


**Drainage Services Department**

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

**Monthly EM&A Report**

**June 2020**

(Version 1)

|              |  |
|--------------|--|
| Certified By | <br>(Environmental Team Leader:<br>Mr. KS Lee) |
|--------------|--|

REMARKS:

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

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| Prepared by | Ms. Echo Hung |  | 16 July 2020 |
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Ref.: DSDSWHS1EM00\_0\_0059E.20

15 July 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 June 2020**

Reference is made to the Environmental Team's submission of Monthly EM&A Report for June 2020 (Version 1) certified by the ET Leader and provided to us via e-mail on 15 July 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.

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



Manson Yeung  
Independent Environmental Checker

c.c.

DSD  
Cinotech

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

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**EXECUTIVE SUMMARY****Introduction**

1. This is the 6<sup>th</sup> 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 June 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**

| <b>Contract No.</b> | <b>Contract Title</b>   | <b>Site Activities</b>  |
|---------------------|---|---|
| DC/2018/06          | Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sludge Treatment Facilities and 132kV Primary Substation      | <ul style="list-style-type: none"> <li>• Sheet piling installation</li> <li>• Pile loading test</li> </ul>  |
| DC/2018/07          | Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sewage Treatment Facilities                                   | <ul style="list-style-type: none"> <li>• Demolition of FST</li> <li>• Sheet piling at inlet</li> <li>• Cable identification and cable diversion at AR3</li> </ul> |
| DE/2018/03          | Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities | <ul style="list-style-type: none"> <li>• Site clearance in WA3</li> <li>• Civil work in WA1-B</li> </ul>  |
| DE/2018/04          | Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - E&M Works for Sewage Treatment Facilities                                     | <ul style="list-style-type: none"> <li>• Dismantle and removal of emergency generators in existing power house</li> </ul>   |

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

*Air Quality*

- Cement of more than 20 bags were covered by impervious materials to avoid dust generation.
- Stockpiles were covered by impervious sheets.

*Water Quality*

- Stagnant water was removed, pumped and collected in the sedimentation tank.
- The water barriers along the site area were completely bounded by sand bags to avoid stagnant water accumulation on-site.

**Summary of Exceedances, Investigation and Follow-up**

4. Exceedance of Action/Limit levels during the reporting month (June 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*

- One (1) Action Level and no Limit Level exceedance was triggered.

**Complaint Handling, Prosecution and Public Engagement**

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

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

**Reporting Changes**

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

**Future Key Issues**

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

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

| <b>Contract No.</b> | <b>Contract Title</b>   | <b>Site Activities</b>  |
|---------------------|---|---|
| DC/2018/06          | Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sludge Treatment Facilities and 132kV Primary Substation      | <ul style="list-style-type: none"> <li>• Sheet piling installation</li> <li>• Pile loading test</li> </ul>  |
| DC/2018/07          | Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sewage Treatment Facilities                                   | <ul style="list-style-type: none"> <li>• Demolition of FST</li> <li>• Sheet piling at inlet</li> <li>• Cable identification and cable diversion at AR3</li> </ul>   |
| DE/2018/03          | Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities | <ul style="list-style-type: none"> <li>• Site clearance in WA3</li> <li>• Civil work in WA1-B</li> <li>• Site office construction work in WA1-B</li> </ul>  |
| DE/2018/04          | Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - E&M Works for Sewage Treatment Facilities                                     | <ul style="list-style-type: none"> <li>• Dismantle and removal of emergency generators in existing power house</li> <li>• Construction of contractor's site office foundation and site installation of the contractor's site office accommodations (MiC)</li> <li>• Construction of temporary filtrate equalisation tank</li> <li>• Installation of temporary primary sludge thickener and its accessories</li> </ul> |

## 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<sup>2</sup>/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<sup>3</sup>/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 6<sup>th</sup> Monthly EM&A Report which summarises the impact monitoring results and audit findings for the EM&A programme during the reporting period in June 2020.

### Project Organizations

- 1.6 Different Parties with different levels of involvement in the project organization include:
  - Permit Holder – Drainage Services Department (DSD)
  - Supervisor Representative – AECOM Asia Company Limited (AECOM)
  - Environmental Team (ET) – Cinotech Consultants Limited (Cinotech)
  - Independent Environmental Checker (IEC) – 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. Manson Yeung       | 3465 2888 |
| KLCWJV   | Contractor (DC/2018/06)           | Mr. Yip Yun Lam        | 9532 7174 |
| KLCWJV   | Contractor (DC/2018/07)           | Mr. Jimmy Cheng        | 9606 5916 |
| JEC      | Contractor (DE/2018/03)           | Mr. Brendan Chan       | 2807 4264 |
| 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      | <ul style="list-style-type: none"> <li>• Sheet piling installation</li> <li>• Pile loading test</li> </ul>  |
| DC/2018/07   | Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sewage Treatment Facilities                                   | <ul style="list-style-type: none"> <li>• Demolition of FST</li> <li>• Sheet piling at inlet</li> <li>• Cable identification and cable diversion at AR3</li> </ul> |
| DE/2018/03   | Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities | <ul style="list-style-type: none"> <li>• Site clearance in WA3</li> <li>• Civil work in WA1-B</li> </ul>  |
| DE/2018/04   | Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - E&M Works for Sewage Treatment Facilities                                     | <ul style="list-style-type: none"> <li>• Dismantle and removal of emergency generators in existing power house</li> </ul>   |

## 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 June 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          |        |
| <b>Environmental Permit (EP)</b>   |                             |              |             |        |
| All  | FEP-02/474/2013             | 15 Feb 2018  | N/A         | Valid  |
| All  | EP-474/2013                 | 21 Nov 2013  | N/A         | Valid  |
| <b>Notification of Construction Works under Air Pollution Control Ordinance (APCO)</b> |                             |              |             |        |
| 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  |
| DE/2018/03   | 455843 (WA3)                | 6 May 2020   | 30 Sep 2020 | Valid  |
| DE/2018/03   | 457212 (WA1-B)              | 15 Jun 2020  | 30 Aug 2020 | Valid  |
| <b>Billing Account for Construction Waste Disposal</b>                                 |                             |              |             |        |
| 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  |
| <b>Registration of Chemical Waste Producer</b>   |                             |              |             |        |
| 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  |
| DE/2018/03   | 5213-624-T3861-01           | 14 Apr 2020  | N/A         | Valid  |
| <b>Effluent Discharge License</b>  |                             |              |             |        |
| DC/2018/06   | WT00035431-2019 (Portion C) | 20 Jan 2020  | 31 Jan 2025 | Valid  |



| Contract No.   | Permit / License No.        | Valid Period |             | Status |
|--|-----------------------------|--------------|-------------|--------|
|  |                             | From         | To          |        |
| DC/2018/06   | WT00035718-2020 (Portion A) | 2 Apr 2020   | 30 Apr 2025 | Valid  |
| DC/2018/07   | WT00035727-2020             | 1 Apr 2020   | 30 Apr 2025 | Valid  |
| <b>Construction Noise Permit (Water Pump and Concrete Work at Portion C)</b> |                             |              |             |        |
| DC/2018/06   | GW-RN0301-20                | 10 May 2020  | 9 Aug 2020  | Valid  |
| <b>Construction Noise Permit (Handtools at Portion A)</b>                    |                             |              |             |        |
| DC/2018/06   | GW-RN0380-20                | 15 Jun 2020  | 15 Aug 2020 | Valid  |
| <b>Admission Ticket for Disposal of Special Waste</b>                        |                             |              |             |        |
| DC/2018/07   | 15646                       | 27 Apr 2020  | 26 Jul 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 <sup>(1)</sup>  | Wai Loi Tsuen                                | Ground Level            |
| AM2 <sup>(1)</sup>  | Fu Tei Au                                    | Ground Level            |
| AM1a <sup>(2)</sup> | Site Boundary of the Shek Wu Hui STW (East)  | Ground Level            |
| AM2a <sup>(2)</sup> | 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            | 3        |
| 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<sup>3</sup>/min. and 1.4 m<sup>3</sup>/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  $\pm 3^\circ\text{C}$ ; the relative humidity (RH) should be  $< 50\%$  and not vary by more than  $\pm 5\%$ . 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), $\mu\text{g}/\text{m}^3$ | Reporting Month (June 2020), $\mu\text{g}/\text{m}^3$ |
|---------------------|---------|---|---|
| AM1 - Wai Loi Tsuen | N/A     | N/A <sup>(1)</sup>  | 13.0 - 117.0  |
| AM2 - Fu Tei Au     | FLN-E28 | 255   | 20.8 - 109.2  |

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), $\mu\text{g}/\text{m}^3$ | Reporting Month (June 2020), $\mu\text{g}/\text{m}^3$ |
|---|--|---|
| AM1a - Site Boundary of the Shek Wu Hui STW (East)  | N/A <sup>(1)</sup>   | 18.8 - 33.6   |
| AM2a - Site Boundary of the Shek Wu Hui STW (North) | N/A <sup>(1)</sup>   | 22.6 - 37.7   |

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 <sub>10</sub> (30 min.) dB(A) | Free Field  |
| NM2                 |                                  |            |               | L <sub>90</sub> (30 min.) dB(A) | Free Field  |
| NM3                 |                                  |            |               | L <sub>eq</sub> (30 min.) dB(A) | 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<sub>eq</sub>) and percentile sound pressure level (L<sub>x</sub>) 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)<br>(at 0700 – 1900 hrs on normal weekdays) | Noise Limit Level, dB (A)<br>(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 (June 2020), Leq (30min) dB(A) |
|-----------------------|--------|--|--|
| NM1 - Wai Loi Tsuen   | N/A    | N/A <sup>(1)</sup>   | 55.5 – 60.6                                    |
| NM2 - Fu Tei Au       | N/A    | N/A <sup>(1)</sup>   | 56.4 – 67.7                                    |
| NM3 – Man Kok Village | FN-18  | 66-75  | 53.2 – 62.9                                    |

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 |
|----------------------------|----------------------|--------------|
| <i>Egretta garzetta</i>    | Little Egret         | 小白鷺          |
| <i>Ardea cinerea</i>       | Grey Heron           | 蒼鷺           |
| <i>Ardeola bacchus</i>     | Chinese Pond Heron   | 池鷺           |
| <i>Phalacrocorax carbo</i> | Great Cormorant      | 普通鷓鴣         |
| <i>Ardea alba</i>          | Great Egret          | 大白鷺          |
| <i>Bubulcus coromandus</i> | 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 | 33                | 315       |
| Waterbirds   | 10                | 144       |

- 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 |
|----------------------------|----------------------|--------------|-----------|
| <i>Egretta garzetta</i>    | Little Egret         | 小白鷺          | 64        |
| <i>Ardea cinerea</i>       | Grey Heron           | 蒼鷺           | 1         |
| <i>Ardeola bacchus</i>     | Chinese Pond Heron   | 池鷺           | 42        |
| <i>Phalacrocorax carbo</i> | Great Cormorant      | 普通鷓鴣         | 0         |
| <i>Ardea alba</i>          | Great Egret          | 大白鷺          | 20        |
| <i>Bubulcus coromandus</i> | Eastern Cattle Egret | 牛背鷺          | 12        |

**Analysis**

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

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

| T-values of Data in Reporting Month |          |        | Confidence Level (Critical Value) |              |
|-------------------------------------|----------|--------|-----------------------------------|--------------|
|                                     |          |        | 95% (-2.353)                      | 99% (-4.541) |
| Abundance                           | Monthly  | -4.971 | ✗                                 | ✗            |
|                                     | Seasonal | -4.372 | ✗                                 | ✓            |

## Remarks

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

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

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

| Common Name of Representative Waterbird | T-value | Confidence Level (Critical Value) |              | T-value  | Confidence Level (Critical Value) |              | Overall      |
|---|---------|-----------------------------------|--------------|----------|-----------------------------------|--------------|--------------|
|   | Monthly | 95% (-2.353)                      | 99% (-4.541) | Seasonal | 95% (-2.353)                      | 99% (-4.541) |              |
| Little Egret                            | -2.258  | ✓                                 | ✓            | -2.376   | ✗                                 | ✓            | ✓            |
| Grey Heron                              | N/A*    |                                   |              |          |                                   |              |              |
| Chinese Pond Heron                      | -4.567  | ✗                                 | ✗            | -3.085   | ✗                                 | ✓            | Action Level |
| Great Cormorant                         | N/A*    |                                   |              |          |                                   |              |              |
| Great Egret                             | 1.960   | ✓                                 | ✓            | 2.010    | ✓                                 | ✓            | ✓            |
| Eastern Cattle Egret                    | -1.470  | ✓                                 | ✓            | -0.565   | ✓                                 | ✓            | ✓            |

## Remarks

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

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

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

- 4.15 The t-test concluded that the abundance for Chinese Pond Heron was significantly lower than the baseline monitoring result for June and summer at 95% confidence level. One (1) Action Level was triggered for ecological monitoring in the reporting month. No Limit Level was triggered.
- 4.16 Despite a decline in Chinese Pond Heron, the results showed that all other representative waterbirds did not significantly differ from the baseline data. As all herons shared similar niche with each other, it is unlikely that the project activity (e.g. noise) will affect a single species only. Since the decline was considered non-project-related, no remedial measures 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
- Singing
- 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) | Vibration hammering, excavation         | Remote boating      |
| T2 (PC3, PC4) | Vibration hammering, trucks, excavation | Jaywalking, fishing |
| PC5           | N/A                                     | N/A                 |
| T3 (PC6, PC7) | N/A                                     | Jaywalking, 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 2, 11, 16, 23 & 30 June 2020 in the reporting month. Joint site inspection with the representative of IEC was conducted on 23 June 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  |
|------------------------------------|-------------|---|--|
| <i>Water Quality</i>               | 26 May 2020 | Water barriers along the site area of Portion A should be completely bounded by sand bags to avoid stagnant water accumulation on-site. | The condition was observed to be improved/rectified by the contractor during the audit session on 2 Jun 2020.  |
|                                    | 2 Jun 2020  | Stagnant water accumulated on the road access and site area of Portion C 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 11 Jun 2020. |
| <i>Air Quality</i>                 | 11 Jun 2020 | Cement of more than 20 bags should be covered by impervious materials at Portion C to avoid dust generation.                            | The condition was observed to be improved/rectified by the contractor during the audit session on 16 Jun 2020. |
| <i>Noise</i>                       | N/A         | There was no observation in the reporting period.   | N/A  |
| <i>Waste / Chemical Management</i> | N/A         | There was no observation in the reporting period.   | N/A  |
| <i>Ecology and Fisheries</i>       | N/A         | There was no observation in the reporting period.   | N/A  |

| <b>Parameters</b>           | <b>Date</b> | <b>Observations and Recommendations</b>           | <b>Follow-up</b> |
|-----------------------------|-------------|---|------------------|
| <i>Visual and Landscape</i> | N/A         | There was no observation in the reporting period. | N/A              |
| <i>Permits /Licences</i>    | N/A         | There was no observation in the reporting period. | N/A              |

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

| <b>Parameters</b>                  | <b>Date</b> | <b>Observations and Recommendations</b>  | <b>Follow-up</b>   |
|------------------------------------|-------------|--|--|
| <i>Water Quality</i>               | N/A         | There was no observation in the reporting period.  | N/A  |
| <i>Air Quality</i>                 | 16 Jun 2020 | Stockpiles should be removed or 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 23 Jun 2020. |
| <i>Noise</i>                       | N/A         | There was no observation in the reporting period.  | N/A  |
| <i>Waste / Chemical Management</i> | N/A         | There was no observation in the reporting period.  | N/A  |
| <i>Ecology and Fisheries</i>       | N/A         | There was no observation in the reporting period.  | N/A  |
| <i>Visual and Landscape</i>        | N/A         | There was no observation in the reporting period.  | N/A  |
| <i>Permits /Licences</i>           | N/A         | There was no observation in the reporting period.  | N/A  |

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### **Implementation Status of Event and Action Plans**

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

*Air Quality Monitoring*

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

*Construction Noise Monitoring*

- No 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*

- One (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 No environmental complaints, warning, notifications of summons and successful prosecutions were received in the reporting month. The summary of environmental complaint, warning, summon and notification of successful prosecution for the Project is presented in **Appendix O**.

### **Summary of Exceedance**

- 9.2 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**

| <b>Contract No.</b> | <b>Contract Title</b>   | <b>Site Activities</b>  |
|---------------------|---|---|
| DC/2018/06          | Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sludge Treatment Facilities and 132kV Primary Substation      | <ul style="list-style-type: none"> <li>• Sheet piling installation</li> <li>• Pile loading test</li> </ul>  |
| DC/2018/07          | Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sewage Treatment Facilities                                   | <ul style="list-style-type: none"> <li>• Demolition of FST</li> <li>• Sheet piling at inlet</li> <li>• Cable identification and cable diversion at AR3</li> </ul>   |
| DE/2018/03          | Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities | <ul style="list-style-type: none"> <li>• Site clearance in WA3</li> <li>• Civil work in WA1-B</li> <li>• Site office construction work in WA1-B</li> </ul>  |
| DE/2018/04          | Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - E&M Works for Sewage Treatment Facilities                                     | <ul style="list-style-type: none"> <li>• Dismantle and removal of emergency generators in existing power house</li> <li>• Construction of contractor's site office foundation and site installation of the contractor's site office accommodations (MiC)</li> <li>• Construction of temporary filtrate equalisation tank</li> <li>• Installation of temporary primary sludge thickener and its accessories</li> </ul> |

### 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 6<sup>th</sup> 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 exceedance was triggered for all ecological monitoring in the reporting month.

### 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 No environmental complaints, notifications of summons and 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.
- Cement of more than 20 bags should be covered by impervious materials to avoid dust generation.

### *Water Quality*

- Ponding water should be removed and pumped through the sedimentation tank.
- The water barriers along the site area should be completely bounded by sand bags to avoid stagnant water accumulation on-site.
- Muddy water should not be discharged into the surrounding rivers.
- No slurry should be disposed of at the existing Shek Wu Hui Sewage Treatment Works.

### *Waste Management*

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



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## FIGURES

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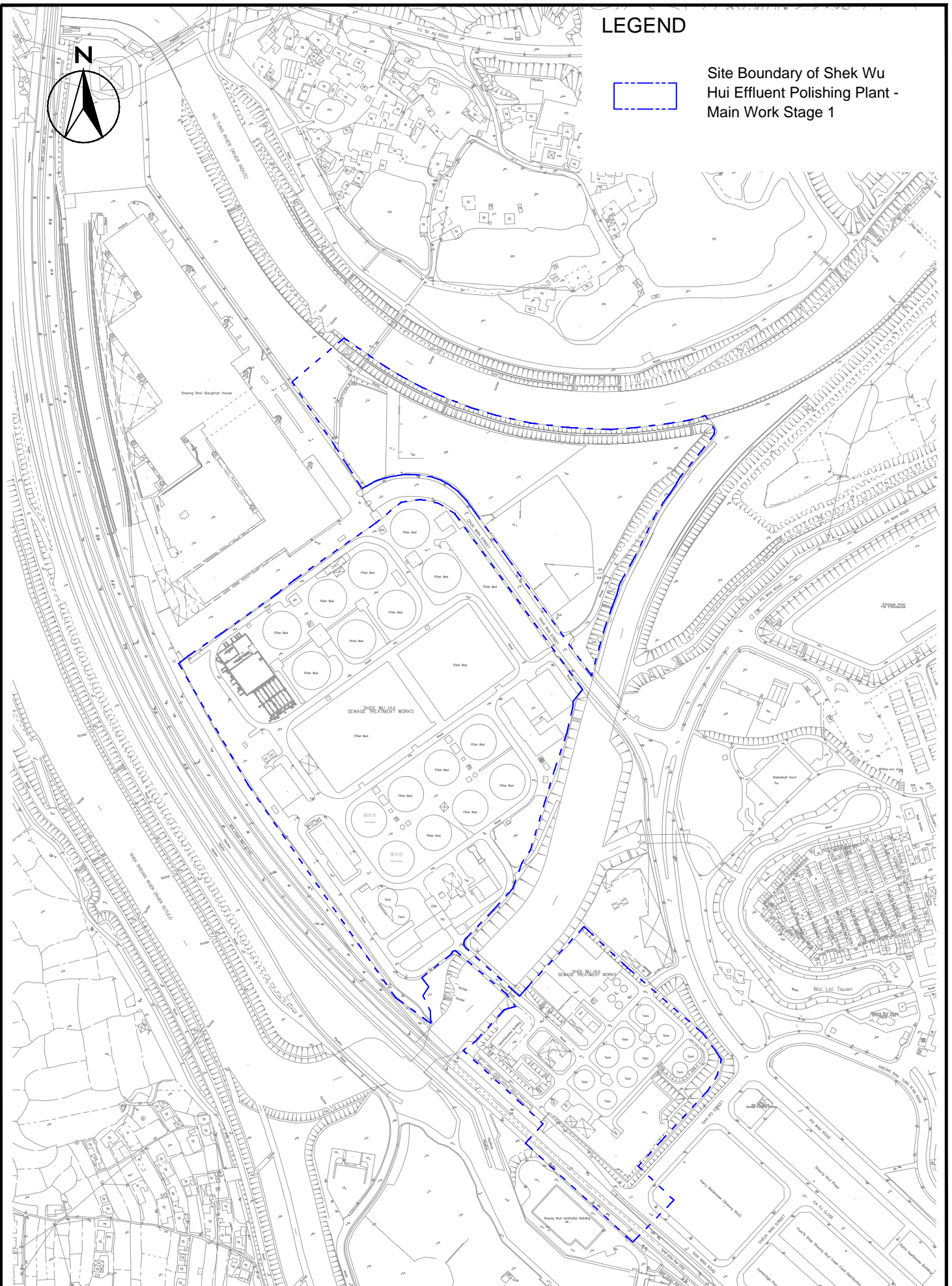
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**LEGEND**



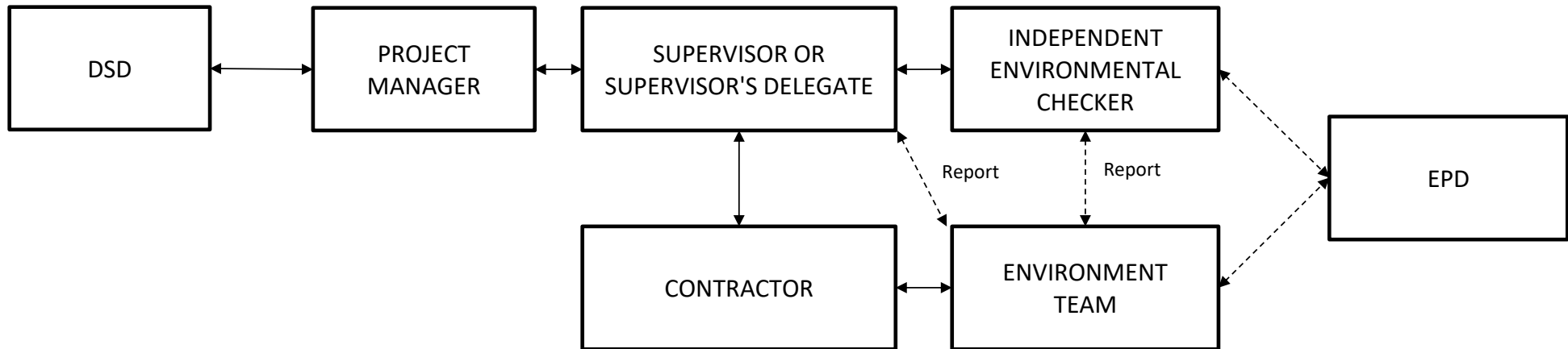
Site Boundary of Shek Wu Hui Effluent Polishing Plant - Main Work Stage 1



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

Site Layout

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



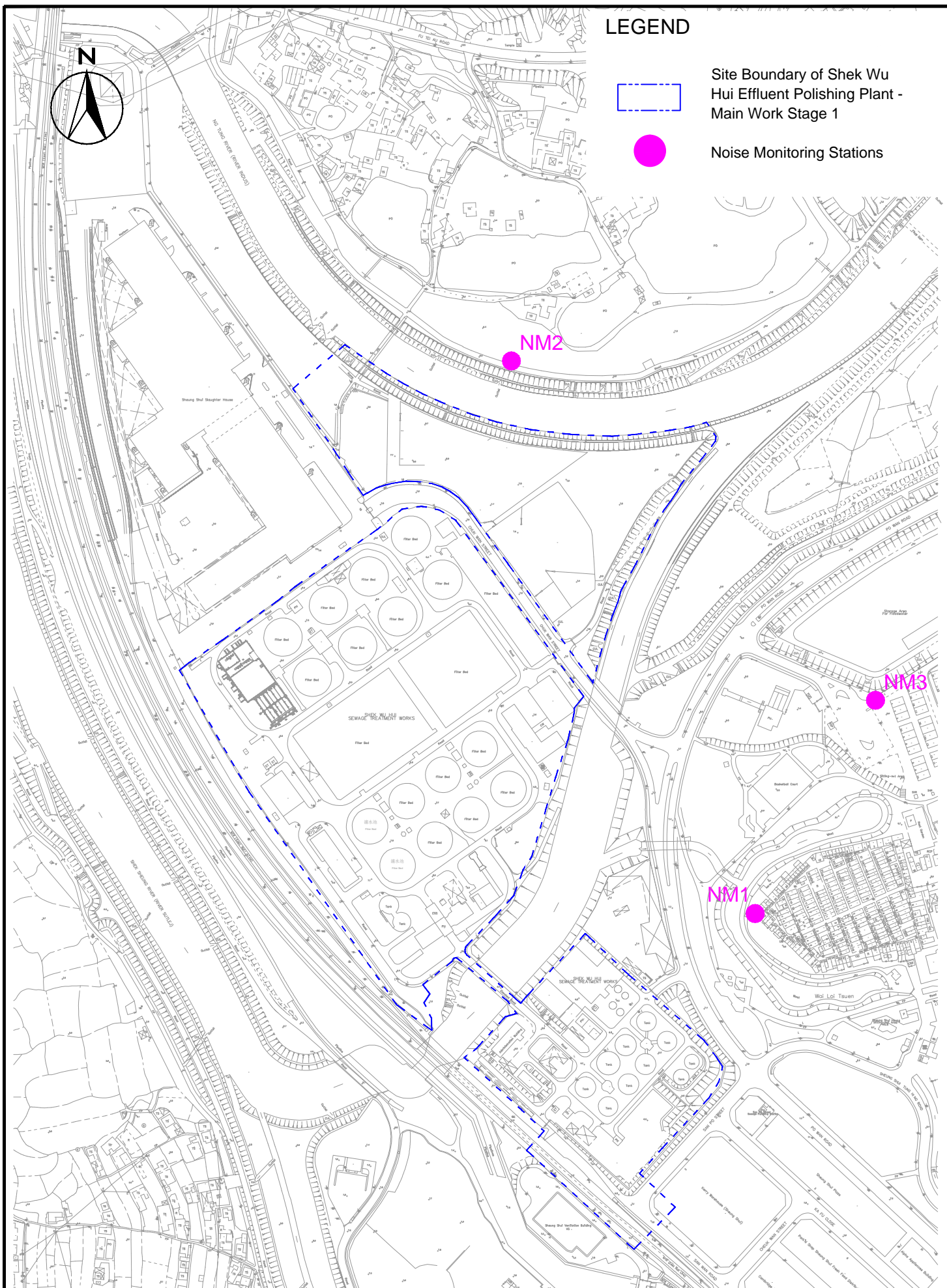
**CINOTECH**

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

|                |         |                   |          |
|----------------|---------|-------------------|----------|
| <b>SCALE</b>   | N.T.S.  | <b>DATE</b>       | Sep 2019 |
| <b>CHECK</b>   | JM      | <b>DRAWN</b>      | SY       |
| <b>JOB NO.</b> | MA19019 | <b>FIGURE NO.</b> | 1.2      |

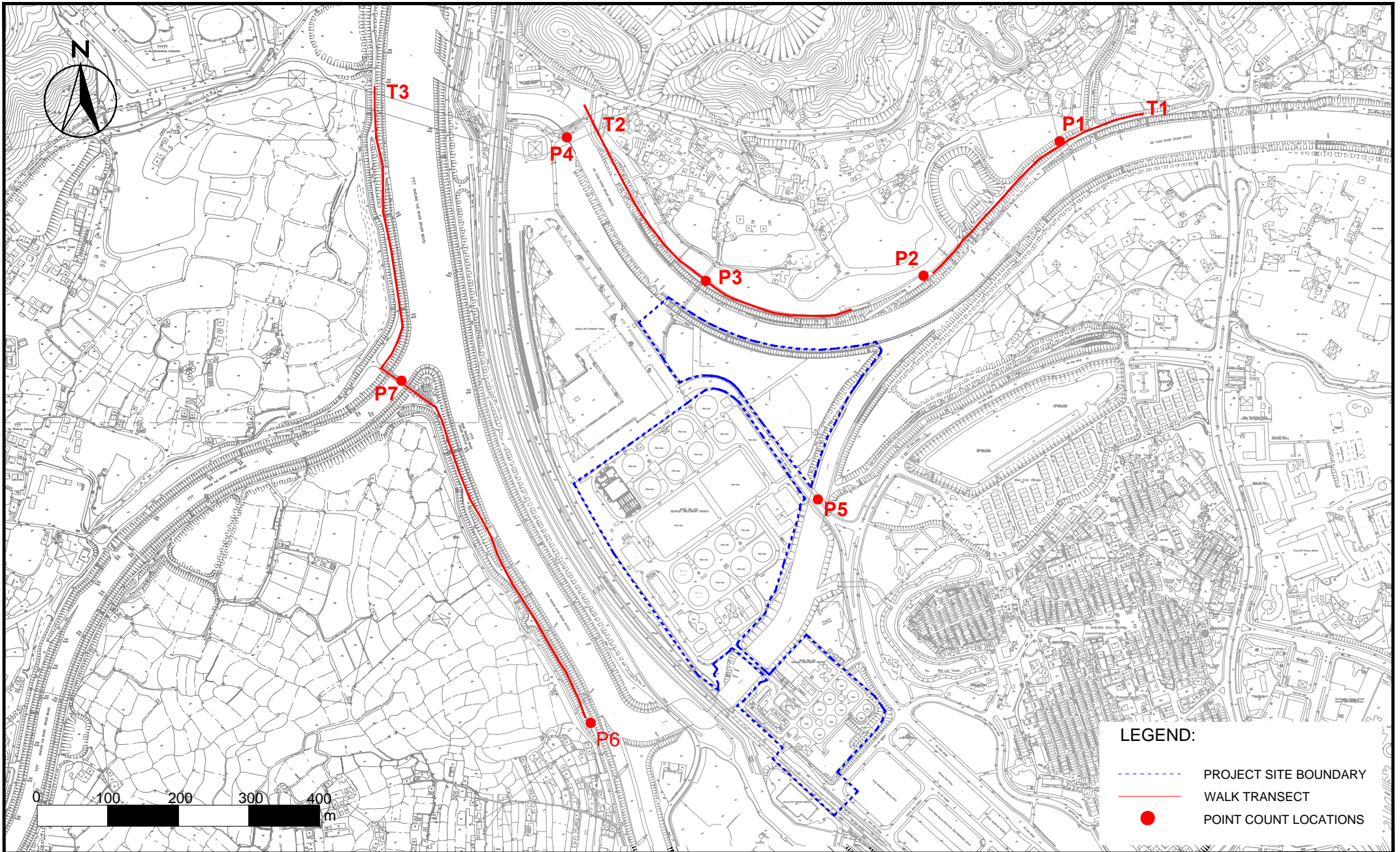






|         |           |            |          |
|---------|-----------|------------|----------|
| SCALE   | 1:4000@A4 | DATE       | OCT 2019 |
| CHECK   | JM        | DRAWN      | SY       |
| JOB No. | MA19019   | FIGURE NO. | 3        |
|         |           | REV        | -        |





**LEGEND:**

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



Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1  
 Survey Location for Impact Ecological Monitoring

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

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**APPENDIX A  
ACTION AND LIMIT LEVELS**

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## Appendix A - Action and Limit Levels

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

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

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

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

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

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

\*Remarks:

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

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

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

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



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**APPENDIX B  
ENVIRONMENTAL MONITORING  
SCHEDULES**

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

| Sunday        | Monday                | Tuesday               | Wednesday             | Thursday              | Friday       | Saturday   |
|---------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------|------------|
|               | 1-Jun                 | 2-Jun                 | 3-Jun                 | 4-Jun                 | 5-Jun        | 6-Jun      |
|               | 24 hrs TSP            | 1 hr TSP x 3<br>Noise |                       |                       | Ecology      | 24 hrs TSP |
| <b>7-Jun</b>  | 8-Jun                 | 9-Jun                 | 10-Jun                | 11-Jun                | 12-Jun       | 13-Jun     |
|               | 1 hr TSP x 3<br>Noise |                       |                       | 24 hrs TSP<br>Ecology | 1 hr TSP x 3 |            |
| <b>14-Jun</b> | 15-Jun                | 16-Jun                | 17-Jun                | 18-Jun                | 19-Jun       | 20-Jun     |
|               |                       |                       | 24 hrs TSP            | 1 hr TSP x 3<br>Noise | Ecology      |            |
| <b>21-Jun</b> | 22-Jun                | 23-Jun                | 24-Jun                | <b>25-Jun</b>         | 26-Jun       | 27-Jun     |
|               |                       | 24 hrs TSP<br>Ecology | 1 hr TSP x 3<br>Noise |                       |              |            |
| <b>28-Jun</b> | 29-Jun                | 30-Jun                |                       |                       |              |            |
|               | 24 hrs TSP            | 1 hr TSP x 3<br>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 (July 2020)**

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

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

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**APPENDIX C  
COPIES OF CALIBRATION  
CERTIFICATES FOR AIR QUALITY  
MONITORING**

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## Certificate of Calibration

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


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 Manufacturer: Sibata Scientific Technology LTD. Validity of Calibration Record 6-Jun-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

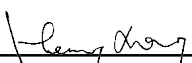
| Calibration of 1 hr TSP  |   |   |
|--|---|---|
| Calibration Point  | Laser Dust Monitor  | HVS   |
|  | Mass Concentration ( $\mu\text{g}/\text{m}^3$ )<br>X-axis | Mass concentration ( $\mu\text{g}/\text{m}^3$ )<br>Y-axis |
| 1  | 44.0  | 84.5  |
| 2  | 34.0  | 81.0  |
| 3  | 25.0  | 76.8  |
| <b>Average</b>   | <b>34.3</b>   | <b>80.8</b>   |
| <b>By Linear Regression of Y on X</b><br>Slope , mw = <u>0.4042</u> Intercept, bw = <u>66.8876</u><br>Correlation coefficient* = <u>0.9966</u> |   |   |
| Set Correlation Factor   |   |   |
| Particulate Concentration by High Volume Sampler ( $\mu\text{g}/\text{m}^3$ )  | 80.8  |   |
| Particulate Concentration by Dust Meter ( $\mu\text{g}/\text{m}^3$ )   | 34.3  |   |
| Measureing time, (min)   | 60.0  |   |
| Set Correlation Factor , SCF   |   |   |
| SCF = [ K=High Volume Sampler / Dust Meter, ( $\mu\text{g}/\text{m}^3$ ) ]   | <u>2.4</u>  |   |

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

## Certificate of Calibration

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
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 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

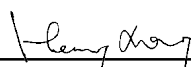
| Calibration of 1 hr TSP  |   |   |
|--|---|---|
| Calibration Point  | Laser Dust Monitor  | HVS   |
|  | Mass Concentration ( $\mu\text{g}/\text{m}^3$ )<br>X-axis | Mass concentration ( $\mu\text{g}/\text{m}^3$ )<br>Y-axis |
| 1  | 47.0  | 100.5   |
| 2  | 37.0  | 96.5  |
| 3  | 26.0  | 91.0  |
| <b>Average</b>   | <b>36.7</b>   | <b>96.0</b>   |
| <b>By Linear Regression of Y on X</b><br>Slope , mw = <u>0.4532</u> Intercept, bw = <u>79.3837</u><br>Correlation coefficient* = <u>0.9980</u> |   |   |
| Set Correlation Factor   |   |   |
| Particulate Concentration by High Volume Sampler ( $\mu\text{g}/\text{m}^3$ )  | 96.0  |   |
| Particulate Concentration by Dust Meter ( $\mu\text{g}/\text{m}^3$ )   | 36.7  |   |
| Measureing time, (min)   | 60.0  |   |
| Set Correlation Factor , SCF   |   |   |
| SCF = [ K=High Volume Sampler / Dust Meter, ( $\mu\text{g}/\text{m}^3$ ) ]   | <u>2.6</u>  |   |

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

## Certificate of Calibration

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


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 Serial No.: 972779  
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 Tisch Calibration Orifice No.: 3607 After Sensitivity Adjustment 744 CPM

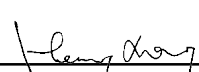
| Calibration of 1 hr TSP  |   |   |
|--|---|---|
| Calibration Point  | Laser Dust Monitor  | HVS   |
|  | Mass Concentration ( $\mu\text{g}/\text{m}^3$ )<br>X-axis | Mass concentration ( $\mu\text{g}/\text{m}^3$ )<br>Y-axis |
| 1  | 45.0  | 84.5  |
| 2  | 32.0  | 81.0  |
| 3  | 18.0  | 76.8  |
| <b>Average</b>   | <b>31.7</b>   | <b>80.8</b>   |
| <b>By Linear Regression of Y on X</b><br>Slope , mw = <u>0.2854</u> Intercept, bw = <u>71.7298</u><br>Correlation coefficient* = <u>0.9995</u> |   |   |
| Set Correlation Factor   |   |   |
| Particulate Concentration by High Volume Sampler ( $\mu\text{g}/\text{m}^3$ )  | 80.8  |   |
| Particulate Concentration by Dust Meter ( $\mu\text{g}/\text{m}^3$ )   | 31.7  |   |
| Measuring time, (min)  | 60.0  |   |
| Set Correlation Factor , SCF   |   |   |
| SCF = [ K=High Volume Sampler / Dust Meter, ( $\mu\text{g}/\text{m}^3$ ) ]   | <u>2.6</u>  |   |

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

## Certificate of Calibration

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


Description: Digital Dust Indicator Date of Calibration 5-Jun-20  
 Manufacturer: Sibata Scientific Technology LTD. Validity of Calibration Record 5-Aug-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

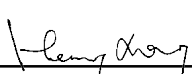
| Calibration of 1 hr TSP  |   |   |
|--|---|---|
| Calibration Point  | Laser Dust Monitor  | HVS   |
|  | Mass Concentration ( $\mu\text{g}/\text{m}^3$ )<br>X-axis | Mass concentration ( $\mu\text{g}/\text{m}^3$ )<br>Y-axis |
| 1  | 46.0  | 100.5   |
| 2  | 33.0  | 96.5  |
| 3  | 19.0  | 91.0  |
| <b>Average</b>   | <b>32.7</b>   | <b>96.0</b>   |
| <b>By Linear Regression of Y on X</b><br>Slope , mw = <u>0.3524</u> Intercept, bw = <u>84.4890</u><br>Correlation coefficient* = <u>0.9976</u> |   |   |
| Set Correlation Factor   |   |   |
| Particulate Concentration by High Volume Sampler ( $\mu\text{g}/\text{m}^3$ )  | 96.0  |   |
| Particulate Concentration by Dust Meter ( $\mu\text{g}/\text{m}^3$ )   | 32.7  |   |
| Measuring time, (min)  | 60.0  |   |
| Set Correlation Factor , SCF   |   |   |
| SCF = [ K=High Volume Sampler / Dust Meter, ( $\mu\text{g}/\text{m}^3$ ) ]   | <u>2.9</u>  |   |

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



## Certificate of Calibration

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


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 Serial No.: 972781  
 Equipment No.: SA-01-10 Sensitivity 0.001 mg/m3  
 High Volume Sampler No.: A-01-01A Before Sensitivity Adjustment 734 CPM  
 Tisch Calibration Orifice No.: 3607 After Sensitivity Adjustment 734 CPM

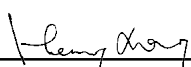
| Calibration of 1 hr TSP  |   |   |
|--|---|---|
| Calibration Point  | Laser Dust Monitor  | HVS   |
|  | Mass Concentration ( $\mu\text{g}/\text{m}^3$ )<br>X-axis | Mass concentration ( $\mu\text{g}/\text{m}^3$ )<br>Y-axis |
| 1  | 43.0  | 84.5  |
| 2  | 37.0  | 81.0  |
| 3  | 28.0  | 76.8  |
| <b>Average</b>   | <b>36.0</b>   | <b>80.8</b>   |
| <b>By Linear Regression of Y on X</b><br>Slope , mw = <u>0.5096</u> Intercept, bw = <u>62.4193</u><br>Correlation coefficient* = <u>0.9980</u> |   |   |
| Set Correlation Factor   |   |   |
| Particulate Concentration by High Volume Sampler ( $\mu\text{g}/\text{m}^3$ )  | 80.8  |   |
| Particulate Concentration by Dust Meter ( $\mu\text{g}/\text{m}^3$ )   | 36.0  |   |
| Measuring time, (min)  | 60.0  |   |
| Set Correlation Factor , SCF   |   |   |
| SCF = [ K=High Volume Sampler / Dust Meter, ( $\mu\text{g}/\text{m}^3$ ) ]   | <u>2.2</u>  |   |

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

## Certificate of Calibration

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


Description: Digital Dust Indicator Date of Calibration 5-Jun-20  
 Manufacturer: Sibata Scientific Technology LTD. Validity of Calibration Record 5-Aug-20  
 Model No.: LD-5R  
 Serial No.: 972781  
 Equipment No.: SA-01-10 Sensitivity 0.001 mg/m3  
 High Volume Sampler No.: A-01-01A Before Sensitivity Adjustment 734 CPM  
 Tisch Calibration Orifice No.: 3607 After Sensitivity Adjustment 734 CPM

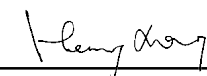
| Calibration of 1 hr TSP  |   |   |
|--|---|---|
| Calibration Point  | Laser Dust Monitor  | HVS   |
|  | Mass Concentration ( $\mu\text{g}/\text{m}^3$ )<br>X-axis | Mass concentration ( $\mu\text{g}/\text{m}^3$ )<br>Y-axis |
| 1  | 46.0  | 100.5   |
| 2  | 40.0  | 96.5  |
| 3  | 31.0  | 91.0  |
| <b>Average</b>   | <b>39.0</b>   | <b>96.0</b>   |
| <b>By Linear Regression of Y on X</b><br>Slope , mw = <u>0.6316</u> Intercept, bw = <u>71.3684</u><br>Correlation coefficient* = <u>0.9997</u> |   |   |
| Set Correlation Factor   |   |   |
| Particulate Concentration by High Volume Sampler ( $\mu\text{g}/\text{m}^3$ )  | 96.0  |   |
| Particulate Concentration by Dust Meter ( $\mu\text{g}/\text{m}^3$ )   | 39.0  |   |
| Measuring time, (min)  | 60.0  |   |
| Set Correlation Factor , SCF   |   |   |
| SCF = [ K=High Volume Sampler / Dust Meter, ( $\mu\text{g}/\text{m}^3$ ) ]   | <u>2.5</u>  |   |

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



# 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) | $\sqrt{\Delta H \left( \frac{Ta}{Pa} \right)}$ (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  |
| <b>QSTD</b>     | m=            | <b>2.09221</b>   | <b>QA</b> | m=          | <b>1.31010</b>  |
|                 | b=            | <b>-0.02779</b>  |           | b=          | <b>-0.01759</b>   |
|                 | r=            | <b>0.99994</b>   |           | r=          | <b>0.99994</b>  |

| Calculations  |  |
|---|--|
| Vstd= $\Delta Vol \left( \frac{Pa - \Delta P}{Pstd} \right) \left( \frac{Tstd}{Ta} \right)$                                 | Va= $\Delta Vol \left( \frac{Pa - \Delta P}{Pa} \right)$                                 |
| Qstd= $Vstd / \Delta Time$  | Qa= $Va / \Delta Time$   |
| 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= $1/m \left( \left( \sqrt{\Delta H \left( \frac{Ta}{Pa} \right)} \right) - b \right)$ |

| Standard Conditions                       |           |
|---|-----------|
| Tstd:                                     | 298.15 °K |
| Pstd:                                     | 760 mm Hg |
| <b>Key</b>                                |           |
| 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 |

# High-Volume TSP Sampler

## 5-POINT CALIBRATION DATA SHEET



File No. MA19019/17/0004

Project No. AM1a - Site boundary of the Shek Wu Hui STW (East)  
 Date: 5-May-20 Next Due Date: 5-Jul-20 Operator: SK  
 Equipment No.: A-01-17 Model No.: GS2310 Serial No. 3460

| Ambient Condition   |              |                     |              |
|---------------------|--------------|---------------------|--------------|
| Temperature, Ta (K) | <b>300.9</b> | Pressure, Pa (mmHg) | <b>756.5</b> |

| Orifice Transfer Standard Information |           |   |        |               |          |
|---------------------------------------|-----------|---|--------|---------------|----------|
| Serial No.                            | 3746      | Slope, mc   | 0.0592 | Intercept, bc | -0.02740 |
| Last Calibration Date:                | 17-Jan-20 | $mc \times Qstd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$<br>$Qstd = \{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc\} / mc$ |        |               |          |
| Next Calibration Date:                | 17-Jan-21 |   |        |               |          |

| Calibration of TSP Sampler |                                    |  |                        |                                |  |
|----------------------------|------------------------------------|--|------------------------|--------------------------------|--|
| Calibration Point          | Orifice                            |  |                        | HVS                            |  |
|                            | $\Delta H$ (orifice), in. of water | $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ | Qstd (CFM)<br>X - axis | $\Delta W$ (HVS), in. of water | $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$<br>Y-axis |
| 1                          | <b>15.8</b>                        | 3.95   | 67.13                  | <b>10.3</b>                    | 3.19   |
| 2                          | <b>12.4</b>                        | 3.50   | 59.52                  | <b>7.7</b>                     | 2.76   |
| 3                          | <b>9.1</b>                         | 3.00   | 51.06                  | <b>6.1</b>                     | 2.45   |
| 4                          | <b>5.3</b>                         | 2.29   | 39.07                  | <b>3.9</b>                     | 1.96   |
| 5                          | <b>3.1</b>                         | 1.75   | 29.99                  | <b>2.3</b>                     | 1.51   |

### By Linear Regression of Y on X

Slope, mw = 0.0438 Intercept, bw = 0.2121  
 Correlation coefficient\* = 0.9980

\*If Correlation Coefficient < 0.990, check and recalibrate.

### Set Point Calculation


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

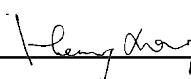
From the Regression Equation, the "Y" value according to

$$mw \times Qstd + bw = [\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$$

Therefore, Set Point; W =  $(mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$  4.45

Remarks: \_\_\_\_\_

Conducted by: SK Wong Signature:  Date: 5 May 2020

Checked by: Henry Leung Signature:  Date: 5 May 2020

# High-Volume TSP Sampler

## 5-POINT CALIBRATION DATA SHEET



File No. MA19019/24/0004

Project No. AM2a - Site Boundary of the Shek Wu Hui STW (North)  
 Date: 5-May-20 Next Due Date: 5-Jul-20 Operator: SK  
 Equipment No.: A-01-24 Model No.: TE 5170 Serial No. 1659

| Ambient Condition   |              |                     |              |
|---------------------|--------------|---------------------|--------------|
| Temperature, Ta (K) | <b>300.9</b> | Pressure, Pa (mmHg) | <b>756.5</b> |

| Orifice Transfer Standard Information |           |   |        |               |          |
|---------------------------------------|-----------|---|--------|---------------|----------|
| Serial No.                            | 3746      | Slope, mc   | 0.0592 | Intercept, bc | -0.02740 |
| Last Calibration Date:                | 17-Jan-20 | $mc \times Qstd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$<br>$Qstd = \{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc\} / mc$ |        |               |          |
| Next Calibration Date:                | 17-Jan-21 |   |        |               |          |

| Calibration of TSP Sampler |                                    |  |                        |                                |  |
|----------------------------|------------------------------------|--|------------------------|--------------------------------|--|
| Calibration Point          | Orifice                            |  |                        | HVS                            |  |
|                            | $\Delta H$ (orifice), in. of water | $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ | Qstd (CFM)<br>X - axis | $\Delta W$ (HVS), in. of water | $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$<br>Y-axis |
| 1                          | <b>15.9</b>                        | 3.96   | 67.34                  | <b>10.1</b>                    | 3.16   |
| 2                          | <b>12.4</b>                        | 3.50   | 59.52                  | <b>7.8</b>                     | 2.77   |
| 3                          | <b>9.2</b>                         | 3.01   | 51.33                  | <b>6.1</b>                     | 2.45   |
| 4                          | <b>5.6</b>                         | 2.35   | 40.15                  | <b>4.3</b>                     | 2.06   |
| 5                          | <b>3.3</b>                         | 1.80   | 30.93                  | <b>2.8</b>                     | 1.66   |

### By Linear Regression of Y on X

Slope, mw = 0.0400 Intercept, bw = 0.4241  
 Correlation coefficient\* = 0.9986

\*If Correlation Coefficient < 0.990, check and recalibrate.

### Set Point Calculation

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

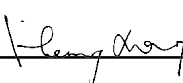
From the Regression Equation, the "Y" value according to

$$mw \times Qstd + bw = [\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$$

Therefore, Set Point; W =  $(mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$  4.67

Remarks: \_\_\_\_\_

Conducted by: SK Wong Signature:  Date: 5 May 2020

Checked by: Henry Leung Signature:  Date: 5 May 2020

## Certificate 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: 29-Apr-2020  
 Next Due Date: 29-Oct-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                |
| 1.2                     | 1.2                   | 0.0                |
| 2.0                     | 2.1                   | -0.1               |
| 3.8                     | 3.8                   | 0.0                |


### 2. Performance check of Wind Direction

| Wind Direction (°)          |                           | Difference D (°) |
|-----------------------------|---------------------------|------------------|
| 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              |

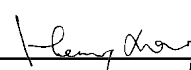
### Test Specification:

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

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**APPENDIX D**  
**WEATHER INFORMATION**

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**APPENDIX D –  
WEATHER CONDITIONS DURING THE MONITORING PERIOD**

**I. General Information from Hong Kong Observatory**

| <b>Date</b> | <b>Mean Air Temperature (°C)</b> | <b>Mean Relative Humidity (%)</b> | <b>Precipitation (mm)</b> |
|-------------|----------------------------------|-----------------------------------|---------------------------|
| 1-Jun-20    | 29.9                             | 78                                | Trace                     |
| 2-Jun-20    | 29.0                             | 82                                | 6.4                       |
| 3-Jun-20    | 29.8                             | 76                                | Trace                     |
| 4-Jun-20    | 30.1                             | 75                                | Trace                     |
| 5-Jun-20    | 30.0                             | 78                                | 2.6                       |
| 6-Jun-20    | 26.8                             | 89                                | 183.8                     |
| 7-Jun-20    | 27.7                             | 91                                | 107.4                     |
| 8-Jun-20    | 28.6                             | 88                                | 40.9                      |
| 9-Jun-20    | 29.4                             | 83                                | 1.3                       |
| 10-Jun-20   | 29.8                             | 78                                | 0.2                       |
| 11-Jun-20   | 30.2                             | 76                                | Trace                     |
| 12-Jun-20   | 30.4                             | 75                                | 0                         |
| 13-Jun-20   | 29.8                             | 81                                | 11.7                      |
| 14-Jun-20   | 28.0                             | 84                                | 29.3                      |
| 15-Jun-20   | 29.3                             | 79                                | 0.2                       |
| 16-Jun-20   | 28.6                             | 81                                | 9.4                       |
| 17-Jun-20   | 29.1                             | 77                                | 0.9                       |
| 18-Jun-20   | 29.5                             | 77                                | 0.1                       |
| 19-Jun-20   | 29.9                             | 74                                | Trace                     |
| 20-Jun-20   | 30.0                             | 74                                | 0                         |
| 21-Jun-20   | 30.2                             | 76                                | Trace                     |
| 22-Jun-20   | 30.4                             | 77                                | Trace                     |
| 23-Jun-20   | 30.3                             | 77                                | 0                         |
| 24-Jun-20   | 30.4                             | 77                                | 0                         |
| 25-Jun-20   | 30.2                             | 76                                | 0.1                       |
| 26-Jun-20   | 30.3                             | 77                                | 1.3                       |
| 27-Jun-20   | 30.2                             | 77                                | 1.2                       |
| 28-Jun-20   | 30.4                             | 75                                | Trace                     |
| 29-Jun-20   | 30.5                             | 74                                | 0.4                       |
| 30-Jun-20   | 30.7                             | 74                                | Trace                     |

\* 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**

| <b>Date</b> | <b>Time</b> | <b>Wind Direction (°)</b> | <b>Wind Speed (m/s)</b> |
|-------------|-------------|---------------------------|-------------------------|
| 1-Jun-20    | 1:00        | 179.7                     | 0.1                     |
| 1-Jun-20    | 2:00        | 37.8                      | 0.1                     |
| 1-Jun-20    | 3:00        | 36.4                      | 0.1                     |
| 1-Jun-20    | 4:00        | 37.3                      | 0.1                     |
| 1-Jun-20    | 5:00        | 26.3                      | 0.1                     |
| 1-Jun-20    | 6:00        | 70.4                      | 0.1                     |
| 1-Jun-20    | 7:00        | 218.6                     | 1.1                     |
| 1-Jun-20    | 8:00        | 223.7                     | 0.7                     |
| 1-Jun-20    | 9:00        | 236.1                     | 0.8                     |
| 1-Jun-20    | 10:00       | 200.1                     | 1.2                     |
| 1-Jun-20    | 11:00       | 214.6                     | 1.3                     |
| 1-Jun-20    | 12:00       | 228.2                     | 3.4                     |
| 1-Jun-20    | 13:00       | 227.1                     | 2.2                     |
| 1-Jun-20    | 14:00       | 201.6                     | 0.1                     |
| 1-Jun-20    | 15:00       | 208.5                     | 0.2                     |
| 1-Jun-20    | 16:00       | 225.7                     | 0.1                     |
| 1-Jun-20    | 17:00       | 213.8                     | 0.2                     |
| 1-Jun-20    | 18:00       | 203.4                     | 0.1                     |
| 1-Jun-20    | 19:00       | 236.6                     | 0.1                     |
| 1-Jun-20    | 20:00       | 209.0                     | 0.5                     |
| 1-Jun-20    | 21:00       | 220.7                     | 0.2                     |
| 1-Jun-20    | 22:00       | 211.5                     | 0.3                     |
| 1-Jun-20    | 23:00       | 291.6                     | 0.2                     |
| 2-Jun-20    | 0:00        | 190.9                     | 0.3                     |
| 2-Jun-20    | 1:00        | 122.3                     | 0.1                     |
| 2-Jun-20    | 2:00        | 79.3                      | 0.1                     |
| 2-Jun-20    | 3:00        | 74.1                      | 0.2                     |
| 2-Jun-20    | 4:00        | 107.7                     | 0.2                     |
| 2-Jun-20    | 5:00        | 61.0                      | 0.4                     |
| 2-Jun-20    | 6:00        | 112.2                     | 0.2                     |
| 2-Jun-20    | 7:00        | 218.6                     | 0.2                     |
| 2-Jun-20    | 8:00        | 241.1                     | 0.6                     |
| 2-Jun-20    | 9:00        | 212.9                     | 0.3                     |
| 2-Jun-20    | 10:00       | 236.5                     | 0.8                     |
| 2-Jun-20    | 11:00       | 223.8                     | 1.4                     |
| 2-Jun-20    | 12:00       | 212.7                     | 0.4                     |

**APPENDIX D –  
WEATHER CONDITIONS DURING THE MONITORING PERIOD**

**II. Mean Wind Speed and Wind Direction**

| <b>Date</b> | <b>Time</b> | <b>Wind Direction (°)</b> | <b>Wind Speed (m/s)</b> |
|-------------|-------------|---------------------------|-------------------------|
| 2-Jun-20    | 13:00       | 200.8                     | 0.8                     |
| 2-Jun-20    | 14:00       | 288.4                     | 1.8                     |
| 2-Jun-20    | 15:00       | 284.3                     | 0.3                     |
| 2-Jun-20    | 16:00       | 193.1                     | 0.4                     |
| 2-Jun-20    | 17:00       | 191.7                     | 0.3                     |
| 2-Jun-20    | 18:00       | 56.7                      | 0.2                     |
| 2-Jun-20    | 19:00       | 235.6                     | 0.2                     |
| 2-Jun-20    | 20:00       | 150.6                     | 0.2                     |
| 2-Jun-20    | 21:00       | 81.2                      | 0.2                     |
| 2-Jun-20    | 22:00       | 184.0                     | 0.2                     |
| 2-Jun-20    | 23:00       | 178.1                     | 0.4                     |
| 3-Jun-20    | 0:00        | 193.5                     | 0.2                     |
| 3-Jun-20    | 1:00        | 220.6                     | 0.6                     |
| 3-Jun-20    | 2:00        | 210.7                     | 0.6                     |
| 3-Jun-20    | 3:00        | 226.7                     | 0.8                     |
| 3-Jun-20    | 4:00        | 188.6                     | 0.2                     |
| 3-Jun-20    | 5:00        | 161.7                     | 0.3                     |
| 3-Jun-20    | 6:00        | 223.2                     | 0.1                     |
| 3-Jun-20    | 7:00        | 190.8                     | 0.1                     |
| 3-Jun-20    | 8:00        | 204.8                     | 0.2                     |
| 3-Jun-20    | 9:00        | 164.8                     | 0.3                     |
| 3-Jun-20    | 10:00       | 215.5                     | 0.5                     |
| 3-Jun-20    | 11:00       | 188.2                     | 0.6                     |
| 3-Jun-20    | 12:00       | 217.9                     | 3.5                     |
| 3-Jun-20    | 13:00       | 201.4                     | 2.7                     |
| 3-Jun-20    | 14:00       | 184.5                     | 1.1                     |
| 3-Jun-20    | 15:00       | 204.3                     | 1.1                     |
| 3-Jun-20    | 16:00       | 233.4                     | 0.6                     |
| 3-Jun-20    | 17:00       | 194.9                     | 0.2                     |
| 3-Jun-20    | 18:00       | 220.4                     | 0.1                     |
| 3-Jun-20    | 19:00       | 235.1                     | 0.1                     |
| 3-Jun-20    | 20:00       | 219.5                     | 0.1                     |
| 3-Jun-20    | 21:00       | 188.8                     | 0.2                     |
| 3-Jun-20    | 22:00       | 205.9                     | 0.1                     |
| 3-Jun-20    | 23:00       | 212.1                     | 0.1                     |
| 4-Jun-20    | 0:00        | 227.9                     | 0.2                     |

**APPENDIX D –  
WEATHER CONDITIONS DURING THE MONITORING PERIOD**

**II. Mean Wind Speed and Wind Direction**

| <b>Date</b> | <b>Time</b> | <b>Wind Direction (°)</b> | <b>Wind Speed (m/s)</b> |
|-------------|-------------|---------------------------|-------------------------|
| 4-Jun-20    | 1:00        | 253.0                     | 0.1                     |
| 4-Jun-20    | 2:00        | 199.0                     | 0.1                     |
| 4-Jun-20    | 3:00        | 237.0                     | 0.1                     |
| 4-Jun-20    | 4:00        | 219.4                     | 0.1                     |
| 4-Jun-20    | 5:00        | 177.8                     | 0.1                     |
| 4-Jun-20    | 6:00        | 192.4                     | 0.1                     |
| 4-Jun-20    | 7:00        | 208.7                     | 0.8                     |
| 4-Jun-20    | 8:00        | 212.5                     | 0.5                     |
| 4-Jun-20    | 9:00        | 221.4                     | 1.1                     |
| 4-Jun-20    | 10:00       | 228.2                     | 1.9                     |
| 4-Jun-20    | 11:00       | 248.2                     | 1.7                     |
| 4-Jun-20    | 12:00       | 216.1                     | 2.0                     |
| 4-Jun-20    | 13:00       | 279.1                     | 0.9                     |
| 4-Jun-20    | 14:00       | 230.3                     | 0.7                     |
| 4-Jun-20    | 15:00       | 213.2                     | 2.1                     |
| 4-Jun-20    | 16:00       | 228.1                     | 1.5                     |
| 4-Jun-20    | 17:00       | 240.1                     | 1.5                     |
| 4-Jun-20    | 18:00       | 250.2                     | 0.1                     |
| 4-Jun-20    | 19:00       | 228.4                     | 0.2                     |
| 4-Jun-20    | 20:00       | 209.2                     | 0.4                     |
| 4-Jun-20    | 21:00       | 219.1                     | 0.1                     |
| 4-Jun-20    | 22:00       | 215.1                     | 0.5                     |
| 4-Jun-20    | 23:00       | 199.6                     | 0.2                     |
| 5-Jun-20    | 0:00        | 208.2                     | 0.3                     |
| 5-Jun-20    | 1:00        | 201.4                     | 0.2                     |
| 5-Jun-20    | 2:00        | 268.0                     | 0.2                     |
| 5-Jun-20    | 3:00        | 195.9                     | 0.2                     |
| 5-Jun-20    | 4:00        | 210.0                     | 0.1                     |
| 5-Jun-20    | 5:00        | 241.1                     | 0.1                     |
| 5-Jun-20    | 6:00        | 244.4                     | 0.4                     |
| 5-Jun-20    | 7:00        | 233.7                     | 1.1                     |
| 5-Jun-20    | 8:00        | 221.7                     | 0.8                     |
| 5-Jun-20    | 9:00        | 184.3                     | 1.4                     |
| 5-Jun-20    | 10:00       | 234.9                     | 1.0                     |
| 5-Jun-20    | 11:00       | 175.1                     | 0.5                     |
| 5-Jun-20    | 12:00       | 223.9                     | 1.1                     |

**APPENDIX D –  
WEATHER CONDITIONS DURING THE MONITORING PERIOD**

**II. Mean Wind Speed and Wind Direction**

| <b>Date</b> | <b>Time</b> | <b>Wind Direction (°)</b> | <b>Wind Speed (m/s)</b> |
|-------------|-------------|---------------------------|-------------------------|
| 5-Jun-20    | 13:00       | 206.5                     | 0.3                     |
| 5-Jun-20    | 14:00       | 210.5                     | 0.7                     |
| 5-Jun-20    | 15:00       | 231.7                     | 2.0                     |
| 5-Jun-20    | 16:00       | 171.0                     | 0.5                     |
| 5-Jun-20    | 17:00       | 219.1                     | 0.3                     |
| 5-Jun-20    | 18:00       | 189.3                     | 0.1                     |
| 5-Jun-20    | 19:00       | 221.3                     | 0.1                     |
| 5-Jun-20    | 20:00       | 79.6                      | 0.2                     |
| 5-Jun-20    | 21:00       | 253.3                     | 0.1                     |
| 5-Jun-20    | 22:00       | 214.4                     | 0.2                     |
| 5-Jun-20    | 23:00       | 235.8                     | 0.1                     |
| 6-Jun-20    | 0:00        | 247.6                     | 0.2                     |
| 6-Jun-20    | 1:00        | 117.8                     | 0.1                     |
| 6-Jun-20    | 2:00        | 146.3                     | 0.1                     |
| 6-Jun-20    | 3:00        | 155.1                     | 0.1                     |
| 6-Jun-20    | 4:00        | 59.2                      | 0.2                     |
| 6-Jun-20    | 5:00        | 74.7                      | 0.2                     |
| 6-Jun-20    | 6:00        | 72.0                      | 0.1                     |
| 6-Jun-20    | 7:00        | 69.5                      | 0.2                     |
| 6-Jun-20    | 8:00        | 152.4                     | 0.3                     |
| 6-Jun-20    | 9:00        | 148.4                     | 0.3                     |
| 6-Jun-20    | 10:00       | 142.6                     | 0.4                     |
| 6-Jun-20    | 11:00       | 158.3                     | 0.4                     |
| 6-Jun-20    | 12:00       | 84.0                      | 0.4                     |
| 6-Jun-20    | 13:00       | 130.5                     | 0.6                     |
| 6-Jun-20    | 14:00       | 177.4                     | 0.7                     |
| 6-Jun-20    | 15:00       | 68.3                      | 0.6                     |
| 6-Jun-20    | 16:00       | 243.6                     | 0.5                     |
| 6-Jun-20    | 17:00       | 270.5                     | 0.5                     |
| 6-Jun-20    | 18:00       | 101.7                     | 0.4                     |
| 6-Jun-20    | 19:00       | 95.9                      | 0.4                     |
| 6-Jun-20    | 20:00       | 205.0                     | 0.5                     |
| 6-Jun-20    | 21:00       | 43.1                      | 0.4                     |
| 6-Jun-20    | 22:00       | 58.6                      | 0.4                     |
| 6-Jun-20    | 23:00       | 71.5                      | 0.4                     |
| 7-Jun-20    | 0:00        | 98.0                      | 0.4                     |

**APPENDIX D –  
WEATHER CONDITIONS DURING THE MONITORING PERIOD**

**II. Mean Wind Speed and Wind Direction**

| <b>Date</b> | <b>Time</b> | <b>Wind Direction (°)</b> | <b>Wind Speed (m/s)</b> |
|-------------|-------------|---------------------------|-------------------------|
| 7-Jun-20    | 1:00        | 83.4                      | 0.3                     |
| 7-Jun-20    | 2:00        | 100.6                     | 0.4                     |
| 7-Jun-20    | 3:00        | 46.2                      | 0.4                     |
| 7-Jun-20    | 4:00        | 277.5                     | 0.3                     |
| 7-Jun-20    | 5:00        | 55.3                      | 0.4                     |
| 7-Jun-20    | 6:00        | 137.0                     | 0.5                     |
| 7-Jun-20    | 7:00        | 128.9                     | 0.5                     |
| 7-Jun-20    | 8:00        | 188.4                     | 0.9                     |
| 7-Jun-20    | 9:00        | 223.2                     | 2.5                     |
| 7-Jun-20    | 10:00       | 74.7                      | 0.5                     |
| 7-Jun-20    | 11:00       | 82.0                      | 0.6                     |
| 7-Jun-20    | 12:00       | 89.3                      | 0.6                     |
| 7-Jun-20    | 13:00       | 91.5                      | 0.4                     |
| 7-Jun-20    | 14:00       | 101.7                     | 0.3                     |
| 7-Jun-20    | 15:00       | 113.3                     | 0.2                     |
| 7-Jun-20    | 16:00       | 94.0                      | 0.2                     |
| 7-Jun-20    | 17:00       | 76.5                      | 0.2                     |
| 7-Jun-20    | 18:00       | 111.6                     | 0.2                     |
| 7-Jun-20    | 19:00       | 109.7                     | 0.3                     |
| 7-Jun-20    | 20:00       | 63.9                      | 0.2                     |
| 7-Jun-20    | 21:00       | 186.3                     | 0.3                     |
| 7-Jun-20    | 22:00       | 54.9                      | 0.4                     |
| 7-Jun-20    | 23:00       | 68.5                      | 0.4                     |
| 8-Jun-20    | 0:00        | 147.6                     | 0.2                     |
| 8-Jun-20    | 1:00        | 172.1                     | 0.2                     |
| 8-Jun-20    | 2:00        | 167.7                     | 0.2                     |
| 8-Jun-20    | 3:00        | 74.9                      | 0.3                     |
| 8-Jun-20    | 4:00        | 235.1                     | 0.4                     |
| 8-Jun-20    | 5:00        | 70.2                      | 0.5                     |
| 8-Jun-20    | 6:00        | 268.2                     | 0.6                     |
| 8-Jun-20    | 7:00        | 266.5                     | 0.5                     |
| 8-Jun-20    | 8:00        | 149.5                     | 0.5                     |
| 8-Jun-20    | 9:00        | 85.7                      | 0.6                     |
| 8-Jun-20    | 10:00       | 66.3                      | 0.7                     |
| 8-Jun-20    | 11:00       | 28.6                      | 0.7                     |
| 8-Jun-20    | 12:00       | 171.8                     | 0.5                     |

**APPENDIX D –  
WEATHER CONDITIONS DURING THE MONITORING PERIOD**

**II. Mean Wind Speed and Wind Direction**

| <b>Date</b> | <b>Time</b> | <b>Wind Direction (°)</b> | <b>Wind Speed (m/s)</b> |
|-------------|-------------|---------------------------|-------------------------|
| 8-Jun-20    | 13:00       | 69.9                      | 0.5                     |
| 8-Jun-20    | 14:00       | 81.1                      | 0.4                     |
| 8-Jun-20    | 15:00       | 177.1                     | 0.2                     |
| 8-Jun-20    | 16:00       | 53.6                      | 0.2                     |
| 8-Jun-20    | 17:00       | 104.0                     | 0.2                     |
| 8-Jun-20    | 18:00       | 73.5                      | 0.2                     |
| 8-Jun-20    | 19:00       | 84.4                      | 0.2                     |
| 8-Jun-20    | 20:00       | 63.3                      | 0.2                     |
| 8-Jun-20    | 21:00       | 70.6                      | 0.3                     |
| 8-Jun-20    | 22:00       | 75.4                      | 0.2                     |
| 8-Jun-20    | 23:00       | 26.2                      | 0.3                     |
| 9-Jun-20    | 0:00        | 112.5                     | 0.3                     |
| 9-Jun-20    | 1:00        | 153.4                     | 0.2                     |
| 9-Jun-20    | 2:00        | 184.4                     | 0.2                     |
| 9-Jun-20    | 3:00        | 161.8                     | 0.2                     |
| 9-Jun-20    | 4:00        | 162.7                     | 0.3                     |
| 9-Jun-20    | 5:00        | 187.3                     | 0.2                     |
| 9-Jun-20    | 6:00        | 231.3                     | 0.5                     |
| 9-Jun-20    | 7:00        | 203.7                     | 0.2                     |
| 9-Jun-20    | 8:00        | 219.4                     | 0.2                     |
| 9-Jun-20    | 9:00        | 220.9                     | 0.4                     |
| 9-Jun-20    | 10:00       | 237.5                     | 0.8                     |
| 9-Jun-20    | 11:00       | 200.2                     | 0.4                     |
| 9-Jun-20    | 12:00       | 204.8                     | 0.8                     |
| 9-Jun-20    | 13:00       | 204.6                     | 2.4                     |
| 9-Jun-20    | 14:00       | 220.6                     | 1.5                     |
| 9-Jun-20    | 15:00       | 242.8                     | 1.1                     |
| 9-Jun-20    | 16:00       | 214.1                     | 1.4                     |
| 9-Jun-20    | 17:00       | 198.5                     | 1.0                     |
| 9-Jun-20    | 18:00       | 209.7                     | 0.9                     |
| 9-Jun-20    | 19:00       | 206.9                     | 0.8                     |
| 9-Jun-20    | 20:00       | 183.8                     | 0.8                     |
| 9-Jun-20    | 21:00       | 68.5                      | 0.8                     |
| 9-Jun-20    | 22:00       | 18.7                      | 0.7                     |
| 9-Jun-20    | 23:00       | 56.0                      | 0.6                     |
| 10-Jun-20   | 0:00        | 72.0                      | 0.6                     |

**APPENDIX D –  
WEATHER CONDITIONS DURING THE MONITORING PERIOD**

**II. Mean Wind Speed and Wind Direction**

| <b>Date</b> | <b>Time</b> | <b>Wind Direction (°)</b> | <b>Wind Speed (m/s)</b> |
|-------------|-------------|---------------------------|-------------------------|
| 10-Jun-20   | 1:00        | 66.0                      | 0.6                     |
| 10-Jun-20   | 2:00        | 49.7                      | 0.6                     |
| 10-Jun-20   | 3:00        | 35.5                      | 0.6                     |
| 10-Jun-20   | 4:00        | 61.4                      | 0.6                     |
| 10-Jun-20   | 5:00        | 50.8                      | 0.7                     |
| 10-Jun-20   | 6:00        | 49.4                      | 0.5                     |
| 10-Jun-20   | 7:00        | 277.0                     | 0.3                     |
| 10-Jun-20   | 8:00        | 211.8                     | 2.0                     |
| 10-Jun-20   | 9:00        | 202.2                     | 2.2                     |
| 10-Jun-20   | 10:00       | 216.7                     | 2.1                     |
| 10-Jun-20   | 11:00       | 244.7                     | 1.8                     |
| 10-Jun-20   | 12:00       | 210.5                     | 1.0                     |
| 10-Jun-20   | 13:00       | 242.4                     | 1.7                     |
| 10-Jun-20   | 14:00       | 210.9                     | 0.6                     |
| 10-Jun-20   | 15:00       | 197.6                     | 1.9                     |
| 10-Jun-20   | 16:00       | 204.5                     | 0.5                     |
| 10-Jun-20   | 17:00       | 240.6                     | 1.1                     |
| 10-Jun-20   | 18:00       | 226.2                     | 0.4                     |
| 10-Jun-20   | 19:00       | 228.7                     | 0.3                     |
| 10-Jun-20   | 20:00       | 220.1                     | 0.3                     |
| 10-Jun-20   | 21:00       | 199.1                     | 0.3                     |
| 10-Jun-20   | 22:00       | 29.0                      | 0.2                     |
| 10-Jun-20   | 23:00       | 19.8                      | 0.2                     |
| 11-Jun-20   | 0:00        | 17.5                      | 0.2                     |
| 11-Jun-20   | 1:00        | 27.2                      | 0.2                     |
| 11-Jun-20   | 2:00        | 47.2                      | 0.2                     |
| 11-Jun-20   | 3:00        | 27.8                      | 0.2                     |
| 11-Jun-20   | 4:00        | 39.2                      | 0.2                     |
| 11-Jun-20   | 5:00        | 168.9                     | 0.2                     |
| 11-Jun-20   | 6:00        | 55.3                      | 0.1                     |
| 11-Jun-20   | 7:00        | 271.1                     | 0.1                     |
| 11-Jun-20   | 8:00        | 234.8                     | 0.1                     |
| 11-Jun-20   | 9:00        | 233.3                     | 0.4                     |
| 11-Jun-20   | 10:00       | 260.1                     | 1.1                     |
| 11-Jun-20   | 11:00       | 268.0                     | 2.3                     |
| 11-Jun-20   | 12:00       | 259.4                     | 1.5                     |

**APPENDIX D –  
WEATHER CONDITIONS DURING THE MONITORING PERIOD**

**II. Mean Wind Speed and Wind Direction**

| <b>Date</b> | <b>Time</b> | <b>Wind Direction (°)</b> | <b>Wind Speed (m/s)</b> |
|-------------|-------------|---------------------------|-------------------------|
| 11-Jun-20   | 13:00       | 238.9                     | 0.3                     |
| 11-Jun-20   | 14:00       | 242.5                     | 0.8                     |
| 11-Jun-20   | 15:00       | 290.1                     | 0.7                     |
| 11-Jun-20   | 16:00       | 201.6                     | 1.2                     |
| 11-Jun-20   | 17:00       | 214.1                     | 1.3                     |
| 11-Jun-20   | 18:00       | 234.1                     | 0.2                     |
| 11-Jun-20   | 19:00       | 255.1                     | 0.1                     |
| 11-Jun-20   | 20:00       | 249.9                     | 0.1                     |
| 11-Jun-20   | 21:00       | 193.6                     | 0.1                     |
| 11-Jun-20   | 22:00       | 137.8                     | 0.1                     |
| 11-Jun-20   | 23:00       | 251.8                     | 0.1                     |
| 12-Jun-20   | 0:00        | 121.6                     | 0.1                     |
| 12-Jun-20   | 1:00        | 127.7                     | 0.1                     |
| 12-Jun-20   | 2:00        | 172.3                     | 0.1                     |
| 12-Jun-20   | 3:00        | 263.7                     | 0.1                     |
| 12-Jun-20   | 4:00        | 269.0                     | 0.1                     |
| 12-Jun-20   | 5:00        | 167.4                     | 0.1                     |
| 12-Jun-20   | 6:00        | 56.2                      | 0.1                     |
| 12-Jun-20   | 7:00        | 97.2                      | 0.1                     |
| 12-Jun-20   | 8:00        | 219.0                     | 0.2                     |
| 12-Jun-20   | 9:00        | 87.0                      | 0.1                     |
| 12-Jun-20   | 10:00       | 282.9                     | 0.2                     |
| 12-Jun-20   | 11:00       | 87.8                      | 0.1                     |
| 12-Jun-20   | 12:00       | 96.7                      | 0.3                     |
| 12-Jun-20   | 13:00       | 160.5                     | 1.0                     |
| 12-Jun-20   | 14:00       | 151.6                     | 0.2                     |
| 12-Jun-20   | 15:00       | 132.4                     | 0.1                     |
| 12-Jun-20   | 16:00       | 143.7                     | 0.2                     |
| 12-Jun-20   | 17:00       | 67.2                      | 0.1                     |
| 12-Jun-20   | 18:00       | 154.7                     | 0.2                     |
| 12-Jun-20   | 19:00       | 139.4                     | 0.2                     |
| 12-Jun-20   | 20:00       | 72.0                      | 0.1                     |
| 12-Jun-20   | 21:00       | 79.0                      | 0.1                     |
| 12-Jun-20   | 22:00       | 63.8                      | 0.1                     |
| 12-Jun-20   | 23:00       | 69.0                      | 0.1                     |
| 13-Jun-20   | 0:00        | 46.0                      | 0.1                     |



**APPENDIX D –  
WEATHER CONDITIONS DURING THE MONITORING PERIOD**

**II. Mean Wind Speed and Wind Direction**

| <b>Date</b> | <b>Time</b> | <b>Wind Direction (°)</b> | <b>Wind Speed (m/s)</b> |
|-------------|-------------|---------------------------|-------------------------|
| 13-Jun-20   | 1:00        | 51.6                      | 0.1                     |
| 13-Jun-20   | 2:00        | 54.3                      | 0.1                     |
| 13-Jun-20   | 3:00        | 52.5                      | 0.1                     |
| 13-Jun-20   | 4:00        | 26.2                      | 0.2                     |
| 13-Jun-20   | 5:00        | 68.8                      | 0.2                     |
| 13-Jun-20   | 6:00        | 44.7                      | 0.2                     |
| 13-Jun-20   | 7:00        | 52.5                      | 0.3                     |
| 13-Jun-20   | 8:00        | 56.7                      | 0.5                     |
| 13-Jun-20   | 9:00        | 111.5                     | 0.8                     |
| 13-Jun-20   | 10:00       | 48.3                      | 0.7                     |
| 13-Jun-20   | 11:00       | 88.4                      | 0.9                     |
| 13-Jun-20   | 12:00       | 126.4                     | 0.9                     |
| 13-Jun-20   | 13:00       | 97.6                      | 0.9                     |
| 13-Jun-20   | 14:00       | 93.2                      | 1.0                     |
| 13-Jun-20   | 15:00       | 110.4                     | 0.4                     |
| 13-Jun-20   | 16:00       | 99.6                      | 0.4                     |
| 13-Jun-20   | 17:00       | 93.6                      | 1.4                     |
| 13-Jun-20   | 18:00       | 114.4                     | 0.7                     |
| 13-Jun-20   | 19:00       | 82.7                      | 0.9                     |
| 13-Jun-20   | 20:00       | 83.2                      | 0.7                     |
| 13-Jun-20   | 21:00       | 77.6                      | 0.8                     |
| 13-Jun-20   | 22:00       | 106.6                     | 0.5                     |
| 13-Jun-20   | 23:00       | 54.8                      | 0.4                     |
| 14-Jun-20   | 0:00        | 141.9                     | 2.2                     |
| 14-Jun-20   | 1:00        | 153.3                     | 1.3                     |
| 14-Jun-20   | 2:00        | 92.7                      | 0.6                     |
| 14-Jun-20   | 3:00        | 189.7                     | 0.5                     |
| 14-Jun-20   | 4:00        | 120.5                     | 0.4                     |
| 14-Jun-20   | 5:00        | 185.7                     | 0.6                     |
| 14-Jun-20   | 6:00        | 124.7                     | 0.6                     |
| 14-Jun-20   | 7:00        | 161.9                     | 0.5                     |
| 14-Jun-20   | 8:00        | 207.8                     | 0.4                     |
| 14-Jun-20   | 9:00        | 158.7                     | 0.8                     |
| 14-Jun-20   | 10:00       | 155.6                     | 1.3                     |
| 14-Jun-20   | 11:00       | 198.1                     | 1.2                     |
| 14-Jun-20   | 12:00       | 216.3                     | 0.9                     |

**APPENDIX D –  
WEATHER CONDITIONS DURING THE MONITORING PERIOD**

**II. Mean Wind Speed and Wind Direction**

| <b>Date</b> | <b>Time</b> | <b>Wind Direction (°)</b> | <b>Wind Speed (m/s)</b> |
|-------------|-------------|---------------------------|-------------------------|
| 14-Jun-20   | 13:00       | 167.5                     | 0.9                     |
| 14-Jun-20   | 14:00       | 118.0                     | 1.0                     |
| 14-Jun-20   | 15:00       | 160.2                     | 1.0                     |
| 14-Jun-20   | 16:00       | 162.8                     | 3.1                     |
| 14-Jun-20   | 17:00       | 56.5                      | 0.5                     |
| 14-Jun-20   | 18:00       | 93.4                      | 0.9                     |
| 14-Jun-20   | 19:00       | 62.5                      | 0.8                     |
| 14-Jun-20   | 20:00       | 71.8                      | 0.5                     |
| 14-Jun-20   | 21:00       | 110.8                     | 0.3                     |
| 14-Jun-20   | 22:00       | 73.6                      | 0.4                     |
| 14-Jun-20   | 23:00       | 76.6                      | 0.5                     |
| 15-Jun-20   | 0:00        | 47.9                      | 0.6                     |
| 15-Jun-20   | 1:00        | 62.5                      | 0.4                     |
| 15-Jun-20   | 2:00        | 45.7                      | 0.4                     |
| 15-Jun-20   | 3:00        | 66.8                      | 0.4                     |
| 15-Jun-20   | 4:00        | 67.1                      | 0.4                     |
| 15-Jun-20   | 5:00        | 76.6                      | 0.4                     |
| 15-Jun-20   | 6:00        | 155.7                     | 0.6                     |
| 15-Jun-20   | 7:00        | 170.2                     | 0.7                     |
| 15-Jun-20   | 8:00        | 237.9                     | 0.8                     |
| 15-Jun-20   | 9:00        | 187.9                     | 2.8                     |
| 15-Jun-20   | 10:00       | 235.0                     | 2.6                     |
| 15-Jun-20   | 11:00       | 228.5                     | 1.2                     |
| 15-Jun-20   | 12:00       | 208.5                     | 2.6                     |
| 15-Jun-20   | 13:00       | 250.9                     | 2.2                     |
| 15-Jun-20   | 14:00       | 246.8                     | 1.1                     |
| 15-Jun-20   | 15:00       | 204.9                     | 2.6                     |
| 15-Jun-20   | 16:00       | 206.3                     | 1.6                     |
| 15-Jun-20   | 17:00       | 233.4                     | 1.1                     |
| 15-Jun-20   | 18:00       | 228.2                     | 0.7                     |
| 15-Jun-20   | 19:00       | 224.6                     | 0.7                     |
| 15-Jun-20   | 20:00       | 229.6                     | 0.6                     |
| 15-Jun-20   | 21:00       | 253.3                     | 0.6                     |
| 15-Jun-20   | 22:00       | 147.5                     | 0.5                     |
| 15-Jun-20   | 23:00       | 203.3                     | 0.5                     |
| 16-Jun-20   | 0:00        | 116.8                     | 0.5                     |

**APPENDIX D –  
WEATHER CONDITIONS DURING THE MONITORING PERIOD**

**II. Mean Wind Speed and Wind Direction**

| <b>Date</b> | <b>Time</b> | <b>Wind Direction (°)</b> | <b>Wind Speed (m/s)</b> |
|-------------|-------------|---------------------------|-------------------------|
| 16-Jun-20   | 1:00        | 249.7                     | 0.4                     |
| 16-Jun-20   | 2:00        | 177.2                     | 0.4                     |
| 16-Jun-20   | 3:00        | 356.3                     | 0.4                     |
| 16-Jun-20   | 4:00        | 40.5                      | 0.4                     |
| 16-Jun-20   | 5:00        | 171.8                     | 0.4                     |
| 16-Jun-20   | 6:00        | 201.5                     | 0.2                     |
| 16-Jun-20   | 7:00        | 171.5                     | 0.1                     |
| 16-Jun-20   | 8:00        | 266.0                     | 1.9                     |
| 16-Jun-20   | 9:00        | 216.1                     | 0.9                     |
| 16-Jun-20   | 10:00       | 240.7                     | 1.1                     |
| 16-Jun-20   | 11:00       | 233.5                     | 2.1                     |
| 16-Jun-20   | 12:00       | 197.7                     | 0.2                     |
| 16-Jun-20   | 13:00       | 223.4                     | 0.6                     |
| 16-Jun-20   | 14:00       | 205.4                     | 1.9                     |
| 16-Jun-20   | 15:00       | 232.4                     | 4.3                     |
| 16-Jun-20   | 16:00       | 194.3                     | 1.1                     |
| 16-Jun-20   | 17:00       | 256.4                     | 1.5                     |
| 16-Jun-20   | 18:00       | 164.7                     | 0.3                     |
| 16-Jun-20   | 19:00       | 94.9                      | 0.2                     |
| 16-Jun-20   | 20:00       | 210.6                     | 0.2                     |
| 16-Jun-20   | 21:00       | 53.8                      | 0.2                     |
| 16-Jun-20   | 22:00       | 168.3                     | 0.2                     |
| 16-Jun-20   | 23:00       | 49.6                      | 0.2                     |
| 17-Jun-20   | 0:00        | 46.6                      | 0.2                     |
| 17-Jun-20   | 1:00        | 258.5                     | 0.1                     |
| 17-Jun-20   | 2:00        | 103.8                     | 0.2                     |
| 17-Jun-20   | 3:00        | 72.9                      | 0.2                     |
| 17-Jun-20   | 4:00        | 49.1                      | 0.2                     |
| 17-Jun-20   | 5:00        | 96.3                      | 0.4                     |
| 17-Jun-20   | 6:00        | 63.2                      | 0.2                     |
| 17-Jun-20   | 7:00        | 144.3                     | 0.4                     |
| 17-Jun-20   | 8:00        | 238.8                     | 0.6                     |
| 17-Jun-20   | 9:00        | 218.6                     | 0.5                     |
| 17-Jun-20   | 10:00       | 201.1                     | 2.1                     |
| 17-Jun-20   | 11:00       | 212.5                     | 1.3                     |
| 17-Jun-20   | 12:00       | 245.4                     | 0.6                     |

**APPENDIX D –  
WEATHER CONDITIONS DURING THE MONITORING PERIOD**

**II. Mean Wind Speed and Wind Direction**

| <b>Date</b> | <b>Time</b> | <b>Wind Direction (°)</b> | <b>Wind Speed (m/s)</b> |
|-------------|-------------|---------------------------|-------------------------|
| 17-Jun-20   | 13:00       | 217.6                     | 1.5                     |
| 17-Jun-20   | 14:00       | 223.2                     | 2.1                     |
| 17-Jun-20   | 15:00       | 203.9                     | 1.2                     |
| 17-Jun-20   | 16:00       | 234.3                     | 1.5                     |
| 17-Jun-20   | 17:00       | 223.3                     | 0.9                     |
| 17-Jun-20   | 18:00       | 197.5                     | 0.3                     |
| 17-Jun-20   | 19:00       | 227.8                     | 0.3                     |
| 17-Jun-20   | 20:00       | 130.2                     | 0.4                     |
| 17-Jun-20   | 21:00       | 58.1                      | 0.4                     |
| 17-Jun-20   | 22:00       | 38.5                      | 0.4                     |
| 17-Jun-20   | 23:00       | 41.3                      | 0.4                     |
| 18-Jun-20   | 0:00        | 211.5                     | 0.4                     |
| 18-Jun-20   | 1:00        | 26.4                      | 0.4                     |
| 18-Jun-20   | 2:00        | 137.4                     | 0.4                     |
| 18-Jun-20   | 3:00        | 213.3                     | 0.4                     |
| 18-Jun-20   | 4:00        | 216.2                     | 0.4                     |
| 18-Jun-20   | 5:00        | 209.2                     | 0.5                     |
| 18-Jun-20   | 6:00        | 251.5                     | 0.2                     |
| 18-Jun-20   | 7:00        | 230.7                     | 0.2                     |
| 18-Jun-20   | 8:00        | 222.6                     | 1.9                     |
| 18-Jun-20   | 9:00        | 193.0                     | 0.4                     |
| 18-Jun-20   | 10:00       | 211.3                     | 0.3                     |
| 18-Jun-20   | 11:00       | 218.0                     | 0.3                     |
| 18-Jun-20   | 12:00       | 184.7                     | 1.2                     |
| 18-Jun-20   | 13:00       | 206.9                     | 1.7                     |
| 18-Jun-20   | 14:00       | 196.1                     | 2.5                     |
| 18-Jun-20   | 15:00       | 208.4                     | 3.8                     |
| 18-Jun-20   | 16:00       | 206.4                     | 0.9                     |
| 18-Jun-20   | 17:00       | 172.1                     | 0.2                     |
| 18-Jun-20   | 18:00       | 232.2                     | 0.3                     |
| 18-Jun-20   | 19:00       | 204.5                     | 0.2                     |
| 18-Jun-20   | 20:00       | 219.9                     | 0.1                     |
| 18-Jun-20   | 21:00       | 198.7                     | 0.1                     |
| 18-Jun-20   | 22:00       | 215.9                     | 0.1                     |
| 18-Jun-20   | 23:00       | 200.0                     | 0.1                     |
| 19-Jun-20   | 0:00        | 185.2                     | 0.1                     |

**APPENDIX D –  
WEATHER CONDITIONS DURING THE MONITORING PERIOD**

**II. Mean Wind Speed and Wind Direction**

| <b>Date</b> | <b>Time</b> | <b>Wind Direction (°)</b> | <b>Wind Speed (m/s)</b> |
|-------------|-------------|---------------------------|-------------------------|
| 19-Jun-20   | 1:00        | 228.9                     | 0.1                     |
| 19-Jun-20   | 2:00        | 154.4                     | 0.1                     |
| 19-Jun-20   | 3:00        | 162.8                     | 0.1                     |
| 19-Jun-20   | 4:00        | 94.6                      | 0.1                     |
| 19-Jun-20   | 5:00        | 127.8                     | 0.1                     |
| 19-Jun-20   | 6:00        | 247.3                     | 0.1                     |
| 19-Jun-20   | 7:00        | 240.8                     | 0.3                     |
| 19-Jun-20   | 8:00        | 210.3                     | 0.8                     |
| 19-Jun-20   | 9:00        | 179.4                     | 0.8                     |
| 19-Jun-20   | 10:00       | 170.0                     | 1.4                     |
| 19-Jun-20   | 11:00       | 236.1                     | 2.0                     |
| 19-Jun-20   | 12:00       | 275.0                     | 2.4                     |
| 19-Jun-20   | 13:00       | 236.3                     | 1.7                     |
| 19-Jun-20   | 14:00       | 264.9                     | 1.1                     |
| 19-Jun-20   | 15:00       | 204.8                     | 0.2                     |
| 19-Jun-20   | 16:00       | 223.7                     | 1.7                     |
| 19-Jun-20   | 17:00       | 216.1                     | 0.3                     |
| 19-Jun-20   | 18:00       | 206.4                     | 0.2                     |
| 19-Jun-20   | 19:00       | 227.2                     | 0.2                     |
| 19-Jun-20   | 20:00       | 202.4                     | 0.1                     |
| 19-Jun-20   | 21:00       | 220.9                     | 0.1                     |
| 19-Jun-20   | 22:00       | 232.4                     | 0.1                     |
| 19-Jun-20   | 23:00       | 135.2                     | 0.1                     |
| 20-Jun-20   | 0:00        | 120.6                     | 0.1                     |
| 20-Jun-20   | 1:00        | 255.4                     | 0.1                     |
| 20-Jun-20   | 2:00        | 210.9                     | 0.1                     |
| 20-Jun-20   | 3:00        | 208.3                     | 0.1                     |
| 20-Jun-20   | 4:00        | 264.6                     | 0.1                     |
| 20-Jun-20   | 5:00        | 160.2                     | 0.1                     |
| 20-Jun-20   | 6:00        | 38.7                      | 0.1                     |
| 20-Jun-20   | 7:00        | 242.7                     | 0.4                     |
| 20-Jun-20   | 8:00        | 230.7                     | 0.2                     |
| 20-Jun-20   | 9:00        | 258.2                     | 1.0                     |
| 20-Jun-20   | 10:00       | 291.7                     | 1.0                     |
| 20-Jun-20   | 11:00       | 224.4                     | 2.3                     |
| 20-Jun-20   | 12:00       | 210.1                     | 2.0                     |

**APPENDIX D –  
WEATHER CONDITIONS DURING THE MONITORING PERIOD**

**II. Mean Wind Speed and Wind Direction**

| <b>Date</b> | <b>Time</b> | <b>Wind Direction (°)</b> | <b>Wind Speed (m/s)</b> |
|-------------|-------------|---------------------------|-------------------------|
| 20-Jun-20   | 13:00       | 199.4                     | 0.9                     |
| 20-Jun-20   | 14:00       | 195.4                     | 0.3                     |
| 20-Jun-20   | 15:00       | 214.0                     | 1.5                     |
| 20-Jun-20   | 16:00       | 231.8                     | 0.6                     |
| 20-Jun-20   | 17:00       | 241.3                     | 0.2                     |
| 20-Jun-20   | 18:00       | 225.4                     | 0.2                     |
| 20-Jun-20   | 19:00       | 211.4                     | 0.2                     |
| 20-Jun-20   | 20:00       | 225.7                     | 0.1                     |
| 20-Jun-20   | 21:00       | 217.2                     | 0.1                     |
| 20-Jun-20   | 22:00       | 216.8                     | 0.1                     |
| 20-Jun-20   | 23:00       | 209.6                     | 0.1                     |
| 21-Jun-20   | 0:00        | 202.7                     | 0.1                     |
| 21-Jun-20   | 1:00        | 204.0                     | 0.1                     |
| 21-Jun-20   | 2:00        | 204.6                     | 0.1                     |
| 21-Jun-20   | 3:00        | 213.4                     | 0.1                     |
| 21-Jun-20   | 4:00        | 227.3                     | 0.1                     |
| 21-Jun-20   | 5:00        | 241.0                     | 0.1                     |
| 21-Jun-20   | 6:00        | 220.2                     | 0.1                     |
| 21-Jun-20   | 7:00        | 244.3                     | 0.4                     |
| 21-Jun-20   | 8:00        | 225.9                     | 3.2                     |
| 21-Jun-20   | 9:00        | 259.6                     | 0.5                     |
| 21-Jun-20   | 10:00       | 228.4                     | 2.3                     |
| 21-Jun-20   | 11:00       | 257.1                     | 2.3                     |
| 21-Jun-20   | 12:00       | 235.9                     | 1.6                     |
| 21-Jun-20   | 13:00       | 228.4                     | 1.1                     |
| 21-Jun-20   | 14:00       | 234.0                     | 0.8                     |
| 21-Jun-20   | 15:00       | 205.0                     | 0.9                     |
| 21-Jun-20   | 16:00       | 233.0                     | 0.6                     |
| 21-Jun-20   | 17:00       | 240.6                     | 0.3                     |
| 21-Jun-20   | 18:00       | 213.0                     | 0.2                     |
| 21-Jun-20   | 19:00       | 194.8                     | 0.1                     |
| 21-Jun-20   | 20:00       | 216.5                     | 0.1                     |
| 21-Jun-20   | 21:00       | 212.5                     | 0.2                     |
| 21-Jun-20   | 22:00       | 233.5                     | 0.4                     |
| 21-Jun-20   | 23:00       | 201.0                     | 0.1                     |
| 22-Jun-20   | 0:00        | 194.2                     | 0.5                     |

**APPENDIX D –  
WEATHER CONDITIONS DURING THE MONITORING PERIOD**

**II. Mean Wind Speed and Wind Direction**

| <b>Date</b> | <b>Time</b> | <b>Wind Direction (°)</b> | <b>Wind Speed (m/s)</b> |
|-------------|-------------|---------------------------|-------------------------|
| 22-Jun-20   | 1:00        | 214.4                     | 0.2                     |
| 22-Jun-20   | 2:00        | 209.6                     | 1.3                     |
| 22-Jun-20   | 3:00        | 191.5                     | 0.1                     |
| 22-Jun-20   | 4:00        | 213.2                     | 0.1                     |
| 22-Jun-20   | 5:00        | 216.9                     | 0.1                     |
| 22-Jun-20   | 6:00        | 178.7                     | 0.2                     |
| 22-Jun-20   | 7:00        | 171.7                     | 0.7                     |
| 22-Jun-20   | 8:00        | 219.8                     | 0.6                     |
| 22-Jun-20   | 9:00        | 215.8                     | 1.6                     |
| 22-Jun-20   | 10:00       | 232.2                     | 1.6                     |
| 22-Jun-20   | 11:00       | 194.7                     | 0.6                     |
| 22-Jun-20   | 12:00       | 218.3                     | 0.5                     |
| 22-Jun-20   | 13:00       | 220.8                     | 1.7                     |
| 22-Jun-20   | 14:00       | 207.7                     | 1.0                     |
| 22-Jun-20   | 15:00       | 213.0                     | 1.5                     |
| 22-Jun-20   | 16:00       | 226.0                     | 1.3                     |
| 22-Jun-20   | 17:00       | 191.4                     | 0.9                     |
| 22-Jun-20   | 18:00       | 214.1                     | 0.2                     |
| 22-Jun-20   | 19:00       | 235.4                     | 0.1                     |
| 22-Jun-20   | 20:00       | 225.8                     | 0.1                     |
| 22-Jun-20   | 21:00       | 174.6                     | 0.1                     |
| 22-Jun-20   | 22:00       | 233.6                     | 0.1                     |
| 22-Jun-20   | 23:00       | 178.0                     | 0.7                     |
| 23-Jun-20   | 0:00        | 242.5                     | 0.1                     |
| 23-Jun-20   | 1:00        | 222.9                     | 0.2                     |
| 23-Jun-20   | 2:00        | 231.4                     | 0.1                     |
| 23-Jun-20   | 3:00        | 199.9                     | 0.1                     |
| 23-Jun-20   | 4:00        | 225.9                     | 0.1                     |
| 23-Jun-20   | 5:00        | 273.8                     | 0.1                     |
| 23-Jun-20   | 6:00        | 253.0                     | 0.2                     |
| 23-Jun-20   | 7:00        | 252.9                     | 0.8                     |
| 23-Jun-20   | 8:00        | 259.7                     | 1.8                     |
| 23-Jun-20   | 9:00        | 261.6                     | 0.8                     |
| 23-Jun-20   | 10:00       | 218.2                     | 1.2                     |
| 23-Jun-20   | 11:00       | 214.0                     | 0.6                     |
| 23-Jun-20   | 12:00       | 262.7                     | 1.8                     |

**APPENDIX D –  
WEATHER CONDITIONS DURING THE MONITORING PERIOD**

**II. Mean Wind Speed and Wind Direction**

| <b>Date</b> | <b>Time</b> | <b>Wind Direction (°)</b> | <b>Wind Speed (m/s)</b> |
|-------------|-------------|---------------------------|-------------------------|
| 23-Jun-20   | 13:00       | 233.5                     | 1.3                     |
| 23-Jun-20   | 14:00       | 220.5                     | 3.1                     |
| 23-Jun-20   | 15:00       | 232.7                     | 0.7                     |
| 23-Jun-20   | 16:00       | 226.5                     | 0.8                     |
| 23-Jun-20   | 17:00       | 235.7                     | 2.4                     |
| 23-Jun-20   | 18:00       | 219.5                     | 1.2                     |
| 23-Jun-20   | 19:00       | 225.9                     | 0.2                     |
| 23-Jun-20   | 20:00       | 253.3                     | 0.1                     |
| 23-Jun-20   | 21:00       | 226.4                     | 0.1                     |
| 23-Jun-20   | 22:00       | 223.7                     | 0.1                     |
| 23-Jun-20   | 23:00       | 230.1                     | 0.2                     |
| 24-Jun-20   | 0:00        | 245.9                     | 0.1                     |
| 24-Jun-20   | 1:00        | 280.7                     | 0.3                     |
| 24-Jun-20   | 2:00        | 226.9                     | 0.1                     |
| 24-Jun-20   | 3:00        | 204.9                     | 0.1                     |
| 24-Jun-20   | 4:00        | 220.4                     | 0.1                     |
| 24-Jun-20   | 5:00        | 223.3                     | 0.1                     |
| 24-Jun-20   | 6:00        | 295.5                     | 0.1                     |
| 24-Jun-20   | 7:00        | 233.5                     | 0.3                     |
| 24-Jun-20   | 8:00        | 226.1                     | 0.7                     |
| 24-Jun-20   | 9:00        | 263.9                     | 2.4                     |
| 24-Jun-20   | 10:00       | 294.2                     | 0.4                     |
| 24-Jun-20   | 11:00       | 241.0                     | 1.7                     |
| 24-Jun-20   | 12:00       | 222.1                     | 0.3                     |
| 24-Jun-20   | 13:00       | 195.4                     | 1.9                     |
| 24-Jun-20   | 14:00       | 222.2                     | 2.3                     |
| 24-Jun-20   | 15:00       | 237.6                     | 1.9                     |
| 24-Jun-20   | 16:00       | 217.1                     | 0.5                     |
| 24-Jun-20   | 17:00       | 264.1                     | 0.5                     |
| 24-Jun-20   | 18:00       | 222.2                     | 0.2                     |
| 24-Jun-20   | 19:00       | 200.4                     | 0.1                     |
| 24-Jun-20   | 20:00       | 224.7                     | 0.4                     |
| 24-Jun-20   | 21:00       | 207.8                     | 0.4                     |
| 24-Jun-20   | 22:00       | 214.6                     | 0.9                     |
| 24-Jun-20   | 23:00       | 213.3                     | 1.0                     |
| 25-Jun-20   | 0:00        | 212.1                     | 0.4                     |



**APPENDIX D –  
WEATHER CONDITIONS DURING THE MONITORING PERIOD**

**II. Mean Wind Speed and Wind Direction**

| <b>Date</b> | <b>Time</b> | <b>Wind Direction (°)</b> | <b>Wind Speed (m/s)</b> |
|-------------|-------------|---------------------------|-------------------------|
| 25-Jun-20   | 1:00        | 245.8                     | 0.1                     |
| 25-Jun-20   | 2:00        | 211.7                     | 0.6                     |
| 25-Jun-20   | 3:00        | 233.4                     | 0.5                     |
| 25-Jun-20   | 4:00        | 192.0                     | 0.4                     |
| 25-Jun-20   | 5:00        | 197.3                     | 0.6                     |
| 25-Jun-20   | 6:00        | 230.2                     | 0.3                     |
| 25-Jun-20   | 7:00        | 212.4                     | 0.7                     |
| 25-Jun-20   | 8:00        | 226.9                     | 0.2                     |
| 25-Jun-20   | 9:00        | 193.2                     | 1.2                     |
| 25-Jun-20   | 10:00       | 201.3                     | 0.6                     |
| 25-Jun-20   | 11:00       | 203.5                     | 1.5                     |
| 25-Jun-20   | 12:00       | 211.7                     | 2.6                     |
| 25-Jun-20   | 13:00       | 226.7                     | 4.4                     |
| 25-Jun-20   | 14:00       | 217.9                     | 1.8                     |
| 25-Jun-20   | 15:00       | 196.0                     | 1.4                     |
| 25-Jun-20   | 16:00       | 200.8                     | 3.0                     |
| 25-Jun-20   | 17:00       | 222.1                     | 2.7                     |
| 25-Jun-20   | 18:00       | 197.6                     | 0.5                     |
| 25-Jun-20   | 19:00       | 178.5                     | 0.1                     |
| 25-Jun-20   | 20:00       | 238.0                     | 0.1                     |
| 25-Jun-20   | 21:00       | 218.8                     | 0.1                     |
| 25-Jun-20   | 22:00       | 217.7                     | 0.3                     |
| 25-Jun-20   | 23:00       | 215.8                     | 0.6                     |
| 26-Jun-20   | 0:00        | 184.1                     | 0.2                     |
| 26-Jun-20   | 1:00        | 190.4                     | 0.1                     |
| 26-Jun-20   | 2:00        | 186.7                     | 0.2                     |
| 26-Jun-20   | 3:00        | 245.9                     | 0.1                     |
| 26-Jun-20   | 4:00        | 191.6                     | 0.1                     |
| 26-Jun-20   | 5:00        | 173.1                     | 0.1                     |
| 26-Jun-20   | 6:00        | 255.1                     | 0.3                     |
| 26-Jun-20   | 7:00        | 219.3                     | 0.1                     |
| 26-Jun-20   | 8:00        | 233.2                     | 0.3                     |
| 26-Jun-20   | 9:00        | 189.7                     | 0.3                     |
| 26-Jun-20   | 10:00       | 197.3                     | 0.2                     |
| 26-Jun-20   | 11:00       | 203.2                     | 0.4                     |
| 26-Jun-20   | 12:00       | 269.7                     | 0.6                     |

**APPENDIX D –  
WEATHER CONDITIONS DURING THE MONITORING PERIOD**

**II. Mean Wind Speed and Wind Direction**

| <b>Date</b> | <b>Time</b> | <b>Wind Direction (°)</b> | <b>Wind Speed (m/s)</b> |
|-------------|-------------|---------------------------|-------------------------|
| 26-Jun-20   | 13:00       | 181.1                     | 1.4                     |
| 26-Jun-20   | 14:00       | 244.2                     | 2.0                     |
| 26-Jun-20   | 15:00       | 212.2                     | 0.3                     |
| 26-Jun-20   | 16:00       | 203.5                     | 1.0                     |
| 26-Jun-20   | 17:00       | 222.0                     | 1.8                     |
| 26-Jun-20   | 18:00       | 219.5                     | 0.4                     |
| 26-Jun-20   | 19:00       | 200.8                     | 0.2                     |
| 26-Jun-20   | 20:00       | 247.7                     | 0.2                     |
| 26-Jun-20   | 21:00       | 229.0                     | 0.1                     |
| 26-Jun-20   | 22:00       | 225.1                     | 0.1                     |
| 26-Jun-20   | 23:00       | 218.0                     | 0.1                     |
| 27-Jun-20   | 0:00        | 231.1                     | 0.1                     |
| 27-Jun-20   | 1:00        | 220.1                     | 0.1                     |
| 27-Jun-20   | 2:00        | 235.9                     | 0.1                     |
| 27-Jun-20   | 3:00        | 187.1                     | 0.1                     |
| 27-Jun-20   | 4:00        | 217.9                     | 0.1                     |
| 27-Jun-20   | 5:00        | 225.4                     | 0.1                     |
| 27-Jun-20   | 6:00        | 44.9                      | 0.1                     |
| 27-Jun-20   | 7:00        | 227.9                     | 0.1                     |
| 27-Jun-20   | 8:00        | 241.5                     | 0.4                     |
| 27-Jun-20   | 9:00        | 226.3                     | 0.1                     |
| 27-Jun-20   | 10:00       | 223.2                     | 0.5                     |
| 27-Jun-20   | 11:00       | 203.4                     | 0.8                     |
| 27-Jun-20   | 12:00       | 197.4                     | 1.7                     |
| 27-Jun-20   | 13:00       | 185.3                     | 1.0                     |
| 27-Jun-20   | 14:00       | 204.5                     | 1.3                     |
| 27-Jun-20   | 15:00       | 223.7                     | 2.0                     |
| 27-Jun-20   | 16:00       | 168.6                     | 0.9                     |
| 27-Jun-20   | 17:00       | 212.6                     | 0.3                     |
| 27-Jun-20   | 18:00       | 262.2                     | 0.2                     |
| 27-Jun-20   | 19:00       | 201.7                     | 0.2                     |
| 27-Jun-20   | 20:00       | 228.8                     | 0.1                     |
| 27-Jun-20   | 21:00       | 213.5                     | 0.1                     |
| 27-Jun-20   | 22:00       | 225.4                     | 0.1                     |
| 27-Jun-20   | 23:00       | 218.7                     | 0.3                     |
| 28-Jun-20   | 0:00        | 242.8                     | 0.1                     |

**APPENDIX D –  
WEATHER CONDITIONS DURING THE MONITORING PERIOD**

**II. Mean Wind Speed and Wind Direction**

| <b>Date</b> | <b>Time</b> | <b>Wind Direction (°)</b> | <b>Wind Speed (m/s)</b> |
|-------------|-------------|---------------------------|-------------------------|
| 28-Jun-20   | 1:00        | 213.3                     | 0.1                     |
| 28-Jun-20   | 2:00        | 111.9                     | 0.1                     |
| 28-Jun-20   | 3:00        | 235.0                     | 0.1                     |
| 28-Jun-20   | 4:00        | 113.3                     | 0.1                     |
| 28-Jun-20   | 5:00        | 70.9                      | 0.1                     |
| 28-Jun-20   | 6:00        | 215.9                     | 0.2                     |
| 28-Jun-20   | 7:00        | 249.1                     | 0.2                     |
| 28-Jun-20   | 8:00        | 179.8                     | 0.9                     |
| 28-Jun-20   | 9:00        | 223.6                     | 2.6                     |
| 28-Jun-20   | 10:00       | 208.9                     | 2.5                     |
| 28-Jun-20   | 11:00       | 210.9                     | 2.1                     |
| 28-Jun-20   | 12:00       | 261.2                     | 0.5                     |
| 28-Jun-20   | 13:00       | 278.5                     | 0.2                     |
| 28-Jun-20   | 14:00       | 236.6                     | 0.5                     |
| 28-Jun-20   | 15:00       | 175.0                     | 1.4                     |
| 28-Jun-20   | 16:00       | 232.2                     | 0.8                     |
| 28-Jun-20   | 17:00       | 218.9                     | 0.7                     |
| 28-Jun-20   | 18:00       | 229.6                     | 0.3                     |
| 28-Jun-20   | 19:00       | 233.2                     | 0.2                     |
| 28-Jun-20   | 20:00       | 220.2                     | 0.3                     |
| 28-Jun-20   | 21:00       | 155.9                     | 0.1                     |
| 28-Jun-20   | 22:00       | 232.4                     | 0.1                     |
| 28-Jun-20   | 23:00       | 237.4                     | 0.1                     |
| 29-Jun-20   | 0:00        | 122.3                     | 0.1                     |
| 29-Jun-20   | 1:00        | 205.9                     | 0.1                     |
| 29-Jun-20   | 2:00        | 128.5                     | 0.1                     |
| 29-Jun-20   | 3:00        | 75.0                      | 0.1                     |
| 29-Jun-20   | 4:00        | 59.8                      | 0.1                     |
| 29-Jun-20   | 5:00        | 122.9                     | 0.1                     |
| 29-Jun-20   | 6:00        | 65.2                      | 0.1                     |
| 29-Jun-20   | 7:00        | 168.4                     | 0.1                     |
| 29-Jun-20   | 8:00        | 131.5                     | 0.3                     |
| 29-Jun-20   | 9:00        | 196.3                     | 0.3                     |
| 29-Jun-20   | 10:00       | 176.1                     | 0.2                     |
| 29-Jun-20   | 11:00       | 215.1                     | 0.7                     |
| 29-Jun-20   | 12:00       | 195.8                     | 0.4                     |

**APPENDIX D –  
WEATHER CONDITIONS DURING THE MONITORING PERIOD**

**II. Mean Wind Speed and Wind Direction**

| <b>Date</b> | <b>Time</b> | <b>Wind Direction (°)</b> | <b>Wind Speed (m/s)</b> |
|-------------|-------------|---------------------------|-------------------------|
| 29-Jun-20   | 13:00       | 247.9                     | 0.8                     |
| 29-Jun-20   | 14:00       | 195.1                     | 0.2                     |
| 29-Jun-20   | 15:00       | 227.8                     | 0.4                     |
| 29-Jun-20   | 16:00       | 252.2                     | 1.5                     |
| 29-Jun-20   | 17:00       | 217.0                     | 0.5                     |
| 29-Jun-20   | 18:00       | 212.2                     | 0.2                     |
| 29-Jun-20   | 19:00       | 183.3                     | 0.1                     |
| 29-Jun-20   | 20:00       | 124.9                     | 0.1                     |
| 29-Jun-20   | 21:00       | 75.0                      | 0.2                     |
| 29-Jun-20   | 22:00       | 139.4                     | 0.1                     |
| 29-Jun-20   | 23:00       | 200.3                     | 0.1                     |
| 30-Jun-20   | 0:00        | 56.3                      | 0.1                     |
| 30-Jun-20   | 1:00        | 45.1                      | 0.1                     |
| 30-Jun-20   | 2:00        | 154.6                     | 0.1                     |
| 30-Jun-20   | 3:00        | 255.7                     | 0.1                     |
| 30-Jun-20   | 4:00        | 137.4                     | 0.1                     |
| 30-Jun-20   | 5:00        | 250.1                     | 0.1                     |
| 30-Jun-20   | 6:00        | 148.5                     | 0.1                     |
| 30-Jun-20   | 7:00        | 234.9                     | 0.1                     |
| 30-Jun-20   | 8:00        | 188.8                     | 0.2                     |
| 30-Jun-20   | 9:00        | 213.5                     | 0.6                     |
| 30-Jun-20   | 10:00       | 104.4                     | 0.5                     |
| 30-Jun-20   | 11:00       | 228.4                     | 0.4                     |
| 30-Jun-20   | 12:00       | 213.6                     | 0.3                     |
| 30-Jun-20   | 13:00       | 245.2                     | 1.0                     |
| 30-Jun-20   | 14:00       | 285.9                     | 0.7                     |
| 30-Jun-20   | 15:00       | 295.2                     | 0.6                     |
| 30-Jun-20   | 16:00       | 191.1                     | 0.2                     |
| 30-Jun-20   | 17:00       | 145.5                     | 0.1                     |
| 30-Jun-20   | 18:00       | 151.3                     | 0.1                     |
| 30-Jun-20   | 19:00       | 49.6                      | 0.1                     |
| 30-Jun-20   | 20:00       | 83.6                      | 0.1                     |
| 30-Jun-20   | 21:00       | 77.6                      | 0.1                     |
| 30-Jun-20   | 22:00       | 99.2                      | 0.1                     |
| 30-Jun-20   | 23:00       | 80.6                      | 0.1                     |

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**APPENDIX E**  
**1-HOUR TSP MONITORING RESULTS**  
**AND GRAPHICAL PRESENTATIONS**

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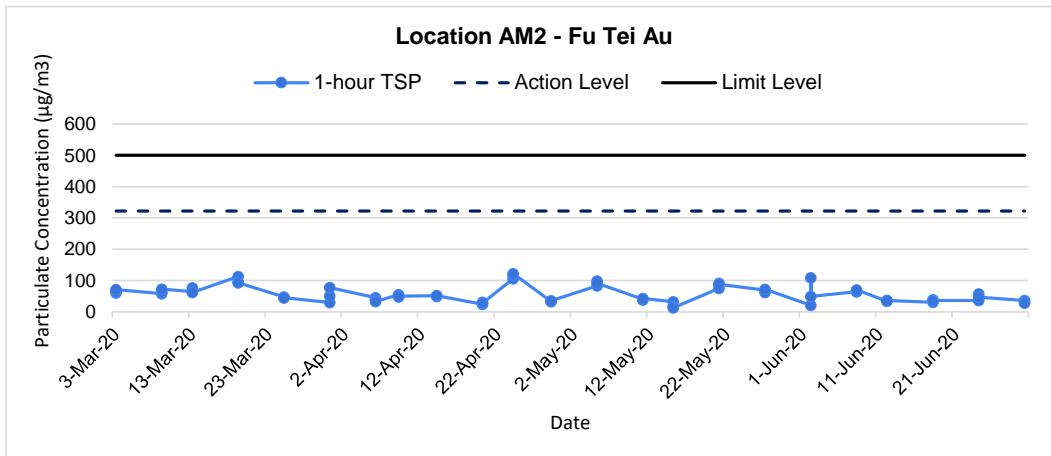
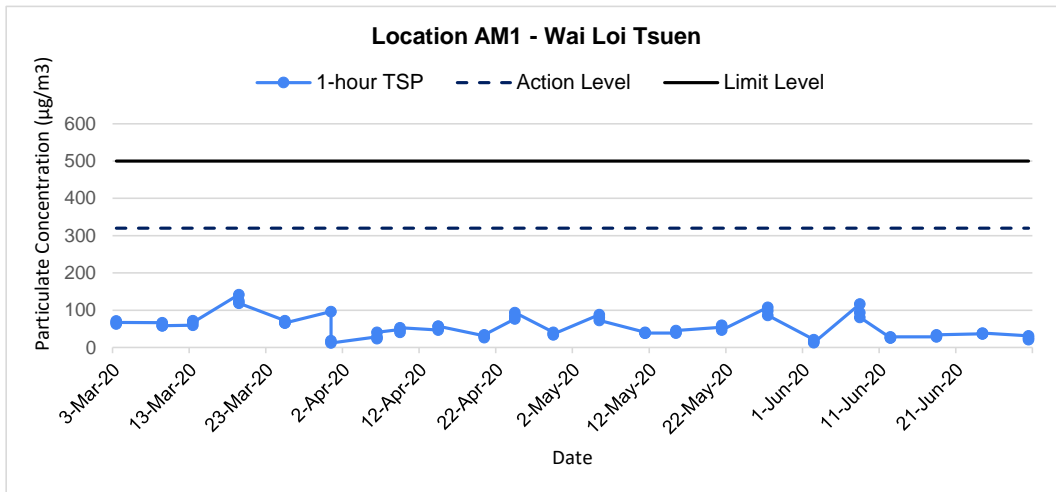
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## Appendix E - 1-hour TSP Monitoring Results

| Location AM1 - Wai Loi Tsuen |       |         |  |
|------------------------------|-------|---------|--|
| Date                         | Time  | Weather | Particulate Concentration ( $\mu\text{g}/\text{m}^3$ ) |
| 2-Jun-20                     | 9:35  | Fine    | 20.8   |
| 2-Jun-20                     | 10:35 | Fine    | 15.6   |
| 2-Jun-20                     | 11:35 | Fine    | 13.0   |
| 8-Jun-20                     | 9:10  | Rainy   | 117.0  |
| 8-Jun-20                     | 10:10 | Rainy   | 93.6   |
| 8-Jun-20                     | 11:10 | Rainy   | 80.6   |
| 12-Jun-20                    | 9:20  | Sunny   | 26.0   |
| 12-Jun-20                    | 10:20 | Sunny   | 26.0   |
| 12-Jun-20                    | 11:20 | Sunny   | 28.6   |
| 18-Jun-20                    | 9:05  | Sunny   | 28.6   |
| 18-Jun-20                    | 10:05 | Sunny   | 31.2   |
| 18-Jun-20                    | 11:05 | Sunny   | 33.8   |
| 24-Jun-20                    | 9:15  | Sunny   | 36.4   |
| 24-Jun-20                    | 10:15 | Sunny   | 36.4   |
| 24-Jun-20                    | 11:15 | Sunny   | 39.0   |
| 30-Jun-20                    | 9:15  | Sunny   | 31.2   |
| 30-Jun-20                    | 10:15 | Sunny   | 20.8   |
| 30-Jun-20                    | 11:15 | Sunny   | 26.0   |
| Average                      |       |         | 39.1   |
| Maximum                      |       |         | 117.0  |
| Minimum                      |       |         | 13.0   |

| Location AM2 - Fu Tei Au |       |         |  |
|--------------------------|-------|---------|--|
| Date                     | Time  | Weather | Particulate Concentration ( $\mu\text{g}/\text{m}^3$ ) |
| 2-Jun-20                 | 14:05 | Fine    | 20.8   |
| 2-Jun-20                 | 15:05 | Fine    | 109.2  |
| 2-Jun-20                 | 16:05 | Fine    | 49.4   |
| 8-Jun-20                 | 13:00 | Rainy   | 65.0   |
| 8-Jun-20                 | 14:00 | Rainy   | 65.0   |
| 8-Jun-20                 | 15:00 | Rainy   | 70.2   |
| 12-Jun-20                | 13:30 | Sunny   | 33.8   |
| 12-Jun-20                | 14:30 | Sunny   | 36.4   |
| 12-Jun-20                | 15:30 | Sunny   | 36.4   |
| 18-Jun-20                | 13:15 | Sunny   | 31.2   |
| 18-Jun-20                | 14:15 | Sunny   | 39.0   |
| 18-Jun-20                | 15:15 | Sunny   | 36.4   |
| 24-Jun-20                | 13:40 | Sunny   | 36.4   |
| 24-Jun-20                | 14:40 | Sunny   | 57.2   |
| 24-Jun-20                | 15:40 | Sunny   | 46.8   |
| 30-Jun-20                | 13:00 | Sunny   | 36.4   |
| 30-Jun-20                | 14:00 | Sunny   | 31.2   |
| 30-Jun-20                | 15:00 | Sunny   | 28.6   |
| Average                  |       |         | 46.1   |
| Maximum                  |       |         | 109.2  |
| Minimum                  |       |         | 20.8   |

### 1-hr TSP Concentration Levels



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

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**APPENDIX F  
24-HOUR TSP MONITORING RESULTS  
AND GRAPHICAL PRESENTATIONS**

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## Appendix F - 24-hour TSP Monitoring Results

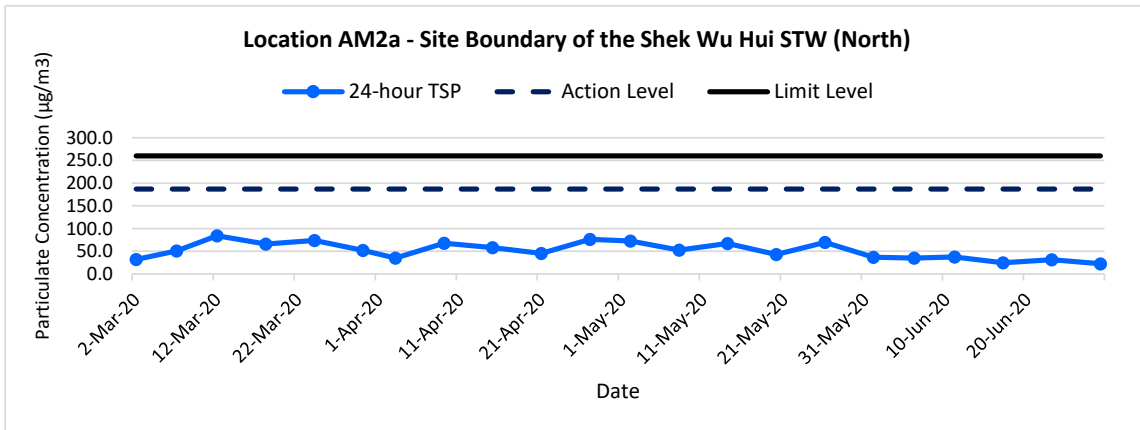
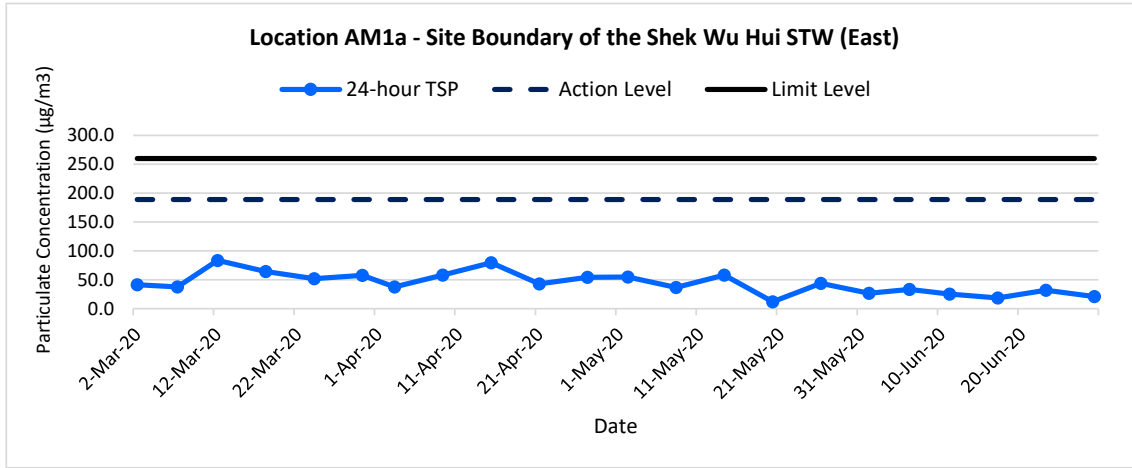
### Location AM1a - Site Boundary of the Shek Wu Hui STW (East)

| 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 <sup>3</sup> /min.) |       | Av. Flow (m <sup>3</sup> /min) | Total vol. (m <sup>3</sup> ) | Conc. (µg/m <sup>3</sup> ) |
|------------|-------------------|---------------|---------------------------------|-------------------|--------|------------------------|-------------|--------|----------------------|----------------------------------|-------|--------------------------------|------------------------------|----------------------------|
|            |                   |               |                                 | Initial           | Final  |                        | Initial     | Final  |                      | Initial                          | Final |                                |                              |                            |
| 1-Jun-20   | Sunny             | 302.5         | 758.4                           | 3.5276            | 3.5743 | 0.0467                 | 8730.6      | 8754.6 | 24.0                 | 1.21                             | 1.22  | 1.21                           | 1748.8                       | 26.7                       |
| 6-Jun-20   | Rainy             | 300.3         | 755.8                           | 3.4728            | 3.5316 | 0.0588                 | 8754.6      | 8778.6 | 24.0                 | 1.22                             | 1.22  | 1.22                           | 1752.6                       | 33.6                       |
| 11-Jun-20  | Sunny             | 303.3         | 755.8                           | 3.4958            | 3.5399 | 0.0441                 | 8778.6      | 8802.6 | 24.0                 | 1.21                             | 1.21  | 1.21                           | 1742.7                       | 25.3                       |
| 17-Jun-20  | Sunny             | 302.3         | 757.3                           | 3.4999            | 3.5328 | 0.0329                 | 8802.6      | 8826.6 | 24.0                 | 1.21                             | 1.21  | 1.21                           | 1747.9                       | 18.8                       |
| 23-Jun-20  | Sunny             | 303.4         | 756.1                           | 3.4979            | 3.5534 | 0.0555                 | 8826.6      | 8850.6 | 24.0                 | 1.21                             | 1.21  | 1.21                           | 1743.0                       | 31.8                       |
| 29-Jun-20  | Sunny             | 303.6         | 755.0                           | 3.5198            | 3.5567 | 0.0369                 | 8850.6      | 8874.6 | 24.0                 | 1.21                             | 1.21  | 1.21                           | 1740.8                       | 21.2                       |
|            |                   |               |                                 |                   |        |                        |             |        |                      |                                  |       |                                | Min                          | 18.8                       |
|            |                   |               |                                 |                   |        |                        |             |        |                      |                                  |       |                                | Max                          | 33.6                       |
|            |                   |               |                                 |                   |        |                        |             |        |                      |                                  |       |                                | Average                      | 26.2                       |

### 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 <sup>3</sup> /min.) |       | Av. Flow (m <sup>3</sup> /min) | Total vol. (m <sup>3</sup> ) | Conc. (µg/m <sup>3</sup> ) |
|------------|-------------------|---------------|---------------------------------|-------------------|--------|------------------------|-------------|---------|----------------------|----------------------------------|-------|--------------------------------|------------------------------|----------------------------|
|            |                   |               |                                 | Initial           | Final  |                        | Initial     | Final   |                      | Initial                          | Final |                                |                              |                            |
| 1-Jun-20   | Sunny             | 302.5         | 758.4                           | 3.4695            | 3.5341 | 0.0646                 | 18900.8     | 18924.8 | 24.0                 | 1.22                             | 1.22  | 1.22                           | 1751.0                       | 36.9                       |
| 6-Jun-20   | Rainy             | 300.3         | 755.8                           | 3.5094            | 3.5714 | 0.0620                 | 18924.8     | 18948.8 | 24.0                 | 1.22                             | 1.22  | 1.22                           | 1755.2                       | 35.3                       |
| 11-Jun-20  | Sunny             | 303.3         | 755.8                           | 3.4900            | 3.5558 | 0.0658                 | 18948.8     | 18972.8 | 24.0                 | 1.21                             | 1.21  | 1.21                           | 1744.2                       | 37.7                       |
| 17-Jun-20  | Sunny             | 302.3         | 757.3                           | 3.4911            | 3.5346 | 0.0435                 | 18972.8     | 18996.8 | 24.0                 | 1.22                             | 1.21  | 1.22                           | 1750.0                       | 24.9                       |
| 23-Jun-20  | Sunny             | 303.4         | 756.1                           | 3.5345            | 3.5891 | 0.0546                 | 18996.8     | 19020.8 | 24.0                 | 1.21                             | 1.21  | 1.21                           | 1744.5                       | 31.3                       |
| 29-Jun-20  | Sunny             | 303.6         | 755.0                           | 3.4730            | 3.5124 | 0.0394                 | 19020.8     | 19044.8 | 24.0                 | 1.21                             | 1.21  | 1.21                           | 1742.0                       | 22.6                       |
|            |                   |               |                                 |                   |        |                        |             |         |                      |                                  |       |                                | Min                          | 22.6                       |
|            |                   |               |                                 |                   |        |                        |             |         |                      |                                  |       |                                | Max                          | 37.7                       |
|            |                   |               |                                 |                   |        |                        |             |         |                      |                                  |       |                                | Average                      | 31.5                       |

## 24-hr TSP Concentration Levels



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

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**APPENDIX G  
COPIES OF CALIBRATION  
CERTIFICATES FOR NOISE  
MONITORING**

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Equipment no.: N-12-01

## Calibration Certificate

0022524

|  |   |
|--|---|
| Customer :<br>Cinotech Consultants Limited<br>RM 1710, Technology Park,<br>18 On Lai Street, Shatin, N.T.<br>Hong Kong | Object 1 : BSWA 308 SLM<br>Serial No. /Ref. No. : 570183 / 550233<br>Object 2 :<br>Serial No. /Ref. No. : |
| Customer Code : SVEC09005  | Manufacturer : BSWAtech   |
| Date of calibration: 23/09/2019<br>Date of the recommended re-calibration: 23/09/2020                                  | Certificate No.: 0022524<br>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



Equipment no.: N-12-02

## Calibration Certificate

0022522

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

+/- 0.2dB 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 :<br>Cinotech Consultants Limited<br>RM 1710, Technology Park,<br>18 On Lai Street, Shatin, N.T.<br>Hong Kong | Object 1 : SVAN957 SLM<br>Serial No. /Ref. No. : 23851 / N-08-12<br>Object 2 : Microphone<br>Serial No. /Ref. No. : 43676 |
| Customer Code : SVEC09005  | Manufacturer : Svantek  |
| Date of calibration: 19/12/2019<br>Date of the recommended re-calibration: 19/12/2020                                  | Certificate No.: 0022999<br>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

+/- 0.2dB 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

0022675

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

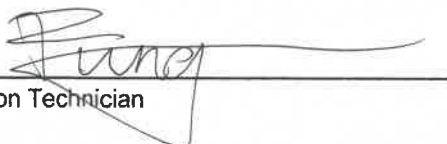
+/- 0.2dB for probability not less than 95%.

## Conformity

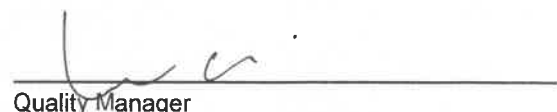
- 1.The resulted values were those obtained at the time of test and applies only to the item calibrated.
- 2.The measurement uncertainty was calculated according to the regulations of GUM with the coverage factor k=2 and contains the uncertainty of the measuring procedure and the uncertainty of the measuring 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

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**APPENDIX H  
NOISE MONITORING RESULTS AND  
GRAPHICAL PRESENTATIONS**

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## Appendix H - Noise Monitoring Results

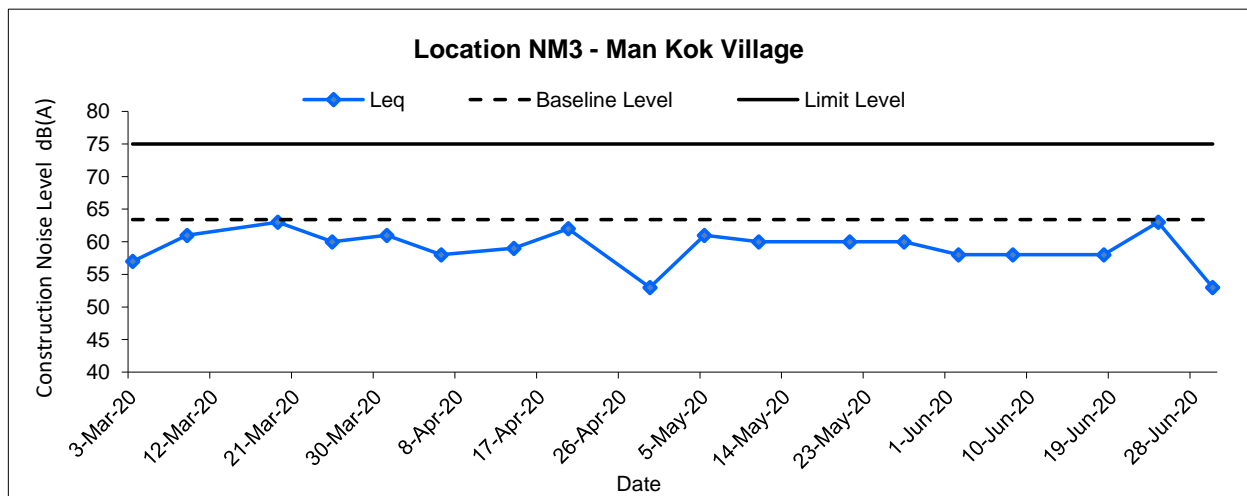
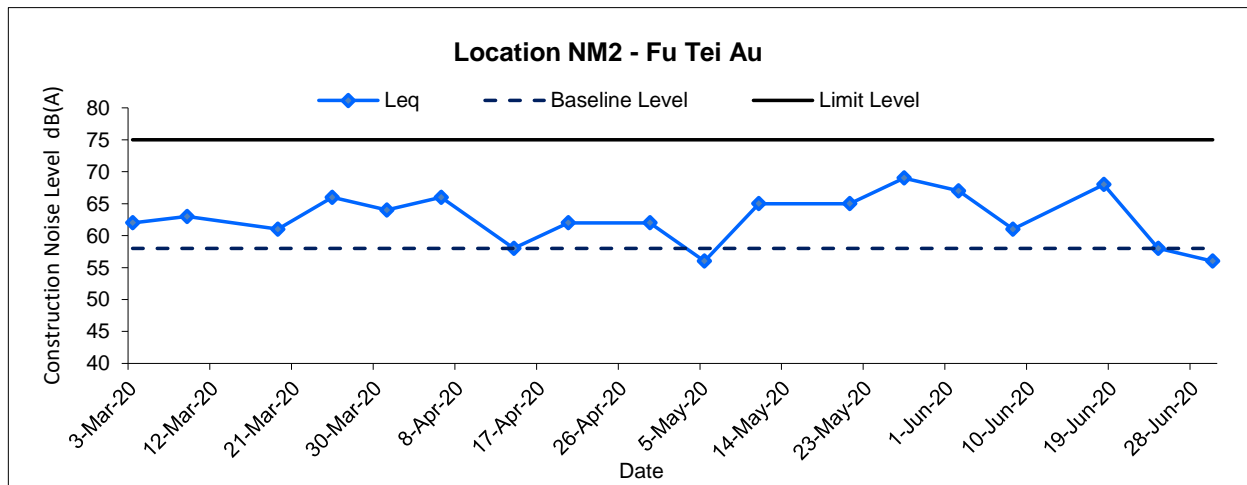
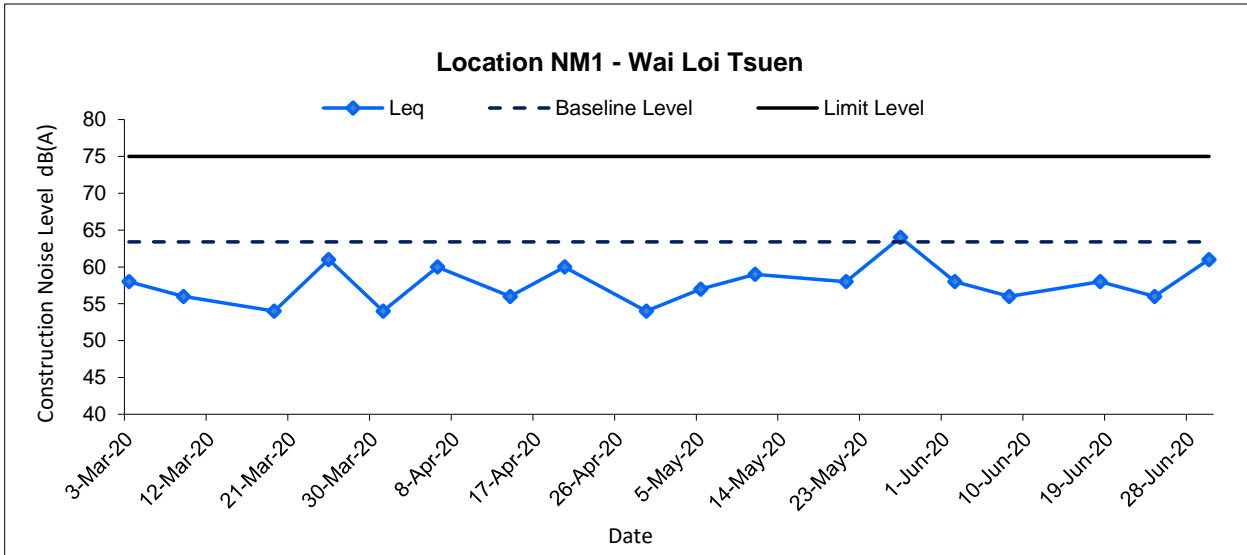
(0700-1900 hrs on Normal Weekdays)

| Location NM1 - Wai Loi Tsuen |       |         |                       |                 |                 |                 |                          |
|------------------------------|-------|---------|-----------------------|-----------------|-----------------|-----------------|--------------------------|
| Date                         | Time  | Weather | Unit: dB (A) (30-min) |                 |                 |                 |                          |
|                              |       |         | Measured Noise Level  |                 |                 | Baseline Level  | Construction Noise Level |
|                              |       |         | L <sub>eq</sub>       | L <sub>10</sub> | L <sub>90</sub> | L <sub>eq</sub> | L <sub>eq</sub>          |
| 2-Jun-20                     | 10:00 | Cloudy  | 57.5                  | 58.7            | 53.0            | 63.4            | 57.5 Measured ≤ Baseline |
| 8-Jun-20                     | 13:15 | Rainy   | 55.5                  | 57.6            | 52.6            | 63.4            | 55.5 Measured ≤ Baseline |
| 18-Jun-20                    | 13:10 | Sunny   | 64.5                  | 66.4            | 59.5            | 63.4            | 58.0                     |
| 24-Jun-20                    | 13:05 | Sunny   | 56.3                  | 59.5            | 50.8            | 63.4            | 56.3 Measured ≤ Baseline |
| 30-Jun-20                    | 9:45  | Sunny   | 60.6                  | 62.3            | 51.0            | 63.4            | 60.6 Measured ≤ Baseline |

| Location NM2 - Fu Tei Au |       |         |                       |                 |                 |                 |                          |
|--------------------------|-------|---------|-----------------------|-----------------|-----------------|-----------------|--------------------------|
| Date                     | Time  | Weather | Unit: dB (A) (30-min) |                 |                 |                 |                          |
|                          |       |         | Measured Noise Level  |                 |                 | Baseline Level  | Construction Noise Level |
|                          |       |         | L <sub>eq</sub>       | L <sub>10</sub> | L <sub>90</sub> | L <sub>eq</sub> | L <sub>eq</sub>          |
| 2-Jun-20                 | 13:15 | Cloudy  | 67.4                  | 69.8            | 63.1            | 58.0            | 66.9                     |
| 8-Jun-20                 | 15:30 | Rainy   | 62.7                  | 64.4            | 60.3            | 58.0            | 60.9                     |
| 18-Jun-20                | 16:15 | Sunny   | 68.1                  | 70.7            | 56.8            | 58.0            | 67.7                     |
| 24-Jun-20                | 15:30 | Sunny   | 61.0                  | 64.1            | 55.8            | 58.0            | 58.0                     |
| 30-Jun-20                | 11:30 | Sunny   | 60.3                  | 63.3            | 56.0            | 58.0            | 56.4                     |

| Location NM3 - Man Kok Village |       |         |                       |                 |                 |                 |                          |
|--------------------------------|-------|---------|-----------------------|-----------------|-----------------|-----------------|--------------------------|
| Date                           | Time  | Weather | Unit: dB (A) (30-min) |                 |                 |                 |                          |
|                                |       |         | Measured Noise Level  |                 |                 | Baseline Level  | Construction Noise Level |
|                                |       |         | L <sub>eq</sub>       | L <sub>10</sub> | L <sub>90</sub> | L <sub>eq</sub> | L <sub>eq</sub>          |
| 2-Jun-20                       | 11:15 | Cloudy  | 64.5                  | 66.9            | 62.9            | 63.4            | 58.0                     |
| 8-Jun-20                       | 14:20 | Rainy   | 57.6                  | 61.1            | 52.2            | 63.4            | 57.6 Measured ≤ Baseline |
| 18-Jun-20                      | 14:30 | Sunny   | 58.2                  | 59.1            | 53.3            | 63.4            | 58.2 Measured ≤ Baseline |
| 24-Jun-20                      | 14:00 | Sunny   | 62.9                  | 66.2            | 58.9            | 63.4            | 62.9 Measured ≤ Baseline |
| 30-Jun-20                      | 10:40 | Sunny   | 63.8                  | 66.0            | 56.1            | 63.4            | 53.2                     |

### Noise Levels



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

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**APPENDIX I  
ECOLOGICAL MONITORING RESULTS  
AND ANALYSIS**

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MA19019 - Ecological Monitoring Result and Analysis

| Table I: Recorded Bird Species and their Abundance in the Reporting Month |                           |              |           |                             |                    |
|---|---------------------------|--------------|-----------|-----------------------------|--------------------|
| Scientific Name   | Common Name               | Chinese Name | Waterbird | Point Count Abundance       | Transect Abundance |
| <i>Acridotheres cristatellus</i>  | Crested Myna              | 八哥           |           | 85                          | +++++              |
| <i>Acridotheres tristis</i>   | Common Myna               | 家八哥          |           | 0                           | +                  |
| <i>Anthus hodgsoni</i>  | Olive Backed Pipit        | 樹鷓           |           | 7                           | +                  |
| <i>Ardea alba</i>   | Great Egret               | 大白鷺          | *         | 20                          | ++                 |
| <i>Ardea cinerea</i>  | Grey Heron                | 蒼鷺           | *         | 1                           | +                  |
| <i>Ardeola bacchus</i>  | Chinese Pond Heron        | 池鷺           | *         | 42                          | +++                |
| <i>Bubulcus coromandus</i>  | Eastern Cattle Egret      | 牛背鷺          | *         | 12                          | ++                 |
| <i>Centropus sinensis</i>   | Greater Coucal            | 褐翅鴉鷓         |           | 0                           | +                  |
| <i>Ceryle rudis</i>   | Pied Kingfisher           | 斑魚狗          | *         | 0                           | +                  |
| <i>Dicurus hottentottus</i>   | Hair-crested Drogon       | 髮冠卷尾         |           | 2                           | +                  |
| <i>Egretta garzetta</i>   | Little Egret              | 小白鷺          | *         | 64                          | +++++              |
| <i>Egretta intermedia</i>   | Intermediate Egret        | 中白鷺          | *         | 1                           | +                  |
| <i>Eudynamis scolopacea</i>   | Common Koel               | 噪鵲           |           | 4                           | +                  |
| <i>Garrulax perspicillatus</i>  | Masked Laughing Thrush    | 黑臉噪鵲         |           | 6                           | ++                 |
| <i>Hierococcyx sparverioides</i>  | Large Hawk Cuckoo         | 大鷹鵲          |           | 1                           | +                  |
| <i>Hirundo rustica</i>  | Barn Swallow              | 家燕           |           | 16                          | +++                |
| <i>Lonchura punctulata</i>  | Spotted Munia             | 斑文鳥          |           | 0                           | +                  |
| <i>Milvus migrans</i>   | Black Kite                | 黑鳶           | *         | 2                           | +                  |
| <i>Motacilla alba</i>   | White Wagtail             | 白鶺鴒          |           | 11                          | +                  |
| <i>Nycticorax nycticorax</i>  | Black-crowned Night Heron | 夜鷺           | *         | 2                           | +                  |
| <i>Orthotomus sutorius</i>  | Common Tailorbird         | 長尾縫葉鶯        |           | 2                           | +                  |
| <i>Passer montanus</i>  | Eurasian Tree Sparrow     | 樹麻雀          |           | 3                           | +                  |
| <i>Phylloscopus fuscatus</i>  | Dusky Warbler             | 褐柳鶯          |           | 0                           | +                  |
| <i>Pica pica</i>  | Magpie                    | 喜鵲           |           | 1                           | +                  |
| <i>Platalea minor</i>   | Black-faced Spoonbill     | 黑臉琵鷺         | *         | 0                           | +                  |
| <i>Prinia flaviventris</i>  | Yellow-bellied Prinia     | 黃腹鷓鶯         |           | 1                           | +                  |
| <i>Prinia inornata</i>  | Plain Prinia              | 純色鷓鶯         |           | 1                           | +                  |
| <i>Pycnonotus jocosus</i>   | Crested bulbul            | 紅耳鶻          |           | 7                           | +                  |
| <i>Pycnonotus sinensis</i>  | Chinese Bulbul            | 白頭鶻          |           | 1                           | +                  |
| <i>Streptopelia chinensis</i>   | Spotted Dove              | 珠頸斑鳩         |           | 8                           | +                  |
| <i>Sturnus nigricollis</i>  | Black-necked Starling     | 黑領椋鳥         |           | 14                          | ++                 |
| <i>Urocissa erythrorhyncha</i>  | Red-billed Blue Magpie    | 紅咀藍鶻         |           | 0                           | +                  |
| <i>Zosterops japonicus</i>  | Japanese White-eye        | 暗綠繡眼鳥        |           | 1                           | +                  |
|   |                           |              |           | Total Point Count Abundance | 315                |
|   |                           |              |           | Total Waterbirds            | 144                |

\*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.

|   |                   |                        |                 |
|---|-------------------|------------------------|-----------------|
| Agreement No. SPW 07/2019<br>Shek Wu Hui Effluent Polishing Plant - Main Work Stage 1 |                   | Project No.<br>MA19019 | <b>CINOTECH</b> |
| Monthly Data Analysis for Ecological Monitoring                                       | Date<br>June 2020 | Appendix<br>I          |                 |

## MA19019 - Waterbird Ecological Monitoring Result

Monitoring Month      Jun  
Season                  Summer

| Table II : Total Bird Abundance from Point Count |             |       |            |                                       |            |                  |
|--|-------------|-------|------------|---------------------------------------|------------|------------------|
| Survey Information                               |             |       |            | Total Bird Abundance from Point Count |            |                  |
| No.  | Date        | Time  | Tide Level | Individuals Recorded                  | Total      | Species Recorded |
| #1   | 5 Jun 2020  | 10:00 | High       | 66                                    | 110        | 13               |
|  |             | 14:00 | Low        | 44                                    |            | 11               |
| #2   | 11 Jun 2020 | 12:00 | High       | 22                                    | 61         | 11               |
|  |             | 7:00  | Low        | 39                                    |            | 11               |
| #3   | 19 Jun 2020 | 9:00  | High       | 29                                    | 78         | 9                |
|  |             | 14:30 | Low        | 49                                    |            | 9                |
| #4   | 23 Jun 2020 | 11:00 | High       | 23                                    | 66         | 7                |
|  |             | 16:00 | Low        | 43                                    |            | 10               |
| <b>Overall Total</b>                             |             |       |            |                                       | <b>315</b> |                  |

| Table III: Total Waterbird Abundance from Point Count |             |       |            |                       |            |  |
|---|-------------|-------|------------|-----------------------|------------|--|
| Survey Information                                    |             |       |            | Numbers of Waterbirds |            |  |
| No.   | Date        | Time  | Tide Level | Individuals Recorded  | Total      |  |
| #1  | 5 Jun 2020  | 10:00 | High       | 19                    | 40         |  |
|   |             | 14:00 | Low        | 21                    |            |  |
| #2  | 11 Jun 2020 | 12:00 | High       | 8                     | 37         |  |
|   |             | 7:00  | Low        | 29                    |            |  |
| #3  | 19 Jun 2020 | 9:00  | High       | 8                     | 31         |  |
|   |             | 14:30 | Low        | 23                    |            |  |
| #4  | 23 Jun 2020 | 11:00 | High       | 6                     | 36         |  |
|   |             | 16:00 | Low        | 30                    |            |  |
| <b>Overall Total</b>                                  |             |       |            |                       | <b>144</b> |  |
| <b>Average</b>  |             |       |            |                       | <b>36</b>  |  |

**Table IV: T-Test Analysis for All Waterbirds**

Baseline Data

Monthly Average Abundance (Jun)      45.30  
Seasonal Average Abundance (Summer)      44.18

T-test

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

H<sub>0</sub> The data collected in the reporting month falls within the normal distribution when compared to the baseline monitoring data.

H<sub>1</sub> The data collected does not falls within the normal distribution when compared to the baseline monitoring data.

If t-test value is smaller than the critical value, then rejects H<sub>0</sub>.

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

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

| T-values of Data in Reporting Month |         |               | Confidence Level |     |
|-------------------------------------|---------|---------------|------------------|-----|
|                                     |         |               | 95%              | 99% |
| Abundance                           | Monthly | <u>-4.971</u> | ×                | ×   |
|                                     | Season  | <u>-4.372</u> | ×                | ✓   |
| Overall:                            |         |               | ×                | ✓   |

Remarks:

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

×

|   |                   |                        |          |
|---|-------------------|------------------------|----------|
| Agreement No. SPW 07/2019<br>Shek Wu Hui Effluent Polishing Plant - Main Work Stage 1 |                   | Project No.<br>MA19019 | CINOTECH |
| Monthly Data Analysis for Ecological Monitoring                                       | Date<br>June 2020 | Appendix<br>I          |          |

**MA19019 - Waterbird Ecological Monitoring Result**

Monitoring Month      Jun  
Season                    Summer

| Table V: Abundance of Representative Waterbirds from Point Count |                      |              |                    |             |             |             |       |               |           |              |  |
|--|----------------------|--------------|--------------------|-------------|-------------|-------------|-------|---------------|-----------|--------------|--|
| Representative Species   |                      |              | Recorded Abundance |             |             |             |       | Baseline Data |           |              |  |
| Species Name   | Common Name          | Chinese Name | 5 Jun 2020         | 11 Jun 2020 | 19 Jun 2020 | 23 Jun 2020 | Total | Average       | Avg (Jun) | Avg (Summer) |  |
| <i>Egretta garzetta</i>  | Little Egret         | 小白鷺          | 17                 | 20          | 12          | 15          | 64    | 16            | 20        | 20           |  |
| <i>Ardea cinerea</i>   | Grey Heron           | 蒼鷺           | 1                  | 0           | 0           | 0           | 1     | 0             | 0         | 1            |  |
| <i>Ardeola bacchus</i>   | Chinese Pond Heron   | 池鷺           | 11                 | 7           | 9           | 15          | 42    | 11            | 18        | 16           |  |
| <i>Phalacrocorax carbo</i>                                       | Great Cormorant      | 普通鸕鶿         | 0                  | 0           | 0           | 0           | 0     | 0             | 0         | 0            |  |
| <i>Ardea alba</i>  | Great Egret          | 大白鷺          | 7                  | 4           | 7           | 2           | 20    | 5             | 3         | 3            |  |
| <i>Bubulcus coromandus</i>                                       | Eastern Cattle Egret | 牛背鷺          | 2                  | 4           | 3           | 3           | 12    | 3             | 4         | 3            |  |

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

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

- H<sub>0</sub> The data collected in the reporting month falls within the normal distribution when compare to the baseline monitoring data.
- H<sub>1</sub> The data collected does not falls within the normal distribution when compare to the baseline monitoring data.

If t-test value for a specific representative is smaller than the critical value, then rejects H<sub>0</sub>.

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

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


| Representative Species       |                      |              | T-value | Confidence Level |     | T-value  | Confidence Level |     | Overall      |
|------------------------------|----------------------|--------------|---------|------------------|-----|----------|------------------|-----|--------------|
| Species Name                 | Common Name          | Chinese Name | Monthly | 95%              | 99% | Seasonal | 95%              | 99% |              |
| <i>Egretta garzetta</i>      | Little Egret         | 小白鷺          | -2.258  | ✓                | ✓   | -2.376   | ✗                | ✓   | ✓            |
| <i>Ardea cinerea</i> *       | Grey Heron*          | 蒼鷺*          |         |                  |     | N/A*     |                  |     |              |
| <i>Ardeola bacchus</i>       | Chinese Pond Heron   | 池鷺           | -4.567  | ✗                | ✗   | -3.085   | ✗                | ✓   | Action Level |
| <i>Phalacrocorax carbo</i> * | Great Cormorant*     | 普通鸕鶿*        |         |                  |     | N/A*     |                  |     |              |
| <i>Ardea alba</i>            | Great Egret          | 大白鷺          | 1.960   | ✓                | ✓   | 2.010    | ✓                | ✓   | ✓            |
| <i>Bubulcus coromandus</i>   | Eastern Cattle Egret | 牛背鷺          | -1.470  | ✓                | ✓   | -0.565   | ✓                | ✓   | ✓            |

Remarks

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

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

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

|   |  |             |           |   |
|---|--|-------------|-----------|---|
| Agreement No. SPW 07/2019<br>Shek Wu Hui Effluent Polishing Plant - Main Work Stage 1 |  | Project No. | MA19019   |  |
| Monthly Data Analysis for Ecological Monitoring                                       |  | Date        | June 2020 |   |

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**APPENDIX J  
PHOTO RECORDS OF ECOLOGICAL  
MONITORING**

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## Appendix J - Photo Records of Ecological Monitoring

### Part A - Conditions of Rivers



Sheung Yue River (Taken on 5 Jun 20)



Ng Tung River (Taken on 5 Jun 20)



Shek Sheung River (Taken on 19 Jun 20)



**Part B – Waterbird Species**



*Ardea alba* (Taken on 5 Jun 20)



*Ardea cinerea* (Taken on 5 Jun 20)



*Ardeola bacchus* (Taken on 19 Jun 20)



*Bubulcus coromandus* (Taken on 19 Jun 20)



*Ceryle rudis* (Taken on 19 Jun 20)



*Egretta garzetta* (Taken on 23 Jun 20)



*Egretta intermedia* (Taken on 5 Jun 20)

## Part C – Human Activities & Site Conditions



Excavation (Taken on 11 Jun 20)



Vibration Hammering (Taken on 5 Jun 20)



Muddy water (non project-related, taken on 26 Jun 20)

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**APPENDIX K**  
**SITE AUDIT SUMMARY**

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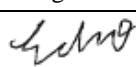



**Agreement No. SPW 07/2019**  
**Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1**  
**Contract No. DC/2018/06**

**Weekly Site Inspection Record Summary**  
**Inspection Information**

|                            |                       |
|----------------------------|-----------------------|
| Checklist Reference Number | 200602                |
| Date                       | 2 June 2020 (Tuesday) |
| Time                       | 14:25 – 17:10         |

| Ref. No.  | Non-Compliance   | Related Item No. |
|-----------|--|------------------|
| -         | None identified  | -                |
| Ref. No.  | Remarks/Observations   | Related Item No. |
|           | <b><i>B. Water Quality</i></b>   |                  |
| 200602-R1 | <ul style="list-style-type: none"> <li>Stagnant water accumulated on the road access and site area of Portion C should be removed or pumped through the sedimentation tank.</li> </ul> | B8               |
|           |  |                  |
|           | <b><i>C. Air Quality</i></b>   |                  |
|           | <ul style="list-style-type: none"> <li>No environmental deficiency was identified during site inspection.</li> </ul>   |                  |
|           |  |                  |
|           | <b><i>D. Noise</i></b>   |                  |
|           | <ul style="list-style-type: none"> <li>No environmental deficiency was identified during site inspection.</li> </ul>   |                  |
|           |  |                  |
|           | <b><i>E. Waste / Chemical Management</i></b>   |                  |
|           | <ul style="list-style-type: none"> <li>No environmental deficiency was identified during site inspection.</li> </ul>   |                  |
|           |  |                  |
|           | <b><i>F. Ecology and Fisheries</i></b>   |                  |
|           | <ul style="list-style-type: none"> <li>No environmental deficiency was identified during site inspection.</li> </ul>   |                  |
|           |  |                  |
|           | <b><i>G. Landscape and Visual</i></b>  |                  |
|           | <ul style="list-style-type: none"> <li>No environmental deficiency was identified during site inspection.</li> </ul>   |                  |
|           |  |                  |
|           | <b><i>H. Permits /Licences</i></b>   |                  |
|           | <ul style="list-style-type: none"> <li>No environmental deficiency was identified during site inspection.</li> </ul>   |                  |
|           |  |                  |
|           | <b><i>I. Others</i></b>  |                  |
|           | Following up on the previous site inspection (ref no.: 200526):<br>Item 200526-R1 was rectified/improved by the Contractor.  |                  |

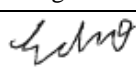

|             | Name            | Signature  | Date        |
|-------------|-----------------|--|-------------|
| Recorded by | Ms. Echo Hung   |  | 2 June 2020 |
| Checked by  | Mr. Samson Yuen |  | 3 June 2020 |

**Agreement No. SPW 07/2019**  
**Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1**  
**Contract No. DC/2018/06**

**Weekly Site Inspection Record Summary**  
**Inspection Information**

|                            |                         |
|----------------------------|-------------------------|
| Checklist Reference Number | 200611                  |
| Date                       | 11 June 2020 (Thursday) |
| Time                       | 9:30 – 11:15            |

| Ref. No.  | Non-Compliance  | Related Item No. |
|-----------|---|------------------|
| -         | None identified   | -                |
| Ref. No.  | Remarks/Observations  | Related Item No. |
|           | <b><i>B. Water Quality</i></b>  |                  |
|           | • No environmental deficiency was identified during site inspection.  |                  |
|           |   |                  |
|           | <b><i>C. Air Quality</i></b>  |                  |
| 200611-R1 | • Cement of more than 20 bags should be covered by impervious materials at Portion C to avoid dust generation.              | C15              |
|           |   |                  |
|           | <b><i>D. Noise</i></b>  |                  |
|           | • No environmental deficiency was identified during site inspection.  |                  |
|           |   |                  |
|           | <b><i>E. Waste / Chemical Management</i></b>  |                  |
|           | • No environmental deficiency was identified during site inspection.  |                  |
|           |   |                  |
|           | <b><i>F. Ecology and Fisheries</i></b>  |                  |
|           | • No environmental deficiency was identified during site inspection.  |                  |
|           |   |                  |
|           | <b><i>G. Landscape and Visual</i></b>   |                  |
|           | • No environmental deficiency was identified during site inspection.  |                  |
|           |   |                  |
|           | <b><i>H. Permits /Licences</i></b>  |                  |
|           | • No environmental deficiency was identified during site inspection.  |                  |
|           |   |                  |
|           | <b><i>I. Others</i></b>   |                  |
|           | Following up on the previous site inspection (ref no.: 200602):<br>Item 200602-R1 was rectified/improved by the Contractor. |                  |

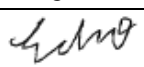

|             | Name            | Signature  | Date         |
|-------------|-----------------|--|--------------|
| Recorded by | Ms. Echo Hung   |  | 11 June 2020 |
| Checked by  | Mr. Samson Yuen |  | 11 June 2020 |

**Agreement No. SPW 07/2019**  
**Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1**  
**Contract No. DC/2018/06**

**Weekly Site Inspection Record Summary**  
**Inspection Information**

|                            |                        |
|----------------------------|------------------------|
| Checklist Reference Number | 200616                 |
| Date                       | 16 June 2020 (Tuesday) |
| Time                       | 14:15 – 15:50          |

| Ref. No. | Non-Compliance  | Related Item No. |
|----------|---|------------------|
| -        | None identified   | -                |
| Ref. No. | Remarks/Observations  | Related Item No. |
|          | <b><i>B. Water Quality</i></b>  |                  |
|          | • No environmental deficiency was identified during site inspection.  |                  |
|          |   |                  |
|          | <b><i>C. Air Quality</i></b>  |                  |
|          | • No environmental deficiency was identified during site inspection.  |                  |
|          |   |                  |
|          | <b><i>D. Noise</i></b>  |                  |
|          | • No environmental deficiency was identified during site inspection.  |                  |
|          |   |                  |
|          | <b><i>E. Waste / Chemical Management</i></b>  |                  |
|          | • No environmental deficiency was identified during site inspection.  |                  |
|          |   |                  |
|          | <b><i>F. Ecology and Fisheries</i></b>  |                  |
|          | • No environmental deficiency was identified during site inspection.  |                  |
|          |   |                  |
|          | <b><i>G. Landscape and Visual</i></b>   |                  |
|          | • No environmental deficiency was identified during site inspection.  |                  |
|          |   |                  |
|          | <b><i>H. Permits /Licences</i></b>  |                  |
|          | • No environmental deficiency was identified during site inspection.  |                  |
|          |   |                  |
|          | <b><i>I. Others</i></b>   |                  |
|          | Following up on the previous site inspection (ref no.: 200611):<br>Item 200611-R1 was rectified/improved by the Contractor. |                  |

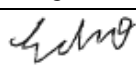

|             | Name            | Signature  | Date         |
|-------------|-----------------|--|--------------|
| Recorded by | Ms. Echo Hung   |  | 16 June 2020 |
| Checked by  | Mr. Samson Yuen |  | 17 June 2020 |

**Agreement No. SPW 07/2019**  
**Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1**  
**Contract No. DC/2018/06**

**Weekly Site Inspection Record Summary**  
**Inspection Information**

|                            |                        |
|----------------------------|------------------------|
| Checklist Reference Number | 200623                 |
| Date                       | 23 June 2020 (Tuesday) |
| Time                       | 14:05 – 15:45          |

| Ref. No. | Non-Compliance  | Related Item No. |
|----------|---|------------------|
| -        | None identified   | -                |
| Ref. No. | Remarks/Observations  | Related Item No. |
|          | <b><i>B. Water Quality</i></b>  |                  |
|          | • No environmental deficiency was identified during site inspection.    |                  |
|          |   |                  |
|          | <b><i>C. Air Quality</i></b>  |                  |
|          | • No environmental deficiency was identified during site inspection.    |                  |
|          |   |                  |
|          | <b><i>D. Noise</i></b>  |                  |
|          | • No environmental deficiency was identified during site inspection.    |                  |
|          |   |                  |
|          | <b><i>E. Waste / Chemical Management</i></b>                            |                  |
|          | • No environmental deficiency was identified during site inspection.    |                  |
|          |   |                  |
|          | <b><i>F. Ecology and Fisheries</i></b>                                  |                  |
|          | • No environmental deficiency was identified during site inspection.    |                  |
|          |   |                  |
|          | <b><i>G. Landscape and Visual</i></b>                                   |                  |
|          | • No environmental deficiency was identified during site inspection.    |                  |
|          |   |                  |
|          | <b><i>H. Permits /Licences</i></b>                                      |                  |
|          | • No environmental deficiency was identified during site inspection.    |                  |
|          |   |                  |
|          | <b><i>I. Others</i></b>   |                  |
|          | No follow-up items from the previous site inspection (ref no.: 200616). |                  |

|             | Name            | Signature  | Date         |
|-------------|-----------------|--|--------------|
| Recorded by | Ms. Echo Hung   |  | 23 June 2020 |
| Checked by  | Mr. Samson Yuen |  | 26 June 2020 |

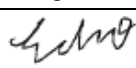



**Agreement No. SPW 07/2019**  
**Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1**  
**Contract No. DC/2018/06**

**Weekly Site Inspection Record Summary**  
**Inspection Information**

|                            |                        |
|----------------------------|------------------------|
| Checklist Reference Number | 200630                 |
| Date                       | 30 June 2020 (Tuesday) |
| Time                       | 14:15 – 16:15          |

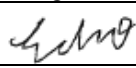

| Ref. No. | Non-Compliance  | Related Item No. |
|----------|---|------------------|
| -        | None identified   | -                |
| Ref. No. | Remarks/Observations  | Related Item No. |
|          | <b><i>B. Water Quality</i></b>  |                  |
|          | • No environmental deficiency was identified during site inspection.    |                  |
|          |   |                  |
|          | <b><i>C. Air Quality</i></b>  |                  |
|          | • No environmental deficiency was identified during site inspection.    |                  |
|          |   |                  |
|          | <b><i>D. Noise</i></b>  |                  |
|          | • No environmental deficiency was identified during site inspection.    |                  |
|          |   |                  |
|          | <b><i>E. Waste / Chemical Management</i></b>                            |                  |
|          | • No environmental deficiency was identified during site inspection.    |                  |
|          |   |                  |
|          | <b><i>F. Ecology and Fisheries</i></b>                                  |                  |
|          | • No environmental deficiency was identified during site inspection.    |                  |
|          |   |                  |
|          | <b><i>G. Landscape and Visual</i></b>                                   |                  |
|          | • No environmental deficiency was identified during site inspection.    |                  |
|          |   |                  |
|          | <b><i>H. Permits /Licences</i></b>                                      |                  |
|          | • No environmental deficiency was identified during site inspection.    |                  |
|          |   |                  |
|          | <b><i>I. Others</i></b>   |                  |
|          | No follow-up items from the previous site inspection (ref no.: 200623). |                  |

|             | Name            | Signature  | Date         |
|-------------|-----------------|--|--------------|
| Recorded by | Ms. Echo Hung   |  | 30 June 2020 |
| Checked by  | Mr. Samson Yuen |  | 3 July 2020  |

**Weekly Site Inspection Record Summary**  
**Inspection Information**

|                            |                       |
|----------------------------|-----------------------|
| Checklist Reference Number | 200602                |
| Date                       | 2 June 2020 (Tuesday) |
| Time                       | 14:25 – 17:10         |

| Ref. No. | Non-Compliance  | Related Item No. |
|----------|---|------------------|
| -        | None identified   | -                |
| Ref. No. | Remarks/Observations  | Related Item No. |
|          | <b><i>B. Water Quality</i></b>  |                  |
|          | • No environmental deficiency was identified during site inspection.    |                  |
|          |   |                  |
|          | <b><i>C. Air Quality</i></b>  |                  |
|          | • No environmental deficiency was identified during site inspection.    |                  |
|          |   |                  |
|          | <b><i>D. Noise</i></b>  |                  |
|          | • No environmental deficiency was identified during site inspection.    |                  |
|          |   |                  |
|          | <b><i>E. Waste / Chemical Management</i></b>                            |                  |
|          | • No environmental deficiency was identified during site inspection.    |                  |
|          |   |                  |
|          | <b><i>F. Ecology and Fisheries</i></b>                                  |                  |
|          | • No environmental deficiency was identified during site inspection.    |                  |
|          |   |                  |
|          | <b><i>G. Landscape and Visual</i></b>                                   |                  |
|          | • No environmental deficiency was identified during site inspection.    |                  |
|          |   |                  |
|          | <b><i>H. Permits /Licences</i></b>                                      |                  |
|          | • No environmental deficiency was identified during site inspection.    |                  |
|          |   |                  |
|          | <b><i>I. Others</i></b>   |                  |
|          | No follow-up items from the previous site inspection (ref no.: 200526). |                  |

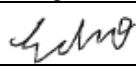

|             | Name            | Signature  | Date        |
|-------------|-----------------|--|-------------|
| Recorded by | Ms. Echo Hung   |  | 2 June 2020 |
| Checked by  | Mr. Samson Yuen |  | 3 June 2020 |

**Agreement No. SPW 07/2019**  
**Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1**  
**Contract No. DC/2018/07**

**Weekly Site Inspection Record Summary**  
**Inspection Information**

|                            |                         |
|----------------------------|-------------------------|
| Checklist Reference Number | 200611                  |
| Date                       | 11 June 2020 (Thursday) |
| Time                       | 9:30 – 11:15            |

| Ref. No. | Non-Compliance  | Related Item No. |
|----------|---|------------------|
| -        | None identified   | -                |
| Ref. No. | Remarks/Observations  | Related Item No. |
|          | <b><i>B. Water Quality</i></b>  |                  |
|          | • No environmental deficiency was identified during site inspection.    |                  |
|          |   |                  |
|          | <b><i>C. Air Quality</i></b>  |                  |
|          | • No environmental deficiency was identified during site inspection.    |                  |
|          |   |                  |
|          | <b><i>D. Noise</i></b>  |                  |
|          | • No environmental deficiency was identified during site inspection.    |                  |
|          |   |                  |
|          | <b><i>E. Waste / Chemical Management</i></b>                            |                  |
|          | • No environmental deficiency was identified during site inspection.    |                  |
|          |   |                  |
|          | <b><i>F. Ecology and Fisheries</i></b>                                  |                  |
|          | • No environmental deficiency was identified during site inspection.    |                  |
|          |   |                  |
|          | <b><i>G. Landscape and Visual</i></b>                                   |                  |
|          | • No environmental deficiency was identified during site inspection.    |                  |
|          |   |                  |
|          | <b><i>H. Permits /Licences</i></b>                                      |                  |
|          | • No environmental deficiency was identified during site inspection.    |                  |
|          |   |                  |
|          | <b><i>I. Others</i></b>   |                  |
|          | No follow-up items from the previous site inspection (ref no.: 200602). |                  |

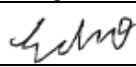

|             | Name            | Signature  | Date         |
|-------------|-----------------|--|--------------|
| Recorded by | Ms. Echo Hung   |  | 11 June 2020 |
| Checked by  | Mr. Samson Yuen |  | 11 June 2020 |

**Agreement No. SPW 07/2019**  
**Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1**  
**Contract No. DC/2018/07**

**Weekly Site Inspection Record Summary**  
**Inspection Information**

|                            |                        |
|----------------------------|------------------------|
| Checklist Reference Number | 200616                 |
| Date                       | 16 June 2020 (Tuesday) |
| Time                       | 14:15 – 15:50          |

| Ref. No.  | Non-Compliance   | Related Item No. |
|-----------|--|------------------|
| -         | None identified  | -                |
| Ref. No.  | Remarks/Observations   | Related Item No. |
|           | <b><i>B. Water Quality</i></b>   |                  |
|           | • No environmental deficiency was identified during site inspection.                                     |                  |
|           |  |                  |
|           | <b><i>C. Air Quality</i></b>   |                  |
| 200616-R1 | • Stockpiles should be removed or covered by impervious materials to avoid dust generation at Portion B. | C1               |
|           |  |                  |
|           | <b><i>D. Noise</i></b>   |                  |
|           | • No environmental deficiency was identified during site inspection.                                     |                  |
|           |  |                  |
|           | <b><i>E. Waste / Chemical Management</i></b>   |                  |
|           | • No environmental deficiency was identified during site inspection.                                     |                  |
|           |  |                  |
|           | <b><i>F. Ecology and Fisheries</i></b>   |                  |
|           | • No environmental deficiency was identified during site inspection.                                     |                  |
|           |  |                  |
|           | <b><i>G. Landscape and Visual</i></b>  |                  |
|           | • No environmental deficiency was identified during site inspection.                                     |                  |
|           |  |                  |
|           | <b><i>H. Permits /Licences</i></b>   |                  |
|           | • No environmental deficiency was identified during site inspection.                                     |                  |
|           |  |                  |
|           | <b><i>I. Others</i></b>  |                  |
|           | No follow-up items from the previous site inspection (ref no.: 200611).                                  |                  |

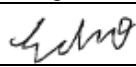

|             | Name            | Signature  | Date         |
|-------------|-----------------|--|--------------|
| Recorded by | Ms. Echo Hung   |  | 16 June 2020 |
| Checked by  | Mr. Samson Yuen |  | 17 June 2020 |

**Agreement No. SPW 07/2019**  
**Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1**  
**Contract No. DC/2018/07**

**Weekly Site Inspection Record Summary**  
**Inspection Information**

|                            |                        |
|----------------------------|------------------------|
| Checklist Reference Number | 200623                 |
| Date                       | 23 June 2020 (Tuesday) |
| Time                       | 14:05 – 15:45          |

| Ref. No. | Non-Compliance  | Related Item No. |
|----------|---|------------------|
| -        | None identified   | -                |
| Ref. No. | Remarks/Observations  | Related Item No. |
|          | <b><i>B. Water Quality</i></b>  |                  |
|          | • No environmental deficiency was identified during site inspection.  |                  |
|          |   |                  |
|          | <b><i>C. Air Quality</i></b>  |                  |
|          | • No environmental deficiency was identified during site inspection.  |                  |
|          |   |                  |
|          | <b><i>D. Noise</i></b>  |                  |
|          | • No environmental deficiency was identified during site inspection.  |                  |
|          |   |                  |
|          | <b><i>E. Waste / Chemical Management</i></b>  |                  |
|          | • No environmental deficiency was identified during site inspection.  |                  |
|          |   |                  |
|          | <b><i>F. Ecology and Fisheries</i></b>  |                  |
|          | • No environmental deficiency was identified during site inspection.  |                  |
|          |   |                  |
|          | <b><i>G. Landscape and Visual</i></b>   |                  |
|          | • No environmental deficiency was identified during site inspection.  |                  |
|          |   |                  |
|          | <b><i>H. Permits /Licences</i></b>  |                  |
|          | • No environmental deficiency was identified during site inspection.  |                  |
|          |   |                  |
|          | <b><i>I. Others</i></b>   |                  |
|          | Following up on the previous site inspection (ref no.: 200616):<br>Item 200616-R1 was rectified/improved by the Contractor. |                  |

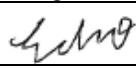

|             | Name            | Signature  | Date         |
|-------------|-----------------|--|--------------|
| Recorded by | Ms. Echo Hung   |  | 23 June 2020 |
| Checked by  | Mr. Samson Yuen |  | 26 June 2020 |

**Agreement No. SPW 07/2019**  
**Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1**  
**Contract No. DC/2018/07**

**Weekly Site Inspection Record Summary**  
**Inspection Information**

|                            |                        |
|----------------------------|------------------------|
| Checklist Reference Number | 200630                 |
| Date                       | 30 June 2020 (Tuesday) |
| Time                       | 14:15 – 16:15          |

| Ref. No. | Non-Compliance  | Related Item No. |
|----------|---|------------------|
| -        | None identified   | -                |
| Ref. No. | Remarks/Observations  | Related Item No. |
|          | <b><i>B. Water Quality</i></b>  |                  |
|          | • No environmental deficiency was identified during site inspection.    |                  |
|          |   |                  |
|          | <b><i>C. Air Quality</i></b>  |                  |
|          | • No environmental deficiency was identified during site inspection.    |                  |
|          |   |                  |
|          | <b><i>D. Noise</i></b>  |                  |
|          | • No environmental deficiency was identified during site inspection.    |                  |
|          |   |                  |
|          | <b><i>E. Waste / Chemical Management</i></b>                            |                  |
|          | • No environmental deficiency was identified during site inspection.    |                  |
|          |   |                  |
|          | <b><i>F. Ecology and Fisheries</i></b>                                  |                  |
|          | • No environmental deficiency was identified during site inspection.    |                  |
|          |   |                  |
|          | <b><i>G. Landscape and Visual</i></b>                                   |                  |
|          | • No environmental deficiency was identified during site inspection.    |                  |
|          |   |                  |
|          | <b><i>H. Permits /Licences</i></b>                                      |                  |
|          | • No environmental deficiency was identified during site inspection.    |                  |
|          |   |                  |
|          | <b><i>I. Others</i></b>   |                  |
|          | No follow-up items from the previous site inspection (ref no.: 200623). |                  |

|             | Name            | Signature  | Date         |
|-------------|-----------------|--|--------------|
| Recorded by | Ms. Echo Hung   |  | 30 June 2020 |
| Checked by  | Mr. Samson Yuen |  | 3 July 2020  |

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**APPENDIX L  
WASTE FLOW TABLE**

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**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 '000m3)  | (in '000m3)                         | (in '000m3)            | (in '000m3)              | (in '000m3)             | (in '000m3)   | (in '000kg)                                       | (in '000kg)                | (in '000kg) | (in '000kg)    | (in '000m3)                 |
| Jan              | 0.376  | 0.000                               | 0.000                  | 0.000                    | 0.376                   | 0.000         | 0.000   | 0.000                      | 0.000       | 0.000          | 0.083                       |
| Feb              | 1.168  | 0.000                               | 0.000                  | 0.332                    | 0.836                   | 0.000         | 0.000   | 0.000                      | 0.000       | 0.000          | 0.052                       |
| Mar              | 2.436  | 0.000                               | 0.000                  | 0.497                    | 1.939                   | 0.000         | 0.000   | 0.000                      | 0.000       | 0.000          | 0.134                       |
| Apr              | 2.660  | 0.000                               | 0.000                  | 0.126                    | 2.534                   | 0.000         | 0.000   | 0.000                      | 0.000       | 0.000          | 0.018                       |
| May              | 2.260  | 0.000                               | 0.000                  | 0.161                    | 2.100                   | 0.000         | 0.000   | 0.000                      | 0.000       | 0.060          | 0.138                       |
| Jun              | 2.271  | 0.000                               | 0.000                  | 0.000                    | 2.271                   | 0.000         | 0.000   | 0.000                      | 0.000       | 0.000          | 0.018                       |
| <b>Sub-total</b> | 11.171   | 0.000                               | 0.000                  | 1.115                    | 10.056                  | 0.000         | 0.000   | 0.000                      | 0.000       | 0.060          | 0.443                       |
| Jul              |  |                                     |                        |                          |                         |               |   |                            |             |                |                             |
| Aug              |  |                                     |                        |                          |                         |               |   |                            |             |                |                             |
| Sep              |  |                                     |                        |                          |                         |               |   |                            |             |                |                             |
| Oct              |  |                                     |                        |                          |                         |               |   |                            |             |                |                             |
| Nov              |  |                                     |                        |                          |                         |               |   |                            |             |                |                             |
| Dec              |  |                                     |                        |                          |                         |               |   |                            |             |                |                             |
| <b>Total</b>     | 11.171   | 0.000                               | 0.000                  | 1.115                    | 10.056                  | 0.000         | 0.000   | 0.000                      | 0.000       | 0.060          | 0.443                       |

- Notes:
1. Assume the density of soil fill is 2 ton/m<sup>3</sup>.
  2. Assume the density of rock and broken concrete is 2.5 ton/m<sup>3</sup>
  3. Assume each truck of C&D wastes is 5m<sup>3</sup>
  4. The inert C&D materials except slurry and bentonite are disposed at Tuen Mun 38
  5. The slurry and bentonite are disposed at Tseung Kwun O 137
  6. The non-inert C&D wastes are disposed at NENT.
  7. Assume the density of metal is 7.850 kg/m<sup>3</sup>
  8. Assume the density of plastic is 941 kg/m<sup>3</sup>
  9. Assume the density of general refuse is 0.9 kg/l
  10. Density of waste oil is assumed to be 0.001 m<sup>3</sup>/l & 0.8 kg/l. Chemical waste includes waste oil.



**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 <sup>3</sup> )                                   | (in '000m <sup>3</sup> )            | (in '000m <sup>3</sup> ) | (in '000m <sup>3</sup> ) | (in '000m <sup>3</sup> ) | (in '000m <sup>3</sup> ) | (in '000kg)                                       | (in '000kg)                | (in '000kg)  | (in kg)        | (in '000m <sup>3</sup> )    |
| Jan              | 0.000  | 0.000                               | 0.000                    | 0.000                    | 0.000                    | 0.000                    | 0.000   | 0.000                      | 0.000        | 0.000          | 0.006                       |
| Feb              | 0.000  | 0.000                               | 0.000                    | 0.000                    | 0.000                    | 0.000                    | 0.000   | 0.000                      | 0.000        | 0.000          | 0.005                       |
| Mar              | 0.075  | 0.000                               | 0.000                    | 0.000                    | 0.075                    | 0.000                    | 0.000   | 0.000                      | 0.000        | 0.000          | 0.000                       |
| Apr              | 0.068  | 0.000                               | 0.000                    | 0.000                    | 0.068                    | 0.000                    | 19.090  | 0.000                      | 0.000        | 0.000          | 0.003                       |
| May              | 0.372  | 0.000                               | 0.000                    | 0.000                    | 0.372                    | 0.000                    | 0.000   | 0.000                      | 0.000        | 0.000          | 0.005                       |
| Jun              | 0.227  | 0.000                               | 0.000                    | 0.000                    | 0.227                    | 0.000                    | 0.000   | 0.000                      | 0.000        | 0.000          | 0.009                       |
| <b>Sub-total</b> | <b>0.742</b>   | <b>0.000</b>                        | <b>0.000</b>             | <b>0.000</b>             | <b>0.742</b>             | <b>0.000</b>             | <b>19.090</b>                                     | <b>0.000</b>               | <b>0.000</b> | <b>0.000</b>   | <b>0.028</b>                |
| Jul              |  |                                     |                          |                          |                          |                          |   |                            |              |                |                             |
| Aug              |  |                                     |                          |                          |                          |                          |   |                            |              |                |                             |
| Sep              |  |                                     |                          |                          |                          |                          |   |                            |              |                |                             |
| Oct              |  |                                     |                          |                          |                          |                          |   |                            |              |                |                             |
| Nov              |  |                                     |                          |                          |                          |                          |   |                            |              |                |                             |
| Dec              |  |                                     |                          |                          |                          |                          |   |                            |              |                |                             |
| <b>Total</b>     | <b>0.742</b>   | <b>0.000</b>                        | <b>0.000</b>             | <b>0.000</b>             | <b>0.742</b>             | <b>0.000</b>             | <b>19.090</b>                                     | <b>0.000</b>               | <b>0.000</b> | <b>0.000</b>   | <b>0.028</b>                |

- Notes:
1. Assume the density of soil fill is 2 ton/m<sup>3</sup>.
  2. Assume the density of rock and broken concrete is 2.5 ton/m<sup>3</sup>
  3. Assume each truck of C&D wastes is 5m<sup>3</sup>
  4. The inert C&D materials except slurry and bentonite are disposed at Tuen Mun 38
  5. The slurry and bentonite are disposed at Tseung Kwun O 137
  6. The non-inert C&D wastes are disposed at NENT.
  7. Assume the density of metal is 7.850 kg/m<sup>3</sup>
  8. Assume the density of plastic is 941 kg/m<sup>3</sup>
  9. Assume the density of general refuse is 0.9 kg/l
  10. Density of waste oil is assumed to be 0.001 m<sup>3</sup>/l & 0.8 kg/l. Chemical waste includes waste oil.



## 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 <sup>3</sup> )   | (in '000m <sup>3</sup> )            | (in '000m <sup>3</sup> ) | (in '000m <sup>3</sup> ) | (in '000m <sup>3</sup> ) | (in '000m <sup>3</sup> ) | (in '000 kg) | (in '000kg)                | (in '000kg)           | (in '000kg)    | (in '000m <sup>3</sup> )    |
| 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<sup>3</sup>. (PS Clause 6.21.7(4)(b) refers)



| 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 <sup>3</sup> )  | (in '000m <sup>3</sup> )            | (in '000m <sup>3</sup> ) | (in '000m <sup>3</sup> ) | (in '000m <sup>3</sup> ) | (in '000m <sup>3</sup> ) | (in '000 kg) | (in '000kg)                | (in '000kg)           | (in '000kg)    | (in '000m <sup>3</sup> )    |
| 0.5   | 0                                   | 0.2                      | 0                        | 0.3                      | 0                        | 0            | 5                          | 0                     | 0              | 0.01                        |

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**

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# 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                     | <ol style="list-style-type: none"> <li>1. Identify source, investigate the causes of complaint and propose remedial measures;</li> <li>2. Inform IEC and ER;</li> <li>3. Repeat measurement to confirm finding;</li> <li>4. Increase monitoring frequency to daily.</li> </ol>   | <ol style="list-style-type: none"> <li>1. Check monitoring data submitted by ET;</li> <li>2. Check Contractor's working method.</li> </ol>  | <ol style="list-style-type: none"> <li>1. Notify Contractor.</li> </ol>  | <ol style="list-style-type: none"> <li>1. Rectify any unacceptable practice;</li> <li>2. Amend working methods if appropriate.</li> </ol>   |
| Action level being exceeded by two or more consecutive sampling | <ol style="list-style-type: none"> <li>1. Identify source;</li> <li>2. Inform IEC and ER;</li> <li>3. Advise the ER on the effectiveness of the proposed remedial measures;</li> <li>4. Repeat measurements to confirm findings;</li> <li>5. Increase monitoring frequency to daily;</li> <li>6. Discuss with IEC and Contractor on remedial actions required;</li> <li>7. If exceedance continues,</li> </ol> | <ol style="list-style-type: none"> <li>1. Check monitoring data submitted by ET;</li> <li>2. Check Contractor's working method;</li> <li>3. Discuss with ET and Contractor on possible remedial measures;</li> <li>4. Advise the ET on the effectiveness of the proposed remedial measures;</li> <li>5. Supervise Implementation of remedial measures.</li> </ol> | <ol style="list-style-type: none"> <li>1. Confirm receipt of notification of exceedance in writing;</li> <li>2. Notify Contractor;</li> <li>3. Ensure remedial measures properly implemented.</li> </ol> | <ol style="list-style-type: none"> <li>1. Submit proposals for remedial actions to IEC within three working days of notification;</li> <li>2. Implement the agreed proposals;</li> <li>3. Amend proposal if appropriate.</li> </ol> |

## Appendix M - Event Action Plans

| Event  | Action  |   |  |  |
|--|---|---|--|--|
|  | ET  | IEC   | ER   | Contractor   |
|  | <p>arrange meeting with IEC and ER;</p> <p>8. If exceedance stops, cease additional monitoring.</p>   |   |  |  |
| Limit level being exceeded by one sampling                     | <ol style="list-style-type: none"> <li>1. Identify source, investigate the causes of exceedance and propose remedial measures;</li> <li>2. Inform Contractor, IEC, ER, and EPD;</li> <li>3. Repeat measurement to confirm finding;</li> <li>4. Increase monitoring frequency to daily;</li> <li>5. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results.</li> </ol> | <ol style="list-style-type: none"> <li>1. Check monitoring data submitted by ET;</li> <li>2. Check Contractor's working method;</li> <li>3. Discuss with ET and Contractor on possible remedial measures;</li> <li>4. Advise the ER on the effectiveness of the proposed remedial measures;</li> <li>5. Supervise implementation of remedial measures.</li> </ol> | <ol style="list-style-type: none"> <li>1. Confirm receipt of notification of exceedance in writing;</li> <li>2. Notify Contractor;</li> <li>3. Ensure remedial measures properly implemented.</li> </ol> | <ol style="list-style-type: none"> <li>1. Take immediate action to avoid further exceedance;</li> <li>2. Submit proposals for remedial actions to IEC within three working days of notification;</li> <li>3. Implement the agreed proposals;</li> <li>4. Amend proposal if appropriate.</li> </ol> |
| Limit level being exceeded by two or more consecutive sampling | <ol style="list-style-type: none"> <li>1. Notify IEC, ER, Contractor and EPD;</li> <li>2. Identify source;</li> <li>3. Repeat measurement to confirm findings;</li> </ol>   | <ol style="list-style-type: none"> <li>1. Discuss amongst ER, ET, and Contractor on the potential remedial actions;</li> <li>2. Review Contractor's remedial actions whenever</li> </ol>  | <ol style="list-style-type: none"> <li>1. Confirm receipt of notification of exceedance in writing;</li> <li>2. Notify Contractor;</li> <li>3. In consolidation with the</li> </ol>                      | <ol style="list-style-type: none"> <li>1. Take immediate action to avoid further exceedance;</li> <li>2. Submit proposals for remedial actions to IEC within three working days of notification;</li> </ol>  |



## Appendix M - Event Action Plans

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

## Appendix M - Event Action Plans

**Table M-2 Event/Action Plan for Construction Noise**

| Event        | Action  |   |   |   |
|--------------|---|---|---|---|
|              | ET  | IEC   | ER  | Contractor  |
| Action Level | <ol style="list-style-type: none"> <li>1. Notify IEC and Contractor;</li> <li>2. Carry out investigation;</li> <li>3. Report the results of investigation to the IEC, ER and Contractor;</li> <li>4. Discuss with the Contractor and formulate remedial measures;</li> <li>5. Increase monitoring frequency to check mitigation effectiveness.</li> </ol> | <ol style="list-style-type: none"> <li>1. Review the analysed results submitted by the ET;</li> <li>2. Review the proposed remedial measures by the Contractor and advise the ER accordingly;</li> <li>3. Supervise the implementation of remedial measures.</li> </ol> | <ol style="list-style-type: none"> <li>1. Confirm receipt of notification of failure in writing;</li> <li>2. Notify Contractor;</li> <li>3. Require Contractor to propose remedial measures for the analysed noise problem;</li> <li>4. Ensure remedial measures are properly implemented.</li> </ol> | <ol style="list-style-type: none"> <li>1. Submit noise mitigation proposals to IEC;</li> <li>2. Implement noise mitigation proposals.</li> </ol>  |
| Limit Level  | <ol style="list-style-type: none"> <li>1. Identify source;</li> <li>2. Inform IEC, ER, EPD and Contractor;</li> <li>3. Repeat measurements to confirm findings;</li> <li>4. Increase monitoring frequency;</li> <li>5. Carry out analysis of</li> </ol>   | <ol style="list-style-type: none"> <li>1. Discuss amongst ER, ET, and Contractor on the potential remedial actions;</li> <li>2. Review Contractors remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly;</li> </ol>          | <ol style="list-style-type: none"> <li>1. Confirm receipt of notification of failure in writing;</li> <li>2. Notify Contractor;</li> <li>3. Require Contractor to propose remedial measures for the analysed noise problem;</li> </ol>  | <ol style="list-style-type: none"> <li>1. Take immediate action to avoid further exceedance;</li> <li>2. Submit proposals for remedial actions to IEC within 3 working days of notification;</li> <li>3. Implement the agreed proposals;</li> </ol> |

## Appendix M - Event Action Plans

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

## Appendix M - Event Action Plans

**Table M-3 Event/Action Plan for Ecology**

| Action Level   | Response   | Limit Level   | Response  |
|--|--|---|---|
| <i>Construction Phase</i>  |  |   |   |
| 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 | <ol style="list-style-type: none"> <li>1. Inform the Contractor, IEC and ER;</li> <li>2. Discuss remedial actions with IEC, ER and Contractor</li> <li>3. Monitor remedial actions until rectification has been completed.</li> </ol> | <ol style="list-style-type: none"> <li>1. Check inspection report;</li> <li>2. Check Contractor's working method;</li> <li>3. Discuss with ET, ER and Contractor on possible remedial measures;</li> <li>4. Advise ER on effectiveness of proposed remedial measures.</li> </ol> | <ol style="list-style-type: none"> <li>1. Confirm receipt of notification of non-conformity in writing;</li> <li>2. Review and agree on the remedial measures proposed by the Contractor;</li> <li>3. Supervise implementation of remedial measures.</li> </ol> | <ol style="list-style-type: none"> <li>1. Identify source and investigate the non-conformity;</li> <li>2. Implement remedial measures;</li> <li>3. Amend working methods agreed with ER as appropriate;</li> <li>4. Rectify damage and undertake any necessary replacement.</li> </ol> |

## Appendix M - Event Action Plans

| Event                   | Action  |  |   |   |
|-------------------------|---|--|---|---|
|                         | ET  | IEC  | ER  | Contractor  |
| Repeated Non-conformity | <ol style="list-style-type: none"> <li>1. Identify source;</li> <li>2. Inform the Contractor, IEC and ER;</li> <li>3. Discuss inspection frequency;</li> <li>4. Discuss remedial actions with IEC, ER and Contractor;</li> <li>5. Monitor remedial actions until rectification has been completed;</li> <li>6. If non-conformity stops, cease additional monitoring.</li> </ol> | <ol style="list-style-type: none"> <li>1. Check inspection report;</li> <li>2. Check Contractor's working method;</li> <li>3. Discuss with ET, ER and Contractor on possible remedial measures;</li> <li>4. Advise ER on effectiveness of proposed remedial measures.</li> </ol> | <ol style="list-style-type: none"> <li>1. Notify the Contractor;</li> <li>2. In consultation with the ET and IEC, agree with the Contractor on the remedial measures to be implemented;</li> <li>3. Supervise implementation of remedial measures.</li> </ol> | <ol style="list-style-type: none"> <li>1. Identify source and investigate the non-conformity;</li> <li>2. Implement remedial measures;</li> <li>3. Amend working methods agreed with ER as appropriate;</li> <li>4. Rectify damage and undertake any necessary replacement. Stop relevant portion of works as determined by ER until the non-conformity is abated.</li> </ol> |

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

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



| EM&A Ref. | Recommended Mitigation Measures   | Objectives of the Recommended Measures & Main Concern to Address | Who to implement the measures? | Location of the measure | When to implement the measures?                               | What requirements or standards for the measure to achieve                                       | Status |
|-----------|---|--|--------------------------------|-------------------------|---|---|--------|
| S2.3.1.3  | Surfaces where any pneumatic or power-driven drilling, cutting, polishing or other mechanical breaking operation takes place should be sprayed with water or a dust suppression chemical continuously;  | To minimize the dust impact                                      | Contractor                     | Work Sites              | Construction phase of Main Works Stage 1, Stage 2 and Stage 3 | Air Pollution Control Ordinance (APCO) and Air Pollution Control (Construction Dust) Regulation | ^      |
|           | Any area that involves demolition activities should be sprayed with water or a dust suppression chemical immediately prior to, during and immediately after the activities so as to maintain the entire surface wet;  |  |                                |                         |   |   | ^      |
|           | Where a scaffolding is erected around the perimeter of a building under construction, effective dust screens, sheeting or netting should be provided to enclose the scaffolding from the ground floor level of the building, or a canopy should be provided from the first floor level up to the highest level of the scaffolding;      |  |                                |                         |   |   | ^      |
|           | 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;  |  |                                |                         |   |   | N/A    |
|           | Loading, unloading, transfer, handling or storage of bulk cement or dry PFA should be carried out in a totally enclosed system or facility, and any vent or exhaust should be fitted with an effective fabric filter or equivalent air pollution control system; and  |  |                                |                         |   |   | N/A    |
|           | Exposed earth should be properly treated by compaction, turfing, hydroseeding, vegetation planting or sealing with latex, vinyl, bitumen, shortcrete or other suitable surface stabiliser within six months after the last construction activity on the construction site or part of the construction site where the exposed earth lies |  |                                |                         |   |   | ^      |

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

| EM&A Ref.                | Recommended Mitigation Measures  | Objectives of the Recommended Measures & Main Concern to Address | Who to implement the measures?      | Location of the measure | When to implement the measures?                               | What requirements or standards for the measure to achieve | Status |
|--------------------------|--|--|-------------------------------------|-------------------------|---|---|--------|
| <b>Ecological Impact</b> |  |  |                                     |                         |   |   |        |
| 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 |
|-----------------------------|---|--|--------------------------------|-------------------------|---|---|--------|
| <b>Water Quality Impact</b> |   |  |                                |                         |   |   |        |
| 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.<br><br>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 | Handling of site sewage  | Contractors                    | Work Sites              | Construction phase of Main Works Stage 1, Stage 2 and Stage 3 | EIAO-TM, WPCO, EIAO                                       | ^      |
|                             | ^   |  |                                |                         |   |   |        |

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

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

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



| EM&A Ref.                   | Recommended Mitigation Measures  | Objectives of the Recommended Measures & Main Concern to Address | Who to implement the measures? | Location of the measure | When to implement the measures?              | What requirements or standards for the measure to achieve | Status |
|-----------------------------|--|--|--------------------------------|-------------------------|--|---|--------|
| <b>Landscape and Visual</b> |  |  |                                |                         |  |   |        |
| 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                    | <p>MM4 – Tree Protection &amp; Preservation</p> <p>Existing trees to be retained within the Project Site should be carefully protected during construction. In particular Old and Valuable Trees (OVTs) will be preserved according to ETWB TC (Works) No. 29/2004. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in Contractor's works areas. A detailed tree survey will be carried out for the Tree Removal Application (TRA) process which will be carried out at the later detailed design stage of the Project. The detailed tree survey will propose which trees should be retained, transplanted or felled and will include details of tree protection measures for those trees to be retained.</p> | Protect and Preserve Trees                                       | Designer / Contractor          | Work Sites              | Prior to construction and construction phase | ETWB TCW No. 29/2004 and DEVB TC(W) No.7/2015             | ^      |

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

| 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<br>Compensatory tree planting for felled trees shall be provided to the satisfaction of relevant Government departments. Required numbers and locations of compensatory trees shall be determined and agreed separately with Government during the Tree Removal Application process under DEVB TC(W) No. 7/2015.   | Compensate for trees and shrubs lost due to the Project  | Designer / Contractor          | Work Sites where possible. Otherwise consider offsite locations | Prior to construction, construction phase and operation phase | DEVB TC(W) No. 7/2015 and ETWB TCW No. 2/2004   | N/A    |
|           | Compensatory planting is proposed at the potential open areas such as open spaces, amenity areas, open areas of the streetscapes, as well as the open areas within development lots.   |  |                                |   |   |   | N/A    |
|           | Compensatory planting for shrubs should be considered in suitable locations. Native species such as <i>Melastoma malabathricum</i> , <i>Diospyros vaccinioides</i> , <i>Gardenia jasminoides</i> , <i>Ixora chinensis</i> , <i>Ligustrum sinense</i> , <i>Litsea rotundifolia</i> , <i>Melastoma dodecandrum</i> , <i>Atalantia buxifolia</i> , <i>Rhodomyrtus tomentosa</i> , <i>Raphiolepis indica</i> , and <i>Rhododendron simsii</i> are suggested. |  |                                |   |   |   | N/A    |
| S7.3.2.1  | MM9 - Vertical Greening<br>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<br>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.<br>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/Urban 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<br>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<br>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<br>Construction day and night time lighting should be controlled to minimize glare impact to adjacent VSRs during the Construction phase. Street and night time lighting shall also be controlled to minimize glare impact to adjacent VSRs during the operation phase.  | To minimize glare impact to adjacent VSRs.   | Designer / Contractor          | Work Sites and/or the Plant  | Construction phase and operation phase                        |   | ^      |

|   |  |
|---|--|
| Remarks: EM&A Programme under FEP-02/474/2013 |  |
| ^   | Compliance of mitigation measure;  |
| N/A   | Not applicable at this stage;  |
| N/A(1)  | Not observed;  |
| *   | Recommendation was made during site audit but improved/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.  |

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

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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: June 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 | <ul style="list-style-type: none"> <li>• Employed suction truck and dump truck to clear the silt and mud at Shek Sheung River</li> <li>• Arranged to repair the wastewater treatment system</li> <li>• Installed additional sedimentation tanks and wastewater treatment system to increase the on-site treatment capacity</li> <li>• Clean the slurry sediment released from the outlet regularly by suction trucks</li> <li>• Avoid damage of underground drains and pipes caused by existing construction works</li> <li>• Avoid illegal discharge from the Site into foul drains and manholes</li> </ul> | Complaint Investigation Report was submitted in April 2020 |

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

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**APPENDIX P**  
**SUMMARY OF EXCEEDANCE**

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**Agreement No. SPW 07/2019**

**Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1**

**Appendix P – Summary of Exceedance**

**Reporting Month:** June 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 exceedance of ecological monitoring was triggered in the reporting month.

No Limit Level exceedance of ecological monitoring was triggered in the reporting month.



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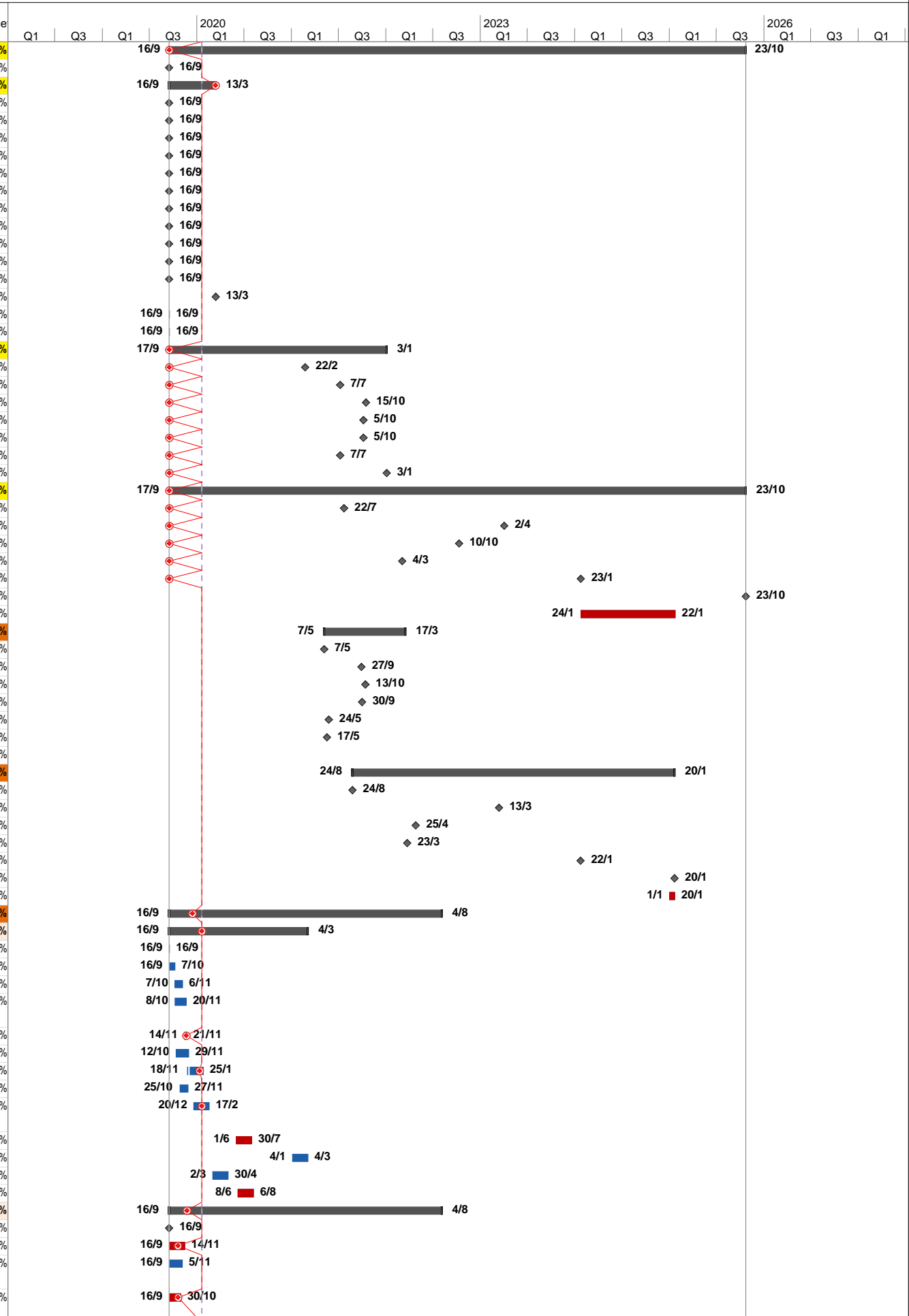
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**APPENDIX Q  
TENTATIVE CONSTRUCTION  
PROGRAMME**

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| ID | KD   | Task Name   | Duration    | Start        | Finish       | Actual Start | Actual Finish | Total Slack | Predecessors                   | Successors                    | % Complete |
|----|------|---|-------------|--------------|--------------|--------------|---------------|-------------|--------------------------------|-------------------------------|------------|
| 1  |      | <b>Contract Dates</b>   | 2229.2 days | 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  |      | <b>Access Date (cal. day)</b>   | 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 |      | <b>Key Date (cal. day)</b>  | 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 |      | <b>Completion Date (cal. day)</b>   | 2228.2 days | 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 | *    | <b>Planned Completion - Key Date (cal. day)</b>   | 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 | *    | <b>Planned Completion - Section of the Works (cal. day)</b>                                 | 1245.2 days | 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 |      | <b>Submissions (cal. day)</b>   | 1054 days   | Mon 16/9/19  | Thu 4/8/22   | Mon 16/9/19  | NA            | 20 days     |                                |                               | 62%        |
| 51 |      | <b>Subletting Package</b>   | 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 |      | <b>Statutory Submission, Submission &amp; Approval</b>                                      | 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 ■



| ID  | KD   | Task Name  | Duration        | Start               | Finish             | Actual Start        | Actual Finish | Total Slack       | Predecessors       | Successors                  | % Complete | Gantt Chart (2020-2026) |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
|-----|------|--|-----------------|---------------------|--------------------|---------------------|---------------|-------------------|--------------------|-----------------------------|------------|-------------------------|----|----|----|------|----|----|----|----|----|------|----|----|----|----|------|----|----|----|
|     |      |  |                 |                     |                    |                     |               |                   |                    |                             |            | Q1                      | Q3 | Q1 | Q3 | 2020 | Q3 | Q1 | Q3 | Q1 | Q3 | 2023 | Q1 | Q3 | Q1 | Q3 | 2026 | Q1 | Q3 | Q1 |
| 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%         | 12/1 4/2                |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 135 |      | <b>Below Ground Level Stage no.3 @ +3.80mPD</b>                            | <b>50 days</b>  | <b>Thu 4/2/21</b>   | <b>Sat 10/4/21</b> | <b>NA</b>           | <b>NA</b>     | <b>-60.8 days</b> |                    |                             | <b>0%</b>  | 4/2 10/4                |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%         | 4/2 26/2                |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%         | 26/2 22/3               |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 138 |      | Extraction of Sheetpiles   | 14 days         | Mon 22/3/21         | Sat 10/4/21        | NA                  | NA            | 22 days           | 137                | 35FF                        | 0%         | 22/3 10/4               |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 139 |      | <b>Above Ground Level @ +7.4mPD</b>  | <b>36 days</b>  | <b>Mon 22/3/21</b>  | <b>Fri 7/5/21</b>  | <b>NA</b>           | <b>NA</b>     | <b>-60.8 days</b> |                    |                             | <b>0%</b>  | 22/3 7/5                |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%         | 22/3 7/5                |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%         | 7/5 7/5                 |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%         | 7/5 24/8                |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 143 | *    | <b>Sludge Digesters and Distribution Chamber</b>                           | <b>638 days</b> | <b>Sat 7/12/19</b>  | <b>Mon 31/1/22</b> | <b>Sat 7/12/19</b>  | <b>NA</b>     | <b>201 days</b>   |                    |                             | <b>2%</b>  | 7/12 31/1               |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 7/12 13/12              |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 14/12 20/12             |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 21/12 13/1              |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 19/12                   |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 148 |      | Sheet Pile Installation  | 45 days         | Tue 14/1/20         | Mon 9/3/20         | NA                  | NA            | 0 days            | 146                | 150FS-23 days,178           | 0%         | 14/1 9/3                |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%         | 29/2 5/3                |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%         | 6/3 10/8                |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%         | 11/8 5/9                |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 152 |      | Construction of Digestors  | 231 days        | Mon 7/9/20          | Sat 19/6/21        | NA                  | NA            | 0 days            |                    |                             | 0%         | 7/9 19/6                |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 153 |      | Digester No. 1   | 187 days        | Mon 7/9/20          | Mon 26/4/21        | NA                  | NA            | 0 days            | 151                |                             | 0%         | 7/9 26/4                |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%         | 7/9 19/10               |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%         | 20/10 3/2               |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 156 |      | Water Test   | 20 days         | Thu 4/2/21          | Tue 2/3/21         | NA                  | NA            | 0 days            | 155                | 157                         | 0%         | 4/2 2/3                 |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 157 |      | Apply Internal Anti-corrosion Protective Lining                            | 14 days         | Wed 3/3/21          | Thu 18/3/21        | NA                  | NA            | 0 days            | 156                | 158                         | 0%         | 3/3 18/3                |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 158 |      | Construction of Roof Slab  | 30 days         | Fri 19/3/21         | Mon 26/4/21        | NA                  | NA            | 0 days            | 157                | 169                         | 0%         | 19/3 26/4               |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 159 |      | Digester No. 2   | 187 days        | Mon 7/9/20          | Mon 26/4/21        | NA                  | NA            | 0 days            | 151                |                             | 0%         | 7/9 26/4                |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%         | 7/9 19/10               |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%         | 20/10 3/2               |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 162 |      | Water Test   | 20 days         | Thu 4/2/21          | Tue 2/3/21         | NA                  | NA            | 0 days            | 161                | 163                         | 0%         | 4/2 2/3                 |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 163 |      | Apply Internal Anti-corrosion Protective Lining                            | 14 days         | Wed 3/3/21          | Thu 18/3/21        | NA                  | NA            | 0 days            | 162                | 164                         | 0%         | 3/3 18/3                |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 164 |      | Construction of Roof Slab  | 30 days         | Fri 19/3/21         | Mon 26/4/21        | NA                  | NA            | 0 days            | 163                | 175                         | 0%         | 19/3 26/4               |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 165 |      | Digester No. 3   | 196 days        | Tue 20/10/20        | Sat 19/6/21        | NA                  | NA            | 0 days            | 151                |                             | 0%         | 20/10 19/6              |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%         | 20/10 30/11             |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%         | 1/12 19/3               |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 168 |      | Water Test   | 20 days         | Sat 20/3/21         | Thu 15/4/21        | NA                  | NA            | 9 days            | 167                | 169                         | 0%         | 20/3 15/4               |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%         | 27/4 13/5               |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 170 |      | Construction of Roof Slab  | 30 days         | Fri 14/5/21         | Sat 19/6/21        | NA                  | NA            | 0 days            | 169                |                             | 0%         | 14/5 19/6               |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 171 |      | Digester No. 4   | 196 days        | Tue 20/10/20        | Sat 19/6/21        | NA                  | NA            | 0 days            | 151                |                             | 0%         | 20/10 19/6              |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%         | 20/10 30/11             |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%         | 1/12 19/3               |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 174 |      | Water Test   | 20 days         | Sat 20/3/21         | Thu 15/4/21        | NA                  | NA            | 9 days            | 173                | 175                         | 0%         | 20/3 15/4               |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%         | 27/4 13/5               |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 176 |      | Construction of Roof Slab  | 30 days         | Fri 14/5/21         | Sat 19/6/21        | NA                  | NA            | 0 days            | 175                |                             | 0%         | 14/5 19/6               |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 177 |      | Construction of Distribution Chamber                                       | 219 days        | Mon 18/1/21         | Wed 13/10/21       | NA                  | NA            | 0 days            |                    |                             | 0%         | 18/1 13/10              |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 178 | SP   | Sheet Pile Installation  | 45 days         | Mon 18/1/21         | Sat 13/3/21        | NA                  | NA            | 5 days            | 148                | 179                         | 0%         | 18/1 13/3               |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%         | 20/3 26/6               |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%         | 28/6 13/10              |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%         | 13/10                   |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 182 |      | Drainage System (within Bldg/ Structure) Installation                      | 90 days         | Fri 15/10/21        | Mon 31/1/22        | NA                  | NA            | 201 days          | 180                | 45FF                        | 0%         | 15/10 31/1              |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 183 |      | FRP Walkway & Miscellaneous Installation                                   | 90 days         | Fri 15/10/21        | Mon 31/1/22        | NA                  | NA            | 201 days          | 180                | 45FF                        | 0%         | 15/10 31/1              |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 184 | SW3  | ABWF Works & BS Works, incl. External Lining                               | 90 days         | Fri 15/10/21        | Mon 31/1/22        | NA                  | NA            | 201 days          | 180,91,62          | 45FF                        | 0%         | 15/10 31/1              |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 185 | *    | <b>Sludge Dewatering Building</b>  | <b>638 days</b> | <b>Tue 26/11/19</b> | <b>Wed 19/1/22</b> | <b>Tue 26/11/19</b> | <b>NA</b>     | <b>211 days</b>   |                    |                             | <b>5%</b>  | 26/11 19/1              |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 26/11 2/12              |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 4/12 24/12              |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 188 |      | Installation of Monitoring Points  | 10 days         | Fri 3/1/20          | Fri 3/1/20         | Fri 3/1/20          | Tue 14/1/20   | 0 days            | 187                | 189                         | 100%       | 3/1 14/1                |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%        | 15/1 24/2               |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%         | 25/2 29/2               |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%         | 2/3 3/9                 |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 192 |      | Pile Loading Test  | 25 days         | Fri 4/9/20          | Mon 28/9/20        | NA                  | NA            | 4 days            | 191                | 193                         | 0%         | 4/9 28/9                |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%         | 29/9 10/12              |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%         | 11/12 30/9              |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 195 |      | Basement Consturction @  | 76 days         | Fri 11/12/20        | Tue 16/3/21        | NA                  | NA            | 2 days            | 193                | 196                         | 0%         | 11/12 16/3              |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 196 |      | Ground Floor Construction @ +7.55mPD                                       | 65 days         | Wed 17/3/21         | Sat 5/6/21         | NA                  | NA            | 2 days            | 195                | 197                         | 0%         | 17/3 5/6                |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 197 |      | 1/F Construction @ +15.3m mPD  | 65 days         | Mon 7/6/21          | Mon 23/8/21        | NA                  | NA            | 2 days            | 196                | 198                         | 0%         | 7/6 23/8                |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 198 | KD3B | Roof Construction @ +25.65mPD  | 32 days         | Tue 24/8/21         | Thu 30/9/21        | NA                  | NA            | 2 days            | 197                | 38FF,286                    | 0%         | 24/8 30/9               |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%         | 30/9                    |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 200 |      | Drainage System (within Bldg/ Structure) Installation                      | 90 days         | Sat 2/10/21         | Wed 19/1/22        | NA                  | NA            | 211 days          | 194                | 45FF                        | 0%         | 2/10 19/1               |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%         | 2/10 18/1               |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 202 | *    | <b>Combined Heat Power Building</b>  | <b>518 days</b> | <b>Tue 10/12/19</b> | <b>Wed 8/9/21</b>  | <b>Tue 10/12/19</b> | <b>NA</b>     | <b>319 days</b>   |                    |                             | <b>4%</b>  | 10/12 8/9               |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 10/12 16/12             |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 17/12 30/12             |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 3/1 9/1                 |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 14/1 18/1               |    |    |    |      |    |    |    |    |    |      |    |    |    |    |      |    |    |    |

Task  Milestone  Summary  Critical 



| ID  | KD   | Task Name   | Duration  | Start        | Finish       | Actual Start | Actual Finish | Total Slack        | Predecessors       | Successors              | % Comple | Gantt Chart |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
|-----|------|---|-----------|--------------|--------------|--------------|---------------|--------------------|--------------------|-------------------------|----------|-------------|----|----|----|------|----|----|----|----|----|----|------|----|----|----|----|------|----|----|----|
|     |      |   |           |              |              |              |               |                    |                    |                         |          | Q1          | Q3 | Q1 | Q3 | 2020 | Q1 | Q3 | Q1 | Q3 | Q1 | Q3 | 2023 | Q1 | Q3 | Q1 | Q3 | 2026 | Q1 | Q3 | Q1 |
| 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%       | 18/1        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 208 |      | Pile Loading Test   | 26 days   | Sat 2/5/20   | Mon 1/6/20   | NA           | NA            | 110 days           | 207                | 209                     | 0%       | 29/4        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 2/5         |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 1/6         |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 2/6         |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 212 |      | Drainage System (within Bldg/ Structure) Installation                     | 60 days   | Tue 25/5/21  | Wed 4/8/21   | NA           | NA            | 349 days           | 210                | 45FF                    | 0%       | 16/9        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 17/9        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 214 | *    | Sewage Pumping Station  | 570 days  | Mon 25/5/20  | Mon 25/4/22  | NA           | NA            | 55 days            |                    |                         | 0%       | 24/5        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 215 |      | Site Clearance & Site Set Up  | 6 days    | Mon 25/5/20  | Sat 30/5/20  | NA           | NA            | 55 days            | 2                  | 216                     | 0%       | 25/5        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 30/5        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 217 |      | Installation of Monitoring Points   | 6 days    | Fri 19/6/20  | Fri 26/6/20  | NA           | NA            | 55 days            | 216                | 218                     | 0%       | 1/6         |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 218 |      | Sheet Pile Installation   | 30 days   | Sat 27/6/20  | Sat 1/8/20   | NA           | NA            | 55 days            | 217                | 220                     | 0%       | 18/6        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 19/6        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 26/6        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 221 |      | Pile Loading Test   | 26 days   | Sun 29/11/20 | Thu 24/12/20 | NA           | NA            | 28 days            | 220                | 222                     | 0%       | 27/6        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 1/8         |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 223 | KD3E | R.C. Structure  | 200 days  | Tue 4/5/21   | Fri 31/12/21 | NA           | NA            | 87,88,89,90,61,248 | 41FF,224           |                         | 0%       | 4/9         |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 9/9         |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 225 | *    | Workshop No. 2  | 501 days  | Tue 24/12/19 | Thu 2/9/21   | Tue 24/12/19 | NA            | 324 days           |                    |                         | 3%       | 10/9        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%     | 28/11       |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%     | 29/11       |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 228 |      | Installation of Monitoring Points   | 2 days    | Tue 14/1/20  | Wed 15/1/20  | NA           | NA            | 77 days            | 227                | 230,229                 | 0%       | 13/1        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 14/1        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 15/1        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 231 |      | Pile Loading Test   | 26 days   | Wed 1/7/20   | Sun 26/7/20  | NA           | NA            | 4 days             | 230                | 232                     | 0%       | 20/4        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 24/4        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 233 |      | R.C. Structure  | 220 days  | Wed 19/8/20  | Mon 17/5/21  | NA           | NA            | 4 days             |                    |                         | 0%       | 25/4        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 234 |      | Ground Floor Construction @ +6.30mpD                                      | 80 days   | Wed 19/8/20  | Mon 23/11/20 | NA           | NA            | 4 days             | 232                | 235                     | 0%       | 1/7         |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 235 |      | First Floor Construction @ +13.50mpD                                      | 80 days   | Tue 24/11/20 | Wed 3/3/21   | NA           | NA            | 4 days             | 234                | 236                     | 0%       | 26/7        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 18/8        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 19/8        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 238 |      | Drainage System (within Bldg/ Structure) Installation                     | 60 days   | Tue 18/5/21  | Thu 29/7/21  | NA           | NA            | 354 days           | 236                | 45FF                    | 0%       | 17/5        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 23/11       |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 240 | *    | Thermal Hydrolysis Pretreatment   | 403 days  | Thu 19/12/19 | Mon 3/5/21   | Thu 19/12/19 | NA            | 0 days             |                    |                         | 11%      | 24/11       |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%     | 3/3         |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%     | 17/5        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 243 |      | Installation of Monitoring Points   | 6 days    | Wed 15/1/20  | Tue 21/1/20  | NA           | NA            | 254 days           | 242                | 245                     | 0%       | 18/5        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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             |                    |                         | 0%       | 29/7        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 2/9         |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 246 |      | Pile Loading Test   | 25 days   | Sun 24/1/21  | Wed 17/2/21  | NA           | NA            | 0 days             | 245                | 247                     | 0%       | 3/5         |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 17/2        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 248 | KD3E | R.C. Plinth   | 40 days   | Sat 13/3/21  | Mon 3/5/21   | NA           | NA            | 0 days             | 247                | 41FF,223                | 0%       | 12/3        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 249 | *    | Ferric Chloride Dosing Facilities   | 216 days  | Tue 18/5/21  | Mon 7/2/22   | NA           | NA            | 4 days             |                    |                         | 0%       | 3/5         |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 7/2         |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 251 |      | Plate Load Test   | 18 days   | Wed 30/6/21  | Wed 21/7/21  | NA           | NA            | 4 days             | 250                | 252                     | 0%       | 29/6        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 252 |      | R.C. Structure  | 66 days   | Thu 22/7/21  | Fri 8/10/21  | NA           | NA            | 4 days             | 251,61             | 253                     | 0%       | 21/7        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 8/10        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 24/12       |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 255 | *    | Fire Hydrant and Booster Pump Room  | 204.8 day | Mon 19/7/21  | Thu 24/3/22  | NA           | NA            | 11 days            |                    |                         | 0%       | 7/2         |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 29/6        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 257 |      | Plate Load Test   | 18 days   | Fri 30/7/21  | Thu 19/8/21  | NA           | NA            | 11 days            | 256                | 258                     | 0%       | 21/7        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 8/10        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 24/12       |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 260 | *    | Transformer and Switchroom  | 183 days  | Tue 1/6/21   | Mon 10/1/22  | NA           | NA            | -20.8 days         |                    |                         | 0%       | 7/2         |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 29/6        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 262 |      | Plate Load Test   | 18 days   | Fri 25/6/21  | Sat 17/7/21  | NA           | NA            | -20.8 days         | 261                | 263                     | 0%       | 21/7        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 8/10        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 24/12       |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 265 | *    | Water Meter Cabinet   | 73 days   | Tue 12/10/21 | Sat 8/1/22   | NA           | NA            | -20 days           |                    |                         | 0%       | 7/2         |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 29/6        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 267 |      | Plate Load Test   | 18 days   | Mon 25/10/21 | Sat 13/11/21 | NA           | NA            | -20 days           | 266                | 268                     | 0%       | 21/7        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 268 |      | R.C. Structure  | 30 days   | Mon 15/11/21 | Sat 18/12/21 | NA           | NA            | -20 days           | 267,61             | 269,271                 | 0%       | 8/10        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 24/12       |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 270 | *    | Guard House   | 75 days   | Sun 19/12/21 | Wed 23/3/22  | NA           | NA            | -20 days           |                    |                         | 0%       | 7/2         |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 271 |      | Excavation to Formation   | 21 days   | Sun 19/12/21 | Sat 8/1/22   | NA           | NA            | -23 days           | 2,268              | 272                     | 0%       | 29/6        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 272 |      | R.C. Structure  | 30 days   | Mon 10/1/22  | Wed 16/2/22  | NA           | NA            | -17 days           | 61,271             | 273                     | 0%       | 21/7        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 8/10        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 274 | *    | Coolers Pumping Station   | 100 days  | Mon 28/6/21  | Tue 26/10/21 | NA           | NA            | 0 days             |                    |                         | 0%       | 7/2         |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 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%       | 26/10       |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 276 | SW4  | R.C. Structure  | 60 days   | Sat 14/8/21  | Tue 26/10/21 | NA           | NA            | 0 days             | 275,61             | 41FF,292                | 0%       | 13/8        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 277 | *    | Waste Gas Buner   | 53 days   | Tue 25/5/21  | Tue 27/7/21  | NA           | NA            | 110 days           |                    |                         | 0%       | 26/10       |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 278 |      | Excavation for Raft Footing (75cu.m)                                      | 15 days   | Tue 25/5/21  | Thu 10/6/21  | NA           | NA            | 110 days           | 2,210              | 279,298                 | 0%       | 27/7        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |
| 279 |      | Plate Load Test   | 18 days   | Fri 11/6/21  | Sat 3/7/21   | NA           | NA            | 110 days           | 278                | 280                     | 0%       | 10/6        |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |      |    |    |    |

Task  Milestone  Summary  Critical 







| ID | Key Date | Task Name  | Duration         | Start               | Finish              | Predecessors | Successors                    | Total Slack                   | Task Calendar       | trade | 2020  |       |       |       |       |       |       |       |       |       |       |       | 2021  |       |       |       | 2022  |       |       |       | 2023  |       |       |       | 2024  |       |       |       | 2025  |       |       |       |
|----|----------|--|------------------|---------------------|---------------------|--------------|-------------------------------|-------------------------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|    |          |  |                  |                     |                     |              |                               |                               |                     |       | Qtr 2 | Qtr 3 | Qtr 4 | Qtr 1 | Qtr 2 | Qtr 3 | Qtr 4 | Qtr 1 | Qtr 2 | Qtr 3 | Qtr 4 | Qtr 1 | Qtr 2 | Qtr 3 | Qtr 4 | Qtr 1 | Qtr 2 | Qtr 3 | Qtr 4 | Qtr 1 | Qtr 2 | Qtr 3 | Qtr 4 | Qtr 1 | Qtr 2 | Qtr 3 | Qtr 4 | Qtr 1 | Qtr 2 | Qtr 3 | Qtr 4 | Qtr 1 |
| 1  |          | <b>Contract Dates</b>  | <b>1585 days</b> | <b>Mon 18/11/19</b> | <b>Thu 27/3/25</b>  |              |                               | <b>0 days</b>                 | <b>None</b>         |       | 18/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 2  |          | Starting Date  | 0 days           | Mon 18/11/19        | Mon 18/11/19        |              | 35FS+1 day,36FS+1 day,30 days |                               | Calendar Day        |       | 18/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 3  |          | <b>Access Dates (cal. day)</b>   | <b>310 days</b>  | <b>Mon 18/11/19</b> | <b>Tue 22/9/20</b>  |              |                               | <b>0 days</b>                 | <b>Calendar Day</b> |       | 18/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 4  |          | Portion B-1 (Access Road AR3)  | 0 days           | Mon 18/11/19        | Mon 18/11/19        |              | 118                           | 77 days                       | Calendar Day        |       | 18/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 5  |          | Portion B-1A (Area for the works for Sidestream Treatment Facilities by Others)  | 0 days           | Mon 18/11/19        | Mon 18/11/19        |              |                               | 1957 days                     | Calendar Day        |       | 18/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 6  |          | Portion B-2 (Inlet Works No.1)   | 0 days           | Mon 18/11/19        | Mon 18/11/19        |              | 122,143,148                   | 105 days                      | Calendar Day        |       | 18/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 7  |          | Portion B-2A (Area for the pipe-jacking works by others)   | 0 days           | Mon 18/11/19        | Mon 18/11/19        |              |                               | 1957 days                     | Calendar Day        |       | 18/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 8  |          | Portion B-3 (Primary Sedimentation Tanks No. 1-4)  | 0 days           | Mon 18/11/19        | Mon 18/11/19        |              | 177                           | 0 days                        | Calendar Day        |       | 18/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 9  |          | Portion B-4 (Bioreactor No. 2A & 2B)   | 0 days           | Mon 18/11/19        | Mon 18/11/19        |              | 189                           | 0 days                        | Calendar Day        |       | 18/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 10 |          | Portion B-5 (Membrane Facilities Building No.2)  | 0 days           | Mon 18/11/19        | Mon 18/11/19        |              | 203                           | 49 days                       | Calendar Day        |       | 18/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 11 |          | Portion B-6 (SAS Pumping Station)  | 0 days           | Mon 18/11/19        | Mon 18/11/19        |              | 224                           | 184 days                      | Calendar Day        |       | 18/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 12 |          | Portion B-7 (Ancillary structures)   | 0 days           | Mon 18/11/19        | Mon 18/11/19        |              | 233                           | 299 days                      | Calendar Day        |       | 18/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 13 |          | Portion B-7A (Alternation works for existing Power House)  | 0 days           | Wed 2/9/20          | Wed 2/9/20          |              | 280,29FS+1 day                | 0 days                        | Calendar Day        |       | 18/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 14 |          | Portion B-8 (Alternation for existing Membrane Facilities Building No.1)   | 0 days           | Tue 22/9/20         | Tue 22/9/20         |              | 281                           | 838 days                      | Calendar Day        |       | 18/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 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        |              | 279                           | 72 days                       | Calendar Day        |       | 18/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 16 |          | Portion B-9 (remainder works in Zone B)  | 0 days           | Mon 18/11/19        | Mon 18/11/19        |              | 282,290                       | 98 days                       | Calendar Day        |       | 18/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 17 |          | Portion B-9A (Area for the pipe-jacking works by others)   | 0 days           | Mon 18/11/19        | Mon 18/11/19        |              |                               | 1957 days                     | Calendar Day        |       | 18/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 18 |          | Portion B-9B (Area for underground pipework modification and connection works by others)   | 0 days           | Mon 18/11/19        | Mon 18/11/19        |              |                               | 1957 days                     | Calendar Day        |       | 18/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 19 |          | Portion B-9C (Area for the works for pipeworks)  | 0 days           | Wed 22/7/20         | Wed 22/7/20         |              | 282,290                       | 1709 days                     | Calendar Day        |       | 18/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 20 |          | <b>Key Dates (cal. day)</b>  | <b>1440 days</b> | <b>Tue 19/11/19</b> | <b>Sat 28/10/23</b> |              |                               | <b>0 days</b>                 | <b>Calendar Day</b> |       | 19/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 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        |       | 19/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 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        |       | 19/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 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        |       | 19/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 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        |       | 19/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 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        |       | 19/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 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        |       | 19/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 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        |       | 19/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 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        |       | 19/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 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        |       | 19/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 30 | KD1J     | KD1J completion of auxiliary facilities 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        |       | 19/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 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        |       | 19/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 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        |       | 19/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 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        |       | 19/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 34 |          | <b>Completion Date (cal. Day)</b>  | <b>1956 days</b> | <b>Tue 19/11/19</b> | <b>Thu 27/3/25</b>  |              |                               | <b>0 days</b>                 | <b>Calendar Day</b> |       | 19/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 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        |       | 19/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 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        |       | 19/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 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        |       | 19/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 38 | DLP      | Defects Liability Period and Landscape Establishment Works   | 365 days         | Thu 28/3/24         | Thu 27/3/25         |              | 37FS+1 day,59FF               | 0 days                        | Calendar Day        |       | 19/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 39 |          | <b>Planned Completion</b>  | <b>1686 days</b> | <b>Fri 14/8/20</b>  | <b>Thu 27/3/25</b>  |              |                               | <b>0 days</b>                 | <b>Calendar Day</b> |       | 14/8  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 40 |          | <b>Planned Completion - Key Dates (cal. day)</b>   | <b>1170 days</b> | <b>Fri 14/8/20</b>  | <b>Sat 28/10/23</b> |              |                               | <b>0 days</b>                 | <b>Calendar Day</b> |       | 14/8  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 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                          | Calendar Day        |       | 12/9  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 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                          | Calendar Day        |       | 14/8  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 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                          | Calendar Day        |       | 4/8   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 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                          | Calendar Day        |       | 20/2  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 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                          | Calendar Day        |       | 31/12 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 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         |              | 199FF,220FF                   | 26FF                          | Calendar Day        |       | 25/1  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 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                          | Calendar Day        |       | 25/6  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 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                          | Calendar Day        |       | 9/8   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 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                          | Calendar Day        |       | 30/1  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 50 | KD1J     | KD1J completion of auxiliary facilities in Portion B-7 (800days after starting date)   | 0 days           | Wed 26/1/22         | Wed 26/1/22         |              | 276FF,275FF,2730FF            | 0 days                        | Calendar Day        |       | 26/1  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 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                          | Calendar Day        |       | 27/3  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 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                          | Calendar Day        |       | 3/9   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 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                          | Calendar Day        |       | 28/10 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 54 |          | <b>Planned Completion Date (cal. Day)</b>  | <b>1056 days</b> | <b>Fri 6/5/22</b>   | <b>Thu 27/3/25</b>  |              |                               | <b>0 days</b>                 | <b>Calendar Day</b> |       | 6/5   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 55 | SW1      | Section 1 of the Works (1,460 after starting date)   | 0 days           | Wed 23/8/23         | Wed 23/8/23         |              | 277FF,271FF,2E35FF            | 86 days                       | Calendar Day        |       | 6/5   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 56 | SW2      | Section 2 of the Works (900 after starting date)   | 0 days           | Fri 6/5/22          | Fri 6/5/22          |              | 284FF,287FF,2E36FF            | 0 days                        | Calendar Day        |       | 6/5   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 57 | SW3      | Section 3 of the Works (1,590 after starting date)   | 0 days           | Tue 26/3/24         | Tue 26/3/24         |              | 281FF,291FF,2E37FF,58FF       | 0 days                        | Calendar Day        |       | 6/5   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 58 |          | Planned Time Risk Allowance (14days per 365day)  | 60 days          | Sat 13/1/24         | Tue 26/3/24         |              | 57FF                          | 294 days                      | None                |       | 13/1  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 59 | DLP      | Defects Liability Period and Landscape Establishment Works   | 0 days           | Thu 27/3/25         | Thu 27/3/25         |              | 294FF                         | 38FF                          | Calendar Day        |       | 27/3  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 60 |          | <b>Submissions (cal.day)</b>   | <b>880 days</b>  | <b>Mon 18/11/19</b> | <b>Fri 15/4/22</b>  |              |                               | <b>0 days</b>                 | <b>Calendar Day</b> |       | 18/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 61 |          | <b>Subletting Package</b>  | <b>96 days</b>   | <b>Mon 18/11/19</b> | <b>Fri 21/2/20</b>  |              |                               | <b>0 days</b>                 | <b>Calendar Day</b> |       | 18/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 62 |          | Prepare & submit subletting procedure  | 12 days          | Mon 18/11/19        | Fri 29/11/19        |              | 63                            | 0 days                        | Calendar Day        |       | 18/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 63 |          | PM review and accept subletting procedure  | 12 days          | Sat 30/11/19        | Wed 11/12/19        |              | 62                            | 0 days                        | Calendar Day        |       | 30/11 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 64 |          | Subletting for Preliminary Works (surveying, condition survey, site clearacne etc)   | 14 days          | Thu 12/12/19        | Wed 25/12/19        |              | 63,82                         | 1 day                         | Calendar Day        |       | 12/12 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 65 |          | Subletting for Contractor desinger for temporary works and ICE   | 24 days          | Thu 12/12/19        | Sat 4/1/20          |              | 63,82                         | 212 days                      | Calendar Day        |       | 12/12 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 66 |          | Subletting for independent BIM consultant  | 24 days          | Mon 6/1/20          | Wed 5/2/20          |              | 65                            | 1474 days                     | None                |       | 6/1   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 67 |          | Subletting for demolition works  | 24 days          | Thu 12/12/19        | Sat 4/1/20          |              | 62,63                         | 179,191,234,143,204,207,1 day | Calendar Day        | dem   | 12/12 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 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                           | Calendar Day        |       | 12/12 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 69 |          | Subletting for pre-drilling works  | 24 days          | Thu 12/12/19        | Sat 4/1/20          |              | 63,82                         | 225,150,180,192,208           | Calendar Day        | pd    | 12/12 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 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           | Calendar Day        | hp    | 12/12 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |

















| Activity ID   | Activity Name  | Original Duration | Early Start | Early Finish | Late Start | Late Finish | Total Float | Gantt Chart (2019-2024)           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---|--|-------------------|-------------|--------------|------------|-------------|-------------|-----------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| <b>Compliance with BEAM Requirements</b>  |  |                   |             |              |            |             |             |                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS013400  | BEAM Plus  | 1580              | 10-Nov-19   | 07-Mar-24    | 12-Nov-19  | 09-Mar-24   | 2           | [Green bar from Nov-19 to Mar-24] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>BIM</b>  |  |                   |             |              |            |             |             |                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS011820a   | Prepare & Submit Construction Stage BIM Execution Plan                                 | 30                | 24-Oct-19   | 22-Nov-19    | 01-Nov-19  | 30-Nov-19   | 8           | [Green bar from Oct-19 to Nov-19] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS011830a   | PM Reivew & Comment Construction Stage BIM Execution Plan                              | 21                | 23-Nov-19   | 13-Dec-19    | 01-Dec-19  | 21-Dec-19   | 8           | [Green bar from Nov-19 to Dec-19] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS011840a   | Revise & Re-submit Construction Stage BIM Execution Plan                               | 14                | 14-Dec-19   | 27-Dec-19    | 22-Dec-19  | 04-Jan-20   | 8           | [Green bar from Dec-19 to Jan-20] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS011850a   | PM Reivew & Approval of Construction Stage BIM Execution Plan                          | 21                | 28-Dec-19   | 17-Jan-20    | 05-Jan-20  | 25-Jan-20   | 8           | [Green bar from Dec-19 to Jan-20] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS011880b   | Contractor Review & Study Design Stage BIM   | 92                | 24-Oct-19   | 23-Jan-20    | 26-Oct-19  | 25-Jan-20   | 2           | [Green bar from Oct-19 to Jan-20] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS011900  | Contractor Develop 1st Construction Stage BIM  | 60                | 24-Jan-20   | 23-Mar-20    | 26-Jan-20  | 25-Mar-20   | 2           | [Green bar from Jan-20 to Mar-20] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS011920a   | Review & Update BIM Execution Plan & BIM Model   | 1415              | 24-Mar-20   | 06-Feb-24    | 26-Mar-20  | 08-Feb-24   | 2           | [Green bar from Mar-20 to Feb-24] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS011960  | Prepare & Submit the Fully Coordinated BIM   | 60                | 09-Dec-23   | 06-Feb-24    | 11-Dec-23  | 08-Feb-24   | 2           | [Green bar from Dec-23 to Feb-24] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS011961  | PM Reivew & Comment Fully Coordinated BIM  | 21                | 07-Feb-24   | 27-Feb-24    | 09-Feb-24  | 29-Feb-24   | 2           | [Green bar from Feb-24 to Feb-24] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS011962  | Revise & Re-submit Fully Coordinated BIM   | 14                | 28-Feb-24   | 12-Mar-24    | 01-Mar-24  | 14-Mar-24   | 2           | [Green bar from Feb-24 to Mar-24] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS011963  | PM Reivew & Approval of Fully Coordinated BIM  | 21                | 13-Mar-24   | 02-Apr-24    | 15-Mar-24  | 04-Apr-24   | 2           | [Green bar from Mar-24 to Apr-24] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Section 1 - Design for UV System No. 1 &amp; Effluent Pumping Station No.1</b> |  |                   |             |              |            |             |             |                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Major Plant &amp; Materials Procurement</b>                                    |  |                   |             |              |            |             |             |                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS103100  | Procurement & PO for UV Disinfection System (S10)                                      | 150               | 20-Nov-19   | 17-Apr-20    | 20-Nov-19  | 17-Apr-20   | 0           | [Red bar from Nov-19 to Apr-20]   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS103120  | Procurement & PO for Lift-up Pumps (S11)   | 150               | 20-Nov-19   | 17-Apr-20    | 20-Nov-19  | 17-Apr-20   | 0           | [Red bar from Nov-19 to Apr-20]   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS103140  | Procurement & PO for Transfer Pumps (S13)  | 150               | 20-Nov-19   | 17-Apr-20    | 20-Nov-19  | 17-Apr-20   | 0           | [Red bar from Nov-19 to Apr-20]   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS103160  | Procurement & PO for FRP Cover (S11)   | 90                | 18-Apr-20   | 16-Jul-20    | 10-May-20  | 07-Aug-20   | 22          | [Green bar from Apr-20 to Aug-20] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS103180  | Procurement & PO for EOT Cranes (2T & 5T) (S19)  | 150               | 19-Jan-20   | 16-Jun-20    | 11-Mar-20  | 07-Aug-20   | 52          | [Green bar from Jan-20 to Aug-20] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS103200  | Procurement & PO for Stoplogs (S21)  | 90                | 18-Apr-20   | 16-Jul-20    | 10-May-20  | 07-Aug-20   | 22          | [Green bar from Apr-20 to Aug-20] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS103220  | Procurement & PO for Penstocks (S21)   | 90                | 18-Apr-20   | 16-Jul-20    | 10-May-20  | 07-Aug-20   | 22          | [Green bar from Apr-20 to Aug-20] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Design &amp; Submission</b>  |  |                   |             |              |            |             |             |                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>General Arrangement Drawings</b>   |  |                   |             |              |            |             |             |                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS101100  | Prepare & Submit General Arrangement Drawings  | 90                | 26-Jan-20   | 24-Apr-20    | 26-Jan-20  | 24-Apr-20   | 0           | [Red bar from Jan-20 to Apr-20]   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS101110  | Review & Comment on General Arrangement Drawings by PM                                 | 21                | 25-Apr-20   | 15-May-20    | 07-May-20  | 27-May-20   | 12          | [Green bar from Apr-20 to May-20] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS101120  | Revise & Re-submit General Arrangement Drawings  | 14                | 16-May-20   | 29-May-20    | 28-May-20  | 10-Jun-20   | 12          | [Green bar from May-20 to Jun-20] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS101130  | Review & Accept of General Arrangement Drawings by PM                                  | 21                | 30-May-20   | 19-Jun-20    | 11-Jun-20  | 01-Jul-20   | 12          | [Green bar from May-20 to Jun-20] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Civil &amp; Dimensional / Tolerance Requirement Drawings</b>                   |  |                   |             |              |            |             |             |                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS102100  | Prepare & Submit Civil Requirement Drawings  | 60                | 07-Mar-20   | 05-May-20    | 07-Mar-20  | 05-May-20   | 0           | [Red bar from Mar-20 to May-20]   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS102110  | Review & Comment on Civil Requirement Drawings by PM                                   | 21                | 06-May-20   | 26-May-20    | 14-May-20  | 03-Jun-20   | 8           | [Green bar from May-20 to Jun-20] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS102120  | Revise & Re-submit Civil Requirement Drawings  | 14                | 27-May-20   | 09-Jun-20    | 04-Jun-20  | 17-Jun-20   | 8           | [Green bar from May-20 to Jun-20] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS102130  | Review & Accept of Civil Requirement Drawings by PM                                    | 21                | 10-Jun-20   | 30-Jun-20    | 18-Jun-20  | 08-Jul-20   | 8           | [Green bar from Jun-20 to Jul-20] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Electrical Schematic Drawings</b>  |  |                   |             |              |            |             |             |                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS102150  | Prepare & Submit Elec. Schematic Drawings  | 60                | 25-Feb-20   | 24-Apr-20    | 26-Feb-20  | 25-Apr-20   | 1           | [Red bar from Feb-20 to Apr-20]   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS102160  | Review & Comment on Elec. Schematic Drawings by PM                                     | 21                | 25-Apr-20   | 15-May-20    | 13-Jun-20  | 03-Jul-20   | 49          | [Green bar from Apr-20 to Jul-20] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS102170  | Revise & Re-submit Elec. Schematic Drawings  | 14                | 16-May-20   | 29-May-20    | 04-Jul-20  | 17-Jul-20   | 49          | [Green bar from May-20 to Jul-20] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS102180  | Review & Accept of Elec. Schematic Drawings by PM                                      | 21                | 30-May-20   | 19-Jun-20    | 18-Jul-20  | 07-Aug-20   | 49          | [Green bar from May-20 to Aug-20] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>UV System No. 1</b>  |  |                   |             |              |            |             |             |                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS102200  | Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.                             | 60                | 24-Mar-20   | 22-May-20    | 25-Mar-20  | 23-May-20   | 1           | [Red bar from Mar-20 to May-20]   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS102210  | Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.                          | 21                | 23-May-20   | 12-Jun-20    | 24-May-20  | 13-Jun-20   | 1           | [Green bar from May-20 to Jun-20] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS102220  | Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.                           | 14                | 13-Jun-20   | 26-Jun-20    | 14-Jun-20  | 27-Jun-20   | 1           | [Green bar from Jun-20 to Jun-20] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS102230  | Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.                           | 21                | 27-Jun-20   | 17-Jul-20    | 28-Jun-20  | 18-Jul-20   | 1           | [Green bar from Jun-20 to Jul-20] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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           | [Red bar from Apr-20 to Jun-20]   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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           | [Green bar from Jun-20 to Jul-20] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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           | [Red bar from Jul-20 to Jul-20]   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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           | [Red bar from Jul-20 to Aug-20]   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Effluent Pumping Station No. 1</b>   |  |                   |             |              |            |             |             |                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS112200  | Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.                             | 60                | 24-Mar-20   | 22-May-20    | 25-Mar-20  | 23-May-20   | 1           | [Red bar from Mar-20 to May-20]   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS112210  | Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.                          | 21                | 23-May-20   | 12-Jun-20    | 24-May-20  | 13-Jun-20   | 1           | [Green bar from May-20 to Jun-20] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS112220  | Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.                           | 14                | 13-Jun-20   | 26-Jun-20    | 14-Jun-20  | 27-Jun-20   | 1           | [Green bar from Jun-20 to Jun-20] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS112230  | Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.                           | 21                | 27-Jun-20   | 17-Jul-20    | 28-Jun-20  | 18-Jul-20   | 1           | [Green bar from Jun-20 to Jul-20] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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           | [Red bar from Apr-20 to Jun-20]   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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           | [Green bar from Jun-20 to Jul-20] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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           | [Red bar from Jul-20 to Jul-20]   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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           | [Red bar from Jul-20 to Aug-20]   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Building Services</b>  |  |                   |             |              |            |             |             |                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AS113100  | Prepare & Submit BS Works Design & Dwgs UV System No.1 & Effluent Pumping Station No.1 | 90                | 15-Mar-20   | 12-Jun-20    | 16-Mar-20  | 13-Jun-20   | 1           | [Green bar from Mar-20 to Jun-20] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |



File Name: DE/2018/03 R3-1  
 Layout: DE1803 (R3) - WBS  
 TASK filter: All Activities

- Remaining Work
- Critical Activity
- ◆ Milestone

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

| Date      | Revision | Checked | Approved |
|-----------|----------|---------|----------|
| 24-Oct-19 | Rev.0    | AI      | KM       |
| 10-Feb-20 | Rev.1    | AI      | KM       |
| 21-Apr-20 | Rev.2    | AI      | KM       |
| 09-Jun-20 | Rev.3    | LT      | KM       |







































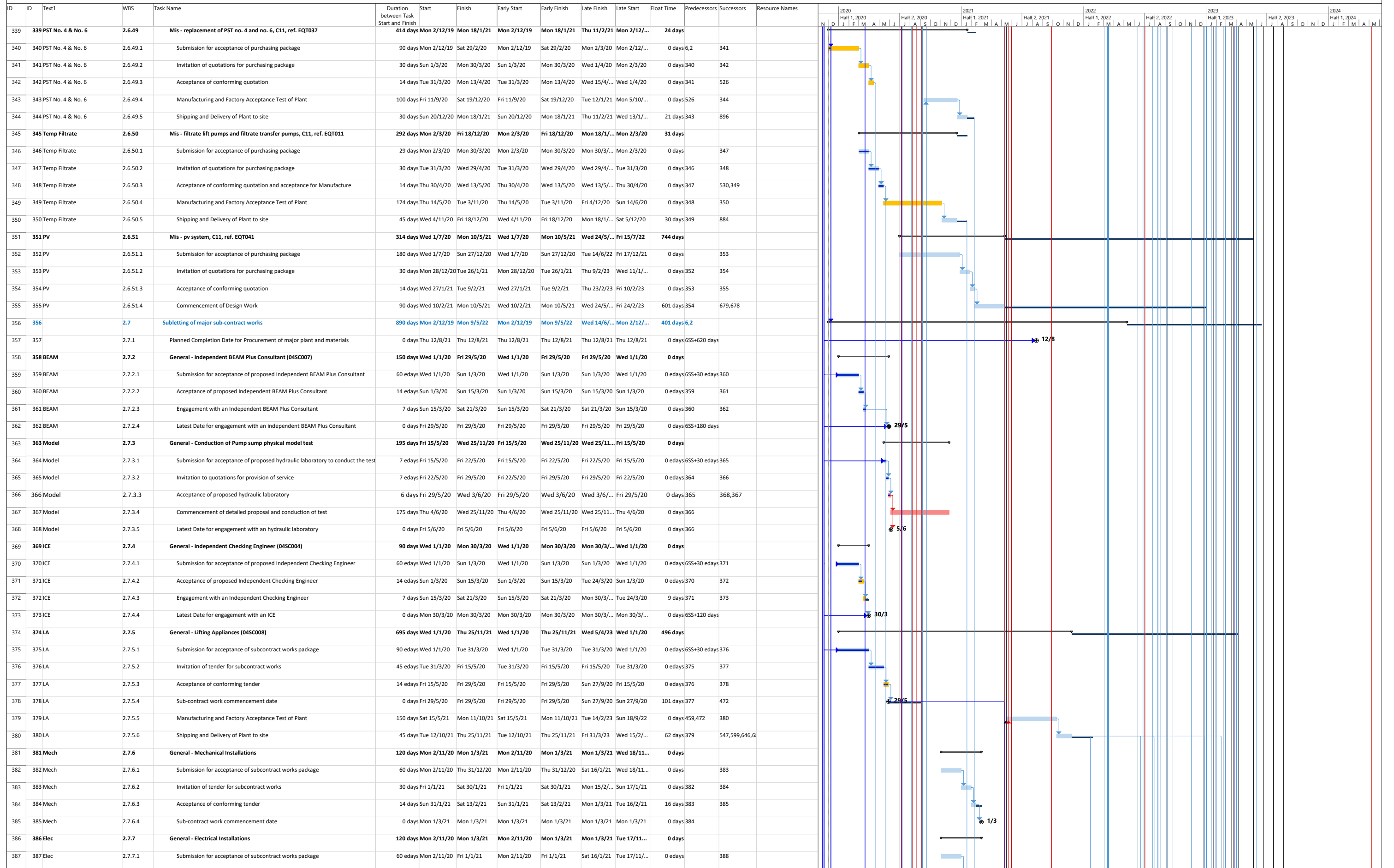




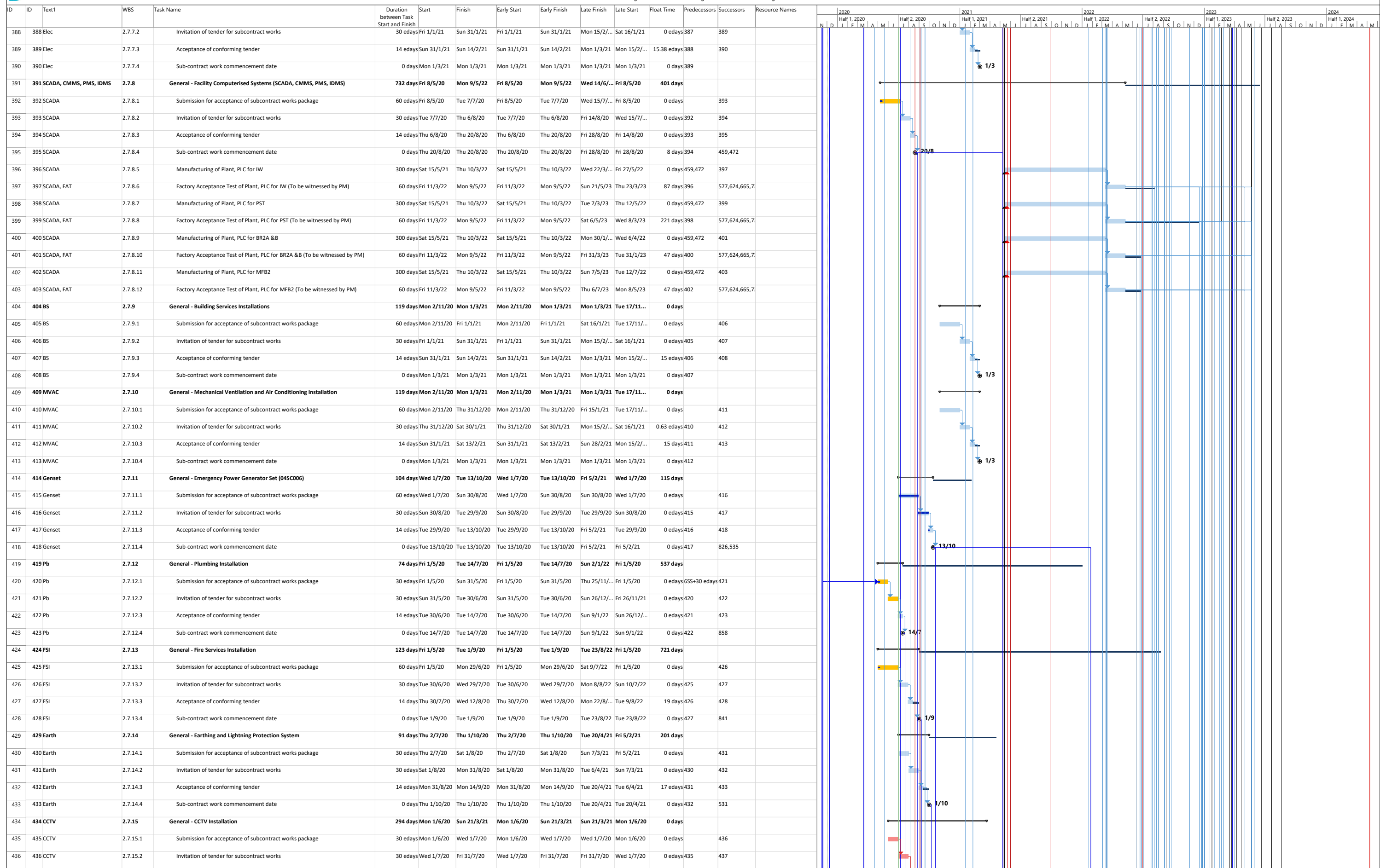
















| ID  | ID  | Text1                              | WBS        | Task Name   | Duration between Task Start and Finish | Start        | Finish       | Early Start  | Early Finish | Late Finish   | Late Start    | Float Time | Predecessors    | Successors    | Resource Names   | Gantt Chart (2020-2024) |                    |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-----|-----|------------------------------------|------------|---|--|--------------|--------------|--------------|--------------|---------------|---------------|------------|-----------------|---------------|------------------|-------------------------|--------------------|--------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 527 | 527 | existing genset                    | 2.8.6.2    | 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  | Thu 30/4/20   | Thu 26/3/20   | 0 days     | 450,454         | 915           |                  |                         | [Gantt Chart Data] |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 528 | 528 | Filter Press                       | 2.8.6.3    | Design submissions for E&M installation works of existing sludge thickening buil  | 45 days                                | Mon 29/6/20  | Wed 12/8/20  | Mon 29/6/20  | Wed 12/8/20  | Wed 12/8/...  | Mon 29/6/...  | 0 days     | 336             | 337           |                  |                         | [Gantt Chart Data] |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 529 | 529 | Filter Plates                      | 2.8.6.4    | Design submission for replacement of filter plates  | 45 edays                               | Tue 28/7/20  | Fri 11/9/20  | Tue 28/7/20  | Fri 11/9/20  | Mon 12/10/... | Tue 28/7/20   | 0.63 edays | 330             | 331           |                  |                         | [Gantt Chart Data] |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 530 | 530 | Temp Filtrate                      | 2.8.6.5    | 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  | Sun 18/7/21   | Fri 4/6/21    | 386 days   | 348             |               |                  |                         | [Gantt Chart Data] |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 531 | 531 | Earth                              | 2.8.6.6    | Design Submission for Earthing and Lightning Protection System  | 90 days                                | Thu 1/10/20  | Tue 29/12/20 | Thu 1/10/20  | Tue 29/12/20 | Sun 18/7/21   | Tue 20/4/21   | 201 days   | 433             |               |                  |                         | [Gantt Chart Data] |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 532 | 532 | DOU                                | 2.8.6.7    | DG Stores Submissions to FSD for approval   | 120 days                               | Sun 14/2/21  | Sun 13/6/21  | Sun 14/2/21  | Sun 13/6/21  | Sun 18/7/21   | Sun 21/3/21   | 35 days    | 472FS-90 day    |               |                  |                         | [Gantt Chart Data] |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 533 | 533 | 2.8.7                              | 2.8.7      | Three-Month Rolling Contractor's Design Submissions   | 302 days                               | Tue 14/4/20  | Tue 9/2/21   | Tue 14/4/20  | Tue 9/2/21   | Fri 4/6/21    | Tue 8/9/20    | 115 days   |                 |               |                  |                         | [Gantt Chart Data] |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 534 | 534 | 534                                | 2.8.7.1    | CDS01 - General Design Parameters   | 30 days                                | Tue 14/4/20  | Wed 13/5/20  | Tue 14/4/20  | Wed 13/5/20  | Fri 6/11/20   | Thu 8/10/20   | 176 days   | 457             |               |                  |                         | [Gantt Chart Data] |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 535 | 535 | Genset                             | 2.8.7.2    | CDS61 - Emergency Power Generator   | 120 days                               | Tue 13/10/20 | Tue 9/2/21   | Tue 13/10/20 | Tue 9/2/21   | Fri 4/6/21    | Fri 5/2/21    | 114 days   | 418             | 458           |                  |                         | [Gantt Chart Data] |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 536 | 536 | 536                                | 2.8.7.3    | CDS80-1 - Civil Work Requirements for Inlet Works up to +8.0 mPD  | 60 days                                | Tue 1/9/20   | Fri 30/10/20 | Tue 1/9/20   | Fri 30/10/20 | Fri 6/11/20   | Tue 8/9/20    | 6 days     | 457             |               |                  |                         |                    | [Gantt Chart Data] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 537 | 537 | 537                                | 2.8.7.4    | CDS80-2 - Civil Work Requirements for PST up to +8.0 mPD  | 60 days                                | Tue 1/9/20   | Fri 30/10/20 | Tue 1/9/20   | Fri 30/10/20 | Fri 6/11/20   | Tue 8/9/20    | 6 days     | 457             |               |                  |                         |                    | [Gantt Chart Data] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 538 | 538 | 538                                | 2.8.7.5    | CDS80-3 - Civil Work Requirements for BR 2A&2B up to +8.0 mPD   | 60 days                                | Tue 1/9/20   | Fri 30/10/20 | Tue 1/9/20   | Fri 30/10/20 | Fri 6/11/20   | Tue 8/9/20    | 6 days     | 457             |               |                  |                         |                    | [Gantt Chart Data] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 539 | 539 | 539                                | 2.8.7.6    | CDS80-4 - Civil Work Requirements for MFB no. 2 up to +8.0 mPD  | 30 days                                | Tue 1/9/20   | Wed 30/9/20  | Tue 1/9/20   | Wed 30/9/20  | Fri 6/11/20   | Thu 8/10/20   | 36 days    | 457             |               |                  |                         |                    | [Gantt Chart Data] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 540 | 540 | Risk Allowance                     | 2.8.8      | Risk Allowance for completion of Section 1  | 5 days                                 | Mon 14/6/21  | Fri 18/6/21  | Mon 14/6/21  | Fri 18/6/21  | Fri 23/7/21   | Mon 19/7/...  | 35 days    | 525,459,472     | 456           |                  |                         |                    | [Gantt Chart Data] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 541 | 541 | 2.9                                | 2.9        | 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) | 1375 days                              | Tue 14/7/20  | Fri 19/4/24  | Tue 14/7/20  | Fri 19/4/24  | Fri 19/4/24   | Mon 20/12/21  | 1 day      | 6,2             |               |                  |                         |                    | [Gantt Chart Data] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 542 | 542 | IW, PST, BR, MFS, LA, PV, CCTV, P1 | 2.9.1      | 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     | 655+1600 edi    |               |                  |                         |                    | [Gantt Chart Data] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 543 | 543 | IW, LA, BS,FSI, Elec               | 2.9.2      | 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 | Fri 25/11/22  | Tue 28/6/22   | 0 edays    | 655+939 eday    |               |                  |                         |                    | [Gantt Chart Data] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 544 | 544 | IW, LA, BS,FSI, Elec, Others       | 2.9.3      | 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   | Mon 28/11/... | Mon 28/11/... | 0 days     | 547,545,587FS   |               |                  |                         |                    | [Gantt Chart Data] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 545 | 545 | IW, Main                           | 2.9.4      | Commencement of E&M Installation at Inlet Works No. 1   | 530 days                               | Fri 5/8/22   | Tue 16/1/24  | Fri 5/8/22   | Tue 16/1/24  | Mon 11/3/...  | Tue 26/1/23   | 0 days     | 544             | 864           |                  |                         |                    | [Gantt Chart Data] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 546 | 546 | IW, H&S                            | 2.9.4.1    | Provision of Temporary Water Supply, Electricity Supply, Lighting, Welfare facilities etc., IW  | 30 days                                | Fri 5/8/22   | Sat 3/9/22   | Fri 5/8/22   | Sat 3/9/22   | Mon 22/1/24   | Sun 24/12/23  | 506 days   | 544             |               |                  |                         |                    | [Gantt Chart Data] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 547 | 547 | IW, LA                             | 2.9.4.2    | Installation of Lifting Appliances at Inlet Works No. 1   | 142 days                               | Fri 5/8/22   | Sat 24/12/22 | Fri 5/8/22   | Sat 24/12/22 | Fri 25/8/23   | Thu 6/4/23    | 0 days     | 380,544         | 55755+30 days |                  |                         |                    | [Gantt Chart Data] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 548 | 548 | IW, LA                             | 2.9.4.2.1  | 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  | Fri 18/8/23   | Wed 5/7/23    | 45 days    | 551,552         | 556           | LA - A x 4*6 men |                         |                    | [Gantt Chart Data] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 549 | 549 | IW, LA                             | 2.9.4.2.2  | 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  | Fri 18/8/23   | Wed 5/7/23    | 45 days    | 551,552         | 556           | LA - B x 4*6 men |                         |                    | [Gantt Chart Data] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 550 | 550 | IW, LA                             | 2.9.4.2.3  | 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  | Tue 4/7/23    | Sun 21/5/23   | 0 days     | 551,552         | 553,554,556   | LA - C x 4*6 men |                         |                    | [Gantt Chart Data] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 551 | 551 | IW, LA                             | 2.9.4.2.4  | 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  | Sat 20/5/23   | Thu 6/4/23    | 0 days     | 548,549,550,551 | 556           | LA - A x 4*6 men |                         |                    | [Gantt Chart Data] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 552 | 552 | IW, LA                             | 2.9.4.2.5  | 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  | Sat 20/5/23   | Thu 6/4/23    | 0 days     | 548,549,550,551 | 556           | LA - B x 4*6 men |                         |                    | [Gantt Chart Data] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 553 | 553 | IW, LA                             | 2.9.4.2.6  | 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 | Fri 18/8/23   | Wed 5/7/23    | 0 days     | 550             | 556           | LA - C x 4*6 men |                         |                    | [Gantt Chart Data] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 554 | 554 | IW, LA                             | 2.9.4.2.7  | 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 | Fri 18/8/23   | Wed 5/7/23    | 0 days     | 550             | 556           | LA - A x 4*6 men |                         |                    | [Gantt Chart Data] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 555 | 555 | IW, LA                             | 2.9.4.2.8  | Submission of T&C Plan and Procedures of LA for acceptance  | 14 days                                | Tue 1/11/22  | Mon 14/11/22 | Tue 1/11/22  | Mon 14/11/22 | Fri 18/8/23   | Sat 5/8/23    | 33 days    | 556             |               |                  |                         |                    | [Gantt Chart Data] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 556 | 556 | IW, LA                             | 2.9.4.2.9  | T&C, Loading Test for Lifting Appliances  | 7 days                                 | Sun 18/12/22 | Sat 24/12/22 | Sun 18/12/22 | Sat 24/12/22 | Fri 25/8/23   | Sat 19/8/23   | 0 days     | 548,549,550,559 | 559           | LA - B x 4*6 men |                         |                    | [Gantt Chart Data] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 557 | 557 | IW, Mech                           | 2.9.4.3    | Mechanical Installations for Inlet Works No. 1  | 350 days                               | Sun 4/9/22   | Sat 19/8/23  | Sun 4/9/22   | Sat 19/8/23  | Wed 10/1/...  | Thu 26/1/23   | 0 days     | 54755+30 day    | 57255+14 days |                  |                         |                    | [Gantt Chart Data] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 558 | 558 | IW, Mech                           | 2.9.4.3.1  | Installation of penstocks and stoplogs (Penstock 35nos, Stoplogs 37 nos)  | 150 days                               | Sun 4/9/22   | Tue 31/1/23  | Sun 4/9/22   | Tue 31/1/23  | Sat 24/6/23   | Thu 26/1/23   | 0 days     | 47,38           | 567,568,571   | ME - E x 4*6 men |                         |                    | [Gantt Chart Data] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 559 | 559 | IW, Mech                           | 2.9.4.3.2  | Installation of fixed bar screen (x1)   | 7 days                                 | Sun 25/12/22 | Sat 31/12/22 | Sun 25/12/22 | Sat 31/12/22 | Fri 1/9/23    | Sat 26/8/23   | 0 days     | 556             | 563           | ME - D x 2*4 men |                         |                    | [Gantt Chart Data] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 560 | 560 | IW, Mech                           | 2.9.4.3.3  | Installation of mechanical raked coarse bar screens (x4)  | 90 days                                | Sun 4/9/22   | Fri 2/12/22  | Sun 4/9/22   | Fri 2/12/22  | Mon 20/11/... | Wed 23/8/...  | 22 days    | 106             | 561           | ME - A x 4*6 men |                         |                    | [Gantt Chart Data] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 561 | 561 | IW, Mech                           | 2.9.4.3.4  | Installation of screening conveyors (x6)  | 30 days                                | Sun 25/12/22 | Mon 23/1/23  | Sun 25/12/22 | Mon 23/1/23  | Wed 20/12/... | Tue 21/11/... | 0 days     | 547,107,560     | 566           | ME - A x 4*6 men |                         |                    | [Gantt Chart Data] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 562 | 562 | IW, Mech                           | 2.9.4.3.5  | Installation of inlet pumps (x5)  | 21 days                                | Fri 17/3/23  | Thu 6/4/23   | Fri 17/3/23  | Thu 6/4/23   | Wed 6/12/...  | Thu 16/11/... | 0 days     | 547,56755+14    | 564           | ME - B x 4*6 men |                         |                    | [Gantt Chart Data] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 563 | 563 | IW, Mech                           | 2.9.4.3.6  | Installation of mechanical raked fine bar screens (x4)  | 75 days                                | Sun 1/1/23   | Thu 16/3/23  | Sun 1/1/23   | Thu 16/3/23  | Wed 15/11/... | Sat 2/9/23    | 0 days     | 106,559         | 562           | ME - B x 4*6 men |                         |                    | [Gantt Chart Data] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 564 | 564 | IW, Mech                           | 2.9.4.3.7  | Installation of grit removal system (x3)  | 14 days                                | Fri 7/4/23   | Thu 20/4/23  | Fri 7/4/23   | Thu 20/4/23  | Wed 20/12/... | Thu 7/12/23   | 0 days     | 562,120         | 565           | ME - B x 4*6 men |                         |                    | [Gantt Chart Data] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 565 | 565 | IW, Mech                           | 2.9.4.3.8  | Installation of grit classifiers (x2)   | 21 days                                | Fri 21/4/23  | Thu 11/5/23  | Fri 21/4/23  | Thu 11/5/23  | Wed 10/1/...  | Thu 21/12/... | 244 days   | 564,126         |               | ME - B x 4*6 men |                         |                    | [Gantt Chart Data] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 566 | 566 | IW, Mech                           | 2.9.4.3.9  | Installation of compactors (x2)   | 21 days                                | Tue 24/1/23  | Mon 13/2/23  | Tue 24/1/23  | Mon 13/2/23  | Wed 10/1/...  | Thu 21/12/... | 331 days   | 561,132         |               | ME - A x 4*6 men |                         |                    | [Gantt Chart Data] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 567 | 567 | IW, Mech                           | 2.9.4.3.10 | Installation of pipework and valves   | 30 days                                | Wed 1/2/23   | Thu 2/3/23   | Wed 1/2/23   | Thu 2/3/23   | Tue 12/9/23   | Mon 14/8/...  | 0 days     | 558             | 56255+14 days | ME - D x 2*4 men |                         |                    | [Gantt Chart Data] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 568 | 568 | IW, Mech                           | 2.9.4.3.11 | Pipework pressure tests   | 30 days                                | Wed 1/2/23   | Thu 2/3/23   | Wed 1/2/23   | Thu 2/3/23   | Tue 12/9/23   | Mon 14/8/...  | 0 days     | 558             | 56255+14 days | ME - D x 2*4 men |                         |                    | [Gantt Chart Data] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 569 | 569 | IW, Mech                           | 2.9.4.3.12 | Installation of instrumentations  | 120 days                               | Fri 3/3/23   | Fri 30/6/23  | Fri 3/3/23   | Fri 30/6/23  | Wed 10/1/...  | Wed 13/9/...  | 194 days   | 567,568         |               | ME - A x 4*6 men |                         |                    | [Gantt Chart Data] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 570 | 570 | IW, Mech                           | 2.9.4.3.13 | Installation of Platforms, Covers etc   | 180 days                               | Sun 4/9/22   | Thu 2/3/23   | Sun 4/9/22   | Thu 2/3/23   | Wed 10/1/...  | Sat 15/7/23   | 314 days   |                 |               | ME - D x 2*4 men |                         |                    | [Gantt Chart Data] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 571 | 571 | IW, Mech                           | 2.9.4.3.14 | Site Acceptance Tests - mechanical aspects including alignment and levels checks, leakage tests, welding tests, installation checks, pressure tests etc.  | 200 days                               | Wed 1/2/23   | Sat 19/8/23  | Wed 1/2/23   | Sat 19/8/23  | Wed 10/1/24   | Sun 25/6/23   | 144 days   | 558             |               | ME - D x 2*4 men |                         |                    | [Gantt Chart Data] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 572 | 572 | IW, Elec                           | 2.9.4.4    | Electrical Installations for Inlet Works No. 1  | 300 days                               | Sun 18/9/22  | Fri 14/7/23  | Sun 18/9/22  | Fri 14/7/23  | Thu 11/1/24   | Fri 17/3/23   | 126 days   | 55755+14 day    | 585           |                  |                         |                    | [Gantt Chart Data] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

















| ID  | ID  | Text1                       | WBS        | Task Name  | Duration between Task Start and Finish | Start        | Finish       | Early Start  | Early Finish | Late Finish   | Late Start    | Float Time | Predecessors              | Successors                      | Resource Names   | Gantt Chart (2020-2024)  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-----|-----|-----------------------------|------------|--|--|--------------|--------------|--------------|--------------|---------------|---------------|------------|---------------------------|---------------------------------|------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 851 | 851 | FSI                         | 2.9.32.11  | Re-inspections with FSD  | 14 days                                | Wed 13/3/24  | Tue 26/3/24  | Wed 13/3/24  | Tue 26/3/24  | Sat 30/3/24   | Sun 17/3/24   | 0 days     | 850                       | 852                             |                  | [Gantt Chart: 2020 Half 1, 2020 Half 2, 2021 Half 1, 2021 Half 2, 2022 Half 1, 2022 Half 2, 2023 Half 1, 2023 Half 2, 2024 Half 1] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 852 | 852 | FSI                         | 2.9.32.12  | Issue of acceptance memo by FSD  | 14 days                                | Wed 27/3/24  | Tue 9/4/24   | Wed 27/3/24  | Tue 9/4/24   | Sat 13/4/24   | Sun 31/3/24   | 4 days     | 851                       |                                 |                  | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 853 | 853 | FSI                         | 2.9.32.13  | 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   | Sun 22/10/... | Thu 24/8/23   | 109 days   | 753                       | 856                             | FS - A x 4~6 men | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 854 | 854 | FSI                         | 2.9.32.14  | 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   | Sun 22/10/... | Thu 24/8/23   | 109 days   | 753                       | 856                             | FS - A x 4~6 men | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 855 | 855 | FSI                         | 2.9.32.15  | 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 | Thu 21/12/... | Mon 23/10/... | 14 days    | 592,639,675, 847,845,846  |                                 |                  | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 856 | 856 | FSI                         | 2.9.32.16  | 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 | Thu 21/12/... | Mon 23/10/... | 14 days    | 592,639,675, 847,845,846  |                                 |                  | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 857 | 857 | Pb, Main                    | 2.9.33     | Commencement of Plumbing Installation  | 1267 days                              | Tue 14/7/20  | Tue 2/1/24   | Tue 14/7/20  | Tue 2/1/24   | Wed 17/1/...  | Sun 2/1/22    | 15 days    | 864                       |                                 |                  | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 858 | 858 | Pb                          | 2.9.33.1   | Submission of detail design for acceptance   | 90 days                                | Tue 14/7/20  | Sun 11/10/20 | Tue 14/7/20  | Sun 11/10/20 | Thu 7/4/22    | Sat 8/1/22    | 0 days     | 423                       | 859                             | Pb - A x 4~6 men | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 859 | 859 | Pb                          | 2.9.33.2   | Submission of WWO542 for WSD's approval  | 355 days                               | Mon 12/10/20 | Fri 1/10/21  | Mon 12/10/20 | Fri 1/10/21  | Tue 28/3/23   | Fri 8/4/22    | 417 days   | 858                       | 590,637,673, 7/Pb - B x 4~6 men | [Gantt Chart]    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 860 | 860 | Pb, others                  | 2.9.33.3   | Connection of External Pumping System (By others)                                  | 0 days                                 | Fri 15/9/23  | Fri 15/9/23  | Fri 15/9/23  | Fri 15/9/23  | Wed 25/10/... | Wed 25/10/... | 4 days     | 861                       |                                 |                  | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 861 | 861 | Pb                          | 2.9.33.4   | 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  | Sat 9/12/23   | Thu 26/10/... | 0 days     | 590,637,673, 862          |                                 |                  | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 862 | 862 | Pb                          | 2.9.33.5   | Obtain WWO46 Part V  | 45 days                                | Fri 3/11/23  | Sun 17/12/23 | Fri 3/11/23  | Sun 17/12/23 | Tue 23/1/24   | Sun 10/12/... | 15 days    | 861                       | 863                             |                  | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 863 | 863 | Pb, Others                  | 2.9.33.6   | Tentative Date for connection of external water pipework (by others)               | 0 days                                 | Tue 2/1/24   | Tue 2/1/24   | Tue 2/1/24   | Tue 2/1/24   | Wed 24/1/...  | Wed 24/1/...  | 22 days    | 862                       |                                 |                  | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 864 | 864 | Test, Main                  | 2.9.34     | Testing and Commissioning  | 82 days                                | Wed 17/1/24  | Sun 7/4/24   | Wed 17/1/24  | Sun 7/4/24   | Sun 7/4/24    | Wed 17/1/...  | 0 days     | 545,597,644,94455-90 eday |                                 |                  | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 865 | 865 | Test                        | 2.9.34.1   | System Commissioning Tests of the E&M systems                                      | 7 days                                 | Wed 17/1/24  | Tue 23/1/24  | Wed 17/1/24  | Tue 23/1/24  | Tue 23/1/...  | Wed 17/1/...  | 0 days     | 866                       |                                 |                  | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 866 | 866 | Test                        | 2.9.34.2   | MBR System Process Startup   | 40 days                                | Wed 24/1/24  | Sun 3/3/24   | Wed 24/1/24  | Sun 3/3/24   | Sun 3/3/24    | Wed 24/1/...  | 0 days     | 865                       | 867                             |                  | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 867 | 867 | Test                        | 2.9.34.3   | Plant Commissioning  | 35 days                                | Mon 4/3/24   | Sun 7/4/24   | Mon 4/3/24   | Sun 7/4/24   | Sun 7/4/24    | Mon 4/3/...   | 0 days     | 866                       | 868,947                         |                  | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 868 | 868 | Risk Allowance              | 2.9.35     | Risk Allowance for completion of Section 2   | 5 days                                 | Wed 10/4/24  | Sun 14/4/24  | Wed 10/4/24  | Sun 14/4/24  | Thu 18/4/24   | Sun 14/4/24   | 4 days     | 867,840,825               | 542                             |                  | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 869 | 869 |                             | 2.10       | 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  | Wed 22/9/21   | Mon 2/12/...  | 1 day      | 6,2                       |                                 |                  | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 870 | 870 | Filter Press, Filter Plates | 2.10.1     | 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/...  | Wed 22/9/...  | 0 days     | 655+660 eday              |                                 |                  | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 871 | 871 | existing genset             | 2.10.2     | 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/...  | Wed 29/7/...  | 1 day      | 655+240 eday              |                                 |                  | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 872 | 872 | PST No. 4 & No. 6           | 2.10.3     | 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      | 655+555 eday              |                                 |                  | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 873 | 873 | Temp Filtrate, LA           | 2.10.4     | 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/...  | Mon 2/12/...  | 0 edays    | 655,255                   | 874                             |                  | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 874 | 874 | Temp Filtrate               | 2.10.5     | 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   | Mon 8/2/21    | Tue 28/4/20   | 1 day      | 873                       | 892                             |                  | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 875 | 875 | Temp Filtrate               | 2.10.5.1   | 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  | Mon 11/5/...  | Tue 28/4/20   | 0 days     | 449                       | 876                             |                  | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 876 | 876 | Temp Filtrate               | 2.10.5.2   | 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  | Mon 1/6/20    | Tue 12/5/20   | 0 days     | 875                       | 877                             |                  | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 877 | 877 | Temp Filtrate               | 2.10.5.3   | Civil formation and underground work   | 21 days                                | Mon 1/6/20   | Sun 21/6/20  | Mon 1/6/20   | Sun 21/6/20  | Mon 22/6/...  | Tue 2/6/20    | 0 days     | 876                       | 883,878                         |                  | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 878 | 878 | Temp Filtrate               | 2.10.5.4   | 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 | Sat 19/12/20  | Tue 23/6/20   | 0 days     | 877                       | 879,882,885,81                  |                  | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 879 | 879 | Temp Filtrate               | 2.10.5.5   | Installation of Lifting Appliances at Temporary Filtrate Lifting Well and Eq. Tank | 7 days                                 | Mon 18/1/21  | Sun 24/1/21  | Mon 18/1/21  | Sun 24/1/21  | Mon 8/2/21    | Tue 2/2/21    | 15 days    | 878                       |                                 |                  | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 880 | 880 | Temp Filtrate, LA           | 2.10.5.5.1 | 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  | Mon 8/2/21    | Tue 2/2/21    | 15 days    | 878                       |                                 | LA - A x 4~6 men | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 881 | 881 | Temp Filtrate, LA           | 2.10.5.5.2 | 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  | Mon 8/2/21    | Tue 2/2/21    | 15 days    | 878                       |                                 | LA - B x 4~6 men | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 882 | 882 | Temp Filtrate, Mech         | 2.10.5.6   | Mechanical Installations for Temp. Filtrate Lifting Well and Eq. Tank              | 37 days                                | Sat 19/12/20 | Sun 24/1/21  | Sat 19/12/20 | Sun 24/1/21  | Mon 25/1/...  | Sun 20/12/... | 0 days     | 878                       | 886FS-30 days                   |                  | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 883 | 883 | Temp Filtrate, Mech         | 2.10.5.6.1 | Installation of pipework and valves  | 30 days                                | Sat 19/12/20 | Sun 17/1/21  | Sat 19/12/20 | Sun 17/1/21  | Mon 18/1/...  | Sun 20/12/... | 0 days     | 877                       | 884                             | ME - A x 4~6 men | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 884 | 884 | Temp Filtrate, Mech         | 2.10.5.6.2 | Installation of pumps  | 7 days                                 | Mon 18/1/21  | Sun 24/1/21  | Mon 18/1/21  | Sun 24/1/21  | Mon 25/1/...  | Tue 19/1/21   | 1 day      | 883,350                   |                                 | ME - A x 4~6 men | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 885 | 885 | Temp Filtrate, Mech         | 2.10.5.6.3 | Installation of instrumentations   | 14 days                                | Sat 19/12/20 | Fri 1/1/21   | Sat 19/12/20 | Fri 1/1/21   | Mon 25/1/...  | Tue 12/1/21   | 24 days    | 878                       |                                 | ME - A x 4~6 men | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 886 | 886 | Temp Filtrate               | 2.10.5.7   | 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  | Mon 18/1/...  | Tue 29/12/... | 0 days     | 882FS-30 day              | 889,891FS-7 d                   |                  | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 887 | 887 | Temp Filtrate, Elec         | 2.10.5.7.1 | 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  | Mon 18/1/...  | Tue 29/12/... | 3 days     |                           |                                 |                  | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 888 | 888 | Temp Filtrate, Elec         | 2.10.5.7.2 | Cables laying and terminations   | 21 days                                | Sat 26/12/20 | Fri 15/1/21  | Sat 26/12/20 | Fri 15/1/21  | Mon 18/1/...  | Tue 29/12/... | 3 days     |                           |                                 |                  | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 889 | 889 | Temp Filtrate               | 2.10.5.8   | 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  | Mon 1/2/21    | Tue 26/1/21   | 0 days     | 882,886                   | 890                             |                  | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 890 | 890 | Temp Filtrate               | 2.10.5.9   | 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   | Mon 8/2/21    | Tue 2/2/21    | 1 day      | 889,891                   |                                 |                  | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 891 | 891 | Temp Filtrate               | 2.10.5.10  | 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  | Mon 1/2/21    | Tue 12/1/21   | 2 days     | 886FS-7 days              | 890                             |                  | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 892 | 892 | Temp Filtrate               | 2.10.6     | 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     | 874                       |                                 |                  | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 893 | 893 | PST No. 4 & No. 6           | 2.10.7     | 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/...  | Mon 2/12/...  | 0 edays    | 6,2                       |                                 |                  | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 894 | 894 | PST No. 4 & No. 6, Others   | 2.10.8     | 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     | 896                       |                                 |                  | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 895 | 895 | PST No. 4 & No. 6           | 2.10.9     | 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   | Tue 8/6/21    | Fri 12/2/21   | 3 days     |                           |                                 |                  | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 896 | 896 | PST No. 4 & No. 6           | 2.10.9.1   | Site Clearance   | 10 days                                | Tue 9/2/21   | Thu 18/2/21  | Tue 9/2/21   | Thu 18/2/21  | Sun 21/2/21   | Fri 12/2/21   | 0 days     | 344,894                   | 898                             |                  | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 897 | 897 | PST No. 4 & No. 6, Mech     | 2.10.9.2   | Mechanical Installations of existing PSTs  | 76 days                                | Fri 19/2/21  | Wed 5/5/21   | Fri 19/2/21  | Wed 5/5/21   | Tue 11/5/21   | Mon 22/2/...  | 3 days     |                           |                                 |                  | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 898 | 898 | PST No. 4 & No. 6, Mech     | 2.10.9.2.1 | Installation of PST influent feed pipe   | 7 days                                 | Fri 19/2/21  | Thu 25/2/21  | Fri 19/2/21  | Thu 25/2/21  | Sun 28/2/21   | Mon 22/2/...  | 0 days     | 896                       | 899                             | ME - A x 4~6 men | [Gantt Chart]  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |



