## Contract No. SPW 02/2023 Environmental Team for Construction of Yuen Long Effluent Polishing Plant Stage 1

Monthly EM&A Report (October 2024) Drainage Services Department

2024-11-11



Sringing ideas

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

Attn: Mr. Simon H.M. YEUNG - CRE(C)

	Contract No. SPW 04/2024			
Our Reference EC/TC/BW/T601100483/ 02/02/L071	Independent Environmental Effluent Polishing Plant Stage	Checker for Construction of Yuen Long e 1 (2024-2025)		
	Environmental Permit No. EP	-565/2019		
Mott MacDonald 3/F Manulife Place	EP Condition 3.4 – Monthly E	M&A Report for October 2024		
348 Kwun Tong Road Kwun Tong Kowloon Hong Kong	12 November 2024 By Hand and By Email			
T +852 2828 5757	Dear Sir,			
mottmac.hk	I refer to the captioned Monthly EM&A Report for October 2024 (Revision 1) which was received via e-mail and certified by the Environmental Team Leader on 12 November 2024 (ref.: PL-202411018).			
	I have no comment on the captioned report and hereby verify that this submission has complied with the requirements set out in the EM&A Manual (in particular Sections 12.4.1 and 12.4.4) for the captioned project, in accordance with Condition 3.4 of Environmental Permit No. EP-565/2019.			
	Should you have any queries regarding the captioned or require any further information, please contact the undersigned at 2828 5875.			
	Yours faithfully for MOTT MACDONALD HONO	G KONG LIMITED		
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	cc DSD	Mr. Wallace CHENG – E/SP 16 (by-email)		

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Ref: PL-202411018

12 November 2024

Mott MacDonald 3/F Manulife Tower, 348 Kwun Tong Road, Kwun Tong, Kowloon, Hong Kong

Attn: Mr. Brandon Wong, IEC

Dear Sir,

Contract No. SPW 02/2023 Environmental Team for Construction of Yuen Long Effluent Polishing Plant Stage 1 Environmental Permit No. EP-565/2019 EP Condition 3.4 – Monthly EM&A Report for October 2024

Pursuant to Clause 3.4 of Environmental Permit No. EP-565/2019 for the captioned project, we are pleased to submit the certified Monthly EM&A Report for October 2024 (Rev.1) for your verification.

Should you have any queries regarding the captioned or require any further information, please contact the undersigned at 2531 0243.

Yours faithfully, For and on behalf of Aurecon Hong Kong Limited

Vincent M. J. Lu Environmental Team Leader

Encl.

cc. AECOM – Mr. Patrick Leung (<u>patrick.leung@ylepp-aecom.com</u>) Paul Y. - CREC Joint Venture – Mr. Gabriel Wong (<u>gabriel.wong@crec.com.hk</u>) By Email

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## Contents

EX	ECUTIVE SUMMARY	1
1	INTRODUCTION	3
2	AIR QUALITY	6
3	NOISE	9
4	WATER QUALITY	12
5	ECOLOGY MONITORING	16
6	LANDSCAPE AND VISUAL	28
7	LAND CONTAMINATION	29
8	SITE INSPECTION AND AUDIT	31
9	NON-COMPLIANCE, COMPLAINTS, NOTIFICATIONS OF SUMMONS AND SUCCESSFUL PROSECUTIONS	32
10	IMPLEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURE	33
11	FUTURE KEY ISSUES	35
12	CONCLUSION AND RECOMMENDATION	36

## **Tables**

Table 1	Contact Information of Key Personnel	4
Table 2	Environmental Licenses, Notification and Permits Summary	
Table 3	Air Quality Monitoring Equipment	
Table 4	Air Quality Monitoring Location	
Table 5	Summary of Air Quality Monitoring Results	
Table 6	Comparison of 1-hr TSP data with EIA predictions	
Table 7	Construction Noise Monitoring Equipment	
Table 8	Monitoring Parameters and Frequencies of Noise Monitoring	
Table 9	Construction Noise Monitoring Location	
Table 10	Summary of Construction Noise Monitoring Results	
Table 11	Comparison of Noise monitoring data with EIA predictions	
Table 12	Water Quality Monitoring and Sampling Equipment	

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Table 13	Monitoring Parameters and Frequency	13
Table 14	Coordinates of Water Quality Monitoring Locations	14
Table 15	Summary of Water Quality Exceedance	15
Table 16	Noise Monitoring Parameters (For Active Ardeid Night Roost Survey)	17
Table 17	Active Ardeid Night Roost Survey Findings	18
Table 18	Noise Monitoring Parameters (For Active Ardeid Night Roost Survey)	19
Table 19	Noise Monitoring Parameters	20
Table 20	Abundance of all Avifauna Species	22
Table 21	Abundance of Species of Conservation Importance	23
Table 22	Shannon Diversity Index Value of all Avifauna Species	24
Table 23	Shannon Diversity Index Value of Species with Conservation Importance	24
Table 24	Wetland habitat utilization of all avifauna species	26
Table 25	Wetland habitat utilization of avifauna species of conservation importance	26
Table 26	Noise Monitoring Results (For Ecological Monitoring of Birds)	27
Table 27	Waste Generated by the Construction and Disposal Ground	31
Table 28	Status of submissions required under the EP	33

## Figures

Figure 1	Location of Proposed Yuen Long Effluent Polishing Plant
Figure 2	Location of Construction Dust Monitoring Stations
Figure 3	Noise Monitoring Locations
Figure 4	Water Quality Monitoring Locations
Figure 5	Ecology Monitoring Locations

## Appendix

APPENDIX A	CONSTRUCTION PROGRAMME
APPENDIX B	PROJECT ORGANIZATION CHART
APPENDIX C	ACTION AND LIMIT LEVELS
APPENDIX D	CALIBRATION CERTIFICATES/ REPORTS OF MONITORING EQUIPMENT
APPENDIX E	ENVIRONMENTAL MONITORING SCHEDULE
APPENDIX F	ENVIRONMENTAL MONITORING RESULTS
APPENDIX G	WIND DATA
APPENDIX H	EVENT AND ACTION PLAN
APPENDIX I	WASTE FLOW TABLE
APPENDIX J	IMPLEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURES
APPENDIX K	WEATHER AND METEOROLOGICAL CONDITIONS
APPENDIX L	CUMULATIVE STATISTICS ON ENVIRONMENTAL COMPLAINTS, NOTIFICATIONS OF SUMMONS AND SUCCESSFUL PROSECUTIONS
APPENDIX M	SUMMARY OF THE ET LEADER'S SITE ENVIRONMENTAL AUDIT IN THE REPORTING MONTH
APPENDIX N	OUTSTANDING ISSUES AND DEFICIENCIES
APPENDIX O	ACTIVE NIGHT ROOST MONITORING AREA AND VANTAGE POINTS; AND NOISE MONITORING STATIONS
APPENDIX P	ECOLOGICAL BIRD MONITORING AREA WITH LOCATIONS OF POINT COUNT SITES AND TRANSECT ROUTE

## EXECUTIVE SUMMARY

This Monthly Environmental Monitoring and Audit (EM&A) Report is prepared for Contract No. SPW 02/2023 "Environmental Team for Construction of Yuen Long Effluent Polishing Plant Stage 1". Drainage Services Department (DSD) has appointed Aurecon Hong Kong Limited (Aurecon) to undertake the Environmental Team services for the project and implement the EM&A works.

This is the 43<sup>rd</sup> Monthly EM&A Report for the construction phase which summaries findings of the EM&A programme during the reporting period from 1 October 2024 to 31 October 2024. As informed by the Contractor, major activities in the reporting month were:

- E&M works and fixing GRC panel at CLP Substation
- ELS works and pipeworks at emergency bypass chamber
- ABWF, E&M work and RC structure at IW
- ABWF and E&M works at PST
- Piling at SDB
- External works at site-wide of predrilling at walkway
- ELS work at AGS
- ELS work at TTS
- RC Structure at STB
- ELS work at Sludge Digester no. 1-3
- E&M work at Biogas Holder no. 1
- ELS works at emergency bypass chamber
- Disposal of construction waste as indicated in Appendix I.

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

No Action and Limit Level exceedance was recorded for air quality monitoring and construction noise monitoring in the reporting month.

No Action and Limit Level exceedance was recorded for water quality monitoring in the reporting month.

No Action / Limit exceedance was recorded for noise levels at stations (NMS1 and NMS2) in close proximity to the two active ardeid night roosts (ANR1 and ANR2) observed within the Survey Area during the reporting month.

No Action / Limit exceedance for the ecological monitoring of birds in the reporting month.

No corrective actions were required according to the Event and Action Plans for the Monitoring Parameters.

#### Land Contamination

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", "Waste Storage Area", "SAS Thickener House-1", "SAS Thickener House-2"and "Screening Press House" were submitted to EPD respectively on 1st November 2021, 23rd November 2021, 29th April 2022, 6th July 2022, 19th June 2023 and 29 October 2024. No contaminated soil and ground water was found within the Main Storeroom & Workshop, Mechanical Workshop, Waste Storage Area, SAS Thickener House-1, SAS Thickener House-2 and Screening Press House, and no remedial action is required for these locations.

#### **Complaint Log**

No complaints were received in the reporting period.

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

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

#### **Reporting Change**

There were no reporting changes during the reporting month.

#### **Future Key Issues**

The main works will be anticipated in the next three months are as follow:

- E&M works and fixing GRC panel at CLP Substation
- ELS works at the existing inspection chamber & inlet effluent pipes from NSWSPS
- ABWF, E&M work and RC structure at IW
- ABWF and E&M works at PST
- Piling and ELS work at SDB
- External works at site-wide include water structure cabinet
- ELS work and RC structure at AGS
- ELS work and RC structure at TTS
- ABWF, E&M work and RC structure at STB
- ELS work at Sludge Digester no. 1-3
- RC Structure at Sludge Digester no. 1-3
- E&M work at Biogas Holder no. 1

## 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) was issued by EPD on 26 April 2019.
- 1.1.4 Fugro Technical Services Limited was 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") for the period from July 2020 to 6 July 2023.
- 1.1.5 Aurecon Hong Kong Limited (Aurecon) 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 from July 2023. Air quality, noise, water quality and ecological monitoring, site inspections and auditing (as scheduled) under EM&A programme with effect from 7 July 2023 was conducted by Aurecon. Aurecon is undertaking the preparation (including reporting of monitoring results), certification by ET Leader and submission of this report to EPD.
- 1.1.6 All ET roles and responsibilities under the EP for this Project were undertaken by Fugro up to 6 July 2023 and by Aurecon with effect from 7 July 2023. Air quality, noise, water quality and ecological monitoring, site inspections and auditing (as scheduled) under EM&A programme up to 6 July 2023 was conducted by Fugro, and the corresponding monitoring results were shared with Aurecon for the purposes of reporting in this report.
- 1.1.7 This is the 43<sup>rd</sup> Monthly EM&A report to document the findings of site inspection activities and EM&A programme for this project from 1 October 2024 to 31 October 2024 (reporting period) and is submitted to fulfil Condition 3.4 of the EP and Section 12.4.1 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**.

 Table 1
 Contact Information of Key Personnel

Party	Position	Name	Telephone
Project Proponent (Drainage Services Department)	Engineer	Mr. Wallace Cheng	2594 7473
Engineer's Representative	Chief Resident Engineer	Mr. Simon Yeung	9075 7172
(AECOM Asia Co. Ltd.)	Senior Resident Engineer	Mr. Patrick Leung	6124 8838
Independent Environmental Checker (Mott MacDonald Hong Kong Limited)	Independent Environmental Checker (IEC)	Mr. Brandon Wong	2828 5875
Contractor	Environmental Specialist	Mr. Gabriel Wong	5269 5723
(Paul Y CREC Joint Venture)	Environmental Officer	Mr. Henry Lau	5490 5271
Environmental Team (Aurecon Hong Kong Limited)	Environmental Team Leader (ETL)	Mr. Vincent Lu	6346 5908

## **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 month

- 1.4.1 The main construction works carried out in the reporting period were as follow:
  - E&M works and fixing GRC panel at CLP Substation
  - ELS works and pipeworks at emergency bypass chamber
  - ABWF, E&M work and RC structure at IW
  - ABWF and E&M works at PST
  - Piling at SDB
  - External works at site-wide of predrilling at walkway
  - ELS work at AGS
  - ELS work at TTS
  - RC Structure at STB
  - ELS work at Sludge Digester no. 1-3
  - E&M work at Biogas Holder no. 1
  - ELS works at emergency bypass chamber

1.4.2 The environmental mitigation measures corresponding to the main construction works implemented in the reporting period can be referred to **Appendix J**.

# 1.5 Status of Environmental Licences, Notification and Permits

1.5.1 A summary of the status of the relevant permits, licenses and/or notifications on environmental protection for this project is presented in **Table 2**.

Permit/ Notification/ License	Reference No	Valid From	Valid Till
Environmental Permit	EP-565/2019	26-Apr-2019	The whole construction and operation period of the Project
Notification of Works under APCO	461616	6-Nov-2020	The whole construction and operation period of the Project
Construction Waste Disposal Billing Account	7038933	20-Nov-2020	The whole construction and operation period of the Project
Registration as Chemical Waste Producer under WDO	WPN5213-528- P2796-03	4-Feb-2021	The whole construction and operation period of the Project
Construction Noise Permit	GW-RN0819-24	17-Jul-2024	16-Nov-2024
Construction Noise Permit	PP-RN0029-24	1-Oct-2024	30-Oct-2024
Construction Noise Permit	GW-RN0998-24	6-Sep-2024	5-Feb-2025
Water Pollution Control Ordinance (WPCO) (CAP. 358) Licence pursuant to Section 20 (Variation of Licence Pursuant to Section 28 of WPCO)	WT00038102- 2021	4-Aug-2021 (Variation approved on 11- Dec-2023 with immediate effect)	31-Aug-2026
Marine Dumping Permit (Type 1 – Open Sea Disposal)	EP/MD/25-009	28-Jun-2024	27-Dec-2024
Marine Dumping Permit (Type 1 – Open Sea Disposal (Dedicated Site) and Type 2 – Confined	EP/MD/25-028	28-Sep-2024	27-Dec-2024
Marine Dumping Permit (Excavated Sediment of Category L - Suitable for Capping Exhausted Contaminated Mud Pits)	EP/MD/25-023	26-Aug-2024	25-Feb-2025
Disposal of Special waste at Landfills Admission Ticket (Pond Sediment)	Admission Ticket Number: 94981	1-Oct-2024	31-Dec-2024
Revised Sediment Quality Report (SQR)	(19) in EP60/G1/12- 583V	4-Apr-2024	3-Apr-2025

 Table 2
 Environmental Licenses, Notification and Permits Summary

## 2 AIR QUALITY

## 2.1 Monitoring Requirement

2.1.1 In accordance with the EM&A Manual, 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.

## 2.2 Monitoring Equipment

- 2.2.1 A portable direct reading dust meter was used to carry out the 1-hour TSP monitoring at the designated monitoring stations.
- 2.2.2 Wind data monitoring equipment is provided at the conspicuous locations for logging wind speed and wind direction near to the dust monitoring locations. The equipment installation location is agreed with the ER and the IEC.
- 2.2.3 The details of the air quality monitoring equipment used are summarized in **Table 3**.

#### Table 3 Air Quality Monitoring Equipment

ltem	Location	Brand	Model	Equipment	Serial No.
1	AM1	Cilcoto	SIBATA LD-5R Digital Dust	882106,	
2	AM2	Sibata	Model LD-5R	Indicator	882107

## 2.3 Monitoring Methodology for Direct Reading Dust Meter

2.3.1 SIBATA LD-5R Digital Dust Indicator complete with appropriate sampling inlets are employed for 1-hour TSP measurement.

#### Measuring Procedures

- a) Pulling up the air sampling inlet cover
- b) Changing the Mode 0 to BG
- c) Pressing Start/Stop switch
- d) Turning the knob to SENSI.ADJ and press it
- e) Pressing Start/Stop switch again
- f) Returning the knob to the position MEASURE slowly
- g) Pressing the timer set switch to set measuring time
- h) Removing the cap and start the measurement

#### Equipment Calibration

1-hour dust meter should be calibrated at 1 year intervals. The calibration certificates are presented in **Appendix D**.

## 2.4 Maintenance and Calibration for Direct Reading Dust Meter

2.4.1 ET shall submit sufficient information to the IEC to prove that the instrument is capable of achieving comparable results to the HVS. The instrument should also be calibrated regularly, and the 1-hour sampling shall be determined periodically by the HVS to check the validity and accuracy of the results measured by direct reading method. The calibration certificate for the direct reading dust meter is provided in **Appendix D**.

## 2.5 Monitoring Locations

- 2.5.1 In accordance with the EM&A Manual, two air quality monitoring locations, namely AM1, AM2 are covered under Contract No. SPW 02/2023 "Environmental Team for Construction of Yuen Long Effluent Polishing Plant Stage 1".
- 2.5.2 The most updated locations are summarized in **Table 4** and the locations of the air monitoring stations shown in **Figure 2**.

 Table 4
 Air Quality Monitoring Location

Monitoring Station	Location
AM1	Topfine Machinery (China) Co. Ltd
AM2	Squatter house at the west of YLSTW

## 2.6 Monitoring Results

- 2.6.1 The schedule of air quality monitoring in reporting month is provided in **Appendix E**.
- 2.6.2 No Action / Limit Level exceedance was recorded for 1-hr TSP at AM1 and AM2.
- 2.6.3 No effect that arose from the other special phenomena and work progress of the concerned site was noted during the current monitoring month.
- 2.6.4 The weather and meteorological conditions during the monitoring are provided in **Appendix K**.
- 2.6.5 The Air Quality Monitoring Results of 1-hr TSP are summarized in **Table 5**. Detailed monitoring data are presented in **Appendix F**.

Table 5 Summary of Air Quality Monitoring Results

Monitoring Station	Average (μg/m³)	Range (µg/m³)	Action Level (µg/m³)	Limit Level (µg/m³)
AM1	41	34-49	291	500
AM2	40	33-47	296	500

2.6.6 The Action and Limit Levels for air quality monitoring have been set and are presented in **Appendix C**.

- 2.6.7 The Event and Action Plan for air quality is given in **Appendix H**.
- 2.6.8 The wind data obtained from the on-site wind station during the reporting period is provided in **Appendix G**.

## 2.7 Comparison of 1-hr TSP Monitoring Results with EIA Predictions

2.7.1 The monitoring data of 1-hr TSP was compared with the EIA predictions as summarized in **Table 6**.

Monitoring Station	EIA ID	Predicted Maximum Hourly Average TSP Concentration (μg/ m³)	Maximum 1-hr TSP Monitoring Results in October 2024 (μg/ m³)
		Content	
AM1	ASR A09	205 454	49
AM2	ASR A11	205-451	47

 Table 6
 Comparison of 1-hr TSP data with EIA predictions

Notes: Predicted TSP Concentration extracted from Table 3.20 of EIA Report, AEIAR-220/2019

2.7.2 The 1-hr TSP monitoring results at AM1 and AM2 were below the Predicted Maximum Hourly Average TSP Concentration in the approved Environmental Impact Assessment (EIA) Report.

## 3 NOISE

## 3.1 Monitoring Requirement

3.1.1 In accordance with the EM&A Manual, 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.

## 3.2 Monitoring Equipment

- 3.2.1 As referred to the requirements of the Technical Memorandum (TM) issued under the NCO, the sound level meters in compliance with the International Electro technical Commission Publications 651: 1979 (Type 1) and 804: 1985 (Type 1) specifications should be used for carrying out the noise monitoring. Immediately prior to and following each noise measurement, the accuracy of the sound level meter should be checked using an acoustic calibrator generating a known sound pressure level at a known frequency. The measurements may be accepted as valid only if the difference between calibration levels obtained before and after the noise measurement is less than 1.0 dB (94 dB ± 0.1 dB).
- 3.2.2 The details of the noise monitoring equipment used are summarized in **Table 7**.

ltem	Brand	Model	Equipment	Serial No.
1	NTi Audio	XL2	NTi Audio XL2 Digital Sound Level Meter	A2A-09696-E0
2	NTi Audio	XL2	NTi Audio XL2 Digital Sound Level Meter	A2A-13548-E0
3	NTi Audio	XL2	NTi Audio XL2 Digital Sound Level Meter	A2A-13663-F0
4	RION	NC-75	RION NC-75 Acoustic Calibrator	34724244
5	RION	NC-75	RION NC-75 Acoustic Calibrator	34724245
6	RION	NC-75	RION NC-75 Acoustic Calibrator	34524163

 Table 7
 Construction Noise Monitoring Equipment

### 3.3 Monitoring Parameters and Frequency

3.3.1 The parameters and frequencies of impact noise monitoring is summarized in **Table 8**.

Table 8 Monitoring Parameters and Frequencies of Noise Monitoring

Parameter	Frequency
LAeq (30 min) (L10 and L90 will be recorded for reference)	At each station at 0700-1900 hours on normal weekdays at a frequency of once a week when construction activities are underway

## 3.4 Monitoring Methodology

3.4.1 Noise measurement should be conducted as the following procedures:

 The monitoring station will set at a point 1m from the exterior of the sensitive receivers building façade and set at a position 1.2m above the ground. (In case façade measurement is not feasible on-site, a free field correction of +3dB(A) will be applied.)

- The battery condition was checked to ensure good functioning of the meter.
- Parameters such as frequency weighting, the time weighting and the measurement time will set as follows:
  - frequency weighting: A
  - time weighting: Fast
  - measurement time: 30 minutes
- Prior to and after noise measurement, the meter shall be calibrated using the calibrator for 94.0 dB at 1000 Hz. If the difference in the calibration level before and after measurement is more than 1.0 dB, the measurement will consider invalid and repeat of noise measurement is required after re-calibration or repair of the equipment.
- Noise measurement should be paused during periods of high intrusive noise if possible and observation shall be recorded when intrusive noise is not avoided.
- Noise measurements shall not be made in fog, rain, wind with a steady speed exceeding 5 m/s or wind with gusts exceeding 10 m/s. The wind speed shall be checked with a portable wind speed meter capable of measuring the wind speed in m/s. Calibration certificate of the anemometer is provided in Appendix D.

### 3.5 Maintenance and Calibration

- 3.5.1 Maintenance and calibration procedures should also be carried out, including:
  - The microphone head of the sound level meter and calibrator should be cleaned with a soft cloth at quarterly intervals.
  - The sound level meter and calibrator should be calibrated annually by a HOKLAS laboratory.
  - Relevant calibration certificates are provided in Appendix D.

## 3.6 Monitoring Locations

- 3.6.1 In accordance with the EM&A Manual, three noise monitoring locations, namely CM1, CM2 and CM3 are covered under Contract No. SPW 02/2023 "Environmental Team for Construction of Yuen Long Effluent Polishing Plant Stage 1".
- 3.6.2 The most updated locations are summarized in **Table 9** and the locations of the noise monitoring stations shown in **Figure 3**.

 Table 9
 Construction Noise Monitoring Location

Monitoring Station ID	Location	Measurements
CM1	Squatter house at the north of YLSTW	Free Field
CM2	Squatter house at the west of YLSTW	Free Field
CM3	Squatter house at the east of YLSTW	Free Field

Note: Correction of +3 dB(A) shall be made to the free field measurements.

## 3.7 Monitoring Results

- 3.7.1 The schedule of noise monitoring in reporting month is provided in **Appendix E**.
- 3.7.2 No Action / Limit Level exceedance of location CM1, CM2 and CM3 was recorded for construction noise in the reporting month.

- 3.7.3 During the monitoring month, 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 month.
- 3.7.4 No raining and wind with speed over 5 m/s was observed during noise monitoring according to the onsite observation. The weather and meteorological conditions during the monitoring month are provided in **Appendix K**.
- 3.7.5 The Construction Noise Monitoring Results are summarized in **Table 10**. Detailed monitoring data are presented in **Appendix F**.

Time Period	Noise Monitoring Stations	Leq (30min) dB(A) (Range)	Action Level	Limit Level dB(A)
0700-1900 hrs	CM1	59.1 – 62.3	When one	75
on normal weekdays	CM2	57.3 – 59.3	documented	75
	СМЗ	61.0 - 62.3	complaint is received	75

Table 10 Summary of Construction Noise Monitoring Results

Remark: CM1, CM2 and CM3: Free-field measurement (+3 dB(A) correction has been applied).

- 3.7.6 The Action and Limit Levels for Construction Noise have been set and are presented in **Appendix C**.
- 3.7.7 The Event and Action Plan for Construction Noise is given in **Appendix H**.

## 3.8 Comparison of Noise Monitoring data with EIA Predictions

3.8.1 The noise monitoring data was compared with the EIA predictions as summarized in **Table** 11.

Monitoring Station	EIA ID	Maximum Predicted Mitigated Construction Noise Level L <sub>eq</sub> (30min) dB(A)	Maximum Construction Noise Level in October 2024 L <sub>eq</sub> (30min) dB(A)
CM1	NSR1	72	62.3
CM2	NSR2	74	59.3
CM3	NSR3	75	62.3

 Table 11 Comparison of Noise monitoring data with EIA predictions

Notes: Predicted TSP Concentration extracted from Table 4.9 of EIA Report, AEIAR-220/2019

3.8.2 The construction noise monitoring results at CM1, CM2 and CM3 were below the Maximum Predicted mitigated Construction Noise Level in the approved Environmental Impact Assessment (EIA) Report (Register No.: AEIAR-220/2019).

## 4 WATER QUALITY

## 4.1 Monitoring Requirement

4.1.1 In accordance with the EM&A Manual, impact monitoring is conducted for three days per week at mid-flood and mid-ebb with sampling and measurement at the designated monitoring stations.

## 4.2 Monitoring Equipment

4.2.1 Equipment used for in-situ measurement and water sampling during impact water quality monitoring is summarised in **Table 12**. The equipment is in compliance with the requirements set out in the EM&A Manual. All in-situ monitoring instruments were calibrated by a HOKLAS- accredited laboratory. Calibration of temperature, DO, salinity, pH and turbidity is conducted in three-month interval. Calibration certificates for the water quality monitoring equipment are attached in **Appendix D**.

Table 12	Water	Quality	Monitoring and	Sampling	Equipment
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Parameter	Equipment	Model	Range	Equipment Accuracy	Serial No.
Temperature Dissolved Oxygen Salinity pH Turbidity	YSI Water Quality Multipara meter Sonde	Tem: -5 to 50°C           DO: 0-50mg/L           DO%: 0-500%           Sal: 0 to 70ppt           pH: 0 to 14 pH units           Turb: 0- 4000NTU		Temp: ±0.2°C; DO: ±0.1mg/L or 1% for 0- 20mg/L; ±8% for 20-50mg/L Sal: ±1% of reading or 0.1 ppt (whichever is greater) pH: ±0.2 units Turb: ±3% or 0.3NTU (FNU) (whichever greater)	22C106561
Current Velocity and Direction	Current Meter	Valeport Model 106	Speed: 0.03 to 5 m/s Direction: 0 to 360	Speed: ± 1.5% of reading above 0.15m/s, ± 0.004 m/s below 0.15m/s Direction: ± 2.5o	N/A
Water Sampling	Water Sampler	Aquatic Research Instruments 2.2L Horizontal Water Sampler HWS2.2CP	N/A	N/A	N/A
Positioning	DGPS	GARMIN GPSMAP 78s	N/A	GPS: ±1m	N/A
Water Depth	Echo Sounder	Garmin ECHO 101	Maximum depth: 457.2 m	0.1 m	N/A

## 4.3 Equipment Calibration

4.3.1 All in-situ monitoring instruments shall be checked, calibrated and certified by a laboratory accredited under HOKLAS before use and subsequently re-calibrated at three monthly intervals throughout all stages of the water quality monitoring programme. Responses of sensors and electrodes shall be checked with certified standard solutions before each use. Wet bulb calibration for a DO meter shall be carried out before measurement at each monitoring location.

4.3.2 Sufficient stocks of spare parts shall be maintained for replacements when necessary. Backup monitoring equipment shall also be made available so that monitoring is uninterrupted even when some equipment is under maintenance or calibration etc.

### 4.4 Monitoring Parameters

The monitoring parameters and frequency for both in-situ measurement and laboratory analysis are summarised in **Table 13**.

Table 13 Monitoring Parameters and Frequency

Parameters	Monitoring Frequency
In-situ Measurement Turbidity (in NTU), pH, DO (in mg/L and % of saturation), Temperature (in °C), Salinity (in ppt) Laboratory Analysis Suspended Solids	3 days per week, at mid-flood and mid-ebb tides (The interval between two sets of monitoring shall not be less than 36 hours.)

## 4.5 Monitoring Operation

- 4.5.1 The position of water monitoring station will be located by the Differential Global Positioning System (DGPS) or equivalent. The water depth of water monitoring station will be determined by the echo sounder affixed to the bottom of the monitoring vessel or a portable echo sounder depth detector.
- 4.5.2 Once the location and water depth are confirmed, water samples shall be collected at 3 depths (1m below the surface, mid-depth, and 1m above the seabed) of the water column at each location, except where water depth is less than 6m, the mid-depth will be omitted and if the water depth is less than 3m only the mid-depth station will be monitored. Duplicate marine samples will be collected in each sampling event. The water samples are decanted from the water sampler into the water sample bottles. The bottles are labelled, tightly sealed, placed into a cool-box and packed with ice ready for delivery to the laboratory.
- 4.5.3 Two consecutive measurements of water quality data, including pH, salinity, dissolved oxygen and turbidity will be recorded according to the monitoring locations. Separate deployment of the monitoring instruments and water samplers will be conducted for the consecutive measurements or samplings. The monitoring location / position, time, water depth, sampling depth, tidal stages, weather conditions, sea condition and any special phenomena or work underway nearby shall also be recorded. If the difference in value between the first and second measurement of DO or turbidity parameters is more than 25% of the value of the first reading, the reading shall be discarded and further readings should be taken.

### 4.6 Laboratory Measurement / Analysis

#### Background

4.6.1 Acumen Laboratory and Testing Limited (HOKLAS Reg: No.241) has been appointed to conduct the laboratory measurement or analysis of water sample in this project.

#### **Quality Assurance / Quality Control**

4.6.2 The laboratory incorporates a variety of QA/QC monitoring programme into their testing system. Where applicable or available, the quality of the analysis will be monitored by conducting the following QC analysis:

For each batch of 20 samples:

- A minimal of 1 laboratory method blank will be analyzed;
- A minimal of 1 sample duplicate will be analyzed;
- A minimal of 1 sample matrix spike will be analyzed.

### 4.7 Monitoring Locations

- 4.7.1 In accordance with the EM&A Manual, water quality monitoring should be carried out at 3 designated monitoring locations.
- 4.7.2 The coordinates of the monitoring location stated in the EM&A Manual is summarised in **Table 14** and the locations of the water quality monitoring stations shown in **Figure 4**.

Table 14 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
М3	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	820 335

### 4.8 Monitoring Results

- 4.8.1 The schedule of water quality monitoring in reporting month is provided in **Appendix E**.
- 4.8.2 Impact water quality monitoring was conducted at all designated monitoring stations in the reporting month. Impact water quality monitoring results and graphical presentations are provided in **Appendix F**.
- 4.8.3 Typhoon Signal No. 3 was hoisted on 26 October 2024. Due to safety concerns, the water quality monitoring on 26 October 2024 has been cancelled.
- 4.8.4 The weather and meteorological conditions during the monitoring are provided in **Appendix K**.
- 4.8.5 Number of Action/ Limit exceedance recorded in the reporting month at each impact stations is summarized in **Table 15**.

Sampling Location	Exceedance Level	DO		Turbidity		Suspended Solids		Total	
Location	Levei	Flood	Ebb	Flood	Ebb	Flood	Ebb	Flood	Ebb
	Action	0	0	0	0	0	0	0	0
M1	Limit	0	0	0	0	0	0	0	0
M2	Action	0	0	0	0	0	0	0	0
IVIZ	Limit	0	0	0	0	0	0	0	0
M3	Action	0	0	0	0	0	0	0	0
IVIS	Limit	0	0	0	0	0	0	0	0
<b>T</b> ( )	Action	0	0	0	0	0	0	0	
Total	Limit	0	0	0	0	0	0	(	)

#### Table 15 Summary of Water Quality Exceedance

- 4.8.6 During the reporting period, no Action and Limit Level exceedance was recorded for water quality monitoring.
- 4.8.7 The Event and Action Plan for water quality is given in **Appendix H**.

## 4.9 WetSeps

Four WetSeps are deployed within the site for treatment of the site runoff prior to disposal in compliance with the conditions stipulated in the water discharge license (Variation of WPCO Discharge Licence was approved by EPD on 11 December 2023 with immediate effect).

## 5 ECOLOGY MONITORING

## 5.1 Ardeid Night Roost Monitoring

#### 5.1.1 Monitoring Requirement

With reference to the Pre-construction Ardeid Night Roost survey (October 2016) findings that identified two active ardeid night roosts within 100 m from the Project boundary (one approximately 40 m east of the Project boundary and the other one approximately 45 m northeast of the Project boundary), consequent monthly monitoring of these active ardeid night roosts was done in accordance to the **EM&A Manual Sections 7.3.10** and **7.3.11**; and **EIA Report Section 8.12.1.3**.

The Ardeid Night Roost Monitoring survey was conducted with the following objectives:

- Check the status and location of any active ardeid night roosts within 100 m from the Project boundary (Survey Area) with reference to EM&A Manual Section 7.3.10;
- Monitor the effectiveness of proposed mitigation measures and detect any unpredicted indirect ecological impacts arising from the proposed Project as specified in EIA Report Section 8.12.1.3; and
- Recommend remedial actions, where appropriate, based on the impact monitoring results (EIA Report Section 8.12.1.3) for the implementation of the contractor as only necessary.

#### 5.1.2 Monitoring Methodology

#### 5.1.2.1 Monitoring Area

With reference from **Section 7.3.10** of the **approved EM&A Manual**, the monitoring was conducted in areas within 100 m from the Project boundary. The monitoring area and vantage points for direct observation of any active night roosts are shown in **Appendix O**.

#### 5.1.2.2 Monitoring Activity

#### 5.1.2.2.1 Active Ardeid Night Roost

Current Ardeid Night Roost Monitoring Survey focused on the two active night roosts within the Survey Area (100 m from the Project boundary) that were previously confirmed during the preconstruction Survey. These roosts include one that was approximately 40 m east of the Project boundary and another around 45 m northeast of the mentioned boundary (Section 3 of the **approved Pre-construction Survey Report of Ardeid Night Roost**). Primary data collection with the use of 8x and 10x binoculars; and field guides including the Avifauna of Hong Kong (Carey et al., 2001) and The Birds of Hong Kong and South China (Viney et al., 2005), was from about one hour before sunset time until one hour after sunset with reference to Section 7.3.10 of the approved EM&A Manual. Sunset time was according to Hong Kong Observatory (HKO). The survey was conducted on 30 October 2024.

Species composition, abundance and locations of night roosts were recorded. Species composition, abundance and location of pre-roosting aggregations (PRA) were also noted. PRAs are gatherings of avian individuals prior to flying into a night roost (Moore and Switzer, 1998). The time of return of the ardeids to the pre-roost and the final night roost were also recorded. Direct observations were made from vantage points adjacent the Project site with clear and unobstructed view of any active roosting location (s) within the Survey Area. However, aside from the established vantage points for the focused mangrove strips along Shan Pui River, observations were also conducted throughout the whole 100 m study site to cover other areas aside from the mangrove strips.



Observations such as any changes in site condition or disturbances detected or observed at the monitoring locations, including both construction and non-construction related activities, during the monitoring activity was recorded with reference to **Section 7.3.10** of the **approved EM&A Manual**. Additionally, other observations such as bird droppings on the ground which may possibly indicate presence of night roosts were noted in addition to noting of the roosting substrate (i.e. substrate species and approximate height). Any breeding activity usage of the roosting locations within the Survey Area was also noted.

#### 5.1.2.2.2 Noise Monitoring

#### Monitoring Locations, Frequency, Time and Parameters

The noise monitoring locations were established at 22°28'4.25"N, 114°1'41.32"E; and 22°28'10.43"N, 114°1'42.17"E for NMS1 and NMS2 stations, respectively. Monitoring frequency was only once a month in concurrence with the construction phase monthly monitoring of the active night roosts for correlation. Monitoring time for both stations started around 16:47, the earliest final night roost period recorded during the survey and lasted for 30 minutes. **Table 16** presents the monitoring parameters.

Table 16	Noise Monitoring	Parameters	(For Active	Ardeid Night Roost Survey)

Parameter	Frequency and Period
LAeq (30 min)	Monthly in concurrence with the construction phase
(L10 and L90 will be recorded for reference)	monthly monitoring of the active night roosts

The Action and Limit Levels for Active Ardeid Night Roost Survey have been set and are presented in **Appendix C**.

However, exceedances to the limit level were endeavoured to be prevented by the full implementation of mitigation measures (Section 4.2 of the approved Pre-construction Survey Report of Ardeid Night Roost and Sections 5.2.1-5.2.2 of this Report) during the construction phase.

#### Event and Action Plan

In instances of exceedance/s in the action and/or limit levels, the different measures as specified in **Table 3.3 Event and Action Plan for Construction Noise** of the **approved EM&A Manual** and likewise presented in **Appendix H** of this report shall be implemented as responses.

#### 5.1.3 Monitoring Results

#### 5.1.3.1 Active Ardeid Night Roost

The monitoring activity was conducted on 30 October 2024 and started around 16:47 (one hour before sunset) on a low tide condition. During the pre-roost period (PRP), the period when avian individuals gather first before flying into a night roost, individuals of Chinese Pond *Heron Ardeola bacchus* (9), Little Egret *Egretta garzetta* (2), Great Egret *Ardea alba* (1) and Grey Heron *Ardea cinerea* (2) were observed in pre-roost aggregate (PRA) around 17:24 at the mudflat east side ANR1 of the Project boundary while individuals of Chinese Pond Heron *Ardeola bacchus* (2), Great Egret *Ardea alba* (3) and Grey Heron *Ardea cinerea* (2) were concurrently noted at the mudflat northeast side ANR2 of the Project boundary (Table 17).

For the final night roost at around 17:52, individuals of Chinese Pond Heron Ardeola bacchus (28), Little Egret Egretta garzetta (2), Great Egret Ardea alba (2) and Grey Heron Ardea cinerea (1) were observed at the roosting area ANR1 utilizing the understory to canopy layer of the roosting substrate Sonneratia apetala and S. caseolaris; while other individuals of Chinese Pond Heron Ardeola bacchus (4), Little Egret Egretta garzetta (2), Great Egret (2), Great Egret Ardea alba (6) and Grey Heron Ardeo cinerea (2) were noted at ANR2 that utilized the understory to canopy layer of the aforementioned roosting substrate.



No disturbance (construction related and/or otherwise) to the active night roost areas was observed during the period. Bird droppings were observed within the vicinity of the roosting area located east of the Project boundary.

#### Table 17 Active Ardeid Night Roost Survey Findings

Date: 30 October 2024			Sunset Time: 17:47	Tidal Condition: Low Tide	
	Pre-roost Period			Final roost Period	
Time of Return:	Chinese Pond Heron <i>Ardeola bacchus</i> , Great Egret <i>Ardea</i> <i>alba,</i> Little Egret <i>Egretta garzetta</i> and Grey Heron <i>Ardea cinerea</i> (17:24)		Time of Return:	Chinese Pond Heron <i>Ardeola bacchus</i> , Great Egret A <i>alba</i> and Little Egret <i>Egretta garzetta</i> (17:52)	
Parameters	Loca	ation	Parameters Location		ation
	ANR1	ANR2	-	ANR1	ANR2
Pre-roost Aggregation (Y/N):	Y	Y	Substrate Species:	Sonneratia apetala and S. caseolaris	Sonneratia apetala and S. caseolaris
Substrate Species:	Sonneratia apetala and S. caseolaris	Sonneratia apetala and S. caseolaris	Substrate Height (m):	Approx. 5 m.	Approx. 3-4 m.
Substrate Height (m):	Approx. 5 m.	Approx. 3-4 m.			
Ardeid Species	Abundance (individuals)		Ardeid Species	Abundance (individuals)	
Composition	ANR1	ANR2	Composition	ANR1	ANR2
Chinese Pond Heron Ardeola bacchus	9	2	Chinese Pond Heron Ardeola bacchus	28	4
Great Egret <i>Ardea alba</i>	1	3	Great Egret Ardea alba	2	6
Little Egret Egretta garzetta	2	-	Little Egret Egretta garzetta	2	2
Grey Heron Ardea cinerea	2	2	Grey Heron Ardea cinerea	1	2
Breeding Activity (Y/N):	ANR1			N	
	ANR2			N	

Notes:

Pre-roost Period: Period when avian individuals gather first before flying into a night roost

ANR1: Active ardeid night roost area east of the Project boundary

ANR2: Active ardeid night roost area northeast of the Project boundary

-: not recorded

#### 5.1.3.2 Noise Monitoring

Noise monitoring activities were conducted on 30 October 2024 in concurrence with the construction phase monthly monitoring of the pre-identified active night roosts. Noise monitoring started at 17:52 and lasted for 30 minutes, until 18:22.

Current survey results showed noise levels (LAeq (30 min.)) at both monitoring stations to be well below the action and limit levels as presented in **Table 18**.

Table 18 Noise Monitoring Parameters (For Active Ardeid Night Roost Survey)

Frequency and Period	Location	Start Time	LAeq (30 min.)	Action Level	Limit Level
Monthly in concurrence with the	NMS1	17:52	60.4		
construction phase monthly monitoring of the active night roosts	NMS2	17:52	61.3	65.5 dB(A) <sup>1</sup>	72.2 dB(A) <sup>2</sup>

Notes:

NMS1= Noise monitoring station 1 located east of the Project boundary

NMS2= Noise monitoring station 2 located northeast of the Project boundary

<sup>1</sup>= Behavioural response of some kind more likely to occur (Wright et al. 2010)

<sup>2</sup>= Flight with abandonment of the site becomes the most likely outcome of the disturbance (Wright et al. 2010)

No Action / Limit exceedance was recorded for noise levels at stations (NMS1 and NMS2) in close proximity to the two active ardeid night roosts (ANR1 and ANR2) observed within the Survey Area during the reporting month.

#### 5.1.4 Detection of Any Unpredicted Indirect Ecological Impacts Arising from the Project

No unpredicted indirect ecological impacts that arose from the project were noted during the current monitoring period.

#### 5.1.5 Summary

#### 5.1.5.1 Status and Location of Any Active Ardeid Night Roost

Two active ardeid night roost areas (ANR1 and ANR2) were observed within the Survey Area during the October 2024 monitoring period. These roosts were located at the mangrove strips in the east and northeast portions of the Project boundary. These were used by individuals of Chinese Pond Heron *Ardeola bacchus*, Great Egret *Ardea alba*, Little Egret *Egretta garzetta* and Grey Heron *Ardea cinerea*.

#### 5.1.5.2 Noise Monitoring Results

Both noise levels at each of the monitoring stations were below the action and limit levels.

### 5.2 Ecological Monitoring of Birds

#### 5.2.1 Monitoring Requirement

With reference to **Section 7.3.6** of the **EM&A Manual**, monthly ecological monitoring of birds, focusing on avifauna species of conservation interest, and overwintering waterbirds utilising wetland habitats in Fung Lok Wai and Nam Sang Wai as well as along Shan Pui River and Kam Tin River within the monitoring area (500 m from the Project Boundary)



was conducted in addition to monitoring on the utilization of wetland habitats by birds also within the same monitoring area as required by **Section 7.3.1** of the **EM&A Manual**.

#### 5.2.2 Monitoring Methodology

#### 5.2.2.1 Monitoring Area

The monitoring area included wetland habitats in Fung Lok Wai and Nam Sang Wai as well as along Shan Pui River and Kam Tin River within 500m from the Project boundary with reference to **Section 7.3.6** of the **EM&A Manual**. The location of point count sites and transect routes is shown in **Appendix P**.

#### 5.2.2.2 Monitoring Activity

Avifauna surveys on the different wetland habitats using the transect count and point count methods was conducted last 23 October 2024 (daytime) which started at around 07:15. Additionally, the survey overlooking the mudflats and mangroves in the Shan Pui River was concurrently conducted on the same date with the daytime survey during the low tide (generally 1.5m or below) period, and also started at around 07:15. The methodology for the monitoring activity followed **Sections 8.3.3.6** and **8.3.3.7** of the **EIA Report (AEIAR-220/2019)** and as detailed below.

For the transect count and point count methods, the presence and relative abundance of avifauna species at various wetland habitats were recorded visually and aurally.

Avifauna species were detected either by direct sighting or by their call and identified to species level. Any notable behaviours such as feeding, roosting and breeding were also recorded. Bird species encountered outside the point count locations and walk transects were also recorded. A comprehensive list of species recorded from the Assessment Area was prepared, with wetland-dependence, conservation and/or protection status indicated. Ornithological nomenclature in this report follows Carey et al. (2001), Viney et al. (2005) and the most recent updated list from Hong Kong Bird Watching Society (HKBWS).

Noise levels were recorded with the methodology and equipment as mentioned in **Section 3.4** and **Section 3.2**, respectively, of this EM&A report. The parameter as shown in was recorded at each of the point count locations.

#### Table 19 Noise Monitoring Parameters

Parameter	Frequency and Period
LAeq (30 min)	Monthly in concurrence with the monthly ecological
(L10 and L90 will be recorded for reference)	bird monitoring at the different point count locations

In addition to recording of noise levels, any changes in site condition or disturbances detected or observed at the monitoring locations, including both construction and non-construction related activities with reference to **Section 7.3.7** of the **EM&A Manual** were also noted.

#### 5.2.2.3 Data Analysis

For the bird communities, the monitoring results were compared to pre-construction baseline condition during the dry and wet seasons as summarized in the Baseline Bird Survey Report with reference to **Section 7.3.8** of the **EM&A Manual**. However, to further account the seasonality, monitoring results of the current month were compared to the results of the corresponding month of the baseline data.

The data for point count method and transect walk method were presented separately to account for the difference in the survey effort of the two methods. For each method, abundance and species composition of the avifauna communities during the monitoring month were summarized.

To check the presence of variation in bird abundance between baseline and impact monitoring, t-test was applied ( $\alpha = 0.05$ ). Moreover, to check the presence of variation in bird species diversity, the two-sided Hutcheson t-test was also used. The two-sided Hutcheson t-test was developed as a method to compare the diversity of two community samples using the Shannon diversity index (Hutcheson 1970). Shannon diversity index will be computed using the formula,  $H' = \sum_{i=1}^{s} p_i ln p_i$  where, H' = Shannon Diversity Index; Pi = proportion of the population of species; i = number of species in sample; ln = natural logarithm. Shannon diversity index is used as it accounts the proportion (relative abundance) of each species; thus, it gives a better description of diversity than a plain number of species (species richness).

The Action and Limit Levels for ecological monitoring of birds have been set and are presented in **Appendix C**.

Wetland habitat utilization during the construction phase monitoring shall only be compared seasonally, hence the comparison shall only be done after all the data (dry season and wet season) were collected with reference to **Appendix 8.5** of the approved **EIA Report**.

#### 5.2.3 Monitoring Results

Results of the avifauna survey on the different habitats within the monitoring area using the transect count and point count methods as conducted last 23 October 2024 (daytime) which started at around 07:15, are presented in **Sections 5.2.3.1** and **5.2.3.2**. Meanwhile, results for the surveys overlooking the mudflats and mangroves in the Shan Pui River, with monitoring activities conducted on similar date with the daytime survey during the low tide (generally 1.5m or below) period around 10:00 had results presented in **Section 5.2.3.3**.

#### 5.2.3.1 Abundance

#### 5.2.3.1.1 All Avifauna Species

An overall total of 743 avifauna individuals were recorded in the monitoring area during the October 2024 monitoring period, of which 521 individuals were recorded from the point count method and 222 individuals from the transect walk method. Relative to the October 2016 baseline data (point count method = 157; and transect walk = 51), an increase was noted for both point count method and transect walk method.

Details of these findings are summarized in **Table 20**.

Abundance of all Avifauna Species						
EIA Report ID	EM&A Manual ID	October-16	October -24	Remarks		
Point Count Method						
P1	FLW1	8	28	+		
P2	FLW2	5	31	+		
P3	FLW3	6	24	+		
P4	FLW4	13	6	-		
P5	FLW5	13	46	+		
P6	FLW6	12	6	-		
P7	FLW7	18	17	-		
P9	SP/NSW3	51	123	+		
P10	SP/NSW2	12	41	+		
P11	NSW1	10	143	+		
P12	SP/NSW1	9	56	+		
Τα	otal	157	521	+		
M	ean	14	47	+		
Transect Walk Meth	nod					
Fung Lok Wai	FLW	51	33	+		
Nam Sang Wai	NSW	0	69	+		
YLIE-CW	YLIE-CW	0	120	+		
Τα	otal	51	222	+		
M	ean	17	74	+		

Table 20 Abundance of all Avifauna Species

Notes:

+ increased abundance;

- decreased abundance;

= no change in abundance.

No Action / Limit exceedance was recorded for the abundance of all avifauna species (including but not limited to overwintering waterbirds) for both the point-count and transect walk method.

#### 5.2.3.1.2 Avifauna Species of Conservation Importance

Of the 743 avifauna individuals recorded in the monitoring area during the October 2024 monitoring period, 458 individuals (point count method = 334 individuals; transect walk method = 124 individuals) were of conservation importance. With reference to October 2016 data, (point count method = 104; and transect walk = 35), an increase was noted for both point count and transect walk method. Details of these findings are summarized in **Table 21**.

Abundance of Species of Conservation Importance							
EIA Report ID	EM&A Manual ID	October-16	October -24	Remarks			
Point Count Method	Point Count Method						
P1	FLW1	2	9	+			
P2	FLW2	3	22	+			
P3	FLW3	3	4	+			
P4	FLW4	10	4	-			
P5	FLW5	9	16	+			
P6	FLW6	9	1	-			
P7	FLW7	13	5	-			
P9	SP/NSW3	40	122	+			
P10	SP/NSW2	11	37	+			
P11	NSW1	2	96	+			
P12	SP/NSW1	5	18	+			
Тс	otal	107	334	+			
Me	ean	8	30	+			
Transect Walk Meth	od						
Fung Lok Wai	FLW	35	4	-			
Nam Sang Wai	NSW	0	29	+			
YLIE-CW	YLIE-CW	0	91	+			
Тс	otal	35	124	+			
Me	ean	12	41	+			

Table 21 Abundance of Species of Conservation Importance

Notes:

+ increased abundance;

- decreased abundance;

= no change in abundance.

No Action / Limit exceedance was recorded for the abundance of Species of Conservation Importance in both point-count and transect walk method.

#### 5.2.3.2 Diversity (Species Richness<sup>1</sup> and Shannon Diversity Index<sup>2</sup>)

#### 5.2.3.2.1 All Avifauna Species

A total of 46 avifauna species (species richness) were recorded during the October 2024 monitoring period, of which, 41 species were recorded by the point count method while 29 species were noted by the transect walk method. Relative to the baseline data (point count method = 32 species; transect walk method = 13 species), an increase in total species richness for both point count and transect walk method was recorded. In terms of Shannon diversity index (H') values, current result in point count method showed a slight decrease (t-value = 1.68; t-crit = 1.97; p-value = 0.095;  $\alpha$  = 0.05) relative to the baseline reference value. The current results in the transect walk method showed a significant increase (t-value = 4.11; t-crit = 1.99; p-value = 1.06E-04;  $\alpha$  = 0.05) from baseline reference value. Details of these findings are summarized in **Table 22**, **Appendix F.6.1**, and **Appendix F.6.2**.

<sup>1</sup> actual n	umber	of sp	pecies
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<sup>2</sup> use to account the proportion (in terms of relative abundance) of each species

Shannon Diversity Index Value of all Avifauna Species						
EIA Report ID	EM&A Manual ID	October-16	October -24	Remarks		
Point Count Method						
P1	FLW1	1.56	2.50	+		
P2	FLW2	1.33	1.73	+		
P3	FLW3	1.01	0.62	-		
P4	FLW4	1.26	1.33	+		
P5	FLW5	1.63	1.62	-		
P6	FLW6	1.10	0.45	-		
P7	FLW7	2.29	1.94	-		
P9	SP/NSW3	2.24	1.59	-		
P10	SP/NSW2	1.47	2.14	+		
P11	NSW1	1.66	1.41	-		
P12	SP/NSW1	1.52	2.60	+		
Over	all H'	2.93	2.77	-		
Species	Richness	32	41	+		
Transect Walk Meth	od		1			
Fung Lok Wai	FLW	1.83	2.26	+		
Nam Sang Wai	NSW	**	2.33	+		
YLIE-CW	YLIE-CW	**	2.11	+		
Over	all H'	1.83	2.64	+		
Species	Richness	13	29	+		

Table 22 Shannon Diversity Index Value of all Avifauna Species

Notes:

\*\* result when no species recorded; + increased Shannon diversity index (H'); - decreased Shannon diversity index (H'); = no change in Shannon diversity index (H')

No Action / Limit exceedance was recorded for the species diversity of all avifauna species in both point count and transect walk method.

#### 5.2.3.2.2 Avifauna Species of Conservation Importance

Of the 46 avifauna species identified during the October 2024 monitoring period, 20 species were of conservation importance (point count method = 17 species; transect walk method = 13 species). Meanwhile, relative to the baseline values in October 2016 (point count method = 13 species; transect walk method = 3 species), an increase in the number of species with conservation importance for both point count and transect walk method was recorded. In terms of Shannon diversity index (H'), a slight decrease was noted in point count method (t-value = 1.75; t-crit = 1.97; p-value = 0.082;  $\alpha$  = 0.05) while a significant increase in transect walk method (t-value = 6.63; t-crit = 1.99; p-value = 4.01E-09;  $\alpha$  = 0.05) was observed relative to the baseline reference values. Details of these findings are summarized in **Table 23**, and **Appendix F.6.3**.

 Table 23
 Shannon Diversity Index Value of Species with Conservation Importance

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Shannon Diversity Index Value of Species with Conservation Importance							
EIA Report ID	EM&A Manual ID	October-16	October -24	Remarks			
Point Count Method	Point Count Method						
P1	FLW1	0	1.43	+			
P2	FLW2	0.64	1.07	+			
P3	FLW3	0	1.04	+			
P4	FLW4	0.64	1.04	+			
P5	FLW5	0.85	1.67	+			
P6	FLW6	1.00	0	-			
P7	FLW7	1.99	1.05	-			
P9	SP/NSW3	1.79	1.55	-			
P10	SP/NSW2	0.94	1.90	+			
P11	NSW1	0	0.17	+			
P12	SP/NSW1	1.05	1.69	+			
Over	all H'	2.17	2.00	-			
Species	Richness	13	17	+			
Transect Walk Meth	od						
Fung Lok Wai	FLW	0.75	1.39	+			
Nam Sang Wai	NSW	**	1.65	+			
YLIE-CW	YLIE-CW	**	1.53	+			
Over	all H'	0.75	1.85	+			
Species	Richness	3	13	+			

Notes:

\*\* result when no species recorded; 0 computation result from only one recorded species;

+ increased Shannon diversity index (H'); - decreased Shannon diversity index (H'); = similar Shannon diversity index (H')

No Action / Limit exceedance was recorded for the species diversity of avifauna species with conservation importance in both point count and transect walk method.

#### 5.2.3.3 Wetland Habitat Utilization

Avifauna communities were observed during the current monitoring period in the different wetland habitats, i.e. mangrove, modified watercourse, ponds, and reed bed.

With reference to **Section 7.3.1** of the **EM&A Manual**, the utilization of the wetland habitats by birds within the monitoring area was recorded and monitored.

#### 5.2.3.3.1 All Avifauna Species

During the current monitoring period, majority of the different wetland habitats were observed with Low (L) abundance. In terms of species richness, different wetland habitats were generally observed with Low (L) and High to Very High (H – VH) number of species (**Table 24**).



### Table 24 Wetland habitat utilization of all avifauna species

Wetland Habitats	Area Description	Abundance <sup>1</sup>	Species Richness <sup>2</sup>
	Confluence of Shan Pui River and Kam Tin River	L	L
Modified Watercourse	Shan Pui River adjacent to Project site	L	H – VH
	Upper course of Shan Pui River along YLIE	L	M – H
	Active Ponds adjacent to Project site in Fung Lok Wai	VL	L
Danda	Active Ponds North to Nullah 2 in Fung Lok Wai	VL	H – VH
Ponds	Inactive Ponds in Fung Lok Wai	VL – L	Н
	Active and Inactive Ponds in Nam Sang Wai	L	М
Mangrove	Mangrove within Assessment Area	-	-
Reedbed	Reedbed in Nam Sang Wai	-	-

Notes:

Abundance of all avifauna species amongst wetland habitats within the assessment area: VL = Very Low (~<50 individuals); L = Low (~100 individuals); M = Moderate (~300 individuals); H = High (~500 individuals), VH = Very High (>700 individuals)

Species richness (total number of species) amongst wetland habitats within the assessment area: VL = Very Low (≤5 species); L = Low (~10 species); M = Moderate (~15 species); H = High (~20 species), VH = Very High (>25 species)

-: no recorded individuals

Source: approved EIA Report (AEIAR-220/2019)

## 5.2.3.3.2 Avifauna Species of Conservation Importance

Majority of the different wetland habitats had Very Low (VL) abundance of avifauna species of conservation importance; and were generally utilized by Low (L) number of species (**Table 25**).

Table 25	Wetland habitat	utilization of a	avifauna species	of conservation i	importance
----------	-----------------	------------------	------------------	-------------------	------------

Wetland Habitats	Area Description	Abundance <sup>1</sup>	Species Richness <sup>2</sup>
	Confluence of Shan Pui River and Kam Tin River	L	L
Modified Watercourse	Shan Pui River adjacent to Project site	VL – L	L
	Upper course of Shan Pui River along YLIE	VL – L	L
	Active Ponds adjacent to Project site in Fung Lok Wai	VL	VL – L
Ponds	Active Ponds North to Nullah 2 in Fung Lok Wai	VL	VL – L
Ponds	Inactive Ponds in Fung Lok Wai	VL	L
	Active and Inactive Ponds in Nam Sang Wai	L	VL
Mangrove	Mangrove within Assessment Area	-	-
Reedbed	Reedbed in Nam Sang Wai	-	-

Notes:

 Abundance of avifauna species of conservation importance amongst wetland habitats within the assessment area: VL = Very Low (~<50 individuals); L = Low (~100 individuals); M = Moderate (~300 individuals); H = High (~500 individuals), VH = Very High (>700 individuals)

Species richness (total number of species) amongst wetland habitats within the assessment area: VL = Very Low (≤5 species); L = Low (~10 species); M = Moderate (~15 species); H = High (~20 species), VH = Very High (>25 species)

-: no recorded individuals

Source: approved EIA Report (AEIAR-220/2019)



## 5.2.3.4 Noise Levels

Noise levels LAeq (30 min) recorded on 23 October 2024 (daytime) from each of the point count locations during the ecological bird monitoring are shown in **Table 26**.

Table 26	Noise Monitoring	<b>Results (For</b>	Ecological	Monitoring of Birds)
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Frequency and	Location	Day time (2	23/10/2024)
Period	Location	Start Time	LAeq (30 min) dB(A)
	FLW1/ P1	09:36	60.4
	FLW2/P2	09:40	59.4
	FLW3/ P3	09:43	58.4
	FLW4/P4	10:59	57.6
Monthly in	FLW5/P5	11:03	58.3
concurrence with the ecological	FLW6/ P6	11:38	57.6
monitoring of birds	FLW7/ P7	11:41	59.0
	SP/NSW3/ P9	07:18	58.6
	SP/NSW2/ P10	07:22	57.7
	NSW1/ P11	07:53	57.9
	SP/NSW1/P12	07:57	58.0

No Action / Limit exceedance was recorded for noise levels at all stations for the ecological monitoring of birds in the reporting month.

# 6 LANDSCAPE AND VISUAL

# 6.1 Audit Requirements

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 planting, control of night-time lighting glare, erection of decorative screen hoarding and management of construction activities and facilities are summarized in **Appendix J**.

# 6.2 **Results and Observations**

To monitor and audit the implementation of landscape and visual mitigation measures, five weekly landscape and visual site audits were carried out on 2, 8, 16, 23 and 30 October 2024.

No outstanding issues were reported during the reporting month. The ET Leader's Site Environmental Audit are summarized in **Appendix M**.

# 7 LAND CONTAMINATION

# 7.1 Contamination Assessment Report

- 7.1.1 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.
- 7.1.2 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.
- 7.1.3 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 6 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.
- 7.1.4 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". As no contaminated soil and groundwater was found within the "SAS Thickener House-1", no remediation actions are required for contaminated soil and groundwater for the scheduled land use of the "SAS Thickener House-1" . Their findings are summarized in Contamination Assessment Report (CAR) and submitted to EPD on 6 July 2022.
- 7.1.5 Risk-Based Remediation Goals (RBRGs) for Industrial have been adopted for the "SAS Thickener House-2" and the laboratory results for the sampling works (conducted between 15 February 2023 to 23 February 2023) show that there are no exceedances of the adopted RBRGs for the "SAS Thickener House-2". The laboratory results are compared against the adopted RBRGs and soil saturation limit (Csat) for soil samples and the adopted RBRGs and the solubility limits for groundwater samples. No exceedance of RBRG are recorded for both soil samples and groundwater samples. Furthermore, no exceedance of the soil saturation limit are recorded for soil samples. However, the exceedances of solubility limits for PCRs (C9-C16) are recorded for groundwater samples collected at BH-18, BH-19, BH-20 and BH-21; and also PCRs (C17-C35) for BH-21. As no non-aqueous phase liquid (NAPL) was observed during sampling, no further sampling and remediation are required. As no contaminated soil and groundwater is found within the



"SAS Thickener House-2", no remediation actions are required for contaminated soil and groundwater for the scheduled land use of the "SAS Thickener House-2". Their findings are summarized in Contamination Assessment Report (CAR) which was certified by ET Leader and verified by IEC on 31 May 2023 and submitted to EPD on 19th June 2023.

7.1.6 Risk-Based Remediation Goals (RBRGs) for Industrial have been adopted for the "Screening Press House" and the laboratory results for the sampling works (conducted between 19 August 2024 to 20 August 2024) show that there are no exceedances of the adopted RBRGs for the "Screening Press House". As no contaminated soil and groundwater was found within the "Screening Press House", no remediation actions are required for contaminated soil and groundwater for the scheduled land use of the "Screening Press House". Their findings are summarized in Contamination Assessment Report (CAR) and submitted to EPD on 29 October 2024.

# 8 SITE INSPECTION AND AUDIT

# 8.1 Site Inspection

- 8.1.1 Site audits were carried out by ET on weekly basis at least once per week to monitor the implementation of proper environmental management practices and mitigation measures in the Project site.
- 8.1.2 In the reporting month, five site inspections were carried out on 2, 8, 16, 23 and 30 October 2024.
- 8.1.3 No outstanding issues were reported during the reporting month. The ET Leader's Site Environmental Audit are summarized in **Appendix M**.

# 8.2 Advice on the Solid and Liquid Waste Management Status

- 8.2.1 The Contractor registered as a chemical waste producer for the Contract. Sufficient numbers of receptacles were available for general refuse collection and sorting.
- 8.2.2 The management of waste generated by the construction is presented in **Table 27**.

 Table 27 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)
	Type 1 – Open Sea Disposal: South Cheung Chau Open Sea Sediment Disposal Area
Marine Sediment	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

- 8.2.3 The monthly summary of waste flow table is detailed in **Appendix I**.
- 8.2.4 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.
- 8.2.5 The Contractor was reminded that chemical waste should be properly handled temporarily in designated chemical waste storage area on site in accordance with the Code of Practice on the Packing, Labelling and Storage of Chemical Waste.

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

# 9.1 Non-compliance (Exceedances of AL levels)

- 9.1.1 No Action / Limit Level exceedance was recorded for 1-hr TSP level at AM1 and AM2 in the reporting month.
- 9.1.2 No Action / Limit Level exceedance was recorded for construction noise at CM1, CM2 and CM3 in the reporting month.
- 9.1.3 No Action and Limit Level exceedance were recorded for water quality at M1, M2 and M3 in the reporting month.
- 9.1.4 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 month.
- 9.1.5 No Action / Limit exceedance was recorded for the ecological monitoring of birds on 23 October 2024 (daytime).
- 9.1.6 No corrective actions were required according to the Event and Action Plans for the Monitoring Parameters.

# 9.2 Complaints, Notification of Summons and Successful Prosecutions

- 9.2.1 No environmental complaints, notification of summons and successful prosecutions was recorded in the reporting month.
- 9.2.2 Cumulative complaint log, summaries of complaints, notification of summons and successful prosecutions are presented in **Appendix L**.
- 9.2.3 No corrective actions were required.

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# 10 IMPLEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURE

# 10.1 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. **Appendix J** summarized the Implementation Status of Environmental Mitigation Measures.

The status of required submissions under the EP as of the reporting period are summarized in **Table 28**.

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, finalised and 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, finalised and 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, finalised and 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, finalised and available for public inspection via the dedicated website.
Condition 2.14	Contamination Assessment Report for SAS Thickener House-1	Submitted to EPD with ET certification and IEC verification, finalised and available for public inspection via the dedicated website.

EP Condition (EP-565/2019)	Submission Title	Submission Status
Condition 2.14	Contamination Assessment Report for SAS Thickener House-2	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 Screening Press House	Certified by ET Leader and verified by IEC on 14 Oct 2024 and submitted to EPD on 29 Oct 2024, 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.
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 September 2024)	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 September 2024)	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 September 2024	Submitted to EPD with ET certification and IEC verification, finalised and available for public inspection via the dedicated website.

# 11 FUTURE KEY ISSUES

# 11.1 Construction Programme for the Next Three Months

- E&M works and fixing GRC panel at CLP Substation
- ELS works at the existing inspection chamber & inlet effluent pipes from NSWSPS
- ABWF, E&M work and RC structure at IW
- ABWF and E&M works at PST
- Piling and ELS work at SDB
- External works at site-wide include water structure cabinet
- ELS work and RC structure at AGS
- ELS work and RC structure at TTS
- ABWF, E&M work and RC structure at STB
- ELS work at Sludge Digester no. 1-3
- RC Structure at Sludge Digester no. 1-3
- E&M work at Biogas Holder no. 1

# **11.2** Key Issues for the Coming Month

Potential environmental impacts arising from the above construction activities are mainly associated with construction dust, construction noise, waste management, ecology, land contamination and landscape and visual impact issues.

# **11.3** Monitoring Schedules for the next three months

The tentative schedule for environmental monitoring in the next three months is provided in **Appendix E**.

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# 12 CONCLUSION AND RECOMMENDATION

# 12.1 Conclusions

- 12.1.1 1-hour TSP impact monitoring was carried out in the reporting month. No Action / Limit Level exceedance at AM1 and AM2 was recorded during the period.
- 12.1.2 Construction noise monitoring was carried out in the reporting month. No Action / Limit Level exceedance at CM1, CM2 and CM3 was recorded during the period.
- 12.1.3 No Action and Limit Level exceedance was recorded for water quality at M1, M2 and M3 in the reporting month.
- 12.1.4 Ardeid night roost monitoring was carried out in the reporting month. Two active ardeid night roost areas (ANR1 and ANR2) were observed within the Survey Area. These roosts were located at the mangrove strips in the east and northeast portions of the Project boundary. No Action / Limit Level exceedance at NMS1 and NMS2 was recorded during the period.
- 12.1.5 Ecological bird monitoring was carried out in the reporting month. No Action / Limit exceedance for the ecological monitoring of birds in the reporting month.
- 12.1.6 Five environmental site inspections were carried out in the reporting month. Recommendations on mitigation measures for air quality impact, chemical waste and construction waste management and permit/ licenses were given to the Contractor for remediating the deficiencies identified during the site inspections.
- 12.1.7 Five landscape and visual site audits were carried out in the reporting month. No recommendations on mitigation measures were given to the Contractor for remediating the deficiencies identified during the site inspections.
- 12.1.8 No environmental complaint, notification of summons and successful prosecution was recorded in the reporting month.

# **12.2 Comment and Recommendations**

- 12.2.1 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.
- 12.2.2 According to the environmental site inspections performed in the reporting month, the following recommendations were provided:

## Air Quality Impact

• The contractor should increase watering for the haul road.

## Construction Noise Impact

• No specific observation was identified in the reporting month.

Water Quality Impact

• No specific observation was identified in the reporting month.



Chemical Waste and Construction Waste Management

- The domestic waste should be removed from the site timely.
- The domestic waste should be stored inside an enclosed rubbish bin.

Land Contamination

• No specific observation was identified in the reporting month.

Ecological Impact

• No specific observation was identified in the reporting month.

Landscape and Visual Impact

• No specific observation was identified in the reporting month.

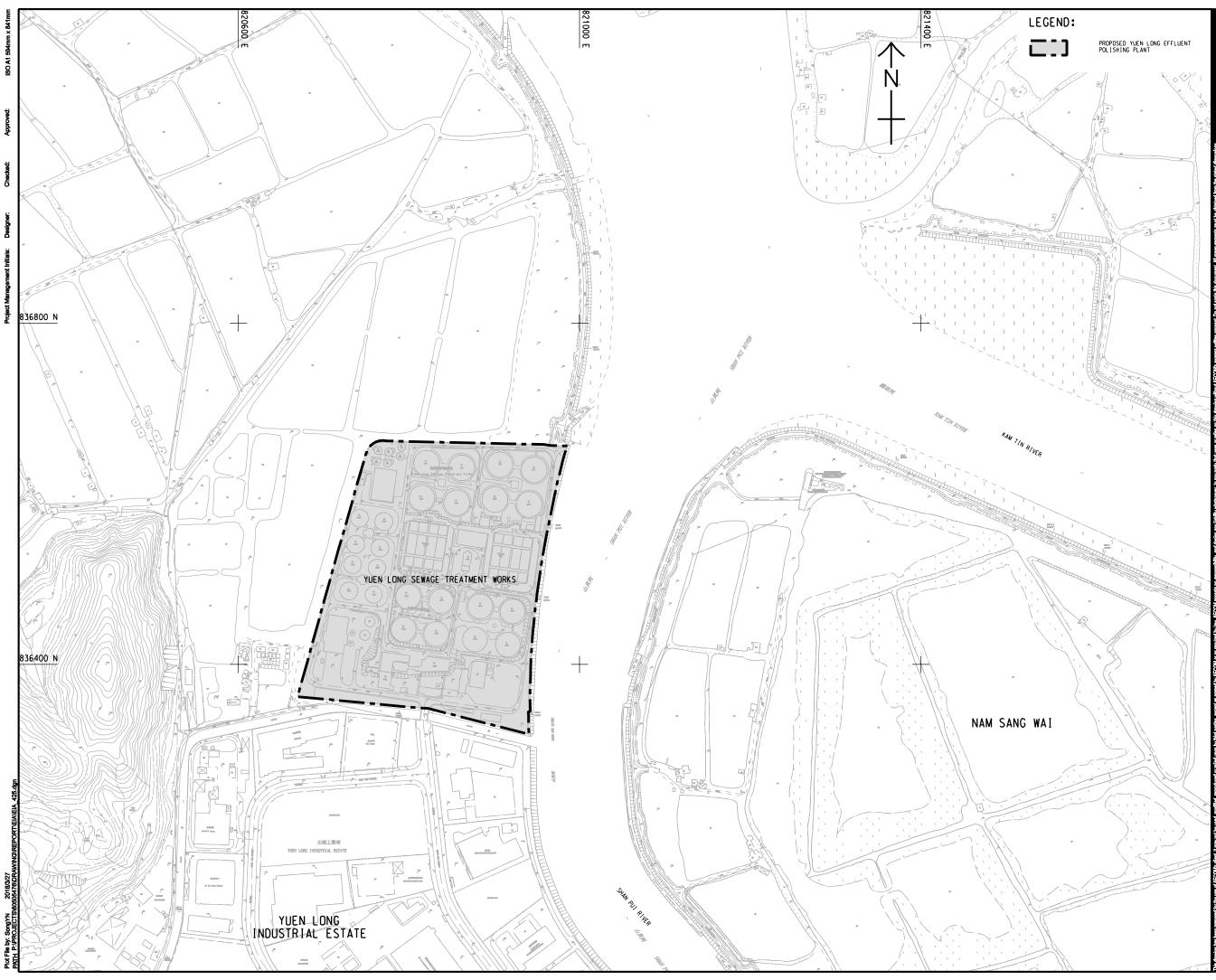
Hazard to Life

• No specific observation was identified in the reporting month.

Permit/ Licenses

• The colour of NRMM label for the forklift at SD should be green.

# Figure 1 Location of Proposed Yuen Long Effluent Polishing Plant



# AECOM

## PROJECT

YUEN LONG EFFLUENT POLISHING PLANT -INVESTIGATION, DESIGN AND CONSTRUCTION

## CLIENT #±



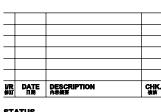
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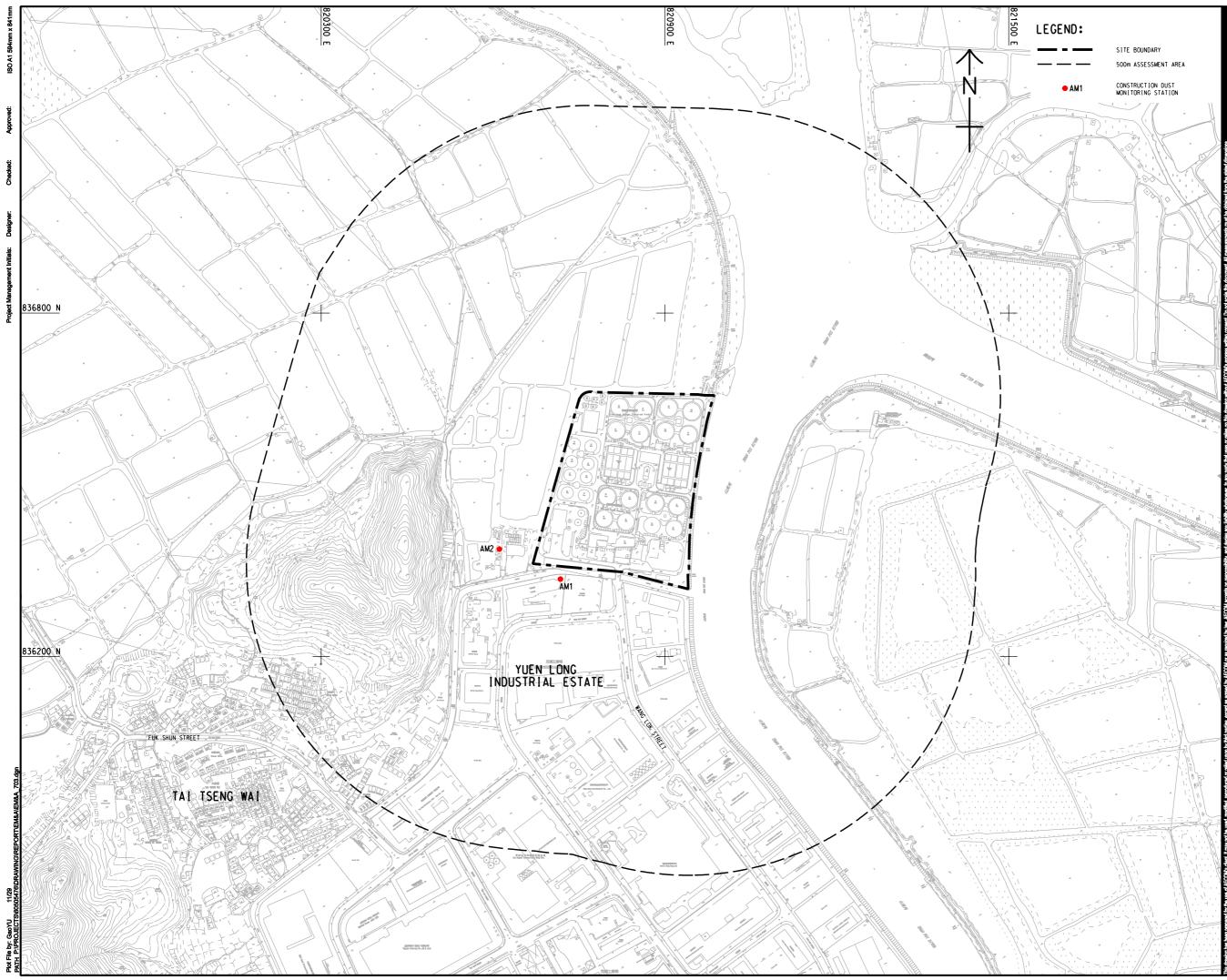
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# Figure 2 Location of Construction Dust Monitoring Stations





# PROJECT

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

# CLIENT #±



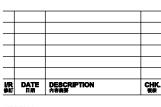
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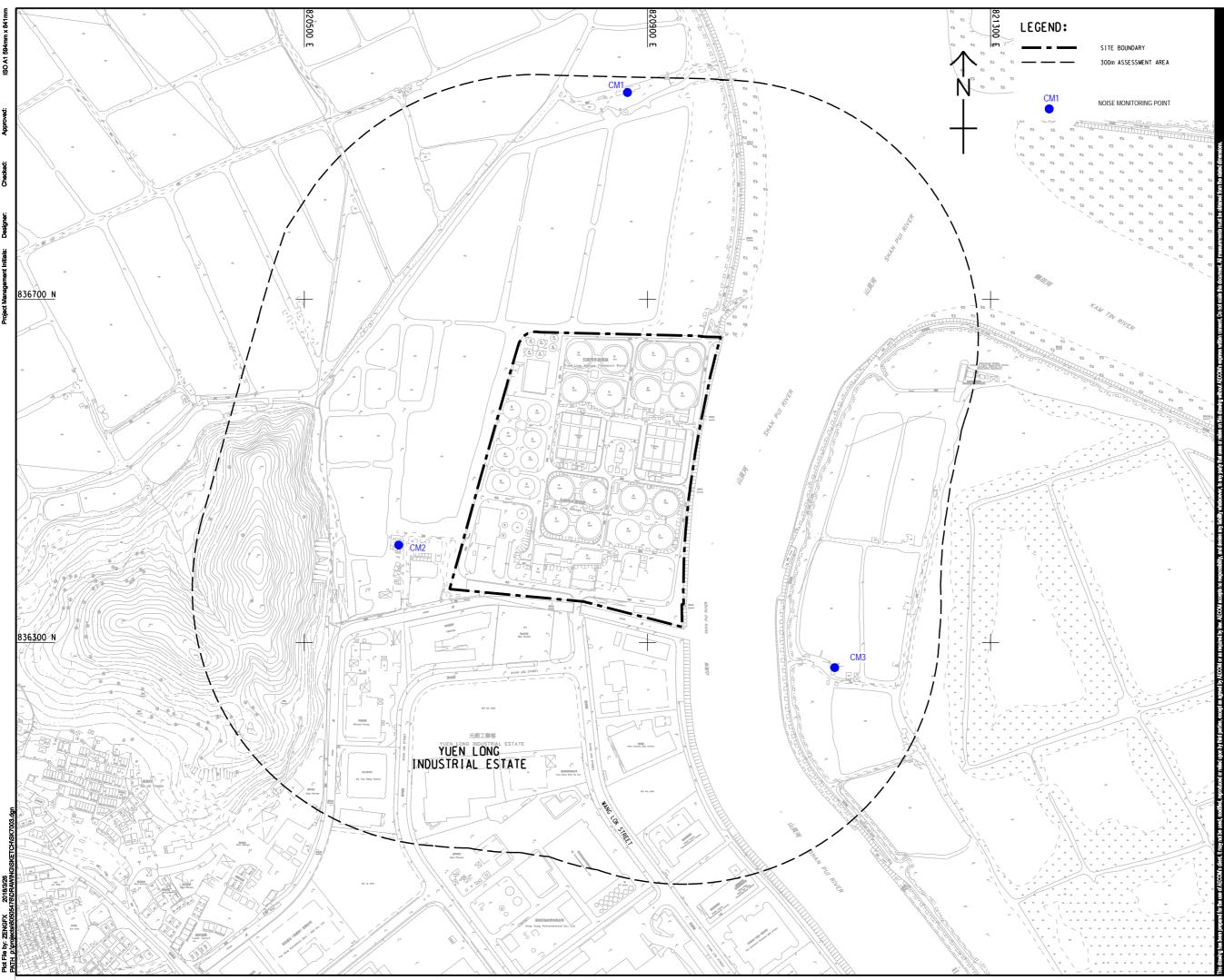
LOCATION OF CONSTRUCTION DUST MONITOING STATIONS

60505476 SHEET TITLE

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# Figure 3 Noise Monitoring Locations

aurecon





# PROJECT

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

# CLIENT



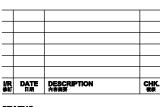
及 渠 務 署 Drainage Services Dep

## CONSULTANT 工程期间公司

AECOM Asia Company Ltd. www.aecom.com

# SUB-CONSULTANTS 分列工程期间公司\_\_\_\_

# ISSUE/REVISION



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PROJECT NO. 项目編號

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LOCATIONS OF NOISE MONITORING POINTS

60505476 SHEET TITLE

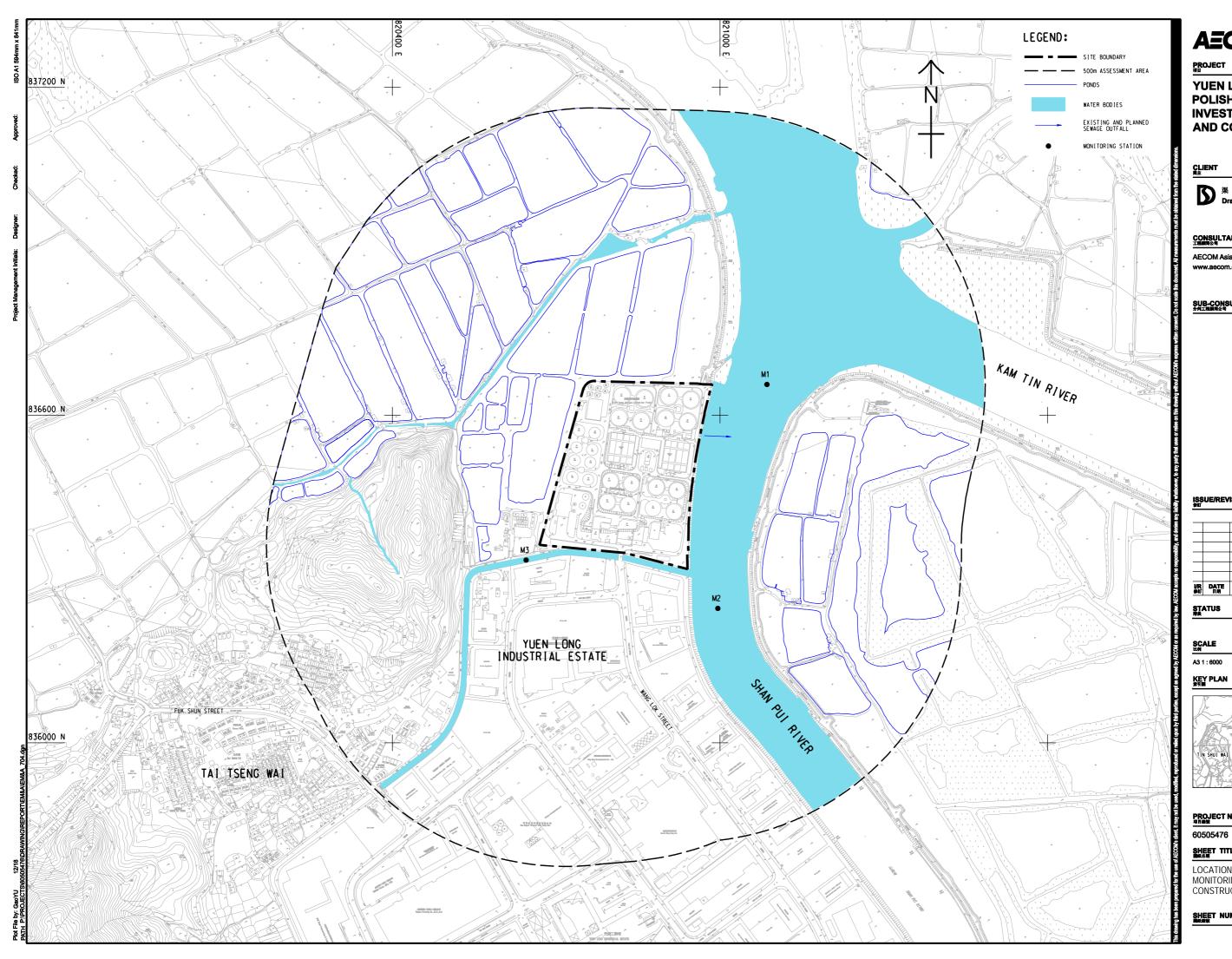
90	NAWA	191,0
8		
3		

<b>用</b> 表	
SCALE	DIMENSION U 天寸単位
A1 1 : 2000	METRES

CONTRACT NO. CE 3/2015 (DS)

# Figure 4 Water Quality Monitoring Locations

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## PROJECT

YUEN LONG EFFLUENT POLISHING PLANT -INVESTIGATION, DESIGN AND CONSTRUCTION

## CLIENT



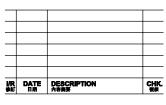
集務署 Drainage Services Dep

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# SUB-CONSULTANTS 分式准确间公司

### ISSUE/REVISION



### STATUS

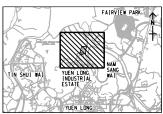
# SCALE 比例

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A3 1 : 6000

METRES

KEY PLAN A31:180000



## PROJECT NO.

CONTRACT NO. CE 3/2015 (DS)

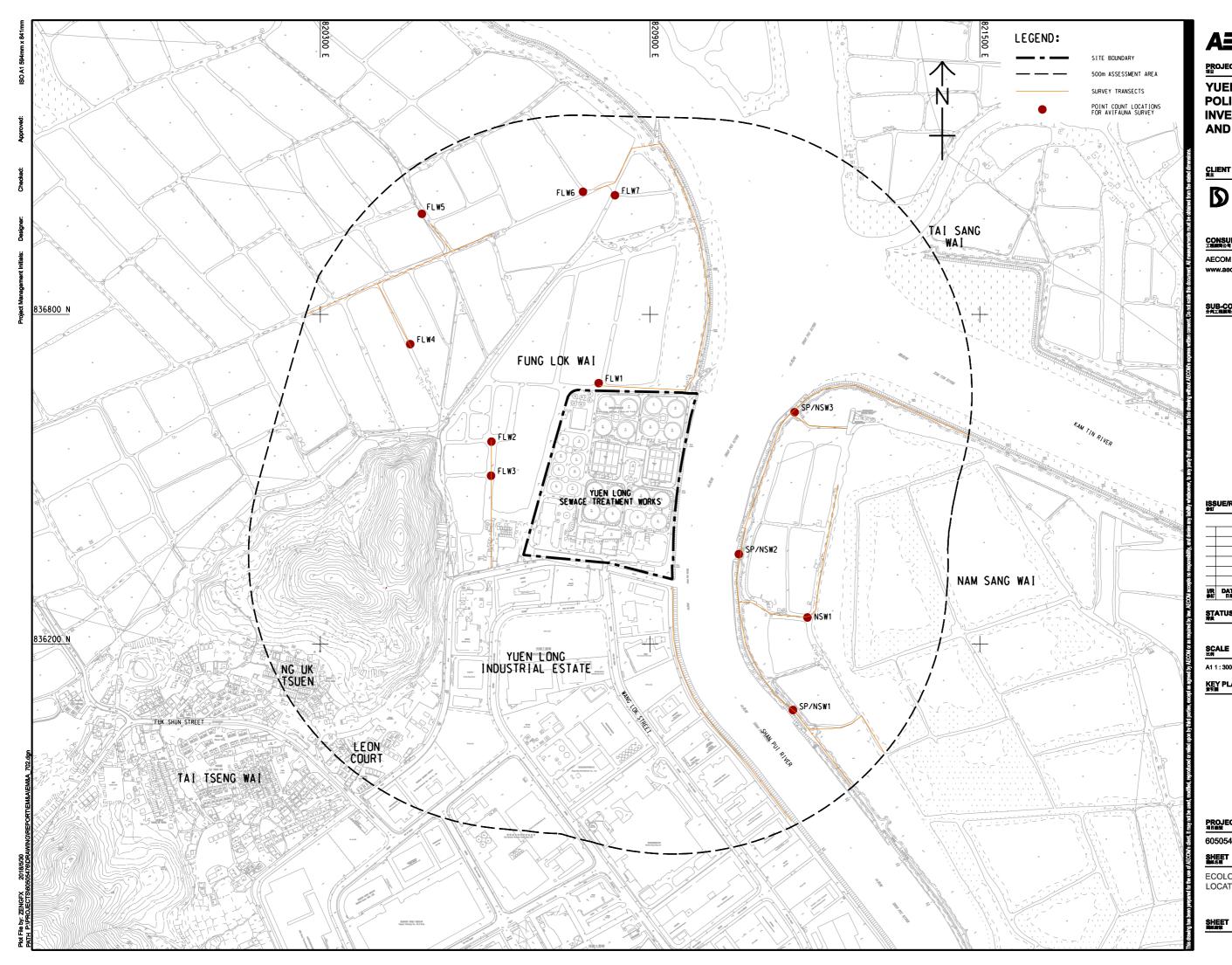
SHEET TITLE

LOCATIONS OF WATER QUALITY MONITORING STATIONS FOR CONSTRUCTION PHASE

SHEET NUMBER

# Figure 5 Ecology Monitoring Locations

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## PROJECT

YUEN LONG EFFLUENT POLISHING PLANT -INVESTIGATION, DESIGN AND CONSTRUCTION

## CLIENT

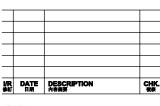


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A1 1 : 3000 METRE

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PROJECT NO. CONTRACT NO. CE 3/2015 (DS) 60505476

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ECOLOGICAL MONITORING

SHEET NUMBER

Appendix A Construction Programme

vity ID Act	ivity Name	Orig Dur	Early Start	Early Finish	Total Float	September 47	October 48	November 49	De cember 50	January 51	February 52	Mar 5
	ishing Plant - Main Works Stage 1 - Detailed Works Programme	DPv42	2_241016			01 08 15 22	29 06 13 20 27	03 10 17	24 01 08 15 22 29	05 12 19 26	02 09 16	23 02
ontract Data Par	t1				_							
DWA2 Wo	rkArea WA2 (sd) (new site possession) validity for 12 months and subject to renewal	757	05-Mar-21 A	22-Feb-25*	0						W	orkArea WA2 (
	3 - Early Comissioning of Inlet Works100,000m3/d atADWF,PST>54,000m3/d atADWF,Civil,struct,E&M& BS (R.K. 10 - Completion of Civil & Structural works of roof floor of sludge thickening bldg (Rev.KD10=28Mar24)	0		30-Sep-24* 30-Sep-24*	-128 -187		<ul> <li>KD3 - Early Comissioning of Inlet Works100,000m3/c</li> <li>KD10 - Completion of Civil &amp; Structural works of roof fl</li> </ul>					
NMM-2175	straints 1.105A Noise Mitgation Measures 2024-2025	151	01-Nov-24*	31-Mar-25	0							
anned Complet	on											
PKD10 KD	10 - Completion of Civil & Structural works of roof floor of sludge thickening bldg	0		06-Nov-24*	-224			♦ KD10 - Completion of Civil & Str	uctural works of roof floor of sludge thickening bldg	s of R/F of Inlet works (separate contractor to install F	W Panala)	
Compensation Eve		0		09-Dec-24*	102					s of FVF of line works (separate contractor to instant	Υ Γ Ο ΠΡΙΣ)	
	plementation of Compensation Event (CE) No.442 - Amber Rains brm Waming and Inclement Weather in April 2024 plementation of Compensation Event (CE) No.468 - Amber Rains brm Waming and Inclement Weather in June 202			10-Sep-24 A 10-Sep-24 A			n Event(CE) No.442 - Amber Rainstorm Warning and Inc Event(CE) No.468 - Amber Rainstorm Warning and Inc					
eliminary and P ubletting	reparation Works				_		-					
	bletting for RC works for MBR bletting for RC works for Master Meter Room	90 60	15-Apr-24A 01-Oct-24	19-Nov-24 29-Nov-24	-302 -330			Sublettir	g for RC works for MBR Subletting for RC works for Master Meter Room			
UB-410 Su	of or FS Works (Licensed Plumber) bletting for Drainage, Sewage & waterworks	60 90	01-Oct-24 17-Oct-24	29-Nov-24 14-Jan-25	-260 44				Subletting for FS Works (Licensed Plumber)	Subletting for Drainage, Sev	våge & waterworks	
sign Submission emporary Works De												
ludge Digester 4-6	srgn S - SD4-6 - Prepare & Submission for PMs review	45	01-Oct-24	14-Nov-24	-171			ELS-SD4-6-Pre	pare & Submission for PMs review			
TWD-470 EL	S - SD4-6 - Review by PMs & ICE review (28 d + 7d) S - SD4-6 - Review his sino for PMs & ICE review (7d prep & resub. + 21d PM& ICE review)	35	15-Nov-24 20-Dec-24	19-Dec-24 16-Jan-25	-171				ELS-SD4-6-Reviewb	PMs & ICE review (28 d + 7d) ELS - SD4-6 - Resubmi	ssion for PMs & ICE review (7d prep & resub. +	+ 21d PM&
Sludge Dewatering an			20-Aug-24 A	09-Oct-24	-75		ELS-SDB-Review by PM's & ICE re	view (28 d + 7d)				
TWD-280 EL	S - SDB - Resubmission for PMs & ICE review (7d prep & resub. + 21d PM& ICE review) S - SDB - Obtain Approval	28 7	10-Oct-24 07-Nov-24	06-Nov-24 13-Nov-24	-75 373				M's & ICE review (7d prep & resub. + 21d PM & ICE review) Approval			
Administration Building		45	01-Oct-24	14-Nov-24	-6			Open CutDesign	- Prepare & Submission for PM's review			
	en CutDesign - Review by PMs & ICE review (28 d + 7d) en CutDesign - Resubmission for PMs & ICE review (7d prep & resub. + 21d PM& ICE review)	35 28	15-Nov-24 20-Dec-24	19-Dec-24 16-Jan-25	-6 -6				Open CutDesign - Řevi	ewby PM's & ICE review (28 d + 7d) Open Cut Design - Resi	ubmission for PM's & ICE review (7d prep & res	sub.+21d P
Wakway Across Tai Ts TWD-600 Wa	seng WaiNullah Ikway-Prepare & Submission for PM's review	45	01-Oct-24	14-Nov-24	495			Wakway-Prepa	e & Submission for PM's review			
	ıkway-Review by PMs & CEneview (28 d + 7d) ıkway-Resubmission for PMs & ICE review (7 dprep & resub. + 21 d PM& ICE review)	35 28	15-Nov-24 20-Dec-24	19-Dec-24 16-Jan-25	495 495				Wakway-Review by PN	//s&ICE review (28 d + 7d) Wakway-Resubmissio	n/for PM/s & ICE review (7 d prep & resub. + 21	d PM& ICE r
	cheme for Early commissioning of SD, BH1, H2S and STB mp. pipe. for BH1 Early CommPrep(90d),Sub.&Review(30d) Comment&Resub(14d)&Approval(7d)	141	30-Jun-23 A	15-Oct-24	-20		Temp.pipe.for BH1 Early	CommPrep(90d),Sub.&Review(30d)Comm	ent&Resub(14d)&Approval(7d)			
ST Stage 2	mp. pipe. for SD1-2 Early CommPrep(90d),Sub & Review(30d) Comment& Resub(14d)& Approval(7d)		29-Dec-23 A	20-Jan-25	-20					Temp. pipe. for S	D1-2 Early CommPrep(90d),Sub.&Review(3	0d)Comme
TWD-1070 EL	S - PST(S2) - Prepare & Submission for PMs review S - PST(S2) - Review by PMs & ICE review (28 d + 7d)	60 35	01-Oct-24* 30-Nov-24	29-Nov-24 03-Jan-25	-210 -210				ELS-PST(S2)-Prepare & Submission for PMs review	ELS-PST(S2)-Review by PMs & ICE review (2	8 d + 7d)	
NP	ent Works Design (include ATAL)											
AIP-530 E8		7	12-Sep-24 A	07-Oct-24	-163		E&MAP Report for Plant Service Water	Øbtain Approval				
DDA Package 2 - Tertiary	/ Treatment System											
	ril Req. for TTS (Foundation design) - Prepare(27d), Sub. & Review(45d), Comment & Resub.(14d), GEO(28d)& App. undation for TTS - Prepare (90d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d), GEO (28d)		13-Jun-21A 08-Oct-21A	02-Oct-24 05-Oct-24	-288 -291		Civil Req. for TTS (Foundation design) - Prepare ( Foundation for TTS - Prepare (90d), Sub. & F	Review(45d),Comment& Resub.(14d)& App	oval (7d), GEO (28d)			
DDA-200 Me	ril Req. for TTS (Superstruct design)-Prepare (147d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7r chanical for TTS - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)	213	31-Dec-21 A	02-Oct-24 14-Dec-24	-286 -120		Civil Req. for TTS (Superstruct. design) - Prepare (	147d), Sub. & Review(45d), Comment & Resu	Mechanical for TTS - Prepare (60	d), Sub. & Review(45d) ,Comment & Resub.(14d)	<u>, , , , , , , , , , , , , , , , , , , </u>	
DDA-140 Arc	ctrical& Control for TTS - Prepare (60d), Sub. & Review(45d), Comment& Resub.(14d) & Approval (7d) hitledural for TTS - Prepare (60d), Sub. & Review(45d), Comment& Resub.(14d) & Approval (7d)	126	31-Dec-21 A 17-Nov-22 A	14-Dec-24 31-Dec-24	-120 -286				Ar	are (60d), Sub. & Review(45d) ,Comment & Resub chitectural for TTS - Prepare (60d), Sub. & Review(4		)
DDA-220 Bu	il & Structural for TTS - Prepare (120d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d) liding Services (BS) for TTS - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)		17-Nov-22 A 30-Oct-23 A	28-Oct-24 31-Dec-24	-286 -137		с	vil & Structural for TTS - Prepare (120d), Sub. 8	Review(45d) Comment& Resub.(14d) & Approval (7d) Bu	ilding Services (BS) for TTS - Prepare (60d), Sub. 8	& Review(45d),Comment& Resub.(14d) & Ap	proval (7d)
DDA-260 Civ	ream Bio-Reactor System il Req. for MBS-AGS (Foundation design) - Prepare (60d), Sub. & Review(45d), Comment& Resub (14d) & Approv	126	09-Jun-21A	16-Oct-24	-302		Civil Req. for MBS-AGS	(Foundation design) - Prepare (60d), Sub. & R	eview(45¢),Comment& Resub (14d)& Approval (7d)			
DDA-300 Ele	chanical for MBS - Prepare (60d), Sub. & Review(45d) Comment& Resub.(14d)& Approval (7d) critical& Control for MBS - Prepare (60d), Sub. & Review(45d), Comment& Resub.(14d) & Approval (7d)	405	08-Oct-21 A 08-Oct-21 A	30-Nov-24 31-Dec-24	-24 -55	· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·		Comment & Resub.(14d)& Approval (7d) ectrical& Control for MBS - Prepare (60d), Sub.& R	eview.(45d) ,Comment&Resub.(14d) &Appro	val (7d)
DDA-240 Fo	ril Req. for MBS-AGS (Superstruct design) - Prepare (60d), Sub. & Review(45d), Comment & Resub (14d) & Approv undation for MBS - Prepare (97d), Sub. & Review(45d), Comment & Resub (14d) GEO (28d) & Approval (7d)	230	01-Mar-22 A 18-Mar-22 A	16-Oct-24 31-Oct-24	-302 -286			Foundation for MBS - Prepare (97d), Sub. 8	eview(45d), Comment & Resub.(14d) & Approval (7d) Review(45d), Comment & Resub.(14d),GEO (28d) & Approval (7d)			
DDA-1530 VC	il & Structural for MBS - Prepare (60d), Sub. & Review (45d), Comment & Resub. (14d) & Approval (7d) AB for AGS&TTS - Prepare (30d), Sub. & Review (30d)	204	20-Jan-23A 16-Jun-23A	24-Nov-24 20-Mar-25	-302 -177	· · · · · · · · · · · · · · · · · · ·			Civil & Stluctural for MBS - Prepare (60d), Sub. & Review (45d) (Comm	ent&Resub.(14d) & Approval (7d)		
Package 5A - Maste	ilding Services (BS) for MBS - Prepare (60d), Sub. & Review.(45d), Comment & Resub.(14d) & Approval (7d) <b>r Water Meter Room</b>	151	01-Oct-24	28-Feb-25	-77							Bu
Package 5B - Plant	& Civil req. for MVIMC - MBS (60d), Sub. & Review (45d), Comment & Resub (14d) & Approval (7d) Service Water (PSW)			03-Dec-24	-285				BS & Civil req. for MWMC - MBS (60d), Sub. & Review			
DDA-1040 Pip	il Requirement Drawings - Prep(60d), Sub & Review(45d), Comment& Resub (14d) & Approval (7d) ing & Instrumentation Diagram (P&D) - Prep(30d), Sub & Review(28d), Comment& Resub (14d) & Approval (7d) (7d)	220	12-Jun-21A 26-Jun-23A	12-Dec-24 28-Feb-25	-196 -196				Civi Requirement Drawings - Prép(6	0d), Sub&Review(45d), Comment&Resub (14d)&	Approval (7 d)	Pip
DDA-1070 Me	ctrical & Control for PSW - Prep(60d), Sub & Review(45d), Comment& Resub (14d) & Approval (7d) chanical for PSW - Prep(60d), Sub & Review(45d), Comment& Resub (14d) & Approval (7 d)	151 151	01-Oct-24 01-Oct-24	28-Feb-25 28-Feb-25	-196 -196							Ele Me
DDA-430 Fo	n Thickening Chemical and Dosing System und for STCS,WasteGasBurn er & Guard Hse-Prepare (60 d),Sub & Review (45d),Comment & Resub (14d),GEO (28		09-Nov-21 A	18-Oct-24	-51		Found.for STCS,Wa		&Review (45d),Comment& Resub.(14d),GEO(28d) & Approval (7d)			
	il & Struct for STCS, WGB & Guard Hse - Prepare (60d), Sub. & Review(45d) /C omment & Resub (14d) & Approva ril Req. for STCDS - Prepare (60d), Sub. & Review(45d) /C omment & Resub.(14d) & Approval (7d)		09-Nov-21 A 15-Nov-21 A	20-Nov-24 08-Oct-24	465 18		Civil Req. for STCDS - Prepare (60d),	Civil & Sub. & Review.(45d) Comment& Resub.(14d)				
DDA-1140 Ele	chanical for STCDS - Prepare (60d), Sub. & Review(45d), C om ment & R esub (14d) & Approval (7d) critical & Control for STCDS - Prepare (60d), Sub. & Review(45d), Comment & R esub.(14d) & Approval (7d)		16-Nov-21 A 30-Nov-21 A	15-Dec-24 31-Oct-24	18 18			Electrical & Control for STCDS - Prepare (6	0d), Sub. & Review.(45d) ,Comment & Resub.(14d) & Approval (7d)	re (60d), Sub. & Review(45d), Comment & Resub (		
DDA-1510 Plu	chanical Ventlaton and Air conditional System Design for Sludge Thickening Building (STB) mbing and Drainage System Design for Sludge Thickening Building (STB)	320 320	16-Jun-22A 07-Jul-22A	15-Dec-24 15-Dec-24	100				Plumbing and Drainage System	onditional System Design for Sludge Thickening B n Design for Sludge Thickening Building (STB)		
DDA-1150 Bu	s Services Design for Sludge Thickening Building (STB) liding Services for STCDS - Prepare (600), Sub. & Review(45d) Comment& Resub (14d)& Approval (7d)	320 126	08-Jul-22A 24-Oct-22A	29-Dec-24 28-Nov-24	86 -51				Fire S Building Services for STCDS - Prepare (60d), Sub. & Review(4	ervices Design for Sludge Thickening Building (STE 5d) Comment& Resub (14d)& Approval (7d)	5]	
DDA-480 UF	u <mark>bstation and 11kV Switchgear House</mark> /S Syslem for CLPSub & 11kV Switchgear Hse - Prepare (102d), Sub. & Review(45d),Comment & Resub (14d)&A	168	03-Jun-21A	30-Nov-24	-265				UPS System for CLPSub &11kV Switchgear Hse - Prepare	(102d), Sub. & Review.(45d), Comment & Resub.(	14d)&Approval (7d)	
Package 9 - Inlet W DDA-1210 Bu	ork (IW) ilding Services for InletWork - Prepare (28d), Sub. & Review(28d), Comment& Resub.(14d) & Approval (7d)	76	30-Mar-22 A	18-Oct-24	52		Building Services for	Inlet Work - Prepare (28d), Sub. & Review(28d	l),Comment&Resub.(14d)&Approval (7d)			
Package 10 - Prima	ry Sedimentation Tank (PST) critical & Control for PST - Prepare (28d), Sub. & Review/(28d), Comment & Resub (14d) & Approval (7d)	48	31-Aug-21 A	22-Oct-24	-308				28d) ,Comment & Resub.(14d) & Approval (7d)			
DDA-1260 Bu	liding Services for PST - Prepare (28d), Sub. & Review(28d), Comment & Resub. (14d) & Approval (7d) ol and Monitoring System		01-Oct-21 A	22-Oct-24	-308		Building Serv	ices for PST - Prepare (28d), Sub. & Review(2	3d),Comment& Resub.(14d)& Approval (7d)			
Decelle	Remaining Level of Ef							<b>0</b> , ,	Project ID : DWPr42_241016	Monthly F	Progress Report - 3MRP	
Pauly	Actual Work		Contr	act	DC/	2019/10 - YLEPP	- Main Works fo	r Stage 1	Layout : DC201910 MPR47-3MRP		Revision Checked	Appro
	Remaining Work		Mc	onthl	v Pr	ogress Report N	0 47. 3MRP (S	en 24)	Page 1 of 8	30-Sep-24 Rev. 0		
	图中鐵聯營體 Critical Remaining Work			/	y i i			~P ~-/				
TAUL ICKI	♦ ♦ Milestone											



Activity ID	Activity Name	Orig	Early Start	Early Finish	Total Float	September	October	November	De cember
		Dur	Lany Guit	Luny Fillion	Total Tiour	47	48 29 06 13 20 27	49	50
DDA-580	Power Quality & Energy Management System (PQEMS) - Prep(28d), Sub & Review(28d), Comment& Resub (14d) & A	130	02-Oct-21 A	30-Dec-24	-132			03 10 17 24	01 08 15 22 29 Po
DDA-550	Supervisory Control&Data Application (SCADA) System - Prep(28d), Sub & Review (28d), Commen & Re sub (14d) & A	238	24-Apr-23A	28-Feb-25	-132	<u>-</u>	· · · · · · · · · · · · · · · · · · ·	u	
DDA-1270	Gas Detection System - Prep(28d), Sub & Review(28d), Comment& Resub (14d) & Ap proval (7d)	91	08-May-23 A	28-Feb-25	-132				
DDA-560	Computerised Mainatenance Mangement System (CMMS) - Prep(28d), Sub & Review(28d), Comment& Resub (14d) &	273	01-Oct-24	30-Jun-25	-132				1 1
DDA-570	Information and Document mangement System (IDMS) - Prep(28d), Sub & Review (28d), Comment & Resub (14d) & Apple (1	273	01-Oct-24	30-Jun-25	-132			· · · · · · · · · · · · · · · · · · ·	
DDA-1280	Data Collection, Management, Analysis & Model System - Prep (28d), Sub & Review (28d), Commen & Resub (14d) & A	273	01-Oct-24	30-Jun-25	-132				
Package 12 -	Chemical System for STB								
DDA-650	Chemical System for Sludge Thickening Building (STB) - Prep(60d), Sub.&Review(45d), Comment&Resub (14d) & Ar	150	08-Aug-24 A	27-Feb-25	18				
- ·	Pipework System								
DDA-660	Pipeworks System for Sludge Thickening Building (STB) - Prep(60d), Sub & Review(45d), Comment& Resub (14d) & A	126	01-Oct-24	03-Feb-25	46				
DDA-1030	Pipeworks System for Sludge Digesters - Prep(60d), Sub & Review (45d), Comment& Resub (14d) & Approval (7d)	126	01-Oct-24	03-Feb-25	46				· · · · · · · · · · · · · · · · · · ·
	Sludge Anærobic Digestion System (SDT)								
DDA-1320	Electrical & Control for SDT & UC/PP - Prepare (55d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d) Building Services for SDT & UC/PP - Prepare (56d), Sub. & Review.(45d), Comment & Resub.(14d) & Approval (7d)	460 181	02-Jul-21 A 02-May-23 A	29-Dec-24 29-Dec-24	192 -17			L	Elec
DDA-1330	Biogas H2S Removal, Storage and Delivery System	101	02-Ivid y-23 A	29-Det-24	-17				Dum
DDA-1390	Building Services for Biogas H2S Removal System - Prepare(28d),Sub& Review(28d),Comment&Resub(14d)&Appr	137	31-May-23 A	30-Dec-24	349				B
DDA-1380	Electrical & Control for Biogas H2S Removal System - Prepare(28d),Sub& Review(28d),Comment&Resub(14d)&App	105	25-Sep-23 A	30-Dec-24	349				÷
	Deodorization Unit System								1
DDA-1420	Mechanical for DOU No.1 - Prepare(28d),Sub& Review(28d),Comment&Resub(14d)&Approval (7d)	78	04-Mar-22 A	24-Oct-24	-295		Mechanica	a for DOU No. 1 - Prepare(28d),Sub& Review(28d),Co	omment&Resub(14d)&Approval (7d)
DDA-1440	Mechanical for DOU No.3 - Prepare(28d),Sub& Review(28d),Comment&Resub(14d)&Approval (7d)	300	17-Jul-22A	02-Dec-24	78		·		Mechanical for DOU No. 3 - Prepare(28d),Sub& Revi
DDA-1430	Mechanical for DOU No. 2A and 2B - Prepare (28d) Sub& Review (28d), Comment& Resub (14d) & Approval (7d)	122	13-Oct-23 A	25-Jan-25	24				
Package 17 -	Sludge Dewatering Building (SDB)								
DDA-910	Roof Rainwater Collection Systemfor (SDB) - Prep (60d), Sub & Review (45d), Comment& Resub (21d) & Approva (7d)	242	06-Mar-24 A	30-May-25	98			· •	
DDA-920	Fire Services System for SDB - Prep(60d), Sub.&Review(45d), Comment&Resub (14d) & Approval(7d)	242	19-Oct-24	17-Jun-25	52				
DDA-930	Mechanical for Sludge Dewatering Building (SDB) - Prep(60d), Sub & Review(45d), Comment& Resub (14d) & Approv	242	19-Oct-24	17-Jun-25	80				
DDA-940	Plumbing System for Sludge Dewatering Bldg (SDB) - Prep(60d), Sub & Review(45d), Comment& Resub(14d) & App r	242	19-Oct-24	17-Jun-25	52			r	
DDA-950	BS for Sludge Dewatering Building (SDB) - Prep(118d), Sub & Review(45d), Comment& Resub (14d) & Approval (7d)	242	19-Oct-24	17-Jun-25	52				
Package 18 -	Viscellaneous Civil & Structural for Misc Manholes DrawPits FenceWall Pren/60(1) Sub & Review (45d) Comment& Resub (14d) & An	23E	28 Dec 24	10 Aug 25	95				· {
DDA-540	Civil & Structural for Misc, Manholes, DrawPits, FenceWall - Prep (60 d), Sub & Re view (45d ), Comment& Resub (14d) & Ap	235	28-Dec-24	19-Aug-25	85	-+		+	·
- ·	Elevated Walkways	101	15-Apr 22 A	20 Dec 24	280	<u></u>			Civil & Structural for
DDA-710	Civil & Structural for Elevated Wa kways - Prep(60d), Sub & Review(45d), Comment& Resub (14d) & Approval(7d), GEC	101	15-Apr-23A	20-Dec-24	289				Civil & Structural tort
Package 20 -		207	01 0+04	25 Ar-05	250				
DDA-720	Civil & Structural for Trellis - Prep(60d), Sub.&Review(45d), Comment&Resub (14d) & Approval(7d) Steel Working Platform	207	01-Oct-24	25-Apr-25	259				
DDA-730	Steel Working Platform Civil & Structural for Steel Working Platform - Prep(60d), Sub.&Review(45d), Comment&Resub (14d) & Approval(7d)	102	02-Sep-22 A	26-Mar-25	289				<u>.</u>
	Civit& Structuration Steel Working Platform - Prep(60d), Sub & Review(45d), Comment& Resub (14d) & Approval(rd) Sampling System of YLEPP	102	02-Sep-22 A	20-Mil-20	269			· · · · · · · · · · · · · · · · · · ·	
DDA-740	Sampling System for W&PST - Prep(60d), Sub & Review(45d), Comment& Resub (14d) & Approval(7d)	62	07-Jul-23A	05-Nov-24	-361			Sampling System for W&PST- Prep(60d)	), \$ub&Review(45d), Comment&Resub (14d) & Approval(7c
DDA-1610	Sampling System for AGS&TTB - Prep(60d), Sub & Revie w(45d), Comment& Resub (14d) & Approval(7d)	127	07-Jul-23A	29-Mar-25	-211		<u>.</u>		
DDA-1620	Sampling System for SDT - Prep(60d), Sub & Review(45d), Comment& Resub (14d) & Approval(7d)	127	07-Jul-23A	29-Mar-25	-107			r	
DDA-1630	Sampling System for STB - Prep (60d), Sub & Review (45d), Comment& Resub (14d) & Appro va (7d)	128	07-Jul-23A	29-Mar-25	-211				
Package 23 -	Security, Public Address and Communication System								
DDA-750	SPC sitewide ACS-Prep(60d), Sub.&Review(45d), Commen &Resub (14d) &Approval(7d)	98	21-Jun-23A	28-Apr-25	-241				
Package 24 -	Administration Building (ADB)								
DDA-0960	Architectural for Administration Building (ADB) - Prep (60 d), Sub. & Review (45d), Comment & Resub (14d) & Approval (70	126	01-Oct-24	03-Feb-25	226				-
DDA-0990	General Arrangement & Civil Req. Drawings for ADB - Prep(60d), Sub & Review (45d), Comment & Resub (14d) & Appr	126	01-Oct-24	03-Feb-25	226			L	·
DDA-1000	Mechanical forAd ministration Building (ADB) -Prep(60d), Sub & Revie w(45d), Commen & Re sub (14d) & Approval(7d	126	01-Oct-24	03-Feb-25	226				
DDA-1010	Electrical & Control for Administration Building (ADB) - Prep(60d), Sub & Review(45d), Comment& Resub (14d) & Appro	126	01-Oct-24	03-Feb-25	226				
DDA-1020	BS forAd ministration Building (ADB) - Prep(60 d), Sub.&Revie w(45 d), Comment&Resub (14 d) & Approval(7 d)	126	01-Oct-24	03-Feb-25	226			÷	·
	ATAL'S Scope	400		00.01	474				Diminana austama athaaa alah (faundatian lauala, Dran (60a
DDA-1540	Drainage systems at base slab / foundation levels - Prep(60d), Sub & Review(45d), Comment& Resub (14d) & Ap prove	126	24-Aug-22 A	28-Nov-24	474				Drainage systems at base slab / foundation levels - Prep(60d
DDA-1560 DDA-1550	Streetfire hydrant system - Prep(60d), Sub & Review(45d), Comment& Resub (14d) & Approva (7d) Rainwater drainage systems - Prep(60d), Sub & Review(45d), Comment& Resub (14d) & Approval (7d)	126 126	22-Dec-23 A 29-Nov-24	03-Jan-25	31 474				
Technical Submi		120	294100-24	03-Apr-25	4/4				
	d Maintenance (O&M) Manuals and Installation Manuals (PS 34.20(11)(12)(13))								1
	d Primary Sedimentation Tank								÷
	Submittreview/approval Operation and Maintenance (O&M) Manuals and Installation Manuals - 1st draft	60	05-Jan-23 A	24-Oct-24	-349	1	Submit/rev	ewapproval Operation and Maintenance (O&M) Man	uals and Installation Manuals - 1stdraft
SUBM-1200	Submit/review/approval Operation and Maintenance (O&M) Manuals and Installation Manuals - revised draft	60	25-Oct-24	23-Dec-24	-302			·	Submit/review/
AGS and TTS									<u></u>
SUBM-1220	Submit/review/approval Operation and Maintenance (O&M) Manuals and Installation Manuals - 1st draft	60	25-Oct-24	23-Dec-24	-115				Submit/review/
SUBM-1230 Sludge Thicke	Submittreviewlapproval Operation and Maintenance (O&M) Manuals and Installation Manuals - revised draft	60	24-Dec-24	21-Feb-25	352				
SUBM-1250	Submit/review/approval Operation and Maintenance (O&M) Manuals and Installation Manuals - 1st draft	60	25-Oct-24	23-Dec-24	322				Submit/review/
SUBM-1260	Submitreview/approval Operation and Maintenance (O&M) Manuals and Installation Manuals - revised draft	60	24-Dec-24	21-Feb-25	322				
Sludge Disges								[	1
SUBM-1310	Submit/review/approval Operation and Maintenance (O&M) Manuals and Installation Manuals - 1st draft	60	25-Oct-24	23-Dec-24	-332				Submit/review/
SUBM-1320	Submit/review/approval Operation and Maintenance (O&M) Manuals and Installation Manuals - revised draft	60	24-Dec-24	21-Feb-25	328				
	emoval System	00	05.0.101	00.0	000			L	
SUBM-1280 SUBM-1290	Submitreview/approval Operation and Maintenance (O&M) Manuals and Installation Manuals - 1st draft Submitreview/approval Operation and Maintenance (O&M) Manuals and Installation Manuals - revised draft	60 60	25-Oct-24 24-Dec-24	23-Dec-24 21-Feb-25	-332 575				Submit/review/
Deodourizatio		00	2-7-0/50-24	21-100-20	515				
SUBM-1340		60	24-Dec-24	21-Feb-25	-332				·
Plant Service								·	
SUBM-1370	Submittreview/approval Operation and Maintenance (O&M) Manuals and Installation Manuals - 1st draft	60	24-Dec-24	21-Feb-25	517				
Commissioni	ng Plan and Procedures (PS34.20(10))								
SUBM-1000	Submit/review/approval Commissioning Plan and Procedures - Early commissioning of W&PST (KD3)	120	21-Feb-24 A	21-Jan-25	-271				
Material Submi	ssion, Procurement, Manufacturing and Delivery								
Inlet Works								[	
PRE-290	SubmittProcure/Manufacture/Deliver New Inlet Works Equip GritTrap and classifier	270	18-Feb-22 A	29-Oct-24	-324			ubmit/Procure/Manufacture/Deliver New Inlet Works E	
PRE-280	Submit/Procure/Manufacture/Deliver New Inlet Works Equip Converyeor and compactor	270	12-Apr-22A	29-Oct-24	-324			ubmit/Procure/Manufacture/Deliver New Inlet Works E	.quipConveryeor and compactor
PRE-310	Submit/Procure/Manufacture/Deliver New Inlet Works Equip Penstocks and stoplogs	270	13-Sep-22 A	08-Oct-24	-342		Submit/Procure/Manufacture/Deliver Ne	w Inlet Works Equip Penstocks and stoplogs	Deliver New Det Works Favin MAC Variation F
PRE-320	Submit/Procure/Manufacture/Deliver New Inlet Works Equip MVAC-Ventilation Fan	211	10-Jan-23 A	12-Nov-24	-314			Submit/Frocure/wanuiacture/	Deliver New Inlet Works Equip MVAC-Ventilation Fan
Biogas Holder PRE-410	Submit/Procure/Manufacture/Deliver Waster Gas Burner	300	19-Aug-21 A	30-Apr-26	133			<u>.</u>	
PRE-410 PRE-420	Submit/Procure/Manufacture/Deliver H2S Removal System	510	25-Feb-22 A	19-Feb-26	-67		<u></u>	· · · · · · · · · · · · · · · · · · ·	
PRE-430	Submit/Procure/Manufacture/Deliver Biogas booster and transfer pumps	539	01-Oct-24	23-Mar-26	111				
Sludge Digesto	r Tank				· ·				
PRE-750	Submit/Procure/Manufacture/Deliver Sludge Digester Tank - Flame Arresters	100	31-Oct-22 A	09-Jan-25	-28				
PRE-780	Submit/Procure/Manufacture/Deliver Sludge Digester Tank - Mixing System and Heat Exchanger for Sludge Anaerobic	420	22-Dec-22 A	26-Oct-24	47		Submi	tProcure/Manufacture/DeliverSludgeDigesterTank-I	Mixing System and HeatExchanger for Sludge Anaerobic Di
PRE-720	Submit/Procure/Manufacture/Deliver Sludge Digester Tank - Inspection Windowsfor Sludge Anaerobic System	365	18-Jan-23 A	09-Jan-25	-28				
PRE-730	SubmittProcure/Manufacture/Deliver Sludge Digester Tank - Gas Take Off Dome for Sludge Anaerobic Digestion Syste	365	18-Jan-23 A	09-Jan-25	-28			· · · · · · · · · · · · · · · · · · ·	
PRE-710	Submit/Procure/Manufacture/Deliver Sludge Digester Tank - Pressure and Vacuum Relief Valves	300	01-Mar-23A	09-Jan-25	-28				t
PRE-740	Submit/Procure/Manufacture/Deliver Sludge Digester Tank - Telescopic Valve for Sludge Anaero bic Digestion System	179	10-Jul-23A	09-Jan-25	-28				
PRE-760	Submit/Procure/Manufacture/Deliver Sludge Digester Tank - Ferric Chloride Dosing Pump	148	29-Aug-23 A	09-Jan-25	-28		· · · · · · · · · · · · · · · · · · ·	L	
PRE-770	Submit/Procure/Manufacture/Deliver Sludge Digester Tank - Ferric Chloride Trasnfer Pump	148	29-Aug-23 A	09-Jan-25	-28				
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Contract DC/2019/10 - YLEPP - Main Works for Stage 1 Monthly Progress Report No. 47- 3MRP (Sep 24)

Project ID : DWPr42\_241016 Layout : DC201910 MPR47-3MRP Page 2 of 8

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Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	Total Float	September	October 48	November December January February March
PRE-250	Submit/Procure/Manufacture/Deliver Sludge Thickening System - Thickening Centrifuges	360	12-Nov-21 A	30-Dec-24	81	01 08 15 22	29 06 13 20 27	49         30         31         31         31         32         33           03         10         17         24         01         08         15         22         29         05         12         19         26         02         09         16         23         02         9           SubmitProcure/Manufacture/Deliver Sludge Thickening System - Thickening Centring System
PRE-500	Submit/Procure/Manufacture/Deliver Sludge Thickening System - Pump and jet mixer	300	07-Jan-22 A	30-Jan-25	-58			SubmitProcure/Manufacture/Deliver Studge Thickening System - P
PRE-510 PRE-480	Submit/Procure/Manufacture/Deliver Sludge Thickening System - LALG Submit/Procure/Manufacture/Deliver Sludge Thickening System - Polymer preparation system	256 388	28-Mar-23A 12-Apr-23A	17-Nov-24 17-Nov-24	38 94			SubmitProcureManufacture/Deliver Studge Thickening System - LALG SubmitProcureManufacture/Deliver Studge Thickening System - Polymer preparation system
PRE-490	Submit/Procure/Manufacture/Deliver Sludge Thickening System - DOU-03	264	07-Jul-23A	11-Feb-25	38			SubmitProcure/Manufacture/Deliver Sludge
PRE-520 Mainstream Bio-	SubmitProcure/Manufacture/Deliver Sludge Thickening System - MVAC Reactor	212	27-Apr-24A	15-Feb-25	34			SubmitProcure/Manufacture/DeliverS
PRE-230	Submit/Procure/Manufacture/Deliver Main Stream Bio-Reactor E&MEquipAGSsystem	480	09-Sep-22 A	23-Mar-25	-100			
PRE-530 PRE-550	Submit/Procure/Manufacture/Deliver Main Stream Bio-Reactor E&M Equip Penstocks and stoplogs Submit/Procure/Manufacture/Deliver Main Stream Bio-Reactor E&M Equip Sludge pre-thickening system	345 510	31-Oct-22 A 31-Oct-22 A	16-Jun-25 23-Mar-25	-94 -93			
PRE-540	Submit/Procure/Manufacture/Deliver Main Stream Bio-Reactor E&M Equip Chemical storage and dosing system	270	18-Nov-22 A	02-Apr-25	-110			
PRE-570 PRE-560	SubmitProcure/Manufacture/Deliver Main Stream Bio-Reactor E&M Equip Instrumentation SubmitProcure/Manufacture/Deliver Main Stream Bio-Reactor E&M Equip LALG	481 349	03-Apr-24A 01-Oct-24*	17-Nov-25 14-Sep-25	-252 -275			
PRE-580	Submit/Procure/Manufacture/Deliver Main Stream Bio-Reactor E&M Equip MVAC	138	01-Oct-24	15-Feb-25	-64			SubmitProcure/Manufacture/Deliver
PRE-610	submitProcureManufacture/Deliver TTS Equip Pumping system	495	19-Jul-22A	20-Oct-24	74		Submit/Procure/M	enufacture/Deliver TTS Equip Pumping system
PRE-600	SubmitProcure/Manufacture/Deliver TTS Equip UV disinfection system	510	08-Sep-22 A	15-Feb-25	-44			SubmitProcureManufacture.Deliver
PRE-240 PRE-590	Submit/Procure/Manufacture/Deliver TTS EquipDisc Filter Submit/Procure/Manufacture/Deliver TTS EquipChemical cleaning system	600 480	27-Sep-22 A 18-Nov-22 A	17-Mar-25 15-Jan-25	-74 -13			SubmitProcure/Manufactute/Deliver TTS Equip - Chemical deaning system
PRE-630	SubmitProcure/Manufacture/Deliver TTS Equip Penstocks and stoplogs	435	30-Nov-22 A	08-May-25	-126			
PRE-620 PRE-690	SubmitProcure/Manufacture/Deliver TTS EquipLALG SubmitProcure/Manufacture/Deliver TTS EquipDOU-02	151 506	27-Mar-23A 07-Sep-23A	08-Jul-25 28-Jul-25	-187 -207			
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PRE-680 PRE-670	SubmitProcure/Manufacture/Deliver Electrial and Control System - SCADA and instrumentation SubmitProcure/Manufacture/Deliver Electrial and Control System - Am cured Cable		30-Apr-22A 21-Dec-22 A	14-Nov-24 29-Oct-24	-249 -279		S	SubmitProcureManufacture/Deliver Electrial and Control System - SCADA and instrumentation ubmitProcure/Manufacture/Deliver Electrial and Control System - Amoured Cable
Site Establishm								
Portion 3 - PST, P3-140	SDB, Admin. Bldg Portion 3 - Carry out RAP	24	02-Oct-24	30-Oct-24	-25			Portion 3 - Carry out RAP
P3-150	Portion 3 - Submit Remediation Report		31-Oct-24	20-Nov-24	-25			Portion 3 - Submit Remediation Report
Statutory Subm WSD Submission	ssion & Approval							
WSD Submissio WSD-1030	NSD - Form WWO46 Part 1 and 2 PM&WSD review and approval	90	26-Jun-24 A	30-Nov-24	-287			WSD - Form WWO46 Part 1 and 2 PM&WSD review and approval
EMSD Submissi	n & Approval							
Biogas System (/ Phase 1	IAL)					- <u>-</u>		
ATAL-FS-0020	Form 105 for Biogas Holder Tank 1 (Submission and Approval Period)	184	03-Jun-24 A	16-Dec-24	268			Form 105 for Biogas Holder Tank 1(Submission and Approval Period)
EPD Submission EPD-1020	& Approval for VEP EPD - VEP Submission to DSD and EPD	28	21-Jun-24 A	08-Oct-24	-91		EPD - VEP Submission to DSD and EP	
EPD-1030	EPD - VEP RtC to DSD and EPD	7	09-Oct-24	15-Oct-24	-91		EPD - VEP RtC to DSD and	
EPD-1060 EPD-1070	EPD - VEP Gazette EPD - VEP approval	28	16-Oct-24 13-Nov-24	12-Nov-24 19-Nov-24	-91 -91			EPD - VEP approval
Zone 1 Constr		,	101101-24	13-1107-24	-51			
CLP Substation	s No. 1 & 2							
	No. 1 & 2 & DSD 11kV Switchgear - GRC Cladding		0151010		015			CLD Cubdoffen No. 1.9.7.9 DCD14(A) Cuidebaser / DC clodeling. Schringfen
CLP-1590 CLP-1600	CLP Substation No.1 & 2 & DSD11KV Switchgear - GRC cladding - fabrication CLP Substation No.1 & 2 & DSD11KV Switchgear - GRC cladding - installation		21-Feb-24 A 02-Oct-24	14-Nov-24 31-Dec-24	615 607			CLP Substation No.1 & 2 & DSD11KV Switchgear - GRC cladding - fabrication CLP Substation No.1 & 2 & DSD11KV Switchgear - GRC cladding - installation CLP Substation No.1 & 2 & DSD11KV Switchgear - GRC cladding - installation
	Existing Emergency Bypass Chamber							
Emergency Bypa IW-1260	ss Chamber - Foundation and ELS W - Modification of Existing Emergency Bypass Chamber - SheetPiles hstallation (1,283m2,60m2/day/rig, 1rig)	18	11-Jul-24 A	03-Oct-24	-304		W-Modification of Existing Emergency Bypass C	hamber- Sheet Piles Installation (1 283m2, 60m2/daylig, 1rig)
IW-3470	W-Modification of Existing Emergency Bypass Chamber - Diagonal grouting atexisting chamber	13	17-Aug-24 A		-004	W-Modification of Existing Emergency Bypass Cha	mber - Diagonal grouting at existing chamber	
IW-1270 IW-3070	W - Modification of Existing Emergency Bypass Chamber - Excavation: 1stlayer +4.5 to +3.5mPD (253m3) W - Modification of Existing Emergency Bypass Chamber - Strutinstallation @ +4.0mPD	2	04-Oct-24 07-Oct-24	05-Oct-24 14-Oct-24	-304 -304			ss Chamber - Excavation: 1stlayer +4.5 to +3.5mPD (253m3) mergency Bypass Chamber - Strutinsbalation @ +4.0mPD
IW-3080	W-Modification of Existing Emergency Bypass Chamber - Excavation: 2nd layer +3.5 to +1.0mPD (633m3)	2	15-Oct-24	16-Oct-24	-304	-	W-Modification of Existin	g Emergency Bypass Chamber - Excavation: 2nd layer + 3.5 to + 1.0mPD (633m3)
IW-3090 IW-3340	W - Modification of Existing Emergency Bypass Chamber - Strutinstallation @ +1.5mPD W - Modification of Existing Emergency Bypass Chamber - Excavation: 3rd layer +1.0 to -2.0mPD (759m3)	6	17-Oct-24 24-Oct-24	23-Oct-24 25-Oct-24	-304 -304			tion of Existing Emergency Bypass Chamber - Strutinstallation @ +1.5mPD fication of Existing Emergency Bypass Chamber - Excavation: 3rd layer +1.0 to -2.0mPD (759m3)
IVV-3350	W - Modification of Existing Emergency Bypass Chamber - Strutinstallation @ -1.5mPD	6	26-Oct-24	01-Nov-24	-304	-		W - Modification of Existing Emergency Bypass Chamber - Strutinstallation @ -1.5mPD
IW-3360 IW-3370	W - Modification of Existing Emergency Bypass Chamber - Excavation: FEL-2 0 to -38mPD (84m3) W - Modification of Existing Emergency Bypass Chamber - Backfill to -2.0mPD	2	02-Nov-24 05-Nov-24	04-Nov-24 07-Nov-24	-304 -304	+		W - Modification of Existing Emergency Bypass Chamber - Excavation: FEL-2.0 to -38m PD (84m3) W - Modification of Existing Emergency Bypass Chamber - Backfill to -20m PD
IVV-3380	W - Modification of Existing Emergency Bypass Chamber - Remove S3	2	08-Nov-24	09-Nov-24	-304			W-Modification of Existing Emergency Bypass Chamber - Remove S3
IW-3390	IW - Modification of Existing Emergency Bypass Chamber - Backfill rockfill to -1.3mPD ss Chamber - Structural Works	3	11-Nov-24	13-Nov-24	-304			W-Modification of Existing Emergency Bypass Chamber-Backfill to-1.3mPD
Emergency Bypa	ss Chamber - Structural modification at Existing EBC							
W-3530 W-3110	W - Modification of Existing Emergency Bypass Chamber - Blinding and waterproofing W - Modification of Existing Emergency Bypass Chamber - Constructbase slab	3	14-Nov-24 18-Nov-24	16-Nov-24 23-Nov-24	-304 -304			W - Modification of Existing Emergency Bypass Chamber - Blinding and waterproofing W - Modification of Existing Emergency Bypass Chamber - Construct base slab
IW-3160	W - Modification of Existing Emergency Bypass Chamber - Remove formwork, backfill, Remove S2	6	25-Nov-24	30-Nov-24	-304			W-Modification of Existing Emergency Bypass Chamber - Remove formwork, backfill, Remove S2
W-3120 W-3170	W - Modification of Existing Emergency Bypass Chamber - Construct wall and backfill to S1 W - Modification of Existing Emergency Bypass Chamber - Remove formwork, waterproofing, backfill, Remove S1	6	02-Dec-24 09-Dec-24	07-Dec-24 14-Dec-24	-304 -304			W-Modification of Existing Emergency Bypass Chamber - Construct wall and backfill to S1 W-Modification of Existing Emergency Bypass Chamber - Remove formwork, waterproofing, backfill, Remove S1
IW-3180	W - Modification of Existing Emergency Bypass Chamber - Construct wall / top slab	8	16-Dec-24	24-Dec-24	-304			W - Modification of Existing Emergency Bypass Chamber - Constructivall / top slab
W-3140 W-3540	W - Modification of Existing Emergency Bypass Chamber - Install bulkhead at existing chamber W - Modification of Existing Emergency Bypass Chamber - Remove formwork/falsework, waterproofing, backfill to GL	7	27-Dec-24 27-Dec-24	04-Jan-25 06-Jan-25	-285 -304			W - Modification of Existing Emergency Bypass/Chamber - hstall bulkhead atexisting chamber W - Modification of Existing Emergency Bypass Chamber - Remove formwork/falsework, waterproofing, backfill
Emergency Bypa	ss Chamber - Manhole MHA1							
W-3100 W-3620	W - Modification of Existing Emergency Bypass Chamber - MHA1 - Excavation: FEL +1.0 b -3 35m PD(481m3) W - Modification of Existing Emergency Bypass Chamber - MHA1 - Backfill rockfill to -2.0mPD	1	24-Oct-24 25-Oct-24	24-Oct-24 28-Oct-24	-277 -277			cation of Existing Emergency Bypass Chamber - MHA1:- Excavation: FEL +1.0 b -3.35mPD (481 m3) Modification of Existing Emergency Bypass Chamber - MHA1 - Backfill to-c0mPD
IW-3630	W - Modification of Existing Emergency Bypass Chamber - MHA1 - Remove S3	2	29-Oct-24	30-Oct-24	-277		<b>—</b>	W-Modification of Existing Emergency Bypass Chamber - MHA1 - Remove S3
W-3640 W-3550	W - Modification of Existing Emergency Bypass Chamber - MHA1 - Backfill rockfill to -1.3mPD W - Modification of Existing Emergency Bypass Chamber - MHA1 - Blinding and waterproofing	2	31-Oct-24 02-Nov-24	01-Nov-24 05-Nov-24	-277 -277			W-Modification of Existing Emergency Bypass Chamber - MHA1 - Backfill rockfill to -1.3mPD W-Modification of Existing Emergency Bypass Chamber - MHA1 - Blinding and waterproofing
W-3560	W - Modification of Existing Emergency Bypass Chamber - MHA1 - Construct base slab	6	06-Nov-24	12-Nov-24	-277			W - Modification of Existing Emergency Bypass Chamber - M-HA1 - Construct base slab:
W-3580 W-3600	W - Modification of Existing Emergency Bypass Chamber - MHA1 - Construct wall W - Modification of Existing Emergency Bypass Chamber - MHA1 - Construct wall / top slab	6	13-Nov-24 20-Nov-24	19-Nov-24 28-Nov-24	-277 -277			M - Modification of Existing Emergency Bypass Chamber - MHA1 - Construct wall W - Modification of Existing Emergency Bypass Chamber - MHA1 - Construct wall / top slab
IW-3590	W - Modification of Existing Emergency Bypass Chamber - MHA1 - Remove formwork/falework, waterproofing	6	29-Nov-24	05-Dec-24	931			M - Modification of Existing Emergency Bypass Chamber - MHA1 - Remove formwork/falework, waterproofing
Emergency Bypa IW-1280	ss Chamber - Pipe laying W - Modification of Existing Emergency Bypass Chamber - 1200mm Pipe Laying (18d) & Testing (6d)	24	29-Nov-24	28-Dec-24	-277			Modification of Existing Emergency Bypass Chamber - 1200mm Pipe Laying (18d) & Testing (6d)
Inlet Works (IW)								
IW Foundation & IW Basement	ELS Works							
IW Basement	C Works					<u> </u>		
W Zone A/D	M(A2) Domain formund, concerts defecture during the Lunco	0	10 4 01 4	14.0 04 -		W(A2) - Remove formwor	concrete defectuartes (holow \$2)	
Z1-IW-6770 Z1-IW-6780	W(A2)- Remove formwork, concrete defect works (below S2) W(A2)- Wate proof, concrete backfil (below S2)	8	19-Aug-24 A 16-Sep-24 A			ivv(n2)-Remove iomwor	k, concrete defectworks (below S2) IW(A2) - Waterproof, concrete backfill (below S2)	
Z1-IW-6900	W(A2)-Remove S2	4	14-Oct-24*	17-Oct-24	-323		W(A2)-Remove S2	toof concrete to defit (for an indiaval)
Z1-IW-6910 Z1-IW-6915	W(A2)-Wate proof, concrete backfil (to ground level) W(A2)-Wa1RC Works (Inletchannel,-0.5 to +5mPD)	3 12	18-Oct-24 18-Oct-24	21-Oct-24 31-Oct-24	-284 -323			toof, concrete baddfil (to groundlevel) W(A2)-WaI RC Works (Inletchannel, -0.5 to +5mPD)
Water Tightne	s Test for IW Basement	4-					IV/R WaterTightmoorTeat Direct 4 (intervent)	
Z1-IW-4120 Z1-IW-4100	WB - Water Tightness TestPhase 1 (inlet well) WB - Water Tightness TestPhase 4 (inlet channel no. 1)	15 15	05-Sep-24 A 03-Oct-24	02-Oct-24 21-Oct-24	-314 -314		WB - Water Tightness Test Phase 1 (inlet well)	Iness TestPhase 4 (inletchannel no. 1)
Z1-IW-6930	WB - Water Tightness Test Phase 2 (inlet wet well no. 1)		03-Oct-24	28-Oct-24	-300			3-WaterTightnessTestPhase 2 (inletwetwell no. 1)
			•				<b></b>	Project ID : DWPr42 241016 Monthly Progress Report - 3MRP
Pau	Remaining Level of Ef		Cont	ract	DC/2	2019/10 - YL FPP	- Main Works for	
	Actual Work							
	Remaining Work		M	onthl	v Pr	ogress Report N	o. 47- 3MRP (Se	Page 3 of 8 30-Sep-24 Rev. 0
	■國中鐵聯營體 Critical Remaining Work		141	<b>.</b>	J ' '	-3.000 Koport N		
PAUL Y	CREC JOINT VENTURE							



Activity ID	Activity Name	Orig	Early Start	Early Finish	Total Float	September	October	November	De cember
		Dur				47 01 08 15 22	48 29 06 13 20 27	49 03 10 17 24	50 01 08 15 22
Z1-IW-6920	WB - Water Tightness TestPhase 3 (Coarse screen channels) WB - Strike formwork and make good for water tightness test (Inlet channel, -0.5 to +5mPD)	18 12	29-Oct-24	18-Nov-24	-298				ss Test Phase 3 (Coarse screen channels) make good for water tightness test (Inlet channel, -0.5 to
Z1-IW-7090 Z1-IW-6940	WB - Strike formwork and make good for water tightness test (Inlet channel, -0.5 to +5mPD) WB - Water Tightness TestPhase 6 (inlet wet well no.2)	12	01-Nov-24 05-Nov-24	14-Nov-24 25-Nov-24	-323				make good for water tigntness test (inlet channel, -0.5 to Water Tightness Test Phase 6 (inlet wet well no. 2)
Z1-IW-4110	WB - WaterTightnessTestPhase 5 (inletchannel no. 2)	18	15-Nov-24	05-Dec-24	-323				WB - Water Tightness Test Phase 5 (inlet ch
IW Civil and Stru									
IW Superstructur RC Works	8								<u>.</u>
Zone D									
Z1-IW-6540	WS (D)-Wal, column (+11.8 to +18.2mPD) and Roof Slab RC Works (+18.2mPD)	16		30-Aug-24 A		1. WS (D) - Wal, column (+11.8 to +18.2mPD) and Roo		remove falsework (+3.95 to +18.2mPD)	
Z1-IW-7040 Z1-IW-7030	WS (D)- Concrete gain strength and remove falsework (+3.95 to +18.2mPD) WS (D)- Wall and slab RC Works (Grittrap no.1-3, +5.0mPD)	14 29	31-Aug-24 A 30-Sep-24 A	09-Oct-24 15-Nov-24	-315		iws (D)- condee gairsiengirand		C Works (Grittrap no.1-3, +5.0mPD)
Zone A1 +A2									
Z1-IW-4195	WS (A1+A2) - 1/F Slab of Falseworks, Formworks and RC Works (+11.8mPD)	12	25-Aug-24 A			IWS (A1+A2)-1/F Slab of Falseworks, Formwo	ks and RC Works (+11.8mPD) Roof Slab of Falseworks, Formworks and RC Works (+18	(Jump)	
Z1-W-4215 Zone A3	WS (A1+A2) - Roof Slab of Falseworks, Formworks and RC Works (+182mPD)	14	04-Sep-24 A	20-Sep-24 A		WVS (A1+A2)-	COOL SIAD OF PAISEWORKS, PORTWORKS and RC WORKS (+ )		
Z1-IW-7060	WS (A3) - G/F Slab of Falseworks, Formworks and RC Works (+3.95mPD)	9	24-Aug-24 A				s, Formworks and RC Works (+3.95mPD)		
Z1-IW-7065	WS (A3) - Intermediate Slab of Falseworks, Formworks and RC Works(+7.84mPD)	10	12-Sep-24 A			WS (	3)- Intermediate Slab of Falseworks, Formworks and RC INS (A2) 15 Slab of Falseworks	Works(+7.84mPD) ormworks and RC Works (+11.8mPD)	
Z1-IW-7070 Z1-IW-7080	WS (A3) - 1/F Slab of Falseworks, Formworks and RC Works (+11.8mPD) WS (A3) - Roof Slab of Falseworks, Formworks and RC Works (+182mPD)	9 14	26-Sep-24 A 09-Nov-24	10-Oct-24 25-Nov-24	-285		INVS (A3)- I/F Siab OI Paisewolks, P		3) - Roof Slab of Falseworks, Formworks and RC Wo
Water Tightne	ss Test for IW Superstructure								
Zone D+A1 (+7		7	44 4.05 04 4	44.0 04.4		MB. Concrete develops	nength (IWZone D+A1 +11.8 slab)		
Z1-IW-6570 Z1-IW-6580	WB - Concrete develop strength (IW Zone D+A1 +11 8 slab) WB - Strike formwork and make good for water tightness test (IW Zone D+A1 +11.8 slab)	7	14-Aug-24 A 16-Sep-24 A				Strike formwork and make good for water tightness test	(IW Zone D+A1 +11.8 slab)	
Z1-W-4240	WS - Water Tightness Test Phase 1 (grit trap no.4)	18	27-Sep-24 A	10-Oct-24	-289		IWS - Water Tightness Test Phase 1	(grittrap no.4)	
Z1-IW-4250	MS - Water Tightness Test Phase 2 (fine screen influent channel/fine screen no 2-4/flow distribution channel)	18 18	12-Oct-24	01-Nov-24	-289 -289			WS - Water Tightness Test Phase 2 (fine screen inf	fuent channel/fine screen no 2-4/flow distribution char Tightness Test Phase 3 (Discharge channel)
Z1-IW-6950 Zone D+A1 (+5	MS - Water Tightness Test Phase 3 (Discharge channel)	18	02-Nov-24	22-Nov-24	-289			IVVS - Water	Tigniness restPhase 3 (Discharge channel)
Z1-IW-7000	WB - Concrete develop strength (W Zone D+A1 +5 slab)	7	16-Nov-24	23-Nov-24	-315			IWB - Con	crete develop strength (W Zone D+A1 +5 slab)
Z1-IW-7010	WB - Strike formwork and make good for water tightness test (IW Zone D+A1 +5 slab)	7	25-Nov-24	02-Dec-24	-315				WB - Strike formwork and make good for water
Z1-IW-6970 Zone A2 +A3 (+1	WS - Water Tightness Test Phase 5 (grit trap no.1-3) 7.83 5)	18	03-Dec-24	23-Dec-24	-315	<u>                                     </u>			WVS-W
Z1-IW-6980	WB - Concrete develop strength (IW Zone A2 +A3 +11.8 slab)	7	12-Oct-24	19-Oct-24	-285		······································	vélop strength (IW Zone A2+A3 +11.8 slab)	
Z1-IW-6990	WB - Strike formwork and make good for water tightness test (IW Zone A2+ A3 +11.8 slab)	7	21-Oct-24	28-Oct-24	-285		W	B - Strike formwork and make good for water tightness to	est (W Zone A2+A3 +11.8 slab) Tightness Test Phase 4 (fine screen channel no.1)
Z1-IW-6960	WS - Water Tightness Test Phase 4 (fine screen channel no.1)	18	02-Nov-24	22-Nov-24	-289	<u> </u>		IWS-Water	ngneress restrinase 4 (inte screen channel no.1)
	st fix for E&M handover								<u>.</u>
IW ABWF Wor						-			
Below +11 8 mF WetArea									
W-3230	InletWork - Lining at inlet well/wet well no.1 at -4.9/-1.6/-0.5mPD	7	29-Oct-24	05-Nov-24	-300			Inlet Work - Lining at inlet well/wet well no.1 a	at-4.9/-1.6/-0.5mPD
IW-3520	InletWork - Lining at coarse screen at -4.9/-1.6/-0.5mPD	7	19-Nov-24	26-Nov-24	-298			Inlet <sup>1</sup>	Work - Lining at coarse screen at -4.9/-1.6/-0.5mPD
W-3510 W-3240	InletWork - Lining at inlet channel/wetwell no 2 at 4.9/1.6/0.5mPD InletWork - Lining at fine screen influent/effluent/chan nel/gittra pat +7 85/+8.2mPD	7	06-Dec-24 24-Dec-24	13-Dec-24 03-Jan-25	-323				InletWork - Lining atinletch
Dry Area	Interview-Linning at the screen initial internet an enginera part of 55 (0.21) D	,	24-060-24	03-0411-23	-010				
IW-3310	Inlet Work - Concrete gain strength (+11.8mPD) and Remove formwork and falsework (basement to +11.8mPD)	14	10-Sep-24 A	14-Oct-24	-290			rength (+11.8mPD) and Remove formwork and falsewo	
W-2780 Above +11 8m	InletWork - ABWF Works 1stfix@ Ground Floor (basement to +11.8mPD)	12	15-Oct-24	28-Oct-24	-290		h)	et Work -ABWF Works 1stfix@ Ground Floor (baseme	ηtto +11.8mPD)
W-3480	Inlet Work - Concrete gain strength (Zone D, +18.3mPD) and Remove formwork and falsework (Zone D, +18.3mPD)	12	31-Aug-24 A	28-Sep-24 A		i	etWork - Concrete gain strength (Zone D, +18.3mPD) ar	nd Remove formwork and falsework (Zone D, +18.3mP	
IW-3320	InletWork - Concrete gain strength (Zone A, +18.3mPD) and Remove formwork and falsework (Zone A, +18.3mPD)	14	21-Sep-24 A	19-Oct-24	-315			te gain strength (Zone A, +18.3mPD) and Remove form	work and falsework (Zone A, +18.3mPD)
IW-3500	InletWork - ABWF Works 1stfix @ FirstFloor (Zone D, +11.8 to +18.3mPD)	10	30-Sep-24 A	12-Oct-24	-289		InletWork-ABWF Works 1stfix	@ First Floor (Zone D, +11.8 to +18.3mPD) Inlet Work - ABWF Works 1stfix @ First Floor (Zon	λ +1185 +183mPD)
W-3010	InletWork-ABWF Works 1stfix@ FirstFloor (Zone A, +11.8 b +18.3mPD)	12	21-Oct-24	02-Nov-24	-315			miletwork-ABWF Works Istik@FilstFloor(201	
IW-3250	InletWork - ABWF Works final fixabove +11.8mPD	90	07-Dec-24	28-Mar-25	-286				
W-3260	InletWork-ABWF Works final fixbelow+11.8mPD	90	07-Dec-24	28-Mar-25	-286				
W-3030	InletWork-ABWF Works @ External Wall	120	07-Oct-24	03-Mar-25	-230				
IW-2990	InletWork - Construct concrete plinth for PV panel (526nos, 11nos/day/gang, 2gangs)	24	12-Nov-24	09-Dec-24	-214				Inlet Work - Construct concrete plin
IW-3000	InletWork -ABWF Works @ Roof Floor (+18.3mPD)	50	10-Dec-24	12-Feb-25	-214				
IW BS Works ATAL-1520	W-MVAC Works	80	19-Dec-24	28-Mar-25	-286				
ATAL-1530	W-ELVWorks	80	19-Dec-24	28-Mar-25	-306				
ATAL-1540	W -P&D Works	80	19-Dec-24	28-Mar-25	-296				
ATAL-1550 ATAL-1560	W - EL Works W - FS. Works	80 80	19-Dec-24 19-Dec-24	28-Mar-25 28-Mar-25	-306				
IW Transformer									
WTx1 E&MWorl				4- 0					
IW-2840	TX House No. 1 - BS & Transformer Installation	32	25-Mar-24 A	15-Oct-24	-226		TX House No. 1 - BS & Tra	Insionner Installation	+
ATAL-1760	W-E&MHandover@below+11.8mPD (Zone C, DOU)	0		16-Sep-24 A		♦ W-E&MHandover@	below+11.8mPD (Zone C, DOU)		
ATAL-1780	W - E&M Handover @ below +18.3mPD (Zone D)	0		12-Oct-24	-289		♦ W-E&MHandover@below+		   
ATAL-1838 ATAL-1140	W - E&M Handover @ below +6.0mPD (Zone A, inlet drywell, ventilation room) W - E&M Handover @ below +18.3mPD (Zone A)	0		28-Oct-24 02-Nov-24	-290			<ul> <li>E&amp;MHandover@below+6.0mPD (Zone A, inletd ryv W - E&amp;MHandover@below+18.3mPD (Zone A)     </li> </ul>	
ATAL-1140	W - E&M Handover @ below + 6.0mPD (Zone A) W - E&M Handover @ below +6.0mPD (Zone A, inlet we I)	0		02-Nov-24	-315			W-E&MHandover@below+6.0mPD(Zo	pneA,inletwell)
ATAL-1832	W -E&M Handover@below+6.0mPD (Zone A, wetwell 1)	0		05-Nov-24	-300			♦ W - E&MHandover @ below +6.0mPD (Zc	
ATAL-1836 ATAL-1830	W - E&M Handover @ below +6.0mPD (Zone A, coarse screen channel) W - E&M Handover @ below +6.0mPD (Zone A, inlet channel)	0		26-Nov-24 13-Dec-24	-298	<u>                                     </u>		◆ IW-1	E&MHandover@below+6.0mPD (ZoneA, coarse sc ♦ W-E&MHandover@below
ATAL-1834	W - E&M Handover @ below +6.0mPD (Zone A, wetwell 2)	0		13-Dec-24					♦ W-E&MHandover@bek
Pre-treatment Zo	ne (Below 11.8 mPD)								
	oplogs x 34 sets at inlet, Coarse Screen Channels	10	03-Dec-24	13-Dec-24	-323				W-Unloading of Penstock
ATAL-1150 ATAL-1152	W - Unloading of Penstock & Stoplogs x34 Nos * W - Penstock x12 Nos *	10 60	03-Dec-24 07-Dec-24	13-Dec-24 21-Feb-25	-323	1 1			w - Onloading of Penstock
ATAL-1154	W-Stoplogs x12 Nos*	60	07-Dec-24	21-Feb-25	-323				
	eens c/w grab unit x 2 Sets	40	14 De- 04	14 Eat 05	200				
ATAL-1180 Coarse Screen	W - Fixed Bar Screens clwgrab unit x2 Sels *	48	14-Dec-24	14-Feb-25	-306	<u> </u> - <u>†</u>			<u>.</u>
ATAL-1210	W - Monoril LA-01-02 for Compactors x3 sets *	30	04-Nov-24	07-Dec-24	-288				W-Monoril LA-01-02 for Compactors
ATAL-1190	W - Coarse Screens x2 Sets *	28	27-Nov-24	31-Dec-24	-298				
ATAL-1194 ATAL-1196	W - Compactors x3 Sets * W - Coarse Screen / Compactors / Conveyors - Divertors and Connectors *	30 30	30-Nov-24 12-Dec-24	07-Jan-25 18-Jan-25	-288 -298				
ATAL-1190	W - Coarse Screen Conveyors x10 Sets *	28	12-Dec-24	18-Jan-25	-298				· · · · · · · · · · · · · · · · · · ·
Inlet Pumping	Station with Pipes, Valves and Fittings					-			
ATAL-1860 ATAL-1200	W - EOT Crane LA-01-09 at +18.3 Level for Inlet Pumping System * W - Inlet Pumping Station with Pipes, Valves and Fittings (0.75set) *	30 60	04-Nov-24 27-Nov-24	07-Dec-24 11-Feb-25	-315				W-EOT Crane LA-01-09 at+18.3 Lev
1.1	ne (Above 11.8 mPD)	00	211107-24	11-1-60-20	-515	1.1			
Penstock & St	oplogs X 56 Sets at Fine Screen, Grit Removal channels								
ATAL-1160	W - Unloading of Penstock & Stoplogs x56 Nos*	10	14-Dec-24	27-Dec-24	-323 -312				M
ATAL-1162 ATAL-1164	W - Penstock x 12 Nos (5d/no./gang, 2gang)*           W - Stoplogs x 20 Nos (5d/no./gang, 3gang)*	30 34	28-Dec-24 28-Dec-24	05-Feb-25 10-Feb-25	-312	1			
							•		
D	Remaining Level of Ff		•						Project ID : DWPr42 241016



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. 47- 3MRP (Sep 24) Project ID : DWPr42\_241016 Layout : DC201910 MPR47-3MRP Page 4 of 8

	51			Febr 5	2	53
29 (	05 12	19	26	02 09	16	23 02 9
5mPD)						
nnel no.2)						
+						
+						
; (+18.2mPD)						
+						
-¦ el)						
htness test (II//	Zone D+A1 +5 slab)					
r Tightness Tes	Zone D+A1 +5 slab) t Phase 5 (grittrap no.1	-3)				
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+						
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1						
			]			
nel/wetwell no	.2 at-4.9/-1.6/-0.5mPD					
InletV	0.2 at-4.9/-1.6/-0.5mPD Vork - Lining at fine scre	een influent/e	ffluent/d	n an nel/grittra pat +7.85/+8	3.2mPD	
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[						
						Inlet Wo
dr PV nanel (5	26nos 11nos/dav/gan	a Sasuas)				·····
orPV panel (5	26nos, 11nos/day/gan	ng, 2gangs)		h	letWork-ABWFV	
orPV panel (5	26nos, 11nos/day/gan	ng, 2gangs)		h	etWork-ABWFV	Vorks@RoofFloor(+1
drPV panel (5	:26nos, 11nos/day/gan	ng, 2gangs)		h	letWork-ABWF V	
drPV panel (5	26nos, 11nos/daylgan	ıg, 2gangs)		h	etWork-ABWF V	
drPV panel (5	26nos, 11nos/day/gan	ıg, 2gangs)		h	etWork-ABWFV	
orPV panel (5	26nos, 11nos/day/gan	ıg, 2gangs)		h	letWork-ABWFV	
drPV panel (5	26nos, 11nos/daylgan	ıg, 2gangs)		h	letWork-ABWFV	
örPV panel (5	28nos, 11nos/day/gan	ıg, 2gangs)		n h	etWork-ABWFV	
drPV panel (5	26nos, 11nos/day/gan	ıg, 2gangs)		n n	let Work - ABWF V	
drPV panel (5	26nos, 11nos/day/gan	ıg, 2gangs)		h	let Work - ABWF V	
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dr PV panel (é	26nos, 11nosidayigan	ıg,2gangs)		n	iet Work - ABWF V	
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en channel)		ıg,2gangs)		in in its second s	iet Work - ABWF V	
eh chame)	neA,inletchannel)	ıg, 2gangs)		h	iet Work - ABWF V	
eh chame)		g, 2gangs)		h	iet Work - ABWF V	
eh chame)	neA,inletchannel)	g, 2gangs)		h	et Work - ABWF V	
eh chame)	neA,inletchannel) neA,wetwell 2)	g, 2gangs)		h		Vorks @ Roof Floor (+1
eh channe) +6.0mPD (Zor +6.0mPD (Zor	neA,inletchannel) neA,wetwell 2)	g, 2gangs)		h		Vorks @ Roof Floor (+1
eh channe) +6.0mPD (Zor +6.0mPD (Zor	neA,inletchannel) neA,wetwell 2)	g,2gangs)		h		
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eh channe) +6.0mPD (Zor +6.0mPD (Zor \$opplogs x341 \$oplogs x341	neA,inletchannel) neA,wetwell 2) Nos *			h	W	Vorks @ Roof Floor (+1
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en channe) +6.0mPD (Zor +6.0mPD (Zor Stoplogs x34) \$ebs* MV-Coarse	neA, intetchannel) neA, wetwell 2) Nos * Nos *	Sets*	creen /C	Compactors / Conveyors -	WFixed Bar S	Vorks @ Roof Floor (+1
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en channe) +6.0mPD (Zor +6.0mPD (Zor Stoplogs x34) \$ebs* MV-Coarse	neA, intetchannel) neA, wetwell 2) Nos * Nos *	Sets*	creen /C	innegors / Conveyors -	W W-Fbed BarS Divertors and Co	Vorks @ Roof Floor (+1
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en channe) ++ 6 OmPD (20 +6 OmPD (20 50 mPD (20 Steplogs x 34 sets * M - Coarse tor Inlet Pump	neA.intetcharmel) neA.wetwell 2) Nos * Screens x2 Sets * IW - Compactors x3 Sets * IW - Compactors x3 Sets *	Sets* W-Coarse S W-Coarse S	creen (C	Compactors / Conveyors - niveyors x 10 Sets*	W-Fixed Bar S Divertors and Co InletPumping St	Vorks @ Roof Floor (+1
en channe) ++ 6 OmPD (20 +6 OmPD (20 50 mPD (20 Steplogs x 34 sets * M - Coarse tor Inlet Pump	neA.intetcharmel) neA.wetwell 2) Nos * Screens x2 Sets * IW - Compactors x3 Sets * IW - Compactors x3 Sets *	Sets* W-Coarse S W-Coarse S	creen /C	Compactors / Conveyors - niveyors x 10 Sets*	W-Fixed Bar S Divertors and Co InletPumping St	Vorks @ Roof Floor (+1
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en channe) ++ 6 OmPD (20 +6 OmPD (20 50 mPD (20 Steplogs x 34 sets * M - Coarse tor Inlet Pump	neA.intetchannel) neA.wetwell 2) Nos * Screens x2 Sets * IW - Compactors x3 S ing System *	Sets* W-Coarse S W-Coarse S 56 Nos*	creen C	iompadots/Conveyors- onveyors.10 Sets* W-Penstock. W-S Togress Repor	W-Fixed Bar S Divertors and Co InletPumping Sta toplogs x20 Nos t - 3MRP	Vorks @ Roof Floor (+1
en channe) ++ 6 OmPD (20 +6 OmPD (20 50 mPD (20 Steplogs x 34 sets * M - Coarse tor Inlet Pump	ne A, intetchannel) ne A, wetwell 2) Nos * Screens x2 Sets * W-Compactors x3 ing System *	Sets* W-Coarse S W-Coarse S 56 Nos*	creen C	iompadots/Conveyors- onveyors.10 Sets* W-Penstock. W-S Togress Repor	W - Fbed Bar S W - Fbed Bar S Divertors and Co Inlet Pumping St 12 Nos (5d/no /g toplogs x20 Nos	Vorks @ Roof Floor (+1
en channe) #6.0mPD (Zor 50mPD (Zo	ne A, intetchannel) ne A, wetwell 2) Nos * Screens x2 Sets * W-Compactors x3 ing System *	Sets* W-Coarse S S6 Nos* Month	creen C nly Pr R	iompadots/Conveyors- onveyors.10 Sets* W-Penstock. W-S Togress Repor	W-Fixed Bar S Divertors and Co InletPumping Sta toplogs x20 Nos t - 3MRP	Vorks @ Roof Floor (+1
en channe) #6.0mPD (Zor 50mPD (Zo	neA.intetchannel) neA.wetwell 2) Nos * Screens x2 Sets * IW - Compactors x3 S ing System *	Sets* W-Coarse S S6 Nos* Month	creen C	iompadots/Conveyors- onveyors.10 Sets* W-Penstock. W-S Togress Repor	W-Fixed Bar S Divertors and Co InletPumping Sta toplogs x20 Nos t - 3MRP	Vorks @ Roof Floor (+1
en channe) #6.0mPD (Zor 50mPD (Zo	ne A, intetchannel) ne A, wetwell 2) Nos * Screens x2 Sets * W-Compactors x3 ing System *	Sets* W-Coarse S S6 Nos* Month	creen C nly Pr R	iompadots/Conveyors- onveyors.10 Sets* W-Penstock. W-S Togress Repor	W-Fixed Bar S Divertors and Co InletPumping Sta toplogs x20 Nos t - 3MRP	Vorks @ Roof Floor (+1
en channe) #6.0mPD (Zor 50mPD (Zo	ne A, intetchannel) ne A, wetwell 2) Nos * Screens x2 Sets * W-Compactors x3 ing System *	Sets* W-Coarse S S6 Nos* Month	creen C nly Pr R	iompadots/Conveyors- onveyors.10 Sets* W-Penstock. W-S Togress Repor	W-Fixed Bar S Divertors and Co InletPumping Sta toplogs x20 Nos t - 3MRP	Vorks @ Roof Floor (+1

D	Activity Name	Orig Dur	Early Start	Early Finish	Total Float	September October November 49		De cember 50
Fine Screening					000	01 08 15 22 29 06 13 20 27 03 10	17 24	01 08 15 22 0
ATAL-1840 Grit Removal S	W - EOT Crane LA-01-07 for Fine Screen * System	30	04-Nov-24	07-Dec-24	-288			IW-EOI Crane LA-01-07 for Fine So
ATAL-1850	W - EOT Crane LA-01-08 for Grit Classifiers *	30	04-Nov-24	07-Dec-24	-288			W-EOT Crane LA-01-08 for Grit Cla
ATAL-1232 ATAL-1234	W - GritClassifiers x4 Sets * W - GritClassifiers Conveyor x2 Sets *	30 30	30-Nov-24 30-Nov-24	07-Jan-25 07-Jan-25	-288 -288			
ATAL-1236 DOU-01 System	W - All Other pipeworks & fittings for gritre moval system *	42	18-Dec-24	11-Feb-25	-315			
ATAL-2040	W - DOU Equipment Installation (1800mm dia. puddle)	25	17-Sep-24 A	18-Oct-24	-324	W - DOU Equipment Installation (1800mm dia.puddle	<del>)</del> )	
ATAL-1250 ATAL-1980	M - DOU Equipment Installation (Biotrick Filter 1A&1B, water break tank, 1st batch FRP pipe)* M - DOU Equipment Installation (Biotrick Filter 1C to 1F, nutrient storage tank, 2nd batch FRP pipe)*	20 20	19-Oct-24 12-Nov-24	11-Nov-24 04-Dec-24	-324 -324	W-DOU	EquipmentInstalla	tion (Biotrick Filter 1A&1B, water break tank, 1st batch F W - DOU Equipment Installation (Biotrick
ATAL-1980 ATAL-1990	W - DOD Equipment installation (Bolick File) To birth unients of age tank, and back FKP pipe) W - DOU Equipment installation (Activated carbon filer 1A&1B, air extraction fans&dehumidfier,3rd&4h bach FRP pipe	20	05-Dec-24	30-Dec-24	-324			
/ Switch Room ATAL-1280	W + PST) W - Incoming Cable Containment&Cabling Works from TX No.1 b LVSB *	24	28-Aug-24 A	25-Sep-24 A		W - Incoming Cable Containment&Cabling Works from TX No. 1 b LVSB *		
ATAL-1280 ATAL-1270	W - Incoming Cable Containmentacabiling Workshoft 17100 1 D LVSB W - LVSB and PLC Panel, Station, UPS System Installation *	36	09-Sep-24 A	30-Nov-24	-272			W - LVSB and PLC Panel, Station, UPS System
ATAL-1290 ATAL-1330	W - Termination Works (TX to LVSB)* W - Energization & SAT of LVSB@W *	6	02-Dec-24 20-Dec-24	07-Dec-24 30-Dec-24	-272 -282			IW - Termination Works (TX to LVSB
lectrical Works	IVV-Energization & SAL of EVSD@IVV		20-Dec-24	30-Dec-24	-202			
ATAL-1340 ATAL-1350	W - Electrical - Cable Containment Installation - LVSB to Equipment* W - Electrical - Local Control Panel Installation *	60 60	14-Oct-24 14-Oct-24	21-Dec-24 21-Dec-24	-289 -277			IW-Elect
ATAL-1380	W - Electrical - Installation of Term ination Box*	60	14-Oct-24	21-Dec-24	-277			IW-Elect
ATAL-1370 ATAL-1390	W - Electrical - Cabling Works * W - Electrical - Megger Testand Termination Works*	45 30	31-Oct-24 18-Nov-24	21-Dec-24 21-Dec-24	-277			IW-Electri IW-Electri
	SCADAWorks		10-1107-24	21-Dec-24	-211			
TAL-1420	W - Instrument & SCADA - Cable Containment Installation & Cabing Works - PLC Panel to Equipment W - Instrument & SCADA - Instrument Installation & Inspection	80	14-Oct-24 29-Nov-24	17-Jan-25 04-Feb-25	-289 -284			
ATAL-1400 ATAL-1440	W - Instrument& SCADA-Instrumentins at alon & inspection W - Instrument& SCADA-Termination Works	52 52	29-Nov-24 29-Nov-24	04-Feb-25	-289			
TAL-1450	$W\-\+\+limits$	45	07-Dec-24	04-Feb-25	-284			
E&M T&C Wo	rrks System Physical Dry Check							
	W-SCADA-VOPoint Test	47	11-Dec-24	10-Feb-25	-289			
	ntation Tank (PST)							
TABWF, E&N TStage 1	1& T&C					÷		
	ABWF Works							
GLA-H above +		6	07.0	40.0	4===			PST Stage 1 - ABWF Wo
PST-3135 PST-3165	PST Stage 1-ABWF Works (wall render:spray=1d,letdry=5d) at+11.8/+18.15mPD PST Stage 1-ABWF Works (wall plaster:3coats) at+11.8/+18.15mPD	6	07-Dec-24 14-Dec-24	13-Dec-24 16-Dec-24	-176 -176			PST Stage 1 - ABWF WC
PST-3175	PST Stage 1 - ABWF Works (floor screeding) at +11.8/+18.15mPD	3	17-Dec-24	19-Dec-24	-176			PST Stage 1
PST-3185 ST Stage 1 -	PST Stage 1 - ABWF Works (floor coating:3coats) at +11.8/+18.15mPD E&M Installation Works	3	20-Dec-24	23-Dec-24	-176			PST S
hase 1 (GLA-	H, PST 1-3, Outlet Channel)							
PST Stage 1 - PST 1	E&M Installation Works at Setting Zone (PST 1-3)							
	red Plate Settling System							
	PST Stage 1 - PST1 - Installation of removable walkway at +92mPD PST Stage 1 - PST1 - Water Spray Pipe and Nozzle Installation c/w pressure test & inspection	7	10-Oct-24* 19-Oct-24	18-Oct-24 01-Nov-24	-235 -235	PST Stage 1 - PST1 - Installation of removable walkwa		ozzle Installation c/w pressure test & inspection
	pressors, Air blowers c/w as sociated fittings	12	13-0024	01-1400-24	-200		opiay ripe and re	
	PST Stage 1 - PST1 - All other process pipes above 11.8 mPD including DO Pipes, Plant Service Water Pipes, Air Pipe	25	02-Nov-24	30-Nov-24	-238			PST Stage 1 - PST1 - All other process pipes abo
PST2 PST2-Com	pressors, Air blowers c/w associated fittings							
	PST Stage 1 - PST2 - All other process pipes above 11.8 mPD including DO Pipes, Plant Service Water Pipes, Air Pipe	24	02-Aug-24 A	07-Oct-24	-209	PST Stage 1 - PST2 - All other process pipes above 11.8mPD including D	) Pipes, PlantSe л	rice Water Pipes,Air Pipe
PST3 - Inclin	ned Plate Settling System							
	PST Stage 1 - PST3 Installation of removable walkway at +9.2mPD	7	02-Oct-24*	09-Oct-24	-235	PST Stage 1 - PST3 Installation of removable walkway at +92mPD		
	PST Stage 1 - PST3 - Water Spray Pipe and Nozzle Installation c/w pressure test & inspection pressors , Air blowers c /w associated fittings	11	10-Oct-24	23-Oct-24	-227	PST Stage 1- PST3 - Water Spray Pipe and	vozzie instaliation	cw pressure test& inspection
	PST Stage 1 - PST3 - All other process pipes above 11.8 mPD including DO Pipes, Plant Service Water Pipes, Air Pipe	26	24-Oct-24	22-Nov-24	-230		PSTStar	ge 1 - PST3 - All other process pipes above 11.8 mPD
	I, (Inlet Channel, Pump Room) Handover for PST early commissioning * Compressors , Air blowers dwassociate dfittings							
	PST Stage 1 - GLH-I-All other process pipes above 11.8 mPD including DO Pipes, Plant Service Water Pipes, Air Pipe	34	02-Nov-24	11-Dec-24	-238			PST Stage 1 - GLH-I-All of
	Electrical Works (PST1-3, Inlet/Outlet Channel&Pump Room) PST Stage 1 - Electrical Works - Cable Contairment h stal la fon -LVSB@W to Equipment	27	14-Oct-24	13-Nov-24	-238	PSTS	tage 1 - Electrical \	Vorks-Cable Containment Installation -LVSB@W to B
ATALPST-56	PST Stage 1 - Electrical Works - Local Control Panel h stallation	27	14-Nov-24	14-Dec-24	-241			PST Stage 1 - Electrica
	PST Stage 1 - Electrical Works - Cabling Works PST Stage 1 - Electrical Works - Termination Works	27 27	14-Nov-24 14-Nov-24	14-Dec-24 14-Dec-24	-241 -241			PST Stage 1 - Electrica PST Stage 1 - Electrica
	Instrumentation & SCADAWorks (PST 1-3, inlet/Outlet Channel & Pump Room)	21	14-1100-24	14-Dec-24	-241			
	PST Stage 1 - SCADA - Cable Containment Installation - LVSB@W to Equipment	40	14-Oct-24	28-Nov-24	-269			PST Stage 1 - SCADA - Cable Containment Installa
	PST Stage 1 - SCADA - Instrument Installation & Inspection PST Stage 1 - SCADA - Cabling Works	37 36	29-Nov-24 29-Nov-24	14-Jan-25 13-Jan-25	-216 -269			
ATALPST-57	PST Stage 1 - SCADA - Termination Works	36	29-Nov-24	13-Jan-25				
· · · ·	IS Works (PST1-3, InletOutlet Channel & Pump Room) PST Stage 1 - MVAC Works	80	19-Dec-24	28-Mar-25	281			
ATALPST-576	PST Stage 1 - ELV Works	80	19-Dec-24	28-Mar-25	281			
	PST Stage 1 - P&D Works PST Stage 1 - EL Works	80 80	19-Dec-24 19-Dec-24	28-Mar-25 28-Mar-25	-296 -296			
ATALPST-579	PST Stage 1 - FS. Works	80	19-Dec-24	28-Mar-25	-296			
ST Stage 1 -	T&C Works &C Works (PST 1-3, Inlet / Outlet Channel & Pump Room)					<u>+</u>		
	1-3 Sub-System Physical Dry Check							
ATALPST-58	PST Stage 1 - SCADA- IO Point Test (not required for interim scheme T&C)	50	20-Nov-24	20-Jan-25	-269			DCT 0 4 [7] (
	PST Stage 1 - Electrical - MeggerTest PST Stage 1 - Energization	9 5	05-Dec-24 23-Dec-24	14-Dec-24 30-Dec-24	-241 -252			PST Stage 1 - Electric
ernal Works	Inlet Work and Primary Sedimentation Tank Perimeter	,						
PST External V tage 1 (KD3)	Vorks - Zone A (Transformer House No.1)							
EW-1715	W/PST Perimeter - Temp. HV/LV/ELV/FS cable drawpits (5nos.) *for KD 3	30	01-Nov-24*	05-Dec-24				W/PST Perimeter - Temp. HV/LV/ELV/
EW-2280 EW-1710	W/PST Perimeter-Temp. HVILV/ELV/FS cable ductings*forKD3 W/PST Perimeter-Cabling works from DSD11kV to Tx1 *for KD3	12 6	29-Nov-24 13-Dec-24	12-Dec-24 19-Dec-24	-282 -282			W/PST Perimeter - Temp.
EW-2270	W/PST Perimeter - Valuing Works non DSD Triv bit Third RDS W/PST Perimeter - Watermain between Master Meter Room and W (ELS=3d,pipe laying=4d,testing=2d,backfill=3d) *f	12	13-Dec-24	28-Dec-24				
	Vorks - Roadworks		00.0	00.0.10	4.12		A D bo-lett '	
W-1550 Ige Dewate	W/PST Perimeter - Road pavement for Temp phase OP EVAa fer Zone A-B backfilled ring Building (SDB)	6	02-Oct-24	08-Oct-24	-146	WPST Perimeter - Road pavement for Temp phase OP EVA after Zone.	1-D DACKTIIIEd	
B Foundation								
OB Preliminarie	s for Foundation Works							
Demolition of Demolition of E	Existing PST1, 2, 3, 4 xisting PST2					+		
								!
Dou	Remaining Level of Ef		<b>A</b> 1	1				Project ID : DWPr42_241016
Pau	Actual Work		Cont	ract	DC/	2019/10 - YLEPP - Main Works for Stage 1		Layout : DC201910 MPR47-3M
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ha -12.	Remaining Work		M	onth	lv Pi	ogress Report No. 47- 3MRP (Sep 24)		Page 5 of 8
保華-「	中國中鐵聯營體 Critical Remaining Work				· · · ·			
PAUL Y	CREC JOINT VENTURE							

保華-中國中鐵聯營體 PAUL Y.-CREC JOINT VENTURE

Milestone

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e	rs*										
- }		IW - Grit	Classifiers x Classifiers C	4 Sets*	v2 Sote *						
- 7		W-Gill	Siassiners C	onveyor	X2 065			IW-AII Ot	herpipewo	rks&fittr	ngs for grit re mov
n	e)*										
1	C to 1F, nutrie	ntstorage	tank, 2nd b	atch FRF	<sup>p</sup> pipe)*						
1	W-DOU Equ	uipment In	stallation (A	ctivated o	carbon filer 1	A&1B,airext	action fa	ins&dehur	midfier,3rd8	4thbatc	n FRP pipe)*
-											
lą	ation *										
-	W-Energiza	tion & SAT	of LVSB@	W*							
Ż	able Contain	mentInsta	llation - LVS	B to Equ	ipment*						
¢	ocal Control P	anel Insta	Ilation *								
	stallation of Te abling Works		Box								
	egger Testan		ation Works								
				/_  noto	nent & CC AC	A. Cabla C	ntainer	antinetalet	inn & Cab	na Wed	
.,			IV	v - Instrun	nent& SCAL	A-Cable Co	- Instrum	ent&SCA	DA-Instrur	ng vvork nentlnst	-PLC Panel to
3 - 1						IW	Instrum	ent& SCA	DA-Termir	nation W	orks
ł						IW	- Instrum	ent& SCA	DA-Instalia	ation of G	UI, PQEMS, DE
-											
į								W-SCAD	A- I/O Point	Test	
1											
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-											
ię.	all render:spra ks (wall plaste	iy=1d,let-c	iry=5d) at+	11.8/+18.	15mPD						
) /F	ks (wall plaste Works (floor	r:3coats); screeding	at+11.8/+18	18 15mPD	 חי						
1	-ABWF Work	ks (floor co	pating:3coat	s) at +11.	8/+18.15mPl	D					
-											
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ļ	8mPD includ	ing DO Pi	pes, PlantS	ervice W	/ater Pipes,A	ir Pipe					
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ir;	ng DO Pipes,	PlantSen	vice Water F	ipes,Airl	Pipe						
-											
ç	ess pipes ab	ove 11.8 r	nPD includi	ngDOP	ipes, PlantSe	rvice Water	Pipes,Ai	r Pipe			
1											
n k	ient s-Local Cont	trolPanel	hstallation								
ķ	s-CablingW	brks									
ķ	s-Termination	n Works									
Ņ	/SB@W to E	quipment									
÷			PST Sta		CADA-Instru		ition & In	spection			
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	gorTogt			PST:	Stage 1 - SC	ADA-I/O Poi	ntTest(n	otrequired	forinterim	scheme	T&C)
	gerTest PST Stage 1 -	Eneraiza	tion								
1											
	e dra wpits (5n	IOS,)*for K	D3								
()	ELV/FS cable	ductings	*forKD3								
¢	Cabling works PST Perimete	from DSI	D11kV to Tx			ond 841/			d to -4	d b - 1 ***	-2 d) #4 145
/	PST Perimete	r-vvaterm	ain betwee	n Master	Meter Room	and IW (ELS	s=3a,pip	e laying=40	a,testing=20	d,Dackfill	=3d)*forKD3
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śvity ID Ac śvity Name	Orig	Early Start	Early Finish	Total Float	September October	November De cember	January February Ma
	Orig Dur				47         48           01         08         15         22         29         06         13         20	49 50 27 03 10 17 24 01 08 15 22 0	51 52 55 29 05 12 19 26 02 09 16 23 0
SDB-1830 SDB - Backfilling of Existing PST2 & remaining chamber&pipe	3	24-Aug-24 A	27-Aug-24 A		DB Backfilling of Existing PST 2 & remaining chamber&pipe		
SDB Foundation - PST 1-4 Footprint SDB Foundation - Driven H-Pile							
SDB-1170 SDB - Driven H-piles (SDB299nos, 17342m @48m/d/rig, 5rigs after PST1,2,3&remaining chamber&pipe demolish)		09-Jul-24A	30-Oct-24	-86		SDB - Driven H-piles (SDB299nos, 17342m @48m/d/rig, 5rigs after PST1,2,3&remaining chamber&pipe dem	nqlish)
SDB-2060         SDB - Driven H-piles (SDB6nos,348m @48m/d/rig, 1rig after existing Detritor modification works)           SDB-1180         SDB - H-piles Testing		20-Sep-24 A 31-Oct-24	10-Oct-24 15-Nov-24	-70 -85	SDB - Driven H-piles (SDB6nos.	.348m @48m/d/ig, 1rig after existing Detritor modification works) SDB - H-piles Testing	
SDB-1910 SDB - Driven H-piles demobilize		31-Oct-24	05-Nov-24	_		SDB - Driven H-piles demobilize	
SDB Foundation - ELS							
SDB Foundation - ELS Stage 1 SDB Foundation - ELS Stage 1 (S1 to S3)							
SDB-1190 SDB - ELS Stage 1 - Sheetpiles (4,200m2, 24m2kl/rig, 3rigs)	62	06-Nov-24	20-Jan-25	-86			SDB - ELS Stage 1 - Sheetpiles (4,200m2,24m2/d/rig,3rigs)
Modification of existing Detritor	05		10.11 01	01			
SDB-6450         SDB - Modification of existing Defritor - Design and method statement submission(14d), reviw and approval (21d)           SDB-6360         SDB - Modification of existing Defritor - Site clearance, Trial pit and UU diversion	35	02-Oct-24 13-Nov-24	12-Nov-24 03-Dec-24	-21 -21		SDB - Modification of existing Detritor - Design and method statementsubmission(14d) SDB - Modification of existing Detritor - Site cleare	
SDB-6370 SDB - Modification of existing Detrilor - Construct diversion chambers (3nos.)	30	04-Dec-24	10-Jan-25	-21			SDB - Modification of existing Detritor - Construct diversion chambers (3nos.)
Administration Building (ADB)							
ADB Foundation Works ADB Predrilling and Piling after Demoiltion							
ADB Predrilling							
ADB-1460 ADB - Predrill (AB-PD9) (within existing building footprint) ADB-1470 ADB - Predrill (AB-PD10) (within existing building footprint)			05-Sep-24 A 11-Sep-24 A		ADB - Predrill (AB-PD9) (within existing building footprint) ADB - Predrill (AB-PD10) (within existing building footprint)		
ADB-ri470 ADB-riedim (AB-PDTO) (www.intexsuing.bdinding.toophing ADB Environmental GI	0	29-Aug-24 A	11-3ep-24 A				
ADB-1490 ADB - Environment GI (ENV-BH38) at Screening Press No. 1			20-Aug-24 A		nentGI (ENV-BH38) at Screening Press No. 1		
ADB-1500 ADB - Environment GI (ENV-BH39) at Screening Press No.2  External Works	3	17-Aug-24 A	20-Aug-24 A		nehtGI (ENV-BH39) at Screening Press No. 2		
Water Meter Cabinet							
Water Meter Cabinet - Structure							
CLP-1740 Master Meter Cabinet - Site clearance and excavation CLP-1750 Master Meter Cabinet - Plate Load Test		30-Nov-24 09-Dec-24	07-Dec-24 17-Dec-24	-269 -269		Master Meter Cabinet- Site clearance and Master Meter Cabinet- Site Clearance and Master Meter Cabinet-	
CLP-1730 Waster Meter Cabinet - Plate Load res. CLP-1130 Master Meter Cabinet - Structure (base slab=12d,wall&roof=12d)			17-Dec-24 17-Jan-25	-269			Master Meter Cabinet - Structure (base slab=12d,wall&roof=12d)
Walkway Across Tai Tseng Wai Nullah		00.0	100				
CLP-1720 Wakway-Predril (1nos.NA-PD4) additional CLP-1730 Wakway-Predril (1nos.NA-PD5) additional		02-Oct-24 17-Oct-24	16-Oct-24 30-Oct-24	468	Wakway-Predril (1n	os. NA-PD4)additional Wakway-Predril (1nos. MA-PD5)additional	
Zone 2 Construction	, ,					······································	
Mainstream Bio-Reactor & Auxillary Facility (MBR and AF)							
MBR and AF Structure							
MBR - ELS Excavation & Demolition stage 2 MBR - ELS Zone A							
Excavation and Demolition							
MBRAF-3710 MBR -Zone A-Toe groutfor 323 pipe pile (AG)			31-Aug-24 A		MBR - Zone A - Toe groutfor 323 pipe pile (AG) MBR - Zone A - Strut Installation S4 (-3.6mPD)(1 orall MBR - Zone A - Strut Installation S4 (-3.6mPD)(1 orall MBR - Zone A - Strut Installation S4 (-3.6mPD)(1 orall)	nna Suudidare 24tan/d)	
MBRAF-1680 MBR - Zone A- StrutInstallation S4 (-3.6mPD)(1 crane, 8welders, 24ton/d) MBRAF-3940 MBR - Zone A- Reinstate dewatering wells and Pumping test (dewater to -10mPD)		20-Aug-24 A 23-Sep-24 A	30-Sep-24 A 07-Oct-24	-245		ane,8welders,24ton/d) wells and Pumping test (dewater to -10mPD)	
MBRAF-3500 MBR - Zone A- Preloading Strut S4 (5 cycles, 5 struts/cycle/day)	5	25-Sep-24 A	30-Sep-24 A		MBR -Zone A-Preloading StrutS4 (5 cycles, 5 stru	ıts/cy/de/day)	
MBRAF-1690         MBR - Zone A- ELS Excavation (-4.15 b-8.3mPD)(9100m3)(3-4 excavators, 500m3d) *MD           MBRAF-1700         MBR - Zone A- Strutinstallation S5 (-7.8mPD)(1 crane, 8welders, 24ton/d)	17	02-Oct-24 15-Oct-24	22-Oct-24 28-Oct-24	-265 -265		ne A-ELS Excavation (4.15 to -8.3mPD)(9100m3)(3-4 excavators, 500m3/d) *MD MBR -Zone A-Strut Installation S5 (-7.8mPD)(1 crane, 8welders, 24ton/d)	
MBRAF-3510 MBR - Zone A- Preloading Strut S5 (5 cycles, 5 struts/cycle/day)	3	29-Oct-24	31-Oct-24	-265	······································	MBR - Zone A - Preloading Strut S5 (5 cycles, 5 struts/cycle/day)	
MBRAF-1710 MBR - Zone A - ELS Excavation (-8.3 to -9.3mPD)(3510m3)(3-4 excavators, 500m3/d)		01-Nov-24	08-Nov-24	-265 -202		MBR - Zone A- ELS Excavation (-8.3 tb -9.3mPD)(3510m3)(3-4 excavators, 500m3/d) MBR - Zone A - Plate Load TestPLT-2 (-9mPD)(1no.)	
MBRAF-4070         MBR - Zone A - Plate Load TestPLT-2 (-9mPD)(1no.)           MBRAF-4150         MBR - Zone A - ConstructBlinding at-9.0mPD (-9.3 to -9.0mPD)(3 pours)		09-Nov-24 21-Nov-24	20-Nov-24 27-Nov-24	-202		MBR - Zone A - Prate Load lest PL1-2 (-smPD) (110.) MBR - Zone A - Construct Blinding at -9.0mPD (-9.3 to -9.0m	mPD) (3 pours)
MBR - ELS Zone B							
Excavation MBRAF-3660 MBR - Zone B - 323dia pipe pile (BP)(22nos., TL=-28 mPD, 1no/day/rig, 2rigs)	11	23-Aug-24 A	28-Sep-24 A		MigR - Zone B - 323dia pipe pile (BP)(22nos., TL=-28 m	IPD 1no.(dav/ria.2rias)	
MBRAF-3920 MBR - Zone B - Reinstate dewatering wells and Pumping test (dewater to -10mPD)		23-Aug-24 A	12-Oct-24	-249	MBR - Zone B - Reinstate de	ewatering wells and Pumping test (dewater to -10mPD)	
MBRAF-3300 MBR - Zone B - StrutInstallation S4 (-3.6mPD)(1 crane, 8welders, 24ton/d) MBRAF-3700 MBR - Zone B - Toe groutfor 323 pipepile (BG)		03-Sep-24 A 30-Sep-24 A	16-Oct-24 09-Oct-24	-280	MBR - Zone B - Struti	Installation S4 (-3.6mPD)(1 crane, 8welders, 24ton/d)	
MBRAF-3590 MBR - Zone B - Preloading Strut S4 (5 cycles, 5 struts/cycle/day)	3	17-Oct-24	19-Oct-24	-240		Preloading Strut S4 (5 cycles, 5 struts/cycle/day)	
MBRAF-3310 MBR - Zone B - ELS Excavation (-4.15 to -8.3mPD)(9100m3)(3-4 excavators, 500m3/d) *MD	18		09-Nov-24	-280		MBR - Zone B - ELS Excavation (4.15 to -8.3mPD)(9100m3)(3-4 excavators, 500m3/d) *MD	נ
MBRAF-3320 MBR - Zone B - Strutinstallation S5 (-7.8mPD)(1 crane, 8welders, 24ton/d) MBRAF-3600 MBR - Zone B - Preloading Strut/S5 (5 cycles, 5 struts/cycle/day)	12	01-Nov-24 15-Nov-24	14-Nov-24 18-Nov-24	-280		MBR - Zone B - Strut Installation S5 (-7 8mPD)(1 crane, 8welders, 241on/d) MBR - Zone B - Preloading Strut S5 (5 cycles, 5 struts/cycle/day)	
MBRAF-3330 MBR - Zone B - ELS Excavation (-8.3 to -9.3mPD)(3510m3)(3-4 excavators, 500m3/d)	7	19-Nov-24	26-Nov-24	-280		MBR:-Zone B - ELS Excavation (-8.3 to -9.3mPD)(3510m3)(3	
MBRAF-4180 MBR - Zone B - Construct Blinding at-9.0mPD (-9.3 to -9.0mPD) (3 pours) MBR - ELS Zone C	6	27-Nov-24	03-Dec-24	-186		MBR - Zone B - ConstructBlinding at -9.0mPD (-	r.9.3 to -9.0mPD) (3 pours)
Excavation							
MBRAF-3630 MBR - Zone C - Preloading Strut S4 (5 cycles, 5 struts/cycle/day)					utš(cycle/day) -8/3mPD) (8400m3)(3-4 excavators, 500m3/d) *MD		
MBRAF-3210 MBR - Zone C - ELS Excavation (-4.15 to -8.3mPD) (8400m3)(3-4 excavators, 500m3/d) *MD MBRAF-3220 MBR - Zone C - Strut Installation S5 (-7.8mPD)(1 crane, 10welders, 24ton/d)		02-Aug-24 A 05-Aug-24 A	06-Aug-24 A 04-Nov-24		-3,5mPD)(8400m3)(3-4 extavalois, 500m3/d) ND	MBR - Zone C - Strut Installation S5 (-7.8mPD)(1 crane, 10welders, 24ton/d)	
MBRAF-3670 MBR - Zone C - 323dia pipe pile (North, CP1) (12nos., TL=-28 mPD, 1no./day/rig)	12	24-Aug-24 A	08-Oct-24	-255	· · · · · · · · · · · · · · · · · · ·	orth, CP1) (12nos, TL=-28 mPD, 1no./day/rig)	
MBRAF-3680 MBR - Zone C - 323dia pipe pile (South, CP2) (23nos, TL=-28 mPD, 1no./day/rig) MBRAF-3900 MBR - Zone C - Reinstate dewatering wells and Pumping test(dewater to -10mPD)	23	11-Sep-24 A 02-Oct-24	19-Oct-24 18-Oct-24	-260		323dia pipe pile (South, CP2) (23nos, TL=-28 mPD, 1no/day/rig) Reinstate dewatering wells and Pumping test (dewater to -10mPD)	
MBRAF-3690 MBR - Zone C - Toe grout for 323 pipe pile (C G1)	16	09-Oct-24	28-Oct-24	-255	· · · · · · · · · · · · · · · · · · ·	MBR - Zone C - Toe groutfor 323 pipe pile (CG1)	
MBRAF-4040 MBR - Zone C - Toe groutfor 323 pipe pile (C G2) MBRAF-3640 MBR - Zone C - Preloading StrutS5 (5 cycles, 5 struts(cycle/day)	12 3	21-Oct-24	02-Nov-24 07-Nov-24	-260 -271		MBR - Zone C - Toe groutfor323 pipe pile (C G2); MBR - Zone C - Preloading StrutS5 (5 cycles, 5 struts/cycle/day)	
MBRAF-3230 MBR - Zone C - ELS Excavation (-8.3 to -9.3mPD) (2400m3)(3-4 excavators, 500m3/d)	7	05-Nov-24 08-Nov-24	07-Nov-24 15-Nov-24	-271		MBR - Zone C - ELS Excavation (-8.3 to -9.3mPD) (2400m3)(3-4 excavators, 500	jm3/d)
MBRAF-4030 MBR - Zone C - Plate Load Test PLT-1 (-9mPD)(1no.)	10	16-Nov-24	27-Nov-24	-188		MBR - Zone C - Plate Load TestPLT-1 (-9mPD)(1no.) MBR - Zone C - Construct Blinding at -9.0mPD	D ( 43 5 h. 40 (mPD) ( 3 nours)
MBRAF-4140 MBR - Zone C - Construct Blinding at-9.0mPD (-9.3 to -9.0mPD) (3 pours) MBR - ELS of Central Corridor (Zone D)	6	28-Nov-24	04-Dec-24	-187			2 - 22 - 22 - 22 - 22 - 22 - 22 - 22 -
MBRAF-2370 MBR - Pumping test(Stage 2) dewater to -13.7mPD	7	27-Nov-24	04-Dec-24	-280		MBR - Pumping test (Stage 2) dewater to -13.7	
MBRAF-1730         MBR - Zone D18283 - ELS Excavation (-9.0 to -10.55mPD)           MBRAF-3720         MBR - Zone D2 - ELS Excavation (-10.6 to -13.7mPD)	6	05-Dec-24 12-Dec-24	11-Dec-24 17-Dec-24	-280		MBR - Zone D1&2&3 - ELS Exca MBR - Zone D2 - ELS	aviation (-9.0 to -10.55mPD) S Excavation (-10.6 to -13.7mPD)
MBRAF-3970 MBR - Zone D2 - Plate Load TestPLT-3 (-13.7mPD)	7	18-Dec-24	27-Dec-24	-280			R - Zone D2 - Plate Load Test PL T-3 (-13.7mPD)
MBRAF-4100 MBR - Zone D2 - Blinding and waterproofing	4	28-Dec-24	02-Jan-25	-280			MBR - Zone D2 - Blinding and waterproofing
MBR - ELS of Central Corridor (North) MBRAF-1740 MBR - Zone D1 - Strut Installation S6 (S6H,S6I,S6J,S6K) (-10.0mPD)	8	12-Dec-24	20-Dec-24	-253		MBR - Zone D1	- \$trut Installation S6 (S6H,S6I,S6J,S6K) (-10.0mPD)
MBRAF-1750 MBR - Zone D1 - ELS Excavation (-10.0 to -13.7mPD)	5	21-Dec-24	28-Dec-24	-253		Mi	/BR - Zone D1 - ELS Excavation (-10.0 to -13.7mPD)
Tertriary Treatment System (TTS)							
TTS Foundation and ELS TTS Foundation and ELS Stage 2							
TTS ELS							
TTS-1260     TTS - Plate load lest (2nos.)(2nos.non-MD area)       TTS-2070     TTS - Preloading StrutS4 (-2.87mPD)(4 cycles, 4 struts/cycle/day, 16 struts)		05-Aug-24 A 26-Sep-24 A	16-Sep-24 A 07-Oct-24	-277	TTS - Plate load test (2nos.)(2nos.non-MD area)	(4 cycles, 4 struts/cycle/day, 16 struts)	
TTS-1300 TTS - ELS Excavation (-3.37 to -5mPD) (9,231m3)(3-4 excavators/WF, 2 WFs, 600m3/d/WF)*MD	8	08-Oct-24 A	17-Oct-24	-277		(+ 3.37 to -5mPD) (9.231m3)(3-4 excavators/WF, 2 WFs, 600m3/d/WF) *MD	
TTS Formation Level	-						
TTS-1810 TTS - Local excavation of marine sediment (-5 to -6.3mPD, 920m3) *MD TTS-2210 TTS - Granular fill and 300mm thk concrete blinding (Stage 1, FC/FE/FF)	6 8	18-Oct-24 18-Oct-24	24-Oct-24 26-Oct-24	-265		.oca  excavation of marine sediment (-5 to -6.3mPD, 920m3) *MD S - Granular fill and 300mm thk concrete blinding (Stage 1, FC/FE/FF)	
TTS-2090 TTS - Plate load test (1no.)(after backfill rockfill)	8	25-Oct-24	02-Nov-24	-265		TTS - Plate load test (1no.) (after backfill rockfill)	
TTS-2220 TTS - Granular fill, earth mat and 300mm thk concrete blinding (Stage 2, FGIFH) TTS-2260 TTS - Remove S4 (Zone B)	14 6	28-Oct-24 28-Oct-24	12-Nov-24 02-Nov-24	-277 -251		TTS - Granular fill, earth mat and 300mm thk concrete blinding (Stage 2, FG/FH) TTS - Remove S4 (Zone B) TTS - Remove S4 (Zone B)	
							Monthly Progress Report - 3MRP
Paul Y Remaining Level of Ef	(	Cont	ract	DC/	2019/10 - YLEPP - Main Works fo	Project ID : DWPr42_241016	
Actual Work		Joint	ιαυι	001		Layout : DC201910 MPR47-3MRF	
Remaining Work		RA.	onthl		agrass Danart No. 17 2MDD /C	Page 6 of 8	30-Sep-24 Rev. 0
		IVI	UIIII	у <b>г</b> I	ogress Report No. 47- 3MRP (S	ν <b>σμ 24</b> )	· · · · ·
PAUL YCREC JOINT VENTURE							
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Activity Name	Ong Dur	Early Start	Early Finish	H	47 01 08 15 22	48         49           29         06         13         20         27         03         10         17         24	50 01 08 15 22	29 05 12	19 26 02	52	23
TTS - Granular fill and 300mm thk concrete blinding (Stage 3, FAFB/FD)           440         TTS - Remove \$4 (Zone A)	8	04-Nov-24 13-Nov-24	12-Nov-24 19-Nov-24	-265 -265		25 00 13 20 27 03 10 17 24 TTS-Granularfill and 300	mm thk concrete blinding (Stage 3, FAFB/FD)				
40 TTS-Remove S4 (Zone A) 80 TTS-Remove S4 (Zone D)	6	13-Nov-24 13-Nov-24	19-Nov-24	-205		TTS-Remov	e S4(Zone D)				
70 TTS - Remove S4 (Zone C)	6	20-Nov-24	26-Nov-24	-277		T	TS-Remove S4 (Zone C)				·····
ure ucture											
0 TTS - BoxRaftFoundation (-5mPD to -3.42mPD) (Stage 1, FH/FA/FC)	21	20-Nov-24	13-Dec-24	-271				5mPD to -3.42mPD) (Stage 1, FH/FA/FC	)		
TTS - BoxRaftFoundation (-5mPD to -3.42mPD) (Stage 2, FB/FD)           TTS - BoxRaftFoundation (-5mPD to -3.42mPD) (Stage 3, FE/FF/FG)	21	20-Nov-24 27-Nov-24	13-Dec-24 20-Dec-24	-265 -277				5mPD to -3.42mPD) (Stage 2, FB/FD) Foundation (-5mPD to -3.42mPD) (Stage	3.FE/FF/FG)		
0 TTS - Erect bwer crane TC-03	7	14-Dec-24	21-Dec-24	-255				wet crane TC-03			
30         TTS - Wall to S3 (3.42mPDto - 1.4mPD)           00         TTS - Erectbower grane TC-04	18	21-Dec-24 23-Dec-24	14-Jan-25 02-Jan-25	-277 -255				TTS - Wal	to S3 (-3.4.2m PD to -1.4m PD)		
Construction	,	20-0-00-24	02-0011-20	-200							
lorth Portion (Z3N)											
Ige Thickening Building (STB)											
iiland Structural Works Structure											
Structure Zone A											
: Substructure Zone A	10	40.0 04.4	05 0-404	74		STB - Zone A&B - Waterproof, backfill and Remove S1					
3-6100         STB - Zone A&B - Waterproof, backfill and Remove S1           3-6060         STB - Zone A - Structure (+3.5 to +6mPD) Ground Floor @ +6.0mPD	10	16-Sep-24 A 07-Oct-24	05-Oct-24 21-Oct-24	-74		STB - Zone A - Structure (+3.5 to +6mPD) Ground Floor @ +6.0mPl	0				
3-6150 STB - Zone A - Waterproof, backfill and Remove remaining S2	5	22-Oct-24	26-Oct-24	-74		STB - Zone A - Waterproof, backfill and Remove remainin	J S2				
: Superstructure Zone A 3-6090 STB - Zone A - Structure (+6.0 to +12.5mPD) First Floor @ +13.5mPD	12	28-Oct-24	09-Nov-24	-74		STB-ZoneA-Structure (+6.0 to	+12,5mPD) First Floor @ +13.5mPD				
3-6190 STB - Zone A - Structure (+12.5 to +13.5mPD) First Floor double slab @ +13.5mPD	6	11-Nov-24	16-Nov-24	-74			ture (+12.5 to +13.5mPD) First Floor double slab @ +13.5r				
3-6180         STB - ZoneA - Structure (+13.5 to +18.3mPD) Roof Floor @ +18.3mPD           3-3000         STB - ZoneA - Structure (+18.3 to +21.1mPD) and remaining structure	12 10	18-Nov-24 02-Dec-24	30-Nov-24 12-Dec-24	-74 267			STB-Zone A - Structure (+13.5 to +18.3mPD) Roof F	Flopr@+18.3mPD 3 tol+21.1mPD) and remaining structure			
S-3000 STB-20neA-Structure (+18.3 to +21.1 mPD) and remaining structure Structure Zone B	IU	02-DEC-24	12-De0-24	201							
: Substructure Zone B	10	02.0-10.1	17.0-2.04	60		STB-Zone B-Structure (+3.5 to +6mPD) Ground Floor @ +6.0mPD					
i3-6290         STB - Zone B - Structure (+3.5 to +6mPD) Ground Floor @ +6.0mPD           i3-6300         STB - Zone B - Waterp roof, baddfil and R emove remaining S2	12	03-Oct-24 18-Oct-24	17-Oct-24 23-Oct-24	-63 -59		STB-Zone B - Structure (+3.5 to +6mPD) Ground Hoor @ +6.0mPD STB-Zone B - Waterpito f, backfil and Remove remaining S2					
Superstructure Zone B						· · · · · · · · · · · · · · · · · · ·					
3-6250         STB - Zone B - Structure (+6.0 to +12.5mPD) First Floor @ +13.5mPD           3-6260         STB - Zone B - Structure (+12.5 to +13.5mPD) First Floor double slab @ +13.5mPD	12	24-Oct-24 07-Nov-24	06-Nov-24 13-Nov-24	-59 -59		STB - Zone B - Structure (+6.0 to +12.5	mPD) First Floor @ +13.5mPD +12,5 to +13.5mPD) First Floor double slab @ +13.5mPD				
Structure Zone C (KD10)							,				
Substructure Zone C		27 Au- 01 /	14 8 244		STB - Zone C - Waterproc	hackfiland Remove S1					
3-3660     STB - Zone C - Wate proof, back fil and Remove S1       3-2630     STB - Zone C - Structural Wall/Column (+3.5 to +6m PD) & Ground Fb or Slab @+6.0m PD		27-Aug-24 A 16-Sep-24 A		-181	GTD-ZOTE C-Waleproc	STB - Zone C - Structural Wall/Column (+3 5 to +6mPD)& Ground Floor Slab @+6.0mPD					
: Superstructure Zone C											
3-2710         STB - Zone C - Structure (+6.0 to +12.5/13.5mPD) First Floor @ +13.5mPD           3-2740         STB - Zone C - Structure (+12.5/13.5 to +18.3mPD) Roof Floor @ +18.3mPD	10	08-Oct-24 21-Oct-24	19-Oct-24 31-Oct-24	-181 -181		STB - Zone C - Structure (+6.0 to +12.5/13.5mPD) FirstFloor @ +13.5m STB - Zone C - Structure (+12.5/13.5 to +18.3mP					
3-2720 STB - Zone C - Construct concrete plinth for PV panel installation (48nos, 10nos/day/gang, 1gang)	5	01-Nov-24	06-Nov-24	-181		STB - Zone C - Construct concrete plin	th for PV panel installation (48nos, 10nos/day/gang, 1gang	g)			
3-2780 STB - Zone C - Civil & Structural Works of Roof Floor & handover to PV's contractor	0		06-Nov-24	-181		STB - Zone C - Civil & Structural Work	s of Roof Floor & handover to PV 's contractor				
Water Tightness Test Water Tightness Test Zone A											
3-6310 STB - Zone A - Concrete gain strength (slab +6mPD)	7	22-Oct-24	29-Oct-24	-66		STB - Zone A - Concrete gain strength (slab +6mPD)					
-6320 STB - ZoneA - Remove formwork and concrete defect works for water test     -6330 STB - ZoneA - Water Tight. Test (water height=6.15m,plug=1d,fill=4d,absoption=7d,test=7d,remove=1d)	7 20	30-Oct-24 07-Nov-24	06-Nov-24 29-Nov-24	-66 -66		STB - Zone A - Remove formwork and	Concrete derect works for water tiest STB - Zone A - Water Tight. Test (water height=6.15m,pl	lug=1d,fill=4d,absoption=7d,test=7d,rem	iove=1d)		
Water Tightness Test Zone B											
L-6340 STB - Zone B - Concrete gain strength (slab +6mPD)     STB - Zone B - Remove formwork and concrete defect works for water test	7	18-Oct-24 26-Oct-24	25-Oct-24 02-Nov-24	-63		STB - Zone B - Concrete gain strength (slab +6mPD) STB - Zone B - Remove formwork and concre	ete defect works for water test				
3-6360 STB - Zone B - Water Tight Test (water height=6.15m.plug=1d,fill=4d,absoption=7d,test=7d,remove=1d)	20	04-Nov-24	26-Nov-24	-63			TB Zone B - Water Tight Test (water height=6.15m plug=1	d,fill=4d,absoption=7d,test=7d,remove=	1d)		
Water Tightness Test Zone C           3-5990         STB - Zone C - Concrete gain strength (slab +6mPD)	7	08-Oct-24	16-Oct-24	-55		STB - Zone C - Concrete gain strength (slab +6mPD)					
-6000 STB - Zone C - Remove formwork and concrete defect works for water test	7	17-Oct-24	24-Oct-24	-55		STB - Zone C - Remove formwork and concrete defect works					
-5200 STB - Zone C - Water Tight Test (water height=6.15m.plug=1d,fill=4d,absoption=7d,test=7d,remove=1d)	20	25-Oct-24	16-Nov-24	-55		STB-Zone C - Wat	er Tight Test (water height=6.15m,plug=1d,fill=4d,absoptior	n=7d,test=7d,remove=1d)			
BWF ABWF (-1.5 to +6.0mPD)											
5980 STB - Remove backprop and falsework for ABWF works (-1.5/+6mPD)	7	30-Nov-24	07-Dec-24	-66			STB - Remove backprop and falsework				
2790         STB-ABW FWorks (1stfix for E&M handover) @ below ground floor (-1.5/+6mPD)           5210         STB -ABW FWorks (lining for E&M handover)(scaffold=1d,surface prep.=1d,install=4d,testing=1d)	18	09-Dec-24 09-Dec-24	31-Dec-24 16-Dec-24	-66 -55			STB - ABWFWorks (lin	STB -ABWF Works (1st fix for E&M) ing for E&M handover)(scaffold=1d,surf			
ABWF (+6.0 to +18.3 mPD)											
6020 STB - Concrete gain strength (slab +13.5/+18.3mPD)	7	02-Dec-24	09-Dec-24	-74			STB - Concrete gain strength (slab +		)/+183mPD)		
6010         STB - Remove backprop and falsework for ABWF works (+6.0/+18.3mPD)           4540         STB - ABWFWorks (1stfixfor E&Mhandover)@ above ground floor (+6.0/+18.3mPD)	7	10-Dec-24 18-Dec-24	17-Dec-24 10-Jan-25	-74 -74			SIB-Remove backp	prop and falsework for ABWF works (+6.	)/+18.3mPD) ks (1st fix for E&M handover)@at	bove ground floor (+6.0/+18	8.3mPD)
ABWF (above +18.3mPD roof)			1								·····
4560 STB-ABWFWorks@roof (+18.0/+21.1mPD)	90	13-Dec-24	03-Apr-25	267							
Middle Portion (Z3M) ion											
SDT14											
140 Tanker-away scheme - Submit, trial, review and approval of Tanker-away scheme by PM&ST1	75	07-Aug-24 A		-183		Tanker-away scheme - Submit, trial, re	view and approval of Tanker-away scheme by PM&ST1				
330         Tanker-away scheme - Demolish Existing SDT1 & 4 (silentmethod)           130         Tanker-away scheme - Remove sludge and water in existing SDT2 & 3	92 24	07-Nov-24* 07-Nov-24*	28-Feb-25 04-Dec-24	-183 -183			Tanker-away scheme - Remove sludge and	water in existing SDT2 & 3			
140 Tanker-away scheme - Demolish Existing SDT2 & 3 & Methane Compressor House (20) (silent method)	68		28-Feb-25	-183					· · · · · · · · · · · · · · · · · · ·		
outh Portion (Z3S)											
Dn 10 Demolish Temporary Sludge Holding Tank (200m3)	24	07-Nov-24	04-Dec-24	281			Demolish Temporary Sludge Holding Tank (2	200m3)			
0 Demolish Gas Holder GH2 (12)	24		31-Dec-24	248				Demolish Gas Holder GH2 (12)			
igestor No. 1-3 (SD1-3) bundation and ELS											
Excavation and Strut Installation											
ELS											
5740         Sludge Digester No.1-3 - Preloading StrutS3 (-0.2mPD)(4 cycle, 5 struts/cycle/day, 16 struts)           2220         Sludge Digester No.1-3 - ELS Excavation (-0.7 to -3.2mPD, 6130m3 @ 1000m3/d) *MD	4	15-Aug-24 A 16-Aug-24 A		No. 1	1-3 - Preloading StrutS3 (-0.2mPD)(4 cycle, 5 struts/c Sludge Digester No, 1-3 - ELS	cle/day, 16 struts) Excavation (-0.7 to -3.2mPD, 6130m3 @ 1000m3/d) *MD					
2230 Sludge Digester No. 1-3 - Strut Installation S4 (-2.7mPD)	12	24-Aug-24 A	15-Oct-24	-144		Sludge Digester No. 1-3 - Strut Installation S4 (-2.7mPD)					
Sludge Digester No.1-3 - Preloading StrutS4 (-2.7mPD)(4 cycle, 5 struts/cycle/day, 16 struts)           2240         Sludge Digester No.1-3 - ELS Excavation (-3.2 to -5.5mPD, 5640m3 @ 500m3/d)	5	14-Oct-24 17-Oct-24	18-Oct-24 30-Oct-24	-144 -144		Sludge Digester No. 1/3 - Preloading Strut S4 (-2.7mPD)(4 cycle, 5 struts Sludge Digester No. 1-3 - ELS Excavation (-3.2 to -					
3600 Sludge Digester No. 1-3 - Strut Installation S5 (-5.0mPD)	12	23-Oct-24	12-Nov-24	-144		Sludge Digester No. 1-3 - 5	StrutInstallation S5 (-5.0mPD)				
5760 Sludge Digester No. 1-3 - Preloading Strut S5 (-5.0mPD)(4 cycle, 5 struts/cycle/day, 16 struts) 3610 Sludge Digester No. 1-3 - ELS Excavation (-5.5 to -7.5mPD, 4904m3 @ 500m3/d)	5 10	11-Nov-24 14-Nov-24	15-Nov-24 25-Nov-24	-144 -144			1-3 -Preloading StrutS5 (-5.0mPD)(4 cycle, 5 struts/cycle/d				
3610     Sludge Digester No. 1-3 - ELS Excavation (-5.5 to -7.5mPD, 4904m3 @ 500m3/d)       3620     Sludge Digester No. 1-3 - Strut Installation S6 (-7mPD)	10	14-Nov-24 20-Nov-24	25-Nov-24 10-Dec-24	-144 -144		Site	dge Digester No. 1-3 - ELS Excavation (-5.5 to -7.5mPD, 4 Sludge Digester No. 1-3 - Strut Ins				
5770 Sludge Digester No. 1-3 - Preloading Strut S6 (-7mPD)(4 cycle, 5 struts/cycle/day, 16 struts)	5	09-Dec-24	13-Dec-24	-144			Sludge Digester No. 1-3 - Pro	eloading Strut S6 (-7mPD)(4 cycle, 5 stru			
3630 Sludge Digester No. 1-3 - ELS Excavation (-7.5 to -9.0mPD, 3678m3 @ 500m3/d) Formation Level	8	12-Dec-24	20-Dec-24	-144			Sludge Digeste	r No. 1-3 - ELS Excavation (-7.5 to -9.0m	-D, 3678m3 @ 500m3/d)		
Sludge Digester No. 1-3 - Plate Load Test SD-PLT1, SD-PLT-2 & SD-PLT3 (3n os, 3 sets)	8	21-Dec-24	02-Jan-25	-144				Sludge Digester No. 1-3 - Plate	_oad TestSD-PLT1 SD-PLT-2 & S	SD-PLT3 (3n os , 3 sets)	
older No. 1 (BH1)											
A Installation						i		1			
Remaining Level of Ef		0 - 4					Project ID : DWPr42_241016		Monthly Progress	Report - 3MRF	S
		Cont	ract	DC/2(	U19/10 - YLEPP	- Main Works for Stage 1	Layout : DC201910 MPR47-3MR		Revision	Checked	-
		-	-			-		·			+ *
Actual Work				-	<b>—</b> · · ·		Dago 7 of 9	$  X   \leq cn_2/2$	Rev 0	1	
Remaining Work		Μ	onthl	v Pro	aress Report N	o. 47- 3MRP (Sep 24)	Page 7 of 8	30-Sep-24	Rev. 0		
		Μ	onthl	y Pro	gress Report N	o. 47- 3MRP (Sep 24)	Page 7 of 8	30-Sep-24	Rev. 0		



Activity ID	Activity Name	Orig	Early Start	Early Finish	Total Float	September	October	November		De c	ember			January			February		March
		Dur	-			47	48	49			50			51			52		53
						01 08 15 22	29 06 13 20 27	03 10 17 24			15 22	29	05	12 19	26	02	09 16	5 23	02
ATALZ3BH-1010	BH No. 1 - Installation of pipework and instrumentation in Biogas Holder Valve Chamber No.4	52	26-Jun-24 A	22-Oct-24	243		BH No. 1 - Install	ation of pipework and instrumentation in Biogas Hol	lder Valve Cha	amberNo.4									
ATALZ3BH-1020	BH No.1 - Instrumentation	30	08-Jul-24A	15-Oct-24	249		BH No. 1 - Instrumentation		1										
ATALZ3BH-1030	BH No. 1 - Installation of Biogas Booster Pump No.1 & 2	30	08-Jul-24A	15-Oct-24	249		BH No. 1 - Installation of Biogr	as Booster Pump No.1 & 2											-
ATALZ3BH-1040	BH No. 1 - Electrical works (Cable wiring, termination, lightning arrestor) (To alt power source until LVSB@STB energiz)	18	08-Jul-24A	15-Oct-24	249		BH No. 1 - Electrical works (Ca	able wiring, termination, lightning arrestor)(To alt. pow	ver source unt	ILVSB@STB e	nergiz)								1
ATALZ3BH-2485	BH No. 1 - Disk assembly inside tank, raise disk, painting on both side	18	15-Jul-24 A	05-Oct-24	216		BH No. 1 - Disk assembly inside tank, raise disk,	painting on both side	1			[							T
ATALZ3BH-2495	BH No. 1 - Membrane fixing and wooden planks Installation	21	07-Oct-24	31-Oct-24	216			3H No. 1 - Membrane fixing and wooden planks Ins	tallation										-
ATALZ3BH-2505	BH No. 1 - Installation of tank accessories (telescopic guide, staricase, safety valve, sensors) and touch-up paint	15	01-Nov-24	18-Nov-24	216			BH No. 1 - Installati	ioh of tank acc	essories (teleso	opic guide, staricase, s	afety valve,	sensors) and tou	ich-up paint					
ATALZ3BH-2515	BH No. 1 - Specialistinspection on structure and membrane	4	19-Nov-24	22-Nov-24	216			BH No. 1 - 5	Specialistinsp	ection on struct	ure and membrane								1
BH1 : Testing & C	ommissioning						[		]			[			]				1
ATALZ3BH-2070	BH No. 1 - T&C - E&M SAT of Biogas Holder No.1 (using Air to test membrane only)	15	23-Nov-24	10-Dec-24	216					BH No.	1-T&C-E&MSAT of	Biogas Hold	erNo.1 (usingA	r to test membrane	only)				-
ATALZ3BH-2090	BH No. 1 - T&C - E&M SAT of whole Biogas Holder No.1 and associated valve and pipework (N2 Purging)	20	23-Nov-24	16-Dec-24	216						BH No. 1 - T&C - E				ciated valve and	pipework (N2 F	Purging)		
ATALZ3BH-2100	BH No. 1 - T&C - E&M SAT of Biogas Booster Pump No.1 & 2	20	23-Nov-24	16-Dec-24	216						BH No. 1 - T&C - E	&MSAT of B	iogas Booster P	ump No.1 & 2					-
ATALZ3BH-1050	BH No. 1 - Early System Commissioning without H2S Removal System	30	17-Dec-24	15-Jan-25	268									BH No. 1 - I	arly System Con	nmissioning w	ithout H2S Remova	al System	1
BH1 : Diversion V	Vorks					[			1										
Z3S7-2070	BH No. 1 - Temporary system and as sociated pipeworks for early commissioning of BH1	30	12-Nov-24	16-Dec-24	216						BH No. 1 - Tempor	arysystem a	nd as sociated p	peworks for early o	ommissioning of	BH1			1



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

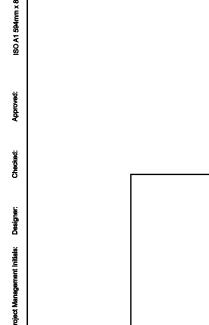
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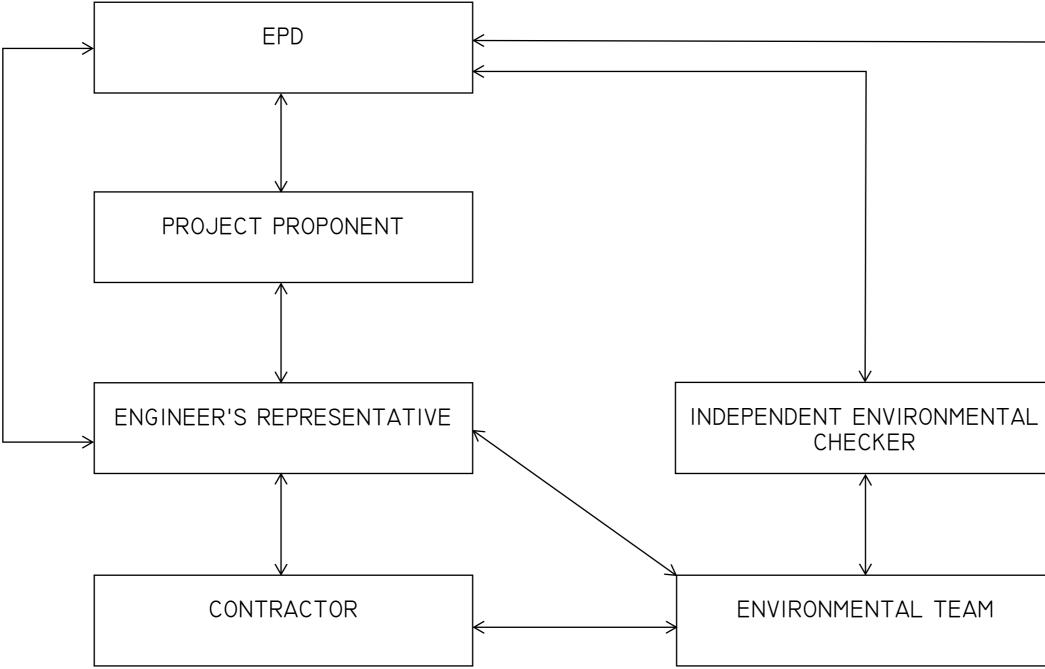
Contract DC/2019/10 - YLEPP - Main Works for Stage 1 Monthly Progress Report No. 47- 3MRP (Sep 24)

Project ID : DWPr42\_241016 Layout : DC201910 MPR47-3MRP Page 8 of 8

	M	Monthly Progress Report - 3MRP										
Р	Date	Revision	Checked	Approved								
	30-Sep-24	Rev. 0										

Appendix B Project Organization Chart





### LINE OF COMMUNICATION



# PROJECT <sup>東目</sup>

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

# CLIENT



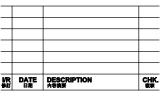
築務署 Drainage Services Departm

### CONSULTANT 工程網開公司

AECOM Asia Company Ltd. www.aecom.com

## SUB-CONSULTANTS 分判工程期間公司

# ISSUE/REVISION



/R 師	DATE 日期	DESCRIPTION 內容摘要
ST/	ATUS	

CALE	DIMENSIO
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### S

N UNIT

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KEY PLAN ★헤르

PROJECT NO.

CONTRACT NO.

60505476

CE 3/2015 (DS)

# SHEET TITLE

PROJECT ORGANISATION

# SHEET NUMBER

Appendix C Action and Limit Levels

### Action and Limit Levels for Air Quality

Parameters	Action Level	Limit Level
1-hour TSP Level in μg/m³	<sup>1</sup> For baseline level $\leq$ 384 µg/m <sup>3</sup> , Action level = (baseline level * 1.3 + Limit level)/2; For baseline level > 384 µg/m <sup>3</sup> , Action level = Limit level	500 µg/m <sup>3</sup>

Notes:

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

a) AM1 =  $(63^{*}1.3 + 500) / 2 = 291 \mu g/m^{3}$ ;

b) AM2 = (70\*1.3 + 500) / 2 = 296 µg/m<sup>3</sup>.

### 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:

1. 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.

2. 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		
Construction Phase Water Quality Monitoring				
DO in mg/L (Surface, Middle & Bottom) <sup>2</sup>	Surface & Middle 5%-ile of baseline data for surface and middle layer. Bottom 5%-ile of baseline data for bottom layer.	Surface & Middle 4 mg/L or 1%-ile of baseline data for surface and middle layer. Bottom 2 mg/L or 1%-ile of baseline data for bottom layer.		
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:	uay	-		

1. "Depth-averaged" is calculated by taking the arithmetic means of reading of all three depths;

2. For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits;

3. 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>	
	Abundance of all avifauna species (including but not only limited to overwintering waterbirds) in the community			
Transect	Species diversity 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	Significant decline in any of these parameters for	
	Abundance of species with conservation importance only			
	Species diversity of species with conservation importance only			
	Abundance of all avifauna species (including but not only limited to overwintering waterbirds) in the community	month relative to the corresponding month during the baseline survey.	three consecutive months.	
Point Count	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 Calibration Certificates/ Reports of Monitoring Equipment

Air Quality Monitoring Equipment



#### Sibata LD-5R K-Factor Verification Test by Total Suspended Particulates HVS Test Report

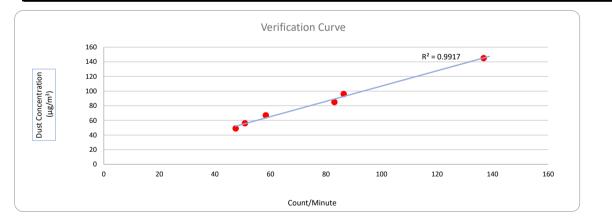
Information of Calibrated Equipement						
28-Nov-23	to	30-Nov-23	Next Verification Test Date:	28-Nov-24		
Sibata LD-5R		1				
882106						
RPT-23-HVS-0068		068				
AM2, location near the Leachate Treatment Works within the NENTX Landfill						
	RI	28-Nov-23         to           Sibata LD-5R         Sibata LD-5R           882106         RPT-23-HVS-00	28-Nov-23         to         30-Nov-23           Sibata LD-5R         882106         882106           RPT-23-HVS-0068         882106         882106	28-Nov-23         to         30-Nov-23         Next Verification Test Date:           Sibata LD-5R         882106         1000000000000000000000000000000000000		

	Standard Equipment Informa	ition
Verification Equipment Type:	Tisch TSP HVS	Tisch HVS Calibrator
Standard Equipment Model No.:	TE-5170X	TE-5025A
Equipment serial no.:	1106	4166
Last Calibration Date:	4-Nov-23	19-Jun-23
Next Calibration Date:	3-Jan-24	19-Jun-24

	Equipement Vertification Result								
Verification			Duration		Results from	Calibrated Equipement	<b>Results from Standard Equipment</b>		
Test No.	Date	Start-time	End-time	Elapsed Time (in min)	Total Counts	Counts/ Minute x-axis	Dust Concentration (µg/m³) y-axis		
1	28/11/2023	8789.68	8792.68	180.00	15546	86	96		
2	28/11/2023	8792.68	8795.68	180.00	14944	83	85		
3	28/11/2023	8795.68	8798.68	180.00	8543	47	49		
4	30/11/2023	8798.68	8801.68	180.00	10499	58	67		
5	30/11/2023	8801.68	8804.68	180.00	24622	137	145		
6	30/11/2023	8804.68	8807.68	180.00	9145	51	56		

#### Linear Regression of y on x

Slope, K fac	tor: <u>1.0437</u>	Intercept:	<u>2.4993</u>	*Correlation Coefficient,R:	<u>0.9958</u>
Verification Test Res	ult: <u>Strong Correlation, R</u>	Strong Correlation, Results were accepted.		* If the Correlation Coefficient, R is <0.5. Che	ecking and Re-verification are required.



Operated By:

Andy Li Project Technician, Environmental

Date: 30-11-2023

Tandy Tse

Checked By:

Senior Consultant, Environmental

Date:



#### Sibata LD-5R K-Factor Verification Test by Total Suspended Particulates HVS Test Report

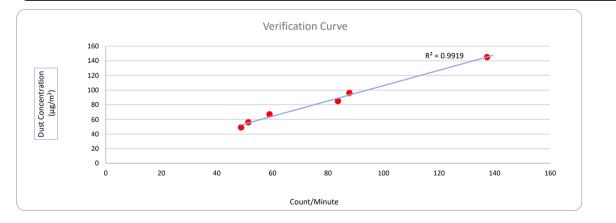
Information of Calibrated Equipement						
28-Nov-23	to	30-Nov-23	Next Verification Test Date:	28-Nov-24		
Sibata LD-5R						
882107						
RPT-23-HVS-0069		69				
AM2, I	ocation near	the Leachate Treat	ment Works within the NENTX Landfill			
	RF	28-Nov-23         to           Sibata LD-5R         882107           RPT-23-HVS-00         882107	28-Nov-23         to         30-Nov-23           Sibata LD-5R         882107         882107           RPT-23-HVS-0069	28-Nov-23     to     30-Nov-23       Sibata LD-5R       882107		

	Standard Equipment Informat	tion
Verification Equipment Type:	Tisch TSP HVS	Tisch HVS Calibrator
Standard Equipment Model No.:	TE-5170X	TE-5025A
Equipment serial no.:	1106	4166
Last Calibration Date:	4-Nov-23	19-Jun-23
Next Calibration Date:	3-Jan-24	19-Jun-24

	Equipement Vertification Result								
Verification			Duration		Results from	a Calibrated Equipement	<b>Results from Standard Equipment</b>		
Test No.	Date	Start-time	End-time	Elapsed Time (in min)	Total Counts	Counts/ Minute x-axis	Dust Concentration (µg/m³) y-axis		
1	28/11/2023	8789.68	8792.68	180.00	15789	88	96		
2	28/11/2023	8792.68	8795.68	180.00	15045	84	85		
3	28/11/2023	8795.68	8798.68	180.00	8765	49	49		
4	30/11/2023	8798.68	8801.68	180.00	10612	59	67		
5	30/11/2023	8801.68	8804.68	180.00	24711	137	145		
6	30/11/2023	8804.68	8807.68	180.00	9235	51	56		

#### Linear Regression of y on x

Γ	Slope, K factor:	<u>1.0468</u>	Intercept:	<u>1.4320</u>	*Correlation Coefficient,R:	<u>0.9959</u>
	Verification Test Result:	Strong Correlation,	Results were accepted.		* If the Correlation Coefficient, R is <0.5. Chec	king and Re-verification are required.



Operated By:

Checked By:

Andy Li Project Technician, Environmental

Date: 30-11-2023

Tandy Tse

Senior Consultant, Environmental

Date: 3

30-11-2023

Noise Quality Monitoring Equipment



# **Certificate of Calibration**

# for

Description:	Sound Level Calibrator
Manufacturer:	RION
Type No.:	NC-75
Serial No.:	34724244

#### Submitted by:

Customer:	Aurecon Hong Kong Limited
Address:	Unit 1608, 16/F, Tower B, Manulife Financial Centre,
	223-231 Wai Yip Street, Kwun Tong,
	Kowloon, Hong Kong

#### Upon receipt for calibration, the instrument was found to be:

$\checkmark$	Within
$\Box$	Outside

#### the allowable tolerance.

The test equipments used for calibration are traceable to National Standards via:

- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory

Date of receipt: 22 July 2024

Date of calibration: 24 July 2024

Date of NEXT calibration: 23 July 2025

Calibrated by: Calibration Technician

Certified by: Mr. Ng Yan Wa

Laboratory Manager

Date of issue: 24 July 2024

Certificate No.: APJ23-154-CC002

Page 1 of 2

# Acoustics and Air Testing Laboratory Co. Ltd. 聲學及空氣測試實驗室有限公司

# 1. Calibration Precautions:

- The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 24 hours, and switched on to warm up for over 10 minutes before the commencement of the test.
- The results presented are the mean of 3 measurements at each calibration point.

#### 2. Calibration Specifications:

Calibration check

#### 3. Calibration Conditions:

Air Temperature:	23.4 °C
Air Pressure:	1005 hPa
<b>Relative Humidity:</b>	56.7 %

### 4. Calibration Equipment:

Test Equipment	Туре	Serial No.	Calibration Report Number	Traceable to
Multifunction Calibrator	B&K 4226	2288467	AV240081	HOKLAS
Sound Level Meter	RION NA-28	30721812	AV230128	HOKLAS

### 5. Calibration Results

#### 5.1 Sound Pressure Level

Nominal value	Accept lower level	Accept upper level	Measured value
dB	dB	dB	dB
94.0	93.6	94.4	

Note:

The values given in this certification only related to the values measured at the time of the calibration.



Certificate No.: APJ23-154-CC002



# Certificate of Calibration

for

Description:	Sound Level Calibrator
Manufacturer:	RION
Type No.:	NC-75
Serial No.:	34724245

### Submitted by:

Customer: Aurecon Hong Kong Limited Address: Unit 1608, 16/F, Tower B, Manulife Financial Centre, 223-231 Wai Yip Street, Kwun Tong, Kowloon, Hong Kong

#### Upon receipt for calibration, the instrument was found to be:

$\checkmark$	Within
	Outside

#### the allowable tolerance.

The test equipments used for calibration are traceable to National Standards via:

- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory

Date of receipt: 22 July 2024

Date of calibration: 24 July 2024

Date of NEXT calibration: 23 July 2025

Calibration Technician Calibrated by:

Date of issue: 24 July 2024

Certified by:

Mr. Ng Yan Wa Laboratory Manager

Certificate No.: APJ23-154-CC003

# \* (A+A) \* L Acoustics and Air Testing Laboratory Co. Ltd. 聲學及空氣測試實驗室有限公司

### 1. Calibration Precautions:

- The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 24 hours, and switched on to warm up for over 10 minutes before the commencement of the test.
- The results presented are the mean of 3 measurements at each calibration point.

### 2. Calibration Specifications:

Calibration check

#### 3. Calibration Conditions:

Air Temperature:	23.4 °C
Air Pressure:	1005 <b>hPa</b>
<b>Relative Humidity:</b>	56.7 %

# 4. Calibration Equipment:

Test Equipment	Туре	Serial No.	Calibration Report Number	Traceable to
Multifunction Calibrator	B&K 4226	2288467	AV240081	HOKLAS
Sound Level Meter	RION NA-28	30721812	AV230128	HOKLAS

### 5. Calibration Results

5.1 Sound Pressure Level

Nominal value	Accept lower level	Accept upper level	Measured value
dB	dB	dB	dB
94.0	93.6	94.4	94.0

Note:

The values given in this certification only related to the values measured at the time of the calibration.



Certificate No.: APJ23-154-CC003



# Certificate of Calibration

for

Description:	Sound Level Calibrator
Manufacturer:	RION
Type No.:	NC-75
Serial No.:	34524163

#### Submitted by:

Customer: Aurecon Hong Kong Limited Address: Unit 1608, 16/F, Tower B, Manulife Financial Centre, 223-231 Wai Yip Street, Kwun Tong, Kowloon, Hong Kong

#### Upon receipt for calibration, the instrument was found to be:

$\checkmark$	Within
	Outside

#### the allowable tolerance.

The test equipments used for calibration are traceable to National Standards via:

- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory

Date of receipt: 22 July 2024

Date of calibration: 24 July 2024

Date of NEXT calibration: 23 July 2025

Calibrated by: Calibration Technician

Certified by: Mr. Ng Yan Wa Laboratory Manager

Date of issue: 24 July 2024

Certificate No.: APJ24-010-CC001

Room 422,Leader Industrial Centre,57-59 Au Pui Wan Street ,Fo Tan, Shatin,N.T.,Hong Kong Tel: (852) 2668 3423 Fax:(852) 2668 6946 Homepage: http://www.aa-lab.com E-mail : inquiry@aa-lab.com Page 1 of 2

# ★ (A+A) \* L Acoustics and Air Testing Laboratory Co. Ltd. 聲學及空氣測試實驗室有限公司

# 1. Calibration Precautions:

- The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 24 hours, and switched on to warm up for over 10 minutes before the commencement of the test.
- The results presented are the mean of 3 measurements at each calibration point.

### 2. Calibration Specifications:

Calibration check

#### 3. Calibration Conditions:

Air Temperature:	23.4 °C
Air Pressure:	1005 hPa
<b>Relative Humidity:</b>	56.7 %

# 4. Calibration Equipment:

Test Equipment	Туре	Serial No.	Calibration Report Number	Traceable to
Multifunction Calibrator	B&K 4226	2288467	AV240081	HOKLAS
Sound Level Meter	RION NA-28	30721812	AV230128	HOKLAS

### 5. Calibration Results

#### 5.1 Sound Pressure Level

Nominal value	Accept lower level	Accept upper level	Measured value
dB	dB	dB	dB
94.0	93.6	94.4	93.9

Note:

The values given in this certification only related to the values measured at the time of the calibration.



Certificate No.: APJ24-010-CC001



# **Certificate of Calibration**

#### for

Description:	Sound Level Meter
Manufacturer:	NTi Audio
Type No.:	XL2 (Serial No.: A2A-09696-E0)
Microphone:	ACO 7052 (Serial No.:73780)
Preamplifier:	NTi Audio MA220 (Serial No.:6282)

#### Submitted by:

Customer: Address:

Unit 1608, 16/F, Tower B, Manulife Financial Centre, 223-231 Wai Yip Street, Kwun Tong, Kowloon, Hong Kong.

Aurecon Hong Kong Limited

Upon receipt for calibration, the instrument was found to be:

✓ Within (31.5Hz – 8kHz)
 □ Outside
 the allowable tolerance.

The test equipment used for calibration are traceable to National Standards via:

- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory

Date of receipt: 28 February 2024

Date of calibration: 02 March 2024

Date of NEXT calibration: 01 March 2025

Calibrated by: Calibration Technician

Date of issue: 02 March 2024

Certificate No.: APJ23-146-CC003

Certified by:

Mr. Ng Yan Wa Laboratory Manager

age 1 of 4

#### 

# 1. Calibration Precaution:

- The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 24 hours, and switched on to warm up for over 10 minutes before the commencement of the test.
- The results presented are the mean of 3 measurements at each calibration point.

### 2. Calibration Conditions:

Air Temperature:	22.9 °C
Air Pressure:	1005 hPa
<b>Relative Humidity:</b>	61.2 %

### 3. Calibration Equipment:

	Туре	Serial No.	Calibration Report Number	Traceable to	
Multifunction Calibrator	B&K 4226	2288467	AV220061	HOKLAS	

### 4. Calibration Results

Sound Pressure Level

Reference Sound Pressure Level

Setting of Unit-under-test (UUT)		Applied value		UUT Reading,	IEC 61672 Class 1		
Range, dB	Freq. V	Weighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
30-130	dBA	SPL	Fast	94	1000	94.1	±0.4

Linearity

Setting of Unit-under-test (UUT)		Applied value		UUT Reading,	IEC 61672 Class 1		
Range, dB	Freq. V	Weighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
				94		94.1	Ref
30-130	dBA	SPL	Fast	104	1000	104.1	±0.3
				114		114.1	±0.3

Time Weighting

Setting of Unit-under-test (UUT)		Applied value		UUT Reading,	IEC 61672 Class 1		
Range, dB	Freq. W	eighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
30-130	dBA	CDI	Fast	94	1000	94.1	Ref
30-130	dBA SPL	Slow	94	1000	94.1	±0.3	

Page 2 of 4

Certificate No.: APJ23-146-CC003

# (A+A)\*L Acoustics and Air Testing Laboratory Co. Ltd. 聲學及空氣測試實驗室有限公司

#### Frequency Response

#### Linear Response

Setting of Unit-under-test (UUT)		Applied value		UUT Reading,	IEC 61672 Class 1		
Range, dB	Freq. V	Veighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
					31.5	94.0	±2.0
					63	94.1	±1.5
					125	94.1	±1.5
		- 11-5-6			250	94.1	±1.4
30-130	dB	SPL	Fast	94	500	94.1	±1.4
					1000	94.1	Ref
					2000	94.4	±1.6
					4000	95.2	±1.6
					8000	94.5	+2.1; -3.1

A-weighting

Setti	Setting of Unit-under-test (UUT)		Applied value		UUT Reading,	IEC 61672 Class 1	
Range, dB	Freq.	Weighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
					31.5	54.6	-39.4 ±2.0
					63	67.9	-26.2±1.5
					125	78.0	-16.1±1.5
					250	85.4	-8.6±1.4
30-130	dBA	SPL	Fast	94	500	90.9	$-3.2 \pm 1.4$
					1000	94.1	Ref
					2000	95.6	+1.2±1.6
					4000	96.2	$+1.0 \pm 1.6$
					8000	93.4	-1.1+2.1; -3.1

C-weighting

Sett	Setting of Unit-under-test (UUT)		Appl	Applied value		IEC 61672 Class 1	
Range, dB	Freq.	Weighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
					31.5	91.0	-3.0 ±2.0
					63	93.3	-0.8±1.5
					125	93.9	-0.2 ±1.5
					250	94.1	$-0.0 \pm 1.4$
30-130	dBC	SPL	Fast	94	500	94.2	$-0.0 \pm 1.4$
					1000	94.1	Ref
					2000	94.2	-0.2 ±1.6
					4000	94.4	-0.8 ±1.6
					8000	91.5	-3.0 +2.1: -3.1

Certificate No.: APJ23-146-CC003





# 5. Calibration Results Applied

The results apply to the particular unit-under-test only. All calibration points are within manufacture's specification as IEC 61672 Class 1.

Uncertainties of Applied Value:

94 dB	31.5 Hz	± 0.10
	63 Hz	± 0.05
	125 Hz	± 0.05
	250 Hz	± 0.05
	500 Hz	± 0.05
	1000 Hz	$\pm$ 0.05
	2000 Hz	$\pm$ 0.05
	4000 Hz	± 0.05
	8000 Hz	± 0.10
104 dB	1000 Hz	$\pm$ 0.05
114 dB	1000 Hz	± 0.05

The uncertainties are evaluated for a 95% confidence level.

#### Note:

The values given in this certification only related to the values measured at the time of the calibration and any uncertainties quoted will not allow for the equipment long-term drift, variations with environmental changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the calibration. (A+A)\*L shall not be liable for any loss or damage resulting from the use of the equipment.



Certificate No.: APJ23-146-CC003



# Certificate of Calibration

### for

Description:	Sound Level Meter
Manufacturer:	NTi Audio
Type No.:	XL2 (Serial No.: A2A-13548-E0)
Microphone:	ACO 7052 (Serial No.:84474)
Preamplifier:	NTi Audio MA220 (Serial No.:7989)

#### Submitted by:

Customer: Aurecon Hong Kong Limited Address: Unit 1608, 16/F, Tower B, Manulife Financial Centre, 223-231 Wai Yip Street, Kwun Tong, Kowloon, Hong Kong.

#### Upon receipt for calibration, the instrument was found to be:

✓ Within (31.5Hz – 8kHz)
 □ Outside
 the allowable tolerance.

The test equipment used for calibration are traceable to National Standards via:

- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory

Date of receipt: 28 February 2024

Date of calibration: 02 March 2024

Date of NEXT calibration: 01 March 2025

Calibrated by: Calibration Technician

Date of issue: 02 March 2024

Certificate No.: APJ23-146-CC004

Certified by:

Mr. Ng Yan Wa aboratory Manager Page 1 of 4

# 1. Calibration Precaution:

- The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 24 hours, and switched on to warm up for over 10 minutes before the commencement of the test.
- The results presented are the mean of 3 measurements at each calibration point.

# 2. Calibration Conditions:

Air Temperature:	22.4 °C
Air Pressure:	1005 hPa
<b>Relative Humidity:</b>	59.6 %

# 3. Calibration Equipment:

	Туре	Serial No.	Calibration Report Number	Traceable to	
Multifunction Calibrator	B&K 4226	2288467	AV220061	HOKLAS	

### 4. Calibration Results

Sound Pressure Level

Reference Sound Pressure Level

Setting of Unit-under-test (UUT)				Appl	ied value	UUT Reading,	IEC 61672 Class 1
Range, dB Freq. Weighting Time Weighting		Level, dB	Frequency, Hz	dB	Specification, dB		
30-130	dBA	SPL	Fast	94	1000	94.1	±0.4

Linearity

Sett	Setting of Unit-under-test (UUT)				Applied value		IEC 61672 Class 1
Range, dB	Freq.	Weighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
				94		94.1	Ref
30-130	dBA	SPL	Fast	104	1000	104.2	±0.3
				114		114.2	±0.3

Time Weighting

Setti	Setting of Unit-under-test (UUT)			Appl	ied value	UUT Reading,	IEC 61672 Class 1
Range, dB	Freq. V	Veighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
30-130	dBA	SPL	Fast	94	1000	94.1	Ref
30-130	uDA	SPL	Slow	94	1000	94.2	±0.3

Certificate No.: APJ23-146-CC004



Page 2 of 4



#### Frequency Response

#### Linear Response

Sett	ing of Un	it-under-t	est (UUT)	Appl	ied value	UUT Reading,	IEC 61672 Class 1
Range, dB	Freq. V	Veighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
					31.5	94.1	±2.0
					63	94.2	±1.5
					125	94.2	±1.5
					250	94.1	±1.4
30-130	dB	SPL	Fast	94	500	94.2	±1.4
					1000	94.1	Ref
					2000	94.3	±1.6
					4000	94.8	±1.6
					8000	93.8	+2.1; -3.1

A-weighting

Setti	ing of U	Jnit-under-t	est (UUT)	Appl	ied value	UUT Reading,	IEC 61672 Class 1
Range, dB	Freq.	Weighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
					31.5	54.7	-39.4 ±2.0
					63	68.0	-26.2±1.5
					125	78.1	-16.1±1.5
					250	85.5	-8.6±1.4
30-130	dBA	SPL	Fast	94	500	91.0	$-3.2 \pm 1.4$
					1000	94.1	Ref
					2000	95.5	$+1.2\pm1.6$
					4000	95.8	$+1.0 \pm 1.6$
					8000	92.7	-1.1+2.1; -3.1

C-weighting

Sett	ing of Unit-under-t	est (UUT)	Appl	Applied value		IEC 61672 Class 1
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
				31.5	91.1	-3.0 ±2.0
				63	93.3	-0.8 ±1.5
				125	94.0	-0.2 ±1.5
				250	94.1	$-0.0 \pm 1.4$
30-130	dBC SPL	Fast	94	500	94.2	$-0.0 \pm 1.4$
				1000	94.1	Ref
				2000	94.2	-0.2 ±1.6
				4000	94.0	-0.8 ±1.6
				8000	90.8	-3.0 +2.1: -3.1

Certificate No.: APJ23-146-CC004

(A+A) Page 3 of 4



# 5. Calibration Results Applied

The results apply to the particular unit-under-test only. All calibration points are within manufacture's specification as IEC 61672 Class 1.

Uncertainties of Applied Value:

94 dB	31.5 Hz	$\pm$ 0.05
	63 Hz	$\pm$ 0.05
	125 Hz	± 0.05
	250 Hz	± 0.05
	500 Hz	± 0.05
	1000 Hz	± 0.05
	2000 Hz	± 0.05
	4000 Hz	$\pm$ 0.05
	8000 Hz	± 0.10
104 dB	1000 Hz	± 0.05
114 dB	1000 Hz	± 0.05

The uncertainties are evaluated for a 95% confidence level.

#### Note:

The values given in this certification only related to the values measured at the time of the calibration and any uncertainties quoted will not allow for the equipment long-term drift, variations with environmental changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the calibration. (A+A)\*L shall not be liable for any loss or damage resulting from the use of the equipment.



Certificate No.: APJ23-146-CC004



# Certificate of Calibration

### for

Description:	Sound Level Meter
Manufacturer:	NTi Audio
Type No.:	XL2 (Serial No.: A2A-13663-F0)
Microphone:	ACO 7052 (Serial No.: 84413)
Preamplifier:	NTi Audio M2211 MA220 (Serial No.: 7014)

#### Submitted by:

Customer: Acuity Sustainability Consulting Limited Address: Unit E, 12/F, Ford Glory Plaza, Nos. 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong

Upon receipt for calibration, the instrument was found to be:

✓ Within (31.5Hz – 4kHz)□ Outside

#### the allowable tolerance.

The test equipment used for calibration are traceable to National Standards via:

- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory

Date of receipt: 25 January 2024

Date of calibration: 29 January 2024

Date of NEXT calibration: 28 January 2025

Calibrated by: Calibration Technician

Certified by:

Mr. Ng Yan Wa Laboratory Manager



Date of issue: 29 January 2024

Certificate No.: APJ23-132-CC001

# (A+A)\*L Acoustics and Air Testing Laboratory Co. Ltd. 聲學及空氣測試實驗室有限公司

# 1. Calibration Precaution:

- The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 24 hours, and switched on to warm up for over 10 minutes before the commencement of the test.
- The results presented are the mean of 3 measurements at each calibration point.

# 2. Calibration Conditions:

20.6 °C
1006 hPa
48.5 %

## 3. Calibration Equipment:

	Туре	Serial No.	Calibration Report Number	Traceable to	
Multifunction Calibrator	B&K 4226	2288467	AV220061	HOKLAS	

### 4. Calibration Results

Sound Pressure Level

Reference Sound Pressure Level

Setting of Unit-under-test (UUT)			Appl	ied value	UUT Reading,	IEC 61672 Class 1	
Range, dB Freq. Weighting Time Weighting		Level, dB	Frequency, Hz	dB	Specification, dB		
30-130	dBA	SPL	Fast	94	1000	94.1	±0.4

Linearity

Setting of Unit-under-test (UUT)				Appl	ied value	UUT Reading,	IEC 61672 Class 1
Range, dB	Freq. V	Veighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
				94		94.1	Ref
30-130	dBA	SPL	Fast	104	1000	104.1	±0.3
				114		114.1	±0.3

Time Weighting

Setting of Unit-under-test (UUT)			Appl	ied value	UUT Reading,	IEC 61672 Class 1	
Range, dB	Freq. W	eighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
20.120	A CL	CDI	Fast	0.4 1.0	1000	94.1	Ref
30-130	dBA SPL	Slow	94	1000	94.1	±0.3	

Certificate No.: APJ23-132-CC001

Page 2 of 4



# (A+A)\*L Acoustics and Air Testing Laboratory Co. Ltd. 聲學及空氣測試實驗室有限公司

#### Frequency Response

#### Linear Response

	Setting of Unit-under-test (UUT)			Appl	ied value	UUT Reading,	IEC 61672 Class 1	
	Range, dB	ange, dB Freq. Weighting Time Weighting		Level, dB	Frequency, Hz	dB	Specification, dB	
						31.5	94.1	±2.0
						63	94.1	±1.5
	30-130			Fast	94	125	94.1	±1.5
		dB	dB SPL			250	94.1	±1.4
	50-150	uБ	SFL	Fast	94	500	94.1	±1.4
						1000	94.1	Ref
						2000	94.5	±1.6
						4000	95.1	±1.6

A-weighting

Setti	Setting of Unit-under-test (UUT)			Appl	ied value	UUT Reading,	IEC 61672 Class 1
Range, dB	B Freq. Weighting		Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
		31.5	54.8	-39.4 ±2.0			
					63	67.9	-26.2±1.5
					125	78.0	-16.1±1.5
30-130	dBA SPL Fast 94 250	85.4	-8.6±1.4				
30-130	UDA	uBA SPL Fast 94 500 9	90.9	$-3.2 \pm 1.4$			
					1000	94.1	Ref
					2000	95.7	+1.2±1.6
					4000	96.2	$+1.0 \pm 1.6$

C-weighting

Setti	Setting of Unit-under-test (UUT)			Appl	ied value	UUT Reading,	IEC 61672 Class 1
Range, dB	ge, dB Freq. Weighting		Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
			31.5	91.1	-3.0 ±2.0		
					63	93.3	-0.8±1.5
· · · · · · · · · · · · · · · · · · ·					125	93.9	-0.2±1.5
20.120	30-130 dBC SPL	CDI	Fast 94 250 500 1000	0.4	250	94.1	$-0.0 \pm 1.4$
30-130		SPL		500	94.2	$-0.0 \pm 1.4$	
					1000	94.1	Ref
					2000	94.3	-0.2±1.6
				4000	94.4	-0.8±1.6	

Certificate No.: APJ23-132-CC001





### 5. Calibration Results Applied

The results apply to the particular unit-under-test only. All calibration points are within manufacture's specification as IEC 61672 Class 1.

Uncertainties of Applied Value:

94 dB	31.5 Hz	± 0.05
	63 Hz	± 0.05
	125 Hz	± 0.05
	250 Hz	± 0.05
	500 Hz	± 0.05
	1000 Hz	± 0.05
	2000 Hz	± 0.10
	4000 Hz	± 0.15
104 dB	1000 Hz	± 0.05
114 dB	1000 Hz	± 0.05

The uncertainties are evaluated for a 95% confidence level.

Note:

The values given in this certification only related to the values measured at the time of the calibration and any uncertainties quoted will not allow for the equipment long-term drift, variations with environmental changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the calibration. (A+A)\*L shall not be liable for any loss or damage resulting from the use of the equipment.

Certificate No.: APJ23-132-CC001



Room 422,Leader Industrial Centre,57-59 Au Pui Wan Street ,Fo Tan, Shatin,N.T.,Hong Kong Tel: (852) 2668 3423 Fax:(852) 2668 6946 Homepage: http://www.aa-lab.com E-mail : inquiry@aa-lab.com Page 4 of 4

Water Quality Monitoring Equipment



# **REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION**

Test Report No.: R-Date of Issue: 02Page No.: 1 c

: R-BD090078 : 02 October 2024 : 1 of 2

#### **PART A - CUSTOMER INFORMATION**

Acuity Sustainability Consulting Limited Unit E, 12/F, Ford Glory Plaza 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong

#### **PART B - SAMPLE INFORMATION**

Name of Equipment :	YSI ProDSS Multi Parameters
Manufacturer :	YSI
Serial Number :	22C106561
Date of Received :	26 September 2024
Date of Calibration :	27 September 2024
Date of Next Calibration :	26 December 2024
Request No. :	D-BD090078

#### PART C - REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Test Parameter	Reference Method
pH value	APHA 21e 4500-H <sup>+</sup> B
Temperature	Section 6 of international Accreditation New Zealand Technical Guide no. 3 Second edition March
	2008: Working Thermometer Calibration Procedure
Salinity	APHA 21e 2520 B
Dissolved oxygen	APHA 23e 4500-O G (Membrane Electrode Method)
Turbidity	APHA 21e 2130 B (Nephelometric Method)

#### **PART D - CALIBRATION RESULT**

#### (1) pH value

Target ( pH unit )	Display Reading ( pH unit )	Tolerance	Result
4.00	4.03	0.03	Satisfactory
7.42	7.49	0.07	Satisfactory
10.01	10.07	0.06	Satisfactory

Tolerance of pH value should be less than  $\pm 0.2$  ( pH unit )

#### (2) Temperature

Reading of Ref. thermometer ( °C )	Display Reading ( °C )	Tolerance	Result
17.0	15.6	-1.4	Satisfactory
28.0	26.2	-1.8	Satisfactory
32.5	30.7	-1.8	Satisfactory

Tolerance of Temperature should be less than  $\pm$  2.0 ( °C )

#### (3) Salinity

Expected Reading (g/L)	Display Reading (g/L)	Tolerance ( % )	Result
10	10.11	1.10	Satisfactory
20	20.59	2.95	Satisfactory
30	31.25	4.17	Satisfactory

Tolerance of Salinity should be less than  $\pm$  10.0 ( % )

--- CONTINUED ON NEXT PAGE ---

LEE Chun-ning Assistant Manager

AUTHORIZED SIGNATORY:



# **REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION**

Test Report No.	: R-BD090078
Date of Issue	: 02 October 2024
Page No.	: 2 of 2

#### (4) Dissolved oxygen

Expected Reading ( mg/L )	Display Reading ( mg/L )	Tolerance	Result
7.37	7.35	-0.02	Satisfactory
5.56	5.49	-0.07	Satisfactory
2.30	2.58	0.28	Satisfactory
0.20	0.39	0.19	Satisfactory

Tolerance of Dissolved oxygen should be less than  $\pm 0.5$  ( mg/L )

#### (5) Turbidity

Expected Reading (NTU)	Display Reading ( NTU )	Tolerance ( % )	Result (a)
0	0.75		Satisfactory
10	10.92	9.2	Satisfactory
20	21.08	5.4	Satisfactory
100	102.32	2.3	Satisfactory
800	786.90	-1.6	Satisfactory

(a) For 0 NTU, Display Reading should be less than 1 NTU

#### Remark(s)

•The "Date of Next Calibration" is recommended according to best practice principals as practiced by QPT or quoted from relevant international standards. •The results relate only to the calibrated equipment as received

•The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.

·"Displayed Reading" denotes the figure shown on item under calibration/ checking regardless of equipment precision or significant figures.

•The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by Quality Pro Test-Consult Ltd. or quoted from relevant international standards.

--- END OF REPORT ---

# Appendix E Environmental Monitoring Schedule

Environmental Monitoring Schedule (October 2024)

Sun	Mon	Tue	Wed	Thur	Fri	Sat
		1	2	3 <b>WQM</b> Mid Flood (09:09) Mid Ebb (13:29)	4	5 <b>WQM, AQM</b> Mid Flood (08:33) Mid Ebb (14:27)
6	7	8 <b>WQM</b> Mid Flood (11:07) Mid Ebb (16:21)	9	10 <b>WQM, AQM, NM</b> Mid Flood (16:40) Mid Ebb (08:54)	11	12 WQM Mid Flood (16:27) Mid Ebb (11:25)
13	14	15 <b>WQM</b> Mid Flood (18:04) Mid Ebb (11:24)	16 AQM, NM	17 <b>WQM</b> Mid Flood (08:34) Mid Ebb (12:53)	18	19 <b>WQM</b> Mid Flood (08:29) Mid Ebb (14:14)
20	21	22 <b>WQM, AQM, NM</b> Mid Flood (11:29) Mid Ebb (16:17)	23 EMB (Day)	24 <b>WQM</b> Mid Flood (17:01) Mid Ebb (09:30)	25	26 *WQM Cancelled
27	28 AQM, NM	29 <b>WQM</b> Mid Flood (17:40) Mid Ebb (11:17)	30 ANRM	31 <b>WQM</b> Mid Flood (08:27) Mid Ebb (12:29)		

Remarks:

- 1. Actual monitoring may be subjected to change due to any safety concern or adverse weather condition.
- 2. Air Quality Monitoring (**AQM**): 3 x 1-hour TSP Monitoring per 6 days.
- 3. Noise Monitoring (NM): Leq (30 min) during between 0700 1900.
- 4. Water Quality Monitoring (**WQM**): Once per day for 3 days per week.
- 5. Ecological Monitoring of Birds (EMB): Once per month.

- 6. Ardeid Night Roost Monitoring (ANRM): Once per month.
- 7. Air Quality Location: AM1 and AM2.
- 8. Noise Monitoring Location: CM1, CM2 and CM3.
- 9. Water Quality Monitoring Location: M1, M2, M3.
- 10.\*Typhoon Signal No. 3 was hoisted on 26 October 2024. Due to safety concerns, the water quality monitoring on 26 October 2024 has been cancelled.

Environmental Monitoring Schedule (November 2024)

Sun	Mon	Tue	Wed	Thur	Fri	Sat
					1	2 <b>WQM, AQM</b> Mid Flood (08:01) Mid Ebb (13:41)
3	4 ANRM	5 <b>WQM, EMB (Day)</b> Mid Flood (10:30) Mid Ebb (15:31)	6	7 <b>WQM</b> Mid Flood (12:55) Mid Ebb (16:59)	8 AQM, NM	9 <b>WQM</b> Mid Flood (17:22) Mid Ebb (09:56)
10	11	12 <b>WQM</b> Mid Flood (17:10) Mid Ebb (09:55)	13	14 <b>WQM, AQM, NM</b> Mid Flood (17:39) Mid Ebb (11:40)	15	16 <b>WQM</b> Mid Flood (09:48) Mid Ebb (13:16)
17	18	19 <b>WQM</b> Mid Flood (10:32) Mid Ebb (15:12)	20 AQM, NM	21 <b>WQM</b> Mid Flood (12:19) Mid Ebb (16:57)	22	23 WQM Mid Flood (14:36) Mid Ebb (09:52)
24	25	26 <b>WQM, AQM, NM</b> Mid Flood (16:15) Mid Ebb (09:45)	27	28 <b>WQM</b> Mid Flood (17:25) Mid Ebb (11:56)	29	30 <b>WQM</b> Mid Flood (09:43) Mid Ebb (12:50)

Remarks:

1. Actual monitoring may be subjected to change due to any safety concern or adverse weather condition.

- 2. Air Quality Monitoring (AQM): 3 x 1-hour TSP Monitoring per 6 days.
- 3. Noise Monitoring (NM): Leq (30 min) during between 0700 1900.

4. Water Quality Monitoring (WQM): Once per day for 3 days per week.

- 5. Ecological Monitoring of Birds (EMB): Once per month.
- 6. Ardeid Night Roost Monitoring (ANRM): Once per month.
- 7. Air Quality Location: AM1 and AM2.
- 8. Noise Monitoring Location: CM1, CM2 and CM3.
- 9. Water Quality Monitoring Location: M1, M2, M3.

Environmental Monitoring Schedule (December 2024)

Sun	Mon	Tue	Wed	Thur	Fri	Sat
1	2 AQM, NM	3 WQM Mid Flood (16:52) Mid Ebb (12:22)	4	5 EMB (Night), ANRM, WQM Mid Flood (09:09) Mid Ebb (13:25)	6	7 <b>AQM, WQM</b> Mid Flood (10:25) Mid Ebb (16:20)
8	9	10 EMB (Day), WQM Mid Flood (10:17) Mid Ebb (15:53)	11	12 <b>WQM</b> Mid Flood (16:47) Mid Ebb (08:40)	13 AQM, NM	14 <b>WQM</b> Mid Flood (18:30) Mid Ebb (12:09)
15	16	17 <b>WQM</b> Mid Flood (18:20) Mid Ebb (11:06)	18	19 <b>AQM, NM, WQM</b> Mid Flood (16:42) Mid Ebb (12:31)	20	21 <b>WQM</b> Mid Flood (10:06) Mid Ebb (13:53)
22	23	24 <b>AQM, NM, WQM</b> Mid Flood (10:56) Mid Ebb (16:14)	25	26 WQM Mid Flood (17:10) Mid Ebb (09:24)	27	28 <b>WQM</b> Mid Flood (18:30) Mid Ebb (09:02)
29	30 AQM, NM	31 WQM Mid Flood (17:32) Mid Ebb (10:50)				

Remarks:

1. Actual monitoring may be subjected to change due to any safety concern or adverse weather condition.

- 2. Air Quality Monitoring (**AQM**): 3 x 1-hour TSP Monitoring per 6 days.
- 3. Noise Monitoring (NM): Leq (30 min) during between 0700 1900.

4. Water Quality Monitoring (WQM): Once per day for 3 days per week.

- 5. Ecological Monitoring of Birds (EMB): Once per month.
- 6. Ardeid Night Roost Monitoring (ANRM): Once per month.
- 7. Air Quality Location: AM1 and AM2.
- 8. Noise Monitoring Location: CM1, CM2 and CM3.
- 9. Water Quality Monitoring Location: M1, M2, M3.

# Appendix F Environmental Monitoring Results

Air Quality Monitoring Results

#### 1-hour TSP Monitoring Result for

Contract No. SPW 02/2023

Environmental Team for Construction of Yuen Long Effluent Polishing Plant Stage 1

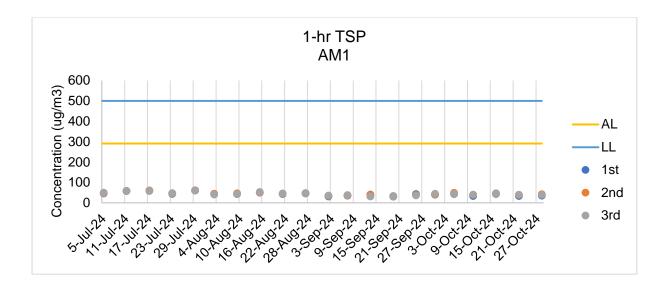
			1	-hour TSP (µg/m	1 <sup>3</sup> )		
Date	Weather	Start	1st	2nd	3rd	Action Level	Limit Level
	Condition	Time	Measurement	Measurement	Measurement	(ug/m <sup>3</sup> )	(ug/m <sup>3</sup>
5/10/2024	sunny	8:10	43	49	45		
10/10/2024	sunny	8:21	34	40	40		
16/10/2024	sunny	8:08	44	46	47	291	500
22/10/2024	sunny	8:30	34	39	40		
28/10/2024	sunny	8:22	35	42	39		
		Min		34			
		Max		49			
		Average		41			

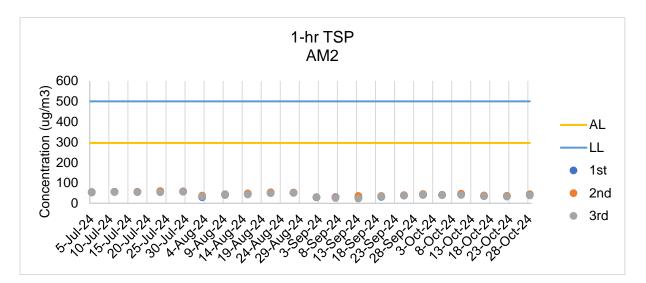
#### AM1 - Topfine Machinery (China) Co. Ltd.

AM2 - Squatter house at the west of Yuen Long STW

-			1	-hour TSP (µg/m	l <sup>3</sup> )		
Date	Weather	Start	1st	2nd	3rd	Action Level	Limit Level
	Condition	Time	Measurement	Measurement	Measurement	(ug/m <sup>3</sup> )	(ug/m <sup>3</sup> )
5/10/2024	sunny	13:11	41	42	40		
10/10/2024	sunny	13:10	44	47	41		
16/10/2024	sunny	13:22	36	39	35	296	500
22/10/2024	sunny	13:00	35	37	33		
28/10/2024	sunny	13:44	44	44	39		
		Min		33			
		Max		47			
		Average		40			

Note: <u>Underline</u>: Exceedance of Action Level <u>Underline and Bold</u>: Exceedance of Limit Level







Noise Monitoring Results

#### Noise Impact Monitoring Result for Contract No. SPW 02/2023 Environmental Team for Construction of Yuen Long Effluent Polishing Plant Stage 1

CM1 - So	uatter	house	to the	north	of YLSTW	ı

		L <sub>eq</sub> 30min	L <sub>10</sub>	L <sub>90</sub>	Wind Speed		Limit Level
Date	Start Time	dB(A)	dB(A)	dB(A)	(m/s)	Weather	dB(A)
10/10/2024	10:24	59.1	60.3	57.2	1.0	sunny	75
16/10/2024	10:25	61.2	63.2	58.4	0.6	sunny	75
22/10/2024	10:30	62.3	63.6	60.3	1.8	sunny	75
28/10/2024	10:29	60.2	61.6	59.3	1.4	sunny	75
	Max	62.3					
	Min	59.1					

#### CM2 - Squatter house to the west of YLSTW

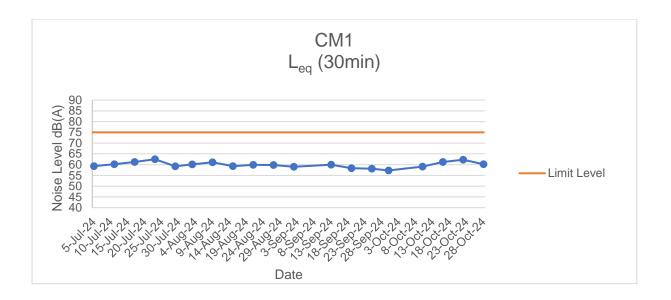
			L <sub>10</sub>	L <sub>90</sub>	Wind Speed		Limit Level
Date	Start Time	L <sub>eq</sub> 30min dB(A)	dB(A)	dB(A)	(m/s)	Weather	dB(A)
10/10/2024	13:10	58.4	60.3	57.4	1.2	sunny	75
16/10/2024	13:22	57.3	59.4	56.4	0.4	sunny	75
22/10/2024	13:00	59.3	61.2	58.4	1.7	sunny	75
28/10/2024	13:44	58.6	59.3	56.4	1.3	sunny	75
	Max	59.3					
	Min	57.3					

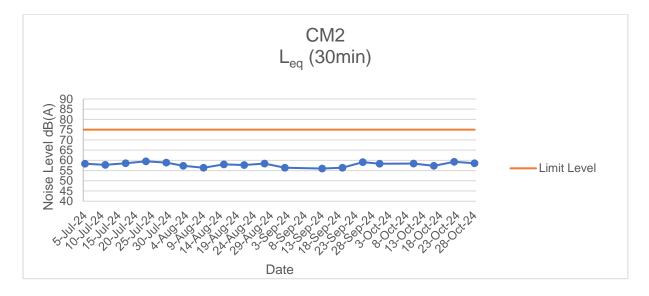
#### CM3 - Squatter house to the east of YLSTW

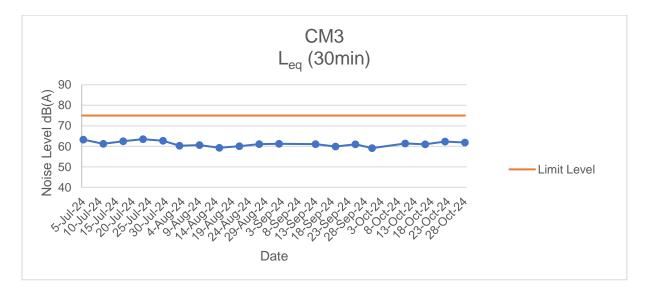
			L <sub>10</sub>	L <sub>90</sub>	Wind Speed		Limit Level
Date	Start Time	L <sub>eq</sub> 30min dB(A)	dB(A)	dB(A)	(m/s)	Weather	dB(A)
10/10/2024	8:52	61.4	63.2	58.3	1.1	sunny	75
16/10/2024	8:31	61.0	62.4	57.4	0.0	sunny	75
22/10/2024	8:54	62.3	64.2	60.4	1.0	sunny	75
28/10/2024	8:48	61.9	62.6	59.4	1.9	sunny	75
	Max	62.3					
	Min	61.0					

Note: CM1, CM2 and CM3: Free-field measurement (+3dB(A) correction has been applied).

No raining or wind with speed over 5 m/s was observed during noise monitoring according to the onsite observation.







**Noise Monitoring Results** 

Water Quality Monitoring Results

						144.4.4			e						In-s	itu Measu	irement						Labor Anal	
Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicat	Current Speed (m/s)	Current Direction (°)	pl	4	Salinit	y (ppt)	Tempe (degr		DO Sat	uration %)	DO (r	ng/L)	Turbidity (NTU)	Total Sus Solids	
										· · /		Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value Ave.	Value	Ave.
M1	3/10/2024	Mid-Flood	Cloudy	Low	13:29	2.5	M	1.25	1	0.087	186.2	7.15	7.15	3.34	3.34	28.9 28.9	28.90	36.4	36.90	2.74	2.78	19.71 19.51	14	13
M1	3/10/2024	Mid-Flood	Cloudy	Low	13:29	2.5	M	1.25	2	0.001	100.2	7.15	1.10	3.34	0.01		20.00	37.4	00.00	2.81	2.10	19.31	11	
M2	3/10/2024	Mid-Flood	Cloudy	Low	13:58	2.1	M	1.05	1	0.084	180.659	7.16	7.17	3.30	3.33	28.9	28.95	35.8	36.40	2.69	2.74	21.08 21.065	14	15
M2	3/10/2024	Mid-Flood	Cloudy	Low	13:58	2.1	M	1.05	2	0.004	100.000	7.17	7.17	3.35	0.00	29	20.00	37.0	00.40	2.78	2.14	21.05	16	10
M3	3/10/2024	Mid-Flood	Cloudy	Low	14:05	1.9	М	0.95	1	0.074	174.037	7.16	7.15	3.63	3.67	28.9	28.90	48.4	49.05	3.64	3.69	35.44 35.23	10	12
M3	3/10/2024	Mid-Flood	Cloudy	Low	14:05	1.9	М	0.95	2	0.074	174.007	7.14	7.15	3.71	5.07	28.9	20.30	49.7	43.05	3.74	5.05	35.02	14	12
M1	3/10/2024	Mid-Ebb	Cloudy	Low	8:33	2.5	М	1.25	1	0.067	310.572	7.16	7.16	3.49	3.54	28.7	28.75	34.2	34.20	2.57	2.57	22.18 22.23	9	12
M1	3/10/2024	Mid-Ebb	Cloudy	Low	8:33	2.5	М	1.25	2	0.007	310.372	7.15	7.10	3.58	5.54	28.8	20.75	34.2	34.20	2.57	2.57	22.28	15	12
M2	3/10/2024	Mid-Ebb	Cloudy	Low	8:00	2	M	1.00	1	0.079	306.281	7.2	7.19	3.55	3.58	28.7	28.70	36.2	36.60	2.72	2.75	21.87 22.01	14	12
M2	3/10/2024	Mid-Ebb	Cloudy	Low	8:01	2	М	1.00	2	0.079	300.201	7.18	7.19	3.6	5.50	28.7	20.70	37.0	30.00	2.78	2.75	22.15	10	12
M3	3/10/2024	Mid-Ebb	Cloudy	Low	8:48	2	M	1.00	1	0.077	336.124	7.13	7.13	3.72	3.76	28.7	28.75	47.2	46.35	3.55	3.49	31.08 31.105	17	10
M3	3/10/2024	Mid-Ebb	Cloudy	Low	8:48	2	М	1.00	2	0.077	330.124	7.12	-	3.8	3.70	28.8	20.75	45.5	40.33	3.42	3.49	31.13	18	10

Remark

1. Orange and Bold: Action Level Exceedance (For Impact Station Only)

2. Red and Bold: Limit Level Exceedance (For Impact Station Only)

3. Action Level for Turbidity: 95%-ile of baseline data or 120% of upstream control station's turbidity recorded on the same day.

4. Limit Level for Turbidity: 99%-ile of baseline data or 130% of upstream control station's turbidity recorded on the same day.

5. Action Level for SS: 95%-ile of baseline data or 120% of upstream control station's SS recorded on the same day.

For Flood Tide						
Monitoring	D	0	N	ΓU	S	S
Location	AL	LL	AL	LL	AL	LL
M2(Impact Station)	1.88	1.79	43.0	52.4	81	112
M3(Impact Station)	3.28	3.14	74	78	104	167
For Ebb Tide						

Monitoring	D	0	N	ΓU	S	
Location	AL	LL	AL	LL	AL	LL
M1(Impact Station)	2.25	1.91	48.4	50.4	59	68

									e						In-s	situ Measu	irement							Labora Anal	
Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicat	Current Speed (m/s)	Current Direction (°)	pl	4	Salinit	y (ppt)	Tempe (degr		DO Sat (%		DO (m	ıg/L)	Turbidity	r (NTU)	Total Sus Solids	
											()	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.
M1	5/10/2024	Mid-Flood	Sunny	Low	14:30	2.7	M	1.35	1	0.076	184.119	7.2	7.19	2.48	2.51	28.1 28.2	28.15	38.3	38.55	2.88	2.90	25.66	25.62	81	74
M1	5/10/2024	Mid-Flood	Sunny	Low	14:31	2.7	M	1.35	2	0.070	104.110	7.18	7.10	2.54	2.01	28.2	20.10	38.8	00.00	2.92	2.00	25.58	20.02	67	14
M2	5/10/2024	Mid-Flood	Sunny	Low	14:52	2.2	M	1.10	1	0.088	169.774	7.22	7.21	2.47	2.51	28.1	28.10	40.7	40.45	3.06	3.04	26.73	26.705	79	69
M2	5/10/2024	Mid-Flood	Sunny	Low	14:52	2.2	М	1.10	2	0.000	103.774	7.2	1.21	2.54	2.01	28.1	20.10	40.2	40.45	3.02	5.04	26.68	20.705	58	03
M3	5/10/2024	Mid-Flood	Sunny	Low	15:03	2.1	М	1.05	1	0.093	175.64	7.23	7.24	2.91	2.90	28.1	28.10	50.3	50.15	3.78	3.77	31.55	31.645	67	74
M3	5/10/2024	Mid-Flood	Sunny	Low	15:03	2.1	M	1.05	2	0.093	175.04	7.25	1.24	2.88	2.90	28.1	20.10	50.0	30.15	3.76	3.11	31.74	31.045	81	/4
M1	5/10/2024	Mid-Ebb	Sunny	Low	8:59	2.6	М	1.30	1	0.074	344,173	7.21	7.21	2.35	2.35	28.0	28.05	39.8	39.90	2.99	3.00	24.55	24.53	54	61
M1	5/10/2024	Mid-Ebb	Sunny	Low	8:59	2.6	М	1.30	2	0.074	344.173	7.2	1.21	2.35	2.55	28.1	20.05	40.0	39.90	3.01	3.00	24.51	24.55	68	01
M2	5/10/2024	Mid-Ebb	Sunny	Low	8:34	2.4	M	1.20	1	0.061	342.322	7.24	7.25	2.34	2.31	28.0	28.00	40.8	40.30	3.07	3.03	25.83	25.67	55	66
M2	5/10/2024	Mid-Ebb	Sunny	Low	8:34	2.4	М	1.20	2	0.001	342.322	7.25	1.25	2.27	2.31	28.0	20.00	39.8	40.30	2.99	3.03	25.51	20.07	77	00
M3	5/10/2024	Mid-Ebb	Sunny	Low	9:11	2.1	М	1.05	1	0.064	332.358	7.26	7.25	2.88	2.90	28.0	28.00	52.5	52.70	3.95	3.97	32.43	32.455	53	62
M3	5/10/2024	Mid-Ebb	Sunny	Low	9:11	2.1	M	1.05	2	0.004	332.330	7.24	1.25	2.91	2.90	28.0	20.00	52.9	52.70	3.98	3.97	32.48	32.435	71	02

Remark

1. Orange and Bold: Action Level Exceedance (For Impact Station Only)

2. Red and Bold: Limit Level Exceedance (For Impact Station Only)

3. Action Level for Turbidity: 95%-ile of baseline data or 120% of upstream control station's turbidity recorded on the same day.

4. Limit Level for Turbidity: 99%-ile of baseline data or 130% of upstream control station's turbidity recorded on the same day.

5. Action Level for SS: 95%-ile of baseline data or 120% of upstream control station's SS recorded on the same day.

For Flood Tide						
Monitoring	D	0	N	ΓU	S	S
Location	AL	LL	AL	LL	AL	LL
M2(Impact Station)	1.88	1.79	43.0	52.4	89	112
M3(Impact Station)	3.28	3.14	74	78	104	167
For Ebb Tide						

Monitoring	D	0	N	ΓU	S	S
Location	AL	LL	AL	LL	AL	LL
M1(Impact Station)	2.25	1.91	48.4	50.4	76.8	83.2

						144.4.4			e						In-s	itu Measu	rement							Labora Anal	
Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicat	Current Speed (m/s)	Current Direction (°)	р	H	Salinity	y (ppt)	Tempe (degr		DO Sat (%	uration %)	DO (n	ng/L)	Turbidity	/ (NTU)	Total Sus Solids	
											()	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.
M1	8/10/2024	Mid-Flood	Sunny	Low	16:21	2.7	M	1.35	1	0.078	161.822	7.08	7.09	2.49	2.52	27.8 27.8	27.80	35.0	35.05	2.63	2.64	18.55	18.71	30	31
M1	8/10/2024	Mid-Flood	Sunny	Low	16:21	2.7	M	1.35	2	0.010	TOTTOLE	7.1	1.00	2.54	2.02		21.00	35.1	00.00	2.64	2.01	18.87	10.11	31	0.
M2	8/10/2024	Mid-Flood	Sunny	Low	16:54	2.4	M	1.20	1	0.086	185.592	7.11	7.11	2.33	2.29	27.8	27.80	37.1	36.55	2.79	2.75	17.48	17.44	34	32
M2	8/10/2024	Mid-Flood	Sunny	Low	16:55	2.4	М	1.20	2	0.000	105.532	7.1	7.11	2.25	2.23	27.8	27.00	36.0	50.55	2.71	2.75	17.4	17.44	30	52
M3	8/10/2024	Mid-Flood	Sunny	Low	17:02	2.1	М	1.05	1	0.092	187.328	7.13	7.12	2.33	2.36	27.8 27.9	27.85	51.6	51.20	3.88	3.85	31.82	31.96	22	25
M3	8/10/2024	Mid-Flood	Sunny	Low	17:02	2.1	M	1.05	2	0.092	107.320	7.11	1.12	2.38	2.30	27.9	27.00	50.8	51.20	3.82	3.05	32.1	31.90	27	25
M1	8/10/2024	Mid-Ebb	Sunny	Low	11:37	2.7	М	1.35	1	0.08	316,481	7.09	7.08	2.36	2.32	27.6	27.60	34.3	33.30	2.58	2.51	18.90	18.775	28	27
M1	8/10/2024	Mid-Ebb	Sunny	Low	11:37	2.7	М	1.35	2	0.08	310.401	7.07	7.00	2.27	2.52	27.6	27.00	32.3	33.30	2.43	2.01	18.65	10.775	25	21
M2	8/10/2024	Mid-Ebb	Sunny	Low	11:07	2.3	M	1.15	1	0.075	338.756	7.11	7.11	2.43	2.45	27.6	27.65	36.3	36.45	2.73	2.74	19.08	18.885	34	37
M2	8/10/2024	Mid-Ebb	Sunny	Low	11:08	2.3	М	1.15	2	0.075	330.730	7.11	7.11	2.46	2.45	27.7	27.05	36.6	30.45	2.75	2.74	18.69	10.005	39	31
M3	8/10/2024	Mid-Ebb	Sunny	Low	11:48	2.1	M	1.05	1	0.07	332.985	7.14	7.14	2.30	2.31	27.6 27.6	27.60	49.1	49.30	3.69	3.71	30.75	30.82	36	38
M3	8/10/2024	Mid-Ebb	Sunny	Low	11:49	2.1	M	1.05	2	0.07	332.905	7.14		2.31	2.31	27.6	27.00	49.5	49.30	3.72	3.71	30.89	30.02	40	30

Remark

1. Orange and Bold: Action Level Exceedance (For Impact Station Only)

2. Red and Bold: Limit Level Exceedance (For Impact Station Only)

3. Action Level for Turbidity: 95%-ile of baseline data or 120% of upstream control station's turbidity recorded on the same day.

4. Limit Level for Turbidity: 99%-ile of baseline data or 130% of upstream control station's turbidity recorded on the same day.

5. Action Level for SS: 95%-ile of baseline data or 120% of upstream control station's SS recorded on the same day.

For Flood Tide						
Monitoring	D	0	N	ΓU	S	S
Location	AL	LL	AL	LL	AL	LL
M2(Impact Station)	1.88	1.79	43.0	52.4	81	112
M3(Impact Station)	3.28	3.14	74	78	104	167
For Ebb Tide						

Monitoring	D	0	N	ΓU	S	S
Location	AL	LL	AL	LL	AL	LL
M1(Impact Station)	2.25	1.91	48.4	50.4	59	68

									e						In-s	situ Measu	irement						Labor Anal	ratory alysis
Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicat	Current Speed (m/s)	Current Direction (°)	pl	4	Salinit	y (ppt)	Tempe (degr		DO Sat	turation %)	DO (r	ng/L)	Turbidity (NTU)	Total Sus Solids	
										( ) )	()	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value Ave.	Value	Ave.
M1	10/10/2024	Mid-Flood	Sunny	Low	8:55	2.6	M	1.30	1	0.077	175.523	7.12	7.12	3.32	3.31	28.6 28.7	28.65	38.6	37.60	2.9	2.83	14.36 14.275	50	35
M1	10/10/2024	Mid-Flood	Sunny	Low	8:56	2.6	M	1.30	2	0.077	110.020	7.12		3.3	0.01		20.00	36.6	01.00	2.75	2.00	14.19	20	00
M2	10/10/2024	Mid-Flood	Sunny	Low	9:31	2.2	M	1.10	1	0.08	179.533	7.11	7.11	3.35	3.36	28.6	28.65	33.9	33.45	2.55	2.52	15.55 15.675	30	27
M2	10/10/2024	Mid-Flood	Sunny	Low	9:31	2.2	M	1.10	2	0.00	170.000	7.1	7.11	3.36	0.00	28.7	20.00	33.0	00.40	2.48	2.02	15.8	24	21
M3	10/10/2024	Mid-Flood	Sunny	Low	9:45	2	M	1.00	1	0.076	180.509	7.14	7.14	3.49	3.49	28.6	28.60	48.5	47.65	3.65	3.59	28.44 28.345	27	32
M3	10/10/2024	Mid-Flood	Sunny	Low	9:45	2	M	1.00	2	0.070	100.303	7.14	7.14	3.48	3.43	28.6	20.00	46.8	47.00	3.52	5.55	28.25	37	52
M1	10/10/2024	Mid-Ebb	Sunny	Low	17:07	2.4	М	1.20	1	0.077	316.205	7.11	7.12	3.18	3.21	28.6 28.6	28.60	38.3	37.65	2.88	2.83	15.69 15.505	30	29
M1	10/10/2024	Mid-Ebb	Sunny	Low	17:08	2.4	М	1.20	2	0.077	310.205	7.12	1.12	3.23	3.21	28.6	20.00	37.0	37.03	2.78	2.05	15.32	28	29
M2	10/10/2024	Mid-Ebb	Sunny	Low	16:40	2.1	M	1.05	1	0.076	333.914	7.19	7.18	3.25	3.27	28.6	28.60	39.4	39.40	2.96	2.96	16.61 16.585	27	29
M2	10/10/2024	Mid-Ebb	Sunny	Low	16:40	2.1	М	1.05	2	0.076	355.914	7.17	1.10	3.29	3.27	28.6	20.00	39.4	39.40	2.96	2.90	16.56	31	29
M3	10/10/2024	Mid-Ebb	Sunny	Low	17:22	1.9	M	0.95	1	0.063	318.083	7.2	7.19	3.46	3.49	28.6	28.60	50.1	50.25	3.77	3.78	29.74 29.705	28	27
M3	10/10/2024	Mid-Ebb	Sunny	Low	17:23	1.9	М	0.95	2	0.003	310.063	7.18	-	3.51	5.49	28.6	20.00	50.4	50.25	3.79	3.70	29.67	26	21

Remark

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2. Red and Bold: Limit Level Exceedance (For Impact Station Only)

3. Action Level for Turbidity: 95%-ile of baseline data or 120% of upstream control station's turbidity recorded on the same day.

4. Limit Level for Turbidity: 99%-ile of baseline data or 130% of upstream control station's turbidity recorded on the same day.

5. Action Level for SS: 95%-ile of baseline data or 120% of upstream control station's SS recorded on the same day.

For Flood Tide						
Monitoring	D	0	N	ΓU	S	S
Location	AL	LL	AL	LL	AL	LL
M2(Impact Station)	1.88	1.79	43.0	52.4	81	112
M3(Impact Station)	3.28	3.14	74	78	104	167
For Ebb Tide						

Monitoring	D	0	N	ΓU	S	S
Location	AL	LL	AL	LL	AL	LL
M1(Impact Station)	2.25	1.91	48.4	50.4	59	68

									Ð					In-s	itu Measu	rement					Labor Anal	
Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicat	Current Speed (m/s)	Current Direction (°)	рН	Salini	y (ppt)	Tempe (degre		DO Saturati (%)	on	DO (mg/L)	Turbidity (NTU)	Total Sus Solids	
										· · /		Value Ave.	Value	Ave.	Value	Ave.	Value A		alue Ave.	Value Ave.	Value	Ave.
M1	12/10/2024	Mid-Flood	Sunny	Low	11:25	2.6	M	1.30	1	0.076	183.503	7.13 7.14	3.58	3.54	27.8 27.8	27.80	37.0 37	00 2	<u>.78</u> 2.78	19.99 20.17	8	8
M1	12/10/2024	Mid-Flood	Sunny	Low	11:26	2.6	M	1.30	2	0.010	100.000	7.15	3.49	0.01		21.00	37.0			20.35	7	Ů
M2	12/10/2024	Mid-Flood	Sunny	Low	11:49	2.2	M	1.10	1	0.095	164.134	7.18 7.19	4.05	4.08	27.8 27.8	27.80	39.1 39		.94 2.90	20.58 20.56	7	10
M2	12/10/2024	Mid-Flood	Sunny	Low	11:51	2.2	М	1.10	2	0.035	104.134	7.2	4.1	4.00	27.8	27.00	38.0	.55 2	.86 2.30	20.54	12	10
M3	12/10/2024	Mid-Flood	Sunny	Low	12:04	1.9	М	0.95	1	0.092	190.798	7.12 7.12	4.48	4.49	27.8	27.80	53.1 50	.10 3	.99 3.92	31.92 31.83	6	0
M3	12/10/2024	Mid-Flood	Sunny	Low	12:04	1.9	М	0.95	2	0.092	190.790	7.11 7.12	4.49	4.43	27.8	27.00	51.1 52	.10 3	.84 3.92	31.74	11	9
M1	12/10/2024	Mid-Ebb	Sunny	Low	16:55	2.5	М	1.25	1	0.063	305.993	7.16 7.17	3.66	3.63	27.5 27.5	27.50	40.6 40	40 3	.05 3.04	20.55 20.46	10	16
M1	12/10/2024	Mid-Ebb	Sunny	Low	16:55	2.5	М	1.25	2	0.005	303.993	7.17	3.6	3.03	27.5	27.50	40.2 40	.40 3	.02 3.04	20.37	21	10
M2	12/10/2024	Mid-Ebb	Sunny	Low	16:27	2	M	1.00	1	0.08	329,704	7.11 7.12	3.85	3.83	27.5 27.6	27.55	41.4	.45 3	.11 3.12	21.44 21.515	13	14
M2	12/10/2024	Mid-Ebb	Sunny	Low	16:28	2	М	1.00	2	0.06	329.704	7.13	3.81	3.03	27.6	21.55	41.5 41	.45 3	.12 3.12	21.59	15	14
M3	12/10/2024	Mid-Ebb	Sunny	Low	17:06	1.9	М	0.95	1	0.076	316.52	7.14 7.15	4.46	4.43	27.5	27.55	54.4	.40 4	.09 4.09	32.26 32.31	18	10
M3	12/10/2024	Mid-Ebb	Sunny	Low	17:07	1.9	М	0.95	2	0.076	510.52	7.16	4.39	4.43	27.6	21.55	54.4	.40 4	.09 4.09	32.36	20	19

Remark

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2. Red and Bold: Limit Level Exceedance (For Impact Station Only)

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4. Limit Level for Turbidity: 99%-ile of baseline data or 130% of upstream control station's turbidity recorded on the same day.

5. Action Level for SS: 95%-ile of baseline data or 120% of upstream control station's SS recorded on the same day.

For Flood Tide						
Monitoring	D	0	N	TU	S	S
Location	AL	LL	AL	LL	AL	LL
M2(Impact Station)	1.88	1.79	43.0	52.4	81	112
M3(Impact Station)	3.28	3.14	74	78	104	167
For Ebb Tide						

Monitoring	D	0	N	ΓU	S	S
Location	AL	LL	AL	LL	AL	LL
M1(Impact Station)	2.25	1.91	48.4	50.4	59	68

						144.4.4			e						In-s	situ Measu	irement						Labora Anal	
Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicat	Current Speed (m/s)	Current Direction (°)	pl	Ŧ	Salinit	y (ppt)	Tempe (degr	erature ee C)	DO Sat (%	uration %)	DO (r	ng/L)	Turbidity (NTU)	Total Sus Solids	
										· · /	.,	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value Ave.	Value	Ave.
M1	15/10/2024	Mid-Flood	Sunny	Low	11:24	2.5	M	1.25	1	0.084	176.993	7.06	7.07	2.69	2.72	27.2 27.3	27.25	37.2	36.40	2.8	2.74	18.55 18.355	35	33
M1	15/10/2024	Mid-Flood	Sunny	Low	11:25	2.5	M	1.25	2	0.001		7.08	1.01	2.75	2.72		21120	35.6	00.10	2.68		18.16	30	
M2	15/10/2024	Mid-Flood	Sunny	Low	11:49	2.1	M	1.05	1	0.085	174,148	7.08	7.09	2.71	2.69	27.2 27.3	27.25	34.8	35.50	2.62	2.67	19.13 19.205	15	16
M2	15/10/2024	Mid-Flood	Sunny	Low	11:49	2.1	М	1.05	2	0.005	174.140	7.09	1.03	2.67	2.03	27.3	21.25	36.2	33.30	2.72	2.07	19.28	16	10
M3	15/10/2024	Mid-Flood	Sunny	Low	12:04	1.9	М	0.95	1	0.094	173,786	7.11	7.11	3.37	3.39	27.2	27.20	47.3	47.40	3.56	3.57	30.59 30.525	15	16
M3	15/10/2024	Mid-Flood	Sunny	Low	12:05	1.9	M	0.95	2	0.094	173.700	7.1	7.11	3.41	3.39	27.2	27.20	47.5	47.40	3.57	3.57	30.46	16	10
M1	15/10/2024	Mid-Ebb	Sunny	Low	18:35	2.5	М	1.25	1	0.075	321.609	7.02	7.02	2.46	2.50	27.0	27.05	33.5	32.80	2.52	2.47	19.71 19.885	15	26
M1	15/10/2024	Mid-Ebb	Sunny	Low	18:35	2.5	М	1.25	2	0.075	521.009	7.02	1.02	2.54	2.50	27.1	27.05	32.1	32.00	2.41	2.47	20.06	36	20
M2	15/10/2024	Mid-Ebb	Sunny	Low	18:04	2.1	М	1.05	1	0.071	312.113	7.09	7.08	2.42	2.46	27.0	27.05	36.3	36.25	2.73	2.73	20.54 20.515	32	35
M2	15/10/2024	Mid-Ebb	Sunny	Low	18:04	2.1	М	1.05	2	0.071	512.115	7.07	1.00	2.49	2.40	27.1	27.05	36.2	30.25	2.72	2.13	20.49 20.515	38	- 55
M3	15/10/2024	Mid-Ebb	Sunny	Low	18:53	2	М	1.00	1	0.077	311.142	7.13	7.13	3.29	3.30	27.0	27.05	51.6	50.75	3.88	3.82	31.18 31.115	42	45
M3	15/10/2024	Mid-Ebb	Sunny	Low	18:53	2	М	1.00	2	0.077	311.142	7.13	1.13	3.31	3.30	27.1	21.05	49.9	50.75	3.75	3.82	31.05	48	40

Remark

1. Orange and Bold: Action Level Exceedance (For Impact Station Only)

2. Red and Bold: Limit Level Exceedance (For Impact Station Only)

3. Action Level for Turbidity: 95%-ile of baseline data or 120% of upstream control station's turbidity recorded on the same day.

4. Limit Level for Turbidity: 99%-ile of baseline data or 130% of upstream control station's turbidity recorded on the same day.

5. Action Level for SS: 95%-ile of baseline data or 120% of upstream control station's SS recorded on the same day.

For Flood Tide						
Monitoring	D	0	N	ΓU	S	S
Location	AL	LL	AL	LL	AL	LL
M2(Impact Station)	1.88	1.79	43.0	52.4	81	112
M3(Impact Station)	3.28	3.14	74	78	104	167
For Ebb Tide						

Monitoring	D	0	N	ΓU	S	S
Location	AL	LL	AL	LL	AL	LL
M1(Impact Station)	2.25	1.91	48.4	50.4	59	68

						144.4.4			e						In-s	itu Measu	irement						Labor Ana	alysis
Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicat	Current Speed (m/s)	Current Direction (°)	pl	Η	Salinit	y (ppt)	Tempe (degr		DO Sat (%	uration %)	DO (n	ng/L)	Turbidity (NTU)	Total Sus Solids	ispended s (mg/L)
										· · /		Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value Ave.	Value	Ave.
M1	17/10/2024	Mid-Flood	Sunny	Low	12:53	2.6	M	1.30	1	0.091	172.475	7.16	7.16	2.44	2.40	28.5 28.6	28.55	38.3	37.45	2.88 2.75	2.82	25.66 25.72	19	19
M1	17/10/2024	Mid-Flood	Sunny	Low	12:53	2.6	M	1.30	2	0.001		7.15		2.36	2.10		20.00	36.6	01110		2.02	25.78	19	
M2	17/10/2024	Mid-Flood	Sunny	Low	13:36	2.2	M	1.10	1	0.093	186.056	7.14	7.14	2.32	2.29	28.5	28.55	39.5	39.95	2.97	3.01	25.80 25.93	36	28
M2	17/10/2024	Mid-Flood	Sunny	Low	13:36	2.2	M	1.10	2	0.000	100.000	7.13	7.14	2.25	2.20	28.6	20.00	40.4	00.00	3.04	0.01	26.06	20	20
M3	17/10/2024	Mid-Flood	Sunny	Low	13:49	1.8	М	0.90	1	0.082	183.688	7.2	7.21	2.99	3.03	28.5	28.50	48.9	48.25	3.68	3.63	34.54 34.40	30	30
M3	17/10/2024	Mid-Flood	Sunny	Low	13:50	1.8	М	0.90	2	0.002	103.000	7.21	1.21	3.07	3.05	28.5	20.00	47.6	40.25	3.58	3.03	34.27	, 29	30
M1	17/10/2024	Mid-Ebb	Sunny	Low	9:05	2.4	М	1.20	1	0.078	328.798	7.18	7.18	2.30	2.34	28.8	28.85	40.2	40.00	3.02	3.01	22.72 22.67	41	46
M1	17/10/2024	Mid-Ebb	Sunny	Low	9:05	2.4	М	1.20	2	0.078	320.790	7.17	1.10	2.37	2.34	28.9	20.00	39.8	40.00	2.99	3.01	22.62	50	40
M2	17/10/2024	Mid-Ebb	Sunny	Low	8:38	2.1	M	1.05	1	0.06	306.672	7.15	7.15	2.32	2.31	28.8	28.85	41.4	41.45	3.11	3.12	23.56 23.73	32	36
M2	17/10/2024	Mid-Ebb	Sunny	Low	8:39	2.1	М	1.05	2	0.06	300.072	7.15	1.15	2.3	2.31	28.9	20.00	41.5	41.45	3.12	J.12	23.91 23.73	40	- 30
M3	17/10/2024	Mid-Ebb	Sunny	Low	9:12	1.9	М	0.95	1	0.063	334.842	7.18	7.18	3.07	3.06	28.8	28.85	50.3	50.90	3.78	3.83	35.70 35.82	50	45
M3	17/10/2024	Mid-Ebb	Sunny	Low	9:12	1.9	M	0.95	2	0.003	334.042	7.18	1.10	3.05	3.00	28.9	20.00	51.5	50.90	3.87	3.65	35.94 35.82	40	40

Remark

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4. Limit Level for Turbidity: 99%-ile of baseline data or 130% of upstream control station's turbidity recorded on the same day.

5. Action Level for SS: 95%-ile of baseline data or 120% of upstream control station's SS recorded on the same day.

For Flood Tide						
Monitoring	D	0	N	TU	S	S
Location	AL	LL	AL	LL	AL	LL
M2(Impact Station)	1.88	1.79	43.0	52.4	81	112
M3(Impact Station)	3.28	3.14	74	78	104	167
For Fbb Tide						

Monitoring	D	0	N	ΓU	S	
Location	AL	LL	AL	LL	AL	LL
M1(Impact Station)	2.25	1.91	48.4	50.4	59	68

						144.4.4			e						In-s	itu Measu	rement							Labora Anal	
Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicat	Current Speed (m/s)	Current Direction (°)	pl	Ŧ	Salinit	y (ppt)	Tempe (degr		DO Sat (%		DO (m	ng/L)	Turbidity	y (NTU)	Total Sus Solids	
										· · /		Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.
M1	19/10/2024	Mid-Flood	Sunny	Low	14:14	2.6	M	1.30	1	0.074	190.053	7.16	7.17	3.15	3.16	28.0 28.1	28.05	37.0 37.2	37.10	2.78	2.79	20.81	20.81	2.5	3
M1	19/10/2024	Mid-Flood	Sunny	Low	14:14	2.6	M	1.30	2	0.07 1	100.000	7.18		3.16	0.10		20.00		00	2.8	2.70	20.81	20.01	2.5	Ű
M2	19/10/2024	Mid-Flood	Sunny	Low	14:43	2.4	M	1.20	1	0.075	171.366	7.18	7.18	3.28	3.28	28.0	28.00	36.7	36.15	2.76	2.72	21.18	21.315	2.5	3
M2	19/10/2024	Mid-Flood	Sunny	Low	14:44	2.4	M	1.20	2	0.010	111.000	7.17	7.10	3.28	0.20	28	20.00	35.6	00.10	2.68	2.72	21.45	21.010	2.5	Ŭ
M3	19/10/2024	Mid-Flood	Sunny	Low	14:59	2	M	1.00	1	0.078	173.319	7.11	7.11	3.48	3.45	28.0	28.05	49.1	48.70	3.69	3.66	32.28	32.23	2.5	3
M3	19/10/2024	Mid-Flood	Sunny	Low	14:59	2	M	1.00	2	0.070	175.515	7.11	7.11	3.42	5.45	28.1	20.00	48.3	40.70	3.63	5.00	32.18	52.25	3	3
M1	19/10/2024	Mid-Ebb	Sunny	Low	8:59	2.4	М	1.20	1	0.074	329.272	7.18	7.19	3.07	3.05	27.8	27.80	39.6	39.20	2.98	2.95	19.83	20	2.5	3
M1	19/10/2024	Mid-Ebb	Sunny	Low	8:59	2.4	М	1.20	2	0.074	323.212	7.19	1.13	3.03	5.05	27.8	27.00	38.8	33.20	2.92	2.35	20.17	20	2.5	3
M2	19/10/2024	Mid-Ebb	Sunny	Low	8:33	2.1	M	1.05	1	0.061	320.774	7.11	7.12	2.91	2.88	27.8 27.8	27.80	41.0	41.45	3.08	3.12	21.78	21.9	2.5	3
M2	19/10/2024	Mid-Ebb	Sunny	Low	8:33	2.1	М	1.05	2	0.001	520.774	7.13	1.12	2.85	2.00	27.8	21.00	41.9	41.40	3.15	0.12	22.02	21.3	2.5	J
M3	19/10/2024	Mid-Ebb	Sunny	Low	9:18	2	M	1.00	1	0.068	339.064	7.2	7.20	3.68	3.69	27.8	27.85	50.8	51.05	3.82	3.84	30.88	30.665	2.5	2
M3	19/10/2024	Mid-Ebb	Sunny	Low	9:18	2	M	1.00	2	0.008	555.004	7.19		3.7	5.09	27.9	21.00	51.3	51.05	3.86	5.04	30.45	50.005	2.5	J

Remark

1. Orange and Bold: Action Level Exceedance (For Impact Station Only)

2. Red and Bold: Limit Level Exceedance (For Impact Station Only)

3. Action Level for Turbidity: 95%-ile of baseline data or 120% of upstream control station's turbidity recorded on the same day.

4. Limit Level for Turbidity: 99%-ile of baseline data or 130% of upstream control station's turbidity recorded on the same day.

5. Action Level for SS: 95%-ile of baseline data or 120% of upstream control station's SS recorded on the same day.

For Flood Tide						
Monitoring	D	0	N	TU	S	S
Location	AL	LL	AL	LL	AL	LL
M2(Impact Station)	1.88	1.79	43.0	52.4	81	112
M3(Impact Station)	3.28	3.14	74	78	104	167
For Ebb Tide						

Monitoring	D	0	N	ΓU	S	
Location	AL	LL	AL	LL	AL	LL
M1(Impact Station)	2.25	1.91	48.4	50.4	59	68

						144.4.4			e						In-s	situ Measu	irement						Labor Ana	ratory alysis
Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicat	Current Speed (m/s)	Current Direction (°)	pl	Ŧ	Salinit	y (ppt)	Tempe (degr	erature ee C)	DO Sat (%	uration %)	DO (n	ng/L)	Turbidity (NTU)	Total Sus Solids	spended (mg/L)
										· · /		Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value Ave.	Value	Ave.
M1	22/10/2024	Mid-Flood	Sunny	Low	9:32	2.5	M	1.25	1	0.089	179.273	7.13	7.13	2.69	2.72	28.0	28.00	41.4	41.45	3.11	3.12	16.78 16.565	41	38
M1	22/10/2024	Mid-Flood	Sunny	Low	9:32	2.5	M	1.25	2	0.000	110.210	7.13	1110	2.74	2.72	28	20.00	41.5	11110	3.12	0.12	16.35	34	00
M2	22/10/2024	Mid-Flood	Sunny	Low	9:51	2.1	M	1.05	1	0.091	175.861	7.13	7.14	2.73	2.70	28.0	28.05	42.3	42.90	3.18	3.23	17.75 17.56	40	34
M2	22/10/2024	Mid-Flood	Sunny	Low	9:51	2.1	М	1.05	2	0.031	175.001	7.14	7.14	2.66	2.70	28.1	20.00	43.5	42.30	3.27	5.25	17.37	28	34
M3	22/10/2024	Mid-Flood	Sunny	Low	10:06	1.9	М	0.95	1	0.089	161.938	7.19	7.18	3.34	3.31	28.0	28.00	50.7	49.80	3.81	3.75	30.11 30.05	22	33
M3	22/10/2024	Mid-Flood	Sunny	Low	10:06	1.9	М	0.95	2	0.003	101.330	7.17	1.10	3.28	3.51	28	20.00	48.9	43.00	3.68	5.75	29.99	44	- 55
M1	22/10/2024	Mid-Ebb	Sunny	Low	17:35	2.4	М	1.20	1	0.077	303.883	7.2	7.21	3.81	3.80	27.8 27.9	27.85	42.8	43.10	3.22	3.24	18.84 18.69	28	39
M1	22/10/2024	Mid-Ebb	Sunny	Low	17:36	2.4	М	1.20	2	0.077	303.863	7.22	1.21	3.78	3.00	27.9	27.00	43.4	43.10	3.26	3.24	18.55	49	39
M2	22/10/2024	Mid-Ebb	Sunny	Low	17:01	2	M	1.00	1	0.062	337.13	7.16	7.17	2.48	2.52	27.8	27.85	42.0	41.00	3.16	3.09	18.12 18.06	40	38
M2	22/10/2024	Mid-Ebb	Sunny	Low	17:01	2	М	1.00	2	0.002	337.13	7.18	7.17	2.55	2.52	27.9	27.00	40.0	41.00	3.01	3.09	18.01	36	30
M3	22/10/2024	Mid-Ebb	Sunny	Low	17:55	1.9	M	0.95	1	0.067	344.014	7.12	7.13	3.40	3.44	27.8	27.85	53.1	52.95	3.99	3.98	28.55 28.57	25	34
M3	22/10/2024	Mid-Ebb	Sunny	Low	17:55	1.9	М	0.95	2	0.007	344.014	7.13	-	3.48	3.44	27.9	21.00	52.8	52.95	3.97	3.90	28.6	43	34

Remark

1. Orange and Bold: Action Level Exceedance (For Impact Station Only)

2. Red and Bold: Limit Level Exceedance (For Impact Station Only)

3. Action Level for Turbidity: 95%-ile of baseline data or 120% of upstream control station's turbidity recorded on the same day.

4. Limit Level for Turbidity: 99%-ile of baseline data or 130% of upstream control station's turbidity recorded on the same day.

5. Action Level for SS: 95%-ile of baseline data or 120% of upstream control station's SS recorded on the same day.

For Flood Tide						
Monitoring	D	0	N	ΓU	S	S
Location	AL	LL	AL	LL	AL	LL
M2(Impact Station)	1.88	1.79	43.0	52.4	81	112
M3(Impact Station)	3.28	3.14	74	78	104	167
For Ebb Tide						

Monitoring	D	0	N	ΓU	S	
Location	AL	LL	AL	LL	AL	LL
M1(Impact Station)	2.25	1.91	48.4	50.4	59	68

									e						In-s	itu Measu	irement						Labor Ana	alysis
Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicat	Current Speed (m/s)	Current Direction (°)	pl	Ŧ	Salinit	y (ppt)	Tempe (degr		DO Sat	uration %)	DO (r	ng/L)	Turbidity (NTU)	Total Su Solids	ispended s (mg/L)
										· · /		Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value Ave.	Value	Ave.
M1	24/10/2024	Mid-Flood	Sunny	Low	9:32	2.5	M	1.25	1	0.084	189.371	7.15	7.16	2.88	2.92	28.7 28.8	28.75	35.9	36.15	2.7	2.67	12.56 12.605	23	26
M1	24/10/2024	Mid-Flood	Sunny	Low	9:32	2.5	M	1.25	2	0.001	100.011	7.17	1110	2.95	2.02		20.10	36.4	00.10	2.63	2.01	12.65	28	20
M2	24/10/2024	Mid-Flood	Sunny	Low	10:01	2.1	M	1.05	1	0.095	186.827	7.12	7.12	2.98	3.01	28.7	28.75	35.4	34.70	2.66	2.59	14.55 14.33	67	64
M2	24/10/2024	Mid-Flood	Sunny	Low	10:01	2.1	M	1.05	2	0.000	100.021	7.11	1.12	3.04	0.01	28.8	20.10	34.0	04.70	2.52	2.00	14.11	60	04
M3	24/10/2024	Mid-Flood	Sunny	Low	10:13	1.9	М	0.95	1	0.086	188.382	7.2	7.21	3.37	3.38	28.7	28.70	46.8	46.70	3.52	3.48	26.55 26.72	18	17
M3	24/10/2024	Mid-Flood	Sunny	Low	10:13	1.9	М	0.95	2	0.000	100.302	7.21	1.21	3.39	5.50	28.7	20.70	46.6	40.70	3.44	5.40	26.89	16	17
M1	24/10/2024	Mid-Ebb	Sunny	Low	17:36	2.5	М	1.25	1	0.063	334.711	7.2	7.21	2.58	2.61	28.7 28.7	28.70	39.2	39.60	2.95	2.88	13.69 13.78	19	21
M1	24/10/2024	Mid-Ebb	Sunny	Low	17:38	2.5	М	1.25	2	0.003	334.711	7.22	1.21	2.63	2.01	28.7	20.70	40.0	39.00	2.81	2.00	13.87	23	21
M2	24/10/2024	Mid-Ebb	Sunny	Low	17:01	2.1	M	1.05	1	0.08	339.829	7.13	7.13	2.76	2.75	28.7	28.75	41.0	40.80	3.08	3.06	15.11 15.17	63	56
M2	24/10/2024	Mid-Ebb	Sunny	Low	17:01	2.1	М	1.05	2	0.06	339.029	7.12	1.15	2.73	2.75	28.8	20.75	40.6	40.00	3.03	3.00	15.23	49	50
M3	24/10/2024	Mid-Ebb	Sunny	Low	17:55	2	М	1.00	1	0.071	304.248	7.18	7.19	3.55	3.54	28.7	28.75	48.9	49.65	3.68	3.64	25.48 25.5	86	81
M3	24/10/2024	Mid-Ebb	Sunny	Low	17:56	2	М	1.00	2	0.071	304.240	7.19	-	3.53	3.54	28.8	20.75	50.4	49.00	3.59	3.04	25.52 25.5	76	01

Remark

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4. Limit Level for Turbidity: 99%-ile of baseline data or 130% of upstream control station's turbidity recorded on the same day.

5. Action Level for SS: 95%-ile of baseline data or 120% of upstream control station's SS recorded on the same day.

For Flood Tide						
Monitoring	D	0	N	ΓU	S	S
Location	AL	LL	AL	LL	AL	LL
M2(Impact Station)	1.88	1.79	43.0	52.4	81	112
M3(Impact Station)	3.28	3.14	74	78	104	167
For Fbb Tide						

Monitoring	D	0	N	ΓU	S	S
Location	AL	LL	AL	LL	AL	LL
M1(Impact Station)	2.25	1.91	48.4	50.4	82.2	89.05

						144.4.4			e						In-s	situ Measu	irement						Labor Anal	
Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicat	Current Speed (m/s)	Current Direction (°)	pl	ł	Salinit	y (ppt)	Tempe (degr		DO Sat (%	uration %)	DO (n	ng/L)	Turbidity (NTU)	Total Sus Solids	
											.,	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value Ave.	Value	Ave.
M1	29/10/2024	Mid-Flood	Sunny	Low	11:17	2.6	M	1.30	1	0.086	181.742	7.16	7.15	3.66	3.65	27.4 27.5	27.45	42.3	41.90	3.18	3.15	25.55 25.59	13	14
M1	29/10/2024	Mid-Flood	Sunny	Low	11:17	2.6	M	1.30	2			7.14		3.64				41.5		3.12		25.63	15	
M2	29/10/2024	Mid-Flood	Sunny	Low	11:48	2.2	M	1.10	1	0.093	181.822	7.14	7.14	3.84	3.84	27.4	27.40	43.2	42.80	3.25	3.22	26.67 26.64	12	14
M2	29/10/2024	Mid-Flood	Sunny	Low	11:48	2.2	M	1.10	2	0.000	101.022	7.14	7.14	3.84	0.04	27.4	21.40	42.4	42.00	3.19	0.22	26.61	15	
M3	29/10/2024	Mid-Flood	Sunny	Low	12:01	1.8	М	0.90	1	0.089	166.461	7.18	7.18	4.12	4.11	27.4	27.40	50.3	50.50	3.78	3.80	31.87 31.9	18	10
M3	29/10/2024	Mid-Flood	Sunny	Low	12:01	1.8	M	0.90	2	0.009	100.401	7.18	1.10	4.1	4.11	27.4	27.40	50.7	50.50	3.81	3.00	31.93	17	10
M1	29/10/2024	Mid-Ebb	Sunny	Low	18:11	2.4	М	1.20	1	0.058	308.602	7.14	7.15	3.75	3.77	27.6 27.7	27.65	39.2	39.90	2.95	3.00	26.62 26.63	15	10
M1	29/10/2024	Mid-Ebb	Sunny	Low	18:12	2.4	М	1.20	2	0.056	300.002	7.15	7.15	3.78	3.11	27.7	27.00	40.6	39.90	3.05	3.00	26.64 20.03	23	19
M2	29/10/2024	Mid-Ebb	Sunny	Low	17:40	2	М	1.00	1	0.068	320.53	7.11	7.12	3.83	3.80	27.6	27.65	41.4	41.80	3.11	3.14	27.84 27.795	28	26
M2	29/10/2024	Mid-Ebb	Sunny	Low	17:40	2	М	1.00	2	0.000	520.55	7.13	1.12	3.77	3.60	27.7	27.00	42.2	41.00	3.17	5.14	27.75	24	20
M3	29/10/2024	Mid-Ebb	Sunny	Low	18:26	1.9	М	0.95	1	0.074	343.123	7.19	7.20	4.30	4.32	27.6	27.60	52.3	52.20	3.93	3.93	38.79 38.955	14	14
M3	29/10/2024	Mid-Ebb	Sunny	Low	18:26	1.9	М	0.95	2	0.074	343.123	7.21	1.20	4.34	4.32	27.6	21.00	52.1	52.20	3.92	5.95	39.12 38.955	14	14

Remark

1. Orange and Bold: Action Level Exceedance (For Impact Station Only)

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4. Limit Level for Turbidity: 99%-ile of baseline data or 130% of upstream control station's turbidity recorded on the same day.

5. Action Level for SS: 95%-ile of baseline data or 120% of upstream control station's SS recorded on the same day.

For Flood Tide						
Monitoring	D	0	N	TU	S	S
Location	AL	LL	AL	LL	AL	LL
M2(Impact Station)	1.88	1.79	43.0	52.4	81	112
M3(Impact Station)	3.28	3.14	74	78	104	167
For Ebb Tide						

Monitoring	D	0	N	ΓU	S	S
Location	AL	LL	AL	LL	AL	LL
M1(Impact Station)	2.25	1.91	48.4	50.4	59	68

						144.4.4			e						In-s	situ Measu	irement						Labor Anal	
Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicat	Current Speed (m/s)	Current Direction (°)	pl	Ŧ	Salinit	y (ppt)	Tempe (degr	erature ee C)	DO Sat (%	uration %)	DO (n	ng/L)	Turbidity (NTU)	Total Sus Solids	
										. ,	.,	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value Ave.	Value	Ave.
M1	31/10/2024	Mid-Flood	Sunny	Low	12:31	2.6	M	1.30	1	0.084	176.599	7.2	7.20	2.85	2.83	28.9	28.95	39.8	40.05	2.99 3.03	3.01	16.94 16.91	23	19
M1	31/10/2024	Mid-Flood	Sunny	Low	12:31	2.6	M	1.30	2	0.001		7.2	1.20	2.81	2.00	29	20.00	40.3	10.00		0.01	16.88	14	
M2	31/10/2024	Mid-Flood	Sunny	Low	13:01	2.2	M	1.10	1	0.08	183.277	7.18	7.17	2.80	2.84	28.9	28.90	41.0	41.45	3.08	3.12	17.55 17.69	17	18
M2	31/10/2024	Mid-Flood	Sunny	Low	13:02	2.2	М	1.10	2	0.00	103.277	7.16	1.11	2.88	2.04	28.9	20.30	41.9	41.45	3.15	5.12	17.83	18	10
M3	31/10/2024	Mid-Flood	Sunny	Low	13:16	1.9	М	0.95	1	0.091	187.998	7.19	7.20	3.46	3.44	28.9	28.95	50.1	50.70	3.77	3.82	31.15 31.15	15	16
M3	31/10/2024	Mid-Flood	Sunny	Low	13:16	1.9	M	0.95	2	0.091	107.990	7.21	1.20	3.42	3.44	29	20.95	51.3	30.70	3.86	3.02	31.15	16	10
M1	31/10/2024	Mid-Ebb	Sunny	Low	8:55	2.5	М	1.25	1	0.06	315.991	7.18	7.19	3.02	3.03	28.7	28.75	41.4	40.65	3.11	3.06	17.93 18.005	16	10
M1	31/10/2024	Mid-Ebb	Sunny	Low	8:55	2.5	М	1.25	2	0.00	315.551	7.2	1.15	3.03	3.03	28.8	20.75	39.9	40.05	3	5.00	18.08	21	19
M2	31/10/2024	Mid-Ebb	Sunny	Low	8:27	2.2	М	1.10	1	0.079	330.843	7.16	7.16	2.99	3.03	28.7	28.70	43.1	42.70	3.24	3.21	18.16 18.13	21	23
M2	31/10/2024	Mid-Ebb	Sunny	Low	8:27	2.2	М	1.10	2	0.079	330.643	7.16	1.10	3.06	3.03	28.7	20.70	42.3	42.70	3.18	3.21	18.1	24	23
M3	31/10/2024	Mid-Ebb	Sunny	Low	9:11	2	М	1.00	1	0.065	308.782	7.17	7.17	3.58	3.63	28.7	28.75	51.2	51.00	3.85	3.84	32.28 32.09	22	23
M3	31/10/2024	Mid-Ebb	Sunny	Low	9:11	2	М	1.00	2	0.065	300.762	7.16	7.17	3.67	3.03	28.8	20.75	50.8	51.00	3.82	3.04	31.9 32.09	24	23

Remark

1. Orange and Bold: Action Level Exceedance (For Impact Station Only)

2. Red and Bold: Limit Level Exceedance (For Impact Station Only)

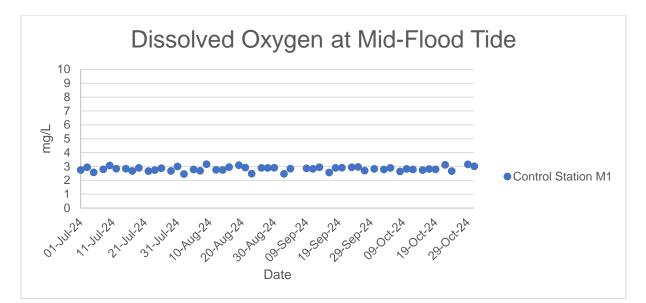
3. Action Level for Turbidity: 95%-ile of baseline data or 120% of upstream control station's turbidity recorded on the same day.

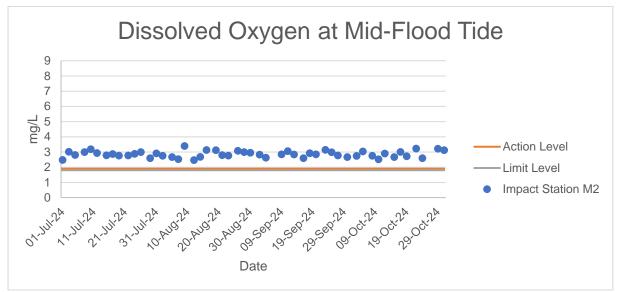
4. Limit Level for Turbidity: 99%-ile of baseline data or 130% of upstream control station's turbidity recorded on the same day.

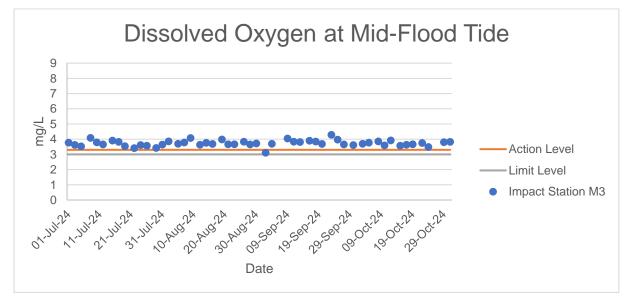
5. Action Level for SS: 95%-ile of baseline data or 120% of upstream control station's SS recorded on the same day.

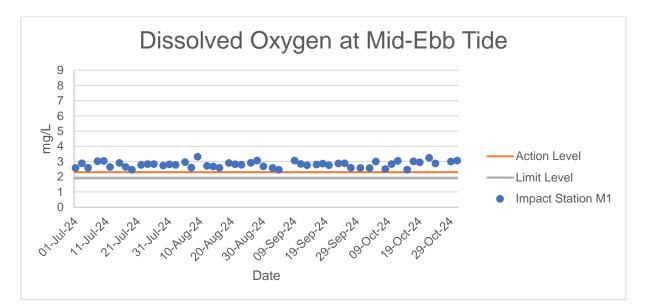
For Flood Tide						
Monitoring	D	0	N	TU	S	S
Location	AL	LL	AL	LL	AL	LL
M2(Impact Station)	1.88	1.79	43.0	52.4	81	112
M3(Impact Station)	3.28	3.14	74	78	104	167
For Ebb Tide						

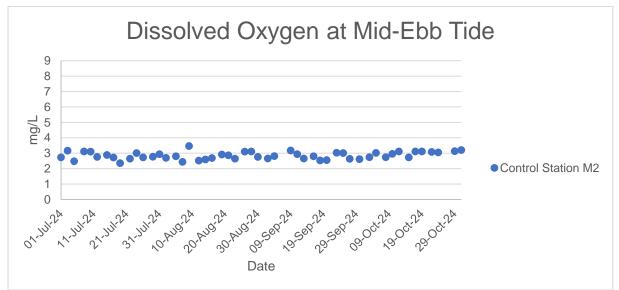
Monitoring	D	0	N	ΓU	S	
Location	AL	LL	AL	LL	AL	LL
M1(Impact Station)	2.25	1.91	48.4	50.4	59	68

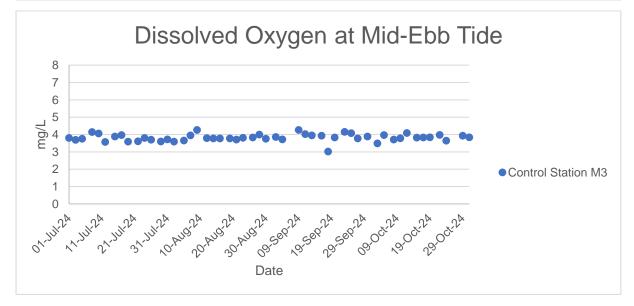


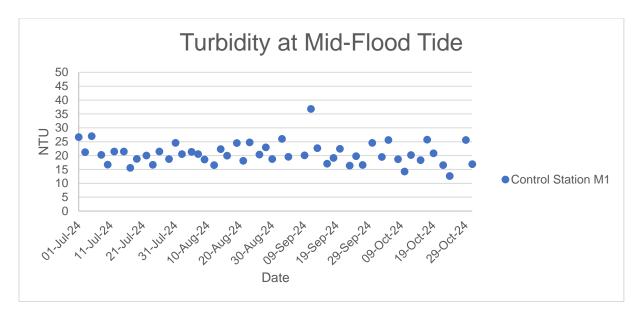


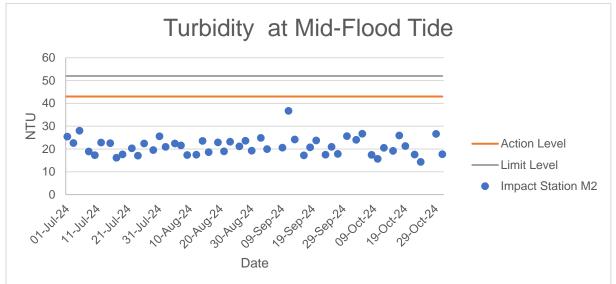


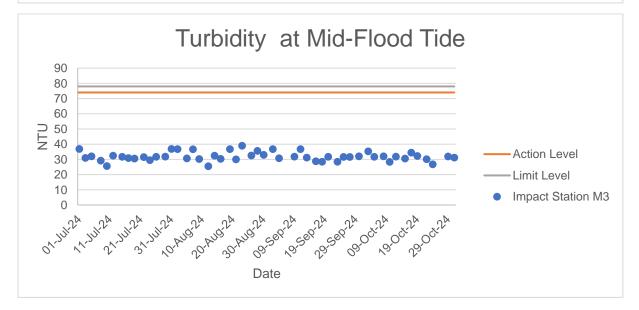


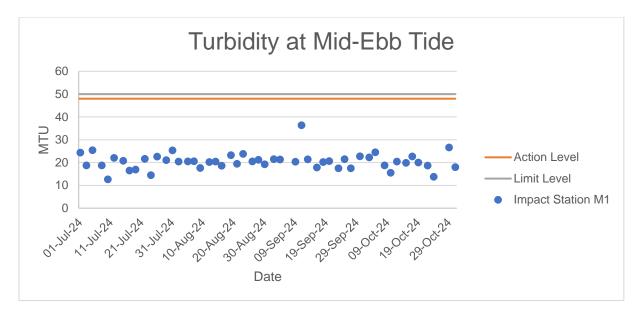


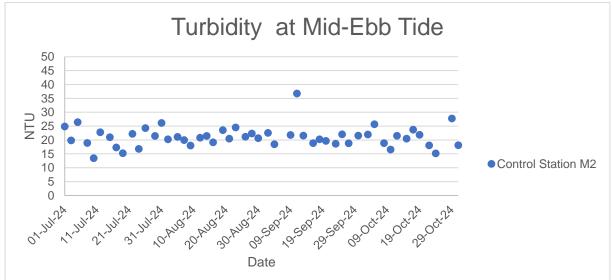


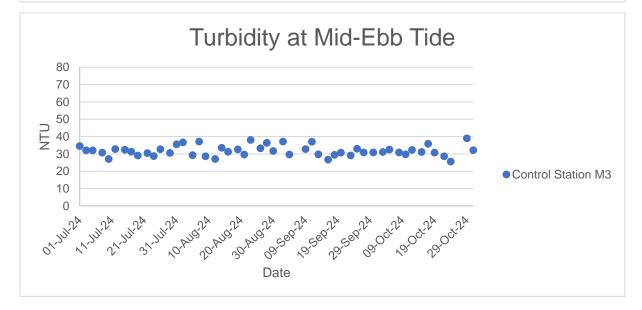


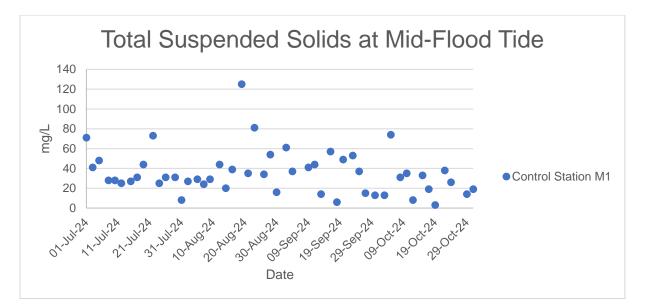


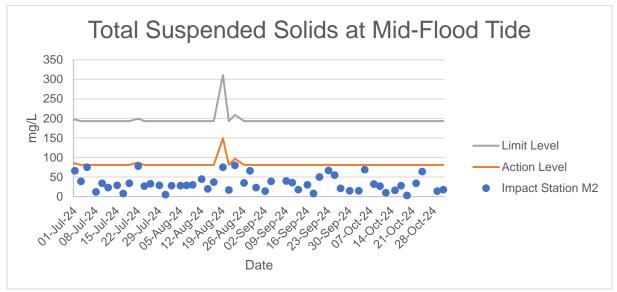


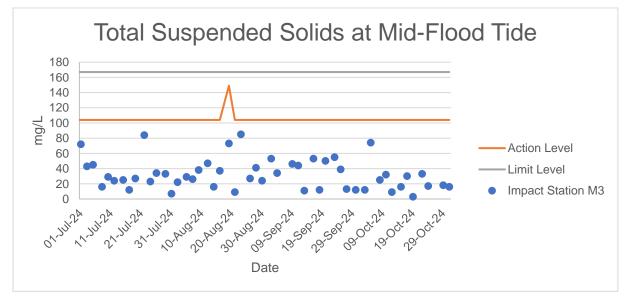


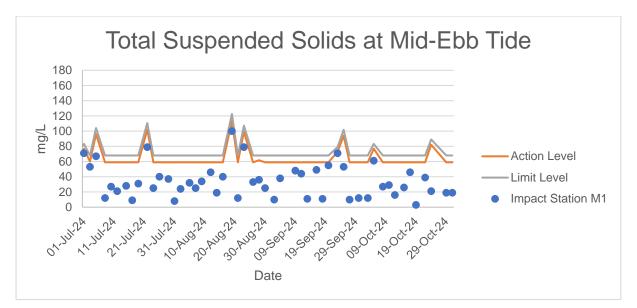


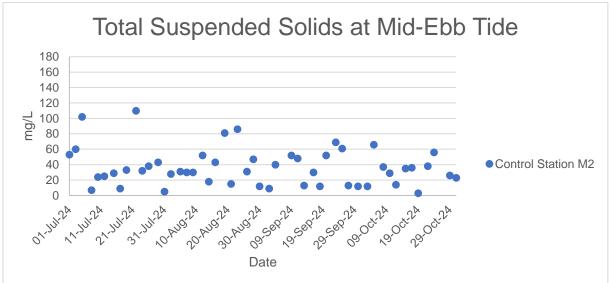














Ecology Monitoring Results for Contract No. SPW 02/2023 Environmental Team for Construction of Yuen long Effluent Polishing Plant Stage 1

Date (dd/mm/yyyy)	Daytime/ Night time	Season	Area	Transect / Point Count	Point Count (Location) / Transect	Common Name	Scientific Name	Abundance	Distribution in Hong Kong <sup>2</sup>	Principal Status <sup>3</sup>	Level of Concern <sup>4</sup>	Protection Status in China <sup>5</sup>	China Red Data Book <sup>6</sup>	Red List of China's Vertebrates <sup>9</sup>	IUCN Red List <sup>7</sup> (v.2020-3)	Species of Conservation Importance	Wetland Dependent <sup>8</sup>
23/10/2024	Daytime	Wet	FLW	Point Count	FLW1	Little Grebe	Tachybaptus ruficollis	2	Common	R	LC	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	FLW	Point Count	FLW1	Little Egret	Egretta garzetta	1	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	FLW	Point Count	FLW1	Great Cormorant	Phalacrocorax carbo	1	Common	WV	PRC	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	FLW	Point Count	FLW1	Little Ringed Plover	Charadrius dubius	4	Common	WV,PM	(LC)	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	FLW	Point Count	FLW1	Common Snipe	Gallinago gallinago	3	Common	PM,WV	-	-	-	LC	LC	Ν	Y
23/10/2024	Daytime	Wet	FLW	Point Count	FLW1	Common Sandpiper	Actitis hypoleucos	2	Common	PM,WV	-	-	-	LC	LC	Ν	Y
23/10/2024	Daytime	Wet	FLW	Point Count	FLW1	Green Sandpiper	Tringa ochropus	1	Uncommon	PM,WV	-	-	-	LC	LC	Ν	Y
23/10/2024	Daytime	Wet	FLW	Point Count	FLW1	Spotted Dove	Spilopelia chinensis	2	Abundant	R	-	-	-	LC	LC	Ν	Ν
23/10/2024	Daytime	Wet	FLW	Point Count	FLW1	White-throated Kingfisher	Halcyon smyrnensis	1	Common	R	-	-	-	LC	LC	Υ	Y
23/10/2024	Daytime	Wet	FLW	Point Count	FLW1	Plain Prinia	Prinia inornata	1	Common	R	-	-	-	LC	LC	Ν	Ν
23/10/2024	Daytime	Wet	FLW	Point Count	FLW1	Crested Myna	Acridotheres cristatellus	2	Common	R	-	-	-	LC	LC	Ν	Ν
23/10/2024	Daytime	Wet	FLW	Point Count	FLW1	Black-collared Starling	Gracupica nigricollis	3	Common	R	-	-	-	LC	LC	Ν	Ν
23/10/2024	Daytime	Wet	FLW	Point Count	FLW1	Stejneger's Stonechat	Saxicola stejnegeri	1	Common	PM,WV	-	-	-	LC	LC	Ν	N
23/10/2024	Daytime	Wet	FLW	Point Count	FLW1	White Wagtail	Motacilla alba	4	Common	PM,WV	-	-	-	LC	LC	Ν	Ν
23/10/2024	Daytime	Wet	FLW	Point Count	FLW2	Chinese Pond Heron	Ardeola bacchus	4	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	FLW	Point Count	FLW2	Little Egret	Egretta garzetta	13	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	FLW	Point Count	FLW2	Black-winged Stilt	Himantopus himantopus	4	Common	PM	RC	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	FLW	Point Count	FLW2	Little Ringed Plover	Charadrius dubius	1	Common	WV,PM	(LC)	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	FLW	Point Count	FLW2	Eurasian Collared Dove	Streptopelia decaocto	1	Common	-	-	-	-	LC	LC	Ν	Ν
23/10/2024	Daytime	Wet	FLW	Point Count	FLW2	Spotted Dove	Spilopelia chinensis	2	Abundant	R	-	-	-	LC	LC	Ν	Ν
23/10/2024	Daytime	Wet	FLW	Point Count	FLW2	Crested Myna	Acridotheres cristatellus	4	Common	R	-	-	-	LC	LC	Ν	Ν
23/10/2024	Daytime	Wet	FLW	Point Count	FLW2	White Wagtail	Motacilla alba	2	Common	PM,WV	-	-	-	LC	LC	Ν	Ν
23/10/2024	Daytime	Wet	FLW	Point Count	FLW3	Little Egret	Egretta garzetta	1	Common	R	PRC (RC)	-	-	LC	LC	Υ	Y
23/10/2024	Daytime	Wet	FLW	Point Count	FLW3	Black Kite	Milvus migrans	2	Common	R,WV	(RC)	Class II	-	LC	LC	Υ	Y

Date (dd/mm/yyyy)	Daytime/ Night time	Season	Area	Transect / Point Count	Point Count (Location) / Transect	Common Name	Scientific Name	Abundance	Distribution in Hong Kong <sup>2</sup>	Principal Status <sup>3</sup>	Level of Concern <sup>4</sup>	Protection Status in China <sup>5</sup>	China Red Data Book <sup>6</sup>	Red List of China's Vertebrates <sup>9</sup>	IUCN Red List <sup>7</sup> (v.2020-3)	Species of Conservation Importance	Wetland Dependent <sup>8</sup>
23/10/2024	Daytime	Wet	FLW	Point Count	FLW3	White-throated Kingfisher	Halcyon smyrnensis	1	Common	R	-	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	FLW	Point Count	FLW3	Crested Myna	Acridotheres cristatellus	20	Common	R	-	-	-	LC	LC	Ν	N
23/10/2024	Daytime	Wet	FLW	Point Count	FLW4	Little Grebe	Tachybaptus ruficollis	2	Common	R	LC	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	FLW	Point Count	FLW4	Chinese Pond Heron	Ardeola bacchus	1	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	FLW	Point Count	FLW4	White-throated Kingfisher	Halcyon smyrnensis	1	Common	R	-	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	FLW	Point Count	FLW4	Stejneger's Stonechat	Saxicola stejnegeri	2	Common	PM,WV	-	-	-	LC	LC	Ν	N
23/10/2024	Daytime	Wet	FLW	Point Count	FLW5	Yellow Bittern	lxobrychus sinensis	1	Uncommon	PM,SV	(LC)	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	FLW	Point Count	FLW5	Chinese Pond Heron	Ardeola bacchus	4	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	FLW	Point Count	FLW5	Eastern Cattle Egret	Bubulcus coromandus	4	Common	R.PM	-	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	FLW	Point Count	FLW5	Great Cormorant	Phalacrocorax carbo	3	Common	WV	PRC	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	FLW	Point Count	FLW5	Black-winged Stilt	Himantopus himantopus	1	Common	PM	RC	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	FLW	Point Count	FLW5	Spotted Dove	Spilopelia chinensis	1	Abundant	R	-	-	-	LC	LC	Ν	N
23/10/2024	Daytime	Wet	FLW	Point Count	FLW5	Crested Myna	Acridotheres cristatellus	25	Common	R	-	-	-	LC	LC	Ν	N
23/10/2024	Daytime	Wet	FLW	Point Count	FLW5	Common Myna	Acridotheres tristis	3	Uncommon	R	-	-	-	LC	LC	Ν	N
23/10/2024	Daytime	Wet	FLW	Point Count	FLW5	Red-billed Starling	Spodiopsar sericeus	3	Common	WV	GC	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	FLW	Point Count	FLW5	Eastern Yellow Wagtail	Motacilla tschutschensis	1	Common	PM,WV	-	-	-	LC	LC	Ν	N
23/10/2024	Daytime	Wet	FLW	Point Count	FLW6	Great Egret	Ardea alba	1	Common	R,WV	PRC (RC)	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	FLW	Point Count	FLW6	Black-collared Starling	Gracupica nigricollis	5	Common	R	-	-	-	LC	LC	Ν	N
23/10/2024	Daytime	Wet	FLW	Point Count	FLW7	Chinese Pond Heron	Ardeola bacchus	2	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	FLW	Point Count	FLW7	Little Egret	Egretta garzetta	1	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	FLW	Point Count	FLW7	Great Cormorant	Phalacrocorax carbo	2	Common	WV	PRC	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	FLW	Point Count	FLW7	Spotted Dove	Spilopelia chinensis	1	Abundant	R	-	-	-	LC	LC	Ν	N
23/10/2024	Daytime	Wet	FLW	Point Count	FLW7	Black Drongo	Dicrurus macrocercus	2	Common	SV	-	-	-	LC	LC	Ν	N
23/10/2024	Daytime	Wet	FLW	Point Count	FLW7	Black-collared Starling	Gracupica nigricollis	4	Common	R	-	-	-	LC	LC	Ν	N

Date (dd/mm/yyyy)	Daytime/ Night time	Season	Area	Transect / Point Count	Point Count (Location) / Transect	Common Name	Scientific Name	Abundance	Distribution in Hong Kong <sup>2</sup>	Principal Status <sup>3</sup>	Level of Concern <sup>4</sup>	Protection Status in China <sup>5</sup>	China Red Data Book <sup>6</sup>	Red List of China's Vertebrates <sup>9</sup>	IUCN Red List <sup>7</sup> (v.2020-3)	Species of Conservation Importance	Wetland Dependent <sup>8</sup>
23/10/2024	Daytime	Wet	FLW	Point Count	FLW7	Oriental Magpie Robin	Copsychus saularis	1	Abundant	R	-	-	-	LC	LC	Ν	N
23/10/2024	Daytime	Wet	FLW	Point Count	FLW7	Scaly-breasted Munia	Lonchura punctulata	4	Common	R	-	-	-	LC	LC	Ν	N
23/10/2024	Daytime	Wet	FLW	Transect	FLW	Great Cormorant	Phalacrocorax carbo	1	Common	WV	PRC	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	FLW	Transect	FLW	Spotted Dove	Spilopelia chinensis	1	Abundant	R	-	-	-	LC	LC	Ν	N
23/10/2024	Daytime	Wet	FLW	Transect	FLW	Greater Coucal	Centropus sinensis	1	Common	R	-	Class II	VU	LC	LC	Y	N
23/10/2024	Daytime	Wet	FLW	Transect	FLW	Pied Kingfisher	Ceryle rudis	1	Uncommon	R	-	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	FLW	Transect	FLW	Collared Crow	Corvus torquatus	1	Uncommon	R	LC	-	-	NT	VU	Y	Y
23/10/2024	Daytime	Wet	FLW	Transect	FLW	Red-whiskered Bulbul	Pycnonotus jocosus	2	Abundant	R	-	-	-	LC	LC	N	N
23/10/2024	Daytime	Wet	FLW	Transect	FLW	Chinese Bulbul	Pycnonotus sinensis	2	Abundant	R	-	-	-	LC	LC	N	N
23/10/2024	Daytime	Wet	FLW	Transect	FLW	Dusky Warbler	Phylloscopus fuscatus	1	Common	PM,WV	-	-	-	LC	LC	N	N
23/10/2024	Daytime	Wet	FLW	Transect	FLW	Plain Prinia	Prinia inornata	1	Common	R	-	-	-	LC	LC	N	Ν
23/10/2024	Daytime	Wet	FLW	Transect	FLW	Swinhoe's White-eye	Zosterops simplex	2	Abundant	R	-	-	-	LC	LC	N	Ν
23/10/2024	Daytime	Wet	FLW	Transect	FLW	Crested Myna	Acridotheres cristatellus	4	Common	R	-	-	-	LC	LC	N	Ν
23/10/2024	Daytime	Wet	FLW	Transect	FLW	Black-collared Starling	Gracupica nigricollis	5	Common	R	-	-	-	LC	LC	N	Ν
23/10/2024	Daytime	Wet	FLW	Transect	FLW	Scaly-breasted Munia	Lonchura punctulata	10	Common	R	-	-	-	LC	LC	N	Ν
23/10/2024	Daytime	Wet	FLW	Transect	FLW	Black-browed Reed Warbler	Acrocephalus bistrigiceps	1	Common	PM	-	-	-	LC	LC	N	N
23/10/2024	Daytime	Wet	NSW	Point Count	NSW1	Chinese Pond Heron	Ardeola bacchus	1	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	NSW	Point Count	NSW1	Great Cormorant	Phalacrocorax carbo	93	Common	WV	PRC	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	NSW	Point Count	NSW1	Black Kite	Milvus migrans	1	Common	R,WV	(RC)	Class II	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	NSW	Point Count	NSW1	White-breasted Waterhen	Amaurornis phoenicurus	3	Common	R	-	-	-	LC	LC	N	Y
23/10/2024	Daytime	Wet	NSW	Point Count	NSW1	Common Sandpiper	Actitis hypoleucos	1	Common	PM,WV	-	-	-	LC	LC	N	Y
23/10/2024	Daytime	Wet	NSW	Point Count	NSW1	Common Redshank	Tringa totanus	1	Common	РМ	RC	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	NSW	Point Count	NSW1	Eurasian Collared Dove	Streptopelia decaocto	6	Common	-	-	-	-	LC	LC	N	N
23/10/2024	Daytime	Wet	NSW	Point Count	NSW1	Spotted Dove	Spilopelia chinensis	9	Abundant	R	-	-	-	LC	LC	Ν	N

Date (dd/mm/yyyy)	Daytime/ Night time	Season	Area	Transect / Point Count	Point Count (Location) / Transect	Common Name	Scientific Name	Abundance	Distribution in Hong Kong <sup>2</sup>	Principal Status <sup>3</sup>	Level of Concern <sup>4</sup>	Protection Status in China <sup>5</sup>	China Red Data Book <sup>6</sup>	Red List of China's Vertebrates <sup>9</sup>	IUCN Red List <sup>7</sup> (v.2020-3)	Species of Conservation Importance	Wetland Dependent <sup>8</sup>
23/10/2024	Daytime	Wet	NSW	Point Count	NSW1	Common Kingfisher	Alcedo atthis	1	Common	PM,WV	-	-	-	LC	LC	Ν	Y
23/10/2024	Daytime	Wet	NSW	Point Count	NSW1	Large-billed Crow	Corvus macrorhynchos	1	Common	R	-	-	-	LC	LC	Ν	Ν
23/10/2024	Daytime	Wet	NSW	Point Count	NSW1	Crested Myna	Acridotheres cristatellus	12	Common	R	-	-	-	LC	LC	Ν	N
23/10/2024	Daytime	Wet	NSW	Point Count	NSW1	Black-collared Starling	Gracupica nigricollis	3	Common	R	-	-	-	LC	LC	Ν	Ν
23/10/2024	Daytime	Wet	NSW	Point Count	NSW1	Eurasian Tree Sparrow	Passer montanus	8	Abundant	R	-	-	-	LC	LC	Ν	Ν
23/10/2024	Daytime	Wet	NSW	Point Count	NSW1	White Wagtail	Motacilla alba	3	Common	PM,WV	-	-	-	LC	LC	Ν	Ν
23/10/2024	Daytime	Wet	NSW	Point Count	SP/NSW1	Chinese Pond Heron	Ardeola bacchus	3	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	NSW	Point Count	SP/NSW1	Grey Heron	Ardea cinerea	1	Common	WV	PRC	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	NSW	Point Count	SP/NSW1	Little Egret	Egretta garzetta	2	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	NSW	Point Count	SP/NSW1	Great Cormorant	Phalacrocorax carbo	1	Common	WV	PRC	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	NSW	Point Count	SP/NSW1	Black-winged Stilt	Himantopus himantopus	7	Common	PM	RC	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	NSW	Point Count	SP/NSW1	Common Greenshank	Tringa nebularia	3	Abundant	PM,WV	RC	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	NSW	Point Count	SP/NSW1	Spotted Dove	Spilopelia chinensis	2	Abundant	R	-	-	-	LC	LC	Ν	Ν
23/10/2024	Daytime	Wet	NSW	Point Count	SP/NSW1	Greater Coucal	Centropus sinensis	1	Common	R	-	Class II	VU	LC	LC	Y	Ν
23/10/2024	Daytime	Wet	NSW	Point Count	SP/NSW1	Red-whiskered Bulbul	Pycnonotus jocosus	3	Abundant	R	-	-	-	LC	LC	Ν	Ν
23/10/2024	Daytime	Wet	NSW	Point Count	SP/NSW1	Chinese Bulbul	Pycnonotus sinensis	2	Abundant	R	-	-	-	LC	LC	Ν	Ν
23/10/2024	Daytime	Wet	NSW	Point Count	SP/NSW1	Plain Prinia	Prinia inornata	2	Common	R	-	-	-	LC	LC	Ν	Ν
23/10/2024	Daytime	Wet	NSW	Point Count	SP/NSW1	Swinhoe's White-eye	Zosterops simplex	6	Abundant	R	-	-	-	LC	LC	Ν	Ν
23/10/2024	Daytime	Wet	NSW	Point Count	SP/NSW1	Crested Myna	Acridotheres cristatellus	10	Common	R	-	-	-	LC	LC	Ν	Ν
23/10/2024	Daytime	Wet	NSW	Point Count	SP/NSW1	Black-collared Starling	Gracupica nigricollis	5	Common	R	-	-	-	LC	LC	Ν	N
23/10/2024	Daytime	Wet	NSW	Point Count	SP/NSW1	Stejneger's Stonechat	Saxicola stejnegeri	1	Common	PM,WV	-	-	-	LC	LC	N	N
23/10/2024	Daytime	Wet	NSW	Point Count	SP/NSW1	White Wagtail	Motacilla alba	3	Common	PM,WV	-	-	-	LC	LC	N	N
23/10/2024	Daytime	Wet	NSW	Point Count	SP/NSW1	Black-browed Reed Warbler	Acrocephalus bistrigiceps	4	Common	PM	-	-	-	LC	LC	N	N
23/10/2024	Daytime	Wet	NSW	Point Count	SP/NSW2	Chinese Pond Heron	Ardeola bacchus	8	Common	R	PRC (RC)	-	-	LC	LC	Y	Y

Date (dd/mm/yyyy)	Daytime/ Night time	Season	Area	Transect / Point Count	Point Count (Location) / Transect	Common Name	Scientific Name	Abundance	Distribution in Hong Kong <sup>2</sup>	Principal Status <sup>3</sup>	Level of Concern <sup>4</sup>	Protection Status in China <sup>5</sup>	China Red Data Book <sup>6</sup>	Red List of China's Vertebrates <sup>9</sup>	IUCN Red List <sup>7</sup> (v.2020-3)	Species of Conservation Importance	Wetland Dependent <sup>8</sup>
23/10/2024	Daytime	Wet	NSW	Point Count	SP/NSW2	Grey Heron	Ardea cinerea	3	Common	WV	PRC	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	NSW	Point Count	SP/NSW2	Great Egret	Ardea alba	6	Common	R,WV	PRC (RC)	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	NSW	Point Count	SP/NSW2	Little Egret	Egretta garzetta	5	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	NSW	Point Count	SP/NSW2	Great Cormorant	Phalacrocorax carbo	2	Common	WV	PRC	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	NSW	Point Count	SP/NSW2	Black-winged Stilt	Himantopus himantopus	9	Common	PM	RC	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	NSW	Point Count	SP/NSW2	Common Sandpiper	Actitis hypoleucos	1	Common	PM,WV	-	-	-	LC	LC	Ν	Y
23/10/2024	Daytime	Wet	NSW	Point Count	SP/NSW2	Common Redshank	Tringa totanus	1	Common	PM	RC	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	NSW	Point Count	SP/NSW2	Common Greenshank	Tringa nebularia	3	Abundant	PM,WV	RC	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	NSW	Point Count	SP/NSW2	Yellow-bellied Prinia	Prinia flaviventris	1	Common	R	-	-	-	LC	LC	Ν	N
23/10/2024	Daytime	Wet	NSW	Point Count	SP/NSW2	White Wagtail	Motacilla alba	2	Common	PM,WV	-	-	-	LC	LC	Ν	N
23/10/2024	Daytime	Wet	NSW	Point Count	SP/NSW3	Chinese Pond Heron	Ardeola bacchus	4	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	NSW	Point Count	SP/NSW3	Grey Heron	Ardea cinerea	1	Common	WV	PRC	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	NSW	Point Count	SP/NSW3	Great Egret	Ardea alba	27	Common	R,WV	PRC (RC)	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	NSW	Point Count	SP/NSW3	Little Egret	Egretta garzetta	52	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	NSW	Point Count	SP/NSW3	Great Cormorant	Phalacrocorax carbo	3	Common	WV	PRC	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	NSW	Point Count	SP/NSW3	Black Kite	Milvus migrans	1	Common	R,WV	(RC)	Class II	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	NSW	Point Count	SP/NSW3	Black-winged Stilt	Himantopus himantopus	26	Common	PM	RC	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	NSW	Point Count	SP/NSW3	Pied Avocet	Recurvirostra avosetta	1	Abundant	WV	RC	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	NSW	Point Count	SP/NSW3	Common Redshank	Tringa totanus	4	Common	PM	RC	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	NSW	Point Count	SP/NSW3	Common Greenshank	Tringa nebularia	3	Abundant	PM,WV	RC	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	NSW	Point Count	SP/NSW3	White Wagtail	Motacilla alba	1	Common	PM,WV	-	-	-	LC	LC	Ν	N
23/10/2024	Daytime	Wet	NSW	Transect	NSW	Chinese Pond Heron	Ardeola bacchus	1	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	NSW	Transect	NSW	Great Egret	Ardea alba	3	Common	R,WV	PRC (RC)	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	NSW	Transect	NSW	Little Egret	Egretta garzetta	2	Common	R	PRC (RC)	-	-	LC	LC	Y	Y

Date (dd/mm/yyyy)	Daytime/ Night time	Season	Area		Point Count (Location) / Transect	Common Name	Scientific Name	Abundance	Distribution in Hong Kong <sup>2</sup>	Principal Status <sup>3</sup>	Level of Concern <sup>4</sup>	Protection Status in China <sup>5</sup>	China Red Data Book <sup>6</sup>	Red List of China's Vertebrates <sup>9</sup>	IUCN Red List <sup>7</sup> (v.2020-3)	Species of Conservation Importance	Wetland Dependent <sup>8</sup>
23/10/2024	Daytime	Wet	NSW	Transect	NSW	Great Cormorant	Phalacrocorax carbo	3	Common	WV	PRC	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	NSW	Transect	NSW	Black-winged Stilt	Himantopus himantopus	12	Common	PM	RC	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	NSW	Transect	NSW	Common Redshank	Tringa totanus	2	Common	PM	RC	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	NSW	Transect	NSW	Common Greenshank	Tringa nebularia	6	Abundant	PM,WV	RC	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	NSW	Transect	NSW	Eurasian Collared Dove	Streptopelia decaocto	2	Common	-	-	-	-	LC	LC	N	Ν
23/10/2024	Daytime	Wet	NSW	Transect	NSW	Spotted Dove	Spilopelia chinensis	2	Abundant	R	-	-	-	LC	LC	Ν	Ν
23/10/2024	Daytime	Wet	NSW	Transect	NSW	Red-whiskered Bulbul	Pycnonotus jocosus	3	Abundant	R	-	-	-	LC	LC	N	Ν
23/10/2024	Daytime	Wet	NSW	Transect	NSW	Yellow-bellied Prinia	Prinia flaviventris	2	Common	R	-	-	-	LC	LC	N	Ν
23/10/2024	Daytime	Wet	NSW	Transect	NSW	Plain Prinia	Prinia inornata	1	Common	R	-	-	-	LC	LC	N	Ν
23/10/2024	Daytime	Wet	NSW	Transect	NSW	Swinhoe's White-eye	Zosterops simplex	1	Abundant	R	-	-	-	LC	LC	N	Ν
23/10/2024	Daytime	Wet	NSW	Transect	NSW	Crested Myna	Acridotheres cristatellus	20	Common	R	-	-	-	LC	LC	N	Ν
23/10/2024	Daytime	Wet	NSW	Transect	NSW	Black-collared Starling	Gracupica nigricollis	6	Common	R	-	-	-	LC	LC	N	Ν
23/10/2024	Daytime	Wet	NSW	Transect	NSW	White Wagtail	Motacilla alba	3	Common	PM,WV	-	-	-	LC	LC	N	Ν
23/10/2024	Daytime	Wet	YLIE-CW	Transect	YLIE-CW	Eurasian Teal	Anas crecca	18	Common	WV	RC	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	YLIE-CW	Transect	YLIE-CW	Chinese Pond Heron	Ardeola bacchus	6	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	YLIE-CW	Transect	YLIE-CW	Grey Heron	Ardea cinerea	4	Common	WV	PRC	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	YLIE-CW	Transect	YLIE-CW	Great Egret	Ardea alba	1	Common	R,WV	PRC (RC)	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	YLIE-CW	Transect	YLIE-CW	Little Egret	Egretta garzetta	2	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	YLIE-CW	Transect	YLIE-CW	White-breasted Waterhen	Amaurornis phoenicurus	1	Common	R	-	-	-	LC	LC	Ν	Y
23/10/2024	Daytime	Wet	YLIE-CW	Transect	YLIE-CW	Common Moorhen	Gallinula chloropus	2	Common	R	-	-	-	LC	LC	N	Y
23/10/2024	Daytime	Wet	YLIE-CW	Transect	YLIE-CW	Black-winged Stilt	Himantopus himantopus	42	Common	PM	RC	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	YLIE-CW	Transect	YLIE-CW	Common Sandpiper	Actitis hypoleucos	1	Common	PM,WV	-	-	-	LC	LC	Ν	Y
23/10/2024	Daytime	Wet	YLIE-CW	Transect	YLIE-CW	Common Redshank	Tringa totanus	16	Common	PM	RC	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	YLIE-CW	Transect	YLIE-CW	Common Greenshank	Tringa nebularia	1	Abundant	PM,WV	RC	-	-	LC	LC	Y	Y

Date (dd/mm/yyyy)	Daytime/ Night time	Season	Area	Transect / Point Count	Point Count (Location) / Transect	Common Name	Scientific Name	Abundance	Distribution in Hong Kong <sup>2</sup>	Principal Status <sup>3</sup>	Level of Concern⁴	Protection Status in China <sup>5</sup>	China Red Data Book <sup>6</sup>	Red List of China's Vertebrates <sup>9</sup>	IUCN Red List <sup>7</sup> (v.2020-3)	Species of Conservation Importance	Wetland Dependent <sup>8</sup>
23/10/2024	Daytime	Wet	YLIE-CW	Transect	YLIE-CW	Eurasian Collared Dove	Streptopelia decaocto	2	Common	-	-	-	-	LC	LC	Ν	Ν
23/10/2024	Daytime	Wet	YLIE-CW	Transect	YLIE-CW	White-throated Kingfisher	Halcyon smyrnensis	1	Common	R	-	-	-	LC	LC	Y	Y
23/10/2024	Daytime	Wet	YLIE-CW	Transect	YLIE-CW	Plain Prinia	Prinia inornata	1	Common	R	-	-	-	LC	LC	Ν	Ν
23/10/2024	Daytime	Wet	YLIE-CW	Transect	YLIE-CW	Swinhoe's White-eye	Zosterops simplex	2	Abundant	R	-	-	-	LC	LC	Ν	Ν
23/10/2024	Daytime	Wet	YLIE-CW	Transect	YLIE-CW	Crested Myna	Acridotheres cristatellus	15	Common	R	-	-	-	LC	LC	Ν	N
23/10/2024	Daytime	Wet	YLIE-CW	Transect	YLIE-CW	Black-collared Starling	Gracupica nigricollis	4	Common	R	-	-	-	LC	LC	Ν	N
23/10/2024	Daytime	Wet	YLIE-CW	Transect	YLIE-CW	White Wagtail	Motacilla alba	1	Common	PM,WV	-	-	-	LC	LC	Ν	Ν

Notes:

1. All wild birds are protected under Wild Animals Protection Ordinance (Cap. 170).

2. AFCD (2021). Hong Kong Biodiversity Database.

3. Carey et al. (2001): R=resident; WV=winter visitor; SV=summer visitor; PM=passage migrant; Sp=spring; A=autumn;

4. Fellowes et al. (2002): LC=Local Concern; RC=Regional Concern; PRC=Potential Regional Concern; PGC: Potential Global Concern. Letters in parentheses indicate that the assessment is on the basis of restrictedness in nesting and/or roosting sites rather than in general occurrence.

5. List of Wild Animals under State Protection (promulgated by State Forestry Administration and Ministry of Agriculture on 14 January, 1989).

6. Zheng, G. M. and Wang, Q. S. (1998). China Red Data Book

7. IUCN 2021. The IUCN Red List of Threatened Species. Version 2020-3.

8. Wetland-dependent species (including wetland-dependent species and waterbirds).

9. Jiang et al. (2016). Red List of China's Vertebrates

# Appendix F.2.1 Ecological Bird Monitoring Diversity (All avifauna species in Point Count Method) in All Habitats (23 October 2024)

Scientific Name	Count	Р	Ln(P)	P*Ln(P)	P*Ln(P) <sup>2</sup>
Tachybaptus ruficollis	4	0.0077	-4.8695	-0.0374	0.1820
Ixobrychus sinensis	1	0.0019	-6.2558	-0.0120	0.0751
Ardeola bacchus	27	0.0518	-2.9599	-0.1534	0.4540
Bubulcus coromandus	4	0.0077	-4.8695	-0.0374	0.1820
Ardea cinerea	5	0.0096	-4.6463	-0.0446	0.2072
Ardea alba	34	0.0653	-2.7294	-0.1781	0.4862
Egretta garzetta	75	0.1440	-1.9383	-0.2790	0.5408
Phalacrocorax carbo	105	0.2015	-1.6018	-0.3228	0.5171
Milvus migrans	4	0.0077	-4.8695	-0.0374	0.1820
Amaurornis phoenicurus	3	0.0058	-5.1571	-0.0297	0.1531
Himantopus himantopus	47	0.0902	-2.4056	-0.2170	0.5220
Recurvirostra avosetta	1	0.0019	-6.2558	-0.0120	0.0751
Charadrius dubius	5	0.0096	-4.6463	-0.0446	0.2072
Gallinago gallinago	3	0.0058	-5.1571	-0.0297	0.1531
Actitis hypoleucos	4	0.0077	-4.8695	-0.0374	0.1820
Tringa ochropus	1	0.0019	-6.2558	-0.0120	0.0751
Tringa totanus	6	0.0115	-4.4640	-0.0514	0.2295
Tringa nebularia	9	0.0173	-4.0585	-0.0701	0.2845
Streptopelia decaocto	7	0.0134	-4.3098	-0.0579	0.2496
Spilopelia chinensis	17	0.0326	-3.4225	-0.1117	0.3822
Centropus sinensis	1	0.0019	-6.2558	-0.0120	0.0751
Halcyon smyrnensis	3	0.0058	-5.1571	-0.0297	0.1531
Alcedo atthis	1	0.0019	-6.2558	-0.0120	0.0751
Dicrurus macrocercus	2	0.0038	-5.5626	-0.0214	0.1188
Corvus macrorhynchos	1	0.0019	-6.2558	-0.0120	0.0751
Pycnonotus jocosus	3	0.0058	-5.1571	-0.0297	0.1531
Pycnonotus sinensis	2	0.0038	-5.5626	-0.0214	0.1188
Acrocephalus bistrigiceps	4	0.0077	-4.8695	-0.0374	0.1820
Prinia flaviventris	1	0.0019	-6.2558	-0.0120	0.0751
Prinia inornata	3	0.0058	-5.1571	-0.0297	0.1531
Zosterops simplex	6	0.0115	-4.4640	-0.0514	0.2295
Acridotheres cristatellus	73	0.1401	-1.9653	-0.2754	0.5412
Acridotheres tristis	3	0.0058	-5.1571	-0.0297	0.1531
Spodiopsar sericeus	3	0.0058	-5.1571	-0.0297	0.1531
Gracupica nigricollis	20	0.0384	-3.2600	-0.1251	0.4080
Copsychus saularis	1	0.0019	-6.2558	-0.0120	0.0751
Saxicola stejnegeri	4	0.0077	-4.8695	-0.0374	0.1820
Passer montanus	8	0.0154	-4.1763	-0.0641	0.2678
Lonchura punctulata	4	0.0077	-4.8695	-0.0374	0.1820
Motacilla tschutschensis	1	0.0019	-6.2558	-0.0120	0.0751
Motacilla alba	15	0.0288	-3.5477	-0.1021	0.3624
Total	521	1	-192.2089	-2.7692	9.1490
Richness	41				1
SS	9.1490				
SQ	7.6683				1
Н	2.7692				
S <sup>2</sup> H	0.0029				1

Appendix F.2.2 Ecological Bird Monitoring Diversity (Avifauna species of conservation importance in Point Count Method) in All Habitats (23 October 2024)

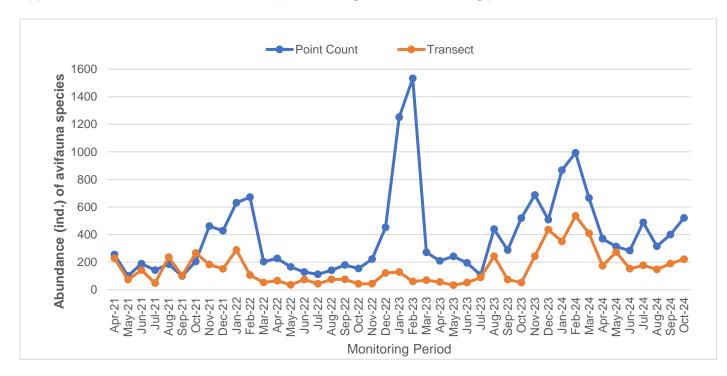
Scientific Name	Count	Р	Ln(P)	P*Ln(P)	P*Ln(P) <sup>2</sup>
Tachybaptus ruficollis	4	0.0120	-4.4248	-0.0530	0.2345
Ixobrychus sinensis	1	0.0030	-5.8111	-0.0174	0.1011
Ardeola bacchus	27	0.0808	-2.5153	-0.2033	0.5114
Bubulcus coromandus	4	0.0120	-4.4248	-0.0530	0.2345
Ardea cinerea	5	0.0150	-4.2017	-0.0629	0.2643
Ardea alba	34	0.1018	-2.2848	-0.2326	0.5314
Egretta garzetta	75	0.2246	-1.4937	-0.3354	0.5010
Phalacrocorax carbo	105	0.3144	-1.1572	-0.3638	0.4210
Milvus migrans	4	0.0120	-4.4248	-0.0530	0.2345
Himantopus himantopus	47	0.1407	-1.9610	-0.2759	0.5411
Recurvirostra avosetta	1	0.0030	-5.8111	-0.0174	0.1011
Charadrius dubius	5	0.0150	-4.2017	-0.0629	0.2643
Tringa totanus	6	0.0180	-4.0194	-0.0722	0.2902
Tringa nebularia	9	0.0269	-3.6139	-0.0974	0.3519
Centropus sinensis	1	0.0030	-5.8111	-0.0174	0.1011
Halcyon smyrnensis	3	0.0090	-4.7125	-0.0423	0.1995
Spodiopsar sericeus	3	0.0090	-4.7125	-0.0423	0.1995
Total	334	1	-65.5816	-2.0023	5.0823
Richness	17				
SS	5.0823				
SQ	4.0091				
Н	2.0023				
S <sup>2</sup> H	0.00329				

Appendix F.2.3 Ecological Bird Monitoring Diversity (All avifauna species in Transect Walk Method) in All Habitats (23 October 2024)

Scientific Name	Count	Р	Ln(P)	P*Ln(P)	P*Ln(P) <sup>2</sup>
Anas crecca	18	0.0811	-2.5123	-0.2037	0.5118
Ardeola bacchus	7	0.0315	-3.4568	-0.1090	0.3768
Ardea cinerea	4	0.0180	-4.0164	-0.0724	0.2907
Ardea alba	4	0.0180	-4.0164	-0.0724	0.2907
Egretta garzetta	4	0.0180	-4.0164	-0.0724	0.2907
Phalacrocorax carbo	4	0.0180	-4.0164	-0.0724	0.2907
Amaurornis phoenicurus	1	0.0045	-5.4027	-0.0243	0.1315
Gallinula chloropus	2	0.0090	-4.7095	-0.0424	0.1998
Himantopus himantopus	54	0.2432	-1.4137	-0.3439	0.4861
Actitis hypoleucos	1	0.0045	-5.4027	-0.0243	0.1315
Tringa totanus	18	0.0811	-2.5123	-0.2037	0.5118
Tringa nebularia	7	0.0315	-3.4568	-0.1090	0.3768
Streptopelia decaocto	4	0.0180	-4.0164	-0.0724	0.2907
Spilopelia chinensis	3	0.0135	-4.3041	-0.0582	0.2503
Centropus sinensis	1	0.0045	-5.4027	-0.0243	0.1315
Halcyon smyrnensis	1	0.0045	-5.4027	-0.0243	0.1315
Ceryle rudis	1	0.0045	-5.4027	-0.0243	0.1315
Corvus torquatus	1	0.0045	-5.4027	-0.0243	0.1315
Pycnonotus jocosus	5	0.0225	-3.7932	-0.0854	0.3241
Pycnonotus sinensis	2	0.0090	-4.7095	-0.0424	0.1998
Phylloscopus fuscatus	1	0.0045	-5.4027	-0.0243	0.1315
Acrocephalus bistrigiceps	1	0.0045	-5.4027	-0.0243	0.1315
Prinia flaviventris	2	0.0090	-4.7095	-0.0424	0.1998
Prinia inornata	3	0.0135	-4.3041	-0.0582	0.2503
Zosterops simplex	5	0.0225	-3.7932	-0.0854	0.3241
Acridotheres cristatellus	39	0.1757	-1.7391	-0.3055	0.5313
Gracupica nigricollis	15	0.0676	-2.6946	-0.1821	0.4906
Lonchura punctulata	10	0.0450	-3.1001	-0.1396	0.4329
Motacilla alba	4	0.0180	-4.0164	-0.0724	0.2907
Total	222	1	-118.5286	-2.6399	8.2621
Richness	29				
SS	8.2621				
SQ	6.9689				
Н	2.6399				
S <sup>2</sup> H	0.006109				

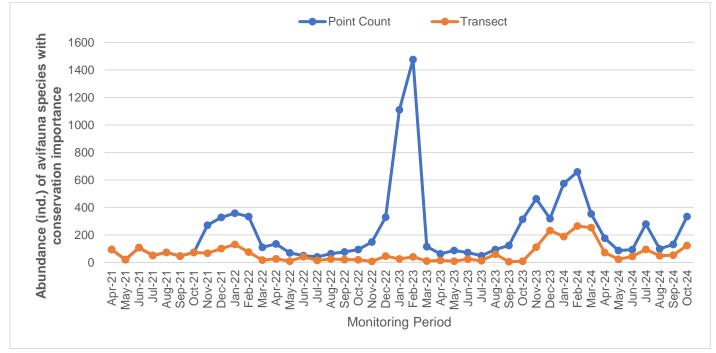
Appendix F.2.4 Ecological Bird Monitoring Diversity (Avifauna species of conservation importance in Transect Walk Method) in All Habitats (23 October 2024)

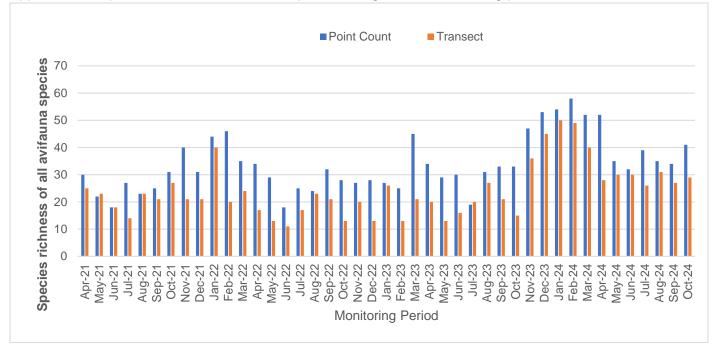
Scientific Name	Count	Р	Ln(P)	P*Ln(P)	P*Ln(P) <sup>2</sup>
Anas crecca	18	0.1452	-1.9299	-0.2801	0.5407
Ardeola bacchus	7	0.0565	-2.8744	-0.1623	0.4664
Ardea cinerea	4	0.0323	-3.4340	-0.1108	0.3804
Ardea alba	4	0.0323	-3.4340	-0.1108	0.3804
Egretta garzetta	4	0.0323	-3.4340	-0.1108	0.3804
Phalacrocorax carbo	4	0.0323	-3.4340	-0.1108	0.3804
Himantopus himantopus	54	0.4355	-0.8313	-0.3620	0.3009
Tringa totanus	18	0.1452	-1.9299	-0.2801	0.5407
Tringa nebularia	7	0.0565	-2.8744	-0.1623	0.4664
Centropus sinensis	1	0.0081	-4.8203	-0.0389	0.1874
Halcyon smyrnensis	1	0.0081	-4.8203	-0.0389	0.1874
Ceryle rudis	1	0.0081	-4.8203	-0.0389	0.1874
Corvus torquatus	1	0.0081	-4.8203	-0.0389	0.1874
Total	124	1	-43.4569	-1.8454	4.5862
Richness	13				
SS	4.5862				
SQ	3.4056				
Н	1.8454				
S²H	0.00991				



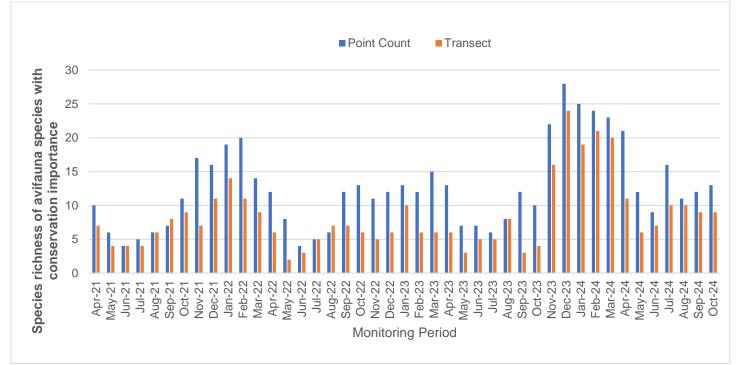
Appendix F.3.1 Abundance of all avifauna species throughout the monitoring period

Appendix F.3.2 Abundance of avifauna species with conservation importance throughout the monitoring period

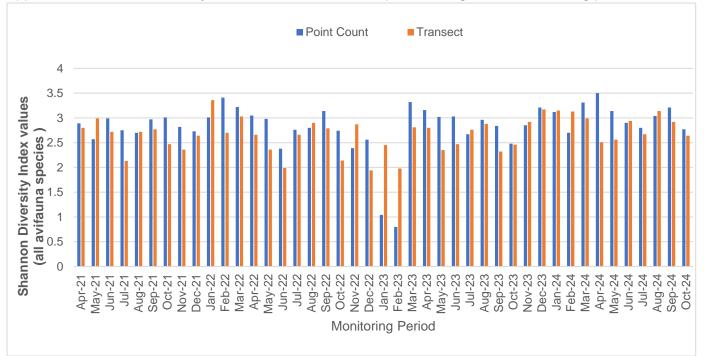




### Appendix F.4.1 Species richness of all avifauna species throughout the monitoring period

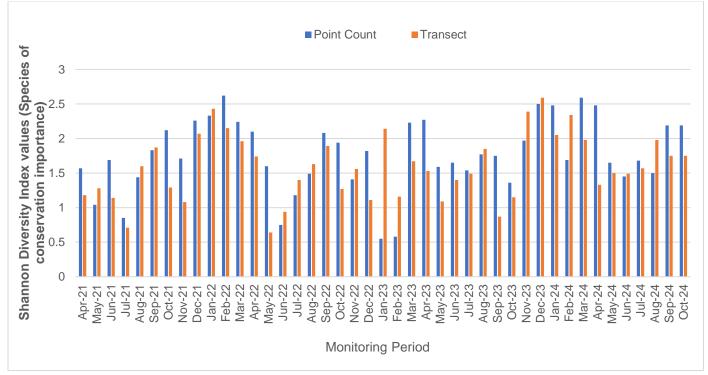


Appendix F.4.2 Species richness of avifauna species with conservation importance throughout the monitoring period



Appendix F.5.1 Shannon Diversity Index values of all avifauna species throughout the monitoring period

Appendix F.5.2 Shannon Diversity Index values of avifauna species with conservation importance throughout the monitoring period



Appendix F.6. Hutcheson t-test testing method and output

Formula:

$$t = \frac{H_a - H_b}{\sqrt{s_{H_a}^2 + s_{H_b}^2}}$$

### Appendix F.6.1 Species diversity of all avifauna species – Point Count Method

Months	October 2016	October 2024
Total	157	521
Richness	32	41
Н	2.9312	2.7692
S <sup>2</sup> H	0.006421	0.002916
t	1.67	73
df	312.5	358
Crit	1.96	76
р	0.094	148
CI	0.1603	0.1080

### Appendix F.6.2 Species diversity of all avifauna species – Transect Walk Method

Months	October 2016	October 2024
Total	51	222
Richness	13	29
н	1.8310	2.6399
S²H	0.03268	0.006109
t	4.1071	
df	71.2770	
Crit	1.9939	
р	1.05812E-04	
CI	0.3616	0.1563

Appendix F.6.3 Species diversity of avifauna species with conservation importance – Point Count Method

Months	October 2016	October 2024
Total	107	334
Richness	13	17
н	2.1670	2.0023
S²H	0.005629	0.003285
t	1.7452	
df	241.9424	
Crit	1.9699	
р	0.0822	
CI	0.1501	0.1146

Appendix F.6.4 Species diversity of avifauna species with conservation importance – Transect Walk Method

Months	October 2016	October 2024
Total	35	124
Richness	3	13
Н	0.74669	1.8454
S <sup>2</sup> H	0.017580	0.00991
t	6.6267	
df	78.5427	
Crit	1.9908	
р	4.0059E-09	
CI	0.2652	0.1991

# Appendix G Wind Data

Date	Wind Speed (m/s)	Wind Direction
01 Oct 2024 00:00	1.0	S
01 Oct 2024 01:00	1.0	S
01 Oct 2024 02:00	1.1	SE
01 Oct 2024 03:00	1.1	NE
01 Oct 2024 04:00	1.1	E
01 Oct 2024 05:00	1.0	W
01 Oct 2024 06:00	1.0	NW
01 Oct 2024 07:00	1.0	E
01 Oct 2024 08:00	1.0	NW
01 Oct 2024 09:00	1.1	NE
01 Oct 2024 10:00	1.0	NW
01 Oct 2024 11:00	1.0	SW
01 Oct 2024 12:00	1.0	S
01 Oct 2024 13:00	1.0	SE
01 Oct 2024 14:00	1.1	S
01 Oct 2024 15:00	1.1	S
01 Oct 2024 16:00	1.1	S
01 Oct 2024 17:00	1.0	NE
01 Oct 2024 18:00	1.0	SE
01 Oct 2024 19:00	1.0	N
01 Oct 2024 20:00	1.0	S
01 Oct 2024 21:00	1.2	NE
01 Oct 2024 22:00	1.1	SE
01 Oct 2024 23:00	1.0	SE
02 Oct 2024 00:00	1.0	N
02 Oct 2024 01:00	1.7	N
02 Oct 2024 02:00	1.0	SE

Date	Wind Speed (m/s)	Wind Direction
02 Oct 2024 03:00	1.0	E
02 Oct 2024 04:00	1.1	Ν
02 Oct 2024 05:00	1.0	W
02 Oct 2024 06:00	1.1	SE
02 Oct 2024 07:00	1.0	E
02 Oct 2024 08:00	1.0	W
02 Oct 2024 09:00	1.0	Ν
02 Oct 2024 10:00	1.1	SW
02 Oct 2024 11:00	1.6	NW
02 Oct 2024 12:00	1.5	S
02 Oct 2024 13:00	1.4	E
02 Oct 2024 14:00	1.0	E
02 Oct 2024 15:00	1.3	S
02 Oct 2024 16:00	1.0	E
02 Oct 2024 17:00	1.7	NE
02 Oct 2024 18:00	1.0	SE
02 Oct 2024 19:00	1.0	NE
02 Oct 2024 20:00	1.0	NE
02 Oct 2024 21:00	1.0	E
02 Oct 2024 22:00	1.0	SE
02 Oct 2024 23:00	1.0	E
03 Oct 2024 00:00	1.0	SE
03 Oct 2024 01:00	1.0	NE
03 Oct 2024 02:00	1.0	NE
03 Oct 2024 03:00	1.2	NE
03 Oct 2024 04:00	1.0	NW
03 Oct 2024 05:00	1.0	NE

Date	Wind Speed (m/s)	Wind Direction
03 Oct 2024 06:00	1.0	NE
03 Oct 2024 07:00	1.0	E
03 Oct 2024 08:00	1.0	NE
03 Oct 2024 09:00	1.4	NE
03 Oct 2024 10:00	2.4	NE
03 Oct 2024 11:00	1.3	NE
03 Oct 2024 12:00	2.6	SE
03 Oct 2024 13:00	1.2	NE
03 Oct 2024 14:00	1.9	E
03 Oct 2024 15:00	1.0	E
03 Oct 2024 16:00	1.0	NE
03 Oct 2024 17:00	1.0	NE
03 Oct 2024 18:00	1.0	E
03 Oct 2024 19:00	1.0	E
03 Oct 2024 20:00	1.0	E
03 Oct 2024 21:00	1.0	E
03 Oct 2024 22:00	1.0	S
03 Oct 2024 23:00	1.0	E
04 Oct 2024 00:00	1.0	E
04 Oct 2024 01:00	1.0	E
04 Oct 2024 02:00	1.0	E
04 Oct 2024 03:00	1.0	E
04 Oct 2024 04:00	1.0	NE
04 Oct 2024 05:00	1.0	NE
04 Oct 2024 06:00	1.0	SE
04 Oct 2024 07:00	1.0	E
04 Oct 2024 08:00	1.1	NE

Date	Wind Speed (m/s)	Wind Direction
04 Oct 2024 09:00	1.0	NE
04 Oct 2024 10:00	1.1	E
04 Oct 2024 11:00	1.6	NE
04 Oct 2024 12:00	1.5	E
04 Oct 2024 13:00	1.0	E
04 Oct 2024 14:00	1.0	E
04 Oct 2024 15:00	1.0	SE
04 Oct 2024 16:00	1.0	NE
04 Oct 2024 17:00	1.0	E
04 Oct 2024 18:00	1.3	NE
04 Oct 2024 19:00	1.0	SE
04 Oct 2024 20:00	1.0	N
04 Oct 2024 21:00	1.0	S
04 Oct 2024 22:00	1.0	E
04 Oct 2024 23:00	1.0	S
05 Oct 2024 00:00	1.0	N
05 Oct 2024 01:00	1.0	E
05 Oct 2024 02:00	1.0	E
05 Oct 2024 03:00	1.0	SE
05 Oct 2024 04:00	1.0	NE
05 Oct 2024 05:00	1.0	E
05 Oct 2024 06:00	1.0	NE
05 Oct 2024 07:00	1.0	S
05 Oct 2024 08:00	1.2	S
05 Oct 2024 09:00	1.0	E
05 Oct 2024 10:00	1.0	NE
05 Oct 2024 11:00	1.3	E

Date	Wind Speed (m/s)	Wind Direction
05 Oct 2024 12:00	1.1	SE
05 Oct 2024 13:00	1.1	SE
05 Oct 2024 14:00	1.8	SE
05 Oct 2024 15:00	1.7	E
05 Oct 2024 16:00	1.5	NE
05 Oct 2024 17:00	1.7	NE
05 Oct 2024 18:00	1.0	E
05 Oct 2024 19:00	1.3	NE
05 Oct 2024 20:00	1.1	E
05 Oct 2024 21:00	1.0	SE
05 Oct 2024 22:00	1.0	NE
05 Oct 2024 23:00	1.0	NE
06 Oct 2024 00:00	1.0	NE
06 Oct 2024 01:00	1.0	NE
06 Oct 2024 02:00	1.0	E
06 Oct 2024 03:00	1.0	NE
06 Oct 2024 04:00	1.0	E
06 Oct 2024 05:00	1.0	E
06 Oct 2024 06:00	1.0	E
06 Oct 2024 07:00	1.0	NE
06 Oct 2024 08:00	1.0	NE
06 Oct 2024 09:00	1.0	N
06 Oct 2024 10:00	1.1	E
06 Oct 2024 11:00	1.0	E
06 Oct 2024 12:00	1.1	E
06 Oct 2024 13:00	1.1	NE
06 Oct 2024 14:00	1.1	NE

Date	Wind Speed (m/s)	Wind Direction
06 Oct 2024 15:00	2.0	NE
06 Oct 2024 16:00	1.0	NE
06 Oct 2024 17:00	1.0	NE
06 Oct 2024 18:00	1.0	SE
06 Oct 2024 19:00	1.0	E
06 Oct 2024 20:00	1.0	NE
06 Oct 2024 21:00	1.0	SE
06 Oct 2024 22:00	1.0	N
06 Oct 2024 23:00	1.0	E
07 Oct 2024 00:00	1.0	E
07 Oct 2024 01:00	1.3	NE
07 Oct 2024 02:00	1.0	SE
07 Oct 2024 03:00	1.0	N
07 Oct 2024 04:00	1.0	NE
07 Oct 2024 05:00	1.0	E
07 Oct 2024 06:00	1.0	SE
07 Oct 2024 07:00	1.0	E
07 Oct 2024 08:00	1.2	S
07 Oct 2024 09:00	1.0	S
07 Oct 2024 10:00	1.0	W
07 Oct 2024 11:00	1.0	N
07 Oct 2024 12:00	1.0	W
07 Oct 2024 13:00	1.4	E
07 Oct 2024 14:00	1.0	SE
07 Oct 2024 15:00	1.1	E
07 Oct 2024 16:00	1.3	SE
07 Oct 2024 17:00	1.2	E

Date	Wind Speed (m/s)	Wind Direction
07 Oct 2024 18:00	1.0	N
07 Oct 2024 19:00	1.1	E
07 Oct 2024 20:00	1.1	S
07 Oct 2024 21:00	1.0	SE
07 Oct 2024 22:00	1.0	S
07 Oct 2024 23:00	1.0	SE
08 Oct 2024 00:00	1.0	SE
08 Oct 2024 01:00	1.0	SE
08 Oct 2024 02:00	1.0	E
08 Oct 2024 03:00	1.0	E
08 Oct 2024 04:00	1.0	S
08 Oct 2024 05:00	1.1	SE
08 Oct 2024 06:00	1.0	E
08 Oct 2024 07:00	1.0	E
08 Oct 2024 08:00	1.0	S
08 Oct 2024 09:00	1.1	NW
08 Oct 2024 10:00	1.2	SE
08 Oct 2024 11:00	1.1	SW
08 Oct 2024 12:00	1.4	S
08 Oct 2024 13:00	1.0	NW
08 Oct 2024 14:00	1.0	S
08 Oct 2024 15:00	1.0	E
08 Oct 2024 16:00	1.1	NE
08 Oct 2024 17:00	1.0	E
08 Oct 2024 18:00	1.0	E
08 Oct 2024 19:00	1.0	Ν
08 Oct 2024 20:00	1.0	SE

Date	Wind Speed (m/s)	Wind Direction
08 Oct 2024 21:00	1.0	NE
08 Oct 2024 22:00	1.0	SE
08 Oct 2024 23:00	1.1	SE
09 Oct 2024 00:00	1.0	S
09 Oct 2024 01:00	1.0	SE
09 Oct 2024 02:00	1.0	S
09 Oct 2024 03:00	1.0	E
09 Oct 2024 04:00	1.1	W
09 Oct 2024 05:00	1.0	SE
09 Oct 2024 06:00	1.0	E
09 Oct 2024 07:00	1.0	NE
09 Oct 2024 08:00	1.0	S
09 Oct 2024 09:00	1.0	W
09 Oct 2024 10:00	1.1	S
09 Oct 2024 11:00	1.0	SW
09 Oct 2024 12:00	1.7	SE
09 Oct 2024 13:00	1.0	S
09 Oct 2024 14:00	1.2	S
09 Oct 2024 15:00	2.0	S
09 Oct 2024 16:00	1.1	S
09 Oct 2024 17:00	1.0	S
09 Oct 2024 18:00	1.3	S
09 Oct 2024 19:00	1.1	S
09 Oct 2024 20:00	1.0	SE
09 Oct 2024 21:00	1.0	SE
09 Oct 2024 22:00	1.0	S
09 Oct 2024 23:00	1.0	SE

Date	Wind Speed (m/s)	Wind Direction
10 Oct 2024 00:00	1.0	S
10 Oct 2024 01:00	1.0	S
10 Oct 2024 02:00	1.2	S
10 Oct 2024 03:00	1.1	SE
10 Oct 2024 04:00	1.0	NE
10 Oct 2024 05:00	1.0	NW
10 Oct 2024 06:00	1.0	NW
10 Oct 2024 07:00	1.0	W
10 Oct 2024 08:00	1.1	SW
10 Oct 2024 09:00	1.5	SW
10 Oct 2024 10:00	1.0	NW
10 Oct 2024 11:00	2.3	W
10 Oct 2024 12:00	1.0	NW
10 Oct 2024 13:00	1.2	NW
10 Oct 2024 14:00	1.7	E
10 Oct 2024 15:00	2.7	S
10 Oct 2024 16:00	1.9	S
10 Oct 2024 17:00	1.1	SE
10 Oct 2024 18:00	1.0	NE
10 Oct 2024 19:00	1.1	E
10 Oct 2024 20:00	1.0	NE
10 Oct 2024 21:00	1.1	E
10 Oct 2024 22:00	1.2	NE
10 Oct 2024 23:00	1.0	E
11 Oct 2024 00:00	1.0	E
11 Oct 2024 01:00	1.0	S
11 Oct 2024 02:00	1.0	SE

Date	Wind Speed (m/s)	Wind Direction
11 Oct 2024 03:00	1.0	E
11 Oct 2024 04:00	1.0	N
11 Oct 2024 05:00	1.0	S
11 Oct 2024 06:00	1.0	SE
11 Oct 2024 07:00	1.0	NE
11 Oct 2024 08:00	1.2	E
11 Oct 2024 09:00	1.0	W
11 Oct 2024 10:00	1.3	W
11 Oct 2024 11:00	1.2	S
11 Oct 2024 12:00	1.1	S
11 Oct 2024 13:00	1.9	E
11 Oct 2024 14:00	1.9	NE
11 Oct 2024 15:00	1.4	S
11 Oct 2024 16:00	1.4	E
11 Oct 2024 17:00	1.1	SE
11 Oct 2024 18:00	1.3	E
11 Oct 2024 19:00	1.0	E
11 Oct 2024 20:00	1.4	N
11 Oct 2024 21:00	1.0	SE
11 Oct 2024 22:00	0.0	S
11 Oct 2024 23:00	0.0	SE
12 Oct 2024 00:00	0.0	S
12 Oct 2024 01:00	0.0	SE
12 Oct 2024 02:00	0.0	SE
12 Oct 2024 03:00	0.0	E
12 Oct 2024 04:00	0.0	NE
12 Oct 2024 05:00	0.0	NE

Date	Wind Speed (m/s)	Wind Direction
12 Oct 2024 06:00	0.4	SW
12 Oct 2024 07:00	0.1	NW
12 Oct 2024 08:00	0.0	NW
12 Oct 2024 09:00	0.0	W
12 Oct 2024 10:00	3.3	W
12 Oct 2024 11:00	0.6	S
12 Oct 2024 12:00	0.8	SE
12 Oct 2024 13:00	0.5	W
12 Oct 2024 14:00	0.8	NW
12 Oct 2024 15:00	0.0	NW
12 Oct 2024 16:00	0.6	S
12 Oct 2024 17:00	0.2	E
12 Oct 2024 18:00	0.0	N
12 Oct 2024 19:00	0.0	NW
12 Oct 2024 20:00	0.0	N
12 Oct 2024 21:00	0.1	E
12 Oct 2024 22:00	0.1	NE
12 Oct 2024 23:00	0.0	NE
13 Oct 2024 00:00	0.0	N
13 Oct 2024 01:00	0.3	N
13 Oct 2024 02:00	0.3	NE
13 Oct 2024 03:00	0.0	E
13 Oct 2024 04:00	0.0	N
13 Oct 2024 05:00	0.1	NW
13 Oct 2024 06:00	0.0	NW
13 Oct 2024 07:00	0.2	Ν
13 Oct 2024 08:00	0.1	W

Date	Wind Speed (m/s)	Wind Direction
13 Oct 2024 09:00	0.6	SW
13 Oct 2024 10:00	0.6	W
13 Oct 2024 11:00	0.1	W
13 Oct 2024 12:00	1.1	S
13 Oct 2024 13:00	0.0	S
13 Oct 2024 14:00	0.8	S
13 Oct 2024 15:00	0.4	SE
13 Oct 2024 16:00	0.4	W
13 Oct 2024 17:00	0.4	S
13 Oct 2024 18:00	0.1	NW
13 Oct 2024 19:00	0.0	S
13 Oct 2024 20:00	0.0	SE
13 Oct 2024 21:00	0.0	E
13 Oct 2024 22:00	0.0	E
13 Oct 2024 23:00	0.0	E
14 Oct 2024 00:00	0.0	NE
14 Oct 2024 01:00	0.0	SE
14 Oct 2024 02:00	0.0	E
14 Oct 2024 03:00	0.0	E
14 Oct 2024 04:00	0.0	E
14 Oct 2024 05:00	0.0	S
14 Oct 2024 06:00	0.0	NE
14 Oct 2024 07:00	0.0	E
14 Oct 2024 08:00	0.0	E
14 Oct 2024 09:00	1.1	N
14 Oct 2024 10:00	0.3	NE
14 Oct 2024 11:00	0.3	NE

Date	Wind Speed (m/s)	Wind Direction
14 Oct 2024 12:00	0.1	S
14 Oct 2024 13:00	0.3	SE
14 Oct 2024 14:00	0.0	E
14 Oct 2024 15:00	0.0	E
14 Oct 2024 16:00	0.0	NE
14 Oct 2024 17:00	0.4	NE
14 Oct 2024 18:00	0.8	W
14 Oct 2024 19:00	0.2	NE
14 Oct 2024 20:00	0.0	NE
14 Oct 2024 21:00	0.0	E
14 Oct 2024 22:00	0.1	SE
14 Oct 2024 23:00	0.0	SE
15 Oct 2024 00:00	0.0	SE
15 Oct 2024 01:00	0.0	NE
15 Oct 2024 02:00	0.0	NE
15 Oct 2024 03:00	0.0	NE
15 Oct 2024 04:00	0.0	NE
15 Oct 2024 05:00	0.0	N
15 Oct 2024 06:00	0.0	N
15 Oct 2024 07:00	0.0	NE
15 Oct 2024 08:00	0.0	SE
15 Oct 2024 09:00	0.0	N
15 Oct 2024 10:00	0.0	E
15 Oct 2024 11:00	0.1	SE
15 Oct 2024 12:00	0.0	NE
15 Oct 2024 13:00	0.1	E
15 Oct 2024 14:00	0.1	E

Date	Wind Speed (m/s)	Wind Direction
15 Oct 2024 15:00	0.4	E
15 Oct 2024 16:00	3.0	E
15 Oct 2024 17:00	0.5	E
15 Oct 2024 18:00	0.0	E
15 Oct 2024 19:00	0.0	SE
15 Oct 2024 20:00	0.1	NE
15 Oct 2024 21:00	0.2	E
15 Oct 2024 22:00	0.1	Ν
15 Oct 2024 23:00	0.4	SE
16 Oct 2024 00:00	0.0	E
16 Oct 2024 01:00	0.0	NE
16 Oct 2024 02:00	0.0	E
16 Oct 2024 03:00	0.0	NE
16 Oct 2024 04:00	0.0	S
16 Oct 2024 05:00	0.0	E
16 Oct 2024 06:00	0.0	E
16 Oct 2024 07:00	0.0	NE
16 Oct 2024 08:00	0.0	E
16 Oct 2024 09:00	0.2	E
16 Oct 2024 10:00	0.6	NE
16 Oct 2024 11:00	0.5	NE
16 Oct 2024 12:00	1.8	SE
16 Oct 2024 13:00	0.4	E
16 Oct 2024 14:00	0.8	SE
16 Oct 2024 15:00	0.2	E
16 Oct 2024 16:00	0.1	E
16 Oct 2024 17:00	1.0	E

Date	Wind Speed (m/s)	Wind Direction
16 Oct 2024 18:00	0.5	SE
16 Oct 2024 19:00	0.3	E
16 Oct 2024 20:00	0.2	E
16 Oct 2024 21:00	0.4	E
16 Oct 2024 22:00	0.8	E
16 Oct 2024 23:00	1.2	NE
17 Oct 2024 00:00	0.3	E
17 Oct 2024 01:00	2.7	E
17 Oct 2024 02:00	3.4	E
17 Oct 2024 03:00	0.6	N
17 Oct 2024 04:00	0.1	E
17 Oct 2024 05:00	0.2	SE
17 Oct 2024 06:00	0.0	E
17 Oct 2024 07:00	0.2	E
17 Oct 2024 08:00	0.4	SE
17 Oct 2024 09:00	0.2	E
17 Oct 2024 10:00	0.4	SE
17 Oct 2024 11:00	1.9	E
17 Oct 2024 12:00	1.8	S
17 Oct 2024 13:00	1.6	SE
17 Oct 2024 14:00	1.6	S
17 Oct 2024 15:00	0.8	S
17 Oct 2024 16:00	0.1	NE
17 Oct 2024 17:00	0.0	NE
17 Oct 2024 18:00	0.1	NE
17 Oct 2024 19:00	0.0	E
17 Oct 2024 20:00	1.0	SE

Date	Wind Speed (m/s)	Wind Direction
17 Oct 2024 21:00	1.0	E
17 Oct 2024 22:00	1.1	NE
17 Oct 2024 23:00	1.1	E
18 Oct 2024 00:00	1.1	SE
18 Oct 2024 01:00	1.0	SE
18 Oct 2024 02:00	1.0	E
18 Oct 2024 03:00	1.0	SE
18 Oct 2024 04:00	1.0	E
18 Oct 2024 05:00	1.1	SE
18 Oct 2024 06:00	1.0	NE
18 Oct 2024 07:00	1.0	S
18 Oct 2024 08:00	1.0	S
18 Oct 2024 09:00	1.0	SE
18 Oct 2024 10:00	1.1	NW
18 Oct 2024 11:00	1.1	SW
18 Oct 2024 12:00	1.1	S
18 Oct 2024 13:00	1.0	S
18 Oct 2024 14:00	1.0	SE
18 Oct 2024 15:00	1.0	Ν
18 Oct 2024 16:00	1.0	E
18 Oct 2024 17:00	1.2	NE
18 Oct 2024 18:00	1.1	SE
18 Oct 2024 19:00	1.0	Ν
18 Oct 2024 20:00	1.0	S
18 Oct 2024 21:00	1.7	S
18 Oct 2024 22:00	1.0	E
18 Oct 2024 23:00	1.0	SE

Date	Wind Speed (m/s)	Wind Direction
19 Oct 2024 00:00	1.1	E
19 Oct 2024 01:00	1.0	S
19 Oct 2024 02:00	1.1	NE
19 Oct 2024 03:00	1.0	E
19 Oct 2024 04:00	1.0	NW
19 Oct 2024 05:00	1.0	NW
19 Oct 2024 06:00	1.1	SE
19 Oct 2024 07:00	1.6	W
19 Oct 2024 08:00	1.5	NE
19 Oct 2024 09:00	1.4	SE
19 Oct 2024 10:00	1.0	E
19 Oct 2024 11:00	1.3	NE
19 Oct 2024 12:00	1.0	E
19 Oct 2024 13:00	1.7	E
19 Oct 2024 14:00	1.0	SE
19 Oct 2024 15:00	1.0	NE
19 Oct 2024 16:00	1.0	NE
19 Oct 2024 17:00	1.0	E
19 Oct 2024 18:00	1.0	E
19 Oct 2024 19:00	1.0	N
19 Oct 2024 20:00	1.0	NE
19 Oct 2024 21:00	1.0	E
19 Oct 2024 22:00	1.0	NE
19 Oct 2024 23:00	1.2	NE
20 Oct 2024 00:00	1.0	NE
20 Oct 2024 01:00	1.0	E
20 Oct 2024 02:00	1.0	S

Date	Wind Speed (m/s)	Wind Direction
20 Oct 2024 03:00	1.0	NE
20 Oct 2024 04:00	1.0	E
20 Oct 2024 05:00	1.4	E
20 Oct 2024 06:00	2.4	NE
20 Oct 2024 07:00	1.3	NE
20 Oct 2024 08:00	2.6	NE
20 Oct 2024 09:00	1.2	NE
20 Oct 2024 10:00	1.9	NE
20 Oct 2024 11:00	1.0	E
20 Oct 2024 12:00	1.0	NE
20 Oct 2024 13:00	1.0	NE
20 Oct 2024 14:00	1.0	NE
20 Oct 2024 15:00	1.0	E
20 Oct 2024 16:00	1.0	NE
20 Oct 2024 17:00	1.0	NE
20 Oct 2024 18:00	1.0	NE
20 Oct 2024 19:00	1.0	SE
20 Oct 2024 20:00	1.0	NE
20 Oct 2024 21:00	1.0	NE
20 Oct 2024 22:00	1.0	NE
20 Oct 2024 23:00	1.0	NE
21 Oct 2024 00:00	1.0	NE
21 Oct 2024 01:00	1.0	NE
21 Oct 2024 02:00	1.0	NE
21 Oct 2024 03:00	1.0	NE
21 Oct 2024 04:00	1.1	NE
21 Oct 2024 05:00	1.0	E

Date	Wind Speed (m/s)	Wind Direction
21 Oct 2024 06:00	1.1	NE
21 Oct 2024 07:00	1.6	NE
21 Oct 2024 08:00	1.5	NE
21 Oct 2024 09:00	1.0	NE
21 Oct 2024 10:00	1.0	NE
21 Oct 2024 11:00	1.0	N
21 Oct 2024 12:00	1.0	SE
21 Oct 2024 13:00	1.0	NE
21 Oct 2024 14:00	1.3	E
21 Oct 2024 15:00	1.0	NE
21 Oct 2024 16:00	1.0	NE
21 Oct 2024 17:00	1.0	E
21 Oct 2024 18:00	1.0	E
21 Oct 2024 19:00	1.0	E
21 Oct 2024 20:00	1.0	W
21 Oct 2024 21:00	1.0	E
21 Oct 2024 22:00	1.0	E
21 Oct 2024 23:00	1.0	E
22 Oct 2024 00:00	1.0	NE
22 Oct 2024 01:00	1.0	NE
22 Oct 2024 02:00	1.0	NE
22 Oct 2024 03:00	1.0	NW
22 Oct 2024 04:00	1.2	SE
22 Oct 2024 05:00	1.0	E
22 Oct 2024 06:00	1.0	SW
22 Oct 2024 07:00	1.3	NE
22 Oct 2024 08:00	1.1	S

Date	Wind Speed (m/s)	Wind Direction
22 Oct 2024 09:00	1.1	S
22 Oct 2024 10:00	1.8	SE
22 Oct 2024 11:00	1.7	S
22 Oct 2024 12:00	1.5	S
22 Oct 2024 13:00	1.7	E
22 Oct 2024 14:00	1.0	NE
22 Oct 2024 15:00	1.3	NE
22 Oct 2024 16:00	1.1	E
22 Oct 2024 17:00	1.0	SE
22 Oct 2024 18:00	1.0	E
22 Oct 2024 19:00	1.0	SE
22 Oct 2024 20:00	1.0	E
22 Oct 2024 21:00	1.0	E
22 Oct 2024 22:00	1.0	NE
22 Oct 2024 23:00	1.0	E
23 Oct 2024 00:00	1.0	SE
23 Oct 2024 01:00	1.0	E
23 Oct 2024 02:00	1.0	NE
23 Oct 2024 03:00	1.0	E
23 Oct 2024 04:00	1.0	W
23 Oct 2024 05:00	1.0	SE
23 Oct 2024 06:00	1.1	N
23 Oct 2024 07:00	1.0	NW
23 Oct 2024 08:00	1.1	NW
23 Oct 2024 09:00	1.1	W
23 Oct 2024 10:00	1.1	NW
23 Oct 2024 11:00	2.0	W

Date	Wind Speed (m/s)	Wind Direction
23 Oct 2024 12:00	1.0	W
23 Oct 2024 13:00	1.0	W
23 Oct 2024 14:00	1.0	S
23 Oct 2024 15:00	1.0	SE
23 Oct 2024 16:00	1.0	NE
23 Oct 2024 17:00	1.0	E
23 Oct 2024 18:00	1.0	E
23 Oct 2024 19:00	1.0	SE
23 Oct 2024 20:00	1.0	S
23 Oct 2024 21:00	1.3	S
23 Oct 2024 22:00	1.0	S
23 Oct 2024 23:00	1.0	SE
24 Oct 2024 00:00	1.0	S
24 Oct 2024 01:00	1.0	S
24 Oct 2024 02:00	1.0	S
24 Oct 2024 03:00	1.0	W
24 Oct 2024 04:00	1.2	W
24 Oct 2024 05:00	1.0	W
24 Oct 2024 06:00	1.0	NW
24 Oct 2024 07:00	1.0	W
24 Oct 2024 08:00	1.0	W
24 Oct 2024 09:00	1.4	S
24 Oct 2024 10:00	1.0	W
24 Oct 2024 11:00	1.1	W
24 Oct 2024 12:00	1.3	W
24 Oct 2024 13:00	1.2	NW
24 Oct 2024 14:00	1.0	SW

Date	Wind Speed (m/s)	Wind Direction
24 Oct 2024 15:00	1.1	S
24 Oct 2024 16:00	1.1	S
24 Oct 2024 17:00	1.0	S
24 Oct 2024 18:00	1.0	S
24 Oct 2024 19:00	1.0	W
24 Oct 2024 20:00	1.0	W
24 Oct 2024 21:00	1.0	E
24 Oct 2024 22:00	1.0	S
24 Oct 2024 23:00	1.0	W
25 Oct 2024 00:00	1.0	S
25 Oct 2024 01:00	1.1	E
25 Oct 2024 02:00	1.0	W
25 Oct 2024 03:00	1.0	N
25 Oct 2024 04:00	1.0	W
25 Oct 2024 05:00	1.1	SW
25 Oct 2024 06:00	1.2	W
25 Oct 2024 07:00	1.1	NW
25 Oct 2024 08:00	1.4	W
25 Oct 2024 09:00	1.0	S
25 Oct 2024 10:00	1.0	NW
25 Oct 2024 11:00	1.0	SW
25 Oct 2024 12:00	1.1	W
25 Oct 2024 13:00	1.0	W
25 Oct 2024 14:00	1.0	SW
25 Oct 2024 15:00	1.0	S
25 Oct 2024 16:00	1.0	SW
25 Oct 2024 17:00	1.0	S

Date	Wind Speed (m/s)	Wind Direction
25 Oct 2024 18:00	1.0	SE
25 Oct 2024 19:00	1.1	E
25 Oct 2024 20:00	1.0	SE
25 Oct 2024 21:00	1.0	SE
25 Oct 2024 22:00	1.0	S
25 Oct 2024 23:00	1.0	SW
26 Oct 2024 00:00	1.1	S
26 Oct 2024 01:00	1.0	S
26 Oct 2024 02:00	1.0	S
26 Oct 2024 03:00	1.0	SE
26 Oct 2024 04:00	1.0	NW
26 Oct 2024 05:00	1.0	N
26 Oct 2024 06:00	1.1	SW
26 Oct 2024 07:00	1.0	NE
26 Oct 2024 08:00	1.7	NW
26 Oct 2024 09:00	1.0	NW
26 Oct 2024 10:00	1.2	SW
26 Oct 2024 11:00	2.0	SE
26 Oct 2024 12:00	1.1	S
26 Oct 2024 13:00	1.0	S
26 Oct 2024 14:00	1.3	S
26 Oct 2024 15:00	1.1	SE
26 Oct 2024 16:00	1.0	E
26 Oct 2024 17:00	1.0	SE
26 Oct 2024 18:00	1.0	E
26 Oct 2024 19:00	1.0	NE
26 Oct 2024 20:00	1.0	S

Date	Wind Speed (m/s)	Wind Direction
26 Oct 2024 21:00	1.0	NE
26 Oct 2024 22:00	1.2	NW
26 Oct 2024 23:00	1.1	NE
27 Oct 2024 00:00	1.0	S
27 Oct 2024 01:00	1.0	E
27 Oct 2024 02:00	1.0	SE
27 Oct 2024 03:00	1.0	S
27 Oct 2024 04:00	1.1	N
27 Oct 2024 05:00	1.5	NE
27 Oct 2024 06:00	1.0	NE
27 Oct 2024 07:00	2.3	NW
27 Oct 2024 08:00	1.0	N
27 Oct 2024 09:00	1.2	N
27 Oct 2024 10:00	1.7	NW
27 Oct 2024 11:00	2.7	S
27 Oct 2024 12:00	1.9	SW
27 Oct 2024 13:00	1.1	S
27 Oct 2024 14:00	1.0	S
27 Oct 2024 15:00	1.1	S
27 Oct 2024 16:00	1.0	S
27 Oct 2024 17:00	1.1	S
27 Oct 2024 18:00	1.2	SW
27 Oct 2024 19:00	1.0	S
27 Oct 2024 20:00	1.0	S
27 Oct 2024 21:00	1.0	S
27 Oct 2024 22:00	1.0	SE
27 Oct 2024 23:00	1.0	S

Date	Wind Speed (m/s)	Wind Direction
28 Oct 2024 00:00	1.0	SE
28 Oct 2024 01:00	1.0	W
28 Oct 2024 02:00	1.0	S
28 Oct 2024 03:00	1.0	S
28 Oct 2024 04:00	1.2	NE
28 Oct 2024 05:00	1.0	W
28 Oct 2024 06:00	1.3	NW
28 Oct 2024 07:00	1.2	N
28 Oct 2024 08:00	1.1	NW
28 Oct 2024 09:00	1.9	SE
28 Oct 2024 10:00	1.9	NW
28 Oct 2024 11:00	1.4	N
28 Oct 2024 12:00	1.4	W
28 Oct 2024 13:00	1.1	NW
28 Oct 2024 14:00	1.3	NE
28 Oct 2024 15:00	1.0	SE
28 Oct 2024 16:00	1.4	S
28 Oct 2024 17:00	1.0	S
28 Oct 2024 18:00	0.0	SE
28 Oct 2024 19:00	0.0	S
28 Oct 2024 20:00	0.0	S
28 Oct 2024 21:00	0.0	S
28 Oct 2024 22:00	0.0	SE
28 Oct 2024 23:00	0.0	S
29 Oct 2024 00:00	0.0	SE
29 Oct 2024 01:00	0.0	W
29 Oct 2024 02:00	0.4	S

Date	Wind Speed (m/s)	Wind Direction
29 Oct 2024 03:00	0.1	S
29 Oct 2024 04:00	0.0	NE
29 Oct 2024 05:00	0.0	W
29 Oct 2024 06:00	3.3	NW
29 Oct 2024 07:00	0.6	N
29 Oct 2024 08:00	0.8	NW
29 Oct 2024 09:00	0.5	SE
29 Oct 2024 10:00	0.8	NW
29 Oct 2024 11:00	0.0	N
29 Oct 2024 12:00	0.6	W
29 Oct 2024 13:00	0.2	NW
29 Oct 2024 14:00	0.0	NE
29 Oct 2024 15:00	0.0	SE
29 Oct 2024 16:00	0.0	S
29 Oct 2024 17:00	0.1	S
29 Oct 2024 18:00	0.1	SE
29 Oct 2024 19:00	0.0	SE
29 Oct 2024 20:00	0.0	S
29 Oct 2024 21:00	0.3	S
29 Oct 2024 22:00	0.3	SE
29 Oct 2024 23:00	0.0	NE
30 Oct 2024 00:00	0.0	E
30 Oct 2024 01:00	0.1	W
30 Oct 2024 02:00	0.0	NW
30 Oct 2024 03:00	0.2	E
30 Oct 2024 04:00	0.1	NW
30 Oct 2024 05:00	0.6	NE

Date	Wind Speed (m/s)	Wind Direction
30 Oct 2024 06:00	0.6	NW
30 Oct 2024 07:00	0.1	SW
30 Oct 2024 08:00	1.1	S
30 Oct 2024 09:00	0.0	SE
30 Oct 2024 10:00	0.8	S
30 Oct 2024 11:00	0.4	S
30 Oct 2024 12:00	0.4	S
30 Oct 2024 13:00	0.4	NE
30 Oct 2024 14:00	0.1	SE
30 Oct 2024 15:00	0.0	N
30 Oct 2024 16:00	0.0	S
30 Oct 2024 17:00	0.0	NE
30 Oct 2024 18:00	0.0	SE
30 Oct 2024 19:00	0.0	SE
30 Oct 2024 20:00	0.0	N
30 Oct 2024 21:00	0.0	N
30 Oct 2024 22:00	0.0	SE
30 Oct 2024 23:00	0.0	E
31 Oct 2024 00:00	0.0	N
31 Oct 2024 01:00	0.0	W
31 Oct 2024 02:00	0.0	SE
31 Oct 2024 03:00	0.0	E
31 Oct 2024 04:00	0.0	W
31 Oct 2024 05:00	1.1	N
31 Oct 2024 06:00	0.3	SW
31 Oct 2024 07:00	0.3	NW
31 Oct 2024 08:00	0.1	S

Date	Wind Speed (m/s)	Wind Direction
31 Oct 2024 09:00	0.3	E
31 Oct 2024 10:00	0.0	E
31 Oct 2024 11:00	0.0	S
31 Oct 2024 12:00	0.0	E
31 Oct 2024 13:00	0.4	NE
31 Oct 2024 14:00	0.8	SE
31 Oct 2024 15:00	0.2	NE
31 Oct 2024 16:00	0.0	NE
31 Oct 2024 17:00	0.0	E
31 Oct 2024 18:00	0.1	SE
31 Oct 2024 19:00	0.0	E
31 Oct 2024 20:00	0.0	SE
31 Oct 2024 21:00	0.0	NE
31 Oct 2024 22:00	0.0	NE
31 Oct 2024 23:00	0.0	NE
1 Nov 2024 00:00	0.0	NW

Appendix H Event and Action Plan

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

Event		Action		
Event	ET	IEC	ER	Contractor
Action level being exceeded by	<ol> <li>Identify source, investigate the causes of complaint and propose remedial measures;</li> <li>Inform Contractor, IEC and ER;</li> <li>Repeat measurement to confirm finding; and</li> <li>Increase monitoring frequency to daily.</li> </ol>	<ol> <li>Check monitoring data submitted by ET;</li> <li>Check Contractor's working method; and</li> <li>Review and advise the ET and ER on the effectiveness of the proposed remedial measures.</li> </ol>	1. Notify Contractor.	<ol> <li>Identify source(s), investigate the causes of exceedance and propose remedial measures;</li> <li>Implement remedial measures; and</li> <li>Amend working methods agreed with the ER as appropriate.</li> </ol>
Action level being exceeded by two or more consecutive sampling	<ol> <li>Identify source;</li> <li>Inform Contractor, IEC and ER;</li> <li>Advise the Contractor and ER on the effectiveness of the proposed remedial measures;</li> <li>Repeat measurements to confirm findings;</li> <li>Increase monitoring frequency to daily;</li> <li>Discuss with IEC and Contractor on remedial actions required;</li> <li>If exceedance continues, arrange meeting with Contractor, IEC and ER; and</li> <li>If exceedance stops, cease additional monitoring.</li> </ol>	<ol> <li>Check monitoring data submitted by ET;</li> <li>Check Contractor's working method;</li> <li>Discuss with ET, ER and Contractor on possible remedial measures;</li> <li>Advise the ET and ER on the effectiveness of the proposed remedial measures; and</li> <li>Supervise Implementation of remedial measures.</li> </ol>	<ol> <li>Confirm receipt of notification of exceedance in writing;</li> <li>Notify Contractor;</li> <li>Ensure remedial measures properly implemented.</li> </ol>	<ol> <li>Identify source and investigate the causes of exceedance;</li> <li>Submit proposals for remedial measures to the ER with a copy to ET and IEC within three working days of notification;</li> <li>Implement the agreed proposals; and</li> <li>Amend proposal as appropriate.</li> </ol>
Limit level being exceeded by one sampling	<ol> <li>Identify source, investigate the causes of exceedance and propose remedial measures;</li> <li>Inform Contractor, IEC, ER, and EPD;</li> <li>Repeat measurement to confirm finding;</li> <li>Increase monitoring frequency to daily; and</li> <li>Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results.</li> </ol>	<ol> <li>Check monitoring data submitted by ET;</li> <li>Check Contractor's working method;</li> <li>Discuss with ET and Contractor on possible remedial measures;</li> <li>Advise the ER on the effectiveness of the proposed remedial measures; and</li> <li>Supervise implementation of remedial measures.</li> </ol>	<ol> <li>Confirm receipt of notification of exceedance in writing;</li> <li>Notify Contractor;</li> <li>Ensure remedial measures properly implemented.</li> </ol>	<ol> <li>Identify source(s) and investigate the causes of exceedance;</li> <li>Take immediate action to avoid further exceedance;</li> <li>Submit proposals for remedial measures to ER with a copy to ET and IEC within three working days of notification;</li> <li>Implement the agreed proposals; and</li> <li>Amend proposal if appropriate.</li> </ol>
Limit level being exceeded by two or more consecutive sampling	<ol> <li>Notify IEC, ER, Contractor and EPD;</li> <li>Identify source;</li> <li>Repeat measurement to confirm findings;</li> <li>Increase monitoring frequency to daily;</li> <li>Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented;</li> <li>Arrange meeting with IEC and ER to discuss the remedial actions to be taken;</li> <li>Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; and</li> <li>If exceedance stops, cease additional monitoring.</li> </ol>	<ol> <li>Check monitoring data submitted by the ET;</li> <li>Discuss amongst ER, ET, and Contractor on the potential remedial actions;</li> <li>Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly; and</li> <li>Supervise the implementation of remedial measures.</li> </ol>	<ol> <li>Confirm receipt of notification of exceedance in writing;</li> <li>In consultation with the ET and IEC, agree with the Contractor on the remedial measures to be implemented;</li> <li>Supervise the implementation of remedial measures; and</li> <li>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> <li>Identify source(s) and investigate the causes of exceedance;</li> <li>Take immediate action to avoid further exceedance;</li> <li>Submit proposals for remedial measures to the ER with a copy to the IEC and ET within three working days of notification;</li> <li>Implement the agreed proposals;</li> <li>Revise and resubmit proposals if problem still not under control; and</li> <li>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)

Front		Action		
Event	ET	IEC	ER	Contractor
Action Level	<ol> <li>Notify IEC and Contractor;</li> <li>Carry out investigation;</li> <li>Report the results of investigation to the IEC, ER and Contractor;</li> <li>Discuss with the Contractor and formulate remedial measures; and</li> <li>Increase monitoring frequency to check mitigation effectiveness.</li> </ol>	<ol> <li>Review the analyzed results submitted by the ET;</li> <li>Review the proposed remedial measures by the Contractor and advise the ER accordingly; and</li> <li>Supervise the implementation of remedial measures.</li> </ol>	<ol> <li>Confirm receipt of notification of failure in writing;</li> <li>Notify Contractor;</li> <li>Require Contractor to propose remedial measures for the analyzed noise problem; and</li> <li>Ensure remedial measures are properly implemented.</li> </ol>	<ol> <li>Submit noise mitigation proposals to IEC; and</li> <li>Implement noise mitigation proposals.</li> </ol>
Limit Level	<ol> <li>Identify source;</li> <li>Inform IEC, ER, EPD and Contractor;</li> <li>Repeat measurements to confirm findings;</li> <li>Increase monitoring frequency;</li> <li>Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented;</li> <li>Inform IEC, ER and EPD the causes and actions taken for the exceedances;</li> <li>Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; and</li> <li>If exceedance stops, cease additional monitoring.</li> </ol>	<ol> <li>Discuss amongst ER, ET, and Contractor on the potential remedial actions;</li> <li>Review Contractors remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly; and</li> <li>Supervise the implementation of remedial measures.</li> </ol>	<ol> <li>Confirm receipt of notification of failure in writing;</li> <li>Notify Contractor;</li> <li>Require Contractor to propose remedial measures for the analyzed noise problem;</li> <li>Ensure remedial measures properly implemented; and</li> <li>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> <li>Take immediate action to avoid further exceedance;</li> <li>Submit proposals for remedial actions to IEC within 3 working days of notification;</li> <li>Implement the agreed proposals;</li> <li>Resubmit proposals if problem still not under control; and</li> <li>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

Front	Action							
Event	ET	IEC	ER	Contractor				
Action level being exceeded by one sampling	<ol> <li>Repeat in situ measurement on the next day of exceedance to confirm findings;</li> <li>Check monitoring data, plant, equipment and Contractor(s)'s working methods;</li> <li>Identify source(s) of impact and record in notification of exceedance;</li> <li>Inform IEC, Contractor(s) and ER</li> </ol>	<ol> <li>Check monitoring data submitted by ET and Contractor(s)'s working methods;</li> <li>Inform EPD and AFCD.</li> </ol>	1. Confirm receipt of notification of exceedance in writing	<ol> <li>Confirm receipt of notification of exceedance in writing;</li> <li>Check plant and equipment and rectify unacceptable practice</li> </ol>				
Action level being exceeded by two or more consecutive sampling	<ol> <li>Repeat in situ measurement on the next day of exceedance to confirm findings;</li> <li>Check monitoring data, plant, equipment and Contractor(s)'s working methods;</li> <li>Identify source(s) of impact and record in notification of exceedance;</li> <li>Inform IEC, Contractor(s) and ER;</li> <li>Discuss with IEC and Contractor(s) on additional mitigation measures and ensure that they are implemented.</li> </ol>	<ol> <li>Check monitoring data submitted by ET and Contractor(s)'s working methods;</li> <li>Inform EPD and AFCD;</li> <li>Discuss with ET and Contractor(s) on additional mitigation measures and advise ER accordingly;</li> <li>Assess the effectiveness of the implemented mitigation measures.</li> </ol>	<ol> <li>Confirm receipt of notification of exceedance in writing;</li> <li>Discuss with the IEC on the proposed additional mitigation measures and agree on the mitigation measures to be implemented.</li> <li>Ensure additional mitigation measures are properly implemented.</li> </ol>	<ol> <li>Confirm receipt of notification of exceedance in writing;</li> <li>Check plant and equipment and rectify unacceptable practice;</li> <li>Consider changes of working methods;</li> <li>Discuss with ET and IEC on additional mitigation measures and propose them to ER within 3 working days;</li> <li>Implement the agreed mitigation measures.</li> </ol>				
Limit level being exceeded by one sampling	<ol> <li>Repeat in situ measurement on the next day of exceedance to confirm findings;</li> <li>Check monitoring data, plant, equipment and Contractor(s)'s working methods;</li> <li>Identify source(s) of impact and record in notification of exceedance;</li> <li>Inform IEC, Contractor(s) and ER;</li> <li>Discuss with IEC and Contractor(s) on additional mitigation measures and ensure that they are implemented.</li> </ol>	<ol> <li>Check monitoring data submitted by ET and Contractor(s)'s working methods;</li> <li>Inform EPD and AFCD;</li> <li>Discuss with ET and Contractor(s) on additional mitigation measures and advise ER accordingly;</li> <li>Assess the effectiveness of the implemented mitigation measures.</li> </ol>	<ol> <li>Confirm receipt of notification of exceedance in writing;</li> <li>Discuss with the IEC on the proposed additional mitigation measures and agree on the mitigation measures to be implemented.</li> <li>Ensure additional mitigation measures are properly implemented.</li> <li>Request Contractor(s) to critically review the working methods.</li> </ol>	<ol> <li>Confirm receipt of notification of exceedance in writing;</li> <li>Check plant and equipment and rectify unacceptable practice;</li> <li>Critically review the need to change working methods;</li> <li>Discuss with ET and IEC on additional mitigation measures and propose them to ER within 3 working days;</li> <li>Implement the agreed mitigation measures.</li> </ol>				
Limit level being exceeded by two or more consecutive sampling	<ol> <li>Repeat in situ measurement on the next day of exceedance to confirm findings;</li> <li>Check monitoring data, plant, equipment and Contractor(s)'s working methods;</li> <li>Identify source(s) of impact and record in notification of exceedance;</li> <li>Inform IEC, Contractor(s) and ER;</li> <li>Discuss with IEC and Contractor(s) on additional mitigation measures and ensure that they are implemented.</li> </ol>	<ol> <li>Check monitoring data submitted by ET and Contractor(s)'s working methods;</li> <li>Inform EPD and AFCD;</li> <li>Discuss with ET and Contractor(s) on additional mitigation measures and advise ER accordingly;</li> <li>Assess the effectiveness of the implemented mitigation measures.</li> </ol>	<ol> <li>Confirm receipt of notification of exceedance in writing;</li> <li>Discuss with the IEC on the proposed additional mitigation measures and agree on the mitigation measures to be implemented.</li> <li>Ensure additional mitigation measures are properly implemented.</li> <li>Request Contractor(s) to critically review the working methods.</li> </ol>	<ol> <li>Confirm receipt of notification of exceedance in writing;</li> <li>Check plant and equipment and rectify unacceptable practice;</li> <li>Critically review the need to change working methods;</li> <li>Discuss with ET and IEC on additional mitigation measures and propose them to ER within 3 working days;</li> <li>Implement the agreed mitigation measures.</li> </ol>				

### Event and Action Plan for Ecology Monitoring

Event		Action			
Event	ET	IEC	ER	Contractor	
Action Level	<ol> <li>Notify IEC and Contractor;</li> <li>Carry out investigation;</li> <li>Report the results of investigation to the IEC, ER and Contractor;</li> <li>Discuss with the Contractor and formulate remedial measures; and</li> <li>Increase monitoring frequency to check mitigation effectiveness.</li> </ol>	<ol> <li>Review the analyzed results submitted by the ET;</li> <li>Review the proposed remedial measures by the Contractor and advise the ER accordingly; and</li> <li>Supervise the implementation of remedial measures.</li> </ol>	<ol> <li>Confirm receipt of notification of failure in writing;</li> <li>Notify Contractor;</li> <li>Require Contractor to propose remedial measures for the analyzed noise problem; and</li> <li>Ensure remedial measures are properly implemented.</li> </ol>	<ol> <li>Submit noise mitigation proposals to IEC; and</li> <li>Implement noise mitigation proposals.</li> </ol>	
Limit Level	<ol> <li>Identify source;</li> <li>Inform IEC, ER, EPD and Contractor;</li> <li>Repeat measurements to confirm findings;</li> <li>Increase monitoring frequency;</li> <li>Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented;</li> <li>Inform IEC, ER and EPD the causes and actions taken for the exceedances;</li> <li>Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; and</li> <li>If exceedance stops, cease additional monitoring.</li> </ol>	<ol> <li>Discuss amongst ER, ET, and Contractor on the potential remedial actions;</li> <li>Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly; and</li> <li>Supervise the implementation of remedial measures.</li> </ol>	<ol> <li>Confirm receipt of notification of failure in writing;</li> <li>Notify Contractor;</li> <li>Require Contractor to propose remedial measures for the analysed noise problem;</li> <li>Ensure remedial measures are properly implemented; and</li> <li>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> <li>Take immediate action to avoid further exceedance;</li> <li>Submit proposals for remedial actions to IEC within 3 working days of notification;</li> <li>Implement the agreed proposals;</li> <li>Resubmit proposals if problem still not under control; and</li> <li>Stop the relevant portion of works as determined by the ER until the exceedance is abated.</li> </ol>	

Appendix I Waste Flow Table

		Actual Quantities of Inert C&D Materials Generated Monthly					Actual Quantities of Non-inert C&D Wastes Generated Monthly				
Monthly Ending	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 2)	Chemical Waste	Others, e.g. general refuse
	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)
2024 Jan	11180.54	Nil	Nil	Nil	11103.51	Nil	Nil	0.25	Nil	Nil	76.86
2024 Feb	39622.50	Nil	Nil	Nil	39511.96	Nil	10.78	0.01	Nil	Nil	99.74
2024 Mar	28642.82	Nil	Nil	Nil	28422.00	Nil	94.04	0.10	Nil	Nil	126.76
2024 Apr	36811.58	Nil	Nil	Nil	36608.65	Nil	75.49	0.10	Nil	Nil	127.33
2024 May	3275.68	Nil	Nil	Nil	3161.67	Nil	Nil	0.15	Nil	Nil	113.86
2024 Jun	2331.53	Nil	Nil	Nil	2241.60	Nil	Nil	0.11	Nil	Nil	89.82
2024 Jul	149.30	Nil	Nil	Nil	Nil	Nil	52.39	0.22	0.01	Nil	96.68
2024 Aug	6992.94	Nil	Nil	Nil	6861.16	Nil	Nil	0.1	0.01	Nil	131.67
2024 Sep	1661.21	Nil	Nil	Nil	1552.32	Nil	Nil	0.14	Nil	Nil	108.75
2024 Oct	1447.83*	Nil*	Nil*	Nil*	1347.61*	Nil*	Nil*	0.1*	Nil*	Nil*	100.12*
Total	130668.1*	Nil*	Nil*	Nil*	129462.87*	Nil*	232.7*	1.18*	0.02*	Nil*	971.47*

Note:

The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
 Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging materials.
 Updated figures are presented during the reporting month.
 \* Disposal Records to Government facilities is updated till 25<sup>th</sup> October 2024.

# Appendix J Implementation Status of Environmental Mitigation Measures

EIA Ref.	Environmental Protection Measures	Location / Duration of Measures / Timing of Completion of Measures	Implementation Status
	Air Quality Impact (Construction Phase)		
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
	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 cons	struction dust impact:
	• Use of regular watering to reduce dust emissions from exposed site surfaces and unpaved roads, particularly during dry weather.		Implemented
	Use of frequent watering for particularly dusty construction areas and areas close to ASRs.		Implemented
	• 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.		Implemented
	• Open stockpiles shall be avoided or covered. Where possible, prevent placing dusty material storage piles near ASRs.		Implemented
	Tarpaulin covering of all dusty vehicle loads transported to, from and between site locations.		Implemented
3.8.1.1	• Establishment and use of vehicle wheel and body washing facilities at the exit points of the site.	Construction Sites	Implemented
	• 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.		N/A
	• 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.		Implemented
	Imposition of speed controls for vehicles on site haul roads.		Implemented
	• Where possible, routing of vehicles and positioning of construction plant should be at the maximum possible distance from ASRs.		Implemented
	<ul> <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

EIA Ref.	Environmental Protection Measures	Location / Duration of Measures / Timing of Completion of Measures	Implementation Status
	Noise Impact (Construction Phase)		
	Movable noise barriers are recommended for hydraulic breakers mounted on excavators to be adopted during construction.		N/A
	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.		Implemented
	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.		Implemented
	• Only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction programme.		Implemented
4.8.1	• Silencers or mufflers on construction equipment should be utilised and should be properly maintained during the construction programme.	Construction Sites	Implemented
	• Mobile plant, if any, should be sited as far away from noise sensitive receivers (NSRs) as possible.		N/A
	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.		Implemented
	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		N/A
	Material stockpiles and other structures should be effectively utilised, wherever practicable, in screening noise from on-site construction activities.		N/A
	Water Quality Impact (Construction Phase)		
5.8.1.2	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	Construction Sites / Construction Phase	Implemented
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

EIA Ref.	Environmental Protection Measures	Location / Duration of Measures / Timing of Completion of Measures	Implementation Status	
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	Implemented	
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 caused by rainstorms. Appropriate drainage like intercepting channels should be provided where necessary	Construction Sites / Construction Phase	Implemented	
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	Implemented	
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	Implemented	
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	
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	Implemented	
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	

EIA Ref.	Environmental Protection Measures	Location / Duration of Measures / Timing of Completion of Measures	Implementation Status		
	Waste Management Implication (Construction Phase)				
	Good Site Practices				
	Recommendations for good site practices during the construction phase include:				
	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;		Implemented		
	Training of site personnel in proper waste management and chemical waste handling procedures;		Implemented		
	Provision of sufficient waste reception/ disposal points, of a suitable vermin-proof design that minimises windblown litter;		N/A		
6.6.1.3	Arrangement for regular collection of waste for transport off-site and final disposal;		Implemented		
	Appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers;	Construction Sites	Implemented		
	Regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors;		Implemented		
	• A recording system for the amount of wastes generated, recycled and disposed (including the disposal sites) should be proposed; and		Implemented		
	• 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.		Implemented		
	Waste Reduction Measures				
	Recommendations to achieve waste reduction include:				
	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;		Implemented		
	• 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;		Implemented		
	Any unused chemicals or those with remaining functional capacity shall be recycled;		N/A		
6.6.1.5	Maximising the use of reusable steel formwork to reduce the amount of C&D material;		Implemented		
	Prior to disposal of C&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;	Construction Sites	Implemented		
	• Adopt proper storage and site practices to minimise the potential for damage to, or contamination of, construction materials;		Implemented		
	• Plan the delivery and stock of construction materials carefully to minimise the amount of surplus waste generated;		N/A		
	Adopt pre-cast construction method instead of cast-in-situ method for construction of concrete structures as much as possible; and		N/A		
	• Minimise over ordering of concrete, mortars and cement grout by doing careful check before ordering.		N/A		

EIA Ref.	Environmental Protection Measures	Location / Duration of Measures / Timing of Completion of Measures	Implementation Status
	Storage of Waste		
	Recommendations to minimise the impacts include:		
	• Waste, such as soil, should be handled and stored well to ensure secure containment, thus minimising the potential of pollution;		Implemented
6.6.1.7	Maintain and clean storage areas routinely;		Implemented
	• Stockpiling area should be provided with covers and water spraying system to prevent materials from wind-blown or being washed away; and	Construction Sites	Implemented
	Different locations should be designated to stockpile each material to enhance reuse.		Implemented
	Collection of Waste Licensed waste haulers should be employed for the collection and transportation of waste generated. The following measures should be ended	nforced to minimise the potential ac	verse impacts:
	Remove waste in timely manner;		Implemented
	Waste collectors should only collect wastes prescribed by their permits;		Implemented
6.6.1.8	• Impacts during transportation, such as dust and odour, should be mitigated by the use of covered trucks or in enclosed containers;		Implemented
	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);	Construction Sites	Implemented
	Waste should be disposed of at licensed waste disposal facilities; and		Implemented
	Maintain records of quantities of waste generated, recycled and disposed.		Implemented
	Transportation of Waste		
6.6.1.10	In order to monitor the disposal of C&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.	Transportation Route of Waste / Construction Phase	Implemented
	Construction and Demolition Material		
6.6.1.12	Careful design, planning together with good site management can reduce over-ordering and generation of C&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	Construction Sites	N/A
	The excavated material arising from site formation and foundation works should be reused on-site as backfilling material and for lands requirements are listed below:	caping works as far as practicable	. Other mitigation
	A WMP, which becomes part of the EMP, should be prepared in accordance with ETWB TCW No.19/2005;		Implemented
6.6.1.13	• A recording system for the amount of wastes generated, recycled and disposed (including the disposal sites) should be adopted for easy tracking; and	Construction Sites	Implemented
	• In order to monitor the disposal of C&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).		Implemented

EIA Ref.	Environmental Protection Measures	Location / Duration of Measures / Timing of Completion of Measures	Implementation Status
	It is recommended that specific areas should be provided by the Contractors for sorting and to provide temporary storage areas (if required) f stockpiles on-site should be taken in order to minimise the noise, generation of dust and pollution of water. These measures include:	or the sorted materials. Control mea	asures for temporary
	Surface of stockpiled soil should be regularly wetted with water especially during dry season;		Implemented
6.6.1.14	Disturbance of stockpile soil should be minimised;	Construction Sites	Implemented
	Stockpiled soil should be properly covered with tarpaulin especially when heavy storms are predicted; and	Construction Ones	Implemented
	Stockpiling areas should be enclosed where space is available.		Implemented
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	Implemented
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	Implemented
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	Implemented
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

EIA Ref.	Environmental Protection Measures	Location / Duration of Measures / Timing of Completion of Measures	Implementation Status		
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	Implemented		
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 be 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		
	Land Contamination				
7.8.1.2 - 7.8.1.3;7.8.2.1	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 EPD's agreed supplementary CAP(s).SI works should be carried out according to the supplementary CAP(s) is a discussed 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).	Existing YLSTW /Construction Phase (after decommissioning of the concerned facilities / areas but prior to the construction works at the concerned facilities / areas)	Implemented		
	The mitigation measures will be recommended in the RAP and would typically include the following:				
	Excavation profiles must be properly designed and executed with attention to the relevant requirements for environment, health and safety;		Implemented		
	• 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;		N/A		
7.8.3.1	• 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.		Implemented		
7.6.3.1	• 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;	Project Site / Construction Phase	Implemented		
	Speed control for the trucks carrying contaminated materials shall be enforced;		Implemented		
	Vehicle wheel and body washing facilities at the site's exist points shall be established and used; and		Implemented		
	• 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.		Implemented		

EIA Ref.	Environmental Protection Measures	Location / Duration of Measures / Timing of Completion of Measures	Implementation Status
	Ecological Impact (Terrestrial and Aquatic) (Construction Phase)		
	Avoidance of Recognised Site of Conservation Importance	Drois et eite / Construction	
8.10.2.1	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
0.40.0.0	Avoidance of Demolition Works Using Breakers Mounted on Excavators and Percussive Piling during Dry Season		
8.10.2.3 – 8.10.2.4	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
	Restriction of Construction Hours		
8.10.2.5	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
	Minimising Construction Noise Disturbance Impacts through Consideration of Alternative Construction Methods		
8.10.3.2 – 8.10.3.3	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
8.10.3.4 – 8.10.3.5	<ul> <li><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.</li> <li>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.</li> </ul>	Project site / Construction Phase	Implemented
	Minimising Construction Noise Disturbance Impacts through Use of Noise Barriers		
8.10.3.6 – 8.10.3.8	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. 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	Construction sites / Construction Phase	Implemented
	plants around the rig. The contractor should provide enclosure for construction equipment, especially static plants, as appropriate to minimise the noise disturbance as far as practicable.		
	Use of Quality Powered Mechanical Equipment		
8.10.3.9	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
	Ecology & Fisheries Impact		
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

EIA Ref.	Environmental Protection Measures	Location / Duration of Measures / Timing of Completion of Measures	Implementation Status
	Fisheries Impact		
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
	Landscape and Visual Impact		
	Preservation of Existing Vegetation (CM1) 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
	Transplanting of Affected Trees (CM2) 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
Table 10.11	Compensatory Tree Planting (CM3) 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.	Project site / Construction Phase	N/A
	Control of Night-time Lighting Glare (CM4) All the night time lighting shall be avoided except for safety purpose. No light glare shall illuminate directly outside the site.	Project site / Construction Phase	Implemented
	Erection of Decorative Screen Hoarding (CM5) Site hoardings, if any, shall be painted in dull green colour	Project site / Construction Phase	Implemented
	Management of Construction Activities and Facilities (CM6) 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.	Project site / Construction Phase	Implemented
	Hazard to Life (Construction Phase)		
	• 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;		N/A
11.5.6.9-	• 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;	Project site / Construction Phase	N/A
11.5.6.12	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	i nast	N/A
	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.	/ehicles from	

EIA Ref.	Environmental Protection Measures	vironmental Protection Measures Location / Duration of Measures / Timing of Completion of Measures		
	Method statements and risk assessments shall be prepared and safety control measures shall be in place before commencement of work		Implemented	
	• All work procedures shall be complied with the operating plant procedures or guidelines and regulatory requirements;		Implemented	
11.5.8	Work permit system, on-site pre-work risk assessment and emergency response procedure shall be in place before commencement of work;	Project site / Construction Phase	Implemented	
	• All construction workers shall equip with appropriate personal protective equipment (PPE) when working at the Project Site;		Implemented	
	Safety training and briefings shall be provided to all construction workers;		Implemented	
	Regular site safety inspections shall be conducted during the construction phase of the Project;	of Project site / Construction Phase	Implemented	
	• Ensure speed limit enforcement is specified in the contractor's method statement to limit the speed of construction vehicles onsite;	_	Implemented	
	Conduct speed checks to ensure enforcement of speed limits and to ensure adequate site access control;		N/A	
	A lifting plan, with detailed risk assessment, should be prepared and endorsed for heavy lifting of large equipment;		Implemented	
	Vehicle crash barriers should be provided between the construction site and the operating biogas facilities;		N/A	
	• 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;		Implemented	
	• 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;	Deviced vite / Occurrenting	Implemented	
11.9.1.2	• Ensure effective communication system / protocol is in place between the contractors and the operation staff;		Implemented	
	• 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;		Implemented	
	• 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;		Implemented	
	• 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.		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 K Weather and Meteorological Conditions

### September 2024 Weather

#### **Station: Wetland Park**

Date	Mean		Air Temperature		Mean	Total
	Pressure Maximum (hPa) (deg. C)			Minimum (deg. C)	Relative Humidity (%)	Rainfall (mm)
			September 2024			
1	1007.6	34.6	29.8	26.7	85	0
2	1007.2	35.4	30.2	27	85	2.5
3	1005.8	35.2	30.2	25.2	82	1
4	1002.1	34.8	29.1	25.4	86	3
5	999.5	33.7	29.3	25.9	83	7.5
6	1001.6	27.3	26.5	25.3	96	85.5
7	1006.7	31	27.8	26.2	94	19.5
8	1008.3	29.5	27.3	26.2	96	12
9	1007.2	31.5	27.7	25.9	89	0
10	1006.9	34.9	28.9	25.3	82	0
11	1007.8	33.4	29.1	25.9	84	0
12	1006.7	32.9	28.3	25.8	88	0
13	1004.7	33.9	28.5	25.9	87	4.5
14	1002.5	31.6	27.8	26.1	92	2
15	1001.9	33.7	28.9	25.5	81	0.5
16	1003.7	32	28.4	26.6	81	0
17	1003.9	36.2	30.1	26.7	81	0
18	1003.6	33.7	29.5	25.9	79	0
19	1002.8	34.4	30	27	76	0
20	1002.9	34	29.3	26.3	85	2.5
21	1003.1	28.8	26.9	26.2	98	10.5
22	1005.7	30.2	26.5	24.1	92	6
23	1009.1	27	24.2	22.3	93	33
24	1010.1	28.1	25.5	23.2	98	46
25	1010.8	32.7	27.9	25.2	88	1.5
26	1010.8	33.2	28.7	25.1	84	0
27	1009.7	34	29.9	27.1	79	0
28	1008.8	33.6	28.2	25.7	89	10.5
29	1008.3	33	28.6	25.5	83	0
30	1005.3	35.6	29.8	26.6	78	0

Note (From Hong Kong Observatory):

1. # Data incomplete

2. Rainfall measured in increment of 0.5 mm. Amount of < 0.5 mm cannot be detected

Source: Hong Kong Observatory

## **October 2024 Weather**

### Station: Hong Kong Observatory

		Air Temperature			Mean Relative	Total Dainfall
Date	Mean Pressure (hPa)	Maximum (deg. C)	Mean (deg. C)	Minimum (deg. C)	Humidity (%)	Total Rainfall (mm)
			October 2024			
1	1005.2	34.2	30.9	27.8	58	0
2	1009.9	30.8	27.4	25.5	54	0
3	1013.2	29.4	26.1	23.3	49	0
4	1014.4	30.9	27	24.6	50	0
5	1013.3	31.5	27.9	25.5	63	0
6	1013.7	33.3	29.2	26.7	70	0
7	1014.4	32.9	29.3	27.3	66	0
8	1014.2	31.7	28.2	26.2	62	0
9	1013.5	27.4	26.4	25.2	68	Trace
10	1013	30.6	27	24.5	68	Trace
11	1013.7	27.5	25.3	23.2	79	8.7
12	1015.1	29.7	27	25.6	67	0
13	1014.5	30.2	27.5	25.9	73	0
14	1013.5	31	28	26.3	75	0
15	1013.6	30.9	28.1	26.6	75	0
16	1014.5	31.1	28.2	27.4	74	Trace
17	1013.9	29.7	27.8	27.1	77	Trace
18	1013.2	30.7	28.3	27.1	78	Trace
19	1014.1	33.7	29.2	26.4	74	0
20	1016.5	29.7	27.9	26.9	75	1.9
21	1015	31.5	27.8	26.4	75	Trace
22	1013.7	32.3	28.3	26	64	0
23	1012.4	28.4	25.7	23.4	57	0
24	1009.2	28.5	24.8	22	42	0
25	1006.7	29.4	26	22.9	45	0
26	1006.6	28.5	26.6	25.3	67	0.7
27	1009.3	29.2	27.3	25.9	73	Trace
28	1010.1	27.2	25.8	24.6	67	Trace
29	1011.1	26.7	25.3	23.7	69	Trace
30	1010.3	29.3	26.2	24.3	64	0
31	1006	30.6	27.1	24.1	52	0

Note (From Hong Kong Observatory):

Trace means rainfall less than 0.05 mm

Source: Hong Kong Observatory

Remark: The corresponding weather station at Wetland Park were unavailable at the time of preparation of this report. The corresponding month's weather will be provided in the next reporting month.

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

### **Environmental Complaints Log**

Reference	Date of Complaint	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
Total	0	0	0

### 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
Total	0	0	0

Appendix M Summary of the ET Leader's Site Environmental Audit in the Reporting Month

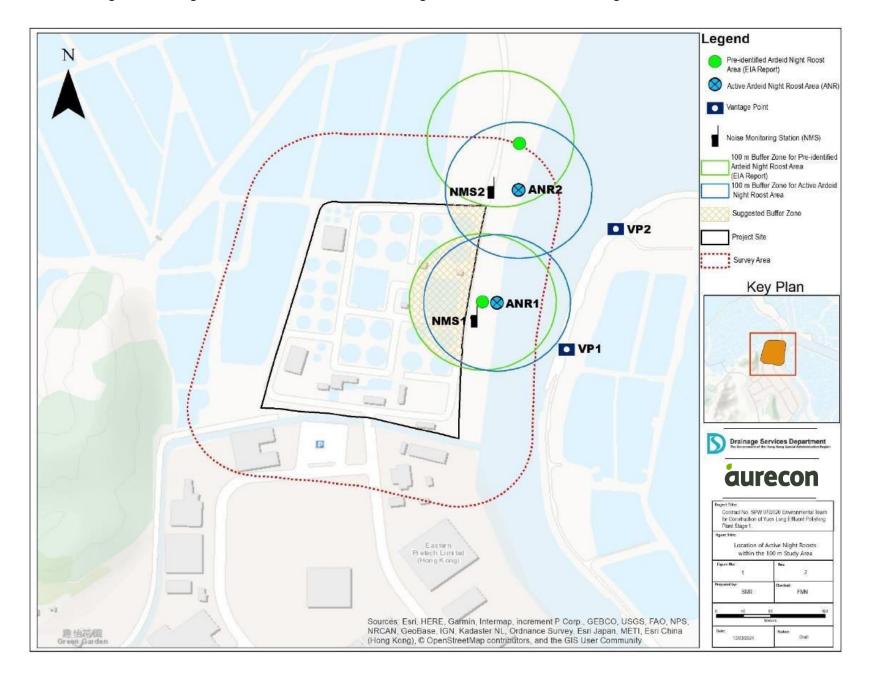
Parameters	Date Observations and Recommendations		Follow-up		
Air Quality	2 October 2024	Reminder 1: The contractor should increase watering for the haul road.	Watering was increased.		
Noise	NA				
Water Quality	NA				
Chemical and	23 October 2024	Reminder 1: The domestic waste should be removed from the site timely.	The removal frequency was increased.		
Waste Management	30 October 2024	Reminder 1: The domestic waste should be stored inside an enclosed rubbish bin.	An enclosed rubbish bin was provided.		
Land Contamination		NA			
Ecological Impact	NA				
Landscape and Visual Impact	NA				
Permit / Licenses 8 October 202		Observation 1: The colour of NRMM label for the forklift at SD should be green.	A new NRMM label was provided		
Others	NA				

# Appendix N Outstanding Issues and Deficiencies

Parameters	Outstanding Issues	Deficiencies
Air Quality	NA	
Noise	NA	
Water Quality	NA	
Chemical and Waste Management	NA	Any items of deficiencies
Land Contamination	NA	can be referred to Appendix M.
Landscape and Visual Impact	NA	
Permit / Licenses	NA	
Others	NA	

### Summary of Outstanding Issues and Deficiencies in the Reporting Month

Appendix O Active Night Roost Monitoring Area and Vantage Points; and Noise Monitoring Stations



0.1 Map of the Monitoring Area, Vantage Points for Observation of Active Night Roosts and Noise Monitoring Stations

### O.2 Survey Photos

## O.2.1 Pre-roosting Aggregate

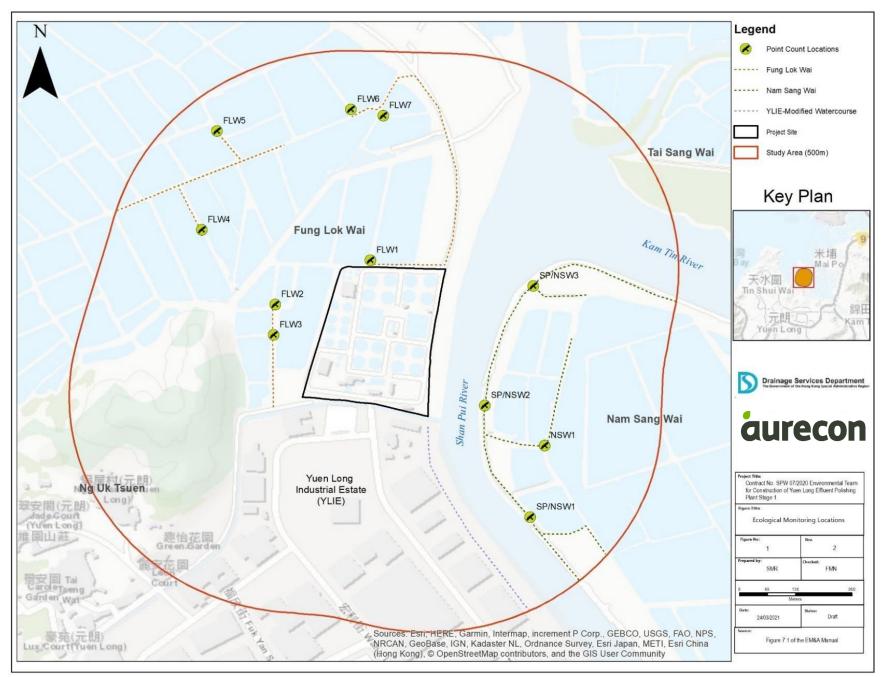


Appendix O.2.1a: Pre-roost aggregate of ardeids in the mudflat east side of the Project boundary (ANR1) observed on 30 October 2024 at around 17:24.



Appendix O.2.2a: Active night roost in the mudflat east side of the Project boundary (ANR1) observed on 30 October 2024 at around 17:52.

Appendix P Ecological Bird Monitoring Area with Locations of Point Count Sites and Transect Route



Appendix P: Ecological bird monitoring area with the locations of point count sites and transect routes

### Prepared by:

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