20	Tue 20/10/20	145	147	0 days	Normal Working Hours	dem
147		Diesel Tank	50 days	Wed 21/10/20	Fri 18/12/20	146		0 days	Normal Working Hours	dem
148		**Inlet Works No.1 Building**	**569 days**	**Sat 19/12/20**	**Mon 21/11/22**	**6**		**0 days**	**Normal Working Hou**	
149		Excavate to +6.5mPD (1980sqm excavated soil)	10 days	Sat 19/12/20	Sat 2/1/21	143	150	0 days	Normal Working Hours	ex
150		Predrilling (59nrs, 6rigs, 4days/drillhole/rig)	40 days	Mon 4/1/21	Mon 22/2/21	149,69	151	0 days	Normal Working Hours	pd
151		Pre-bored H piles (186nos, 7rigs, 5days/rig/pile)	133 days	Tue 23/2/21	Wed 4/8/21	150,70	152SS+24 days,154,162,1	0 days	Normal Working Hours	hp
152		Sheetpile Installation (FSPIV, 3,840sq.m, 1rigs, 50sqm/rig/day) with toe grouting	80 days	Tue 23/3/21	Wed 30/6/21	151SS+24 days	154	55 days	Normal Working Hours_20190924	sp
153		Pile Load Test	26 days	Thu 5/8/21	Fri 3/9/21	151	154	0 days	Normal Working Hours	lt
154		ELS works (strutting 4 layers, excavate soil 7445cu.m)	77 days	Sat 4/9/21	Mon 6/12/21	152,151,71,153		0 days	Normal Working Hours	ex
155		Excavate to +5.0mPD and S1 wailing / strutting (960sqm excavated soil)	15 days	Sat 4/9/21	Tue 21/9/21		156	0 days	Normal Working Hours_20190924	ex
156		Excavate to +2.0mPD and S2 wailing / strutting (1920sqm excavated soil)	20 days	Thu 23/9/21	Mon 18/10/21	155	157	0 days	Normal Working Hours_20190924	ex
157		Excavate to +0.0mPD and S3 wailing / strutting (1280sqm excavated soil)	15 days	Tue 19/10/21	Thu 4/11/21	156	158	0 days	Normal Working Hours_20190924	ex
158		Excavate to -3.0mPD and S4 wailing / strutting (1920sqm excavated soil)	20 days	Fri 5/11/21	Sat 27/11/21	157	159	0 days	Normal Working Hours_20190924	ex
159		Excavate -7.4mPD (1365sqm excavated soil)	7 days	Mon 29/11/21	Mon 6/12/21	158	166	0 days	Normal Working Hours	ex
160		R.C. Structure works	296 days	Thu 5/8/21	Thu 4/8/22	73,107,108		0 days	Normal Working Hours	rc
161		Phase A (floor area 585 sqm)	105 days	Thu 5/8/21	Wed 8/12/21			66 days	Normal Working Hours	rc
162		Rebar fix and formwork and concreting for the pile cap (G/F)	40 days	Thu 5/8/21	Mon 20/9/21	151	163	66 days	Normal Working Hours	rc
163		Rebar fix and formwork and concreting upto +13.45mPD (1/F)	25 days	Tue 21/9/21	Fri 22/10/21	162	164	66 days	Normal Working Hours	rc
164		Rebar fix and formwork and concreting upto +25.80mPD (R/F)	40 days	Sat 23/10/21	Wed 8/12/21	163	170	66 days	Normal Working Hours	rc
165		Phase B (621 sqm) and Phase C (662 sqm)	193 days	Tue 7/12/21	Thu 4/8/22			0 days	Normal Working Hours	rc
166		Rebar fix and formwork and concreting for the Inlet Works structure upto level -3.0mPD and removal of S4 wailing/strutting	26 days	Tue 7/12/21	Sat 8/1/22	159	167	0 days	Normal Working Hours_20190924	rc
167		Rebar fix and formwork and concreting for the Inlet Works structure upto level +0.0mPD and removal of S3 and S2 wailing/strutting	14 days	Mon 10/1/22	Tue 25/1/22	166	168	0 days	Normal Working Hours_20190924	rc
168		Rebar fix and formwork and concreting for the Inlet Works structure upto level +5.0mPD and removal of S1 wailing/strutting	14 days	Wed 26/1/22	Mon 14/2/22	167	169	0 days	Normal Working Hours_20190924	rc
169		Apply waterproofing membrance and backfilling	14 days	Tue 15/2/22	Wed 2/3/22	168	170	0 days	Normal Working Hours	
170		Rebar fix and formwork and concreting for the Inlet Works structure of ground floor levels	35 days	Thu 3/3/22	Wed 13/4/22	169,164	171	0 days	Normal Working Hours_20190924	rc
171		Rebar fix and formwork and concreting for the Inlet Works structure of 1/F levels (Phase B +20.11mPD and Phase C +13.45mPD)	30 days	Thu 14/4/22	Tue 24/5/22	170	172	0 days	Normal Working Hours_20190924	rc
172		Rebar fix and formwork and concreting for the Inlet Works structure of double part levels (Phase B +21.31mPD)	20 days	Wed 25/5/22	Fri 17/6/22	171	173	0 days	Normal Working Hours_20190924	rc
173		Rebar fix and formwork and concreting for the Inlet Works structure of R/F levels (Phase B +27.50mPD and Phase C +25.80mPD)	20 days	Sat 18/6/22	Tue 12/7/22	172	174	0 days	Normal Working Hours_20190924	rc
174	KD1C	Rebar fix and formwork and concreting for the Inlet Works structure upto level +27.8mPD (upper roof floor level)	20 days	Wed 13/7/22	Thu 4/8/22	173	176,43FF,175	0 days	Normal Working Hours_20190924	rc
175	KD1C	Allow access to Contractor DE/2018/04 for E&M installation and T&C works	0 days	Thu 4/8/22	Thu 4/8/22	174	43FF	0 days	Normal Working Hours_20190924	
176	SW1	ABWF works	90 days	Fri 5/8/22	Mon 21/11/22	174,110,78	55FF	293 days	Normal Working Hours	abwf
177		**Primary Sedimentation Tanks, B-3**	**1115 days**	**Mon 18/11/19**	**Wed 23/8/23**	**8**		**0 days**	**Normal Working Hou**	
178		Operation of the Existing Primary sedimentation Tanks	615 days	Mon 18/11/19	Sat 11/12/21	2	179	0 days	None	
179		Decommission and Demolition of existing primary sedimentation tanks no. 1 & 2	45 days	Mon 13/12/21	Wed 9/2/22	67,88,90,178	180	0 days	Normal Working Hours_20190924	dem
180		Predrilling (68nrs, 7rigs, 4days/drillhole/rig)	38 days	Thu 10/2/22	Fri 25/3/22	179,69,225	181	0 days	Normal Working Hours	pd
181		Pre-bored H piles (205nos, 8rigs, 4days/pile/rig)	102 days	Sat 26/3/22	Mon 1/8/22	180,70,226	182SS+45 days,184,183	0 days	Normal Working Hours	hp
182		Sheetpile Installation (FSP-II, 3360sq.m) with toe grouting	85 days	Wed 25/5/22	Fri 2/9/22	181SS+45 days	184	0 days	Normal Working Hours	sp
183		Pile Load Test	26 days	Tue 2/8/22	Wed 31/8/22	181	184	2 days	Normal Working Hours	lt
184		ELS works (20000cu.m soil with 2 layers wailing / strutting)	45 days	Sat 3/9/22	Fri 28/10/22	181,72,183,182	185	0 days	Normal Working Hours	ex
185	KD1D	R.C. Structure works	92 days	Sat 29/10/22	Mon 20/2/23	184	186,187,44FF,188	0 days	Normal Working Hours	rc
186	KD1D	Allow access to Contractor DE/2018/04 for E&M installation and T&C works	0 days	Mon 20/2/23	Mon 20/2/23	185	44FF	0 days	Normal Working Hours	
187	SW1	ABWF works	150 days	Tue 21/2/23	Wed 23/8/23	185,110,78	55FF	71 days	Normal Working Hours	abwf
188	SW1	Flowmeter Chamber no.1	60 days	Tue 21/2/23	Sat 6/5/23	185	55FF	161 days	None	
189		**Bioreactors No.2A & 2B, B-4**	**1106 days**	**Mon 18/11/19**	**Sat 12/8/23**	**9**		**0 days**	**Normal Working Hou**	
190		Operation of 2no. Existing 800mm air mains over bioreactor no.2	360 days	Mon 18/11/19	Tue 2/2/21	2	191	0 days	None	
191		Decommission and Demolition of existing bioreactor no.2	60 days	Wed 3/2/21	Tue 20/4/21	67,88,90,190	192	0 days	Normal Working Hours	dem
192		Predrilling (76nrs, 7rigs, 4days/drillhole/rig)	44 days	Wed 21/4/21	Sat 12/6/21	191,69	193	0 days	Normal Working Hours	pd
193		Pre-bored H piles (157nos, 6rigs, 5days/pile/rig)	131 days	Tue 15/6/21	Thu 18/11/21	192,70,209	194SS+72 days,196,195	0 days	Normal Working Hours	hp
194		Sheetpile Installation (FSP-II, 3000sq.m, 50sqm/rig/day) with toe grouting	60 days	Wed 8/9/21	Fri 19/11/21	193SS+72 days	196	25 days	Normal Working Hours_20190924	sp
195		Pile Load Test	26 days	Fri 19/11/21	Sat 18/12/21	193	196	0 days	Normal Working Hours	lt
196		ELS works (18100cu.m soil with 4 layers wailing / strutting)	125 days	Mon 20/12/21	Fri 27/5/22	193,194,72,195	197	0 days	Normal Working Hours	ex
197	KD1E	R.C. Structure works	180 days	Sat 28/5/22	Sat 31/12/22	75,107,108,196	198,202,45FF,199,200,201	0 days	Normal Working Hours	rc
198	KD1E	Allow access to Contractor DE/2018/04 for E&M installation and T&C works	0 days	Sat 31/12/22	Sat 31/12/22	197	45FF	0 days	Normal Working Hours	
199	SW1	Flowmeter no. 2-4	180 days	Tue 3/1/23	Sat 12/8/23	197	55FF	80 days	None	
200	SW1	Gate Valve Chamber no.1-3	180 days	Tue 3/1/23	Sat 12/8/23	197	55FF	80 days	None	
201	SW1	Plug Vakve Chamber no.1-2	180 days	Tue 3/1/23	Sat 12/8/23	197	55FF	80 days	None	
202	SW1	ABWF works	180 days	Tue 3/1/23	Sat 12/8/23	197,110,78	55FF	80 days	Normal Working Hours	abwf
203		**Membrane Facilities Building, B-5**	**941 days**	**Mon 6/1/20**	**Thu 9/3/23**	**10**		**0 days**	**Normal Working Hou**	
204		Decommission and Demolition of existing final sedimentation tanks no. 3 & 4 (Partial)	14 days	Mon 6/1/20	Tue 21/1/20	88,67,90	205	0 days	Normal Working Hours_20190924	dem
205		Installation of sheetpile, FSP-IV 2460sq.m & FSP-II 1680sq.m (50sq.m/rig/day, 2rigs) with toe grout	40 days	Wed 22/1/20	Wed 11/3/20	204	206	0 days	Normal Working Hours_20190924	sp
206		Excavation to level +5.5mPD (5700cu.m soil, 250cu.m/day)	23 days	Thu 12/3/20	Wed 8/4/20	205,92,93	207	0 days	Normal Working Hours	ex
207		Demolition of remaining final sedimentation tanks	45 days	Thu 9/4/20	Fri 5/6/20	206,67,88,90	208	0 days	Normal Working Hours	dem
208		Predrilling (83nrs, 8rigs, 4days/drillhole/rig)	42 days	Sat 6/6/20	Mon 27/7/20	207,69	209	0 days	Normal Working Hours	pd
209		Pre-bored H piles (224nos, 8rigs, 5days/pile/rig)	140 days	Tue 28/7/20	Wed 13/1/21	208,70	211,210,193	0 days	Normal Working Hours	hp
210		Install S1 wailing / strutting	10 days	Thu 14/1/21	Mon 25/1/21	209	213	16 days	Normal Working Hours	ex
211		Pile Load Test	26 days	Thu 14/1/21	Tue 16/2/21	209	212	0 days	Normal Working Hours	lt
212		**ELS works**	**169 days**	**Wed 17/2/21**	**Thu 9/9/21**	**211**		**0 days**	**None**	
213		Excavate to level +2mPD and install S2 wailing / strutting (8090cu.m soil, 250cu.m/day)	45 days	Wed 17/2/21	Tue 13/4/21	210,72	214	0 days	Normal Working Hours_20190924	ex
214		Installation of sheetpile, FSP-IV 380sq.m (50sq.m/rig/day, 1rigs)	14 days	Wed 14/4/21	Thu 29/4/21	213	215	0 days	Normal Working Hours	sp
215		Excavate to level -1.5mPD and install S3 wailing / strutting (4000cu.m soil, 160cu.m/day)	25 days	Fri 30/4/21	Mon 31/5/21	214	216	0 days	Normal Working Hours_20190924	ex
216		Excavate to level -4.6mPD and install S4 wailing / strutting (5200cu.m soil, 160cu.m/day)	35 days	Tue 1/6/21	Tue 13/7/21	215	217	0 days	Normal Working Hours_20190924	ex

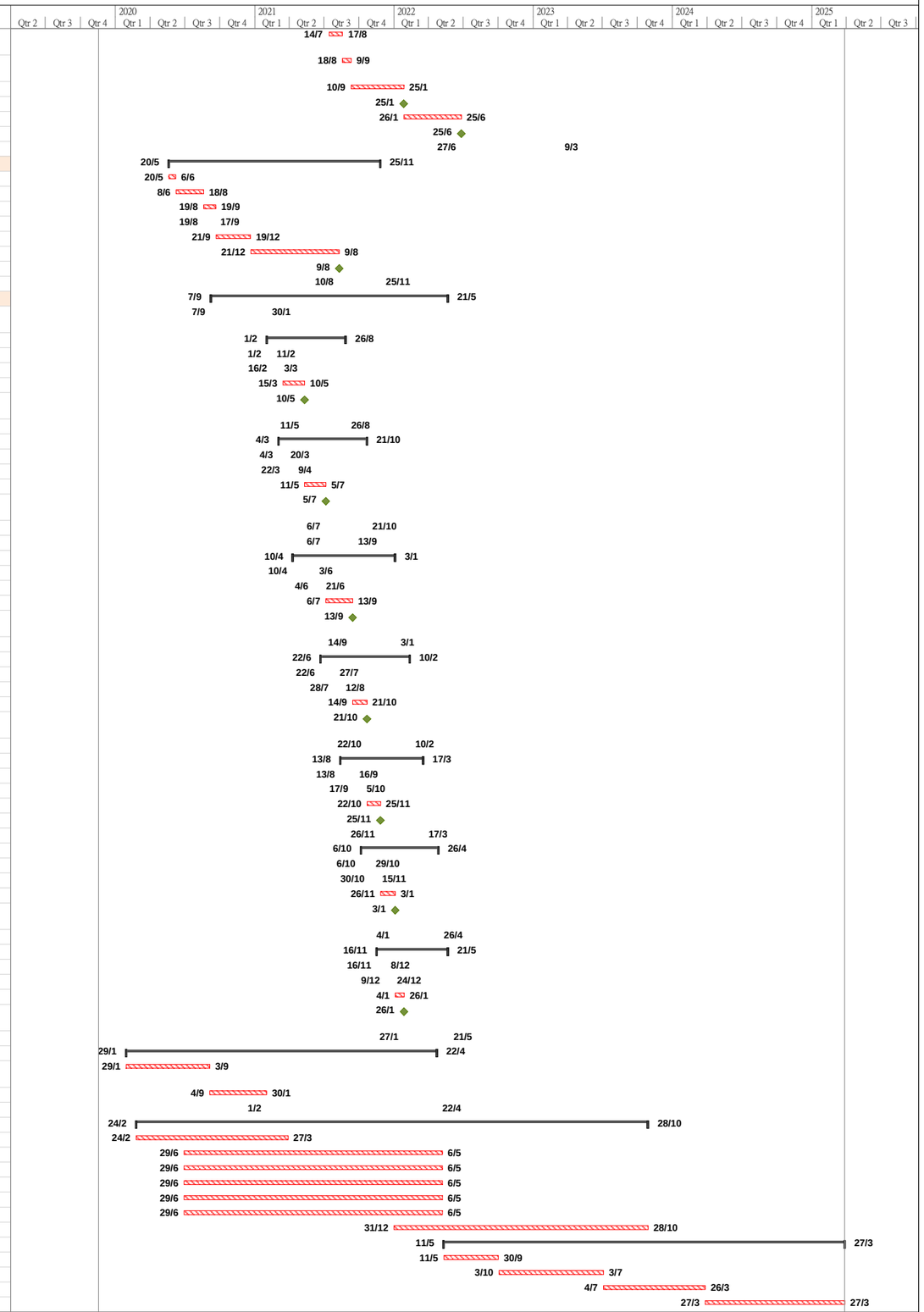


Critical Task Milestone Summary

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

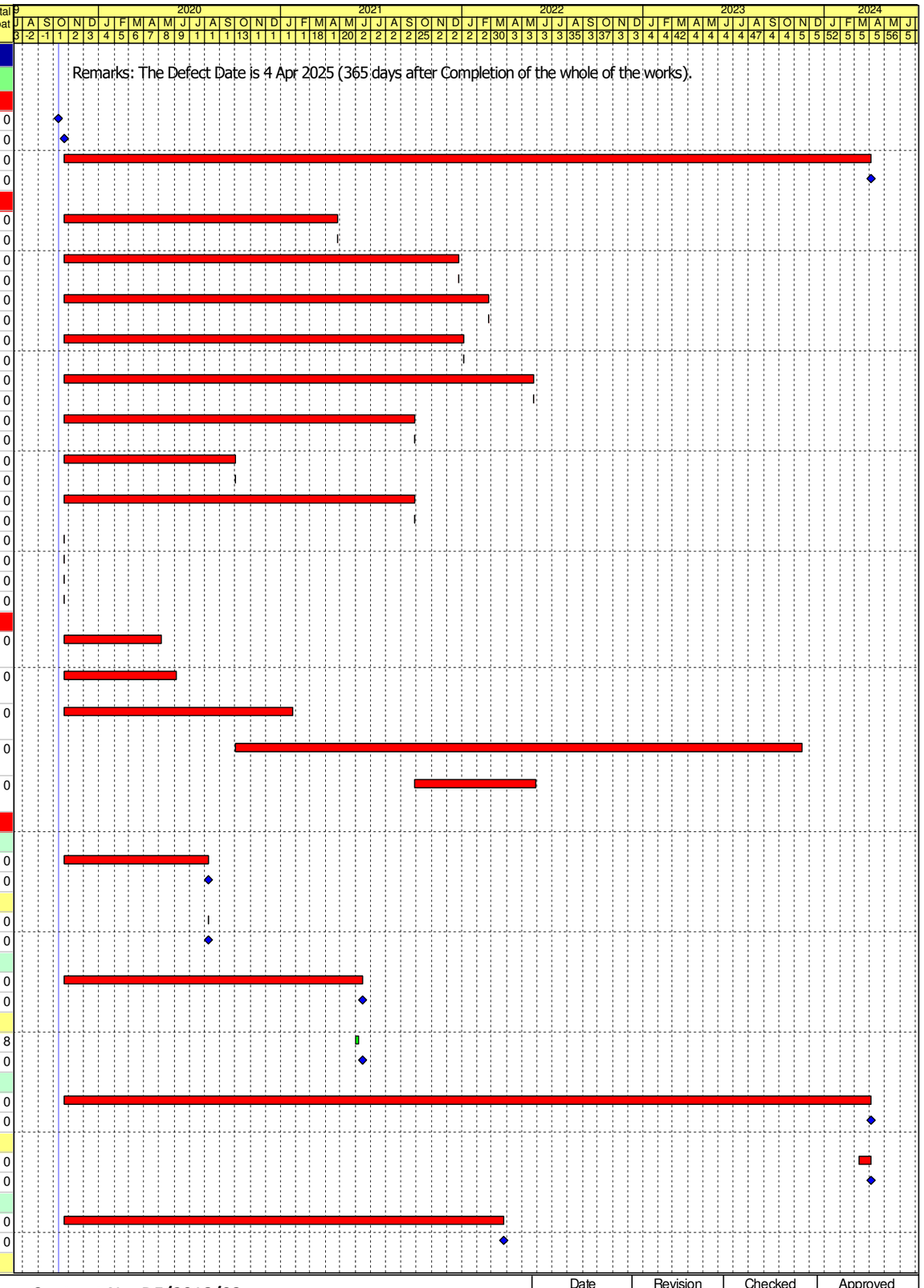
First Programme

ID	Key Date	Task Name	Duration	Start	Finish	Predecessors	Successors	Total Slack	Task Calendar	trade
217		Excavate to level -7.3mPD and install S5 wailing / strutting (4540cu.m soil, 160cu.m/day)	30 days	Wed 14/7/21	Tue 17/8/21	216	218	0 days	Normal Working Hours_20190924	ex
218		Excavate to final formation level -9.0mPD and install S5 wailing / strutting (2860cu.m soil, 160cu.m/day)	20 days	Wed 18/8/21	Thu 9/9/21	217	219	0 days	Normal Working Hours_20190924	ex
219	KD1F	R.C. Structure works (from B2 - Level 1)	112 days	Fri 10/9/21	Tue 25/1/22	76,107,108,230,	46FF,220,221	0 days	Normal Working Hours	rc
220	KD1F	Allow access to Contractor DE/2018/04 for E&M installation and T&C works	0 days	Tue 25/1/22	Tue 25/1/22	219	46FF	0 days	Normal Working Hours	
221	KD1G	R.C. Structure works (from Level 1 to Roof)	120 days	Wed 26/1/22	Sat 25/6/22	219	223,47FF,222	0 days	Normal Working Hours	rc
222	KD1G	Allow access to Contractor DE/2018/04 for E&M installation and T&C works	0 days	Sat 25/6/22	Sat 25/6/22	221	47FF	0 days	Normal Working Hours	
223	SW1	ABWF works	210 days	Mon 27/6/22	Thu 9/3/23	221,110,78,97	55FF	206 days	Normal Working Hours	abwf
224		**SAS Pumping Station, B-6**	**455 days**	**Wed 20/5/20**	**Thu 25/11/21**	**11**		**0 days**	**Normal Working Hou**	
225		Predrilling (4nrs, 1rig, 4days/drillhole/rig)	16 days	Wed 20/5/20	Sat 6/6/20	69	226,180	0 days	Normal Working Hours	pd
226		Pre-bored H piles (12nos, 1rigs, 5days/pile/rig)	60 days	Mon 8/6/20	Tue 18/8/20	225,70	227,181,228	0 days	Normal Working Hours	hp
227		Sheetpile Installation (FSP-II, 690sq.m, 50sqm/day) with toe grouting	28 days	Wed 19/8/20	Sat 19/9/20	226	229	0 days	Normal Working Hours	sp
228		Pile Load Test	26 days	Wed 19/8/20	Thu 17/9/20	226	229	2 days	Normal Working Hours	lt
229		ELS works (1300cu.m soil with 2 layers wailing / strutting)	75 days	Mon 21/9/20	Sat 19/12/20	227,72,228	230	0 days	Normal Working Hours	ex
230	KD1H	R.C. Structure works	186 days	Mon 21/12/20	Mon 9/8/21	77,107,108,229	231,232,48FF,219	0 days	Normal Working Hours	rc
231	KD1H	Allow access to Contractor DE/2018/03 for E&M installation and T&C works	0 days	Mon 9/8/21	Mon 9/8/21	230	48FF	0 days	Normal Working Hours	
232	SW1	ABWF works	90 days	Tue 10/8/21	Thu 25/11/21	230,110,78	55FF	585 days	Normal Working Hours	abwf
233		**Ancillary Structures, B-7**	**503 days**	**Mon 7/9/20**	**Sat 21/5/22**	**12**		**5 days**	**Normal Working Hou**	
234		Demolition of Existing Faciliates and Structures (leachate pump pit & pumping station)	120 days	Mon 7/9/20	Sat 30/1/21	67,88,90	235,241,248,254,260,266,2	5 days	Normal Working Hours_20190924	dem
235		**Chemical System No.1**	**168 days**	**Mon 1/2/21**	**Thu 26/8/21**	**234**		**5 days**	**Normal Working Hou**	
236		Excavation for Raft Footing (20cu.m)	10 days	Mon 1/2/21	Thu 11/2/21		237	5 days	Normal Working Hours	ex
237		Plate load test	14 days	Tue 16/2/21	Wed 3/3/21	236	238,242	5 days	Normal Working Hours	
238	KD1J	R.C. structure works	45 days	Mon 15/3/21	Mon 10/5/21	237	239,50FF,244,240	0 days	Normal Working Hours	rc
239	KD1J	Allow access to Contractor DE/2018/04 for E&M installation and T&C works	0 days	Mon 10/5/21	Mon 10/5/21	238	50FF	215 days	Normal Working Hours_20190924	
240	SW1	ABWF works + BS works	90 days	Tue 11/5/21	Thu 26/8/21	110,78,238	55FF	660 days	Normal Working Hours	abwf
241		**Chemical System No.2**	**189 days**	**Thu 4/3/21**	**Thu 21/10/21**	**234**		**5 days**	**Normal Working Hou**	
242		Excavation for Raft Footing (100cu.m)	15 days	Thu 4/3/21	Sat 20/3/21	237	243	5 days	Normal Working Hours	ex
243		Plate load test	14 days	Mon 22/3/21	Fri 9/4/21	242	244,249	5 days	Normal Working Hours	
244	KD1J	R.C. structure works	45 days	Tue 11/5/21	Mon 5/7/21	243,238	245,251,50FF,246,247	0 days	Normal Working Hours	rc
245	KD1J	Allow access to Contractor DE/2018/04 for E&M installation and T&C works	0 days	Mon 5/7/21	Mon 5/7/21	244	50FF	170 days	Normal Working Hours_20190924	
246	SW1	ABWF works + BS works	90 days	Tue 6/7/21	Thu 21/10/21	110,78,244	55FF	615 days	Normal Working Hours	abwf
247	SW1	Demolition of existing chemical room	60 days	Tue 6/7/21	Mon 13/9/21	244	55FF	645 days	Normal Working Hours	
248		**Fire Services Sprinkler Pumping Room**	**220 days**	**Sat 10/4/21**	**Mon 3/1/22**	**234**		**5 days**	**Normal Working Hou**	
249		Excavation for Raft Footing (800cu.m)	45 days	Sat 10/4/21	Thu 3/6/21	243	250	5 days	Normal Working Hours	ex
250		Plate load test	14 days	Fri 4/6/21	Mon 21/6/21	249	251,255	5 days	Normal Working Hours	
251	KD1J	R.C. structure works	60 days	Tue 6/7/21	Mon 13/9/21	250,244	253,257,252,50FF	0 days	Normal Working Hours	rc
252	KD1J	Allow access to Contractor DE/2018/04 for E&M installation and T&C works	0 days	Mon 13/9/21	Mon 13/9/21	251	50FF	110 days	Normal Working Hours_20190924	
253	SW1	ABWF works + BS works	90 days	Tue 14/9/21	Mon 3/1/22	110,78,251	55FF	555 days	Normal Working Hours	abwf
254		**Temporary Chemical Dosing System**	**191 days**	**Tue 22/6/21**	**Thu 10/2/22**	**234**		**5 days**	**Normal Working Hou**	
255		Excavation for Raft Footing (300cu.m)	30 days	Tue 22/6/21	Tue 27/7/21	250	256	5 days	Normal Working Hours	ex
256		Plate load test	14 days	Wed 28/7/21	Thu 12/8/21	255	257,261	5 days	Normal Working Hours	
257	KD1J	R.C. structure works	30 days	Tue 14/9/21	Thu 21/10/21	256,251	258,50FF,263,259	0 days	Normal Working Hours	rc
258	KD1J	Allow access to Contractor DE/2018/04 for E&M installation and T&C works	0 days	Thu 21/10/21	Thu 21/10/21	257	50FF	80 days	Normal Working Hours_20190924	
259	SW1	ABWF works + BS works	90 days	Fri 22/10/21	Thu 10/2/22	110,78,257	55FF	525 days	Normal Working Hours	abwf
260		**Fire Hydrant and Booster Pump Room**	**177 days**	**Fri 13/8/21**	**Thu 17/3/22**	**234**		**5 days**	**Normal Working Hou**	
261		Excavation for Raft Footing (200cu.m)	30 days	Fri 13/8/21	Thu 16/9/21	256	262	5 days	Normal Working Hours	ex
262		Plate load test	14 days	Fri 17/9/21	Tue 5/10/21	261	263,267	5 days	Normal Working Hours	
263	KD1J	R.C. structure works	30 days	Fri 22/10/21	Thu 25/11/21	262,257	264,265,50FF,269	0 days	Normal Working Hours	rc
264	KD1J	Allow access to Contractor DE/2018/04 for E&M installation and T&C works	0 days	Thu 25/11/21	Thu 25/11/21	263	50FF	50 days	Normal Working Hours	
265	SW1	ABWF works + BS works	90 days	Fri 26/11/21	Thu 17/3/22	263,110,78	55FF	495 days	Normal Working Hours	abwf
266		**Emergency Generator House**	**163 days**	**Wed 6/10/21**	**Tue 26/4/22**	**234**		**5 days**	**Normal Working Hou**	
267		Excavation for Raft Footing (100cu.m)	20 days	Wed 6/10/21	Fri 29/10/21	262	268	5 days	Normal Working Hours	ex
268		Plate load test	14 days	Sat 30/10/21	Mon 15/11/21	267	269,273	5 days	Normal Working Hours	
269	KD1J	R.C. structure works	30 days	Fri 26/11/21	Mon 3/1/22	268,263	270,50FF,271,275	0 days	Normal Working Hours	rc
270	KD1J	Allow access to Contractor DE/2018/04 for E&M installation and T&C works	0 days	Mon 3/1/22	Mon 3/1/22	269	50FF	20 days	Normal Working Hours_20190924	
271	SW1	ABWF works + BS works	90 days	Tue 4/1/22	Tue 26/4/22	110,78,269	55FF	465 days	Normal Working Hours	abwf
272		**Deodorization System No.1 and No.3A**	**149 days**	**Tue 16/11/21**	**Sat 21/5/22**	**234**		**5 days**	**Normal Working Hou**	
273		Excavation for Raft Footing (400cu.m)	20 days	Tue 16/11/21	Wed 8/12/21	268	274	5 days	Normal Working Hours	ex
274		Plate load test	14 days	Thu 9/12/21	Fri 24/12/21	273	275	5 days	Normal Working Hours	
275	KD1J	R.C. structure works	20 days	Tue 4/1/22	Wed 26/1/22	274,269	276,277,50FF	0 days	Normal Working Hours	rc
276	KD1J	Allow access to Contractor DE/2018/04 for E&M installation and T&C works	0 days	Wed 26/1/22	Wed 26/1/22	275	50FF	0 days	Normal Working Hours_20190924	
277	SW1	ABWF works + BS works	90 days	Thu 27/1/22	Sat 21/5/22	275	55FF	445 days	Normal Working Hours	
278		**Additional and Alternation Works for Existing Facilities (B-7A, B-8, B-8A)**	**662 days**	**Wed 29/1/20**	**Fri 22/4/22**			**0 days**	**Normal Working Hou**	
279	KD2B	B-8A Alternation works for existing Air Blower House No.2 (Pipeline CHTA, approx. 133m DN800 D.I.)	180 days	Wed 29/1/20	Thu 3/9/20	15,79,105,106	52FF,280	0 days	Normal Working Hours_20190924	uu
280	KD1I	B7-A Alternation works for exisiting Power House	122 days	Fri 4/9/20	Sat 30/1/21	13,67,88,90,279	49FF,281	0 days	Normal Working Hours	dem
281	SW3	Alternation works for existing Membrane Facilities Building No.1	360 days	Mon 1/2/21	Fri 22/4/22	14,280	57FF	573 days	Normal Working Hours	
282		**External Underground Service, Utilities, Road/Drain**	**1091 days**	**Mon 24/2/20**	**Sat 28/10/23**	**16**		**0 days**	**Normal Working Hou**	
283	KD2A	Process Pipes CHR and CHS (approx. 100m twin DN900 D.I.)	325 days	Mon 24/2/20	Sat 27/3/21	105,106,79FS+2	289,288SS+101 days,286S	0 days	Normal Working Hours	uu
284	SW2	Process Pipes, exclude CHR and CHS	550 days	Mon 29/6/20	Fri 6/5/22	283SS+101 days	289FS-100 days,56FF	0 days	Normal Working Hours	uu
285	SW2	Drainage	550 days	Mon 29/6/20	Fri 6/5/22	283SS+101 days	289FS-100 days,56FF	0 days	Normal Working Hours	uu
286	SW2	Sewerage	550 days	Mon 29/6/20	Fri 6/5/22	283SS+101 days	289FS-100 days,56FF	0 days	Normal Working Hours	uu
287	SW2	Waterworks	550 days	Mon 29/6/20	Fri 6/5/22	283SS+101 days	291FS+2 days,56FF	0 days	Normal Working Hours	uu
288	SW2	Cable Ducts	550 days	Mon 29/6/20	Fri 6/5/22	283SS+101 days	289FS-100 days,56FF	0 days	Normal Working Hours	uu
289	KD3A	Roadworks	540 days	Fri 31/12/21	Sat 28/10/23	285FS-100 days	53FF	0 days	Normal Working Hours	
290		**Landscaping Works**	**854 days**	**Wed 11/5/22**	**Thu 27/3/25**	**16**		**0 days**	**Normal Working Hou**	
291	SW3	Irrigation System	120 days	Wed 11/5/22	Fri 30/9/22	287FS+2 days,1	292,57FF	0 days	Normal Working Hours	uu
292	SW3	Hard Landscaping Works	220 days	Mon 3/10/22	Mon 3/7/23	291,80	293,57FF	0 days	Normal Working Hours	land
293	SW3	Soft Landscaping Works	220 days	Tue 4/7/23	Tue 26/3/24	292,80	294,57FF	0 days	Normal Working Hours	land
294	DLP	Establishment Works (365 days)	294 days	Wed 27/3/24	Thu 27/3/25	293,80	59FF	0 days	Normal Working Hours	



Critical Task Milestone Summary

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
SWH - Main Works Stage 1 Sidestream Treatment Facilities & E&M Works for Sludge Treatment Facilities							
Contract Data							
Starting Date & Completion Date							
AS000010	Contract Date (LOA)	0	11-Oct-19		11-Oct-19		0
AS000020	Starting Date	0	23-Oct-19		23-Oct-19		0
AS000110	Whole Contract Period	1625	24-Oct-19	04-Apr-24	24-Oct-19	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	24-Oct-19	25-Apr-21	24-Oct-19	25-Apr-21	0
AS001120	Planned Access Date for Portion C-1A	1	25-Apr-21	25-Apr-21	25-Apr-21	25-Apr-21	0
AS001200	Portion C-2A (within 705 to 795 days from starting date)	795	24-Oct-19	26-Dec-21	24-Oct-19	26-Dec-21	0
AS001220	Planned Access Date for Portion C-2A	1	26-Dec-21	26-Dec-21	26-Dec-21	26-Dec-21	0
AS001300	Portion C-2B (within 765 to 855 days from starting date)	855	24-Oct-19	24-Feb-22	24-Oct-19	24-Feb-22	0
AS001320	Planned Access Date for Portion C-2B	1	24-Feb-22	24-Feb-22	24-Feb-22	24-Feb-22	0
AS001400	Portion C-2C (within 715 to 805 days from starting date)	805	24-Oct-19	05-Jan-22	24-Oct-19	05-Jan-22	0
AS001420	Planned Access Date for Portion C2-C	1	05-Jan-22	05-Jan-22	05-Jan-22	05-Jan-22	0
AS001500	Portion C-2D (within 825 to 945 days from starting date)	945	24-Oct-19	25-May-22	24-Oct-19	25-May-22	0
AS001520	Planned Access Date for Portion C-2D	1	25-May-22	25-May-22	25-May-22	25-May-22	0
AS001600	Portion C-3 (within 615 to 705 days from starting date)	705	24-Oct-19	27-Sep-21	24-Oct-19	27-Sep-21	0
AS001620	Planned Access Date for Portion C-3	1	27-Sep-21	27-Sep-21	27-Sep-21	27-Sep-21	0
AS001700	Portion B-1 (within 285 to 345 days from starting date)	345	24-Oct-19	02-Oct-20	24-Oct-19	02-Oct-20	0
AS001720	Planned Access Date for Portion B-1	1	02-Oct-20	02-Oct-20	02-Oct-20	02-Oct-20	0
AS001800	Portion B-2 (within 615 to 705 days from starting date)	705	24-Oct-19	27-Sep-21	24-Oct-19	27-Sep-21	0
AS001820	Planned Access Date for Portion B-2	1	27-Sep-21	27-Sep-21	27-Sep-21	27-Sep-21	0
AS001900	Works Area WA1-B (starting date)	1	23-Oct-19	23-Oct-19	23-Oct-19	23-Oct-19	0
AS001910	Planned Access Date for Works Area WA1-B	1	23-Oct-19	23-Oct-19	23-Oct-19	23-Oct-19	0
AS001920	Works Area WA3 (starting date)	1	23-Oct-19	23-Oct-19	23-Oct-19	23-Oct-19	0
AS001930	Planned Access Date for Works Area WA3	1	23-Oct-19	23-Oct-19	23-Oct-19	23-Oct-19	0
Key Dates							
AS002010	KD1A Submission of Civil Requirement Dwgs, Elec. Schematic Dwgs of UV System No.1 and Effluent Pumping Station No.1	195	24-Oct-19	05-May-20	24-Oct-19	05-May-20	0
AS002020	KD2A Submission of Civil Requirement Dwgs, Elec. Schematic Dwgs of SD Bldg, SD & DC, CHP Bldg, Workshop No.2, etc.	225	24-Oct-19	04-Jun-20	24-Oct-19	04-Jun-20	0
AS002040	KD2B Submission of Remaining Civil Requirement Dwgs, Elec. Schematic Dwgs of SD Bldg, SD & DC, CHP Bldg, etc.	460	24-Oct-19	25-Jan-21	24-Oct-19	25-Jan-21	0
AS002050	KD3A Completion of Phase 1 Commissioning of Sidestream Treatment Facilities (1140d after Portion B-1 Access)	1140	03-Oct-20	16-Nov-23	03-Oct-20	16-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)	245	28-Sep-21	30-May-22	28-Sep-21	30-May-22	0
Completion Date							
Section 1 - Complete All Design at UV System No.1 & EP Station No. 1							
AS003100	Contract Duration of Section 1	290	24-Oct-19	08-Aug-20	24-Oct-19	08-Aug-20	0
AS003110	Completion date - Section 1 (290 days from starting date)	0		08-Aug-20		08-Aug-20	0
Time Risk Allowance and Planned Completion							
AS003105	Time Risk Allowance for Section 1	0	09-Aug-20	09-Aug-20	08-Aug-20	08-Aug-20	0
AS003130	Planned Completion for Section 1	0		09-Aug-20		08-Aug-20	0
Section 2 - Complete All Designs (exclude Sec. 1 & 3)							
AS003200	Contract Duration of Section 2	600	24-Oct-19	14-Jun-21	24-Oct-19	14-Jun-21	0
AS003210	Completion date - Section 2 (600 days from starting date)	0		14-Jun-21		14-Jun-21	0
Time Risk Allowance and Planned Completion							
AS003220	Time Risk Allowance for Section 2	7	31-May-21	06-Jun-21	08-Jun-21	14-Jun-21	8
AS003230	Planned Completion for Section 2	0		14-Jun-21		14-Jun-21	0
Section 3 - Complete Design, Construction & T&C for Sidestream Facilities							
AS003300	Contract Duration of Section 3	1625	24-Oct-19	04-Apr-24	24-Oct-19	04-Apr-24	0
AS003310	Completion date - Section 3 (1625 days from starting date)	0		04-Apr-24		04-Apr-24	0
Time Risk Allowance and Planned Completion							
AS003320	Time Risk Allowance for Section 3	26	10-Mar-24	04-Apr-24	10-Mar-24	04-Apr-24	0
AS003330	Planned Completion for Section 3	0		04-Apr-24		04-Apr-24	0
Section 4 - Complete Construction & T&C for UV System No.1 & EP Station No. 1							
AS003400	Contract Duration of Section 4	885	24-Oct-19	26-Mar-22	24-Oct-19	26-Mar-22	0
AS003410	Completion date - Section 4 (885 days from starting date)	0		26-Mar-22		26-Mar-22	0
Time Risk Allowance and Planned Completion							



JEC

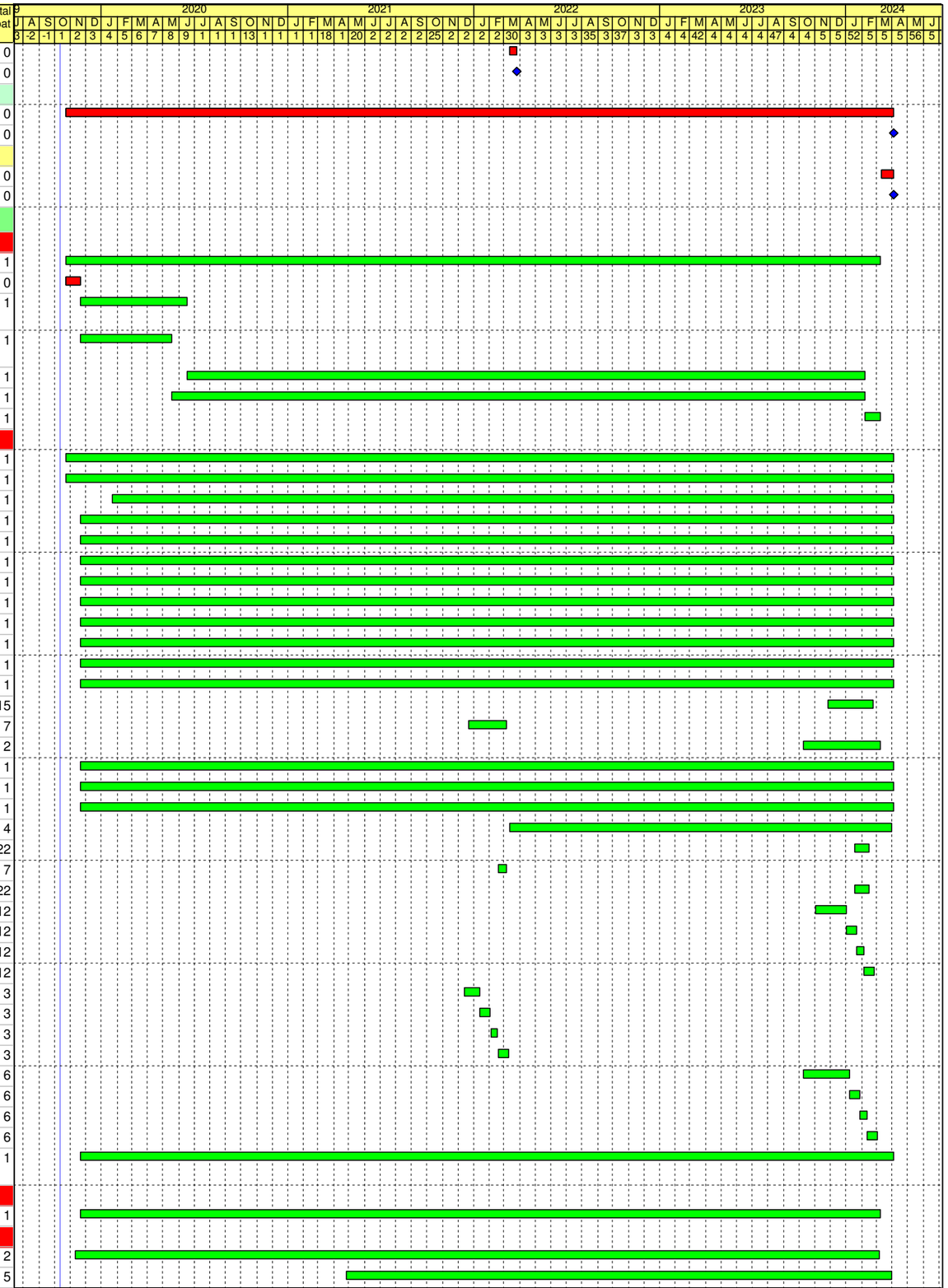
File Name: DE/2018/03 R1-3
Layout: DE1803 (R1) - WBS
TASK filter: All Activities

Remaining Work
Critical Activity
Milestone
Actual Progress

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

Date	Revision	Checked	Approved
24-Oct-19	Rev. 0	AI	KM
10-Feb-20	Rev. 1	AI	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
AS003420	Time Risk Allowance for Section 4	14	13-Mar-22	26-Mar-22	13-Mar-22	26-Mar-22	0
AS003430	Planned Completion for Section 4	0		26-Mar-22		26-Mar-22	0
Section 5 - Complete all remainder Works (incl. T&C)							
AS003500	Contract Duration of Section 5	1625	24-Oct-19	04-Apr-24	24-Oct-19	04-Apr-24	0
AS003510	Completion date - Section 5 (1625 days from starting date)	0		04-Apr-24		04-Apr-24	0
Time Risk Allowance and Planned Completion							
AS003520	Time Risk Allowance for Section 5	26	10-Mar-24	04-Apr-24	10-Mar-24	04-Apr-24	0
AS003530	Planned Completion for Section 5	0		04-Apr-24		04-Apr-24	0
Preliminaries							
Mobilisation							
AS010100	Provison of Equipment / Facilities for the PM's Office	1598	24-Oct-19	08-Mar-24	25-Oct-19	09-Mar-24	1
AS010200	Mobilisation	28	24-Oct-19	20-Nov-19	24-Oct-19	20-Nov-19	0
AS010205a	Design, Procurement & PO & Construction of Contractor's Site Office (Works Area WA1 -B)	210	21-Nov-19	17-Jun-20	22-Nov-19	18-Jun-20	1
AS010210	Design, Procurement & PO & Construction of Contractor's Storage (Works Area WA3)	180	21-Nov-19	18-May-20	22-Nov-19	19-May-20	1
AS010220	Maintain Contractor's Site Office	1330	18-Jun-20	07-Feb-24	19-Jun-20	08-Feb-24	1
AS010230a	Maintain Contractor's Storage	1360	19-May-20	07-Feb-24	20-May-20	08-Feb-24	1
AS010240	Removal of Site Office, Storage & Relevant Facilities	30	08-Feb-24	08-Mar-24	09-Feb-24	09-Mar-24	1
Site Preliminaries							
AS010300	Provision of Insurance, Third Party Insurances & PII	1624	24-Oct-19	03-Apr-24	25-Oct-19	04-Apr-24	1
AS010400	Provision of 2 Contract Car for the Use of the PM & Supervisor	1624	24-Oct-19	03-Apr-24	25-Oct-19	04-Apr-24	1
AS010420a	Provision of 1 Electric Car for the Use of the PM & Supervisor	1534	22-Jan-20	03-Apr-24	23-Jan-20	04-Apr-24	1
AS010600	Provision of Photographs	1596	21-Nov-19	03-Apr-24	22-Nov-19	04-Apr-24	1
AS010700	Provision of Environmental Mitigation Measures	1596	21-Nov-19	03-Apr-24	22-Nov-19	04-Apr-24	1
AS010800	Provision of Air Pollution Abatment	1596	21-Nov-19	03-Apr-24	22-Nov-19	04-Apr-24	1
AS010900	Provision of Noise Pollution Abatment	1596	21-Nov-19	03-Apr-24	22-Nov-19	04-Apr-24	1
AS011000	Provision of Wastewater Pollution Abatement	1596	21-Nov-19	03-Apr-24	22-Nov-19	04-Apr-24	1
AS011100	Provision of Wastement Management	1596	21-Nov-19	03-Apr-24	22-Nov-19	04-Apr-24	1
AS011200	Provision of Monitoring the Use of Ultra Low Sulphur Diesel	1596	21-Nov-19	03-Apr-24	22-Nov-19	04-Apr-24	1
AS011300	Provision of Environmental Management	1596	21-Nov-19	03-Apr-24	22-Nov-19	04-Apr-24	1
AS011400	Provision of Site Management Plan for Trip Ticket System	1596	21-Nov-19	03-Apr-24	22-Nov-19	04-Apr-24	1
AS011500	Provision of As-constructed Drawings for Section 3	90	26-Nov-23	23-Feb-24	11-Dec-23	09-Mar-24	15
AS011520a	Provision of As-constructed Drawings for Section 4	75	21-Dec-21	06-Mar-22	28-Dec-21	12-Mar-22	7
AS011540a	Provision of As-constructed Drawings for Section 5	150	10-Oct-23	08-Mar-24	12-Oct-23	09-Mar-24	2
AS011600	Provision of Systematic Risk Management	1596	21-Nov-19	03-Apr-24	22-Nov-19	04-Apr-24	1
AS011700	Provision of Site Liaison Group & Community Liaison Group	1596	21-Nov-19	03-Apr-24	22-Nov-19	04-Apr-24	1
AS011800	Provision of 24-Hour Telephone Line	1596	21-Nov-19	03-Apr-24	22-Nov-19	04-Apr-24	1
AS012000	Provision of Upkeeping and Protection of Completed Works	750	13-Mar-22	31-Mar-24	17-Mar-22	04-Apr-24	4
AS012100	Provision of Provide Training for Employer's Staff for Section 3	30	18-Jan-24	16-Feb-24	09-Feb-24	09-Mar-24	22
AS012120a	Provision of Provide Training for Employer's Staff for Section 4	15	19-Feb-22	06-Mar-22	26-Feb-22	12-Mar-22	7
AS012140a	Provision of Provide Training for Employer's Staff for Section 5	30	18-Jan-24	16-Feb-24	09-Feb-24	09-Mar-24	22
AS012300	Prepare & Submit O&M Manual for Section 3	60	03-Nov-23	01-Jan-24	15-Nov-23	13-Jan-24	12
AS012302a	PM Reivew & Comment O&M Manual for Section 3	21	02-Jan-24	22-Jan-24	14-Jan-24	03-Feb-24	12
AS012304a	Revise & Re-submit O&M Manual for Section 3	14	23-Jan-24	05-Feb-24	04-Feb-24	17-Feb-24	12
AS012306a	PM Reivew & Approval of O&M Manual for Section 3	21	06-Feb-24	26-Feb-24	18-Feb-24	09-Mar-24	12
AS012320a	Prepare & Submit O&M Manual for Section 4	30	14-Dec-21	13-Jan-22	17-Dec-21	15-Jan-22	3
AS012322a	PM Reivew & Comment O&M Manual for Section 4	21	13-Jan-22	02-Feb-22	16-Jan-22	05-Feb-22	3
AS012324a	Revise & Re-submit O&M Manual for Section 4	14	03-Feb-22	16-Feb-22	06-Feb-22	19-Feb-22	3
AS012326a	PM Reivew & Approval of O&M Manual for Section 4	21	17-Feb-22	09-Mar-22	20-Feb-22	12-Mar-22	3
AS012340a	Prepare & Submit O&M Manual for Section 5	90	10-Oct-23	07-Jan-24	16-Oct-23	13-Jan-24	6
AS012342a	PM Reivew & Comment O&M Manual for Section 5	21	08-Jan-24	28-Jan-24	14-Jan-24	03-Feb-24	6
AS012344a	Revise & Re-submit O&M Manual for Section 5	14	29-Jan-24	11-Feb-24	04-Feb-24	17-Feb-24	6
AS012346a	PM Reivew & Approval of O&M Manual for Section 5	21	12-Feb-24	03-Mar-24	18-Feb-24	09-Mar-24	6
AS012400	Provision of ICE for Certification of the Design, Cal, Dwgs, Plans and all relevant Doc and Process Commissioning	1596	21-Nov-19	03-Apr-24	22-Nov-19	04-Apr-24	1
Site Clearance							
AS013100	General Site Clearance of the Site	1570	21-Nov-19	08-Mar-24	22-Nov-19	09-Mar-24	1
Safety and Environmental Management							
AS013200	Construction Health and Safety Plan	1580	10-Nov-19	07-Mar-24	12-Nov-19	09-Mar-24	2
AS013300	Site Traffic Safety Management Plan	1070	26-Apr-21	30-Mar-24	01-May-21	04-Apr-24	5

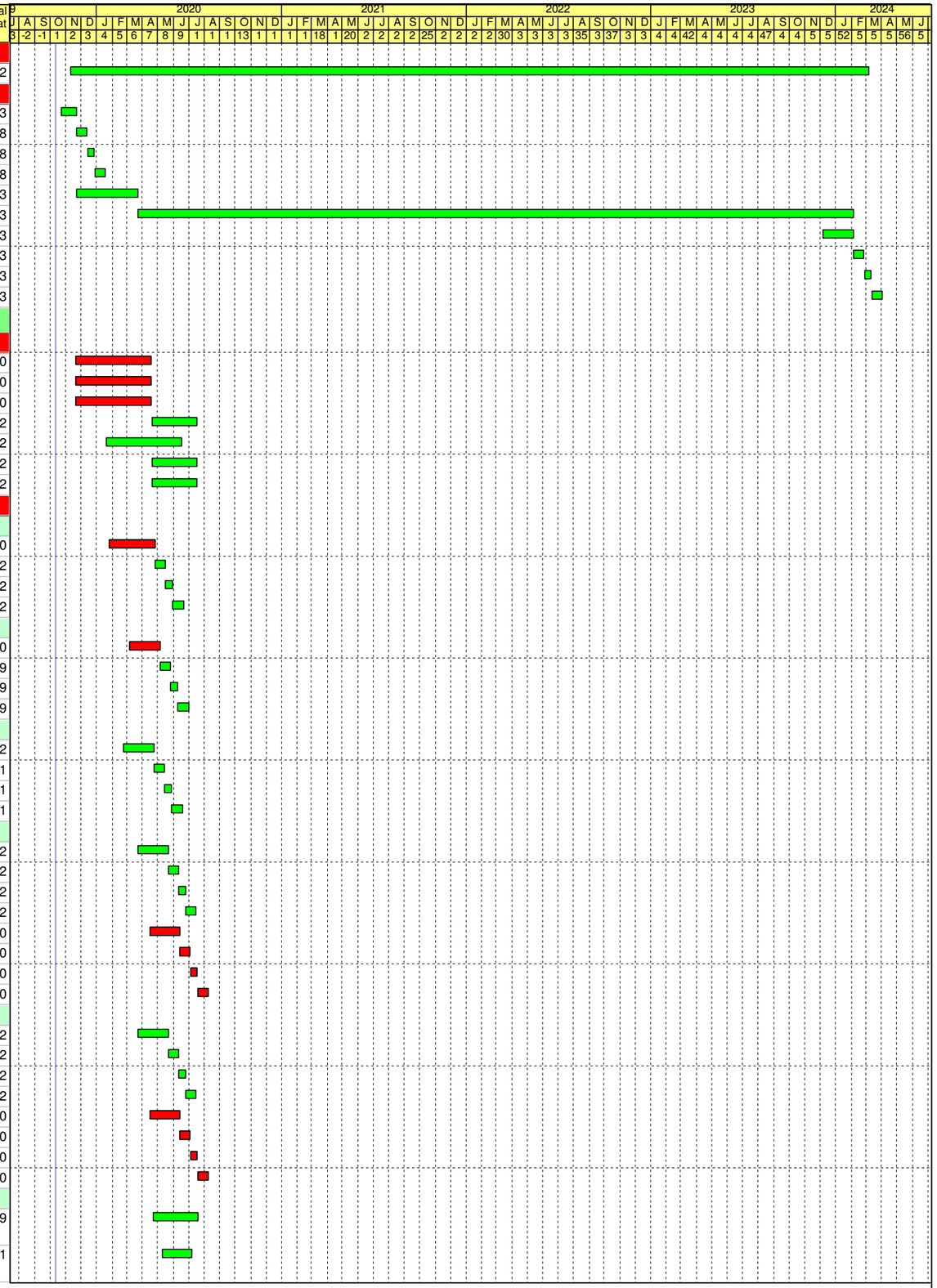


Remaining Work
Critical Activity
Milestone
Actual Progress

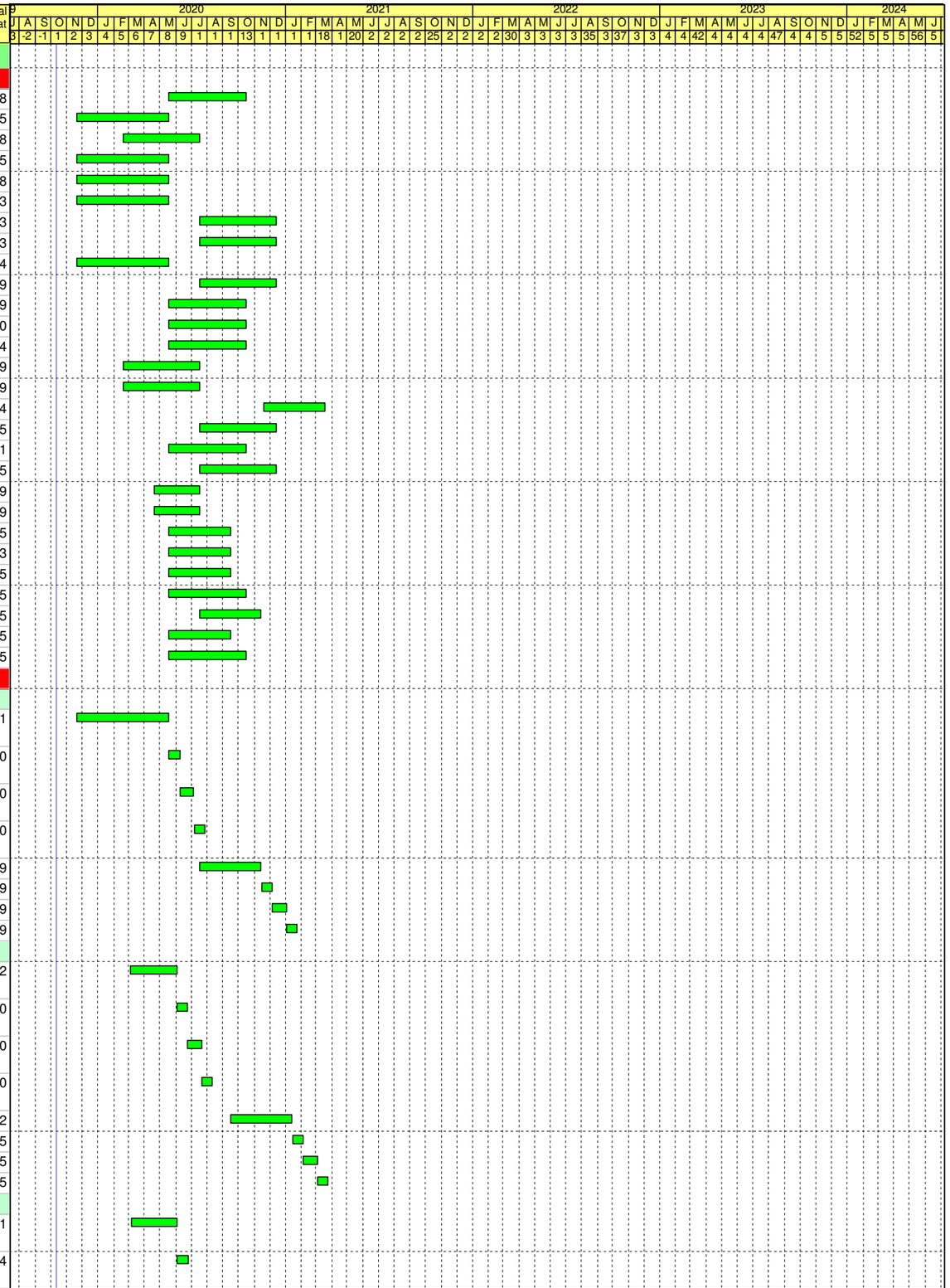
Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sluge Treatment Faciliteis
Master Programme

Date	Revision	Checked	Approved
24-Oct-19	Rev. 0	AI	KM
10-Feb-20	Rev. 1	AI	KM

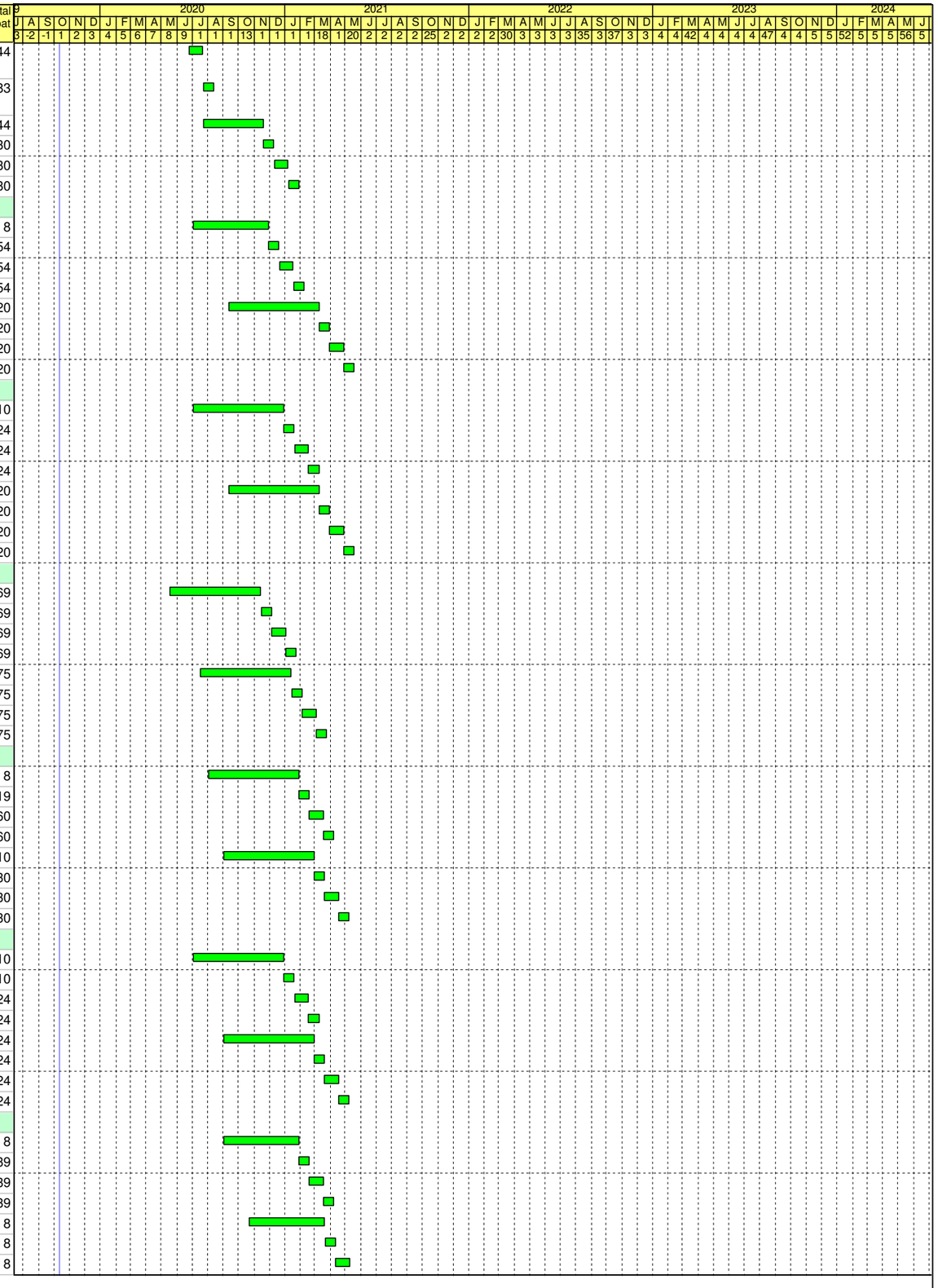
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
Compliance with BEAM Requirements							
AS013400	BEAM Plus	1580	10-Nov-19	07-Mar-24	12-Nov-19	09-Mar-24	2
BIM							
AS011820a	Prepare & Submit Construction Stage BIM Execution Plan	30	24-Oct-19	22-Nov-19	27-Oct-19	25-Nov-19	3
AS011830a	PM Reivew & Comment Construction Stage BIM Execution Plan	21	23-Nov-19	13-Dec-19	01-Dec-19	21-Dec-19	8
AS011840a	Revise & Re-submit Construction Stage BIM Execution Plan	14	14-Dec-19	27-Dec-19	22-Dec-19	04-Jan-20	8
AS011850a	PM Reivew & Approval of Construction Stage BIM Execution Plan	21	28-Dec-19	17-Jan-20	05-Jan-20	25-Jan-20	8
AS011900	Contractor Develop 1st Construction Stage BIM	121	23-Nov-19	22-Mar-20	26-Nov-19	25-Mar-20	3
AS011920a	Review & Update BIM Execution Plan & BIM Model	1415	23-Mar-20	05-Feb-24	26-Mar-20	08-Feb-24	3
AS011960	Submission of Fully Coordinated BIM	60	08-Dec-23	05-Feb-24	11-Dec-23	08-Feb-24	3
AS011961	PM Reivew & Comment Fully Coordinated BIM	21	06-Feb-24	26-Feb-24	09-Feb-24	29-Feb-24	3
AS011962	Revise & Re-submit Fully Coordinated BIM	14	27-Feb-24	11-Mar-24	01-Mar-24	14-Mar-24	3
AS011963	PM Reivew & Approval of Fully Coordinated BIM	21	12-Mar-24	01-Apr-24	15-Mar-24	04-Apr-24	3
Section 1 - Design for UV System No. 1 & Effluent Pumping Station No.1							
Major Plant & Materials Procurement							
AS103100	Procurement & PO for UV Disinfection System (S10)	150	21-Nov-19	18-Apr-20	21-Nov-19	18-Apr-20	0
AS103120	Procurement & PO for Lift-up Pumps (S11)	150	21-Nov-19	18-Apr-20	21-Nov-19	18-Apr-20	0
AS103140	Procurement & PO for Transfer Pumps (S13)	150	21-Nov-19	18-Apr-20	21-Nov-19	18-Apr-20	0
AS103160	Procurement & PO for FRP Cover (S11)	90	19-Apr-20	17-Jul-20	11-May-20	08-Aug-20	22
AS103180	Procurement & PO for EOT Cranes (2T & 5T) (S19)	150	20-Jan-20	17-Jun-20	12-Mar-20	08-Aug-20	52
AS103200	Procurement & PO for Stoplogs (S21)	90	19-Apr-20	17-Jul-20	11-May-20	08-Aug-20	22
AS103220	Procurement & PO for Penstocks (S21)	90	19-Apr-20	17-Jul-20	11-May-20	08-Aug-20	22
Design & Submission							
General Arrangement Drawings							
AS101100	Prepare & Submit General Arrangement Drawings	90	27-Jan-20	25-Apr-20	27-Jan-20	25-Apr-20	0
AS101110	Review & Comment on General Arrangement Drawings by PM	21	26-Apr-20	16-May-20	07-Jun-20	27-Jun-20	42
AS101120	Revise & Re-submit General Arrangement Drawings	14	17-May-20	30-May-20	28-Jun-20	11-Jul-20	42
AS101130	Review & Accept of General Arrangement Drawings by PM	21	31-May-20	20-Jun-20	12-Jul-20	01-Aug-20	42
Civil & Dimensional / Tolerance Requirement Drawings							
AS102100	Prepare & Submit Civil Requirement Drawings	60	07-Mar-20	05-May-20	07-Mar-20	05-May-20	0
AS102110	Review & Comment on Civil Requirement Drawings by PM	21	06-May-20	26-May-20	14-Jun-20	04-Jul-20	39
AS102120	Revise & Re-submit Civil Requirement Drawings	14	27-May-20	09-Jun-20	05-Jul-20	18-Jul-20	39
AS102130	Review & Accept of Civil Requirement Drawings by PM	21	10-Jun-20	30-Jun-20	19-Jul-20	08-Aug-20	39
Electrical Schematic Drawings							
AS102150	Prepare & Submit Elec. Schematic Drawings	60	24-Feb-20	24-Apr-20	26-Feb-20	25-Apr-20	2
AS102160	Review & Comment on Elec. Schematic Drawings by PM	21	24-Apr-20	14-May-20	14-Jun-20	04-Jul-20	51
AS102170	Revise & Re-submit Elec. Schematic Drawings	14	15-May-20	28-May-20	05-Jul-20	18-Jul-20	51
AS102180	Review & Accept of Elec. Schematic Drawings by PM	21	29-May-20	18-Jun-20	19-Jul-20	08-Aug-20	51
UV System No. 1							
AS102200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	60	23-Mar-20	21-May-20	25-Mar-20	23-May-20	2
AS102210	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	22-May-20	11-Jun-20	24-May-20	13-Jun-20	2
AS102220	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	14	12-Jun-20	25-Jun-20	14-Jun-20	27-Jun-20	2
AS102230	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	21	26-Jun-20	16-Jul-20	28-Jun-20	18-Jul-20	2
AS102300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	60	15-Apr-20	13-Jun-20	15-Apr-20	13-Jun-20	0
AS102310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	14-Jun-20	04-Jul-20	14-Jun-20	04-Jul-20	0
AS102320	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	14	05-Jul-20	18-Jul-20	05-Jul-20	18-Jul-20	0
AS102330	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	21	19-Jul-20	08-Aug-20	19-Jul-20	08-Aug-20	0
Effluent Pumping Station No. 1							
AS112200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	60	23-Mar-20	21-May-20	25-Mar-20	23-May-20	2
AS112210	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	22-May-20	11-Jun-20	24-May-20	13-Jun-20	2
AS112220	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	14	12-Jun-20	25-Jun-20	14-Jun-20	27-Jun-20	2
AS112230	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	21	26-Jun-20	16-Jul-20	28-Jun-20	18-Jul-20	2
AS112300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	60	15-Apr-20	13-Jun-20	15-Apr-20	13-Jun-20	0
AS112310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	14-Jun-20	04-Jul-20	14-Jun-20	04-Jul-20	0
AS112320	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	14	05-Jul-20	18-Jul-20	05-Jul-20	18-Jul-20	0
AS112330	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	21	19-Jul-20	08-Aug-20	19-Jul-20	08-Aug-20	0
Building Services							
AS113100	Prepare & Submit BS Works Design & Dwgs UV System No.1 & Effluent Pumping Station No.1	90	22-Apr-20	20-Jul-20	11-May-20	08-Aug-20	19
AS113200	Prepare & Submit FS Works Design & Dwgs UV System No.1 & Effluent Pumping Station No.1	60	10-May-20	08-Jul-20	11-May-20	09-Jul-20	1



Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
Section 2 - Complete All Designs (exclude Sec. 1 & 3)							
Major Plant & Materials Procurement							
AS023100	Procurement & PO for Sludge Screening System (S2)	150	19-May-20	15-Oct-20	27-May-20	23-Oct-20	8
AS023120	Procurement & PO for Sludge Thickening System (S3)	180	21-Nov-19	18-May-20	14-Apr-20	10-Oct-20	145
AS023140	Procurement & PO for Sludge Digestion System (S5)	150	19-Feb-20	17-Jul-20	27-Feb-20	25-Jul-20	8
AS023160	Procurement & PO for Sludge Dewatering System (S6)	180	21-Nov-19	18-May-20	14-Apr-20	10-Oct-20	145
AS023180	Procurement & PO for THP System (S4)	180	21-Nov-19	18-May-20	29-Nov-19	26-May-20	8
AS023190a	Procurement & PO for Biogas Holding Tanks(S7)	180	21-Nov-19	18-May-20	13-Mar-20	08-Sep-20	113
AS023200	Procurement & PO for Biogas Booster and Transfer Pumps (S7)	150	18-Jul-20	14-Dec-20	10-Aug-20	06-Jan-21	23
AS023210	Procurement & PO for H2S Removal System (S7)	150	18-Jul-20	14-Dec-20	10-Aug-20	06-Jan-21	23
AS023220	Procurement & PO for CHP System (S8)	180	21-Nov-19	18-May-20	15-Dec-19	11-Jun-20	24
AS023240	Procurement & PO for Waste Gas Burning System (S9)	150	18-Jul-20	14-Dec-20	27-Jul-20	23-Dec-20	9
AS023260	Procurement & PO for Plant Service Water System (S12)	150	19-May-20	15-Oct-20	28-May-20	24-Oct-20	9
AS023270	Procurement & PO for Reclaimed Water Utilisation (S13)	150	19-May-20	15-Oct-20	18-Jun-20	14-Nov-20	30
AS023280	Procurement & PO for SAS Pumping System (S14)	150	19-May-20	15-Oct-20	12-Jun-20	08-Nov-20	24
AS023300	Procurement & PO for Transfomers (S17)	150	19-Feb-20	17-Jul-20	06-Aug-20	02-Jan-21	169
AS023320	Procurement & PO for 11 kV Switchboard (S17)	150	19-Feb-20	17-Jul-20	06-Aug-20	02-Jan-21	169
AS023340	Procurement & PO for 380V Switchboard (S17)	120	20-Nov-20	19-Mar-21	03-Jan-21	02-May-21	44
AS023380	Procurement & PO for Control & Monitoring System (S18)	150	18-Jul-20	14-Dec-20	09-Jan-21	07-Jun-21	175
AS023400	Procurement & PO for Lifting Appliances (S19)	150	19-May-20	15-Oct-20	19-Jun-20	15-Nov-20	31
AS023420	Procurement & PO for DO System (S21)	150	18-Jul-20	14-Dec-20	09-Jan-21	07-Jun-21	175
AS023440	Procurement & PO for Stoplog (S21)	90	19-Apr-20	17-Jul-20	04-Mar-21	01-Jun-21	319
AS023460	Procurement & PO for Penstock (S21)	90	19-Apr-20	17-Jul-20	04-Mar-21	01-Jun-21	319
AS023480	Procurement & PO for Sewage Pump (S21)	120	19-May-20	15-Sep-20	08-Feb-21	07-Jun-21	265
AS023500	Procurement & PO for Process Water Pump (S21)	120	19-May-20	15-Sep-20	28-Nov-20	27-Mar-21	193
AS023520	Procurement & PO for External Sludge Transfer Pump (S21)	120	19-May-20	15-Sep-20	08-Feb-21	07-Jun-21	265
AS023540	Procurement & PO for THP Cooling Pump (S21)	150	19-May-20	15-Oct-20	09-Jan-21	07-Jun-21	235
AS023560	Procurement & PO for Ferric Chloride Storage Tank (S21)	120	18-Jul-20	14-Nov-20	08-Feb-21	07-Jun-21	205
AS023580	Procurement & PO for Ferric Chloride Dosing Pump (S21)	120	19-May-20	15-Sep-20	08-Feb-21	07-Jun-21	265
AS023600	Procurement & PO for Temporary Primary Sludge Pump (S21)	150	19-May-20	15-Oct-20	09-Jan-21	07-Jun-21	235
Design & Submission							
General Arrangement Drawings							
AS020100	Prepare & Submit General Arrangement Drawings (from formation level up to +8mPD)	180	21-Nov-19	18-May-20	22-Nov-19	19-May-20	1
AS020110	Review & Comment on General Arrangement Drawings by PM (from formation level up to +8mPD)	21	19-May-20	08-Jun-20	08-Jun-20	28-Jun-20	20
AS020120	Revise & Re-submit General Arrangement Drawings (from formation level up to +8mPD)	28	09-Jun-20	06-Jul-20	29-Jun-20	26-Jul-20	20
AS020130	Review & Accept of General Arrangement Drawings by PM (from formation level up to +8mPD)	21	07-Jul-20	27-Jul-20	24-Nov-20	14-Dec-20	140
AS020140a	Prepare & Submit General Arrangement Drawings (remaining)	120	18-Jul-20	14-Nov-20	27-Jul-20	23-Nov-20	9
AS020150a	Review & Comment on General Arrangement Drawings by PM (remaining)	21	15-Nov-20	05-Dec-20	24-Nov-20	14-Dec-20	9
AS020160a	Revise & Re-submit General Arrangement Drawings (remaining)	28	06-Dec-20	02-Jan-21	15-Dec-20	11-Jan-21	9
AS020170a	Review & Accept of General Arrangement Drawings by PM (remaining)	21	03-Jan-21	23-Jan-21	12-Jan-21	01-Feb-21	9
Civil & Dimensional / Tolerance Requirement Drawings							
AS020200	Prepare & Submit Civil Requirement Drawings (from formation level up to +8mPD) -KD2A	90	05-Mar-20	02-Jun-20	07-Mar-20	04-Jun-20	2
AS020210	Review & Comment on Civil Requirement Drawings by PM (from formation level up to +8mPD)	21	03-Jun-20	23-Jun-20	30-Mar-21	19-Apr-21	300
AS020220	Revise & Re-submit Civil Requirement Drawings (from formation level up to +8mPD)	28	24-Jun-20	21-Jul-20	20-Apr-21	17-May-21	300
AS020230	Review & Accept of Civil Requirement Drawings by PM (from formation level up to +8mPD)	21	22-Jul-20	11-Aug-20	18-May-21	07-Jun-21	300
AS020300	Prepare & Submit Civil Requirement Drawings (remaining) -KD2B	120	16-Sep-20	13-Jan-21	28-Sep-20	25-Jan-21	12
AS020310	Review & Comment on Civil Requirement Drawings by PM (remaining)	21	14-Jan-21	03-Feb-21	30-Mar-21	19-Apr-21	75
AS020320	Revise & Re-submit Civil Requirement Drawings (remaining)	28	04-Feb-21	03-Mar-21	20-Apr-21	17-May-21	75
AS020330	Review & Accept of Civil Requirement Drawings by PM (remaining)	21	04-Mar-21	24-Mar-21	18-May-21	07-Jun-21	75
Electrical Schematic Drawings							
AS021200	Prepare & Elec. Schematic Drawings (from formation level up to +8mPD) -KD2A	90	06-Mar-20	03-Jun-20	07-Mar-20	04-Jun-20	1
AS021210	Review & Comment on Elec. Schematic Drawings by PM (from formation level up to +8mPD)	21	04-Jun-20	24-Jun-20	18-Jul-20	07-Aug-20	44



Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
AS021220	Revise & Re-submit Elec. Schematic Drawings (from formation level up to +8mPD)	28	25-Jun-20	22-Jul-20	08-Aug-20	04-Sep-20	44
AS021230	Review & Accept of Elec. Schematic Drawings by PM (from formation level up to +8mPD)	21	23-Jul-20	12-Aug-20	14-Oct-20	03-Nov-20	83
AS021300	Prepare & Submit Elec. Schematic Drawings (remaining) -KD2B	120	23-Jul-20	19-Nov-20	05-Sep-20	02-Jan-21	44
AS021310	Review & Comment on Elec. Schematic Drawings by PM (remaining)	21	20-Nov-20	10-Dec-20	30-Mar-21	19-Apr-21	130
AS021320	Revise & Re-submit Elec. Schematic Drawings (remaining)	28	11-Dec-20	07-Jan-21	20-Apr-21	17-May-21	130
AS021330	Review & Accept of Elec. Schematic Drawings by PM (remaining)	21	08-Jan-21	28-Jan-21	18-May-21	07-Jun-21	130
Sludge Screening (SSc)							
AS022200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	150	03-Jul-20	29-Nov-20	11-Jul-20	07-Dec-20	8
AS022210	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	30-Nov-20	20-Dec-20	23-Jan-21	12-Feb-21	54
AS022220	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	28	21-Dec-20	17-Jan-21	13-Feb-21	12-Mar-21	54
AS022230	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	21	18-Jan-21	07-Feb-21	13-Mar-21	02-Apr-21	54
AS022300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	180	11-Sep-20	09-Mar-21	01-Oct-20	29-Mar-21	20
AS022310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	10-Mar-21	30-Mar-21	30-Mar-21	19-Apr-21	20
AS022320	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	28	31-Mar-21	27-Apr-21	20-Apr-21	17-May-21	20
AS022330	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	21	28-Apr-21	18-May-21	18-May-21	07-Jun-21	20
Sludge Thickening (STh)							
AS032200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	180	03-Jul-20	29-Dec-20	13-Jul-20	08-Jan-21	10
AS032210	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	30-Dec-20	19-Jan-21	23-Jan-21	12-Feb-21	24
AS032220	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	28	20-Jan-21	16-Feb-21	13-Feb-21	12-Mar-21	24
AS032230	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	21	17-Feb-21	09-Mar-21	13-Mar-21	02-Apr-21	24
AS032300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	180	11-Sep-20	09-Mar-21	01-Oct-20	29-Mar-21	20
AS032310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	10-Mar-21	30-Mar-21	30-Mar-21	19-Apr-21	20
AS032320	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	28	31-Mar-21	27-Apr-21	20-Apr-21	17-May-21	20
AS032330	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	21	28-Apr-21	18-May-21	18-May-21	07-Jun-21	20
Thermal Hydrolysis Process (THP)							
AS042200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	180	19-May-20	14-Nov-20	27-Jul-20	22-Jan-21	69
AS042210	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	15-Nov-20	05-Dec-20	23-Jan-21	12-Feb-21	69
AS042220	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	28	06-Dec-20	02-Jan-21	13-Feb-21	12-Mar-21	69
AS042230	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	21	03-Jan-21	23-Jan-21	13-Mar-21	02-Apr-21	69
AS042300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	180	18-Jul-20	13-Jan-21	01-Oct-20	29-Mar-21	75
AS042310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	14-Jan-21	03-Feb-21	30-Mar-21	19-Apr-21	75
AS042320	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	28	04-Feb-21	03-Mar-21	20-Apr-21	17-May-21	75
AS042330	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	21	04-Mar-21	24-Mar-21	18-May-21	07-Jun-21	75
Sludge Digestion (SDi)							
AS052200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	180	02-Aug-20	28-Jan-21	10-Aug-20	05-Feb-21	8
AS052210	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	29-Jan-21	18-Feb-21	17-Feb-21	09-Mar-21	19
AS052220	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	28	19-Feb-21	18-Mar-21	20-Apr-21	17-May-21	60
AS052230	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	21	19-Mar-21	08-Apr-21	18-May-21	07-Jun-21	60
AS052300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	180	01-Sep-20	27-Feb-21	11-Sep-20	09-Mar-21	10
AS052310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	28-Feb-21	20-Mar-21	30-Mar-21	19-Apr-21	30
AS052320	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	28	21-Mar-21	17-Apr-21	20-Apr-21	17-May-21	30
AS052330	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	21	18-Apr-21	08-May-21	18-May-21	07-Jun-21	30
Sludge Dewatering (SDe)							
AS062200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	180	03-Jul-20	29-Dec-20	13-Jul-20	08-Jan-21	10
AS062210	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	30-Dec-20	19-Jan-21	09-Jan-21	29-Jan-21	10
AS062220	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	28	20-Jan-21	16-Feb-21	13-Feb-21	12-Mar-21	24
AS062230	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	21	17-Feb-21	09-Mar-21	13-Mar-21	02-Apr-21	24
AS062300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	180	01-Sep-20	27-Feb-21	25-Sep-20	23-Mar-21	24
AS062310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	28-Feb-21	20-Mar-21	24-Mar-21	13-Apr-21	24
AS062320	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	28	21-Mar-21	17-Apr-21	14-Apr-21	11-May-21	24
AS062330	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	21	18-Apr-21	08-May-21	12-May-21	01-Jun-21	24
Biogas Storage & Pre-Treatment (BSPT)							
AS072200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	150	01-Sep-20	28-Jan-21	09-Sep-20	05-Feb-21	8
AS072210	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	29-Jan-21	18-Feb-21	09-Mar-21	29-Mar-21	39
AS072220	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	28	19-Feb-21	18-Mar-21	30-Mar-21	26-Apr-21	39
AS072230	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	21	19-Mar-21	08-Apr-21	27-Apr-21	17-May-21	39
AS072300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	150	23-Oct-20	21-Mar-21	31-Oct-20	29-Mar-21	8
AS072310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	22-Mar-21	11-Apr-21	30-Mar-21	19-Apr-21	8
AS072320	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	28	12-Apr-21	09-May-21	20-Apr-21	17-May-21	8

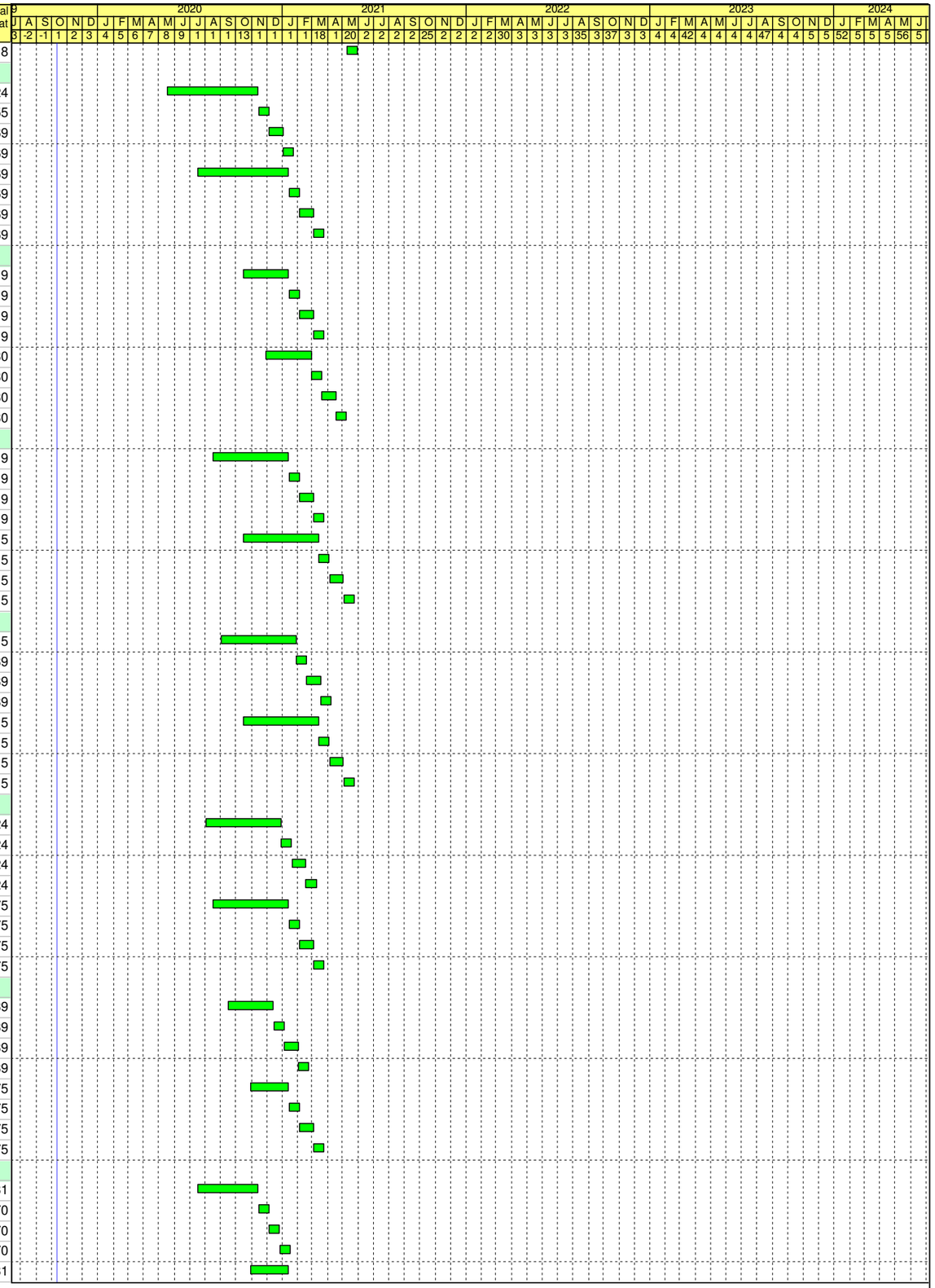


Remaining Work
Critical Activity
Milestone
Actual Progress

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

Date	Revision	Checked	Approved
24-Oct-19	Rev. 0	AI	KM
10-Feb-20	Rev. 1	AI	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
AS072330	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	21	10-May-21	30-May-21	18-May-21	07-Jun-21	8
Combined Heat & Power Generation (CHP)							
AS082200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	180	19-May-20	14-Nov-20	12-Jun-20	08-Dec-20	24
AS082210	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	15-Nov-20	05-Dec-20	09-Jan-21	29-Jan-21	55
AS082220	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	28	06-Dec-20	02-Jan-21	13-Feb-21	12-Mar-21	69
AS082230	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	21	03-Jan-21	23-Jan-21	13-Mar-21	02-Apr-21	69
AS082300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	180	18-Jul-20	13-Jan-21	25-Sep-20	23-Mar-21	69
AS082310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	14-Jan-21	03-Feb-21	24-Mar-21	13-Apr-21	69
AS082320	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	28	04-Feb-21	03-Mar-21	14-Apr-21	11-May-21	69
AS082330	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	21	04-Mar-21	24-Mar-21	12-May-21	01-Jun-21	69
Waste Gas Burning System (WGB)							
AS092200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	90	16-Oct-20	13-Jan-21	25-Oct-20	22-Jan-21	9
AS092210	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	14-Jan-21	03-Feb-21	23-Jan-21	12-Feb-21	9
AS092220	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	28	04-Feb-21	03-Mar-21	13-Feb-21	12-Mar-21	9
AS092230	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	21	04-Mar-21	24-Mar-21	13-Mar-21	02-Apr-21	9
AS092300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	90	30-Nov-20	27-Feb-21	30-Dec-20	29-Mar-21	30
AS092310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	28-Feb-21	20-Mar-21	30-Mar-21	19-Apr-21	30
AS092320	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	28	21-Mar-21	17-Apr-21	20-Apr-21	17-May-21	30
AS092330	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	21	18-Apr-21	08-May-21	18-May-21	07-Jun-21	30
Plant Service Water System (PSW)							
AS122200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	150	17-Aug-20	13-Jan-21	26-Aug-20	22-Jan-21	9
AS122210	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	14-Jan-21	03-Feb-21	23-Jan-21	12-Feb-21	9
AS122220	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	28	04-Feb-21	03-Mar-21	13-Feb-21	12-Mar-21	9
AS122230	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	21	04-Mar-21	24-Mar-21	13-Mar-21	02-Apr-21	9
AS122300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	150	16-Oct-20	14-Mar-21	31-Oct-20	29-Mar-21	15
AS122310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	15-Mar-21	04-Apr-21	30-Mar-21	19-Apr-21	15
AS122320	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	28	05-Apr-21	02-May-21	20-Apr-21	17-May-21	15
AS122330	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	21	03-May-21	23-May-21	18-May-21	07-Jun-21	15
Reclaimed Water Utilisation (RWU)							
AS132200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	150	01-Sep-20	28-Jan-21	16-Sep-20	12-Feb-21	15
AS132210	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	29-Jan-21	18-Feb-21	09-Mar-21	29-Mar-21	39
AS132220	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	28	19-Feb-21	18-Mar-21	30-Mar-21	26-Apr-21	39
AS132230	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	21	19-Mar-21	08-Apr-21	27-Apr-21	17-May-21	39
AS132300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	150	16-Oct-20	14-Mar-21	31-Oct-20	29-Mar-21	15
AS132310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	15-Mar-21	04-Apr-21	30-Mar-21	19-Apr-21	15
AS132320	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	28	05-Apr-21	02-May-21	20-Apr-21	17-May-21	15
AS132330	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	21	03-May-21	23-May-21	18-May-21	07-Jun-21	15
Surplus Activated Sludge Pumping Station (SAS)							
AS142200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	150	02-Aug-20	29-Dec-20	26-Aug-20	22-Jan-21	24
AS142210	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	30-Dec-20	19-Jan-21	23-Jan-21	12-Feb-21	24
AS142220	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	28	20-Jan-21	16-Feb-21	13-Feb-21	12-Mar-21	24
AS142230	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	21	17-Feb-21	09-Mar-21	13-Mar-21	02-Apr-21	24
AS142300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	150	17-Aug-20	13-Jan-21	31-Oct-20	29-Mar-21	75
AS142310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	14-Jan-21	03-Feb-21	30-Mar-21	19-Apr-21	75
AS142320	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	28	04-Feb-21	03-Mar-21	20-Apr-21	17-May-21	75
AS142330	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	21	04-Mar-21	24-Mar-21	18-May-21	07-Jun-21	75
Control and Monitoring System							
AS182200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	90	16-Sep-20	14-Dec-20	25-Oct-20	22-Jan-21	39
AS182210	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	15-Dec-20	04-Jan-21	23-Jan-21	12-Feb-21	39
AS182220	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	28	05-Jan-21	01-Feb-21	13-Feb-21	12-Mar-21	39
AS182230	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	21	02-Feb-21	22-Feb-21	13-Mar-21	02-Apr-21	39
AS182300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	75	31-Oct-20	13-Jan-21	14-Jan-21	29-Mar-21	75
AS182310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	14-Jan-21	03-Feb-21	30-Mar-21	19-Apr-21	75
AS182320	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	28	04-Feb-21	03-Mar-21	20-Apr-21	17-May-21	75
AS182330	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	21	04-Mar-21	24-Mar-21	18-May-21	07-Jun-21	75
Lifting Appliances							
AS192200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	120	18-Jul-20	14-Nov-20	18-Aug-20	15-Dec-20	31
AS192210	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	15-Nov-20	05-Dec-20	24-Jan-21	13-Feb-21	70
AS192220	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	21	06-Dec-20	26-Dec-20	14-Feb-21	06-Mar-21	70
AS192230	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	21	27-Dec-20	16-Jan-21	07-Mar-21	27-Mar-21	70
AS192300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	75	31-Oct-20	13-Jan-21	01-Dec-20	13-Feb-21	31

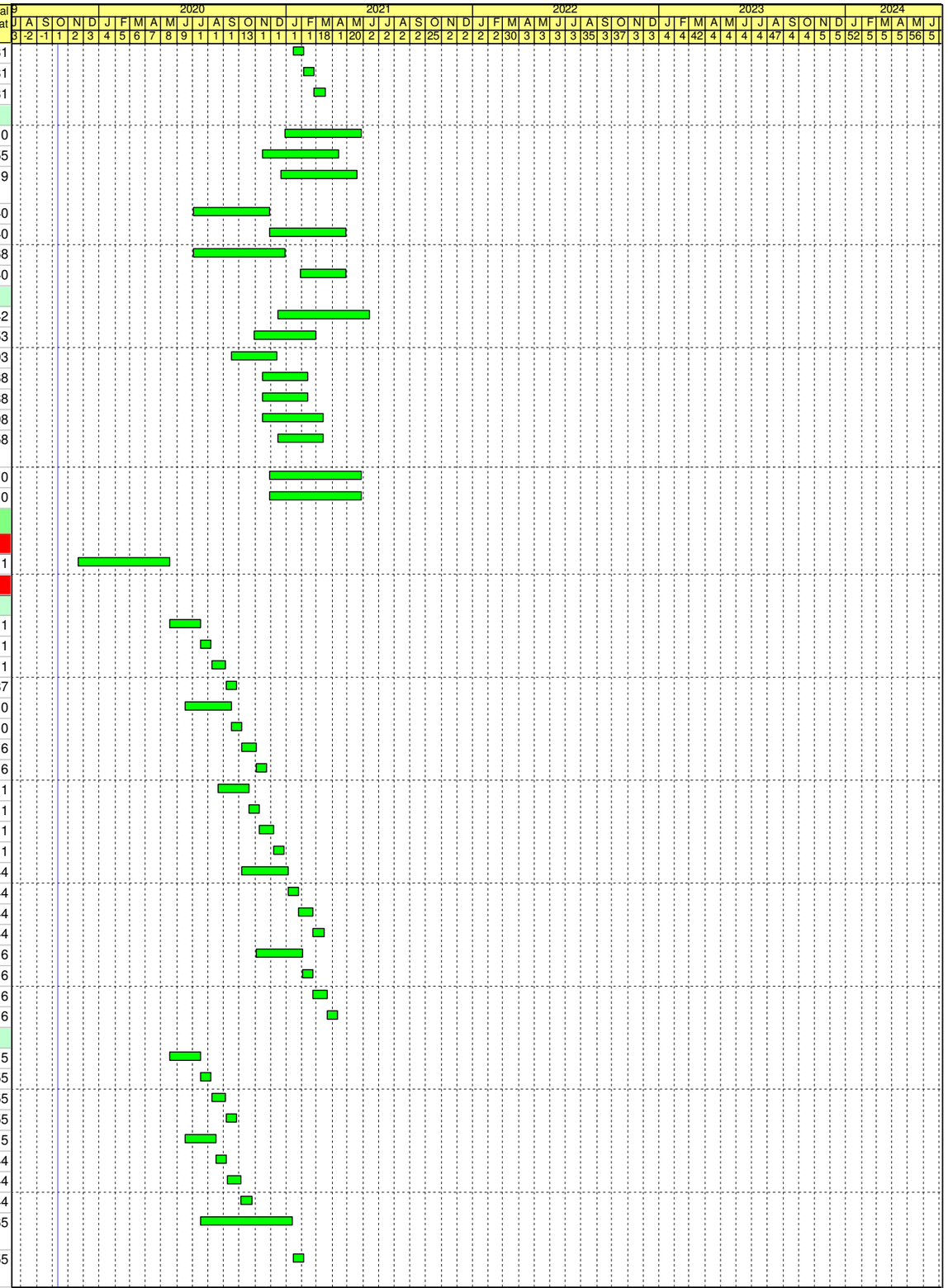


Remaining Work
Critical Activity
Milestone
Actual Progress

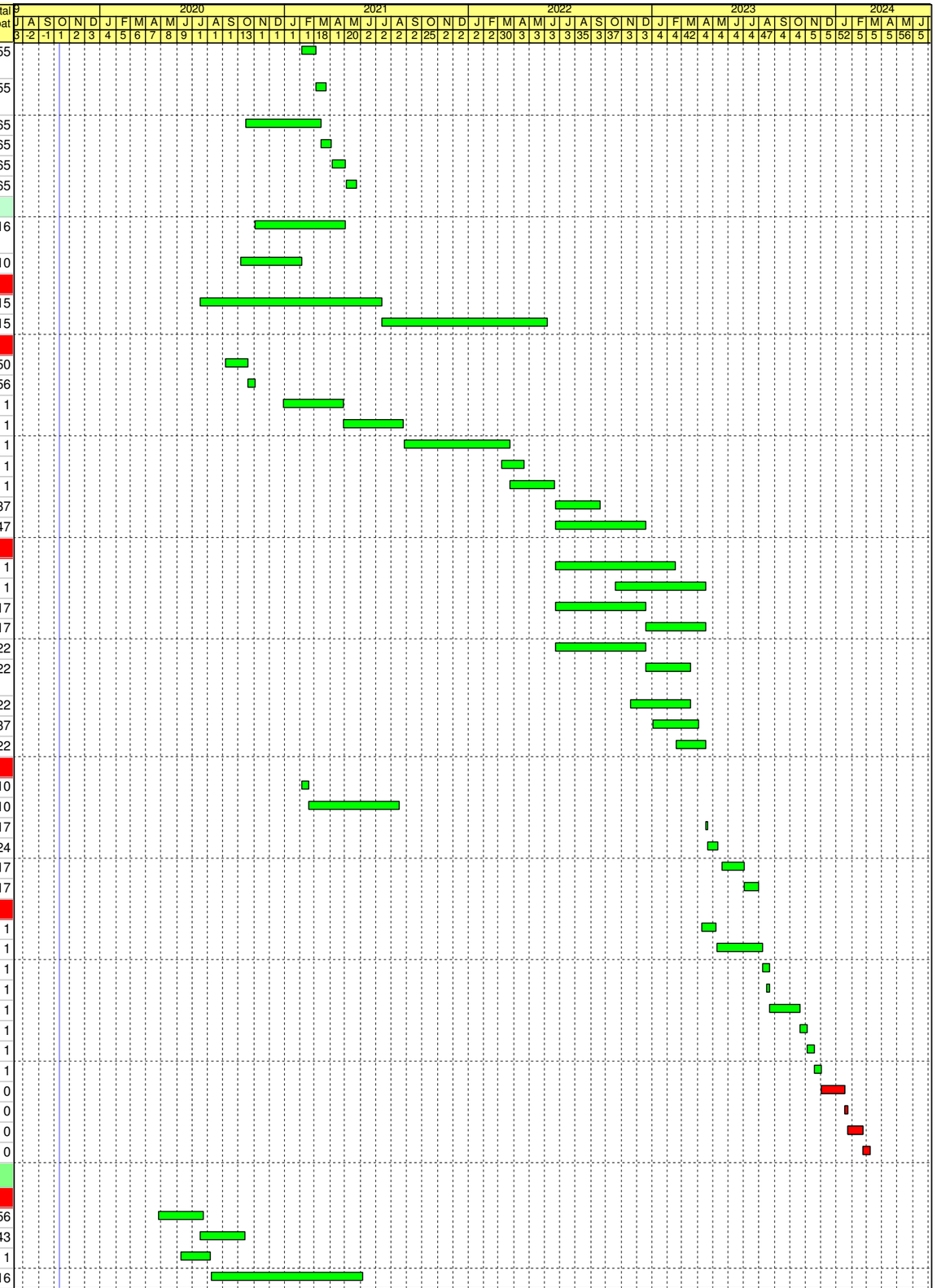
Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sluge Treatment Faciliteis
Master Programme

Date	Revision	Checked	Approved
24-Oct-19	Rev. 0	AI	KM
10-Feb-20	Rev. 1	AI	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
AS192310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	14-Jan-21	03-Feb-21	14-Feb-21	06-Mar-21	31
AS192320	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	21	04-Feb-21	24-Feb-21	07-Mar-21	27-Mar-21	31
AS192330	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	21	25-Feb-21	17-Mar-21	28-Mar-21	17-Apr-21	31
Building Services							
AS201100	Submit & Accept BS Works Design & Dwgs for Sludge Dewatering Building	150	30-Dec-20	28-May-21	09-Jan-21	07-Jun-21	10
AS201200	Submit & Accept BS Works Design & Dwgs for CHP Building	150	15-Nov-20	13-Apr-21	09-Jan-21	07-Jun-21	55
AS201300	Submit & Accept BS Works Design & Dwgs for Sludge Digester & Distribution Chamber	150	21-Dec-20	19-May-21	09-Jan-21	07-Jun-21	19
AS201500	Submit & Accept BS Works Design & Dwgs for Workshop No. 2	150	03-Jul-20	29-Nov-20	12-Aug-20	08-Jan-21	40
AS201700	Submit & Accept BS Works Design & Dwgs for Other Facilities	150	30-Nov-20	28-Apr-21	09-Jan-21	07-Jun-21	40
AS201800	Submit & Accept BS Works Design & Dwgs for FS Installation	180	03-Jul-20	29-Dec-20	09-Sep-20	07-Mar-21	68
AS201900	Submit & Accept BS Works Design & Dwgs for Outdoor Lighting Installation	90	29-Jan-21	28-Apr-21	10-Mar-21	07-Jun-21	40
Miscellaneous							
AS211100	Submit & Accept Design & Dwgs for DO System	180	15-Dec-20	12-Jun-21	14-Aug-21	09-Feb-22	242
AS211200	Submit & Accept Design & Dwgs for Sewage Pumping Station	120	31-Oct-20	27-Feb-21	11-Jul-21	07-Nov-21	253
AS211300	Submit & Accept Design & Dwgs for Process Water Pumping System	90	16-Sep-20	14-Dec-20	28-Mar-21	25-Jun-21	193
AS211400	Submit & Accept Design & Dwgs for External Sludge Transfer Pumping System	90	15-Nov-20	12-Feb-21	08-Dec-21	07-Mar-22	388
AS211500	Submit & Accept Design & Dwgs for THP Cooling Water Pumping Station	90	15-Nov-20	12-Feb-21	08-Dec-21	07-Mar-22	388
AS211600	Submit & Accept Design & Dwgs for Ferric Chloride Dosing System	120	15-Nov-20	14-Mar-21	09-Sep-21	06-Jan-22	298
AS211700	Submit & Accept Design & Dwgs for Temporary Primary Sludge Pumping Facility	90	15-Dec-20	14-Mar-21	08-Dec-21	07-Mar-22	358
AS211800	Submit & Accept Design & Dwgs for Gas Detection System	180	30-Nov-20	28-May-21	10-Dec-20	07-Jun-21	10
AS211900	Submit & Accept Design & Dwgs for CCTV System	180	30-Nov-20	28-May-21	10-Dec-20	07-Jun-21	10
Section 3 - Complete Design, Construction & T&C for Sidestream Facilities							
Major Subcontractor / Supplier Procurement							
AS160020	Procurement & PO for Deammonification Sidestream Treatment Facilities	180	21-Nov-19	18-May-20	22-Nov-19	19-May-20	1
Design & Submission							
Civil Works Design							
AS160100	Prepare & Submit General Layout Plan	60	19-May-20	17-Jul-20	20-May-20	18-Jul-20	1
AS160110	Review & Comment on General Layout Plan by PM	21	18-Jul-20	07-Aug-20	19-Jul-20	08-Aug-20	1
AS160120	Revise & Re-submit General Layout Plan	28	08-Aug-20	04-Sep-20	09-Aug-20	05-Sep-20	1
AS160130	Review & Accept of General Layout Plan by PM	21	05-Sep-20	25-Sep-20	15-Mar-24	04-Apr-24	1287
AS160200	Prepare & Submit Architectural Design / Drawings	90	18-Jun-20	15-Sep-20	28-Jun-20	25-Sep-20	10
AS160210	Review & Comment on Architectural Design / Drawings by PM	21	16-Sep-20	06-Oct-20	26-Sep-20	16-Oct-20	10
AS160220	Revise & Re-submit Architectural Design / Drawings	28	07-Oct-20	03-Nov-20	23-Oct-20	19-Nov-20	16
AS160230	Review & Accept of Architectural Design / Drawings by PM	21	04-Nov-20	24-Nov-20	20-Nov-20	10-Dec-20	16
AS160300	Prepare & Submit Foundation Design / Drawings	60	21-Aug-20	19-Oct-20	22-Aug-20	20-Oct-20	1
AS160310	Review & Comment on Foundation Design / Drawings by PM	21	20-Oct-20	09-Nov-20	21-Oct-20	10-Nov-20	1
AS160320	Revise & Re-submit Foundation Design / Drawings	28	10-Nov-20	07-Dec-20	11-Nov-20	08-Dec-20	1
AS160330	Review & Accept of Foundation Design / Drawings by PM	21	08-Dec-20	28-Dec-20	09-Dec-20	29-Dec-20	1
AS160400	Prepare & Submit Structural & Civil Design / Drawings	90	07-Oct-20	04-Jan-21	20-Nov-20	17-Feb-21	44
AS160410	Review & Comment on Structural & Civil Design / Drawingsby PM	21	05-Jan-21	25-Jan-21	18-Feb-21	10-Mar-21	44
AS160420	Revise & Re-submit Structural & Civil Design / Drawings	28	26-Jan-21	22-Feb-21	11-Mar-21	07-Apr-21	44
AS160430	Review & Accept of Structural & Civil Design / Drawings by PM	21	23-Feb-21	15-Mar-21	08-Apr-21	28-Apr-21	44
AS160500	Prepare & Submit Builder's Works Drawings	90	04-Nov-20	01-Feb-21	20-Nov-20	17-Feb-21	16
AS160510	Review & Comment on Builder's Works Drawings by PM	21	02-Feb-21	22-Feb-21	18-Feb-21	10-Mar-21	16
AS160520	Revise & Re-submit Builder's Works Drawings	28	23-Feb-21	22-Mar-21	11-Mar-21	07-Apr-21	16
AS160530	Review & Accept of Builder's Works Drawings by PM	21	23-Mar-21	12-Apr-21	08-Apr-21	28-Apr-21	16
E&M Design							
AS151100	Prepare & Submit General Arrangement Drawings	60	19-May-20	17-Jul-20	24-May-20	22-Jul-20	5
AS151110	Review & Comment on General Arrangement Drawings by PM	21	18-Jul-20	07-Aug-20	11-Sep-20	01-Oct-20	55
AS151120	Revise & Re-submit General Arrangement Drawings	28	08-Aug-20	04-Sep-20	02-Oct-20	29-Oct-20	55
AS151130	Review & Accept of General Arrangement Drawings by PM	21	05-Sep-20	25-Sep-20	30-Oct-20	19-Nov-20	55
AS152100	Prepare & Submit Civil Requirement Drawings	60	18-Jun-20	16-Aug-20	23-Jun-20	21-Aug-20	5
AS152110	Review & Comment on Civil Requirement Drawings by PM	21	17-Aug-20	06-Sep-20	30-Sep-20	20-Oct-20	44
AS152120	Revise & Re-submit Civil Requirement Drawings	28	07-Sep-20	04-Oct-20	21-Oct-20	17-Nov-20	44
AS152130	Review & Accept of Civil Requirement Drawings by PM	21	05-Oct-20	25-Oct-20	18-Nov-20	08-Dec-20	44
AS152200	Prepare & Submit Ele. Schematic Dwgs, Wiring Dwgs, Cable Schedule & Design Cal.	180	18-Jul-20	13-Jan-21	21-Sep-20	19-Mar-21	65
AS152210	Review & Comment on Ele. Schematic Dwgs, Wiring Dwgs, Cable Schedule & Design Cal.	21	14-Jan-21	03-Feb-21	14-Apr-22	04-May-22	455



Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
AS152220	Revise & Re-submit Ele. Schematic Dwgs, Wiring Dwgs, Cable Schedule & Design Cal.	28	04-Feb-21	03-Mar-21	05-May-22	01-Jun-22	455
AS152230	Review & Accept of Ele. Schematic Dwgs, Wiring Dwgs, Cable Schedule & Design Cal.	21	04-Mar-21	24-Mar-21	02-Jun-22	22-Jun-22	455
AS152300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	150	16-Oct-20	14-Mar-21	20-Dec-20	18-May-21	65
AS152310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	15-Mar-21	04-Apr-21	19-May-21	08-Jun-21	65
AS152320	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	28	05-Apr-21	02-May-21	09-Jun-21	06-Jul-21	65
AS152330	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	21	03-May-21	23-May-21	07-Jul-21	27-Jul-21	65
Building Services							
AS201400	Prepare & Submit BS Works Design & Dwgs for Sidestream Treatment Facilities	180	04-Nov-20	02-May-21	28-Feb-21	26-Aug-21	116
AS201420	Prepare & Submit FS Works Design & Dwgs for Sidestream Treatment Facilities	120	07-Oct-20	03-Feb-21	17-Oct-20	13-Feb-21	10
Major Plant & Materials Procurement							
AS153100	Procurement & PO for Deammonification Sidestream Treatment Facilities	360	18-Jul-20	12-Jul-21	02-Aug-20	27-Jul-21	15
AS153120	Fabrication & Delivery of Deammonification Sidestream Treatment Facilities	330	13-Jul-21	07-Jun-22	28-Jul-21	22-Jun-22	15
Civil Works Construction							
AS161100	Ground Investigation	45	05-Sep-20	19-Oct-20	25-Oct-20	08-Dec-20	50
AS161120	Site Clearance	15	20-Oct-20	03-Nov-20	15-Dec-20	29-Dec-20	56
AS161140	Foundation / Pilings	120	29-Dec-20	27-Apr-21	30-Dec-20	28-Apr-21	1
AS161160	ELS / Substructure	120	28-Apr-21	25-Aug-21	29-Apr-21	26-Aug-21	1
AS161180	Superstructure	210	26-Aug-21	23-Mar-22	27-Aug-21	24-Mar-22	1
AS161200	Waterproofing	45	09-Mar-22	22-Apr-22	10-Mar-22	23-Apr-22	1
AS161220	External & Internal Finishes - 1st Fix	90	24-Mar-22	21-Jun-22	25-Mar-22	22-Jun-22	1
AS161240	External & Internal Finishes - 2nd Fix	90	22-Jun-22	19-Sep-22	11-Dec-23	09-Mar-24	537
AS161260	Landscaping & Establishment Works	180	22-Jun-22	18-Dec-22	12-Sep-23	09-Mar-24	447
E&M Installation							
AS154100	E&M Installation of Deammonification Sidestream Treatment Facilities	240	22-Jun-22	16-Feb-23	23-Jun-22	17-Feb-23	1
AS154120	Installation of Electrical Supply Systems	180	20-Oct-22	17-Apr-23	21-Oct-22	18-Apr-23	1
AS154160	FS Installation - Conduits, Trunking, & Pipeworks	180	22-Jun-22	18-Dec-22	09-Jul-22	04-Jan-23	17
AS154180	FS Installation - Cable Laying, Termination, Associated Fitting & Field Devices	120	19-Dec-22	17-Apr-23	05-Jan-23	04-May-23	17
AS154200	BS Fitting Installation - Conduits, Trunking, & Ductworks	180	22-Jun-22	18-Dec-22	14-Jul-22	09-Jan-23	22
AS154220	BS Fitting Installation - Cable Laying, Termination, Associated Fitting & Field Devices	90	19-Dec-22	18-Mar-23	10-Jan-23	09-Apr-23	22
AS154240	Installation of Control & Monitoring System	120	19-Nov-22	18-Mar-23	11-Dec-22	09-Apr-23	22
AS154260	Installation of CCTV System	90	03-Jan-23	02-Apr-23	09-Feb-23	09-May-23	37
AS154280	Installation of Gas Detection System	60	17-Feb-23	17-Apr-23	11-Mar-23	09-May-23	22
Statutory Submission / Inspection (FSD)							
AS201440	Prepare & Submit Stage I FSI/314 for FSD approval	14	04-Feb-21	17-Feb-21	14-Feb-21	27-Feb-21	10
AS201460	FSD Review & Approval of Stage I FSI/314	180	18-Feb-21	16-Aug-21	28-Feb-21	26-Aug-21	10
AS201510a	Prepare & Submit Stage II FSI/314 & FSI/501	3	18-Apr-23	20-Apr-23	05-May-23	07-May-23	17
AS201520a	FSD Review & Approval of Stage II FSI/314 & FSI/501	21	21-Apr-23	11-May-23	15-May-23	04-Jun-23	24
AS201540a	F.S. Inspection, Defects Rectification & Reinspection	45	19-May-23	02-Jul-23	05-Jun-23	19-Jul-23	17
AS201560a	Issuance of Acceptance Letter	28	03-Jul-23	30-Jul-23	20-Jul-23	16-Aug-23	17
Testing & Commissioning							
AS155100	SAT for Deammonification Sidestream Treatment Facilities	30	09-Apr-23	08-May-23	10-Apr-23	09-May-23	1
AS155120a	Process Start Up	92	09-May-23	08-Aug-23	10-May-23	09-Aug-23	1
AS155140a	Submission & Acceptance of Process Start Up Report	14	09-Aug-23	22-Aug-23	10-Aug-23	23-Aug-23	1
AS155160a	Notice for Commencement of Phase 1 Commissioning Tests	7	16-Aug-23	22-Aug-23	17-Aug-23	23-Aug-23	1
AS155200	Phase 1 Commissioning Tests	60	23-Aug-23	21-Oct-23	24-Aug-23	22-Oct-23	1
AS155220a	Submission & Acceptance of Phase 1 Commissioning Tests Report	14	22-Oct-23	04-Nov-23	23-Oct-23	05-Nov-23	1
AS155240a	Phase 1 Post Commissioning	14	05-Nov-23	18-Nov-23	06-Nov-23	19-Nov-23	1
AS155260a	Submission & Acceptance of Phase 1 Post Commissioning Report	14	19-Nov-23	02-Dec-23	20-Nov-23	03-Dec-23	1
AS155300	Phase 2 Commissioning Tests	45	04-Dec-23	17-Jan-24	04-Dec-23	17-Jan-24	0
AS155320a	Acceptance of Phase 2 Commissioning Tests Results	7	18-Jan-24	24-Jan-24	18-Jan-24	24-Jan-24	0
AS155340a	Phase 3 Commissioning Tests	30	25-Jan-24	23-Feb-24	25-Jan-24	23-Feb-24	0
AS155360a	Submission & Acceptance of Phase 3 Commissioning Report	15	24-Feb-24	09-Mar-24	24-Feb-24	09-Mar-24	0
Section 4 - Complete Construction & T&C for UV System No.1 & EP Station No. 1							
Major Plant & Materials Fabrication & Delivery							
AS103300	Procurement & PO for Pipeworks & Associated Valves	90	26-Apr-20	24-Jul-20	29-Sep-20	27-Dec-20	156
AS103320	Procurement & PO for Elec. Materials	90	17-Jul-20	14-Oct-20	29-Aug-20	26-Nov-20	43
AS103400	Procurement & PO for FS System (S20)	60	09-Jun-20	07-Aug-20	10-Jun-20	08-Aug-20	1
AS104100	Fabrication & Delivery of UV Disinfection System (S10)	300	09-Aug-20	04-Jun-21	03-Dec-20	28-Sep-21	116

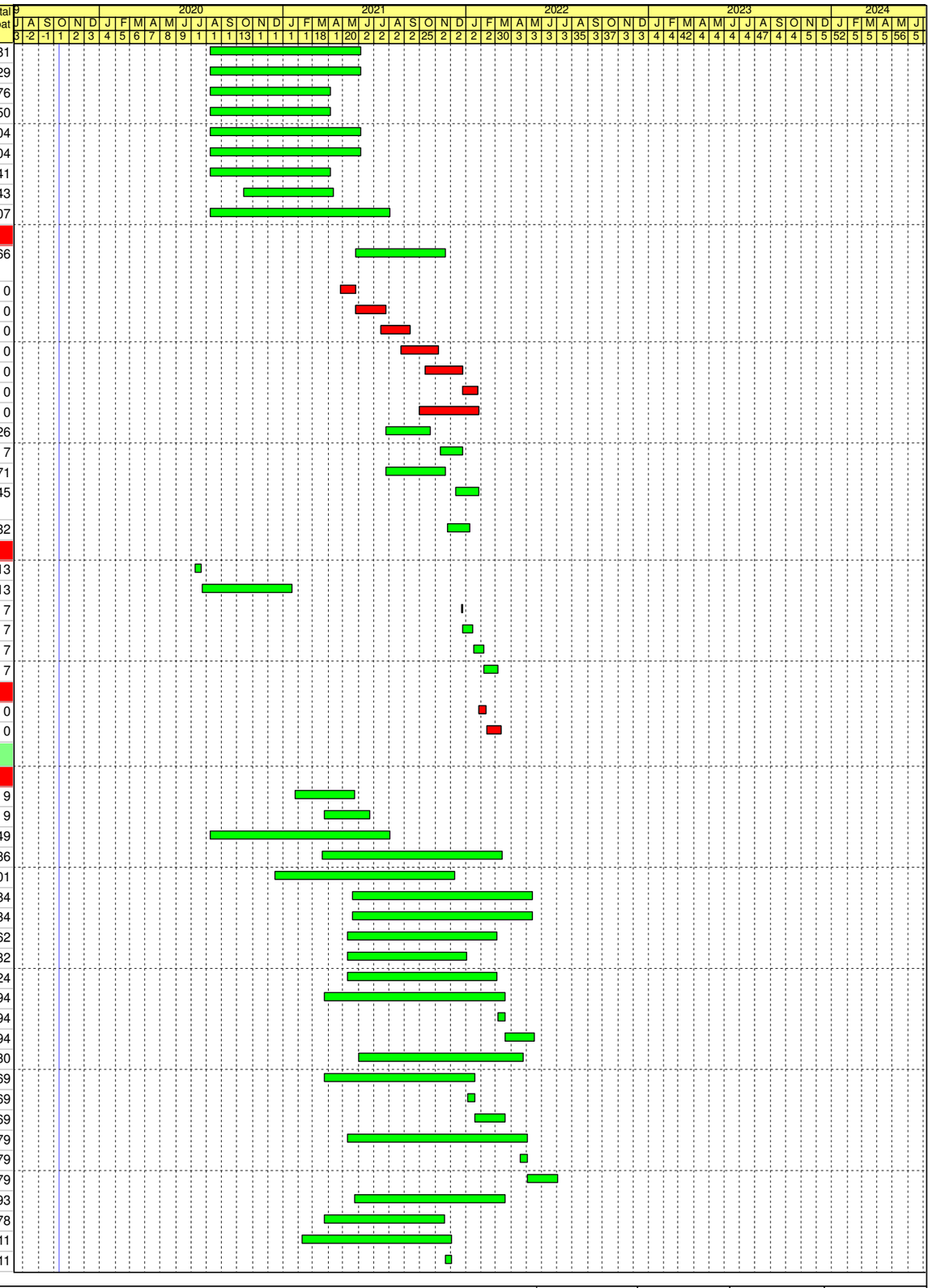


Remaining Work
Critical Activity
Milestone
Actual Progress

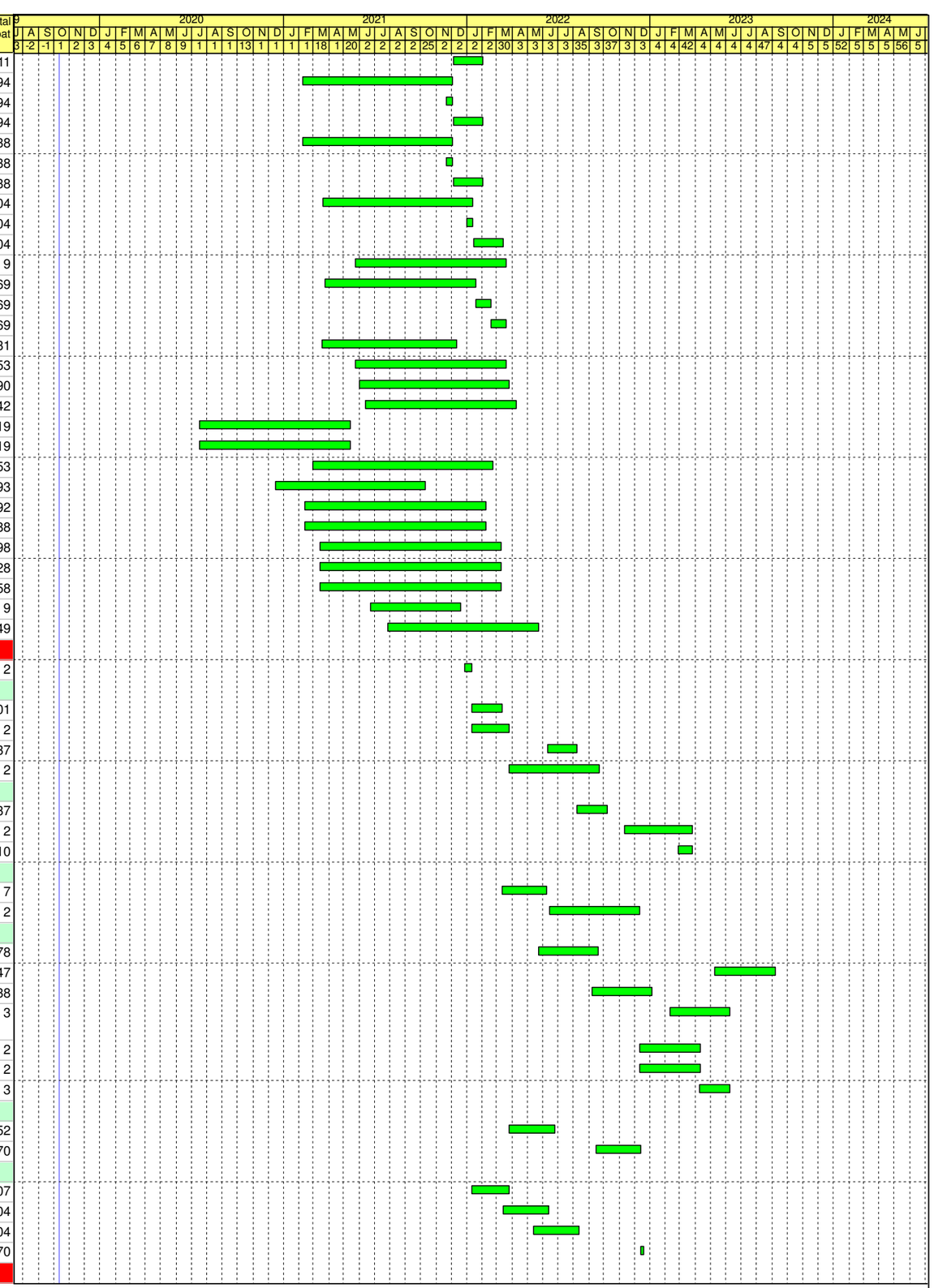
Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sluge Treatment Faciliteis
Master Programme

Date	Revision	Checked	Approved
24-Oct-19	Rev. 0	AI	KM
10-Feb-20	Rev. 1	AI	KM

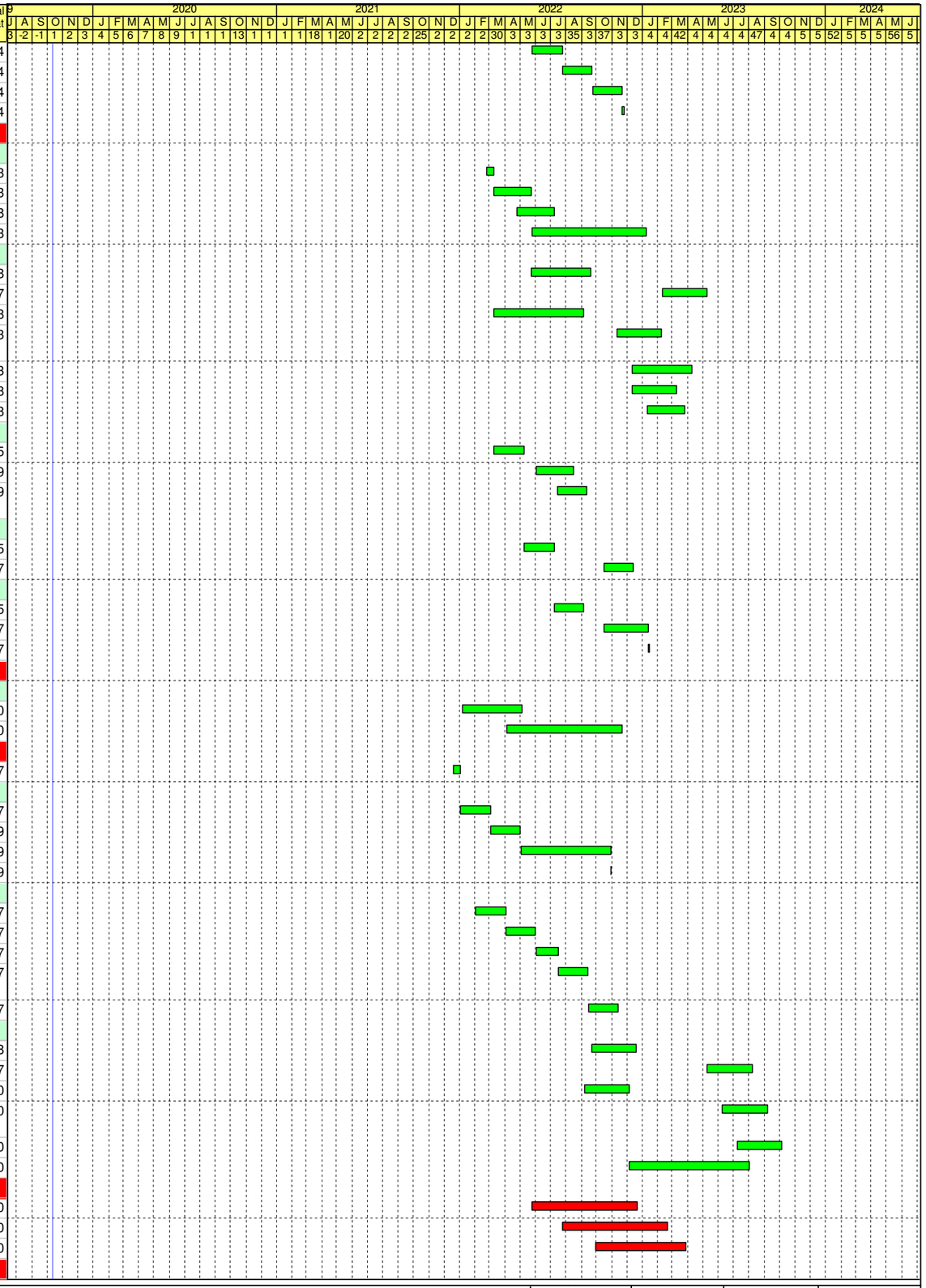
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
AS104120	Fabrication & Delivery of Lift-up Pumps (S11)	300	09-Aug-20	04-Jun-21	29-Oct-20	24-Aug-21	81
AS104140	Fabrication & Delivery of Transfer Pumps (S13)	300	09-Aug-20	04-Jun-21	16-Dec-20	11-Oct-21	129
AS104160	Fabrication & Delivery of FRP Cover (S11)	240	09-Aug-20	05-Apr-21	01-Feb-21	28-Sep-21	176
AS104180	Fabrication & Delivery of EOT Cranes (2T & 5T) (S19)	240	09-Aug-20	05-Apr-21	28-Sep-20	25-May-21	50
AS104200	Fabrication & Delivery of Stoplogs (S21)	300	09-Aug-20	04-Jun-21	01-Mar-21	25-Dec-21	204
AS104220	Fabrication & Delivery of Penstocks (S21)	300	09-Aug-20	04-Jun-21	01-Mar-21	25-Dec-21	204
AS104300	Fabrication & Delivery of Pipeworks & Associated Valves	240	09-Aug-20	05-Apr-21	28-Dec-20	24-Aug-21	141
AS104320	Fabrication & Delivery of Elec. Materials	180	15-Oct-20	12-Apr-21	27-Nov-20	25-May-21	43
AS104400	Fabrication & Delivery of FS System (S20)	360	08-Aug-20	02-Aug-21	23-Nov-20	17-Nov-21	107
E&M Installation							
AS105100	Provision of Temporary Power for UV System No.1 & Effluent Transfer Pumping Station	180	26-May-21	21-Nov-21	31-Jul-21	26-Jan-22	66
AS106100	Mobilisation	30	26-Apr-21	25-May-21	26-Apr-21	25-May-21	0
AS106120	E&M Installation of EOT Cranes (5T)	60	26-May-21	24-Jul-21	26-May-21	24-Jul-21	0
AS106140	E&M Installation of EOT Cranes (2T)	60	15-Jul-21	12-Sep-21	15-Jul-21	12-Sep-21	0
AS106160	E&M Installation of Lift-up Pumps & Associated Pipeworks / Valves	75	25-Aug-21	07-Nov-21	25-Aug-21	07-Nov-21	0
AS106180	E&M Installation of Transfer Pumps & Associated Pipeworks / Valves	75	12-Oct-21	25-Dec-21	12-Oct-21	25-Dec-21	0
AS106200	E&M Installation of Penstocks & Stoplogs	30	26-Dec-21	24-Jan-22	26-Dec-21	24-Jan-22	0
AS106210	E&M Installation of UV System	120	29-Sep-21	26-Jan-22	29-Sep-21	26-Jan-22	0
AS106220	FS Installation - Conduits, Trunking, & Pipeworks	90	25-Jul-21	22-Oct-21	20-Aug-21	17-Nov-21	26
AS106240	FS Installation - Cable Laying, Termination, Associated Fitting & Field Devices	45	11-Nov-21	25-Dec-21	18-Nov-21	01-Jan-22	7
AS106260	BS Fitting Installation - Conduits, Trunking, & Ductworks	120	25-Jul-21	21-Nov-21	04-Oct-21	31-Jan-22	71
AS106280	BS Fitting Installation - Cable Laying, Termination, Associated Fitting & Field Devices	47	11-Dec-21	26-Jan-22	25-Jan-22	12-Mar-22	45
AS106320	Installation of CCTV System	45	26-Nov-21	09-Jan-22	28-Dec-21	10-Feb-22	32
Statutory Submission / Inspection (FSD)							
AS107050	Prepare & Submit Stage I FSI/314 for FSD approval	14	09-Jul-20	22-Jul-20	07-Feb-21	20-Feb-21	213
AS107060a	FSD Review & Approval of Stage I FSI/314	180	23-Jul-20	18-Jan-21	21-Feb-21	19-Aug-21	213
AS107100	Prepare & Submit Stage II FSI/314 & FSI/501	3	23-Dec-21	25-Dec-21	30-Dec-21	01-Jan-22	7
AS107110a	FSD Review & Approval of Stage II FSI/314 & FSI/501	21	26-Dec-21	15-Jan-22	02-Jan-22	22-Jan-22	7
AS107200	F.S. Inspection	21	16-Jan-22	05-Feb-22	23-Jan-22	12-Feb-22	7
AS107300	Issuance of Acceptance Letter	28	06-Feb-22	05-Mar-22	13-Feb-22	12-Mar-22	7
Testing & Commissioning							
AS107400	SAT for UV System No. 1 & Effluent Transfer Pumping Station No. 1	15	27-Jan-22	10-Feb-22	27-Jan-22	10-Feb-22	0
AS107500	System Commissioning Tests	30	11-Feb-22	12-Mar-22	11-Feb-22	12-Mar-22	0
Section 5 - Complete all remainder Works (incl. T&C)							
Fabrication, FAT & Delivery of Major Plant & Materials							
AS023290	Procurement & PO for Pipeworks & Associated Valves	120	24-Jan-21	23-May-21	02-Feb-21	01-Jun-21	9
AS023620	Procurement & PO for Elec. Materials	90	25-Mar-21	22-Jun-21	03-Apr-21	01-Jul-21	9
AS104240	Fabrication & Delivery of Transfomers -UV (Tx 07 & 08) (S17)	360	09-Aug-20	03-Aug-21	01-Nov-21	26-Oct-22	449
AS104260	Fabrication & Delivery of LVSB -UV (S17)	360	20-Mar-21	14-Mar-22	31-Dec-21	25-Dec-22	286
AS104280	Fabrication & Delivery of Control & Monitoring System -UV (S18)	360	15-Dec-20	09-Dec-21	16-Nov-22	10-Nov-23	701
AS501100	Fabrication & Delivery of Sludge Screening System (S2)	360	19-May-21	13-May-22	19-Nov-21	13-Nov-22	184
AS501120	Fabrication & Delivery of Sludge Thickening System (S3)	360	19-May-21	13-May-22	22-Jun-21	16-Jun-22	34
AS501140	Fabrication & Delivery of Sludge Digestion System (S5)	300	09-May-21	04-Mar-22	10-Jul-21	05-May-22	62
AS501150a	Fabrication & Delivery of FRP Walkway / Cover (S5)	240	09-May-21	03-Jan-22	10-Jun-21	04-Feb-22	32
AS501160	Fabrication & Delivery of Sludge Dewatering System (S6)	300	09-May-21	04-Mar-22	02-Jun-21	28-Mar-22	24
AS501180	Fabrication of THP System (S4)	360	25-Mar-21	19-Mar-22	05-Oct-21	29-Sep-22	194
AS501200	FAT for THP System (S4)	14	06-Mar-22	19-Mar-22	16-Sep-22	29-Sep-22	194
AS501220	Delivery of THP System (S4)	60	20-Mar-22	18-May-22	30-Sep-22	28-Nov-22	194
AS501240	Fabrication & Delivery of Biogas Storage & Pre-Treatment (S7)	330	31-May-21	25-Apr-22	30-Jun-21	25-May-22	30
AS501260	Fabrication of CHP System (S8)	300	25-Mar-21	18-Jan-22	02-Jun-21	28-Mar-22	69
AS501280	FAT for CHP Generators (S8)	14	05-Jan-22	18-Jan-22	15-Mar-22	28-Mar-22	69
AS501300	Delivery of CHP Generators (S8)	60	19-Jan-22	19-Mar-22	29-Mar-22	27-May-22	69
AS501320	Fabrication of Waste Gas Burning System (S9)	360	09-May-21	03-May-22	04-Nov-21	29-Oct-22	179
AS501340	FAT for Waste Gas Steam Generation Boiler (S9)	14	20-Apr-22	03-May-22	16-Oct-22	29-Oct-22	179
AS501360	Delivery of Waste Gas Burning System (S9)	60	04-May-22	02-Jul-22	30-Oct-22	28-Dec-22	179
AS501380	Fabrication & Delivery of Plant Service Water System (S12)	300	24-May-21	19-Mar-22	25-Aug-21	20-Jun-22	93
AS501400	Fabrication & Delivery of SAS Pumping System (S14)	240	25-Mar-21	19-Nov-21	11-Jun-21	05-Feb-22	78
AS501420	Fabrication of 11kV Transfomers (S17)	300	08-Feb-21	04-Dec-21	16-Dec-21	11-Oct-22	311
AS501440	FAT for 11kV Transfomers (S17)	14	21-Nov-21	04-Dec-21	28-Sep-22	11-Oct-22	311



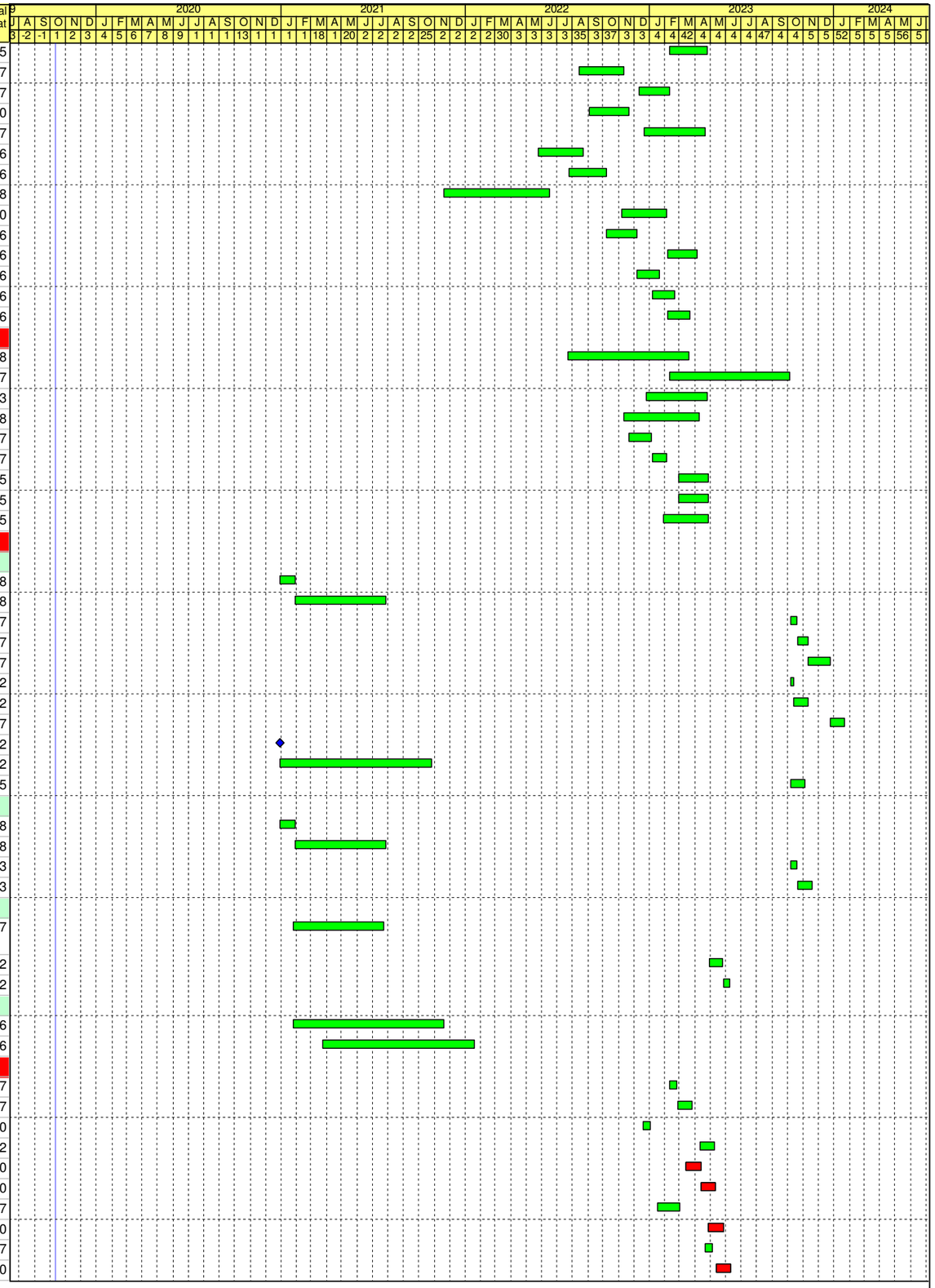
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
AS501460	Delivery of 11kV Transfomers (S17)	60	05-Dec-21	02-Feb-22	12-Oct-22	10-Dec-22	311
AS501480	Fabrication of 380V Transfomers (S17)	300	08-Feb-21	04-Dec-21	29-Nov-21	24-Sep-22	294
AS501500	FAT for 380V Transfomers (S17)	14	21-Nov-21	04-Dec-21	11-Sep-22	24-Sep-22	294
AS501520	Delivery of 380V Transfomers (S17)	60	05-Dec-21	02-Feb-22	25-Sep-22	23-Nov-22	294
AS501540	Fabrication of 11 kV Switchboard (S17)	300	08-Feb-21	04-Dec-21	04-Oct-21	30-Jul-22	238
AS501560	FAT for 11 kV Switchboard (S17)	14	21-Nov-21	04-Dec-21	17-Jul-22	30-Jul-22	238
AS501580	Delivery of 11 kV Switchboard (S17)	60	05-Dec-21	02-Feb-22	31-Jul-22	28-Sep-22	238
AS501600	Fabrication of 380V Switchboard (S17)	300	20-Mar-21	13-Jan-22	02-Jul-21	27-Apr-22	104
AS501620	FAT for 380V Switchboard (S17)	14	31-Dec-21	13-Jan-22	14-Apr-22	27-Apr-22	104
AS501640	Delivery of 380V Switchboard (S17)	60	14-Jan-22	14-Mar-22	28-Apr-22	26-Jun-22	104
AS501660	Fabrication & Delivery of Pipeworks & Associated Valves	300	24-May-21	19-Mar-22	02-Jun-21	28-Mar-22	9
AS501680	Fabrication of Control & Monitoring System (S18)	300	25-Mar-21	18-Jan-22	19-Dec-21	14-Oct-22	269
AS501700	FAT fro SCADA System (S18)	30	19-Jan-22	17-Feb-22	15-Oct-22	13-Nov-22	269
AS501720	Delivery of SCADA System (S18)	30	18-Feb-22	19-Mar-22	14-Nov-22	13-Dec-22	269
AS501740	Fabrication & Delivery of Lifting Appliances (S19)	270	18-Mar-21	12-Dec-21	18-Apr-21	12-Jan-22	31
AS501760	Fabrication & Delivery of Reclaimed Water Utilisation (S13)	300	24-May-21	19-Mar-22	24-Oct-21	19-Aug-22	153
AS501780	Fabrication & Delivery of H2S Removal System (S7)	300	31-May-21	26-Mar-22	07-Dec-21	02-Oct-22	190
AS501800	Fabrication & Delivery of DO System (S21)	300	13-Jun-21	08-Apr-22	10-Feb-22	06-Dec-22	242
AS501820	Fabrication & Delivery of Stoplog (S21)	300	18-Jul-20	13-May-21	02-Jun-21	28-Mar-22	319
AS501840	Fabrication & Delivery of Penstock (S21)	300	18-Jul-20	13-May-21	02-Jun-21	28-Mar-22	319
AS501860	Fabrication & Delivery of Sewage Pump (S21)	360	28-Feb-21	22-Feb-22	08-Nov-21	02-Nov-22	253
AS501880	Fabrication & Delivery of Process Water Pump (S21)	300	15-Dec-20	10-Oct-21	26-Jun-21	21-Apr-22	193
AS501900	Fabrication & Delivery of External Sludge Transfer Pump (S21)	360	13-Feb-21	07-Feb-22	12-Mar-22	06-Mar-23	392
AS501920	Fabrication & Delivery of THP Cooling Pump (S21)	360	13-Feb-21	07-Feb-22	08-Mar-22	02-Mar-23	388
AS501940	Fabrication & Delivery of Ferric Chloride Storage Tank (S21)	360	15-Mar-21	09-Mar-22	07-Jan-22	01-Jan-23	298
AS501960	Fabrication & Delivery of Ferric Chloride Dosing Pump (S21)	360	15-Mar-21	09-Mar-22	06-Feb-22	31-Jan-23	328
AS501980	Fabrication & Delivery of Temporary Primary Sludge Pump (S21)	360	15-Mar-21	09-Mar-22	08-Mar-22	02-Mar-23	358
AS510060	Fabrication & Delivery of Elec. Materials	180	23-Jun-21	19-Dec-21	02-Jul-21	28-Dec-21	9
AS510080	Fabrication & Delivery of Gas Detection System	300	28-Jul-21	23-May-22	03-Apr-22	27-Jan-23	249
Sludge Dewatering Building							
AS502100	Mobilisation	15	27-Dec-21	10-Jan-22	29-Dec-21	12-Jan-22	2
Sludge Dewatering (SDe)							
AS502120	E&M Installation of Process Water Pump (S21)	60	11-Jan-22	11-Mar-22	22-Apr-22	20-Jun-22	101
AS502140	E&M Installation of EOT Crane LA-01-02	75	11-Jan-22	26-Mar-22	13-Jan-22	28-Mar-22	2
AS502150	E&M Installation of Monorail LA-01-04	60	10-Jun-22	08-Aug-22	17-Jul-22	14-Sep-22	37
AS502160	E&M Installation of Sludge Dewatering System (S6)	180	27-Mar-22	22-Sep-22	29-Mar-22	24-Sep-22	2
Sludge Screening (SSc)							
AS502180	E&M Installation of Monorail LA-01-01	60	09-Aug-22	07-Oct-22	15-Sep-22	13-Nov-22	37
AS502200	E&M Installation of Sludge Screening System (S2)	135	12-Nov-22	26-Mar-23	14-Nov-22	28-Mar-23	2
AS502220	E&M Installation of External Sludge Transfer Pump (S21)	30	25-Feb-23	26-Mar-23	07-Mar-23	05-Apr-23	10
Sludge Thickening (STh)							
AS502260	E&M Installation of EOT Crane LA-01-03	90	12-Mar-22	09-Jun-22	19-Mar-22	16-Jun-22	7
AS502280	E&M Installation of Sludge Thickening System (S3)	180	15-Jun-22	11-Dec-22	17-Jun-22	13-Dec-22	2
Building Services							
AS502300	FS Installation - Conduits, Trunking, & Pipeworks	120	24-May-22	20-Sep-22	26-Feb-23	25-Jun-23	278
AS502320	FS Installation - Cable Laying, Termination, Associated Fitting & Field Devices	120	10-May-23	06-Sep-23	26-Jun-23	23-Oct-23	47
AS502340	BS Fitting Installation - Conduits, Trunking, & Ductworks	120	07-Sep-22	04-Jan-23	15-Oct-22	11-Feb-23	38
AS502360	BS Fitting Installation - Cable Laying, Termination, Associated Fitting & Field Devices	120	09-Feb-23	08-Jun-23	12-Feb-23	11-Jun-23	3
AS502380	Installation of Control & Monitoring System	120	12-Dec-22	10-Apr-23	14-Dec-22	12-Apr-23	2
AS502400	Installation of CCTV System	120	12-Dec-22	10-Apr-23	14-Dec-22	12-Apr-23	2
AS502410	Installation of Gas Detection System	60	10-Apr-23	08-Jun-23	13-Apr-23	11-Jun-23	3
Tx Rm							
AS502420	BS Fitting Intallation	90	27-Mar-22	24-Jun-22	26-Aug-22	23-Nov-22	152
AS502440	E&M Installation of 380V Transformers (S17)	90	15-Sep-22	13-Dec-22	24-Nov-22	21-Feb-23	70
LV Switchroom							
AS502460	BS Fitting Intallation	75	11-Jan-22	26-Mar-22	28-Apr-22	11-Jul-22	107
AS502480	E&M Installation of LVSB at G/F (S17)	90	15-Mar-22	12-Jun-22	27-Jun-22	24-Sep-22	104
AS502500	E&M Installation of LVSB at 1/F (S17)	90	14-May-22	11-Aug-22	26-Aug-22	23-Nov-22	104
AS502520	Ready for Energisation	5	14-Dec-22	18-Dec-22	22-Feb-23	26-Feb-23	70
Tx Rm & LV Switchroom (for UV)							



Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
AS105120	BS Fitting Intallation (at Tx Rm & LV Switchroom)	60	26-May-22	24-Jul-22	28-Aug-22	26-Oct-22	94
AS105140	E&M Installation of Transfomers in Tx Rm	60	25-Jul-22	22-Sep-22	27-Oct-22	25-Dec-22	94
AS105160	E&M Installation of LVSB	60	23-Sep-22	21-Nov-22	26-Dec-22	23-Feb-23	94
AS105180	Ready for Permanet Power Energisation	3	22-Nov-22	24-Nov-22	24-Feb-23	26-Feb-23	94
Combined Heat & Power Building							
Combined Heat & Power Generation (CHP)							
AS503100	Mobilisation	14	25-Feb-22	10-Mar-22	28-Feb-22	13-Mar-22	3
AS503120	E&M Installation of EOT Crane No. 1	75	11-Mar-22	24-May-22	14-Mar-22	27-May-22	3
AS503140	E&M Installation of EOT Crane No. 2	75	25-Apr-22	08-Jul-22	02-Jun-22	15-Aug-22	38
AS503160	E&M Installation of CHP System (S8)	230	25-May-22	09-Jan-23	28-May-22	12-Jan-23	3
Building Services							
AS503180	FS Installation - Conduits, Trunking, & Pipeworks	120	24-May-22	20-Sep-22	31-Jul-22	27-Nov-22	68
AS503200	FS Installation - Cable Laying, Termination, Associated Fitting & Field Devices	90	09-Feb-23	09-May-23	28-Mar-23	25-Jun-23	47
AS503220	BS Fitting Installation - Conduits, Trunking, & Ductworks	180	11-Mar-22	06-Sep-22	18-Apr-22	14-Oct-22	38
AS503240	BS Fitting Installation - Cable Laying, Termination, Associated Fitting & Field Devices	90	11-Nov-22	08-Feb-23	14-Nov-22	11-Feb-23	3
AS503260	Installation of Control & Monitoring System	120	11-Dec-22	09-Apr-23	14-Dec-22	12-Apr-23	3
AS503280	Installation of CCTV System	90	11-Dec-22	10-Mar-23	29-Dec-22	28-Mar-23	18
AS503290	Installation of Gas Detection System	75	10-Jan-23	25-Mar-23	28-Jan-23	12-Apr-23	18
11kV Switchroom							
AS503300	BS Fitting Installation	60	11-Mar-22	09-May-22	14-Jun-22	12-Aug-22	95
AS503320	E&M Installation of 11kV Switchboard (S17)	75	02-Jun-22	15-Aug-22	29-Sep-22	12-Dec-22	119
AS503340	Main Cables Laying between 11kV SwitchRoom of CHP Bldg to Tx Rm of Workshop No.2	60	15-Jul-22	12-Sep-22	11-Nov-22	09-Jan-23	119
Tx Rm							
AS503360	BS Fitting Installation	60	10-May-22	08-Jul-22	13-Aug-22	11-Oct-22	95
AS503380	E&M Installation of 11kV Transfomers (S17)	60	15-Oct-22	13-Dec-22	11-Dec-22	08-Feb-23	57
LV Switchroom							
AS503400	BS Fitting Intallation	60	09-Jul-22	06-Sep-22	12-Oct-22	10-Dec-22	95
AS503420	E&M Installation of LVSB at 1/F (S17)	90	15-Oct-22	12-Jan-23	11-Dec-22	10-Mar-23	57
AS503440	Ready for Energisation	3	13-Jan-23	15-Jan-23	11-Mar-23	13-Mar-23	57
Sludge Digesters & Distribution Chamber							
Sludge Digestion (SDi)							
AS503500	FRP Walkway / Cover Installation	120	06-Jan-22	05-May-22	05-Feb-22	04-Jun-22	30
AS503600	E&M Installation of Sludge Digestion System (S5)	230	06-Apr-22	21-Nov-22	06-May-22	21-Dec-22	30
Workshop No. 2							
AS504000	Mobilisation	14	20-Dec-21	02-Jan-22	15-Feb-22	28-Feb-22	57
CLP Substation							
AS504100	BS Fitting Intallation (at CLP Sub-station in Workshop No.2)	60	03-Jan-22	03-Mar-22	01-Mar-22	29-Apr-22	57
AS509940a	Inspections, Rectification & H/O to CLP	60	04-Mar-22	02-May-22	01-Jul-22	29-Aug-22	119
AS509960	E&M Installation of HV Transformer (By CLP)	180	03-May-22	29-Oct-22	30-Aug-22	25-Feb-23	119
AS509980	Energisation (By CLP)	1	30-Oct-22	30-Oct-22	26-Feb-23	26-Feb-23	119
11kV HV Switchroom							
AS504200	BS Fitting Intallation	60	02-Feb-22	02-Apr-22	31-Mar-22	29-May-22	57
AS504240	E&M Installation of 11kV HVSB (at Workshop No.2)	60	03-Apr-22	01-Jun-22	30-May-22	28-Jul-22	57
AS504260	Main Cables Laying between Workshop No.2 & Tx Rm for UV System No.1	45	02-Jun-22	16-Jul-22	29-Jul-22	11-Sep-22	57
AS504280	Main Cables Laying between Workshop No.2 & Tx Rm for Sludge Dewatering Bldg	60	17-Jul-22	14-Sep-22	12-Sep-22	10-Nov-22	57
AS504300	Main Cables Laying between Workshop No.2 & Tx Rm for CHP Bldg	60	15-Sep-22	13-Nov-22	11-Nov-22	09-Jan-23	57
Building Services							
AS504400a	FS Installation - Conduits, Trunking, & Pipeworks	90	21-Sep-22	19-Dec-22	27-May-23	24-Aug-23	248
AS504410a	FS Installation - Cable Laying, Termination, Associated Fitting & Field Devices	90	10-May-23	07-Aug-23	25-Aug-23	22-Nov-23	107
AS504420a	BS Fitting Installation - Conduits, Trunking, & Ductworks	90	07-Sep-22	05-Dec-22	15-Apr-23	13-Jul-23	220
AS504430a	BS Fitting Installation - Cable Laying, Termination, Associated Fitting & Field Devices	90	09-Jun-23	06-Sep-23	27-Sep-23	25-Dec-23	110
AS504450	Installation of CCTV System	90	09-Jul-23	06-Oct-23	27-Oct-23	24-Jan-24	110
AS504460	Installation of Lift	240	06-Dec-22	02-Aug-23	14-Jul-23	09-Mar-24	220
Biogas Storage & Pre-Treatment (BSPT)							
AS504500	E&M Installation of Biogas Storage Tank 1	210	26-May-22	21-Dec-22	26-May-22	21-Dec-22	0
AS504520	E&M Installation of Biogas Storage Tank 2	210	25-Jul-22	19-Feb-23	25-Jul-22	19-Feb-23	0
AS504540	E&M Installation of Biogas Storage Tank 3	180	30-Sep-22	28-Mar-23	30-Sep-22	28-Mar-23	0
Miscellaneous							



Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
AS106300	Installation of Control & Monitoring System - UV	75	09-Feb-23	24-Apr-23	11-Nov-23	24-Jan-24	275
AS505000	E&M Installation of THP System (S4)	90	14-Aug-22	11-Nov-22	29-Nov-22	26-Feb-23	107
AS505100	E&M Installation of Thickened Sludge Feed Pipe to THP System	60	12-Dec-22	09-Feb-23	28-Jan-23	28-Mar-23	47
AS505200	E&M Installation of H2S Removal System (S7)	80	03-Sep-22	21-Nov-22	03-Oct-22	21-Dec-22	30
AS505300	E&M Installation of Waste Gas Burning System (S9)	120	22-Dec-22	20-Apr-23	29-Dec-22	27-Apr-23	7
AS505400	E&M Installation of Plant Service Water System (S12)	90	26-May-22	23-Aug-22	21-Jun-22	18-Sep-22	26
AS505500	E&M Installation of Reclaimed Water Utilisation (S13)	75	25-Jul-22	07-Oct-22	20-Aug-22	02-Nov-22	26
AS505600	E&M Installation of SAS Pumping System (S14)	210	20-Nov-21	17-Jun-22	06-Feb-22	03-Sep-22	78
AS505700	E&M Installation of DO System (S21)	90	07-Nov-22	04-Feb-23	07-Dec-22	06-Mar-23	30
AS506000	E&M Installation of Sewage Pump (S21)	60	08-Oct-22	06-Dec-22	03-Nov-22	01-Jan-23	26
AS506100	E&M Installation of THP Cooling Pump (S21)	60	05-Feb-23	05-Apr-23	03-Mar-23	01-May-23	26
AS506200	E&M Installation of Ferric Chloride Storage Tank (S21)	45	07-Dec-22	20-Jan-23	02-Jan-23	15-Feb-23	26
AS506300	E&M Installation of Ferric Chloride Dosing Pump (S21)	45	06-Jan-23	19-Feb-23	01-Feb-23	17-Mar-23	26
AS506400	E&M Installation of Temporary Primary Sludge Pump (S21)	45	05-Feb-23	21-Mar-23	03-Mar-23	16-Apr-23	26
Building Services							
AS507000	FS Installation - Conduits, Trunking, & Pipeworks	240	23-Jul-22	19-Mar-23	29-Sep-22	26-May-23	68
AS507100	FS Installation - Cable Laying, Termination, Associated Fitting & Field Devices	240	09-Feb-23	06-Oct-23	28-Mar-23	22-Nov-23	47
AS507200	Installation of Control & Monitoring System	120	26-Dec-22	24-Apr-23	29-Dec-22	27-Apr-23	3
AS507300	Installation of CCTV System	150	11-Nov-22	09-Apr-23	29-Nov-22	27-Apr-23	18
AS507700	BS Installation for Sludge Digester	45	22-Nov-22	05-Jan-23	28-Jan-23	13-Mar-23	67
AS507800	BS Installation for THP Facilities	30	06-Jan-23	04-Feb-23	13-Apr-23	12-May-23	97
AS507900	BS Installation for Biogas Holding Tanks	60	27-Feb-23	27-Apr-23	14-Mar-23	12-May-23	15
AS508000	BS Installation for Sewage Pumping Station	60	27-Feb-23	27-Apr-23	14-Mar-23	12-May-23	15
AS508100	BS Installation for Other Facilities	90	28-Jan-23	27-Apr-23	12-Feb-23	12-May-23	15
Statutory Submission / Inspection							
Statutory Submission / Inspection (FSD)							
AS509100	Prepare & Submit Stage I FSI/314 for FSD approval	30	30-Dec-20	28-Jan-21	08-Mar-21	06-Apr-21	68
AS509110a	FSD Review & Approval of Stage I FSI/314	180	29-Jan-21	27-Jul-21	01-Feb-22	30-Jul-22	368
AS509120	Prepare & Submit Stage II FSI/314 & FSI/501	14	07-Oct-23	20-Oct-23	23-Nov-23	06-Dec-23	47
AS509120a	FSD Review & Approval of Stage II FSI/314 & FSI/501	21	21-Oct-23	10-Nov-23	07-Dec-23	27-Dec-23	47
AS509140a	F.S. Inspection, Defects Rectification & Reinspection	45	11-Nov-23	25-Dec-23	28-Dec-23	10-Feb-24	47
AS509160	Report of Completion on Ventilation System	7	07-Oct-23	13-Oct-23	07-Jan-24	13-Jan-24	92
AS509180	VAC Inspection	28	14-Oct-23	10-Nov-23	14-Jan-24	10-Feb-24	92
AS509200	Issuance of Acceptance Letter	28	26-Dec-23	22-Jan-24	11-Feb-24	09-Mar-24	47
AS509220	Application of D.G. Licence	0	30-Dec-20		30-Jul-21		212
AS509240	Processing of D.G. Licence Application	300	30-Dec-20	25-Oct-21	30-Jul-21	25-May-22	212
AS509260	D.G. Inspection & Issue D.G. Licence	30	07-Oct-23	05-Nov-23	09-Feb-24	09-Mar-24	125
Statutory Submission / Inspection (WSD)							
AS509300	Submit WWO46 Pt. I & II to WSD (FS)	30	30-Dec-20	28-Jan-21	08-Mar-21	06-Apr-21	68
AS509320	Approval of WWO46 Pt. I & II by WSD (FS)	180	29-Jan-21	27-Jul-21	07-Apr-21	03-Oct-21	68
AS509340	Submit WWO46 Pt. IV to WSD (FS)	14	07-Oct-23	20-Oct-23	29-Dec-23	11-Jan-24	83
AS509360	WSD Inspection (FS)	30	21-Oct-23	19-Nov-23	12-Jan-24	10-Feb-24	83
Gas Safety - EMSD							
AS509400a	Application for Construction Approval of Notifiable Gas Installation (Form 104) - including Fire Risk Assessment Report	180	24-Jan-21	22-Jul-21	02-Nov-22	30-Apr-23	647
AS509420a	Application for Approval of Use of Notifiable Gas Installation (Form 105)	28	29-Apr-23	26-May-23	01-May-23	28-May-23	2
AS509440a	EMSD Inspection - Gas Holding Tanks	14	27-May-23	09-Jun-23	29-May-23	11-Jun-23	2
Environmental Protection - EPD							
AS509500a	EPD Submission & Approval for Air Pollution Control - Genset	300	24-Jan-21	19-Nov-21	31-Mar-23	24-Jan-24	796
AS509520a	EPD Submission & Approval for Air Pollution Control - CHP, CAPC, Flare	300	25-Mar-21	18-Jan-22	31-Mar-23	24-Jan-24	736
Testing & Commissioning							
AS510100	SAT of THP System	15	10-Feb-23	24-Feb-23	29-Mar-23	12-Apr-23	47
AS510200a	System Commissioning Tests for THP System	30	25-Feb-23	26-Mar-23	13-Apr-23	12-May-23	47
AS510300	SAT for Sludge Dewatering System	15	19-Dec-22	02-Jan-23	27-Feb-23	13-Mar-23	70
AS510400	System Commissioning Tests for Sludge Dewatering System	30	11-Apr-23	10-May-23	13-Apr-23	12-May-23	2
AS510500	SAT for Biogas Storage System	30	14-Mar-23	12-Apr-23	14-Mar-23	12-Apr-23	0
AS510600	System Commissioning Tests for Biogas Storage System	30	13-Apr-23	12-May-23	13-Apr-23	12-May-23	0
AS510700	SAT for Sludge Digestion System	45	16-Jan-23	01-Mar-23	14-Mar-23	27-Apr-23	57
AS510800	System Commissioning Tests for Sludge Digestion System	30	28-Apr-23	27-May-23	28-Apr-23	27-May-23	0
AS510900	SAT for Gas Burning System	15	21-Apr-23	05-May-23	28-Apr-23	12-May-23	7
AS511000	System Commissioning Tests for Gas Burning System	30	13-May-23	11-Jun-23	13-May-23	11-Jun-23	0

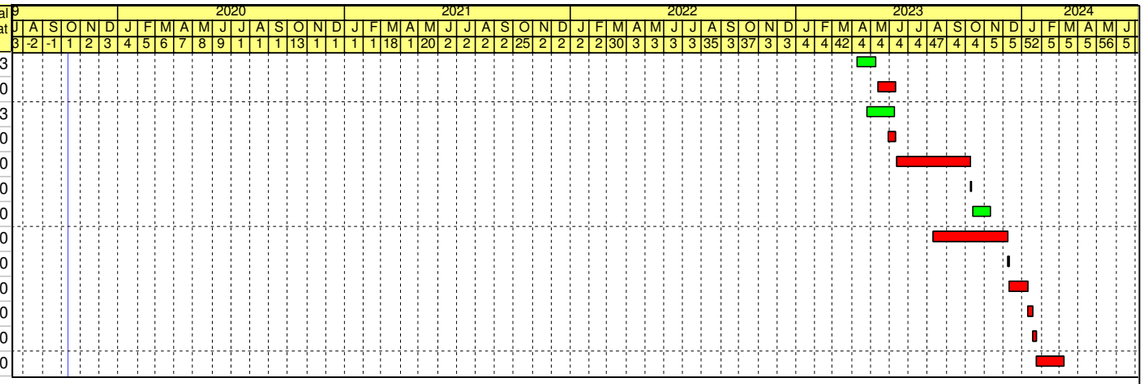


Remaining Work
Critical Activity
Milestone
Actual Progress

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

Date	Revision	Checked	Approved
24-Oct-19	Rev. 0	AI	KM
10-Feb-20	Rev. 1	AI	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
AS511100	SAT for CHP System	30	10-Apr-23	09-May-23	13-Apr-23	12-May-23	3
AS511200	System Commissioning Tests for CHP System	30	13-May-23	11-Jun-23	13-May-23	11-Jun-23	0
AS511300	SAT & System Commissioning Tests for Other Facilities	45	25-Apr-23	08-Jun-23	28-Apr-23	11-Jun-23	3
AS512100	Seeding	14	29-May-23	11-Jun-23	29-May-23	11-Jun-23	0
AS512200a	Process Start Up - Digester 1	120	12-Jun-23	09-Oct-23	12-Jun-23	09-Oct-23	0
AS512300a	Notice to Commence Phase 1 System Commissioning - Digester 1	3	10-Oct-23	12-Oct-23	09-Dec-23	11-Dec-23	60
AS512400a	Phase 1 System Commissioning - Digester 1	30	13-Oct-23	11-Nov-23	12-Dec-23	10-Jan-24	60
AS512500a	Process Start Up - Digester 2	120	11-Aug-23	08-Dec-23	11-Aug-23	08-Dec-23	0
AS512600a	Notice to Commence Phase 1 System Commissioning - Digester 2	3	09-Dec-23	11-Dec-23	09-Dec-23	11-Dec-23	0
AS512700a	Phase 1 System Commissioning - Digester 2	30	12-Dec-23	10-Jan-24	12-Dec-23	10-Jan-24	0
AS512800a	Phase 2 System Commissioning - Digester 1 & 2	7	11-Jan-24	17-Jan-24	11-Jan-24	17-Jan-24	0
AS512900a	Notice to Commence Plant Commissioning	7	18-Jan-24	24-Jan-24	18-Jan-24	24-Jan-24	0
AS513000a	Plant Commissioning Tests	45	25-Jan-24	09-Mar-24	25-Jan-24	09-Mar-24	0



Remaining Work
Critical Activity
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Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
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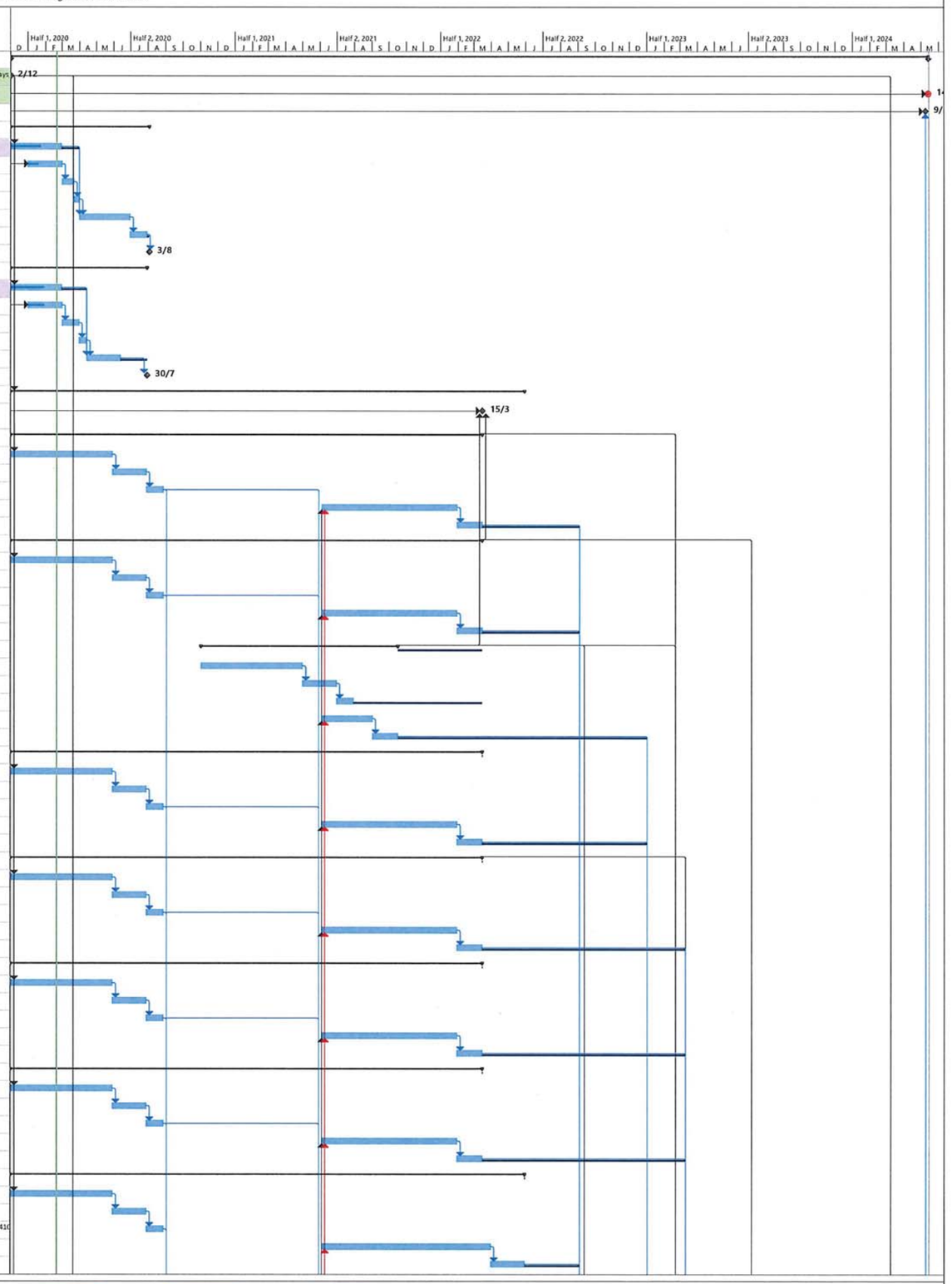
Master Programme

Date	Revision	Checked	Approved
24-Oct-19	Rev. 0	AI	KM
10-Feb-20	Rev. 1	AI	KM

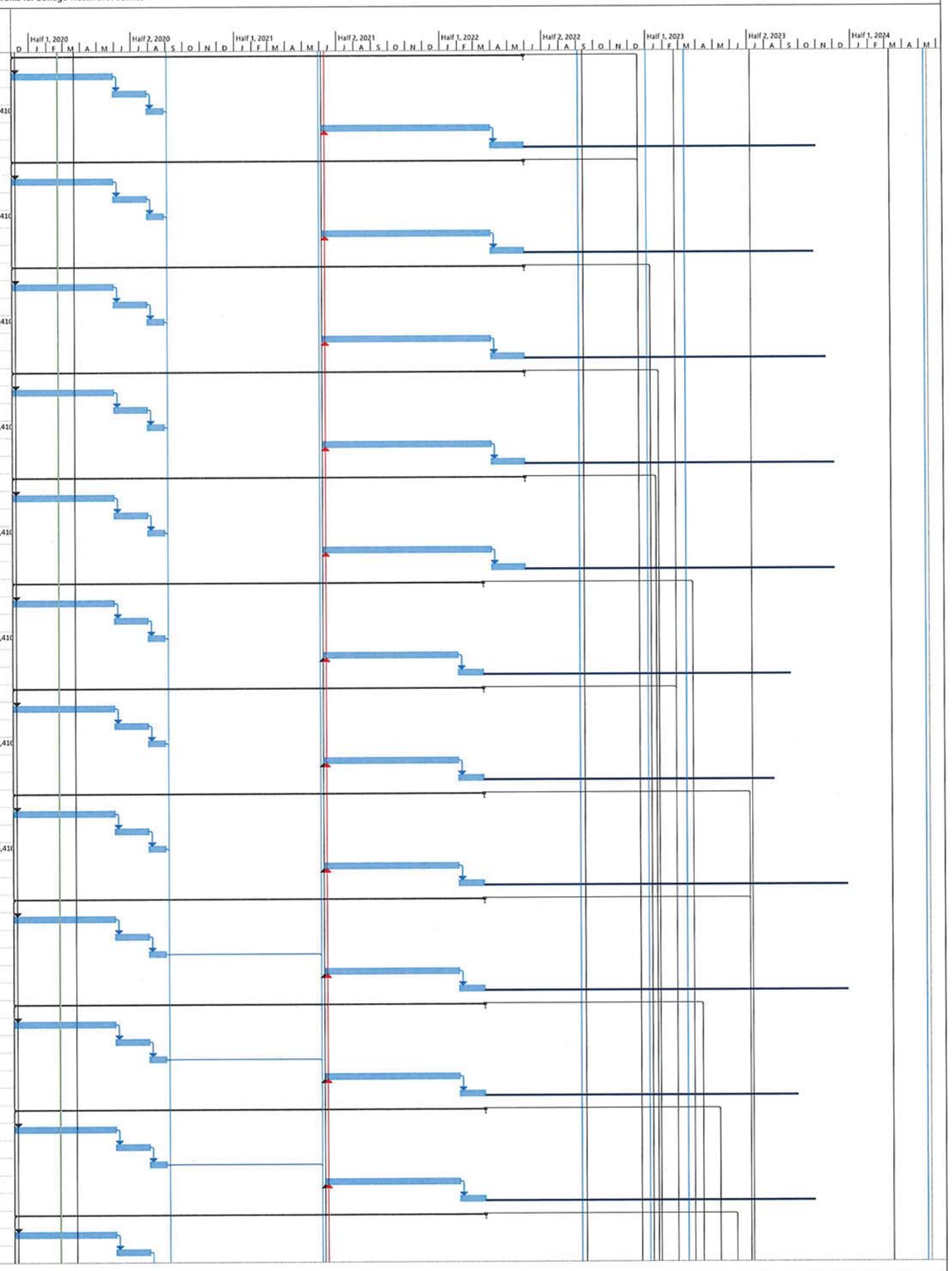
ID	ID	Ta	Text1	WBS	Task Name	Duration	Start	Finish	Early Start	Early Finish	Late Start	Late Finish	Free Slack	Predecessors	Successors
1	1			1	**DE/2018/04 - Master Programme**	1625 days	Mon 2/12/19	Tue 14/5/24	Mon 2/12/19	Tue 14/5/24	Mon 2/12/19	Tue 14/5/24	0 days		
2	2			1.1	Starting Date	0 days	Mon 2/12/19	Mon 2/12/19	Mon 2/12/19	Mon 2/12/19	Mon 2/12/19	Mon 2/12/19	0 days	35S+1625 edays	
3	3			1.2	Completion Date	0 days	Tue 14/5/24	Tue 14/5/24	Tue 14/5/24	Tue 14/5/24	Tue 14/5/24	Tue 14/5/24	0 days	2SS+1625 edays	
4	4		Inlet Works, PST, BR, M	1.3	Planned Completion Date	0 days	Thu 9/5/24	Thu 9/5/24	Thu 9/5/24	Thu 9/5/24	Thu 9/5/24	Thu 9/5/24	0 days	2SS+1620 edays,748	
5	5		WA1-C	1.4	**Works Area WA1-C**	245 days	Mon 2/12/19	Mon 3/8/20	Mon 2/12/19	Mon 3/8/20	Mon 2/12/19	Mon 3/8/20	0 days		
6	6		WA1-C	1.4.1	Access date for Works Area WA1-C	89 edays	Mon 2/12/19	Sat 29/2/20	Mon 2/12/19	Sat 29/2/20	Mon 2/12/19	Sun 5/4/20	32 edays	2	10
7	7		WA1-C	1.4.2	Submission for acceptance of subcontract works package	60 days	Wed 1/1/20	Sat 29/2/20	Wed 1/1/20	Sat 29/2/20	Wed 1/1/20	Wed 4/3/20	0 days	2SS+30 edays	8
8	8		WA1-C	1.4.3	Invitation of quotations for subcontract works	21 days	Sun 1/3/20	Sat 21/3/20	Sun 1/3/20	Sat 21/3/20	Thu 5/3/20	Wed 25/3/20	0 days	7	9
9	9		WA1-C	1.4.4	Acceptance of conforming quotation	10 days	Sun 22/3/20	Tue 31/3/20	Sun 22/3/20	Tue 31/3/20	Thu 26/3/20	Sat 4/4/20	0 days	8	10
10	10		WA1-C	1.4.5	Fabrication and erection of the Contractor's Site Accomodations	90 days	Wed 1/4/20	Mon 29/6/20	Wed 1/4/20	Mon 29/6/20	Sun 5/4/20	Fri 3/7/20	0 days	9,6	11
11	11		WA1-C	1.4.6	Site Installation of the Contractor's Site Accomodations	30 days	Tue 30/6/20	Wed 29/7/20	Tue 30/6/20	Wed 29/7/20	Sat 4/7/20	Sun 2/8/20	4 days	10	12
12	12		WA1-C	1.4.7	Anticipated date of working at site	0 days	Mon 3/8/20	Mon 3/8/20	Mon 3/8/20	Mon 3/8/20	Mon 3/8/20	Mon 3/8/20	0 days	11	
13	13		WA2-C	1.5	**Works Area WA2-C**	241 days	Mon 2/12/19	Thu 30/7/20	Mon 2/12/19	Thu 30/7/20	Mon 2/12/19	Thu 30/7/20	0 days		
14	14		WA2-C	1.5.1	Access date for Works Area WA2-C	89 edays	Mon 2/12/19	Sat 29/2/20	Mon 2/12/19	Sat 29/2/20	Mon 2/12/19	Sun 31/5/20	45 edays	2	18
15	15		WA2-C	1.5.2	Submission for acceptance of subcontract works package	60 edays	Wed 1/1/20	Sun 1/3/20	Wed 1/1/20	Sun 1/3/20	Wed 1/1/20	Fri 17/4/20	0 edays	2SS+30 edays	16
16	16		WA2-C	1.5.3	Invitation of quotations for subcontract works	30 edays	Sun 1/3/20	Tue 31/3/20	Sun 1/3/20	Tue 31/3/20	Fri 17/4/20	Sun 17/5/20	0 edays	15	17
17	17		WA2-C	1.5.4	Acceptance of conforming quotation	14 edays	Tue 31/3/20	Tue 14/4/20	Tue 31/3/20	Tue 14/4/20	Sun 17/5/20	Sun 31/5/20	0 edays	16	18
18	18		WA2-C	1.5.5	Erection of Contractor's Storage Area	60 edays	Tue 14/4/20	Sat 13/6/20	Tue 14/4/20	Sat 13/6/20	Sun 31/5/20	Thu 30/7/20	47 edays	14,17	19
19	19		WA2-C	1.5.6	Anticipated date of Storage Area available	0 days	Thu 30/7/20	Thu 30/7/20	Thu 30/7/20	Thu 30/7/20	Thu 30/7/20	Thu 30/7/20	0 days	18	
20	20			1.6	**Procurement of major plant and materials**	910 days	Mon 2/12/19	Sun 29/5/22	Mon 2/12/19	Sun 29/5/22	Mon 2/12/19	Thu 21/12/23	0 days	2	
21	21		WA2-C	1.6.1	Planned Completion Date for Procurement of major plant and materials	0 days	Tue 15/3/22	Tue 15/3/22	Tue 15/3/22	Tue 15/3/22	Tue 15/3/22	Tue 15/3/22	0 days	2SS+620 days,22,34,28	
22	22		PST, BR, MFS	1.6.2	**General - stoplogs and penstocks**	835 days	Mon 2/12/19	Tue 15/3/22	Mon 2/12/19	Tue 15/3/22	Tue 3/12/19	Fri 14/7/23	0 days		21,473
23	23		PST, BR, MFS	1.6.2.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	24
24	24		PST, BR, MFS	1.6.2.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	23	25
25	25		PST, BR, MFS	1.6.2.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	24	405,409
26	26		PST, BR, MFS	1.6.2.4	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 4/6/21	Sat 29/1/22	Fri 4/6/21	Sat 29/1/22	Mon 3/10/22	Tue 30/5/23	0 days	405,409	27
27	27		PST, BR, MFS	1.6.2.5	Shipping and Delivery of Plant to site	45 days	Sun 30/1/22	Tue 15/3/22	Sun 30/1/22	Tue 15/3/22	Wed 31/5/23	Fri 14/7/23	172 days	26	435
28	28		PST, MFS	1.6.3	**General - Instrumentations except use at BR**	835 days	Mon 2/12/19	Tue 15/3/22	Mon 2/12/19	Tue 15/3/22	Tue 3/12/19	Fri 14/7/23	0 days		21,482
29	29		PST, MFS	1.6.3.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	30
30	30		PST, MFS	1.6.3.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	29	31
31	31		PST, MFS	1.6.3.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	30	405,409
32	32		PST, MFS	1.6.3.4	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 4/6/21	Sat 29/1/22	Fri 4/6/21	Sat 29/1/22	Mon 3/10/22	Tue 30/5/23	0 days	405,409	33
33	33		PST, MFS	1.6.3.5	Shipping and Delivery of Plant to site	45 days	Sun 30/1/22	Tue 15/3/22	Sun 30/1/22	Tue 15/3/22	Wed 31/5/23	Fri 14/7/23	172 days	32	435
34	34		PST, BR, MFS, Chambe	1.6.4	**General - pipework and valves**	349 days	Mon 2/11/20	Sat 16/10/21	Mon 2/11/20	Sat 16/10/21	Sat 19/6/21	Sun 26/3/23	150 days		21,474,550
35	35		PST, BR, MFS, Chamber	1.6.4.1	Submission for acceptance of purchasing package	180 days	Mon 2/11/20	Fri 30/4/21	Mon 2/11/20	Fri 30/4/21	Sat 19/6/21	Wed 15/12/21	0 days		36
36	36		PST, BR, MFS, Chamber	1.6.4.2	Invitation of quotations for purchasing package	60 days	Sat 1/5/21	Tue 29/6/21	Sat 1/5/21	Tue 29/6/21	Thu 16/12/21	Sun 13/2/22	0 days	35	37
37	37		PST, BR, MFS, Chamber	1.6.4.3	Acceptance of conforming quotation	30 days	Wed 30/6/21	Thu 29/7/21	Wed 30/6/21	Thu 29/7/21	Mon 14/2/22	Tue 15/3/22	229 days	36	
38	38		PST, BR, MFS, Chamber	1.6.4.4	Manufacturing and Factory Acceptance Test of Plant	90 days	Fri 4/6/21	Wed 1/9/21	Fri 4/6/21	Wed 1/9/21	Sat 12/11/22	Thu 9/2/23	0 days	405,409	39
39	39		PST, BR, MFS, Chamber	1.6.4.5	Shipping and Delivery of Plant to site	45 days	Thu 2/9/21	Sat 16/10/21	Thu 2/9/21	Sat 16/10/21	Fri 10/2/23	Sun 26/3/23	442 days	38	509
40	40		PST, BR, MFS	1.6.5	**General - electric actuators**	835 days	Mon 2/12/19	Tue 15/3/22	Mon 2/12/19	Tue 15/3/22	Tue 3/12/19	Sun 26/3/23	1 day		
41	41		PST, BR, MFS	1.6.5.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	42
42	42		PST, BR, MFS	1.6.5.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	41	43
43	43		PST, BR, MFS	1.6.5.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	42	405,409
44	44		PST, BR, MFS	1.6.5.4	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 4/6/21	Sat 29/1/22	Fri 4/6/21	Sat 29/1/22	Wed 15/6/22	Thu 9/2/23	0 days	405,409	45
45	45		PST, BR, MFS	1.6.5.5	Shipping and Delivery of Plant to site	45 days	Sun 30/1/22	Tue 15/3/22	Sun 30/1/22	Tue 15/3/22	Fri 10/2/23	Sun 26/3/23	292 days	44	509
46	46		MFS	1.6.6	**General - HV Switchboards**	835 days	Mon 2/12/19	Tue 15/3/22	Mon 2/12/19	Tue 15/3/22	Tue 3/12/19	Wed 19/4/23	1 day		574
47	47		MFS	1.6.6.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	48
48	48		MFS	1.6.6.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	47	49
49	49		MFS	1.6.6.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	48	405,409
50	50		MFS	1.6.6.4	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 4/6/21	Sat 29/1/22	Fri 4/6/21	Sat 29/1/22	Sat 9/7/22	Sun 5/3/23	0 days	405,409	51
51	51		MFS	1.6.6.5	Shipping and Delivery of Plant to site	45 days	Sun 30/1/22	Tue 15/3/22	Sun 30/1/22	Tue 15/3/22	Mon 6/3/23	Wed 19/4/23	360 days	50	574
52	52		PST, BR, MFS	1.6.7	**General - LV Switchboards**	835 days	Mon 2/12/19	Tue 15/3/22	Mon 2/12/19	Tue 15/3/22	Tue 3/12/19	Mon 20/3/23	1 day		
53	53		PST, BR, MFS	1.6.7.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	54
54	54		PST, BR, MFS	1.6.7.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	53	55
55	55		PST, BR, MFS	1.6.7.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	54	405,409
56	56		PST, BR, MFS	1.6.7.4	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 4/6/21	Sat 29/1/22	Fri 4/6/21	Sat 29/1/22	Thu 9/6/22	Fri 3/2/23	0 days	405,409	57
57	57		PST, BR, MFS	1.6.7.5	Shipping and Delivery of Plant to site	45 days	Sun 30/1/22	Tue 15/3/22	Sun 30/1/22	Tue 15/3/22	Sat 4/2/23	Mon 20/3/23	360 days	56	572,573
58	58		MFS	1.6.8	**General - 11kV/380V Stepdown Power Transformers**	835 days	Mon 2/12/19	Tue 15/3/22	Mon 2/12/19	Tue 15/3/22	Tue 3/12/19	Thu 12/10/23	1 day		
59	59		MFS	1.6.8.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	60
60	60		MFS	1.6.8.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	59	61
61	61		MFS	1.6.8.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	60	405,409
62	62		MFS	1.6.8.4	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 4/6/21	Sat 29/1/22	Fri 4/6/21	Sat 29/1/22	Sun 1/1/23	Mon 28/8/23	0 days	405,409	63
63	63		MFS	1.6.8.5	Shipping and Delivery of Plant to site	45 days	Sun 30/1/22	Tue 15/3/22	Sun 30/1/22	Tue 15/3/22	Tue 29/8/23	Thu 12/10/23	360 days	62	575
64	64		Inlet Works	1.6.9	**Inlet Works - mechanical raked bar screens**	910 days	Mon 2/12/19	Sun 29/5/22	Mon 2/12/19	Sun 29/5/22	Tue 3/12/19	Sun 22/10/23	1 day		
65	65		Inlet Works	1.6.9.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	66
66	66		Inlet Works	1.6.9.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	65	67
67	67		Inlet Works	1.6.9.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	66	407,408,406,41
68	68		Inlet Works	1.6.9.4	Manufacturing and Factory Acceptance Test of Plant	300 days	Fri 4/6/21	Wed 30/3/22	Fri 4/6/21	Wed 30/3/22	Fri 28/10/22	Wed 23/8/23	0 days	409	69
69	69		Inlet Works	1.6.9.5	Shipping and Delivery of Plant to site	60 days	Thu 31/3/22	Sun 29/5/22	Thu 31/3/22	Sun 29/5/22	Thu 24/8/23	Sun 22/10/23	97 days	68	486



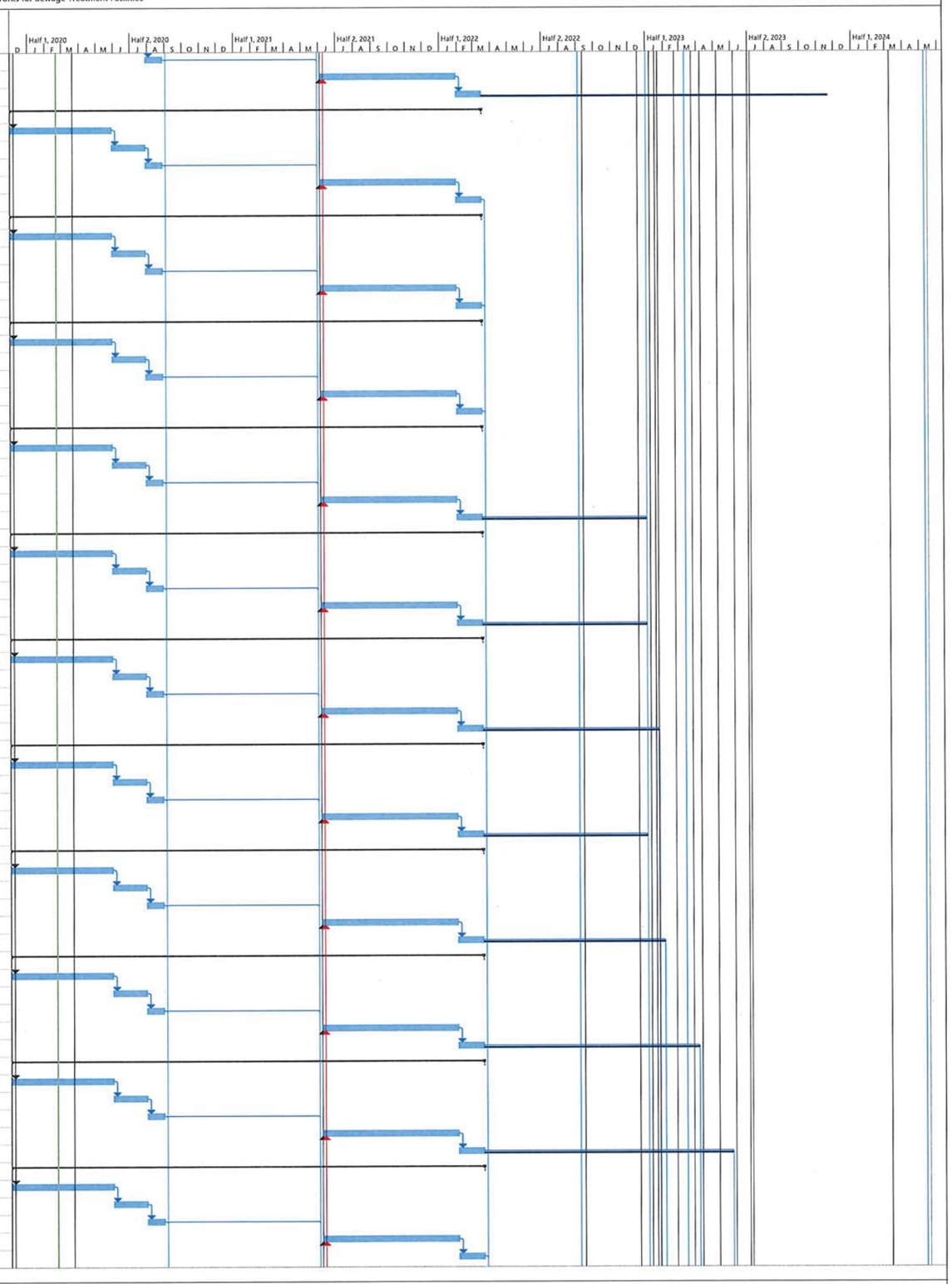
Bestwise
Project: DE/2018/04
Date: Fri 21/2/20

Task | Milestone | Milestone | Summary | Project Summary | Manual Summary | Critical | Progress | Manual Progress | Slack

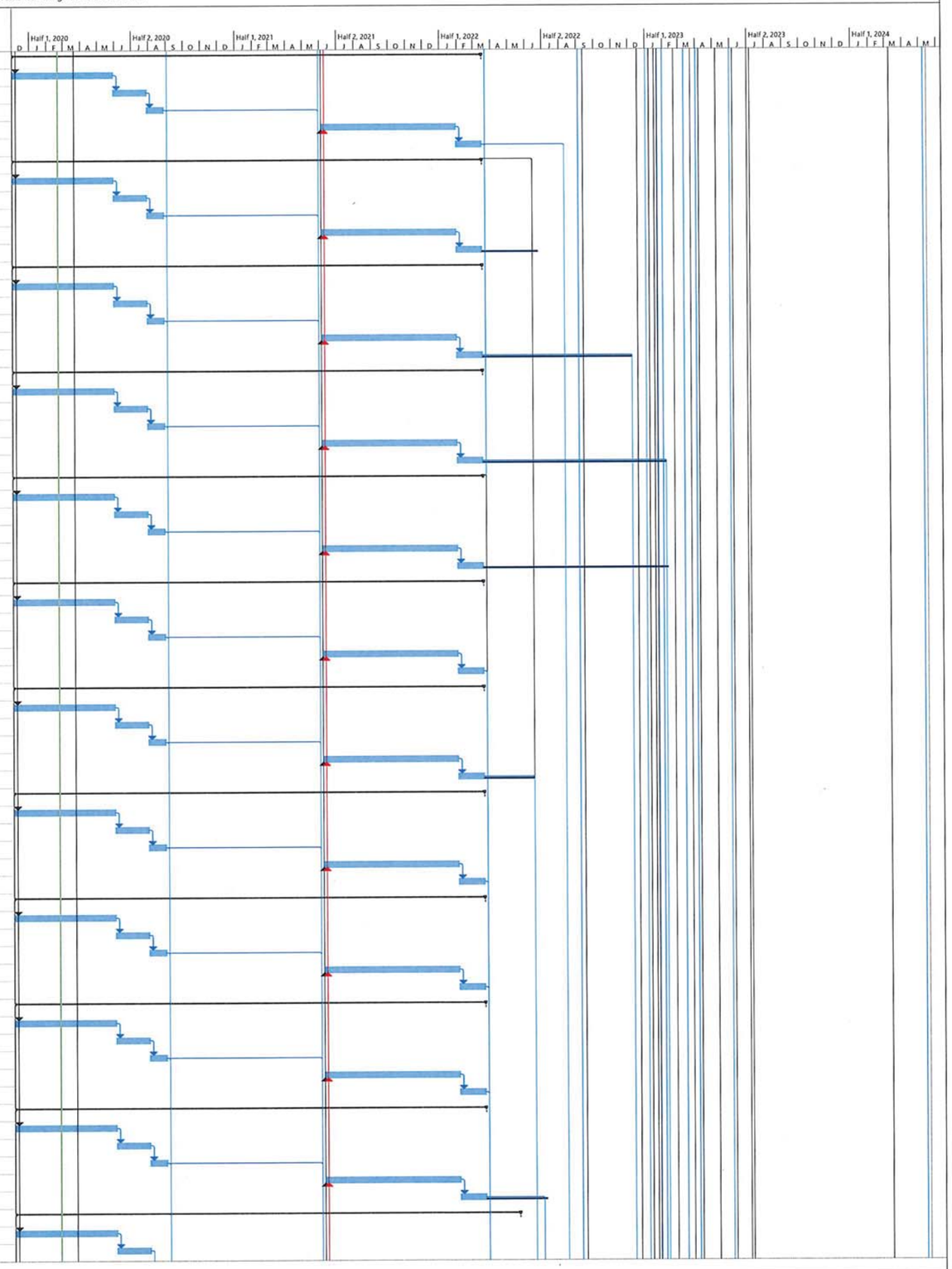
ID	ID	Ta Mo	Text1	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Late Start	Late Finish	Free Slack	Predecessors	Successors
70	70		Inlet Works	1.6.10	**Inlet Works - screening conveyors**	910 days	Mon 2/12/19	Sun 29/5/22	Mon 2/12/19	Sun 29/5/22	Tue 3/12/19	Tue 31/10/23	1 day		437
71	71		Inlet Works	1.6.10.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	72
72	72		Inlet Works	1.6.10.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	71	73
73	73		Inlet Works	1.6.10.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	72	407,408,406,410
74	74		Inlet Works	1.6.10.4	Manufacturing and Factory Acceptance Test of Plant	300 days	Fri 4/6/21	Wed 30/3/22	Fri 4/6/21	Wed 30/3/22	Sun 6/11/22	Fri 1/9/23	0 days	409	75
75	75		Inlet Works	1.6.10.5	Shipping and Delivery of Plant to site	60 days	Thu 31/3/22	Sun 29/5/22	Thu 31/3/22	Sun 29/5/22	Sat 2/9/23	Tue 31/10/23	520 days	74	
76	76		Inlet Works	1.6.11	**Inlet Works - inlet Pumps**	910 days	Mon 2/12/19	Sun 29/5/22	Mon 2/12/19	Sun 29/5/22	Tue 3/12/19	Thu 26/10/23	1 day		438
77	77		Inlet Works	1.6.11.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	78
78	78		Inlet Works	1.6.11.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	77	79
79	79		Inlet Works	1.6.11.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	78	407,408,406,410
80	80		Inlet Works	1.6.11.4	Manufacturing and Factory Acceptance Test of Plant	300 days	Fri 4/6/21	Wed 30/3/22	Fri 4/6/21	Wed 30/3/22	Tue 1/11/22	Sun 27/8/23	0 days	409	81
81	81		Inlet Works	1.6.11.5	Shipping and Delivery of Plant to site	60 days	Thu 31/3/22	Sun 29/5/22	Thu 31/3/22	Sun 29/5/22	Mon 28/8/23	Thu 26/10/23	515 days	80	
82	82		Inlet Works	1.6.12	**Inlet Works - grit removal system**	910 days	Mon 2/12/19	Sun 29/5/22	Mon 2/12/19	Sun 29/5/22	Tue 3/12/19	Thu 16/11/23	1 day		439
83	83		Inlet Works	1.6.12.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	84
84	84		Inlet Works	1.6.12.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	83	85
85	85		Inlet Works	1.6.12.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	84	407,408,406,410
86	86		Inlet Works	1.6.12.4	Manufacturing and Factory Acceptance Test of Plant	300 days	Fri 4/6/21	Wed 30/3/22	Fri 4/6/21	Wed 30/3/22	Tue 22/11/22	Sun 17/9/23	0 days	409	87
87	87		Inlet Works	1.6.12.5	Shipping and Delivery of Plant to site	60 days	Thu 31/3/22	Sun 29/5/22	Thu 31/3/22	Sun 29/5/22	Mon 18/9/23	Thu 16/11/23	536 days	86	
88	88		Inlet Works	1.6.13	**Inlet Works - grit classifiers**	910 days	Mon 2/12/19	Sun 29/5/22	Mon 2/12/19	Sun 29/5/22	Tue 3/12/19	Thu 30/11/23	1 day		440
89	89		Inlet Works	1.6.13.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	90
90	90		Inlet Works	1.6.13.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	89	91
91	91		Inlet Works	1.6.13.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	90	407,408,406,410
92	92		Inlet Works	1.6.13.4	Manufacturing and Factory Acceptance Test of Plant	300 days	Fri 4/6/21	Wed 30/3/22	Fri 4/6/21	Wed 30/3/22	Tue 6/12/22	Sun 1/10/23	0 days	409	93
93	93		Inlet Works	1.6.13.5	Shipping and Delivery of Plant to site	60 days	Thu 31/3/22	Sun 29/5/22	Thu 31/3/22	Sun 29/5/22	Mon 2/10/23	Thu 30/11/23	550 days	92	
94	94		Inlet Works	1.6.14	**Inlet Works - compactors**	910 days	Mon 2/12/19	Sun 29/5/22	Mon 2/12/19	Sun 29/5/22	Tue 3/12/19	Thu 30/11/23	1 day		441
95	95		Inlet Works	1.6.14.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	96
96	96		Inlet Works	1.6.14.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	95	97
97	97		Inlet Works	1.6.14.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	96	407,408,406,410
98	98		Inlet Works	1.6.14.4	Manufacturing and Factory Acceptance Test of Plant	300 days	Fri 4/6/21	Wed 30/3/22	Fri 4/6/21	Wed 30/3/22	Tue 6/12/22	Sun 1/10/23	0 days	409	99
99	99		Inlet Works	1.6.14.5	Shipping and Delivery of Plant to site	60 days	Thu 31/3/22	Sun 29/5/22	Thu 31/3/22	Sun 29/5/22	Mon 2/10/23	Thu 30/11/23	550 days	98	
100	100		PST	1.6.15	**PST - lamella plate settlers**	835 days	Mon 2/12/19	Tue 15/3/22	Mon 2/12/19	Tue 15/3/22	Tue 3/12/19	Tue 12/9/23	1 day		475
101	101		PST	1.6.15.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	102
102	102		PST	1.6.15.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	101	103
103	103		PST	1.6.15.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	102	407,408,406,410
104	104		PST	1.6.15.4	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 4/6/21	Sat 29/1/22	Fri 4/6/21	Sat 29/1/22	Fri 2/12/22	Sat 29/7/23	0 days	405,409	105
105	105		PST	1.6.15.5	Shipping and Delivery of Plant to site	45 days	Sun 30/1/22	Tue 15/3/22	Sun 30/1/22	Tue 15/3/22	Sun 30/7/23	Tue 12/9/23	546 days	104	
106	106		PST	1.6.16	**PST - reciprocating type bottom scrapers**	835 days	Mon 2/12/19	Tue 15/3/22	Mon 2/12/19	Tue 15/3/22	Tue 3/12/19	Sun 13/8/23	1 day		476
107	107		PST	1.6.16.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	108
108	108		PST	1.6.16.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	107	109
109	109		PST	1.6.16.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	108	407,408,406,410
110	110		PST	1.6.16.4	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 4/6/21	Sat 29/1/22	Fri 4/6/21	Sat 29/1/22	Wed 2/11/22	Thu 29/6/23	0 days	405,409	111
111	111		PST	1.6.16.5	Shipping and Delivery of Plant to site	45 days	Sun 30/1/22	Tue 15/3/22	Sun 30/1/22	Tue 15/3/22	Fri 30/6/23	Sun 13/8/23	516 days	110	
112	112		PST	1.6.17	**PST - surface scum skimmers**	835 days	Mon 2/12/19	Tue 15/3/22	Mon 2/12/19	Tue 15/3/22	Tue 3/12/19	Thu 21/12/23	1 day		477
113	113		PST	1.6.17.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	114
114	114		PST	1.6.17.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	113	115
115	115		PST	1.6.17.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	114	407,408,406,410
116	116		PST	1.6.17.4	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 4/6/21	Sat 29/1/22	Fri 4/6/21	Sat 29/1/22	Sun 12/3/23	Mon 6/11/23	0 days	405,409	117
117	117		PST	1.6.17.5	Shipping and Delivery of Plant to site	45 days	Sun 30/1/22	Tue 15/3/22	Sun 30/1/22	Tue 15/3/22	Tue 7/11/23	Thu 21/12/23	646 days	116	
118	118		PST	1.6.18	**PST - scum collector pipes**	835 days	Mon 2/12/19	Tue 15/3/22	Mon 2/12/19	Tue 15/3/22	Tue 3/12/19	Thu 21/12/23	1 day		478
119	119		PST	1.6.18.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	120
120	120		PST	1.6.18.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	119	121
121	121		PST	1.6.18.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	120	405,409
122	122		PST	1.6.18.4	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 4/6/21	Sat 29/1/22	Fri 4/6/21	Sat 29/1/22	Sun 12/3/23	Mon 6/11/23	0 days	405,409	123
123	123		PST	1.6.18.5	Shipping and Delivery of Plant to site	45 days	Sun 30/1/22	Tue 15/3/22	Sun 30/1/22	Tue 15/3/22	Tue 7/11/23	Thu 21/12/23	646 days	122	
124	124		PST	1.6.19	**PST - piston type primary sludge pumps**	835 days	Mon 2/12/19	Tue 15/3/22	Mon 2/12/19	Tue 15/3/22	Tue 3/12/19	Fri 22/9/23	1 day		479
125	125		PST	1.6.19.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	126
126	126		PST	1.6.19.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	125	127
127	127		PST	1.6.19.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	126	405,409
128	128		PST	1.6.19.4	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 4/6/21	Sat 29/1/22	Fri 4/6/21	Sat 29/1/22	Mon 12/12/22	Tue 8/8/23	0 days	405,409	129
129	129		PST	1.6.19.5	Shipping and Delivery of Plant to site	45 days	Sun 30/1/22	Tue 15/3/22	Sun 30/1/22	Tue 15/3/22	Wed 9/8/23	Fri 22/9/23	556 days	128	
130	130		PST	1.6.20	**PST - drain pumps**	835 days	Mon 2/12/19	Tue 15/3/22	Mon 2/12/19	Tue 15/3/22	Tue 3/12/19	Sun 22/10/23	1 day		480
131	131		PST	1.6.20.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	132
132	132		PST	1.6.20.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	131	133
133	133		PST	1.6.20.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	132	405,409
134	134		PST	1.6.20.4	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 4/6/21	Sat 29/1/22	Fri 4/6/21	Sat 29/1/22	Wed 11/1/23	Thu 7/9/23	0 days	405,409	135
135	135		PST	1.6.20.5	Shipping and Delivery of Plant to site	45 days	Sun 30/1/22	Tue 15/3/22	Sun 30/1/22	Tue 15/3/22	Fri 8/9/23	Sun 22/10/23	586 days	134	
136	136		PST	1.6.21	**PST - air blowers**	835 days	Mon 2/12/19	Tue 15/3/22	Mon 2/12/19	Tue 15/3/22	Tue 3/12/19	Tue 21/11/23	1 day		481
137	137		PST	1.6.21.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	138
138	138		PST	1.6.21.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	137	139



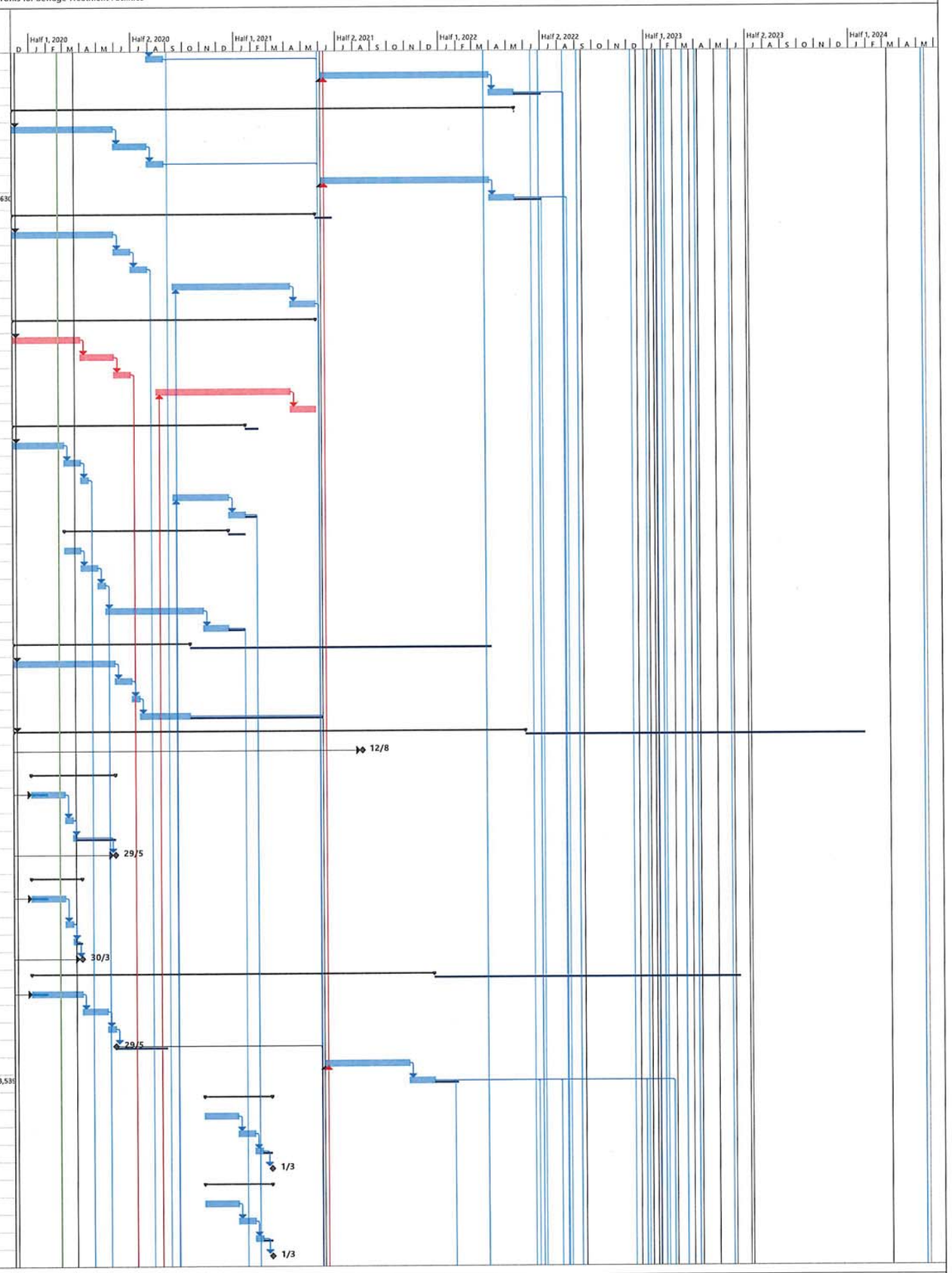
ID	ID	Ta Mo	Text1	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Late Start	Late Finish	Free Slack	Predecessors	Successors
139	139		PST	1.6.21.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	138	405,409
140	140		PST	1.6.21.4	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 4/6/21	Sat 29/1/22	Fri 4/6/21	Sat 29/1/22	Fri 10/2/23	Sat 7/10/23	0 days	405,409	141
141	141		PST	1.6.21.5	Shipping and Delivery of Plant to site	45 days	Sun 30/1/22	Tue 15/3/22	Sun 30/1/22	Tue 15/3/22	Sun 8/10/23	Tue 21/11/23	616 days	140	
142	**142**		**Chemical**	**1.6.22**	**Chemical Storage and Dosing - chemical storage tanks**	**835 days**	**Mon 2/12/19**	**Tue 15/3/22**	**Mon 2/12/19**	**Tue 15/3/22**	**Tue 3/12/19**	**Mon 26/12/22**	**1 day**		
143	143		Chemical	1.6.22.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	144
144	144		Chemical	1.6.22.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	143	145
145	145		Chemical	1.6.22.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	144	405,409
146	146		Chemical	1.6.22.4	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 4/6/21	Sat 29/1/22	Fri 4/6/21	Sat 29/1/22	Thu 17/3/22	Fri 11/11/22	0 days	405,409	147
147	147		Chemical	1.6.22.5	Shipping and Delivery of Plant to site	45 days	Sun 30/1/22	Tue 15/3/22	Sun 30/1/22	Tue 15/3/22	Sat 12/11/22	Mon 26/12/22	0 days	146	595,605
148	**148**		**Chemical**	**1.6.23**	**Chemical Storage and Dosing - chemical dosing pumps**	**835 days**	**Mon 2/12/19**	**Tue 15/3/22**	**Mon 2/12/19**	**Tue 15/3/22**	**Tue 3/12/19**	**Mon 26/12/22**	**1 day**		
149	149		Chemical	1.6.23.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	150
150	150		Chemical	1.6.23.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	149	151
151	151		Chemical	1.6.23.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	150	405,409
152	152		Chemical	1.6.23.4	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 4/6/21	Sat 29/1/22	Fri 4/6/21	Sat 29/1/22	Thu 17/3/22	Fri 11/11/22	0 days	405,409	153
153	153		Chemical	1.6.23.5	Shipping and Delivery of Plant to site	45 days	Sun 30/1/22	Tue 15/3/22	Sun 30/1/22	Tue 15/3/22	Sat 12/11/22	Mon 26/12/22	0 days	152	595,605
154	**154**		**Chemical**	**1.6.24**	**Chemical Storage and Dosing - transfer pumps**	**835 days**	**Mon 2/12/19**	**Tue 15/3/22**	**Mon 2/12/19**	**Tue 15/3/22**	**Tue 3/12/19**	**Mon 26/12/22**	**1 day**		
155	155		Chemical	1.6.24.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	156
156	156		Chemical	1.6.24.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	155	157
157	157		Chemical	1.6.24.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	156	405,409
158	158		Chemical	1.6.24.4	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 4/6/21	Sat 29/1/22	Fri 4/6/21	Sat 29/1/22	Thu 17/3/22	Fri 11/11/22	0 days	405,409	159
159	159		Chemical	1.6.24.5	Shipping and Delivery of Plant to site	45 days	Sun 30/1/22	Tue 15/3/22	Sun 30/1/22	Tue 15/3/22	Sat 12/11/22	Mon 26/12/22	0 days	158	595,605
160	**160**		**BR**	**1.6.25**	**BR - pre-treatment fine screens**	**835 days**	**Mon 2/12/19**	**Tue 15/3/22**	**Mon 2/12/19**	**Tue 15/3/22**	**Tue 3/12/19**	**Wed 2/8/23**	**1 day**		
161	161		BR	1.6.25.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	162
162	162		BR	1.6.25.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	161	163
163	163		BR	1.6.25.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	162	405,409
164	164		BR	1.6.25.4	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 4/6/21	Sat 29/1/22	Fri 4/6/21	Sat 29/1/22	Sat 22/10/22	Sun 18/6/23	0 days	405,409	165
165	165		BR	1.6.25.5	Shipping and Delivery of Plant to site	45 days	Sun 30/1/22	Tue 15/3/22	Sun 30/1/22	Tue 15/3/22	Mon 19/6/23	Wed 2/8/23	292 days	164	510
166	**166**		**BR**	**1.6.26**	**BR - air diffusion system**	**835 days**	**Mon 2/12/19**	**Tue 15/3/22**	**Mon 2/12/19**	**Tue 15/3/22**	**Tue 3/12/19**	**Thu 25/5/23**	**1 day**		
167	167		BR	1.6.26.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	168
168	168		BR	1.6.26.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	167	169
169	169		BR	1.6.26.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	168	405,409
170	170		BR	1.6.26.4	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 4/6/21	Sat 29/1/22	Fri 4/6/21	Sat 29/1/22	Sun 14/8/22	Mon 10/4/23	0 days	405,409	171
171	171		BR	1.6.26.5	Shipping and Delivery of Plant to site	45 days	Sun 30/1/22	Tue 15/3/22	Sun 30/1/22	Tue 15/3/22	Tue 11/4/23	Thu 25/5/23	292 days	170	511
172	**172**		**BR**	**1.6.27**	**BR - submersible mixers**	**835 days**	**Mon 2/12/19**	**Tue 15/3/22**	**Mon 2/12/19**	**Tue 15/3/22**	**Tue 3/12/19**	**Wed 23/8/23**	**1 day**		
173	173		BR	1.6.27.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	174
174	174		BR	1.6.27.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	173	175
175	175		BR	1.6.27.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	174	405,409
176	176		BR	1.6.27.4	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 4/6/21	Sat 29/1/22	Fri 4/6/21	Sat 29/1/22	Sat 12/11/22	Sun 9/7/23	0 days	405,409	177
177	177		BR	1.6.27.5	Shipping and Delivery of Plant to site	45 days	Sun 30/1/22	Tue 15/3/22	Sun 30/1/22	Tue 15/3/22	Mon 10/7/23	Wed 23/8/23	313 days	176	512
178	**178**		**BR**	**1.6.28**	**BR - mixed liquor return pumps**	**835 days**	**Mon 2/12/19**	**Tue 15/3/22**	**Mon 2/12/19**	**Tue 15/3/22**	**Tue 3/12/19**	**Mon 24/7/23**	**1 day**		
179	179		BR	1.6.28.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	180
180	180		BR	1.6.28.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	179	181
181	181		BR	1.6.28.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	180	405,409
182	182		BR	1.6.28.4	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 4/6/21	Sat 29/1/22	Fri 4/6/21	Sat 29/1/22	Thu 13/10/22	Fri 9/6/23	0 days	405,409	183
183	183		BR	1.6.28.5	Shipping and Delivery of Plant to site	45 days	Sun 30/1/22	Tue 15/3/22	Sun 30/1/22	Tue 15/3/22	Sat 10/6/23	Mon 24/7/23	292 days	182	513
184	**184**		**BR**	**1.6.29**	**BR - scum removal systems**	**835 days**	**Mon 2/12/19**	**Tue 15/3/22**	**Mon 2/12/19**	**Tue 15/3/22**	**Tue 3/12/19**	**Wed 23/8/23**	**1 day**		
185	185		BR	1.6.29.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	186
186	186		BR	1.6.29.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	185	187
187	187		BR	1.6.29.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	186	405,409
188	188		BR	1.6.29.4	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 4/6/21	Sat 29/1/22	Fri 4/6/21	Sat 29/1/22	Sat 12/11/22	Sun 9/7/23	0 days	405,409	189
189	189		BR	1.6.29.5	Shipping and Delivery of Plant to site	45 days	Sun 30/1/22	Tue 15/3/22	Sun 30/1/22	Tue 15/3/22	Mon 10/7/23	Wed 23/8/23	322 days	188	514
190	**190**		**BR**	**1.6.30**	**BR - aeration blowers**	**835 days**	**Mon 2/12/19**	**Tue 15/3/22**	**Mon 2/12/19**	**Tue 15/3/22**	**Tue 3/12/19**	**Wed 23/8/23**	**1 day**		
191	191		BR	1.6.30.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	192
192	192		BR	1.6.30.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	191	193
193	193		BR	1.6.30.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	192	405,409
194	194		BR	1.6.30.4	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 4/6/21	Sat 29/1/22	Fri 4/6/21	Sat 29/1/22	Sat 12/11/22	Sun 9/7/23	0 days	405,409	195
195	195		BR	1.6.30.5	Shipping and Delivery of Plant to site	45 days	Sun 30/1/22	Tue 15/3/22	Sun 30/1/22	Tue 15/3/22	Mon 10/7/23	Wed 23/8/23	382 days	194	515
196	**196**		**BR**	**1.6.31**	**BR - Instrumentations**	**835 days**	**Mon 2/12/19**	**Tue 15/3/22**	**Mon 2/12/19**	**Tue 15/3/22**	**Tue 3/12/19**	**Wed 23/8/23**	**1 day**		
197	197		BR	1.6.31.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	198
198	198		BR	1.6.31.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	197	199
199	199		BR	1.6.31.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	198	405,409
200	200		BR	1.6.31.4	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 4/6/21	Sat 29/1/22	Fri 4/6/21	Sat 29/1/22	Sat 12/11/22	Sun 9/7/23	0 days	405,409	201
201	201		BR	1.6.31.5	Shipping and Delivery of Plant to site	45 days	Sun 30/1/22	Tue 15/3/22	Sun 30/1/22	Tue 15/3/22	Mon 10/7/23	Wed 23/8/23	442 days	200	516
202	**202**		**MFS**	**1.6.32**	**MFS - hollow fibre membrane modules**	**835 days**	**Mon 2/12/19**	**Tue 15/3/22**	**Mon 2/12/19**	**Tue 15/3/22**	**Tue 3/12/19**	**Sat 10/12/22**	**1 day**		
203	203		MFS	1.6.32.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	204
204	204		MFS	1.6.32.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	203	205
205	205		MFS	1.6.32.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	204	405,409
206	206		MFS	1.6.32.4	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 4/6/21	Sat 29/1/22	Fri 4/6/21	Sat 29/1/22	Tue 1/3/22	Wed 26/10/22	0 days	405,409	207
207	207		MFS	1.6.32.5	Shipping and Delivery of Plant to site	45 days	Sun 30/1/22	Tue 15/3/22	Sun 30/1/22	Tue 15/3/22	Thu 27/10/22	Sat 10/12/22	0 days	206	545



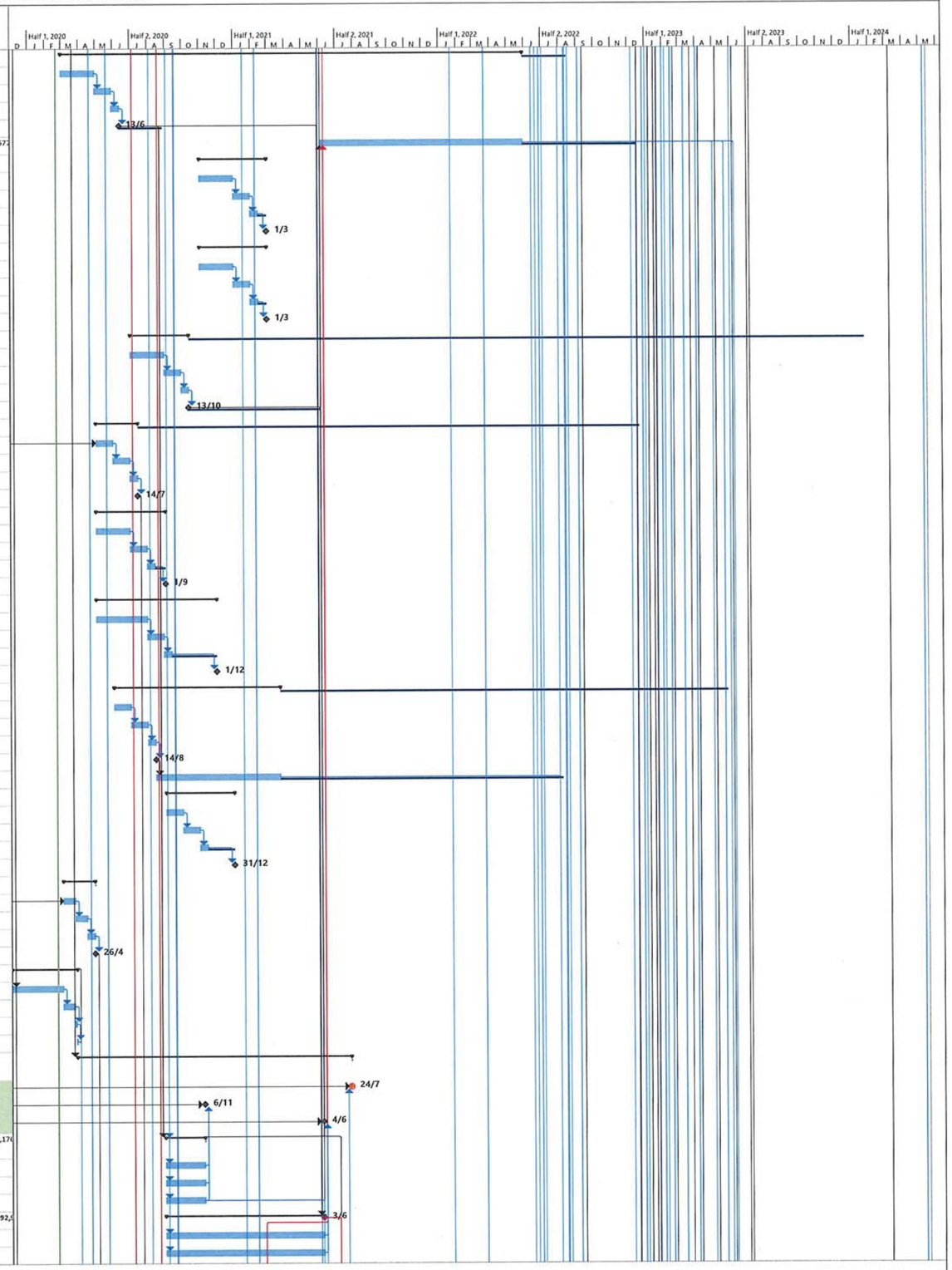
ID	ID	Ta Mc	Text1	WBS	Task Name	Duration	Start	Finish	Early Start	Early Finish	Late Start	Late Finish	Free Slack	Predecessors	Successors
208	**208**		**MFS**	**1.6.33**	**MFS - air scour blowers**	**835 days**	**Mon 2/12/19**	**Tue 15/3/22**	**Mon 2/12/19**	**Tue 15/3/22**	**Tue 3/12/19**	**Fri 25/3/22**	**1 day**		
209	209		MFS	1.6.33.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	210
210	210		MFS	1.6.33.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	209	211
211	211		MFS	1.6.33.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	210	405,409
212	212		MFS	1.6.33.4	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 4/6/21	Sat 29/1/22	Fri 4/6/21	Sat 29/1/22	Mon 14/6/21	Tue 8/2/22	0 days	405,409	213
213	213		MFS	1.6.33.5	Shipping and Delivery of Plant to site	45 days	Sun 30/1/22	Tue 15/3/22	Sun 30/1/22	Tue 15/3/22	Wed 9/2/22	Fri 25/3/22	0 days	212	546,568
214	**214**		**MFS**	**1.6.34**	**MFS - permeate pumps**	**835 days**	**Mon 2/12/19**	**Tue 15/3/22**	**Mon 2/12/19**	**Tue 15/3/22**	**Tue 3/12/19**	**Thu 23/6/22**	**1 day**		**547**
215	215		MFS	1.6.34.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	216
216	216		MFS	1.6.34.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	215	217
217	217		MFS	1.6.34.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	216	405,409
218	218		MFS	1.6.34.4	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 4/6/21	Sat 29/1/22	Fri 4/6/21	Sat 29/1/22	Sun 12/9/21	Mon 9/5/22	0 days	405,409	219
219	219		MFS	1.6.34.5	Shipping and Delivery of Plant to site	45 days	Sun 30/1/22	Tue 15/3/22	Sun 30/1/22	Tue 15/3/22	Tue 10/5/22	Thu 23/6/22	100 days	218	
220	**220**		**MFS**	**1.6.35**	**MFS - compressed air system**	**835 days**	**Mon 2/12/19**	**Tue 15/3/22**	**Mon 2/12/19**	**Tue 15/3/22**	**Tue 3/12/19**	**Sat 29/7/23**	**1 day**		
221	221		MFS	1.6.35.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	222
222	222		MFS	1.6.35.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	221	223
223	223		MFS	1.6.35.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	222	405,409
224	224		MFS	1.6.35.4	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 4/6/21	Sat 29/1/22	Fri 4/6/21	Sat 29/1/22	Tue 18/10/22	Wed 14/6/23	0 days	405,409	225
225	225		MFS	1.6.35.5	Shipping and Delivery of Plant to site	45 days	Sun 30/1/22	Tue 15/3/22	Sun 30/1/22	Tue 15/3/22	Thu 15/6/23	Sat 29/7/23	267 days	224	569
226	**226**		**MFS**	**1.6.36**	**MFS - instrumentation**	**835 days**	**Mon 2/12/19**	**Tue 15/3/22**	**Mon 2/12/19**	**Tue 15/3/22**	**Tue 3/12/19**	**Wed 27/9/23**	**1 day**		
227	227		MFS	1.6.36.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	228
228	228		MFS	1.6.36.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	227	229
229	229		MFS	1.6.36.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	228	405,409
230	230		MFS	1.6.36.4	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 4/6/21	Sat 29/1/22	Fri 4/6/21	Sat 29/1/22	Sat 17/12/22	Sun 13/8/23	0 days	405,409	231
231	231		MFS	1.6.36.5	Shipping and Delivery of Plant to site	45 days	Sun 30/1/22	Tue 15/3/22	Sun 30/1/22	Tue 15/3/22	Mon 14/8/23	Wed 27/9/23	327 days	230	570
232	**232**		**MFS**	**1.6.37**	**MFS - chemical storage tanks**	**835 days**	**Mon 2/12/19**	**Tue 15/3/22**	**Mon 2/12/19**	**Tue 15/3/22**	**Tue 3/12/19**	**Wed 8/2/23**	**0 days**		**551**
233	233		MFS	1.6.37.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	234
234	234		MFS	1.6.37.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	233	235
235	235		MFS	1.6.37.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	234	405,409
236	236		MFS	1.6.37.4	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 4/6/21	Sat 29/1/22	Fri 4/6/21	Sat 29/1/22	Sat 30/4/22	Sun 25/12/22	0 days	405,409	237
237	237		MFS	1.6.37.5	Shipping and Delivery of Plant to site	45 days	Sun 30/1/22	Tue 15/3/22	Sun 30/1/22	Tue 15/3/22	Mon 26/12/22	Wed 8/2/23	330 days	236	
238	**238**		**MFS**	**1.6.38**	**MFS - chemical dosing pumps**	**835 days**	**Mon 2/12/19**	**Tue 15/3/22**	**Mon 2/12/19**	**Tue 15/3/22**	**Tue 3/12/19**	**Wed 8/2/23**	**1 day**		
239	239		MFS	1.6.38.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	240
240	240		MFS	1.6.38.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	239	241
241	241		MFS	1.6.38.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	240	405,409
242	242		MFS	1.6.38.4	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 4/6/21	Sat 29/1/22	Fri 4/6/21	Sat 29/1/22	Sat 30/4/22	Sun 25/12/22	0 days	405,409	243
243	243		MFS	1.6.38.5	Shipping and Delivery of Plant to site	45 days	Sun 30/1/22	Tue 15/3/22	Sun 30/1/22	Tue 15/3/22	Mon 26/12/22	Wed 8/2/23	0 days	242	552
244	**244**		**MFS**	**1.6.39**	**MFS - return activated sludge pumps**	**835 days**	**Mon 2/12/19**	**Tue 15/3/22**	**Mon 2/12/19**	**Tue 15/3/22**	**Tue 3/12/19**	**Thu 23/6/22**	**1 day**		
245	245		MFS	1.6.39.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	246
246	246		MFS	1.6.39.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	245	247
247	247		MFS	1.6.39.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	246	405,409
248	248		MFS	1.6.39.4	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 4/6/21	Sat 29/1/22	Fri 4/6/21	Sat 29/1/22	Sun 12/9/21	Mon 9/5/22	0 days	405,409	249
249	249		MFS	1.6.39.5	Shipping and Delivery of Plant to site	45 days	Sun 30/1/22	Tue 15/3/22	Sun 30/1/22	Tue 15/3/22	Tue 10/5/22	Thu 23/6/22	90 days	248	548
250	**250**		**MFS**	**1.6.40**	**MFS - membrane tank drain pumps**	**835 days**	**Mon 2/12/19**	**Tue 15/3/22**	**Mon 2/12/19**	**Tue 15/3/22**	**Tue 3/12/19**	**Tue 24/5/22**	**1 day**		
251	251		MFS	1.6.40.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	252
252	252		MFS	1.6.40.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	251	253
253	253		MFS	1.6.40.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	252	405,409
254	254		MFS	1.6.40.4	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 4/6/21	Sat 29/1/22	Fri 4/6/21	Sat 29/1/22	Fri 13/8/21	Sat 9/4/22	0 days	405,409	255
255	255		MFS	1.6.40.5	Shipping and Delivery of Plant to site	45 days	Sun 30/1/22	Tue 15/3/22	Sun 30/1/22	Tue 15/3/22	Sun 10/4/22	Tue 24/5/22	0 days	254	549
256	**256**		**MFS**	**1.6.41**	**Plant Service Water System - booster pumps**	**835 days**	**Mon 2/12/19**	**Tue 15/3/22**	**Mon 2/12/19**	**Tue 15/3/22**	**Tue 3/12/19**	**Tue 24/1/23**	**1 day**		
257	257		MFS	1.6.41.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	258
258	258		MFS	1.6.41.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	257	259
259	259		MFS	1.6.41.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	258	405,409
260	260		MFS	1.6.41.4	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 4/6/21	Sat 29/1/22	Fri 4/6/21	Sat 29/1/22	Fri 15/4/22	Sat 10/12/22	0 days	405,409	261
261	261		MFS	1.6.41.5	Shipping and Delivery of Plant to site	45 days	Sun 30/1/22	Tue 15/3/22	Sun 30/1/22	Tue 15/3/22	Sun 11/12/22	Tue 24/1/23	0 days	260	553
262	**262**		**MFS**	**1.6.42**	**Plant Service Water System - hydro-pneumatic pressure tanks**	**835 days**	**Mon 2/12/19**	**Tue 15/3/22**	**Mon 2/12/19**	**Tue 15/3/22**	**Tue 3/12/19**	**Tue 24/1/23**	**1 day**		
263	263		MFS	1.6.42.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	264
264	264		MFS	1.6.42.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	263	265
265	265		MFS	1.6.42.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	264	405,409
266	266		MFS	1.6.42.4	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 4/6/21	Sat 29/1/22	Fri 4/6/21	Sat 29/1/22	Fri 15/4/22	Sat 10/12/22	0 days	405,409	267
267	267		MFS	1.6.42.5	Shipping and Delivery of Plant to site	45 days	Sun 30/1/22	Tue 15/3/22	Sun 30/1/22	Tue 15/3/22	Sun 11/12/22	Tue 24/1/23	0 days	266	553
268	**268**		**DOU**	**1.6.43**	**DOU - biotrickling filter (DOU No. 1)**	**835 days**	**Mon 2/12/19**	**Tue 15/3/22**	**Mon 2/12/19**	**Tue 15/3/22**	**Tue 3/12/19**	**Wed 25/10/23**	**1 day**		
269	269		DOU	1.6.43.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	270
270	270		DOU	1.6.43.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	269	271
271	271		DOU	1.6.43.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	270	405,409
272	272		DOU	1.6.43.4	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 4/6/21	Sat 29/1/22	Fri 4/6/21	Sat 29/1/22	Sat 14/1/23	Sun 10/9/23	0 days	405,409	273
273	273		DOU	1.6.43.5	Shipping and Delivery of Plant to site	45 days	Sun 30/1/22	Tue 15/3/22	Sun 30/1/22	Tue 15/3/22	Mon 11/9/23	Wed 25/10/23	109 days	272	614
274	**274**		**DOU**	**1.6.44**	**DOU - activated carbon filter (DOU No. 2A, No. 3A, No. 3B)**	**895 days**	**Mon 2/12/19**	**Sat 14/5/22**	**Mon 2/12/19**	**Sat 14/5/22**	**Tue 3/12/19**	**Wed 25/10/23**	**1 day**		
275	275		DOU	1.6.44.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	276
276	276		DOU	1.6.44.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	275	277



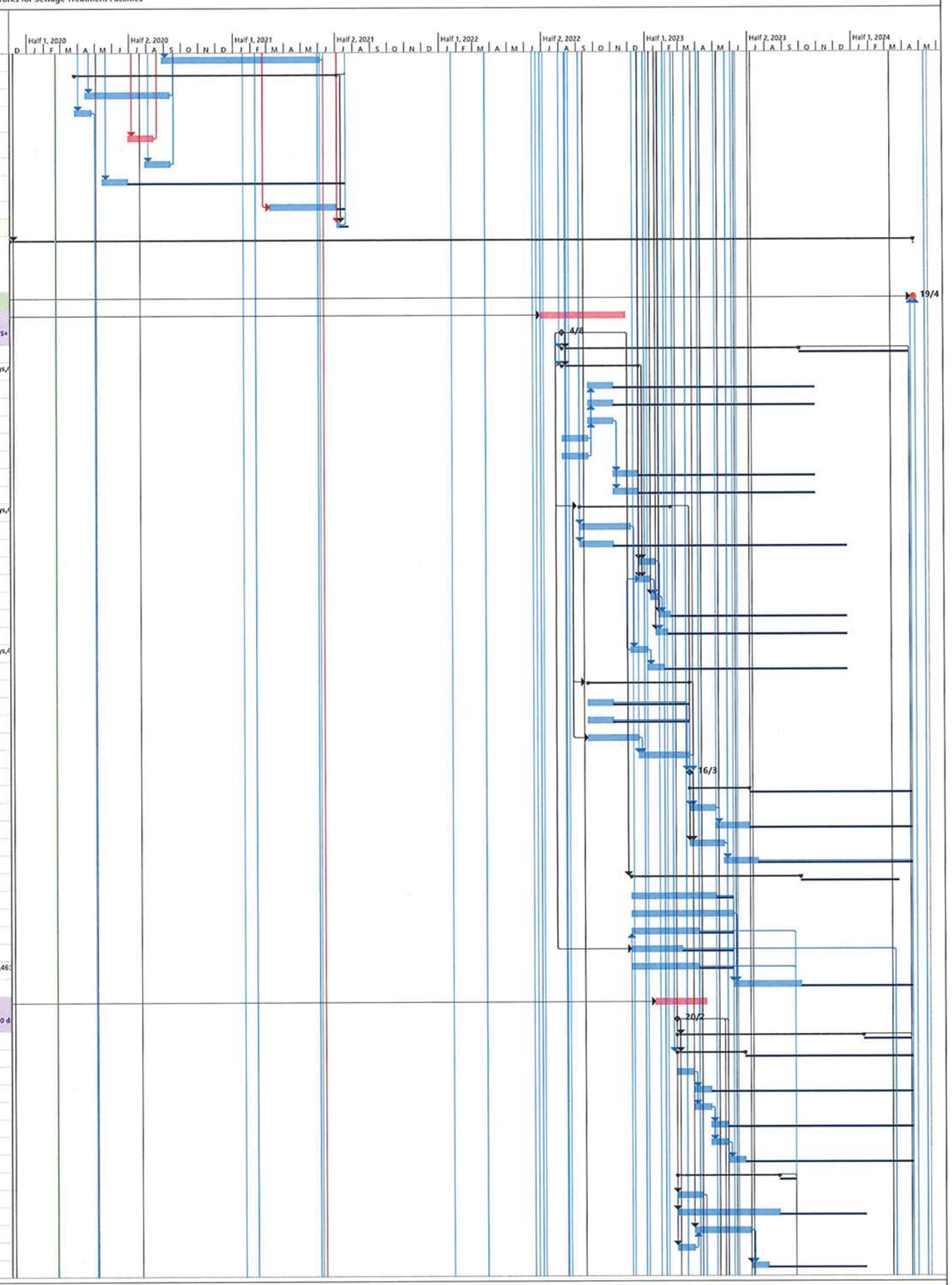
ID	ID	Ta Mo	Text1	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Late Start	Late Finish	Free Slack	Predecessors	Successors
277	277		DOU	1.6.44.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	276	405,409
278	278		DOU	1.6.44.4	Manufacturing and Factory Acceptance Test of Plant	300 days	Fri 4/6/21	Wed 30/3/22	Fri 4/6/21	Wed 30/3/22	Tue 15/11/22	Sun 10/9/23	0 days	405,409	279
279	279		DOU	1.6.44.5	Shipping and Delivery of Plant to site	45 days	Thu 31/3/22	Sat 14/5/22	Thu 31/3/22	Sat 14/5/22	Mon 11/9/23	Wed 25/10/23	49 days	278	619,624,629
280	280		**DOU**	**1.6.45**	**DOU - FRP air ductwork**	**895 days**	**Mon 2/12/19**	**Sat 14/5/22**	**Mon 2/12/19**	**Sat 14/5/22**	**Tue 3/12/19**	**Wed 25/10/23**	**1 day**		
281	281		DOU	1.6.45.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Tue 3/12/19	Sat 30/5/20	0 days	2	282
282	282		DOU	1.6.45.2	Invitation of quotations for purchasing package	60 days	Sat 30/5/20	Tue 28/7/20	Sat 30/5/20	Tue 28/7/20	Sun 31/5/20	Wed 29/7/20	0 days	281	283
283	283		DOU	1.6.45.3	Acceptance of conforming quotation	30 days	Wed 29/7/20	Thu 27/8/20	Wed 29/7/20	Thu 27/8/20	Thu 30/7/20	Fri 28/8/20	0 days	282	405,409
284	284		DOU	1.6.45.4	Manufacturing and Factory Acceptance Test of Plant	300 days	Fri 4/6/21	Wed 30/3/22	Fri 4/6/21	Wed 30/3/22	Tue 15/11/22	Sun 10/9/23	0 days	405,409	285
285	285		DOU	1.6.45.5	Shipping and Delivery of Plant to site	45 days	Thu 31/3/22	Sat 14/5/22	Thu 31/3/22	Sat 14/5/22	Mon 11/9/23	Wed 25/10/23	49 days	284	615,620,625,630
286	286		**Filter Plates**	**1.6.46**	**MIs - new replacement filter plates**	**540 days**	**Mon 2/12/19**	**Mon 24/5/21**	**Mon 2/12/19**	**Mon 24/5/21**	**Wed 1/1/20**	**Wed 23/6/21**	**30 days**		
287	287		Filter Plates	1.6.46.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Wed 1/1/20	Sun 28/6/20	0 days	2	288
288	288		Filter Plates	1.6.46.2	Invitation of quotations for purchasing package	30 days	Sat 30/5/20	Sun 28/6/20	Sat 30/5/20	Sun 28/6/20	Mon 29/6/20	Tue 28/7/20	0 days	287	289
289	289		Filter Plates	1.6.46.3	Acceptance of conforming quotation	30 days	Mon 29/6/20	Tue 28/7/20	Mon 29/6/20	Tue 28/7/20	Wed 29/7/20	Thu 27/8/20	0 days	288	417
290	290		Filter Plates	1.6.46.4	Manufacturing and Factory Acceptance Test of Plant	210 days	Sat 12/9/20	Fri 9/4/21	Sat 12/9/20	Fri 9/4/21	Mon 12/10/20	Sun 9/5/21	0 days	417	291
291	291		Filter Plates	1.6.46.5	Shipping and Delivery of Plant to site	45 days	Sat 10/4/21	Mon 24/5/21	Sat 10/4/21	Mon 24/5/21	Mon 10/5/21	Wed 23/6/21	0 days	290	740
292	292		**Filter Press**	**1.6.47**	**MIs - membrane filter press system**	**540 days**	**Mon 2/12/19**	**Mon 24/5/21**	**Mon 2/12/19**	**Mon 24/5/21**	**Mon 2/12/19**	**Mon 24/5/21**	**0 days**		
293	293		Filter Press	1.6.47.1	Submission for acceptance of purchasing package	120 days	Mon 2/12/19	Mon 30/3/20	Mon 2/12/19	Mon 30/3/20	Mon 2/12/19	Mon 30/3/20	0 days	2	294
294	294		Filter Press	1.6.47.2	Invitation of quotations for purchasing package	60 days	Tue 31/3/20	Fri 29/5/20	Tue 31/3/20	Fri 29/5/20	Tue 31/3/20	Fri 29/5/20	0 days	293	295
295	295		Filter Press	1.6.47.3	Acceptance of conforming quotation	30 days	Sat 30/5/20	Sun 28/6/20	Sat 30/5/20	Sun 28/6/20	Sat 30/5/20	Sun 28/6/20	0 days	294	416
296	296		Filter Press	1.6.47.4	Manufacturing and Factory Acceptance Test of Plant	240 days	Thu 13/8/20	Fri 9/4/21	Thu 13/8/20	Fri 9/4/21	Thu 13/8/20	Fri 9/4/21	0 days	416	297
297	297		Filter Press	1.6.47.5	Shipping and Delivery of Plant to site	45 days	Sat 10/4/21	Mon 24/5/21	Sat 10/4/21	Mon 24/5/21	Sat 10/4/21	Mon 24/5/21	0 days	296	724
298	298		**PST No. 4 & No. 6**	**1.6.48**	**MIs - replacement of PST no. 4 and no. 6**	**414 days**	**Mon 2/12/19**	**Mon 18/1/21**	**Mon 2/12/19**	**Mon 18/1/21**	**Thu 26/12/19**	**Thu 11/2/21**	**24 days**		
299	299		PST No. 4 & No. 6	1.6.48.1	Submission for acceptance of purchasing package	90 days	Mon 2/12/19	Sat 29/2/20	Mon 2/12/19	Sat 29/2/20	Thu 26/12/19	Tue 24/3/20	0 days	2	300
300	300		PST No. 4 & No. 6	1.6.48.2	Invitation of quotations for purchasing package	30 days	Sun 1/3/20	Mon 30/3/20	Sun 1/3/20	Mon 30/3/20	Wed 25/3/20	Thu 23/4/20	0 days	299	301
301	301		PST No. 4 & No. 6	1.6.48.3	Acceptance of conforming quotation	14 days	Tue 31/3/20	Mon 13/4/20	Tue 31/3/20	Mon 13/4/20	Fri 24/4/20	Thu 7/5/20	0 days	300	414
302	302		PST No. 4 & No. 6	1.6.48.4	Manufacturing and Factory Acceptance Test of Plant	100 days	Fri 11/9/20	Sat 19/12/20	Fri 11/9/20	Sat 19/12/20	Mon 5/10/20	Tue 12/1/21	0 days	414	303
303	303		PST No. 4 & No. 6	1.6.48.5	Shipping and Delivery of Plant to site	30 days	Sun 20/12/20	Mon 18/1/21	Sun 20/12/20	Mon 18/1/21	Wed 13/1/21	Thu 11/2/21	21 days	302	697
304	304		**Temp Filtrate**	**1.6.49**	**MIs - filtrate lift pumps and filtrate transfer pumps**	**292 days**	**Mon 2/3/20**	**Fri 18/12/20**	**Mon 2/3/20**	**Fri 18/12/20**	**Thu 2/4/20**	**Mon 18/1/21**	**31 days**		
305	305		Temp Filtrate	1.6.49.1	Submission for acceptance of purchasing package	29 days	Mon 2/3/20	Mon 30/3/20	Mon 2/3/20	Mon 30/3/20	Thu 2/4/20	Thu 30/4/20	0 days		306
306	306		Temp Filtrate	1.6.49.2	Invitation of quotations for purchasing package	30 days	Tue 31/3/20	Wed 29/4/20	Tue 31/3/20	Wed 29/4/20	Fri 1/5/20	Sat 30/5/20	0 days	305	307
307	307		Temp Filtrate	1.6.49.3	Acceptance of conforming quotation and acceptance for Manufacture	14 days	Thu 30/4/20	Wed 13/5/20	Thu 30/4/20	Wed 13/5/20	Sun 31/5/20	Sat 13/6/20	0 days	306	418,308
308	308		Temp Filtrate	1.6.49.4	Manufacturing and Factory Acceptance Test of Plant	174 days	Thu 14/5/20	Tue 3/11/20	Thu 14/5/20	Tue 3/11/20	Sun 14/6/20	Fri 4/12/20	0 days	307	309
309	309		Temp Filtrate	1.6.49.5	Shipping and Delivery of Plant to site	45 days	Wed 4/11/20	Fri 18/12/20	Wed 4/11/20	Fri 18/12/20	Sat 5/12/20	Mon 18/1/21	30 days	308	685
310	310		**PV**	**1.6.50**	**MIs - pv system**	**314 days**	**Mon 2/12/19**	**Sat 10/10/20**	**Mon 2/12/19**	**Sat 10/10/20**	**Fri 21/5/21**	**Wed 30/3/22**	**536 days**		
311	311		PV	1.6.50.1	Submission for acceptance of purchasing package	180 days	Mon 2/12/19	Fri 29/5/20	Mon 2/12/19	Fri 29/5/20	Fri 21/5/21	Tue 16/11/21	0 days	2	312
312	312		PV	1.6.50.2	Invitation of quotations for purchasing package	30 days	Sat 30/5/20	Sun 28/6/20	Sat 30/5/20	Sun 28/6/20	Wed 17/11/21	Thu 16/12/21	0 days	311	313
313	313		PV	1.6.50.3	Acceptance of conforming quotation	14 days	Mon 29/6/20	Sun 12/7/20	Mon 29/6/20	Sun 12/7/20	Fri 17/12/21	Thu 30/12/21	0 days	312	314
314	314		PV	1.6.50.4	Commencement of Design Work	90 days	Mon 13/7/20	Sat 10/10/20	Mon 13/7/20	Sat 10/10/20	Fri 31/12/21	Wed 30/3/22	236 days	313	531
315	315			1.7	Subletting of major sub-contract works	910 days	Mon 2/12/19	Sun 29/5/22	Mon 2/12/19	Sun 29/5/22	Sun 8/12/19	Wed 24/1/24	604 days	2	
316	316			1.7.1	Planned Completion Date for Procurement of major plant and materials	0 days	Thu 12/8/21	Thu 12/8/21	Thu 12/8/21	Thu 12/8/21	Thu 12/8/21	Thu 12/8/21	0 days	2SS+620 days	
317	317		**BEAM**	**1.7.2**	**General - Independent BEAM Plus Consultant**	**150 days**	**Wed 1/1/20**	**Fri 29/5/20**	**Wed 1/1/20**	**Fri 29/5/20**	**Wed 1/1/20**	**Fri 29/5/20**	**0 days**		
318	318		BEAM	1.7.2.1	Submission for acceptance of proposed Independent BEAM Plus Consultant	60 edays	Wed 1/1/20	Sun 1/3/20	Wed 1/1/20	Sun 1/3/20	Wed 1/1/20	Sat 9/5/20	0 edays	2SS+30 edays	319
319	319		BEAM	1.7.2.2	Acceptance of proposed Independent BEAM Plus Consultant	14 edays	Sun 1/3/20	Sun 15/3/20	Sun 1/3/20	Sun 15/3/20	Sat 9/5/20	Sat 23/5/20	0 edays	318	320
320	320		BEAM	1.7.2.3	Engagement with an Independent BEAM Plus Consultant	7 days	Sun 15/3/20	Sat 21/3/20	Sun 15/3/20	Sat 21/3/20	Sat 23/5/20	Fri 29/5/20	69 days	319	321
321	321		BEAM	1.7.2.4	Latest Date for engagement with an Independent BEAM Plus Consultant	0 days	Fri 29/5/20	Fri 29/5/20	Fri 29/5/20	Fri 29/5/20	Fri 29/5/20	Fri 29/5/20	0 days	2SS+180 days,320	
322	322		**ICE**	**1.7.3**	**General - Independent Checking Engineer**	**90 days**	**Wed 1/1/20**	**Mon 30/3/20**	**Wed 1/1/20**	**Mon 30/3/20**	**Wed 1/1/20**	**Mon 30/3/20**	**0 days**		
323	323		ICE	1.7.3.1	Submission for acceptance of proposed Independent Checking Engineer	60 edays	Wed 1/1/20	Sun 1/3/20	Wed 1/1/20	Sun 1/3/20	Wed 1/1/20	Tue 10/3/20	0 edays	2SS+30 edays	324
324	324		ICE	1.7.3.2	Acceptance of proposed Independent Checking Engineer	14 edays	Sun 1/3/20	Sun 15/3/20	Sun 1/3/20	Sun 15/3/20	Tue 10/3/20	Tue 24/3/20	0 edays	323	325
325	325		ICE	1.7.3.3	Engagement with an Independent Checking Engineer	7 days	Sun 15/3/20	Sat 21/3/20	Sun 15/3/20	Sat 21/3/20	Tue 24/3/20	Mon 30/3/20	9 days	324	326
326	326		ICE	1.7.3.4	Latest Date for engagement with an ICE	0 days	Mon 30/3/20	Mon 30/3/20	Mon 30/3/20	Mon 30/3/20	Mon 30/3/20	Mon 30/3/20	0 days	2SS+120 days,325	
327	327		**LA**	**1.7.4**	**General - Lifting Appliances**	**715 days**	**Wed 1/1/20**	**Wed 15/12/21**	**Wed 1/1/20**	**Wed 15/12/21**	**Wed 1/1/20**	**Tue 13/6/23**	**545 days**		
328	328		LA	1.7.4.1	Submission for acceptance of subcontract works package	90 edays	Wed 1/1/20	Tue 31/3/20	Wed 1/1/20	Tue 31/3/20	Wed 1/1/20	Tue 30/6/20	0 edays	2SS+30 edays	329
329	329		LA	1.7.4.2	Invitation of tender for subcontract works	45 edays	Tue 31/3/20	Fri 15/5/20	Tue 31/3/20	Fri 15/5/20	Tue 30/6/20	Fri 14/8/20	0 edays	328	330
330	330		LA	1.7.4.3	Acceptance of conforming tender	14 edays	Fri 15/5/20	Fri 29/5/20	Fri 15/5/20	Fri 29/5/20	Fri 14/8/20	Fri 28/8/20	0 edays	329	331
331	331		LA	1.7.4.4	Sub-contract work commencement date	0 days	Fri 29/5/20	Fri 29/5/20	Fri 29/5/20	Fri 29/5/20	Fri 28/8/20	Fri 28/8/20	91 days	330	409
332	332		LA	1.7.4.5	Manufacturing and Factory Acceptance Test of Plant	150 days	Fri 4/6/21	Sun 31/10/21	Fri 4/6/21	Sun 31/10/21	Thu 1/12/22	Sat 29/4/23	0 days	405,409	333
333	333		LA	1.7.4.6	Shipping and Delivery of Plant to site	45 days	Mon 1/11/21	Wed 15/12/21	Mon 1/11/21	Wed 15/12/21	Sun 30/4/23	Tue 13/6/23	42 days	332	426,465,503,535
334	334		**Mech**	**1.7.5**	**General - Mechanical Installations**	**120 days**	**Mon 2/11/20**	**Mon 1/3/21**	**Mon 2/11/20**	**Mon 1/3/21**	**Wed 18/11/20**	**Mon 1/3/21**	**0 days**		
335	335		Mech	1.7.5.1	Submission for acceptance of subcontract works package	60 days	Mon 2/11/20	Thu 31/12/20	Mon 2/11/20	Thu 31/12/20	Wed 18/11/20	Sat 16/1/21	0 days		336
336	336		Mech	1.7.5.2	Invitation of tender for subcontract works	30 days	Fri 1/1/21	Sat 30/1/21	Fri 1/1/21	Sat 30/1/21	Sun 17/1/21	Mon 15/2/21	0 days	335	337
337	337		Mech	1.7.5.3	Acceptance of conforming tender	14 days	Sun 31/1/21	Sat 13/2/21	Sun 31/1/21	Sat 13/2/21	Tue 16/2/21	Mon 1/3/21	16 days	336	338
338	338		Mech	1.7.5.4	Sub-contract work commencement date	0 days	Mon 1/3/21	Mon 1/3/21	Mon 1/3/21	Mon 1/3/21	Mon 1/3/21	Mon 1/3/21	0 days	337	
339	339		Elec	1.7.6	General - Electrical Installations	120 days	Mon 2/11/20	Mon 1/3/21	Mon 2/11/20	Mon 1/3/21	Tue 17/11/20	Mon 1/3/21	0 days		
340	340		Elec	1.7.6.1	Submission for acceptance of subcontract works package	60 edays	Mon 2/11/20	Fri 1/1/21	Mon 2/11/20	Fri 1/1/21	Tue 17/11/20	Sat 16/1/21	0 edays		341
341	341		Elec	1.7.6.2	Invitation of tender for subcontract works	30 edays	Fri 1/1/21	Sun 31/1/21	Fri 1/1/21	Sun 31/1/21	Sat 16/1/21	Mon 15/2/21	0 edays	340	342
342	342		Elec	1.7.6.3	Acceptance of conforming tender	14 edays	Sun 31/1/21	Sun 14/2/21	Sun 31/1/21	Sun 14/2/21	Mon 15/2/21	Mon 1/3/21	15.38 edays	341	343
343	343		Elec	1.7.6.4	Sub-contract work commencement date	0 days	Mon 1/3/21	Mon 1/3/21	Mon 1/3/21	Mon 1/3/21	Mon 1/3/21	Mon 1/3/21	0 days	342	



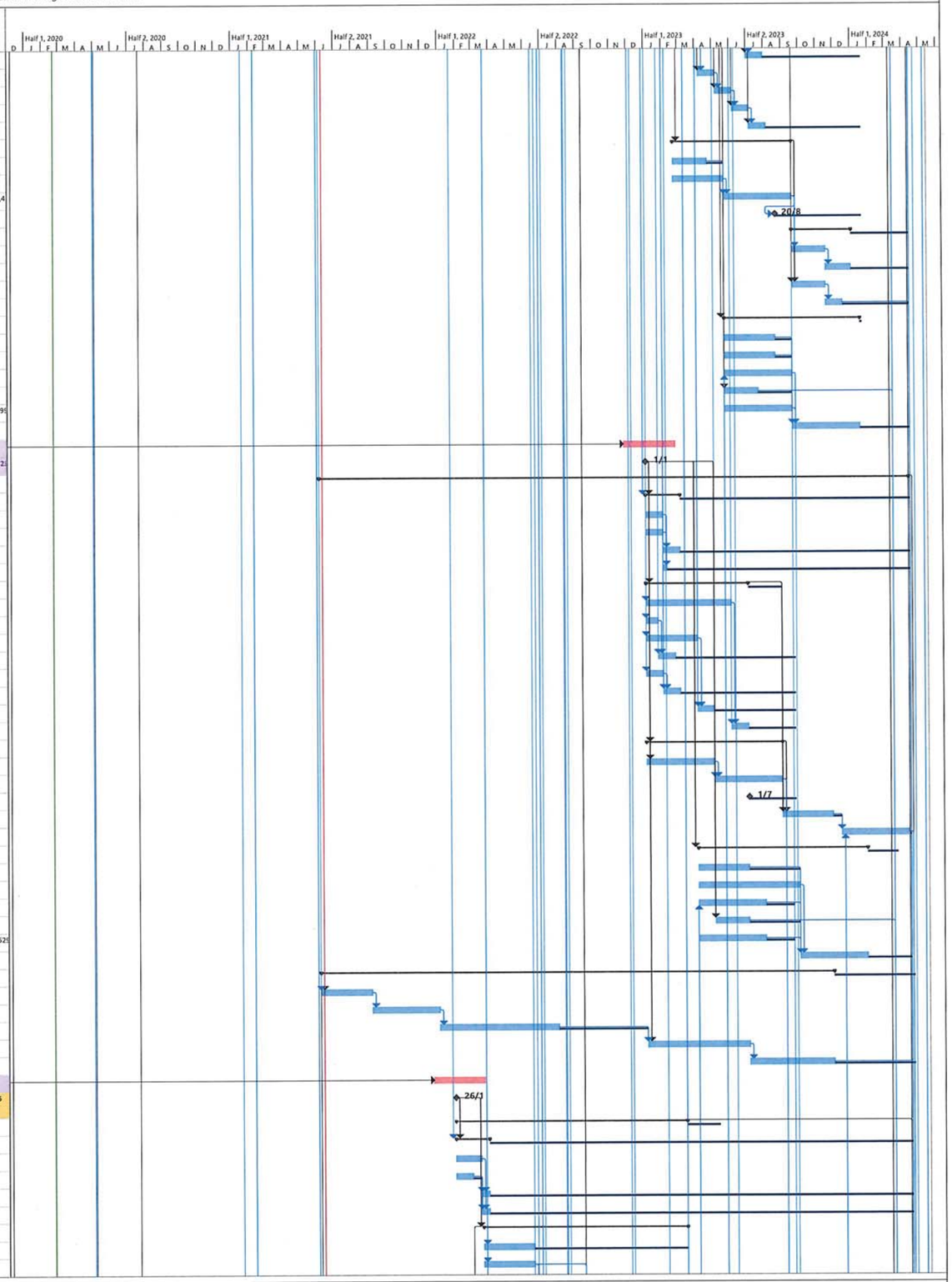
ID	ID	Ta Mc	Text1	WBS	Task Name	Duration	Start	Finish	Early Start	Early Finish	Late Start	Late Finish	Free Slack	Predecessors	Successors
344	344		SCADA, CMMS, PMS, I	1.7.7	General - Facility Computerised Systems (SCADA, CMMS, PMS, IDMS	820 days	Sun 1/3/20	Sun 29/5/22	Sun 1/3/20	Sun 29/5/22	Sat 16/5/20	Wed 10/5/23	77 days		
345	345		SCADA	1.7.7.1	Submission for acceptance of subcontract works package	60 edays	Sun 1/3/20	Thu 30/4/20	Sun 1/3/20	Thu 30/4/20	Sat 16/5/20	Wed 15/7/20	0 edays		346
346	346		SCADA	1.7.7.2	Invitation of tender for subcontract works	30 edays	Thu 30/4/20	Sat 30/5/20	Thu 30/4/20	Sat 30/5/20	Wed 15/7/20	Fri 14/8/20	0 edays	345	347
347	347		SCADA	1.7.7.3	Acceptance of conforming tender	14 edays	Sat 30/5/20	Sat 13/6/20	Sat 30/5/20	Sat 13/6/20	Fri 14/8/20	Fri 28/8/20	0 edays	346	348
348	348		SCADA	1.7.7.4	Sub-contract work commencement date	0 days	Sat 13/6/20	Sat 13/6/20	Sat 13/6/20	Sat 13/6/20	Fri 28/8/20	Fri 28/8/20	76 days	347	405,409
349	349		SCADA	1.7.7.5	Manufacturing and Factory Acceptance Test of Plant	360 days	Fri 4/6/21	Sun 29/5/22	Fri 4/6/21	Sun 29/5/22	Mon 16/5/22	Wed 10/5/23	201 days	405,409	448,486,519,57
350	350		BS	1.7.8	General - Building Services Installations	119 days	Mon 2/11/20	Mon 1/3/21	Mon 2/11/20	Mon 1/3/21	Tue 17/11/20	Mon 1/3/21	0 days		
351	351		BS	1.7.8.1	Submission for acceptance of subcontract works package	60 edays	Mon 2/11/20	Fri 1/1/21	Mon 2/11/20	Fri 1/1/21	Tue 17/11/20	Sat 16/1/21	0 edays		352
352	352		BS	1.7.8.2	Invitation of tender for subcontract works	30 edays	Fri 1/1/21	Sun 31/1/21	Fri 1/1/21	Sun 31/1/21	Sat 16/1/21	Mon 15/2/21	0 edays	351	353
353	353		BS	1.7.8.3	Acceptance of conforming tender	14 edays	Sun 31/1/21	Sun 14/2/21	Sun 31/1/21	Sun 14/2/21	Mon 15/2/21	Mon 1/3/21	15 edays	352	354
354	354		BS	1.7.8.4	Sub-contract work commencement date	0 days	Mon 1/3/21	Mon 1/3/21	Mon 1/3/21	Mon 1/3/21	Mon 1/3/21	Mon 1/3/21	0 days	353	
355	355		MVAC	1.7.9	General - Air Conditioning and Mechanical Ventilation Installation	119 days	Mon 2/11/20	Mon 1/3/21	Mon 2/11/20	Mon 1/3/21	Tue 17/11/20	Mon 1/3/21	0 days		
356	356		MVAC	1.7.9.1	Submission for acceptance of subcontract works package	60 days	Mon 2/11/20	Thu 31/12/20	Mon 2/11/20	Thu 31/12/20	Tue 17/11/20	Fri 15/1/21	0 days		357
357	357		MVAC	1.7.9.2	Invitation of tender for subcontract works	30 edays	Thu 31/12/20	Sat 30/1/21	Thu 31/12/20	Sat 30/1/21	Sat 16/1/21	Mon 15/2/21	0.63 edays	356	358
358	358		MVAC	1.7.9.3	Acceptance of conforming tender	14 days	Sun 31/1/21	Sat 13/2/21	Sun 31/1/21	Sat 13/2/21	Mon 15/2/21	Sun 28/2/21	15 days	357	359
359	359		MVAC	1.7.9.4	Sub-contract work commencement date	0 days	Mon 1/3/21	Mon 1/3/21	Mon 1/3/21	Mon 1/3/21	Mon 1/3/21	Mon 1/3/21	0 days	358	
360	360		Genset	1.7.10	General - Emergency Power Generator Set	104 days	Wed 1/7/20	Tue 13/10/20	Wed 1/7/20	Tue 13/10/20	Thu 12/10/23	Wed 24/1/24	1198 days		
361	361		Genset	1.7.10.1	Submission for acceptance of subcontract works package	60 edays	Wed 1/7/20	Sun 30/8/20	Wed 1/7/20	Sun 30/8/20	Thu 12/10/23	Mon 11/12/23	0 edays		362
362	362		Genset	1.7.10.2	Invitation of tender for subcontract works	30 edays	Sun 30/8/20	Tue 29/9/20	Sun 30/8/20	Tue 29/9/20	Mon 11/12/23	Wed 10/1/24	0 edays	361	363
363	363		Genset	1.7.10.3	Acceptance of conforming tender	14 edays	Tue 29/9/20	Tue 13/10/20	Tue 29/9/20	Tue 13/10/20	Wed 10/1/24	Wed 24/1/24	0 edays	362	364
364	364		Genset	1.7.10.4	Sub-contract work commencement date	0 days	Tue 13/10/20	Tue 13/10/20	Tue 13/10/20	Tue 13/10/20	Wed 24/1/24	Wed 24/1/24	234 days	363	638
365	365		P&D	1.7.11	General - Plumbing and Drainage Installation	74 days	Fri 1/5/20	Tue 14/7/20	Fri 1/5/20	Tue 14/7/20	Sat 8/10/22	Wed 21/12/22	890 days		
366	366		P&D	1.7.11.1	Submission for acceptance of subcontract works package	30 edays	Fri 1/5/20	Sun 31/5/20	Fri 1/5/20	Sun 31/5/20	Sat 8/10/22	Mon 7/11/22	0 edays	25S+30 edays	367
367	367		P&D	1.7.11.2	Invitation of tender for subcontract works	30 edays	Sun 31/5/20	Tue 30/6/20	Sun 31/5/20	Tue 30/6/20	Mon 7/11/22	Wed 7/12/22	0 edays	366	368
368	368		P&D	1.7.11.3	Acceptance of conforming tender	14 edays	Tue 30/6/20	Tue 14/7/20	Tue 30/6/20	Tue 14/7/20	Wed 7/12/22	Wed 21/12/22	0 edays	367	369
369	369		P&D	1.7.11.4	Sub-contract work commencement date	0 days	Tue 14/7/20	Tue 14/7/20	Tue 14/7/20	Tue 14/7/20	Wed 21/12/22	Wed 21/12/22	0 days	368	665
370	370		FSI	1.7.12	General - Fire Services Installation	123 days	Fri 1/5/20	Tue 1/9/20	Fri 1/5/20	Tue 1/9/20	Wed 20/5/20	Tue 1/9/20	0 days		
371	371		FSI	1.7.12.1	Submission for acceptance of subcontract works package	60 days	Fri 1/5/20	Mon 29/6/20	Fri 1/5/20	Mon 29/6/20	Wed 20/5/20	Sat 18/7/20	0 days		372
372	372		FSI	1.7.12.2	Invitation of tender for subcontract works	30 days	Tue 30/6/20	Wed 29/7/20	Tue 30/6/20	Wed 29/7/20	Sun 19/7/20	Mon 17/8/20	0 days	371	373
373	373		FSI	1.7.12.3	Acceptance of conforming tender	14 days	Thu 30/7/20	Wed 12/8/20	Thu 30/7/20	Wed 12/8/20	Tue 18/8/20	Mon 31/8/20	19 days	372	374
374	374		FSI	1.7.12.4	Sub-contract work commencement date	0 days	Tue 1/9/20	Tue 1/9/20	Tue 1/9/20	Tue 1/9/20	Tue 1/9/20	Tue 1/9/20	0 days	373	
375	375		Earth	1.7.13	General - Earthing and Lightning Protection System	214 days	Fri 1/5/20	Tue 1/12/20	Fri 1/5/20	Tue 1/12/20	Mon 20/7/20	Tue 1/12/20	0 days		
376	376		Earth	1.7.13.1	Submission for acceptance of subcontract works package	90 edays	Fri 1/5/20	Thu 30/7/20	Fri 1/5/20	Thu 30/7/20	Mon 20/7/20	Sun 18/10/20	0 edays		377
377	377		Earth	1.7.13.2	Invitation of tender for subcontract works	30 edays	Thu 30/7/20	Sat 29/8/20	Thu 30/7/20	Sat 29/8/20	Sun 18/10/20	Tue 17/11/20	0 edays	376	378
378	378		Earth	1.7.13.3	Acceptance of conforming tender	14 edays	Sat 29/8/20	Sat 12/9/20	Sat 29/8/20	Sat 12/9/20	Tue 17/11/20	Tue 1/12/20	80 edays	377	379
379	379		Earth	1.7.13.4	Sub-contract work commencement date	0 days	Tue 1/12/20	Tue 1/12/20	Tue 1/12/20	Tue 1/12/20	Tue 1/12/20	Tue 1/12/20	0 days	378	
380	380		CCTV	1.7.14	General - CCTV Installation	294 days	Mon 1/6/20	Sun 21/3/21	Mon 1/6/20	Sun 21/3/21	Fri 5/8/22	Thu 25/5/23	795 days		
381	381		CCTV	1.7.14.1	Submission for acceptance of subcontract works package	30 edays	Mon 1/6/20	Wed 1/7/20	Mon 1/6/20	Wed 1/7/20	Fri 5/8/22	Sun 4/9/22	0 edays		382
382	382		CCTV	1.7.14.2	Invitation of tender for subcontract works	30 edays	Wed 1/7/20	Fri 31/7/20	Wed 1/7/20	Fri 31/7/20	Sun 4/9/22	Tue 4/10/22	0 edays	381	383
383	383		CCTV	1.7.14.3	Acceptance of conforming tender	14 edays	Fri 31/7/20	Fri 14/8/20	Fri 31/7/20	Fri 14/8/20	Tue 4/10/22	Tue 18/10/22	0 edays	382	384
384	384		CCTV	1.7.14.4	Sub-contract work commencement date	0 days	Fri 14/8/20	Fri 14/8/20	Fri 14/8/20	Fri 14/8/20	Tue 18/10/22	Tue 18/10/22	0 days	383	385
385	385		CCTV	1.7.14.5	Design, Procurements and Delivery to Site	220 days	Fri 14/8/20	Sun 21/3/21	Fri 14/8/20	Sun 21/3/21	Tue 18/10/22	Thu 25/5/23	501 days	384	425
386	386		Civil	1.7.15	General - Civil Construction Work for underground pipework	121 days	Tue 1/9/20	Thu 31/12/20	Tue 1/9/20	Thu 31/12/20	Sun 18/10/20	Thu 31/12/20	0 days		
387	387		Civil	1.7.15.1	Submission for acceptance of subcontract works package	30 days	Tue 1/9/20	Wed 30/9/20	Tue 1/9/20	Wed 30/9/20	Sun 18/10/20	Mon 16/11/20	0 days		388
388	388		Civil	1.7.15.2	Invitation of tender for subcontract works	30 days	Thu 1/10/20	Fri 30/10/20	Thu 1/10/20	Fri 30/10/20	Tue 17/11/20	Wed 16/12/20	0 days	387	389
389	389		Civil	1.7.15.3	Acceptance of conforming tender	14 days	Sat 31/10/20	Fri 13/11/20	Sat 31/10/20	Fri 13/11/20	Thu 17/12/20	Wed 30/12/20	47 days	388	390
390	390		Civil	1.7.15.4	Sub-contract work commencement date	0 days	Thu 31/12/20	Thu 31/12/20	Thu 31/12/20	Thu 31/12/20	Thu 31/12/20	Thu 31/12/20	0 days	389	
391	391		Temp Filtrate	1.7.16	General - Civil Construction Work for Temp. Filtrate Eq. System	56 days	Mon 2/3/20	Sun 26/4/20	Mon 2/3/20	Sun 26/4/20	Tue 3/3/20	Tue 28/4/20	1 day		
392	392		Temp Filtrate	1.7.16.1	Submission for acceptance of subcontract works package	21 days	Mon 2/3/20	Sun 22/3/20	Mon 2/3/20	Sun 22/3/20	Tue 3/3/20	Mon 23/3/20	0 days	25S+30 edays	393
393	393		Temp Filtrate	1.7.16.2	Invitation of tender for subcontract works	21 days	Mon 23/3/20	Sun 12/4/20	Mon 23/3/20	Sun 12/4/20	Tue 24/3/20	Mon 13/4/20	0 days	392	394
394	394		Temp Filtrate	1.7.16.3	Acceptance of conforming tender	14 days	Mon 13/4/20	Sun 26/4/20	Mon 13/4/20	Sun 26/4/20	Tue 14/4/20	Mon 27/4/20	0 days	393	395
395	395		Temp Filtrate	1.7.16.4	Sub-contract work commencement date	0 days	Sun 26/4/20	Sun 26/4/20	Sun 26/4/20	Sun 26/4/20	Tue 28/4/20	Tue 28/4/20	0 days	394	676
396	396		existing genset	1.7.17	Mis - Modification of existing power house	115 days	Mon 2/12/19	Wed 25/3/20	Mon 2/12/19	Wed 25/3/20	Sun 8/12/19	Tue 31/3/20	0 days		415
397	397		existing genset	1.7.17.1	submission for acceptance of subcontract works package	90 days	Mon 2/12/19	Sat 29/2/20	Mon 2/12/19	Sat 29/2/20	Sun 8/12/19	Fri 6/3/20	0 days	2	398
398	398		existing genset	1.7.17.2	invitation of tender for subcontract works	21 days	Sun 1/3/20	Sat 21/3/20	Sun 1/3/20	Sat 21/3/20	Sat 7/3/20	Fri 27/3/20	0 days	397	399
399	399		existing genset	1.7.17.3	Acceptance of conforming tender	3 days	Sun 22/3/20	Tue 24/3/20	Sun 22/3/20	Tue 24/3/20	Sat 28/3/20	Mon 30/3/20	0 days	398	400
400	400		existing genset	1.7.17.4	Sub-contract work commencement date	1 day	Wed 25/3/20	Wed 25/3/20	Wed 25/3/20	Wed 25/3/20	Tue 31/3/20	Tue 31/3/20	0 days	399	415
401	401			1.8	Section 1 - Completion of the design of E&M Works for all works as defined in WI_GP Cl. 10.1(a)	485 days	Thu 26/3/20	Sat 24/7/21	Thu 26/3/20	Sat 24/7/21	Wed 1/4/20	Sat 24/7/21	1 day	2	
402	402		Inlet Works, PST, BR, M	1.8.1	Section 1 - Latest Completion Date	0 days	Sat 24/7/21	Sat 24/7/21	Sat 24/7/21	Sat 24/7/21	Sat 24/7/21	Sat 24/7/21	0 days	25S+600 edays,413,420	
403	403		Inlet Works, PST, BR, M	1.8.2	Key Date KD1A, document submissions Part 1	0 days	Fri 6/11/20	Fri 6/11/20	Fri 6/11/20	Fri 6/11/20	Fri 6/11/20	Fri 6/11/20	1 day	25S+340 edays,406,407,	
404	404		Inlet Works, PST, BR, M	1.8.3	Key Date KD1B, document submissions Part 2	0 days	Fri 4/6/21	Fri 4/6/21	Fri 4/6/21	Fri 4/6/21	Fri 4/6/21	Fri 4/6/21	0 days	25S+550 edays,410,411,	531
405	405		Inlet Works, PST, BR, MFS,LA,FV, DOU,	1.8.4	Document Submissions for design work from formation level up to +8.0 mPD	70 days	Fri 28/8/20	Thu 5/11/20	Fri 28/8/20	Thu 5/11/20	Sat 29/8/20	Fri 6/11/20	1 day	25,31,43,49,55,121,127,	104,164,170,176
406	406		Inlet Works, PST, BR, M	1.8.4.1	Drawing submissions for acceptance	70 days	Fri 28/8/20	Thu 5/11/20	Fri 28/8/20	Thu 5/11/20	Sat 29/8/20	Fri 6/11/20	0 days	67,73,79,85,91,97,103,1	403
407	407		Inlet Works, PST, BR, M	1.8.4.2	Plant and Material submissions for acceptance	70 days	Fri 28/8/20	Thu 5/11/20	Fri 28/8/20	Thu 5/11/20	Sat 29/8/20	Fri 6/11/20	0 days	67,73,79,85,91,97,103,1	403
408	408		Inlet Works, PST, BR, M	1.8.4.3	Design Calculations for acceptance	70 days	Fri 28/8/20	Thu 5/11/20	Fri 28/8/20	Thu 5/11/20	Sat 29/8/20	Fri 6/11/20	0 days	67,73,79,85,91,97,103,1	403,531
409	409		Inlet Works, PST, BR, M	1.8.5	Document Submissions for design work above level +8.0 mPD	280 days	Thu 27/8/20	Thu 3/6/21	Thu 27/8/20	Thu 3/6/21	Fri 28/8/20	Fri 4/6/21	0 days	331,25,31,43,49,55,121,	68,74,80,86,92,
410	410		Inlet Works, PST, BR, M	1.8.5.1	Drawing submissions for acceptance	280 edays	Thu 27/8/20	Thu 3/6/21	Thu 27/8/20	Thu 3/6/21	Fri 28/8/20	Fri 4/6/21	0.63 edays	67,73,79,85,91,97,103,1	404
411	411		Inlet Works, PST, BR, M	1.8.5.2	Plant and Material submissions for acceptance	280 edays	Thu 27/8/20	Thu 3/6/21	Thu 27/8/20	Thu 3/6/21	Fri 28/8/20	Fri 4/6/21	0.63 edays	67,73,79,85,91,97,103,1	404



ID	ID	Ta Mo	Text1	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Late Start	Late Finish	Free Slack	Predecessors	Successors
412	412		Inlet Works, PST, BR, M	1.8.5.3	Design Calculations for acceptance	280 edays	Thu 27/8/20	Thu 3/6/21	Thu 27/8/20	Thu 3/6/21	Fri 28/8/20	Fri 4/6/21	0.63 edays	67,73,79,85,91,97,103,1	404
413	413		**Inlet Works, PST, BR, M**	**1.8.6**	**Document Submissions for remaining work**	**465 days**	**Thu 26/3/20**	**Sat 3/7/21**	**Thu 26/3/20**	**Sat 3/7/21**	**Wed 1/4/20**	**Sun 18/7/21**	**0 days**		**402,420**
414	414		PST No. 4 & No. 6	1.8.6.1	Design submissions for retrofitting the existing PST No. 4 and No. 6	150 days	Tue 14/4/20	Thu 10/9/20	Tue 14/4/20	Thu 10/9/20	Fri 8/5/20	Sun 4/10/20	0 days	301	302
415	415		existing genset	1.8.6.2	Design submissions for E&M installation works of existing power house	30 days	Thu 26/3/20	Fri 24/4/20	Thu 26/3/20	Fri 24/4/20	Wed 1/4/20	Thu 30/4/20	0 days	396,400	716
416	416		Filter Press	1.8.6.3	Design submissions for E&M installation works of existing sludge thickening building	45 days	Mon 29/6/20	Wed 12/8/20	Mon 29/6/20	Wed 12/8/20	Mon 29/6/20	Wed 12/8/20	0 days	295	296
417	417		Filter Plates	1.8.6.4	Design submission for replacement of filer plates	45 edays	Tue 28/7/20	Fri 11/9/20	Tue 28/7/20	Fri 11/9/20	Fri 28/8/20	Mon 12/10/20	0.63 edays	289	290
418	418		Temp Filtrate	1.8.6.5	Design submission for E&M installation works for temp. filtrate eq. system	45 days	Thu 14/5/20	Sat 27/6/20	Thu 14/5/20	Sat 27/6/20	Fri 4/6/21	Sun 18/7/21	386 days	307	
419	419		DOU	1.8.6.6	DG Stores Submissions to FSD for approval	120 days	Sat 6/3/21	Sat 3/7/21	Sat 6/3/21	Sat 3/7/21	Sun 21/3/21	Sun 18/7/21	15 days	409FS-90 days	
420	420		Risk Allowance	1.8.7	Risk Allowance for completion of Section 1	5 days	Sun 4/7/21	Thu 8/7/21	Sun 4/7/21	Thu 8/7/21	Mon 19/7/21	Fri 23/7/21	15 days	413,405,409	402
421	421			1.9	**Section 2 - Completion of all works for Inlet Works, PST No. 1~4, BR No. 2A & 2B, MFB No. 2, temporary chemical dosing system, deodorisation systems, chemical system no. 1 and no. 2, FS and sprinkler pump room, ...etc as defined in WI_GP 10.1(b)**	**1600 days**	**Mon 2/12/19**	**Fri 19/4/24**	**Mon 2/12/19**	**Fri 19/4/24**	**Mon 20/12/21**	**Sat 20/4/24**	**1 day**	**2**	
422	422		Inlet Works, PST, BR, M	1.9.1	Section 2 - Latest Completion Date	0 days	Fri 19/4/24	Fri 19/4/24	Fri 19/4/24	Fri 19/4/24	Fri 19/4/24	Fri 19/4/24	0 days	25S+1600 edays,535,665	
423	423		**Inlet Works, LA, BS,FSI**	**1.9.2**	**Access Date for Portion B-2, Inlet Works No. 1**	**150 edays**	**Tue 28/6/22**	**Fri 25/11/22**	**Tue 28/6/22**	**Fri 25/11/22**	**Tue 28/6/22**	**Fri 25/11/22**	**0 edays**	**25S+939 edays**	
424	424		Inlet Works, LA, BS,FSI	1.9.3	Tentative Civil Handover Date, Portion B-2, Inlet Works No. 1	1 day	Thu 4/8/22	Thu 4/8/22	Thu 4/8/22	Thu 4/8/22	Wed 25/1/23	Wed 25/1/23	0 days		426,425,455FS+
425	425		Inlet Works	1.9.4	Commencement of E&M Installation at Inlet Works No. 1	420 days	Fri 5/8/22	Thu 28/9/23	Fri 5/8/22	Thu 28/9/23	Fri 26/5/23	Sat 20/4/24	195 days	385,424	669
426	426		**Inlet Works, LA**	**1.9.4.1**	**Installation of Lifting Appliances at Inlet Works No. 1**	**135 days**	**Fri 5/8/22**	**Sat 17/12/22**	**Fri 5/8/22**	**Sat 17/12/22**	**Wed 14/6/23**	**Thu 26/10/23**	**0 days**	**333,424**	**434SS+30 days,**
427	427		LA	1.9.4.1.1	1/F EOT Crane LA-01-01 SWL 5t	45 days	Mon 19/9/22	Wed 2/11/22	Mon 19/9/22	Wed 2/11/22	Tue 12/9/23	Thu 26/10/23	358 days	430,431	
428	428		LA	1.9.4.1.2	1/F EOT Crane LA-01-02 SWL 5t	45 days	Mon 19/9/22	Wed 2/11/22	Mon 19/9/22	Wed 2/11/22	Tue 12/9/23	Thu 26/10/23	358 days	430,431	
429	429		LA	1.9.4.1.3	1/F EOT Crane LA-01-03 SWL 5t	45 days	Mon 19/9/22	Wed 2/11/22	Mon 19/9/22	Wed 2/11/22	Sat 29/7/23	Mon 11/9/23	0 days	430,431	432,433
430	430		LA	1.9.4.1.4	UG EOT Crane LA-01-04 SWL 10t	45 days	Fri 5/8/22	Sun 18/9/22	Fri 5/8/22	Sun 18/9/22	Wed 14/6/23	Fri 28/7/23	0 days		427,428,429
431	431		LA	1.9.4.1.5	UG EOT Crane LA-01-05 SWL 10t	45 days	Fri 5/8/22	Sun 18/9/22	Fri 5/8/22	Sun 18/9/22	Wed 14/6/23	Fri 28/7/23	0 days		427,428,429
432	432		LA	1.9.4.1.6	1/F Retractable Crane LA-01-06 SWL 10t	45 days	Thu 3/11/22	Sat 17/12/22	Thu 3/11/22	Sat 17/12/22	Tue 12/9/23	Thu 26/10/23	313 days	429	
433	433		LA	1.9.4.1.7	1/F Mobile A-frame LA-01-07 SWL 2t	45 days	Thu 3/11/22	Sat 17/12/22	Thu 3/11/22	Sat 17/12/22	Tue 12/9/23	Thu 26/10/23	313 days	429	
434	434		**Inlet Works, Mech**	**1.9.4.2**	**Mechanical Installations for Inlet Works No. 1**	**161 days**	**Sun 4/9/22**	**Sat 11/2/23**	**Sun 4/9/22**	**Sat 11/2/23**	**Sat 15/7/23**	**Thu 21/12/23**	**0 days**	**426SS+30 days**	**444SS+14 days,**
435	435		Inlet Works, Mech	1.9.4.2.1	Installation of stoplogs and penstocks	90 days	Sun 4/9/22	Fri 2/12/22	Sun 4/9/22	Fri 2/12/22	Sat 15/7/23	Thu 12/10/23	0 days	27,33	442
436	436		Inlet Works, Mech	1.9.4.2.2	Installation of mechanical raked bar screens	60 days	Sun 4/9/22	Wed 2/11/22	Sun 4/9/22	Wed 2/11/22	Mon 23/10/23	Thu 21/12/23	414 days	69	
437	437		Inlet Works, Mech	1.9.4.2.3	Installation of screening conveyors	30 days	Sun 18/12/22	Mon 16/1/23	Sun 18/12/22	Mon 16/1/23	Wed 1/11/23	Thu 30/11/23	0 days	426,70	441
438	438		Inlet Works, Mech	1.9.4.2.4	Installation of inlet pumps	21 days	Sun 18/12/22	Sat 7/1/23	Sun 18/12/22	Sat 7/1/23	Fri 27/10/23	Thu 16/11/23	0 days	426,442SS+14 days,76	439
439	439		Inlet Works, Mech	1.9.4.2.5	Installation of grit removal system	14 days	Sun 8/1/23	Sat 21/1/23	Sun 8/1/23	Sat 21/1/23	Fri 17/11/23	Thu 30/11/23	0 days	438,82	440
440	440		Inlet Works, Mech	1.9.4.2.6	Installation of grit classifiers	21 days	Sun 22/1/23	Sat 11/2/23	Sun 22/1/23	Sat 11/2/23	Fri 1/12/23	Thu 21/12/23	313 days	439,88	
441	441		Inlet Works, Mech	1.9.4.2.7	Installation of compactors	21 days	Tue 17/1/23	Mon 6/2/23	Tue 17/1/23	Mon 6/2/23	Fri 1/12/23	Thu 21/12/23	318 days	437,94	
442	442		Inlet Works, Mech	1.9.4.2.8	Installation of pipework and valves	30 days	Sat 3/12/22	Sun 1/1/23	Sat 3/12/22	Sun 1/1/23	Fri 13/10/23	Sat 11/11/23	0 days	435	438SS+14 days,4
443	443		Inlet Works, Mech	1.9.4.2.9	Installation of instrumentations	30 days	Mon 2/1/23	Tue 31/1/23	Mon 2/1/23	Tue 31/1/23	Wed 22/11/23	Thu 21/12/23	324 days	442	
444	444		**Inlet Works, Elec**	**1.9.4.3**	**Electrical Installations for Inlet Works No. 1**	**180 days**	**Sun 18/9/22**	**Thu 16/3/23**	**Sun 18/9/22**	**Thu 16/3/23**	**Sun 25/6/23**	**Fri 22/12/23**	**0 days**	**434SS+14 days**	**453**
445	445		Inlet Works, Elec	1.9.4.3.1	Installation of LV Switchboards	45 days	Sun 18/9/22	Tue 1/11/22	Sun 18/9/22	Tue 1/11/22	Tue 7/11/23	Thu 21/12/23	135 days		449
446	446		Inlet Works, Elec, SCAD	1.9.4.3.2	Installation of PLC Panels	45 days	Sun 18/9/22	Tue 1/11/22	Sun 18/9/22	Tue 1/11/22	Tue 7/11/23	Thu 21/12/23	135 days		449,451
447	447		Inlet Works, Elec	1.9.4.3.3	Installation of cable trays and cable containments	90 days	Sun 18/9/22	Fri 16/12/22	Sun 18/9/22	Fri 16/12/22	Sun 25/6/23	Fri 22/9/23	0 days	434SS	448
448	448		Inlet Works, Elec, SCAD	1.9.4.3.4	Cables laying and terminations	90 days	Sat 17/12/22	Thu 16/3/23	Sat 17/12/22	Thu 16/3/23	Sat 23/9/23	Thu 21/12/23	0 days	447,349	449,451
449	449		Inlet Works, Elec	1.9.4.3.5	Energisation of LV Switchboards	0 days	Thu 16/3/23	Thu 16/3/23	Thu 16/3/23	Thu 16/3/23	Fri 22/12/23	Fri 22/12/23	0 days	448,445,446	453
450	450		**Inlet Works, SCADA**	**1.9.4.4**	**SCADA Systems, Inlet Works**	**105 days**	**Fri 17/3/23**	**Thu 29/6/23**	**Fri 17/3/23**	**Thu 29/6/23**	**Sun 31/12/23**	**Sat 13/4/24**	**289 days**		
451	451		Inlet Works, SCADA	1.9.4.4.1	Configuration of PLC System	45 days	Fri 17/3/23	Sun 30/4/23	Fri 17/3/23	Sun 30/4/23	Sun 31/12/23	Tue 13/2/24	0 days	448,446	452
452	452		Inlet Works, SCADA	1.9.4.4.2	Site Acceptance Test for PLC System at Inlet Works No. 1	60 days	Mon 1/5/23	Thu 29/6/23	Mon 1/5/23	Thu 29/6/23	Wed 14/2/24	Sat 13/4/24	289 days	451	
453	453		Inlet Works, SCADA	1.9.4.5	Site Acceptance Test for E&M Equip at Inlet Works No. 1	60 days	Fri 17/3/23	Mon 15/5/23	Fri 17/3/23	Mon 15/5/23	Fri 22/12/23	Mon 19/2/24	0 days	434,444,449	454
454	454		Inlet Works, SCADA	1.9.4.6	System Commissioning for E&M Equip at Inlet Works No. 1	60 edays	Mon 15/5/23	Fri 14/7/23	Mon 15/5/23	Fri 14/7/23	Tue 20/2/24	Sat 20/4/24	274.63 edays	453	746
455	455		**BS, Inlet Works**	**1.9.4.7**	**Building Services Installations for Inlet Works No. 1**	**300 days**	**Sat 3/12/22**	**Thu 28/9/23**	**Sat 3/12/22**	**Thu 28/9/23**	**Fri 26/5/23**	**Sat 13/4/24**	**174 days**	**424FS+120 days**	
456	456		BS, Inlet Works, MVAC	1.9.4.7.1	Mechanical Ventilation System	150 days	Sat 3/12/22	Mon 1/5/23	Sat 3/12/22	Mon 1/5/23	Wed 19/7/23	Fri 15/12/23	30 days		461
457	457		BS, Inlet Works	1.9.4.7.2	Lighting and Power Distribution System	180 days	Sat 3/12/22	Wed 31/5/23	Sat 3/12/22	Wed 31/5/23	Mon 19/6/23	Fri 15/12/23	0 days		461
458	458		BS, Inlet Works, P&D	1.9.4.7.3	Plumbing and Drainage Installation	120 days	Sat 3/12/22	Sat 1/4/23	Sat 3/12/22	Sat 1/4/23	Fri 18/8/23	Fri 15/12/23	60 days	666	667,461
459	459		BS, Inlet Works, CCTV	1.9.4.7.4	CCTV Installation (5 Cameras)	90 days	Sat 3/12/22	Thu 2/3/23	Sat 3/12/22	Thu 2/3/23	Sun 17/9/23	Fri 15/12/23	90 days	424SS+60 days	745,461
460	460		BS, Inlet Works, FSI	1.9.4.7.5	Fire Services Installation	120 days	Sat 3/12/22	Sat 1/4/23	Sat 3/12/22	Sat 1/4/23	Fri 26/5/23	Fri 22/9/23	60 days		650,662,663,46
461	461		BS, Inlet Works	1.9.4.7.6	Testing and Commissioning of Building Services Installations	120 days	Thu 1/6/23	Thu 28/9/23	Thu 1/6/23	Thu 28/9/23	Sat 16/12/23	Sat 13/4/24	198 days	456,457,458,459,460	
462	462		PST, LA, BS	1.9.5	**Access Date for Portion B-3, PST No. 1~4**	**90 edays**	**Sat 14/1/23**	**Fri 14/4/23**	**Sat 14/1/23**	**Fri 14/4/23**	**Sat 14/1/23**	**Fri 14/4/23**	**0 edays**	**25S+1139 edays**	
463	463		PST, LA, BS	1.9.6	Tentative Civil Handover Date, Portion B-3, PST No. 1~4	1 day	Mon 20/2/23	Mon 20/2/23	Mon 20/2/23	Mon 20/2/23	Fri 24/2/23	Fri 24/2/23	0 days		465,493FS+90 d
464	464		**PST No. 1~4**	**1.9.7**	**Commencement of E&M Installation at PST No. 1~4**	**330 days**	**Tue 21/2/23**	**Tue 16/1/24**	**Tue 21/2/23**	**Tue 16/1/24**	**Fri 26/5/23**	**Fri 19/4/24**	**85 days**	**463**	**669**
465	465		**LA, PST**	**1.9.7.1**	**Installation of Lifting Appliances at PST No. 1~4**	**120 days**	**Tue 21/2/23**	**Tue 20/6/23**	**Tue 21/2/23**	**Tue 20/6/23**	**Sat 16/12/23**	**Sat 13/4/24**	**298 days**	**333,463**	
466	466		LA, PST	1.9.7.1.1	Basement EOT Crane LA-02-01 SWL 10t	30 days	Tue 21/2/23	Wed 22/3/23	Tue 21/2/23	Wed 22/3/23	Sat 16/12/23	Sun 14/1/24	0 days		467,468
467	467		LA, PST	1.9.7.1.2	Coping Level EOT Crane LA-02-02 SWL 5t	30 days	Thu 23/3/23	Fri 21/4/23	Thu 23/3/23	Fri 21/4/23	Fri 15/3/24	Sat 13/4/24	358 days	466	
468	468		LA, PST	1.9.7.1.3	Coping Level EOT Crane LA-02-03 SWL 5t	30 days	Thu 23/3/23	Fri 21/4/23	Thu 23/3/23	Fri 21/4/23	Mon 15/1/24	Tue 13/2/24	0 days	466	469,470
469	469		LA, PST	1.9.7.1.4	Coping Level EOT Crane LA-02-04 SWL 5t	30 days	Sat 22/4/23	Sun 21/5/23	Sat 22/4/23	Sun 21/5/23	Fri 15/3/24	Sat 13/4/24	328 days	468	
470	470		LA, PST	1.9.7.1.5	Coping Level EOT Crane LA-02-05 SWL 5t	30 days	Sat 22/4/23	Sun 21/5/23	Sat 22/4/23	Sun 21/5/23	Wed 14/2/24	Thu 14/3/24	0 days	468	471
471	471		LA, PST	1.9.7.1.6	Coping Level EOT Crane LA-02-06 SWL 2t	30 days	Mon 22/5/23	Tue 20/6/23	Mon 22/5/23	Tue 20/6/23	Fri 15/3/24	Sat 13/4/24	298 days	470	
472	472		**PST, Mech**	**1.9.7.2**	**Mechanical Installations at PST No. 1~4**	**180 days**	**Tue 21/2/23**	**Sat 19/8/23**	**Tue 21/2/23**	**Sat 19/8/23**	**Tue 25/7/23**	**Sat 20/1/24**	**30 days**		**491**
473	473		PST, Mech	1.9.7.2.1	Installation of stoplogs and penstocks	45 days	Tue 21/2/23	Thu 6/4/23	Tue 21/2/23	Thu 6/4/23	Wed 9/8/23	Fri 22/9/23	0 days	22	479
474	474		PST, Mech	1.9.7.2.2	Installation of pipework and valves	180 days	Tue 21/2/23	Sat 19/8/23	Tue 21/2/23	Sat 19/8/23	Tue 25/7/23	Sat 20/1/24	154 days	34	
475	475		PST, Mech	1.9.7.2.3	Installation of lamella plate settlers	100 days	Thu 23/3/23	Fri 30/6/23	Thu 23/3/23	Fri 30/6/23	Wed 13/9/23	Thu 21/12/23	0 days	476,100	477,478
476	476		PST, Mech	1.9.7.2.4	Installation of reciprocating type bottom scrapers	30 days	Tue 21/2/23	Wed 22/3/23	Tue 21/2/23	Wed 22/3/23	Mon 14/8/23	Tue 12/9/23	0 days	106	475
477	477		PST, Mech	1.9.7.2.5	Installation of surface scum skimmers	30 days	Sat 1/7/23	Sun 30/7/23	Sat 1/7/23	Sun 30/7/23	Fri 22/12/23	Sat 20/1/24	174 days	475,112	



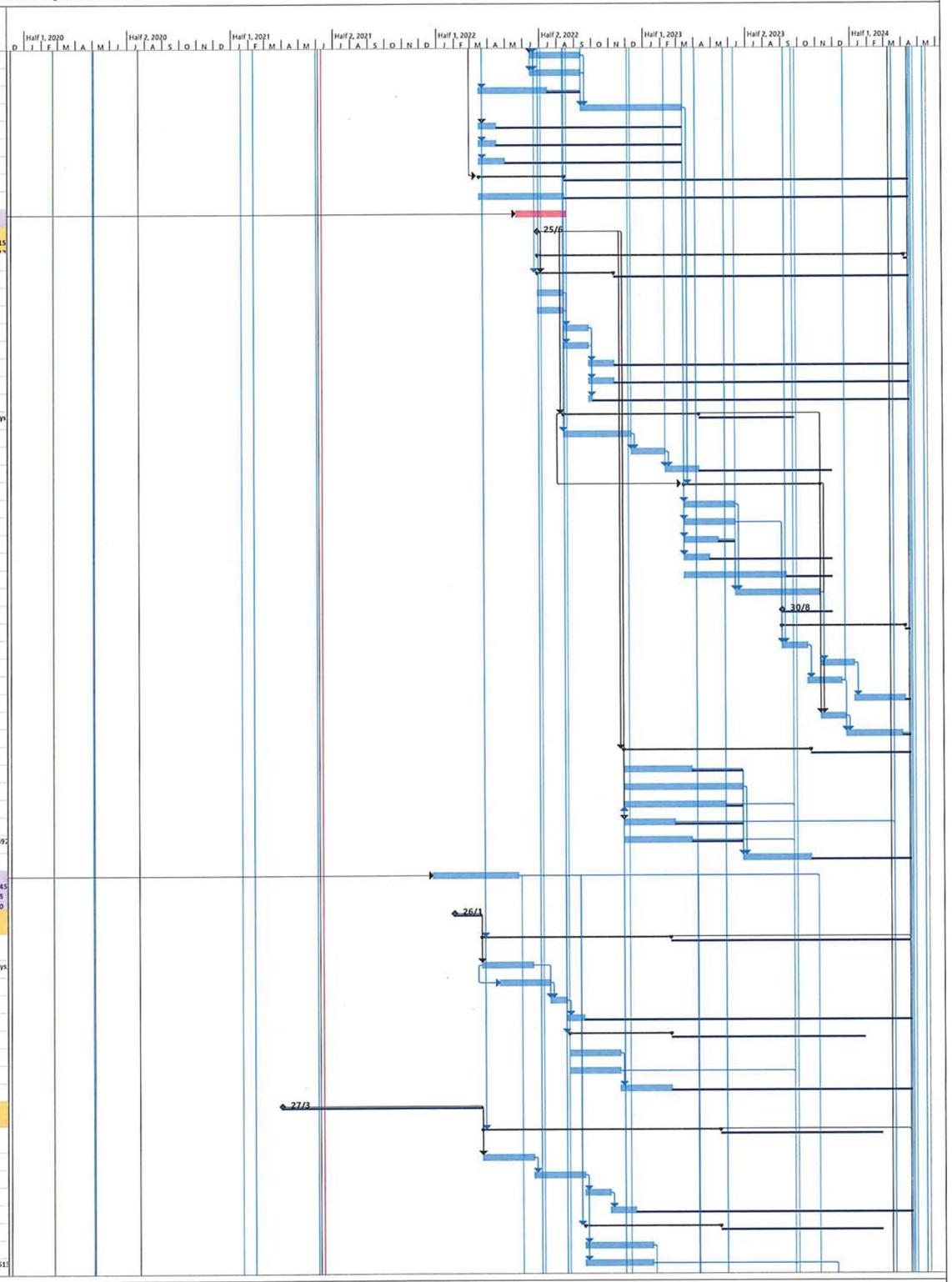
ID	ID	Ta Mo	Text1	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Late Start	Late Finish	Free Slack	Predecessors	Successors
478	478		PST, Mech	1.9.7.2.6	Installation of scum collector pipes	30 days	Sat 1/7/23	Sun 30/7/23	Sat 1/7/23	Sun 30/7/23	Fri 22/12/23	Sat 20/1/24	174 days	475,118	
479	479		PST, Mech	1.9.7.2.7	Installation of piston type primary sludge pumps	30 days	Fri 7/4/23	Sat 6/5/23	Fri 7/4/23	Sat 6/5/23	Sat 23/9/23	Sun 22/10/23	0 days	124,473	480
480	480		PST, Mech	1.9.7.2.8	Installation of drain pumps	30 days	Sun 7/5/23	Mon 5/6/23	Sun 7/5/23	Mon 5/6/23	Mon 23/10/23	Tue 21/11/23	0 days	130,479	481
481	481		PST, Mech	1.9.7.2.9	Installation of air blowers	30 days	Tue 6/6/23	Wed 5/7/23	Tue 6/6/23	Wed 5/7/23	Wed 22/11/23	Thu 21/12/23	0 days	136,480	482
482	482		PST, Mech	1.9.7.2.10	Installation of instrumentations	30 days	Thu 6/7/23	Fri 4/8/23	Thu 6/7/23	Fri 4/8/23	Fri 22/12/23	Sat 20/1/24	169 days	28,481	
483	483		PST, Elec	1.9.7.3	**Electrical Installations for PST No. 1~4**	210 days	Tue 21/2/23	Mon 18/9/23	Tue 21/2/23	Mon 18/9/23	Sun 4/6/23	Sat 20/1/24	0 days	463	491
484	484		PST, Elec	1.9.7.3.1	Installation of LV Switchboards	60 days	Tue 21/2/23	Fri 21/4/23	Tue 21/2/23	Fri 21/4/23	Tue 4/7/23	Fri 1/9/23	30 days		486
485	485		PST, Elec	1.9.7.3.2	Installation of cable trays and cable containments	90 days	Tue 21/2/23	Sun 21/5/23	Tue 21/2/23	Sun 21/5/23	Sun 4/6/23	Fri 1/9/23	0 days		486
486	486		PST, Elec, SCADA	1.9.7.3.3	Cables laying and terminations	120 days	Mon 22/5/23	Mon 18/9/23	Mon 22/5/23	Mon 18/9/23	Sat 2/9/23	Sat 30/12/23	0 days	484,485,349	487FS-30 days,4
487	487		PST, Elec	1.9.7.3.4	Energisation of LV Switchboards	1 day	Sun 20/8/23	Sun 20/8/23	Sun 20/8/23	Sun 20/8/23	Sat 20/1/24	Sat 20/1/24	153 days	486FS-30 days	
488	488		PST, SCADA	1.9.7.4	**SCADA Systems, PST No. 1~4**	105 days	Tue 19/9/23	Mon 1/1/24	Tue 19/9/23	Mon 1/1/24	Sun 31/12/23	Sat 13/4/24	103 days		
489	489		PST,SCADA	1.9.7.4.1	Configuration of PLC System	60 days	Tue 19/9/23	Fri 17/11/23	Tue 19/9/23	Fri 17/11/23	Sun 31/12/23	Wed 28/2/24	0 days	486	490
490	490		PST, SCADA	1.9.7.4.2	Site Acceptance Test for PLC System at PST No. 1~4	45 days	Sat 18/11/23	Mon 1/1/24	Sat 18/11/23	Mon 1/1/24	Thu 29/2/24	Sat 13/4/24	103 days	489	
491	491		PST, SCADA	1.9.7.5	Site Acceptance Test for E&M Equip at PST No. 1~4	60 edays	Mon 18/9/23	Fri 17/11/23	Mon 18/9/23	Fri 17/11/23	Sun 21/1/24	Thu 21/3/24	0.63 edays	472,483	492
492	492		PST, SCADA	1.9.7.6	System Commissioning for E&M Equip at PST No, 1~4	30 days	Sat 18/11/23	Sun 17/12/23	Sat 18/11/23	Sun 17/12/23	Thu 21/3/24	Fri 19/4/24	118 days	491	746
493	493		PST	1.9.7.7	**Building Services Installations for for PST No. 1~4**	240 days	Mon 22/5/23	Tue 16/1/24	Mon 22/5/23	Tue 16/1/24	Fri 26/5/23	Sat 13/4/24	4 days	463FS+90 days	
494	494		BS, PST, MVAC	1.9.7.7.1	Mechanical Ventilation System	90 days	Mon 22/5/23	Sat 19/8/23	Mon 22/5/23	Sat 19/8/23	Sun 17/9/23	Fri 15/12/23	30 days		499
495	495		BS, PST	1.9.7.7.2	Lighting and Power Distribution System	90 days	Mon 22/5/23	Sat 19/8/23	Mon 22/5/23	Sat 19/8/23	Sun 17/9/23	Fri 15/12/23	30 days		499
496	496		BS, PST, P&D	1.9.7.7.3	Plumbing and Drainage Installation	120 days	Mon 22/5/23	Mon 18/9/23	Mon 22/5/23	Mon 18/9/23	Fri 18/8/23	Fri 15/12/23	0 days	666	667,499
497	497		BS, PST, CCTV	1.9.7.7.4	CCTV Installation (9 Cameras)	60 days	Mon 22/5/23	Thu 20/7/23	Mon 22/5/23	Thu 20/7/23	Tue 17/10/23	Fri 15/12/23	60 days	463FS+60 days	745,499
498	498		BS, PST, FSI	1.9.7.7.5	Fire Services Installation	120 days	Mon 22/5/23	Mon 18/9/23	Mon 22/5/23	Mon 18/9/23	Fri 26/5/23	Fri 22/9/23	0 days		650,662,663,49
499	499		BS, PST	1.9.7.7.6	Testing and Commissioning of Building Services Installations	120 days	Tue 19/9/23	Tue 16/1/24	Tue 19/9/23	Tue 16/1/24	Sat 16/12/23	Sat 13/4/24	88 days	494,495,496,497,498	
500	500		BR, LA, BS, PV	1.9.8	**Access Date for Portion B-4, BR 2A & 2B**	90 edays	Fri 25/11/22	Thu 23/2/23	Fri 25/11/22	Thu 23/2/23	Fri 25/11/22	Thu 23/2/23	0 edays	255+1089 edays	
501	501		BR, LA, BS, PV	1.9.9	Tentative Civil Handover Date, Portion B-4, BR2A & 2B	1 day	Sun 1/1/23	Sun 1/1/23	Sun 1/1/23	Sun 1/1/23	Tue 10/1/23	Tue 10/1/23	0 days		503,508,517,52
502	502		BR	1.9.10	Commencement of E&M Installation at Bioreactor No. 2A & 2B	1042 days	Fri 4/6/21	Wed 10/4/24	Fri 4/6/21	Wed 10/4/24	Thu 31/3/22	Fri 19/4/24	0 days		669
503	503		BR, LA	1.9.10.1	**Installation of Lifting Appliances**	60 days	Mon 2/1/23	Thu 2/3/23	Mon 2/1/23	Thu 2/3/23	Wed 14/2/24	Sat 13/4/24	408 days	333,501	
504	504		BR, LA	1.9.10.1.1	Coping Level EOT Crane LA-03-01 SWL 5t	30 days	Mon 2/1/23	Tue 31/1/23	Mon 2/1/23	Tue 31/1/23	Wed 14/2/24	Thu 14/3/24	0 days		506,507
505	505		BR, LA	1.9.10.1.2	Coping Level EOT Crane LA-03-02 SWL 5t	30 days	Mon 2/1/23	Tue 31/1/23	Mon 2/1/23	Tue 31/1/23	Wed 14/2/24	Thu 14/3/24	0 days		506,507
506	506		BR, LA	1.9.10.1.3	Coping Level EOT Crane LA-03-03 SWL 5t	30 days	Wed 1/2/23	Thu 2/3/23	Wed 1/2/23	Thu 2/3/23	Fri 15/3/24	Sat 13/4/24	408 days	504,505	
507	507		BR, LA	1.9.10.1.4	Coping Level Mobile A-frame LA-03-04 SWL 4t	7 days	Wed 1/2/23	Tue 7/2/23	Wed 1/2/23	Tue 7/2/23	Sun 7/4/24	Sat 13/4/24	431 days	504,505	
508	508		BR, Mech	1.9.10.2	**Mechanical Installations for E&M Equip at BR 2A & 2B**	180 days	Mon 2/1/23	Fri 30/6/23	Mon 2/1/23	Fri 30/6/23	Mon 27/3/23	Fri 22/9/23	60 days	501	521
509	509		BR, Mech	1.9.10.2.1	Installation of pipework and valves	150 days	Mon 2/1/23	Wed 31/5/23	Mon 2/1/23	Wed 31/5/23	Mon 27/3/23	Wed 23/8/23	0 days	45,39	516
510	510		BR, Mech	1.9.10.2.2	Installation of pre-treatment fine screens	21 days	Mon 2/1/23	Sun 22/1/23	Mon 2/1/23	Sun 22/1/23	Thu 3/8/23	Wed 23/8/23	0 days	165	512
511	511		BR, Mech	1.9.10.2.3	Installation of air diffusion system	90 days	Mon 2/1/23	Sat 1/4/23	Mon 2/1/23	Sat 1/4/23	Fri 26/5/23	Wed 23/8/23	0 days	171	515
512	512		BR, Mech	1.9.10.2.4	Installation of submersible mixers	30 days	Mon 23/1/23	Tue 21/2/23	Mon 23/1/23	Tue 21/2/23	Thu 24/8/23	Fri 22/9/23	213 days	510,177	
513	513		BR, Mech	1.9.10.2.5	Installation of mixed liquor return pumps	30 days	Mon 2/1/23	Tue 31/1/23	Mon 2/1/23	Tue 31/1/23	Tue 25/7/23	Wed 23/8/23	0 days	183	514
514	514		BR, Mech	1.9.10.2.6	Installation of scum removal systems	30 days	Wed 1/2/23	Thu 2/3/23	Wed 1/2/23	Thu 2/3/23	Thu 24/8/23	Fri 22/9/23	204 days	513,189	
515	515		BR, Mech	1.9.10.2.7	Installation of aeration blowers	30 days	Sun 2/4/23	Mon 1/5/23	Sun 2/4/23	Mon 1/5/23	Thu 24/8/23	Fri 22/9/23	144 days	511,195	
516	516		BR, Mech	1.9.10.2.8	Installation of instrumentations	30 days	Thu 1/6/23	Fri 30/6/23	Thu 1/6/23	Fri 30/6/23	Thu 24/8/23	Fri 22/9/23	84 days	509,201	
517	517		BR, Elec	1.9.10.3	**Electrical Installations for E&M Equip at BR 2A & 2B**	240 days	Mon 2/1/23	Tue 29/8/23	Mon 2/1/23	Tue 29/8/23	Wed 11/1/23	Fri 22/9/23	0 days	501	521
518	518		BR, Elec	1.9.10.3.1	Installation of cable trays and cable containments	120 days	Mon 2/1/23	Mon 1/5/23	Mon 2/1/23	Mon 1/5/23	Wed 11/1/23	Wed 10/5/23	0 days	501	519
519	519		BR, Elec, SCADA	1.9.10.3.2	Cables laying and terminations	120 days	Tue 2/5/23	Tue 29/8/23	Tue 2/5/23	Tue 29/8/23	Thu 11/5/23	Thu 7/9/23	0 days	518,349	580
520	520		BR, Elec	1.9.10.3.3	Energisation of LV Switchboards	1 day	Sat 1/7/23	Sat 1/7/23	Sat 1/7/23	Sat 1/7/23	Fri 22/9/23	Fri 22/9/23	83 days		
521	521		BR, SCADA	1.9.10.4	Site Acceptance Test for E&M Equip at BR 2A & 2B	90 edays	Tue 29/8/23	Mon 27/11/23	Tue 29/8/23	Mon 27/11/23	Sat 23/9/23	Fri 22/12/23	15.63 edays	508,517	522
522	522		BR,SCADA	1.9.10.5	System Commissioning for E&M Equip at BR 2A & 2B	120 days	Wed 13/12/23	Wed 10/4/24	Wed 13/12/23	Wed 10/4/24	Fri 22/12/23	Fri 19/4/24	3 days	521,582	746
523	523		BR	1.9.10.6	**Building Services Installations for BR 2A & 2B**	300 days	Sun 2/4/23	Fri 26/1/24	Sun 2/4/23	Fri 26/1/24	Fri 26/5/23	Sat 13/4/24	54 days	501FS+90 edays	
524	524		BS, BR, MVAC	1.9.10.6.1	Mechanical Ventilation System	90 days	Sun 2/4/23	Fri 30/6/23	Sun 2/4/23	Fri 30/6/23	Sun 17/9/23	Fri 15/12/23	90 days		529
525	525		BS, BR	1.9.10.6.2	Lighting and Power Distribution System	180 days	Sun 2/4/23	Thu 28/9/23	Sun 2/4/23	Thu 28/9/23	Mon 19/6/23	Fri 15/12/23	0 days		529
526	526		BS, BR, P&D	1.9.10.6.3	Plumbing and Drainage Installation	120 days	Sun 2/4/23	Sun 30/7/23	Sun 2/4/23	Sun 30/7/23	Fri 18/8/23	Fri 15/12/23	50 days	666	667,529
527	527		BS, BR, CCTV	1.9.10.6.4	CCTV Installation (7 Cameras)	60 days	Tue 2/5/23	Fri 30/6/23	Tue 2/5/23	Fri 30/6/23	Tue 17/10/23	Fri 15/12/23	90 days	501FS+120 days	745,529
528	528		BS, BR, FSI	1.9.10.6.5	Fire Services Installation	120 days	Sun 2/4/23	Sun 30/7/23	Sun 2/4/23	Sun 30/7/23	Fri 26/5/23	Fri 22/9/23	50 days		650,662,663,52
529	529		BS, BR	1.9.10.6.6	Testing and Commissioning of Building Services Installations	120 days	Fri 29/9/23	Fri 26/1/24	Fri 29/9/23	Fri 26/1/24	Sat 16/12/23	Sat 13/4/24	78 days	524,525,526,527,528	
530	530		BR, PV	1.9.10.7	**PV System**	907 days	Fri 4/6/21	Mon 27/11/23	Fri 4/6/21	Mon 27/11/23	Thu 31/3/22	Thu 18/4/24	143 days		
531	531		BR, PV	1.9.10.7.1	Submission of Application to CLP	90 days	Fri 4/6/21	Wed 1/9/21	Fri 4/6/21	Wed 1/9/21	Thu 31/3/22	Tue 28/6/22	0 days	404,408,314	532
532	532		BR, PV	1.9.10.7.2	CLP's approval	120 days	Thu 2/9/21	Thu 30/12/21	Thu 2/9/21	Thu 30/12/21	Wed 29/6/22	Wed 26/10/22	0 days	531	533
533	533		BR, PV	1.9.10.7.3	Material ordering and delivery to site	210 days	Fri 31/12/21	Thu 28/7/22	Fri 31/12/21	Thu 28/7/22	Thu 27/10/22	Wed 24/5/23	157 days	532	534
534	534		BR, PV	1.9.10.7.4	Site Installation	180 days	Mon 2/1/23	Fri 30/6/23	Mon 2/1/23	Fri 30/6/23	Thu 25/5/23	Mon 20/11/23	0 days	533,501	535
535	535		BR, PV	1.9.10.7.5	CLP's meter installation and Final on-grid test with CLP	150 days	Sat 1/7/23	Mon 27/11/23	Sat 1/7/23	Mon 27/11/23	Tue 21/11/23	Thu 18/4/24	143 days	534	422
536	536		MFS, LA, BS	1.9.11	**Access Date for Portion B-5A, MFB No. 2 below 1st floor level**	90 edays	Mon 20/12/21	Sun 20/3/22	Mon 20/12/21	Sun 20/3/22	Mon 20/12/21	Sun 20/3/22	0 edays	255+749 edays	
537	537		MFS, LA, BS	1.9.12	Tentative Civil Handover Date, Portion B-5A, MFB No. 2 below 1st floor level	1 day	Wed 26/1/22	Wed 26/1/22	Wed 26/1/22	Wed 26/1/22	Tue 8/2/22	Tue 8/2/22	0 days		539,544FS+45 edays
538	538		MFS	1.9.13	**Commencement of E&M Installation at MFB No. 2 Lower Part**	408 days	Thu 27/1/22	Fri 10/3/23	Thu 27/1/22	Fri 10/3/23	Sat 26/3/22	Sat 13/4/24	58 days		669
539	539		MFS, LA	1.9.13.1	**Installation of Lifting Appliances**	59 days	Thu 27/1/22	Sat 26/3/22	Thu 27/1/22	Sat 26/3/22	Thu 15/2/24	Sat 13/4/24	749 days	333,537	
540	540		MFS, LA	1.9.13.1.1	B2 EOT Crane LA-04-01 SWL 5t	45 days	Thu 27/1/22	Sat 12/3/22	Thu 27/1/22	Sat 12/3/22	Thu 15/2/24	Sat 30/3/24	0 days		542,543
541	541		MFS, LA	1.9.13.1.2	B2 EOT Crane LA-04-02 SWL 5t	30 days	Thu 27/1/22	Fri 25/2/22	Thu 27/1/22	Fri 25/2/22	Fri 1/3/24	Sat 30/3/24	15 days		542,543
542	542		MFS, LA	1.9.13.1.3	B2 MR LA-04-03 SWL 5t	14 days	Sun 13/3/22	Sat 26/3/22	Sun 13/3/22	Sat 26/3/22	Sun 31/3/24	Sat 13/4/24	749 days	540,541	
543	543		MFS, LA	1.9.13.1.4	B1 MR LA-04-04 SWL 3t	14 days	Sun 13/3/22	Sat 26/3/22	Sun 13/3/22	Sat 26/3/22	Sun 31/3/24	Sat 13/4/24	749 days	540,541	
544	544		MFS, Mech	1.9.13.2	**Mechanical Installations for E&M Equip. at MFB No. 2 Lower Part**	360 days	Wed 16/3/22	Fri 10/3/23	Wed 16/3/22	Fri 10/3/23	Sat 26/3/22	Mon 20/3/23	0 days	537FS+45 edays	554SS
545	545		MFS, Mech	1.9.13.2.1	Installation of hollow fibre membrane modules	90 days	Wed 16/3/22	Mon 13/6/22	Wed 16/3/22	Mon 13/6/22	Sun 11/12/22	Fri 10/3/23	270 days	207	
546	546		MFS, Mech	1.9.13.2.2	Installation of air scour blowers	90 days	Wed 16/3/22	Mon 13/6/22	Wed 16/3/22	Mon 13/6/22	Sat 26/3/22	Thu 23/6/22	0 days	213	550,547,548



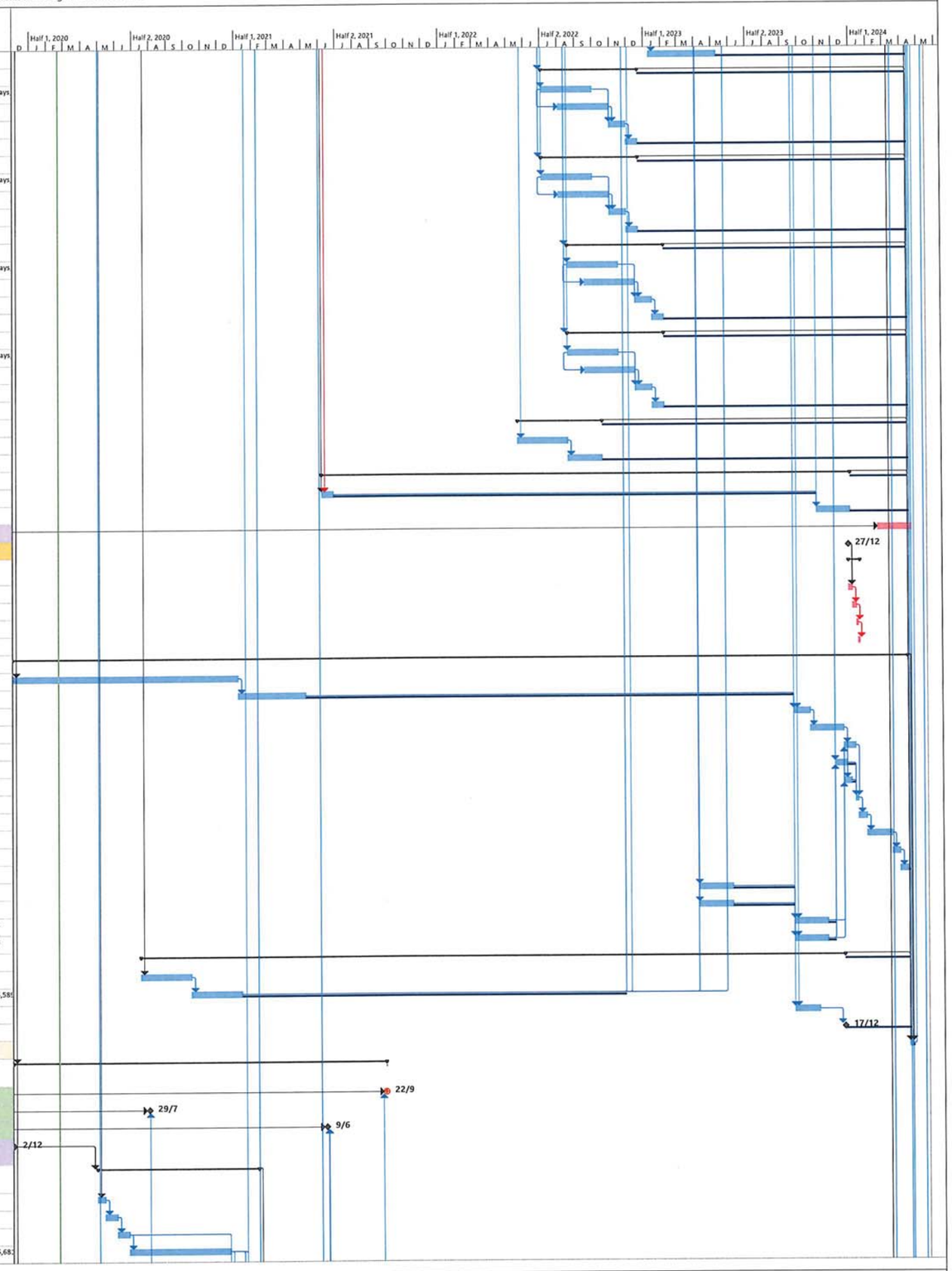
Bestwise
Project: DE/2018/04
Date: Fri 21/2/20

Task | Milestone | Milestone | Summary | Project Summary | Manual Summary | Critical | Progress | Manual Progress | Slack

ID	ID	Ta Mo	Text1	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Late Start	Late Finish	Free Slack	Predecessors	Successors
547	547		MFS, Mech	1.9.13.2.3	Installation of permeate pumps	90 days	Tue 14/6/22	Sun 11/9/22	Tue 14/6/22	Sun 11/9/22	Fri 24/6/22	Wed 21/9/22	0 days	214,546	550
548	548		MFS, Mech	1.9.13.2.4	Installation of return activated sludge pumps	90 days	Tue 14/6/22	Sun 11/9/22	Tue 14/6/22	Sun 11/9/22	Fri 24/6/22	Wed 21/9/22	0 days	249,546	550
549	549		MFS, Mech	1.9.13.2.5	Installation of membrane tank drain pumps	120 days	Wed 16/3/22	Wed 13/7/22	Wed 16/3/22	Wed 13/7/22	Wed 25/5/22	Wed 21/9/22	60 days	255	550
550	550		MFS, Mech	1.9.13.2.6	Installation of pipework and valves	180 days	Mon 12/9/22	Fri 10/3/23	Mon 12/9/22	Fri 10/3/23	Thu 22/9/22	Mon 20/3/23	0 days	34,546,547,548,549	571
551	551		MFS, Mech	1.9.13.2.7	Installation of chemical storage tank	30 days	Wed 16/3/22	Thu 14/4/22	Wed 16/3/22	Thu 14/4/22	Thu 9/2/23	Fri 10/3/23	330 days	232	
552	552		MFS, Mech	1.9.13.2.8	Installation of chemical dosing pumps	30 days	Wed 16/3/22	Thu 14/4/22	Wed 16/3/22	Thu 14/4/22	Thu 9/2/23	Fri 10/3/23	330 days	243	
553	553		MFS, Mech	1.9.13.2.9	Installation of plant service water system	45 days	Wed 16/3/22	Fri 29/4/22	Wed 16/3/22	Fri 29/4/22	Wed 25/1/23	Fri 10/3/23	315 days	261,267	
554	554		**MFS, Elec**	**1.9.13.3**	**Electrical Installations for E&M Equip. at MFB No. 2 Lower Part**	**150 days**	**Wed 16/3/22**	**Fri 12/8/22**	**Wed 16/3/22**	**Fri 12/8/22**	**Thu 16/11/23**	**Sat 13/4/24**	**610 days**	**544SS**	
555	555		MFS, Elec	1.9.13.3.1	Installation of cable trays and cable containments	150 days	Wed 16/3/22	Fri 12/8/22	Wed 16/3/22	Fri 12/8/22	Thu 16/11/23	Sat 13/4/24	610 days		
556	556		**MFS, LA, BS**	**1.9.14**	**Access Date for Portion B-5B, MFB No. 2 remaining portion**	**90 edays**	**Thu 19/5/22**	**Wed 17/8/22**	**Thu 19/5/22**	**Wed 17/8/22**	**Thu 19/5/22**	**Wed 17/8/22**	**0 edays**	**25S+899 edays**	
557	557		MFS, LA, BS	1.9.15	Tentative Civil Handover Date, Portion B-5B, MFB No. 2 remaining portion	1 day	Sat 25/6/22	Sat 25/6/22	Sat 25/6/22	Sat 25/6/22	Tue 20/12/22	Tue 20/12/22	0 days		559,567FS+45 edays,586FS+15
558	558		**MFS**	**1.9.16**	**Commencement of E&M Installation at MFB No. 2 Upper Part**	**648 days**	**Sun 26/6/22**	**Wed 3/4/24**	**Sun 26/6/22**	**Wed 3/4/24**	**Tue 21/3/23**	**Fri 19/4/24**	**7 days**		669
559	559		**MFS, LA**	**1.9.16.1**	**Installation of Lifting Appliances**	**135 days**	**Sun 26/6/22**	**Mon 7/11/22**	**Sun 26/6/22**	**Mon 7/11/22**	**Fri 1/12/23**	**Sat 13/4/24**	**523 days**	**333,557**	
560	560		MFS, LA	1.9.16.1.1	GF EOT Crane LA-04-05 SWL 5t	45 days	Sun 26/6/22	Tue 9/8/22	Sun 26/6/22	Tue 9/8/22	Fri 1/12/23	Sun 14/1/24	0 days		562,563
561	561		MFS, LA	1.9.16.1.2	GF Gantry Crane LA-04-06 SWL 6t	45 days	Sun 26/6/22	Tue 9/8/22	Sun 26/6/22	Tue 9/8/22	Fri 1/12/23	Sun 14/1/24	0 days		562,563
562	562		MFS, LA	1.9.16.1.3	1F EOT Crane LA-04-07 SWL 15t	45 days	Wed 10/8/22	Fri 23/9/22	Wed 10/8/22	Fri 23/9/22	Mon 15/1/24	Wed 28/2/24	0 days	560,561	564,565,566
563	563		MFS, LA	1.9.16.1.4	1F EOT Crane LA-04-08 SWL 15t	45 days	Wed 10/8/22	Fri 23/9/22	Wed 10/8/22	Fri 23/9/22	Mon 15/1/24	Wed 28/2/24	0 days	560,561	564,565,566
564	564		MFS, LA	1.9.16.1.5	RF EOT Crane LA-04-09 SWL 2t	45 days	Sat 24/9/22	Mon 7/11/22	Sat 24/9/22	Mon 7/11/22	Thu 29/2/24	Sat 13/4/24	523 days	562,563	
565	565		MFS, LA	1.9.16.1.6	RF Retractable MR LA-04-10 SWL 2t	45 days	Sat 24/9/22	Mon 7/11/22	Sat 24/9/22	Mon 7/11/22	Thu 29/2/24	Sat 13/4/24	523 days	562,563	
566	566		MFS, LA	1.9.16.1.7	Mobile A-frame LA-04-11 SWL 2t	7 days	Sat 24/9/22	Fri 30/9/22	Sat 24/9/22	Fri 30/9/22	Sun 7/4/24	Sat 13/4/24	561 days	562,563	
567	567		**MFS, Mech**	**1.9.16.2**	**Mechanical Installations for E&M Equip. at MFB No. 2 Upper Part**	**240 days**	**Wed 10/8/22**	**Thu 6/4/23**	**Wed 10/8/22**	**Thu 6/4/23**	**Sat 1/4/23**	**Sun 26/11/23**	**168 days**	**557FS+45 edays**	**571SS+45 edays**
568	568		MFS, Mech	1.9.16.2.1	Installation of air scour blowers	120 days	Wed 10/8/22	Wed 7/12/22	Wed 10/8/22	Wed 7/12/22	Sat 1/4/23	Sat 29/7/23	0 days	213	569
569	569		MFS, Mech	1.9.16.2.2	Installation of compressed air system	60 days	Thu 8/12/22	Sun 5/2/23	Thu 8/12/22	Sun 5/2/23	Sun 30/7/23	Wed 27/9/23	0 days	225,568	570
570	570		MFS, Mech	1.9.16.2.3	Installation of instrumentations	60 days	Mon 6/2/23	Thu 6/4/23	Mon 6/2/23	Thu 6/4/23	Thu 28/9/23	Sun 26/11/23	234 days	569,231	
571	571		**MFS, Elec**	**1.9.16.3**	**Electrical Installations for E&M Equip. at MFB No. 2 Upper Part**	**240 days**	**Sat 11/3/23**	**Sun 5/11/23**	**Sat 11/3/23**	**Sun 5/11/23**	**Tue 21/3/23**	**Sun 26/11/23**	**0 days**	**567SS+45 edays,550**	**584**
572	572		MFS, Elec	1.9.16.3.1	Installation of LV Switchboards	90 days	Sat 11/3/23	Thu 8/6/23	Sat 11/3/23	Thu 8/6/23	Tue 21/3/23	Sun 18/6/23	0 days	57	577
573	573		MFS, Elec, SCADA	1.9.16.3.2	Installation of PLC Panels	90 days	Sat 11/3/23	Thu 8/6/23	Sat 11/3/23	Thu 8/6/23	Tue 21/3/23	Sun 18/6/23	0 days	57	577,580
574	574		MFS, Elec	1.9.16.3.3	Installation of HV Switchboards	60 days	Sat 11/3/23	Tue 9/5/23	Sat 11/3/23	Tue 9/5/23	Thu 20/4/23	Sun 18/6/23	30 days	46,51	577
575	575		MFS, Elec	1.9.16.3.4	Installation of transformer	45 days	Sat 11/3/23	Mon 24/4/23	Sat 11/3/23	Mon 24/4/23	Fri 13/10/23	Sun 26/11/23	216 days	63	
576	576		MFS, Elec	1.9.16.3.5	Installation of cable trays and cable containments	180 days	Sat 11/3/23	Wed 6/9/23	Sat 11/3/23	Wed 6/9/23	Wed 31/5/23	Sun 26/11/23	81 days		
577	577		MFS, Elec, SCADA	1.9.16.3.6	Cables laying and terminations	150 days	Fri 9/6/23	Sun 5/11/23	Fri 9/6/23	Sun 5/11/23	Mon 19/6/23	Wed 15/11/23	0 days	349,572,574,573	581
578	578		MFS, Elec	1.9.16.3.7	Energisation of LV Switchboards	1 day	Wed 30/8/23	Wed 30/8/23	Wed 30/8/23	Wed 30/8/23	Sun 26/11/23	Sun 26/11/23	88 days		
579	579		**MFS, SCADA**	**1.9.16.4**	**SCADA Systems, BR No. 1 & No 2, MFB No. 2**	**218 days**	**Wed 30/8/23**	**Wed 3/4/24**	**Wed 30/8/23**	**Wed 3/4/24**	**Fri 8/9/23**	**Sat 13/4/24**	**9 days**		
580	580		MFS, SCADA	1.9.16.4.1	Configuration of PLC System for BR No. 1 & No. 2	45 days	Wed 30/8/23	Fri 13/10/23	Wed 30/8/23	Fri 13/10/23	Fri 8/9/23	Sun 22/10/23	0 days	519,573	582
581	581		MFS, SCADA	1.9.16.4.2	Configuration of PLC System for MFS	60 days	Mon 6/11/23	Thu 4/1/24	Mon 6/11/23	Thu 4/1/24	Thu 16/11/23	Sun 14/1/24	0 days	577	583
582	582		MFS, SCADA	1.9.16.4.3	Site Acceptance Test for PLC System at BR No. 1 and No. 2	60 days	Sat 14/10/23	Tue 12/12/23	Sat 14/10/23	Tue 12/12/23	Mon 23/10/23	Thu 21/12/23	0 days	580	522,585
583	583		MFS, SCADA	1.9.16.4.4	Site Acceptance Test for PLC System at MFS	90 days	Fri 5/1/24	Wed 3/4/24	Fri 5/1/24	Wed 3/4/24	Mon 15/1/24	Sat 13/4/24	10 days	581	
584	584		MFS,SCADA	1.9.16.5	Site Acceptance Test for E&M Equip at MFB No. 2	45 edays	Sun 5/11/23	Wed 20/12/23	Sun 5/11/23	Wed 20/12/23	Mon 27/11/23	Thu 11/1/24	0.63 edays	567,571	585
585	585		MFS,SCADA	1.9.16.6	System Commissioning for E&M Equip at MFB No. 2	100 days	Thu 21/12/23	Fri 29/3/24	Thu 21/12/23	Fri 29/3/24	Thu 11/1/24	Fri 19/4/24	15 days	584,582	746
586	586		**MFS**	**1.9.16.7**	**Building Services Installations for MFB No. 2**	**330 days**	**Wed 23/11/22**	**Wed 18/10/23**	**Wed 23/11/22**	**Wed 18/10/23**	**Sat 20/5/23**	**Sat 13/4/24**	**178 days**	**557FS+150 edays**	
587	587		BS, MFS, MVAC	1.9.16.7.1	Mechanical Ventilation System	120 days	Wed 23/11/22	Wed 22/3/23	Wed 23/11/22	Wed 22/3/23	Fri 18/8/23	Fri 15/12/23	90 days		592
588	588		BS, MFS	1.9.16.7.2	Lighting and Power Distribution System	210 days	Wed 23/11/22	Tue 20/6/23	Wed 23/11/22	Tue 20/6/23	Sat 20/5/23	Fri 15/12/23	0 days		592
589	589		BS, MFS, P&D	1.9.16.7.3	Plumbing and Drainage Installation	180 days	Wed 23/11/22	Sun 21/5/23	Wed 23/11/22	Sun 21/5/23	Mon 19/6/23	Fri 15/12/23	30 days	666	667,592
590	590		BS, MFS, CCTV	1.9.16.7.4	CCTV Installation (10 Cameras)	90 days	Wed 23/11/22	Mon 20/2/23	Wed 23/11/22	Mon 20/2/23	Sun 17/9/23	Fri 15/12/23	120 days	557FS+120 days	745,592
591	591		BS, MFS, FSI	1.9.16.7.5	Fire Services Installation	120 days	Wed 23/11/22	Wed 22/3/23	Wed 23/11/22	Wed 22/3/23	Fri 26/5/23	Fri 22/9/23	90 days		650,662,663,592
592	592		BS, MFS	1.9.16.7.6	Testing and Commissioning of Building Services Installations	120 days	Wed 21/6/23	Wed 18/10/23	Wed 21/6/23	Wed 18/10/23	Sat 16/12/23	Sat 13/4/24	178 days	587,588,589,590,591	
593	593		Chem	1.9.17	Access Date for Portion B-7 & 7B, Chemical Dosing, Concrete Plinth for DO1, Chemical Sys 1 & 2, FS & sprinkler pump room, Genset, FS hydrant and booster pump room, flowmeter chambers	150 edays	Mon 20/12/21	Thu 19/5/22	Mon 20/12/21	Thu 19/5/22	Tue 18/10/22	Fri 17/3/23	0 edays	25S+749 edays	600FS+90 edays,615FS+45 days,620FS+45 days,625FS+90
594	594		Temp Chemical	1.9.18	Tentative Civil Handover Date, Portion B-7 & B-7B, temporary chemical dosing system, concrete plinth for deodorisation system	1 day	Wed 26/1/22	Wed 26/1/22	Wed 26/1/22	Wed 26/1/22	Mon 16/10/23	Mon 16/10/23	48 days		596
595	595		**Temp Chemical**	**1.9.19**	**Commencement of E&M Installation at Temporary Chemial Dosing System**	**334 days**	**Tue 15/3/22**	**Sun 12/2/23**	**Tue 15/3/22**	**Sun 12/2/23**	**Tue 25/7/23**	**Sun 14/4/24**	**423 days**	**147,153,159**	**669**
596	596		Temp Chemical, Mech	1.9.19.1	Mechanical Installations for E&M Equip. for Chemical Dosing Syster	90 edays	Tue 15/3/22	Mon 13/6/22	Tue 15/3/22	Mon 13/6/22	Tue 17/10/23	Mon 15/1/24	0 edays	594	597SS+30 edays
597	597		Temp Chemical, Elec	1.9.19.2	Electrical Installations for E&M Equip. for Chemical Dosing System	90 edays	Thu 14/4/22	Wed 13/7/22	Thu 14/4/22	Wed 13/7/22	Thu 16/11/23	Wed 14/2/24	0 edays	596SS+30 edays	598
598	598		Temp Chemical	1.9.19.3	Site Acceptance Test for E&M Equip for Chemical Dosing System	30 edays	Wed 13/7/22	Fri 12/8/22	Wed 13/7/22	Fri 12/8/22	Wed 14/2/24	Fri 15/3/24	0 edays	596,597	599
599	599		Temp Chemical	1.9.19.4	System Commissioning for E&M Equip for Chemical Dosing System	30 edays	Fri 12/8/22	Sun 11/9/22	Fri 12/8/22	Sun 11/9/22	Fri 15/3/24	Sun 14/4/24	580.63 edays	598	
600	600		**Temp Chemical**	**1.9.19.5**	**Building Services Installations at Chemical Dosing System areas**	**180 days**	**Wed 17/8/22**	**Sun 12/2/23**	**Wed 17/8/22**	**Sun 12/2/23**	**Tue 25/7/23**	**Sat 13/4/24**	**342 days**	**593FS+90 edays**	
601	601		Temp Chemical, BS	1.9.19.5.1	Lighting and Power Distribution System	90 days	Wed 17/8/22	Mon 14/11/22	Wed 17/8/22	Mon 14/11/22	Tue 17/10/23	Sun 14/1/24	0 days		603
602	602		Temp Chemical, FSI	1.9.19.5.2	Fire Services Installation, DG Stores	90 days	Wed 17/8/22	Mon 14/11/22	Wed 17/8/22	Mon 14/11/22	Tue 25/7/23	Sun 22/10/23	0 days		662,663,603
603	603		Temp Chemical, BS	1.9.19.5.3	Testing and Commissioning of Building Services Installations	90 days	Tue 15/11/22	Sun 12/2/23	Tue 15/11/22	Sun 12/2/23	Mon 15/1/24	Sat 13/4/24	426 days	601,602	
604	604		Chemical	1.9.20	Tentative Civil Handover Date, Portion chemical dosing system 1 and system 2	1 day	Sat 27/3/21	Sat 27/3/21	Sat 27/3/21	Sat 27/3/21	Mon 26/12/22	Mon 26/12/22	353 days		606
605	605		**Chemical**	**1.9.21**	**Commencement of E&M Installation at Chemical Dosing System 1 and System 2**	**420 days**	**Tue 15/3/22**	**Tue 9/5/23**	**Tue 15/3/22**	**Tue 9/5/23**	**Tue 27/12/22**	**Sat 13/4/24**	**286 days**	**159,153,147**	**669**
606	606		Chemical, Mech	1.9.21.1	Mechanical Installations for E&M Equip. for Chemical Dosing Syster	90 edays	Tue 15/3/22	Mon 13/6/22	Tue 15/3/22	Mon 13/6/22	Tue 27/12/22	Mon 27/3/23	0 edays	604	607
607	607		Chemical, Elec	1.9.21.2	Electrical Installations for E&M Equip. for Chemical Dosing System	90 edays	Mon 13/6/22	Sun 11/9/22	Mon 13/6/22	Sun 11/9/22	Mon 27/3/23	Sun 25/6/23	0.63 edays	606	608,611,612
608	608		Chemical, Elec	1.9.21.3	Site Acceptance Test for E&M Equip for Chemical Dosing System	45 days	Mon 12/9/22	Wed 26/10/22	Mon 12/9/22	Wed 26/10/22	Mon 15/1/24	Wed 28/2/24	0 days	607	609
609	609		Chemical, Elec	1.9.21.4	System Commissioning for E&M Equip for Chemical Dosing System	45 days	Thu 27/10/22	Sat 10/12/22	Thu 27/10/22	Sat 10/12/22	Thu 29/2/24	Sat 13/4/24	490 days	608	
610	610		**Chemical**	**1.9.21.5**	**Building Services Installations at Chemical Dosing System areas**	**240 days**	**Mon 12/9/22**	**Tue 9/5/23**	**Mon 12/9/22**	**Tue 9/5/23**	**Sun 25/6/23**	**Sat 13/4/24**	**286 days**	**593FS+100 days**	
611	611		Chemical, BS	1.9.21.5.1	Lighting and Power Distribution System	120 days	Mon 12/9/22	Mon 9/1/23	Mon 12/9/22	Mon 9/1/23	Fri 18/8/23	Fri 15/12/23	0 days	607	613
612	612		Chemical, FSI	1.9.21.5.2	Fire Services Installation, DG Stores	120 days	Mon 12/9/22	Mon 9/1/23	Mon 12/9/22	Mon 9/1/23	Sun 25/6/23	Sun 22/10/23	0 days	607	662,663,653,613



ID	ID	Ta Mo	Text1	WBS	Task Name	Duration	Start	Finish	Early Start	Early Finish	Late Start	Late Finish	Free Slack	Predecessors	Successors
613	613		Chemical, BS	1.9.21.5.3	Testing and Commissioning of Building Services Installations	120 days	Tue 10/1/23	Tue 9/5/23	Tue 10/1/23	Tue 9/5/23	Sat 16/12/23	Sat 13/4/24	340 days	611,612	
614	614		**DOU**	**1.9.22**	**Commencement of E&M Installation at DOU 1**	**171 days**	**Sat 2/7/22**	**Tue 20/12/22**	**Sat 2/7/22**	**Tue 20/12/22**	**Thu 26/10/23**	**Sun 14/4/24**	**477 days**	**273**	**669**
615	615		DOU, Mech	1.9.22.1	Mechanical Installations for DOU 1	90 edays	Sat 2/7/22	Fri 30/9/22	Sat 2/7/22	Fri 30/9/22	Thu 26/10/23	Wed 24/1/24	0 edays	593FS+45 days,285	616SS+30 edays
616	616		DOU, Elec	1.9.22.2	Electrical Installations for DOU 1	90 edays	Mon 1/8/22	Sun 30/10/22	Mon 1/8/22	Sun 30/10/22	Sat 25/11/23	Fri 23/2/24	0 edays	615SS+30 edays	617
617	617		DOU	1.9.22.3	Site Acceptance Test for DOU1	30 edays	Sun 30/10/22	Tue 29/11/22	Sun 30/10/22	Tue 29/11/22	Fri 23/2/24	Sun 24/3/24	0 edays	615,616	618
618	618		DOU	1.9.22.4	System Commissioning for DOU 1	21 edays	Tue 29/11/22	Tue 20/12/22	Tue 29/11/22	Tue 20/12/22	Sun 24/3/24	Sun 14/4/24	480.63 edays	617	
619	619		**DOU**	**1.9.23**	**Commencement of E&M Installation at DOU 2A**	**171 days**	**Sat 2/7/22**	**Tue 20/12/22**	**Sat 2/7/22**	**Tue 20/12/22**	**Thu 26/10/23**	**Sun 14/4/24**	**477 days**	**279**	**669**
620	620		DOU, Mech	1.9.23.1	Mechanical Installations for DOU 2A	90 edays	Sat 2/7/22	Fri 30/9/22	Sat 2/7/22	Fri 30/9/22	Thu 26/10/23	Wed 24/1/24	0 edays	593FS+45 days,285	621SS+30 edays
621	621		DOU, Elec	1.9.23.2	Electrical Installations for DOU 2A	90 edays	Mon 1/8/22	Sun 30/10/22	Mon 1/8/22	Sun 30/10/22	Sat 25/11/23	Fri 23/2/24	0 edays	620SS+30 edays	622
622	622		DOU	1.9.23.3	Site Acceptance Test for E&M Equip for DOU 2A	30 edays	Sun 30/10/22	Tue 29/11/22	Sun 30/10/22	Tue 29/11/22	Fri 23/2/24	Sun 24/3/24	0 edays	620,621	623
623	623		DOU	1.9.23.4	System Commissioning Test for DOU 2A	21 edays	Tue 29/11/22	Tue 20/12/22	Tue 29/11/22	Tue 20/12/22	Sun 24/3/24	Sun 14/4/24	480.63 edays	622	
624	624		**DOU**	**1.9.24**	**Commencement of E&M Installation at DOU 3A**	**171 days**	**Tue 16/8/22**	**Fri 3/2/23**	**Tue 16/8/22**	**Fri 3/2/23**	**Thu 26/10/23**	**Sun 14/4/24**	**432 days**	**279**	**669**
625	625		DOU, Mech	1.9.24.1	Mechanical Installations for DOU 3A	90 edays	Tue 16/8/22	Mon 14/11/22	Tue 16/8/22	Mon 14/11/22	Thu 26/10/23	Wed 24/1/24	0 edays	593FS+90 days,285	626SS+30 edays
626	626		DOU, Elec	1.9.24.2	Electrical Installations for DOU 3A	90 edays	Thu 15/9/22	Wed 14/12/22	Thu 15/9/22	Wed 14/12/22	Sat 25/11/23	Fri 23/2/24	0 edays	625SS+30 edays	627
627	627		DOU	1.9.24.3	Site Acceptance Test for E&M Equip for DOU 3A	30 edays	Wed 14/12/22	Fri 13/1/23	Wed 14/12/22	Fri 13/1/23	Fri 23/2/24	Sun 24/3/24	0 edays	625,626	628
628	628		DOU	1.9.24.4	System Commissioning Test for DOU 3A	21 edays	Fri 13/1/23	Fri 3/2/23	Fri 13/1/23	Fri 3/2/23	Sun 24/3/24	Sun 14/4/24	435.63 edays	627	
629	629		**DOU**	**1.9.25**	**Commencement of E&M Installation at DOU 3B**	**171 days**	**Tue 16/8/22**	**Fri 3/2/23**	**Tue 16/8/22**	**Fri 3/2/23**	**Thu 26/10/23**	**Sun 14/4/24**	**432 days**	**279**	**669**
630	630		DOU, Mech	1.9.25.1	Mechanical Installations for DOU 3B	90 edays	Tue 16/8/22	Mon 14/11/22	Tue 16/8/22	Mon 14/11/22	Thu 26/10/23	Wed 24/1/24	0 edays	593FS+90 days,285	631SS+30 edays
631	631		DOU, Elec	1.9.25.2	Electrical Installations for DOU 3B	90 edays	Thu 15/9/22	Wed 14/12/22	Thu 15/9/22	Wed 14/12/22	Sat 25/11/23	Fri 23/2/24	0 edays	630SS+30 edays	632
632	632		DOU	1.9.25.3	Site Acceptance Test for E&M Equip for DOU 3B	30 edays	Wed 14/12/22	Fri 13/1/23	Wed 14/12/22	Fri 13/1/23	Fri 23/2/24	Sun 24/3/24	0 edays	630,631	633
633	633		DOU	1.9.25.4	System Commissioning Test for DOU 3B	21 edays	Fri 13/1/23	Fri 3/2/23	Fri 13/1/23	Fri 3/2/23	Sun 24/3/24	Sun 14/4/24	435.63 edays	632	
634	634		**Chamber**	**1.9.26**	**Commencement of Valves and Flowmeters Installation at Chambers**	**150 days**	**Thu 19/5/22**	**Sat 15/10/22**	**Thu 19/5/22**	**Sat 15/10/22**	**Thu 16/11/23**	**Sat 13/4/24**	**543 days**		**669**
635	635		Chamber, Mech	1.9.26.1	Installation of valves and flowmeters	90 days	Thu 19/5/22	Tue 16/8/22	Thu 19/5/22	Tue 16/8/22	Thu 16/11/23	Tue 13/2/24	0 days	593	636
636	636		Chamber	1.9.26.2	cables laying and terminations	60 days	Wed 17/8/22	Sat 15/10/22	Wed 17/8/22	Sat 15/10/22	Wed 14/2/24	Sat 13/4/24	546 days	635	
637	637		**Genset**	**1.9.27**	**Commencement of E&M Installation for Genset**	**940 days**	**Fri 4/6/21**	**Sat 30/12/23**	**Fri 4/6/21**	**Sat 30/12/23**	**Wed 24/1/24**	**Sat 13/4/24**	**102 days**		**669**
638	638		Genset	1.9.27.1	Application for EPD's Approval	21 days	Fri 4/6/21	Thu 24/6/21	Fri 4/6/21	Thu 24/6/21	Wed 24/1/24	Tue 13/2/24	859 days	364,409	639
639	639		Genset	1.9.27.2	Installation of Genset	60 days	Wed 1/11/23	Sat 30/12/23	Wed 1/11/23	Sat 30/12/23	Wed 14/2/24	Sat 13/4/24	105 days	638,593	
640	640		Civil	1.9.28	Access Date for Portion B-9B, underground pipework	60 edays	Sun 18/2/24	Thu 18/4/24	Sun 18/2/24	Thu 18/4/24	Sun 18/2/24	Thu 18/4/24	0 edays	2SS+1539 edays	
641	641		Civil	1.9.29	Tentative Civil Handover Date, Portion B-9B	1 day	Wed 27/12/23	Wed 27/12/23	Wed 27/12/23	Wed 27/12/23	Wed 27/12/23	Wed 27/12/23	0 days		643
642	642		Civil	1.9.30	Commencement of underground pipework modification and connection works	20 days	Thu 28/12/23	Tue 16/1/24	Thu 28/12/23	Tue 16/1/24	Thu 28/12/23	Tue 16/1/24	0 days		
643	643		Civil	1.9.30.1	Road Excavation	7 days	Thu 28/12/23	Wed 3/1/24	Thu 28/12/23	Wed 3/1/24	Thu 28/12/23	Wed 3/1/24	0 days	641	644
644	644		Civil	1.9.30.2	Pipe Laying and connection works	7 days	Thu 4/1/24	Wed 10/1/24	Thu 4/1/24	Wed 10/1/24	Thu 4/1/24	Wed 10/1/24	0 days	643	645
645	645		Civil	1.9.30.3	Pressure Tests	3 days	Thu 11/1/24	Sat 13/1/24	Thu 11/1/24	Sat 13/1/24	Thu 11/1/24	Sat 13/1/24	0 days	644	646
646	646		Civil	1.9.30.4	Make Good	3 days	Sun 14/1/24	Tue 16/1/24	Sun 14/1/24	Tue 16/1/24	Sun 14/1/24	Tue 16/1/24	0 days	645	
647	647		**FSI**	**1.9.31**	**Commencement of Fire Services Installation**	**1591 days**	**Mon 2/12/19**	**Tue 9/4/24**	**Mon 2/12/19**	**Tue 9/4/24**	**Thu 21/4/22**	**Sat 13/4/24**	**1 day**		**669**
648	648		FSI	1.9.31.1	Design Review of Approved General Building Plan	400 days	Mon 2/12/19	Mon 4/1/21	Mon 2/12/19	Mon 4/1/21	Thu 21/4/22	Thu 25/5/23	0 days	2	649
649	649		FSI	1.9.31.2	Submission of WWO542 for WSD's approval	120 days	Tue 5/1/21	Tue 4/5/21	Tue 5/1/21	Tue 4/5/21	Fri 26/5/23	Fri 22/9/23	867 days	648	650
650	650		FSI	1.9.31.3	Submission of WWO46 for WSD's Inspection	30 days	Tue 19/9/23	Wed 18/10/23	Tue 19/9/23	Wed 18/10/23	Sat 23/9/23	Sun 22/10/23	0 days	460,498,528,591,649	651
651	651		FSI	1.9.31.4	Obtain WWO46 Part V	60 days	Thu 19/10/23	Sun 17/12/23	Thu 19/10/23	Sun 17/12/23	Mon 23/10/23	Thu 21/12/23	0 days	650	654,652
652	652		FSI	1.9.31.5	FSD Inspection and Approval for MVAC	21 days	Mon 18/12/23	Sun 7/1/24	Mon 18/12/23	Sun 7/1/24	Fri 22/12/23	Thu 11/1/24	0 days	662,663,651	655
653	653		FSI	1.9.31.6	FSD Inspection and Approval for DG Stores	21 days	Sat 2/12/23	Fri 22/12/23	Sat 2/12/23	Fri 22/12/23	Fri 22/12/23	Thu 11/1/24	16 days	662,663,612	655
654	654		FSI	1.9.31.7	Submission of (FSI/314 & FSI/501) to FSD	14 days	Mon 18/12/23	Sun 31/12/23	Mon 18/12/23	Sun 31/12/23	Fri 29/12/23	Thu 11/1/24	7 days	662,663,651	655
655	655		FSI	1.9.31.8	Pre-inspection meeting with FSD	5 days	Mon 8/1/24	Fri 12/1/24	Mon 8/1/24	Fri 12/1/24	Fri 12/1/24	Tue 16/1/24	0 days	654,652,653	656
656	656		FSI	1.9.31.9	Initial Inspection with FSD	15 days	Sat 13/1/24	Sat 27/1/24	Sat 13/1/24	Sat 27/1/24	Wed 17/1/24	Wed 31/1/24	0 days	655	657
657	657		FSI	1.9.31.10	Document Checking	45 days	Sun 28/1/24	Tue 12/3/24	Sun 28/1/24	Tue 12/3/24	Thu 1/2/24	Sat 16/3/24	0 days	656	658
658	658		FSI	1.9.31.11	Re-inspections with FSD	14 days	Wed 13/3/24	Tue 26/3/24	Wed 13/3/24	Tue 26/3/24	Sun 17/3/24	Sat 30/3/24	0 days	657	659
659	659		FSI	1.9.31.12	Issue of acceptance memo by FSD	14 days	Wed 27/3/24	Tue 9/4/24	Wed 27/3/24	Tue 9/4/24	Sun 31/3/24	Sat 13/4/24	4 days	658	
660	660		FSI	1.9.31.13	Installation of FS Pumps and Sprinkler Pumps	60 days	Mon 3/4/23	Thu 1/6/23	Mon 3/4/23	Thu 1/6/23	Thu 24/8/23	Sun 22/10/23	109 days	593	663
661	661		FSI	1.9.31.14	Installation of Fire Hydrant and Booster Pumps	60 days	Mon 3/4/23	Thu 1/6/23	Mon 3/4/23	Thu 1/6/23	Thu 24/8/23	Sun 22/10/23	109 days	593	663
662	662		FSI	1.9.31.15	SAT for Manual and automatic fire detection and alarm system	60 days	Tue 19/9/23	Fri 17/11/23	Tue 19/9/23	Fri 17/11/23	Mon 23/10/23	Thu 21/12/23	14 days	460,498,528,591,602,61	654,652,653
663	663		FSI	1.9.31.16	SAT for Fire hydrants, hose reels and street fire hydrant system	60 days	Tue 19/9/23	Fri 17/11/23	Tue 19/9/23	Fri 17/11/23	Mon 23/10/23	Thu 21/12/23	14 days	460,498,528,591,602,61	654,652,653
664	664		**P&D**	**1.9.32**	**Commencement of Plumbing and Drainage Installation**	**1252 days**	**Tue 14/7/20**	**Sun 17/12/23**	**Tue 14/7/20**	**Sun 17/12/23**	**Wed 21/12/22**	**Sat 13/4/24**	**115 days**		**669**
665	665		P&D	1.9.32.1	Submission of detail design for acceptance	90 days	Tue 14/7/20	Sun 11/10/20	Tue 14/7/20	Sun 11/10/20	Wed 21/12/22	Mon 20/3/23	0 days	369	666
666	666		P&D	1.9.32.2	Submission of WWO542 for WSD's approval	90 days	Mon 12/10/20	Sat 9/1/21	Mon 12/10/20	Sat 9/1/21	Tue 21/3/23	Sun 18/6/23	682 days	665	458,496,526,58
667	667		P&D	1.9.32.3	Submission of WWO46 for WSD's Inspection	45 days	Tue 19/9/23	Thu 2/11/23	Tue 19/9/23	Thu 2/11/23	Mon 15/1/24	Wed 28/2/24	0 days	458,496,526,589	668
668	668		P&D	1.9.32.4	Obtain WWO46 Part V	45 days	Fri 3/11/23	Sun 17/12/23	Fri 3/11/23	Sun 17/12/23	Thu 29/2/24	Sat 13/4/24	118 days	667	
669	669		Risk Allowance	1.9.33	Risk Allowance for completion of Section 2	5 days	Thu 11/4/24	Mon 15/4/24	Thu 11/4/24	Mon 15/4/24	Sun 14/4/24	Thu 18/4/24	3 days	425,464,502,538,558,59	422
670	670			1.10	Section 3 - Completion of all works for retrofitting of the existing PST...etc	659 days	Mon 2/12/19	Wed 22/9/21	Mon 2/12/19	Wed 22/9/21	Mon 2/12/19	Wed 22/9/21	1 day	2	
671	671		Filter Press, Filter Plate	1.10.1	Section 3 - Latest Completion Date	0 days	Wed 22/9/21	Wed 22/9/21	Wed 22/9/21	Wed 22/9/21	Wed 22/9/21	Wed 22/9/21	0 days	2SS+660 edays,739,740	
672	672		existing genset	1.10.2	Key Date KD3A, E&M Installation works of existing power house	0 days	Wed 29/7/20	Wed 29/7/20	Wed 29/7/20	Wed 29/7/20	Wed 29/7/20	Wed 29/7/20	1 day	2SS+240 edays,721	
673	673		PST No. 4 & No. 6	1.10.3	Key Date KD3B, E&M work for provision of the existing PSTs	0 days	Wed 9/6/21	Wed 9/6/21	Wed 9/6/21	Wed 9/6/21	Wed 9/6/21	Wed 9/6/21	1 day	2SS+555 edays,712,741	
674	674	✓	Temp Filtrate, LA	1.10.4	Access Date for Portion B-3B, Temporary Filtrate Lifting Well and Eq. Tank	0 edays	Mon 2/12/19	Mon 2/12/19	Mon 2/12/19	Mon 2/12/19	Mon 2/12/19	Mon 2/12/19	0 edays	2SS	675
675	675		**Temp Filtrate**	**1.10.5**	**Commencement of E&M Installation at Temp. Filtrate Lifting Well and Eq. Tank**	**287 days**	**Mon 27/4/20**	**Sun 7/2/21**	**Mon 27/4/20**	**Sun 7/2/21**	**Tue 28/4/20**	**Mon 8/2/21**	**1 day**	**674**	**693**
676	676		Temp Filtrate	1.10.5.1	Civil on-site survey and report submission for acceptance	14 days	Mon 27/4/20	Sun 10/5/20	Mon 27/4/20	Sun 10/5/20	Tue 28/4/20	Mon 11/5/20	0 days	395	677
677	677		Temp Filtrate	1.10.5.2	Civil structural design and drawing submission for acceptance	21 days	Mon 11/5/20	Sun 31/5/20	Mon 11/5/20	Sun 31/5/20	Tue 12/5/20	Mon 1/6/20	0 days	676	678
678	678		Temp Filtrate	1.10.5.3	Civil formation and underground work	21 days	Mon 1/6/20	Sun 21/6/20	Mon 1/6/20	Sun 21/6/20	Tue 2/6/20	Mon 22/6/20	0 days	677	684,679
679	679		Temp Filtrate	1.10.5.4	RC structure works including cast-in items	180 days	Mon 22/6/20	Fri 18/12/20	Mon 22/6/20	Fri 18/12/20	Tue 23/6/20	Sat 19/12/20	0 days	678	680,683,686,68



Bestwise
Project: DE/2018/04
Date: Fri 21/2/20

Task | Milestone | Milestone | Summary | Project Summary | Manual Summary | Critical | Progress | Manual Progress | Slack

ID	ID	Ta Mo	Text1	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Late Start	Late Finish	Free Slack	Predecessors	Successors
680	680		Temp Filtrate	1.10.5.5	**Installation of Lifting Appliances**	**7 days**	**Mon 18/1/21**	**Sun 24/1/21**	**Mon 18/1/21**	**Sun 24/1/21**	**Tue 2/2/21**	**Mon 8/2/21**	**15 days**	679	
681	681		Temp Filtrate, LA	1.10.5.5.1	GF MR LA-09-01 SWL 1t	7 days	Mon 18/1/21	Sun 24/1/21	Mon 18/1/21	Sun 24/1/21	Tue 2/2/21	Mon 8/2/21	15 days	679	
682	682		Temp Filtrate, LA	1.10.5.5.2	GF MR LA-09-02 SWL 1t	7 days	Mon 18/1/21	Sun 24/1/21	Mon 18/1/21	Sun 24/1/21	Tue 2/2/21	Mon 8/2/21	15 days	679	
683	683		Temp Filtrate, Mech	1.10.5.6	**Mechanical Installations for Temp. Filtrate Lifting Well and Eq. Ta**	**37 days**	**Sat 19/12/20**	**Sun 24/1/21**	**Sat 19/12/20**	**Sun 24/1/21**	**Sun 20/12/20**	**Mon 25/1/21**	**0 days**	679	687FS-30 days,6
684	684		Temp Filtrate, Mech	1.10.5.6.1	Installation of pipework and valves	30 days	Sat 19/12/20	Sun 17/1/21	Sat 19/12/20	Sun 17/1/21	Sun 20/12/20	Mon 18/1/21	0 days	678	685
685	685		Temp Filtrate, Mech	1.10.5.6.2	Installation of pumps	7 days	Mon 18/1/21	Sun 24/1/21	Mon 18/1/21	Sun 24/1/21	Tue 19/1/21	Mon 25/1/21	1 day	684,309	
686	686		Temp Filtrate, Mech	1.10.5.6.3	Installation of instrumentations	14 days	Sat 19/12/20	Fri 1/1/21	Sat 19/12/20	Fri 1/1/21	Tue 12/1/21	Mon 25/1/21	24 days	679	
687	687		Temp Filtrate	1.10.5.7	**Electrical Installations for Temp. Filtrate Lifting Well and Eq. Tank**	**21 days**	**Sat 26/12/20**	**Fri 15/1/21**	**Sat 26/12/20**	**Fri 15/1/21**	**Tue 29/12/20**	**Mon 18/1/21**	**0 days**	683FS-30 days	690,692FS-7 day
688	688		Temp Filtrate, Elec	1.10.5.7.1	Installation of cable trays and cable containments	21 days	Sat 26/12/20	Fri 15/1/21	Sat 26/12/20	Fri 15/1/21	Tue 29/12/20	Mon 18/1/21	3 days		
689	689		Temp Filtrate, Elec	1.10.5.7.2	Cables laying and terminations	21 days	Sat 26/12/20	Fri 15/1/21	Sat 26/12/20	Fri 15/1/21	Tue 29/12/20	Mon 18/1/21	3 days		
690	690		Temp Filtrate	1.10.5.8	Site Acceptance Test for E&M Equip at Filtrate Lifting Well and Eq. Tank	7 days	Mon 25/1/21	Sun 31/1/21	Mon 25/1/21	Sun 31/1/21	Tue 26/1/21	Mon 1/2/21	0 days	683,687	691
691	691		Temp Filtrate	1.10.5.9	System Commissioning for E&M Equip at Temp. Filtrate Lifting Well and Eq. Tank	7 days	Mon 1/2/21	Sun 7/2/21	Mon 1/2/21	Sun 7/2/21	Tue 2/2/21	Mon 8/2/21	1 day	690,692	
692	692		Temp Filtrate	1.10.5.10	Building Services installations for Filtrate Lifting Well and Eq. Tank	21 days	Sat 9/1/21	Fri 29/1/21	Sat 9/1/21	Fri 29/1/21	Tue 12/1/21	Mon 1/2/21	2 days	687FS-7 days	691
693	693		Temp Filtrate	1.10.6	Work completion for Temp. Filtrate Lifting Well and Eq. Tank	0 days	Mon 8/2/21	Mon 8/2/21	Mon 8/2/21	Mon 8/2/21	Mon 8/2/21	Mon 8/2/21	0 days	675	
694	694	✓	PST No. 4 & No. 6	1.10.7	Access Date for Portion B-3A, Existing PST No. 4 and No. 6	0 edays	Mon 2/12/19	Mon 2/12/19	Mon 2/12/19	Mon 2/12/19	Mon 2/12/19	Mon 2/12/19	0 edays	2	
695	695		PST No. 4 & No. 6	1.10.8	Tentative Commencement Date	1 day	Mon 8/2/21	Mon 8/2/21	Mon 8/2/21	Mon 8/2/21	Thu 11/2/21	Thu 11/2/21	0 days		697
696	696		PST No. 4 & No. 6	1.10.9	**Commencement of retrofitting the existing PST No. 4 and No. 6**	**117 days**	**Tue 9/2/21**	**Sat 5/6/21**	**Tue 9/2/21**	**Sat 5/6/21**	**Fri 12/2/21**	**Tue 8/6/21**	**3 days**		
697	697		PST No. 4 & No. 6	1.10.9.1	Site Clearance	10 days	Tue 9/2/21	Thu 18/2/21	Tue 9/2/21	Thu 18/2/21	Fri 12/2/21	Sun 21/2/21	0 days	303,695	699
698	698		PST No. 4 & No. 6, Mec	1.10.9.2	**Mechanical Installations of existing PSTs**	**76 days**	**Fri 19/2/21**	**Wed 5/5/21**	**Fri 19/2/21**	**Wed 5/5/21**	**Mon 22/2/21**	**Tue 11/5/21**	**3 days**		
699	699		PST No. 4 & No. 6, Mec	1.10.9.2.1	Installation of PST influent feed pipe	7 days	Fri 19/2/21	Thu 25/2/21	Fri 19/2/21	Thu 25/2/21	Mon 22/2/21	Sun 28/2/21	0 days	697	700
700	700		PST No. 4 & No. 6, Mec	1.10.9.2.2	Installation of circular baffle diffuser box	7 days	Fri 26/2/21	Thu 4/3/21	Fri 26/2/21	Thu 4/3/21	Mon 1/3/21	Sun 7/3/21	0 days	699	701
701	701		PST No. 4 & No. 6, Mec	1.10.9.2.3	Installation of scum baffle plates	7 days	Fri 5/3/21	Thu 11/3/21	Fri 5/3/21	Thu 11/3/21	Mon 8/3/21	Sun 14/3/21	0 days	700	702
702	702		PST No. 4 & No. 6, Mec	1.10.9.2.4	Installation of scum box with collection valve and pipework	7 days	Fri 12/3/21	Thu 18/3/21	Fri 12/3/21	Thu 18/3/21	Mon 15/3/21	Sun 21/3/21	0 days	701	703
703	703		PST No. 4 & No. 6, Mec	1.10.9.2.5	Installation of v-notched weir plate	10 days	Fri 19/3/21	Sun 28/3/21	Fri 19/3/21	Sun 28/3/21	Mon 22/3/21	Wed 31/3/21	0 days	702	704
704	704		PST No. 4 & No. 6, Mech	1.10.9.2.6	Installation of center bearing and slip ring assembly for rotating bridge	10 days	Mon 29/3/21	Wed 7/4/21	Mon 29/3/21	Wed 7/4/21	Thu 1/4/21	Sat 10/4/21	0 days	703	705
705	705		PST No. 4 & No. 6, Mec	1.10.9.2.7	Installation of motor and gearbox assembly for rotating bridge	7 days	Thu 8/4/21	Wed 14/4/21	Thu 8/4/21	Wed 14/4/21	Sun 11/4/21	Sat 17/4/21	0 days	704	706,709
706	706		PST No. 4 & No. 6, Mec	1.10.9.2.8	Installation of rotating bridge sludge and scum scraper assembly	7 days	Thu 15/4/21	Wed 21/4/21	Thu 15/4/21	Wed 21/4/21	Wed 21/4/21	Tue 27/4/21	0 days	705	707
707	707		PST No. 4 & No. 6, Mec	1.10.9.2.9	Installation of removable FRP covers for effluent channel	14 days	Thu 22/4/21	Wed 5/5/21	Thu 22/4/21	Wed 5/5/21	Wed 28/4/21	Tue 11/5/21	3 days	706	711
708	708		PST No. 4 & No. 6, Elec	1.10.9.3	**Electrical Installations of existing PSTs**	**24 days**	**Thu 15/4/21**	**Sat 8/5/21**	**Thu 15/4/21**	**Sat 8/5/21**	**Sun 18/4/21**	**Tue 11/5/21**	**0 days**		711
709	709		PST No. 4 & No. 6, Elec	1.10.9.3.1	Installation of local control panels	10 days	Thu 15/4/21	Sat 24/4/21	Thu 15/4/21	Sat 24/4/21	Sun 18/4/21	Tue 27/4/21	0 days	705	710
710	710		PST No. 4 & No. 6, Elec	1.10.9.3.2	cable laying and terminatons	14 days	Sun 25/4/21	Sat 8/5/21	Sun 25/4/21	Sat 8/5/21	Wed 28/4/21	Tue 11/5/21	0 days	709	711
711	711		PST No. 4 & No. 6	1.10.9.4	Site Acceptance Test for E&M Equip at existing PST No. 4 and No. 6	21 days	Sun 9/5/21	Sat 29/5/21	Sun 9/5/21	Sat 29/5/21	Wed 12/5/21	Tue 1/6/21	0 days	708,707,710	712
712	712		PST No. 4 & No. 6	1.10.9.5	System Commissioning for E&M Equip at existing PST No. 4 and No	7 days	Sun 30/5/21	Sat 5/6/21	Sun 30/5/21	Sat 5/6/21	Wed 2/6/21	Tue 8/6/21	0 days	711	673,741
713	713	✓	existing genset	1.10.10	Access Date for Portion B-7A & 7B, area for modification of existing emergency generator electrical works	0 edays	Mon 2/12/19	Mon 2/12/19	Mon 2/12/19	Mon 2/12/19	Mon 2/12/19	Mon 2/12/19	0 edays	2	
714	714		existing genset	1.10.11	Tentative Civil Handover Date, Portion B-7A & 7B area for modification of existing emergency generator electrical works	1 day	Sun 31/1/21	Sun 31/1/21	Sun 31/1/21	Sun 31/1/21	Sun 31/1/21	Sun 31/1/21	0 days		
715	715		existing genset	1.10.12	**Commencement of Modification of existing emergency generator Electrical Works**	**89 days**	**Sat 25/4/20**	**Wed 22/7/20**	**Sat 25/4/20**	**Wed 22/7/20**	**Fri 1/5/20**	**Tue 28/7/20**	**6 days**		
716	716		existing genset	1.10.12.1	Fabrication and delivery of material to site	60 days	Sat 25/4/20	Tue 23/6/20	Sat 25/4/20	Tue 23/6/20	Fri 1/5/20	Mon 29/6/20	0 days	415	717
717	717		existing genset	1.10.12.2	Modification of existing emergency generator electrical works	14 days	Wed 24/6/20	Tue 7/7/20	Wed 24/6/20	Tue 7/7/20	Tue 30/6/20	Mon 13/7/20	0 days	716	718
718	718		existing genset	1.10.12.3	Test the new switchboar for on-site mobile generator	10 days	Wed 8/7/20	Fri 17/7/20	Wed 8/7/20	Fri 17/7/20	Tue 14/7/20	Thu 23/7/20	0 days	717	719
719	719		existing genset	1.10.12.4	Dismantling and removal the existing power & control cables	2 days	Sat 18/7/20	Sun 19/7/20	Sat 18/7/20	Sun 19/7/20	Fri 24/7/20	Sat 25/7/20	0 days	718	720
720	720		existing genset	1.10.12.5	Take down existing generator to DSD	3 days	Mon 20/7/20	Wed 22/7/20	Mon 20/7/20	Wed 22/7/20	Sun 26/7/20	Tue 28/7/20	0 days	719	721
721	721		Risk Allowance	1.10.13	Risk Allowance for meeting Key Date KD3A	1 day	Thu 23/7/20	Thu 23/7/20	Thu 23/7/20	Thu 23/7/20	Wed 29/7/20	Wed 29/7/20	5 days	720	672
722	722	✓	Filter Press	1.10.14	Access Date for B-10, existing sludge thickening building	0 edays	Mon 2/12/19	Mon 2/12/19	Mon 2/12/19	Mon 2/12/19	Mon 2/12/19	Mon 2/12/19	0 edays	2	
723	723		Filter Press	1.10.15	**Commencement of E&M Installation at Existing Filter Press**	**103 days**	**Tue 25/5/21**	**Sat 4/9/21**	**Tue 25/5/21**	**Sat 4/9/21**	**Tue 25/5/21**	**Tue 21/9/21**	**0 days**		
739	739		Filter Plates	1.10.16	**Commencement of replacement of filter plates**	**90 days**	**Tue 25/5/21**	**Sun 22/8/21**	**Tue 25/5/21**	**Sun 22/8/21**	**Thu 24/6/21**	**Tue 21/9/21**	**30 days**		
740	740		Filter Plates	1.10.16.1	Replacement of filter plates	90 days	Tue 25/5/21	Sun 22/8/21	Tue 25/5/21	Sun 22/8/21	Thu 24/6/21	Tue 21/9/21	30 days	291	671
741	741		Risk Allowance	1.10.17	Risk Allowance for meeting Key Date KD3B	1 day	Sun 6/6/21	Sun 6/6/21	Sun 6/6/21	Sun 6/6/21	Wed 9/6/21	Wed 9/6/21	2 days	712	673
742	742			1.11	**Section 4 - Completion of Work for remainder of the works**	**61 days**	**Thu 14/3/24**	**Tue 14/5/24**	**Thu 14/3/24**	**Tue 14/5/24**	**Wed 20/3/24**	**Tue 14/5/24**	**0 days**	2	
743	743		Inlet Works, PST, BR, M	1.11.1	Section 4 - Latest Completion Date	0 days	Tue 14/5/24	Tue 14/5/24	Tue 14/5/24	Tue 14/5/24	Tue 14/5/24	Tue 14/5/24	0 days	2SS+1625 edays	
744	744		CCTV, SCADA	1.11.2	Latest date for connection of optical fibres	1 day	Thu 14/3/24	Thu 14/3/24	Thu 14/3/24	Thu 14/3/24	Wed 20/3/24	Wed 20/3/24	0 days		745
745	745		CCTV	1.11.3	Overall commissioning of CCTV system	30 days	Fri 15/3/24	Sat 13/4/24	Fri 15/3/24	Sat 13/4/24	Thu 21/3/24	Fri 19/4/24	0 days	459,497,527,590,744	748,747,746
746	746		SCADA	1.11.4	Overall commissioning of Facility Computerised Systems (SCADA, CMMS, PMS, IDMS)	7 days	Sun 14/4/24	Sat 20/4/24	Sun 14/4/24	Sat 20/4/24	Sat 20/4/24	Fri 26/4/24	0 days	454,492,522,585,745	748,747
747	747		Others	1.11.5	Overall Plant Commissioning and DSD pre-handover inspections	10 days	Sun 21/4/24	Tue 30/4/24	Sun 21/4/24	Tue 30/4/24	Sat 27/4/24	Mon 6/5/24	0 days	745,746	748
748	748		Risk Allowance	1.11.6	Risk Allowance for completion of Section 4	2 days	Wed 1/5/24	Thu 2/5/24	Wed 1/5/24	Thu 2/5/24	Tue 7/5/24	Wed 8/5/24	6 days	745,746,747	4