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## Quarterly EM&A Summary Report (April 2022 - June 2022)

0120/20/ED/0499 02

**Contract No. SPW 07/2020 Environmental Team for Construction of Yuen Long Effluent Polishing Plant Stage 1**

Ref.: DSDYLSTWEM00\_0\_0290L.22

28 July 2022

By E-mail and By Hand

AECOM  
12/F Grand Central Plaza, Tower 2  
138 Shatin Rural Committee Road  
Shatin, Hong Kong.

Attention: Mr YEUNG H. M. Simon

Dear Mr YEUNG,

**Re: Contract No. SPW 08/2020  
Independent Environmental Checker for  
Construction of Yuen Long Effluent Polishing Plant Stage 1**

**Verification of the Quarterly EM&A Summary Report (April to June 2022)**

Reference is made to the Quarterly EM&A Summary Report (April to June 2022) by the ET with Fugro Document No. 0120/20/ED/0499/02 (the Report), which was received via e-mail dated 28 July 2022.

Having reminded that, in accordance with the Condition 3.6 of the EP-565/2019, it is the ET's responsibility to ensure all submitted EM&A data shall be true, valid and correct, we have no further comments and herewith verify that the Report has in general fulfilled all conditions stipulated in Section 12.4.5 of the EM&A Manual

Please contact the undersigned or our Mr. Y.H. HUI should you have any questions on the matter.

Yours sincerely,



WONG Fu Nam  
Independent Environmental Checker

c.c.

DSD  
Fugro

Mr LAM Yu Wang  
Mr YU Lap Bong

By E-mail  
By E-mail

# Document Control




## Document Information

Project Title	Contract No. SPW 07/2020 Environmental Team for Construction of Yuen Long Effluent Polishing Plant Stage 1
Document Title	Quarterly EM&A Summary Report (April 2022 - June 2022)
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## Client Information

Client	Drainage Services Department
Client Address	45/F, Revenue Tower, 5 Gloucester Road, Wan Chai, Hong Kong
Client Contact	Mr. LAM Yu Wang

## Environmental Team

Initials	Name	Role	Signature
LB	Alvin L.B. Yu	Environmental Team Leader	
CY	Cyrus C.Y. Lai	Senior Environmental Consultant	
KH	Toby K.H. Wan	Assistant Environmental Consultant	

## EXECUTIVE SUMMARY

- i. This Quarterly Environmental Monitoring and Audit (EM&A) Summary Report is prepared for Contract No. SPW 07/2020 "Environmental Team for Construction of Yuen Long Effluent Polishing Plant Stage 1". Drainage Services Department (DSD) has appointed Fugro Technical Services Limited (FTS) to undertake the Environmental Team services for the project and implement the EM&A works.
- ii. This is the 5th Quarterly EM&A Summary Report for the Contract which summaries findings of the EM&A programme during the reporting period from 1 April 2022 to 30 June 2022. As informed by the Contractor, major activities in the reporting period were shown in section 1.4.1.
- iii. The EM&A methodology has been effective in monitoring the environmental impacts of the Project and the effectiveness of the mitigation measures. The data collected were useful in determining whether the Project had caused unacceptable impacts on the sensitive receivers. Analysis of all EM&A data collected throughout the baseline and the impact periods demonstrated the environmental acceptability of the Project.

### **Breaches of Environmental Quality Performance Limits (AL levels)**

- iv. No Action and Limit Level exceedance was recorded for air quality monitoring and construction noise monitoring in the reporting period.
- v. No Action and Limit Level exceedance was recorded for water quality in the reporting period.
- vi. No Action / Limit Level exceedance was recorded for noise levels at stations (NMS1 and NMS2) in close proximity to the active ardeid night roosts during the reporting period.
- vii. A total of two (2) Action Level exceedances were recorded for the ecological monitoring of birds during the reporting period. However, these exceedances were not project-related.
- viii. No corrective actions were required according to the Event and Action Plans for the Monitoring Parameters.

### **Land Contamination**

- ix. Regular site inspection was carried out to ensure the recommended mitigation measures are properly implemented. The signed final Contamination Assessment Report (CAR) for "Main Storeroom & Workshops", "Mechanical Workshop" and "Waste Storage Area" were submitted to EPD respectively on 1<sup>st</sup> November 2021, 23<sup>rd</sup> November 2021 and 29<sup>th</sup> April 2022. No contaminated soil and ground water was found within the Main Storeroom & Workshop, Mechanical Workshop and the Waste Storage Area, and no remedial action is required for both locations. Part of the Site investigation (SI) work within the SAS Thickener House-1 (i.e. ENV-BH16, ENV-BH17, ENV-BH22 and ENV-BH23) was completed by 16<sup>th</sup> May 2022. While the laboratory results of sampling works show that there is no contaminated soil or groundwater within the SAS Thickener House-1, the findings are summarized in the draft CAR for the area which is under review and will be submitted to EPD.

### **Complaint Log**

- x. No complaints were received in the reporting period.

### **Notifications of Summons and Successful Prosecutions**

xi. No notifications of summons and successful prosecutions were received in the reporting period.

**Reporting Change**

xii. There were no reporting changes during the reporting period.

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# 1. INTRODUCTION

## 1.1 Background

- 1.1.1 The existing Yuen Long Sewage Treatment Works (YLSTW) is a secondary sewage treatment works, located at Yuen Long Industrial Estate serves Yuen Long Town, Yuen Long Industrial Estate and Kam Tin areas with a design capacity of 70,000 m<sup>3</sup> per day. Based on the latest planning data, the volume of sewage generation from the YLSTW catchment is estimated to increase to 150,000 m<sup>3</sup> per day after 20 years. In addition, since YLSTW has been operating for over 30 years and most of its facilities are of out-dated design and reaching the end of their design life, the environmental facilities of the plant will also be upgraded and hence improving the adjacent environment through upgrading the YLSTW to Yuen Long Effluent Polishing Plant (YLEPP). The Location of Proposed Yuen Long Effluent Polishing Plant is given in **Figure 1**.
- 1.1.2 YLSTW will be reconstructed in two stages to increase its capacity to 150,000 m<sup>3</sup> per day. The proposed works, as Stage 1 of the project, will firstly increase the treatment capacity to 100,000 m<sup>3</sup> per day. In the course of Stage 1 construction, about half of the existing facilities of YLSTW would be demolished, while the other half would be kept in operation to maintain the sewage treatment service for Yuen Long area. This 72-month works contract commenced on 9 November 2020. Demolition of existing YLSTW for construction of new treatment facilities are in progress.
- 1.1.3 The Project is a designated project under Schedule 2 of the Environmental Impact Assessment Ordinance (EIAO) (Cap. 499) for which Environmental Impact Assessment (EIA) report and Environmental Monitoring and Audit (EM&A) Manual was approved by EPD (Register No.: AEIAR-220/2019) on 25 April 2019. The Environmental Permit (EP) (EP No. EP-565/2019) to construct and operate was issued by EPD on 26 April 2019.
- 1.1.4 Fugro Technical Services Limited (FTS) has been appointed as the Environmental Team (ET) by Drainage Services Department (DSD) to undertake the Environmental Team services for the Project and implement the EM&A works under the Contract No. DC/2019/10 Yuen Long Effluent Polishing Plant -Main Works for Stage 1 (hereinafter referred as "the Contract").
- 1.1.5 This is the 5th Quarterly EM&A Summary Report to document the findings of site inspection activities and EM&A programme for this project from 1 April 2022 to 30 June 2022 (reporting period) and is submitted to fulfil Condition 3.5 of the EP and Section 12.4.5 of the EM&A Manual. According to Condition 4 of the EP, electronic reporting is provided on the internet website to facilitate public inspection of the report.



## 1.2 Project Organization

1.2.1 The Project Organization structure is shown in **Appendix B**. The key personnel contact names and numbers are summarized in **Table 1.1**.

Table 1.1 – Contact Information of Key Personnel

Party	Position	Name	Telephone
Project Proponent (Drainage Services Department)	Engineer	Mr. Lam Yu Wang	2594 7473
Engineer's Representative (AECOM Asia Co. Ltd.)	Chief Resident Engineer	Mr. Simon Yeung	9075 7172
	Senior Resident Engineer	Mr. Patrick Leung	6124 8838
Independent Environmental Checker (Ramboll Hong Kong Limited)	Independent Environmental Checker (IEC)	Mr. F.N. Wong	2531 0247
Contractor (Paul Y. - CREC Joint Venture)	Environmental Officer until 27 May 2022	Ms. Iris Ho	5490 5271
	Assistant Environmental Officer	Mr. Sam Tsang	4634 2581
Environmental Team (Fugro Technical Services Limited)	Environmental Team Leader (ETL)	Mr. Alvin Yu	3565 4373

## 1.3 Construction Programme and Activities

1.3.1 The construction programme of this project is shown in **Appendix A**.

## 1.4 Works Undertaken During the Period

1.4.1 The main construction works carried out in the reporting period were summarized in **Table 1.2**:

Table 1.2 – Main Construction Works Carried out in the Reporting Period

April 2022	May 2022	June 2022
<ul style="list-style-type: none"> <li>• Demolition of FST no. 5-6 by excavator mounted crusher</li> <li>• Demolition of Auxiliary Pumping Station (above ground)</li> <li>• Pre-drill work at A. tank by 1 rig</li> <li>• Pre-drill work at Air Flotation Thickener and Sludge Digestion Tank by 3 rigs</li> <li>• Installation of sheet pile at IW &amp; PST</li> <li>• Piling work at PST</li> <li>• Drilling and installation of dewatering well and observation well at IW &amp; PST</li> <li>• ELS works at IW &amp; PST</li> <li>• ELS work at Zone 2B</li> <li>• Pipe laying for Zone 3 diversion</li> <li>• Zone 3 Diversion works:               <ol style="list-style-type: none"> <li>a. Temp. Gravity thickening tank – Pipe laying and E&amp;M installation work</li> <li>b. Temp. Sludge Holding Tank – Pipe laying and E&amp;M installation work</li> <li>c. Temp. Water heater house – Pipe laying and E&amp;M installation work</li> <li>d. Temp. Primary Sludge Pumping Station – Sheet piling work</li> <li>e. Temp. Digested sludge pump – ELS Work</li> <li>f. Digested Sludge Pumping Station house – Pipe laying and E&amp;M installation work;</li> </ol> </li> <li>• Demolition works at Sha Tin Treatment Plant;</li> <li>• Demolition of Sludge Holding Tank no. 3 &amp; 4;</li> </ul>	<ul style="list-style-type: none"> <li>• Pre-drill work at A.tank by 1 rig;</li> <li>• Pre-drill work at Air Flotation Thickener and Sludge Digestion Tank by 3 rigs;</li> <li>• Installation of sheet pile at IW &amp; PST;</li> <li>• Piling work at PST;</li> <li>• Drilling and installation of dewatering well and observation well at IW &amp; PST;</li> <li>• ELS works at IW &amp; PST;</li> <li>• Pipe laying for Zone 3 diversion;</li> <li>• Zone 3 Diversion works:               <ol style="list-style-type: none"> <li>a. Temp. Gravity thickening tank – Pipe laying and E&amp;M installation work;</li> <li>b. Temp. Sludge Holding Tank – Pipe laying and E&amp;M installation work;</li> <li>c. Temp. Water heater house – Pipe laying and E&amp;M installation work;</li> <li>d. Temp. Primary Sludge Pumping Station – ELS work;</li> <li>e. Temp. Digested sludge pump / Supernatant Pumping – ELS Work;</li> <li>f. Ferrie Chloride and Chemical Dosing System – R.C. works;</li> <li>g. Digested Sludge Pumping Station house – Pipe laying and E&amp;M installation work;</li> </ol> </li> <li>• Demolition of Sludge Holding Tank no. 3;</li> <li>• Foundation works at CLP substation;</li> <li>• Installation of MIC unit at MIC office;</li> <li>• Backfill work at FST no. 5-8;</li> <li>• ELS works at Zone 2B; and</li> </ul>	<ul style="list-style-type: none"> <li>• Sludge Digestion Tank by 1 rigs;</li> <li>• Installation of sheet pile at IW &amp; PST;</li> <li>• Piling work at PST;</li> <li>• Piling work at Transformer House;</li> <li>• Drilling and installation of dewatering well and observation well at IW &amp; PST;</li> <li>• ELS works at IW &amp; PST;</li> <li>• Pipe laying for Zone 3 diversion;</li> <li>• Zone 3 Diversion works:               <ol style="list-style-type: none"> <li>a. Temp. Gravity thickening tank – Pipe laying and E&amp;M installation work;</li> <li>b. Temp. Sludge Holding Tank – Pipe laying and E&amp;M installation work;</li> <li>c. Temp. Water heater house – Pipe laying and E&amp;M installation work;</li> <li>d. Temp. Primary Sludge Pumping Station – ELS work;</li> <li>e. Temp. Digested sludge pump / Supernatant Pumping – ELS Work;</li> <li>f. Ferrie Chloride and Chemical Dosing System – R.C. works;</li> <li>g. Digested Sludge Pumping Station house – Pipe laying and E&amp;M installation work;</li> </ol> </li> <li>• Demolition of Sludge Holding Tank no. 1, 3 &amp; 4;</li> <li>• Foundation works at CLP substation;</li> <li>• Installation of MIC unit at MIC office;</li> <li>• Backfill work at FST no. 5-8;</li> <li>• Backfill work at A. Tank 6-8;</li> <li>• Construction of RC chamber at Zone 2B;</li> </ul>

<ul style="list-style-type: none"> <li>• Foundation works at CLP substation;</li> <li>• Foundation works at MIC office;</li> <li>• Env. Drill holes inside Air Flotation Thickener; and</li> <li>• Disposal of construction waste as indicated in <b>Appendix F</b></li> </ul>	<ul style="list-style-type: none"> <li>• Disposal of construction waste as indicated in <b>Appendix F</b>.</li> </ul>	<ul style="list-style-type: none"> <li>• Disposal of Pond Sediment excavated from PST; and</li> <li>• Disposal of construction waste as indicated in <b>Appendix F</b>.</li> </ul>
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1.4.2 The environmental mitigation measures corresponding to the main construction works implemented in the reporting period can be referred to **Appendix G**.

## 2. SUMMARY OF EM&A REQUIREMENTS AND MONITORING RESULTS

### 2.1 Monitoring Requirement

2.1.1 The EM&A programme was undertaken in accordance with the EM&A Manual. It should be noted that the air quality, noise, water quality and ecology monitoring works are covered by this contract.

#### Air quality Monitoring

2.1.2 1-hour Total Suspended Particulates (TSP) levels should be measured at the designated air quality monitoring stations to ensure that any deteriorating air quality could be readily detected and timely action shall be undertaken to rectify such situation. Impact 1-hour TSP monitoring was conducted for at least three times every 6 days when the highest dust impact occurs.

#### Noise Monitoring

2.1.3 Leq (30min) monitoring is conducted at least once a week when there are Project-related construction activities being undertaken within a radius of 300 m from the monitoring stations. The monitoring is conducted during the construction phase between 0700 and 1900 on normal weekdays at the designated monitoring locations.

#### Water quality Monitoring

2.1.4 Turbidity (in NTU), pH, DO (in mg/L and % of saturation), Temperature (in °C), Salinity (in ppt) and Suspended Solids are conducted for three days per week at mid-flood and mid-ebb with sampling and measurement at the designated monitoring stations.

#### Ecology Monitoring

2.1.5 Ardeid night roost monitoring was conducted once a month in areas within 100 m from the Project boundary to monitor the effectiveness of proposed mitigation measures and detect any unpredicted indirect ecological impacts arising from the Project.

2.1.6 Ecological monitoring of birds was conducted monthly during the quarter at point count sites and transect routes along the wetland habitats in Fung Lok Wai and Nam Sang Wai as well as along Shan Pui River and Kam Tin River within 500 m from the Project boundary.

## 2.2 Monitoring Locations

2.2.1 The air quality and noise monitoring are summarized in **Table 2.1**. The locations of the air quality and noise monitoring stations shown in **Figure 2** and **Figure 3**, respectively.

Table 2.1 – Air Quality and Noise Monitoring Location

Environmental Monitoring	Monitoring Station	Location
Air Quality	AM1	Topfine Machinery (China) Co. Ltd
	AM2	Squatter house at the west of Yuen Long STW
Noise	CM1	Squatter house at the north of Yuen Long STW
	CM2	Squatter house at the west of Yuen Long STW
	CM3	Squatter house at the east of Yuen Long STW

2.2.2 The coordinates of water quality monitoring locations are summarized in **Table 2.2**. The locations of the water quality monitoring stations shown in **Figure 4**.

Table 2.2 – Coordinates of Water Quality Monitoring Locations

Sampling Location		Easting	Northing
M1	Serve as the control station at upstream location of construction site (Flood Tide) / Serve as the impact station at downstream location of construction site (Ebb Tide)	821 086	836 656
M2	Serve as the impact station at downstream location of construction site (Flood Tide)/ Serve as the control station at upstream location of construction site (Ebb Tide)	820 996	836 246
M3	Serve as the impact station at downstream location of construction site (Flood Tide) / Serve as the control station at upstream location of construction site (Ebb Tide)	820 645	836 335

## 2.3 Results and Observations

2.3.1 Graphical presentation of the environmental monitoring data in the reporting period is presented in **Appendix D**.

### Air quality Monitoring

2.3.2 1-hour TSP impact monitoring at AM1 and AM2 were carried out in the reporting period, the air quality monitoring results are reported in the monthly EM&A Report prepared for this Contract.

2.3.3 No Action and Limit Level exceedance was recorded for air quality monitoring in the reporting period.

### Noise Monitoring

- 2.3.4 Construction noise monitoring were carried out in the reporting period, the construction noise monitoring results for CM1, CM2 and CM3 are reported in the monthly EM&A Reports prepared for this Contract.
- 2.3.5 No Action and Limit Level exceedance was recorded for construction noise monitoring in the reporting period.
- 2.3.6 No raining and wind with speed over 5 m/s was observed during noise monitoring according to the onsite observation.
- 2.3.7 During the noise monitoring period, at CM2, road traffic from the squatter house at the west of Yuen Long STW was observed, at CM3, road traffic from the Nam Sang Wai Road was observed. No effect that arose from the other special phenomena and work progress of the concerned site for CM1 was noted during the current monitoring period.

### Water quality Monitoring

- 2.3.8 Water quality monitoring were carried out in the reporting period, the monitoring results for M1, M2 and M3 are reported in the monthly EM&A Reports prepared for this Contract.
- 2.3.9 During the reporting period, no Action and Limit Level exceedance was recorded for Dissolved Oxygen, Turbidity, and Suspended Solids. Number of water quality exceedance recorded in the reporting period at each impact stations is summarized in **Table 2.3**.

Table 2.3 – Summary of Water Quality Exceedance

Sampling Location	Exceedance Level	DO		Turbidity		Suspended Solids		Total	
		Flood	Ebb	Flood	Ebb	Flood	Ebb	Flood	Ebb
M1	Action	0	0	0	0	0	0	0	0
	Limit	0	0	0	0	0	0	0	0
M2	Action	0	0	0	0	0	0	0	0
	Limit	0	0	0	0	0	0	0	0
M3	Action	0	0	0	0	0	0	0	0
	Limit	0	0	0	0	0	0	0	0
Total	Action	0	0	0	0	0	0	0	
	Limit	0	0	0	0	0	0	0	

### Ecology Monitoring

- 2.3.10 Ardeid night roost monitoring and ecological bird monitoring were carried out in the reporting period. The monitoring results are reported in the monthly EM&A Reports prepared for this Contract.
- 2.3.11 Results of the ardeid night roost monitoring showed that the two confirmed ardeid night roosts (ANR 1 and ANR 2) during the pre-construction survey were still observed to be active from April 2022 to June 2022. No Action / Limit Level exceedance at NMS1 and NMS2 was recorded during the reporting period.
- 2.3.12 Results of the ecological bird monitoring recorded two exceedances in Action Level June 2022. These include significant declines in point count method results for the species diversity of all avifauna species in the community and species diversity of species of conservation importance only. However, the exceedances were not project-related and could be due to the dominance of Chinese Pond Heron in the community.

## **2.4 Action and Limit Levels**

- 2.4.1 The Action and Limit Levels for air quality, noise, water quality and ecology monitoring have been set and are presented in **Appendix C**.

## **2.5 Event and Action Plans**

- 2.5.1 The event and action plans for air quality, noise, water quality and ecology monitoring are presented in **Appendix E**.

## **2.6 Mitigation Measures**

- 2.6.1 The Contractor had implemented environmental mitigation measures and requirements as stated in the EIA Report, the EP and EM&A Manual. The implementation status of the environmental mitigation measures during the reporting period is summarized in **Appendix G**.

## 3. LANDSCAPE AND VISUAL

### 3.1 Audit Requirements

3.1.1 According to the EM&A Manual, a Landscape Architect or related professional shall be employed to audit the implementation of landscape construction works particularly during site clearance operations when the proposed tree felling and transplanting will take place and subsequent maintenance operations. Site audits should be undertaken every week during the construction phase to check that the proposed landscape and visual mitigation measures are properly implemented and maintained as per their intended objectives. The mitigation measure recommended in the EIA Report as the audit requirements for landscape and visual, including: preservation of existing vegetation, transplanting of affected trees, compensatory tree planning, control of night-time lighting glare, erection of decorative screen hoarding and management of construction activities and facilities are summarized in **Appendix G**.

### 3.2 Results and Observations

3.2.1 According to the EM&A Manual, site audits should be undertaken every week during the construction phase to check that the proposed landscape and visual mitigation measures are properly implemented and maintained as per their intended objectives.

3.2.2 To monitor and audit the implementation of landscape and visual mitigation measures, 13 weekly landscape and visual site audits were carried out in the reporting period. No outstanding issues were reported during the reporting period. Observations and recommendations during site audits are summarized in **Table 5.1**.



## 4. LAND CONTAMINATION

### 4.1 Contamination Assessment Report

- 4.1.1 Risk-Based Remediation Goals (RBRGs) for Industrial have been adopted for the “Main Storeroom & Workshops” and the laboratory results for the sampling works (conducted between 30 June 2021 to 16 July 2021) show that there are no exceedances of the adopted RBRGs for the “Main Storeroom & Workshops”. As no contaminated soil and groundwater was found within the “Main Storeroom & Workshops”, no remediation actions are required for contaminated soil and groundwater for the scheduled land use of the “Main Storeroom & Workshops”. Their findings are summarized in Contamination Assessment Report (CAR) and submitted to EPD on 1 November 2021.
- 4.1.2 Risk-Based Remediation Goals (RBRGs) for Industrial have been adopted for the “Mechanical Workshop” and the laboratory results for the sampling works (conducted between 23 July 2021 to 4 August 2021) show that there are no exceedances of the adopted RBRGs for the “Mechanical Workshop”. As no contaminated soil and groundwater was found within the “Mechanical Workshop”, no remediation actions are required for contaminated soil and groundwater for the scheduled land use of the “Mechanical Workshop”. Their findings are summarized in Contamination Assessment Report (CAR) and submitted to EPD on 23 November 2021.
- 4.1.3 Risk-Based Remediation Goals (RBRGs) for Industrial have been adopted for the “Waste Storage Area” and the laboratory results for the sampling works (conducted between 24 November 2021 to 26 January 2022) show that there are no exceedances of the adopted RBRGs for the “Waste Storage Area”. As no contaminated soil and groundwater was found within the “Waste Storage Area”, no remediation actions are required for contaminated soil and groundwater for the scheduled land use of the “Waste Storage Area”. Their findings are summarized in Contamination Assessment Report (CAR) and submitted to EPD on 29 April 2022.
- 4.1.4 Risk-Based Remediation Goals (RBRGs) for Industrial have been adopted for the “SAS Thickener House-1” and the laboratory results for the sampling works (conducted between 13 April 2022 to 16 May 2022) show that there are no exceedances of the adopted RBRGs for the “SAS Thickener House-1”, hence no contaminated soil or groundwater is found within the “SAS Thickener House-1”. Their findings are summarized in draft Contamination Assessment Report (CAR) which is under review and will be submitted to EPD.

## 5. SITE INSPECTION AND AUDIT

### 5.1 Site Inspection

- 5.1.1 Site audits were carried out by ET at least once per week to monitor the implementation of proper environmental management practices and mitigation measures in the Project site.
- 5.1.2 In the reporting period, 13 site inspections were carried out. No outstanding issues were reported during the reporting period. Details of observations recorded during the site inspections are presented in **Table 5.1**.

Table 5.1 – Observations and Recommendations of Site Audit

Parameters	Date	Observations and Recommendations	Follow-up
Air Quality	6 Apr 2022	Recommendation 1: The Contractor is recommended to provide water spraying to prevent dust emission for access road at FST Area (Portion 1 - YLSTW).	6 Apr 2022
	12 Apr 2022	Reminder 1: The Contractor is reminded to provide water spraying for dust suppression at haul roads (Portion 1 - YLSTW).	12 Apr 2022
	29 Jun 2022	Reminder 1: The Contractor is reminded to provide water spraying for dust suppression at loading/unloading area and haul roads (Portion 1 - YLSTW).	NA
Noise	NA		
Water Quality	1 Jun 2022	Reminder 1: The Contractor is reminded to provide sandbags to prevent runoff into the storm drain (Portion 1 - YLSTW).	NA
	10 Jun 2022	Reminder 1: The Contractor is reminded to provide sandbags to prevent silty runoff into the storm drain (Portion 1 - YLSTW).	NA
Chemical and Waste Management	20 Apr 2022	Reminder 1: The Contractor is reminded to clean up the oil stain on road with chemical absorbent pad and treat it as chemical waste for disposal (Portion 1 - YLSTW).	20 Apr 2022
	25 May 2022	Reminder 1: The Contractor is reminded to clean up the oil stain on road with chemical absorbent pad and treat it as chemical waste for disposal (Portion 1 - YLSTW).	26 May 2022
Land Contamination	NA		
Ecological Impact	4 May 2022	Reminder 1: The Contractor is reminded to maintain and reinstate the bird curtains at the east site boundary (Portion 1 - YLSTW).	NA

Parameters	Date	Observations and Recommendations	Follow-up
	18 May 2022	Reminder 1: The Contractor is reminded to maintain and reinstate the bird curtains at the northern and eastern site boundary (Portion 1 - YLSTW).	NA
	25 May 2022	Reminder 1: The Contractor is reminded to maintain and reinstate the bird curtains at the eastern & northern site boundary (Portion 1 - YLSTW).	NA
	1 Jun 2022	Reminder 1: The Contractor is reminded to maintain and reinstate the bird curtains at the eastern & northern site boundary (Portion 1 - YLSTW).	NA
	22 Jun 2022	Reminder 1: The Contractor is reminded to maintain and reinstate the bird curtains at the eastern and northern site boundary (Portion 1 - YLSTW).	NA
Landscape and Visual Impact	27 Apr 2022	Reminder 1 (Landscape & Visual Impact): Please keep adjacent ground of trees free of construction materials (Portion 1 - YLSTW).	27 Apr 2022
	18 May 2022	Recommendation 1 (Landscape & Visual Impact): All trees shall be checked to ensure no construction materials or cables attached to them (Portion 1 - YLSTW).	19 May 2022
	10 Jun 2022	Recommendation 1 (Landscape & Visual Impact): Please provide maintenance check after rainstorms for possible broken branches or other possible damages to trees (Portion 1 - YLSTW).	NA
Permit / Licenses		NA	
Others		NA	

## 5.2 Advice on the Solid and Liquid Waste Management Status

- 5.2.1 The Contractor registered as a chemical waste producer for the Contract. Sufficient numbers of receptacles were available for general refuse collection and sorting.
- 5.2.2 The management of waste generated by the construction is presented in **Table 5.2**.

Table 5.2 – Waste Generated by the Construction and Disposal Ground

Types of Waste	Disposal Ground
Inert C&D Waste (Excluding slurry and bentonite)	Tuen Mun Area 38
Inert C&D Waste (For slurry and bentonite)	Tseung Kwan O Area 137
Non-inert C&D Materials	North East New Territories Landfill (NENT)
Sludge	West New Territories Landfill (WENT)
Marine Sediment	Type 1 – Open Sea Disposal: South Cheung Chau Open Sea Sediment Disposal Area Type 1 – Open Sea Disposal (Dedicate Site) and Type 2 – Confined Marine Disposal: Contaminated Mud Pit Vb of the Confined Marine Disposal Facilities to the East of Sha Chau

- 5.2.3 The amount of wastes generated by the site activities in the reporting period is shown in **Appendix F**.
- 5.2.4 If off-site disposal is required, the excavated marine mud from the land-based works shall be disposed of at the designated disposal sites within Hong Kong as allocated by the Marine Fill Committee or other locations as agreed by the Director. The Contractor shall ensure no spilling and overflowing of materials during loading / unloading / transportation is allowed.
- 5.2.5 The Contractor was reminded that chemical waste should be properly handled and temporarily store in designated chemical waste storage area on site in accordance with the Code of Practice on the Packing, Labelling and Storage of Chemical Waste.

## 6. NON-COMPLIANCE, COMPLAINTS, NOTIFICATIONS OF SUMMONS AND SUCCESSFUL PROSECUTIONS

### 6.1 Non-compliance (Exceedances of AL levels)

- 6.1.1 No Action and Limit Level exceedance was recorded for air quality monitoring and construction noise monitoring in the reporting period.
- 6.1.2 No Action and Limit Level exceedance was recorded for water quality in the reporting period.
- 6.1.3 No Action / Limit exceedance was recorded for noise levels at stations (NMS1 and NMS2) in close proximity to the active ardeid night roosts in the reporting period.
- 6.1.4 A total of two (2) Action Level exceedances were noted for the ecological monitoring of birds during the reporting period, however, these exceedances were not project-related.
- 6.1.5 No corrective actions were required according to the Even-Action Plans.

### 6.2 Complaints, Notification of Summons and Successful Prosecutions

- 6.2.1 No environmental complaints, notification of summons and successful prosecutions were received in the reporting period.
- 6.2.2 Cumulative complaint log, summaries of complaints, notification of summons and successful prosecutions are presented in **Appendix H**.
- 6.2.3 No corrective actions were required.

## 7. IMPLEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURE

### 7.1 Implementation Status of Environmental Protection and Pollution Control / Mitigation Measures

The Contractor had implemented environmental protection and pollution control / mitigation measures as stated in the EIA Report, the EP and EM&A Manual. The implementation status of the recommended mitigation measures during the reporting period is summarized in **Appendix G**.

The status of required submissions under the EP as of the reporting period are summarized in **Table 7.1**.

Table 7.1 – Status of submissions required under the EP

EP Condition (EP-565/2019)	Submission Title	Submission Status
Condition 2.9	Construction Phase Emergency Response Plan	Submitted to EPD with ET certification and IEC verification, to be finalised and made available for public inspection via the dedicated website.
Condition 2.11	Pre-construction Ardeid Night Roost Survey Report	Submitted to EPD with ET certification and IEC verification, finalised and available for public inspection via the dedicated website.
EM&A Manual Sec. 7.3.3 & 7.3.4	Baseline Bird Survey Report	Submitted to EPD with ET certification and IEC verification, finalised and available for public inspection via the dedicated website.
Condition 2.12	Noise Mitigation Measures Plan	Submitted to EPD with ET certification and IEC verification, to be finalised and made available for public inspection via the dedicated website.
Condition 2.13	Proposal for Minimization of Overspill Light to Ecological Sensitive Areas	Submitted to EPD with ET certification and IEC verification, finalised and available for public inspection via the dedicated website.
Condition 2.14	Supplementary Contamination Assessment Plan	Submitted to EPD with ET certification and IEC verification, finalised and available for public inspection via the dedicated website.
Condition 2.14	Contamination Assessment Report for Main Storeroom & Workshops	Submitted to EPD with ET certification and IEC verification, to be finalised and made available for public inspection via the dedicated website.
Condition 2.14	Contamination Assessment Report for Mechanical Workshop	Submitted to EPD with ET certification and IEC verification, finalised and available for public inspection via the dedicated website.
Condition 2.14	Contamination Assessment Report for Waste Storage Area	Submitted to EPD with ET certification and IEC verification, to be finalised and made available for public inspection via the dedicated website.
Condition 2.15	Landscape and Visual Mitigation Plan	Submitted to EPD with ET certification and IEC verification, to be finalised and made available for public inspection via the dedicated website.

EP Condition (EP-565/2019)	Submission Title	Submission Status
Condition 3.3	Baseline Monitoring Report	Submitted to EPD with ET certification and IEC verification, finalised and available for public inspection via the dedicated website.
Condition 3.4	Monthly EM&A Report (from April 2021 to June 2022)	Submitted to EPD with ET certification and IEC verification, finalised and available for public inspection via the dedicated website.
Condition 3.5	Quarterly EM&A Report (from April 2021 to March 2022)	Submitted to EPD with ET certification and IEC verification, finalised and available for public inspection via the dedicated website.
Condition 4.2	Environmental Monitoring Data from April 2021 to June 2022	Submitted to EPD with ET certification and IEC verification, finalised and available for public inspection via the dedicated website.

## 8. CONCLUSION AND RECOMMENDATION

### 8.1 Conclusions

- 8.1.1 No Action and Limit Level exceedance was recorded for air quality monitoring and construction noise monitoring in the reporting period.
- 8.1.2 No Action and Limit Level exceedance was recorded for water quality in the reporting period.
- 8.1.3 No Action / Limit exceedance was recorded for noise levels at stations (NMS1 and NMS2) in close proximity to the active ardeid night roosts in the monitoring period.
- 8.1.4 A total of two (2) Action Level exceedances were recorded for the ecological monitoring of birds during the reporting period. However, these exceedances were not project-related.
- 8.1.5 13 environmental site inspections and 13 landscape and visual site audits were carried out in the reporting period. Recommendations on mitigation measures were given to the Contractor for remediating the deficiencies identified during the site inspections.
- 8.1.6 No environmental complaints, notification of summons and successful prosecutions were recorded in the reporting period.
- 8.1.7 The EM&A methodology has been effective in monitoring the environmental impacts of the Project and the effectiveness of the mitigation measures. The data collected were useful in determining whether the Project had caused unacceptable impacts on the sensitive receivers. Analysis of all EM&A data collected throughout the baseline and the impact monitoring periods demonstrated the environmental acceptability of the Project.



## 8.2 Comment and Recommendations

8.2.1 The recommended environmental mitigation measures, as proposed in the EIA report and EM&A Manual shall be effectively implemented to minimize the potential environmental impacts from the Project. The EM&A programme would effectively monitor the environmental impacts generated from the construction activities and ensure the proper implementation of mitigation measures.

8.2.2 According to the environmental site inspections performed in the reporting period, the following recommendations were provided:

### Air Quality Impact

- The Contractor is recommended to provide water spraying to prevent dust emission for access road at FST Area.
- The Contractor shall provide water spraying for dust suppression at haul roads.
- The Contractor shall provide water spraying for dust suppression at loading/unloading area and haul roads.

### Construction Noise Impact

- No specific observation was identified in the reporting period.

### Water Quality Impact

- The Contractor shall provide sandbags to prevent silty runoff into the storm drain.

### Chemical Waste and Construction Waste Management

- The Contractor shall clean up the oil stain on road with chemical absorbent pad and treat it as chemical waste for disposal.

### Land Contamination

- No specific observation was identified in the reporting period.

### Ecological Impact

- The Contractor shall maintain and reinstate the bird curtains at the east site boundary.
- The Contractor shall maintain and reinstate the bird curtains at the northern and eastern site boundary.
- The Contractor shall maintain and reinstate the bird curtains at the eastern and northern site boundary.

### Landscape and Visual Impact

- Please keep adjacent ground of trees free of construction materials.
- All trees shall be checked to ensure no construction materials or cables attached to them.
- Provide maintenance check after rainstorms for possible broken branches or other possible damages to trees.

### Hazard to Life

- No specific observation was identified in the reporting period.

### Permit/ Licenses

- No specific observation was identified in the reporting period.

# Figure 1

---

Location of Proposed Yuen Long Effluent  
Polishing Plant

836800 N

820600 E

821000 E

821400 E

LEGEND:



PROPOSED YUEN LONG EFFLUENT POLISHING PLANT



**AECOM**

PROJECT  
項目

**YUEN LONG EFFLUENT POLISHING PLANT - INVESTIGATION, DESIGN AND CONSTRUCTION**

CLIENT  
業主

渠務署  
Drainage Services Department

CONSULTANT  
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IR 批註	DATE 日期	DESCRIPTION 內容摘要	CHK. 核對

STATUS  
階段

SCALE  
比例

A1 1 : 2000

DIMENSION UNIT  
尺寸單位

METRES

KEY PLAN  
索引圖

PROJECT NO.  
項目編號

60505476

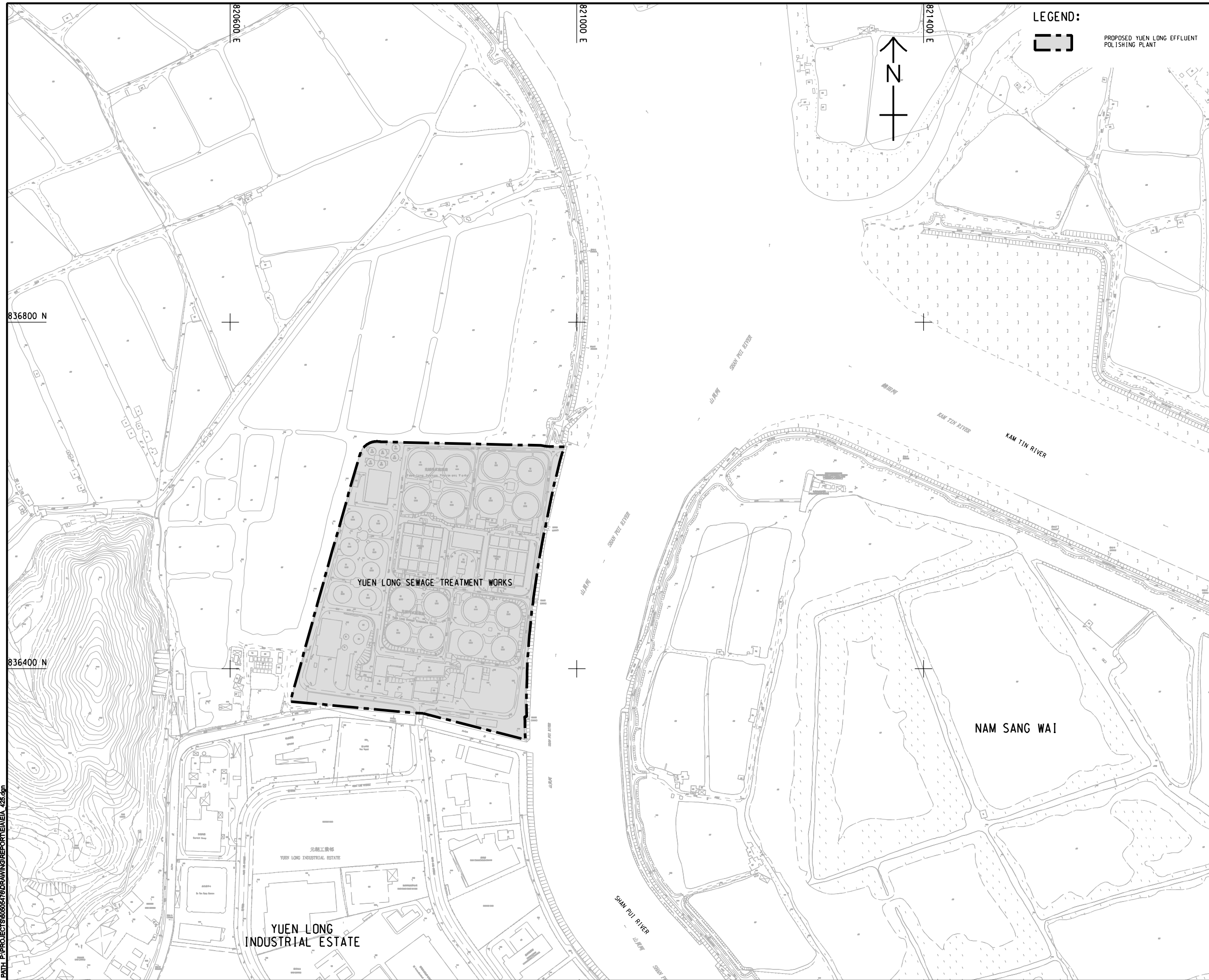
CONTRACT NO.  
合約編號

CE 3/2015 (DS)

SHEET TITLE  
圖紙名稱

LOCATION OF PROPOSED YUEN LONG EFFLUENT POLISHING PLANT

SHEET NUMBER  
圖紙編號

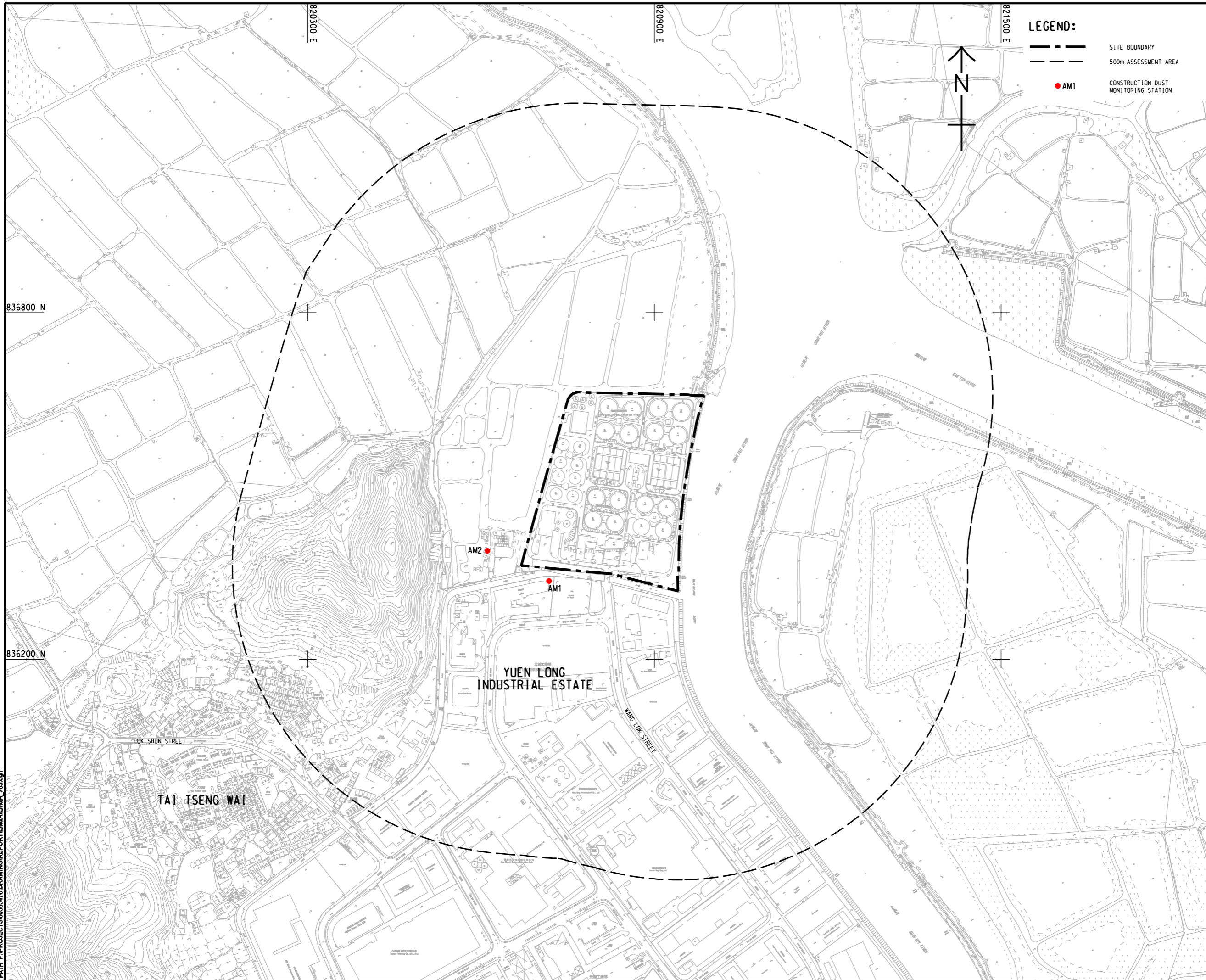


## Figure 2

---

Location of Construction Dust  
Monitoring Stations

ISO A1 594mm x 841mm  
 Approved:  
 Checked:  
 Designer:  
 Project Management Initials:  
 836800 N  
 836200 N  
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 11/29  
 P:\PROJECTS\6056576\DRAWING\REPORT\EM\EA\EA\_703.dgn



**LEGEND:**

- SITE BOUNDARY
- 500m ASSESSMENT AREA
- AM1 CONSTRUCTION DUST MONITORING STATION



**PROJECT**  
 項目  
**YUEN LONG EFFLUENT POLISHING PLANT - INVESTIGATION, DESIGN AND CONSTRUCTION**

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I/R	DATE	DESCRIPTION	CHK.
號	日期	內容摘要	核對

**STATUS**  
 階段

**SCALE**  
 比例  
 A1 1 : 3000

**DIMENSION UNIT**  
 尺寸單位  
 METRES

**KEY PLAN**  
 索引圖

**PROJECT NO.**  
 項目編號  
 60505476

**CONTRACT NO.**  
 合約編號  
 CE 3/2015 (DS)

**SHEET TITLE**  
 圖紙名稱  
 LOCATION OF CONSTRUCTION DUST MONITING STATIONS

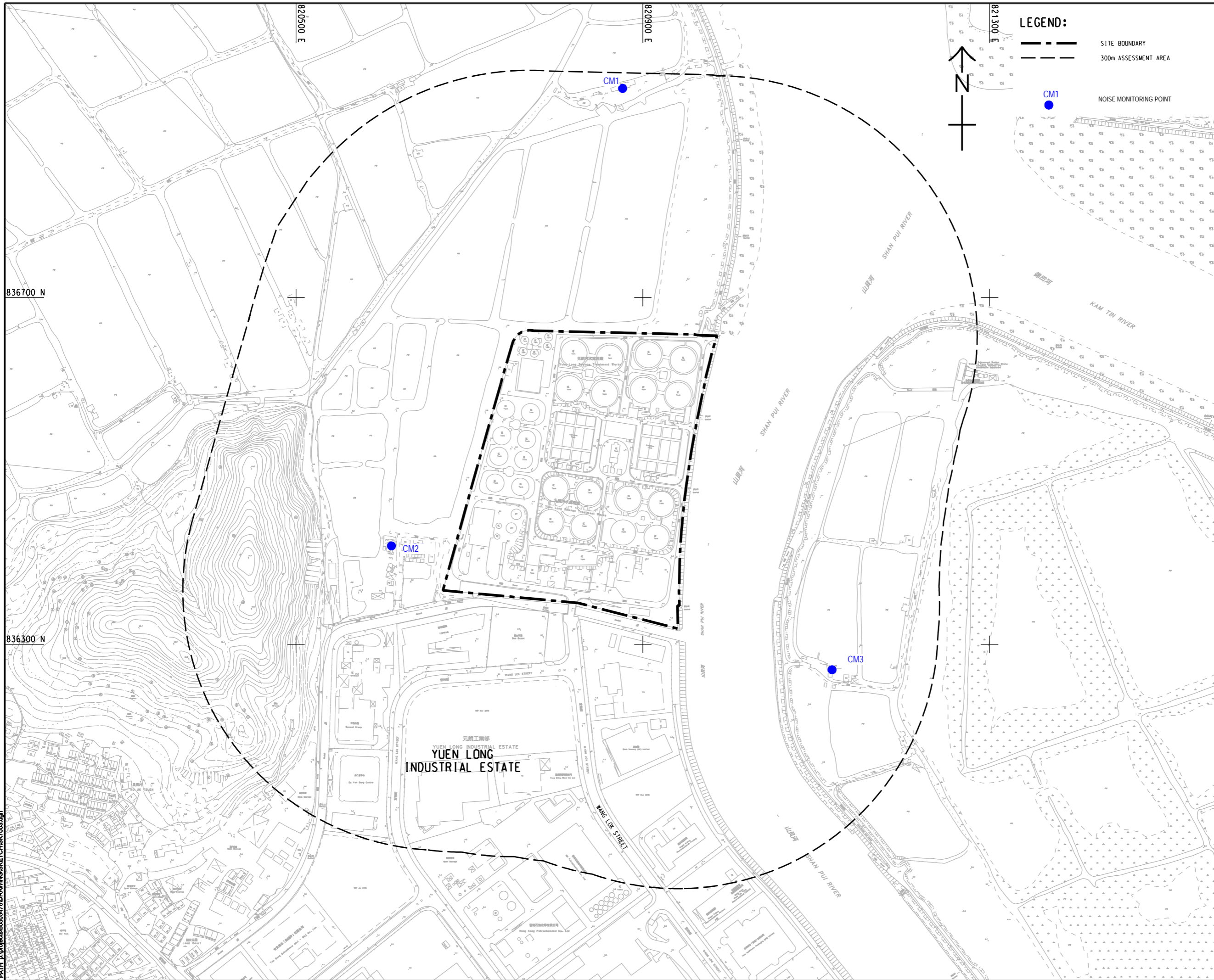
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 圖紙編號

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## Figure 3

---

Noise Monitoring Locations



LEGEND:

- SITE BOUNDARY
- 300m ASSESSMENT AREA
- NOISE MONITORING POINT



**PROJECT**  
項目

**YUEN LONG EFFLUENT POLISHING PLANT - INVESTIGATION, DESIGN AND CONSTRUCTION**

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**STATUS**  
圖版

**SCALE**  
比例

A1 1:2000

**DIMENSION UNIT**  
尺寸單位

METRES

**KEY PLAN**  
索引圖

**PROJECT NO.**  
項目編號

60505476

**CONTRACT NO.**  
合約編號

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**SHEET TITLE**  
圖紙名稱

LOCATIONS OF NOISE MONITORING POINTS

**SHEET NUMBER**  
圖紙編號

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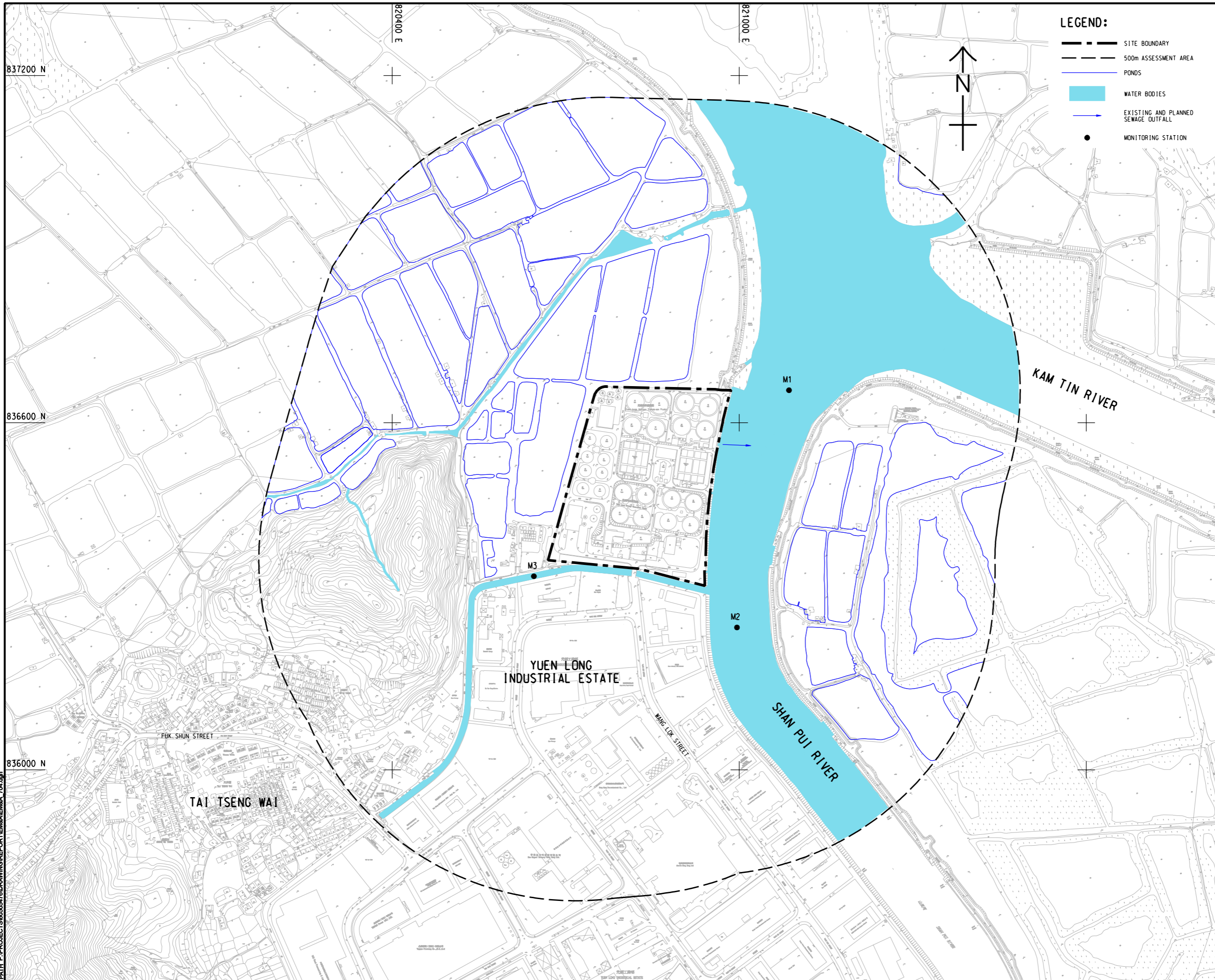
# Figure 4

---

Water Quality Monitoring Locations



Pld File by: GuoYU 12/18  
 PATH: P:\PROJECTS\60505476\DRAWING\REPORT\EMBA\EMBA\_704.dgn  
 ISO A1 594mm x 841mm  
 Approved: \_\_\_\_\_  
 Checked: \_\_\_\_\_  
 Designer: \_\_\_\_\_  
 Project Management Initials: \_\_\_\_\_



**LEGEND:**

- SITE BOUNDARY
- 500m ASSESSMENT AREA
- PONDS
- WATER BODIES
- EXISTING AND PLANNED SEWAGE OUTFALL
- MONITORING STATION

**AECOM**

**PROJECT**  
 項目

**YUEN LONG EFFLUENT POLISHING PLANT - INVESTIGATION, DESIGN AND CONSTRUCTION**

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 修訂

IR	DATE	DESCRIPTION	CHK.

**STATUS**  
 階段

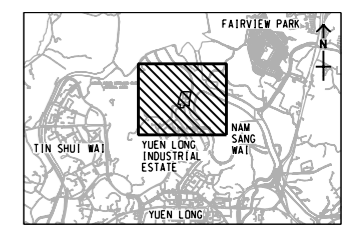
**SCALE**  
 比例

A3 1: 8000

**DIMENSION UNIT**  
 尺寸單位

METRES

**KEY PLAN** A3 1: 180000



**PROJECT NO.**  
 項目編號

60505476

**CONTRACT NO.**  
 合約編號

CE 3/2015 (DS)

**SHEET TITLE**  
 圖名

LOCATIONS OF WATER QUALITY MONITORING STATIONS FOR CONSTRUCTION PHASE

**SHEET NUMBER**  
 圖號

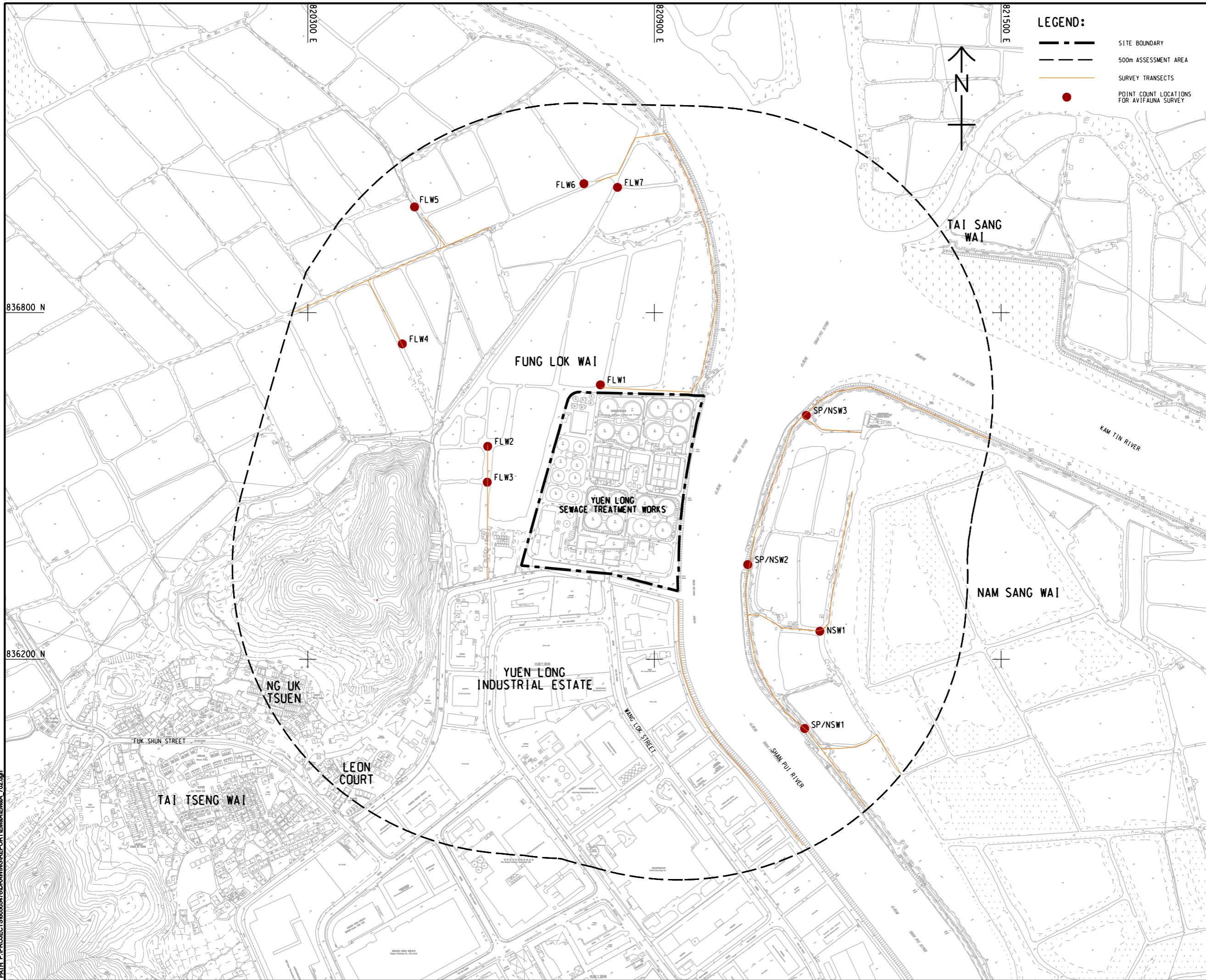
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# Figure 5

---

Ecology Monitoring Locations

ISO A1 594mm x 841mm  
 Approved:  
 Checked:  
 Designer:  
 Project Management Initials:  
 836800 N  
 836200 N  
 P:\PROJECTS\60505476\DRAWING\REPORT\EM\A\EM\_A\_702.dgn  
 Pld File by: ZENGFX 2018/05/30  
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**LEGEND:**

- SITE BOUNDARY
- 500m ASSESSMENT AREA
- SURVEY TRANSECTS
- POINT COUNT LOCATIONS FOR AVIFAUNA SURVEY



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**STATUS**  
 階段

NO.	DATE	DESCRIPTION	CHK.

**SCALE**  
 比例  
 A1 1 : 3000

**DIMENSION UNIT**  
 尺寸單位  
 METRES

**KEY PLAN**  
 索引圖

**PROJECT NO.**  
 項目編號  
 60505476

**CONTRACT NO.**  
 合約編號  
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**SHEET TITLE**  
 圖紙名稱  
 ECOLOGICAL MONITORING LOCATIONS

**SHEET NUMBER**  
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# Appendix A

---

Construction Programme

Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	Total Float	April 18				May 19					June 20				July 21				August 22		
						03	10	17	24	01	08	15	22	29	05	12	19	26	03	10	17	24	31	07	
<b>YL Effluent Polishing Plant - Main Works Stage 1 - Detailed Works Programme DPv13 20220513</b>																									
<b>Contract Data Part 1</b>																									
<b>Access Dates</b>																									
ADWA2	Work Area WA2 (sd) (new site possession) validity for 12 months and subject to renewal	365	05-Mar-21 A	04-Mar-23*	0																				
<b>Environmental Constraints</b>																									
EBS-2155	Egrets Breeding Season 2022	154	01-Mar-22 A	30-Aug-22*	0																				
<b>Preliminary and Preparation Works</b>																									
<b>Subletting</b>																									
SUB-230	Subletting for CLP Substation No.1 & 2 Structure	100	01-Jun-21 A	02-May-22	23	Subletting for CLP Substation No.1 & 2 Structure																			
SUB-240	Subletting for CLP Substation No.1 & 2 ABWF & BS	100	30-Aug-21 A	18-Jun-22	51	Subletting for CLP Substation No.1 & 2 ABWF & BS																			
SUB-250	Subletting for Ground Improvement works for Biogas Holder	86	07-Jul-21 A	01-May-22	-175	Subletting for Ground Improvement works for Biogas Holder																			
SUB-270	Subletting for ELS works for IW, PST, SDB, STB, SD, MBB, TTB, underpass and open cut for admin. bldg	50	12-Oct-21 A	01-May-22	80	Subletting for ELS works for IW, PST, SDB, STB, SD, MBB, TTB, underpass and open cut for admin. bldg																			
SUB-280	Subletting for RC works for IW, PST, SDB, STB, SD, Biogas holder, underpass and admin. bldg	105	29-Nov-21 A	12-Jul-22	-54	Subletting for RC works for IW, PST, SDB, STB, SD, Biogas holder, underpass and admin. bldg																			
SUB-290	Subletting for ABWF works for IW, PST, SDB, STB, MBR, TTB and admin. bldg	60	13-Jul-22	10-Sep-22	75	Subletting for ABWF works for IW, PST, SDB, STB, MBR, TTB and admin. bldg																			
SUB-310	Subletting for Utilities Corridor ELS	59	27-May-22	24-Jul-22	110	Subletting for Utilities Corridor ELS																			
SUB-350	Subletting for Waterproofing membrane and protection board	86	29-Nov-21 A	08-Jun-22	188	Subletting for Waterproofing membrane and protection board																			
SUB-360	Subletting for Rebar fixing	86	29-Nov-21 A	09-May-22	-54	Subletting for Rebar fixing																			
SUB-380	Subletting for Sheet piling works for remaining areas	150	12-Oct-21 A	08-Aug-22	1	Subletting for Sheet piling works for remaining areas																			
<b>Design Submission</b>																									
<b>Temporary Works Design</b>																									
<b>Inlet Work and Primary Sedimentation Tank</b>																									
TWD-440	ELS Stage 2 - Resubmission for PM's & ICE review (7d prep & resub. + 7d ICE)	15	22-Jul-21 A	01-May-22	-39	ELS Stage 2 - Resubmission for PM's & ICE review (7d prep & resub. + 7d ICE)																			
<b>Mainstream Bio-Reactor System</b>																									
TWD-220	ELS - Prepare & Submission for PM's review	45	01-Sep-21 A	15-May-22	23	ELS - Prepare & Submission for PM's review																			
TWD-230	ELS - Review by PM's & ICE review (28 d + 7d)	35	16-Oct-21 A	16-May-22	22	ELS - Review by PM's & ICE review (28 d + 7d)																			
TWD-240	ELS - Resubmission for PM's & ICE review (7d prep & resub. + 7d ICE)	14	17-May-22	30-May-22	22	ELS - Resubmission for PM's & ICE review (7d prep & resub. + 7d ICE)																			
TWD-250	ELS - Obtain Approval	7	31-May-22	06-Jun-22	22	ELS - Obtain Approval																			
TWD-520	ELS - Submit to GEO (Dewatering Proposal)	28	31-May-22	27-Jun-22	102	ELS - Submit to GEO (Dewatering Proposal)																			
<b>Sludge Thickening Building</b>																									
TWD-190	ELS - Review by PM's & ICE review (28 d + 7d)	35	04-Mar-22 A	04-May-22	76	ELS - Review by PM's & ICE review (28 d + 7d)																			
TWD-200	ELS - Resubmission for PM's & ICE review (7d prep & resub. + 7d ICE)	14	05-May-22	18-May-22	76	ELS - Resubmission for PM's & ICE review (7d prep & resub. + 7d ICE)																			
TWD-210	ELS - Obtain Approval	7	19-May-22	25-May-22	76	ELS - Obtain Approval																			
TWD-540	ELS - Submit to GEO (Dewatering Proposal)	28	19-May-22	15-Jun-22	103	ELS - Submit to GEO (Dewatering Proposal)																			
<b>Tertiary Treatment System</b>																									
TWD-140	ELS - Prepare & Submission for PM's review	45	02-Dec-21 A	14-May-22	39	ELS - Prepare & Submission for PM's review																			
TWD-150	ELS - Review by PM's & ICE review (28 d + 7d)	35	15-May-22	18-Jun-22	39	ELS - Review by PM's & ICE review (28 d + 7d)																			
TWD-160	ELS - Resubmission for PM's & ICE review (7d prep & resub. + 7d ICE)	14	19-Jun-22	02-Jul-22	39	ELS - Resubmission for PM's & ICE review (7d prep & resub. + 7d ICE)																			
TWD-170	ELS - Obtain Approval	7	03-Jul-22	09-Jul-22	39	ELS - Obtain Approval																			
TWD-550	ELS - Submit to GEO (Dewatering Proposal)	28	03-Jul-22	30-Jul-22	72	ELS - Submit to GEO (Dewatering Proposal)																			
<b>Sludge Digester 1-3 &amp; Utilities Corridor</b>																									
TWD-340	ELS - Prepare & Submission for PM's review	45	31-Aug-21 A	01-May-22	-21	ELS - Prepare & Submission for PM's review																			
TWD-350	ELS - Review by PM's & ICE review (28 d + 7d)	35	02-May-22	05-Jun-22	-21	ELS - Review by PM's & ICE review (28 d + 7d)																			
TWD-360	ELS - Resubmission for PM's & ICE review (7d prep & resub. + 7d ICE)	14	27-May-22	09-Jun-22	-21	ELS - Resubmission for PM's & ICE review (7d prep & resub. + 7d ICE)																			
TWD-370	ELS - Obtain Approval	7	10-Jun-22	16-Jun-22	-18	ELS - Obtain Approval																			
TWD-560	ELS - Submit to GEO (Dewatering Proposal)	28	10-Jun-22	07-Jul-22	-21	ELS - Submit to GEO (Dewatering Proposal)																			
<b>Sludge Digester 4-6</b>																									
TWD-460	ELS - Prepare & Submission for PM's review	45	17-Jun-22	31-Jul-22	890	ELS - Prepare & Submission for PM's review																			
<b>Sludge Dewatering and Underpass</b>																									
TWD-260	ELS - Prepare & Submission for PM's review	45	02-Jul-22*	15-Aug-22	605	ELS - Prepare & Submission for PM's review																			
<b>Contractor's Permanent Works Design (include ATAL)</b>																									
<b>AIP</b>																									
<b>Package 2A - Tertiary Treatment System (TTS)</b>																									
AIP-480	E&M AIP Report for Tertiary Treatment System (TTS) - Resubmission for further review	14	10-Mar-22 A	14-May-22	233	E&M AIP Report for Tertiary Treatment System (TTS) - Resubmission for further review																			
AIP-490	E&M AIP Report for Tertiary Treatment System (TTS) - Obtain Approval	7	15-May-22	21-May-22	233	E&M AIP Report for Tertiary Treatment System (TTS) - Obtain Approval																			
<b>Package 3A - Plant Service Water</b>																									
AIP-520	E&M AIP Report for Plant Service Water - Resubmission for further review	14	01-May-22*	14-May-22	452	E&M AIP Report for Plant Service Water - Resubmission for further review																			
AIP-530	E&M AIP Report for Plant Service Water - Obtain Approval	7	15-May-22	21-May-22	452	E&M AIP Report for Plant Service Water - Obtain Approval																			
<b>Package 6A - Control &amp; Monitoring System</b>																									
AIP-200	Control & Monitoring System - Resubmission for further review	14	01-May-22*	14-May-22	71	Control & Monitoring System - Resubmission for further review																			
AIP-620	Control & Monitoring System - Obtain Approval	7	15-May-22	21-May-22	71	Control & Monitoring System - Obtain Approval																			



- Remaining Level of Effort
- Actual Work
- Remaining Work
- Critical Remaining Work
- ◆ Milestone

## Contract DC/2019/10 - YLEPP - Main Works for Stage 1

### Monthly Progress Report No. 18 - 3MRP (April 2022)

Project ID : DWP.DPr13\_220514  
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Monthly Progress Report No. 18 - 3MRP			
Date	Revision	Checked	Approved
30-Apr-22	Rev. 0		

Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	Total Float	April 18				May 19					June 20				July 21				August 22		
						03	10	17	24	01	08	15	22	29	05	12	19	26	03	10	17	24	31	07	
<b>Package 7A - Building Services System</b>																									
AIP-240	BS System - Resubmission for further review	14	28-Mar-22 A	14-May-22	368	BS System - Resubmission for further review																			
AIP-250	BS System - Obtain Approval	7	15-May-22	21-May-22	368	BS System - Obtain Approval																			
<b>Package 14A - E&amp;M AIP Report for Deodorization Unit System</b>																									
AIP-850	DEO - Resubmission for further review	14	01-May-22*	14-May-22	2050	DEO - Resubmission for further review																			
AIP-860	DEO - Obtain Approval	7	15-May-22	21-May-22	2050	DEO - Obtain Approval																			
<b>Package 15A - Civil, Structural &amp; Geotechnical</b>																									
AIP-400	Civil, Structural & Geotechnical - Resubmission for further review	14	05-Jan-22 A	14-May-22	212	Civil, Structural & Geotechnical - Resubmission for further review																			
AIP-410	Civil, Structural & Geotechnical - Obtain Approval	7	15-May-22	21-May-22	212	Civil, Structural & Geotechnical - Obtain Approval																			
<b>Package 16A - E&amp;M AIP Report for Hydraulic Design</b>																									
AIP-890	Hydraulic - Resubmission for further review	14	05-Jan-22 A	14-May-22	1006	Hydraulic - Resubmission for further review																			
AIP-900	Hydraulic - Obtain Approval	38	15-May-22	21-Jun-22	1006	Hydraulic - Obtain Approval																			
<b>Package 22A - Sampling System of YLEPP</b>																									
AIP-910	Sampling System - Prepare & Submission for PM's review	45	01-May-22	14-Jun-22	293	Sampling System - Prepare & Submission for PM's review																			
AIP-920	Sampling System - Review by PM's & ICE review (28 d + 7d)	35	15-Jun-22	19-Jul-22	293	Sampling System - Review by PM's & ICE review (28 d + 7d)																			
AIP-930	Sampling System - Resubmission for further review	14	20-Jul-22	02-Aug-22	293	Sampling System - Resubmission for further review																			
<b>Package 23A - Security, Public Address and Communication System</b>																									
AIP-950	SPC - Prepare & Submission for PM's review	45	01-May-22	14-Jun-22	422	SPC - Prepare & Submission for PM's review																			
AIP-960	SPC - Review by PM's & ICE review (28 d + 7d)	35	15-Jun-22	19-Jul-22	422	SPC - Review by PM's & ICE review (28 d + 7d)																			
AIP-970	SPC - Resubmission for further review	14	20-Jul-22	02-Aug-22	422	SPC - Resubmission for further review																			
<b>DDA</b>																									
<b>Package 1 - General Architecture, Civil, Structural &amp; Geotechnical</b>																									
DDA-1080	Contractor's Design for General Architecture, Civil, Structural & Geotechnical - Submit to GEO for comment and approval	28	15-May-22	11-Jun-22	212	Contractor's Design for General Architecture, Civil, Structural & Geotechnical - Submit to GEO for comment and approval																			
DDA-120	Contractor's Design for General Architecture, Civil, Structural & Geotechnical - Resubmission for further review	14	25-Mar-22 A	15-May-22	212	Contractor's Design for General Architecture, Civil, Structural & Geotechnical - Resubmission for further review																			
DDA-130	Contractor's Design for General Architecture, Civil, Structural & Geotechnical - Obtain Approval	7	05-Jun-22	11-Jun-22	212	Contractor's Design for General Architecture, Civil, Structural & Geotechnical - Obtain Approval																			
<b>Package 2 - Tertiary Treatment System</b>																									
DDA-140	Architectural for TTS - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)	126	12-Jun-22	15-Oct-22	212	Architectural for TTS - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)																			
DDA-150	Foundation for TTS - Prepare (90d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d), GEO (28d)	184	08-Oct-21 A	31-Aug-22	5	Foundation for TTS - Prepare (90d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d), GEO (28d)																			
DDA-170	Civil Req. for TTS (Foundation design) - Prepare(27d), Sub. & Review(45d), Comment & Resub.(14d), GEO(28d)& Approval (7d)	121	13-Jun-21 A	19-May-22	299	Civil Req. for TTS (Foundation design) - Prepare(27d), Sub. & Review(45d), Comment & Resub.(14d), GEO(28d)& Approval (7d)																			
DDA-180	Civil Req. for TTS (Superstruct. design) - Prepare (147d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)	213	11-Oct-21 A	28-Sep-22	207	Civil Req. for TTS (Superstruct. design) - Prepare (147d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)																			
DDA-190	P&ID for TTS - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)	126	31-Dec-21 A	03-Aug-22	473	P&ID for TTS - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)																			
DDA-200	Mechanical for TTS - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)	126	31-Dec-21 A	03-Aug-22	504	Mechanical for TTS - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)																			
DDA-210	Electrical& Control for TTS - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)	126	31-Dec-21 A	03-Aug-22	504	Electrical& Control for TTS - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)																			
DDA-220	Building Services (BS) for TTS - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)	126	22-May-22	24-Sep-22	452	Building Services (BS) for TTS - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)																			
<b>Package 3 - Mainstream Bio-Reactor System</b>																									
DDA-230	Architectural for MBS - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)	126	05-Oct-21 A	04-Jul-22	155	Architectural for MBS - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)																			
DDA-240	Foundation for MBS - Prepare (97d), Sub. & Review(45d), Comment & Resub.(14d), GEO (28d) & Approval (7d)	191	18-Mar-22 A	11-Dec-22	155	Foundation for MBS - Prepare (97d), Sub. & Review(45d), Comment & Resub.(14d), GEO (28d) & Approval (7d)																			
DDA-250	Civil & Structural for MBS - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)	126	09-Jul-22	11-Nov-22	185	Civil & Structural for MBS - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)																			
DDA-260	Civil Req. for MBS-AGS (Foundation design) - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)	126	09-Jun-21 A	26-May-22	159	Civil Req. for MBS-AGS (Foundation design) - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)																			
DDA-270	Civil Req. for MBS-AGS (Superstruct. design) - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)	126	15-Sep-21 A	04-Jun-22	208	Civil Req. for MBS-AGS (Superstruct. design) - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)																			
DDA-280	P&ID for TTS - MBS (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)	126	08-Oct-21 A	03-Jun-22	586	P&ID for TTS - MBS (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)																			
DDA-290	Mechanical for MBS - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)	126	08-Oct-21 A	08-Jul-22	551	Mechanical for MBS - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)																			
DDA-300	Electrical& Control for MBS - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)	126	08-Oct-21 A	08-Jul-22	551	Electrical& Control for MBS - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)																			
DDA-310	Building Services (BS) for MBS - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)	126	08-Oct-21 A	08-Jul-22	551	Building Services (BS) for MBS - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)																			
<b>Package 5A - Master Water Meter Cabinet</b>																									
DDA-360	Foundation for Master WM Cabinet- Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d), GEO(28d) & Approval (7d)	154	15-Feb-22 A	31-Aug-22	201	Foundation for Master WM Cabinet- Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d), GEO(28d) & Approval (7d)																			
DDA-370	Civil & Struct. for WM Cabinet- Prepare (90d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)	156	14-Jan-22 A	02-Sep-22	103	Civil & Struct. for WM Cabinet- Prepare (90d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)																			
<b>Package 5B - Plant Service Water (PSW)</b>																									
DDA-1050	Civil Requirement Drawings - Prep(60d), Sub.&Review(45d), Comment&Resub (14d) & Approval (7d)	126	12-Jun-21 A	09-Jun-22	340	Civil Requirement Drawings - Prep(60d), Sub.&Review(45d), Comment&Resub (14d) & Approval (7d)																			
DDA-1060	Electrical & Control for PSW - Prep(60d), Sub.&Review(45d), Comment&Resub (14d) & Approval (7d)	126	31-Aug-21 A	03-Jun-22	565	Electrical & Control for PSW - Prep(60d), Sub.&Review(45d), Comment&Resub (14d) & Approval (7d)																			
DDA-1070	Mechanical for PSW - Prep(60d), Sub.&Review(45d), Comment&Resub (14d) & Approval (7d)	126	31-Aug-21 A	03-Jun-22	565	Mechanical for PSW - Prep(60d), Sub.&Review(45d), Comment&Resub (14d) & Approval (7d)																			
<b>Package 6 - Sludge Thickening Chemical and Dosing System</b>																									
DDA-1120	P&ID for STCDS - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)	126	28-Jun-21 A	26-May-22	278	P&ID for STCDS - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)																			
DDA-1130	Mechanical for STCDS - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)	126	28-Jun-21 A	22-May-22	282	Mechanical for STCDS - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)																			
DDA-1140	Electrical & Control for STCDS - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)	126	28-Jun-21 A	26-May-22	278	Electrical & Control for STCDS - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)																			
DDA-1150	Building Services for STCDS - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)	126	28-Jun-21 A	26-May-22	278	Building Services for STCDS - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)																			
DDA-420	Arch. for STCS, Waste Gas Burner & Guard Hse - Prepare (60d), Sub. & Review(45d), Com. & Resub.(14d) & Approval (7d)	126	05-Oct-21 A	03-Jul-22	144	Arch. for STCS, Waste Gas Burner & Guard Hse - Prepare (60d), Sub. & Review(45d), Com. & Resub.(14d) & Approval (7d)																			
DDA-430	Found. for STCS, Waste Gas Burner & Guard Hse - Prepare(60d), Sub.&Review(45d), Comment & Resub.(14d), GEO(28d) & Approval (7d)	126	04-Jun-22	07-Oct-22	144	Found. for STCS, Waste Gas Burner & Guard Hse - Prepare(60d), Sub.&Review(45d), Comment & Resub.(14d), GEO(28d) & Approval (7d)																			
DDA-440	Civil & Struct. for STCS, WGB & Guard Hse - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)	126	09-Nov-21 A	08-Jul-22	235	Civil & Struct. for STCS, WGB & Guard Hse - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)																			
DDA-440B	Civil Req. for STCDS - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)	126	28-Jun-21 A	19-May-22	285	Civil Req. for STCDS - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)																			
<b>Package 7 - CLP Substation and 11kV Switchgear House</b>																									
DDA-1160	Earthing & Lighting System Design Report - Prepare (28d), Sub. & Review(28d), Comment & Resub.(14d) & Approval (7d)	78	02-Jul-21 A	26-May-22	74	Earthing & Lighting System Design Report - Prepare (28d), Sub. & Review(28d), Comment & Resub.(14d) & Approval (7d)																			



- Remaining Level of Effort
- Actual Work
- Remaining Work
- Critical Remaining Work
- ◆ Milestone

## Contract DC/2019/10 - YLEPP - Main Works for Stage 1

### Monthly Progress Report No. 18 - 3MRP (April 2022)

Project ID : DWP.DPr13\_220514  
 Layout : DC201910 MPR18-3MRP  
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Monthly Progress Report No. 18 - 3MRP			
Date	Revision	Checked	Approved
30-Apr-22	Rev. 0		

Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	Total Float	April 18				May 19				June 20				July 21				August 22			
						03	10	17	24	01	08	15	22	29	05	12	19	26	03	10	17	24	31	07	
						Gantt Chart (Color-coded bars representing work status)																			
DDA-1450	VCAB, FSD & WSD Design Report - Prepare (28d), Sub. & Review(28d), Comment & Resub.(14d) & Approval (7d)	78	02-Jul-21 A	26-May-22	74	VCAB, FSD & WSD Design Report - Prepare (28d), Sub. & Review(28d), Comment & Resub.(14d) & Approval (7d)																			
DDA-460	Civil&Struct. for CLP Sub. & 11kV Switchgear Hse- Prep. (30d), Sub. & Review(30d), Comment & Resub.(14d) & Approval (7d)	82	01-Jun-21 A	12-May-22	74	Civil&Struct. for CLP Sub. & 11kV Switchgear Hse- Prep. (30d), Sub. & Review(30d), Comment & Resub.(14d) & Approval (7d)																			
DDA-470	Electrical System for all facilities - Prepare (28d), Sub. & Review(28d), Comment & Resub.(14d) & Approval (7d)	78	01-Jun-21 A	26-May-22	74	Electrical System for all facilities - Prepare (28d), Sub. & Review(28d), Comment & Resub.(14d) & Approval (7d)																			
DDA-480	UPS System for CLP Sub. & 11kV Switchgear Hse - Prepare (102d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)	168	03-Jun-21 A	26-May-22	100	UPS System for CLP Sub. & 11kV Switchgear Hse - Prepare (102d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)																			
DDA-490	BS for CLP Sub. & 11kV Switchgear Hse - Prepare (28d), Sub. & Review(28d), Comment & Resub.(14d) & Approval (7d)	78	01-Jun-21 A	26-May-22	74	BS for CLP Sub. & 11kV Switchgear Hse - Prepare (28d), Sub. & Review(28d), Comment & Resub.(14d) & Approval (7d)																			
<b>Package 8 - Advance Works and SCADA Relocation</b>																									
DDA-500	Mechanical for Advance Works - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)	78	22-May-21 A	26-May-22	-173	Mechanical for Advance Works - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)																			
DDA-510	Electrical & Control for Advance Works - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)	78	04-Jun-21 A	19-May-22	-166	Electrical & Control for Advance Works - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)																			
DDA-520	BS for Advance Works - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)	78	04-May-21 A	26-May-22	-173	BS for Advance Works - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)																			
DDA-530	E&M for Advance Works - SCADA Relocation - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)	76	24-Jun-21 A	26-May-22	-173	E&M for Advance Works - SCADA Relocation - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)																			
<b>Package 9 - Inlet Work (IW)</b>																									
DDA-1170	Civil Req. Drawing for Inlet Work - Prepare (30d), Sub. & Review(30d), Comment & Resub.(14d) & Approval (7d)	82	10-Jun-21 A	26-May-22	249	Civil Req. Drawing for Inlet Work - Prepare (30d), Sub. & Review(30d), Comment & Resub.(14d) & Approval (7d)																			
DDA-1180	PID for Inlet Work - Prepare (30d), Sub. & Review(30d), Comment & Resub.(14d) & Approval (7d)	82	10-Jun-21 A	26-May-22	249	PID for Inlet Work - Prepare (30d), Sub. & Review(30d), Comment & Resub.(14d) & Approval (7d)																			
DDA-1190	Mechanical for Inlet Work - Prepare (28d), Sub. & Review(28d), Comment & Resub.(14d) & Approval (7d)	78	09-Aug-21 A	26-May-22	249	Mechanical for Inlet Work - Prepare (28d), Sub. & Review(28d), Comment & Resub.(14d) & Approval (7d)																			
DDA-1200	Electrical & Control for Inlet Work - Prepare (28d), Sub. & Review(28d), Comment & Resub.(14d) & Approval (7d)	78	31-Aug-21 A	26-May-22	249	Electrical & Control for Inlet Work - Prepare (28d), Sub. & Review(28d), Comment & Resub.(14d) & Approval (7d)																			
DDA-1210	Building Services for Inlet Work - Prepare (28d), Sub. & Review(28d), Comment & Resub.(14d) & Approval (7d)	76	15-Oct-21 A	08-Jun-22	270	Building Services for Inlet Work - Prepare (28d), Sub. & Review(28d), Comment & Resub.(14d) & Approval (7d)																			
<b>Package 10 - Primary Sedimentation Tank (PST)</b>																									
DDA-1220	Civil Req. Drawing for PST - Prepare (46d), Sub. & Review(30d), Comment & Resub.(14d) & Approval (7d)	98	01-Jun-21 A	26-May-22	175	Civil Req. Drawing for PST - Prepare (46d), Sub. & Review(30d), Comment & Resub.(14d) & Approval (7d)																			
DDA-1230	PID for PST - Prepare (46d), Sub. & Review(30d), Comment & Resub.(14d) & Approval (7d)	98	01-Jun-21 A	26-May-22	175	PID for PST - Prepare (46d), Sub. & Review(30d), Comment & Resub.(14d) & Approval (7d)																			
DDA-1240	Mechanical for PST - Prepare (46d), Sub. & Review(30d), Comment & Resub.(14d) & Approval (7d)	98	01-Jun-21 A	26-May-22	175	Mechanical for PST - Prepare (46d), Sub. & Review(30d), Comment & Resub.(14d) & Approval (7d)																			
DDA-1250	Electrical & Control for PST - Prepare (28d), Sub. & Review(28d), Comment & Resub.(14d) & Approval (7d)	48	31-Aug-21 A	26-May-22	175	Electrical & Control for PST - Prepare (28d), Sub. & Review(28d), Comment & Resub.(14d) & Approval (7d)																			
DDA-1260	Building Services for PST - Prepare (28d), Sub. & Review(28d), Comment & Resub.(14d) & Approval (7d)	78	01-Oct-21 A	02-Jun-22	175	Building Services for PST - Prepare (28d), Sub. & Review(28d), Comment & Resub.(14d) & Approval (7d)																			
<b>Package 11 - Control and Monitoring System</b>																									
DDA-1270	Gas Detection System - Prep(28d), Sub.&Review(28d), Comment&Resub (14d) & Approval (7d)	78	01-Jun-22	17-Aug-22	193	Gas Detection System - Prep(28d), Sub.&Review(28d), Comment&Resub (14d) & Approval (7d)																			
DDA-1280	Data Collection, Management, Analysis, & Model System - Prep(28d), Sub.&Review(28d), Comment&Resub (14d) & Approval (7d)	78	01-Jun-22	17-Aug-22	193	Data Collection, Management, Analysis, & Model System - Prep(28d), Sub.&Review(28d), Comment&Resub (14d) & Approval (7d)																			
DDA-550	Supervisory Control&Data Application (SCADA) System - Prep(28d), Sub.&Review(28d), Comment&Resub (14d) & Approval (7d)	78	31-Aug-21 A	17-May-22	285	Supervisory Control&Data Application (SCADA) System - Prep(28d), Sub.&Review(28d), Comment&Resub (14d) & Approval (7d)																			
DDA-560	Computerised Maintenance Management System (CMMS) - Prep(28d), Sub.&Review(28d), Comment&Resub (14d) & Approval (7d)	78	01-Jun-22*	17-Aug-22	193	Computerised Maintenance Management System (CMMS) - Prep(28d), Sub.&Review(28d), Comment&Resub (14d) & Approval (7d)																			
DDA-570	Information and Document management System (IDMS) - Prep(28d), Sub.&Review(28d), Comment&Resub (14d) & Approval (7d)	78	01-Jun-22	17-Aug-22	193	Information and Document management System (IDMS) - Prep(28d), Sub.&Review(28d), Comment&Resub (14d) & Approval (7d)																			
DDA-580	Power Quality & Energy Management System (PQEMS) - Prep(28d), Sub.&Review(28d), Comment&Resub (14d) & Approval (7d)	78	02-Oct-21 A	17-May-22	285	Power Quality & Energy Management System (PQEMS) - Prep(28d), Sub.&Review(28d), Comment&Resub (14d) & Approval (7d)																			
<b>Package 13 - Pipework System</b>																									
DDA-1030	Pipeworks System for Sludge Digesters - Prep(60d),Sub.&Review(45d),Comment&Resub (14d) & Approval (7d)	126	18-May-22	20-Sep-22	272	Pipeworks System for Sludge Digesters - Prep(60d),Sub.&Review(45d),Comment&Resub (14d) & Approval (7d)																			
DDA-670	Pipeworks System for Primary Sedimentation Tanks (PST)- Prep(57d), Sub.&Review(45d), Comment&Resub(14d) & Approval (7d)	123	18-Sep-21 A	31-May-22	-2	Pipeworks System for Primary Sedimentation Tanks (PST)- Prep(57d), Sub.&Review(45d), Comment&Resub(14d) & Approval (7d)																			
DDA-680	Pipeworks System for Biogas Holder (BH) - Prep(57d), Sub.&Review(45d), Comment&Resub (14d) & Approval (7d)	123	18-Sep-21 A	31-May-22	-2	Pipeworks System for Biogas Holder (BH) - Prep(57d), Sub.&Review(45d), Comment&Resub (14d) & Approval (7d)																			
DDA-690	Pipeworks System for Sludge Dewatering Building (SDB) - Prep(60d),Sub.&Review(45d),Comment&Resub (14d) & Approval (7d)	126	18-May-22	20-Sep-22	272	Pipeworks System for Sludge Dewatering Building (SDB) - Prep(60d),Sub.&Review(45d),Comment&Resub (14d) & Approval (7d)																			
DDA-700	Pipeworks System for Utility Corridor&Pipe Portal (UC/PP) - Prep(103d),Sub.&Review(45d),Comment&Resub(14d) & Approval (7d)	126	18-May-22	20-Sep-22	433	Pipeworks System for Utility Corridor&Pipe Portal (UC/PP) - Prep(103d),Sub.&Review(45d),Comment&Resub(14d) & Approval (7d)																			
<b>Package 14 - Sludge Anaerobic Digestion System (SDT)</b>																									
DDA-1290	Civil Req. Drawing for SDT - Prepare (47d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)	113	10-Jul-21 A	22-May-22	-184	Civil Req. Drawing for SDT - Prepare (47d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)																			
DDA-1300	PID for SDT - Prepare (47d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)	113	10-Jul-21 A	26-May-22	201	PID for SDT - Prepare (47d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)																			
DDA-1310	Mechanical for SDT & UC/PP - Prepare (47d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)	113	10-Jul-21 A	26-May-22	201	Mechanical for SDT & UC/PP - Prepare (47d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)																			
DDA-1320	Electrical & Control for SDT & UC/PP - Prepare (55d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)	121	02-Jul-21 A	26-May-22	267	Electrical & Control for SDT & UC/PP - Prepare (55d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)																			
DDA-1340	Civil Req. Drawing for UC/PP - Prepare (47d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)	113	10-Jul-21 A	26-May-22	85	Civil Req. Drawing for UC/PP - Prepare (47d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)																			
<b>Package 15 - Biogas H2S Removal, Storage and Delivery System</b>																									
DDA-1350	Civil Req. Drawing for Biogas Storage&Delivery System - Prepare(28d),Sub& Review(28d),Comment&Resub(14d) & Approval (7d)	78	31-Aug-21 A	10-May-22	-184	Civil Req. Drawing for Biogas Storage&Delivery System - Prepare(28d),Sub& Review(28d),Comment&Resub(14d) & Approval (7d)																			
DDA-1360	PID for Biogas H2S Removal, Storage and Delivery System - Prepare(28d),Sub& Review(28d),Comment&Resub(14d) & Approval (7d)	75	13-Jul-21 A	02-Jun-22	-82	PID for Biogas H2S Removal, Storage and Delivery System - Prepare(28d),Sub& Review(28d),Comment&Resub(14d) & Approval (7d)																			
DDA-1370	Mechanical for Biogas H2S Removal System - Prepare(28d),Sub& Review(28d),Comment&Resub(14d) & Approval (7d)	78	03-Jun-22	19-Aug-22	-82	Mechanical for Biogas H2S Removal System - Prepare(28d),Sub& Review(28d),Comment&Resub(14d) & Approval (7d)																			
DDA-1380	Electrical & Control for Biogas H2S Removal System - Prepare(28d),Sub& Review(28d),Comment&Resub(14d) & Approval (7d)	78	26-May-22	11-Aug-22	-74	Electrical & Control for Biogas H2S Removal System - Prepare(28d),Sub& Review(28d),Comment&Resub(14d) & Approval (7d)																			
DDA-1390	Building Services for Biogas H2S Removal System - Prepare(28d),Sub& Review(28d),Comment&Resub(14d) & Approval (7d)	78	26-May-22	11-Aug-22	-74	Building Services for Biogas H2S Removal System - Prepare(28d),Sub& Review(28d),Comment&Resub(14d) & Approval (7d)																			
DDA-1400	Civil Req. Drawing for Biogas H2S Removal System - Prepare(28d),Sub& Review(28d),Comment&Resub(14d) & Approval (7d)	78	26-May-22	11-Aug-22	-74	Civil Req. Drawing for Biogas H2S Removal System - Prepare(28d),Sub& Review(28d),Comment&Resub(14d) & Approval (7d)																			
<b>Package 16 - Deodorization Unit System</b>																									
DDA-1410	PID for DOU System - Prepare(28d),Sub& Review(28d),Comment&Resub(14d) & Approval (7d)	78	03-Sep-21 A	01-Aug-22	2050	PID for DOU System - Prepare(28d),Sub& Review(28d),Comment&Resub(14d) & Approval (7d)																			
DDA-1420	Mechanical for DOU No. 1 - Prepare(28d),Sub& Review(28d),Comment&Resub(14d) & Approval (7d)	78	15-Mar-22 A	01-Aug-22	2050	Mechanical for DOU No. 1 - Prepare(28d),Sub& Review(28d),Comment&Resub(14d) & Approval (7d)																			
DDA-1430	Mechanical for DOU No. 2A and 2B - Prepare(28d),Sub& Review(28d),Comment&Resub(14d) & Approval (7d)	78	22-May-22	07-Aug-22	2050	Mechanical for DOU No. 2A and 2B - Prepare(28d),Sub& Review(28d),Comment&Resub(14d) & Approval (7d)																			
DDA-1440	Mechanical for DOU No. 3 - Prepare(28d),Sub& Review(28d),Comment&Resub(14d) & Approval (7d)	78	22-May-22	07-Aug-22	2050	Mechanical for DOU No. 3 - Prepare(28d),Sub& Review(28d),Comment&Resub(14d) & Approval (7d)																			
<b>Package 17 - Sludge Dewatering Building (SDB)</b>																									
DDA-890	Architectural for Sludge Dewatering Building (SDB) - Prep(60d), Sub.&Review(45d), Comment&Resub (14d) & Approval (7d)	126	07-Jun-21 A	02-Jun-22	1438	Architectural for Sludge Dewatering Building (SDB) - Prep(60d), Sub.&Review(45d), Comment&Resub (14d) & Approval (7d)																			
DDA-900	Found. for Sludge Dewatering Building (SDB) - Prep(60d), Sub.&Review(45d), Comment&Resub (14d), GEO (28d)	154	10-Nov-21 A	10-Aug-22	644	Found. for Sludge Dewatering Building (SDB) - Prep(60d), Sub.&Review(45d), Comment&Resub (14d), GEO (28d)																			
DDA-950	BS for Sludge Dewatering Building (SDB) - Prep(118d), Sub.&Review(45d), Comment&Resub (14d) & Approval (7d)	184	02-May-22	01-Nov-22	1286	BS for Sludge Dewatering Building (SDB) - Prep(118d), Sub.&Review(45d), Comment&Resub (14d) & Approval (7d)																			
<b>Package 19 - Elevated Walkways</b>																									
DDA-710	Civil & Structural for Elevated Walkways - Prep(60d), Sub.&Review(45d), Comment&Resub (14d) & Approval(7d), & Approval (7d)	154	05-Jun-22	05-Nov-22	855	Civil & Structural for Elevated Walkways - Prep(60d), Sub.&Review(45d), Comment&Resub (14d) & Approval(7d), & Approval (7d)																			
<b>Package 20 - Trellis</b>																									
DDA-720	Civil & Structural for Trellis - Prep(60d), Sub.&Review(45d), Comment&Resub (14d) & Approval(7d)	126	31-Aug-21 A	04-Jun-22	890	Civil & Structural for Trellis - Prep(60d), Sub.&Review(45d), Comment&Resub (14d) & Approval(7d)																			
<b>Package 21 - Steel Working Platform</b>																									



- Remaining Level of Effort
- Actual Work
- Remaining Work
- Critical Remaining Work
- ◆ Milestone

## Contract DC/2019/10 - YLEPP - Main Works for Stage 1

### Monthly Progress Report No. 18 - 3MRP (April 2022)

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Date	Revision	Checked	Approved
30-Apr-22	Rev. 0		

Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	Total Float	April 18				May 19				June 20				July 21				August 22			
						03	10	17	24	01	08	15	22	29	05	12	19	26	03	10	17	24	31	07	
DDA-730	Civil & Structural for Steel Working Platform - Prep(60d), Sub.&Review(45d), Comment&Resub (14d) & Approval(7d)	126	05-Jun-22	08-Oct-22	855																				
<b>Building Services</b>																									
DDA-590	BS for Inlet Works (IW) - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)	126	31-Aug-21 A	04-Jun-22	274																				
DDA-600	BS for Sludge Thickening Building (STB) - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)	126	31-Aug-21 A	04-Jun-22	415																				
DDA-610	BS for Primary Sedimentation Tanks (PST) - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)	126	30-Sep-21 A	04-Jul-22	294																				
DDA-620	BS for Biogas Holder (BH) - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)	126	31-Aug-21 A	04-Jun-22	-6																				
<b>Technical Submission</b>																									
<b>Inlet Works (IW)</b>																									
TS-890	PID - Sub.&Review(45d), Comment&resub(14d) & Approval (7d)	66	03-Sep-21 A	23-May-22	210																				
TS-900	Equipment Loading Summary - Sub.&Review(45d), Comment&resub(14d) & Approval (7d)	66	03-Sep-21 A	23-May-22	210																				
TS-910	General Arrangement Drawing - Sub.&Review(45d), Comment&resub(14d) & Approval (7d)	66	30-May-21 A	26-May-22	249																				
TS-920	Civil Requirement Drawings (Superstructure) - Sub.&Review(45d), Comment&resub(14d) & Approval (7d)	66	30-May-21 A	26-May-22	249																				
<b>Primary Sedimentation Tank (PST)</b>																									
TS-930	Equipment Loading Summary - Sub.&Review(45d), Comment&resub(14d) & Approval (7d)	66	03-Sep-21 A	23-May-22	210																				
TS-940	PID - Sub.&Review(45d), Comment&resub(14d) & Approval (7d)	66	03-Sep-21 A	06-Jun-22	210																				
TS-950	General Arrangement Drawing - Sub.&Review(45d), Comment&resub(14d) & Approval (7d)	66	01-May-22*	05-Jul-22	210																				
TS-960	Civil Requirement Drawings (Superstructure) - Sub.&Review(45d), Comment&resub(14d) & Approval (7d)	66	01-May-22*	05-Jul-22	210																				
<b>Sludge Thickening Building (STB)</b>																									
TS-820	Architectural for Sludge Thickening Building (STB) - Prep(60d), Sub.&Review(45d), Comment&Resub (14d) & Approval (7d)	126	01-Jun-21 A	19-May-22	167																				
TS-830	Found. for Sludge Thickening Building (STB) - Prep(60d), Sub.&Review(45d), Comment&Resub (14d), GEO(28d) & Approval (7d)	154	01-Jun-21 A	19-May-22	-36																				
TS-840	Civil & Structural for Sludge Thickening Bldg (STB) - Prep(27d), Sub.&Review(45d), Comment&Resub (14d) & Approval (7d)	93	14-Jun-22	14-Sep-22	167																				
TS-850	General Arrangement & Civil Req. Drawings for STB - Prep(27d), Sub.&Review(45d), Comment&Resub (14d) & Approval (7d)	93	14-Jun-22	14-Sep-22	526																				
TS-970	PID - Prep(27d), Sub.&Review(45d), Comment&resub(14d) & Approval (7d)	93	14-Jun-22	14-Sep-22	167																				
TS-980	Equipment Loading Summary - Prep(27d), Sub.&Review(45d), Comment&resub(14d) & Approval (7d)	93	14-Jun-22	14-Sep-22	601																				
<b>Sludge Digesters (SD)</b>																									
TS-1030	PID - Prep(60d), Sub.&Review(45d), Comment&resub(14d) & Approval (7d)	126	25-Sep-21 A	04-Jun-22	380																				
TS-1040	Equipment Loading Summary - Prep(60d), Sub.&Review(45d), Comment&resub(14d) & Approval (7d)	126	25-Sep-21 A	04-Jun-22	380																				
TS-740	Found. for Sludge Digesters (SD) - Prep(60d), Sub.&Review(45d), Comment&Resub (14d), GEO (28d)& Approval (7d)	126	25-Sep-21 A	04-Jun-22	-62																				
TS-750	Civil & Structural for Sludge Digesters (SD) - Prep(60d), Sub.&Review(45d), Comment&Resub (14d) & Approval(7d)	126	25-Sep-21 A	31-May-22	196																				
TS-760	General Arrangement & Civil Req. Drawings for SD - Prep (60d), Sub.&Review(45d), Comment&Resub (14d) & Approval (7d)	126	25-Sep-21 A	29-May-22	265																				
TS-770	Mechanical for Sludge Digesters (SD) - Prep(60d), Sub.&Review(45d), Comment&Resub (14d) & Approval(7d)	126	25-May-22	27-Sep-22	265																				
<b>Biogas Holders (BH)</b>																									
TS-1050	PID - Sub.&Review(45d), Comment&resub(14d) & Approval (7d)	66	31-Aug-21 A	06-May-22	-72																				
TS-1060	Equipment Loading Summary - Sub.&Review(45d), Comment&resub(14d) & Approval (7d)	66	31-Aug-21 A	06-May-22	-72																				
TS-780	Foundation for Biogas Holders (BH) - Prep(53d), Sub.&Review(45d), Comment&Resub (14d), GEO (28d) & Approval (7d)	147	12-Jun-21 A	31-May-22	-205																				
TS-790	Civil & Structural for Biogas Holders (BH) - Sub.&Review(45d), Comment&Resub (14d) & Approval(7d)	66	12-Jun-21 A	31-May-22	-104																				
TS-800	General Arrangement & Civil Req. Drawings for BH - Prep(127d), Sub.&Review(45d), Comment&Resub (14d) & Approval (7d)	193	16-Sep-21 A	10-Sep-22	-104																				
TS-810	Mechanical for Biogas Holders (BH) - Prep(60d), Sub.&Review(45d), Comment&Resub (14d) & Approval (7d)	126	05-Nov-21 A	09-Aug-22	-72																				
<b>SCADA</b>																									
TS-1070	Layout and Wiring Diagram for YLEPP PLC Panel - Prep(144d), Sub.&Review(45d), Comment&Resub (14d)&Approval (7d)	210	22-May-22	17-Dec-22	71																				
TS-1080	System Architecture for Existing YLSTW Temporary SCADA System - Prep(144d),Sub&Rev(45d),Comments&Resub(14d) & Approval (7d)	210	22-May-22	17-Dec-22	71																				
TS-1090	Layout and Wiring Diagram for Existing YLSTW Temp PLC Panel - Prep(144d),Sub&Rev(45d),Comments&Resub(14d) & Approval (7d)	210	22-May-22	17-Dec-22	71																				
TS-1100	System Architecture for YLEPP SCADA System - Prep(144d), Sub.&Review(45d), Comment&Resub (14d) & Approval (7d)	210	22-May-22	17-Dec-22	71																				
<b>Utility Corridor and Pipe Portal</b>																									
TS-1110	General Arrangement Drawing - Prep(144d), Sub.&Review(45d), Comment&resub(14d) & Approval (7d)	210	22-May-22	17-Dec-22	477																				
TS-1120	Civil Requirement Drawings (Superstructure) - Prep(144d), Sub.&Review(45d), Comment&resub(14d) & Approval (7d)	210	22-May-22	17-Dec-22	477																				
TS-1140	Equipment Loading Summary - Prep(144d), Sub.&Review(45d), Comment&resub(14d) & Approval (7d)	210	22-May-22	17-Dec-22	477																				
<b>Hazardous Area Classification and Fire Risk Assessment</b>																									
TS-1800	Hazardous Area Classification and Fire Risk Assessment Specialist - Submission & Approval	20	31-Aug-21 A	01-May-22	-7																				
TS-1810	Hazardous Area Classification Assessment - Prep(60), Sub.&Review(45d), Comment&resub(14d) & Approval (7d)	126	20-Sep-21 A	05-Jun-22	-7																				
TS-1820	Fire Risk Assessment - Prep(60), Sub.&Review(45d), Comment&resub(14d) & Approval (7d)	126	20-Sep-21 A	05-Jun-22	-7																				
<b>Material Submission, Procurement, Manufacturing and Delivery</b>																									
PRE-230	Submit/Procure/Manufacture/Deliver Main Stream Bio-Reactor E&M Equip.	270	09-Nov-20 A	01-May-22	619																				
PRE-240	Submit/Procure/Manufacture/Deliver TTS & Auxillary Facility Equip.	270	09-Nov-20 A	01-May-22	598																				
PRE-250	Submit/Procure/Manufacture/Deliver Thickening System/Digestion/sludge holding Tanks	300	09-Nov-20 A	05-May-22	910																				
<b>Site Establishment Works</b>																									
<b>Temporary Transformer 1600A</b>																									
1600A-0090	Defects Rectification	3	04-Mar-22 A	07-Mar-22 A																					
P5-140	CLP Inspection & Energization of Temporary Transformer	18	25-Mar-22 A	24-May-22	-43																				
P5-150	Comepletion of Temp Transformer 1600A	0		24-May-22*	-43																				
<b>PM and Contractor Accomodation</b>																									



- Remaining Level of Effort
- Actual Work
- Remaining Work
- Critical Remaining Work
- ◆ Milestone

## Contract DC/2019/10 - YLEPP - Main Works for Stage 1

### Monthly Progress Report No. 18 - 3MRP (April 2022)

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 Layout : DC201910 MPR18-3MRP  
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Monthly Progress Report No. 18 - 3MRP			
Date	Revision	Checked	Approved
30-Apr-22	Rev. 0		



Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	Total Float	April 18				May 19					June 20				July 21				August 22	
						03	10	17	24	01	08	15	22	29	05	12	19	26	03	10	17	24	31	07
<b>Project Manager's &amp; Contractor Site Accommodation</b>																								
<b>MIC Section</b>																								
PMCA-190	Installation of Green Roof	16	09-Nov-21 A	30-Jun-22	1706	Installation of Green Roof																		
<b>Caving System</b>																								
PMCA-240	Caving System Construction	33	03-May-22*	11-Jun-22	-20	Caving System Construction																		
PMCA-250	Caving System Installation (Set-Up & T&C)	60	13-Jun-22	22-Aug-22	-20	Caving System Installation (Set-Up & T&C)																		
<b>FSI, FSD and OP Requirements</b>																								
<b>FSI Submission &amp; Approval</b>																								
FSD-1030	PM Review	31	12-Nov-21 A	20-Jun-22	208	PM Review																		
FSD-1040	Submission Period for FSD Review (Assumed 12 Months) - Full GBP+GBP for TOP1	367	21-Jun-22	22-Jun-23	208	Submission Period for FSD Review (Assumed 12 Months) - Full GBP+GBP for TOP1																		
<b>Application Form Schedule EMSD (ATAL)</b>																								
<b>Phase 1</b>																								
ATAL-FS-0010	Form 104 for Biogas Holder Tank 1 (Submission and Approval Period)	184	01-May-22*	31-Oct-22	1478	Form 104 for Biogas Holder Tank 1 (Submission and Approval Period)																		
<b>HAZOP Study</b>																								
HAZOP-010	Engage Independent Consultant	20	03-May-22*	26-May-22	-55	Engage Independent Consultant																		
<b>Zone 1 (for PST(Stage1), others provide later)</b>																								
HAZOP-Z1-010	Review Design / Installation HAZOP for PST (Stage 1) by independent consultant	30	27-May-22	02-Jul-22	143	Review Design / Installation HAZOP for PST (Stage 1) by independent consultant																		
HAZOP-Z1-020	Re-submission of Design / Installation methodology	20	04-Jul-22	26-Jul-22	143	Re-submission of Design / Installation methodology																		
HAZOP-Z1-030	Obtain Approval	7	27-Jul-22	03-Aug-22	143	Obtain Approval																		
<b>Zone 2 (for MBR, others provide later)</b>																								
HAZOP-Z2-010	Review Design / Installation HAZOP for MBR by independent consultant	30	04-Jul-22	06-Aug-22	394	Review Design / Installation HAZOP for MBR by independent consultant																		
<b>Zone 3 (for BH No.1, others provide later)</b>																								
HAZOP-Z3-010	Review Design / Installation HAZOP for Biogas Holder No. 1 by independent consultant	30	27-May-22	02-Jul-22	-55	Review Design / Installation HAZOP for Biogas Holder No. 1 by independent consultant																		
HAZOP-Z3-020	Re-submission of Design / Installation methodology	20	04-Jul-22	26-Jul-22	-55	Re-submission of Design / Installation methodology																		
HAZOP-Z3-030	Obtain Approval	7	27-Jul-22	03-Aug-22	-55	Obtain Approval																		
<b>General Advance Works</b>																								
<b>NSWSPS Sensors</b>																								
ATALGA-1160	CGS - Method Statement for Installation	101	03-Aug-21 A	02-Jun-22	500	CGS - Method Statement for Installation																		
ATALGA-1170	Procurement & Delivery of Sensor	101	03-Aug-21 A	02-Jun-22	500	Procurement & Delivery of Sensor																		
ATALGA-1260	Installation of pressure sensors at NSWSPS	22	04-Jun-22	29-Jun-22	500	Installation of pressure sensors at NSWSPS																		
<b>Air Blower House</b>																								
ATALGA-1280	CMS - Air Blower System	128	01-Jun-22*	02-Nov-22	176	CMS - Air Blower System																		
<b>Disc Filter (DF) Pilot Plant</b>																								
ATALGA-1140	E&M installation of DF Pilot Plant	51	10-Feb-22 A	06-Jun-22	498	E&M installation of DF Pilot Plant																		
ATALGA-1190	T&C	22	07-Jun-22	02-Jul-22	498	T&C																		
<b>Dissolved Air Flotation (DAF) Pilot Plant</b>																								
ATALGA-1070	Civil Structural Construction of DAF Pilot Plant from STSTW	97	17-Jan-22 A	30-Jul-22	268	Civil Structural Construction of DAF Pilot Plant from STSTW																		
ATALGA-1110	Procurement & Delivery of Materials	97	28-Oct-21 A	24-Jun-22	298	Procurement & Delivery of Materials																		
<b>Aerobic Granular Sludge (AGS) Pilot Plant</b>																								
ATALGA-1180	E&M installation of AGS Pilot Plant	6	10-Feb-22 A	10-May-22	351	E&M installation of AGS Pilot Plant																		
ATALGA-1210	Seeding, process start-up and T&C	52	11-May-22	12-Jul-22	351	Seeding, process start-up and T&C																		
ATALGA-1270	Post-commissioning	139	13-Jul-22	24-Dec-22	351	Post-commissioning																		
<b>Zone 1 Construction</b>																								
<b>Temporary Works Design</b>																								
<b>SDB</b>																								
TWD-1030	ELS for SDB(Sludge Dewatering Building) & Underpass (SDB) - ICE Period Submission	31	16-Jul-22*	15-Aug-22	584	ELS for SDB(Sludge Dewatering Building) & Underpass (SDB) - ICE Period Submission																		
<b>Inlet Works (IW)</b>																								
<b>IW Foundation &amp; ELS Works</b>																								
<b>IW Basement</b>																								
Z1-IW-3940	Set-up and Installation for Total ~61 Nos. Wells (1-2 Wells/day/rig, 2 rigs)	44	23-Mar-22 A	18-May-22	-42	Set-up and Installation for Total ~61 Nos. Wells (1-2 Wells/day/rig, 2 rigs)																		
Z1-IW-3950	Pumping Test & Commissioning Period	14	19-May-22	04-Jun-22	-42	Pumping Test & Commissioning Period																		
Z1-IW-4300	Submit to GEO (28d)	28	03-May-22	06-Jun-22	-43	Submit to GEO (28d)																		
Z1-IW-4710	4th Pile Loading Test (WB-PB15, WB-PB33)	4	11-Mar-22 A	15-Mar-22 A		4th Pile Loading Test (WB-PB15, WB-PB33)																		
<b>Sheet Piling (Total Length: 12104m)</b>																								
<b>Zone A/D (4964m)</b>																								
Z1-IW-4681	Remaining Sheet Piling Works (Part of it require Pre-boring) (2991m, 100m/day/rig, 1 rig)	36	07-Feb-22 A	18-May-22	-42	Remaining Sheet Piling Works (Part of it require Pre-boring) (2991m, 100m/day/rig, 1 rig)																		
<b>Zone C (7140m)</b>																								
Z1-IW-4683	Remaining Sheet Piling Works (4946m, 140m/day/rig, 2rigs)	24	21-Feb-22 A	07-May-22	-34	Remaining Sheet Piling Works (4946m, 140m/day/rig, 2rigs)																		
<b>Excavation Works &amp; ELS (Excavation Volume: 32,857m3)</b>																								



- Remaining Level of Effort
- Actual Work
- Remaining Work
- Critical Remaining Work
- ◆ Milestone

## Contract DC/2019/10 - YLEPP - Main Works for Stage 1

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Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	Total Float	April 18				May 19				June 20				July 21				August 22			
						03	10	17	24	01	08	15	22	29	05	12	19	26	03	10	17	24	31	07	
Z1-IW-4450	WB - Excavation to S1 Level (+4.35 mPD), (4,422m3, 1000m3/day, 4excavators,8m3/truck, 15trucks/hr, 4mock o	5	07-Jun-22	11-Jun-22	-43	WB - Excavation to S1 Level (+4.35 mPD), (4,422m3, 1000m3/day, 4excavators,8m3/truck, 15trucks/hr, 4mock o																			
Z1-IW-4460	WB - Erection and Installation of S1 Strut & W1 Waling (+4.35 mPD, 3-4crane, 3-4workfronts, 10welders)	9	13-Jun-22	22-Jun-22	-43	WB - Erection and Installation of S1 Strut & W1 Waling (+4.35 mPD, 3-4crane, 3-4workfronts, 10welders)																			
Z1-IW-4470	WB - Excavation to S2 Level (+2.50 mPD), (7,114m3, 1000m3/day, 4excavators,8m3/truck, 15trucks/hr, 4mock o	7	23-Jun-22	30-Jun-22	-43	WB - Excavation to S2 Level (+2.50 mPD), (7,114m3, 1000m3/day, 4excavators,8m3/truck, 15trucks/hr, 4mock o																			
Z1-IW-4480	WB - Erection and Installation of S2 Strut & W2 Waling (+2.50 mPD, 3-4crane, 3-4workfronts, 10welders)	9	02-Jul-22	12-Jul-22	-43	WB - Erection and Installation of S2 Strut & W2 Waling (+2.50 mPD, 3-4crane, 3-4workfronts, 10welders)																			
Z1-IW-4490	WB - Excavation to S3 Level (+0.65 mPD), (7,114m3, 800m3/day, 3excavators,8m3/truck, 12trucks/hr, 4mock oul	9	13-Jul-22	22-Jul-22	-43	WB - Excavation to S3 Level (+0.65 mPD), (7,114m3, 800m3/day, 3excavators,8m3/truck, 12trucks/hr, 4mock oul																			
Z1-IW-4500	WB - Erection and Installation of S3 Strut & W3 Waling (+0.65 mPD, 3-4crane, 3-4workfronts, 10welders)	9	23-Jul-22	02-Aug-22	-43	WB - Erection and Installation of S3 Strut & W3 Waling (+0.65 mPD, 3-4crane, 3-4workfronts, 10welders)																			
<b>IW Transformer House No. 1</b>																									
IW-2785	TX House No. 1 - Piling Works (8 nos.)	10	21-May-22	01-Jun-22	88	TX House No. 1 - Piling Works (8 nos.)																			
<b>Primary Sedimentation Tank (PST)</b>																									
<b>PST Stage 1 of Works</b>																									
<b>PST Stage 1 - Foundation (At First 3 Tanks, PST 7-8 Footprint)</b>																									
EBS-2022	Egrets Breeding Season 2022	184	01-Mar-22 A	31-Aug-22*	0	Egrets Breeding Season 2022																			
PST-1220	PST Stage 1 - Driven H-Pile (21nos. @ ave. 1.5no/d/rig, 1 rig)	14	06-Apr-22 A	19-May-22	68	PST Stage 1 - Driven H-Pile (21nos. @ ave. 1.5no/d/rig, 1 rig)																			
PST-1230	PST Stage 1 - Time Risk Allowance for Driven H-Pile	2	20-May-22	21-May-22	68	PST Stage 1 - Time Risk Allowance for Driven H-Pile																			
PST-3020	PST Stage 1 - Submit to GEO (28d)	28	31-Mar-22 A	07-May-22	-40	PST Stage 1 - Submit to GEO (28d)																			
<b>PST Stage 1</b>																									
<b>Sheet Piling (Total Length: 8440m)</b>																									
<b>Zone E (3800m)</b>																									
Z1-PST-4272	Sheet Piling Works (3800m, 180m/day/rig, 1 rig)	21	26-Jan-22 A	12-May-22	76	Sheet Piling Works (3800m, 180m/day/rig, 1 rig)																			
Z1-PST-4282	Preboring for sheet piling work (approx. 12 nos, 6nos/day/rig, 1rig)	2	02-Mar-22 A	03-Mar-22 A		approx. 12 nos, 6nos/day/rig, 1rig)																			
<b>Excavation Works (South Portion), (Excavation Volume: 5,795m3)</b>																									
Z1-PST-3580	PST(S1) - Excavation S1 Level (+0.875mPD), (4942m3, 500-800m3/day, 2excavator, 8m3/truck,10-12tks/hr, 2mc	7	13-May-22	20-May-22	76	PST(S1) - Excavation S1 Level (+0.875mPD), (4942m3, 500-800m3/day, 2excavator, 8m3/truck,10-12tks/hr, 2mc																			
Z1-PST-3600	PST(S1) - Excavation FEL Level (-3.225mPD), (853m3, 300-400m3/day, 1excavator 8m3/truck, 5 trucks/hr, 1moc	3	28-May-22	31-May-22	76	PST(S1) - Excavation FEL Level (-3.225mPD), (853m3, 300-400m3/day, 1excavator 8m3/truck, 5 trucks/hr, 1moc																			
Z1-PST-3810	PST (S1) - Time Risk Allowance for Excavation and ELS Installation	2	01-Jun-22	02-Jun-22	76	PST (S1) - Time Risk Allowance for Excavation and ELS Installation																			
<b>ELS Erection Works</b>																									
Z1-PST-3590	PST(S1) - Erection and Installation of S1 Strut & W1 Waling (+1.375 mPD, 1crane, 4welders, 2work fronts)	6	21-May-22	27-May-22	76	PST(S1) - Erection and Installation of S1 Strut & W1 Waling (+1.375 mPD, 1crane, 4welders, 2work fronts)																			
<b>Basement RC Works (Stage 1 - Southern Portion)</b>																									
<b>Excavation for Southern Trench (Lower Portion)</b>																									
Z1-PST-3610	PST(S1) - Install Reprops R2	2	02-Jun-22	04-Jun-22	-40	PST(S1) - Install Reprops R2																			
Z1-PST-3630	PST(S1) - Install Reprops R1	4	15-Jun-22	18-Jun-22	-40	PST(S1) - Install Reprops R1																			
Z1-PST-3640	PST(S1) - Wall Erection of Formworks and RC Works (Ground Level)	6	08-Jun-22	14-Jun-22	-40	PST(S1) - Wall Erection of Formworks and RC Works (Ground Level)																			
Z1-PST-3800	PST(S1) - Removal of S1	2	06-Jun-22	07-Jun-22	-40	PST(S1) - Removal of S1																			
Z1-PST-3860	PST(S1) - Base Slab & Wall Erection of Formworks and RC Works (+0.325 mPD)	10	10-May-22	20-May-22	-40	PST(S1) - Base Slab & Wall Erection of Formworks and RC Works (+0.325 mPD)																			
Z1-PST-3870	PST(S1) - Removal of S2	4	21-May-22	25-May-22	-40	PST(S1) - Removal of S2																			
Z1-PST-3880	PST(S1) - Wall Erection of Formworks and RC Works (+1.375 mPD & +3.875mPD)	6	26-May-22	01-Jun-22	-40	PST(S1) - Wall Erection of Formworks and RC Works (+1.375 mPD & +3.875mPD)																			
<b>Excavation for Northern Trench (Lower Portion)</b>																									
Z1-PST-3620	PST(S1) - Base Slab & Wall Erection of Formworks and RC Works (+0.325 mPD)	6	15-Jun-22	21-Jun-22	67	PST(S1) - Base Slab & Wall Erection of Formworks and RC Works (+0.325 mPD)																			
Z1-PST-4240	PST(S1) - Removal of S2	2	22-Jun-22	23-Jun-22	67	PST(S1) - Removal of S2																			
Z1-PST-4250	PST(S1) - Base Slab Erection of Formworks and RC Works (+3.00 mPD)	8	24-Jun-22	04-Jul-22	67	PST(S1) - Base Slab Erection of Formworks and RC Works (+3.00 mPD)																			
Z1-PST-4260	PST(S1) - Wall Erection of Formworks and RC Works (Ground Level)	6	05-Jul-22	11-Jul-22	67	PST(S1) - Wall Erection of Formworks and RC Works (Ground Level)																			
<b>Excavation Works (North Portion), (Excavation Volume: 3,840m3)</b>																									
Z1-PST-4180	PST(S1) - Excavation F.E.L. Level (+1.875 mPD) (3,840m3, 1000m3/day) after stage 2 piling	4	24-Jun-22	28-Jun-22	61	PST(S1) - Excavation F.E.L. Level (+1.875 mPD) (3,840m3, 1000m3/day) after stage 2 piling																			
<b>Basement RC Works (North Portion)</b>																									
Z1-PST-4190	PST(S1) - Base Slab & Wall Erection of Formworks and RC Works (+3.00 mPD) after stage 2 piling	10	29-Jun-22	11-Jul-22	61	PST(S1) - Base Slab & Wall Erection of Formworks and RC Works (+3.00 mPD) after stage 2 piling																			
Z1-PST-4200	PST(S1) - Wall Erection of Formworks and RC Works (Ground Level) after stage 2 piling	6	12-Jul-22	18-Jul-22	61	PST(S1) - Wall Erection of Formworks and RC Works (Ground Level) after stage 2 piling																			
<b>PST Stage 2 of Works</b>																									
<b>PST Foundation - Stage 2 (At Remaining 2 Tanks, PST 5-6 Footprint)</b>																									
EBS-2115	Egrets Breeding Season 2022	184	01-Mar-22 A	31-Aug-22*	0	Egrets Breeding Season 2022																			
Z1-PST-3890	PST Stage 2 - Driven H-pile (Stage 2: 2,332m, includ. 30% increment)(60m/day, 1 rig) (54nos.)	40	08-Apr-22 A	30-May-22	61	PST Stage 2 - Driven H-pile (Stage 2: 2,332m, includ. 30% increment)(60m/day, 1 rig) (54nos.)																			
Z1-PST-3980	PST Stage 2 - Pile Loading Test (Batch 2 Completion at PST: 75nos.)	20	31-May-22	23-Jun-22	61	PST Stage 2 - Pile Loading Test (Batch 2 Completion at PST: 75nos.)																			
Z1-PST-4230	PST Stage 2 - Submit to GEO (28d)	28	16-Jun-22	19-Jul-22	307	PST Stage 2 - Submit to GEO (28d)																			
<b>PST Superstructure</b>																									
<b>Stage 1</b>																									
<b>RC Works</b>																									
Z1-PST-3650	PST - Wall Erection of Formworks and RC Works (+5.85mPD)	6	19-Jul-22	25-Jul-22	61	PST - Wall Erection of Formworks and RC Works (+5.85mPD)																			
Z1-PST-3660	PST - Wall Erection of Formworks and RC Works (+7.5mPD)	6	26-Jul-22	01-Aug-22	61	PST - Wall Erection of Formworks and RC Works (+7.5mPD)																			
<b>CLP Substations No. 1 &amp; 2</b>																									
<b>Foundation</b>																									
CLP-1200	Raft Foundation	24	25-Mar-22 A	25-May-22	0	Raft Foundation																			
CLP-1260	Install sheet piles for raft foundation construction	17	05-Mar-22 A	24-Mar-22 A		sheet piles for raft foundation construction																			
<b>Civil Provision for CLP (drawpits &amp; ductings)</b>																									



- Remaining Level of Ef...
- Actual Work
- Remaining Work
- Critical Remaining Work
- ◆ Milestone

## Contract DC/2019/10 - YLEPP - Main Works for Stage 1

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Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	Total Float	April 18				May 19					June 20				July 21				August 22		
						03	10	17	24	01	08	15	22	29	05	12	19	26	03	10	17	24	31	07	
CLP-1270	Ducting and Drawpits construction	45	14-Jul-22	03-Sep-22	46																				
<b>CLP Substation No. 1</b>																									
CLP-1010	CLP Substation No.1 - Structure	76	26-May-22	24-Aug-22	0																				
<b>CLP Substation No. 2</b>																									
CLP-1020	CLP Substation No.2 - Structure	76	26-May-22	24-Aug-22	0																				
<b>DSD 11kV Switchgear</b>																									
CLP-1030	DSD11kV Switchgear - Structure	78	26-May-22	26-Aug-22	0																				
<b>Sludge Dewatering Building (SDB)</b>																									
<b>SDB Foundation &amp; ELS - Stage 1</b>																									
<b>SDB Foundation - PST 1-4 Footprint</b>																									
EBS-2105	Egrets Breeding Season 2022	184	01-Mar-22 A	31-Aug-22*	0																				
<b>Administration Building (ADB)</b>																									
<b>Temporary Admin Office and Control Room</b>																									
ADB-1040	Handover of Temp. Admin Office and Control Room	20	11-Jul-22	03-Aug-22	495																				
ADB-1250	Relocation of Existing SCADA System of Admin Bldg (23) and Document Centre (24)	21	11-Jul-22	04-Aug-22	495																				
<b>Temp Admin Office - MIC Section</b>																									
ADB-1020A100	Fabrication and Delivery of MIC Unit	36	02-May-22	11-Jun-22	523																				
ADB-1020A20	Construction/Installation	41	21-May-22	11-Jul-22	495																				
ADB-1020A30	E&M Installation and T&C	24	11-Jun-22	11-Jul-22	495																				
ADB-1020A40	Relocation of Admin Office (MiC)	18	11-Jul-22	01-Aug-22	497																				
<b>Zone 2 Construction</b>																									
<b>Temporary Works Design</b>																									
<b>MBS Building (AGS)</b>																									
TWD-1190	ELS for MBS(Mainstream Bio-Reactor System) Building(AGS) - ICE Period Submission	45	02-Dec-21 A	14-May-22	-1																				
TWD-1200	ELS for MBS(Mainstream Bio-Reactor System) Building(AGS) - ICE Review Period	31	15-May-22	14-Jun-22	-1																				
TWD-1210	ELS for MBS(Mainstream Bio-Reactor System) Building(AGS) - PM Review Period	46	15-May-22	29-Jun-22	-1																				
TWD-1220	ELS for MBS(Mainstream Bio-Reactor System) Building(AGS) - Consent Date	0		29-Jun-22	-1																				
<b>TTS Building</b>																									
TWD-1150	ELS for TTS(Tertiary Treatment System) Building - ICE Period Submission	31	16-Dec-21 A	03-May-22	4																				
TWD-1160	ELS for TTS(Tertiary Treatment System) Building - ICE Review Period	31	04-May-22	03-Jun-22	4																				
TWD-1170	ELS for TTS(Tertiary Treatment System) Building - PM Review Period	46	04-Jun-22	19-Jul-22	4																				
<b>Temporary Diversion</b>																									
<b>Zone 2B : FST, Temporary RAS to Aeration Tanks</b>																									
<b>Temporary RAS</b>																									
Z2B-1020	ELS & Excavation	26	21-Mar-22 A	11-May-22	0																				
Z2B-1030	Construction of Temp RAS	21	12-May-22	06-Jun-22	0																				
Z2B-1040	Temp RAS E&M installation	19	27-May-22	18-Jun-22	0																				
Z2B-1200	Laying of pipes from temp. RAS to Consolidation tanks & Aeration tanks	19	27-May-22	18-Jun-22	0																				
Z2B-1210	T&C	40	20-Jun-22	05-Aug-22	0																				
<b>Temporary Sewage Routing</b>																									
Z2D-2160	Complete Demolition of PST4	0		30-Jul-22	509																				
<b>Demolition Works</b>																									
EBS-2125	Egrets Breeding Season 2022	184	01-Mar-22 A	30-Sep-22*	-31																				
<b>Advance Works</b>																									
MBR-1480	MBR - Relocation of Noise barrier/ bird curtain	58	27-May-22	04-Aug-22	27																				
MBR-1490	MBR - Decommission of Auxiliary PS & Associated pipes and Modification of Washwater PS	20	03-May-22*	26-May-22	27																				
MBR-1520	MBR - Design submission of Relocation of Noise barrier/ bird curtain	20	03-May-22	26-May-22	27																				
MBR-1530	MBR - G.I. Works (3 nos., 1rig, nos. of G.I. subject to GEO Further Comment)	73	03-Jan-22 A	17-May-22	35																				
Z2D-4280	Submit/Approve Method Statement for Sheetpiling Works	15	11-Sep-21 A	03-May-22	53																				
Z2D-4290	Submit/Approve Design for Sheetpiles	55	01-Jun-21 A	06-May-22	43																				
Z2D-4310	Procurement and Delivery of Sheetpiles	21	04-Sep-21 A	03-May-22	53																				
<b>Other Existing Pumping Stations</b>																									
Z2T-154B	Demolition of Settled Sewage Overflow Chamber (31)	25	02-Jul-22*	30-Jul-22	31																				
<b>Auxiliary Pumping Stations</b>																									
Z2T-150B	Demolition of Auxiliary Pumping Station (19) above ground	4	20-Apr-22 A	23-Apr-22 A																					
Z2T-150B10	Sheet piling works for Demolition of Auxiliary Pumping Station (19) belowground	25	27-May-22	25-Jun-22	211																				
<b>Final Sedimentation Tanks</b>																									
Z2T-180	Demolition of Final Sedimentation Tank No.5-6 (6 and 37)	50	24-Jan-22 A	10-May-22	68																				
<b>Mainstream Bio-Reactor &amp; Auxiliary Facility (MBR and AF)</b>																									
<b>MBR Stage 1 and AF Structure</b>																									



- Remaining Level of Eff...
- Actual Work
- Remaining Work
- Critical Remaining Work
- ◆ Milestone

## Contract DC/2019/10 - YLEPP - Main Works for Stage 1

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Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	Total Float	April 18				May 19				June 20				July 21				August 22	
						03	10	17	24	01	08	15	22	29	05	12	19	26	03	10	17	24	31
<b>A-Tanks Demolition and ELS Works</b>																							
MBRAF-1010	MBR - Sheet Piles Install (approx. 391m, 9,390m2 @ 120m2/d) After Advance works (zone 2A)	58	30-Jun-22	06-Sep-22	-1																		
MBRAF-1500	MBR - Demolition of PST 4	31	24-Jun-22*	30-Jul-22	31																		
MBRAF-1540	MBR - advance coring for king post installation & wells installation	25	03-May-22*	01-Jun-22	75																		
MBRAF-1550	MBR - King post installation at AT footprint	30	02-Jun-22	08-Jul-22	75																		
<b>Tertiary Treatment System (TTS)</b>																							
<b>Foundation and ELS</b>																							
EBS-2135	Egrets Breeding Season 2022	184	01-Mar-22 A	29-Aug-22*	0																		
TTS-1000	TTS - Site Clearance	15	27-May-22	14-Jun-22	54																		
<b>Zone 3 Construction</b>																							
<b>Temporary Works Design</b>																							
<b>UC (Utilities Corridor)</b>																							
TWD-1250	ELS for Utilities Corridor (UC) - PM Review Period	49	04-Mar-22 A	04-Jun-22	161																		
TWD-1260	ELS for Utilities Corridor (UC) - Consent Date	0		04-Jun-22	161																		
<b>Sludge Thickening Building (STB)</b>																							
TWD-1290	ELS for Sludge Thickening Building (STB) - PM Review Period	49	04-Mar-22 A	04-Jun-22	67																		
TWD-1300	ELS for Sludge Thickening Building (STB) - Consent Date	0		04-Jun-22	67																		
<b>Sludge Digester (SD)</b>																							
TWD-1350	ELS for Sludge Digesters (SD) - ICE Period Submission	30	26-Apr-22 A	25-May-22	-73																		
TWD-1360	ELS for Sludge Digesters (SD) - ICE Review Period	28	26-May-22	22-Jun-22	-73																		
TWD-1370	ELS for Sludge Digesters (SD) - PM Review Period	49	23-Jun-22	10-Aug-22	-73																		
<b>Stage 1</b>																							
<b>Stage 1 - Advance Works</b>																							
<b>Zone 3A (at SHT)</b>																							
<b>240m3 Temporary Sludge Holding Tank(SHT) (Location B)</b>																							
<b>Sludge Forward Pump Station</b>																							
Z3A-000070	E&M Installation and T&C (ATAL)	24	10-Mar-22 A	17-May-22	-124																		
<b>Relocation of Heater Room (Location C)</b>																							
Z3A-000180	E&M Installation	24	31-Mar-22 A	14-May-22	-148																		
Z3A-000320	Temp. Water Heater House Structural Completion	0		31-Mar-22 A																			
Z3A-000550	Relocation and T&C (ATAL)	24	16-May-22	13-Jun-22	-148																		
<b>Digested Sludge Pumping Station (Location F)</b>																							
Z3B-320	E&M Works (ATAL)	10	17-Mar-22 A	07-May-22	636																		
Z3B-330	T&C Works (ATAL)	8	10-May-22	18-May-22	636																		
Z3B-340	Digested Sludge Pumping Station Structural Completion	0		16-Mar-22 A																			
<b>Micro Turbine Relocation</b>																							
Z3A-000540	E&M Installation and T&C(ATAL)	24	10-Mar-22 A	24-May-22	-131																		
<b>Pipe Laying</b>																							
Z3A-000210	Pipe Installation between SDT and Temp. SHT & SDB (Batch 1 & 4 - DN200 Sludge)	30	17-Dec-21 A	30-May-22	626																		
Z3A-000330	Pipe Installation between Compressor House and Gas Holders (Batch 3 - DN300 Gas, SS316L)	34	19-Jan-22 A	30-May-22	-35																		
Z3A-000340	Pipe Installation between Compressor House and Temp. Water Heater House (Batch 4 - DN200 Hotwater)	30	17-Dec-21 A	12-May-22	-161																		
<b>Pipe Connection</b>																							
Z3A-000370	240m3 Temp SHT Completion (Location B)	0		17-May-22	637																		
Z3A-000390	Digested Sludge Pumping Station Completion (Location F)	0		18-May-22	636																		
Z3A-000400	Temp. Water Heater House Completion (Location C)	0		13-Jun-22	-146																		
Z3A-000410	Completion of Zone 3A Dversion	0		13-Jul-22	595																		
<b>Sludge/Supernatant DI Pipe</b>																							
Z3A-000360	Connection between SDT and Temp. SHT & SDB	5	31-May-22	06-Jun-22	626																		
<b>Gas Pipe - SS316L</b>																							
<b>DN300 from Gas Holders to Compressor House</b>																							
Z3A-000380	Connection at Gas Holders	10	03-May-22	14-May-22	644																		
Z3A-000420	Connection at Compressor House	5	31-May-22	06-Jun-22	626																		
<b>DN300 from SDT, Compressor House to Gas Holders</b>																							
Z3A-000450	Connection at Gas Holders	10	31-May-22	11-Jun-22	621																		
Z3A-000460	Gas Purging of SDT No.2 (YLEPP)	21	31-May-22	20-Jun-22	739																		
Z3A-000470	Connection at SDT No.2,3 & 4	1	21-Jun-22	21-Jun-22	594																		
Z3A-000480	Gas Purging of SDT No.1 (YLEPP)	21	22-Jun-22	12-Jul-22	741																		
Z3A-000490	Connection at SDT No.1	1	13-Jul-22	13-Jul-22	595																		
<b>DN200 from Gas Holder to Temp. Water Heater House</b>																							
Z3A-000440	Connection at Gas Holders	10	03-May-22	14-May-22	-148																		
<b>Hotwater DI Pipe</b>																							



- █ Remaining Level of Ef...
- █ Actual Work
- █ Remaining Work
- █ Critical Remaining Work
- ◆ Milestone

## Contract DC/2019/10 - YLEPP - Main Works for Stage 1

### Monthly Progress Report No. 18 - 3MRP (April 2022)

Project ID : DWP.DPr13\_220514  
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Monthly Progress Report No. 18 - 3MRP			
Date	Revision	Checked	Approved
30-Apr-22	Rev. 0		

Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	Total Float	April 18				May 19				June 20				July 21				August 22	
						03	10	17	24	01	08	15	22	29	05	12	19	26	03	10	17	24	31
Z3A-000500	Connection between Compressor House and Temp. Water Heater House	2	13-May-22	14-May-22	-161																		
<b>Zone 3B (at STB)</b>																							
<b>Gravity Thickening Tank (Location A)</b>																							
Z3B-000090	E&M Works (North Tank) (ATAL)	12	16-Mar-22 A	14-May-22	-146																		
Z3B-000100	E&M Works (South Tank) (ATAL)	12	16-Mar-22 A	14-May-22	-124																		
Z3B-000110	T&C Works (North & South Tank) (ATAL)	22	16-May-22	10-Jun-22	-146																		
Z3B-000260	Temp. Gravity Thickening Tank (Location A) Completion	0		10-Jun-22	-146																		
<b>Temporary Primary Sludge Pumping Station (Location D)</b>																							
Z3A-250	Method Statement Approval	0		11-Mar-22 A																			
Z3A-290	Civil and Structural Works Construction	27	25-Mar-22 A	26-May-22	-168																		
Z3A-300	E&M Installation (ATAL)	18	27-May-22	17-Jun-22	-168																		
Z3A-310	T&C Works (ATAL)	16	18-Jun-22	07-Jul-22	-168																		
Z3A-430	Temp. Primary Sludge Pumping Station (Location D) Completion	0		07-Jul-22	-168																		
<b>Temporary Thickened Sludge / Supernatant Pumping Station (Location E)</b>																							
Z3B-000150	E&M Works (ATAL) & T&C (ATAL)	50	07-Jun-22	04-Aug-22	-192																		
Z3B-000160	ELS Works	9	04-Apr-22 A	10-May-22	-192																		
Z3B-000450	Civil and Structural Works Construction	22	11-May-22	06-Jun-22	-192																		
<b>Relocation of Ferric Chloride (FeCl3) Dosing System &amp; LV Switchboard (Location E)</b>																							
Z3B-000170	Design Consent	0		11-Apr-22 A																			
Z3B-000180	Method Statement Approval	0		11-Apr-22 A																			
Z3B-000190	Civil and Structural Works Construction	35	12-Apr-22 A	31-May-22	-178																		
Z3B-000200	E&M Works (ATAL) & T&C Works (ATAL)	40	01-Jun-22	19-Jul-22	-178																		
Z3B-000280	FeCl3 Relocation (Location E) Completion	0		19-Jul-22	-178																		
<b>Pipe Laying</b>																							
Z3B-000240	Pipe Installation from CT to MH2 (Batch 1 - DN250 Supernatant)	20	18-Dec-21 A	26-May-22	-133																		
Z3B-000350	Pipe Installation from Location A to Location E (Batch 6 - DN250 Supernatant)	36	31-Dec-21 A	15-Jun-22	-150																		
Z3B-000360	Pipe Installation from Location A to Location E & SDT (Batch 7 - DN200 Sludge)	36	17-Jan-22 A	15-Jun-22	-150																		
Z3B-000370	Pipe Installation from Temp. Primary Sludge Pumping Station (Location D) to CT (Batch 7 - DN200 Sludge)	20	17-Jan-22 A	26-May-22	-134																		
<b>Pipe Connection</b>																							
Z3B-000390	Temp. Gravity Thickening Tank (Location A) Completion	0		10-Jun-22	-146																		
Z3B-000400	Temp. Primary Sludge Pumping Station (Location D) Completion	0		07-Jul-22	-168																		
Z3B-000410	Connection at Temp. Primary Sludge Pumping Station (Location D)	1	08-Jul-22	08-Jul-22	-168																		
Z3B-000420	FeCl3 System (Location E) Relocation Completion	0		19-Jul-22	-178																		
<b>Advance Works</b>																							
Z3S1A-3010	Completion of Stage 1 (Construction & E&M for Temporary facilities)	0		13-Jun-22	-146																		
<b>Stage 1 Demolition Works</b>																							
<b>SHT 3&amp;4 Demolition Works below ground</b>																							
Z3A-000020	Sheet Piling Works at Sludge Holding Tank No. 1,2	40	14-Jul-22	29-Aug-22	595																		
Z3A-000025	Sheet Piling Works at Sludge Holding Tank No. 4	27	30-May-22*	30-Jun-22	-62																		
Z3A-000030	Demolition Works for Sludge Holding Tank No. 4 (below ground)	25	14-Jul-22	11-Aug-22	595																		
Z3A-000130	Demolition Works for Sludge Holding Tank No. 3 (below ground)	20	10-Mar-22 A	16-May-22	-155																		
Z3A-000140	Backfill to Ground Level	7	17-May-22	24-May-22	-155																		
<b>UC Decommission Works</b>																							
Z3A-000110	Decommission Works for Existing Utilities Gallery	12	14-Jul-22	27-Jul-22	595																		
<b>Stage 2</b>																							
<b>Stage 2 : New Sludge Thickening Building (STB)</b>																							
<b>Stage 2 - Demolition Works</b>																							
ATALZ3S1-1050	Switching Duty from SDT No.1 & 2 to SDT No.1 & 3 (9) for STB Demolition and Utility Corridor Construction	23	31-May-22	27-Jun-22	-35																		
ATALZ3S1-2210	Switching Duty from SDT No.1 & 3 to SDT No. 3 & 4 (9) for STB Construction	23	02-Jul-22	28-Jul-22	-62																		
Z3S2-2050	Submission of Demolition Plan for STB, Review by PM(28d), Resubmission(14d), Obtain Approval(7d)	49	15-Mar-22 A	02-Jun-22	-8																		
Z3S2-2310	Submission of Method Statement for demolition of STB, Review by PM(28d), Resubmission(14d), Obtain Approval(7d)	26	03-May-22	02-Jun-22	-8																		
<b>Stage 2 : STB Pre-drilling Works</b>																							
Z3S3-2020	Predrilling Works (4 nos. STB-PD5,8,11)	31	11-Mar-22 A	22-Apr-22 A																			
Z3S3-2030	Predrilling Works (5 nos. STB-PD3,6,10)	40	24-Feb-22 A	30-May-22	-35																		
Z3S3-3050	Predrilling Works (2 nos. STB-PD1)	10	03-May-22	14-May-22	-22																		
Z3S3-3400	Environment GI (4 nos., 7d/no., 2 rigs)	37	12-Apr-22 A	30-May-22	-31																		
<b>Stage 2 : Existing Sludge Holding Tanks</b>																							
Z3S1a.7-60	Completion Connection to Temporary SHT & Dewatering House	0		13-Jun-22	-146																		
Z3S2-2015	Demolition of SHT 1 (10)	26	18-May-22*	17-Jun-22	-150																		
Z3S2.5-10	Demolition of Existing Water Heater House	25	31-May-22	29-Jun-22	-161																		
<b>Stage 2 : Biogas Holder No. 1</b>																							
Z3BH-0995	Biogas Holder No. 1 - GI Works	21	06-May-22	31-May-22	-161																		



- █ Remaining Level of Effort
- █ Actual Work
- █ Remaining Work
- █ Critical Remaining Work
- ◆ Milestone

## Contract DC/2019/10 - YLEPP - Main Works for Stage 1

### Monthly Progress Report No. 18 - 3MRP (April 2022)

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Monthly Progress Report No. 18 - 3MRP			
Date	Revision	Checked	Approved
30-Apr-22	Rev. 0		

Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	Total Float	April 18				May 19				June 20				July 21				August 22			
						03	10	17	24	01	08	15	22	29	05	12	19	26	03	10	17	24	31	07	
Z3BH-1000	Biogas Holder No. 1 - Band drain Installation for Ground Improvement	25	01-Jun-22	30-Jun-22	-161	Biogas Holder No. 1 - Band drain Installation for																			
<b>Stage 2 : Utility Corridor Construction</b>																									
Z3S2-2350	Switching Duty from SDT No.2 to No. 3 (9)	0		27-Jun-22	104	◆ Switching Duty from SDT No.2 to No. 3 (9)																			
<b>Stage 2 : Utility Corridor No. 3</b>																									
<b>S2 : UC/PP3 Foundation and ELS Works</b>																									
Z3S2-2060	UC/PP 3 - Sheetpile Installation (2,674m2 @90m2/d)	30	25-Jul-22	27-Aug-22	92																				
Z3S2-2340	UC/PP 3 - Site Setup & Mobilization	10	28-Jun-22	09-Jul-22	104	UC/PP 3 - Site Setup & Mobilization																			
<b>Stage 3</b>																									
<b>Stage 3 : New Sludge Thickening Building (STB) (Continued)</b>																									
<b>Stage 3 : STB Foundation and ELS</b>																									
Z3S1a.7-70	Complete Predrilling Works for STB	0		30-May-22	-35	◆ Complete Predrilling Works for STB																			
Z3S3-2090	STB - Driven H-pile (101 nos, @1.5no/d/rig, 2rigs)	94	04-Jul-22	24-Oct-22	-62																				
Z3S3-3010	STB - Site Setup & Mobilization	9	22-Jun-22	02-Jul-22	-62	STB - Site Setup & Mobilization																			
<b>Stage 3 : New Sludge Digester No. 1 and 2 (Continued)</b>																									
<b>Stage 3 : SD 1,2 Pre-drilling Works</b>																									
Z3S3-2010	Sludge Digester No. 1-2 - Pre-drill (2 nos. SD-BH9 ,BH10)	16	28-Mar-22 A	21-May-22	-52	Sludge Digester No. 1-2 - Pre-drill (2 nos. SD-BH9 ,BH10)																			



- █ Remaining Level of Ef...
- █ Actual Work
- █ Remaining Work
- █ Critical Remaining Work
- ◆ Milestone

## Contract DC/2019/10 - YLEPP - Main Works for Stage 1

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Monthly Progress Report No. 18 - 3MRP			
Date	Revision	Checked	Approved
30-Apr-22	Rev. 0		

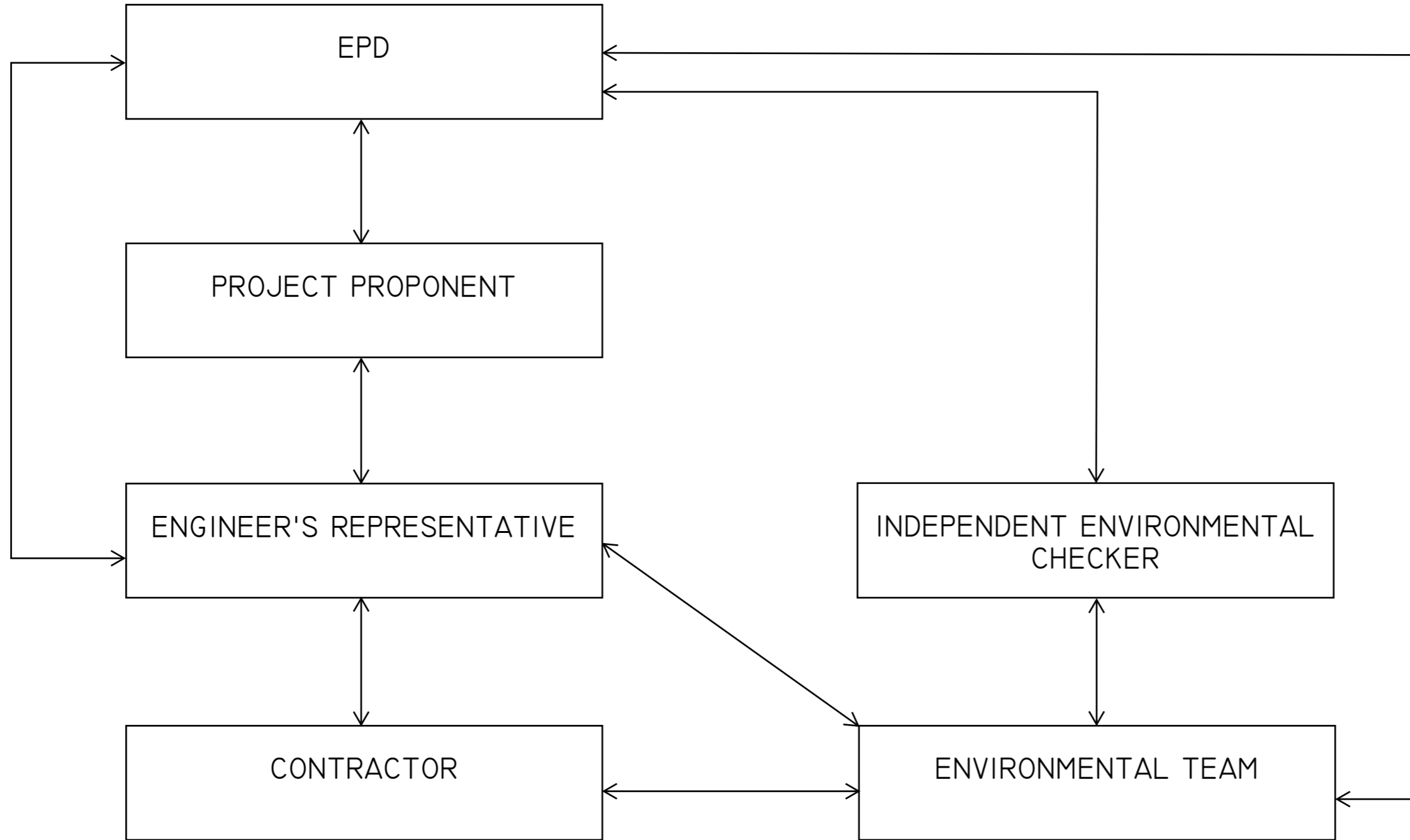
# Appendix B

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## Project Organization Chart

LEGEND:

↔ LINE OF COMMUNICATION



PROJECT  
項目

YUEN LONG EFFLUENT  
POLISHING PLANT -  
INVESTIGATION, DESIGN  
AND CONSTRUCTION

CLIENT  
業主



CONSULTANT  
工程顧問公司

AECOM Asia Company Ltd.  
www.aecom.com

SUB-CONSULTANTS  
分判工程顧問公司

ISSUE/REVISION  
發行

I/R 發行	DATE 日期	DESCRIPTION 內容摘要	CHK. 審核

STATUS  
階段

SCALE  
比例

A3 1 : 40000

DIMENSION UNIT  
尺寸單位

METRES

KEY PLAN  
索引圖

PROJECT NO.  
項目編號

60505476

CONTRACT NO.  
合約編號

CE 3/2015 (DS)

SHEET TITLE  
圖紙名稱

PROJECT ORGANISATION

SHEET NUMBER  
圖紙編號

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# Appendix C

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## Action and Limit Levels

## Action and Limit Levels for Air Quality

Parameters	Action Level	Limit Level
1-hour TSP Level in $\mu\text{g}/\text{m}^3$	<sup>1</sup> For baseline level $\leq 384 \mu\text{g}/\text{m}^3$ , Action level = $(\text{baseline level} * 1.3 + \text{Limit level})/2$ ; For baseline level $> 384 \mu\text{g}/\text{m}^3$ , Action level = Limit level	500 $\mu\text{g}/\text{m}^3$

### Notes:

1. The Action Level for 1-hour TSP Level:

a) AMS 2 =  $(63 * 1.3 + 500) / 2 = 291 \mu\text{g}/\text{m}^3$ ;

b) AMS 3C =  $(70 * 1.3 + 500) / 2 = 296 \mu\text{g}/\text{m}^3$ .

## Action and Limit Levels for Construction Noise

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

### Notes:

- If works are to be carried out during restricted hours, the conditions stipulated in the construction noise permit issued by the Noise Control Authority have to be followed.
- Correction of +3 dB(A) shall be made to the free field measurements.

## Action and Limit Levels for Water Quality

Parameters	Action Levels	Limit Levels
<i>Construction Phase Water Quality Monitoring</i>		
DO in mg/L (Surface, Middle & Bottom) <sup>2</sup>	<p><u>Surface &amp; Middle</u> 5%-ile of baseline data for surface and middle layer.</p> <p><u>Bottom</u> 5%-ile of baseline data for bottom layer.</p>	<p><u>Surface &amp; Middle</u> 4 mg/L or 1%-ile of baseline data for surface and middle layer.</p> <p><u>Bottom</u> 2 mg/L or 1%-ile of baseline data for bottom layer.</p>
SS in mg/L (depth-averaged <sup>1</sup> ) <sup>3</sup>	95%-ile of baseline data or 120% of upstream control station's SS recorded on the same day	99%-ile of baseline data or 130% of upstream control station's SS recorded on the same day
Turbidity in NTU (depth-averaged <sup>1</sup> ) <sup>3</sup>	95%-ile of baseline data or 120% of upstream control station's turbidity recorded on the same day	99%-ile of baseline data or 130% of upstream control station's turbidity recorded on the same day

### Notes:

- "Depth-averaged" is calculated by taking the arithmetic means of reading of all three depths;
- For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits;
- For SS and turbidity, non-compliance of the water quality limits occurs when monitoring result is higher than the limits.

## Action and Limit Levels for Ecology

### Active Ardeid Night Roost Survey

As there are no specific guidelines on noise thresholds for roosting ardeids, the Action and Limit levels specified in below table were based on study conducted on exploring behavioural responses of shorebirds to impulsive noise (Wright et al. 2010).

Time Period	Action Level	Limit Level
after 17:30 during dry season after 18:00 during wet season	65.5 dB(A) <sup>1</sup>	72.2 dB(A) <sup>2</sup>

Notes:

1. Behavioural response of some kind more likely to occur
2. Flight with abandonment of the site becomes the most likely outcome of the disturbance

### Ecological Monitoring of Birds

Method	Parameters	Action Level <sup>3</sup>	Limit Level <sup>3</sup>
Transect	Abundance of all avifauna species (including but not only limited to overwintering waterbirds) in the community	Significant decline <sup>1,2</sup> in any of these parameters during the current monitoring month relative to the corresponding month during the baseline survey.	Significant decline in any of these parameters for three consecutive months.
	Species diversity of all avifauna species (including but not only limited to overwintering waterbirds) in the community		
	Abundance of species with conservation importance only		
	Species diversity of species with conservation importance only		
Point Count	Abundance of all avifauna species (including but not only limited to overwintering waterbirds) in the community		
	Species diversity of all avifauna species (including but not only limited to overwintering waterbirds) in the community		
	Abundance of species with conservation importance only		
	Species diversity of species with conservation importance only		

Notes:

1. Significant decline in abundance will be determined using two-tailed t-test,  $\alpha = 0.05$ .
2. Significant decline in species diversity will be determined using the Hutcheson t-test, two tailed.
3. Response will be triggered if any of the above level is reached for each parameter.

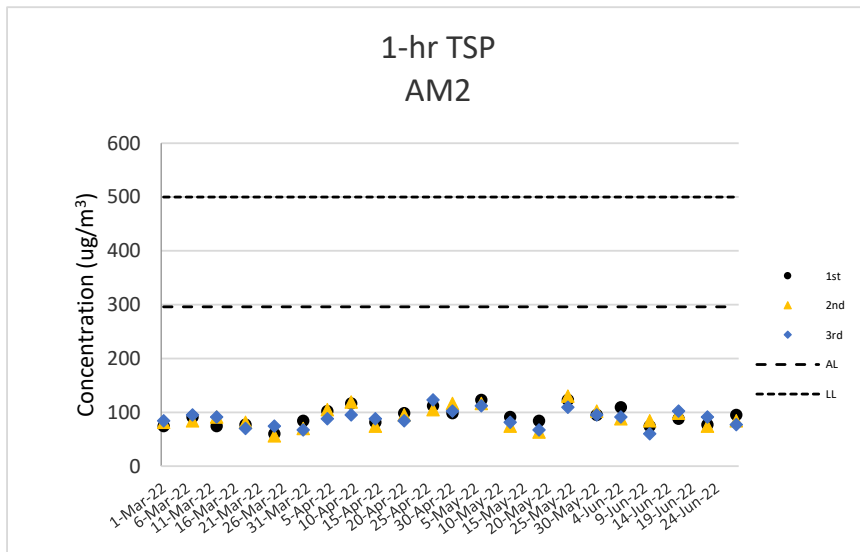
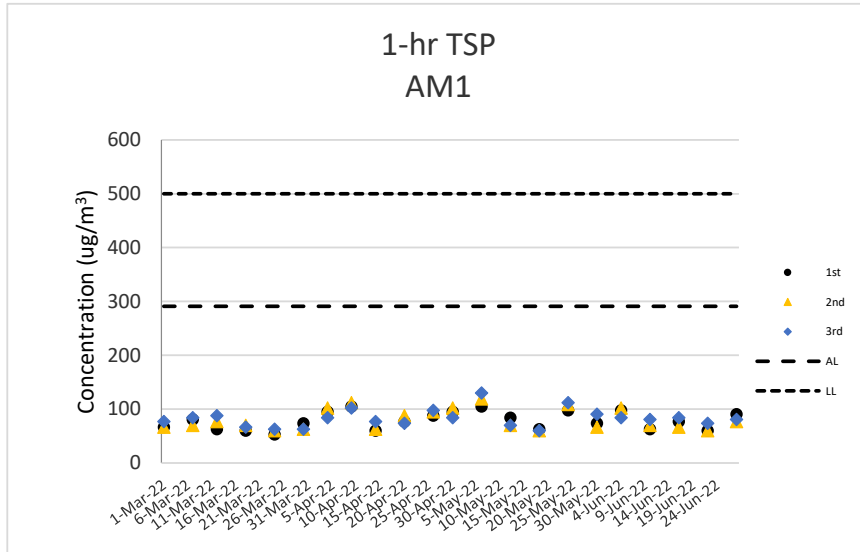
# Appendix D

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Graphical Presentation of Monitoring Data

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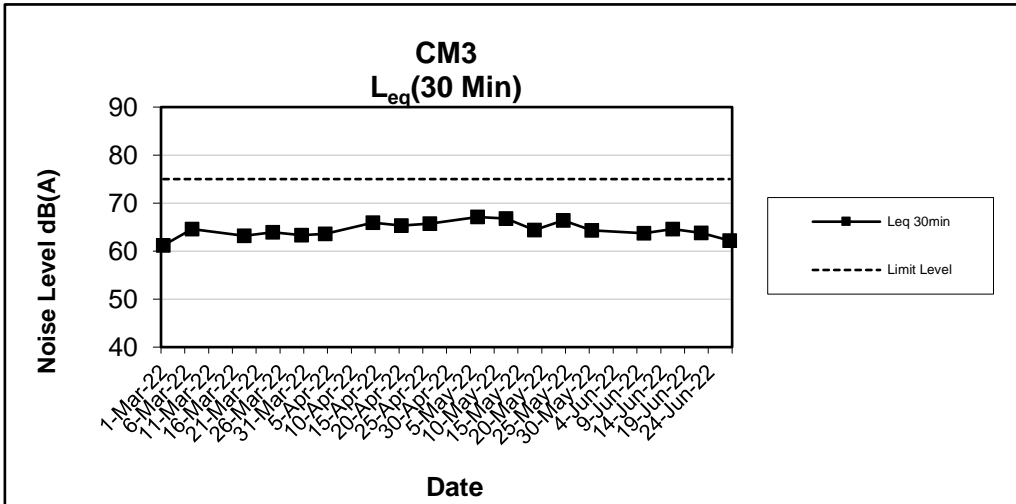
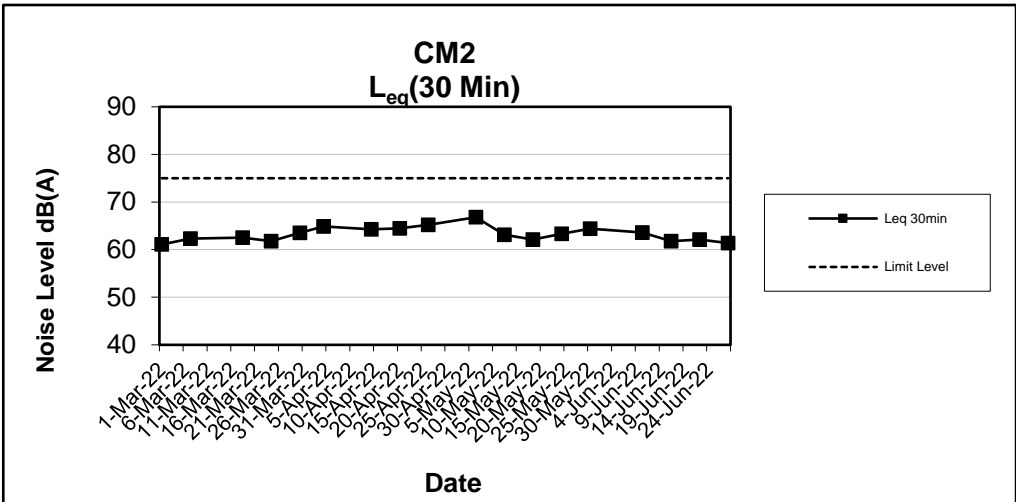
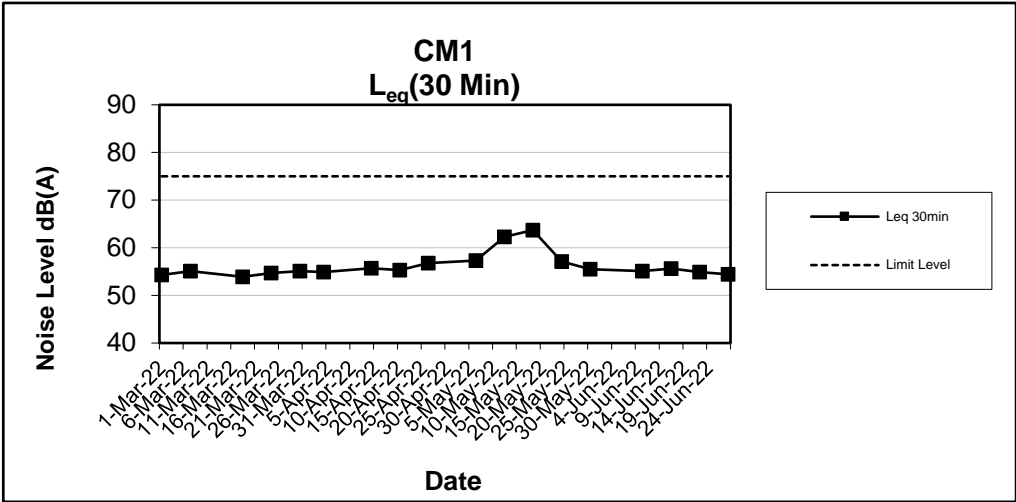
## Air Quality Monitoring Results



**Air Quality Monitoring Results**

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## Noise Monitoring Results



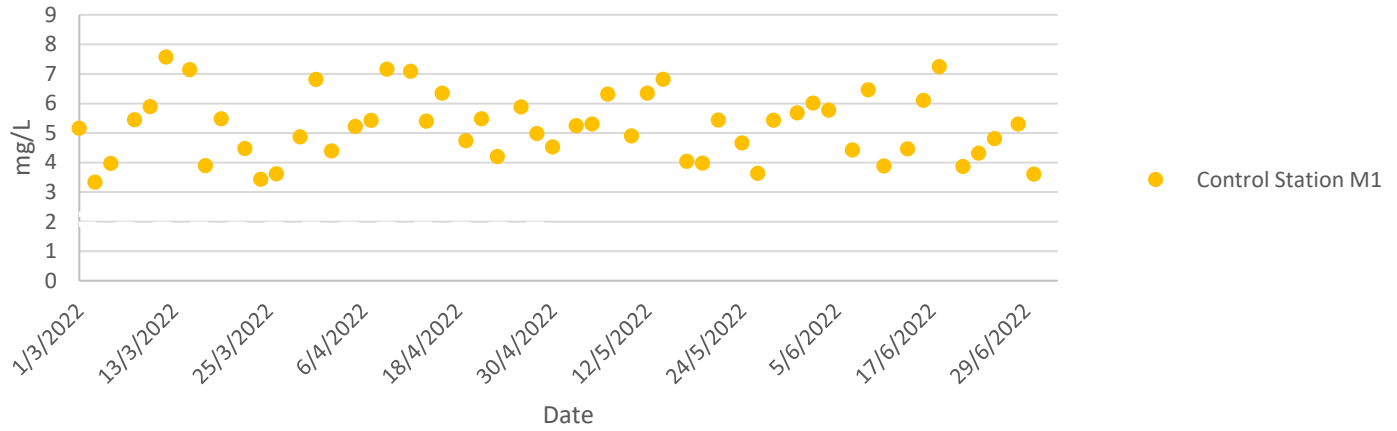
**Noise Monitoring Results**



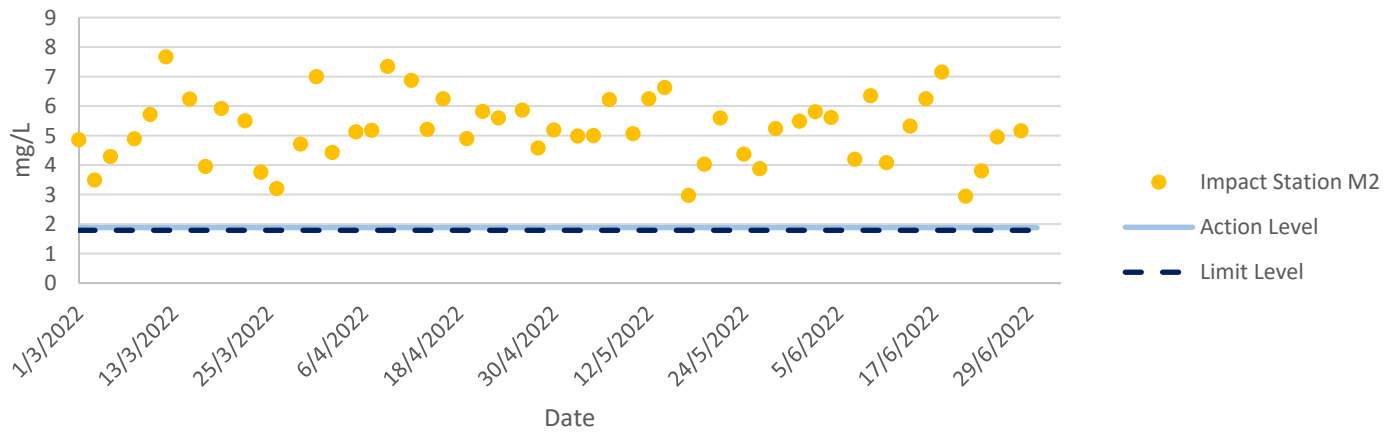
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## Water Quality Monitoring Results

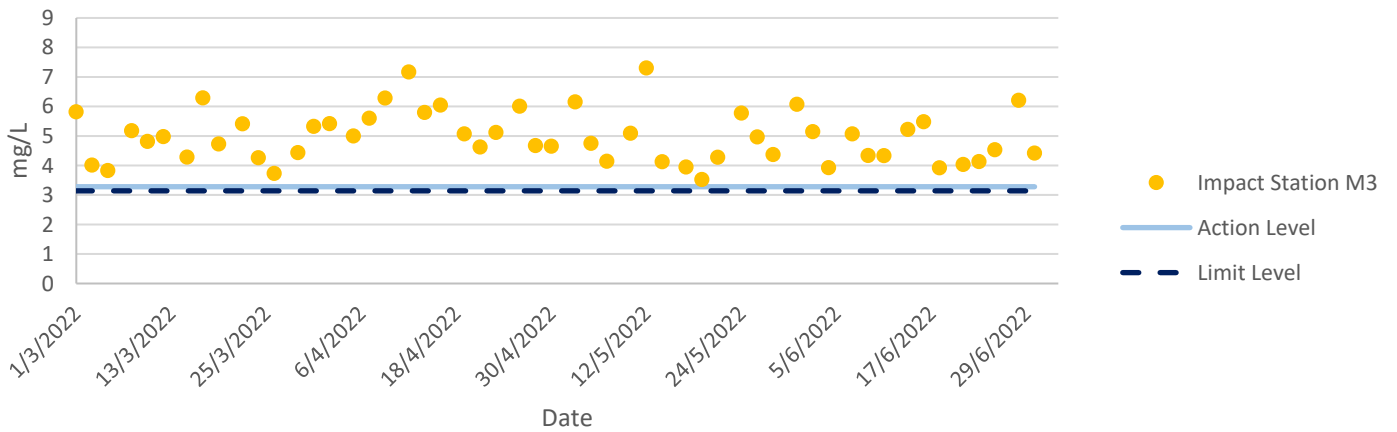
### Dissolved Oxygen at Mid-Flood Tide



### Dissolved Oxygen at Mid-Flood Tide

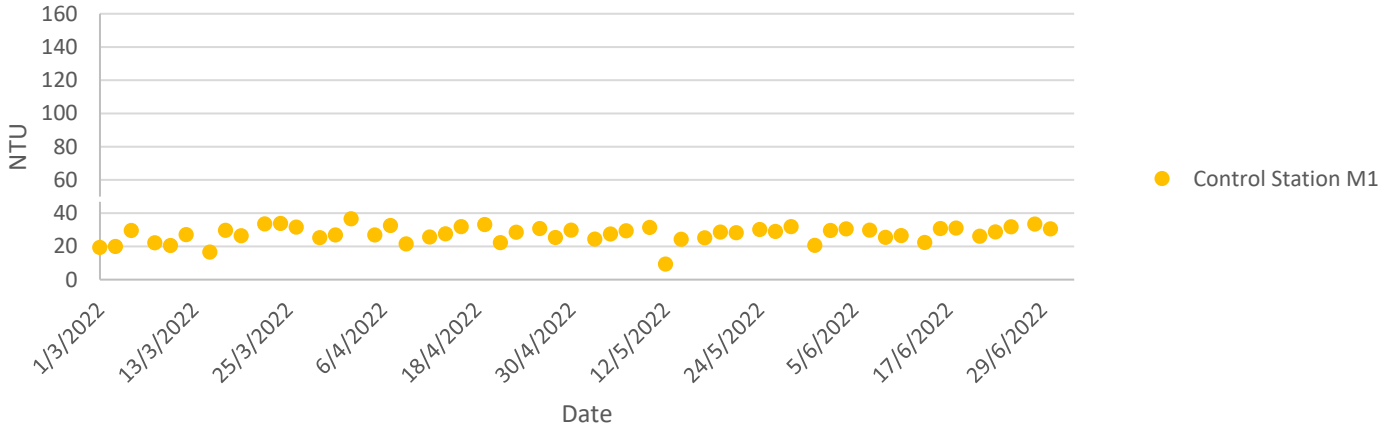


### Dissolved Oxygen at Mid-Flood Tide

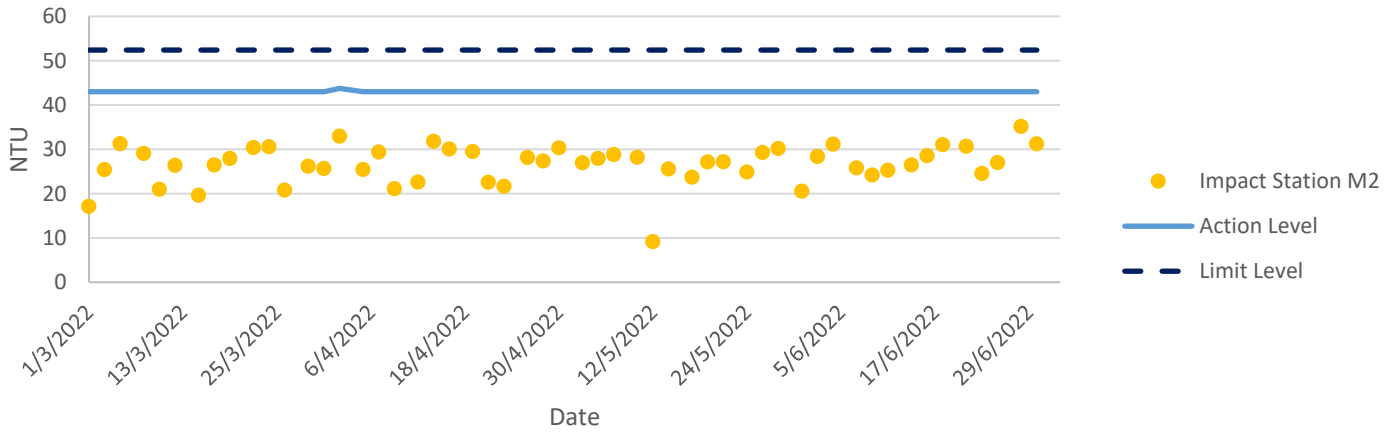


## Water Quality Monitoring Results

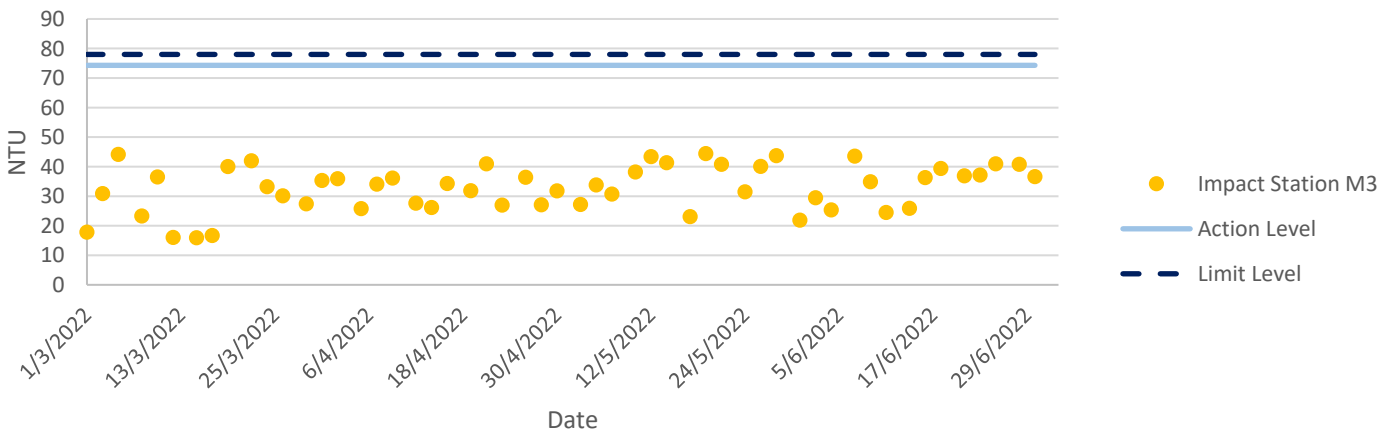
### Turbidity at Mid-Flood Tide



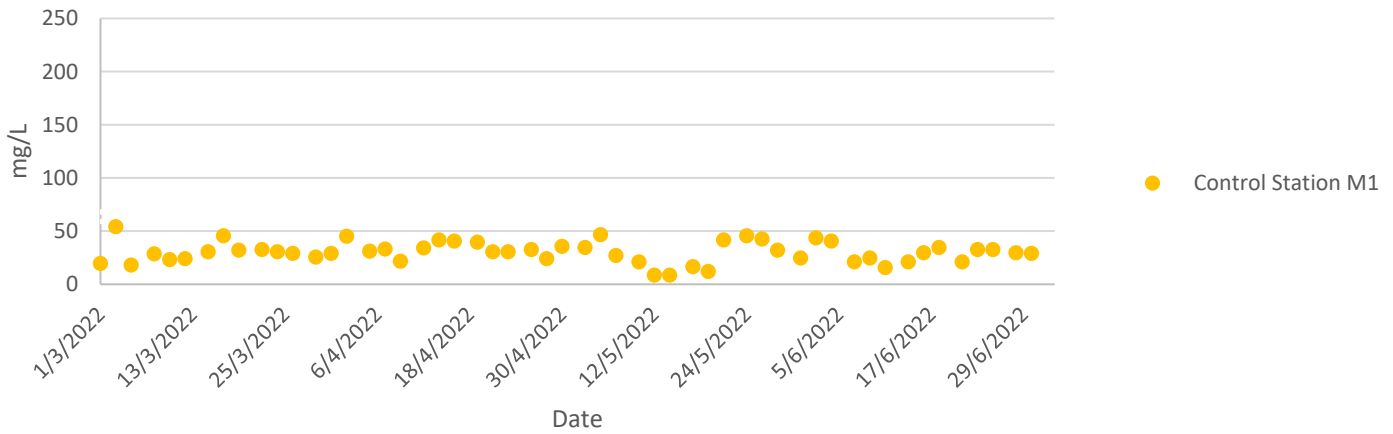
### Turbidity at Mid-Flood Tide



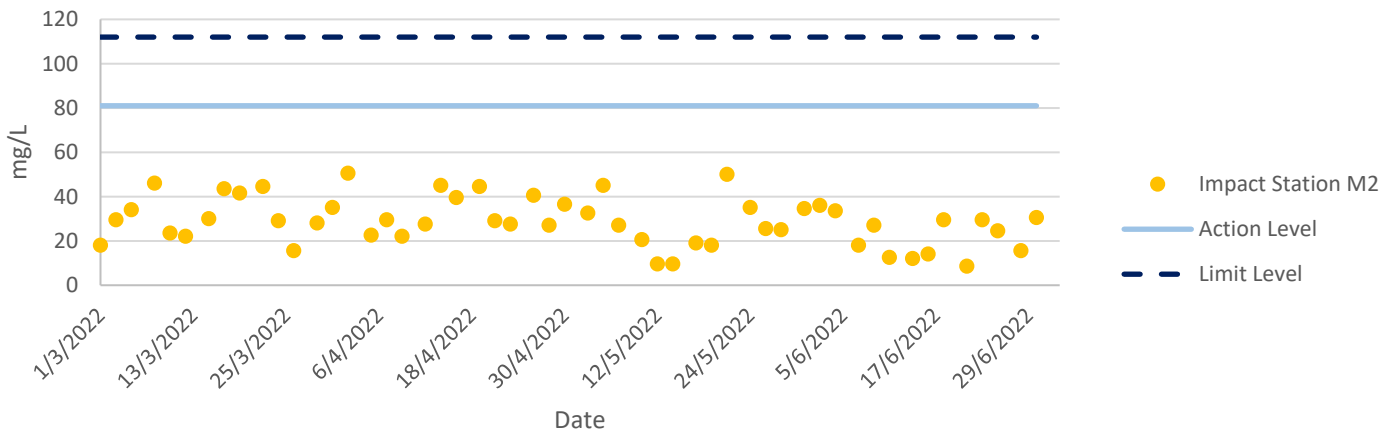
### Turbidity at Mid-Flood Tide



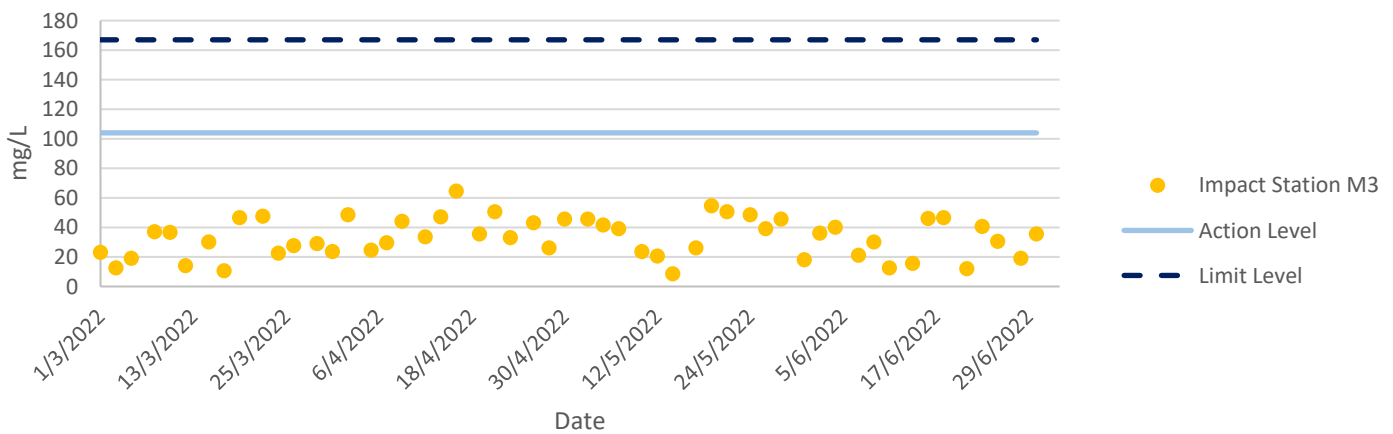
### Total Suspended Solids at Mid-Flood Tide



### Total Suspended Solids at Mid-Flood Tide

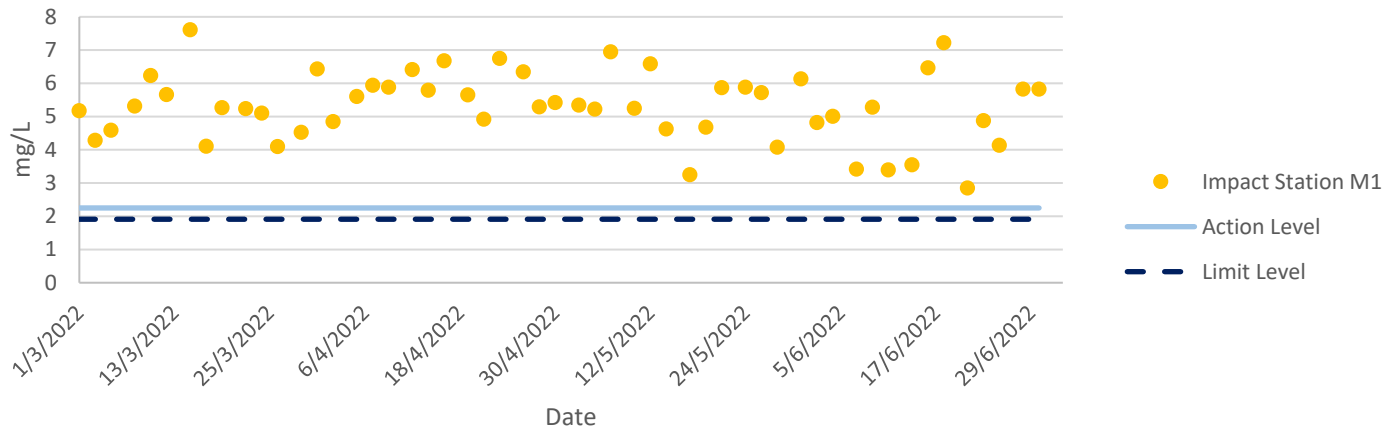


### Total Suspended Solids at Mid-Flood Tide

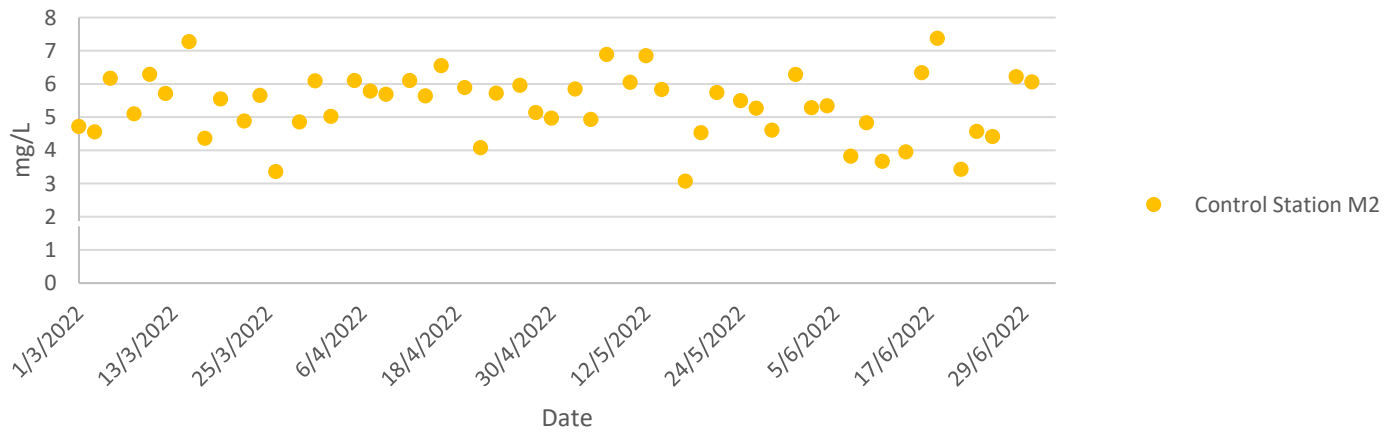


## Water Quality Monitoring Results

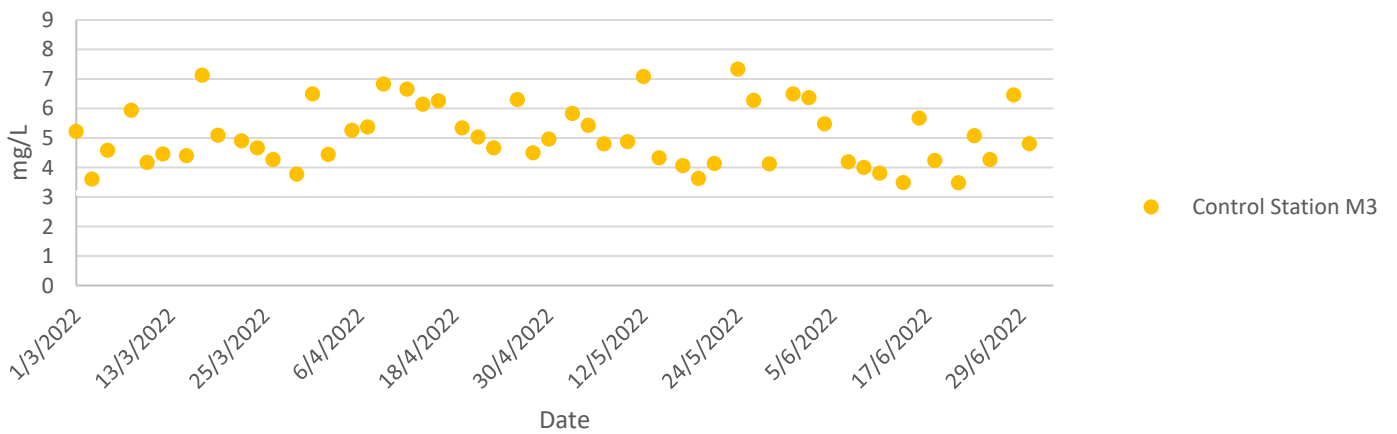
### Dissolved Oxygen at Mid-Ebb Tide



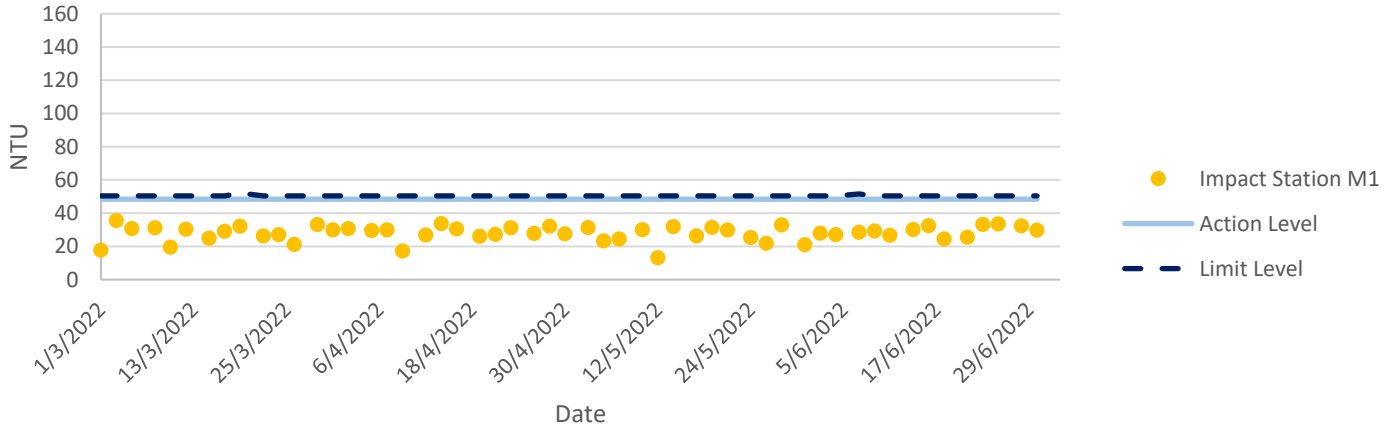
### Dissolved Oxygen at Mid-Ebb Tide



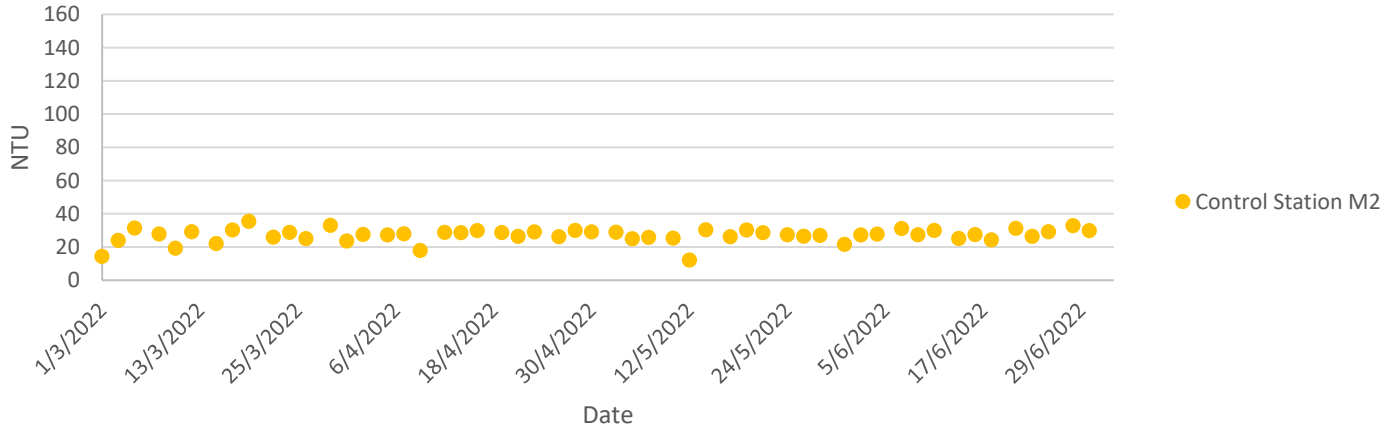
### Dissolved Oxygen at Mid-Ebb Tide



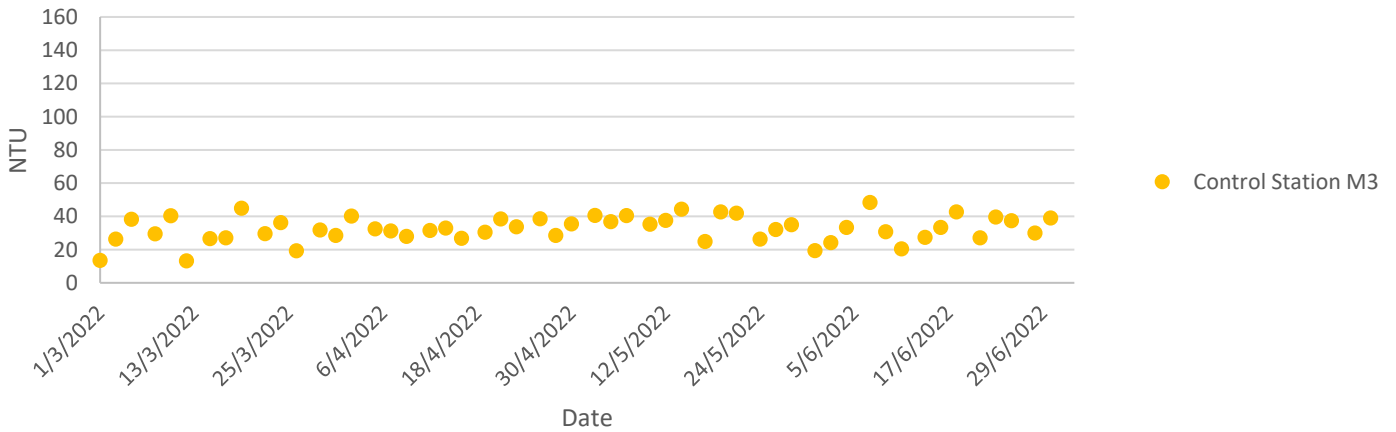
### Turbidity at Mid-Ebb Tide



### Turbidity at Mid-Ebb Tide

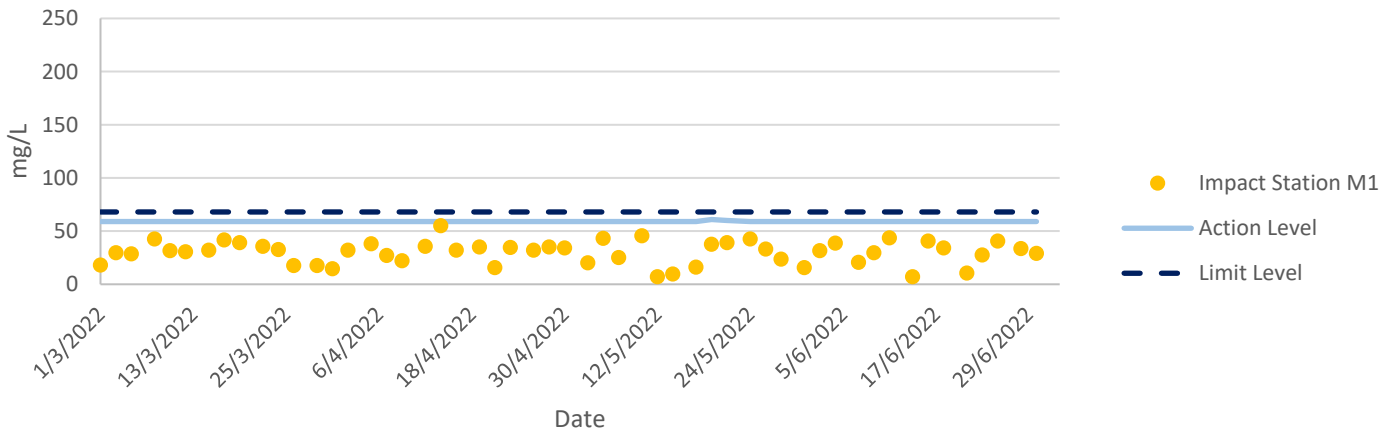


### Turbidity at Mid-Ebb Tide

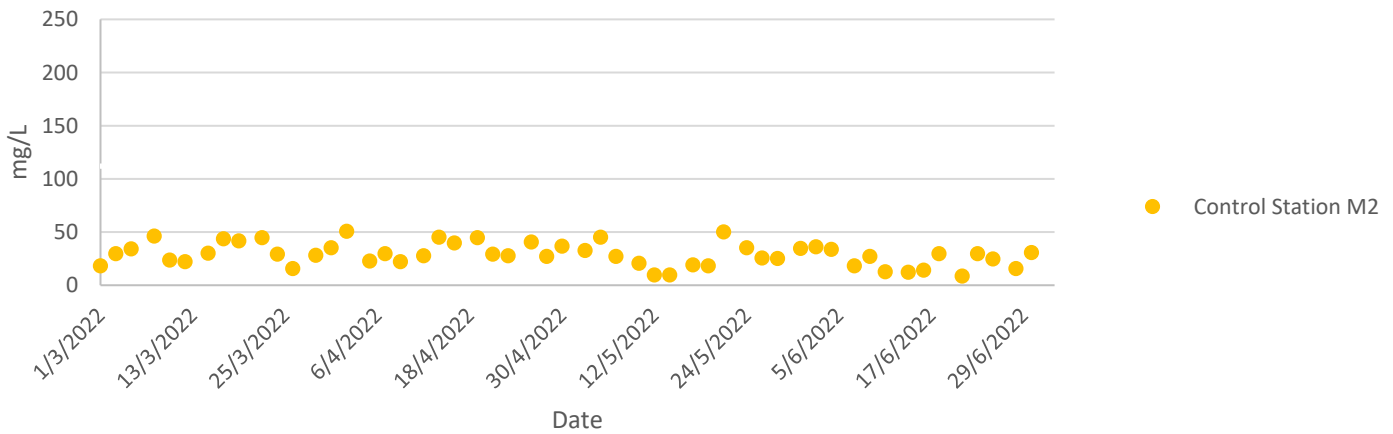


## Water Quality Monitoring Results

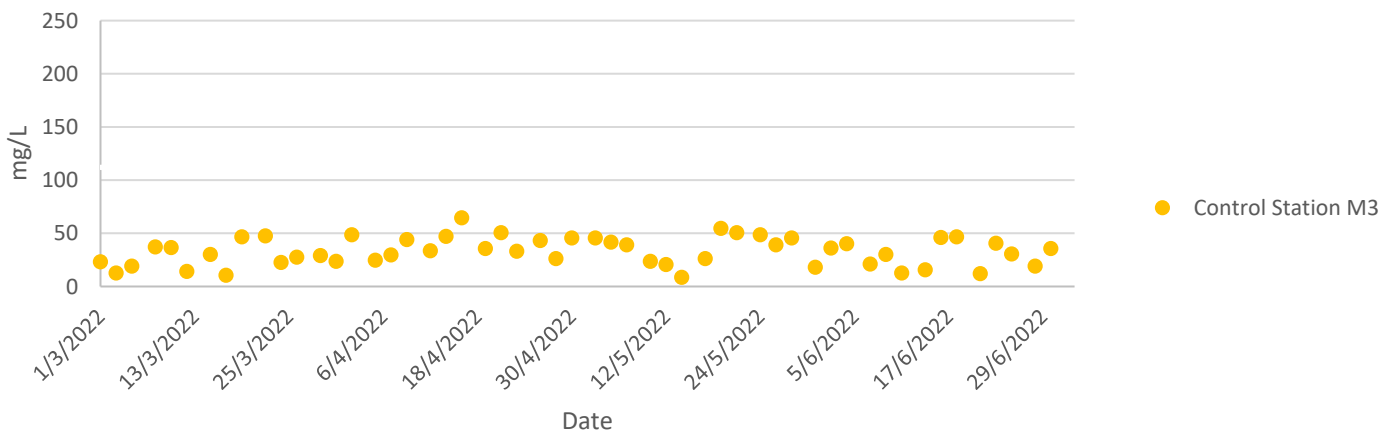
### Total Suspended Solids at Mid-Ebb Tide



### Total Suspended Solids at Mid-Ebb Tide



### Total Suspended Solids at Mid-Ebb Tide



## Water Quality Monitoring Results

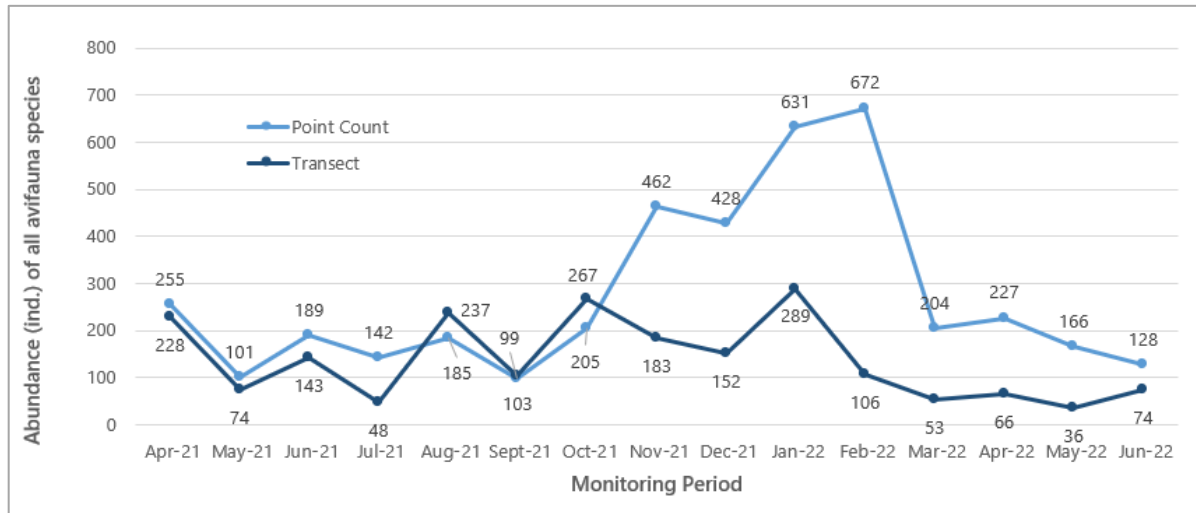
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## Ecology Monitoring Results

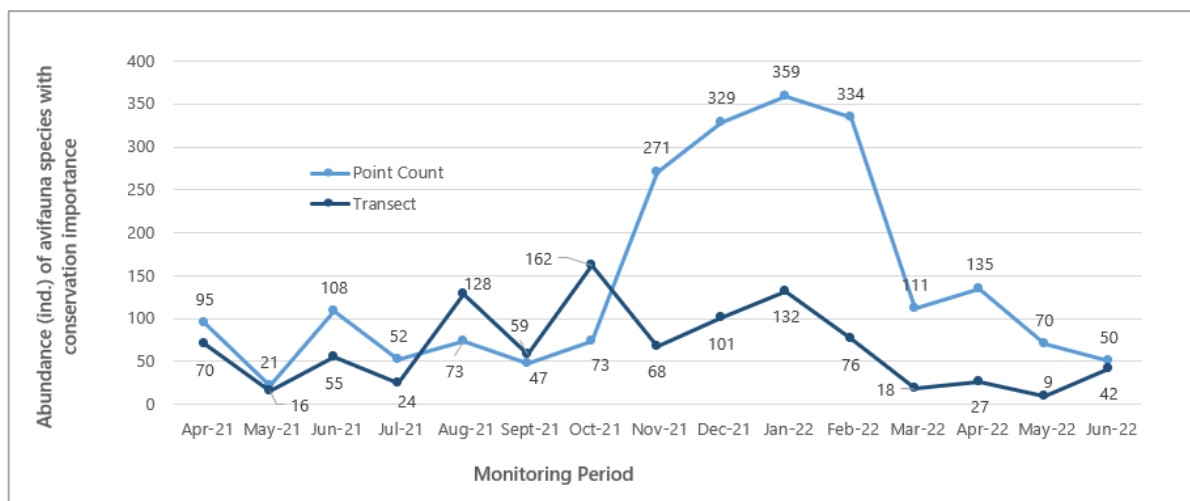


## Ecology Monitoring Results

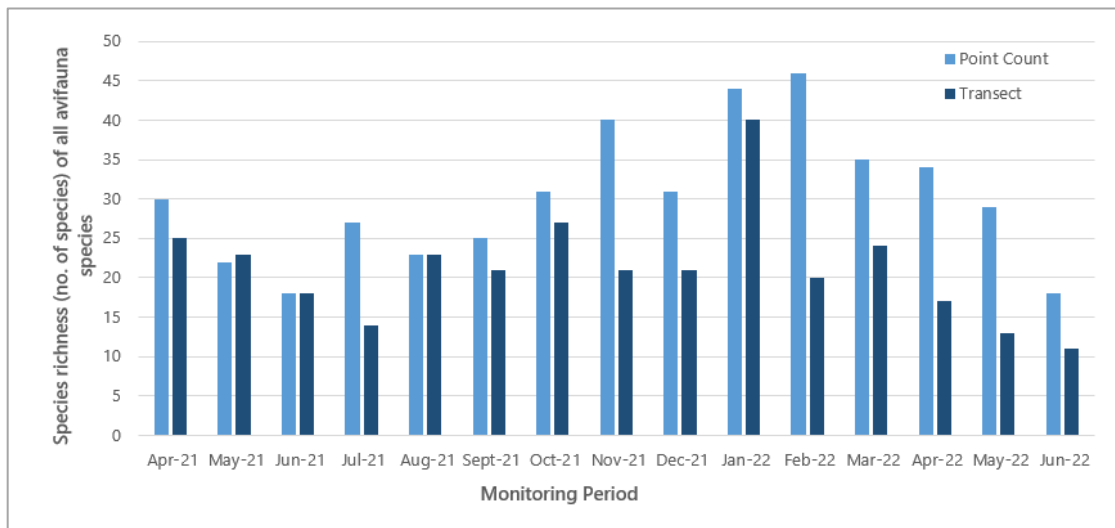
### Abundance of all avifauna species throughout the monitoring period



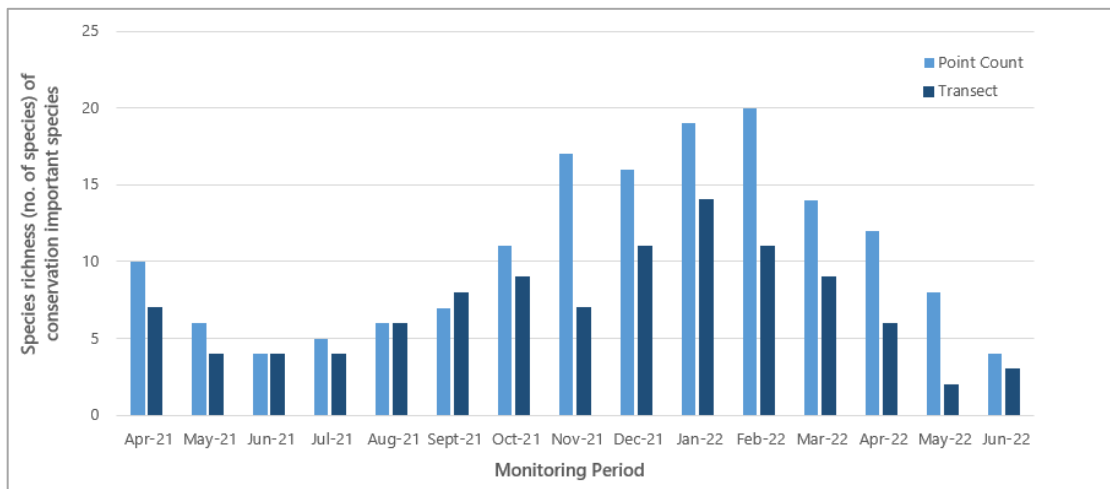
### Abundance of avifauna species with conservation importance throughout the monitoring period



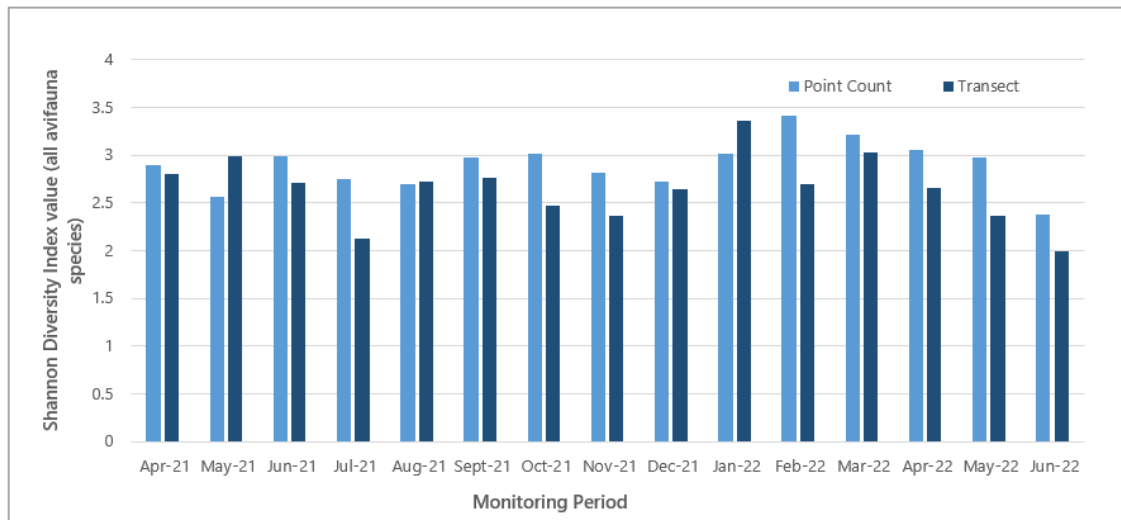
### Species richness of all avifauna species throughout the monitoring period



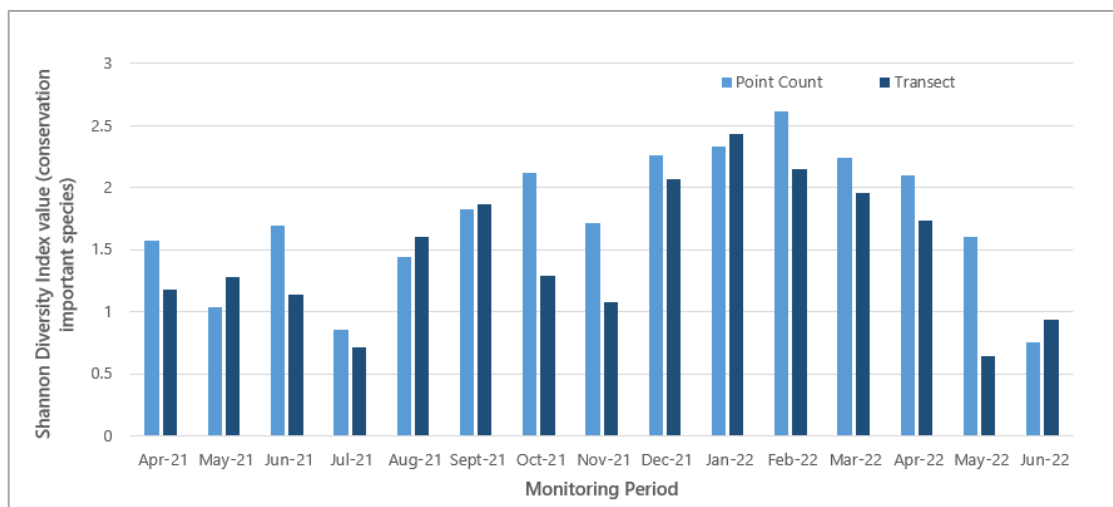
### Species richness of avifauna species with conservation importance throughout the monitoring period



Shannon Diversity Index values of all avifauna species throughout the monitoring period



Shannon Diversity Index values of avifauna species with conservation importance throughout the monitoring period



# Appendix E

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Event and Action Plan

## Event and Action Plan for Air Quality (Construction Dust)

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 Contractor, IEC and ER;</li> <li>3. Repeat measurement to confirm finding; and</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; and</li> <li>3. Review and advise the ET and ER on the effectiveness of the proposed remedial measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. Notify Contractor.</li> </ol>	<ol style="list-style-type: none"> <li>1. Identify source(s), investigate the causes of exceedance and propose remedial measures;</li> <li>2. Implement remedial measures; and</li> <li>3. Amend working methods agreed with the ER as 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 Contractor, IEC and ER;</li> <li>3. Advise the Contractor and 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, arrange meeting with Contractor, IEC and ER; and</li> <li>8. If exceedance stops, cease additional monitoring.</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, ER and Contractor on possible remedial measures;</li> <li>4. Advise the ET and ER on the effectiveness of the proposed remedial measures; and</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. Identify source and investigate the causes of exceedance;</li> <li>2. Submit proposals for remedial measures to the ER with a copy to ET and IEC within three working days of notification;</li> <li>3. Implement the agreed proposals; and</li> <li>4. Amend proposal as appropriate.</li> </ol>
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; and</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; and</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. Identify source(s) and investigate the causes of exceedance;</li> <li>2. Take immediate action to avoid further exceedance;</li> <li>3. Submit proposals for remedial measures to ER with a copy to ET and IEC within three working days of notification;</li> <li>4. Implement the agreed proposals; and</li> <li>5. 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> <li>4. Increase monitoring frequency to daily;</li> <li>5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented;</li> <li>6. Arrange meeting with IEC and ER to discuss the remedial actions to be taken;</li> <li>7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; and</li> <li>8. If exceedance stops, cease additional monitoring.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check monitoring data submitted by the ET;</li> <li>2. Discuss amongst ER, ET, and Contractor on the potential remedial actions;</li> <li>3. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly; and</li> <li>4. Supervise the 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. In consultation with the ET and IEC, agree with the Contractor on the remedial measures to be implemented;</li> <li>3. Supervise the implementation of remedial measures; and</li> <li>4. 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.</li> </ol>	<ol style="list-style-type: none"> <li>1. Identify source(s) and investigate the causes of exceedance;</li> <li>2. Take immediate action to avoid further exceedance;</li> <li>3. Submit proposals for remedial measures to the ER with a copy to the IEC and ET within three working days of notification;</li> <li>4. Implement the agreed proposals;</li> <li>5. Revise and resubmit proposals if problem still not under control; and</li> <li>6. Stop the relevant portion of works as determined by the ER until the exceedance is abated.</li> </ol>

## Event and Action Plan for Noise (Construction)

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; and</li> <li>5. Increase monitoring frequency to check mitigation effectiveness.</li> </ol>	<ol style="list-style-type: none"> <li>1. Review the analyzed results submitted by the ET;</li> <li>2. Review the proposed remedial measures by the Contractor and advise the ER accordingly; and</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 analyzed noise problem; and</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; and</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 Contractor's working procedures to determine possible mitigation to be implemented;</li> <li>6. Inform IEC, ER and EPD the causes and actions taken for the exceedances;</li> <li>7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; and</li> <li>8. If exceedance stops, cease additional monitoring.</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; and</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 analyzed noise problem;</li> <li>4. Ensure remedial measures properly implemented; and</li> <li>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.</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> <li>4. Resubmit proposals if problem still not under control; and</li> <li>5. Stop the relevant portion of works as determined by the ER until the exceedance is abated.</li> </ol>

## Event and Action Plan for Water Quality Monitoring

EVENT	ACTION			
	ET	IEC	ER	Contractor
Action level being exceeded by one sampling day	<ol style="list-style-type: none"> <li>1. Repeat in situ measurement on the next day of exceedance to confirm findings;</li> <li>2. Check monitoring data, plant, equipment and Contractor(s)'s working methods;</li> <li>3. Identify source(s) of impact and record in notification of exceedance;</li> <li>4. Inform IEC, Contractor(s) and ER</li> </ol>	<ol style="list-style-type: none"> <li>1. Check monitoring data submitted by ET and Contractor(s)'s working methods;</li> <li>2. Inform EPD and AFCD.</li> </ol>	<ol style="list-style-type: none"> <li>1. Confirm receipt of notification of exceedance in writing</li> </ol>	<ol style="list-style-type: none"> <li>1. Confirm receipt of notification of exceedance in writing;</li> <li>2. Check plant and equipment and rectify unacceptable practice</li> </ol>
Action level being exceeded by two or more consecutive sampling days	<ol style="list-style-type: none"> <li>1. Repeat in situ measurement on the next day of exceedance to confirm findings;</li> <li>2. Check monitoring data, plant, equipment and Contractor(s)'s working methods;</li> <li>3. Identify source(s) of impact and record in notification of exceedance;</li> <li>4. Inform IEC, Contractor(s) and ER;</li> <li>5. Discuss with IEC and Contractor(s) on additional mitigation measures and ensure that they are implemented.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check monitoring data submitted by ET and Contractor(s)'s working methods;</li> <li>2. Inform EPD and AFCD;</li> <li>3. Discuss with ET and Contractor(s) on additional mitigation measures and advise ER accordingly;</li> <li>4. Assess the effectiveness of the implemented mitigation measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. Confirm receipt of notification of exceedance in writing;</li> <li>2. Discuss with the IEC on the proposed additional mitigation measures and agree on the mitigation measures to be implemented.</li> <li>3. Ensure additional mitigation measures are properly implemented.</li> </ol>	<ol style="list-style-type: none"> <li>1. Confirm receipt of notification of exceedance in writing;</li> <li>2. Check plant and equipment and rectify unacceptable practice;</li> <li>3. Consider changes of working methods;</li> <li>4. Discuss with ET and IEC on additional mitigation measures and propose them to ER within 3 working days;</li> <li>5. Implement the agreed mitigation measures.</li> </ol>

EVENT	ACTION			
	ET	IEC	ER	Contractor
Limit level being exceeded by one sampling day	<ol style="list-style-type: none"> <li>1. Repeat in situ measurement on the next day of exceedance to confirm findings;</li> <li>2. Check monitoring data, plant, equipment and Contractor(s)'s working methods;</li> <li>3. Identify source(s) of impact and record in notification of exceedance;</li> <li>4. Inform IEC, Contractor(s) and ER;</li> <li>5. Discuss with IEC and Contractor(s) on additional mitigation measures and ensure that they are implemented.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check monitoring data submitted by ET and Contractor(s)'s working methods;</li> <li>2. Inform EPD and AFCD;</li> <li>3. Discuss with ET and Contractor(s) on additional mitigation measures and advise ER accordingly;</li> <li>4. Assess the effectiveness of the implemented mitigation measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. Confirm receipt of notification of exceedance in writing;</li> <li>2. Discuss with the IEC on the proposed additional mitigation measures and agree on the mitigation measures to be implemented.</li> <li>3. Ensure additional mitigation measures are properly implemented.</li> <li>4. Request Contractor(s) to critically review the working methods.</li> </ol>	<ol style="list-style-type: none"> <li>1. Confirm receipt of notification of exceedance in writing;</li> <li>2. Check plant and equipment and rectify unacceptable practice;</li> <li>3. Critically review the need to change working methods;</li> <li>4. Discuss with ET and IEC on additional mitigation measures and propose them to ER within 3 working days;</li> <li>5. Implement the agreed mitigation measures.</li> </ol>
Limit level being exceeded by two or more consecutive sampling days	<ol style="list-style-type: none"> <li>1. Repeat in situ measurement on the next day of exceedance to confirm findings;</li> <li>2. Check monitoring data, plant, equipment and Contractor(s)'s working methods;</li> <li>3. Identify source(s) of impact and record in notification of exceedance;</li> <li>4. Inform IEC, Contractor(s) and ER;</li> <li>5. Discuss with IEC and Contractor(s) on additional mitigation measures and ensure that they are implemented.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check monitoring data submitted by ET and Contractor(s)'s working methods;</li> <li>2. Inform EPD and AFCD;</li> <li>3. Discuss with ET and Contractor(s) on additional mitigation measures and advise ER accordingly;</li> <li>4. Assess the effectiveness of the implemented mitigation measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. Confirm receipt of notification of exceedance in writing;</li> <li>2. Discuss with the IEC on the proposed additional mitigation measures and agree on the mitigation measures to be implemented.</li> <li>3. Ensure additional mitigation measures are properly implemented.</li> <li>4. Request Contractor(s) to critically review the working methods.</li> </ol>	<ol style="list-style-type: none"> <li>1. Confirm receipt of notification of exceedance in writing;</li> <li>2. Check plant and equipment and rectify unacceptable practice;</li> <li>3. Critically review the need to change working methods;</li> <li>4. Discuss with ET and IEC on additional mitigation measures and propose them to ER within 3 working days;</li> <li>5. Implement the agreed mitigation measures.</li> </ol>



## Event and Action Plan for Ecology Monitoring

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; and</li> <li>5. Increase monitoring frequency to check mitigation effectiveness.</li> </ol>	<ol style="list-style-type: none"> <li>1. Review the analyzed results submitted by the ET;</li> <li>2. Review the proposed remedial measures by the Contractor and advise the ER accordingly; and</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 analyzed noise problem; and</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; and</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 Contractor's working procedures to determine possible mitigation to be implemented;</li> <li>6. Inform IEC, ER and EPD the causes and actions taken for the exceedances;</li> <li>7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; and</li> <li>8. If exceedance stops, cease additional monitoring.</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 necessary to assure their effectiveness and advise the ER accordingly; and</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; and</li> <li>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.</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> <li>4. Resubmit proposals if problem still not under control; and</li> <li>5. Stop the relevant portion of works as determined by the ER until the exceedance is abated.</li> </ol>

# Appendix F

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Waste Flow Table

Waste Flow Table for Year 2022											
Monthly Ending	Total Quantity Generated	Actual Quantities of Inert C&D Materials Generated Monthly					Actual Quantities of Non-inert C&D Wastes Generated Monthly				
		Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 2)	Chemical Waste	Others, e.g. general refuse
	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)
2022 Jan	243.88	Nil	Nil	Nil	215.24	Nil	17.46	0.04	Nil	Nil	11.14
2022 Feb	92.65	Nil	Nil	Nil	38.73	Nil	43.95	Nil	Nil	Nil	9.97
2022 Mar	398.96	Nil	Nil	Nil	312.08	Nil	76.31	Nil	Nil	Nil	10.57
2022 Apr	3619.84	Nil	Nil	Nil	3552.01	Nil	58.86	0.13	Nil	Nil	8.84
2022 May	2708.03	Nil	Nil	Nil	2692.75	Nil	8.61	Nil	Nil	Nil	6.67
2022 Jun	94.92	Nil	Nil	Nil	Nil	Nil	78.34	Nil	Nil	Nil	16.58
2022 Jul											
2022 Aug											
2022 Sep											
2022 Oct											
2022 Nov											
2022 Dec											
<b>Total</b>	<b>7158.28</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6810.81</b>	<b>0</b>	<b>283.53</b>	<b>0.17</b>	<b>0</b>	<b>0</b>	<b>63.77</b>

Note:

- 1) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
- 2) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging materials.

Sources/ reference of the waste flow data; From the Contractor

# Appendix G

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Implementation Status of

Environmental Mitigation Measures

**Construction of Yuen Long Effluent Polishing Plant Stage 1**

EIA Ref.	Environmental Protection Measures	Location / Duration of Measures / Timing of Completion of Measures	Implementation Status
<b>Air Quality Impact</b>			
<b>Construction Phase</b>			
3.6.1.6	Watering once per every two hours on active works areas to reduce dust emission.	All active works areas during construction phase	Implemented
3.8.1.1	<p>Dust suppression measures stipulated in the Air Pollution Control (Construction Dust) Regulation and good site practices listed below shall be carried out to further minimize construction dust impact:</p> <ul style="list-style-type: none"> <li>• Use of regular watering to reduce dust emissions from exposed site surfaces and unpaved roads, particularly during dry weather.</li> <li>• Use of frequent watering for particularly dusty construction areas and areas close to ASRs.</li> <li>• Side enclosure and covering of any aggregate or dusty material storage piles to reduce emissions. Where this is not practicable owing to frequent usage, watering shall be applied to aggregate fines.</li> <li>• Open stockpiles shall be avoided or covered. Where possible, prevent placing dusty material storage piles near ASRs.</li> <li>• Tarpaulin covering of all dusty vehicle loads transported to, from and between site locations.</li> <li>• Establishment and use of vehicle wheel and body washing facilities at the exit points of the site.</li> <li>• Provision of wind shield and dust extraction units or similar dust mitigation measures at the loading area of barging point, and use of water sprinklers at the loading area where dust generation is likely during the loading process of loose material, particularly in dry seasons/ periods.</li> <li>• Provision of not less than 2.4m high hoarding from ground level along site boundary where adjoins a road, streets or other accessible to the public except for a site entrance or exit.</li> <li>• Imposition of speed controls for vehicles on site haul roads.</li> <li>• Where possible, routing of vehicles and positioning of construction plant should be at the maximum possible distance from ASRs.</li> </ul>	Construction Sites	<p>Implemented</p> <p>Implemented</p> <p>Implemented</p> <p>Implemented</p> <p>Partially Implemented</p> <p>Implemented</p> <p>N/A</p> <p>Implemented</p> <p>Implemented</p> <p>Implemented</p>

**Construction of Yuen Long Effluent Polishing Plant Stage 1**

EIA Ref.	Environmental Protection Measures	Location / Duration of Measures / Timing of Completion of Measures	Implementation Status
	<ul style="list-style-type: none"> <li>• Instigation of an environmental monitoring and auditing program to monitor the construction process in order to enforce controls and modify method of work if dusty conditions arise.</li> </ul>		Implemented
<b>Noise Impact</b>			
Construction Phase			
4.8.1	<p>Movable noise barriers are recommended for hydraulic breakers mounted on excavators to be adopted during construction.</p> <p>Good site practices listed below and the noise control requirements stated in EPD's "Recommended Pollution Control Clauses for Construction Contracts" should be included in the Contract Specification for the Contractors to follow and should be implemented to further minimize the potential noise impacts during the construction phase of the Project.</p> <ul style="list-style-type: none"> <li>• Quiet PME, such that those listed in EPD's Quality Powered Mechanical Equipment, should be considered for construction works to further minimize the potential construction noise impact.</li> <li>• Only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction programme.</li> <li>• Silencers or mufflers on construction equipment should be utilised and should be properly maintained during the construction programme.</li> <li>• Mobile plant, if any, should be sited as far away from noise sensitive receivers (NSRs) as possible.</li> <li>• Machines and plant (such as trucks) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum.</li> <li>• 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</li> <li>• Material stockpiles and other structures should be effectively utilised, wherever practicable, in screening noise from on-site construction activities.</li> </ul>	Construction Sites	<p>Implemented</p> <p>N/A</p> <p>Implemented</p> <p>Implemented</p> <p>N/A</p> <p>N/A</p> <p>Implemented</p> <p>N/A</p> <p>N/A</p>
<b>Water Quality Impact</b>			
Construction Phase			
5.8.1.2	<p>Water used in ground boring and drilling for site investigation or rock / soil anchoring should as far as practicable be re-circulated after sedimentation. When there is a need for final disposal, the wastewater should be discharged into storm drains via silt removal facilities</p>	Construction Sites / Construction Phase	Implemented

**Construction of Yuen Long Effluent Polishing Plant Stage 1**

EIA Ref.	Environmental Protection Measures	Location / Duration of Measures / Timing of Completion of Measures	Implementation Status
5.8.1.3	All vehicles and plant should be cleaned before they leave a construction site to minimise the deposition of earth, mud, debris on roads. A wheel washing bay should be provided at every site exit if practicable and wash-water should have sand and silt settled out or removed before discharging into storm drains. The section of construction road between the wheel washing bay and the public road should be paved with backfill to reduce vehicle tracking of soil and to prevent site run-off from entering public road drains.	Construction Sites / Construction Phase	Implemented
5.8.1.4	Good site practices should be adopted to remove rubbish and litter from construction sites so as to prevent the rubbish and litter from spreading from the site area. It is recommended to clean the construction sites on a regular basis.	Construction Sites / Construction Phase	Implemented
5.8.1.5 – 5.8.1.6	The site practices outlined in ProPECC PN 1/94 “Construction Site Drainage” should be followed where applicable to minimise surface run-off and the chance of erosion. Surface run-off from construction sites should be discharged into storm drains via adequately designed sand / silt removal facilities such as sand traps, silt traps and sedimentation basins. Channels, earth bunds or sand bag barriers should be provided on site to properly direct stormwater to such silt removal facilities. Perimeter channels at site boundaries should be provided as necessary to intercept storm run-off from outside the site so that it will not wash across the site. Catchpits and perimeter channels should be constructed in advance of site formation works and earthworks.	Construction Sites /Construction Phase	Implemented
5.8.1.7	Silt removal facilities, channels and manholes should be maintained and the deposited silt and grit should be removed regularly (as well as at the onset of and after each rainstorm) to prevent overflows and localised flooding.	Construction Sites / Construction Phase	Implemented
5.8.1.8	Construction works should be programmed to minimise soil excavation in the wet season (i.e. April to September). If soil excavation cannot be avoided in these months or at any time of year when rainstorms are likely, temporarily exposed slope surfaces should be covered e.g. by tarpaulin, and temporary access roads should be protected by crushed stone or gravel, as excavation proceeds. Intercepting channels should be provided (e.g. along the crest / edge of excavation) to prevent storm run-off from washing across exposed soil surfaces.	Construction Sites / Construction Phase	N/A
5.8.1.9	Earthworks final surfaces should be well compacted and the subsequent permanent work or surface protection should be carried out immediately after the final surfaces are formed to prevent erosion	Construction Sites / Construction Phase	Implemented

**Construction of Yuen Long Effluent Polishing Plant Stage 1**

EIA Ref.	Environmental Protection Measures	Location / Duration of Measures / Timing of Completion of Measures	Implementation Status
	caused by rainstorms. Appropriate drainage like intercepting channels should be provided where necessary		
5.8.1.10	Measures should be taken to minimise the ingress of rainwater into trenches. If excavation of trenches in the wet season is necessary, they should be dug and backfilled in short sections. Rainwater pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal facilities.	Construction Sites / Construction Phase	N/A
5.8.1.11	Construction materials (e.g. aggregates, sand and fill material) on sites should be covered with tarpaulin or similar fabric during rainstorms	Construction Sites / Construction Phase	Implemented
5.8.1.12	Manholes (including newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system, and to prevent storm run-off from getting into foul sewers. Discharge of surface run-off into foul sewers must always be prevented in order not to unduly overload the foul sewerage system.	Construction Sites / Construction Phase	Implemented
5.8.1.13	The practices outlined in Environment, Transport and Works Bureau (ETWB) TC (Works) No. 5/2005 "Protection of natural streams/rivers from adverse impacts arising from construction works" should also be adopted where applicable to minimise the water quality impacts upon any natural streams or surface water systems.	Construction Sites / Construction Phase	N/A
5.8.1.14	Sufficient chemical toilets should be provided in the works areas. A licensed waste collector should be deployed to clean the chemical toilets on a regular basis.	Construction Sites / Construction Phase	Implemented
5.8.1.15	Notices should be posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the surrounding environment.	Construction Sites / Construction Phase	Implemented
5.8.1.16	Contractor must register as a chemical waste producer if chemical wastes would be produced from the construction activities. The WDO (Cap 354) and its subsidiary regulations in particular the Waste Disposal (Chemical Waste) (General) Regulation, should be observed and complied with for control of chemical wastes.	Construction Sites / Construction Phase	Implemented



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EIA Ref.	Environmental Protection Measures	Location / Duration of Measures / Timing of Completion of Measures	Implementation Status
5.8.1.17	Any service shop and maintenance facilities should be located on hard standings within a bunded area, and sumps and oil interceptors should be provided. Maintenance of vehicles and equipment involving activities with potential for leakage and spillage should only be undertaken within the areas appropriately equipped to control these discharges.	Construction Sites /Construction Phase	N/A
5.8.1.18	Disposal of chemical wastes should be carried out in compliance with the WDO. The Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes published under the WDO should be followed to avoid leakage or spillage of chemicals.	Construction Sites / Construction Phase	Implemented
5.8.1.19	All the runoff and wastewater generated from the works areas should be treated so that it satisfies all the standards listed in the Technical Memorandum on Standards for Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters (TM-DSS).	Construction Sites / Construction Phase	N/A
5.8.2.11	Chemical should be stored on site at bunded area and separate drainage system as appropriate should be provided to avoid any spilled chemicals from entering the storm drain in case of accidental spillage. Also, adequate tools for cleanup of spilled chemicals should be stored on site and appropriate training shall be provided to staffs to further prevent potential adverse water quality impacts from happening.	Project site / Design and Operation Phase	Implemented

**Waste Management Implication**
**Construction Phase**

6.6.1.3	<u>Good Site Practices</u>	Construction Sites	
	Recommendations for good site practices during the construction phase include:		
	<ul style="list-style-type: none"> <li>• Nomination of approved personnel, such as a site manager, to be responsible for good site practices, and making arrangements for collection of all wastes generated at the site and effective disposal to an appropriate facility;</li> </ul>		Implemented
	<ul style="list-style-type: none"> <li>• Training of site personnel in proper waste management and chemical waste handling procedures;</li> </ul>		Implemented
	<ul style="list-style-type: none"> <li>• Provision of sufficient waste reception/ disposal points, of a suitable vermin-proof design that minimises windblown litter;</li> </ul>		N/A
	<ul style="list-style-type: none"> <li>• Arrangement for regular collection of waste for transport off-site and final disposal;</li> </ul>		Implemented
	<ul style="list-style-type: none"> <li>• Appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers;</li> <li>• Regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors;</li> </ul>		Implemented

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EIA Ref.	Environmental Protection Measures	Location / Duration of Measures / Timing of Completion of Measures	Implementation Status
6.6.1.5	<ul style="list-style-type: none"> <li>• A recording system for the amount of wastes generated, recycled and disposed (including the disposal sites) should be proposed; and</li> </ul>		Implemented
	<ul style="list-style-type: none"> <li>• A WMP should be prepared and should be submitted to the Engineer for approval. One may make reference to ETWB TCW No. 19/2005 for details.</li> </ul>		Implemented
	<p>Waste Reduction Measures Recommendations to achieve waste reduction include:</p>	Construction Sites	
	<ul style="list-style-type: none"> <li>• Segregate and store different types of construction related waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal;</li> </ul>		Implemented
	<ul style="list-style-type: none"> <li>• Provide separate labelled bins to segregate recyclable waste such as aluminium cans from other general refuse generated by the work force, and to encourage collection by individual collectors;</li> </ul>		Implemented
	<ul style="list-style-type: none"> <li>• Any unused chemicals or those with remaining functional capacity shall be recycled;</li> </ul>		N/A
	<ul style="list-style-type: none"> <li>• Maximising the use of reusable steel formwork to reduce the amount of C&amp;D material;</li> </ul>		N/A
	<ul style="list-style-type: none"> <li>• Prior to disposal of C&amp;D waste, it is recommended that wood, steel and other metals shall be separated for re-use and / or recycling to minimise the quantity of waste to be disposed of to landfill;</li> </ul>		Implemented
	<ul style="list-style-type: none"> <li>• Adopt proper storage and site practices to minimise the potential for damage to, or contamination of, construction materials;</li> </ul>		Implemented
	<ul style="list-style-type: none"> <li>• Plan the delivery and stock of construction materials carefully to minimise the amount of surplus waste generated;</li> </ul>		N/A
	<ul style="list-style-type: none"> <li>• Adopt pre-cast construction method instead of cast-in-situ method for construction of concrete structures as much as possible; and</li> </ul>		N/A
<ul style="list-style-type: none"> <li>• Minimise over ordering of concrete, mortars and cement grout by doing careful check before ordering.</li> </ul>	N/A		
6.6.1.7	<p><u>Storage of Waste</u> Recommendations to minimise the impacts include:</p>	Construction Sites	
	<ul style="list-style-type: none"> <li>• Waste, such as soil, should be handled and stored well to ensure secure containment, thus minimising the potential of pollution;</li> </ul>		Implemented
	<ul style="list-style-type: none"> <li>• Maintain and clean storage areas routinely;</li> </ul>		Implemented

**Construction of Yuen Long Effluent Polishing Plant Stage 1**

EIA Ref.	Environmental Protection Measures	Location / Duration of Measures / Timing of Completion of Measures	Implementation Status
	<ul style="list-style-type: none"> <li>• Stockpiling area should be provided with covers and water spraying system to prevent materials from wind-blown or being washed away; and</li> </ul>		Implemented
	<ul style="list-style-type: none"> <li>• Different locations should be designated to stockpile each material to enhance reuse.</li> </ul>		Implemented
6.6.1.8	<p><u>Collection of Waste</u>Licensed waste haulers should be employed for the collection and transportation of waste generated. The following measures should be enforced to minimise the potential adverse impacts:</p> <ul style="list-style-type: none"> <li>• Remove waste in timely manner;</li> <li>• Waste collectors should only collect wastes prescribed by their permits;</li> <li>• Impacts during transportation, such as dust and odour, should be mitigated by the use of covered trucks or in enclosed containers;</li> <li>• Obtain relevant waste disposal permits from the appropriate authorities, in accordance with the WDO (Cap. 354), Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 345) and the Land (Miscellaneous Provisions) Ordinance (Cap. 28);</li> <li>• Waste should be disposed of at licensed waste disposal facilities; and</li> <li>• Maintain records of quantities of waste generated, recycled and disposed.</li> </ul>	Construction Sites	<p>Implemented</p> <p>Implemented</p> <p>Implemented</p> <p>Implemented</p> <p>Implemented</p> <p>Implemented</p>
6.6.1.10	<p><u>Transportation of Waste</u></p> <p>In order to monitor the disposal of C&amp;D materials at PFRFs and landfills and to control fly-tipping, a trip-ticket system should be established in accordance with DEVB TCW No. 6/2010. A recording system for the amount of waste generated, recycled and disposed, including the disposal sites, should also be set up. Warning signs should be put up to remind the designated disposal sites. CCTV should be installed at the vehicular entrance and exit of the site as additional measures to prevent fly-tipping.</p>	Transportation Route of Waste / Construction Phase	N/A

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EIA Ref.	Environmental Protection Measures	Location / Duration of Measures / Timing of Completion of Measures	Implementation Status
6.6.1.12	<p><u>Construction and Demolition Material</u>            Careful design, planning together with good site management can reduce over-ordering and generation of C&amp;D materials such as concrete, mortar and cement grouts. Formwork should be designed to maximize the use of standard wooden panels, so that high reuse levels can be achieved. Alternatives such as steel formwork or plastic facing should be considered to increase the potential for reuse</p>	Construction Sites	N/A
6.6.1.13	<p>The excavated material arising from site formation and foundation works should be reused on-site as backfilling material and for landscaping works as far as practicable. Other mitigation requirements are listed below:</p> <ul style="list-style-type: none"> <li>• A WMP, which becomes part of the EMP, should be prepared in accordance with ETWB TCW No.19/2005;</li> <li>• A recording system for the amount of wastes generated, recycled and disposed (including the disposal sites) should be adopted for easy tracking; and</li> <li>• In order to monitor the disposal of C&amp;D materials at public filling facilities and landfills and to control fly-tipping, a trip-ticket system should be adopted (refer to DEVB TCW 06/2010).</li> </ul>	Construction Sites	<p>Implemented</p> <p>Implemented</p> <p>Implemented</p>
6.6.1.14	<p>It is recommended that specific areas should be provided by the Contractors for sorting and to provide temporary storage areas (if required) for the sorted materials. Control measures for temporary stockpiles on-site should be taken in order to minimise the noise, generation of dust and pollution of water. These measures include:</p> <ul style="list-style-type: none"> <li>• Surface of stockpiled soil should be regularly wetted with water especially during dry season;</li> <li>• Disturbance of stockpile soil should be minimised;</li> <li>• Stockpiled soil should be properly covered with tarpaulin especially when heavy storms are predicted; and</li> <li>• Stockpiling areas should be enclosed where space is available.</li> </ul>	Construction Sites	<p>Implemented</p> <p>Implemented</p> <p>Implemented</p> <p>Implemented</p>

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EIA Ref.	Environmental Protection Measures	Location / Duration of Measures / Timing of Completion of Measures	Implementation Status
6.6.1.15	The Contactor should prepare and implement an EMP in accordance with ETWB TCW No.19/2005, which describes the arrangements for avoidance, reuse, recovery, recycling, storage, collection, treatment and disposal of different categories of waste to be generated from construction activities. Such a management plan should incorporate site-specific factors, such as the designation of areas for segregation and temporary storage of reusable and recyclable materials. The EMP should be submitted to the Engineer for approval. The Contractor should implement waste management practices in the EMP throughout the construction stage of the Project. The EMP should be reviewed regularly and updated by the Contractor, preferably on a monthly basis.	Construction Sites	Implemented
6.6.1.16	The Contractor would be responsible for devising a system to work for on-site sorting of C&D materials and promptly removing all sorted and process materials arising from the construction activities to minimise temporary stockpiling on-site. The system should be included in the EMP identifying the source of generation, estimated quantity, arrangement for on-site sorting, collection, temporary storage areas and frequency of collection by recycling Contractors or frequency of removal off-site.	Construction Sites	Implemented
6.6.1.17 – 6.6.1.18	The sediment should be excavated, handled, transported and disposed of in a manner that would minimise adverse environmental impacts. To minimise sediment disposal, it is proposed to reuse the Type 1 sediment generated (e.g. as backfilling materials) as far as possible. Requirements of the Air Pollution Control (Construction Dust) Regulation, where relevant, shall be adhered to during excavation, transportation and disposal of the sediment.	Construction Sites	N/A
6.6.1.19	Workers shall, if necessary, wear appropriate personal protective equipments (PPE) when handling contaminated sediments. Adequate washing and cleaning facilities shall also be provided on site.	Construction Sites	N/A
6.6.1.20	For off-site disposal, the basic requirements and procedures specified under ETWB TC(W) No. 34/2002 shall be followed.	Transportation Route of Waste / Construction Phase	N/A
6.6.1.24	Stockpiling of contaminated sediments should be avoided as far as possible. If temporary stockpiling of contaminated sediments is necessary, the excavated sediment should be covered by tarpaulin and the area should be placed within earth bunds or sand bags to prevent leachate from entering the ground, nearby drains and surrounding water bodies. The stockpiles should be completely paved or covered by linings in order to avoid contamination to underlying soil or groundwater. Separate and clearly defined areas should be provided for stockpiling of contaminated and uncontaminated materials. Leachate, if any, should be collected and discharged according to the Water Pollution Control Ordinance (WPCO).	Construction Sites	N/A

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EIA Ref.	Environmental Protection Measures	Location / Duration of Measures / Timing of Completion of Measures	Implementation Status
6.6.1.25	In order to minimise the potential odour / dust emissions during excavation and transportation of the sediment, the excavated sediments shall be wetted during excavation / material handling and shall be properly covered when placed on trucks or barges. Loading of the excavated sediment to the barge shall be controlled to avoid splashing and overflowing of the sediment slurry to the surrounding water.	Construction sites & transportation route of waste / Construction phase	N/A
6.6.1.26	The barge transporting the sediments to the designated disposal sites shall be equipped with tight fitting seals to prevent leakage and shall not be filled to a level that would cause overflow of materials or laden water during loading or transportation. In addition, monitoring of the barge loading shall be conducted to ensure that loss of material does not take place during transportation. Transport barges or vessels shall be equipped with automatic self-monitoring devices as specified by the DEP.	Transportation route of waste / Construction phase	N/A
6.6.1.27	Suitable containers compatible with the chemical wastes should be used, and incompatible chemicals should be stored separately. Appropriate labels should be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the chemical waste, such as explosive, flammable, oxidizing, irritant, toxic, harmful, corrosive, etc. The Contractor shall employ a licensed collector to transport and dispose of the chemical wastes, to the licensed CWTC, or other licensed facilities, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.	Construction and Operation Phases	N/A
6.6.1.28	It is recommended to place clearly labelled recycling bins at designated locations with convenient access. Other general refuse should be separated from chemical and industrial waste by providing separated bins or skips for storage to maximise the recyclable volume. A reputable licensed waste collector should be employed to remove general refuse on a daily basis to minimise odour, pest and litter impacts.	Construction and Operation Phases	Implemented
6.6.1.29	Should buildings are found with potential ACM, sufficient and reasonable lead time shall be allowed for preparation, vetting and implementation of Asbestos Investigation Report and Asbestos Abatement Plan in accordance with Air Pollution Control Ordinance before commencement of any demolition or site clearance work.	Demolition	N/A
<b>Land Contamination</b>			

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EIA Ref.	Environmental Protection Measures	Location / Duration of Measures / Timing of Completion of Measures	Implementation Status
7.8.1.2 - 7.8.1.3;7.8.2.1	<p>Prior to the commencement of the SI works, a review of the Contamination Assessment Plan (CAP) should be conducted to confirm whether the proposed SI works (e.g. sampling locations, testing parameters etc.) are still valid. Supplementary CAP(s), presenting findings of the review, the latest site conditions and updated sampling strategy and testing protocol, should be submitted to EPD for endorsement. The SI works should be carried out according to EPD's agreed supplementary CAP(s). SI works should be carried out according to the supplementary CAP endorsed by EPD. Following completion of SI works and receipt of laboratory test results, Contamination Assessment Report(s) ((CAR)(s)) should be prepared to present the findings of the SI works and to discuss the presence, nature and extent of contamination. If contamination is identified, Remedial Action Plan(s) ((RAP)(s)) which provides details of the remedial actions for the identified contaminated soil and / or groundwater should be endorsed by EPD. The possible remediation methods are detailed in Section 5.2 of the CAP provided in Appendix 7.1 of the EIA Report. Remediation action, if necessary, will be carried out according to EPD endorsed RAP(s) and Remediation Report(s) (RR(s)) will be submitted after completion of the remediation action. The RR(s) should be endorsed by EPD prior to the commencement of construction works at the respective identified contaminated areas (if any).</p>	Existing YLSTW /Construction Phase (after decommissioning of the concerned facilities / areas but prior to the construction works at the concerned facilities / areas)	Implemented
7.8.3.1	<p>The mitigation measures will be recommended in the RAP and would typically include the following:</p> <ul style="list-style-type: none"> <li>• Excavation profiles must be properly designed and executed with attention to the relevant requirements for environment, health and safety;</li> <li>• Excavation shall be carried out during dry season as far as possible to minimise contaminated runoff from contaminated soils; Supply of suitable clean backfill material (or treated soil) after excavation;</li> <li>• Stockpiling site(s) shall be lined with impermeable sheeting and bunded. Stockpiles shall be fully covered by impermeable sheeting to reduce dust emission. If this is not practicable due to frequent usage, regular watering shall be applied. However, watering shall be avoided on stockpiles of contaminated soil to minimise contaminated runoff.</li> <li>• Vehicles containing any excavated materials shall be suitably covered to limit potential dust emissions or contaminated wastewater run-off, and truck bodies and tailgates shall be sealed to prevent any discharge during transport or during wet conditions;</li> <li>• Speed control for the trucks carrying contaminated materials shall be enforced;</li> </ul>	Project Site / Construction Phase	<p>Implemented</p> <p>N/A</p> <p>Implemented</p> <p>N/A</p> <p>N/A</p>

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EIA Ref.	Environmental Protection Measures	Location / Duration of Measures / Timing of Completion of Measures	Implementation Status
	<ul style="list-style-type: none"> <li>• Vehicle wheel and body washing facilities at the site's exist points shall be established and used; and</li> <li>• Pollution control measures for air emissions (e.g. from biopile blower and handling of cement), noise emissions (e.g. from blower or earthmoving equipment), and water discharges (e.g. runoff control from treatment facility) shall be implemented and complied with relevant regulations and guidelines.</li> </ul>		N/A
			N/A
<b>Ecological Impact (Terrestrial and Aquatic)</b>			
<b>Construction Phase</b>			
8.10.2.1	<u>Avoidance of Recognised Site of Conservation Importance</u> Construction works are designed to be confined to the boundary of the existing YLSTW that direct impacts on all other sites of conservation importance within the assessment area, including the Ramsar Site, Priority Site, WCA, WBA, SSSI and CA would be avoided.	Project site / Construction Phase	Implemented
8.10.2.3 – 8.10.2.4	<u>Avoidance of Demolition Works Using Breakers Mounted on Excavators and Percussive Piling during Dry Season</u> In order to minimise the construction noise disturbance on overwintering waterbirds, the noisy construction works, i.e. all percussive piling works and demolition using breakers mounted on excavators, would therefore be scheduled outside the dry season (i.e. November to March, which is the peak overwintering period of waterbirds).	Construction sites / Construction Phase	Implemented
8.10.2.5	<u>Restriction of Construction Hours</u> No construction activities with the use of PME should be conducted within 100m from any night roost confirmed by the pre-construction survey after 18:00 during wet season and 17:30 during dry season to avoid disturbance to the nearby ardeids night roosts.	Construction sites / Construction Phase	Implemented
8.10.3.2 – 8.10.3.3	<u>Minimising Construction Noise Disturbance Impacts through Consideration of Alternative Construction Methods</u> Demolition using concrete crusher is quieter than demolition using breaker that its construction noise level is comparable to other general construction activities and concrete crusher would be used for demolition works to be undertaken during dry season months. The quieter foundation methods, including bored piling, raft foundation and shallow foundation, would be adopted as far as possible.	Construction sites / Construction Phase	Implemented



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EIA Ref.	Environmental Protection Measures	Location / Duration of Measures / Timing of Completion of Measures	Implementation Status
8.10.3.4 – 8.10.3.5	<p><u>Minimising Construction Noise Disturbance Impacts Through Careful Phasing of Construction Activities</u> Percussive piling works and demolition using breakers mounted on excavators would typically be completed over two wet seasons and not be undertaken in the same construction zone at the same time to localise the construction disturbance and to reduce the duration of high level of disturbances on sensitive wetland habitats and associated waterbirds nearby each construction zone.</p> <p>Facilities in the eastern side of the Project site (i.e. Phase 1A and Phase 1B) are scheduled to be developed first that the new structures could screen the works in the middle and western parts of the site in later stage of the construction phase after the structures in Phase 1A and Phase 1B are completed, hence minimising the construction noise and human disturbance on sensitive wetland habitats adjacent to the Project site in Shan Pui River, including the confluence of Shan Pui River and Kam Tin River and ardeid night roost to the immediate east of the Project site.</p>	Project site / Construction Phase	Implemented
8.10.3.6 – 8.10.3.8	<p><u>Minimising Construction Noise Disturbance Impacts through Use of Noise Barriers</u> Noise barriers with absorptive materials of about 4m high will be erected along the northern, eastern and western sides of the site, throughout the construction phase to screen the construction noise and human disturbance to the waterbirds foraging in ponds in Fung Lok Wai and Shan Pui River during construction phase.</p> <p>Adequate noise barriers should also be provided for demolition works using breakers mounted on excavators and percussive piling works, to further minimise the construction noise disturbance from these construction activities. Movable noise barriers should be provided to breaker mounted on excavator used for demolition works as discussed in Section 4.8 and acoustic mat should be provided to the piling plants around the rig.</p> <p>The contractor should provide enclosure for construction equipment, especially static plants, as appropriate to minimise the noise disturbance as far as practicable.</p>	Construction sites / Construction Phase	Implemented

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EIA Ref.	Environmental Protection Measures	Location / Duration of Measures / Timing of Completion of Measures	Implementation Status
8.10.3.9	<u>Use of Quality Powered Mechanical Equipment</u> The contractor should source QPMEs for construction as far as practicable to further minimise the overall construction noise and other disturbance to the nearby wetland habitats and associated waterbirds to the maximum practical extent.	Construction sites / Construction Phase	Implemented
<b>Ecology &amp; Fisheries Impact</b>			
8.12.1.4, 9.7	Groundwater observation wells and recharge wells will be provided at the northern and western side of the site. Groundwater table will be closely monitored at the observation well. In case of any unlikely events of abnormal drawdown of groundwater table near the excavation area, groundwater dewatering will stop and water will be pumped into the recharge wells to recover the normal groundwater table as necessary.	Construction Phase	N/A
<b>Fisheries Impact</b>			
9.7	The implementation of good site practices during construction could minimise the potential water quality impacts from the land-based construction works. Mitigation measures recommended in the Water Quality Impact Assessment (Section 5) for controlling water quality impact would also serve to protect fisheries resources and activities from indirect impacts.	Construction and Operation Phase	N/A
<b>Landscape and Visual Impact</b>			
Table 10.11	<u>Preservation of Existing Vegetation (CM1)</u> All the existing Trees to be retained and not to be affected by the Project shall be carefully protected during construction accordance with DEVB TCW No. 7/2015 - Tree Preservation and the latest Guidelines on Tree Preservation during Development issued by GLTM Section of DevB. Any existing vegetation in landscaped areas and natural terrain not to be affected by the Project shall be carefully preserved.	Project site / Construction Phase	Implemented
Table 10.11	<u>Transplanting of Affected Trees (CM2)</u> Trees unavoidably affected by the works shall be transplanted as far as possible in accordance with DEVB TCW No. 7/2015 - Tree Preservation and the latest Guidelines on Tree Transplanting issued by GLTM Section of DevB.	Project site / Construction Phase	Implemented

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EIA Ref.	Environmental Protection Measures	Location / Duration of Measures / Timing of Completion of Measures	Implementation Status
Table 10.11	<p><u>Compensatory Tree Planting (CM3)</u> Any trees to be felled under the Project shall be compensated in accordance with DEVB TCW No. 7/2015 - Tree Preservation. For trees to be compensated on slopes, the guidelines for tree planting stipulated in GEO Publication No. 1/2011 will be followed.</p>	Project site / Construction Phase	N/A
Table 10.11	<p><u>Control of Night-time Lighting Glare (CM4)</u> All the night time lighting shall be avoided except for safety purpose. No light glare shall illuminate directly outside the site.</p>	Project site / Construction Phase	Implemented
Table 10.11	<p><u>Erection of Decorative Screen Hoarding (CM5)</u> Site hoardings, if any, shall be painted in dull green colour</p>	Project site / Construction Phase	Implemented
Table 10.11	<p><u>Management of Construction Activities and Facilities (CM6)</u> Construction activities shall be well scheduled and avoid powered mechanical equipment's operating simultaneously. All stockpiling areas and idled area shall be covered by tarpaulin sheet or hydroseeded as far as possible.</p>	Project site / Construction Phase	Implemented
<b>Hazard to Life</b>			
<b>Construction Phase</b>			
11.5.6.9-11.5.6.12	<ul style="list-style-type: none"> <li>• Implementation of those major construction works and movement of plants and vehicles would be stringently controlled to have a setback of at least 15m clear distance, or physical barrier with an empty digester / gas holder from the digesters / gas holders in operation;</li> <li>• For those construction works to be carried out in close proximity to the 15m zone from digesters / gas holders in operation, the height of plants for those major construction shall be limited to 15m such that the plants would not damage digesters /gas holders in such incident as plant collapse or overturning;</li> <li>• Whenever practicable, the construction sequence shall be arranged with empty unit(s) for separating the major construction works from these digesters / gas holders in use; and</li> </ul>	Project site / Construction Phase	<p>N/A</p> <hr/> <p>N/A</p> <hr/> <p>N/A</p>

**Construction of Yuen Long Effluent Polishing Plant Stage 1**

EIA Ref.	Environmental Protection Measures	Location / Duration of Measures / Timing of Completion of Measures	Implementation Status
	<ul style="list-style-type: none"> <li>Physical barriers such as concrete blocks shall be set up at the 15m zone in order to avoid those construction plants or vehicles from colliding to the digester / gas holder units in use.</li> </ul>		N/A
11.5.8	<ul style="list-style-type: none"> <li>Method statements and risk assessments shall be prepared and safety control measures shall be in place before commencement of work</li> </ul>	Project site / Construction Phase	Implemented
	<ul style="list-style-type: none"> <li>All work procedures shall be complied with the operating plant procedures or guidelines and regulatory requirements;</li> </ul>		Implemented
	<ul style="list-style-type: none"> <li>Work permit system, on-site pre-work risk assessment and emergency response procedure shall be in place before commencement of work;</li> </ul>		Implemented
	<ul style="list-style-type: none"> <li>All construction workers shall equip with appropriate personal protective equipment (PPE) when working at the Project Site;</li> </ul>		Implemented
	<ul style="list-style-type: none"> <li>Safety training and briefings shall be provided to all construction workers;</li> </ul>		Implemented
	<ul style="list-style-type: none"> <li>Regular site safety inspections shall be conducted during the construction phase of the Project;</li> </ul>		Implemented
11.9.1.2	<ul style="list-style-type: none"> <li>Ensure speed limit enforcement is specified in the contractor's method statement to limit the speed of construction vehicles onsite;</li> </ul>	Project site / ConstructionPhase	Implemented
	<ul style="list-style-type: none"> <li>Conduct speed checks to ensure enforcement of speed limits and to ensure adequate site access control;</li> </ul>		N/A
	<ul style="list-style-type: none"> <li>A lifting plan, with detailed risk assessment, should be prepared and endorsed for heavy lifting of large equipment;</li> </ul>		Implemented
	<ul style="list-style-type: none"> <li>Vehicle crash barriers should be provided between the construction site and the operating biogas facilities;</li> </ul>		N/A
	<ul style="list-style-type: none"> <li>Ensure that a hazardous are classification study is conducted and hazardous area maps are updated before the start of the construction activities to ensure ignition sources are controlled during both construction and operation phases;</li> </ul>		Implemented
	<ul style="list-style-type: none"> <li>Ensure work permit system for hot work activities within the Project Site is specified in the contractor's method statement to minimize and control the ignition sources during the construction phase;</li> </ul>		Implemented
	<ul style="list-style-type: none"> <li>Ensure effective communication system / protocol is in place between the contractors and the operation staff;</li> </ul>		Implemented
	<ul style="list-style-type: none"> <li>Ensure the Project Construction Emergency Response Plan is integrated with the Emergency Response Plan for the YLEPP during construction phase. The plan should address stop work instructions to be promptly communicated to all construction workers performing hot works in case a confirmed biogas detection at the Project Site;</li> </ul>		N/A

**Construction of Yuen Long Effluent Polishing Plant Stage 1**

EIA Ref.	Environmental Protection Measures	Location / Duration of Measures / Timing of Completion of Measures	Implementation Status
	<ul style="list-style-type: none"> <li>• Ensure that the construction activities do not impede the functions of fire and gas detection system, fire protection system, muster areas, fire-fighting vehicle access and escape routes;</li> </ul>		N/A
	<ul style="list-style-type: none"> <li>• Ensure a Job Safety Analysis is conducted for construction activities of the Project during the construction phase, to identify and analyze hazards associated with the construction activities (e.g. lifting operations by cranes) onto the operating biogas facilities.</li> </ul>		Implemented
	Potential risks of the construction activities shall be assessed, and risk precautionary measures shall be implemented in Contractor's works procedures.		Implemented

Note:

Implementation status: Implemented / Partially Implemented / Not Implemented / Not Applicable (N/A)

Sources / reference of the Implementation Status: Appendix B of EIA Report, AEIAR-220/2019

# Appendix H

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Cumulative statistics on Environmental Complaints,  
Notifications of Summons and Successful Prosecutions

### Environmental Complaints Log

Reference No.	Date of Complaint Received	Received From	Received By	Nature of Complaint	Date of Investigation	Outcome	Date of Reply

### Cumulative Statistics on Complaints

Environmental Parameters	Cumulative No. Brought Forward	No. of Complaints This Month	Cumulative Project-to-Date
Air	0	0	0
Noise	0	0	0
Water	0	0	0
Waste	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>

### Cumulative Statistics on Notification of Summons and Successful Prosecutions

Environmental Parameters	Cumulative No. Brought Forward	No. of Notification of Summons and Prosecutions This Month	Cumulative Project-to-Date
Air	0	0	0
Noise	0	0	0
Water	0	0	0
Waste	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>