

# **Airport City Link**

Monthly EM&A Report for March 2023

April 2023

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Airport Authority Hong Kong

# **Airport City Link**

Monthly EM&A Report for March 2023

April 2023

# This Submission of Construction Phase Monthly Environmental Monitoring and Audit (EM&A) Report for March 2023

has been reviewed and certified by

the Environmental Team Leader (ETL) in accordance with

Condition 3.5 of Environmental Permit No. EP-581/2020 and

Section 11.2 of the EM&A Manual of the Project.

Certified by:

Ir Thomas Chan

Mum Clin

Environmental Team Leader (ETL) Mott MacDonald Hong Kong Limited

Date 13 April 2023



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#### By Email

Capital Works Management Department Level 6, HKIA Tower 2, 15 Cheong Tat Road, Hong Kong International Airport, Lantau, Hong Kong

Attn: Collin Chan (Manager, Civil)

13 April 2023

Dear Sir,

# Contract C21C02 – Independent Environmental Checker Consultancy Services for Airport City Link

#### Monthly Environmental and Audit (EM&A) Report for March 2023

Reference is made to the Environmental Team's submission of Monthly EM&A Report for March 2023 in accordance with Condition 3.5 of the Environmental Permit (No: EP-581/2020) and Section 11.2 of the EM&A Manual of the Project certified by the ET Leader on 13 April 2023.

We would like to inform you that we have verified on the captioned submission in accordance with the requirement stipulated in Condition 1.9 of EP-581/2020.

Should you have any queries, please feel free to contact the undersigned at 3922 9366.

Yours faithfully, AECOM Asia Co. Ltd.

Y'W Fung

Independent Environmental Checker

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## **Executive summary**

In July 2020, a Project Profile (PP) (Register No.: PP-606/2020) of the Airport City Link (ACL) (hereinafter as "the Project") was submitted for the application for permission to apply directly for an Environmental Permit (EP), which was approved by Environmental Protection Department (EPD) in August 2020. The EP of the Project (EP No.: EP-581/2020) was obtained in October 2020.

On 10 June 2021, Mott MacDonald Hong Kong Limited (MMHK) was commissioned by Airport Authority Hong Kong (AAHK) to provide Environmental Team (ET) consultancy services for the implementation of an Environmental Monitoring and Audit (EM&A) programme of the Project in accordance with the EP requirements throughout the Pre-construction, Construction and Post-construction phases.

The construction phase EM&A programme of the Project started on 26 July 2022. The construction of marine section was commenced on 26 July 2022, while the construction of the land section was commenced on 20 February 2023.

This is the 8<sup>th</sup> Monthly EM&A Report for the construction phase of the Project which summaries findings of the EM&A programme during the reporting period from 1 to 31 March 2023.

#### **Key Construction Works in the Reporting Period**

A summary of construction activities undertaken during the reporting period is presented below:

#### **Marine Section**

- Plant mobilization and material delivery for marine bored piling works
- Marine bored piling works
- Marine substructure works

#### **Land Section**

- GI works
- Underground utilities diversion work
- Bored pile work

#### **Environmental Monitoring and Audit Progress**

The monthly EM&A programme was undertaken by ET in accordance with the approved EM&A Manual. A summary of the monitoring activities during the reporting period is presented below:

Table I: Summary Table for EM&A Activities in the Reporting Period

EM&A Activities	Number of Sessions
Water quality monitoring	13
Weekly environmental site inspections (Marine Section)	4
Weekly environmental site inspections (Land Section)	4

#### **Breaches of Action and Limit Levels**

#### Water Quality

The water quality monitoring results for dissolved oxygen (DO), turbidity and suspended solids (SS) obtained during the reporting period were within the corresponding Action and Limit Levels.

#### **Complaint Log**

There was no complaint in relation to the environmental impact received during the reporting period.

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

There was no notifications of summons or successful prosecutions received during this reporting period.

#### **Reporting Changes**

There was no reporting change during the reporting period.

#### **Future Key Issues**

The future key issues to be undertaken in the upcoming month are:

#### Marine Section

- Plant mobilization and material delivery for marine bored piling works
- Marine bored piling works
- Marine substructure works

#### Land Section

- GI works
- Underground utilities diversion work
- Bored pile work

## 1 Introduction

#### 1.1 Background

In July 2020, a Project Profile (PP) (Register No.: PP-606/2020) of the Airport City Link (ACL) (hereinafter as "the Project") was submitted for the application for permission to apply directly for an Environmental Permit (EP), which was approved by Environmental Protection Department (EPD) in August 2020. The EP of the Project (EP No.: EP-581/2020) was obtained in October 2020.

The Project is situated between the Airport Island and Hong Kong Port (HKP) Island, at the south of existing SkyPier on the Airport Island. To enhance vehicular mobility and walkability between HKP Island and the SKYCITY, the Project serves as a connection bridge providing shuttle services and pedestrian pathway.

The construction for the Project consists of a marine section in a marine area between the Airport Island and HKP Island, and a land section on the Airport Island and HKP Island. The connection bridge comprises of approximately 400m long marine section and 450m long land section. The construction works of marine section will be carried out by marine works Contractor, while the construction works of land section will be carried out by land works Contractor.

On 10 June 2021, Mott MacDonald Hong Kong Limited (MMHK) was commissioned by Airport Authority Hong Kong (AAHK) to provide Environmental Team (ET) consultancy services for the implementation of an Environmental Monitoring and Audit (EM&A) programme in accordance with the EP requirements throughout the Pre-construction, Construction and Post-construction phases.

The construction phase EM&A programme of the Project started on 26 July 2022. The construction of marine section was commenced on 26 July 2022, while the construction of the land section was commenced on 20 February 2023.

This is the 8<sup>th</sup> Monthly EM&A report summarising the key findings of the construction phase EM&A programme from 1 to 31 March 2023 (the reporting period) and is submitted to fulfil requirements in Condition 3.5 of EP and Section 11.2 of EM&A Manual of the Project.

#### 1.2 Project Organisation

The organisation chart and lines of communication with respect to the on-site environmental management structure of the key personnel are shown in **Appendix A**. The key personnel contact names and numbers are summarized in **Table 1.1.** 

**Table 1.1: Contact Information of Key Personnel** 

Party	Position	Name	Telephone
Project Manager's Representative (Airport Authority Hong Kong)	Senior Project Engineer, Environment	Becky Yan	2183 2773
Environmental Team (ET)	Environmental Team Leader	Thomas Chan	2828 5967
(Mott MacDonald Hong Kong Limited)	Deputy Environmental Team Leader	Gary Chow	2828 5874
Independent Environmental Checker (IEC)	Independent Environmental Checker	Y W Fung	3922 9366

Party	Position	Name	Telephone
(AECOM Asia Company Limited)	Deputy Independent Environmental Checker	Lemon Lam	3922 9381
Main Contractor – Marine Section	Senior Project Manager	Brian Ho	9041 7535
(Gammon Engineering & Construction Company Limited)	Environmental Officer	Elena Lai	6841 3324
Main Contractor – Land Section	Project Manager	Kingsley Chiang	9424 8437
(China State Construction Engineering (HK) Ltd.)	Senior Environmental Officer	William Chan	5408 3045

#### 1.3 Construction Works Programme and Construction Works Area

The construction phase EM&A programme of the Project started on 26 July 2022. The construction of marine section was commenced on 26 July 2022, while the construction of the land section was commenced on 20 February 2023.

The construction works programme and the construction works area of the Project are shown in **Appendix B** and **Appendix C** respectively.

#### 1.4 Construction Works undertaken during the Reporting Period

A summary of construction activities undertaken during this reporting period is presented below:

#### **Marine Section**

- Plant mobilization and material delivery for marine bored piling works
- Marine bored piling works
- Marine substructure works

#### **Land Section**

- GI works
- Underground utilities diversion work
- Bored pile work

## 2 Water Quality

#### 2.1 Baseline Water Quality Monitoring

As stipulated in the EM&A Manual, the construction activities under sea water level for the Project will commence in a month after completion of that of Intermodal Transfer Terminal Bonded Vehicular Bridge (ITT-BVB). Therefore, it is likely that the period for baseline monitoring would overlap with the construction activities under sea water level of ITT-BVB, which may influence the baseline water quality for the Project.

Since the baseline monitoring of ITT-BVB project has been carried out at the same proposed baseline monitoring locations of the Project during 15 August 2019 – 10 September 2019, and 28 November 2019 – 24 December 2019 covering both dry and wet seasons, which was carried out before any marine construction activities in the vicinity of the Project. Hence, the baseline monitoring data from ITT-BVB would be the most recent and representative to the baseline condition of the water quality in the vicinity of the Project without any interference. Thus, the baseline monitoring data from ITT-BVB would be adopted for the Project.

ET submitted the baseline monitoring report of the Project on 12 November 2021 and EPD expressed no comment on 24 November 2021.

#### 2.2 Impact Water Quality Monitoring

#### 2.2.1 Monitoring Requirement

The impact water quality monitoring was conducted three days per week at mid-flood and midebb tides, at 5 water quality monitoring stations. Samples were taken at three depths, namely, 1m below water surface, mid-depth and 1m above sea bed, except where the water depth less than 6m, the mid-depth station was omitted. For locations with water depth less than 3m, only the mid-depth station was monitored. Duplicate in-situ measurements and water samples were collected from each independent monitoring event for all parameters to ensure a robust statistically interpretable dataset.

#### 2.2.2 Monitoring Locations

The water quality monitoring was conducted at three locations in the sea channel between the HKIA and the HKBCF (M1, M2 and M3) and two control stations (C1 and C2), locations are shown in **Figure 2.1** and summarized in **Table 2.1**.

**Table 2.1: Locations of Marine Water Quality Monitoring Stations** 

ID	Monitoring Station	Easting	Northing
M1	Impact Station	812423	819635
M2 <sup>(1)</sup>	Impact Station	812629	819845
M3 <sup>(2)</sup>	Impact Station	812586	820069
C1	Control Station - West	812419	820670
C2	Control Station - East	813072	820595

Notes:

<sup>1.</sup> As updated in the baseline monitoring report, the water quality monitoring at M2 station was shifted to bring it closer to the Project site and away from the SkyPier ferry movements for better representation.

 As updated in the baseline monitoring report, the water quality monitoring at M3 station was shifted to the location near the seawater intake of HKBCF to better represent the potential water quality impacts at the nearby sensitive receiver

#### 2.2.3 Monitoring Parameters

For the 3 impact stations (M1 to M3) and 2 control stations (C1 and C2), monitoring of DO, DO%, pH, temperature, turbidity, salinity, SS and water depth were undertaken.

Other relevant data were also recorded, including monitoring location, time, tidal stages, weather conditions and any special phenomena or work during the monitoring.

#### 2.2.4 Monitoring Schedule for the Reporting Period

Construction impact monitoring for water quality was undertaken in compliance with the EM&A Manual during the reporting period.

The schedule for water quality monitoring of the reporting period is presented in **Appendix D**.

#### 2.2.5 Monitoring Equipment

Water samples for all monitoring parameters were collected, stored, preserved and analysed according to the Standard Methods, APHA 21st ed. and/or other methods as agreed by the EPD. In-situ measurements at monitoring locations including dissolved oxygen (DO), dissolved oxygen saturation (DO%), pH, temperature, turbidity, salinity and water depth were collected using the equipment listed in **Table 2.2**.

Water samples for suspended solids (SS) analysis were stored in suitable containers provided by the HOKLAS laboratory with no preservative added, packed in ice (cooled to 4°C without being frozen) and delivered to the HOKLAS laboratory as soon as possible after collection.

**Table 2.2: Impact Water Quality Monitoring Equipment** 

Equipment	Brand and Model	Quantity
Water Sampler	Van Dorn Water Sampler	2
Monitoring Position Equipment (measurement of DGPS)	Garmin eTrex 20x	1
Water Depth Detector (measurement of water depth)	Garmin STRIKER™ Series	1
Multifunctional Meter (measurement of DO, DO%, temperature, turbidity, salinity and pH)	YSI ProDSS (Multiparameter Sampling Instrument)	3

#### 2.2.6 Maintenance and Calibration of In-situ Instruments

In-situ monitoring instruments for water quality parameters were checked, calibrated and certified by a laboratory accredited under HOKLAS before use. Responses of sensors and electrodes were checked with certified standard solutions before each use.

Wet bulb calibration for DO measurement was carried out before commencement of monitoring and after completion of all measurements each day. The turbidity meter was calibrated in order to establish the relationship between NTU units and the levels of suspended solids. A zero check in distilled water was performed with the turbidity probe at least once per monitoring day. The probe was then calibrated with a solution of known NTU. Standard buffer solutions of at least pH 7 and pH 10 was used for calibration of the pH instrument before and after use on each monitoring day.

Calibration certificates of the monitoring equipment used in the monitoring for water quality parameters are provided in **Appendix E**.

#### 2.2.7 Laboratory Measurement / Analysis

Analysis of SS was out in a HOKLAS accredited laboratory, ALS Technichem (HK) Pty Ltd (Reg. No. HOKLAS 066). Sufficient water samples were collected at each of the control stations and impact stations for carrying out the laboratory SS determination.

The SS determination works started within 24 hours after collection of the water samples. The analysis followed the APHA 2540D analytical method with a detection limit of 1 mg/L.

#### 2.3 Event and Action Plan

#### 2.3.1 Action and Limit Levels

The Action and Limit Levels for the impact monitoring stations were extracted from Table 2.8 of the Baseline Monitoring Report of ITT-BVB. The derived Action and Limit Levels are summarized in **Table 2.3**.

Table 2.3: Derived Action and Limit Levels

Parameters	Action Level	Limit Level
Impact Stations M1 and M2		
DO in mg/L		
Surface & Middle	4.3	4.0
Bottom	3.8	3.0
SS in mg/L	14.2	17.4
	AND	AND
	120% of upstream control station at the same tide of the same day	130% of upstream control station at the same tide of the same day
Turbidity in NTU	11.0	16.3
	AND	AND
	120% of upstream control station at the same tide of the same day	130% of upstream control station at the same tide of the same day
Impact Station M3		
SS in mg/L	33	42

#### Notes:

- 1. For DO measurement, non-compliance occurs when the monitoring result is lower than the limits.
- 2. For parameters other than DO, non-compliance of water quality occurs when the monitoring result is higher than the limits.
- 3. Depth-averaged results are used unless specified otherwise.
- 4. Impact station M3 is represents the impact station SR1A of "Expansion of Hong Kong International Airport into a Three-Runway System". The AL levels for M3 in Table 2.3 is referencing the agreed and adopted AL levels of SR1A from the Updated EM&A Manual for Expansion of Hong Kong International Airport into a Three-Runway System.

#### 2.3.2 Event and Action Plan

In the event of water quality monitoring results at impact stations exceeding the Action and/or Limit levels for water quality as defined in **Table 2.3**, the actions in accordance with the Event and Action Plan presented in **Appendix F** shall be carried out.

#### 2.4 Water Quality Monitoring Results

#### 2.4.1 Impact Water Quality Monitoring

The water quality monitoring results for dissolved oxygen (DO), turbidity and suspended solids (SS) obtained during the reporting period were within the corresponding Action and Limit Levels.

**Table 2.4** presents the summary of exceedances during the reporting period. Detailed impact monitoring results and relevant graphical plots are presented in **Appendix G**.

**Table 2.4: Summary of Exceedances** 

Date	Parameter(s)	Affected Station(s)	Tide	Exceedance Type
N/A	N/A	N/A	N/A	N/A

#### 2.5 Conclusion

The water quality monitoring results for dissolved oxygen (DO), turbidity and suspended solids (SS) obtained during the reporting period were within the corresponding Action and Limit Levels.

In the meantime, the Contractor was reminded to implement and maintain all mitigation measures during weekly site inspection and regular environmental management meetings. These include maintaining mitigation measures properly as recommended in the EM&A Manual.

## 3 Environmental Site Inspection and Audit

#### 3.1 Environmental Site Inspection

Site inspections for marine and land section were carried out by ET on a weekly basis to monitor the implementation of proper environmental pollution control mitigation measures for the Project. Key observations were recorded in the site inspection checklist and passed to the Contractors together with the appropriate recommended mitigation measures where necessary.

#### Marine Section

During the reporting period, site inspections were carried out on 7, 14, 21 and 28 March 2023 for marine section. Joint IEC site inspection for marine section was carried out on 14 March 2023. Monthly landscape and visual site audit was carried out on 14 March 2023.

#### Land Section

During the reporting period, site inspections were carried out on 6, 13, 20 and 27 March 2023 for land section. Joint IEC site inspection for land section was carried out on 13 March 2023. Monthly landscape and visual site audit was carried out on 13 March 2023.

Key observations and reminders during the site inspections and landscape and visual site audit are described in **Table 3.1**.

**Table 3.1: Summary of Site Inspections and Recommendations** 

Marine Sect	ion		
Inspection Date	Key Observations / Reminders	Recommendations / Actions	Close-Out Date
28 Feb 2023	Sand materials and metal debris were deposited on the deck of barge Gammon No. 39 and Pier 4.	The Contractor should keep the deck clear of debris and maintain good housekeeping to prevent any materials from getting into sea water.	7 Mar 2023
28 Feb 2023	General refuse were observed on the temporary access platform at Pier 4.	The Contractor should provide regular cleaning of refuse to prevent any materials from getting into sea water.	7 Mar 2023
28 Feb 2023	Silt curtain as installed at Pier 4 was observed with gaps.	The Contractor should arrange maintenance to ensure the silt curtain remain intact and without gaps.	7 Mar 2023
7 Mar 2023	Oil stain was observed on temporary access platform at Pier 8.	The Contractor should clean up the oil stain and handle as chemical waste.	14 Mar 2023
14 Mar 2023	Oil stain was observed on the deck of barge Gammon No. 39.	The Contractor should clean up the oil stain and handle as chemical waste	21 Mar 2023
14 Mar 2023	Silt curtain as installed at Pier 4 was not properly in placed. No dewatering work was observed during the site inspection.	The Contractor should arrange maintenance for the silt curtain and ensure the silt curtain remain intact.	21 Mar 2023

Marine Secti			
21 Mar 2023	Gammon No. 23 – Faded NRMM label was observed on the generator (Reminder).	The Contractor was reminded to replace the faded NRMM label displayed on the generator	21 Mar 2023
28 Mar 2023	Stagnant water should be cleared regularly (Reminder).	The Contractor was reminded to keep drip trays on barge free of rainwater after each rainstorm to ensure adequate capacity of drip tray for spillage prevention.	28 Mar 2023
28 Mar 2023	Silt curtain should be deployed properly all the time (Reminder).	The Contractor was reminded to ensure the silt curtain properly deployed at Pier 4 during installation and dewatering of the cofferdam.	28 Mar 2023
Land Section	1		
Inspection Date	Key Observations / Reminders	Recommendations / Actions	Close-Out Date
27 Feb 2023	The NRMM label on the RCD machine was missing.	The Contractor should display valid NRMM label on the regulated machinery	6 Mar 2023
27 Feb 2023	The chemical storage cabinet was not secured/locked.	The Contractor should ensure the cabinet is secured/locked to prevent unauthorized access by others.	6 Mar 2023
6 Mar 2023	Direct discharge of re-circulated water for ground investigation works was prohibited (Reminder).	The Contractor was reminded to divert the re-circulated water for ground investigation works to wastewater treatment facilities prior to discharge.	6 Mar 2023
6 Mar 2023	Signage to demarcate the temporary storage area for excavated marine sediment was observed insufficient (Reminder).	The Contractor was reminded to provide signage to demarcate the temporary storage area for excavated marine sediment.	6 Mar 2023
6 Mar 2023	Environmental permit was observed missing at the vehicular site entrances/exits (Reminder).	The Contractor was reminded to display a copy of valid Environmental Permit at the vehicular site entrances/exits for public inspection.	6 Mar 2023
13 Mar 2023	NRMM label on the boring machine for ground investigation was missing.	The Contractor should display valid NRMM label on the machinery.	20 Mar 2023
13 Mar 2023	Protection measures for public drain at stockpile area were insufficient.	The Contractor should enhance measures to prevent any site runoff from entering the public drainage system.	20 Mar 2023
13 Mar 2023	Water control measures was insufficient at the vehicular entrance / exit.	The Contractor should provide measures (e.g. bunding) to avoid muddy runoff from the site discharged into public drain and public road.	20 Mar 2023
13 Mar 2023	Mitigation measures to avoid silty runoff from entering the public drainage system were observed insufficient (Reminder).	The Contractor was reminded to cover and seal the gully to prevent any silty runoff from entering the public drainage system.	13 Mar 2023
20 Mar 2023	Spillage response training should be provided to the frontline staff for oil ducting works (Reminder).	The Contractor was reminded to provide training on spillage response procedures to frontline	20 Mar 2023

		staff for oil ducting works to ensure spill responses were carried out promptly and correctly in the event of a spillage incident.	
20 Mar 2023	Mitigation measures to prevent wastewater from entering the public drain were observed insufficient (Reminder).	The Contractor was reminded to enhance the protection measures for the public gullies to prevent any wastewater from entering the public drain.	20 Mar 2023
20 Mar 2023	Mitigation measures to avoid muddy runoff and construction materials from entering the public U-channel were observed insufficient (Reminder).	The Contractor was reminded to provide measures to prevent any muddy runoff and construction materials from entering the public U-channel.	20 Mar 2023
20 Mar 2023	Mitigation measures to prevent leachate were observed insufficient (Reminder).	The Contractor was reminded to cover the stockpile of excavated marine sediment entirely to prevent generation of leachate.	20 Mar 2023
27 Mar 2023	Maintenance record should be displayed at wastewater treatment facility (Reminder).	The Contractor was reminded to keep the maintenance record for wastewater treatment facility for inspection.	27 Mar 2023
27 Mar 2023	Wheel washing operation at site entrance was observed insufficient (Reminder).	The Contractor was reminded to ensure proper wheel washing operation at site entrance and keep the public road clear of dust.	27 Mar 2023
27 Mar 2023	Wastewater should be treated properly prior to discharge. (Reminder).	The Contractor was reminded that all wastewater accumulated at the excavation pit should be directed to wastewater treatment facility for treatment prior to discharge.	27 Mar 2023

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

The Contractors were registered as chemical waste producers for the Project. Construction and demolition (C&D) material sorting was carried out on site. Sufficient numbers of receptacles were provided for general refuse collection and sorting. Excavated inert C&D materials were reused to minimise the disposal of C&D waste to public fill. The Contractors were reminded to maintain on site waste sorting and recording system and maximize reuse / recycling of C&D wastes, whenever these are generated.

The monthly summary of waste flow table for marine and land section are detailed in **Appendix H.** 

The valid environmental licenses and permits for the Project during the reporting period are summarized in **Appendix I**.

#### 3.3 Implementation Status of Environmental Mitigation Measures

In response to the site audit findings, the Contractors carried out corrective actions.

A summary of the environmental mitigation measures implementation status is presented in **Appendix J**. Necessary mitigation measures were implemented properly, observations and reminders were issued to the Contractors where actions were taken by the Contractors to rectify the identified issues.

#### 3.4 Summary of Exceedance of the Environmental Quality Performance Limit

#### **Water Quality**

The water quality monitoring results for dissolved oxygen (DO), turbidity and suspended solids (SS) obtained during the reporting period were within the corresponding Action and Limit Levels.

Detailed impact monitoring results and relevant graphical plots are presented in Appendix G.

# 3.5 Summary of Complaints, Notifications of Summons and Successful Prosecutions

#### **Complaint Log**

There was no complaint received in relation to the environmental impact during the reporting period.

#### **Notifications of Summons or Status of Prosecution**

There was no notification of summons or prosecutions received during the reporting period.

#### **Cumulative Statistics**

Statistics on complaints, notifications of summons and successful prosecutions are summarized in **Table 3.2**.

Table 3.2: Statistics on Environmental Complaints, Notifications of Summons and Successful Prosecutions

Reporting Period	Environmental Complaints	Notifications of Summons	Successful Prosecutions
This reporting period (Mar 2023)	0	0	0
From commencement date of construction to end of reporting period	0	0	0

## 4 Future Key Issues

#### 4.1 Construction Programme for the Coming Month

As informed by the Contractors, the major construction activities for the next reporting period (April 2023) are summarized in **Table 4.1.** 

Table 4.1: Construction Activities for the Next Reporting Period

Marine Section	n
Period	Description of Activities
Apr 2023	<ul> <li>Plant mobilization and material delivery for marine bored piling works</li> <li>Marine bored piling works</li> <li>Marine substructure works</li> </ul>
<b>Land Section</b>	
Period	Description of Activities
Apr 2023	<ul><li>GI works</li><li>Underground utilities diversion work</li><li>Bored pile work</li></ul>

# 4.2 Environmental Site Inspection and Monitoring Schedule for the Next Reporting Period

The tentative schedule for weekly site inspection and water quality monitoring for the next reporting period is provided in **Appendix D**.

## 5 Conclusions

#### General

The construction works for the Project commenced on 26 July 2022. The ET of the Project has undertaken environmental site inspections and water quality monitoring under the construction phase EM&A programme during the reporting period.

#### **Water Quality Monitoring**

The water quality monitoring results for dissolved oxygen (DO), turbidity and suspended solids (SS) obtained during the reporting period were within the corresponding Action and Limit Levels.

#### **Environmental Site Inspections**

Environmental site inspections were carried out 4 times for marine section and 4 times for land section during the reporting period. Recommendations on remedial actions were given to the Contractors for the deficiencies identified during the site inspections.

#### **Complaint Log**

There was no complaint received in relation to the environmental impact during the reporting period.

#### **Reporting Changes**

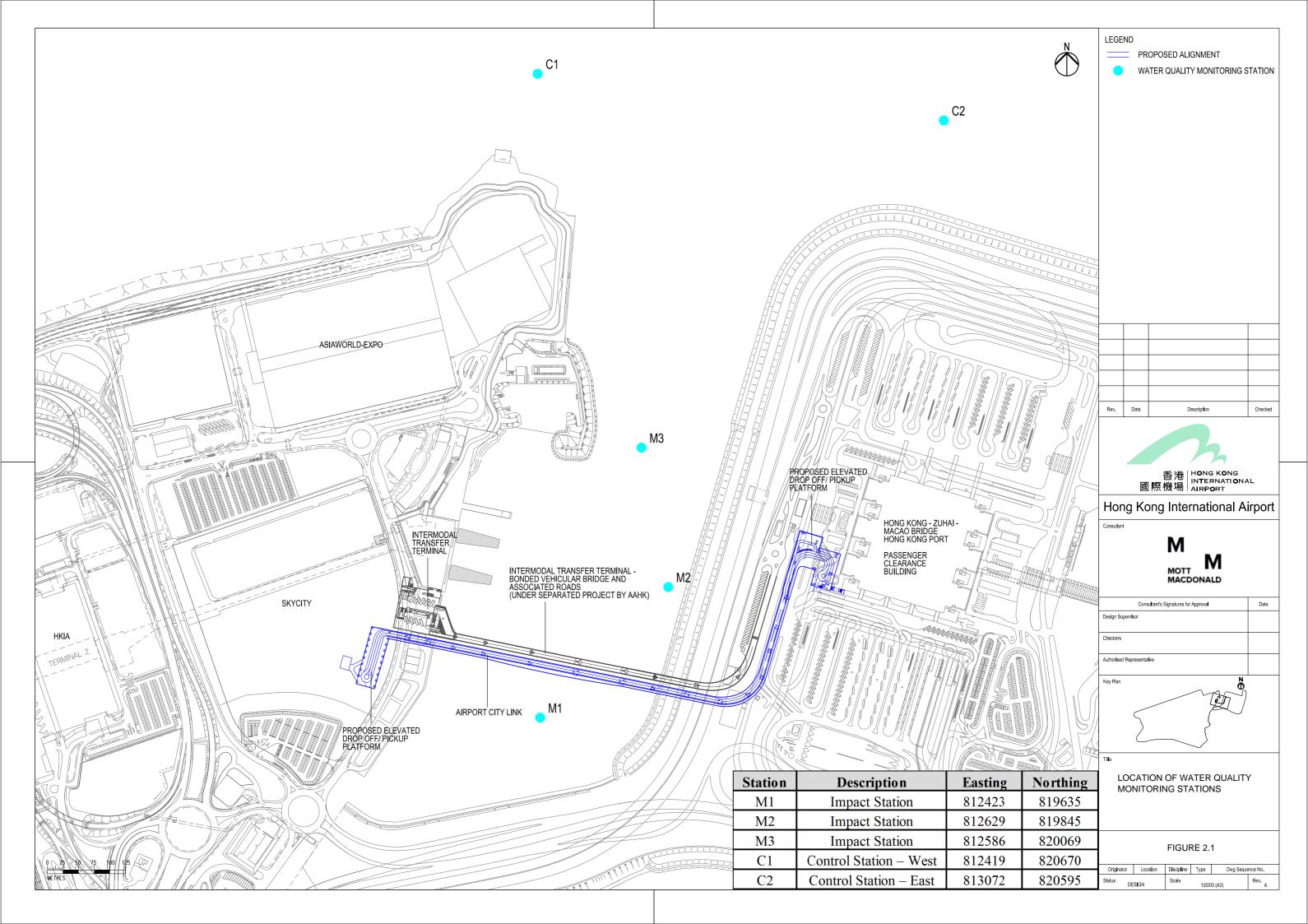
There was no reporting change during the reporting period.

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

There was no notification of summons or successful prosecutions received during the reporting period.

# **Figure**

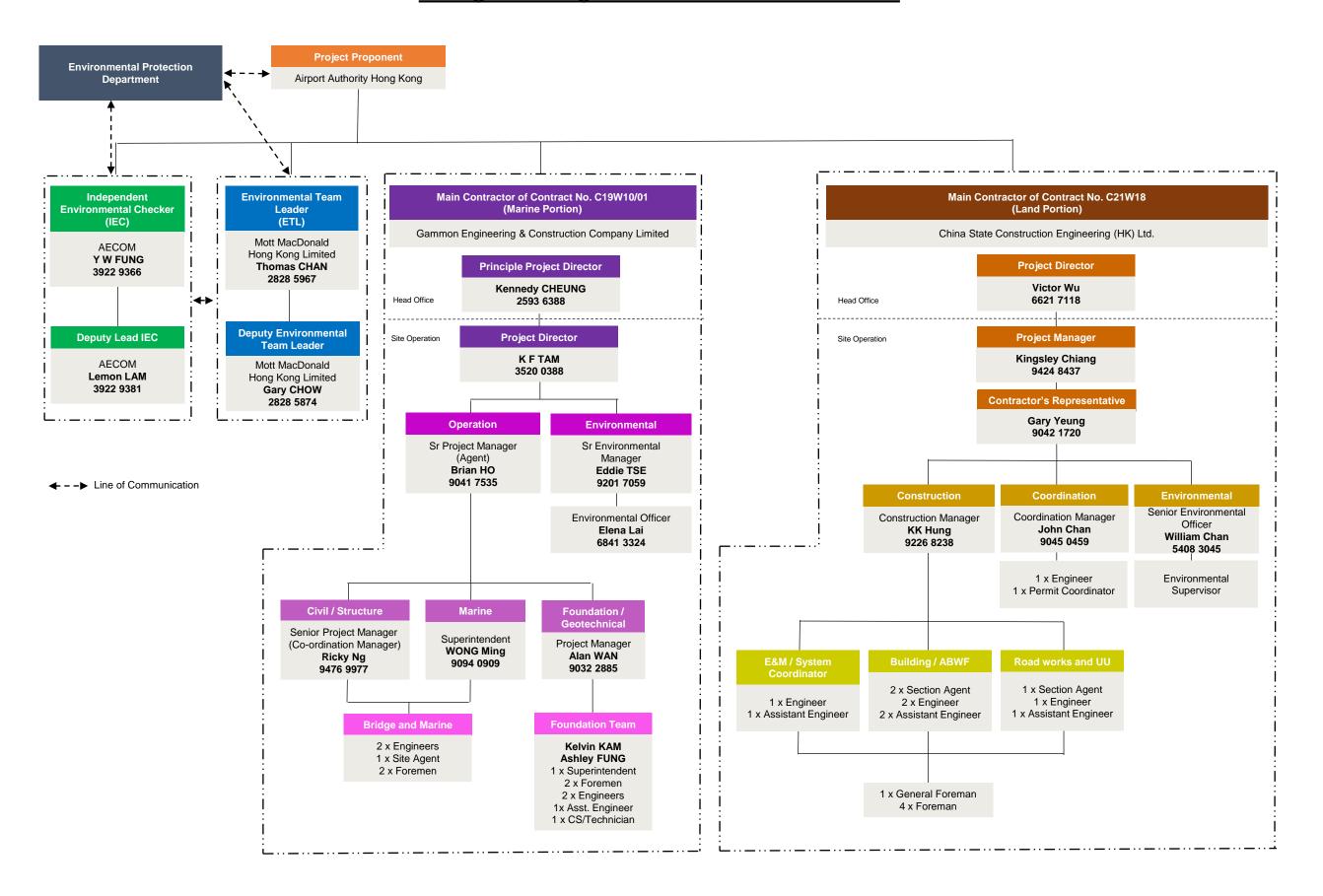
# **Figure 2.1 Water Quality Monitoring Locations**



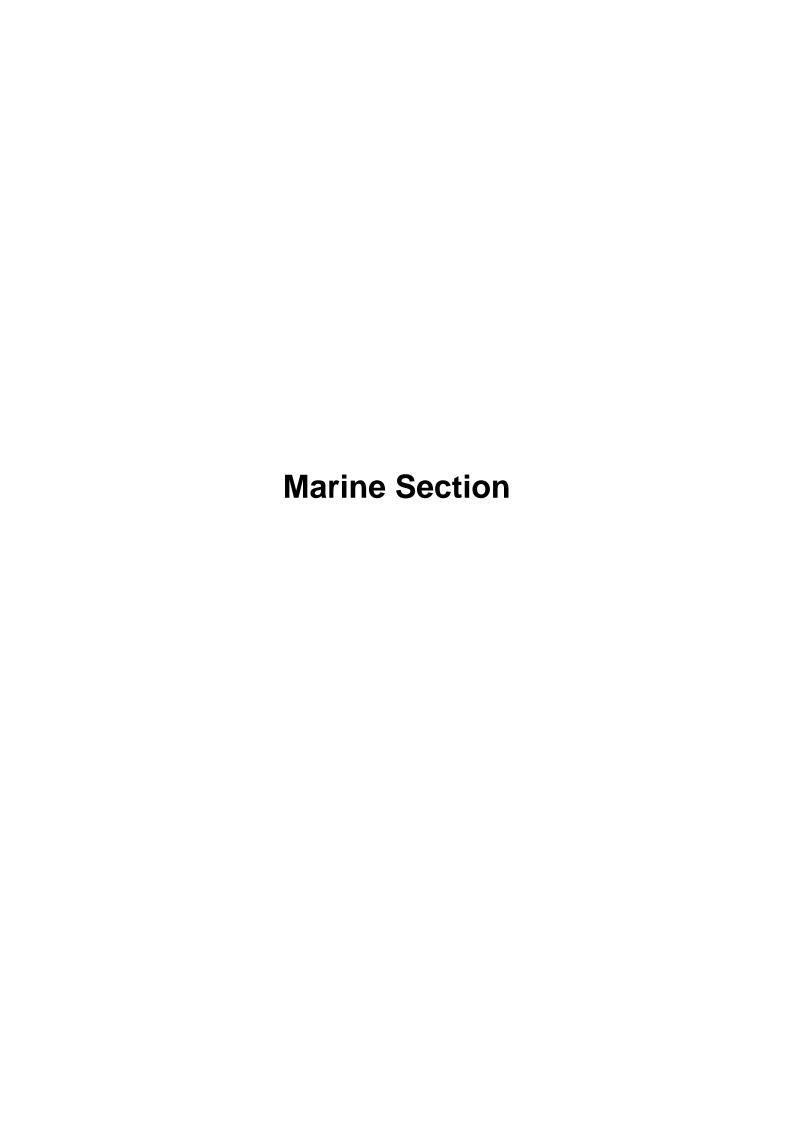
# **Appendices**

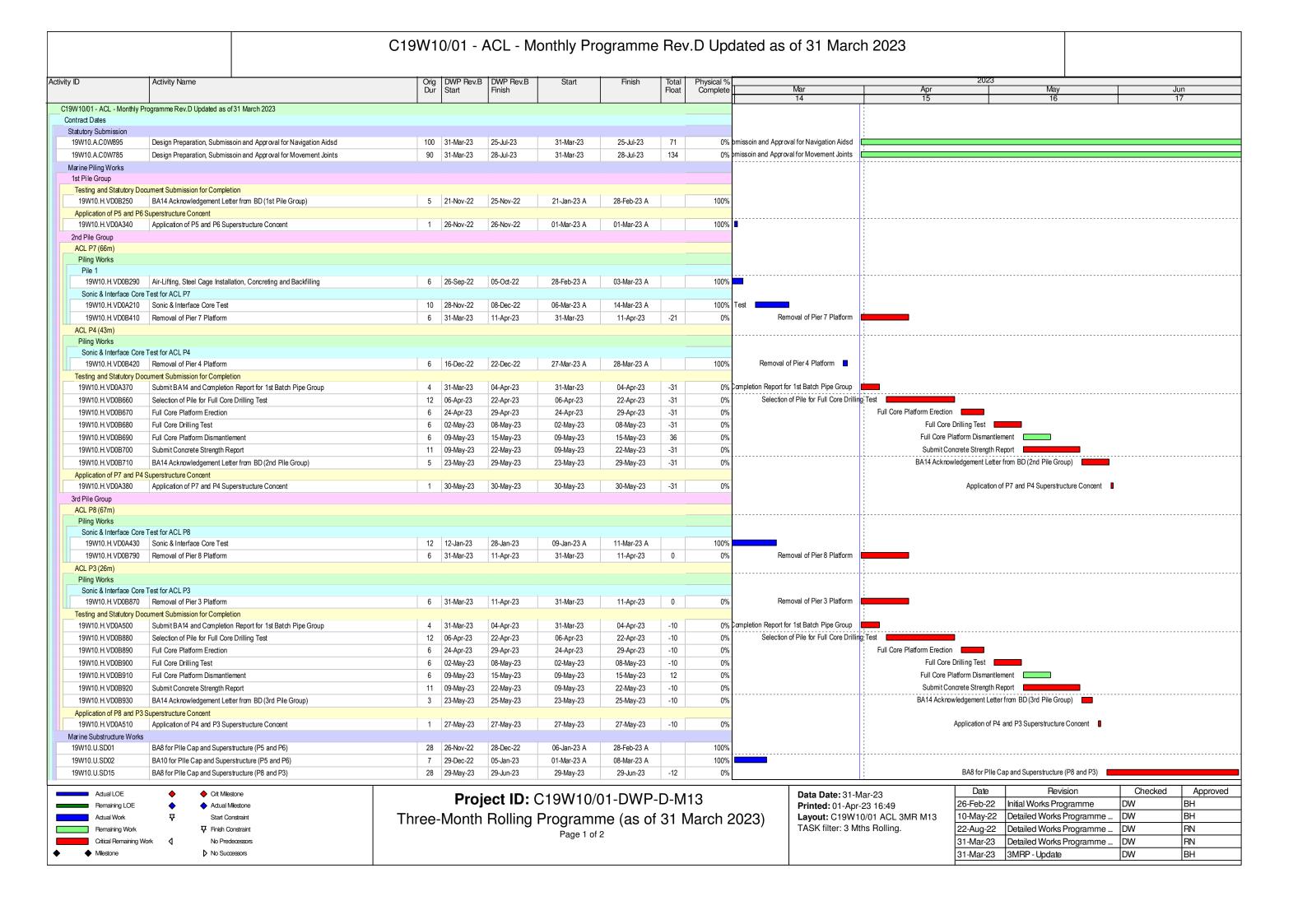
# **Appendix A. Project Organisation**

## **Management Organizations for EP Condition 2.3**

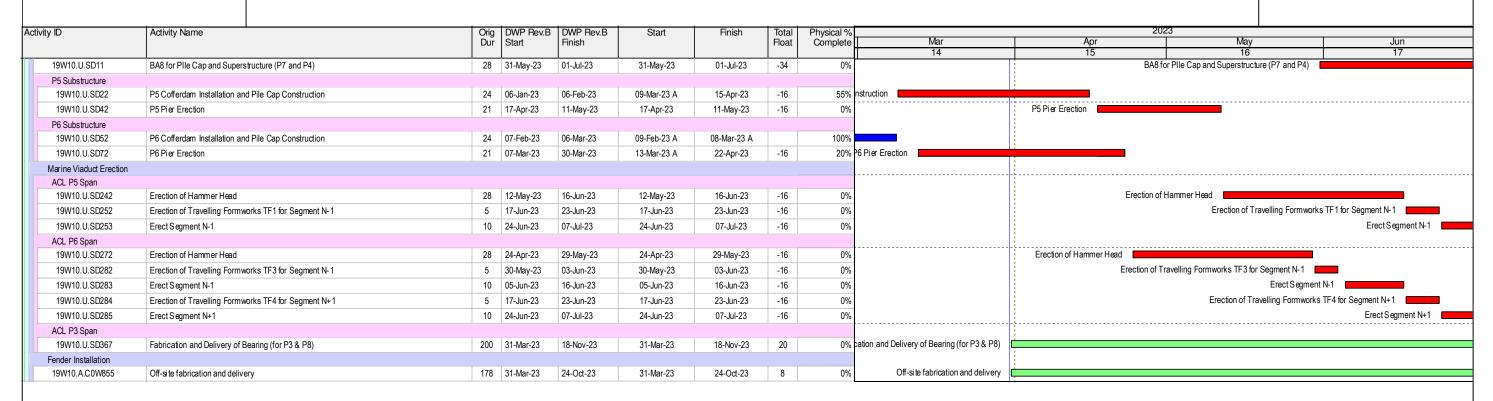


# **Appendix B. Construction Works Programme**





## C19W10/01 - ACL - Monthly Programme Rev.D Updated as of 31 March 2023



Actual LOE Crit Milestone Actual Milestone Remaining LOE Start Constraint ▼ Finish Constraint Remaining Work Critical Remaining Work No Successors

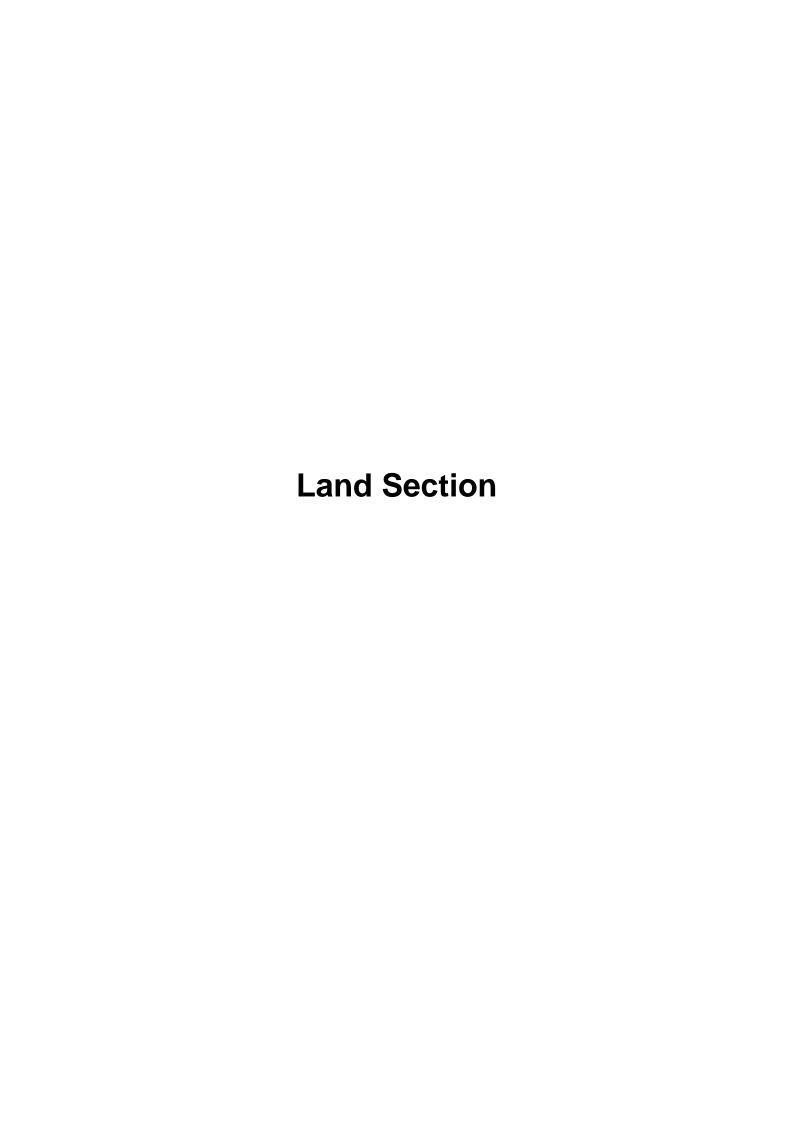
**Project ID:** C19W10/01-DWP-D-M13 Three-Month Rolling Programme (as of 31 March 2023)

**Printed:** 01-Apr-23 16:49 **Layout:** C19W10/01 ACL 3MR M13

TASK filter: 3 Mths Rolling.

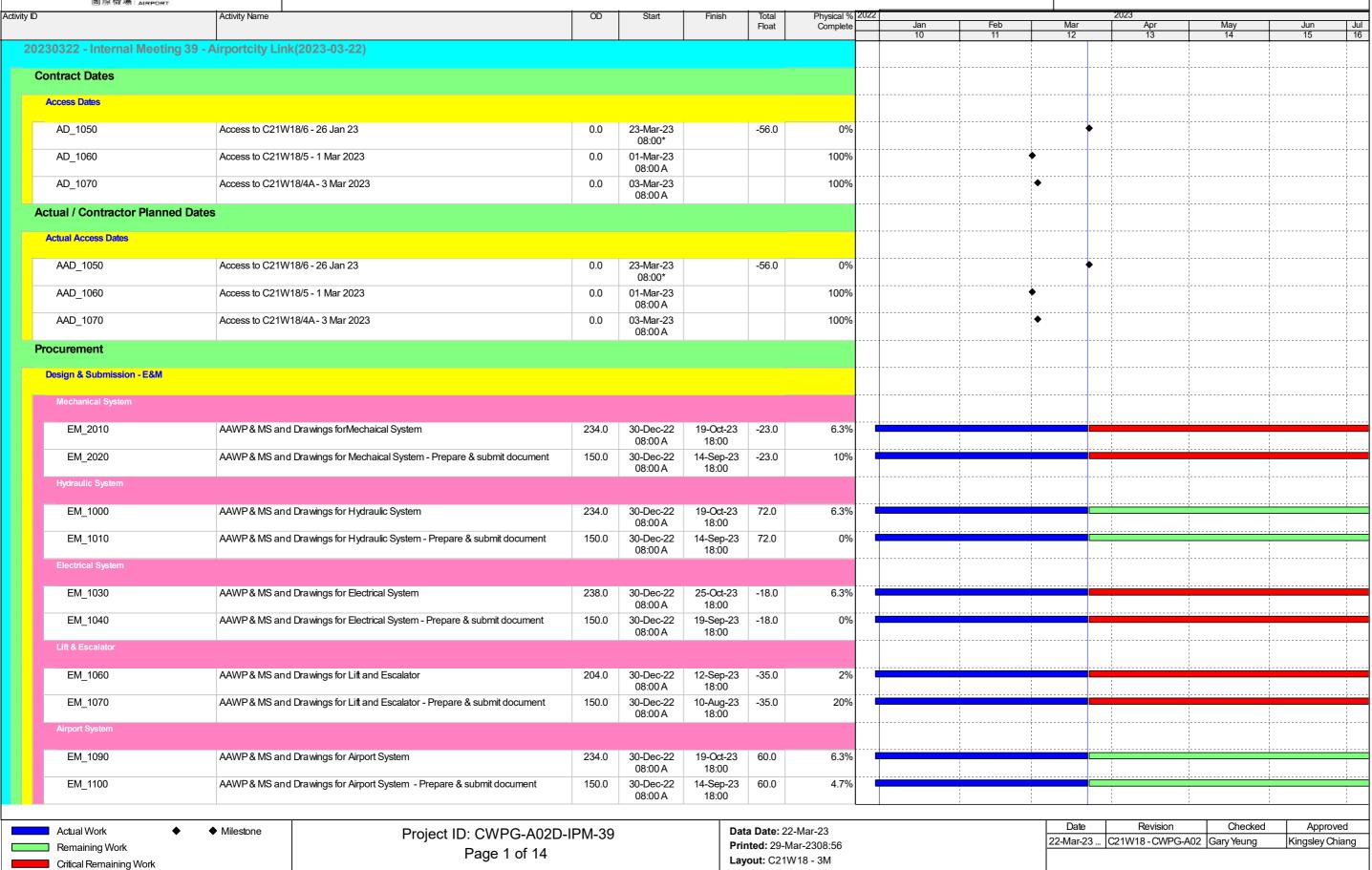
Data Date: 31-Mar-23

Date	Revision	Checked	Approved
26-Feb-22	Initial Works Programme	DW	BH
10-May-22	Detailed Works Programme	DW	BH
22-Aug-22	Detailed Works Programme	DW	RN
31-Mar-23	Detailed Works Programme	DW	RN
31-Mar-23	3MRP - Update	DW	вн





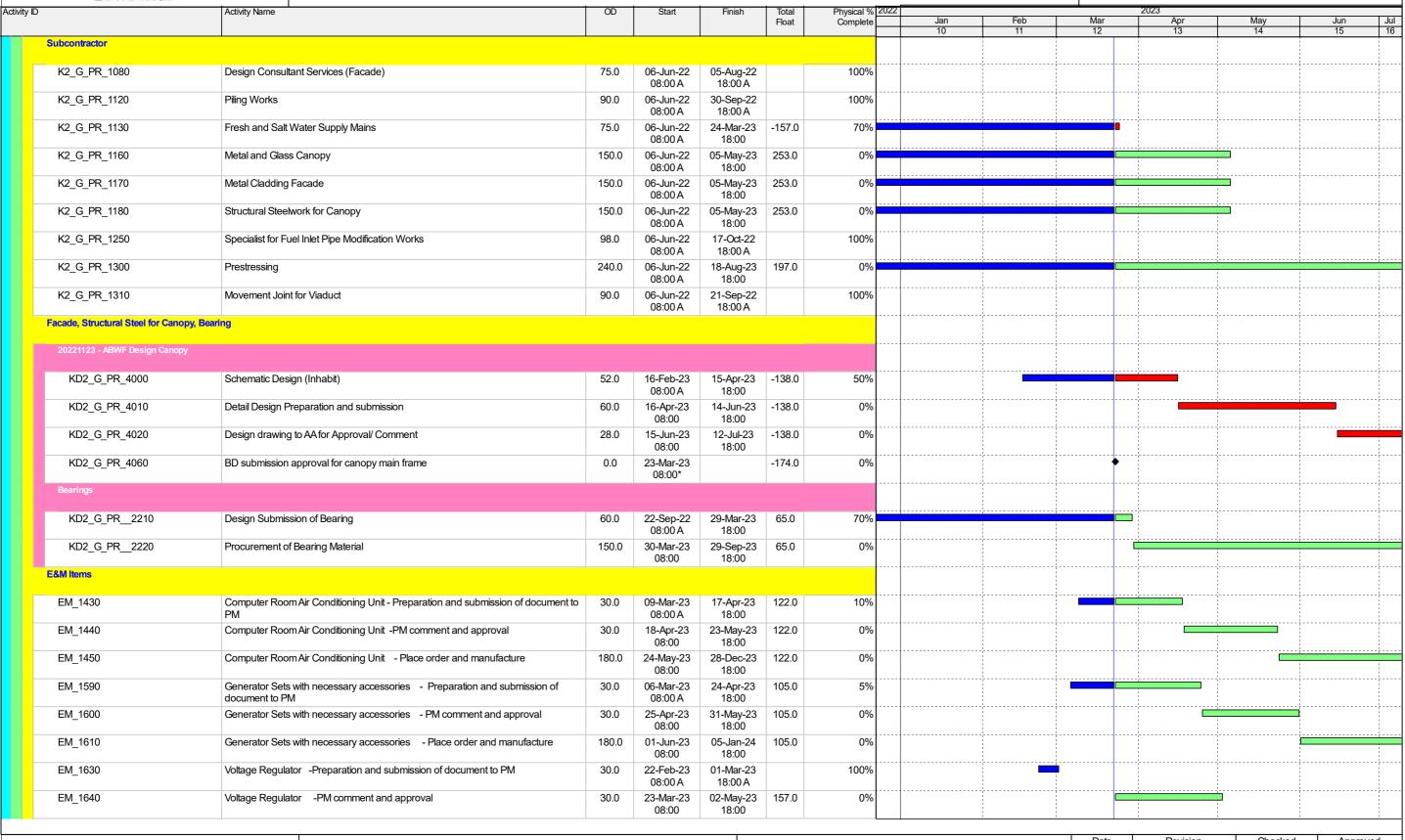




TASK filters: C21W18 - 3 M, C21W18 - No Procurement Key Date.



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Actual Work 

Milestone

Remaining Work

Critical Remaining Work

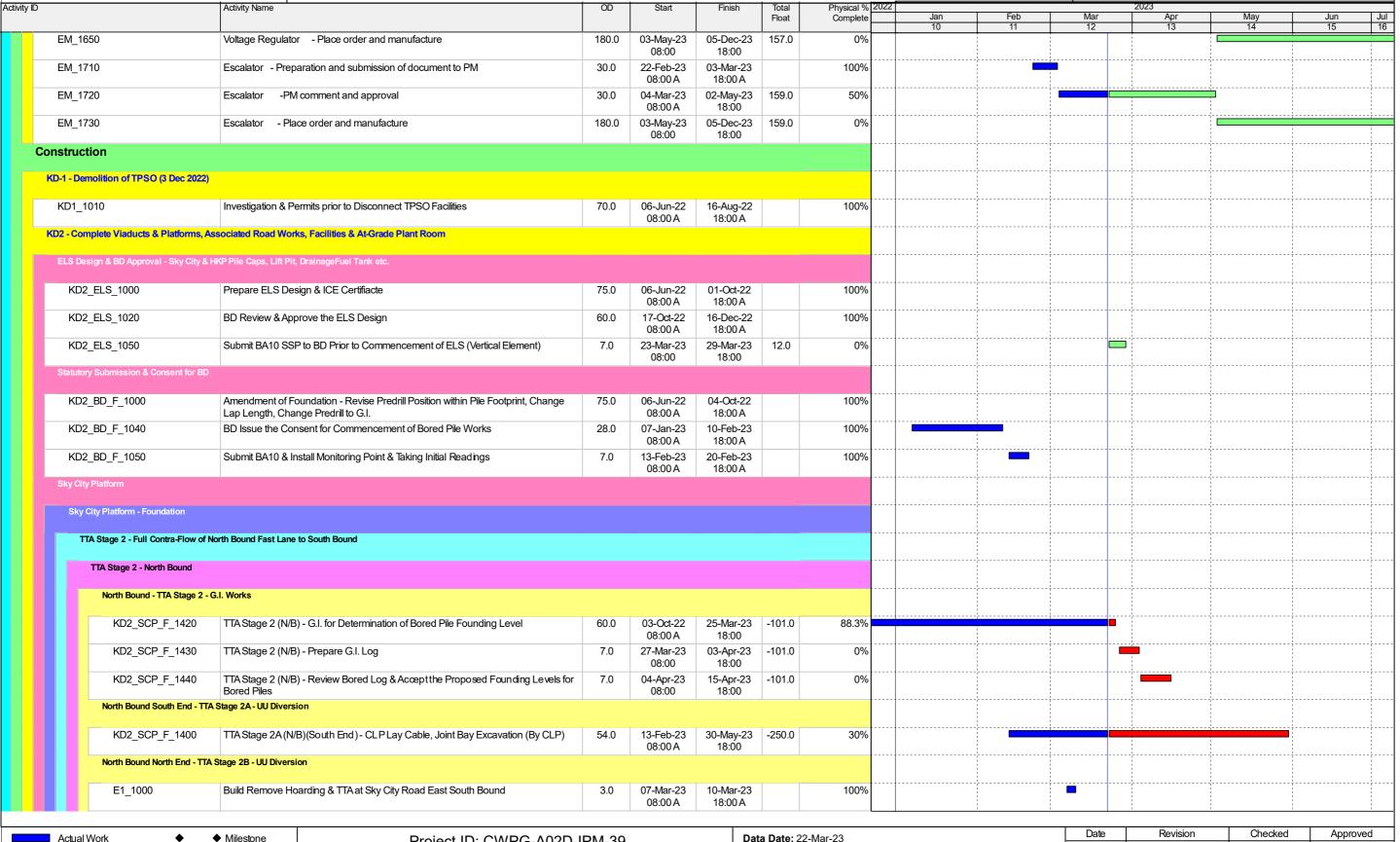
Project ID: CWPG-A02D-IPM-39 Page 2 of 14 Data Date: 22-Mar-23 Printed: 29-Mar-2308:56 Layout: C21W18 - 3M

TASK filters: C21W18 - 3 M, C21W18 - No Procurement Key Date.

Date	Revision	Checked	Approved
22-Mar-23	C21W18 - CWPG-A02	Gary Yeung	Kingsley Chiang









Project ID: CWPG-A02D-IPM-39 Page 3 of 14

Printed: 29-Mar-2308:56 Layout: C21W18 - 3M

TASK filters: C21W18 - 3 M, C21W18 - No Procurement Key D	ate
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Date	Revision	Checked	Approved
22-Mar-23	C21W18 - CWPG-A02	Gary Yeung	Kingsley Chiang





Activity ID Float Complet 100% E1\_1010 TMLG - Propose & Approve for TTA for Full Contra-flow of North Bound Fast Lane at 11-Mar-23 17-Mar-23 18:00 A 08:00 A E1\_1020 TTA Stage 2B (N/B)(North End) - Implement TTA for Full Contra-flow of North Bound 23-Mar-23 23-Mar-23 -187.0 0% Fast Lane at North End 08:00 18:00 TTA Stage 2B (N/B)(North End) - Excavation + Duct for outstanding portion (2 0% E1\_1030 -187.0 14.0 24-Mar-23 13-Apr-23 08:00 18:00 E1\_1040 TTA Stage 2B (N/B)(North End) - CLP Excavate Joint Bay (1 Month) 30.0 13-May-23 -233.0 0% 14-Apr-23 18:00 08:00 TTA Stage 2B (N/B)(North End) - CLP Cable Connection (2 Month) E1\_1050 31-May-23 29-Jul-23 -250.0 0% 08:00 18:00 TTA Stage 2 - South Bound TTA Stage 2 - South Bound 11KV Cable Diversion TTA Stage 2 - Cross Road Duct at Site Offices Entrance KD2\_SCP\_F\_1152 TTA Stage 2 (S/B) - Excavate & Lay Cross Road Duct, Relocate Bus Stop 16-Feb-23 17-Feb-23 100% 08:00 A 18:00 A TTA Stage 2A - UU Diversion at South Bound South End TTA Stage 2 (S/B) - Trench Excavation, Duct Laying & Draw Pit Construction from 27-Mar-23 -139.0 KD2\_SCP\_F\_1050 08-Sep-22 10% Relocated Bus Stop to Hoarding 08:00 A 18:00 TTA Stage 2B - UU Diversion at South Bound North End E1\_1060 Build King Allow Access to Start Excavation for Outstanding Ducting inside Build King 17-Mar-23 17-Mar-23 100% 08:00 A 18:00 A E1 1070 18-Mar-23 21-Mar-23 100% Site Survey & Preparation 3.0 08:00 A 18:00 A E1 1080 Excavation to Expose the Existing 11KV for CLP Connection 14.0 22-Mar-23 06-Apr-23 -147.0 10% 08:00 A 18:00 TTA Stage 2 (S/B) - Lay 11KV Cable & Connection (By CLP) KD2\_SCP\_F\_1560 63.0 07-Apr-23 08-Jun-23 -179.0 0% 08:00 18:00 TTA Stage 2 - South Bound G.I. Works KD2 SCP F 1090 TTA Stage 2 (S/B) - Review Bored Log & Accept the Proposed Founding Levels for 10-Feb-23 30-Mar-23 70% 7.0 -88.0 A 00:80 18:00 TTA Stage 2 - South Bound Bored Piling Works KD2 SCP F 1100 TTA Stage 2 (S/B) - Construct Bored Pile S-P3 to S-P6 (4no x 16d/p = 64d) 64.0 09-Jun-23 24-Aug-23 -142.0 0% 08:00 18:00 Sky City Platform - Superstructure Sky City Platform - Superstructure - Column Group 2 - North Bound - Lift Shaft above S-P7 Pile Cap below Platform Deck (Detail 23-Mar-23 01-Jun-24 -200.0 KD2 SCP S 1160 in Lift Section) 08:00 18:00 Sky City - Lift Sky City - Lift - E&M Installation KD2\_SCP\_S\_1400 Sky City - Lift LT-01 - Submit Form LE3 to EMSD for Notification of Installation Works 23-Mar-23 23-Mar-23 1.0 343.0 0% 18:00 08:00 KD2\_SCP\_S\_1410 Sky City - Lift LT-01 - EMSD Consent the Commencement of Lift Installation 0% 14.0 24-Mar-23 13-Apr-23 343.0 08:00 18:00 KD2\_SCP\_S\_1420 Sky City - Lift LT-01 - Prepare & Submit the Material Proposal to PM 23-May-23 189.0 95.5% 90.0 16-Feb-23 08:00 A 18:00



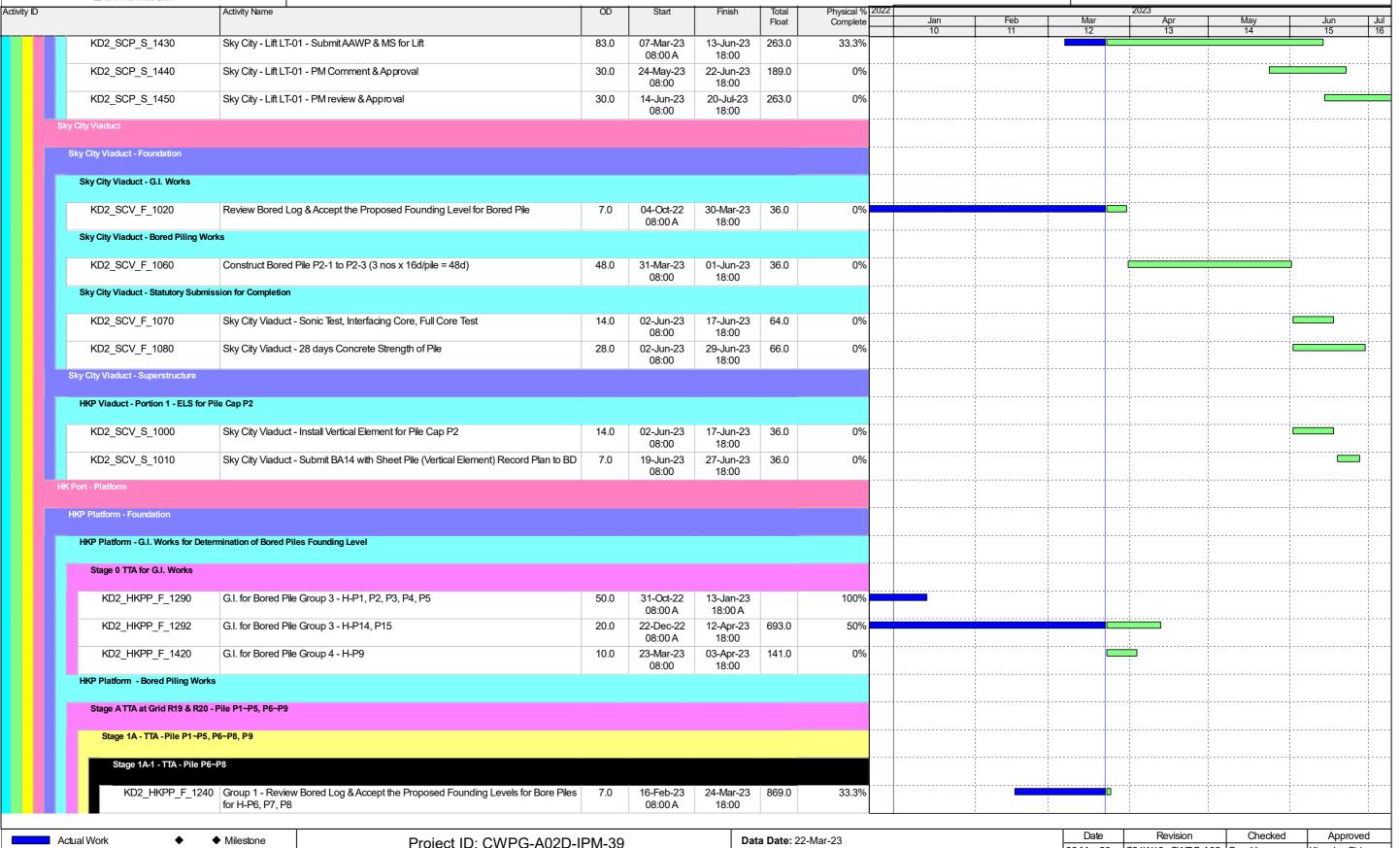
Project ID: CWPG-A02D-IPM-39 Page 4 of 14 Data Date: 22-Mar-23 Printed: 29-Mar-2308:56 Layout: C21W18 - 3M

ΓASK filters: C21W18 - 3 M, C21W18 - No Procurement Key D	ate
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Date	Revision	Checked	Approved
22-Mar-23	C21W18 - CWPG-A02	Gary Yeung	Kingsley Chiang







Actual Work 

♠ Milestone

Remaining Work

Critical Remaining Work

Project ID: CWPG-A02D-IPM-39 Page 5 of 14

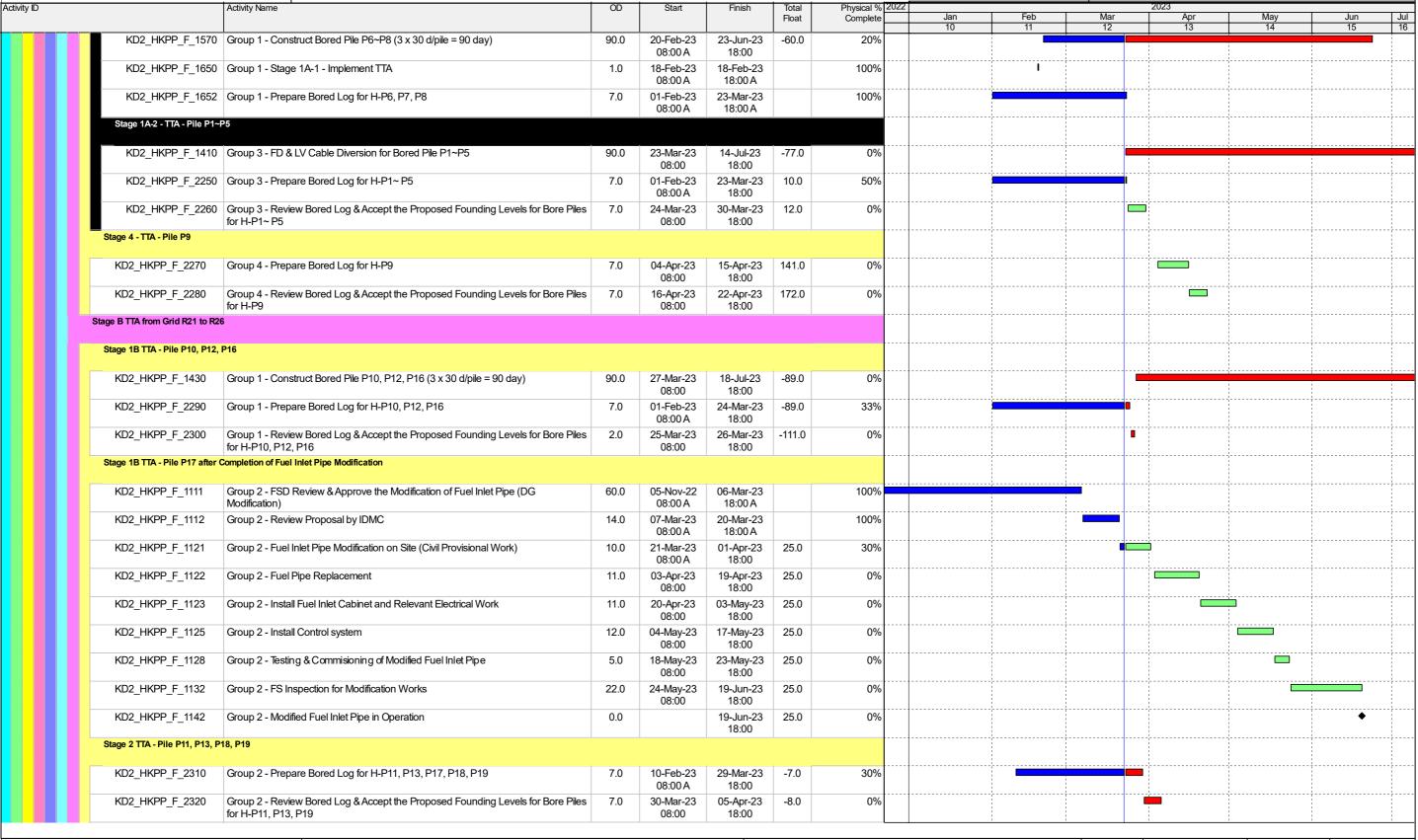
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Layout: C21W18 - 3M

TASK filters: C21W18 - 3 M, C21W18 - No Procurement Key D	ate
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Date	Revision	Checked	Approved
22-Mar-23	C21W18 - CWPG-A02	Gary Yeung	Kingsley Chiang



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Actual Work 

◆ Milestone

Remaining Work

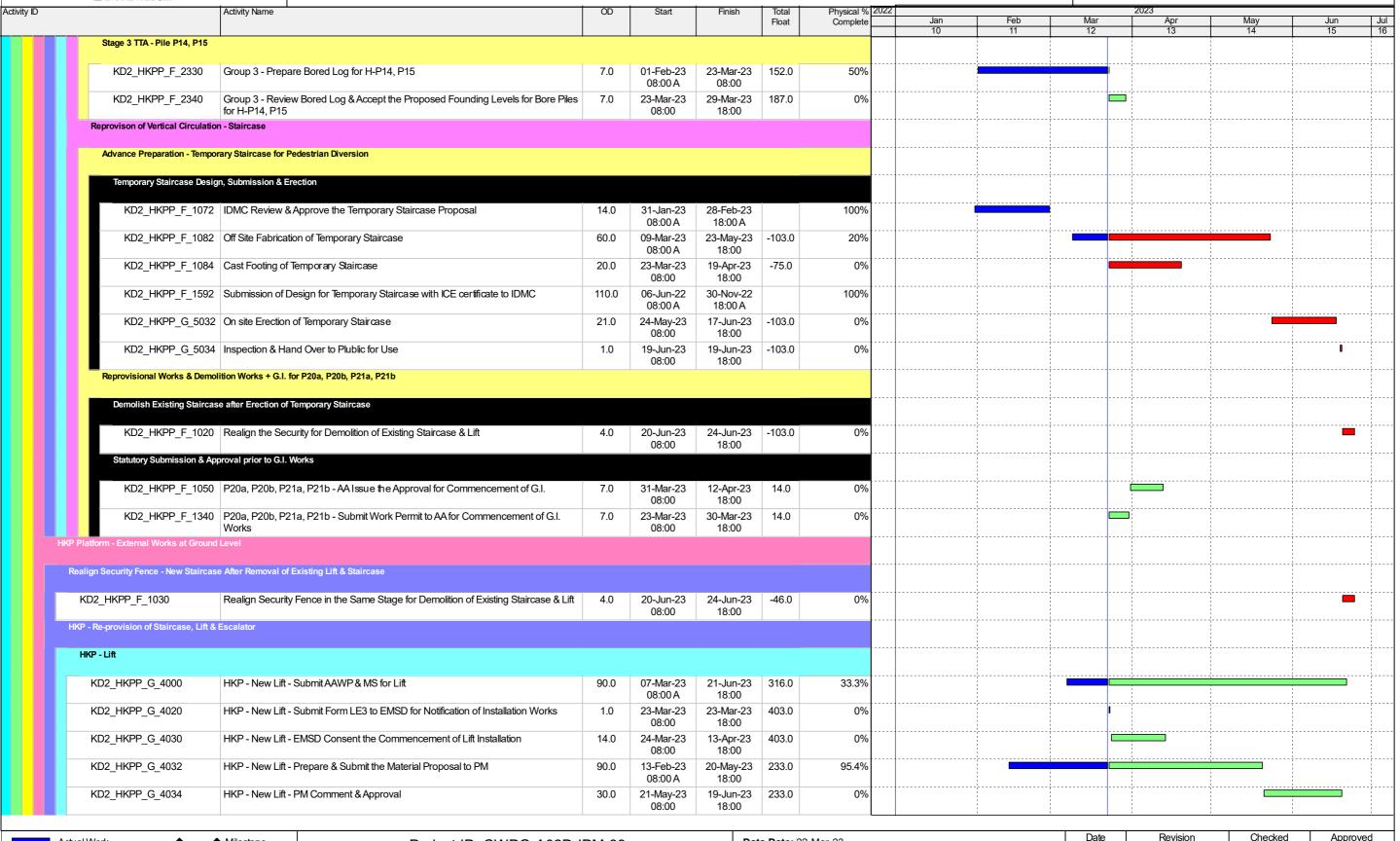
Critical Remaining Work

Project ID: CWPG-A02D-IPM-39 Page 6 of 14 Data Date: 22-Mar-23 Printed: 29-Mar-2308:56 Layout: C21W18 - 3M

Date	Revision	Checked	Approved
22-Mar-23	C21W18 - CWPG-A02	Gary Yeung	Kingsley Chiang







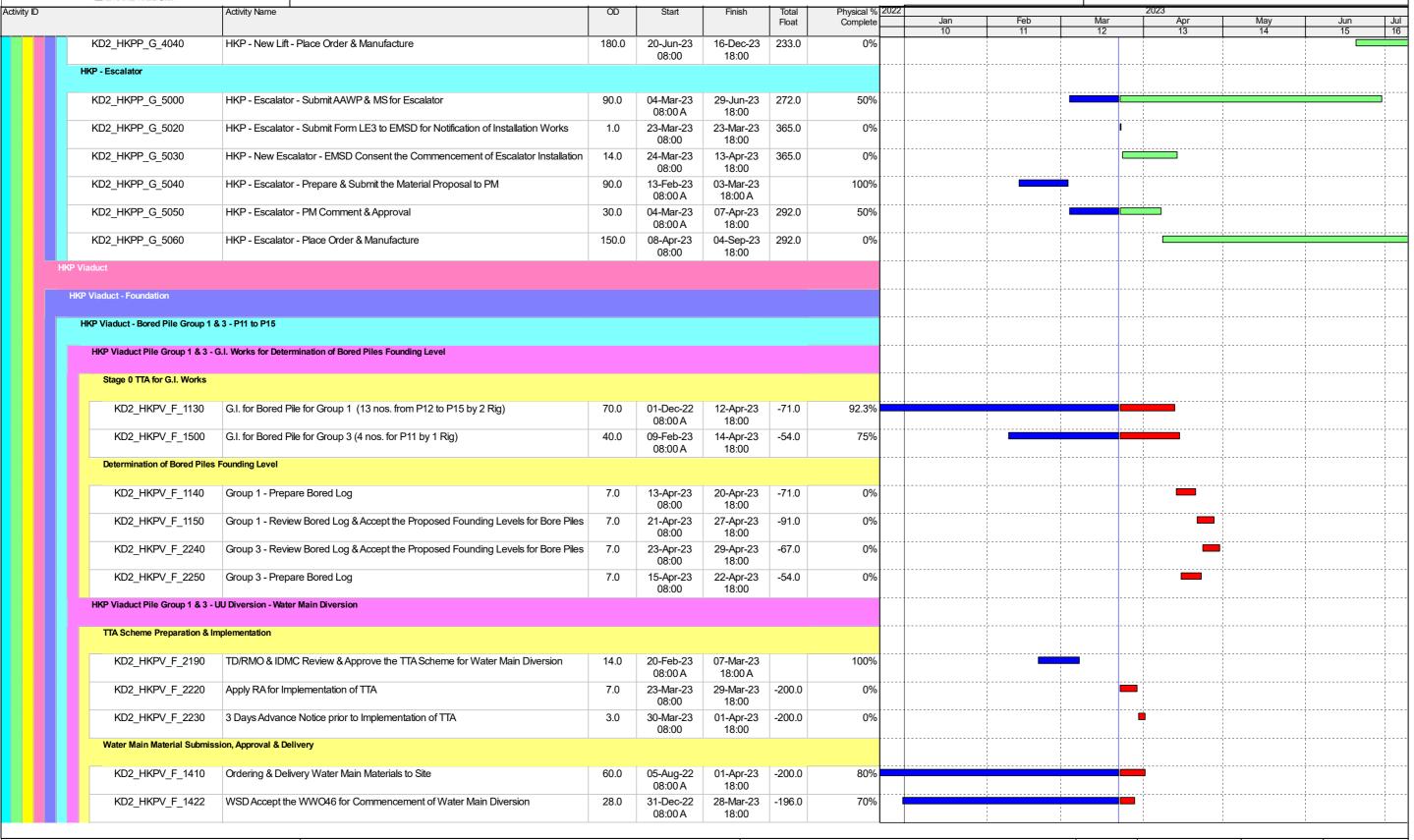


Project ID: CWPG-A02D-IPM-39 Page 7 of 14 Data Date: 22-Mar-23 Printed: 29-Mar-2308:56 Layout: C21W18 - 3M

Date	Revision	Checked	Approved
22-Mar-23	C21W18 - CWPG-A02	Gary Yeung	Kingsley Chiang



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Project ID: CWPG-A02D-IPM-39 Page 8 of 14 Data Date: 22-Mar-23 Printed: 29-Mar-2308:56 Layout: C21W18 - 3M

TASK filters: C21W18 - 3 M, C21W18 - No Procurement Key Date
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Date	Revision	Checked	Approved
22-Mar-23	C21W18 - CWPG-A02	Gary Yeung	Kingsley Chiang



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Activity ID Activity Name Float Complete -200.0 KD2\_HKPV\_F\_1550 Commencement of Water Main Diversion 02-Apr-23 08:00 Watermain Diversion - Stage 1 KD2\_HKPV\_F\_1430 Stage 1 - Implement TTA to Close Shun Wan Road Out Bound for Water Main 1.0 03-Apr-23 03-Apr-23 -164.0 0% 18:00 KD2\_HKPV\_F\_1440 Stage 1 - Excavate Trench for Water Main Diversion 7.0 04-Apr-23 15-Apr-23 -164.0 0% 18:00 08:00 Stage 1 - Lay Water Main (DN300mm DI & DN200mmPE) KD2\_HKPV\_F\_1450 17-Apr-23 22-Apr-23 -164.0 0% 18:00 08:00 KD2\_HKPV\_F\_1460 Stage 1 - Backfill Water Main Trench & Reinstate Road Surface 3.0 -164.0 0% 24-Apr-23 26-Apr-23 08:00 18:00 Watermain Diversion - Stage 2 KD2\_HKPV\_F\_1470 Stage 2 - Implement TTA for Water Main Diversion -164.0 0% 1.0 27-Apr-23 27-Apr-23 08:00 18:00 KD2\_HKPV\_F\_1480 Stage 2 - Excavate Trench for Water Main Diversion 7.0 06-May-23 -164.0 0% 28-Apr-23 08:00 18:00 KD2\_HKPV\_F\_1490 Stage 2 - Lay Water Main (DN300mm DI & DN200mmPE) 08-May-23 13-May-23 0% 6.0 08:00 18:00 KD2\_HKPV\_F\_1560 Stage 2 - Backfill Water Main Trench & Reinstate Road Surface -164.0 0% 2.0 15-May-23 16-May-23 08:00 18:00 Watermain Diversion - Connection of Water Supply KD2\_HKPV\_F\_1510 Water Pressure Test 17-May-23 23-May-23 -204.0 0% 08:00 18:00 Swabbing Water Main 0% KD2\_HKPV\_F\_1512 24-May-23 -164.0 1.0 24-May-23 08:00 18:00 KD2\_HKPV\_F\_1514 WSD Site Inspection of Water Main 1.0 25-May-23 25-May-23 -164.0 0% 08:00 18:00 KD2\_HKPV\_F\_1520 Disinfection of Water Main 26-May-23 01-Jun-23 -204.0 0% 18:00 Connection of Permanent Water Supply (By WSD) KD2\_HKPV\_F\_1530 0% -204.0 2.0 02-Jun-23 03-Jun-23 08:00 18:00 KD2 HKPV F 1540 Backfill Water Main Connection Point & Reinstate Road Surface -163.0 0% 05-Jun-23 12-Jun-23 08:00 18:00 HKP Viaduct Pile Group 1 & 3 - UU Diversion - LV, ELV Cable Duct Diversion ELV Cable Duct - Stage 1 KD2 HKPV F 1160 Stage 1 - Implement TTA for ELV cable Duct Diversion 13-Jun-23 13-Jun-23 0% 08:00 18:00 0% KD2\_HKPV\_F\_1170 Stage 1 - ELV Cable Duct Laying (6no x DN100mm) 2.0 14-Jun-23 15-Jun-23 -163.0 08:00 18:00 Stage 1 - ELV Construct Draw Pit (2 nos.) KD2 HKPV F 1180 -163.0 0% 6.0 16-Jun-23 23-Jun-23 18:00 08:00 HKP Viaduct - Bored Pile Group 2 - P9, P10 KD2 HKPV F 1670 HKP Viaduct (P9, P10) - Access to Works Area C21W18/5 1.0 01-Mar-23 01-Mar-23 100% A 00:80 18:00 A HKP Viaduct Pile Group 2 - G.I. Works for Determination of Bored Piles Founding Level HKP Viaduct (P9, P10) - G.I. for Bored Pile (6 nos. for P9, P10 by 3 Rigs) KD2\_HKPV\_F\_1000 09-Mar-23 08-May-23 12.0 -95.0 50% 08:00 A 18:00 KD2\_HKPV\_F\_1010 HKP Viaduct (P9, P10) - Prepare Bored Log & Submit to BD 09-May-23 11-May-23 -95.0 0% 3.0 08:00 18:00

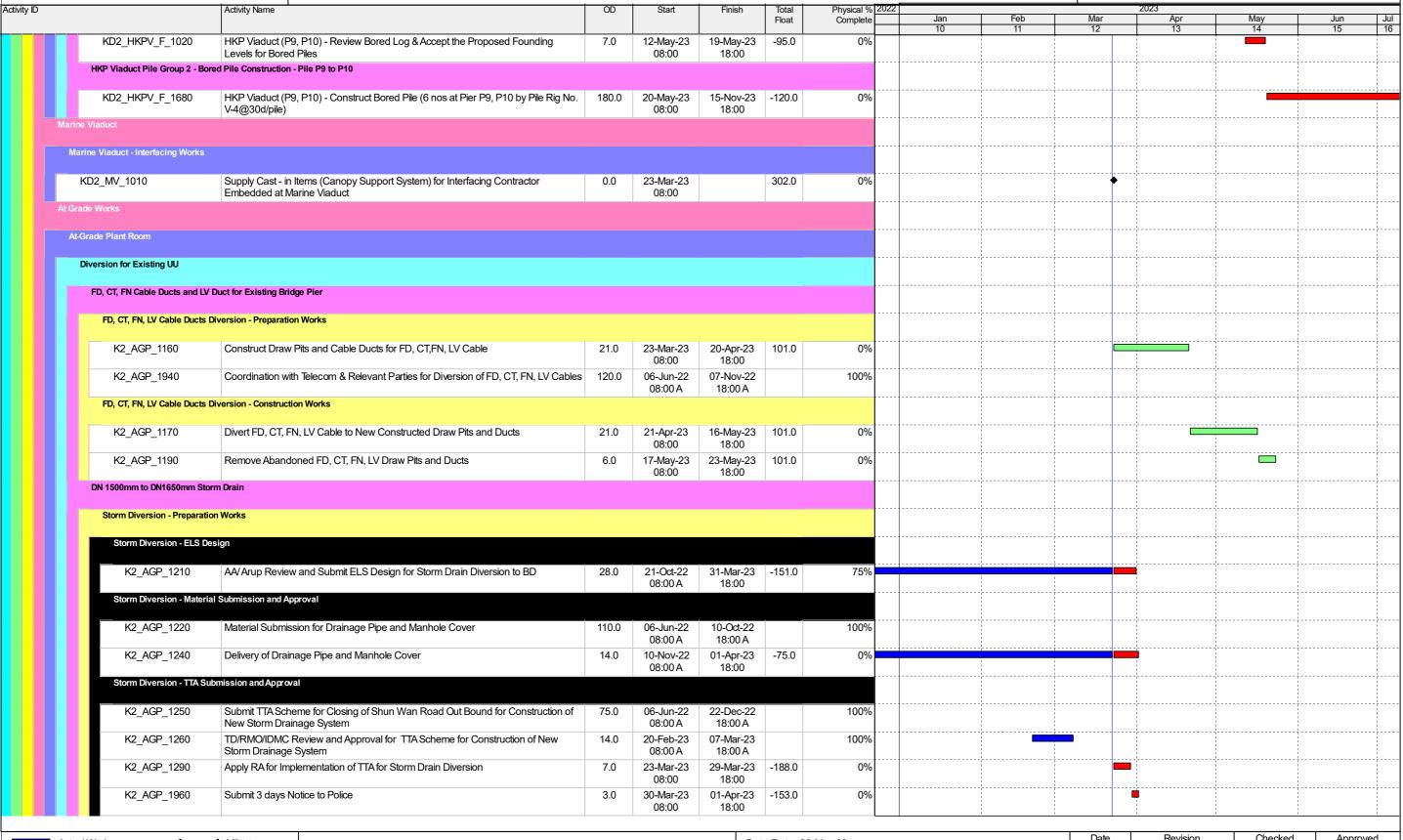


Project ID: CWPG-A02D-IPM-39 Page 9 of 14 Data Date: 22-Mar-23 Printed: 29-Mar-2308:56 Layout: C21W18 - 3M

Date	Revision	Checked	Approved
22-Mar-23	C21W18 - CWPG-A02	Gary Yeung	Kingsley Chiang







Actual Work 

Milestone

Remaining Work

Critical Remaining Work

Project ID: CWPG-A02D-IPM-39 Page 10 of 14 Data Date: 22-Mar-23 Printed: 29-Mar-2308:56 Layout: C21W18 - 3M

Date	Revision	Checked	Approved		
22-Mar-23 C21W18 - CWPG-A0		Gary Yeung	Kingsley Chiang		





Activity ID Complete Float K2\_AGP\_1970 Implement TTA to Close Shun Wan Road South Bound for Diversion of Storm Drain 03-Apr-23 03-Apr-23 -153.0 08:00 18:00 Storm Diversion - Construction Works Storm Diversion - Stage 1 - TTA to Close Shun Wan Road Out Bound K2\_AGP\_1300 Stage 1A - Install ELS Works for Storm Drain Construction within Works Area before 01-Apr-23 09-May-23 0% Closing Shun Wan Road Out Bound 08:00 18:00 K2\_AGP\_1302 Stage 1A-Install DN1500 Drain Pipe from SMH001 up to the edge of Shun Wan 10.0 10-May-23 20-May-23 -102.0 0% 08:00 18:00 K2\_AGP\_1310 Construct Manhole SMH001 22-May-23 07-Jun-23 -102.0 0% 08:00 18:00 K2\_AGP\_1312 Stage 1B - Install ELS Works for Storm Drain Up Stream within TTA of Closure of -153.0 0% 28.0 04-Apr-23 11-May-23 18:00 08:00 K2\_AGP\_1314 Stage 1B - Install DN1500 Drain Pipe within TTA of Closure of Shun Wan Road Out 10.0 12-May-23 23-May-23 -90.0 0% Bound 08:00 18:00 K2\_AGP\_1316 Install ELS for Down Stream of DN1650 within TTA to M1C.12 12-May-23 -153.0 14-Jun-23 0% 0% K2 AGP 1320 Install DN1650 Drain Pipe from M1C.12 up to the edge of Shun Wan Road 10.0 15-Jun-23 27-Jun-23 -153.0 08:00 18:00 **CLP LV Cables CLP LV Cable Diversion - Preparation Works** CLP LV Cable Diversion - Coordination with CLP 07-Nov-22 Confirm, Agree & Place Order to CLP for LV Cable Diversion for Construction of At K2\_AGP\_1040 158.0 06-Jun-22 100% 18:00 A CLP LV Cable Diversion - Ducting and Pillar Box (2 nos.) K2\_AGP\_1070 Material Submission for Cable Duct & Pillar Box 24.0 23-Mar-23 24-Apr-23 9.0 0% 08:00 18:00 K2 AGP 1080 Review and Approval for Material for Cable & Pillar Box 14.0 25-Apr-23 11-May-23 9.0 0% 08:00 18:00 K2 AGP 1090 Delivery of Cable Ducts 12-May-23 22-May-23 9.0 0% 08:00 18:00 K2\_AGP\_1100 Install Cable Ducts 14.0 23-May-23 08-Jun-23 9.0 0% 08:00 18:00 K2 AGP 1110 Delivery of Pillar Box and Associated Accessories 12-May-23 24-Jul-23 0% 08:00 18:00 DN300mm Existing Sewer Sewage Diversion - Preparation Works K2\_AGP\_1450 Submission of Temporary Sewer Diversion Scheme 140.0 23-Mar-23 11-Sep-23 -101.0 0% 18:00 Structure, ABWF and E&M Works for At-Grade Plant Room Revision Checked Approved Actual Work ◆ Milestone Data Date: 22-Mar-23 Project ID: CWPG-A02D-IPM-39 22-Mar-23 ... C21W18 - CWPG-A02 Gary Yeung Kingsley Chiang Printed: 29-Mar-2308:56 Remaining Work Page 11 of 14 Layout: C21W18 - 3M Critical Remaining Work





Activity ID Activity Name Float Complete At-Grade Plant Room - Structure Works At-Grade Plant Room Structure - Statutory Submission, Approval & Procedure Submit BA8 for Commencement of Construction of Plant Room K2\_AGP\_1500 23-Mar-23 30-Mar-23 113.0 0% 08:00 18:00 K2\_AGP\_1510 BD Issue the Consent for Commencement of Plant Room Construction 28.0 31-Mar-23 27-Apr-23 141.0 0% 08:00 18:00 Airport and Specialist Systems -- Design and Submission --AA's Works Permit (AAWP) & Method Statement (MS) AAWP & MS for Access Control System (ACS) KD2 AS 1000 AAWP & MS for ACS - Prepare and submit document 60.0 10-Jan-23 15-Apr-23 472.0 50% 08:00 A 18:00 KD2 AS 1010 AAWP & MS for ACS - PM review and approval 21.0 16-Apr-23 06-May-23 472.0 0% 08:00 18:00 AAWP & MS for Closed Circuit Television (CCTV) System KD2\_AS\_1020 AAWP & MS for CCTV System - Prepare and submit document 06-Jan-23 15-Apr-23 472.0 50% 08:00 A 18:00 KD2\_AS\_1030 AAWP & MS for CCTV System - PM review and approval 16-Apr-23 06-May-23 472.0 0% 08:00 18:00 AAWP & MS for Trunked Mobile Radio (TMR) System KD2 AS 1040 AAWP & MS for TMR System - Prepare and submit document 60.0 06-Jan-23 15-Apr-23 472.0 50% A 00:80 18:00 KD2\_AS\_1050 AAWP & MS for TMR System - PM review and approval 21.0 16-Apr-23 06-May-23 472.0 0% 08:00 18:00 AAWP & MS for Automated Branch Exchange (APABX) System KD2\_AS\_1060 AAWP & MS for APABX System - Prepare and submit document 60.0 06-Jan-23 15-Apr-23 50% 08:00 A 18:00 AAWP & MS for APABX System - PM review and approval KD2 AS 1070 21.0 16-Apr-23 06-May-23 472.0 0% 08:00 18:00 AAWP & MS for AA Wireless Network (WNET) KD2 AS 1080 AAWP & MS for WNET - Prepare and submit document 06-Jan-23 15-Apr-23 472.0 50% 08:00 A 18:00 KD2\_AS\_1090 AAWP & MS for WNET - PM review and approval 21.0 16-Apr-23 06-May-23 472.0 0% 08:00 18:00 AAWP & MS for Airport Network (AANET) KD2 AS 1100 AAWP & MS for AANET - Prepare and submit document 06-Jan-23 15-Apr-23 472.0 50% 18:00 08:00 A KD2 AS 1110 AAWP & MS for AANET - PM review and approval 16-Apr-23 06-May-23 472.0 0% 21.0 08:00 18:00 AAWP & MS for Voice and Data Cabling (VDC) System KD2\_AS\_1120 VDC System - Submit equipment sample and accompanying manufacturers design 14.0 23-Mar-23 05-Apr-23 -290.0 0% 08:00 18:00\* KD2\_AS\_1130 AAWP & MS for VDC System - Prepare and submit document 04-Nov-22 15-Apr-23 472.0 62.5% 60.0 08:00 A 18:00



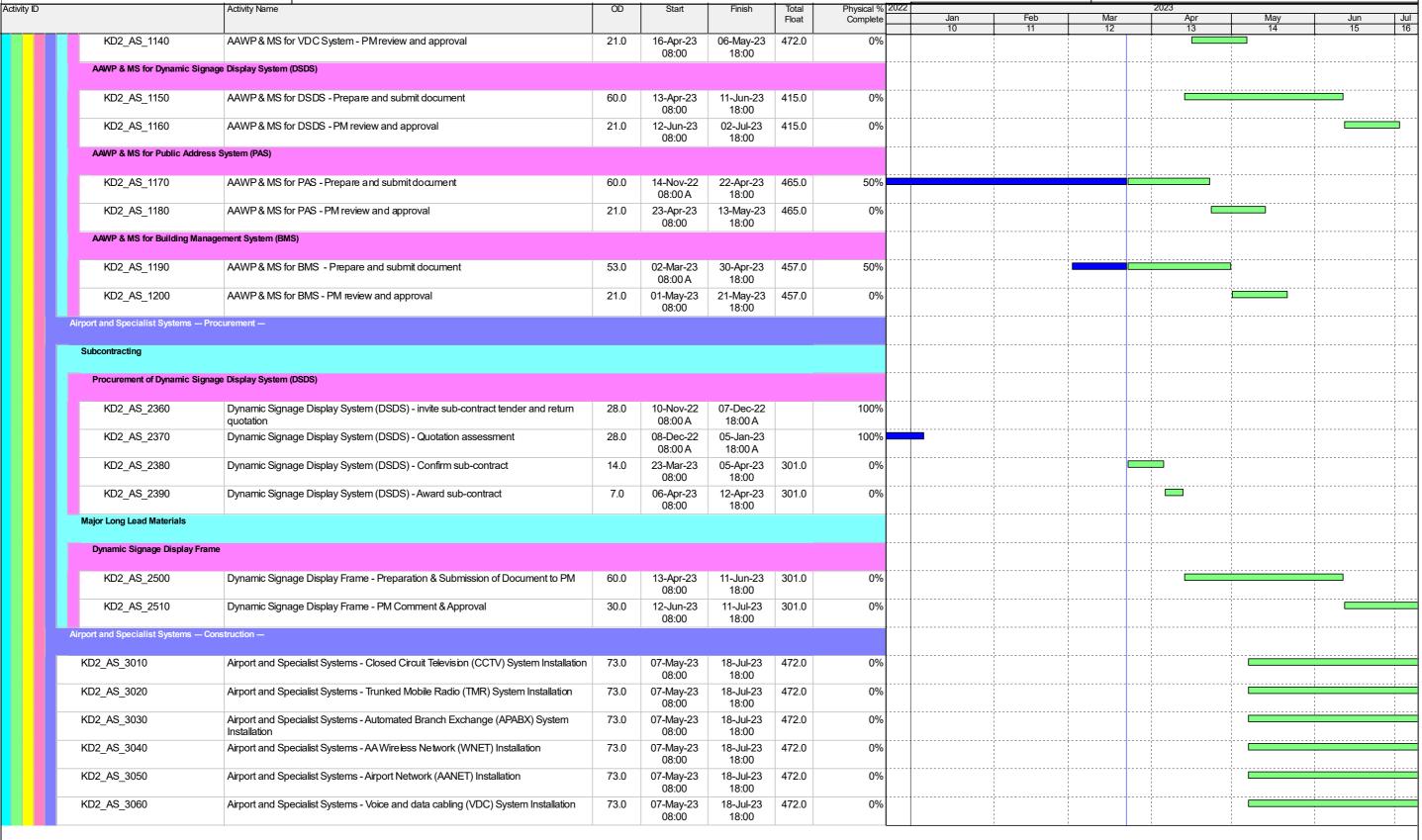
Project ID: CWPG-A02D-IPM-39 Page 12 of 14 **Data Date:** 22-Mar-23 **Printed:** 29-Mar-2308:56 **Layout:** C21W18 - 3M

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TASK	filters:	C21W	18 - 3 N	M. C2	1W18 -	- No P	rocurement	Key Dat	te.

Date	Revision	Checked	Approved
22-Mar-23	C21W18 - CWPG-A02	Gary Yeung	Kingsley Chiang



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Actual Work 

Milestone

Remaining Work

Critical Remaining Work

Project ID: CWPG-A02D-IPM-39 Page 13 of 14 Data Date: 22-Mar-23 Printed: 29-Mar-2308:56 Layout: C21W18 - 3M

Date	Revision	Checked	Approved
22-Mar-23	C21W18 - CWPG-A02	Gary Yeung	Kingsley Chiang



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7	tivity ID		Activity Name	OD	Start	Finish	Total	Physical % 2022	2			2023			
	-						Float	Complete	Jan	Feb	Mar	Apr	May	Jun	Jul
								· ·	10	11	12	13	14	15	16
		KD2_AS_3080	Airport and Specialist Systems - Public Address System (PAS) Installation	73.0	14-May-23	25-Jul-23	465.0	0%		1				•	
					08:00	18:00									
		KD2_AS_3090	Airport and Specialist Systems - Building Management System (BMS) Installation	73.0	22-May-23	02-Aug-23	457.0	0%				!			
					08:00	18:00				1			1		

Actual Work 

♠ Milestone

Remaining Work

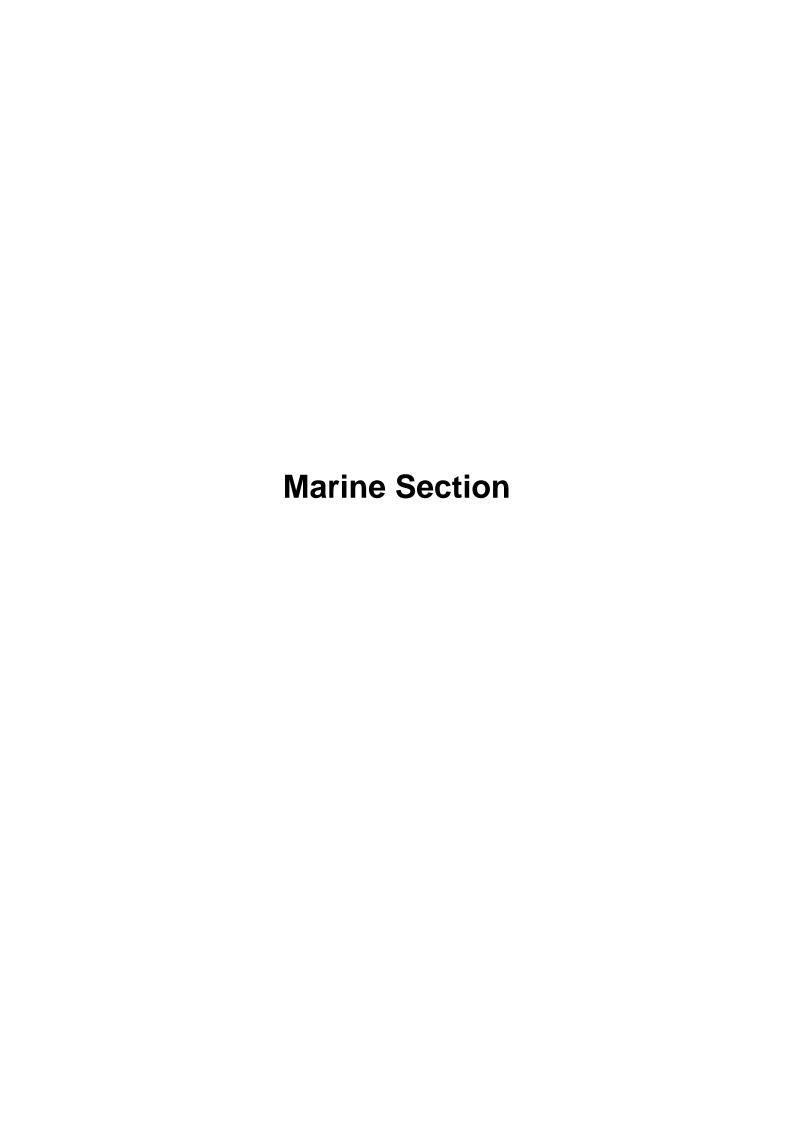
Critical Remaining Work

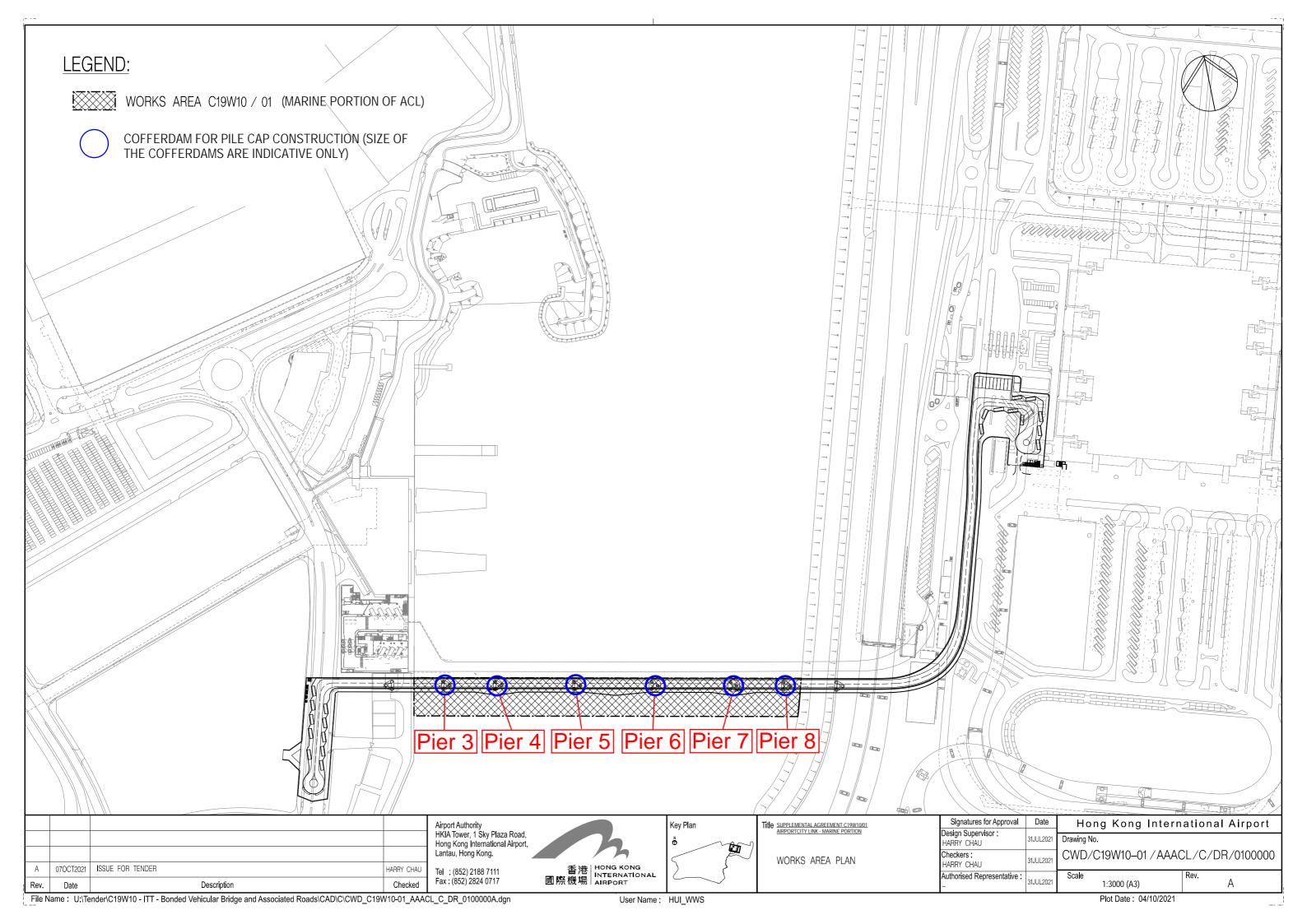
Project ID: CWPG-A02D-IPM-39
Page 14 of 14

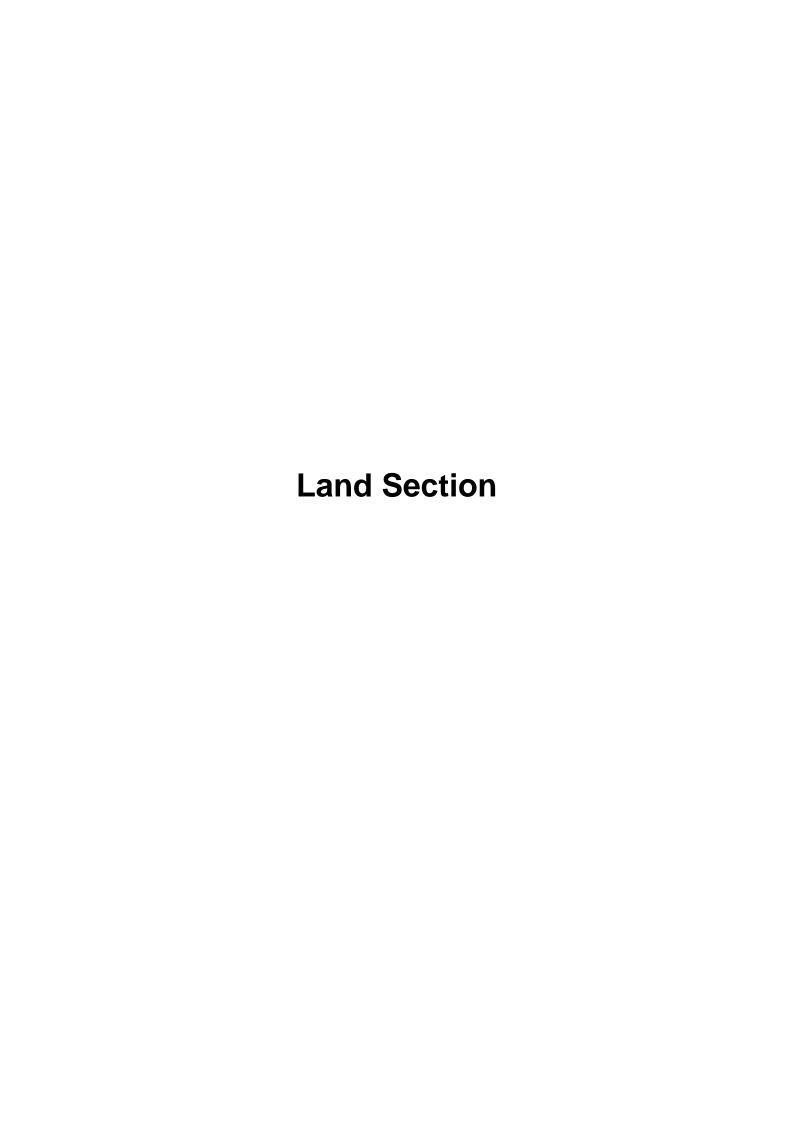
**Data Date:** 22-Mar-23 **Printed:** 29-Mar-2308:56 **Layout:** C21W18 - 3M

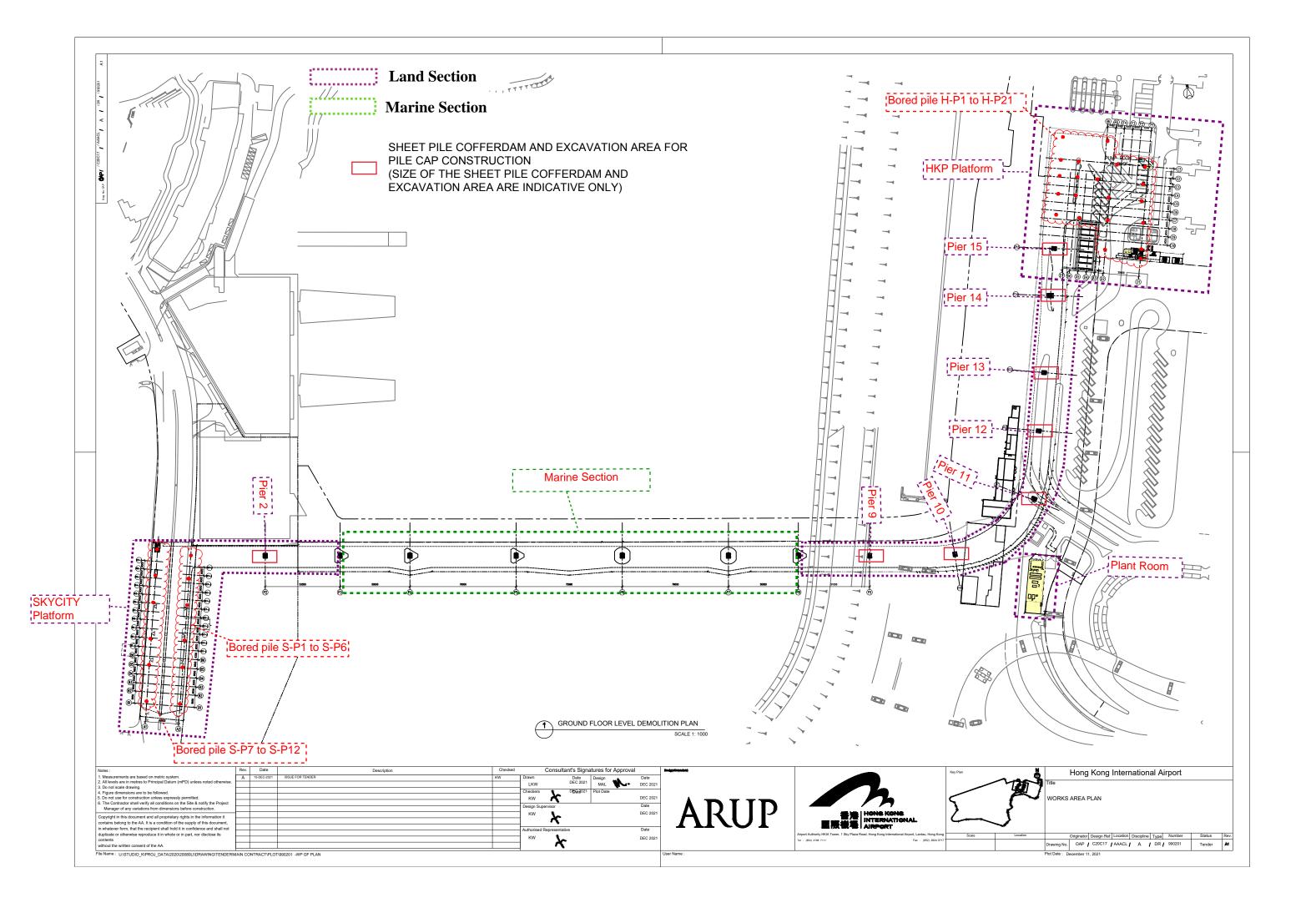
Date		Revision	Checked	Approved	
22-Mar-23 C		C21W18 - CWPG-A02	Gary Yeung	Kingsley Chiang	
			,		

### **Appendix C. Construction Works Area**









# **Appendix D. Environmental Site Inspection and Monitoring Schedule**

#### ACL Environmental Monitoring and Site Inspection Schedule for Mar 2023

### Mar-23

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	3	4
				Water Quality Monitoring		Water Quality Monitoring
				mid- ebb: 22:40		mid- ebb: 12:0°
				mid- flood: 10:16		mid- flood: 6:5
5	6	7	8	9	10	11
	ACL (Land) Environmental Site Inspection	ACL (Marine) Environmental Site Inspection				
		Water Quality Monitoring		Water Quality Monitoring		Water Quality Monitoring
		mid- ebb: 13:20		mid- ebb: 14:13		mid- ebb: 15:1
		mid- flood: 7:51		mid- flood: 8:28		mid- flood: 9:0
12	13	14	15	16	17	18
	ACL (Land) Environmental Site Inspection	ACL (Marine) Environmental Site Inspection				
		Water Quality Monitoring		Water Quality Monitoring		Water Quality Monitoring
		mid- ebb: 17:38		mid- ebb: 20:26		mid- ebb: 11:14
		mid- flood: 10:28		mid- flood: 7:33		mid- flood: 15:53
19	20	21	22	23	24	25
	ACL (Land) Environmental Site Inspection	ACL (Marine) Environmental Site Inspection				
		Water Quality Monitoring		Water Quality Monitoring		Water Quality Monitoring
		mid- ebb: 13:13		mid- ebb: 14:19		mid- ebb: 15:29
		mid- flood: 7:28		mid- flood: 8:17		mid- flood: 8:59
26	27	28	29	30	31	
	ACL (Land) Environmental Site Inspection	ACL (Marine) Environmental Site Inspection				
		Water Quality Monitoring		Water Quality Monitoring		
		mid- ebb: 17:47		mid- ebb: 20:26		
		mid- flood: 9:54		mid- flood: 7:45		
		Notes:				

#### ACL Environmental Monitoring and Site Inspection Schedule for Apr 2023

### Apr-22

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
·						1	
						Water Quality Mor	nitoring
						mid- ebb:	11:24
						mid- flood:	15:58
2	3	4	5	6	7	8	
	ACL (Land) Environmental Site Inspection	ACL (Marine) Environmental Site Inspection					
		Water Quality Monitoring		Water Quality Monitoring		Water Quality Mor	nitoring
		mid- ebb: 12:27		mid- ebb: 13:18		mid- ebb:	14:20
		mid- flood: 6:40		mid- flood: 7:18		mid- flood:	8:01
9	10	11	12	13	14	15	
		ACL (Marine) Environmental Site Inspection	ACL (Land) Environmental Site Inspection				
		Water Quality Monitoring		Water Quality Monitoring		Water Quality Mor	_
		mid- ebb: 16:25		mid- ebb: 18:34		mid- ebb:	10:05
		mid- flood: 9:21		mid- flood: 5:52		mid- flood:	14:33
16	17	18	19	20	21	22	
	ACL (Land) Environmental Site Inspection	ACL (Marine) Environmental Site Inspection					
		Water Quality Monitoring		Water Quality Monitoring		Water Quality Mor	nitoring
		mid- ebb: 12:12		mid- ebb: 13:17		mid- ebb:	14:26
		mid- flood: 6:14		mid- flood: 7:01		mid- flood:	7:47
23	24	25	26	27	28	29	
	ACL (Land) Environmental Site Inspection	ACL (Marine) Environmental Site Inspection					
		Water Quality Monitoring		Water Quality Monitoring		Water Quality Mor	•
		mid- ebb: 16:24		mid- ebb: 18:06		mid- ebb:	20:45
		mid- flood: 8:56		mid- flood: 5:32		mid- flood:	8:17
30		Notes:					

### **Appendix E. Calibration Certificates**



Email: info@qualityprotest.com; Website: www.qualityprotest.com Tel: (852) 3956 8717; Fax: (852) 3956 3928

REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No.

: R-BB120079

Date of Issue

: 20 December 2022

Page No.

: 1 of 2

#### PART A - CUSTOMER INFORMATION

Enovative Environmental Service Ltd.

Flat 2207, Yu Fun House Yu Chui Court, Shatin

New Territories (HK) Hong Kong

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

Name of Equipment:

YSI ProDSS (Multi-Parameters)

Manufacturer:

YSI (a xylem brand)

Serial Number:

16H104234

Date of Received:

20 December 2022

Date of Calibration:

20 December 2022 19 March 2023

Date of Next Calibration: Request No.:

D-BB120079

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

**Test Parameter** 

Reference Method

pH value

APHA 21e 4500 H+

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 21e 4500 O

Turbidity

APHA 21e 2130 B

Conductivity

APHA 21e 2510 B

#### PART D - CALIBRATION RESULT

#### (1) pH value

Target ( pH unit )	Display Reading (pH unit)	Tolerance	Result
4.00	4.08	0.08	Satisfactory
7.42	7.36	-0.06	Satisfactory
10.01	9.85	-0.16	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
15	14.9	-0.1	Satisfactory
30	30.0	0.0	Satisfactory
45	49.9	4.9	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	9.92	-0.80	Satisfactory
20	20.19	0.95	Satisfactory
30	29.88	-0.40	Satisfactory

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

--- CONTINUED ON NEXT PAGE ---

AUTHORIZED SIGNATORY:

LEE Chun-ning

Assistant Manager (Chemical Testing)



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#### REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No.

: R-BB120079

Date of Issue

: 20 December 2022

Page No.

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#### (4) Dissolved oxygen

Expected Reading ( mg/L )	Display Reading ( mg/L )	Tolerance	Result
9.37	9.62	0.25	Satisfactory
7.08	6.80	-0.28	Satisfactory
4.84	4.40	-0.44	Satisfactory
3.10	2.91	-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
. 0	0.10		Satisfactory
10	9.82	-1.84	Satisfactory
20	19.84	-0.84	Satisfactory
100	98.80	-1.24	Satisfactory
800	797.46	-0.34	Satisfactory

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

#### (6) Conductivity

Expected Reading ( μS/cm at 25°C )	Display Reading	Tolerance (%)	Result
146.9	150.1	2.18	Satisfactory
1412	1389	-1.63	Satisfactory
12890	13089	1.54	Satisfactory
58670	59635	1.64	Satisfactory
111900	110417	-1.33	Satisfactory

Tolerance of Conductivity should be less than ± 10.0 (%)

#### Remark(s)

- 'The "Date of Next Calibration" is recommended according to best practice principals as practiced by QPT or quoted form relevant international standards.
- ·The results relate only to the calibrated equipment as received
- The performance of the equipment stated 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 form relevant international standards.

--- END OF REPORT ---



#### 專業化驗有限公司 OUALITY PRO TEST-CONSULT LIMITED

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#### REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No.

: R-BC020017

Date of Issue

: 06 February 2023

Page No.

:1 of 2

#### PART A - CUSTOMER INFORMATION

Enovative Environmental Service Ltd.

Flat 2207, Yu Fun House Yu Chui Court, Shatin

New Territories (HK) Hong Kong

#### PART B - SAMPLE INFORMATION

Name of Equipment:

YSI ProDSS (Multi-Parameters)

Manufacturer:

YSI (a xylem brand)

Serial Number:

16H104234

Date of Received :

03 February 2023

Date of Calibration:

03 February 2023

Date of Next Calibration: Request No.:

02 May 2023 D-BC020017

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

**Test Parameter** 

Reference Method

pH value

APHA 21e 4500 H+

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 21e 4500 O

Turbidity

APHA 21e 2130 B

Conductivity

APHA 21e 2510 B

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

#### (1) pH value

Target ( pH unit )	Display Reading (pH unit)	Tolerance	Result
4.00	3.92	-0.08	Satisfactory
7.42	7.38	-0.04	Satisfactory
10.01	9.94	-0.07	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
40	40.0	0.0	Satisfactory
30	30.0	0.0	Satisfactory
20	20.0	0.0	Satisfactory

Tolerance of Temperature should be less than  $\pm~2.0$  (  $^{\circ}C$  )

#### (3) Salinity

Expected Reading (g/L)	Display Reading (g/L)	Tolerance (%)	Result
10	9.92	-0.80	Satisfactory
20	20.40	2.00	Satisfactory
30	29.79	-0.70	Satisfactory

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

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AUTHORIZED SIGNATORY:

LEE Chun-ning

Assistant Manager (Chemical Testing)



#### 專業化驗有限公司 QUALITY PRO TEST-CONSULT LIMITED

Unit 10, 5/F, Wah Wai Centre, 38-40 Au Pui Wan St., Fotan, Hong Kong Email: info@qualityprotest.com; Website: www.qualityprotest.com Tel: (852) 3956 8717; Fax: (852) 3956 3928

#### REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No.

: R-BC020017

**Date of Issue** 

: 06 February 2023

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#### (4) Dissolved oxygen

Expected Reading ( mg/L )	Display Reading ( mg/L )	Tolerance	Result
8.34	8.50	0.16	Satisfactory
6.70	6.62	-0.08	Satisfactory
3.41	3.22	-0.19	Satisfactory
0.11	0.50	0.39	Satisfactory

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

#### (5) Turbidity

Expected Reading ( NTU )	Display Reading (NTU)	Tolerance ( % )	Result
0	0.05		Satisfactory
10	9.90	-1.0	Satisfactory
20	19.36	-3.2	Satisfactory
100	96.52	-3.5	Satisfactory
800	795.37	-0.6	Satisfactory

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

#### (6) Conductivity

Expected Reading ( μS/cm at 25°C )	Display Reading	Tolerance (%)	Result
146.9	150	2.11	Satisfactory
1412	1477	4.60	Satisfactory
12890	13582	5.37	Satisfactory
58670	59121	0.77	Satisfactory
111900	114082	1.95	Satisfactory

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

#### Remark(s)

- 'The "Date of Next Calibration" is recommended according to best practice principals as practiced by QPT or quoted form relevant international standards.
- ·The results relate only to the calibrated equipment as received
- 'The performance of the equipment stated 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 form relevant international standards.

--- END OF REPORT ---



#### 專業化驗有限公司 QUALITY PRO TEST-CONSULT LIMITED

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#### REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No.

: R-BC030056

**Date of Issue** 

: 20 March 2023

Page No.

: 1 of 2

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

Enovative Environmental Service Ltd. Flat 2207, Yu Fun House Yu Chui Court, Shatin New Territories (HK) Hong Kong

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

Name of Equipment:

YSI ProDSS (Multi-Parameters)

Manufacturer:

YSI (a xylem brand)

Serial Number:

S/N: 15M100005

Date of Received :

5/14. 151V1100005

Date of Calibration :

17 March 2023 17 March 2023

Date of Next Calibration :

16 June 2023

Request No.:

D-BC030056

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

**Test Parameter** 

Reference Method

pH value

APHA 21e 4500 H+

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 21e 4500 O

Turbidity

APHA 21e 2130 B

Conductivity

APHA 21e 2510 B

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

#### (1) pH value

Target (pH unit)	Display Reading ( pH unit )	Tolerance	Result
4.00	4.02	0.02	Satisfactory
7.42	7.46	0.04	Satisfactory
10.01	10.16	0.15	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
15	15.0	. 0.0	Satisfactory
30	30.0	0.0	Satisfactory
40	39.8	-0.2	Satisfactory

Tolerance of Temperature should be less than  $\pm~2.0$  (  $^{\circ}C$  )

#### (3) Salinity

Expected Reading (g/L)	Display Reading (g/L)	Tolerance (%)	Result
10	10.09	0.90	Satisfactory
20	20.53	2.65	Satisfactory
30	30.46	1.53	Satisfactory

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

--- CONTINUED ON NEXT PAGE ---

AUTHORIZED SIGNATORY:

LEE Chun ning
Assistant Manager (Chemical Testing)



#### 專業化驗有限公司 QUALITY PRO TEST-CONSULT LIMITED

Unit 10, 5/F, Wah Wai Centre, 38-40 Au Pui Wan St., Fotan, Hong Kong Email: info@qualityprotest.com; Website: www.qualityprotest.com Tel: (852) 3956 8717; Fax: (852) 3956 3928

#### REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No.

: R-BC030056

**Date of Issue** 

: 20 March 2023

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#### (4) Dissolved oxygen

Expected Reading ( mg/L )	Display Reading ( mg/L )	Tolerance	Result
8.17	8.33	0.16	Satisfactory
5.28	5.21	-0.07	Satisfactory
1.86	1.58	-0.28	Satisfactory
0.30	0.39	0.09	Satisfactory

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

#### (5) Turbidity

Expected Reading (NTU)	Display Reading (NTU)	Tolerance (%)	Result
0	0.10		Satisfactory
10	9.88	-1.2	Satisfactory
20	19.72	-1.4	Satisfactory
100	97.36	-2.6	Satisfactory
800	789.53	-1.3	Satisfactory

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

#### (6) Conductivity

Expected Reading ( µS/cm at 25°C )	Display Reading	Tolerance (%)	Result
146.9	151.3	3.00	Satisfactory
1412	1366	-3.26	Satisfactory
12890	12852	-0.29	Satisfactory
58670	60593	3.28	Satisfactory
111900	111742	-0.14	Satisfactory

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

#### Remark(s)

- 'The "Date of Next Calibration" is recommended according to best practice principals as practiced by QPT or quoted form 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
- "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 form relevant international standards.

--- END OF REPORT ---



#### 專業化驗有限公司 OUALITY PRO TEST-CONSULT LIMITED

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### REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No.

: R-BC030055

**Date of Issue** 

: 20 March 2023

Page No.

: 1 of 2

#### PART A - CUSTOMER INFORMATION

Enovative Environmental Service Ltd.

Flat 2207, Yu Fun House Yu Chui Court, Shatin

New Territories (HK) Hong Kong

#### PART B - SAMPLE INFORMATION

Name of Equipment:

YSI ProDSS (Multi-Parameters)

Manufacturer:

YSI (a xylem brand)

Serial Number:

S/N: 21G105356

Date of Received:

17 March 2023

Date of Calibration:

17 March 2023

Date of Next Calibration:

16 June 2023

Request No.:

D-BC030055

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

**Test Parameter** 

Reference Method

pH value

APHA 21e 4500 H+

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 21e 4500 O APHA 21e 2130 B

Turbidity Conductivity

APHA 21e 2510 B

#### PART D - CALIBRATION RESULT

#### (1) pH value

Target ( pH unit )	Display Reading (pH unit)	Tolerance	Result
4.00	4.04	0.04	Satisfactory
7.42	7.46	0.04	Satisfactory
10.01	10.14	0.13	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
15	15.0	0.0	Satisfactory
30	30.0	0.0	Satisfactory
40	39.9	-0.1	Satisfactory

Tolerance of Temperature should be less than  $\pm\,2.0$  (  $^{\circ}C$  )

#### (3) Salinity

Expected Reading (g/L)	Display Reading (g/L)	Tolerance (%)	Result
10	10.10	1.00	Satisfactory
20	19.82	-0.90	Satisfactory
30	30.55	1.83	Satisfactory

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

--- CONTINUED ON NEXT PAGE ---

AUTHORIZED SIGNATORY:

LEE Chun-ning
Assistant Manager (Chemical Testing)



#### REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No.

: R-BC030055

**Date of Issue** 

: 20 March 2023

Page No.

: 2 of 2

#### (4) Dissolved oxygen

Expected Reading ( mg/L )	Display Reading (mg/L)	Tolerance	Result
8.17	8.31	0.14	Satisfactory
5.28	5.29	0.01	Satisfactory
1.86	1.56	-0.30	Satisfactory
0.30	0.39	0.09	Satisfactory

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

#### (5) Turbidity

Expected Reading (NTU)	Display Reading (NTU)	Tolerance ( % )	Result
0	0.10		Satisfactory
10	9.86	-1.4	Satisfactory
	19.73	-1.4	Satisfactory
100	98.87	-1.1	Satisfactory
800	790.41	-1.2	Satisfactory

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

#### (6) Conductivity

Expected Reading ( μS/cm at 25°C )	Display Reading	Tolerance (%)	Result
146.9	148.7	1.23	Satisfactory
1412	1511	7.01	Satisfactory
12890	12994	0.81	Satisfactory
58670	60395	2.94	Satisfactory
111900	111890	-0.01	Satisfactory

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

#### Remark(s)

- 'The "Date of Next Calibration" is recommended according to best practice principals as practiced by QPT or quoted form 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 form relevant international standards.

--- END OF REPORT ---

### **Appendix F. Event and Action Plan**

Table F.1: Event and Action Plan for Marine Water Quality

		Ac	tion	
Event	ET	IEC	AAHK/PM	Contractor
Action level being exceeded by one sampling day	1. Repeat in-situ measurement to confirm findings; 2. Identify reasons for non-compliance and source(s) of impact; 3. Inform IEC and Contractor; 4. Check monitoring data, all plant, equipment and Contractor's working methods; 5. Discuss mitigation measures with IEC and Contractor; 6. Repeat measurement on next day of exceedance.	mitigation measures submitted by Contractor and advise AAHK / PM accordingly;  3. Assess the effectiveness of the implemented	the proposed mitigation measures; 2. Make agreement on the mitigation measures to be implemented; 4. Assess the effectiveness of the implemented mitigation measures.	PM and confirm notification of the non-compliance in writing;  2. Rectify unacceptable practice;  3. Check all plant and equipment;  4. Consider changes of
Action level being exceeded by two or more consecutive sampling days	1. Repeat in-situ measurement to confirm findings; 2. Identify reasons for non-compliance and source(s) of impact; 3. Inform IEC and Contractor; 4. Check monitoring data, all plant, equipment and Contractor's working methods; 5. Discuss mitigation measures with IEC and Contractor; 6. Ensure mitigation measures are implemented; 7. Prepare to increase the monitoring frequency to daily; 8. Repeat measurement on next day of exceedance.	Contractor on the mitigation measures  2. Review proposals or mitigation measures submitted by Contractor and advise the AAHK / PM accordingly;  3. Assess the effectiveness of the implemented	<ol> <li>Make agreement on the mitigation measures to be implemented;</li> <li>Assess the effectiveness of the implemented mitigation measures.</li> </ol>	PM and confirm notification of the non-compliance in writing;  2. Rectify unacceptable practice;  3. Check all plant and equipment  4. Consider changes of
Limit level being exceeded by one sampling day	<ol> <li>Repeat in-situ measurement to confirm findings;</li> <li>Identify reasons for non-compliance and source(s) of impact;</li> <li>Inform IEC, Contractor and EPD</li> <li>Check monitoring data, all plant, equipment and Contractor's working methods;</li> <li>Discuss mitigation measures with IEC, AAHK / PM and</li> </ol>	submitted by Contractor and advise the AAHK / PM accordingly; 3. Assess the effectiveness of the	and Contractor on the proposed mitigation measures:  2. Request Contractor to critically review the working methods;  3. Make agreement on the mitigation measures to be implemented;  4. Assess the	PM and confirm notification of the non-compliance in writing; 2. Rectify unacceptable practice; 3. Check all plant and equipment; 4. Consider changes of working methods; 5. Discuss with ET, IEC and AAHK / PM and propose mitigation

	Action									
Event	ET	IEC	AAHK/PM	Contractor						
	Contractor;			three working days;						
	<ol> <li>Ensure mitigation measures are implemented;</li> </ol>			<ol><li>Implement the agreed mitigation measures.</li></ol>						
	<ol> <li>Increase the monitoring frequency to daily until no exceedance of limit level.</li> </ol>									
Limit level being exceeded by two or more consecutive	Repeat in-situ     measurement to     confirm findings;	Discuss with ET and Contractor on the mitigation measures;		and confirm notification of non-						
sampling days	<ol><li>Identify reasons for non-compliance and source(s) of impact;</li></ol>	<ol><li>Review proposals on mitigation measures submitted by</li></ol>	<ol><li>Request Contractor</li></ol>	compliance in writing; 2. Rectify unacceptable						
	3. Inform IEC,	Contractor and	working methods;	practices;						
	Contractor and EPD;	advise the AAHK / PM accordingly;	Make agreement on the mitigation	<ol><li>Check all plant and equipment;</li></ol>						
	Check monitoring data, all plant, equipment and	Assess the effectiveness of	measures to be implemented;	Consider changes of working method;						
	Contractor's working methods;	implemented mitigation measures.	Assess the effectiveness of the	5. Discuss with ET, IEC and AAHK / PM and						
	<ol><li>Discuss mitigation measures with IEC.</li></ol>		implemented mitigation measures;	propose mitigation measures to IEC and						
	AAHK / PM and Contractor;		5. Consider and instruct, if necessary,	AAHK / PM within 3						
	Contractor; 6. Ensure mitigation measures are implemented;		the Contractor to slow down or to stop all or part of the	6. Implement the agreed mitigation measures:						
	7. Increase the monitoring frequency to daily until no exceedance of Limit level for two consecutive days.		construction activities until no exceedance of Limit level.	7. As directed by the AAHK / PM, to slow down or to stop all or part of the construction activities.						

# **Appendix G. Monitoring Data and Graphical Plots**

Water Quality Monitoring Results on 02 March 23 during Mid-Ebb Tide

vater waa	iity ivioiiii	tering recou			UZ March 25	auring wia	_~~													
Monitoring	Weather	Sea Condition	Sampling		Sampling Dep	oth (m)	Water Te	emperature (°C)	þ	рΗ	Salin	nity (ppt)	DO Satur	ration (%)	Dissolved (mg/l		Turbidity(	(NTU)	Suspende (mg.	
Station	Condition		Time	(m)		()	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	19.1	19.2	8.0	8.0	30.6	30.6	96.4	96.6	7.4		2.1		2.6	
					Surface	1.0	19.2	19.2	8.0	6.0	30.6	30.6	96.7	90.0	7.5	7.4	2.0		2.4	
C1	Misty	Calm	21:20	11.0	Middle	5.5	19.3	19.2	8.0	8.0	30.6	30.7	96.1	96.2	7.4	7.4	2.6	2.4	2.8	3.2
O1	iviioty	Cairii	21.20	11.0	Middle	5.5	19.1	19.2	8.0	0.0	30.7	30.7	96.3	30.2	7.4		2.5	2.4	3.3	5.2
					Bottom	10.0	19.6	19.4	8.0	8.0	30.3	30.5	96.6	96.6	7.4	7.5	2.7		3.8	
					Bottom	10.0	19.1	10.1	8.0	0.0	30.7	00.0	96.5	00.0	7.5	7.0	2.7		4.2	
					Surface	1.0	19.1	19.2	8.0	8.0	30.6	30.4	96.2	96.7	7.4		1.9		3.3	
						1.0	19.2		8.0		30.2		97.1		7.5	7.5	1.9		3.0	
C2	Misty	Calm	21:36	11.2	Middle	5.6	19.0	19.1	8.0	8.0	30.8	30.6	95.7	96.3	7.4		2.3	2.2	2.5	2.6
	,					5.6	19.2		8.0		30.4		96.9		7.5		2.4		2.6	-
					Bottom	10.2	18.9	19.0	8.0	8.0	30.8	30.6	95.8	96.3	7.4	7.5	2.4		2.1	-
						10.2	19.1		8.0		30.4		96.7		7.5		2.5		2.3	
					Surface	1.0	19.7	19.6	8.0	8.0	28.8	28.9	102.0	101.4	7.9		1.6		1.4	4
						1.0	19.4		8.0		28.9		100.8		7.8	7.9	1.6		1.8	4
M1	Misty	Calm	21:28	4.8	Middle	-	-	-	-	-	-	-	-	-	-		-	1.9	-	2.0
						3.8	19.9		7.9		28.7		102.8		7.9		2.2		2.2	-
					Bottom	3.8	19.6	19.8	8.0	8.0	28.8	28.8	102.8	102.2	7.9	7.9	2.1		2.7	-
						1.0	19.1		8.1		30.2		96.7		7.5		2.1		2.3	<del></del>
					Surface	1.0	19.1	19.1	8.1	8.1	29.8	30.0	97.3	97.0	7.5		2.2		2.4	1
						-	-		-		-		-		-	7.5	-			•
M2	Misty	Calm	21:30	5.4	Middle	-	-	-	-	-	-	-	-	-	-		-	2.3	-	2.5
					5	4.4	19.1		8.1		30.6		96.6		7.5		2.4		2.7	1
					Bottom	4.4	19.1	19.1	8.1	8.1	30.1	30.4	97.0	96.8	7.5	7.5	2.4		2.6	1
					Surface	1.0	19.3	19.2	8.0	8.0	30.1	30.2	97.1	97.1	7.5		2.2		2	
					Surface	1.0	19.1	19.2	8.0	6.0	30.2	30.2	97.0	97.1	7.5	7.5	2.3		2	1
M3	Misty	Calm	21.24	7.6	Middle	3.8	19.5	19.3	8.0	8.0	30.4	30.4	97.1	97.2	7.4	1.5	3.3	2.9	3	3
IVIS	iviiSty	Callli	21:24	7.6	ivildale	3.8	19.1	13.3	8.0	0.0	30.4	30.4	97.2	31.2	7.5		3.2	2.9	3	] 3
				Bottom	6.6	19.7	19.4	7.9	8.0	30.2	30.3	98.5	98.0	7.5	7.5	3.3		4	]	
					Dottom	6.6	19.1	13.4	8.0	0.0	30.3	50.5	97.4	90.0	7.5	7.5	3.3		3	

DA: Depth-averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough: White capped or rougher Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined

Water Quality Monitoring Results on 02 March 23 during Mid-Flood Tide

Monitoring	Weather	Sea Condition	Sampling		Sampling Dep	th (m)	Water Te	emperature (°C)	р	Н	Salin	ity (ppt)	DO Satur	ation (%)	Dissolved ( (mg/L		Turbidity(	(NTU)	Suspende (mg/	
Station	Condition		Time	(m)	32 7 3 37	,	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	19.1	19.1	8.0	8.0	30.7	30.7	95.5	95.6	7.4		2.0		1.6	
					Juliace	1.0	19.1	19.1	8.0	0.0	30.7	30.7	95.7	33.0	7.4	7.4	1.9		1.9	ı
C1	Misty	Calm	11:04	8.8	Middle	4.4	19.1	19.1	8.0	8.0	30.7	30.7	95.6	95.6	7.4	'	2.3	2.5	2.2	2.3
		J		0.0	Middle	4.4	19.1	10.1	8.0	0.0	30.7	00.1	95.5	00.0	7.4		2.4	2.0	2.4	0
					Bottom	7.8	19.1	19.1	8.0	8.0	30.7	30.7	96.1	95.9	7.4	7.4	3.3		2.8	1
					Bottom	7.8	19.1	10.1	8.0	0.0	30.7	50.7	95.7	55.5	7.4	7	3.3		3.1	<u> </u>
					Surface	1.0	19.2	19.2	8.0	8.0	29.9	29.4	97.8	97.1	7.6		2.2		2.6	ı
						1.0	19.1		8.0		28.8	-	96.3		7.5	7.5	2.2		2.2	ı
C2	Misty	Calm	10:48	10.8	Middle	5.4	19.1	19.1	7.9	8.0	30.2	30.3	96.9	96.9	7.5		2.6	2.6	3.2	3.1
						5.4	19.1		8.0		30.3		96.8		7.5		2.6		2.8	1
					Bottom	9.8	19.2	19.2	7.9	8.0	30.1	30.1	100.7	99.4	7.8	7.7	3.1		4.0	ı
						9.8	19.1		8.0		30.1		98.0		7.6		3.0		3.7	
					Surface	1.0	19.1 19.1	19.1	7.9 8.0	8.0	29.2 29.1	29.2	100.9 99.9	100.4	7.9 7.8		1.1 1.1		2.5 2.8	1
						1.0	19.1		8.0		29.1		99.9		7.0	7.9	1.1		-	1
M1	Misty	Calm	10:55	5.2	Middle	-	_	-		-		-	-	-	-		-	1.6		3.1
						4.2	19.1		7.9		29.4		101.3		7.9		2.0		3.6	ı
					Bottom	4.2	19.1	19.1	8.0	8.0	29.1	29.3	100.5	100.9	7.8	7.9	2.1		3.4	i
					0 (	1.0	18.9	40.0	8.0	0.0	28.9	00.0	101.4	404.0	7.9		1.1		2.4	
					Surface	1.0	19.0	19.0	8.0	8.0	29.0	29.0	100.9	101.2	7.9		1.1		2.8	ı
140		0.1	40.57	4.0	NA: 1 II	-	-		-		-		-		-	7.9	-	4 -	-	
M2	Misty	Calm	10:57	4.2	Middle	-	-	-	-	-	-	-	-	-	-		-	1.5	-	3.0
					D-#	3.2	18.9	40.0	7.9	0.0	29.4	00.0	101.5	404.4	7.9	7.0	1.9		3.6	ı
					Bottom	3.2	18.9	18.9	8.0	8.0	29.0	29.2	101.2	101.4	7.9	7.9	1.8		3.2	1
	_				Surface	1.0	19.0	19.1	8.0	8.0	30.2	30.1	98.0	97.5	7.6		1.1		1	
					Surface	1.0	19.1	19.1	8.0	8.0	29.9	30.1	96.9	97.5	7.5	7.6	1.0		2	1
M3	Misty	Calm	11:00	7.2	Middle	3.6	19.0	19.1	7.9	8.0	30.7	30.5	97.8	97.5	7.6	7.0	1.7	1.6	3	2
IVIO	IVIIOLY	Jann	11.00	1.2	iviidalo	3.6	19.1	10.1	8.0	0.0	30.2	50.5	97.1	37.0	7.5		1.7	1.0	2	_
					Bottom	6.2	19.1	19.1	7.9	8.0	30.8	30.5	101.4	99.6	7.8	7.7	2.0		3	ı
DA: Donth sugar						6.2	19.1		8.0		30.1		97.7		7.6		2.0		3	

DA: Depth-averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough: White capped or rougher

Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined

Water Quality Monitoring Results on 04 March 23 during Mid-Ebb Tide

		loring Resu		Water Depth	V4 Water 23	during ima		emperature (°C)		pН	Salin	ity (ppt)	DO Satu	ration (%)	Dissolved (mg/l		Turbidity(	(NTU)	Suspende (mg.				
Monitoring Station	Weather Condition	Sea Condition	Time	(m)	Sampling Dep	oth (m)		. , , ,							(mg/i	L)			(mg	/L)			
G.a.io.i	00.10			()			Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			
					Surface	1.0	18.8	18.9	7.8	7.9	29.7	29.5	117.1	117.1	9.3		3.0		2.2				
					Surface	1.0	18.9	10.9	7.9	1.5	29.2	29.0	117.0	117.1	9.3	9.0	2.9		2.6	i			
C1	Misty	Calm	10:53	10.0	Middle	5.0	18.7	18.8	7.8	7.9	30.5	29.9	110.2	110.7	8.7	5.0	4.6	4.1	2.9	3.0			
	iviloty	Cum	10.00	10.0	Wildalo	5.0	18.9	10.0	7.9	7.0	29.2	20.0	111.2	110.7	8.8		4.6		3.1	0.0			
					Bottom	9.0	18.7	18.8	7.8	7.8	30.6	30.1	110.1	110.1	8.7	8.7	4.7		3.6	1			
						9.0	18.9		7.8		29.6		110.0		8.7		4.8		3.3	1			
					Surface	1.0	18.6	18.7	7.8	7.8	30.8	30.8	112.0	111.6	8.8		1.6		5.4	1			
						1.0	18.7		7.8		30.7		111.1		8.8	8.7	1.7		4.9	1			
C2	Misty	Calm	11:11	8.8	Middle	4.4	18.6	18.7	7.8	7.8	30.9	30.9	107.5	109.0	8.5		2.9	2.6	4.3	4.0			
						4.4	18.7		7.8		30.8		110.5		8.7		2.9		3.7	ł			
					Bottom	7.8	18.7	18.7	7.8	7.8	30.8	30.8	109.4	110.7	8.6	8.7	3.2		3.1	1			
						7.8	18.7		7.8		30.8		112.0		8.8		3.3		2.7				
					Surface	1.0	18.7	18.7	7.8	7.8	30.6	30.7	106.3	106.6	8.4	4	2.2		4.9	1			
						1.0	18.7		7.8		30.7		106.8		8.4	8.4	2.1		4.4	1			
M1	Misty	Calm	11:01	5.2	Middle	-	-	-	-	-	-	-	-	-	-	4	-	2.8	-	4.2			
						4.2	18.6		7.7		20.7		105.2		- 0.0		-		3.6	İ			
					Bottom	4.2	18.7	18.7	7.7	7.8	30.7	30.7	105.2	105.9	8.3 8.4	8.4	3.3		3.6	İ			
						1.0	18.8		7.8		30.7		108.6		8.6		1.6		2.3				
					Surface	1.0	18.8	18.8	7.8	7.8	30.6	30.6	110.1	109.4	8.7	1	1.6		2.6	İ			
						- 1.0	-		-		-				-	8.7	- 1.0		-	İ			
M2	Misty	Calm	11:04	4.2	Middle	_	_	-	_	-	_	-	_	-	_		_	2.1	_	2.8			
						3.2	18.9		7.8		30.3		107.1		8.4		2.5		3.2	İ			
					Bottom	3.2	18.8	18.9	7.8	7.8	30.6	30.5	109.5	108.3	8.6	8.5	2.6		3.1	İ			
					0.1	1.0	18.7		7.8		30.9		109.4	400.4	8.6		4.4		4				
					Surface	1.0	18.7	18.7	7.8	7.8	30.8	30.9	109.4	109.4	8.6		4.4		4	İ			
140	N 4: - 4: .	0-1	40.57	7.0	NAC-L-U-	3.6	18.6	40.7	7.8	7.0	31.0	20.0	104.0	404.0	8.2	8.4	5.1	- 0	3				
M3	Misty	Calm	10:57	7.2	Middle	3.6	18.7	18.7	7.8	7.8	30.8	30.9	104.0	104.0	8.2	1	5.2	5.2	3	3			
				<u> </u>	-	-		Dottom	6.2	18.6	10.7	7.8	7.0	30.9	20.0	104.6	104.6	8.3	0.2	6.0		3	1
					Bottom	6.2	18.7	18.7	7.8	7.8	30.8	30.9	104.5	104.6	8.2	8.3	6.1		2	<u> </u>			

DA: Depth-averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough: White capped or rougher Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined

Water Quality Monitoring Results on 04 March 23 during Mid-Flood Tide

Monitoring	Weather	Sea Condition	Sampling		Sampling Dep	th (m)	Water Te	emperature (°C)	ŗ	эΗ	Salin	ity (ppt)	DO Satur	ation (%)	Dissolved ( (mg/L		Turbidity(	(NTU)	Suspende (mg/	
Station	Condition		Time	(m)	33 7 3 37	,	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	18.6	18.6	7.9	7.9	30.8	30.9	109.8	108.5	8.7		1.7		3.0	
					Juliace	1.0	18.6	10.0	7.8	7.5	30.9	30.9	107.2	100.5	8.5	8.3	1.7		2.8	
C1	Misty	Calm	08:03	11.0	Middle	5.5	18.6	18.6	7.8	7.8	31.0	31.0	103.0	102.3	8.1	0.0	2.1	2.2	3.2	3.4
			00.00		Middle	5.5	18.6	10.0	7.8	7.0	31.0	01.0	101.6	102.0	8.0		2.1		3.5	1
					Bottom	10.0	18.5	18.6	7.8	7.8	31.0	31.0	103.8	102.9	8.2	8.2	2.7		4.0	i
					Bottom	10.0	18.6	10.0	7.8	7.0	31.0	01.0	101.9	102.5	8.1	0.2	2.8		3.7	1
					Surface	1.0	18.6	18.6	7.8	7.8	31.0	31.0	102.8	103.1	8.1		2.6		3.6	ł
						1.0	18.6		7.8		31.0		103.3		8.2	8.2	2.5		3.9	ł
C2	Misty	Calm	07:45	12.4	Middle	6.2	18.6	18.6	7.8	7.8	31.0	31.0	102.5	102.8	8.1		2.8	3.0	4.4	4.3
						6.2	18.6		7.8		31.0		103.1		8.2		2.8		4.0	1
					Bottom	11.4	18.5	18.6	7.8	7.8	31.0	31.0	102.7	103.3	8.1	8.2	3.5		4.7	ł
						11.4	18.6				30.9		103.8		8.2		3.6		5.0	
					Surface	1.0	18.7 18.6	18.7	7.8 7.8	7.8	30.7	30.7	101.9 104.3	103.1	8.1 8.3		2.2		2.7 2.5	ł
						1.0	10.0		7.0		30.7		104.3		0.3	8.2	2.2		-	1
M1	Misty	Calm	07:51	4.6	Middle	-	_	-		-		-	-	-	-		-	2.6		3.0
						3.6	18.7		7.8		30.7		101.5		8.0		3.0		3.6	1
					Bottom	3.6	18.6	18.7	7.8	7.8	30.7	30.7	102.6	102.1	8.1	8.1	3.1		3.1	1
					2 (	1.0	18.7	40.0	7.8	7.0	30.6	00.0	102.1	400.0	8.1		2.2		2.9	<del></del>
					Surface	1.0	18.5	18.6	7.8	7.8	30.6	30.6	103.0	102.6	8.2		2.2		2.6	ł
140		0.1	07.50	4.0	B 4" 1 11	-	-		-		-		-		-	8.2	-	0.7	-	
M2	Misty	Calm	07:56	4.2	Middle	-	-	-	-	-	-	-	-	-	-		-	2.7	-	3.1
					D-#	3.2	18.7	40.7	7.8	7.0	30.4	20.5	102.0	400.0	8.1	0.4	3.2		3.5	ł
					Bottom	3.2	18.6	18.7	7.8	7.8	30.6	30.5	102.3	102.2	8.1	8.1	3.3		3.3	ł
					Surface	1.0	18.6	18.6	7.8	7.8	30.8	30.9	106.7	106.7	8.4		4.2		3	1
					Surface	1.0	18.6	10.0	7.8	7.0	30.9	30.9	106.7	106.7	8.4	8.3	4.2		4	ł
M3	Misty	Calm	07:59	6.6	Middle	3.3	18.6	18.6	7.8	7.8	31.0	31.0	102.4	102.4	8.1	0.3	5.2	5.1	3	3
IVIO	iviloty	Callii	01.03	0.0	Middle	3.3	18.6	10.0	7.8	7.0	31.0	31.0	102.4	102.4	8.2		5.2	5.1	3	, ,
					Bottom	5.6	18.6	18.6	7.8	7.8	31.0	30.9	102.3	102.3	8.1	8.1	6.0		2	4
DA: Donth sugar					Bottom	5.6	18.6	15.0	7.8		30.8	55.5	102.3	102.0	8.0	0.1	6.0		3	

DA: Depth-averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough: White capped or rougher

Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined

Water Quality Monitoring Results on 07 March 23 during Mid-Ebb Tide

Monitoring	Weather	Sea Condition		Water Depth	Sampling Dep	th (m)		emperature (°C)		рН	Salin	ity (ppt)	DO Satur	ation (%)	Dissolved (mg/l		Turbidity(	NTU)	Suspende (mg/	
Station	Condition		Time	(m)		,	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	19.3	19.3	8.1	8.1	29.5	29.5	97.9	97.4	7.6		3.9		2.6	
					Sullace	1.0	19.2	19.5	8.1	0.1	29.5	29.5	96.8	37.4	7.5	7.6	4.0		3.0	
C1	Misty	Calm	12:09	11.0	Middle	5.5	19.2	19.2	8.1	8.1	29.6	29.6	98.3	97.6	7.6	7.0	4.1	4.4	3.4	3.5
01	iviisty	Odilli	12.00	11.0	Wildaic	5.5	19.2	15.2	8.1	0.1	29.6	25.0	96.9	37.0	7.5		4.2	7.7	3.7	0.0
					Bottom	10.0	19.2	19.3	8.1	8.1	29.6	29.6	99.6	98.8	7.7	7.7	5.1		4.0	
					Bottom	10.0	19.3	10.0	8.1	0.1	29.5	20.0	98.0	00.0	7.6	1	5.2		4.5	
					Surface	1.0	19.2	19.2	8.1	8.1	29.6	29.6	98.3	98.0	7.6		2.0		3.6	
						1.0	19.2	.0.2	8.1	0	29.6	20.0	97.6	00.0	7.6	7.6	2.0		3.2	
C2	Misty	Calm	12:25	9.0	Middle	4.5	19.2	19.2	8.1	8.1	29.6	29.6	99.3	98.6	7.7	1	2.2	2.5	3.8	4.0
	,					4.5	19.2		8.1		29.6		97.8		7.6		2.3		4.1	- ! !
					Bottom	8.0	19.2	19.3	8.1	8.1	29.6	29.6	100.4	99.3	7.8	7.7	3.2		4.4	
						8.0	19.3		8.1		29.6		98.1		7.6		3.3		4.7	
					Surface	1.0	19.2	19.2	8.1	8.1	29.7	29.7	99.7	99.4	7.7		1.2		3.6	
						1.0	19.2		8.1		29.7		99.1		7.7	7.7	1.3		4.0	
M1	Misty	Calm	12:17	5.0	Middle	-	-	-	-	-	-	-	-	-	-	4	-	1.9	-	4.2
						-	- 40.0		-		- 00.7		400.7		7.0		-		-	
					Bottom	4.0	19.2 19.2	19.2	8.1 8.1	8.1	29.7 29.7	29.7	100.7 99.4	100.1	7.8 7.7	7.8	2.5 2.5		4.8	
				<u> </u>		1.0	19.2		8.1		29.7		100.6		7.7		3.1		3.9	
					Surface	1.0	19.2	19.2	8.1	8.1	29.6	29.6	99.7	100.2	7.7	-	3.1		3.5	
						-	-		-		-		-		- 1.1	7.8	-		-	
M2	Misty	Calm	12:20	4.4	Middle		_	-	_	-		-	_	-		1	_	3.7	_	4.0
						3.4	19.2		8.1		29.6		101.4		7.9		4.2		4.1	
					Bottom	3.4	19.2	19.2	8.1	8.1	29.6	29.6	100.1	100.8	7.8	7.9	4.2		4.3	
					2 /	1.0	19.1	40.0	8.1		29.7		98.8		7.7		3.2		3	
					Surface	1.0	19.2	19.2	8.1	8.1	29.6	29.7	97.2	98.0	7.5	1	3.3		4	I
140	N 41 - 4	0-1	40:44	0.0	NA:-I-II-	3.3	19.1	40.0	8.1	0.4	29.7	00.7	99.2	00.0	7.7	7.6	4.2	4.0	4	
М3	Misty	Calm	12:14	6.6	Middle	3.3	19.2	19.2	8.1	8.1	29.6	29.7	97.4	98.3	7.6	1	4.1	4.2	4	4
					D-#	5.6	19.1	40.0	8.1	0.4	29.7	00.7	100.2	00.4	7.8		5.1		6	l
					Bottom	5.6	19.2	19.2	8.1	8.1	29.6	29.7	97.9	99.1	7.6	7.7	5.0		5	

DA: Depth-averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough: White capped or rougher

<u>Value exceeding Action Level is underlined</u>; <u>Value exceeding Limit Level is bolded and underlined</u>

Water Quality Monitoring Results on 07 March 23 during Mid-Flood Tide

C1   Misty   Calm   09:29   9.0   Surface   1.0   19:2   19:2   8.0   8.0   29:8   29:9   104.0   104.0   8.2   2.1   2.8   3.2   3.2   3.3   3.4   3.8	Monitoring	Weather	Sea Condition	Sampling	Water Depth	Sampling Dep	th (m)		emperature (°C)		рН	Salin	ity (ppt)	DO Satur	ation (%)	Dissolved (mg/L		Turbidity(	(NTU)	Suspende (mg/					
C1 Misty Calm 09:29 9.0 Middle 4.5 19.2 19.2 8.0 8.0 29.8 29.9 104.0 104.0 8.2 3.1 3.2 3.4 3.8 3.8 3.8 3.8 3.8 3.8 3.8 3.8 3.8 3.8	Station	Condition		Time	(m)			Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA				
C1 Misty Calm 09:29 9.0 Middle 4.5 19.2 19.2 8.0 29.9 29.9 104.0 104.0 8.2 3.2 3.1 3.4 3.8 3.8 3.8 3.0 19.2 19.2 8.0 8.0 29.9 29.9 104.0 104.0 8.2 3.2 3.1 3.4 3.8 3.8 3.8 3.8 3.8 3.8 3.8 3.8 3.8 3.8						Surface	1.0	19.2	10.2	8.0	9.0	29.9	20.0	104.0	104.0	8.2		2.1		2.8					
C1 Misty Calm 09:29 9.0 Middle 4.5 19.2 19.2 8.0 8.0 29.9 104.0 104.0 8.2 3.1 3.4 3.4 3.4 3.4 3.4 3.4 3.4 3.4 3.4 3.4						Sulface	1.0	19.2	19.2	8.0	0.0	29.8	23.3	104.0	104.0	8.2	9.2	2.0		3.2	I				
Misty   Calm   O9:11   10.8   Surface   1.0   19.2   19.2   8.0   8.0   29.8   29.9   104.0   104.1   8.2   8.2   4.9   4.0	C1	Micty	Calm	00.30	9.0	Middle	4.5	19.2	10.2	8.0	9.0	29.9	20.0	104.0	104.0	8.2	0.2	3.1	3.4	3.4	3.6				
C2 Misty Calm 09:11 10.8 Surface 1.0 19.2 19.2 8.0 8.0 29.8 29.8 103.2 103.3 8.1 8.1 21 10.8 Surface 1.0 19.2 19.2 8.1 8.0 8.1 29.8 29.8 103.2 103.3 8.1 8.1 21 10.8 Surface 1.0 19.2 19.2 8.1 8.0 8.1 29.8 29.8 103.2 103.3 8.1 8.1 21 10.8 Surface 1.0 19.1 19.2 8.1 8.0 8.1 29.8 29.8 103.2 103.3 8.1 8.1 8.1 21 10.8 Surface 1.0 19.1 19.1 19.1 19.1 19.1 19.1 19.1		iviioty	Callii	03.23	9.0	ivildule	4.5	19.2	19.2	8.0	0.0	29.8	25.5	104.0	104.0	8.2		3.2	5.4	3.8	J.0				
C2 Misty Calm 09:11 10.8						Rottom	8.0	19.2	10.2	8.0	8.0		20.0	104.0	104.1	8.2	8.2	4.9		4.4	İ				
C2 Misty Calm 09:11 10.8 Middle 1.0 19.2 19.2 8.0 0.1 29.8 29.8 103.3 103.3 8.1 8.1 2.1 3.2 3.0 3.3 3.1 3.1 8.1 8.1 2.1 3.2 3.2 3.3 3.3 3.1 3.1 8.1 8.1 8.1 3.2 3.2 3.2 3.3 3.3 3.1 3.1 8.1 8.1 3.2 3.2 3.2 3.3 3.3 3.1 3.1 8.1 8.1 3.2 3.2 3.2 3.3 3.3 3.1 3.1 3.2 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1						Dottom	8.0	19.2	19.2	8.0	0.0	29.8	23.3	104.1	104.1	8.2	0.2	4.9		4.0	1				
C2 Misty Calm 09:11 10.8 Middle 10.0 19.2 19.2 19.2 19.2 19.2 19.2 19.2 19.2						Surface			19.2		8.1		29.8		103.3						1				
C2 Misty Calm 09:11 10.8 Middle 5.4 19.2 19.2 19.2 8.1 8.1 29.8 29.8 103.2 103.3 8.1 3.2 3.3 3.3 3.3 3.3 3.1 3.1 3.2 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3						Curiaco			10.2		0.1		20.0		100.0		8 1				-				
Misty   Calm   O9:21   5.2   Surface   1.0   19.1   19.1   8.0   8.0   29.8   29.8   103.3   103.2   8.1   8.1   4.6   3.6   3.9   10.0   10	C2	Mistv	Calm	09:11	10.8	Middle			19.2		8.1	29.8	29.8		103.3		0.1		3.3		3.3				
M1 Misty Calm 09:21 5.2 Surface 1.0 19.1 19.1 8.0 8.0 8.0 29.8 29.9 100.7 100.8 7.9 7.9 1.8 3.6 3.8 1.0 19.1 19.1 8.0 8.0 8.0 29.8 29.9 100.7 100.8 7.9 7.9 7.9 1.8 3.6 3.8 1.0 1.0 19.1 19.1 8.0 8.0 8.0 29.8 29.8 100.5 100.7 7.9 7.9 7.9 2.1 3.3 3.3 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2																									
M1 Misty Calm 09:21 5.2 Surface 1.0 19.1 19.1 8.0 8.0 29.8 29.9 100.7 100.8 7.9 7.9 7.9 1.18 3.6 3.8 3.8 3.8 3.8 3.8 3.8 3.8 3.8 3.8 3.8						Bottom			19.2		8.1	29.8	29.8		103.2		8.1								
M1 Misty Calm 09:21 5.2 Middle 1.0 19.1 19.1 8.0 8.0 29.9 29.9 100.9 100.8 7.9 7.9 7.9 1.8 3.8 3.8 3.8 3.8 3.8 3.8 3.8 3.8 3.8 3																									
M1 Misty Calm 09:21 5.2 Middle						Surface			19.1		8.0		29.9		100.8						I				
M1 Misty Calm 09:21 5.2 Middle								19.1		8.0		29.9		100.9		7.9	7.9				-				
Bottom	M1	Misty	Calm	09:21	5.2	Middle		-	-	-	-	-	-	-	-	-			2.0		3.5				
M2 Misty Calm 09:18 5.0 Middle										-						7.0									
M2 Misty Calm 09:18 5.0 Surface 1.0 19.1 19.1 8.0 8.0 29.8 29.8 100.4 100.5 7.9 7.9 7.9 1.1 3.6 3.4 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9						Bottom			19.1		8.0		29.8		100.7		7.9								
M2 Misty Calm 09:18 5.0 Surface 1.0 19.1 19.1 8.0 8.0 29.8 29.8 100.5 100.5 7.9 7.9 1.1 3.4 3.4 3.4 3.4 3.4 3.4 3.4 3.4 3.4 3.4					<u> </u>					_															
M2 Misty Calm 09:18 5.0 Middle						Surface			19.1		8.0		29.8		100.5										
M2 Misty Calm 09:18 5.0 Middle 1.9 - 4.  Retter 4.0 19.1 10.1 8.0 8.0 29.8 20.8 100.3 100.4 7.9 7.0 2.7 4.2								13.1								1.3	7.9				I				
Pottom 4.0 19.1 10.1 8.0 8.0 29.8 20.8 100.3 100.4 7.9 7.0 2.7 4.2	M2	Misty	Calm	09:18	5.0	Middle	-		-		-		-		-				1.9		4.0				
								10.1		8.0		20.8				7.0		27							
						Bottom			19.1		8.0		29.8		100.4		7.9								
Surface 1.0 10.2 19.2 9.0 8.0 20.8 103.9 9.2 3.4 2						Surface			19.2		8.0		29.8		103.9										
27 102 20 102 102 102 102 102 102 102 102																	8.2				I				
M3 Misty Calm 09:27 7.4 Middle 3.7 19.2 19.2 8.0 8.0 29.8 103.9 103.9 8.2 4.3 4.2 3 3	M3	Misty	Calm	09:27	7.4	Middle			19.2		8.0		29.8		103.9				4.2		3				
64 192 80 298 1039 82 50 4					F	-	-	-	-																ı
Bottom 6.4 19.2 19.2 8.0 8.0 29.8 103.9 103.9 8.2 8.2 5.1 4						Bottom			19.2		8.0		29.8		103.9		8.2			4	l				

DA: Depth-averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough: White capped or rougher

Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined

Water Quality Monitoring Results on 09 March 23 during Mid-Ebb Tide

Monitoring	Weather	loring itesu		Water Depth	US INGICIT 23	daring wild		emperature (°C)		рН	Salin	ity (ppt)	DO Satur	ration (%)	Dissolved (mg/l		Turbidity(	NTU)	Suspende (mg/	
Station	Condition	Sea Condition	Time	(m)	Sampling Dep	th (m)	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
						1.0	19.4		7.7		29.8		95.2		7.4		3.2		5.3	
					Surface	1.0	19.5	19.5	7.7	7.7	29.8	29.8	94.4	94.8	7.3	٠.	3.2		5.5	i
04	N 41 - 41 .	0-1	40.50	0.0	NAC-L-III-	4.4	19.4	40.4	7.7	7.7	29.8	29.8	95.5	95.0	7.4	7.4	4.6	4.5	6.0	
C1	Misty	Calm	12:58	8.8	Middle	4.4	19.4	19.4	7.7	7.7	29.8	29.8	94.5	95.0	7.3		4.7	4.5	6.3	6.2
					Bottom	7.8	19.4	19.4	7.7	7.7	29.8	29.8	96.3	95.6	7.4	7.4	5.7		6.9	i
					DOLLOTTI	7.8	19.4	19.4	7.7	1.1	29.8	29.0	94.9	95.0	7.3	7.4	5.6		7.2	
					Surface	1.0	19.4	19.4	7.7	7.7	29.9	29.9	95.2	94.8	7.3		3.6		7.7	
					Juliace	1.0	19.4	19.4	7.7	7.7	29.9	23.3	94.4	34.0	7.3	7.3	3.6		8.0	i
C2	Mistv	Calm	13:14	9.6	Middle	4.8	19.5	19.5	7.7	7.7	29.8	29.9	95.3	95.0	7.3	7.5	4.6	4.4	7.1	6.7
02		ou		0.0	·····adio	4.8	19.4		7.7	• • • •	29.9	20.0	94.7	00.0	7.3		4.6		6.7	
					Bottom	8.6	19.7	19.6	7.7	7.7	29.7	29.8	95.7	95.4	7.4	7.4	4.9		5.6	i
					201.0111	8.6	19.4		7.7	• • • •	29.9	20.0	95.1	00.1	7.3		4.8		5.3	
					Surface	1.0	19.3	19.4	7.7	7.7	30.1	30.1	97.3	97.2	7.5		4.0		6.3	i
						1.0	19.5		7.7		30.0		97.0		7.6	7.6	4.0		6.0	i
M1	Misty	Calm	13:09	5.0	Middle	-	-	-	-	-	-	-	-	-	-		-	4.1	-	6.9
	-					-	-		-		-		-		-		-		-	i
					Bottom	4.0	19.1 19.4	19.3	7.7	7.7	30.3	30.2	101.3 101.2	101.3	7.8 7.9	7.9	4.2		7.5 7.6	
				<u> </u>		1.0	19.4		7.7		29.8		95.7		7.9		5.8		5.2	
					Surface	1.0	19.3	19.5	7.7	7.7	29.8	29.8	95.1	95.4	7.4		5.9		5.6	i
						1.0	13.4		-		23.0		-		-	7.4				i
M2	Misty	Calm	13:06	5.6	Middle	_	_	-	_	-	_	-	_	-	_		_	6.3	_	5.7
					_	4.6	19.5		7.7		29.8		96.6		7.4		6.7		5.9	i
					Bottom	4.6	19.5	19.5	7.7	7.7	29.8	29.8	95.4	96.0	7.3	7.4	6.7		6.2	
					0 (	1.0	19.4	40.4	7.7		29.9	00.0	95.3	04.0	7.4		5.1		6	
					Surface	1.0	19.4	19.4	7.7	7.7	29.8	29.9	94.3	94.8	7.3	7.4	5.0		7	i
M3	Misty	Calm	13:02	7.2	Middle	3.6	19.4	19.4	7.7	7.7	29.9	29.9	95.6	95.2	7.4	1.4	6.1	6.2	6	6
IVIS	iviiSty	Califi	13:02	1.2	iviidale	3.6	19.4	19.4	7.7	1.7	29.9	29.9	94.7	90.2	7.3	1	6.2	0.2	6	0
					Bottom	6.2	19.4	19.4	7.7	7.7	29.9	29.9	96.2	95.6	7.4	7.4	7.2		5	1
					DOUGHT	6.2	19.4	13.4	7.7	1.1	29.9	23.3	94.9	95.0	7.3	7.4	7.3		5	

DA: Depth-averaged

Water Quality Monitoring Results on 09 March 23 during Mid-Flood Tide

rater qua		torning ixesu			03 March 23	auring Mia-	<del></del> .	140												
Monitoring	Weather	Sea Condition	Sampling		Sampling De		Water Te	emperature (°C)	ŀ	рΗ	Salin	nity (ppt)	DO Satur	ration (%)	Dissolved (mg/l		Turbidity(	(NTU)	Suspende (mg	
Station	Condition		Time	(m)	Jam., p. 1. 1	()	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	19.4	19.4	7.7	7.7	29.7	29.8	97.1	97.2	7.5		5.0		6.9	
					Surface	1.0	19.4	19.4	7.7	7.7	29.8	29.0	97.2	91.2	7.6	7.6	5.0		6.5	
C1	Misty	Calm	09:46	10.0	Middle	5.0	19.3	19.4	7.7	7.7	29.9	29.9	97.9	97.9	7.6	7.0	5.9	5.8	5.6	5.9
01	IVIISty	Odiiii	03.40	10.0	Middle	5.0	19.4	19.4	7.7	7.1	29.8	23.3	97.8	31.3	7.6		5.8	0.0	6.0	0.0
					Bottom	9.0	18.8	19.1	7.7	7.7	30.2	30.0	99.6	99.4	7.8	7.8	6.4		5.0	
					Dottom	9.0	19.4	19.1	7.7	7.1	29.7	30.0	99.2	33.4	7.7	7.0	6.4		5.3	
					Surface	1.0	19.3	19.4	7.8	7.8	29.9	29.9	95.3	94.7	7.4		4.9		5.1	
						1.0	19.4		7.7		29.8	20.0	94.0	0	7.3	7.4	4.8		5.5	
C2	Misty	Calm	09:28	9.6	Middle	4.8	19.3	19.3	7.8	7.8	29.9	29.9	95.7	94.8	7.4		5.0	5.5	6.6	6.3
						4.8	19.3		7.7		29.9		93.9		7.3		5.0		6.2	
					Bottom	8.6	19.0	19.2	7.8	7.8	30.1	30.0	97.3	96.0	7.6	7.5	6.5		7.2	
						8.6	19.3		7.8		29.8		94.7		7.3		6.5		6.9	
					Surface	1.0	19.2 19.4	19.3	7.7	7.7	30.0 29.8	29.9	97.0 97.4	97.2	7.5		4.8 4.8		6.1	
						1.0	19.4		1.1		29.8		97.4		7.6	7.6	4.8		5.7	
M1	Misty	Calm	09:33	5.4	Middle	-		-	-	-	-	-	-	-	-		-	5.3		4.9
						4.4	19.0		7.7		30.0		101.2		7.9		5.8		4.0	
					Bottom	4.4	19.4	19.2	7.7	7.7	29.9	30.0	101.3	101.3	7.9	7.9	5.7		3.7	
						1.0	19.4		7.7		30.0		95.1		7.3		5.9		4.7	
					Surface	1.0	19.5	19.5	7.7	7.7	30.0	30.0	94.1	94.6	7.2		5.9		4.4	
						-	-		-		-		-		-	7.3	-		-	
M2	Misty	Calm	09:38	5.6	Middle	-	-	-	-	-	-	-	-	-	-		-	6.1	_	5.0
					D #	4.6	19.1	40.0	7.7		30.2	00.4	96.9	05.0	7.5	- 1	6.3		5.2	
					Bottom	4.6	19.5	19.3	7.7	7.7	30.0	30.1	94.6	95.8	7.3	7.4	6.3		5.6	
					Surface	1.0	19.4	19.4	7.7	7.7	29.9	29.9	93.7	93.4	7.2		4.2		6	
					Surface	1.0	19.4	19.4	7.7	1.1	29.9	29.9	93.1	93.4	7.2	7.2	4.3		5	
M3	Misty	Calm	09:41	7.2	Middle	3.6	19.4	19.4	7.7	7.7	29.9	29.9	93.8	93.6	7.2	1.2	4.6	4.8	5	5
IVIS	iviioty	Callii	03.41	1.2	Miluule	3.6	19.4	13.4	7.7	1.1	29.9	23.3	93.3	93.0	7.2		4.5	4.0	5	]
					Bottom	6.2	19.4	19.4	7.7	7.7	30.0	29.9	94.2	93.8	7.3	7.3	5.7		4	]
Δ· Denth-aver					Dottom	6.2	19.4	15.7	7.7	7.7	29.8	20.0	93.4	30.0	7.2	7.5	5.7		4	

DA: Depth-averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough: White capped or rougher

Water Quality Monitoring Results on 11 March 23 during Mid-Ebb Tide

Monitoring	Weather	Sea Condition	Sampling		Sampling Dep	oth (m)	Water Te	emperature (°C)	pl	Н	Salin	nity (ppt)	DO Satur	ation (%)	Dissolved (mg/L		Turbidity(	NTU)	Suspende (mg/	
Station	Condition		Time	(m)		,	Value	Average	Value A	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	20.2	20.2	7.9	7.9	29.1	29.1	90.9	90.7	6.9		4.1		7.9	
					Sunace	1.0	20.2	20.2	7.9	7.9	29.1	29.1	90.4	90.7	7.0	6.9	4.0		8.0	1
C1	Misty	Calm	13:43	8.6	Middle	4.3	20.2	20.2	7.8	7.9	29.1	29.1	90.1	90.6	6.9	0.5	5.5	5.4	8.6	8.5
01	iviisty	Odiiii	10.40	0.0	Wildale	4.3	20.2	20.2	7.9	7.5	29.1	20.1	91.0	30.0	6.9		5.5	0.4	8.3	0.5
					Bottom	7.6	20.2	20.2	7.8	7.9	29.1	29.1	86.6	86.7	6.6	6.7	6.6		9.4	1
					201.0111	7.6	20.2	20.2	7.9		29.1	2011	86.7	00	6.7	0	6.5		9.0	<u> </u>
					Surface	1.0	20.2	20.3	8.0	8.1	29.1	29.1	92.8	92.8	7.1		4.1		7.9	1
						1.0	20.3		8.1		29.1		92.7		7.1	7.1	4.2		7.5	1
C2	Misty	Calm	13:59	9.4	Middle	4.7	20.2	20.3	8.0	8.1	29.1	29.1	92.8	92.7	7.1		5.5	5.5	6.7	6.9
	,					4.7	20.3		8.1		29.1	-	92.6		7.1		5.5		7.1	1
					Bottom	8.4	20.3	20.3	8.0	8.0	29.2	29.2	92.8	92.8	7.1	7.1	6.8		5.8	1
						8.4	20.2		8.0		29.1		92.8		7.1		6.8		6.2	<b></b>
					Surface	1.0	20.4	20.4	7.8	7.9	29.0	29.1	89.5	89.8	6.8		4.8		6.1	ł
						1.0	20.3		7.9		29.1		90.1		6.9	6.9	4.9		6.5	1
M1	Misty	Calm	13:54	5.2	Middle	-	-	-	-	-	-	-	-	-	-		-	5.4	-	5.7
						- 4.0	- 00.0		7.0		- 00.0		-		-		-		-	1
					Bottom	4.2	20.3	20.4	7.8	7.9	29.0 29.0	29.0	88.8 89.9	89.4	6.8	6.8	5.9 5.8		5.2 4.8	İ
				1		1.0	20.4		7.9		29.0		86.7		6.6	<u> </u>	3.7		5.6	<del></del>
					Surface	1.0	20.5	20.5	7.9	7.9	29.1	29.2	87.5	87.1	6.6		3.7		5.3	İ
						-	-		7.5		23.2		-		- 0.0	6.6	-		-	İ
M2	Misty	Calm	13:51	5.0	Middle	_	-	-	_	-		-	-	-			_	4.5	_	5.8
						4.0	20.5		7.7		29.1		86.4		6.6		5.2		6.2	İ
					Bottom	4.0	20.5	20.5	7.8	7.8	29.2	29.2	87.0	86.7	6.6	6.6	5.3		5.9	İ
						1.0	20.2		8.0		29.1		92.6		7.1		4.0		5	
					Surface	1.0	20.3	20.3	8.1	8.1	29.1	29.1	92.7	92.7	7.1	۱	4.1		5	İ
Mo	N 41 - 4	0-1	40.47	7.0	NAC-L-II-	3.5	20.2	00.0	8.0	0.4	29.1	00.4	92.6	00.7	7.1	7.1	5.1	<b>5</b> 0	5	
M3	Misty	Calm	13:47	7.0	Middle	3.5	20.3	20.3	8.1	8.1	29.1	29.1	92.7	92.7	7.1	1	5.1	5.2	6	6
					D-#	6.0	20.2	00.0	8.0	0.4	29.1	00.4	92.6	00.0	7.1	7.4	6.5		6	1
					Bottom	6.0	20.3	20.3	8.1	8.1	29.1	29.1	92.6	92.6	7.1	7.1	6.6		6	1

DA: Depth-averaged

Water Quality Monitoring Results on 11 March 23 during Mid-Flood Tide

Monitoring	Weather	Sea Condition	Sampling		Sampling Dep	th (m)	Water Te	emperature (°C)	ŗ	эΗ	Salin	ity (ppt)	DO Satur	ation (%)	Dissolved (mg/L		Turbidity(	(NTU)	Suspende (mg.	
Station	Condition		Time	(m)	33 7 3 37		Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	20.3	20.3	7.8	7.9	29.0	29.1	92.6	92.2	7.1		5.2		7.4	
					Sulface	1.0	20.2	20.5	7.9	7.9	29.1	25.1	91.7	32.2	7.0	7.1	5.2		7.0	]
C1	Misty	Calm	09:56	9.8	Middle	4.9	20.3	20.3	7.8	7.9	28.9	29.0	92.7	92.2	7.1	7.1	6.3	6.2	8.2	7.9
	iviloty	Cami	00.00	0.0	Wildale	4.9	20.2	20.0	7.9	7.5	29.1	25.0	91.7	52.2	7.0		6.4	0.2	7.9	]
					Bottom	8.8	20.4	20.3	7.8	7.9	29.0	29.1	93.1	92.6	7.1	7.1	7.0		8.4	
					Dottom	8.8	20.2	20.5	7.9	7.5	29.1	23.1	92.0	32.0	7.0	7.1	7.1		8.7	
					Surface	1.0	20.3	20.3	7.9	7.9	29.0	29.1	90.0	90.6	6.9		4.0		7.2	
						1.0	20.2	20.0	7.9		29.1	2011	91.2	00.0	7.0	6.9	4.0		6.9	
C2	Misty	Calm	09:39	9.4	Middle	4.7	20.5	20.4	7.8	7.9	28.8	29.0	89.3	90.1	6.8		5.6	5.3	7.8	7.9
						4.7	20.2		7.9		29.1		90.8		6.9		5.5		8.2	
					Bottom	8.4	20.6	20.4	7.8	7.9	28.7	28.9	88.4	89.5	6.7	6.8	6.3		8.8	
						8.4	20.2		7.9		29.0		90.5	l	6.9		6.2		8.5	
					Surface	1.0	20.6	20.5	7.8	7.9	28.8	28.9	89.4	89.8	6.8		3.4		7.7	ł
						1.0	20.4		7.9		29.0		90.1		6.8	6.8	3.3		8.0	1
M1	Misty	Calm	09:44	5.2	Middle	-	-	-	-	-	-	-	-	-	-		-	3.8	-	7.3
						4.2	20.8		7.7		28.7		88.6		6.7		4.2		6.5	1
					Bottom	4.2	20.5	20.7	7.8	7.8	28.9	28.8	89.7	89.2	6.8	6.8	4.3		6.8	
					2 /	1.0	20.8		7.9		29.0		87.7		6.6		4.2		8.2	
					Surface	1.0	20.5	20.7	7.9	7.9	29.2	29.1	88.6	88.2	6.7		4.2		7.8	
						-	-		-		-		-		-	6.7	-		-	
M2	Misty	Calm	09:48	5.0	Middle	-	-	-	-	-	-	-	-	-	-		-	4.7	-	8.6
					D. //	4.0	20.9	00.0	7.8	7.0	28.9	00.0	84.7	00.5	6.4		5.2		9.0	
					Bottom	4.0	20.6	20.8	7.9	7.9	29.1	29.0	88.2	86.5	6.7	6.6	5.2		9.4	
					Ourford	1.0	20.4	00.4	8.0	0.0	28.9	00.0	91.2	04.0	6.9		4.1		7	
					Surface	1.0	20.4	20.4	8.0	8.0	29.0	29.0	91.4	91.3	6.9	6.0	4.2		7	
M3	Misty	Calm	09:51	7.0	Middle	3.5	20.6	20.5	7.9	8.0	29.0	29.0	88.3	88.2	6.7	6.8	5.4	5.4	7	8
IVIS	iviiSty	Callii	09.51	7.0	ivildale	3.5	20.4	20.5	8.0	0.0	29.0	29.0	88.0	00.2	6.7		5.3	5.4	8	0
					Bottom	6.0	20.9	20.7	7.8	7.9	28.8	28.9	87.7	87.7	6.6	6.7	6.5		8	]
DA: Donth aver					Dottom	6.0	20.4	20.7	8.0	1.5	29.0	20.9	87.6	01.1	6.8	0.7	6.6		9	

DA: Depth-averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough: White capped or rougher

Water Quality Monitoring Results on 14 March 23 during Mid-Ebb Tide

Monitoring	Weather	Sea Condition		Water Depth	Sampling Dep	th (m)		emperature (°C)	ı	рН	Salin	ity (ppt)	DO Satur	ation (%)	Dissolved (mg/l		Turbidity(	(NTU)	Suspende (mg/	
Station	Condition		Time	(m)		,	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	19.7	19.7	8.0	8.0	30.4	30.4	90.4	90.4	6.9		3.1		2.7	
					Sullace	1.0	19.7	19.7	8.0	0.0	30.4	30.4	90.4	30.4	6.9	6.9	3.0		2.4	j
C1	Sunny	Rough	16:32	10.6	Middle	5.3	19.6	19.6	8.0	8.0	30.5	30.5	90.4	90.4	6.9	0.3	3.7	4.2	3.1	3.3
01	Curiny	Rough	10.52	10.0	Wildaic	5.3	19.6	13.0	8.0	0.0	30.4	00.0	90.4	30.4	6.9		3.7	7.2	3.3	5.5
					Bottom	9.6	19.5	19.5	8.0	8.0	31.1	31.1	90.4	90.4	6.9	6.9	5.7		4.4	j
					Bottom	9.6	19.5	10.0	8.0	0.0	31.1	01.1	90.3	00.1	6.9	0.0	5.7		4.0	
					Surface	1.0	19.6	19.6	8.0	8.0	30.7	30.7	89.2	89.2	6.8		3.4		4.6	ı '
						1.0	19.6		8.0	0.0	30.7	00	89.2	00.2	6.8	6.8	3.4		4.9	
C2	Sunny	Rough	17:06	10.8	Middle	5.4	19.5	19.5	8.1	8.1	30.9	30.9	88.6	88.6	6.8	1	4.8	4.3	4.2	4.1
	,	3				5.4	19.5		8.1		30.9		88.6		6.8		4.8		3.9	į !
					Bottom	9.8	19.5	19.5	8.1	8.1	31.0	31.0	88.4	88.4	6.8	6.8	4.8		3.2	į !
						9.8	19.5		8.1		31.0		88.4		6.8		4.8		3.5	
					Surface	1.0	19.8	19.8	8.0	8.0	30.5	30.5	92.1	92.1	7.0		2.1		3.6	1
						1.0	19.8		8.0		30.5		92.1		7.0	7.0	2.1		4.0	
M1	Sunny	Moderate	16:50	5.4	Middle	-	-	-	-	-	-	-	-	-	-	4	-	2.6	-	3.4
						-	- 40.0		-		-		- 00.0		-		-		-	
					Bottom	4.4	19.6 19.6	19.6	8.0	8.0	30.8	30.8	90.6 90.6	90.6	6.9 6.9	6.9	3.1 3.1		2.9 3.1	
						1.0	19.6		8.0		30.8		90.6		6.9		2.6		3.4	$\overline{}$
					Surface	1.0	19.9	19.9	8.0	8.0	30.4	30.4	90.9	90.9	6.9	-	2.6		3.7	
						-	-		- 0.0		-		-		- 0.3	6.9	-		-	
M2	Sunny	Moderate	16:54	5.1	Middle	_	_	-	_	-	_	-	-	-	_	1	_	3.4	_	3.9
						4.1	19.5		8.0		30.9		89.2		6.8		4.1		4.0	1
					Bottom	4.1	19.5	19.5	8.0	8.0	30.9	30.9	89.2	89.2	6.8	6.8	4.1		4.4	
						1.0	19.7		8.0		30.4		91.4		7.0		2.4		3	
					Surface	1.0	19.7	19.7	8.0	8.0	30.4	30.4	91.4	91.4	7.0	1	2.4		3	
140	0	Madant	40:44	7.4	NA:-I-II-	3.7	19.7	40.7	8.0	0.0	30.6	20.0	90.6	00.0	6.9	7.0	2.9	0.0	4	,
М3	Sunny	Moderate	16:41	7.4	Middle	3.7	19.7	19.7	8.0	8.0	30.6	30.6	90.6	90.6	6.9	1	2.9	3.0	4	4
					D-#	6.4	19.6	40.0	8.0	0.0	30.7	20.7	89.8	00.0	6.9	0.0	3.8		4	1 !
					Bottom	6.4	19.6	19.6	8.0	8.0	30.7	30.7	89.8	89.8	6.9	6.9	3.8		4	

DA: Depth-averaged

Water Quality Monitoring Results on 14 March 23 during Mid-Flood Tide

Monitoring	Weather	Sea Condition		Water Depth	Sampling Dep	th (m)		emperature (°C)		рН	Salin	ity (ppt)	DO Satur	ration (%)	Dissolved (mg/L		Turbidity(	NTU)	Suspende (mg/	
Station	Condition		Time	(m)			Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	19.6	19.6	8.0	8.0	30.1	30.1	90.4	90.4	6.9		2.1		5.3	
					Sullace	1.0	19.6	19.0	8.0	0.0	30.1	30.1	90.4	30.4	6.9	6.9	2.1		5.5	I
C1	Fine	Moderate	10:42	9.6	Middle	4.8	19.6	19.6	8.0	8.0	30.6	30.6	88.7	88.7	6.8	0.9	2.5	2.4	4.7	4.4
C1	1 1110	Moderate	10.42	9.0	ivildule	4.8	19.6	19.0	8.0	0.0	30.6	30.0	88.7	00.7	6.8		2.5	2.4	4.2	7.7
					Bottom	8.6	19.6	19.6	8.0	8.0	30.6	30.6	89.4	89.3	6.8	6.8	2.7		3.6	I
					BOLLOITI	8.6	19.6	19.0	8.0	0.0	30.6	30.0	89.2	09.3	6.8	0.0	2.7		3.1	I.
					Surface	1.0	19.5	19.5	8.0	8.0	30.7	30.7	88.6	88.6	6.8		2.9		3.1	1
					Sullace	1.0	19.5	19.5	8.0	0.0	30.7	30.7	88.6	00.0	6.8	6.8	2.9		3.4	I
C2	Fine	Moderate	10:04	9.4	Middle	4.7	19.6	19.6	8.0	8.0	30.7	30.7	88.5	88.5	6.8	0.0	2.8	2.7	4.0	4.2
02	1 1110	Moderate	10.04	3.4	Wildale	4.7	19.6	19.0	8.0	0.0	30.7	30.7	88.5	00.5	6.8		2.8	2.1	4.4	7.2
					Bottom	8.4	19.6	19.6	8.0	8.0	30.7	30.7	88.4	88.4	6.8	6.8	2.5		4.8	I
					Bottom	8.4	19.6	15.0	8.0	0.0	30.7	50.7	88.4	00.4	6.8	0.0	2.5		5.2	
					Surface	1.0	19.6	19.6	8.0	8.0	30.2	30.2	87.2	87.2	6.7		3.6		3.5	I
						1.0	19.6		8.0	0.0	30.2	00.2	87.1	0	6.7	6.7	3.6		3.8	I
M1	Fine	Calm	10:19	4.9	Middle	-	-	-	-	-	-	-	-	-	-	0	-	4.0	-	4.0
						-	-		-		-		-		-		-		-	1
					Bottom	3.9	19.6	19.6	8.0	8.0	30.2	30.2	88.0	88.0	6.8	6.8	4.5		4.2	I
						3.9	19.6		8.0		30.2		87.9		6.7		4.4		4.4	
					Surface	1.0	19.6	19.6	8.0	8.0	30.2	30.2	87.2	87.2	6.7		3.8		5.6	I
						1.0	19.6		8.0		30.2		87.2		6.7	6.7	3.8		5.2	I
M2	Fine	Calm	10:16	4.5	Middle	-	-	-	-	-	-	_	-	-	-		-	3.7	-	5.1
						-	-		-		-		-		-		-		-	1
					Bottom	3.5	19.6	19.6	8.0	8.0	30.2	30.2	87.9	87.9	6.7	6.7	3.6		4.9	I
						3.5	19.6		8.0		30.2		87.8		6.7		3.6		4.6	
					Surface	1.0	19.6	19.6	8.0	8.0	30.2	30.2	87.2	87.2	6.7		3.3		5	ı
						1.0	19.6		8.0	0.0	30.2	00.2	87.2	0	6.7	6.7	3.3		4	I
M3	Fine	Moderate	10:28	6.9	Middle	3.5	19.6	19.6	8.0	8.0	30.3	30.3	87.1	87.1	6.7		5.7	4.7	4	4
						3.5	19.6		8.0		30.2		87.1	-	6.7		5.7		4	l
					Bottom	5.9	19.6	19.6	8.0	8.0	30.3	30.3	87.6	87.6	6.7	6.7	5.1		3	l
DA: Donth aver						5.9	19.6		8.0		30.3		87.6		6.7		5.1		3	<u> </u>

DA: Depth-averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough: White capped or rougher

Water Quality Monitoring Results on 16 March 23 during Mid-Ebb Tide

Monitoring	Weather	Sea Condition	Sampling	Water Depth	Sampling Dep	th (m)		emperature (°C)		рН	Salin	ity (ppt)	DO Satur	ration (%)	Dissolved (mg/l		Turbidity(	(NTU)	Suspended (mg/	
Station	Condition		Time	(m)		,	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	19.9	19.9	7.6	7.6	30.8	30.8	92.0	91.8	7.0		2.9		4.0	
					Sullace	1.0	19.9	19.9	7.6	7.0	30.8	30.0	91.5	91.0	7.0	7.0	2.8		5.0	1
C1	Misty	Calm	19:09	10.0	Middle	5.0	19.8	19.8	7.6	7.6	30.9	30.9	91.4	91.0	7.0	7.0	3.9	3.7	2.5	3.5
	iviioty	Odiiii	13.03	10.0	Wildaic	5.0	19.8	13.0	7.6	7.0	30.9	00.0	90.6	31.0	6.9		3.9	0.1	2.0	0.0
					Bottom	9.0	19.8	19.8	7.5	7.6	30.9	30.9	92.3	91.9	7.0	7.0	4.2		3.2	ı
					Bottom	9.0	19.8	10.0	7.6	7.0	30.8	00.0	91.4	01.0	7.0	7.0	4.3		4.1	
					Surface	1.0	19.9	19.9	7.5	7.5	30.8	30.8	91.6	91.3	7.0		2.2		3.7	ı
						1.0	19.9		7.5		30.8	00.0	91.0	00	6.9	7.0	2.2		5.5	ı
C2	Misty	Calm	19:25	9.6	Middle	4.8	19.8	19.8	7.5	7.5	31.0	31.0	91.3	91.1	7.0	1	3.1	3.2	3.5	4.8
						4.8	19.8		7.5		30.9		90.9	-	6.9		3.1		5.2	
					Bottom	8.6	19.8	19.9	7.5	7.5	31.0	30.9	91.9	91.9	7.0	7.0	4.2		5.3	1
						8.6	20.0		7.5		30.8		91.9		7.0		4.2		5.7	
					Surface	1.0	19.8	19.8	7.5	7.5	30.6	30.6	91.4	91.3	7.0		4.9		7.1	ı
						1.0	19.8		7.5		30.5		91.1		6.9	7.0	4.8		6.8	
M1	Misty	Calm	19:17	5.6	Middle	-	-	-	-	-	-	-	-	-	-		-	5.2	-	5.1
						-	-		-		-		-		-		-		-	1
					Bottom	4.6	19.7	19.8	7.5	7.5	30.6	30.6	91.8	91.5	7.0	7.0	5.6		2.7	1
						4.6	19.8		7.5		30.5		91.2		7.0		5.6		3.6	
					Surface	1.0	20.1 19.9	20.0	7.5 7.5	7.5	30.4	30.5	92.7 91.9	92.3	7.0 7.0	-	2.1		4.3	ı
						1.0			7.5						7.0	7.0	-		_	ı
M2	Misty	Calm	19:20	4.8	Middle	-	-	-		-	-	-	-	-	-		-	2.7	-	3.8
						3.8	20.1		7.5		30.4		92.8		7.1	-	3.3		2.6	ı
					Bottom	3.8	20.1	20.1	7.5	7.5	30.5	30.5	92.3	92.6	7.1	7.1	3.3		4.2	1
						1.0	19.9		7.5		30.7		92.7		7.0		3.9		3	
					Surface	1.0	19.9	19.9	7.5	7.5	30.7	30.7	92.5	92.6	7.0	1	4.0		4	ı
						3.5	19.8		7.5		30.8		92.7		7.1	7.0	5.6		2	
M3	Misty	Calm	19:14	7.0	Middle	3.5	19.9	19.9	7.5	7.5	30.7	30.8	92.6	92.7	7.0	1	5.6	5.2	3	3
						6.0	19.8		7.5		30.9		93.0		7.1		6.0		3	ı
					Bottom	6.0	20.0	19.9	7.5	7.5	30.6	30.8	92.7	92.9	7.0	7.1	6.0		2	1
<u> </u>		l .	i	i		0.0	20.0		7.5		50.0		32.1		1.0	<u> </u>	0.0			

DA: Depth-averaged

Water Quality Monitoring Results on 16 March 23 during Mid-Flood Tide

rrater qua		torning ixesu			10 March 25	auring Mia-	<u> </u>	140												
Monitoring	Weather	Sea Condition	Sampling		Sampling De	pth (m)	Water Te	emperature (°C)	-	рН	Salin	nity (ppt)	DO Satur	ration (%)	Dissolved (mg/l		Turbidity	(NTU)	Suspende (mg	
Station	Condition		Time	(m)	Jam., m. g = 1	()	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	19.9	19.9	7.6	7.6	30.8	30.8	91.8	91.8	7.0		1.1		3.8	
					Surface	1.0	19.9	19.9	7.6	7.0	30.8	30.0	91.8	91.0	7.0	7.0	1.0		2.9	
C1	Misty	Calm	08:47	11.2	Middle	5.6	19.8	19.8	7.6	7.6	30.9	30.9	91.6	91.5	7.0	7.0	1.8	1.6	3.9	3.9
0.	Iviloty	Cum	00.11	11.2	Wildale	5.6	19.8	13.0	7.6	7.0	30.9	50.5	91.3	31.0	7.0		1.8	1.0	4.9	0.0
					Bottom	10.2	20.0	20.0	7.6	7.6	30.7	30.7	92.9	92.5	7.0	7.0	2.1		4.4	
					Bottom	10.2	19.9	20.0	7.6	7.0	30.7	00.7	92.1	02.0	7.0	7.0	2.0		3.4	
					Surface	1.0	19.8	19.8	7.6	7.6	30.8	30.9	90.7	90.6	6.9		2.4		5.5	-
						1.0	19.8		7.6		30.9		90.5		6.9	6.9	2.4		4.4	_
C2	Misty	Calm	08:30	10.4	Middle	5.2	19.8	19.8	7.6	7.6	30.9	30.9	90.1	90.5	6.9		3.2	3.2	3.2	4.1
						5.2	19.8		7.6		30.9		90.8		6.9		3.2		3.1	-
					Bottom	9.4	19.8 19.8	19.8	7.6 7.6	7.6	30.9	30.9	91.3 91.1	91.2	7.0 6.9	7.0	4.1 4.1		4.1	1
				<u> </u>		9.4													4.4	1
					Surface	1.0	19.9 19.8	19.9	7.6 7.6	7.6	30.5	30.6	91.9 91.0	91.5	7.0 6.9		4.2		4.2 3.6	-
						1.0	19.0		7.0		30.6		91.0		0.9	7.0	4.3		-	
M1	Misty	Calm	08:35	4.8	Middle	_	_	-		-		-	-	-				4.7	_	4.2
					_	3.8	19.9		7.6		30.6		92.2		7.0		5.2		3.9	1
					Bottom	3.8	19.8	19.9	7.6	7.6	30.5	30.6	91.6	91.9	7.0	7.0	5.1		4.9	
					0	1.0	19.8	19.8	7.6	7.6	30.5	30.5	92.1	91.7	7.0		5.3		4.0	
					Surface	1.0	19.8	19.8	7.6	7.6	30.5	30.5	91.3	91.7	7.0	7.0	5.4		4.4	
M2	Misty	Calm	08:39	5.8	Middle	-	-		-		-		-	_	-	7.0	-	5.7	-	3.5
IVI∠	IVIISTY	Caim	06:39	5.8	Middle	-	-	-	-	-	-	-	-	-	-		-	5.7	-	3.5
					Bottom	4.8	19.9	19.9	7.6	7.6	30.4	30.5	92.9	92.3	7.1	7.1	6.0		2.3	
					Bottom	4.8	19.8	19.9	7.6	7.0	30.5	30.3	91.7	92.3	7.0	7.1	5.9		3.2	
					Surface	1.0	19.8	19.9	7.6	7.6	30.7	30.7	91.0	91.1	6.9		1.3		4	
					Juliace	1.0	19.9	19.9	7.6	7.0	30.6	30.7	91.2	31.1	6.9	6.9	1.3		3	
M3	Misty	Calm	08:43	6.2	Middle	3.1	19.8	19.8	7.6	7.6	30.8	30.8	90.9	91.0	6.9	0.0	2.5	3.0	4	3
0			000	J		3.1	19.8		7.6		30.7	00.0	91.0	00	6.9		2.5	0.0	3	<u> </u>
					Bottom	5.2	19.8	19.8	7.6	7.6	30.7	30.7	91.8	91.4	7.0	7.0	5.3		4	-
Δ· Denth-aver						5.2	19.8		7.6		30.7		91.0	-	6.9	_	5.2		2	

DA: Depth-averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough: White capped or rougher

Water Quality Monitoring Results on 18 March 23 during Mid-Ebb Tide

	y	torning ixesu			10 March 25	during wild			,											
Monitoring	Weather	Sea Condition		Water Depth	Sampling Dep	th (m)	Water Te	emperature (°C)		рН	Salin	ity (ppt)	DO Satu	ration (%)	Dissolved (mg/l		Turbidity(	NTU)	Suspende (mg/	
Station	Condition		Time	(m)	24pg = 2p	()	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	20.3	20.3	7.7	7.7	30.5	30.5	98.6	98.2	7.4		1.1		3.1	i
					Surface	1.0	20.3	20.3	7.7	7.7	30.5	30.5	97.7	96.2	7.4	7.4	1.2		3.4	ł
C1	Misty	Calm	10:19	9.6	Middle	4.8	20.3	20.3	7.7	7.7	30.6	30.6	98.9	98.4	7.5	7.4	2.8	2.6	3.7	3.7
Ci	iviisty	Callli	10.19	9.0	ivildale	4.8	20.3	20.3	7.7	7.7	30.5	30.6	97.9	90.4	7.4		2.9	2.0	3.4	3.7
					Bottom	8.6	20.3	20.3	7.7	7.7	30.6	30.6	99.7	99.0	7.5	7.5	3.9		4.1	ł
					Dolloin	8.6	20.3	20.5	7.7	7.7	30.5	30.0	98.2	99.0	7.4	7.5	3.9		4.4	<u> </u>
					Surface	1.0	20.4	20.5	7.6	7.6	30.4	30.3	97.3	97.4	7.4		3.4		3.9	l
					Sullace	1.0	20.5	20.5	7.6	7.0	30.2	30.3	97.5	37.4	7.4	7.4	3.5		4.1	i
C2	Mistv	Calm	10:01	9.6	Middle	4.8	20.3	20.4	7.6	7.6	30.5	30.4	97.8	97.5	7.4	] '	4.9	4.5	4.4	4.7
02	iviioty	Callii	10.01	9.0	Middle	4.8	20.4	20.4	7.6	7.0	30.3	30.4	97.1	31.5	7.3		4.8	4.5	4.8	J /
					Bottom	8.6	20.4	20.4	7.6	7.6	30.4	30.4	98.4	97.8	7.4	7.4	5.3		5.6	i
					Bottom	8.6	20.4	20.4	7.6	7.0	30.4	JUT	97.1	37.0	7.3	7	5.2		5.2	<u> </u>
					Surface	1.0	20.0	20.2	7.7	7.7	29.9	30.1	100.8	100.8	7.7		2.9		3.3	ĺ
					Curidoo	1.0	20.3	20.2	7.6		30.2	00.1	100.8	100.0	7.6	7.7	2.8		3.5	l
M1	Misty	Calm	10:07	5.0	Middle	-	-	_	-	_	-	_	-	_	-	] '''	-	3.4	-	3.8
	····oty	- Camir	10.01	0.0	maaro	-	-		-		-		-		-		-	0	-	1
					Bottom	4.0	19.8	20.0	7.7	7.7	30.5	30.3	100.8	100.8	7.7	7.7	3.9		4.0	l
					Bottom	4.0	20.1	20.0	7.6		30.1	00.0	100.8	100.0	7.6	1	3.9		4.2	
					Surface	1.0	20.1	20.2	7.6	7.6	30.0	30.0	100.3	98.4	7.6	_	2.8		4.4	ł
						1.0	20.3		7.6		29.9		96.4		7.3	7.5	2.8		4.9	Ì
M2	Misty	Calm	10:11	4.8	Middle	-	-	_	-	-	-	-	-	_	-		-	3.5	-	4.2
						-	-		-		-		-		-		-		-	Ì
					Bottom	3.8	19.9	20.1	7.6	7.6	30.2	30.1	100.7	100.3	7.7	7.7	4.2		3.7	l
						3.8	20.2		7.6		30.0		99.8		7.6		4.2		3.9	<b></b>
					Surface	1.0	20.4	20.5	7.6	7.6	30.3	29.8	94.1	95.0	7.1	_	1.2		4	ł
						1.0	20.6		7.6		29.2		95.9		7.2	7.2	1.2		4	Ì
M3	Misty	Calm	10:15	7.4	Middle	3.7	20.3	20.4	7.6	7.6	30.3	30.2	93.9	94.4	7.1	4	2.1	2.2	4	5
						3.7	20.5		7.6		30.1		94.8		7.2	<u> </u>	2.2		5	ł
					Bottom	6.4	20.3	20.4	7.6	7.6	30.3	30.3	94.0	94.2	7.1	7.1	3.2		6	ł
DA: Donth aver						6.4	20.4		7.6		30.2		94.4		7.1		3.2		5	

DA: Depth-averaged

Water Quality Monitoring Results on 18 March 23 during Mid-Flood Tide

Monitoring	Weather	Sea Condition	Sampling	Water Depth	Sampling Dept	th (m)		emperature (°C)		рН	Salin	ity (ppt)	DO Satur	ration (%)	Dissolved (mg/L		Turbidity(	(NTU)	Suspende (mg/	
Station	Condition		Time	(m)			Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	20.7	20.7	7.6	7.6	30.0	30.1	98.7	98.8	7.4		1.1		3.7	
					Sullace	1.0	20.6	20.7	7.6	7.0	30.2	30.1	98.8	90.0	7.4	7.4	1.0		3.9	
C1	Misty	Calm	14:35	8.4	Middle	4.2	21.0	20.8	7.6	7.6	30.0	30.1	99.3	99.0	7.4	7.4	1.2	1.4	4.1	4.0
01	iviioty	Odilli	14.00	0.4	Wildale	4.2	20.6	20.0	7.6	7.0	30.2	50.1	98.7	33.0	7.4		1.1	1.4	4.0	4.0
					Bottom	7.4	21.1	20.9	7.6	7.6	29.9	30.0	99.8	99.3	7.5	7.5	2.1		4.1	
					Dottom	7.4	20.6	20.9	7.6	7.0	30.1	30.0	98.7	99.0	7.4	7.5	2.1		4.2	
					Surface	1.0	20.7	20.6	7.6	7.6	30.3	30.4	96.7	97.0	7.3		2.2		3.1	
					Curiaco	1.0	20.4	20.0	7.6	7.0	30.5	00.1	97.3	07.0	7.3	7.3	2.2		3.2	
C2	Misty	Calm	14:53	9.4	Middle	4.7	20.8	20.6	7.6	7.6	30.2	30.4	96.3	96.7	7.2	7.0	2.2	2.5	3.9	3.7
	····oty	•		· · ·		4.7	20.4	20.0	7.6		30.5	00	97.0	00	7.3		2.2	2.0	3.6	0
					Bottom	8.4	21.1	20.8	7.6	7.6	30.0	30.2	99.1	98.1	7.4	7.4	3.2		4.3	
						8.4	20.5		7.6		30.4		97.1		7.3		3.2		4.0	
					Surface	1.0	20.5	20.5	7.6	7.6	30.1	30.1	99.7	99.1	7.5		3.6		3.3	
						1.0	20.5		7.6		30.0		98.4		7.4	7.5	3.5		3.6	
M1	Misty	Calm	14:43	5.2	Middle	-	-	-	-	-	-	-	-	_	-		-	4.2	-	3.8
						-	-		-		-		-		-		-		-	
					Bottom	4.2	20.4	20.5	7.7	7.7	30.0	30.0	100.4	99.8	7.6	7.6	4.7		4.1	
						4.2	20.5		7.6		30.0		99.1		7.5		4.8		4.3	
					Surface	1.0	20.5	20.5	7.6	7.6	30.3	30.3	99.8	98.2	7.5		4.0		3.1	
						1.0	20.5		7.6		30.2		96.6		7.3	7.4	3.9		2.8	
M2	Misty	Calm	14:47	5.8	Middle	-	-	-	-	-	-	-	-	-	-		-	4.6	-	3.6
						-	-		-		-		-		-				-	
					Bottom	4.8	20.5	20.5	7.6	7.6	30.1	30.2	100.3	99.8	7.6	7.6	5.1		4.0	
						4.8	20.5		7.6		30.3		99.3		7.5		5.2		4.3	
					Surface	1.0	20.4	20.5	7.6	7.6	30.3	30.3	96.3	96.2	7.3		2.8		4	
						1.0	20.5		7.6		30.2		96.1		7.3	7.3	2.9		4	
M3	Misty	Calm	14:40	6.8	Middle	3.4	20.4	20.5	7.6	7.6	30.3	30.3	96.5	96.3	7.3		4.2	4.0	4	4
						3.4	20.5		7.6		30.3		96.1		7.3		4.2		4	
					Bottom	5.8	20.5	20.5	7.6	7.6	30.3	30.3	97.0	96.6	7.3	7.3	5.0		3	
DA: Danth avan						5.8	20.5		7.6		30.2		96.2		7.3		5.1		3	

DA: Depth-averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough: White capped or rougher

Water Quality Monitoring Results on 21 March 23 during Mid-Ebb Tide

Monitoring	Weather	Sea Condition	Sampling	Water Depth	Sampling Dept	th (m)		emperature (°C)	ı	рН	Salin	ity (ppt)	DO Satur	ration (%)	Dissolved (mg/l		Turbidity(	NTU)	Suspender (mg/	
Station	Condition		Time	(m)		,	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	21.5	21.5	8.2	8.2	29.5	29.5	95.7	95.9	7.1		1.1		3.6	
					Sullace	1.0	21.4	21.5	8.2	0.2	29.4	29.5	96.0	95.9	7.1	7.1	1.2		4.0	
C1	Misty	Calm	12:20	11.2	Middle	5.6	21.4	21.4	8.2	8.2	29.5	29.5	95.3	95.3	7.1	/.!	1.4	1.6	4.6	4.6
01	IVIIOLY	Cairii	12.20	11.2	Wildale	5.6	21.4	21.4	8.2	0.2	29.5	29.0	95.2	90.0	7.1		1.3	1.0	4.9	4.0
					Bottom	10.2	21.4	21.4	8.2	8.2	29.5	29.5	95.6	95.6	7.1	7.1	2.1		5.2	
					Dottom	10.2	21.4	21.7	8.2	0.2	29.5	20.0	95.5	30.0	7.1	/	2.2		5.4	
					Surface	1.0	21.4	21.4	8.2	8.2	29.4	29.5	95.4	95.3	7.1		2.8		4.1	
					Curiaco	1.0	21.4	21.1	8.2	0.2	29.5	20.0	95.2	00.0	7.1	7.1	2.7		3.8	
C2	Misty	Calm	12:27	10.6	Middle	5.3	21.4	21.4	8.2	8.2	29.5	29.5	95.3	95.4	7.1	1	2.9	2.9	4.9	4.9
						5.3	21.4		8.2		29.4		95.4		7.1		2.9		4.6	
					Bottom	9.6	21.4	21.4	8.1	8.2	29.5	29.5	96.2	95.9	7.2	7.2	3.0		6.2	
						9.6	21.4		8.2		29.4		95.6		7.1		2.9		5.8	
					Surface	1.0	21.5	21.5	8.1	8.1	29.4	29.5	96.7	96.2	7.2		2.0		4.0	
						1.0	21.5		8.1		29.5		95.6		7.1	7.2	2.0		4.4	
M1	Misty	Calm	12:41	4.4	Middle	-	-	-	-	-	-	-	-	-	-	1	-	2.0	-	4.8
						-	-		-		-		-		-		-		-	
					Bottom	3.4	21.4	21.5	8.1	8.1	29.4	29.4	97.4	96.9	7.3	7.3	2.0		5.6	
						3.4	21.5		8.1	-	29.4		96.4		7.2		2.0		5.3	
					Surface	1.0	21.4	21.4	8.1	8.2	29.4	29.4	95.1	94.8	7.1		2.9		5.5	i
						1.0	21.4		8.2		29.4		94.4		7.0	7.1	3.1		5.6	
M2	Misty	Calm	12:36	5.8	Middle	-	-	-	-	-	-	-	-	-	-	4	-	3.2	-	5.4
						-	-		-		-		-				-		-	
					Bottom	4.8	21.5	21.5	8.1	8.1	29.4	29.4	95.9	95.3	7.1	7.1	3.3		5.3	
						4.8	21.4		8.1		29.4		94.7		7.1		3.4		5.2	
					Surface	1.0	21.4 21.4	21.4	8.2	8.2	29.4	29.4	95.4 95.6	95.5	7.1 7.1	4	2.6		5	ļ
																7.1				
M3	Misty	Calm	12:12	7.0	Middle	3.5	21.5	21.5	8.2	8.2	29.4	29.4	95.4	95.4	7.1	-	2.9	2.8	5	5
						3.5	21.4		8.2		29.4		95.3		7.1		2.9		5	ļ
					Bottom	6.0	21.5	21.4	8.1	8.2	29.4	29.4	96.0	95.8	7.2	7.2	3.0		6	1
						6.0	21.3		8.2		29.4		95.6		7.1	1	2.9		6	

DA: Depth-averaged

Water Quality Monitoring Results on 21 March 23 during Mid-Flood Tide

Monitoring	Weather	Sea Condition		Water Depth	Sampling Dep	th (m)		emperature (°C)		рН	Salin	ity (ppt)	DO Satur	ration (%)	Dissolved (mg/L		Turbidity(	(NTU)	Suspende (mg/	
Station	Condition		Time	(m)			Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	21.3	21.4	8.1	8.1	24.8	24.3	95.7	95.5	7.3		3.4		4.6	
					Sulface	1.0	21.5	21.4	8.1	0.1	23.8	24.3	95.3	95.5	7.3	7.2	3.3		5.0	I
C1	Misty	Calm	08:41	9.2	Middle	4.6	21.3	21.4	8.1	8.1	26.7	27.1	95.7	95.5	7.2	1.2	3.6	3.8	5.2	5.1
C1	iviioty	Callii	00.41	3.2	ivildule	4.6	21.5	21.4	8.1	0.1	27.5	21.1	95.3	95.5	7.1		3.7	5.0	5.1	J. 1
					Bottom	8.2	21.4	21.4	8.1	8.1	28.7	29.2	95.9	95.7	7.2	7.2	4.5		5.2	I
					DULLUIII	8.2	21.4	21.4	8.1	0.1	29.7	29.2	95.4	95.7	7.1	1.2	4.5		5.4	
					Surface	1.0	21.4	21.4	8.1	8.1	30.1	30.1	95.3	95.1	7.0		2.1		4.8	
					Sulface	1.0	21.4	21.4	8.1	0.1	30.1	30.1	94.9	95.1	7.0	7.0	2.2		4.5	I
C2	Misty	Calm	08:22	9.4	Middle	4.7	21.4	21.4	8.1	8.1	30.2	30.2	95.3	95.2	7.0	7.0	3.3	3.3	5.3	5.2
02	iviioty	Callii	00.22	3.4	Wildale	4.7	21.4	21.4	8.1	0.1	30.2	30.2	95.1	90.2	7.0		3.3	3.3	5.0	J.Z
					Bottom	8.4	21.4	21.4	8.1	8.1	30.1	30.1	95.5	95.3	7.0	7.0	4.3		5.9	I
					Bottom	8.4	21.4	21.4	8.1	0.1	30.1	50.1	95.1	30.0	7.0	7.0	4.4		5.4	
					Surface	1.0	21.4	21.5	8.1	8.1	25.9	26.5	95.7	95.2	7.3		3.9		5.4	I
						1.0	21.5		8.1	0	27.1	20.0	94.6	00.2	7.1	7.2	3.9		5.0	I
M1	Misty	Calm	08:30	4.4	Middle	-	-	-	-	-	-	-	-	-	-		-	4.1	-	6.0
						-	-		-		-		-		-		-		-	1
					Bottom	3.4	21.4	21.5	8.1	8.1	29.1	29.1	96.0	95.6	7.1	7.1	4.2		6.6	I
						3.4	21.5		8.1		29.0		95.1		7.1		4.3		6.9	-
					Surface	1.0	21.5	21.5	8.1	8.1	26.7	25.9	95.1	94.8	7.2		2.8		7.4	I
						1.0	21.4		8.1		25.0		94.4		7.2	7.2	2.8		6.9	I
M2	Misty	Calm	08:33	4.8	Middle	-	-	-	-	-	-	-	-	-	-		-	3.4	-	6.3
						-	-		-		-		-		-		-		-	1
					Bottom	3.8	21.5	21.5	8.1	8.1	28.3	28.9	95.7	95.2	7.1	7.1	4.1		5.2	I
						3.8	21.4		8.1		29.4		94.7		7.0		4.0		5.6	
					Surface	1.0	21.4	21.4	8.1	8.1	24.9	25.2	93.8	93.8	7.2		2.5		5	I
						1.0	21.3		8.1	0	25.4	20.2	93.8	00.0	7.1	7.1	2.6		5	I
M3	Misty	Calm	08:37	7.0	Middle	3.5	21.4	21.4	8.1	8.1	27.7	27.3	93.9	93.8	7.0		3.3	3.4	6	6
						3.5	21.3		8.1	-	26.9	_	93.6		7.1		3.4		6	- I
					Bottom	6.0	21.4	21.5	8.1	8.1	30.2	30.2	94.1	93.9	7.0	7.0	4.2		7	l
DA: Danth aver						6.0	21.5	-	8.1	-	30.1		93.7		6.9		4.1		6	<u> </u>

DA: Depth-averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough: White capped or rougher

Water Quality Monitoring Results on 23 March 23 during Mid-Ebb Tide

Monitoring	Weather	Sea Condition		Water Depth	Sampling Dep	th (m)		emperature (°C)	ı	рН	Salin	ity (ppt)	DO Satur	ation (%)	Dissolved (mg/l		Turbidity(	NTU)	Suspende (mg/	
Station	Condition		Time	(m)		,	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	21.5	21.5	8.1	8.2	29.8	29.9	93.2	92.5	6.9		3.2		5.3	· <del></del>
					Sullace	1.0	21.4	21.5	8.2	0.2	29.9	25.5	91.7	92.5	6.8	6.9	3.2		5.8	ı
C1	Misty	Moderate	12:53	11.2	Middle	5.6	21.7	21.5	8.1	8.2	29.6	29.8	94.0	93.0	6.9	0.3	5.0	4.6	4.6	4.8
01	iviioty	Moderate	12.55	11.2	Wildale	5.6	21.3	21.5	8.2	0.2	29.9	23.0	92.0	90.0	6.8		5.0	4.0	5.0	4.0
					Bottom	10.2	21.9	21.7	8.1	8.1	29.5	29.7	95.5	94.0	7.0	6.9	5.6		4.3	ı
					Bottom	10.2	21.4	21.7	8.1	0.1	29.9	20.1	92.4	01.0	6.8	0.0	5.6		3.9	
					Surface	1.0	21.6	21.6	8.2	8.2	29.7	29.8	93.4	92.4	6.9		5.0		4.3	ı
						1.0	21.5	21.0	8.2	0.2	29.8	20.0	91.3	02	6.7	6.8	5.1		4.6	1
C2	Misty	Moderate	13:07	10.6	Middle	5.3	21.8	21.6	8.2	8.2	29.5	29.7	94.2	93.1	6.9		5.7	5.8	4.8	5.2
	- ,					5.3	21.4		8.2		29.8		92.0		6.8		5.8		5.2	1
					Bottom	9.6	22.0	21.8	8.2	8.2	29.4	29.6	95.6	94.2	7.0	7.0	6.5		6.3	1
						9.6	21.5		8.2		29.8		92.8		6.9		6.5		5.8	
					Surface	1.0	21.7	21.6	8.1	8.1	29.8	29.9	93.6	93.0	6.9		4.0		7.4	1
						1.0	21.5		8.1		30.0		92.4		6.8	6.9	4.0		7.9	ı
M1	Misty	Calm	13:00	4.4	Middle	-	-	-	-	-	-	-	-	-	-		-	4.2	-	7.3
	-					-	-		-		-		-		-		-		-	ı
					Bottom	3.4	21.8 21.7	21.8	8.1 8.1	8.1	29.7 29.9	29.8	95.3 92.9	94.1	7.0 6.8	6.9	4.3		7.1 6.7	ı
						1.0	21.7		8.2		29.9		93.4		6.9	<u> </u>	4.4		4.7	
					Surface	1.0	21.7	21.6	8.2	8.2	29.8	29.7	92.3	92.9	6.8		4.2		5.1	1
						-	21.4		- 0.2		-		-		-	6.9	-		-	1
M2	Misty	Calm	13:02	5.8	Middle	-	-	-	-	-	_	-	_	-	_		_	4.9	_	4.6
					_	4.8	21.8		8.2		28.1		94.7		7.0		5.6		4.5	1
					Bottom	4.8	21.6	21.7	8.2	8.2	29.7	28.9	92.9	93.8	6.9	7.0	5.6		4.2	1
					0 (	1.0	21.5	04.4	8.2	0.0	29.8	00.0	91.3	00.7	6.7		5.5		5	
					Surface	1.0	21.3	21.4	8.2	8.2	29.9	29.9	90.0	90.7	6.7		5.5		5	
Ma	Minter	Colm	10.57	7.0	Middle	3.5	21.6	24.5	8.2	0.0	29.6	20.0	91.7	00.0	6.8	6.7	6.2	6.4	5	_
М3	Misty	Calm	12:57	7.0	Middle	3.5	21.3	21.5	8.2	8.2	29.9	29.8	90.1	90.9	6.7	1	6.1	6.1	6	5
					Dattam	6.0	21.8	24.6	8.2	0.0	29.5	20.7	92.5	04.5	6.8	6.0	6.5		6	
					Bottom	6.0	21.4	21.6	8.2	8.2	29.8	29.7	90.4	91.5	6.7	6.8	6.5		6	1

DA: Depth-averaged

Water Quality Monitoring Results on 23 March 23 during Mid-Flood Tide

Station Cor	Veather	Sea Condition		Water Depth	Sampling Dept	h (m)	Water Te	emperature (°C)	ı	рН	Salin	ity (ppt)	DO Satur	ration (%)	Dissolved ( (mg/L		Turbidity(	(NTU)	Suspende (mg/	ed Solids /L)
	Condition		Time	(m)		, ,	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	21.4	21.4	8.1	8.2	29.7	29.8	97.3	96.8	7.2		7.4		5.0	
					Sunace	1.0	21.3	21.4	8.2	0.2	29.8	25.0	96.3	90.0	7.1	7.2	7.3		4.7	ł
C1 N	Misty	Moderate	09:41	9.2	Middle	4.6	21.6	21.5	8.1	8.2	29.6	29.7	97.7	97.3	7.2	1.2	7.6	7.7	4.6	4.7
OI N	iviioty	Moderate	03.41	3.2	Middle	4.6	21.3	21.5	8.2	0.2	29.8	25.1	96.9	31.3	7.2		7.5	1.1	4.6	J /
					Bottom	8.2	21.7	21.5	8.1	8.1	29.5	29.7	98.8	97.6	7.3	7.2	8.1		4.5	l
					DOLLOITI	8.2	21.3	21.5	8.1	0.1	29.8	23.1	96.4	97.0	7.1	1.2	8.1		4.6	1
					Surface	1.0	21.4	21.4	7.8	7.8	29.8	29.9	93.0	92.6	6.9		6.5		5.3	l
					Cunado	1.0	21.3	21.1	7.8	7.0	29.9	20.0	92.2	02.0	6.9	6.9	6.5		5.6	l
C2 N	Misty	Moderate	09:22	9.4	Middle	4.7	21.5	21.4	7.8	7.8	29.7	29.8	93.2	92.9	6.9	0.0	7.3	7.5	5.0	5.1
,		ouo.u.o	00.22	0	madio	4.7	21.3		7.8		29.9	20.0	92.6	02.0	6.9		7.3		5.3	1
					Bottom	8.4	21.8	21.6	7.8	7.8	29.5	29.7	93.8	93.3	6.9	6.9	8.7		4.4	l
						8.4	21.3		7.8		29.9		92.8		6.9		8.8		4.8	
					Surface	1.0	21.7	21.7	7.8	7.8	29.7	29.8	94.2	93.6	7.0		3.9		4.6	ł
						1.0	21.6		7.8		29.8		92.9		6.9	7.0	4.0		4.9	l
M1 N	Misty	Calm	09:30	4.4	Middle	-	-	-	-	-	-	-	-	-	-		-	4.4	-	5.2
						-	- 04.0		- 7.0		- 00.4		- 05.4		7.4		- 4.0		-	ł
					Bottom	3.4	21.8 21.6	21.7	7.8	7.8	29.1 29.8	29.5	95.1 93.5	94.3	7.1 6.9	7.0	4.8		5.4 5.7	ł
<u> </u>						1.0	21.6		8.2				93.6		6.9	 	6.6		5.1	
					Surface	1.0	21.5	21.6	8.2	8.2	29.9 30.0	30.0	92.3	93.0	6.8		6.7		5.4	ł
						-	-		-		-		-		0.0	6.9	- 0.7		-	ł
M2 N	Misty	Calm	09:33	4.8	Middle		_	-		-		-		-				7.0	_	5.0
						3.8	21.7		8.3		29.9		95.5		7.1		7.3		4.8	ł
					Bottom	3.8	21.6	21.7	8.2	8.3	29.9	29.9	92.8	94.2	6.9	7.0	7.2		4.8	ł
						1.0	21.6		8.1		29.7		97.8		7.2	l 	4.4		5	
					Surface	1.0	21.3	21.5	8.1	8.1	29.9	29.8	97.8	97.8	7.2		4.4		5	ł
						3.5	21.7		8.1		29.6		97.5		7.2	7.2	5.1		5	l
M3 N	Misty	Calm	09:37	7.0	Middle	3.5	21.3	21.5	8.1	8.1	29.9	29.8	97.8	97.7	7.2		5.0	4.9	6	5
						6.0	21.9		8.1		29.4		97.5		7.2		5.3		6	l
					Bottom	6.0	21.4	21.7	8.1	8.1	29.8	29.6	97.8	97.7	7.2	7.2	5.3		6	l

DA: Depth-averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough: White capped or rougher

Water Quality Monitoring Results on 25 March 23 during Mid-Ebb Tide

Monitoring	Weather	Sea Condition		Water Depth	Sampling Dep	h (m)		emperature (°C)		рН	Salin	ity (ppt)	DO Satur	ration (%)	Dissolved (mg/l		Turbidity(	NTU)	Suspende (mg/	
Station	Condition		Time	(m)		,	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	21.9	21.8	8.0	8.0	29.5	29.6	92.4	91.9	6.8		5.1		19.4	
					Sullace	1.0	21.7	21.0	8.0	0.0	29.7	25.0	91.4	31.3	6.8	6.8	5.2		19.4	
C1	Rainy	Rough	14:18	8.6	Middle	4.3	22.1	21.9	7.9	8.0	29.4	29.6	93.2	92.5	6.9	0.0	6.3	6.2	20.9	18.8
01	rtairiy	Rough	14.10	0.0	Wildaic	4.3	21.7	21.5	8.0	0.0	29.7	25.0	91.8	32.0	6.8		6.3	0.2	20.4	10.0
					Bottom	7.6	22.2	22.0	7.9	8.0	29.4	29.6	94.2	93.1	6.9	6.9	7.2		13.5	
					Bottom	7.6	21.7	22.0	8.0	0.0	29.7	20.0	92.0	00.1	6.8	0.0	7.1		19.4	
					Surface	1.0	21.7	21.7	8.0	8.0	29.7	29.7	91.0	90.7	6.7		6.9		6.7	
						1.0	21.7		8.0	0.0	29.7	20	90.4	00	6.7	6.7	7.0		6.5	
C2	Rainy	Rough	14:33	9.6	Middle	4.8	21.7	21.7	8.0	8.0	29.7	29.7	91.1	90.9	6.7		7.5	7.5	7.8	7.6
	. ,	3				4.8	21.7		8.0		29.7		90.6		6.7		7.4		6.8	
					Bottom	8.6	21.9	21.8	8.0	8.0	29.6	29.7	91.4	91.1	6.7	6.7	8.2		9.2	
						8.6	21.7		8.0		29.7		90.8		6.7		8.2		8.8	
					Surface	1.0	21.8	21.8	7.9	7.9	29.9	29.9	90.9	90.7	6.7		4.4		11.6	
						1.0	21.8		7.9		29.9		90.4		6.7	6.7	4.3		10.6	
M1	Rainy	Calm	14:26	4.8	Middle	-	-	-	-	-	-	-	-	-	-		-	4.7	-	9.5
	-					-	-		-		-		-		-		-		-	
					Bottom	3.8	21.8	21.8	7.9 7.9	7.9	29.9 29.9	29.9	91.2	90.9	6.7	6.7	5.1		7.4	
						3.8	21.8						90.6		6.7		5.0		8.4	
					Surface	1.0	22.1 21.9	22.0	7.9 7.9	7.9	29.6 29.8	29.7	94.5 92.0	93.3	7.0 6.8		3.9		7.9 8.2	
						1.0	- 21.9		7.9		29.0		92.0		0.0	6.9	- 3.0		- 0.2	
M2	Rainy	Calm	14:28	5.6	Middle	-	-	-		-		-		-				4.3		7.8
						4.6	22.1		7.9		29.7		95.7		7.0		4.6		7.5	
					Bottom	4.6	22.0	22.1	7.9	7.9	29.7	29.7	93.1	94.4	6.9	7.0	4.7		7.6	
						1.0	22.0		7.9		29.6		92.3		6.8		2.4		7	
					Surface	1.0	21.8	21.9	7.9	7.9	29.7	29.7	91.3	91.8	6.8		2.5		7	
						3.6	22.1		7.9		29.5		93.1	<u> </u>	6.8	6.8	3.1		11	
M3	Rainy	Calm	14:22	7.2	Middle	3.6	21.8	22.0	7.9	7.9	29.7	29.6	91.7	92.4	6.8		3.0	3.4	12	9
						6.2	22.2		7.9		29.6		94.7		7.0		4.5		7	ļ
					Bottom	6.2	21.9	22.1	7.9	7.9	29.6	29.6	91.9	93.3	6.8	6.9	4.6		8	i

DA: Depth-averaged

Water Quality Monitoring Results on 25 March 23 during Mid-Flood Tide

Monitoring	Weather	Sea Condition	Sampling		Sampling Dep	th (m)	Water Te	emperature (°C)	ŀ	эΗ	Salin	ity (ppt)	DO Satur	ation (%)	Dissolved ( (mg/L		Turbidity(	(NTU)	Suspende (mg.	
Station	Condition		Time	(m)	33 7 3 37		Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	21.7	21.7	7.9	7.9	29.6	29.7	92.1	91.2	6.8		6.0		3.6	
					Sulface	1.0	21.7	21.7	7.9	7.9	29.7	25.1	90.3	91.2	6.7	6.8	6.0		4.4	
C1	Misty	Moderate	10:15	9.2	Middle	4.6	21.8	21.8	7.9	7.9	29.6	29.6	92.4	91.5	6.8	0.0	7.1	7.1	4.6	4.4
01	iviloty	Moderate	10.10	0.2	Wildale	4.6	21.7	21.0	7.9	7.5	29.6	25.0	90.6	31.0	6.7		7.1		4.7	] '''
					Bottom	8.2	22.0	21.9	7.9	7.9	29.5	29.6	93.3	92.2	6.9	6.8	8.1		4.6	
					Dottom	8.2	21.7	21.9	7.9	7.5	29.6	29.0	91.1	32.2	6.7	0.0	8.0		4.4	
					Surface	1.0	21.8	21.8	7.9	7.9	29.6	29.6	92.7	91.8	6.9		5.1		6.4	]
						1.0	21.7	21.0	7.9		29.6	20.0	90.9	0.10	6.7	6.8	5.1		6.8	
C2	Misty	Moderate	09:58	9.0	Middle	4.5	22.0	21.9	7.9	7.9	29.4	29.5	93.1	92.3	6.9	0.0	6.7	6.4	7.7	6.9
						4.5	21.7		7.9		29.6		91.5		6.8		6.8		6.4	
					Bottom	8.0	22.2	22.0	7.9	7.9	29.3	29.5	94.0	93.0	6.9	6.9	7.2		7.0	
						8.0	21.8		7.9		29.6		92.0		6.8		7.2		7.1	<u> </u>
					Surface	1.0	22.1	22.0	7.9	7.9	29.6	29.7	93.3	91.9	6.9		5.3		6.6	
						1.0	21.8		7.9		29.8		90.4		6.7	6.8	5.3		7.4	
M1	Misty	Calm	10:05	4.8	Middle	-	-	-	-	-	-	-	-	-	-		-	6.1	-	6.9
						3.8	22.2		7.9				94.1		6.9		6.9		6.5	
					Bottom	3.8	21.8	22.0	7.9	7.9	29.6 29.8	29.7	90.8	92.5	6.7	6.8	6.8		7.2	- I
						1.0	21.9		7.9		29.9		91.7		6.8		4.0		6.5	<del></del>
					Surface	1.0	21.8	21.9	7.9	7.9	29.9	29.9	89.8	90.8	6.6		4.0		5.8	İ
						-	-		-		-		-		-	6.7	-		-	İ
M2	Misty	Calm	10:08	5.4	Middle	_	_	-	_	-	_	-	_	-	_		_	4.1	_	6.5
						4.4	22.2		7.9		29.6		94.6		6.9		4.1		6.7	1
					Bottom	4.4	21.8	22.0	7.9	7.9	29.9	29.8	90.5	92.6	6.7	6.8	4.1		6.9	1
						1.0	21.8		7.9		29.6		90.7		6.7		5.7		8	
					Surface	1.0	21.8	21.8	7.9	7.9	29.8	29.7	88.8	89.8	6.6	١	5.6		9	
		0.1	40.44		A41 1 II	4.3	21.9	04.0	7.9	7.0	29.8	00.0	91.8	00.5	6.8	6.7	6.1		11	40
M3	Misty	Calm	10:11	8.6	Middle	4.3	21.8	21.9	7.9	7.9	29.8	29.8	89.1	90.5	6.6		6.0	6.0	12	10
					D. "	7.6	22.1	20.0	7.9	7.0	29.7	00.0	92.9	04.0	6.8	0.7	6.1		11	
					Bottom	7.6	21.8	22.0	7.9	7.9	29.8	29.8	89.7	91.3	6.6	6.7	6.2		10	

DA: Depth-averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough: White capped or rougher

Water Quality Monitoring Results on 28 March 23 during Mid-Ebb Tide

	Weather	Sea Condition		Water Depth	Sampling Dep	th (m)	Water Te	emperature (°C)		рН	Salin	ity (ppt)	DO Satur	ration (%)	Dissolved (mg/l		Turbidity(	NTU)	Suspende (mg/	
Station	Condition		Time	(m)		,	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	21.3	21.3	7.9	7.9	29.6	29.6	87.7	87.5	6.6		1.0		4.1	. <del></del>
					Sullace	1.0	21.3	21.5	7.9	7.5	29.6	29.0	87.2	07.5	6.5	6.6	1.1		3.8	
C1	Misty	Moderate	16:23	8.4	Middle	4.2	21.4	21.3	7.8	7.9	29.6	29.6	86.9	87.4	6.5	0.0	2.5	2.2	5.0	4.7
	iviioty	Woderate	10.20	0.4	Wildaic	4.2	21.2	21.0	7.9	7.5	29.6	25.0	87.8	07.4	6.6		2.5	2.2	5.9	7.7
					Bottom	7.4	21.4	21.3	7.8	7.9	29.6	29.6	83.4	83.5	6.2	6.3	3.1		5.4	
					Bottom	7.4	21.2	21.0	7.9	7.0	29.6	20.0	83.5	00.0	6.3	0.0	3.1		4.1	
					Surface	1.0	21.4	21.4	8.0	8.1	29.6	29.6	89.6	89.6	6.7		3.1		5.4	
						1.0	21.4		8.1	0	29.5	20.0	89.5	00.0	6.7	6.7	3.2		5.0	
C2	Misty	Moderate	16:39	9.4	Middle	4.7	21.4	21.4	8.0	8.1	29.6	29.6	89.6	89.5	6.7	1	4.5	4.5	4.0	4.2
	- 7					4.7	21.4		8.1		29.5		89.4		6.7		4.5		4.1	
					Bottom	8.4	21.4	21.3	8.0	8.0	29.7	29.7	89.6	89.6	6.7	6.7	5.8		3.5	
						8.4	21.2		8.0		29.6		89.6		6.7		5.8		3.2	
					Surface	1.0	21.1	21.1	7.8	7.9	29.4	29.5	86.3	86.6	6.5		3.8		4.3	
						1.0	21.1		7.9		29.5		86.9		6.5	6.5	3.9		3.8	
M1	Misty	Calm	16:34	5.2	Middle	-	-	-	-	-	-	-	-	-	-		-	4.4	-	3.6
	•					-	-		-		-		-		-		-		-	
					Bottom	4.2	21.1	21.1	7.8	7.9	29.5	29.5	85.6	86.2	6.4	6.5	4.9		3.6	
						4.2	21.1		7.9		29.5		86.7		6.5		4.8		2.8	
					Surface	1.0	21.1 21.2	21.2	7.8 7.9	7.9	29.5 29.7	29.6	83.5 84.3	83.9	6.3 6.3	4	2.7		3.2 4.4	
						1.0			7.9						0.3	6.3				
M2	Misty	Calm	16:31	5.0	Middle	-	-	-	-	-	-	-	-	-	-		-	3.5	-	4.1
						4.0	21.1		7.7		29.6		83.2		6.2	-	4.2		4.3	
					Bottom	4.0	21.1	21.2	7.8	7.8	29.7	29.7	83.8	83.5	6.3	6.3	4.2		4.5	
						1.0	21.2		8.0		29.6		89.4		6.7		3.0		3	
					Surface	1.0	21.2	21.2	8.1	8.1	29.5	29.6	89.5	89.5	6.7	1	3.1		3	I
						3.5	21.3		8.0		29.6		89.4		6.7	6.7	4.1		5	I
M3	Misty	Calm	16:27	7.0	Middle	3.5	21.3	21.3	8.1	8.1	29.5	29.6	89.5	89.5	6.7	1	4.1	4.0	5	4
					_	6.0	21.3		8.0		29.6		89.4		6.7		4.9		5	I
					Bottom	6.0	21.3	21.3	8.1	8.1	29.5	29.6	89.4	89.4	6.7	6.7	4.9		5	I

DA: Depth-averaged

Water Quality Monitoring Results on 28 March 23 during Mid-Flood Tide

Monitoring	Weather	Sea Condition	Sampling	Water Depth	Sampling Dept	th (m)		emperature (°C)		рН	Salin	ity (ppt)	DO Satur	ration (%)	Dissolved (mg/L		Turbidity(	NTU)	Suspende (mg/	
Station	Condition		Time	(m)		. ,	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	21.4	21.4	7.9	8.0	29.3	29.4	89.3	89.3	6.7		1.0		3.5	
					Sulface	1.0	21.4	21.4	8.0	0.0	29.4	25.4	89.3	09.5	6.7	6.7	1.0		3.7	
C1	Misty	Moderate	11:13	9.4	Middle	4.7	21.4	21.4	7.9	8.0	29.5	29.5	90.4	90.4	6.7	0.7	2.0	1.9	4.0	3.7
01	iviioty	Woderate	11.10	3.4	Wildale	4.7	21.4	21.4	8.0	0.0	29.4	25.5	90.4	30.4	6.8		1.9	1.5	3.8	0.7
					Bottom	8.4	21.4	21.4	7.9	7.9	29.5	29.5	92.2	92.2	6.9	6.9	2.8		4.2	
					Dottom	8.4	21.4	21.4	7.9	7.5	29.4	29.0	92.2	92.2	6.9	0.9	2.8		3.2	
					Surface	1.0	21.3	21.3	7.9	8.0	29.5	29.1	87.3	87.3	6.5		2.8		3.1	
					Canado	1.0	21.2	21.0	8.0	0.0	28.7	20.1	87.3	07.0	6.6	6.7	2.8		4.4	
C2	Misty	Moderate	10:57	8.8	Middle	4.4	21.4	21.4	7.9	7.9	29.9	29.6	90.8	90.8	6.8	0.7	3.4	3.3	3.3	3.8
		moderate	10.01	0.0		4.4	21.3		7.9		29.2	20.0	90.8	00.0	6.8		3.3	0.0	3.2	
					Bottom	7.8	21.4	21.4	7.9	7.9	29.9	29.7	92.4	92.4	6.9	6.9	3.7		5.2	
						7.8	21.3		7.9		29.4		92.4	<b>V</b>	6.9		3.8		3.7	
					Surface	1.0	21.1	21.1	7.9	8.0	28.3	28.4	94.0	92.2	7.1		1.1		3.1	
						1.0	21.1		8.0		28.5		90.4		6.8	7.0	1.2		3.3	
M1	Misty	Calm	11:03	5.0	Middle	-	-	-	-	-	-	-	-	-	-		-	1.4	-	3.4
						-			-		-		-		-		-		-	
					Bottom	4.0	21.1	21.1	7.9	8.0	28.3	28.4	94.4	93.8	7.1	7.1	1.7		3.6	
						4.0	21.1		8.0		28.4		93.1		7.0		1.7		3.5	
					Surface	1.0	21.0	21.0	7.9	7.9	28.8	28.8	89.8	89.4	6.8		3.1		4.1	
						1.0	21.0		7.9				88.9		6.7	6.8	3.1		3.0	
M2	Misty	Calm	11:06	5.2	Middle	-	-	-	-	-	-	-	-	-	-		-	3.8	-	3.0
	-					-	-		-		-		-		-		-		-	
					Bottom	4.2	21.0	21.0	7.9	7.9	28.8	28.8	91.5	90.2	6.9	6.8	4.4		2.6	
						4.2	21.0		7.9		28.8		88.9		6.7		4.4		2.3	
					Surface	1.0	21.2	21.2	7.9	8.0	28.9	28.8	89.4	88.2	6.7		3.3		4	
						1.0	21.1		8.0				87.0		6.6	6.7	3.3		3	
M3	Misty	Calm	11:09	8.4	Middle	4.2	21.3	21.2	7.9	8.0	29.1	29.0	90.8	89.5	6.8		4.9	4.6	4	4
						4.2	21.1		8.0		28.8		88.2		6.7		5.0		4	
					Bottom	7.4	21.3	21.3	7.9	8.0	29.5	29.2	93.6	91.2	7.0	6.9	5.5		3	
DA: Danth avar						7.4	21.2		8.0		28.9		88.7		6.7		5.5		4	

DA: Depth-averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough: White capped or rougher

Water Quality Monitoring Results on 30 March 23 during Mid-Ebb Tide

Monitoring	Weather	Sea Condition	Sampling		Sampling Dep	oth (m)	Water Te	emperature (°C)	р	Н	Salin	ity (ppt)	DO Satur	ation (%)	Dissolved (mg/L		Turbidity(	(NTU)	Suspende (mg/	
Station	Condition		Time	(m)		,	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	21.3	21.3	8.0	8.0	27.1	27.2	91.6	91.3	6.9		1.1		4.1	i
					Sunace	1.0	21.2	21.0	8.0	0.0	27.2	21.2	90.9	31.5	6.9	6.9	1.0		3.8	i
C1	Misty	Moderate	19:09	8.8	Middle	4.4	21.3	21.3	8.0	8.0	27.2	27.5	91.6	91.4	6.9	0.0	1.1	1.3	3.5	3.4
01	iviloty	Moderate	10.00	0.0	Middle	4.4	21.2	21.0	8.0	0.0	27.7	27.0	91.1	01.1	6.9		1.1	1.0	3.2	J
					Bottom	7.8	21.1	21.2	7.8	7.9	30.4	30.3	92.5	92.1	6.9	6.9	1.7		2.6	ł
						7.8	21.2		8.0		30.1		91.7		6.8		1.8		3.0	
					Surface	1.0	21.2	21.2	8.0	8.0	30.5	30.3	83.8	83.9	6.2		2.3		3.0	ł
						1.0	21.2		8.0		30.1		84.0		6.3	6.2	2.3		2.7	ł
C2	Misty	Moderate	19:26	10.8	Middle	5.4	21.2	21.2	8.0	8.0	30.6	30.5	83.7	83.8	6.2		3.1	2.9	3.3	3.5
						5.4	21.2		8.0		30.3		83.9		6.2		3.0		3.7	1
					Bottom	9.8	21.2	21.2	8.0	8.0	30.6	30.5	83.9	83.9	6.2	6.2	3.3		4.0	1
						9.8	21.2		8.0		30.4		83.8		6.2		3.4		4.3	
					Surface	1.0	21.2	21.2	7.9	7.9	29.8	29.8	85.1	85.1	6.4	ł	2.5		2.7	ł
						1.0	21.1		7.9		29.7		85.1		6.4	6.4	2.4		2.9	1
M1	Misty	Calm	19:17	4.6	Middle	-	-	-	-	-	-	-	-	-	-		-	2.5	-	2.5
						-	- 04.0		7.0		-		-		- 0.4		-		-	1
					Bottom	3.6	21.2 21.2	21.2	7.9 7.9	7.9	29.9 29.8	29.9	85.2 85.1	85.2	6.4	6.4	2.6 2.5		2.0	1
				<u> </u>		1.0	21.2		7.9		29.8		90.4		6.8	<u> </u>	2.5		3.4	
					Surface	1.0	21.1	21.1	7.9	7.9	29.8	29.8	88.4	89.4	6.6		2.3		3.1	ł
						-	-		- 1.3		23.0		-		- 0.0	6.7	-		-	ł
M2	Misty	Calm	19:20	4.0	Middle	_	_	-	_	-		-	-	-			_	2.7	_	4.0
						3.0	21.1		7.8		29.1		93.0		7.0		3.1		4.9	l
					Bottom	3.0	21.1	21.1	7.9	7.9	29.8	29.5	89.2	91.1	6.7	6.9	3.1		4.5	ł
						1.0	21.1		7.9		28.8		90.9		6.8		1.7		2	i
					Surface	1.0	21.2	21.2	7.9	7.9	28.9	28.9	89.7	90.3	6.7		1.7		2	1
Mo	N 45 - 4	0-1	40:44	7.0	NAC-L-II-	3.5	21.1	04.4	7.8	7.0	29.3	00.0	90.8	00.5	6.8	6.8	2.1	0.0	2	۱ ۵
M3	Misty	Calm	19:14	7.0	Middle	3.5	21.1	21.1	7.9	7.9	29.1	29.2	90.1	90.5	6.8	1	2.1	2.0	3	2
					D-#	6.0	21.1	04.4	7.8	7.0	29.7	00.4	93.7	00.0	7.0		2.1		3	i
					Bottom	6.0	21.1	21.1	7.9	7.9	29.0	29.4	90.7	92.2	6.8	6.9	2.1		4	i '

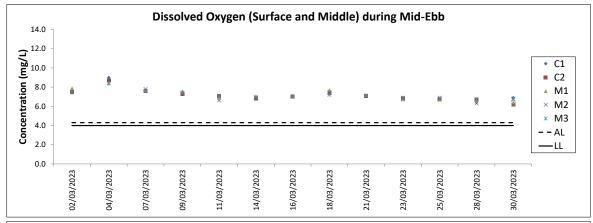
DA: Depth-averaged

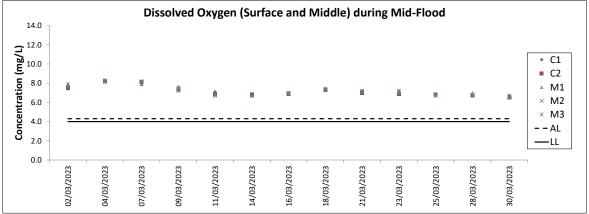
Water Quality Monitoring Results on 30 March 23 during Mid-Flood Tide

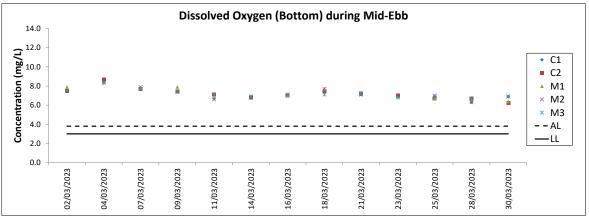
Monitoring	Weather	Sea Condition	Sampling	Water Depth	Sampling Dept	h (m)		emperature (°C)		рН	Salin	ity (ppt)	DO Satur	ration (%)	Dissolved (mg/L		Turbidity(	(NTU)	Suspende (mg/	
Station	Condition		Time	(m)		. ,	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	21.1	21.2	7.9	8.0	26.9	27.2	88.1	89.0	6.7		1.3		2.7	
					Sulface	1.0	21.2	21.2	8.0	0.0	27.4	21.2	89.9	09.0	6.8	6.7	1.3		3.1	
C1	Misty	Moderate	09:03	9.4	Middle	4.7	21.0	21.1	7.9	8.0	30.5	29.4	88.5	89.4	6.6	0.7	2.1	2.2	3.7	3.8
01	iviioty	Woderate	03.00	5.4	Wildale	4.7	21.2	21.1	8.0	0.0	28.2	25.4	90.3	03.4	6.8		2.1	2.2	3.3	0.0
					Bottom	8.4	21.0	21.1	7.9	7.9	30.6	30.4	89.3	89.9	6.7	6.7	3.1		4.8	
					Dottom	8.4	21.2	21.1	7.9	1.5	30.2	30.4	90.5	03.3	6.7	0.7	3.0		5.2	
					Surface	1.0	21.1	21.2	7.9	7.9	30.2	30.0	87.8	87.3	6.5		1.5		2.9	
					Odilacc	1.0	21.2	21.2	7.9	7.5	29.7	50.0	86.7	07.0	6.5	6.5	1.6		3.1	
C2	Misty	Moderate	08:47	8.0	Middle	4.0	21.0	21.1	7.9	7.9	30.6	30.4	88.4	87.8	6.6	0.0	1.8	1.7	3.4	3.7
		moderate	00	0.0	······································	4.0	21.2		7.9		30.1	00.1	87.2	07.0	6.5		1.7	•••	3.8	
					Bottom	7.0	20.9	21.1	7.9	7.9	30.7	30.4	89.6	88.7	6.7	6.6	1.9		4.8	
					20110111	7.0	21.2		7.9		30.1	00	87.7	00	6.5	0.0	1.9		4.4	
					Surface	1.0	20.9	21.0	7.8	7.9	29.6	29.5	90.0	89.3	6.8		2.1		2.1	
						1.0	21.1		7.9		29.4		88.5		6.6	6.7	2.1		2.5	
M1	Misty	Calm	08:52	4.2	Middle	-	-	-	-	-	-	-	-	_	-		-	2.2	-	2.6
						-	-		-		-		-		-		-		-	
					Bottom	3.2	20.9	21.0	7.7	7.8	29.8	29.7	93.7	91.6	7.0	6.9	2.3		2.8	
						3.2	21.0		7.8		29.5		89.4		6.7		2.3		3.0	
					Surface	1.0	21.0	21.1	7.8	7.9	29.3	29.3	89.7	89.7	6.7		2.4		3.5	
						1.0	21.1		7.9		29.3		89.7		6.7	6.7	2.3		3.1	
M2	Misty	Calm	08:55	4.6	Middle	-	-	-	-	-	-	-	-	_	-		-	3.0	-	3.8
						-	-		-		-		-		-		-		-	
					Bottom	3.6	20.9	21.0	7.7	7.8	29.9	29.7	92.7	92.7	7.0	7.0	3.7		4.0	
						3.6	21.1		7.9		29.4		92.7		6.9		3.7		4.5	
					Surface	1.0	21.2	21.2	7.9	8.0	29.9	29.9	87.2	86.4	6.5		2.4		3	
						1.0	21.2		8.0		29.9		85.6		6.4	6.5	2.3		3	
M3	Misty	Calm	08:58	7.2	Middle	3.6	21.1	21.2	7.9	7.9	30.3	30.2	87.9	87.2	6.6		2.6	2.7	4	4
						3.6	21.2		7.9		30.0		86.4		6.4		2.6		3	
					Bottom	6.2	20.9	21.1	7.8	7.9	30.4	30.2	90.6	88.8	6.8	6.7	3.3		4	
DA: Donth sugar						6.2	21.2		7.9		30.0		86.9		6.5		3.2		4	

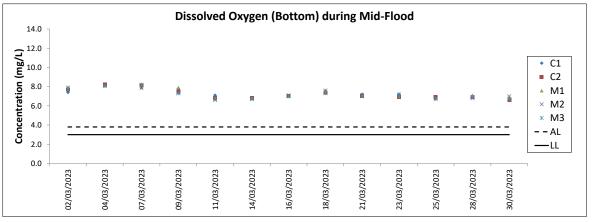
DA: Depth-averaged

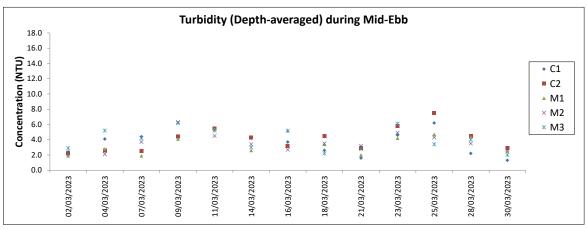
Calm: Small or no wave; Moderate: Between calm and rough; Rough: White capped or rougher

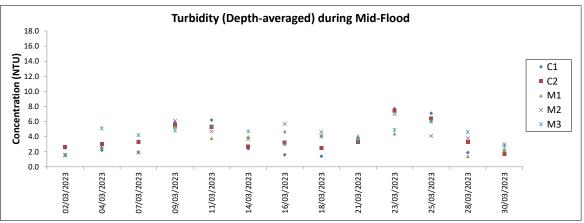










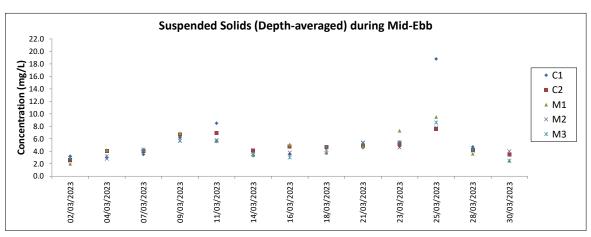


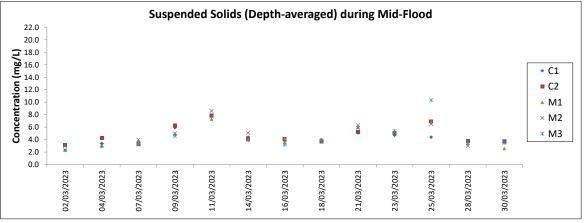
Note: The Action and Limit Level of turbidity can be referred to Table 2.3 of the monthly EM&A report.

Major site activities carried out during the reporting period are summarized in Section 1.4 of the monthly EM&A report.

Weather conditions during monitoring are presented in the data tables above.

QA/ QC requirements as stipulated in the EM&A Manual were carried out during measurement.





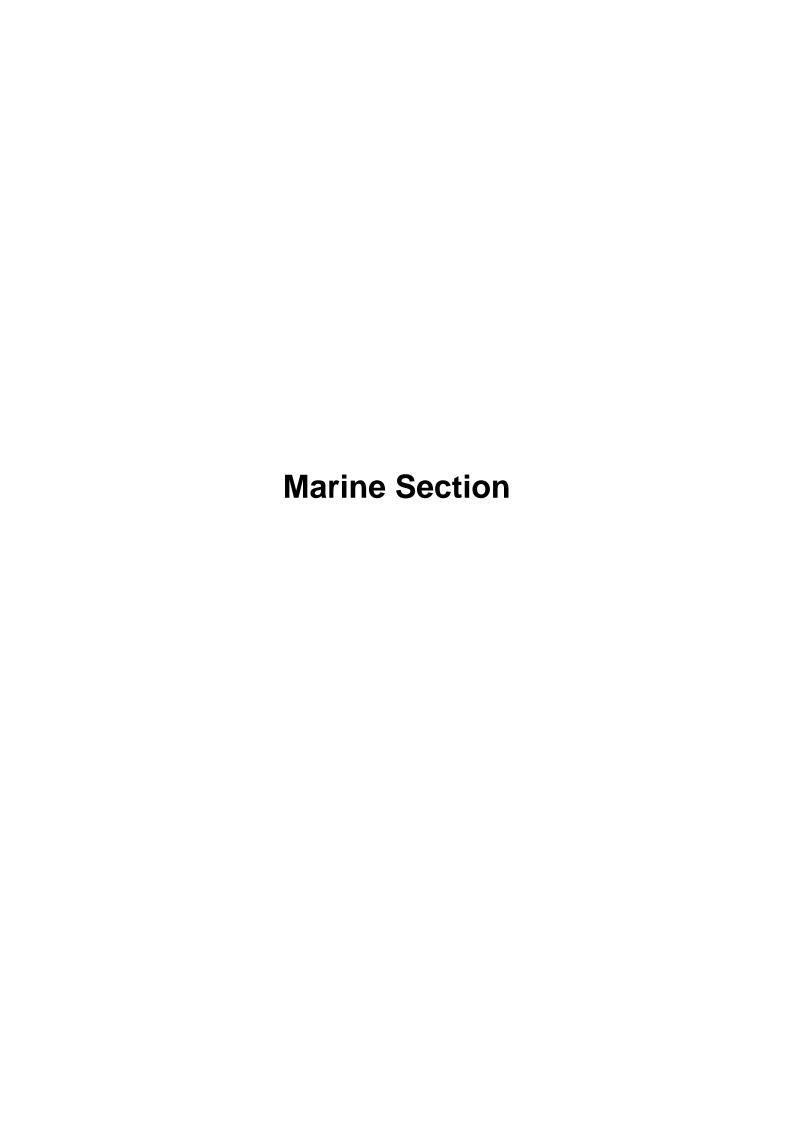
Note: The Action and Limit Level of suspended solids can be referred to Table 2.3 of the monthly EM&A report.

Major site activities carried out during the reporting period are summarized in Section 1.4 of the monthly EM&A report.

Weather conditions during monitoring are presented in the data tables above.

QA/QC requirements as stipulated in the EM&A Manual were carried out during measurement.

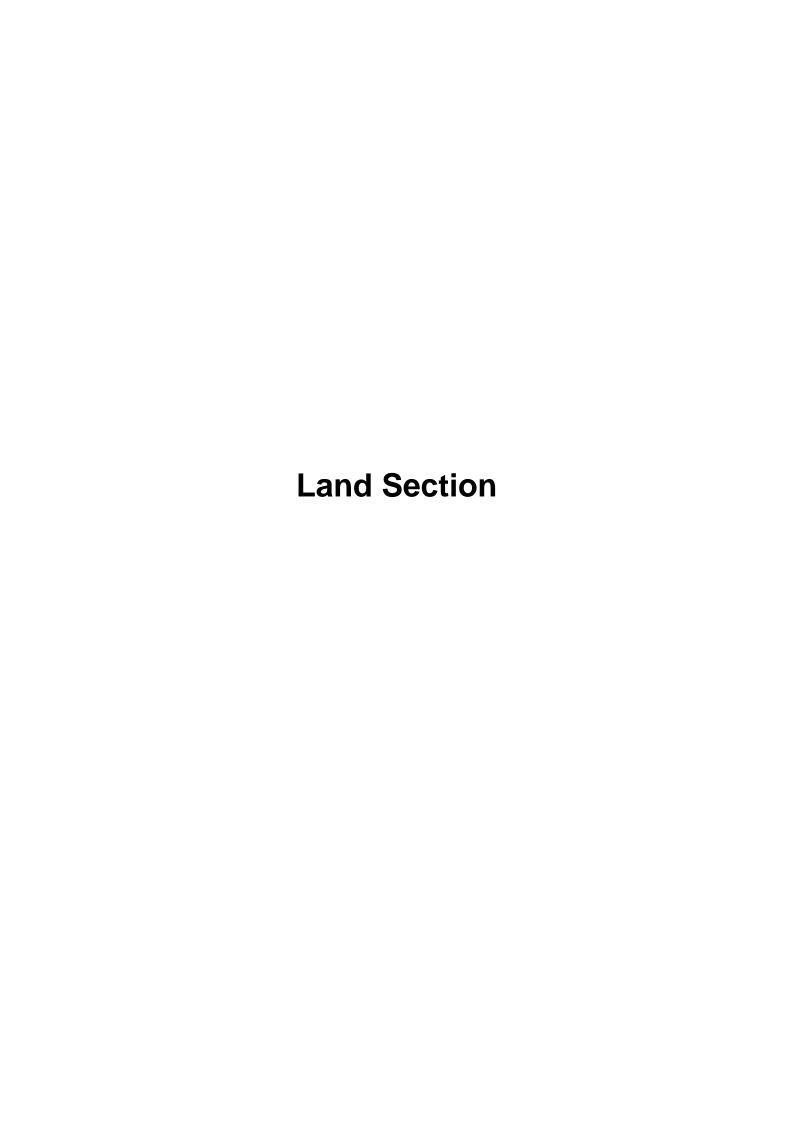
### **Appendix H. Waste Flow Table**



#### AAHK Supplemental Contract No. C19W10/01 Airport City Link - Marine Portion Monthly Waste Flow Table

		Actual Quar		C&D Materials (e:s) e.g. broken co	•	/ated waste)	Ac	tual Quantities	of Non-inert C&	D Waste (tonn	es)		
Month	Excavated Waste (tonnes)	(a) Total inert C&D material generated (a) = (b) + (c) + (d) + (e)	(b) Reused in contract	(c) Reused in other projects	(d) Sent to recycling company	(e) Disposed to public fill	(f) Recycled scrap metal	(g) Reused / recycled timber	(h) Chemical waste	(i) Other waste disposed to landfill	(j) Total non- inert C&D material generated (j) = (f) + (g) + (h) + (i)	(k) Total recyclable waste (k) = (b) + (c) + (d) + (f) + (g)	(I) Total construction waste generated (I) = (a) + (j)
Apr-22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
May-22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jun-22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jul-22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug-22	2591.67	2591.67	0.00	0.00	1584.00	1007.67	0.00	0.00	0.00	0.00	0.00	1584.00	2591.67
Sep-22	1340.00	1340.00	0.00	0.00	1340.00	0.00	0.00	0.00	0.36	0.00	0.36	1340.00	1340.36
Oct-22	1385.00	1385.00	0.00	0.00	1385.00	0.00	0.00	0.00	0.00	0.00	0.00	1385.00	1385.00
Nov-22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dec-22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jan-23	1814.47	1814.47	0.00	0.00	1814.47	0.00	0.00	0.00	0.36	0.00	0.36	1814.47	1814.83
Feb-23	761.45	761.45	0.00	0.00	0.00	761.45	0.00	0.00	0.00	0.00	0.00	0.00	761.45
Mar-23	939.46	939.46	0.00	0.00	939.46	0.00	0.00	0.00	0.25	0.00	0.25	939.46	939.71
Total	8832.05	8832.05	0.00	0.00	7062.93	1769.12	0.00	0.00	0.97	0.00	0.97	7062.93	8833.02

<sup>\*</sup>Chemical waste, Wasted oil density 0.9kg/L



### **C21W18 Monthly Waste Flow Table**

		_	ties of Inert Con Generated Month	struction Waste		Actual Quanti	ties of Non-inert	Construction Wast	e Generated Month	ly
	Month	(a)=(b)+(c)	(b)	(c)	Recycled	Recycled	Recycled	Recycled		General Refuse
		Total Quantity Generated	Reused in other Projects	Disposed of as Public Fill	Timber	Metals	Paper/ cardboard	Plastic	Chemical Waste	disposed of at Landfill
Year		(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)
	Jan	-	-	-	-	-	-	-	-	-
	Feb	754.38	0	754.38	0	0.017	0.129	0.038	0	22.27
	Mar	1309.33	0	1309.33	0	0.014	0.087	0.024	0	8.82
2023	Apr									
	May									
	Jun									
	Sub-total	2063.71	0	2063.71	0	0.031	0.216	0.062	0	31.09
Γ	Total	2063.71	0.00	2063.71	0.00	0.03	0.22	0.06	0.00	31.09

## **Appendix I. Status of Environmental Permits and Licences**

Table I.1: Summary of Environmental Licenses and Permits - Marine Section (Mar 2023)

Type of Licence / Permit	Reference No.	Valid From	Valid Until	Remark
Environmental Permit	EP-581/2020	5 Oct 2020	End of Project	N/A
Billing Account for Disposal of Construction Waste	7043487	18 Mar 2022	End of Project	N/A
Construction Dust Notification under APCO	477560	10 Mar 2022	N/A	N/A
Construction Noise Permit	GW-RS0867-22	22 Oct 2022	20 Apr 2023	Superseded by GW- RS0246-23 on 28 Mar 2023
	GW-RS0106-23	16 Feb 2023	14 Aug 2023	N/A
	GW-RS0246-23	28 Mar 2023	27 Sep 2023	N/A
Chemical Waste Producer	5213-951-G2961-01	19 Apr 2022	End of Project	N/A
Marine Dumping (Type 1 – Open Sea Disposal)	EP/MD/23-080	30 Dec 2022	31 May 2023	N/A
Marine Dumping (Type 1 – open sea Disposal) (Dedicated Site)	EP/MD/23-099	06 Feb 2023	05 Mar 2023	N/A

Table I.2: Summary of Environmental Licenses and Permits - Land Section (Mar 2023)

Type of Licence / Permit	Reference No.	Valid From	Valid Until	Remark
Environmental Permit	EP-581/2020	5 Oct 2020	End of Project	N/A
Billing Account for Disposal of Construction Waste	7044291	27 Jun 2022	End of Project	N/A
Construction Dust Notification under APCO	480843	10 Jun 2022	N/A	N/A
Construction Noise Permit	GW-RS0040-23	30 Jan 2023	30 Apr 2023	N/A
Construction Noise Fermit	GW-RS0186-23	10 Mar 2023	9 Sep 2023	N/A
Chemical Waste Producer	5213-951-C1169-68	23 Jun 2022	End of Project	N/A
Water Discharge License	WT00042879-2022	4 Jan 2023	31 Jan 2028	N/A
water bischarge License	WT00042680-2022	9 Jan 2023	31 Jan 2028	N/A

# **Appendix J. Environmental Mitigation Measures Implementation Status**

#### **Environmental Mitigation Measures Implementation Status (Mar 2023)**

Recommended Mitigation Measures for Air Quality Impact

PP Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^ (Marine Section)	Mitigation Measures Implemented? ^ (Land Section)	
		<ul> <li>Relevant control measures as required in the Air Pollution Control (Construction Dust) Regulation shall be implemented to minimise dust impact.</li> </ul>	N/A	Yes	
		Skip hoist for material transport should be totally enclosed by impervious sheeting.	N/A	Yes	
		<ul> <li>All dusty materials should be sprayed with water prior to any loading, unloading or transfer operation to maintain the dusty materials wet.</li> </ul>	N/A	Yes	
		<ul> <li>All stockpiles of aggregate or spoil should be covered and/or water applied.</li> </ul>	N/A	Yes	
S6.1.1	S4.2.1	<ul> <li>The height from which excavated materials are dropped should be controlled to a minimum practical height to limit fugitive dust generation from unloading.</li> </ul>	Yes	Yes	
			<ul> <li>Immediately before leaving a construction site, every vehicle shall be washed to remove any dusty materials from its body and wheels.</li> </ul>	N/A	Rem
		• The load of dusty materials carried by a vehicle leaving a construction site should be covered entirely by clean impervious sheeting to ensure dust materials do not leak from the vehicle.	N/A	Yes	
		<ul> <li>All NRMMs operated on-site are approved or exempted (as the case may be) and affixed with the requisite approval/exemption labels under the Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation, or are in the process of application for such approval/exemption during the relevant grace period.</li> </ul>	Rem	Obs	
Recomm	ended Miti	gation Measures for Noise Impact			
PP Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^ (Marine Section)	Mitigation Measures Implemented? ^ (Land Section)	
		Only well-maintained plant should be operated on-site and plant should be serviced regularly.	Yes	Yes	
S6.2.1	S5.2.1	Silencers or mufflers on construction plant should be utilised.	Yes	N/A	
		Mobile plant should be sited as far away from sensitive uses as possible.	Yes	Yes	

		<ul> <li>Machines and plant that may be in intermittent use should be shut down between works periods or should be throttled down to a minimum.</li> </ul>	Yes	Yes
		<ul> <li>Plant known to emit noise strongly in one direction should, where possible, be orientated so that noise is directed away from the nearby sensitive uses.</li> </ul>	Yes	Yes
		<ul> <li>Material stockpiles and other structures such as site hoarding should be effectively utilised to screen noise from on-site construction activities.</li> </ul>	N/A	N/A
		<ul> <li>Noisy construction activities such as road breaking, should be scheduled to less sensitive hours during the day, e.g. midday.</li> </ul>	Yes	Yes
ecomm	ended Miti	gation Measures for Water Quality Impact		
PP Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^ (Marine Section)	Mitigation Measures Implemented? ^ (Land Section)
S6.3.1	S6.2.1	<ul> <li>Steel pile casing and watertight cofferdam should be installed at the pier site and seawater trapped inside the casing and cofferdam should be pumped out to generate a dry working environment prior to carrying out sediment excavation.</li> </ul>	Yes	N/A
S6.3.1	S6.2.1	<ul> <li>During dewatering of the cofferdam, appropriate desilting or sedimentation device should be provided on site for treatment before discharge. The Contractor should ensure discharge water from the sedimentation tank meeting the WPCO / TM-DSS requirements before discharge.</li> </ul>	Yes	N/A
\$6.3.1- \$6.3.2	S6.2.1	• To minimise any adverse water quality impact during the excavation of sediment, a funnel should be placed at the top of pile casing during excavation and silt curtains should be deployed to completely enclose the cofferdam and steel pile casing. Silt curtains should be deployed prior to installation of temporary platform on barge, cofferdam and steel pile casing. Silt curtains should only be removed after completion of pile caps and piers. The Contractor should be responsible for the design, installation and maintenance of the silt curtain to minimise the impacts on water quality. The design and specification of the silt curtains should be submitted by the Contractor to the Project Manager or Project Manager's Representative of AAHK for approval. The marine bridge piers should not be constructed at the same time to avoid adverse hydrodynamic impact due to flow blockage increase during the interim construction stages. All vessels should be sized such that adequate clearance is maintained between vessels and the sea bed at all states of the tide to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash.	Obs/ Rem	N/A
S6.3.1	S6.2.1	<ul> <li>For in-situ construction method, concrete would be delivered from existing concrete batching plants off-site to avoid on site concrete batching activity. During the in-situ bridge deck concreting, the concrete should be pumped or lifted inside an enclosed container for concreting the deck. Tarpaulin plastic sheet should be mounted at the bottom of the temporary working platform for concreting to prevent concrete from falling to the sea.</li> </ul>	N/A	N/A

PP Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^ (Marine Section)	Mitigation Measures Implemented? ^ (Land Section)
S6.3.1	S6.2.1	<ul> <li>The marine works of the Project should be proactively planned and coordinated to avoid any concurrent marine works below seawater level with those of ITT-BVB to minimise cumulative water quality impact during construction phase.</li> </ul>	Yes	N/A
S6.3.1	S6.2.1	<ul> <li>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 or 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 on site boundaries where 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.</li> </ul>	Yes	Obs/ Rem
S6.3.1	S6.2.1	<ul> <li>Silt removal facilities, channels and manholes should be maintained and the deposited silt and grit should be removed regularly, at the onset of and after each rainstorm to prevent local flooding. Before disposal at the public fill reception facilities, the deposited silt and grit should be solicited in such a way that it can be contained and delivered by dump truck instead of tanker truck. Any practical options for the diversion and re-alignment of drainage should comply with both engineering and environmental requirements in order to provide adequate hydraulic capacity of all drains.</li> </ul>	N/A	Yes
S6.3.1	S6.2.1	• Construction works should be programmed to minimise soil excavation works in rainy seasons (April to September). If excavation in soil cannot be avoided in these months or at any time of year when rainstorms are likely, for the purpose of preventing soil erosion, temporary 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 runoff from washing across exposed soil surfaces. Arrangements should always be in place in such a way that adequate surface protection measures can be safely carried out well before the arrival of a rainstorm.	N/A	Yes
S6.3.1	S6.2.1	<ul> <li>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.</li> </ul>	N/A	N/A
S6.3.1	S6.2.1	<ul> <li>Measures should be taken to minimise the ingress of rainwater into trenches. If excavation of trenches in wet seasons 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.</li> </ul>	N/A	Rem
S6.3.1	S6.2.1	<ul> <li>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</li> </ul>	N/A	Rem

PP Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^ (Marine Section)	Mitigation Measures Implemented? ^ (Land Section)
		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.		
		<ul> <li>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. Also, the following mitigation measures related to the transportation of the sediment should be implemented to minimise the potential water quality impact:</li> </ul>		
		<ul> <li>Loading of the excavated marine-based sediment to the barge shall be controlled to avoid splashing and overflowing of the sediment slurry to the surrounding water/ storm drains;</li> </ul>		
S6.3.1	S6.2.1	The barge/ dump truck transporting the excavated marine-based sediment/ land-based sediment 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; and	Yes	Yes
		<ul> <li>Monitoring of the barge/ dump truck loading shall be conducted to ensure that loss of material does not take place during transportation. Transport barges or vessels/ dump truck shall be equipped with automatic self-monitoring devices as specified by the Director of Environmental Protection (DEP).</li> </ul>		
S6.3.1	S6.2.1	<ul> <li>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.</li> </ul>	Yes	Rem
S6.3.1	S6.2.1	<ul> <li>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 backfall to reduce vehicle tracking of soil and to prevent site run-off from entering public road drains.</li> </ul>	N/A	Yes
S6.3.1	S6.2.1	• There is a need to apply to EPD for a discharge licence for discharge of effluent from the construction site under the WPCO. The discharge quality must meet the requirements specified in the discharge licence. All the runoff and wastewater generated from the works areas should be treated so that it satisfies all the standards listed in the TM-DSS. The beneficial uses of the treated effluent for other onsite activities such as dust suppression, wheel washing and general cleaning etc., can minimise water consumption and reduce the effluent discharge volume. If monitoring of the treated effluent quality from the works areas is required during the construction phase of the Project, the monitoring should be carried out in accordance with the relevant WPCO license.	N/A	Rem
S6.3.1	S6.2.1	<ul> <li>No discharge of sewage to the storm water system and marine water will be allowed. Sufficient chemical toilets should be provided in the works areas to handle the sewage generated from the</li> </ul>	Yes	Yes

PP Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^ (Marine Section)	Mitigation Measures Implemented? ^ (Land Section)
		construction workforce. A licensed waste collector should be deployed to clean the chemical toilets on a regular basis.		
S6.3.1	S6.2.1	<ul> <li>Notices should be posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the surrounding environment. Regular environmental audit of the construction site will provide an effective control of any malpractices and can encourage continual improvement of environmental performance on site. It is anticipated that sewage generation during the construction phase of the project would not cause water pollution problem after undertaking all required measures.</li> </ul>	Yes	Yes
S6.3.1	S6.2.1	<ul> <li>Contractor must register as a chemical waste producer if chemical wastes would be produced from the construction activities. The Waste Disposal Ordinance (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.</li> </ul>	Yes	Yes
S6.3.1	S6.2.1	<ul> <li>Any service shop and maintenance facilities should be located on hard standings within a bonded area, and sumps 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.</li> </ul>	Yes	Yes
S6.3.1	S6.2.1	<ul> <li>Suitable containers should be used to hold the chemical wastes to avoid leakage or spillage during storage, handling and transport. Chemical waste containers should be suitably labelled, to notify and warn the personnel who are handling the wastes, to avoid accidents. Storage area should be selected at a safe location on site and adequate space should be allocated to the storage area.</li> </ul>	Obs/ Rem	Rem
Recomm	ended Miti	gation Measures for Waste Management		
PP Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^ (Marine Section)	Mitigation Measures Implemented? ^ (Land Section)
\$6.4.1- \$6.4.2	07.04	<ul> <li>Good Site Practices:</li> <li>Nomination of approved personnel, such as a site manager, to be responsible for implementation of good site practices, arrangements for waste collection and effective disposal to an appropriate facility.</li> </ul>	Yes	Yes
	S7.2.1	<ul> <li>Training of site personnel in site cleanliness, concepts of waste reduction, reuse and recycling, proper waste management and chemical waste handling procedures.</li> </ul>	Yes	Yes
		Provision of sufficient waste reception/ disposal points, and regular collection of waste.	Yes	Yes

PP Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^ (Marine Section)	Mitigation Measures Implemented? ^ (Land Section)	
		<ul> <li>Adoption of appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers.</li> </ul>	Yes	Yes	
		Provision of regular cleaning and maintenance programme for drainage systems and sumps.	Yes	Yes	
		<ul> <li>Adoption of a recording system for the amount of wastes generated, recycled and disposed (including the disposal sites).</li> </ul>	Yes	Yes	
		<ul> <li>Preparation of Waste Management Plan (WMP), as part of the Environmental Management Plan (EMP).</li> </ul>	Yes	Yes	
		Waste Reduction Measures:  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.	Yes	Yes	
	S7.2.1		<ul> <li>Provide separate labelled bins to segregate recyclable waste such as aluminium cans from other general refuse generated by the work force, and to encourage collection by individual collectors.</li> </ul>	N/A	N/A
		Recycle any unused chemicals or those with remaining functional capacity.	N/A	N/A	
S6.4.1		Maximise the use of reusable steel formwork to reduce the amount of C&D materials.	Yes	N/A	
		<ul> <li>Adopt proper storage and site practices to minimise the potential for damage to, or contamination of construction materials.</li> </ul>	Yes	Yes	
		<ul> <li>Plan the delivery and stock of construction materials carefully to minimise the amount of waste generated.</li> </ul>	Yes	Yes	
		<ul> <li>Minimise over ordering and wastage through careful planning during purchasing of construction materials.</li> </ul>	Yes	Yes	
S6.4.1	S7.2.1	<ul> <li><u>C&amp;D materials:</u></li> <li>The C&amp;D materials generated should be sorted on-site into inert C&amp;D materials (that is, public fill) and non-inert (C&amp;D waste).</li> </ul>	Yes	Yes	
S6.4.1	S7.2.1	<ul> <li>To minimise the impact resulting from collection and transportation of C&amp;D materials as far as practicable, C&amp;D waste, such as wood, plastic, steel and other metals should be reused or recycled and, as a last resort, disposed to landfill.</li> </ul>	N/A	N/A	
S6.4.1	S7.2.1	<ul> <li>Proper handling and storage of waste such as soil by means of covers and/or water spraying system to minimise the potential environmental impact and to prevent materials from wind-blown or being washed away.</li> </ul>	Yes	Yes	
20. 1. 1	0	Covering materials during heavy rainfall.	N/A	N/A	
		Locating stockpiles to minimise potential visual impacts.	Yes	Yes	

PP Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^ (Marine Section)	Mitigation Measures Implemented? ^ (Land Section)
		Minimising land intake of stockpile areas as far as possible.	N/A	Yes
		<ul> <li>Adopting GPS or equivalent system for tracking and monitoring of all dump trucks engaged for the Project in recording their travel routings and parking locations to prohibit illegal dumping and landfilling of C&amp;D materials.</li> </ul>	N/A	N/A
		<ul> <li>Keeping record and analysis of data collected by GPS or equivalent system related to travel routings and parking locations of dump trucks engaged on site.</li> </ul>	Yes	N/A
		General Refuse:  • General refuse should be stored in covered bins or compaction units separately from C&D materials. A reputable waste collector should be employed by the Contractor to remove general refuse from the site regularly, separately from C&D materials. An enclosed and covered area is preferred to reduce the occurrence of "wind blown" light materials.	Yes	Yes
S6.4.1	S7.2.1	<ul> <li>The recyclable component of general refuse, such as aluminium cans, paper and cleansed plastic containers shall be separated from other waste. Provision and collection of recycling bins for different types of recyclable waste shall be set up by the Contractor. The Contractor shall also be responsible for arranging recycling companies to collect these materials.</li> </ul>	N/A	N/A
		<ul> <li>The Contractor should carry out an education programme for workers in avoiding, reducing, reusing and recycling of materials generation. Posters and leaflets advising on the use of the bins should also be provided in the site as reminders.</li> </ul>	N/A	Yes
\$6.4.1- \$6.4.2		Chemical Waste:  • If chemical wastes were to be produced, the Contractor would be required to register with the EPD as a Chemical Waste Producer, and to follow the guidelines stated in the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.	Yes	Yes
	S7.2.1	<ul> <li>Appropriate containers with proper labels should be used for storage of chemical wastes. Chemical wastes should be collected and delivered to designated outlet by a licensed collector. Chemical wastes (e.g. spent lubricant oil) should be recycled at an appropriate facility as far as possible, while the chemical waste that cannot be recycled should be disposed of at either the CWTC, or another licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.</li> </ul>	Yes	Yes
		<ul> <li>Any unused chemicals or those with remaining functional capacity should be collected for reuse as far as practicable.</li> </ul>	Yes	N/A
		• Trip ticket system shall be implemented to prevent illegal dumping in accordance with the "Trip Ticket System for Disposal of Construction and Demolition Materials'.	Yes	Yes
		Sediment:	Yes	Yes

PP Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^ (Marine Section)	Mitigation Measures Implemented? ^ (Land Section)
		• The sediment should be excavated, handled, treated, transported and/or disposed of in a manner that would minimise adverse environmental impacts.		
		<ul> <li>Relevant ordinances (such as Waste Disposal Ordinance, Air Pollution Ordinance (Construction Dust)</li> <li>Regulation and Water Pollution Control Ordinance) shall be complied with during the excavation and handling of the sediment.</li> </ul>	Yes	Yes
S6.4.1 & S6.4.3	S7.2.1	• The temporary stockpiling area should be placed within earth bunds or sand bags to prevent leachate from entering the ground, nearby drains and surrounding water bodies. The temporary stockpiling area should be completely paved 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, treated and discharged according to the Water Pollution Control Ordinance (WPCO). In order to minimise the exposure to contaminated materials, 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.	Yes	Rem
S6.4.1	S7.2.1	<ul> <li>For off-site disposal, the basic requirements and procedures specified under PNAP No. 252 (ADV-21) shall be followed. Marine Fill Committee (MFC) of CEDD is managing the disposal facilities in Hong Kong for the excavated sediment, while EPD is the authority of issuing marine dumping permit under the Dumping at Sea Ordinance (DASO).</li> </ul>	N/A	N/A
\$6.4.1, 6.4.3	\$7.2.1	<ul> <li>For the purpose of site allocation and application of marine dumping permit and if considered necessary by Dumping at Sea Ordinance (DASO) Team/EPD, separate submissions (e.g. SSTP/SQR) shall be submitted to DASO team/EPD for agreement under DASO. Additional SI works, based on the SSTP, shall then be carried out in order to confirm the disposal arrangements of the excavated sediment. A Sediment Quality Report (SQR), reporting the chemical and biological screening results and the estimated quantities of sediment under different disposal options, shall then be submitted to DASO team/EPD for agreement under DASO.</li> </ul>	N/A	N/A
		<ul> <li>To ensure disposal space is allocated for the Project, the Project Proponent should be responsible for obtaining agreement from MFC on the allocation of the disposal site. The contractor(s), on the other hand, should be responsible for the application of the marine dumping permit under DASO from EPD for the sediment disposal.</li> </ul>	Yes	N/A
		<ul> <li>The excavated sediments is expected to be loaded onto the barge and transported to the designated disposal sites allocated by MFC. The excavated sediment would be disposed of according to its determined disposal options and PNAP No. 252 (ADV-21).</li> </ul>	N/A	N/A
S6.4.1	S7.2.1	<ul> <li>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 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 area should be completely paved in order to avoid</li> </ul>	Yes	Yes

PP Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^ (Marine Section)	Mitigation Measures Implemented? ^ (Land Section)
		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).		
		<ul> <li>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/ dump truck shall be controlled to avoid splashing and overflowing of the sediment slurry to the surrounding water/ storm drains.</li> </ul>	Yes	Yes
		<ul> <li>The barge/ dump truck 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/ dump truck loading shall be conducted to ensure that loss of material does not take place during transportation. Transport barges or vessels/ dump truck shall be equipped with automatic self- monitoring devices as specified by the DEP.</li> </ul>	Yes	N/A
S6.4.1	S7.2.1	Potential Floating Refuse:  Proper management and education should be given to construction site workers such that accidental release or intentional disposal would be avoided. The refuse should be stored in enclosed bin to avoid adverse impacts to the surroundings including marine environment. Regular checking should also be carried out to ensure that the refuse is stored properly.	Yes	N/A
ecomm	ended Miti	gation Measures for Marine Ecological Impact		
PP Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^ (Marine Section)	Mitigation Measures Implemented? ^ (Land Section)
-	-	No underwater percussive piling shall be conducted in this Project	Yes	N/A
S6.5.1	S8.2.1	<ul> <li>Based upon a precautionary approach, a speed limit of 10 knots should be strictly enforced on all construction-related vessels.</li> </ul>	Yes	N/A
S6.5.1	S8.2.1	<ul> <li>Good site practices, guidelines and mitigation measures detailed in Water Quality Sections 6.3.1 of the Project Profile should be adopted to further alleviate water quality impacts.</li> </ul>	Yes	N/A

Recommended Mitigation Measures for Landscape and Visual Impact

PP Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^ (Marine Section)	Mitigation Measures Implemented? ^ (Land Section)
S6.6.1	S9.3.1	All affected trees will be felled and compensated, no transplantation is required.	N/A	Yes
S6.6.1	S9.3.1	<ul> <li>Optimising construction activities, e.g. minimising extent of temporary works area, installing site hoardings and minimising illumination on non-target areas.</li> </ul>	Yes	Yes
S6.6.1	S9.3.1	Minimise construction periods where possible.	Yes	Yes
S6.6.1	S9.3.1	Early establishment of planting areas as far as appropriate.	N/A	Yes
S6.6.1	S9.3.1	Erection of decorative mesh screen or construction hoardings.	N/A	N/A
S6.6.1	S9.3.1	Control of night-time lighting.	N/A	N/A
S6.6.1	S9.3.1	Temporary vertical greening, screen / buffer at-grade planting to soften the engineering structure of construction works.	N/A	N/A
S6.6.1	S9.3.1	<ul> <li>Tree preservation in accordance with Development Bureau Technical Circular (Works) No. 4/2020 (ref: DEVB(GLTM) 200/2/1/1).</li> </ul>	N/A	Yes
S6.6.1	S9.3.1	Proposed tree felling / tree compensation.	N/A	Yes
Others				
PP Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^ (Marine Section)	Mitigation Measures Implemented? ^ (Land Section)
-	-	<ul> <li>A copy of the valid Environmental Permit shall be displayed conspicuously on the Project site(s) at all vehicular site entrances/exits or at a convenient location for public's information at all times. The most updated information about the Permit, including any amended Permit, shall be displayed at such locations.</li> <li>If the Permit Holder surrenders a part or whole of the Permit, the notice he send to the Director shall also be displayed at the same locations as the original Permit. The suspended, varied or cancelled Permit shall be removed from display at the Project site(s).</li> </ul>	Yes	Rem
-	-	The required licences should be obtained by the Contractor (including CNP (if any), WPCO licence, etc.	N/A	Yes

#### Notes:

Yes = Implemented where applicable

Obs/Rem = Observations or reminders were issued, and items were rectified

N/A = Not applicable to the construction works implemented during the reporting period

^ Checked by ET through site inspection and record provided by the Contractor