



Airport City Link

Monthly EM&A Report for October 2022

November 2022

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Airport Authority Hong Kong

Airport City Link

Monthly EM&A Report for October 2022

November 2022

**This Submission of Construction Phase Monthly Environmental
Monitoring and Audit (EM&A) Report for October 2022**

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
Environmental Team Leader (ETL)
Mott MacDonald Hong Kong Limited

Date

14 November 2022

Your Ref: -
Our Ref: 60664934/C/FYW2211141

By Email

Airport Authority Hong Kong
HKIA Tower, 1 Sky Plaza Road,
Hong Kong International Airport,
Lantau, Hong Kong

Attn: Alan Chan (Manager, Civil)

14 November 2022

Dear Sir,

**Contract C21C02 – Independent Environmental Checker Consultancy Services for Airport
City Link
Monthly Environmental and Audit (EM&A) Report for October 2022**

Reference is made to the Environmental Team's submission of Monthly EM&A Report for October 2022 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 14 November 2022.

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 tentatively commences in December 2022.

This is the 3rd 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 October 2022.

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

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	12
Weekly environmental site inspections	4

Breaches of Action and Limit Levels

Water Quality

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

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

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 SKY CITY, 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 tentatively commences in December 2022.

This is the 3rd Monthly EM&A report summarising the key findings of the construction phase EM&A programme from 1 to 31 October 2022 (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) (Mott MacDonald Hong Kong Limited)	Environmental Team Leader	Thomas Chan	2828 5967
	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 (Gammon Engineering & Construction Company Limited)	Senior Project Manager	Brian Ho	9041 7535
	Environmental Officer	Elena Lai	6841 3324
Main Contractor – Land Section (China State Construction Engineering (HK) Ltd.)	Project Manager	Kingsley Chiang	9424 8437
	Environmental Officer	Denzel Chan	6223 5374

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 tentatively commences in December 2022.

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

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 mid-ebb 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 ⁽¹⁾	Impact Station	812629	819845
M3 ⁽²⁾	Impact Station	812586	820069
C1	Control Station - West	812419	820670
C2	Control Station - East	813072	820595

Notes:

1. 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.

2. 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. Ebb tide water quality monitoring on 18 October 2022 was cancelled due to Strong Wing Signal No. 3 in force. Also, on the same day, flood tide water quality monitoring was cancelled due to safety concern.

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)	2

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 AND	17.4 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 AND	16.3 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 DO and turbidity obtained during the reporting period were within the corresponding Action and Limit Levels. For SS, one result triggered the Action Level.

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
8 Oct 2022	SS	M2	Ebb tide	Action Level

As informed by the contractor, construction activities were only conducted at Pier 4, 6 and 8, no construction activity was carried out at other piers during the ebb tide. No discharge and spillage incidents were recorded on 8 Oct 2022. No sediment plume and muddy condition was observed in the vicinity during the monitoring. Furthermore, based on the daily visual inspection checklist and photo record for silt curtains provided by the contractor, it was shown that the mitigation measures for water quality were properly implemented. No exceedance of SS was found on 8 Oct 2022 at flood tide for the same construction activities. In addition, during the ebb tide monitoring, impact station M2 was located at upstream while impact station M1 was located at downstream and closer to the project area. However, no exceedance was recorded at impact station M1 during the concerned period.

With regards to the above findings, it was concluded that the exceedance was not related to the Project. However, Gammon environmental team and operation team will keep monitoring the water quality and mitigation measures will be implemented when necessary to reduce the water quality impacts.

2.5 Conclusion

The water quality monitoring results for DO and turbidity obtained during the reporting period were within the corresponding Action and Limit Levels. For SS, one result triggered the Action Level. After the investigation, it was concluded that the exceedance was not related to the Project

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 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 Contractor together with the appropriate recommended mitigation measures where necessary.

During the reporting period, site inspections were carried out on 5, 11, 19 and 25 October 2022 for marine section. Joint IEC site inspection for marine section was carried out on 11 October 2022.

Monthly landscape and visual site audit was carried out on 11 October 2022.

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 Section			
Inspection Date	Key Observations / Reminders	Recommendations / Actions	Close-Out Date
11 Oct 2022	General refuse was observed trapped in steel pile floating on sea.	The Contractor should collect and dispose the refuse and prevent any refuse from getting into sea water.	19 Oct 2022
19 Oct 2022	No NRMM label was displayed on the regulated machinery.	The Contractor should affix valid NRMM label on the machinery operated on-site	25 Oct 2022
25 Oct 2022	General refuse was observed at the temporary access platform at Pier 5.	The Contractor should provide regular cleaning of refuse and debris to prevent any materials from getting into sea water.	On-going
25 Oct 2022	NRMM label displayed on the generator was faded (Reminder).	The Contractor was reminded to replace the faded NRMM label.	25 Oct 2022

3.2 Advice on the Solid and Liquid Waste Management Status

The Contractor was registered as a chemical waste producer 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 Contractor was 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 is 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 Contractor 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 Contractor where actions were taken by the Contractor to rectify the identified issues.

3.4 Summary of Exceedance of the Environmental Quality Performance Limit

Water Quality

The water quality monitoring results for DO and turbidity obtained during the reporting period were within the corresponding Action and Limit Levels. For SS, one result triggered the Action Level. After the investigation, it was concluded that the exceedance was not related to the Project

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 (Oct 2022)	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 Contractor, the major construction activities for the next reporting period (November 2022) are summarized in **Table 4.1**.

Table 4.1: Construction Activities for the Next Reporting Period

Marine Section	
Period	Description of Activities
Nov 2022	<ul style="list-style-type: none">Plant mobilization and material delivery for marine bored piling worksMarine bored piling works

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 DO and turbidity obtained during the reporting period were within the corresponding Action and Limit Levels. For SS, one result triggered the Action Level. After the investigation, it was concluded that the exceedance was not related to the Project.

Environmental Site Inspections

Environmental site inspections were carried out 4 times during the reporting period. Recommendations on remedial actions were given to the Contractor 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

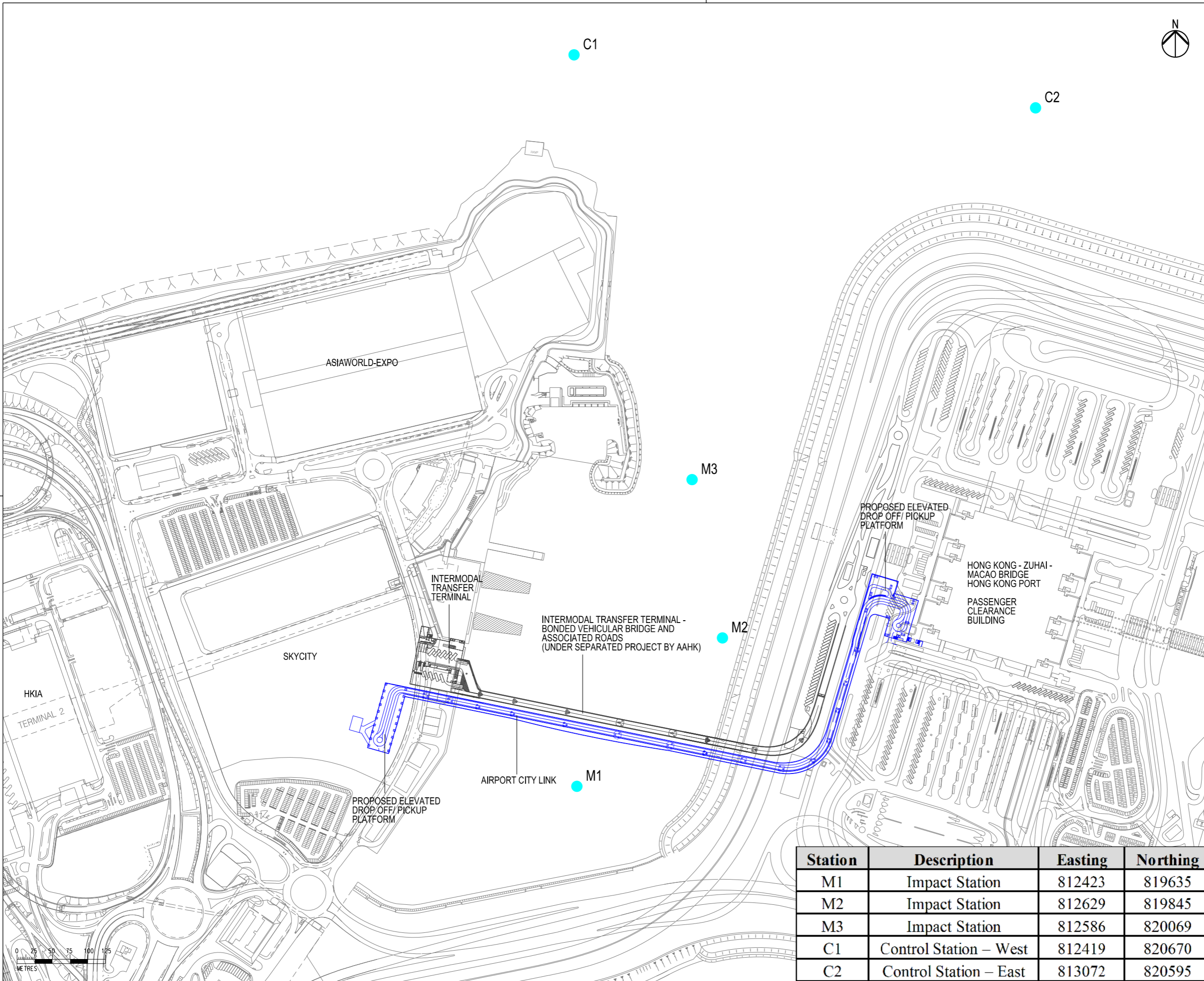
There was no reporting change during the reporting period.

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



LEGEND
 PROPOSED ALIGNMENT
 WATER QUALITY MONITORING STATION

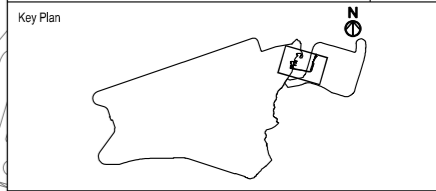
Rev.	Date	Description	Checked



Hong Kong International Airport

Consultant
 MOTT MACDONALD

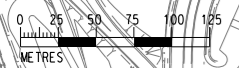
Design Supervisor	
Checkers	
Authorised Representative	



Title
LOCATION OF WATER QUALITY MONITORING STATIONS

Station	Description	Easting	Northing
M1	Impact Station	812423	819635
M2	Impact Station	812629	819845
M3	Impact Station	812586	820069
C1	Control Station - West	812419	820670
C2	Control Station - East	813072	820595

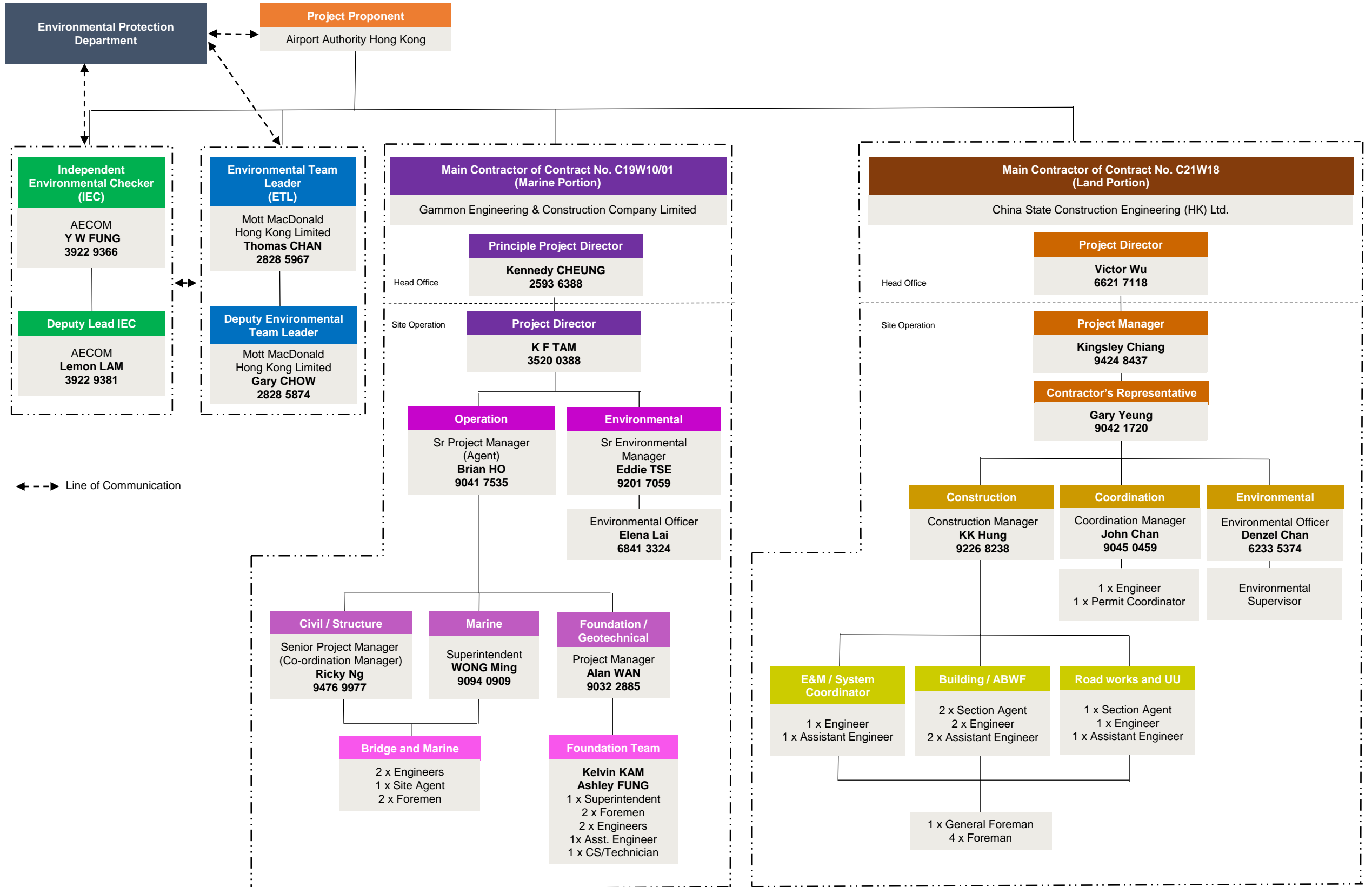
FIGURE 2.1



Originator	Location	Discipline	Type	Dwg Sequence No.
Status	DESIGN	Scale	1:5000 (A3)	Rev. A

Appendices

Appendix A. Project Organisation



Appendix B. Construction Works Programme

C19W10/01 - ACL - Monthly Programme Rev.A Updated as of 31 October 2022

Activity ID	Activity Name	Orig Dur	Start	Finish	Total Float	Physical % Complete	2022			2023
							Oct 9	Nov 10	Dec 11	Jan 12
C19W10/01 - ACL - Monthly Programme Rev.A Updated as of 31 October 2022										
Contract Dates										
Project Key Date										
Preconstruction Works										
Statutory Submission										
Navigation Channel Diversion Schedule										
Mobilization of Plant and Equipment										
Erection of Working Platform										
Marine Piling Works										
Submission of BA10 for the Commencement of Piling Works										
19W10.A.AD01	Submission of BA10	7	21-Apr-22 A	27-Apr-22 A		100%				
1st Pile Group										
ACL P5 (47m)										
19W10.H.VD0A60	Pre-Drilling for P5 Bored Pile	10	30-Apr-22 A	14-May-22 A		100%				
19W10.H.VD0B110	Founding Assessment Report	6	07-Jun-22 A	17-Jun-22 A		100%				
Piling Works										
Pile 1										
Pile 2										
Pile 3										
Sonic & Interface Core Test for ACL P5										
19W10.H.VD0A110	Sonic & Interface Core Test	11	13-Oct-22 A	26-Oct-22 A		100%	Interface Core Test			
19W10.H.VD0B190	Removal of Pier 5 Platform	7	31-Oct-22	07-Nov-22	-7	0%		Removal of Pier 5 Platform		
ACL P6 (57m)										
19W10.H.VD0A10	Pre-Drilling for P6 Bored Pile	10	16-May-22 A	02-Jun-22 A		100%				
19W10.H.VD0B10	Founding Assessment Report	6	07-Jun-22 A	17-Jun-22 A		100%				
Piling Works										
Pile 1										
19W10.H.VD0A30	Casing Installation and Soil Excavation	10	26-Jul-22 A	16-Aug-22 A		100%				
19W10.H.VD0B50	RCD Rock Drilling	6	24-Sep-22 A	05-Oct-22 A		100%				
19W10.H.VD0B60	Air-Lifting, Steel Cage Installation, Concreting and Backfilling	6	07-Oct-22 A	10-Oct-22 A		100%	ackfilling			
Pile 2										
Pile 3										
Sonic & Interface Core Test for ACL P6										
19W10.H.VD0A100	Sonic & Interface Core Test	11	20-Oct-22 A	25-Oct-22 A		100%	Sonic & Interface Core Test			
19W10.H.VD0B180	Removal of Pier 6 Platform	7	31-Oct-22	07-Nov-22	-7	0%		Removal of Pier 6 Platform		
Testing and Statutory Document Submission for Completion										
19W10.H.VD0A120	Submit BA14 and Completion Report for 1st Batch Pipe Group	3	31-Oct-22 A	03-Nov-22	-11	0%		Submit BA14 and Completion Report for 1st Batch Pipe Group		
19W10.H.VD0B200	Selection of Pile for Full Core Drilling Test	14	03-Nov-22	19-Nov-22	-11	0%		Selection of Pile for Full Core Drilling Test		
19W10.H.VD0B210	Full Core Platform Erection	6	12-Nov-22	19-Nov-22	-11	0%		Full Core Platform Erection		
19W10.H.VD0B220	Full Core Drilling Test	6	19-Nov-22	26-Nov-22	-11	0%		Full Core Drilling Test		
19W10.H.VD0B230	Full Core Platform Dismantlement	6	26-Nov-22	03-Dec-22	13	0%		Full Core Platform Dismantlement		
19W10.H.VD0B240	Submit Concrete Strength Report	12	26-Nov-22	10-Dec-22	-11	0%		Submit Concrete Strength Report		
19W10.H.VD0B250	BA14 Acknowledgement Letter from BD (1st Pile Group)	6	10-Dec-22	16-Dec-22	-12	0%		BA14 Acknowledgement Letter from BD (1st Pile Group)		
Application of P5 and P6 Superstructure Concret										
19W10.H.VD0A340	Application of P5 and P6 Superstructure Concret	0	26-Nov-22	26-Nov-22	-12	0%		Application of P5 and P6 Superstructure Concret		
2nd Pile Group										
ACL P4 (43m)										
19W10.H.VD0A390	Pre-Drilling for P4 Bored Pile	10	04-Jun-22 A	16-Jun-22 A		100%				
19W10.H.VD0B720	Founding Assessment Report	6	28-Jun-22 A	05-Jul-22 A		100%				
Piling Works										
Pile 1										
19W10.H.VD0A400	Casing Installation and Soil Excavation	6	16-Aug-22 A	29-Oct-22 A		100%				
19W10.H.VD0B730	RCD Rock Drilling	5	31-Oct-22 A	03-Nov-22	49	20%		RCD Rock Drilling		
19W10.H.VD0B740	Air-Lifting, Steel Cage Installation, Concreting and Backfilling	5	04-Nov-22	09-Nov-22	49	0%		Air-Lifting, Steel Cage Installation, Concreting and Backfilling		
Pile 2										
Pile 3										
19W10.H.VD0A420	Casing Installation and Soil Excavation	6	16-Aug-22 A	05-Oct-22 A		100%				

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

Project ID: C19W10/01-DWP-A-M08
Three-Month Rolling Programme (as of 31 October 2022)
 Page 1 of 3

Data Date: 31-Oct-22
Printed: 11-Nov-22 16:29
Layout: C19W10/01 ACL 3MR M8
TASK filter: All Activities

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-Oct-22	3MRP - Update	DW	RN

C19W10/01 - ACL - Monthly Programme Rev.A Updated as of 31 October 2022

Activity ID	Activity Name	Orig Dur	Start	Finish	Total Float	Physical % Complete	2022			2023
							Oct 9	Nov 10	Dec 11	Jan 12
19W10.H.VD0B770	RCD Rock Drilling	5	06-Oct-22 A	08-Oct-22 A		100%	Drilling			
19W10.H.VD0B780	Air-Lifting, Steel Cage Installation, Concreting and Backfilling	5	24-Oct-22 A	29-Oct-22 A		100%	Installation, Concreting and Backfilling			
Sonic & Interface Core Test for ACL P4										
19W10.H.VD0A430	Sonic & Interface Core Test	12	13-Dec-22	28-Dec-22	58	0%			Sonic & Interface Core Test	
19W10.H.VD0B790	Removal of Pier 4 Platform	6	29-Dec-22	05-Jan-23	67	0%			Removal of Pier 4 Platform	
ACL P3 (26m)										
19W10.H.VD0A440	Pre-Drilling for P3 Bored Pile	9	31-Oct-22	09-Nov-22	27	0%	Pre-Drilling for P3 Bored Pile			
19W10.H.VD0B800	Founding Assessment Report	6	10-Nov-22	16-Nov-22	27	0%	Founding Assessment Report			
Piling Works										
Pile 1										
19W10.H.VD0A450	Casing Installation and Soil Excavation	6	17-Nov-22	23-Nov-22	27	0%	Casing Installation and Soil Excavation			
19W10.H.VD0B810	RCD Rock Drilling	5	24-Nov-22	29-Nov-22	27	0%	RCD Rock Drilling			
19W10.H.VD0B820	Air-Lifting, Steel Cage Installation, Concreting and Backfilling	5	30-Nov-22	05-Dec-22	27	0%	Air-Lifting, Steel Cage Installation, Concreting and Backfilling			
Pile 2										
19W10.H.VD0A460	Casing Installation and Soil Excavation	6	06-Dec-22	12-Dec-22	27	0%	Casing Installation and Soil Excavation			
19W10.H.VD0B830	RCD Rock Drilling	5	13-Dec-22	17-Dec-22	27	0%	RCD Rock Drilling			
19W10.H.VD0B840	Air-Lifting, Steel Cage Installation, Concreting and Backfilling	5	19-Dec-22	23-Dec-22	27	0%	Air-Lifting, Steel Cage Installation, Concreting and Backfilling			
Pile 3										
19W10.H.VD0A470	Casing Installation and Soil Excavation	6	24-Dec-22	03-Jan-23	27	0%	Casing Installation and Soil Excavation			
19W10.H.VD0B850	RCD Rock Drilling	5	04-Jan-23	09-Jan-23	27	0%	RCD Rock Drilling			
19W10.H.VD0B860	Air-Lifting, Steel Cage Installation, Concreting and Backfilling	5	10-Jan-23	14-Jan-23	27	0%	Air-Lifting, Steel Cage Installation, Concreting and Backfilling			
Sonic & Interface Core Test for ACL P3										
19W10.H.VD0A480	Erection of Full Core Platform	6	16-Jan-23	25-Jan-23	27	0%			Erection of Full Core Platform	
19W10.H.VD0A490	Sonic & Interface Core Test	11	26-Jan-23	07-Feb-23	27	0%			Sonic & Interface Core Test	
19W10.H.VD0B870	Removal of Pier 3 Platform	6	08-Feb-23	14-Feb-23	36	0%			Removal of Pier	
Testing and Statutory Document Submission for Completion										
Application of P4 and P3 Superstructure Consent										
3rd Pile Group										
ACL P7 (66m)										
19W10.H.VD0A130	Pre-Drilling for P7 Bored Pile	10	31-May-22 A	23-Jun-22 A		100%				
19W10.H.VD0B270	Founding Assessment Report	6	14-Jul-22 A	21-Jul-22 A		100%				
Piling Works										
Pile 1										
19W10.H.VD0A140	Casing Installation and Soil Excavation	10	17-Nov-22	28-Nov-22	-17	0%	Casing Installation and Soil Excavation			
19W10.H.VD0B280	RCD Rock Drilling	6	29-Nov-22	05-Dec-22	-17	0%	RCD Rock Drilling			
19W10.H.VD0B290	Air-Lifting, Steel Cage Installation, Concreting and Backfilling	6	06-Dec-22	12-Dec-22	-17	0%	Air-Lifting, Steel Cage Installation, Concreting and Backfilling			
Pile 2										
19W10.H.VD0A150	Casing Installation and Soil Excavation	10	13-Dec-22	23-Dec-22	-17	0%	Casing Installation and Soil Excavation			
19W10.H.VD0B300	RCD Rock Drilling	6	24-Dec-22	03-Jan-23	-17	0%	RCD Rock Drilling			
19W10.H.VD0B310	Air-Lifting, Steel Cage Installation, Concreting and Backfilling	6	10-Jan-23	17-Jan-23	-17	0%	Air-Lifting, Steel Cage Installation, Concreting and Backfilling			
Pile 3										
Sonic & Interface Core Test for ACL P7										
ACL P8 (61m)										
19W10.H.VD0A170	Pre-Drilling for P8 Bored Pile (by Jack Up Barge)	9	19-May-22 A	06-Jul-22 A		100%				
19W10.H.VD0B340	Founding Assessment Report	6	14-Jul-22 A	21-Jul-22 A		100%				
Piling Works										
Pile 1										
19W10.H.VD0A180	Casing Installation and Soil Excavation	10	22-Sep-22 A	20-Oct-22 A		100%	Casing Installation and Soil Excavation			
19W10.H.VD0B350	RCD Rock Drilling	6	21-Oct-22 A	28-Oct-22 A		100%	RCD Rock Drilling			
19W10.H.VD0B360	Air-Lifting, Steel Cage Installation, Concreting and Backfilling	5	17-Nov-22	22-Nov-22	-5	0%	Air-Lifting, Steel Cage Installation, Concreting and Backfilling			
Pile 2										
19W10.H.VD0A190	Casing Installation and Soil Excavation	10	22-Sep-22 A	03-Dec-22	-10	0%	Casing Installation and Soil Excavation			
19W10.H.VD0B370	RCD Rock Drilling	6	05-Dec-22	10-Dec-22	1	0%	RCD Rock Drilling			
19W10.H.VD0B380	Air-Lifting, Steel Cage Installation, Concreting and Backfilling	5	12-Dec-22	16-Dec-22	1	0%	Air-Lifting, Steel Cage Installation, Concreting and Backfilling			
Pile 3										
Sonic & Interface Core Test for ACL P8										

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

Project ID: C19W10/01-DWP-A-M08
Three-Month Rolling Programme (as of 31 October 2022)
 Page 2 of 3

Data Date: 31-Oct-22
Printed: 11-Nov-22 16:29
Layout: C19W10/01 ACL 3MR M8
TASK filter: All Activities

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-Oct-22	3MRP - Update	DW	RN

C19W10/01 - ACL - Monthly Programme Rev.A Updated as of 31 October 2022

Activity ID	Activity Name	Orig Dur	Start	Finish	Total Float	Physical % Complete	2022			2023
							Oct	Nov	Dec	Jan
							9	10	11	12
Testing and Statutory Document Submission for Completion										
Application of P7 and P8 Superstructure Concret										
Marine Substructure Works										
19W10.U.SD01	BA8 for Pile Cap and Superstructure (P5 and P6)	28	26-Nov-22	24-Dec-22	-12	0%				
19W10.U.SD02	BA10 for Pile Cap and Superstructure (P5 and P6)	7	24-Dec-22	31-Dec-22	-12	0%				
19W10.U.SD15	BA8 for Pile Cap and Superstructure (P4 and P3)	28	31-Mar-23	28-Apr-23	38	0%				
19W10.U.SD16	BA10 for Pile Cap and Superstructure (P4 and P3)	7	28-Apr-23	05-May-23	38	0%				
19W10.U.SD11	BA8 for Pile Cap and Superstructure (P7 and P8)	28	05-May-23	02-Jun-23	-21	0%				
19W10.U.SD12	BA10 for Pile Cap and Superstructure (P7 and P8)	7	02-Jun-23	09-Jun-23	-21	0%				
P5 Substructure										
19W10.U.SD22	P5 Cofferdam Installation	12	31-Dec-22	16-Jan-23	-9	0%				
19W10.U.SD32	P5 Pile Cap Erection	12	16-Jan-23	02-Feb-23	21	0%				
19W10.U.SD42	P5 Pier Erection	21	02-Feb-23	27-Feb-23	21	0%				
P6 Substructure										
P7 Substructure										
P8 Substructure										
P4 Substructure										
P3 Substructure										
Marine Viaduct Erection										
Installation of Drainage Pipe										
Sealing Up the Temporary Opening on Deck										
Viaduct Parapet Erection										
Erection of Staircase										

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

Project ID: C19W10/01-DWP-A-M08
Three-Month Rolling Programme (as of 31 October 2022)
 Page 3 of 3


Data Date: 31-Oct-22
Printed: 11-Nov-22 16:29
Layout: C19W10/01 ACL 3MR M8
TASK filter: All Activities


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-Oct-22	3MRP - Update	DW	RN

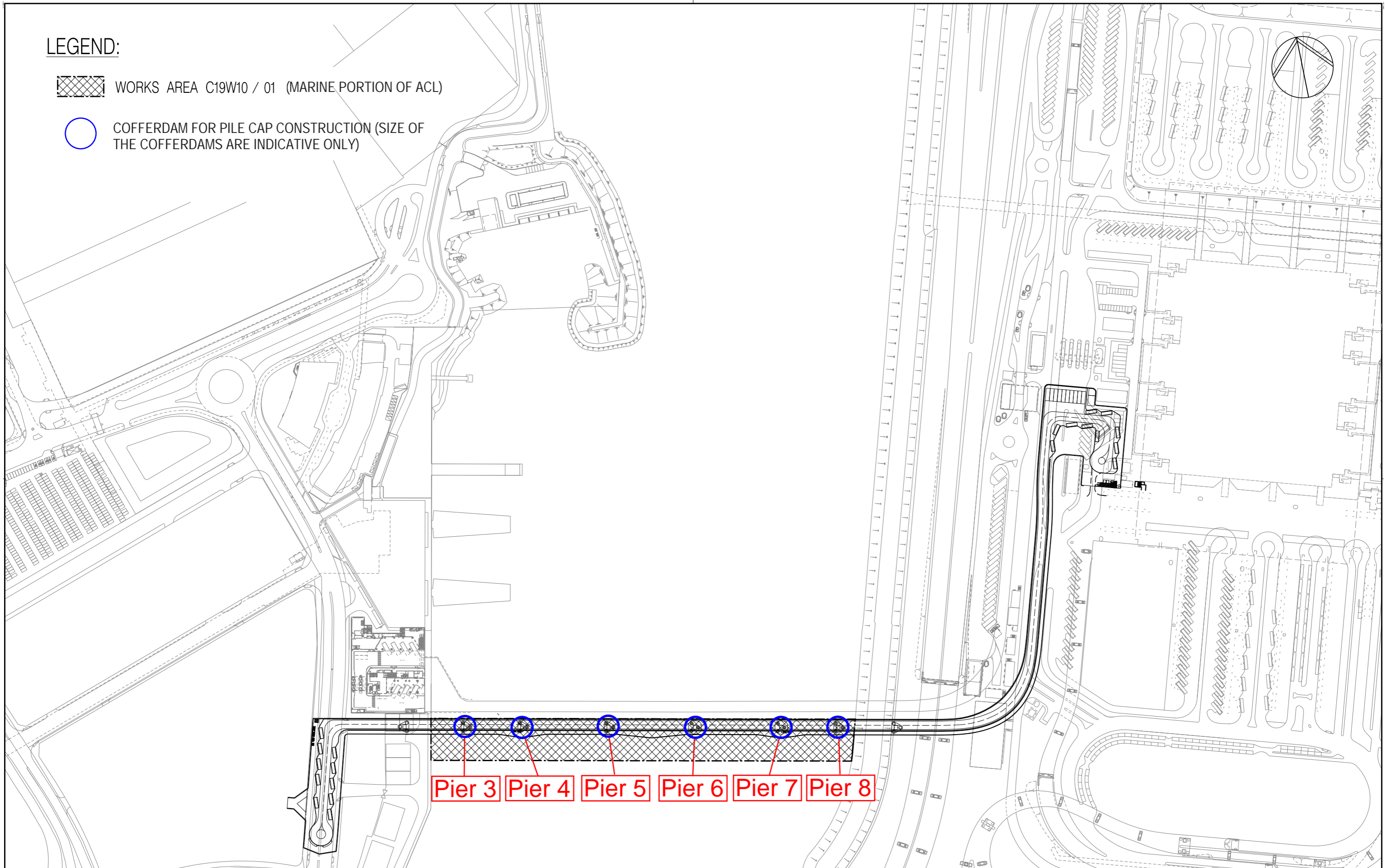
Appendix C. Construction Works Area

Marine Section

LEGEND:

 WORKS AREA C19W10 / 01 (MARINE PORTION OF ACL)

 COFFERDAM FOR PILE CAP CONSTRUCTION (SIZE OF THE COFFERDAMS ARE INDICATIVE ONLY)



Rev.	Date	Description	Checked
A	07OCT2021	ISSUE FOR TENDER	HARRY CHAU

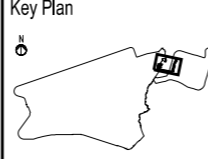
Airport Authority
 HKIA Tower, 1 Sky Plaza Road,
 Hong Kong International Airport,
 Lantau, Hong Kong.

Tel : (852) 2188 7111
 Fax : (852) 2824 0717



香港國際機場 HONG KONG INTERNATIONAL AIRPORT

Key Plan



Title SUPPLEMENTAL AGREEMENT C19W10/01
 AIRPORTCITY LINK - MARINE PORTION

WORKS AREA PLAN

Signatures for Approval	Date
Design Supervisor : HARRY CHAU	31JUL2021
Checkers : HARRY CHAU	31JUL2021
Authorised Representative :	31JUL2021

Hong Kong International Airport

Drawing No. CWD/C19W10-01 / AAACL / C / DR / 0100000

Scale 1:3000 (A3)

Rev. A

Appendix D. Environmental Site Inspection and Monitoring Schedule

ACL Environmental Monitoring and Site Inspection Schedule for Oct 2022

Oct-22

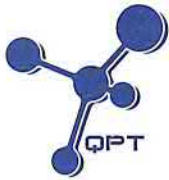
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1 Water Quality Monitoring mid- ebb: 16:40 mid- flood: 11:13
2	3	4 Water Quality Monitoring mid- ebb: 7:23 mid- flood: 20:21	5 Environmental Site Inspection	6 Water Quality Monitoring mid- ebb: 10:12 mid- flood: 17:42	7	8 Water Quality Monitoring mid- ebb: 11:54 mid- flood: 18:41
9	10	11 Environmental Site Inspection Water Quality Monitoring mid- ebb: 13:48 mid- flood: 7:48	12	13 Water Quality Monitoring mid- ebb: 14:54 mid- flood: 9:19	14	15 Water Quality Monitoring mid- ebb: 16:00 mid- flood: 11:05
16	17	18 (1) (2) Water Quality Monitoring mid- ebb: 6:20 mid- flood: 19:11	19 Environmental Site Inspection	20 Water Quality Monitoring mid- ebb: 9:14 mid- flood: 17:10	21	22 Water Quality Monitoring mid- ebb: 11:00 mid- flood: 17:42
23	24	25 Environmental Site Inspection Water Quality Monitoring mid- ebb: 12:52 mid- flood: 6:51	26	27 Water Quality Monitoring mid- ebb: 14:13 mid- flood: 8:26	28	29 Water Quality Monitoring mid- ebb: 15:44 mid- flood: 10:20
30	31	Notes: (1) Ebb tide water quality monitoring on 18 Oct 2022 was cancelled due to Strong Wind Signal No.3 in force. (2) Flood tide water quality monitoring on 18 Oct 2022 was cancelled due to safety concern although Strong Wind Signal No.3 was cancelled at 15:40.				

ACL Environmental Monitoring and Site Inspection Schedule for Nov 2022

Nov-22

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1 Environmental Site Inspection Water Quality Monitoring mid- ebb: 5:45 mid- flood: 18:26	2	3 Water Quality Monitoring mid- ebb: 8:40 mid- flood: 16:25	4	5 Water Quality Monitoring mid- ebb: 10:42 mid- flood: 17:28
6	7	8 Environmental Site Inspection Water Quality Monitoring mid- ebb: 12:48 mid- flood: 7:02	9	10 Water Quality Monitoring mid- ebb: 14:00 mid- flood: 8:36	11	12 Water Quality Monitoring mid- ebb: 15:03 mid- flood: 10:07
13	14	15 Environmental Site Inspection Water Quality Monitoring mid- ebb: 4:42 mid- flood: 17:02	16	17 Water Quality Monitoring mid- ebb: 6:28 mid- flood: 19:31	18	19 Water Quality Monitoring mid- ebb: 9:11 mid- flood: 16:18
20	21	22 Environmental Site Inspection Water Quality Monitoring mid- ebb: 11:44 mid- flood: 17:29	23	24 Water Quality Monitoring mid- ebb: 13:16 mid- flood: 7:42	25	26 Water Quality Monitoring mid- ebb: 14:47 mid- flood: 9:30
27	28	29 Environmental Site Inspection Water Quality Monitoring mid- ebb: 4:35 mid- flood: 17:04	30			
		Notes:				

Appendix E. Calibration Certificates



REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No. : R-BB070113
Date of Issue : 28 July 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 : 15M10005
 Date of Received : 28 July 2022
 Date of Calibration : 28 July 2022
 Date of Next Calibration : 27 October 2022
 Request No. : D-BB070113

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 2520B
Dissolved oxygen	APHA 21e 4500 O
Turbidity	APHA 21e 2130B
Conductivity	APHA 21e 2510B

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	7.53	0.11	Satisfactory
10.01	10.14	0.13	Satisfactory

Tolerance of pH value should be less than ± 0.2 (pH unit)

(2) Temperature

Reading of Ref. thermometer (°C)	Display Reading (°C)	Tolerance	Result
15.0	14.9	-0.1	Satisfactory
25.0	25.1	0.1	Satisfactory
40.0	40.0	0.0	Satisfactory

Tolerance of Temperature should be less than ± 2.0 (°C)


(3) Salinity

Expected Reading (g/L)	Display Reading (g/L)	Tolerance (%)	Result
10	9.90	-1.00	Satisfactory
20	20.49	2.45	Satisfactory
30	30.77	2.57	Satisfactory

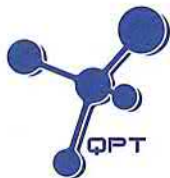
Tolerance of Salinity should be less than ± 10.0 (%)

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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, 14/F, Wah Wai Centre, 38-40 Au Pui Wan St., Fotan, Hong Kong

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Tel: (852) 3956 8717; Fax: (852) 3956 3928

REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No. : R-BB070113

Date of Issue : 28 July 2022

Page No. : 2 of 2

(4) Dissolved oxygen

Expected Reading (mg/L)	Display Reading (mg/L)	Tolerance	Result
7.36	7.56	0.20	Satisfactory
5.52	5.70	0.18	Satisfactory
2.82	3.00	0.18	Satisfactory
0.11	0.30	0.19	Satisfactory

Tolerance of Dissolved oxygen should be less than ± 0.5 (mg/L)

(5) Turbidity

Expected Reading (NTU)	Display Reading (NTU)	Tolerance (%)	Result
0	0.05	--	Satisfactory
10	9.82	-1.80	Satisfactory
20	19.17	-4.10	Satisfactory
100	97.92	-2.10	Satisfactory
800	812.44	1.60	Satisfactory

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

(6) Conductivity

Expected Reading ($\mu\text{S/cm}$ at 25°C)	Display Reading ($\mu\text{S/cm}$ at 25°C)	Tolerance (%)	Result
146.9	150.6	2.52	Satisfactory
1412	1291	-8.57	Satisfactory
12890	12806	-0.65	Satisfactory
58670	59168	0.85	Satisfactory
111900	114106	1.97	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 from relevant international standards.

·The results relate only to the calibrated equipment as received

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

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

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

--- END OF REPORT ---



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QUALITY PRO TEST-CONSULT LIMITED

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No. : R-BB090081
Date of Issue : 19 September 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 : 16 September 2022
 Date of Calibration : 16 September 2022
 Date of Next Calibration : 15 December 2022
 Request No. : D-BB090081

PART C - REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

<u>Test Parameter</u>	<u>Reference Method</u>
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 2520B
Dissolved oxygen	APHA 21e 4500 O
Turbidity	APHA 21e 2130B
Conductivity	APHA 21e 2510B

PART D - CALIBRATION RESULT

(1) pH value

Target (pH unit)	Display Reading (pH unit)	Tolerance	Result
4.00	3.97	-0.03	Satisfactory
7.42	7.38	-0.04	Satisfactory
10.01	9.92	-0.09	Satisfactory

Tolerance of pH value should be less than ± 0.2 (pH unit)

(2) Temperature

Reading of Ref. thermometer (°C)	Display Reading (°C)	Tolerance	Result
40	40.1	0.1	Satisfactory
30	30.1	0.1	Satisfactory
10	10.0	0.0	Satisfactory

Tolerance of Temperature should be less than ± 2.0 (°C)

(3) Salinity

Expected Reading (g/L)	Display Reading (g/L)	Tolerance (%)	Result
10	10.17	1.70	Satisfactory
20	20.50	2.50	Satisfactory
30	30.31	1.03	Satisfactory

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

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AUTHORIZED
SIGNATORY:

LEE Chun-ning
 Assistant Manager (Chemical Testing)



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QUALITY PRO TEST-CONSULT LIMITED

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No. : R-BB090081

Date of Issue : 19 September 2022

Page No. : 2 of 2

(4) Dissolved oxygen

Expected Reading (mg/L)	Display Reading (mg/L)	Tolerance	Result
7.38	7.60	0.22	Satisfactory
4.70	4.85	0.15	Satisfactory
1.48	1.80	0.32	Satisfactory
0.45	0.40	-0.05	Satisfactory

Tolerance of Dissolved oxygen should be less than ± 0.5 (mg/L)

(5) Turbidity

Expected Reading (NTU)	Display Reading (NTU)	Tolerance (%)	Result
0	0.10	--	Satisfactory
10	9.84	-1.60	Satisfactory
20	19.82	-0.90	Satisfactory
100	97.79	-2.20	Satisfactory
800	819.11	2.40	Satisfactory

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

(6) Conductivity

Expected Reading ($\mu\text{S/cm at } 25^\circ\text{C}$)	Display Reading	Tolerance (%)	Result
146.9	137.9	-6.13	Satisfactory
1412	1380.2	-2.25	Satisfactory
12890	12637.4	-1.96	Satisfactory
58670	57116	-2.65	Satisfactory
111900	112537	0.57	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 from relevant international standards.
- The results relate only to the calibrated equipment as received
- The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.
- "Displayed Reading" denotes the figure shown on item under calibration/ checking regardless of equipment precision or significant figures.
- The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by Quality Pro Test-Consult Ltd. or quoted from relevant international standards.

--- END OF REPORT ---

Appendix F. Event and Action Plan

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

Event	Action			
	ET	IEC	AAHK / PM	Contractor
Action level being exceeded by one sampling day	<ol style="list-style-type: none"> 1. Repeat <i>in-situ</i> 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. 	<ol style="list-style-type: none"> 1. Discuss with ET and Contractor on the mitigation measures; 2. Review proposals on mitigation measures submitted by Contractor and advise AAHK / PM accordingly; 3. Assess the effectiveness of the implemented mitigation measures. 	<ol style="list-style-type: none"> 1. Discuss with IEC on the proposed mitigation measures; 2. Make agreement on the mitigation measures to be implemented; 4. Assess the effectiveness of the implemented mitigation measures. 	<ol style="list-style-type: none"> 1. Inform the AAHK / 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 and IEC and propose mitigation measures.
Action level being exceeded by two or more consecutive sampling days	<ol style="list-style-type: none"> 1. Repeat <i>in-situ</i> 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. 	<ol style="list-style-type: none"> 1. Discuss with ET and Contractor on the mitigation measures; 2. Review proposals on mitigation measures submitted by Contractor and advise the AAHK / PM accordingly; 3. Assess the effectiveness of the implemented mitigation measures. 	<ol style="list-style-type: none"> 1. Discuss with IEC on the proposed mitigation measures; 2. Make agreement on the mitigation measures to be implemented; 3. Assess the effectiveness of the implemented mitigation measures. 	<ol style="list-style-type: none"> 1. Inform the AAHK / 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 and IEC and propose mitigation measures to IEC and AAHK / PM within 3 working days; 6. Implement the agreed mitigation measures.
Limit level being exceeded by one sampling day	<ol style="list-style-type: none"> 1. Repeat <i>in-situ</i> measurement to confirm findings; 2. Identify reasons for non-compliance and source(s) of impact; 3. Inform IEC, Contractor and EPD; 4. Check monitoring data, all plant, equipment and Contractor's working methods; 5. Discuss mitigation measures with IEC, AAHK / PM and 	<ol style="list-style-type: none"> 1. Discuss with ET and Contractor on the mitigation measures; 2. Review proposals on mitigation measures submitted by Contractor and advise the AAHK / PM accordingly; 3. Assess the effectiveness of the implemented mitigation measures. 	<ol style="list-style-type: none"> 1. Discuss with IEC, ET 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 effectiveness of the implemented mitigation measures. 	<ol style="list-style-type: none"> 1. Inform the AAHK / 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 measures to IEC and AAHK / PM within

Event	Action			
	ET	IEC	AAHK / PM	Contractor
	Contractor; 6. Ensure mitigation measures are implemented; 7. Increase the monitoring frequency to daily until no exceedance of limit level.			three working days; 6. Implement the agreed mitigation measures.
Limit level being exceeded by two or more consecutive sampling days	1. Repeat <i>in-situ</i> measurement to confirm findings; 2. Identify reasons for non-compliance and source(s) of impact; 3. Inform IEC, Contractor and EPD; 4. Check monitoring data, all plant, equipment and Contractor's working methods; 5. Discuss mitigation measures with IEC, AAHK / PM and Contractor; 6. Ensure mitigation measures are implemented; 7. Increase the monitoring frequency to daily until no exceedance of Limit level for two consecutive days.	1. Discuss with ET and Contractor on the mitigation measures; 2. Review proposals on mitigation measures submitted by Contractor and advise the AAHK / PM accordingly; 3. Assess the effectiveness of implemented mitigation measures.	1. Discuss with IEC, ET 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 effectiveness of the implemented mitigation measures; 5. Consider and instruct, if necessary, the Contractor to slow down or to stop all or part of the construction activities until no exceedance of Limit level.	1. Inform AAHK / PM and confirm notification of non-compliance in writing; 2. Rectify unacceptable practices; 3. Check all plant and equipment; 4. Consider changes of working method; 5. Discuss with ET, IEC and AAHK / PM and propose mitigation measures to IEC and AAHK / PM within 3 working days; 6. Implement the agreed mitigation measures; 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

**Airport City Link
Water Quality Monitoring**

Water Quality Monitoring Results on 01 October 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)							
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA						
C1	Misty	Moderate	15:00	9.2	Surface	1.0	27.9	27.9	8.1	8.1	30.9	30.9	85.6	85.4	5.7	5.8	7.8	8.5	10.3	11.4						
						1.0	27.9		8.1		30.8		85.1		5.6		7.7		10.7							
					Middle	4.6	27.9	27.9	8.1	8.1	30.9	30.9	89.4	89.2	5.9	6.1	8.4	9.2	11.2							
						4.6	27.9		8.1		30.9		89.0		5.9		8.5		11.7							
					Bottom	8.2	27.9	27.9	8.1	8.1	30.9	30.9	92.6	92.5	6.1	6.1	9.2	9.2	12.0							
						8.2	27.9		8.1		30.9		92.4		6.1		9.2		12.4							
					C2	Misty	Moderate	15:16	8.2	Surface	1.0	27.9	27.9	8.1	8.1	30.9	30.9	84.3	84.3		5.6	5.6	7.2	8.2	12.0	11.1
											1.0	27.9		8.1		30.9		84.3			5.5		7.1		11.7	
Middle	4.1	27.9	27.9	8.1						8.1	30.9	30.9	84.7	84.7	5.6	5.6	8.3	9.1	11.0							
	4.1	27.9		8.1							30.9		84.7		5.5		8.2		11.4							
Bottom	7.2	27.9	27.9	8.1						8.1	30.9	30.9	85.2	85.2	5.6	5.6	9.1	9.1	10.4							
	7.2	27.9		8.1							30.9		85.2		5.5		9.1		10.1							
M1	Misty	Moderate	15:10	4.2						Surface	1.0	27.9	28.0	8.1	8.1	30.7	30.7	91.5	91.5	6.0	6.0	5.1	5.7	10.7	11.4	
											1.0	28.0		8.1		30.7		91.5		6.0		5.0		11.1		
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
						-	-		-		-		-		-		-		-							
					Bottom	3.2	27.9	28.0	8.1	8.1	30.6	30.7	96.5	96.5	6.4	6.4	6.4	6.4	12.0							
						3.2	28.0		8.1		30.7		96.5		6.3		6.4		11.6							
					M2	Misty	Moderate	15:07	5.4	Surface	1.0	27.9	27.9	8.1	8.1	30.7	30.8	82.7	82.7	5.5	5.5	6.4	6.9	9.0		9.7
											1.0	27.9		8.1		30.8		82.7		5.4		6.3		8.6		
Middle	-	-	-	-						-	-	-	-	-	-	-	-	-	-							
	-	-		-							-		-		-		-		-							
Bottom	4.4	27.9	27.9	8.1						8.1	30.6	30.7	88.1	88.1	5.8	5.9	7.5	7.4	10.4							
	4.4	27.9		8.1							30.7		88.1		5.9		7.4		10.8							
M3	Misty	Moderate	15:04	7.2						Surface	1.0	27.9	27.9	8.1	8.1	30.8	30.8	88.9	88.7	5.9	5.9	6.5	7.5	11	10	
											1.0	27.9		8.1		30.7		88.4		5.8		6.6		12		
					Middle	3.6	27.8	27.9	8.1	8.1	30.9	30.9	90.4	90.3	6.0	6.2	7.5	8.5	10							
						3.6	27.9		8.1		30.8		90.1		6.0		7.5		10							
					Bottom	6.2	27.8	27.9	8.1	8.1	30.9	30.8	93.6	93.6	6.2	6.2	8.5	8.4	9							
						6.2	28.0		8.1		30.7		93.5		6.2		8.4		10							

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

**Airport City Link
Water Quality Monitoring**

Water Quality Monitoring Results on 01 October 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	
C1	Misty	Moderate	10:55	9.4	Surface	1.0	<u>27.8</u>	27.8	8.1	8.1	30.9	30.9	86.8	86.9	5.7	5.8	5.2	5.3	11.6	10.8	
						1.0	<u>27.8</u>		8.1		30.9		86.9		5.8		5.2		11.4		
					Middle	4.7	<u>27.8</u>	27.8	8.1	8.1	30.9	30.9	87.9	87.8	5.8	5.9	6.7	5.9	6.6		11.0
						4.7	<u>27.8</u>		8.1		30.9		87.6		5.8		6.6		10.9		
					Bottom	8.4	<u>27.8</u>	27.8	8.1	8.1	30.9	30.9	89.7	89.4	5.9	5.9	4.0	5.9	4.0		9.9
						8.4	<u>27.8</u>		8.1		30.9		89.0		5.9		3.9		10.0		
C2	Misty	Moderate	10:38	8.2	Surface	1.0	<u>27.8</u>	27.9	8.1	8.1	30.8	30.8	86.8	85.2	5.7	5.7	6.2	7.2	12.0	11.4	
						1.0	<u>27.9</u>		8.1		30.8		83.5		5.5		6.1		12.4		
					Middle	4.1	<u>27.9</u>	27.9	8.1	8.1	30.7	30.8	88.0	86.2	5.8	5.8	7.4	5.8	7.4		11.4
						4.1	<u>27.8</u>		8.1		30.8		84.4		5.6		7.4		11.7		
					Bottom	7.2	<u>28.0</u>	27.9	8.1	8.1	30.6	30.7	89.9	87.8	5.9	5.8	8.1	5.8	8.1		10.8
						7.2	<u>27.8</u>		8.1		30.8		85.6		5.7		8.1		10.3		
M1	Misty	Moderate	10:44	4.4	Surface	1.0	<u>27.8</u>	27.8	8.1	8.1	30.8	30.8	88.0	88.1	5.8	5.8	4.0	4.5	9.7	9.9	
						1.0	<u>27.8</u>		8.1		30.8		88.1		5.8		4.0		9.3		
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
						-	-		-		-		-		-		-		-		
					Bottom	3.4	<u>27.7</u>	27.8	8.1	8.1	30.8	30.8	90.8	90.5	6.0	6.0	5.0	6.0	5.0		10.4
						3.4	<u>27.8</u>		8.1		30.8		90.2		6.0		5.0		10.1		
M2	Misty	Moderate	10:47	5.8	Surface	1.0	<u>27.7</u>	27.7	8.1	8.1	30.8	30.8	85.9	85.7	5.7	5.7	7.2	7.7	9.2	10.2	
						1.0	<u>27.7</u>		8.1		30.8		85.4		5.7		7.3		8.9		
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
						-	-		-		-		-		-		-		-		
					Bottom	4.8	<u>27.7</u>	27.7	8.1	8.1	30.7	30.8	88.3	88.3	5.9	5.9	8.1	5.9	8.1		11.3
						4.8	<u>27.7</u>		8.1		30.8		88.2		5.9		8.1		11.2		
M3	Misty	Moderate	10:51	6.4	Surface	1.0	<u>27.9</u>	28.0	8.1	8.1	30.7	30.6	83.3	83.0	5.5	5.5	5.2	6.2	10	12	
						1.0	<u>28.0</u>		8.1		30.5		82.7		5.5		5.2		11		
					Middle	3.2	<u>27.8</u>	27.9	8.1	8.1	30.8	30.7	83.3	83.0	5.5	5.5	6.2	5.5	6.2		12
						3.2	<u>28.0</u>		8.1		30.6		82.6		5.5		6.2		12		
					Bottom	5.4	<u>27.8</u>	27.9	8.1	8.1	30.8	30.7	84.2	83.7	5.6	5.6	7.1	5.6	7.1		13
						5.4	<u>28.0</u>		8.1		30.6		83.1		5.5		7.0		13		

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**

**Airport City Link
Water Quality Monitoring**

Water Quality Monitoring Results on 04 October 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
C1	Fine	Moderate	08:59	9.4	Surface	1.0	28.8	28.8	8.1	8.1	29.4	29.4	93.1	91.3	6.1	6.0	1.1	1.7	2.5	2.9
						1.0	28.8		8.1		29.3		89.4		5.9		1.0		2.2	
					Middle	4.7	28.7	28.8	8.1	8.1	29.4	29.4	94.1	91.7	6.2		1.6		2.8	
						4.7	28.8		8.1		29.3		89.2		5.9		1.6		2.9	
					Bottom	8.4	28.7	28.8	8.1	8.1	29.4	29.4	96.3	94.3	6.3		2.3		3.6	
						8.4	28.8		8.1		29.3		92.3		6.1		2.4		3.4	
C2	Fine	Moderate	08:43	8.2	Surface	1.0	28.7	28.7	8.1	8.1	29.3	29.3	93.2	93.1	6.1	6.2	2.2	3.2	4.0	3.7
						1.0	28.7		8.1		29.3		93.0		6.1		2.1		4.4	
					Middle	4.1	28.6	28.7	8.1	8.1	29.3	29.3	94.3	94.3	6.2		3.1		3.9	
						4.1	28.7		8.1		29.3		94.2		6.2		3.2		3.6	
					Bottom	7.2	28.6	28.7	8.2	8.2	29.3	29.3	96.7	96.6	6.4		4.2		3.1	
						7.2	28.7		8.1		29.3		96.5		6.3		4.2		3.4	
M1	Fine	Moderate	08:48	5.6	Surface	1.0	28.4	28.5	8.1	8.1	29.8	29.8	88.0	88.2	5.8	5.8	4.1	4.9	3.2	3.6
						1.0	28.5		8.1		29.7		88.4		5.8		4.2		3.4	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.6	28.4	28.5	8.1	8.1	30.3	30.1	89.0	89.2	5.9		5.6		4.1	
						4.6	28.5		8.1		29.8		89.4		5.9		5.6		3.8	
M2	Fine	Moderate	08:51	5.6	Surface	1.0	28.3	28.5	8.1	8.1	29.9	29.8	92.2	90.3	6.1	6.0	6.1	6.6	3.1	3.5
						1.0	28.7		8.1		29.7		88.4		5.8		6.0		3.3	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.6	28.0	28.3	8.1	8.1	30.1	30.0	94.8	93.2	6.3		7.2		3.8	
						4.6	28.5		8.1		29.8		91.6		6.0		7.2		3.6	
M3	Fine	Moderate	08:54	7.7	Surface	1.0	28.5	28.6	8.0	8.0	29.7	29.7	88.3	88.3	5.8	5.8	4.7	5.5	3	4
						1.0	28.6		8.0		29.7		88.3		5.8		4.8		3	
					Middle	3.9	28.4	28.5	8.0	8.0	30.1	30.0	86.6	86.6	5.7		5.1		4	
						3.9	28.6		8.0		29.8		86.5		5.7		5.2		4	
					Bottom	6.7	28.4	28.5	8.1	8.1	30.0	29.9	89.0	89.1	5.9		6.5		5	
						6.7	28.6		8.0		29.7		89.1		5.8		6.5		5	

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

**Airport City Link
Water Quality Monitoring**

Water Quality Monitoring Results on 04 October 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)							
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA						
C1	Fine	Moderate	18:39	9.2	Surface	1.0	29.0	29.1	8.1	8.1	28.6	28.4	93.2	92.5	6.1	6.1	1.5	2.2	2.4	3.5						
						1.0	29.2		8.1		28.2		91.7		6.0		1.4		2.6							
					Middle	4.6	28.8	29.0	8.1	8.1	29.2	28.8	94.0	93.0	6.2	6.2	2.1	2.2	3.5							
						4.6	29.2		8.1		28.4		92.0		6.0		2.2		3.1							
					Bottom	8.2	28.6	28.9	8.1	8.1	29.4	28.9	95.3	93.9	6.3	6.2	3.0	6.2	3.0		4.6					
						8.2	29.1		8.1		28.4		92.5		6.1		3.0									
					C2	Fine	Moderate	18:54	8.2	Surface	1.0	28.8	28.9	8.1	8.1	29.4	29.3	90.9	90.3		6.0	5.9	3.7	4.7	3.8	3.5
											1.0	29.0		8.1		29.1		89.6			5.9		3.8		4.2	
Middle	4.1	28.5	28.7	8.1						8.1	29.9	29.6	90.7	89.6	6.0	6.1	4.5	6.1	3.5							
	4.1	28.9		8.1							29.3		88.4		5.8		4.6		3.7							
Bottom	7.2	28.5	28.7	8.1						8.1	29.9	29.6	93.7	92.3	6.2	6.1	5.9	6.1	3.2							
	7.2	28.9		8.1							29.3		90.8		6.0		5.9		2.7							
M1	Fine	Moderate	18:47	4.2						Surface	1.0	28.8	28.9	8.0	8.0	30.4	30.2	87.6	87.4	5.7	5.7	4.1	4.9	3.1	3.6	
											1.0	28.9		8.0		30.0		87.2		5.7		4.0		2.8		
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
						-	-		-		-		-		-		-		-							
					Bottom	3.2	28.7	28.8	8.0	8.0	30.7	30.5	88.3	87.9	5.8	5.8	5.6	5.8	4.4							
						3.2	28.9		8.0		30.2		87.5		5.7		5.7		3.9							
					M2	Fine	Moderate	18:50	5.0	Surface	1.0	28.4	28.5	8.1	8.1	29.9	29.8	93.2	92.1	6.1	6.1	2.5	2.9	4.1		3.5
											1.0	28.6		8.1		29.7		90.9		6.0		2.4		3.6		
Middle	-	-	-	-						-	-	-	-	-	-	-	-	-	-							
	-	-		-							-		-		-		-		-							
Bottom	4.0	28.2	28.4	8.1						8.1	30.0	29.9	95.5	93.9	6.3	6.2	3.3	6.2	3.3							
	4.0	28.5		8.1							29.8		92.2		6.1		3.3		3.1							
M3	Fine	Moderate	18:43	6.8						Surface	1.0	28.4	28.6	8.1	8.1	29.9	29.8	90.8	90.3	6.0	6.0	4.2	5.3	3	4	
											1.0	28.7		8.1		29.6		89.7		5.9		4.2		3		
					Middle	3.4	28.3	28.5	8.0	8.1	30.0	29.9	91.2	90.7	6.0	6.1	5.6	6.1	4							
						3.4	28.6		8.1		29.7		90.2		5.9		5.5		4							
					Bottom	5.8	28.3	28.5	8.0	8.1	30.2	30.0	93.7	92.2	6.2	6.1	6.1	6.1	5							
						5.8	28.6		8.1		29.7		90.6		6.0		6.0		5							

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**

**Airport City Link
Water Quality Monitoring**

Water Quality Monitoring Results on 06 October 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
C1	Fine	Moderate	10:30	9.4	Surface	1.0	28.6	28.6	8.0	8.0	30.3	30.3	84.1	84.1	5.6	5.6	4.8	5.4	3.5	2.9
						1.0	28.6		8.0		30.3		84.1		5.6		4.8		3.3	
					Middle	4.7	28.3	28.5	8.0	8.0	30.6	30.5	84.6	84.6	5.6		5.1		3.0	
						4.7	28.6		8.0		30.3		84.6		5.6		5.1		2.7	
					Bottom	8.4	28.2	28.4	8.0	8.0	30.7	30.5	86.4	86.4	5.9		6.3		2.5	
						8.4	28.6		8.0		30.3		86.4		5.7		6.4		2.2	
C2	Fine	Moderate	10:11	9.4	Surface	1.0	28.6	28.6	8.0	8.0	30.5	30.5	82.7	82.5	5.4	5.4	2.1	3.3	2.9	2.6
						1.0	28.6		8.0		30.4		82.3		5.4		2.0		3.2	
					Middle	4.7	28.5	28.6	7.9	8.0	30.5	30.5	83.3	82.9	5.5		3.3		2.5	
						4.7	28.6		8.0		30.4		82.4		5.4		3.3		2.7	
					Bottom	8.4	28.4	28.5	7.9	8.0	30.5	30.5	84.6	83.6	5.7		4.4		2.1	
						8.4	28.6		8.0		30.4		82.6		5.6		4.4		2.3	
M1	Fine	Moderate	10:17	4.0	Surface	1.0	28.5	28.5	8.0	8.0	30.7	30.7	82.0	81.7	5.4	5.4	5.2	5.2	2.9	2.6
						1.0	28.5		8.0		30.7		81.4		5.3		5.2		2.8	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	3.0	28.5	28.5	8.0	8.0	30.7	30.7	82.8	82.2	5.5		5.3		2.3	
						3.0	28.5		8.0		30.7		81.6		5.3		5.2		2.5	
M2	Fine	Moderate	10:22	5.2	Surface	1.0	28.5	28.5	8.0	8.0	31.2	31.2	78.6	78.9	5.3	5.3	4.0	4.7	1.8	2.2
						1.0	28.5		8.0		31.2		79.1		5.2		4.0		1.9	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.2	28.2	28.4	7.9	8.0	31.4	31.4	79.5	79.3	5.3		5.5		2.6	
						4.2	28.5		8.0		31.3		79.0		5.3		5.4		2.5	
M3	Fine	Moderate	10:26	7.8	Surface	1.0	28.5	28.5	8.0	8.0	31.2	31.1	79.7	79.8	5.3	5.3	4.7	5.5	2	3
						1.0	28.5		8.0		31.0		79.9		5.4		4.7		2	
					Middle	3.9	28.4	28.5	8.0	8.0	31.5	31.3	79.2	78.8	5.3		5.8		3	
						3.9	28.5		8.0		31.0		78.3		5.3		5.7		3	
					Bottom	6.8	28.2	28.4	7.9	8.0	31.8	31.5	81.5	80.8	5.4		6.1		3	
						6.8	28.5		8.0		31.1		80.0		5.3		6.1		4	

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

**Airport City Link
Water Quality Monitoring**

Water Quality Monitoring Results on 06 October 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)							
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA						
C1	Fine	Moderate	16:43	9.0	Surface	1.0	29.2	29.2	8.0	8.0	29.8	29.8	90.3	90.1	5.9	5.9	1.1	2.1	2.2	2.8						
						1.0	29.2		8.0		29.8		89.8		5.8		1.0		2.5							
					Middle	4.5	29.3	29.3	8.0	8.0	29.7	29.8	90.2	90.1	5.9	5.9	2.5	2.7	2.9							
						4.5	29.2		8.0		29.8		89.9		5.9		2.5									
					Bottom	8.0	29.5	29.4	8.0	8.0	29.6	29.7	90.5	90.4	5.9	5.9	2.7	2.6	3.2							
						8.0	29.2		8.0		29.8		90.2		5.9		3.2									
					C2	Fine	Moderate	16:59	8.2	Surface	1.0	29.1	29.1	8.0	8.0	29.9	29.9	90.4	89.9		5.9	6.0	1.9	2.3	2.5	2.9
											1.0	29.1		8.0		29.8		89.3			6.0		2.0		2.3	
Middle	4.1	29.0	29.1	8.0						8.0	29.9	29.9	90.7	90.1	5.9	6.0	2.1	2.7	2.7							
	4.1	29.1		8.0							29.9		89.5		6.0		2.1		3.1							
Bottom	7.2	29.0	29.1	8.0						8.0	29.9	29.9	92.2	91.2	6.1	6.1	2.7	2.8	3.4							
	7.2	29.1		8.0							29.9		90.2		6.0		3.4									
M1	Fine	Moderate	16:51	5.2						Surface	1.0	29.2	29.1	8.0	8.0	30.4	30.5	86.5	86.1	5.8	5.8	5.0	5.2	2.7	3.1	
											1.0	29.0		8.0		30.5		85.7		5.7		4.9		3.0		
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
						-	-		-		-		-		-		-		-							
					Bottom	4.2	29.5	29.3	8.0	8.0	30.3	30.4	87.5	86.8	5.7	5.7	5.5	5.7	3.3							
						4.2	29.0		8.0		30.5		86.1		5.7		5.4		3.5							
					M2	Fine	Moderate	16:54	5.0	Surface	1.0	29.4	29.2	8.0	8.0	30.1	30.3	87.8	87.4	5.7	5.8	6.0	6.4	2.6		3.0
											1.0	28.9		8.0		30.4		87.0		5.8		5.9		2.8		
Middle	-	-	-	-						-	-	-	-	-	-	-	-	-	-							
	-	-		-							-		-		-		-		-							
Bottom	4.0	29.6	29.4	8.0						8.0	30.1	30.2	90.0	88.9	5.8	5.8	6.9	5.8	3.5							
	4.0	29.2		8.0							30.3		87.8		5.8		6.8		3.2							
M3	Fine	Moderate	16:47	6.8						Surface	1.0	29.2	29.1	8.0	8.0	30.1	30.2	88.6	88.5	5.8	5.9	4.8	5.4	2	3	
											1.0	29.0		8.0		30.2		88.3		5.9		4.8		3		
					Middle	3.4	29.4	29.2	8.0	8.0	30.1	30.2	88.0	87.4	5.9	5.8	5.3	5.8	3							
						3.4	28.9		8.0		30.3		86.8		5.8		5.3		3							
					Bottom	5.8	29.6	29.3	8.0	8.0	30.1	30.2	88.8	88.8	5.7	5.8	6.1	5.8	3							
						5.8	29.0		8.0		30.3		88.7		5.8		6.0		4							

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**

**Airport City Link
Water Quality Monitoring**

Water Quality Monitoring Results on 08 October 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity (NTU)		Suspended Solids (mg/L)							
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA						
C1	Fine	Moderate	12:37	9.2	Surface	1.0	28.7	28.7	8.0	8.1	30.7	30.7	89.0	88.1	5.8	5.8	6.7	7.3	4.9	5.7						
						1.0	28.7		8.1		30.6		87.2		5.7		6.7		5.2							
					Middle	4.6	28.7	28.7	8.0	8.1	30.7	30.7	89.8	88.7	5.9	5.9	7.2	7.2	5.5							
						4.6	28.7		8.1		30.7		87.6		5.7		7.2		5.9							
					Bottom	8.2	28.7	28.7	8.0	8.1	30.7	30.7	91.3	89.8	6.0	5.9	8.1	8.0	6.6							
						8.2	28.7		8.1		30.7		88.2		5.8		8.0		6.3							
					C2	Fine	Moderate	12:19	8.4	Surface	1.0	28.7	28.7	8.0	8.0	30.6	30.6	88.7	88.1		5.8	5.8	6.4	7.4	15.1	14.1
											1.0	28.7		8.0		30.6		87.4			5.7		6.4		14.8	
Middle	4.2	28.6	28.7	8.0						8.0	30.6	30.6	89.1	88.4	5.8	5.8	7.8	7.7	14.2							
	4.2	28.7		8.0							30.6		87.7		5.7		7.7		13.9							
Bottom	7.4	28.6	28.7	8.0						8.0	30.7	30.7	89.8	88.9	5.9	5.8	8.1	8.0	13.2							
	7.4	28.7		8.0							30.6		88.0		5.7		8.0		13.6							
M1	Fine	Moderate	12:26	4.6						Surface	1.0	28.7	28.7	8.0	8.0	30.8	30.8	88.7	87.6	5.8	5.7	3.0	3.6	8.3	8.9	
											1.0	28.7		8.0		30.8		86.5		5.6		3.0		8.6		
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
						-	-		-		-		-		-		-		-							
					Bottom	3.6	28.7	28.7	7.9	8.0	29.9	30.4	91.4	89.6	6.0	5.9	4.1	4.2	9.4							
						3.6	28.7		8.0		30.8		87.8		5.7		4.2		9.3							
					M2	Fine	Moderate	12:29	5.2	Surface	1.0	28.7	28.7	8.0	8.0	30.9	30.9	86.7	85.6	5.7	5.6	5.2	5.6	11.9		14.8
											1.0	28.7		8.0		30.9		84.5		5.5		5.3		12.0		
Middle	-	-	-	-						-	-	-	-	-	-	-	-	-	-							
	-	-		-							-		-		-		-		-							
Bottom	4.2	28.7	28.7	7.9						8.0	30.9	31.0	90.1	88.0	5.9	5.8	6.0	6.0	17.8							
	4.2	28.7		8.0							31.0		85.9		5.6		6.0		17.4							
M3	Fine	Moderate	12:32	7.6						Surface	1.0	28.7	28.7	8.0	8.0	30.9	31.0	85.9	84.6	5.6	5.5	5.1	5.9	4	5	
											1.0	28.7		8.0		31.0		83.2		5.4		5.2		4		
					Middle	3.8	28.7	28.7	8.0	8.0	31.0	31.0	86.4	84.6	5.6	5.5	6.0	6.0	5							
						3.8	28.7		8.0		31.0		82.7		5.4		6.0		5							
					Bottom	6.6	28.8	28.8	8.0	8.0	31.0	31.0	88.2	84.9	5.7	5.5	6.6	6.6	6							
						6.6	28.7		8.0		30.9		81.5		5.3		6.6		5							

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

**Airport City Link
Water Quality Monitoring**

Water Quality Monitoring Results on 08 October 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)					
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA				
C1	Fine	Moderate	17:06	9.0	Surface	1.0	28.7	28.7	8.1	8.1	30.7	30.7	88.6	88.0	5.8	5.8	6.6	8.0	8.7					
						1.0	28.7		8.1		30.7		87.4		5.7			8.4						
					Middle	4.5	28.6	28.7	8.0	8.1	30.8	30.8	89.2	88.4	5.8	5.8	6.5	6.6	8.8					
						4.5	28.7		8.1		30.7		87.6		5.7		8.5							
					Bottom	8.0	28.7	28.7	8.0	8.1	30.7	30.7	90.0	89.0	5.9	5.8	7.3	6.6	9.1					
						8.0	28.7		8.1		30.7		88.0		5.7		9.3							
					C2	Fine	Moderate	17:22	8.4	Surface	1.0	28.7	28.7	8.0	8.1	30.7	30.7	89.8	89.3	5.9	5.9	7.2	10.0	10.8
											1.0	28.7		8.1		30.7		88.7		5.8			9.9	
Middle	4.2	28.7	28.7	8.0						8.1	30.8	30.8	90.4	89.7	5.9	5.9	7.4	7.2	10.5					
	4.2	28.7		8.1							30.7		89.0		5.8		11.0							
Bottom	7.4	28.7	28.7	8.0						8.0	30.8	30.8	91.9	90.6	6.0	5.9	8.1	7.2	11.8					
	7.4	28.7		8.0							30.7		89.3		5.8		11.4							
M1	Fine	Moderate	17:13	4.2						Surface	1.0	28.8	28.8	8.0	8.0	30.9	30.9	91.9	91.9	6.0	6.0	6.0	8.2	7.4
											1.0	28.8		8.0		30.9		91.9		5.9			8.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	6.0	-					
						-	-		-		-		-		-		-							
					Bottom	3.2	28.8	28.8	7.9	8.0	30.9	30.9	94.2	94.2	6.2	6.2	6.1	6.0	6.1					
						3.2	28.8		8.0		30.9		94.2		6.1		6.6							
					M2	Fine	Moderate	17:16	5.0	Surface	1.0	28.8	28.8	8.0	8.0	30.7	30.8	88.6	87.5	5.8	5.7	5.9	15.1	14.2
											1.0	28.7		8.0		30.8		86.4		5.6			14.7	
Middle	-	-	-	-						-	-	-	-	-	-	-	-	5.9	-					
	-	-		-							-		-		-		-							
Bottom	4.0	28.8	28.8	8.0						8.0	30.7	30.8	91.3	89.6	5.9	5.8	6.3	5.9	13.8					
	4.0	28.7		8.0							30.8		87.8		5.7		13.3							
M3	Fine	Moderate	17:10	6.8						Surface	1.0	28.8	28.8	8.0	8.0	30.8	30.8	87.7	87.2	5.7	5.7	6.2	5	7
											1.0	28.8		8.0		30.8		86.7		5.7			5	
					Middle	3.4	28.8	28.8	8.0	8.0	30.8	30.8	88.3	87.7	5.8	5.7	6.2	6.2	6					
						3.4	28.8		8.0		30.8		87.0		5.7		6							
					Bottom	5.8	28.8	28.8	8.0	8.0	30.8	30.8	89.6	88.5	5.8	5.8	7.1	6.2	10					
						5.8	28.8		8.0		30.8		87.4		5.7		9							

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**

**Airport City Link
Water Quality Monitoring**

Water Quality Monitoring Results on 11 October 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	
C1	Fine	Moderate	12:30	9.0	Surface	1.0	27.4	27.4	8.1	8.1	32.5	32.5	92.2	92.3	6.1	6.1	3.8	4.4	14.0	13.6	
						1.0	27.4		8.1		32.5		92.4		6.1		3.9		15.6		
					Middle	4.5	27.3	27.4	8.1	8.1	32.5	32.5	93.0	93.0	6.1		4.3		10.5		
						4.5	27.4		8.1		32.5		93.0		6.1		4.2		12.0		
					Bottom	8.0	27.3	27.4	8.1	8.1	32.5	32.5	99.5	99.5	6.6		6.6		5.2		15.1
						8.0	27.4		8.1		32.5		99.5		6.6				5.1		14.2
C2	Fine	Moderate	12:45	8.0	Surface	1.0	27.3	27.4	8.1	8.1	32.6	32.6	91.5	91.5	6.0	6.1	6.4	7.5	13.9	13.1	
						1.0	27.4		8.1		32.5		91.5		6.1		6.4		12.1		
					Middle	4.0	27.3	27.4	8.1	8.1	32.6	32.6	92.6	92.3	6.1		6.1		7.5		12.9
						4.0	27.4		8.1		32.5		92.0		6.1				7.5		13.8
					Bottom	7.0	27.3	27.4	8.1	8.1	32.6	32.6	96.7	96.7	6.4		6.4		8.5		13.5
						7.0	27.4		8.1		32.5		96.7		6.4				8.5		12.2
M1	Fine	Moderate	12:38	5.4	Surface	1.0	26.8	26.8	8.1	8.1	31.8	31.8	94.2	94.2	6.3	6.4	4.1	4.8	12.1	12.7	
						1.0	26.8		8.1		31.8		94.2		6.4		4.0		12.9		
					Middle	-	-	-	-	-	-	-	-	-	-		-		-		-
						-	-		-		-		-		-				-		-
					Bottom	4.4	26.8	26.8	8.2	8.2	31.8	31.8	97.2	97.3	6.5		6.5		5.4		12.6
						4.4	26.8		8.1		31.8		97.4		6.5				5.5		13.0
M2	Fine	Moderate	12:40	5.6	Surface	1.0	26.8	26.8	8.1	8.1	31.8	31.8	91.3	91.3	6.1	6.1	7.4	7.7	11.9	12.8	
						1.0	26.8		8.1		31.8		91.2		6.1		7.3		13.2		
					Middle	-	-	-	-	-	-	-	-	-	-		-		-		-
						-	-		-		-		-		-				-		-
					Bottom	4.6	26.8	26.8	8.2	8.2	31.6	31.7	98.8	98.6	6.6		6.6		8.0		13.6
						4.6	26.8		8.1		31.8		98.4		6.6				8.0		12.5
M3	Fine	Moderate	12:34	7.2	Surface	1.0	26.9	26.9	8.1	8.1	31.9	31.9	89.9	89.5	6.0	6.1	6.8	7.4	13	14	
						1.0	26.9		8.1		31.9		89.0		6.0		6.7		14		
					Middle	3.6	26.9	26.9	8.1	8.1	32.0	32.0	92.4	92.4	6.2		6.2		7.4		12
						3.6	26.9		8.1		31.9		92.3		6.2				7.4		14
					Bottom	6.2	26.9	26.9	8.2	8.2	32.0	32.0	97.8	97.8	6.5		6.6		8.0		15
						6.2	26.9		8.1		31.9		97.8		6.6				8.1		15

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

**Airport City Link
Water Quality Monitoring**

Water Quality Monitoring Results on 11 October 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	
C1	Fine	Moderate	09:09	9.0	Surface	1.0	27.1	27.1	8.0	8.1	32.4	32.4	93.9	93.9	6.2	6.4	7.9	8.2	15.7	13.7	
						1.0	27.1		8.1		32.4		93.9		6.2		7.8		14.1		
					Middle	4.5	27.1	27.1	8.0	8.1	32.4	32.4	98.1	98.1	6.5		8.2		13.2		
						4.5	27.1		8.1		32.4		98.1		6.5		8.1		12.8		
					Bottom	8.0	27.0	27.1	8.0	8.1	32.3	32.4	104.4	104.4	6.9		6.9		8.3		13.2
						8.0	27.1		8.1		32.4		104.4		6.9				9.0		13.2
C2	Fine	Moderate	08:52	8.2	Surface	1.0	27.1	27.2	8.0	8.0	32.5	32.5	90.0	89.0	6.0	5.9	6.1	7.3	13.4	12.6	
						1.0	27.2		8.0		32.5		87.9		5.8		6.2		14.1		
					Middle	4.1	27.1	27.1	8.0	8.0	32.5	32.5	90.5	89.5	6.0		7.2		12.8		
						4.1	27.1		8.0		32.5		88.4		5.9		7.1		11.0		
					Bottom	7.2	27.1	27.1	8.1	8.1	32.5	32.5	91.5	90.4	6.1		6.0		8.7		12.8
						7.2	27.1		8.0		32.5		89.3		5.9				8.6		11.7
M1	Fine	Moderate	08:59	4.4	Surface	1.0	26.6	26.6	8.1	8.1	31.9	31.9	95.3	95.3	6.4	6.4	6.7	6.9	13.4	14.1	
						1.0	26.6		8.0		31.9		95.3		6.4		6.6		14.1		
					Middle	-	-	-	-	-	-	-	-	-	-		-		-		
						-	-		-		-		-		-		-		-		
					Bottom	3.4	26.6	26.6	8.1	8.1	31.9	31.9	98.9	98.9	6.6		6.6		7.1		15.0
						3.4	26.6		8.0		31.9		98.9		6.6				7.0		13.8
M2	Fine	Moderate	09:02	5.8	Surface	1.0	26.6	26.6	8.1	8.1	31.9	31.9	96.4	96.4	6.5	6.5	7.5	8.2	15.7	15.1	
						1.0	26.6		8.0		31.9		96.4		6.5		7.5		15.8		
					Middle	-	-	-	-	-	-	-	-	-	-		-		-		
						-	-		-		-		-		-		-		-		
					Bottom	4.8	26.6	26.6	8.1	8.1	31.9	31.9	99.6	99.6	6.7		6.7		8.8		14.2
						4.8	26.6		8.0		31.9		99.6		6.7				8.9		14.8
M3	Fine	Moderate	09:06	7.6	Surface	1.0	26.7	26.7	8.0	8.0	31.9	31.9	93.1	93.1	6.2	6.4	6.8	7.3	13	14	
						1.0	26.7		8.0		31.9		93.1		6.3		6.8		12		
					Middle	3.8	26.7	26.7	8.1	8.1	31.9	31.9	96.3	96.3	6.5		7.1		13		
						3.8	26.7		8.0		31.9		96.3		6.4		7.2		12		
					Bottom	6.6	26.7	26.7	8.1	8.1	31.8	31.9	99.6	99.6	6.8		6.8		8.1		15
						6.6	26.7		8.0		31.9		99.6		6.7				8.0		16

DA: Depth-averaged

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

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**Airport City Link
Water Quality Monitoring**

Water Quality Monitoring Results on 13 October 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
C1	Fine	Moderate	13:19	9.0	Surface	1.0	26.5	26.6	8.2	8.2	30.9	30.9	88.9	88.9	6.0	6.0	3.6	4.0	5.5	4.5
						1.0	26.7		8.2		30.9		88.9		6.0		3.7		4.6	
					Middle	4.5	26.4	26.6	8.2	8.2	30.9	30.9	88.7	88.9	6.0	6.0	4.0	4.0	4.5	
						4.5	26.7		8.2		30.9		89.1		6.0		3.9		3.0	
					Bottom	8.0	26.3	26.5	8.2	8.2	30.9	30.9	88.6	88.9	6.0	6.0	4.3	6.0	4.5	
						8.0	26.7		8.2		30.9		89.1		6.0		4.2		4.7	
C2	Fine	Moderate	13:36	8.6	Surface	1.0	26.4	26.4	8.2	8.2	30.9	30.9	89.8	89.6	6.1	6.1	6.7	7.1	4.7	4.0
						1.0	26.4		8.2		30.9		89.4		6.0		6.6		3.4	
					Middle	4.3	26.3	26.4	8.2	8.2	30.9	30.9	89.2	89.6	6.1	6.0	7.2	6.5	3.4	
						4.3	26.4		8.2		30.9		90.0		6.0		7.2		4.2	
					Bottom	7.6	26.3	26.4	8.2	8.2	30.9	30.9	95.0	95.0	6.4	6.5	7.5	6.5	3.6	
						7.6	26.4		8.2		30.9		95.0		6.5		7.6		4.5	
M1	Fine	Moderate	13:28	5.6	Surface	1.0	26.3	26.4	8.2	8.2	30.6	30.6	93.1	93.4	6.3	6.3	4.2	4.5	3.6	4.0
						1.0	26.4		8.2		30.6		93.6		6.3		4.3		4.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	6.5	-	
						-	-		-		-		-		-		-		-	
					Bottom	4.6	26.3	26.3	8.2	8.2	30.6	30.6	96.1	96.1	6.5	6.5	4.7	6.5	3.8	
						4.6	26.3		8.2		30.6		96.0		6.5		4.8		3.6	
M2	Fine	Moderate	13:30	4.8	Surface	1.0	26.3	26.3	8.2	8.2	30.6	30.6	95.4	93.1	6.5	6.4	4.3	4.5	4.9	4.0
						1.0	26.3		8.2		30.6		90.7		6.2		4.2		4.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	6.6	-	
						-	-		-		-		-		-		-		-	
					Bottom	3.8	26.2	26.3	8.2	8.2	30.6	30.6	97.9	96.1	6.7	6.6	4.7	6.6	3.6	
						3.8	26.3		8.2		30.6		94.2		6.4		4.7		3.5	
M3	Fine	Moderate	13:24	6.8	Surface	1.0	26.2	26.2	8.2	8.2	30.7	30.7	87.9	87.4	6.0	6.0	3.2	4.3	3	4
						1.0	26.2		8.2		30.7		86.8		5.9		3.1		4	
					Middle	3.4	26.2	26.2	8.2	8.2	30.7	30.7	88.5	87.8	6.0	6.0	4.4	6.1	5	
						3.4	26.2		8.2		30.7		87.0		5.9		4.5		4	
					Bottom	5.8	26.2	26.2	8.2	8.2	30.7	30.7	89.1	88.4	6.1	6.1	5.4	6.1	4	
						5.8	26.2		8.2		30.7		87.6		6.0		5.4		5	

DA: Depth-averaged

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**Airport City Link
Water Quality Monitoring**

Water Quality Monitoring Results on 13 October 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
C1	Fine	Moderate	09:24	9.0	Surface	1.0	26.2	26.2	8.1	8.1	30.7	30.7	86.5	86.5	5.9	5.9	6.8	7.3	4.3	4.3
						1.0	26.2		8.1		30.7		86.5		5.9		6.8		3.8	
					Middle	4.5	26.2	26.2	8.1	8.1	30.7	30.7	86.5	86.5	5.9	5.9	7.2	7.1	4.3	
						4.5	26.2		8.1		30.7		86.5		5.9		7.1		4.2	
					Bottom	8.0	26.2	26.2	8.2	8.2	30.7	30.7	86.5	86.5	5.9	5.9	8.1	8.0	5.3	
						8.0	26.2		8.1		30.7		86.5		5.9		8.0		4.0	
C2	Fine	Moderate	09:06	8.4	Surface	1.0	26.2	26.2	8.1	8.1	30.7	30.7	88.0	88.2	6.0	6.1	6.2	7.1	5.2	5.0
						1.0	26.2		8.1		30.7		88.4		6.0		6.1		3.5	
					Middle	4.2	26.2	26.2	8.1	8.1	30.7	30.7	89.9	89.7	6.1	6.3	7.1	8.1	6.6	
						4.2	26.2		8.1		30.7		89.4		6.1		7.2		5.7	
					Bottom	7.4	26.2	26.2	8.1	8.1	30.7	30.7	91.9	91.5	6.3	6.3	8.1	8.0	4.7	
						7.4	26.2		8.1		30.7		91.0		6.2		8.0		4.5	
M1	Fine	Moderate	09:13	4.8	Surface	1.0	26.1	26.1	8.1	8.1	30.5	30.5	93.6	93.6	6.4	6.4	6.7	7.3	4.9	5.0
						1.0	26.1		8.1		30.5		93.6		6.4		6.6		6.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
						-	-		-		-		-		-		-		-	
					Bottom	3.8	26.0	26.1	8.1	8.1	29.2	29.9	97.8	97.7	6.7	6.7	7.9	7.8	4.6	
						3.8	26.1		8.1		30.5		97.5		6.7		7.8		4.5	
M2	Fine	Moderate	09:15	4.8	Surface	1.0	26.0	26.0	8.1	8.1	30.6	30.6	91.4	91.4	6.2	6.3	4.8	5.2	4.8	4.7
						1.0	26.0		8.1		30.6		91.4		6.3		4.9		5.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
						-	-		-		-		-		-		-		-	
					Bottom	3.8	26.0	26.0	8.1	8.1	30.6	30.6	94.6	94.4	6.5	6.5	5.5	5.5	4.5	
						3.8	26.0		8.1		30.6		94.2		6.4		5.5		4.1	
M3	Fine	Moderate	09:19	7.4	Surface	1.0	26.2	26.2	8.1	8.1	30.5	30.5	87.8	87.7	6.0	6.0	2.7	3.5	5	5
						1.0	26.2		8.1		30.5		87.6		6.0		2.7		4	
					Middle	3.7	26.2	26.2	8.1	8.1	30.5	30.5	88.7	88.4	6.0	6.1	3.1	4.8	5	
						3.7	26.2		8.1		30.5		88.1		6.0		3.0		6	
					Bottom	6.4	26.2	26.2	8.1	8.1	30.5	30.5	90.2	90.1	6.1	6.1	4.8	4.9	5	
						6.4	26.2		8.1		30.5		90.0		6.1		4.9		5	

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

**Airport City Link
Water Quality Monitoring**

Water Quality Monitoring Results on 15 October 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)							
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA						
C1	Sunny	Rough	14:47	9.4	Surface	1.0	26.9	26.9	8.2	8.2	33.3	33.3	95.6	95.6	6.3	6.3	1.5	1.8	5.6	4.6						
						1.0	26.9		8.2		33.3		95.6		6.3		1.5		5.1							
					Middle	4.7	26.9	26.9	8.2	8.2	33.3	33.3	94.7	94.7	6.3	6.3	1.6	1.6	4.7							
						4.7	26.9		8.2		33.3		94.7		6.3		1.6		4.4							
					Bottom	8.4	26.9	26.9	8.2	8.2	33.3	33.3	94.1	94.1	6.2	6.2	2.1	2.2	3.7							
						8.4	26.9		8.2		33.3		94.0		6.2		2.2		3.9							
					C2	Sunny	Rough	15:10	10.8	Surface	1.0	27.0	27.0	8.2	8.2	33.3	33.3	96.3	96.4		6.4	6.3	1.2	4.4	3.5	4.4
											1.0	27.0		8.2		33.3		96.4			6.4		1.2		3.8	
Middle	5.4	26.9	26.9	8.2						8.2	33.3	33.3	93.3	93.3	6.2	6.2	2.5	2.5	4.6							
	5.4	26.9		8.2							33.3		93.2		6.2		2.5		4.2							
Bottom	9.8	26.8	26.8	8.2						8.2	33.3	33.3	91.7	91.7	6.1	6.1	9.6	9.5	5.1							
	9.8	26.8		8.2							33.3		91.6		6.1		9.5		5.0							
M1	Sunny	Moderate	14:57	5.5						Surface	1.0	27.2	27.3	8.2	8.2	33.5	33.5	102.1	102.2	6.7	6.7	1.3	1.4	5.5	4.3	
											1.0	27.3		8.2		33.5		102.2		6.7		1.3		5.0		
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
						-	-		-		-		-		-		-		-							
					Bottom	4.5	27.2	27.2	8.2	8.2	33.5	33.5	101.4	101.4	6.8	6.8	1.4	1.5	3.5							
						4.5	27.2		8.2		33.5		101.3		6.8		1.5		3.2							
M2	Sunny	Moderate	15:01	5.3	Surface	1.0	27.1	27.1	8.2	8.2	33.4	33.4	100.8	100.8	6.7	6.7	1.9	2.0	3.9	4.7						
						1.0	27.1		8.2		33.4		100.8		6.7		1.9		4.1							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
						-	-		-		-		-		-		-		-							
					Bottom	4.3	27.1	27.1	8.2	8.2	33.5	33.5	99.3	99.3	6.6	6.6	2.1	2.0	5.1							
						4.3	27.1		8.2		33.5		99.2		6.6		2.0		5.5							
M3	Sunny	Rough	14:52	7.2	Surface	1.0	27.0	27.0	8.2	8.2	33.4	33.4	100.2	100.3	6.7	6.6	2.5	4.4	5	4						
						1.0	27.0		8.2		33.4		100.4		6.7		2.4		4							
					Middle	3.6	26.9	27.0	8.2	8.2	33.4	33.4	97.3	97.5	6.5	6.5	4.6	4.6	4							
						3.6	27.0		8.2		33.4		97.7		6.5		4.6		4							
					Bottom	6.2	26.9	26.9	8.2	8.2	33.5	33.5	90.0	90.0	6.0	6.0	6.2	6.2	4							
						6.2	26.9		8.2		33.5		89.9		6.0		6.2		3							

DA: Depth-averaged

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

**Airport City Link
Water Quality Monitoring**

Water Quality Monitoring Results on 15 October 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)							
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA						
C1	Sunny	Moderate	11:22	8.9	Surface	1.0	26.7	26.7	8.2	8.2	33.0	33.0	94.8	94.8	6.5	6.5	2.8	3.8	2.4	3.7						
						1.0	26.7		8.2		33.0		94.8		6.5		2.8									
					Middle	4.5	26.8	26.8	8.2	8.2	33.2	33.2	94.3	94.3	6.4	6.4	2.3	6.4	2.3		6.4	4.0				
						4.5	26.8		8.2		33.2		94.3		6.4		2.3									
					Bottom	7.9	26.7	26.7	8.2	8.2	33.2	33.2	93.6	93.6	6.4	6.4	6.3	6.4	6.3		6.4	4.6				
						7.9	26.7		8.2		33.2		93.5		6.4		6.2		4.4							
					C2	Sunny	Moderate	10:58	9.1	Surface	1.0	26.9	26.9	8.2	8.2	33.3	33.3	93.8	93.8		6.4	6.4	2.0	2.6	5.5	4.5
											1.0	26.9		8.2		33.3		93.8			6.4		2.0			
Middle	4.6	26.8	26.8	8.2						8.2	33.3	33.3	93.4	93.4	6.3	6.3	2.6	6.3	2.5	6.3	4.6					
	4.6	26.8		8.2							33.3		93.4		6.3		2.5		4.3							
Bottom	8.1	26.7	26.7	8.2						8.2	33.3	33.3	93.8	93.8	6.3	6.3	3.1	6.3	3.1	6.3	3.6					
	8.1	26.7		8.2							33.3		93.8		6.3		3.2		4.1							
M1	Sunny	Calm	11:10	4.6						Surface	1.0	27.0	27.0	8.2	8.2	33.6	33.6	95.3	95.3	6.5	6.5	3.3	3.2	3.9	4.5	
											1.0	27.0		8.2		33.6		95.3		6.5		3.3				
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
						-	-		-		-		-		-		-		-							
					Bottom	3.6	27.0	27.0	8.2	8.2	33.6	33.6	95.7	95.7	6.5	6.5	3.1	6.5	3.1	6.5	4.8					
						3.6	27.0		8.2		33.6		95.6		6.5		3.1		5.2							
					M2	Sunny	Calm	11:07	4.7	Surface	1.0	27.0	27.0	8.2	8.2	33.5	33.5	94.9	95.0	6.5	6.5	2.9	3.0	3.5		3.8
											1.0	27.0		8.2		33.5		95.0		6.5		2.8		3.3		
Middle	-	-	-	-						-	-	-	-	-	-	-	-	-	-	-	-					
	-	-		-							-		-		-		-		-							
Bottom	3.7	27.0	27.0	8.2						8.2	33.5	33.5	95.1	95.1	6.5	6.5	3.1	6.5	3.1	6.5	4.4					
	3.7	27.0		8.2							33.5		95.1		6.5		3.0		4.1							
M3	Sunny	Calm	11:15	6.9						Surface	1.0	26.8	26.8	8.2	8.2	33.2	33.2	97.7	97.8	6.7	6.5	2.1	3.8	4	4	
											1.0	26.8		8.2		33.2		97.8		6.7		2.1		4		
					Middle	3.5	26.8	26.8	8.2	8.2	33.4	33.4	91.7	91.8	6.3	6.3	4.8	6.3	4.8	6.3	4					
						3.5	26.8		8.2		33.4		91.9		6.3		4.8		4							
					Bottom	5.9	26.9	26.9	8.2	8.2	33.6	33.6	92.8	92.8	6.3	6.3	4.6	6.3	4.6	6.3	5					
						5.9	26.9		8.2		33.6		92.8		6.3		4.6		5							

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**

**Airport City Link
Water Quality Monitoring**

Water Quality Monitoring Results on 20 October 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)			
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
C1	Fine	Moderate	08:41	8.8	Surface	1.0	24.8	24.9	8.2	8.2	34.4	34.4	97.8	97.6	6.7	6.7	1.7	2.8	2.8	2.8		
						1.0	24.9		8.2		34.4		97.4		6.7		1.6		2.4			
					Middle	4.4	24.8	24.9	8.2	8.2	34.4	34.4	98.5	98.6	6.7		6.8		2.8		2.7	2.5
						4.4	24.9		8.2		34.4		98.6		6.8				2.7			3.0
					Bottom	7.8	24.8	24.9	8.2	8.2	34.4	34.4	100.7	100.4	6.9		6.9		4.0		3.9	3.3
						7.8	24.9		8.2		34.4		100.0		6.8				3.9			2.8
C2	Fine	Moderate	08:28	8.6	Surface	1.0	25.2	25.2	8.2	8.2	34.7	34.7	92.3	92.3	6.3	6.3	3.3	3.7	2.5	2.8		
						1.0	25.1		8.2		34.6		92.3		6.3		3.2		2.4			
					Middle	4.3	25.2	25.2	8.2	8.2	34.7	34.7	92.9	92.6	6.3		6.3		3.9		3.8	3.0
						4.3	25.1		8.2		34.6		92.3		6.3				3.0			3.0
					Bottom	7.6	25.2	25.2	8.2	8.2	34.7	34.7	94.8	93.5	6.4		6.3		4.1		4.1	2.4
						7.6	25.2		8.2		34.6		92.2		6.2				4.1			3.7
M1	Fine	Moderate	08:35	5.0	Surface	1.0	25.3	25.3	8.2	8.2	34.5	34.6	94.5	94.5	6.4	6.4	5.3	5.7	2.8	2.9		
						1.0	25.3		8.2		34.6		94.5		6.4		5.3		2.7			
					Middle	-	-	-	-	-	-	-	-	-	-		-		-		-	-
						-	-		-		-		-		-				-			-
					Bottom	4.0	25.3	25.3	8.2	8.2	34.5	34.5	98.8	98.8	6.7		6.8		6.1		6.0	2.7
						4.0	25.3		8.2		34.5		98.8		6.8				6.0			3.3
M2	Fine	Moderate	08:37	4.6	Surface	1.0	25.2	25.2	8.2	8.2	34.5	34.5	95.6	94.6	6.5	6.4	3.9	4.3	1.6	2.3		
						1.0	25.2		8.2		34.5		93.6		6.3		4.0		2.3			
					Middle	-	-	-	-	-	-	-	-	-	-		-		-		-	-
						-	-		-		-		-		-				-			-
					Bottom	3.6	25.3	25.3	8.2	8.2	34.5	34.5	99.0	96.9	6.7		6.6		4.6		4.6	2.6
						3.6	25.2		8.2		34.5		94.7		6.4				4.6			2.8
M3	Fine	Moderate	08:39	7.4	Surface	1.0	25.2	25.2	8.2	8.2	34.6	34.6	94.8	93.7	6.4	6.4	3.1	4.2	3	3		
						1.0	25.2		8.2		34.6		92.5		6.3		3.1		2			
					Middle	3.7	25.2	25.2	8.2	8.2	34.6	34.6	95.8	94.5	6.5		6.3		4.3		4.4	3
						3.7	25.2		8.2		34.6		93.1		6.3				4.4			3
					Bottom	6.4	25.2	25.2	8.2	8.2	34.5	34.6	97.1	95.6	6.6		6.5		5.2		5.2	3
						6.4	25.2		8.2		34.6		94.0		6.4				5.2			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

**Airport City Link
Water Quality Monitoring**

Water Quality Monitoring Results on 20 October 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
C1	Fine	Moderate	15:47	8.8	Surface	1.0	24.6	24.6	8.2	8.2	34.3	34.3	98.3	97.1	6.7	6.7	2.0	2.8	3.4	2.8
						1.0	24.6		8.2		34.3		95.8		6.6		1.9		2.2	
					Middle	4.4	24.5	24.6	8.2	8.2	34.3	34.3	99.2	98.0	6.8		3.0		3.1	
						4.4	24.6		8.2		34.3		96.7		6.6		3.0		2.4	
					Bottom	7.8	24.5	24.6	8.2	8.2	34.3	34.3	99.5	98.5	6.9		3.1		2.9	
						7.8	24.6		8.2		34.3		97.5		6.7		3.5		2.6	
C2	Fine	Moderate	16:07	8.2	Surface	1.0	24.8	24.8	8.2	8.2	34.3	34.3	94.7	94.1	6.5	6.5	1.1	1.7	2.9	2.5
						1.0	24.7		8.2		34.3		93.4		6.4		1.0		2.7	
					Middle	4.1	24.8	24.8	8.2	8.2	34.3	34.3	95.1	94.4	6.5		1.7		2.2	
						4.1	24.7		8.2		34.3		93.7		6.4		1.6		1.7	
					Bottom	7.2	24.8	24.8	8.2	8.2	34.3	34.3	95.7	94.9	6.5		2.4		2.8	
						7.2	24.7		8.2		34.3		94.1		6.4		2.5		2.5	
M1	Fine	Moderate	15:53	5.0	Surface	1.0	25.3	25.3	8.2	8.2	34.5	34.5	97.9	97.1	6.6	6.6	1.4	2.0	2.4	2.3
						1.0	25.3		8.2		34.5		96.2		6.5		1.4		2.3	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.0	25.3	25.3	8.2	8.2	34.4	34.4	99.8	98.4	6.8		2.6		2.0	
						4.0	25.3		8.2		34.4		97.0		6.6		2.6		2.4	
M2	Fine	Moderate	15:56	5.2	Surface	1.0	25.4	25.4	8.2	8.2	34.5	34.6	97.3	95.9	6.6	6.5	4.5	5.0	2.6	2.6
						1.0	25.4		8.2		34.6		94.4		6.4		4.6		2.5	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.2	25.4	25.4	8.2	8.2	34.3	34.4	100.7	98.2	6.8		5.4		2.0	
						4.2	25.4		8.2		34.5		95.7		6.5		5.3		3.2	
M3	Fine	Moderate	16:02	6.8	Surface	1.0	24.7	24.7	8.2	8.2	34.3	34.3	98.3	98.3	6.7	6.7	1.7	2.4	3	3
						1.0	24.7		8.2		34.3		98.3		6.7		1.7		3	
					Middle	3.4	24.7	24.7	8.2	8.2	34.3	34.3	99.1	98.2	6.8		2.6		3	
						3.4	24.7		8.2		34.3		97.2		6.6		2.6		3	
					Bottom	5.8	24.6	24.7	8.2	8.2	34.3	34.3	100.4	99.0	6.9		2.9		3	
						5.8	24.7		8.2		34.3		97.5		6.7		2.8		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**

**Airport City Link
Water Quality Monitoring**

Water Quality Monitoring Results on 22 October 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
C1	Fine	Moderate	10:21	11.3	Surface	1.0	25.0	25.0	8.2	8.2	34.5	34.5	94.0	93.8	6.4	6.4	2.4	5.3	7.5	6.6
						1.0	25.0		8.2		34.5		93.6		6.4		2.6		7.1	
					Middle	5.7	24.9	24.9	8.2	8.2	34.5	34.5	93.4	93.6	6.4		5.4		6.8	
						5.7	24.9		8.2		34.5		93.7		6.4		6.0		6.5	
					Bottom	10.3	25.0	25.0	8.2	8.2	34.5	34.5	93.9	93.7	6.4		7.8		5.9	
						10.3	25.0		8.2		34.5		93.5		6.4		7.4		5.6	
C2	Fine	Moderate	09:56	10.1	Surface	1.0	25.1	25.2	8.2	8.2	34.5	34.6	94.9	95.4	6.4	6.4	1.3	4.6	5.2	4.7
						1.0	25.2		8.2		34.6		95.8		6.5		1.1		5.5	
					Middle	5.1	25.1	25.1	8.2	8.2	34.6	34.6	94.7	94.5	6.4		5.0		4.9	
						5.1	25.0		8.2		34.5		94.3		6.4		5.2		4.5	
					Bottom	9.1	25.0	25.0	8.2	8.2	34.5	34.5	94.9	94.9	6.5		7.6		4.1	
						9.1	25.0		8.2		34.5		94.9		6.5		7.6		3.9	
M1	Fine	Moderate	10:11	5.8	Surface	1.0	25.1	25.1	8.1	8.1	34.4	34.4	92.5	92.3	6.3	6.3	5.7	5.5	3.9	3.4
						1.0	25.1		8.1		34.4		92.1		6.3		5.2		4.2	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.8	25.0	25.1	8.2	8.2	34.5	34.5	92.8	92.6	6.3		5.8		2.5	
						4.8	25.1		8.1		34.4		92.3		6.3		5.4		2.9	
M2	Fine	Moderate	10:06	5.2	Surface	1.0	25.2	25.2	8.1	8.1	34.4	34.4	94.9	94.8	6.4	6.4	1.8	2.4	3.8	3.0
						1.0	25.2		8.1		34.4		94.7		6.4		1.6		3.4	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.2	25.1	25.2	8.1	8.1	34.5	34.5	95.0	94.8	6.4		3.0		2.6	
						4.2	25.2		8.1		34.4		94.5		6.4		3.0		2.2	
M3	Fine	Moderate	10:15	6.7	Surface	1.0	25.1	25.1	8.2	8.2	34.5	34.5	95.2	95.0	6.5	6.5	3.8	4.7	3	3
						1.0	25.1		8.2		34.5		94.8		6.4		4.5		3	
					Middle	3.4	25.1	25.1	8.2	8.2	34.5	34.5	94.6	94.9	6.4		5.1		3	
						3.4	25.1		8.2		34.5		95.1		6.5		5.6		4	
					Bottom	5.7	25.1	25.1	8.2	8.2	34.5	34.5	95.3	95.1	6.5		4.9		4	
						5.7	25.1		8.2		34.5		94.8		6.4		4.4		4	

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

**Airport City Link
Water Quality Monitoring**

Water Quality Monitoring Results on 22 October 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)			
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
C1	Fine	Moderate	16:33	11.1	Surface	1.0	26.1	26.1	8.2	8.2	32.5	32.5	102.8	102.5	6.9	6.8	2.3	5.1	7.3	6.1		
						1.0	26.1		8.2		32.5		102.2		6.9		2.4		6.9			
					Middle	5.6	25.8	25.8	8.2	8.2	32.8	32.8	98.5	99.2	6.7		6.3		6.5			
						5.6	25.8		8.2		32.8		99.8		6.8		6.5		6.2			
					Bottom	10.1	25.8	25.8	8.2	8.2	32.9	32.9	100.4	100.4	6.8		6.8		6.6		6.6	4.8
						10.1	25.8		8.2		32.9		100.4		6.8				6.6		5.1	
C2	Fine	Moderate	16:57	10.7	Surface	1.0	26.0	26.1	8.2	8.2	32.6	32.6	101.5	101.3	6.9	6.8	3.7	6.3	2.8	4.3		
						1.0	26.1		8.2		32.5		101.0		6.8		3.9		3.2			
					Middle	5.4	25.5	25.6	8.2	8.2	33.5	33.5	97.8	98.7	6.6		6.8		5.7		3.6	
						5.4	25.6		8.2		33.4		99.5		6.7				6.5		3.9	
					Bottom	9.7	25.2	25.4	8.2	8.2	34.1	33.9	93.6	92.3	6.3		6.3		9.1		6.4	
						9.7	25.5		8.2		33.6		90.9		6.2				8.7		6.0	
M1	Fine	Moderate	16:44	5.7	Surface	1.0	26.0	25.9	8.2	8.2	33.0	33.0	98.5	97.8	6.6	6.6	6.5	6.6	5.6	5.6		
						1.0	25.8		8.2		33.0		97.1		6.6		6.9		6.1			
					Middle	-	-	-	-	-	-	-	-	-	-		6.6		-		-	
						-	-		-		-		-		-				-			
					Bottom	4.7	25.7	25.8	8.2	8.2	33.1	33.1	95.4	96.9	6.5		6.6		6.7		5.5	
						4.7	25.9		8.2		33.0		98.3		6.6				6.2		5.3	
M2	Fine	Moderate	16:47	5.3	Surface	1.0	25.9	26.0	8.2	8.2	33.0	33.0	98.3	99.0	6.6	6.7	5.7	6.0	5.0	5.4		
						1.0	26.0		8.2		33.0		99.7		6.7		5.8		5.3			
					Middle	-	-	-	-	-	-	-	-	-	-		6.7		-		-	
						-	-		-		-		-		-				-			
					Bottom	4.3	25.8	25.9	8.2	8.2	33.0	33.0	97.3	96.8	6.6		6.6		6.1		5.6	
						4.3	26.0		8.2		33.0		96.3		6.5				6.4		5.8	
M3	Fine	Moderate	16:39	7.1	Surface	1.0	25.9	25.9	8.2	8.2	33.0	33.0	99.0	99.1	6.7	6.6	4.3	3.5	6	5		
						1.0	25.9		8.2		33.0		99.1		6.7		4.0		6			
					Middle	3.6	25.7	25.7	8.2	8.2	33.0	33.0	95.9	96.2	6.5		6.6		3.4		5	
						3.6	25.6		8.2		33.0		96.5		6.5				3.0		5	
					Bottom	6.1	25.6	25.7	8.2	8.2	33.0	33.0	101.1	98.4	6.9		6.7		3.3		5	
						6.1	25.7		8.2		33.0		95.7		6.5				2.9		5	

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**

**Airport City Link
Water Quality Monitoring**

Water Quality Monitoring Results on 25 October 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)							
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA						
C1	Fine	Moderate	11:22	8.6	Surface	1.0	24.7	24.7	8.2	8.2	31.6	31.6	101.3	100.7	7.0	7.0	1.0	1.5	5.4	4.8						
						1.0	24.7		8.2		31.6		100.0		6.9		1.0		5.7							
					Middle	4.3	24.7	24.7	8.2	8.2	31.6	31.6	101.8	101.2	7.1	7.1	1.2	1.5	4.6							
						4.3	24.7		8.2		31.6		100.6		7.0		1.1		5.0							
					Bottom	7.6	24.6	24.7	8.2	8.2	31.6	31.6	102.6	101.8	7.1	7.1	2.2	1.5	4.0							
						7.6	24.7		8.2		31.6		100.9		7.0		2.2		4.1							
					C2	Fine	Moderate	11:41	8.2	Surface	1.0	24.7	24.7	8.2	8.2	31.5	31.5	100.0	99.2		7.0	6.9	1.4	2.5	3.3	4.1
											1.0	24.7		8.2		31.5		98.4			6.8		1.4		3.6	
Middle	4.1	24.7	24.7	8.2						8.2	31.5	31.5	100.4	99.5	7.0	7.0	2.5	2.5	4.0							
	4.1	24.7		8.2							31.5		98.6		6.9		2.5		4.3							
Bottom	7.2	24.6	24.7	8.2						8.2	31.5	31.5	101.4	100.2	7.1	7.0	3.5	2.5	4.8							
	7.2	24.7		8.2							31.5		98.9		6.9		3.6		4.6							
M1	Fine	Moderate	11:32	5.0						Surface	1.0	24.4	24.5	8.2	8.2	31.7	31.7	97.5	97.7	6.8	6.9	2.3	2.9	3.8	4.9	
											1.0	24.5		8.2		31.7		97.8		6.9		2.3		4.2		
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
						-	-		-		-		-		-		-		-							
					Bottom	4.0	24.4	24.4	8.2	8.2	31.7	31.7	102.1	102.1	7.1	7.1	3.5	2.9	5.9							
						4.0	24.4		8.2		31.7		102.0		7.1		3.5		5.6							
					M2	Fine	Moderate	11:35	4.6	Surface	1.0	24.6	24.6	8.2	8.2	31.6	31.6	100.6	99.8	7.0	7.0	5.1	5.8	3.8		4.0
											1.0	24.6		8.2		31.6		98.9		6.9		5.1		3.6		
Middle	-	-	-	-						-	-	-	-	-	-	-	-	-	-							
	-	-		-							-		-		-		-		-							
Bottom	3.6	24.5	24.6	8.2						8.2	30.9	31.3	101.4	100.6	7.1	7.0	6.5	5.8	4.1							
	3.6	24.6		8.2							31.6		99.8		6.9		6.4		4.6							
M3	Fine	Moderate	11:27	6.8						Surface	1.0	24.6	24.6	8.2	8.2	31.6	31.6	97.8	97.5	6.8	6.8	2.6	2.8	4	5	
											1.0	24.6		8.2		31.6		97.1		6.8		2.6		3		
					Middle	3.4	24.6	24.6	8.2	8.2	31.6	31.6	99.3	98.3	6.9	6.8	2.9	2.8	5							
						3.4	24.6		8.2		31.6		97.2		6.8		2.8		5							
					Bottom	5.8	24.6	24.6	8.2	8.2	31.6	31.6	99.9	98.7	7.0	6.9	3.0	2.8	6							
						5.8	24.6		8.2		31.6		97.4		6.8		2.9		6							

DA: Depth-averaged

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

**Airport City Link
Water Quality Monitoring**

Water Quality Monitoring Results on 25 October 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
C1	Fine	Moderate	08:24	8.8	Surface	1.0	24.6	24.6	8.2	8.2	31.5	31.5	98.9	98.1	6.9	6.9	2.7	3.4	5.8	4.6
						1.0	24.6		8.2		31.5		97.2		6.8		2.7		6.1	
					Middle	4.4	24.6	24.6	8.2	8.2	31.5	31.5	99.6	98.7	6.9		3.3		4.1	
						4.4	24.6		8.2		31.5		97.8		6.8		3.4		4.5	
					Bottom	7.8	24.6	24.6	8.2	8.2	31.5	31.5	100.9	99.5	7.0		4.3		3.8	
						7.8	24.6		8.2		31.5		98.1		6.8		4.2		3.4	
C2	Fine	Moderate	08:07	8.6	Surface	1.0	24.6	24.6	8.2	8.2	31.5	31.5	99.3	98.5	6.9	6.9	1.1	2.6	5.0	6.4
						1.0	24.6		8.2		31.5		97.6		6.8		1.1		5.4	
					Middle	4.3	24.6	24.6	8.2	8.2	31.5	31.5	100.2	99.1	7.0		3.0		5.8	
						4.3	24.6		8.2		31.5		98.0		6.8		3.0		6.2	
					Bottom	7.6	24.6	24.6	8.2	8.2	31.5	31.5	101.5	100.0	7.1		3.7		8.0	
						7.6	24.6		8.2		31.5		98.5		6.9		3.7		7.8	
M1	Fine	Moderate	08:13	5.0	Surface	1.0	24.4	24.4	8.2	8.2	31.6	31.6	99.3	98.4	6.9	6.9	4.3	4.4	3.8	4.6
						1.0	24.4		8.2		31.6		97.5		6.8		4.2		4.1	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.0	24.4	24.4	8.2	8.2	31.3	31.5	101.0	99.7	7.1		4.6		5.6	
						4.0	24.4		8.2		31.6		98.3		6.9		4.5		5.0	
M2	Fine	Moderate	08:16	4.2	Surface	1.0	24.4	24.4	8.2	8.2	31.6	31.6	99.2	99.3	6.9	7.0	2.8	3.3	4.8	4.5
						1.0	24.4		8.2		31.6		99.4		7.0		2.9		5.0	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	3.2	24.3	24.4	8.3	8.3	31.6	31.6	100.3	100.3	7.0		3.7		4.2	
						3.2	24.4		8.2		31.6		100.2		7.0		3.7		3.8	
M3	Fine	Moderate	08:20	7.0	Surface	1.0	24.4	24.5	8.2	8.2	31.6	31.6	98.1	96.9	6.8	6.8	4.0	5.4	5	5
						1.0	24.5		8.2		31.6		95.6		6.7		4.0		5	
					Middle	3.5	24.4	24.5	8.2	8.2	31.6	31.6	99.3	98.0	6.9		5.5		5	
						3.5	24.5		8.2		31.6		96.7		6.7		5.4		5	
					Bottom	6.0	24.4	24.5	8.2	8.2	31.6	31.6	100.5	98.9	7.0		6.6		4	
						6.0	24.5		8.2		31.6		97.3		6.8		6.6		4	

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**

**Airport City Link
Water Quality Monitoring**

Water Quality Monitoring Results on 27 October 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
C1	Fine	Moderate	12:43	8.2	Surface	1.0	24.5	24.6	8.3	8.3	31.5	31.5	100.7	100.7	7.0	7.0	1.8	2.8	6.1	6.6
						1.0	24.6		8.3		31.5		100.7		7.0		1.7		5.7	
					Middle	4.1	24.5	24.6	8.3	8.3	31.5	31.5	100.6	100.7	7.0	7.0	2.8	2.8	6.5	
						4.1	24.6		8.3		31.5		100.7		7.0		2.7		6.8	
					Bottom	7.2	24.5	24.6	8.3	8.3	31.5	31.5	101.1	100.9	7.0	7.0	3.8	7.0	7.0	
						7.2	24.6		8.3		31.5		100.7		7.0		3.8		7.4	
C2	Fine	Moderate	12:59	7.8	Surface	1.0	24.6	24.6	8.3	8.3	31.5	31.5	100.9	101.0	7.0	7.0	5.5	6.2	6.4	5.9
						1.0	24.6		8.3		31.5		101.1		7.0		5.4		6.7	
					Middle	3.9	24.5	24.6	8.3	8.3	31.5	31.5	100.7	100.9	7.0	7.0	6.1	6.2	5.6	
						3.9	24.6		8.3		31.5		101.0		7.0		6.1		6.0	
					Bottom	6.8	24.6	24.6	8.3	8.3	31.5	31.5	100.9	101.0	7.0	7.0	7.1	7.0	5.4	
						6.8	24.6		8.3		31.5		101.0		7.0		7.0		5.0	
M1	Fine	Moderate	12:51	5.0	Surface	1.0	24.4	24.4	8.3	8.3	31.6	31.6	100.3	100.1	7.0	7.0	3.4	3.6	5.9	7.1
						1.0	24.4		8.3		31.6		99.9		7.0		3.3		6.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	3.6	-	
						-	-		-		-		-		-		-		-	
					Bottom	4.0	24.4	24.4	8.3	8.3	31.5	31.6	100.6	100.4	7.0	7.0	3.8	7.0	7.8	
						4.0	24.4		8.3		31.6		100.1		7.0		3.9		8.2	
M2	Fine	Moderate	12:53	4.6	Surface	1.0	24.5	24.5	8.3	8.3	31.6	31.6	100.9	100.9	7.0	7.0	2.0	2.6	9.3	8.6
						1.0	24.5		8.3		31.6		100.8		7.0		2.1		9.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	2.6	-	
						-	-		-		-		-		-		-		-	
					Bottom	3.6	24.6	24.6	8.3	8.3	31.6	31.6	101.1	101.0	7.0	7.0	3.1	7.0	7.8	
						3.6	24.5		8.3		31.6		100.8		7.0		3.1		7.4	
M3	Fine	Moderate	12:47	6.2	Surface	1.0	24.4	24.4	8.3	8.3	31.6	31.6	99.6	99.3	7.0	7.0	2.3	3.2	9	8
						1.0	24.4		8.3		31.6		98.9		6.9		2.2		9	
					Middle	3.1	24.4	24.4	8.3	8.3	31.6	31.6	99.5	99.3	7.0	7.0	3.3	3.2	9	
						3.1	24.4		8.3		31.6		99.0		6.9		3.4		9	
					Bottom	5.2	24.4	24.4	8.3	8.3	31.6	31.6	100.0	99.8	7.0	7.0	4.1	7.0	7	
						5.2	24.4		8.3		31.6		99.5		6.9		4.1		7	

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**Airport City Link
Water Quality Monitoring**

Water Quality Monitoring Results on 27 October 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)														
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA													
C1	Fine	Moderate	09:43	8.0	Surface	1.0	24.4	24.4	8.2	8.3	31.4	31.4	98.9	98.3	7.0	7.0	2.7	3.6	5.0	5.8													
						1.0	24.4		8.3		31.4		97.6		6.9		2.6		4.6														
						4.0	24.3		24.4		8.2		8.3		31.6		31.5		99.8		98.8	7.1	3.5	5.4									
							24.4				8.3				31.4				97.7			6.9	3.4	5.8									
					Bottom	7.0	24.2	24.3	8.2	8.3	31.6	31.5	100.6	99.3	7.2	7.1	4.7	7.1	4.7		7.2												
						7.0	24.4		8.3		31.4		98.0		7.0		4.7		6.9														
						C2	Fine		Moderate		09:25		8.4		Surface		1.0		24.3		24.3	8.3	8.3	31.6	31.6	98.1	97.6	7.0	7.0	3.1	4.2	6.8	6.0
																	1.0		24.3			8.3		31.5		97.0		7.0		3.1		6.6	
4.2	24.3	24.3	8.2	8.3	31.6			31.6		98.5		97.9		7.1		4.3	6.2																
	24.3		8.3		31.5					97.3				7.0		4.3	5.8																
Bottom	7.4	24.3	24.3	8.2	8.3			31.6		31.6		99.0		98.3	7.1	7.1	5.3	7.1	5.3	5.6													
	7.4	24.3		8.3				31.5				97.6			7.0		5.3		5.2														
	M1	Fine		Moderate				09:32				5.0			Surface		1.0		24.2	24.2	8.2	8.2	31.5	31.6	97.1	97.5	7.0	7.0	4.8	4.9	4.5	8.3	
																	1.0		24.2		8.2		31.6		97.8		7.0		4.8		5.0		
-			-		-	-	-		-	-	-		-	-		-	-	-															
			-			-			-		-			-		-	-																
Bottom			4.0		24.2	24.2	8.2		8.2	31.0	31.3		101.2	101.1	7.3	7.3	5.1	7.3	5.1	11.2													
			4.0		24.2		8.2			31.5			101.0		7.3		5.0		12.6														
			M2		Fine		Moderate			09:35			4.2		Surface		1.0		24.1	24.1	8.3	8.3	31.7	31.7	97.1	97.0	6.9	7.0	1.5	2.0	5.9		7.2
																	1.0		24.1		8.3		31.7		96.9		7.0		1.4		6.2		
-	-	-		-		-		-	-		-	-		-		-	-																
	-			-				-			-			-		-	-																
Bottom	3.2	24.1		24.1		8.3		8.3	31.7		31.7	97.3		97.2	7.0	7.0	2.6	7.0	2.6	8.6													
	3.2	24.1				8.3			31.7			97.0			7.0		2.6		8.1														
	M3	Fine				Moderate			09:38			7.0			Surface		1.0		24.2	24.2	8.2	8.2	31.6	31.6	96.5	96.6	6.9	6.9	3.5	4.5	6	7	
																	1.0		24.2		8.2		31.6		96.7		6.9		3.4		6		
3.5			24.2	24.2	8.2		8.2	31.6		31.6	97.1		97.2	6.9		4.5	7																
			24.2		8.2			31.6			97.3			6.9		4.4	6																
Bottom			6.0	24.2	24.2		8.2	8.2		31.6	31.6		100.8	100.6	7.2	7.2	5.4	7.2	5.4	8													
			6.0	24.2			8.2			31.6			100.3		7.1		5.5		8														

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

**Airport City Link
Water Quality Monitoring**

Water Quality Monitoring Results on 29 October 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
C1	Fine	Moderate	14:22	11.4	Surface	1.0	25.3	25.3	8.3	8.3	33.7	33.7	100.1	100.5	6.8	6.8	2.7	3.3	7.5	7.7
						1.0	25.3		8.3		33.7		100.9		6.9		2.5		7.7	
					Middle	5.7	25.1	25.2	8.3	8.3	33.7	33.7	97.9	98.9	6.7		2.8		7.8	
						5.7	25.3		8.3		33.7		99.9		6.8		2.7		7.6	
					Bottom	10.4	25.1	25.1	8.2	8.3	33.7	33.7	98.1	98.1	6.7		4.9		7.7	
						10.4	25.1		8.3		33.7		98.1		6.7		4.0		8.0	
C2	Fine	Moderate	14:45	11.0	Surface	1.0	25.2	25.2	8.2	8.3	33.7	33.7	98.2	98.4	6.7	6.7	2.7	4.4	8.7	7.3
						1.0	25.2		8.3		33.7		98.6		6.7		2.7		8.3	
					Middle	5.5	25.1	25.1	8.2	8.2	33.7	33.7	97.2	97.1	6.6		4.3		7.2	
						5.5	25.1		8.2		33.7		97.0		6.6		4.8		7.0	
					Bottom	10.0	25.1	25.1	8.2	8.2	33.7	33.7	94.7	95.8	6.4		6.3		6.2	
						10.0	25.1		8.2		33.7		96.8		6.6		5.5		6.3	
M1	Fine	Moderate	14:33	5.8	Surface	1.0	25.5	25.5	8.3	8.3	33.7	33.7	103.2	103.3	7.0	7.0	2.4	2.8	7.5	7.6
						1.0	25.5		8.3		33.7		103.4		7.0		2.0		7.1	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.8	25.2	25.4	8.2	8.3	33.8	33.8	100.9	102.0	6.9		3.5		8.1	
						4.8	25.5		8.3		33.7		103.1		7.0		3.2		7.8	
M2	Fine	Moderate	14:36	5.8	Surface	1.0	25.3	25.3	8.3	8.3	33.8	33.8	100.6	101.0	6.8	6.9	2.3	3.4	7.6	7.4
						1.0	25.3		8.3		33.8		101.4		6.9		2.5		8.0	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-		-	
					Bottom	4.8	25.2	25.2	8.3	8.3	33.8	33.8	99.5	99.9	6.8		4.7		7.1	
						4.8	25.2		8.3		33.8		100.2		6.8		4.2		6.7	
M3	Fine	Moderate	14:28	7.4	Surface	1.0	25.3	25.3	8.3	8.3	33.7	33.7	100.8	100.9	6.8	6.8	2.5	3.8	6	7
						1.0	25.3		8.3		33.7		101.0		6.9		2.4		5	
					Middle	3.7	25.2	25.2	8.3	8.3	33.8	33.8	98.3	98.6	6.7		3.6		7	
						3.7	25.2		8.3		33.7		98.8		6.7		3.5		7	
					Bottom	6.4	25.1	25.1	8.2	8.3	33.8	33.8	97.4	98.0	6.6		5.3		9	
						6.4	25.1		8.3		33.8		98.6		6.7		5.2		9	

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

**Airport City Link
Water Quality Monitoring**

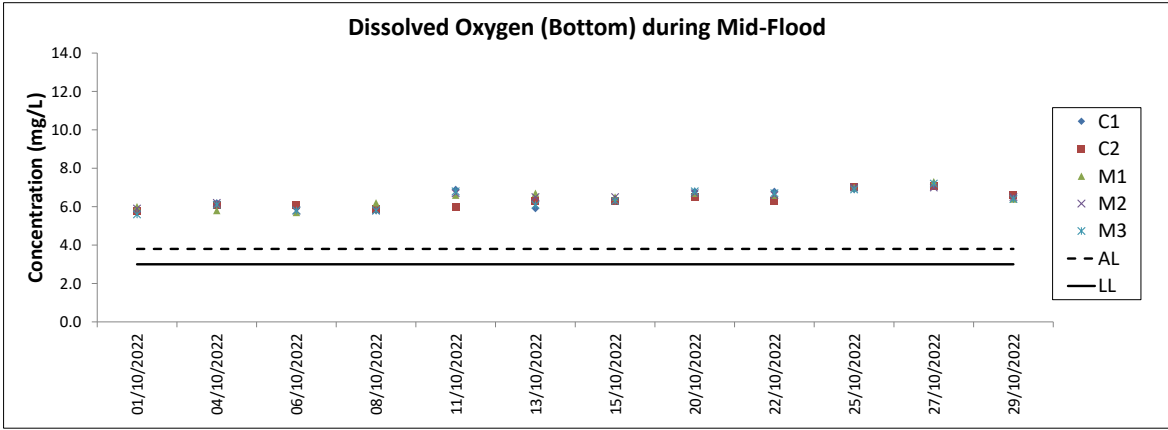
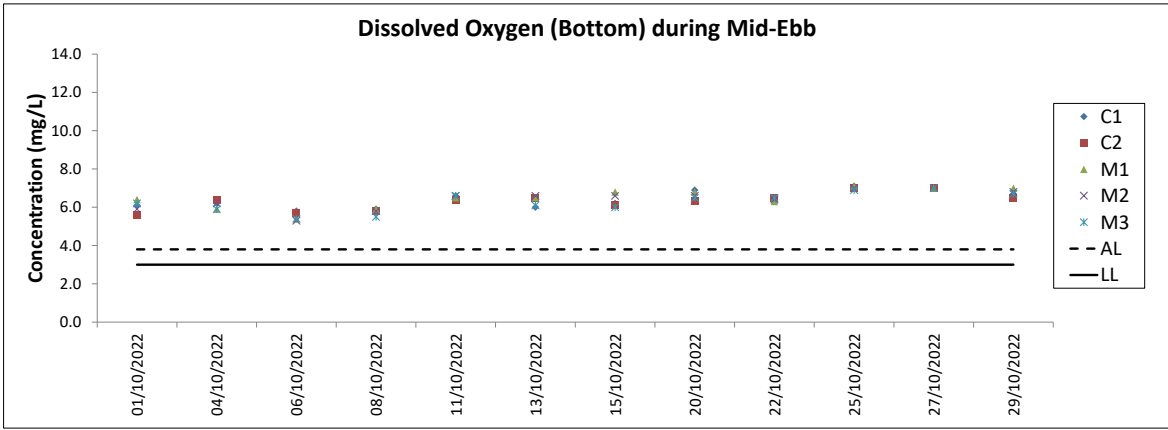
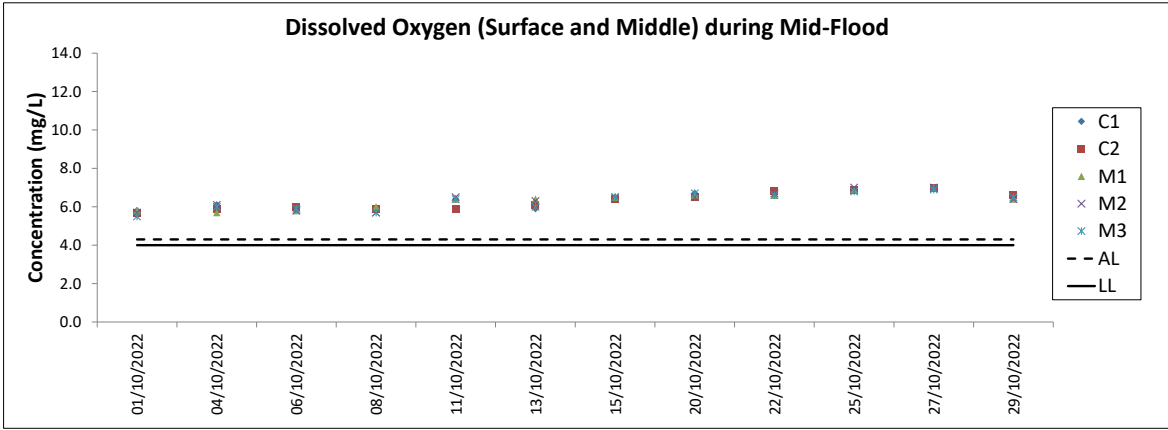
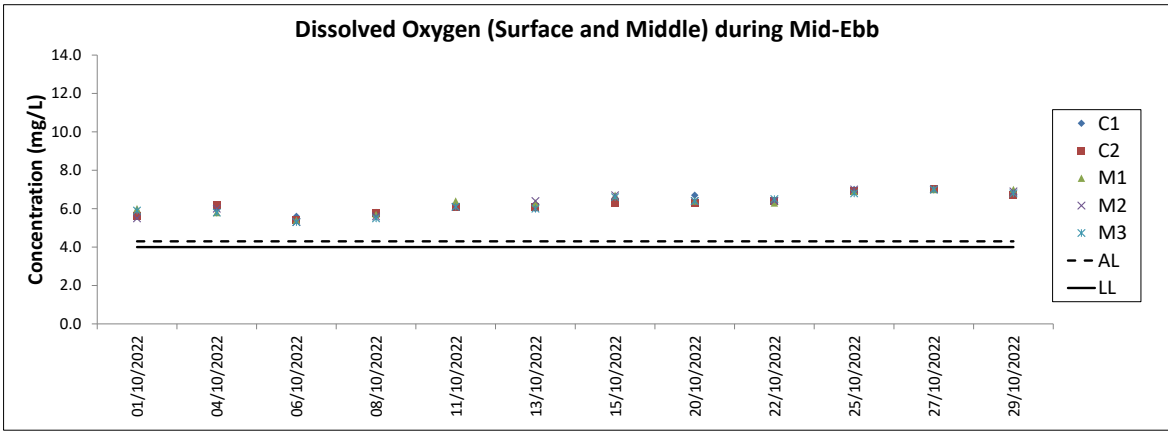
Water Quality Monitoring Results on 29 October 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
							Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
C1	Fine	Moderate	09:35	10.8	Surface	1.0	25.0	25.0	8.2	8.2	33.7	33.7	95.4	95.4	6.5	6.5	4.0	4.9	6.6	7.2
						1.0	25.0		8.2		33.7		95.4		6.5		4.1		7.0	
					Middle	5.4	25.0	25.0	8.2	8.2	33.7	33.7	95.3	95.2	6.5		4.2		7.3	
						5.4	25.0		8.2		33.7		95.0		6.5		4.8		7.0	
					Bottom	9.8	24.9	24.9	8.2	8.2	33.7	33.7	95.4	95.1	6.5		6.3		7.5	
						9.8	24.9		8.2		33.6		94.8		6.5		6.0		7.6	
C2	Fine	Moderate	09:08	10.6	Surface	1.0	25.0	25.0	8.2	8.2	33.7	33.7	96.4	96.4	6.6	6.6	4.2	4.8	6.9	7.4
						1.0	25.0		8.2		33.7		96.4		6.6		4.2		6.5	
					Middle	5.3	24.9	24.9	8.2	8.2	33.7	33.7	95.9	96.0	6.6		4.4		7.6	
						5.3	24.9		8.2		33.7		96.0		6.6		4.7		7.2	
					Bottom	9.6	24.9	24.9	8.2	8.2	33.7	33.7	95.9	96.0	6.6		6.0		8.4	
						9.6	24.9		8.2		33.7		96.0		6.6		5.0		8.0	
M1	Fine	Moderate	09:23	5.7	Surface	1.0	25.0	25.0	8.2	8.2	33.9	33.9	94.3	94.3	6.4	6.4	3.5	3.9	6.6	7.5
						1.0	25.0		8.2		33.9		94.2		6.4		3.5		6.4	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-			
					Bottom	4.7	24.9	25.0	8.2	8.2	33.9	33.9	94.4	94.3	6.4		4.5		8.8	
						4.7	25.0		8.2		33.9		94.2		6.4		3.9		8.3	
M2	Fine	Moderate	09:18	4.9	Surface	1.0	25.0	25.0	8.2	8.2	33.7	33.7	94.2	94.2	6.4	6.4	10.0	8.0	7.0	7.6
						1.0	25.0		8.2		33.7		94.1		6.4		10.2		7.3	
					Middle	-	-	-	-	-	-	-	-	-	-		-		-	
						-	-		-		-		-		-		-			
					Bottom	3.9	25.0	25.0	8.2	8.2	33.8	33.8	94.8	94.4	6.5		6.0		8.1	
						3.9	25.0		8.2		33.7		93.9		6.4		5.9		7.8	
M3	Fine	Moderate	09:27	7.3	Surface	1.0	25.1	25.1	8.2	8.2	33.5	33.6	96.8	96.6	6.6	6.5	2.8	5.3	9	8
						1.0	25.0		8.2		33.6		96.3		6.6		3.0		9	
					Middle	3.7	25.0	25.0	8.2	8.2	33.6	33.7	94.7	94.4	6.5		4.3		8	
						3.7	25.0		8.2		33.7		94.1		6.4		4.0		8	
					Bottom	6.3	25.0	25.0	8.2	8.2	33.8	33.8	93.5	93.7	6.4		8.9		7	
						6.3	25.0		8.2		33.8		93.8		6.4		8.7		8	

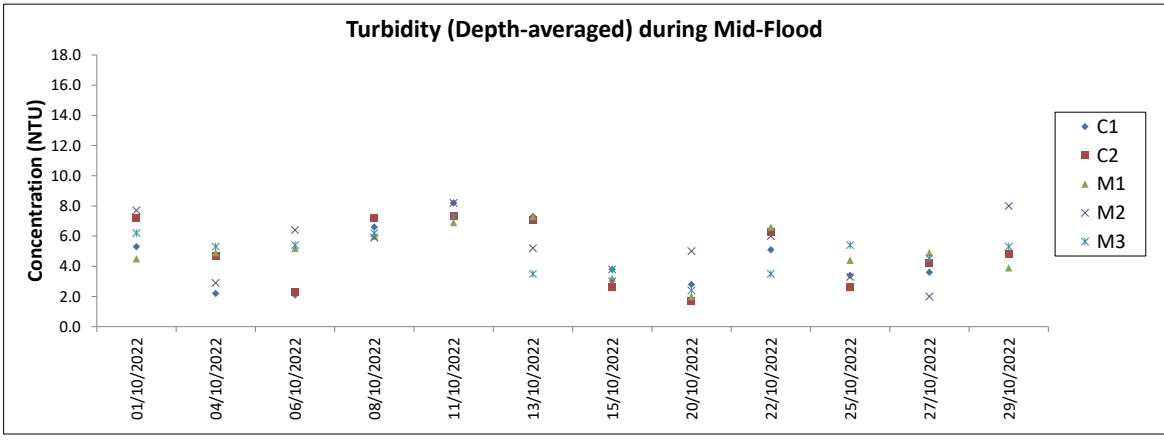
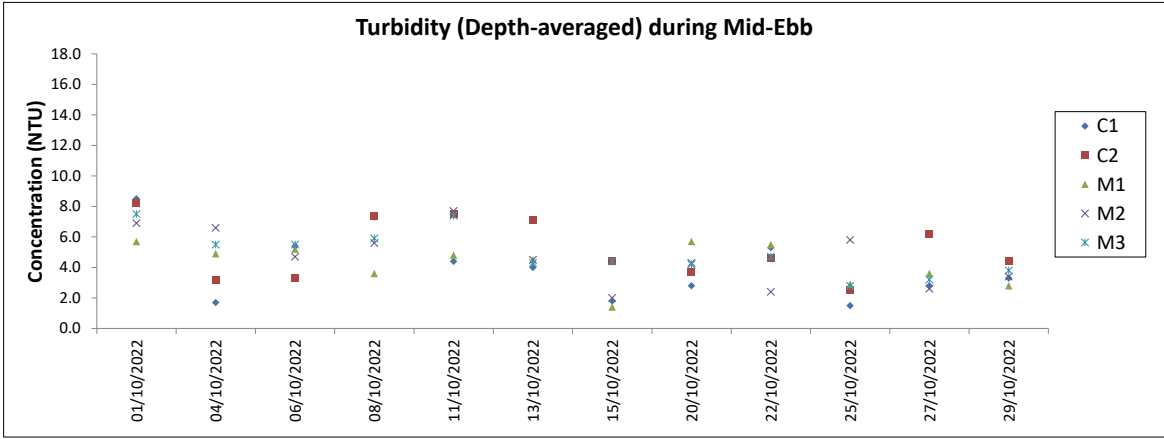
DA: Depth-averaged

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

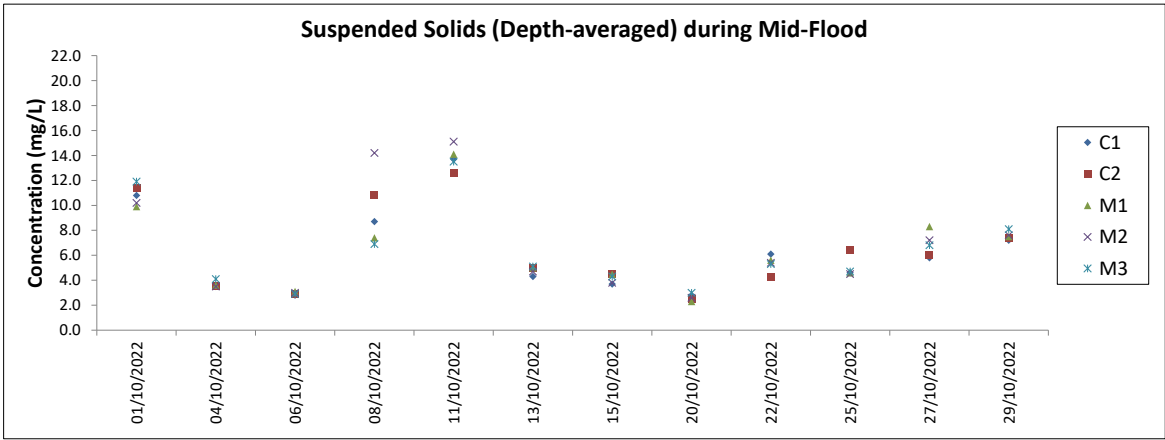
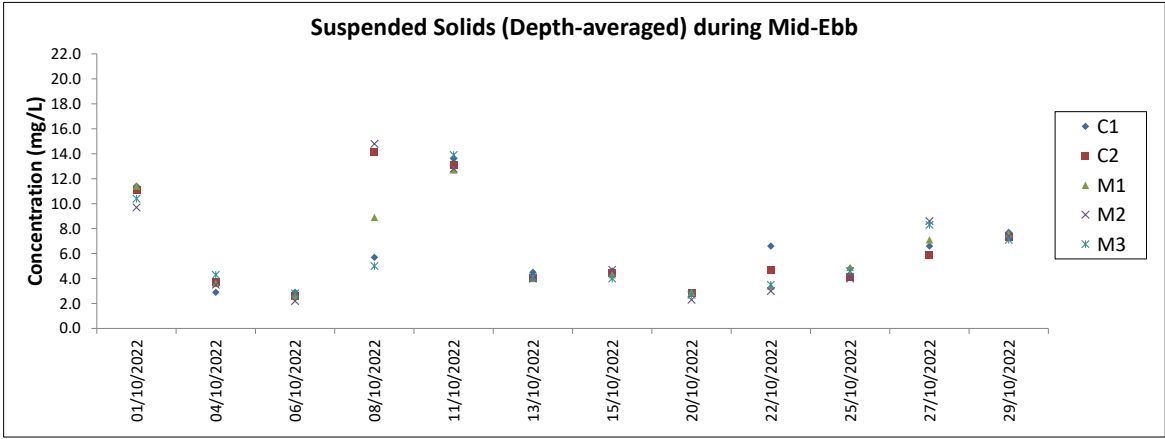
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**



Note: The Action and Limit Level of dissolved oxygen 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 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

Month	Excavated Waste (tonnes)	Actual Quantities of Inert C&D Materials (excluding excavated waste) (tonnes) e.g. broken concrete					Actual Quantities of Non-inert C&D Waste (tonnes)					(k) Total recyclable waste (k) = (b) + (c) + (d) + (f) + (g)	(l) Total construction waste generated (l) = (a) + (j)
		(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)		
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
Total	5316.67	5316.67	0.00	0.00	4309.00	1007.67	# 0.00	0.00	0.36	0.00	0.36	# 4309.00	5317.03

*Chemical waste, Wasted oil density 0.9kg/L

Appendix I. Status of Environmental Permits and Licences

Table I.1: Summary of Environmental Licenses and Permits - Marine Section (Oct 2022)

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-RS0607-22	27 Jul 2022	25 Jan 2023	GW-RS0607-22 was replaced by GW-RS0867-22 since 22 Oct 2022
	GW-RS0867-22	22 Oct 2022	20 Apr 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/22-136	30 Jun 2022	29 Dec 2022	N/A
Marine Dumping (Type 1 – open sea Disposal) (Dedicated Site)	EP/MD/23-043	30 Sep 2022	29 Oct 2022	N/A

Appendix J. Environmental Mitigation Measures Implementation Status

Environmental Mitigation Measures Implementation Status (Oct 2022)

Recommended Mitigation Measures for Air Quality Impact

PP Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^ (Marine Section)
S6.1.1	S4.2.1	<ul style="list-style-type: none"> Relevant control measures as required in the Air Pollution Control (Construction Dust) Regulation shall be implemented to minimise dust impact. 	N/A
		<ul style="list-style-type: none"> Skip hoist for material transport should be totally enclosed by impervious sheeting. 	N/A
		<ul style="list-style-type: none"> All dusty materials should be sprayed with water prior to any loading, unloading or transfer operation to maintain the dusty materials wet. 	N/A
		<ul style="list-style-type: none"> All stockpiles of aggregate or spoil should be covered and/or water applied. 	N/A
		<ul style="list-style-type: none"> The height from which excavated materials are dropped should be controlled to a minimum practical height to limit fugitive dust generation from unloading. 	Yes
		<ul style="list-style-type: none"> Immediately before leaving a construction site, every vehicle shall be washed to remove any dusty materials from its body and wheels. 	N/A
		<ul style="list-style-type: none"> 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
		<ul style="list-style-type: none"> 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. 	Obs

Recommended Mitigation Measures for Noise Impact

PP Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^ (Marine Section)
S6.2.1	S5.2.1	<ul style="list-style-type: none"> Only well-maintained plant should be operated on-site and plant should be serviced regularly. 	Yes
		<ul style="list-style-type: none"> Silencers or mufflers on construction plant should be utilised. 	Yes
		<ul style="list-style-type: none"> Mobile plant should be sited as far away from sensitive uses as possible. 	Yes
		<ul style="list-style-type: none"> Machines and plant that may be in intermittent use should be shut down between works periods or should be throttled down to a minimum. 	Yes
		<ul style="list-style-type: none"> 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. 	Yes

		<ul style="list-style-type: none"> Material stockpiles and other structures such as site hoarding should be effectively utilised to screen noise from on-site construction activities. 	N/A
		<ul style="list-style-type: none"> Noisy construction activities such as road breaking, should be scheduled to less sensitive hours during the day, e.g. midday. 	Yes

Recommended Mitigation Measures for Water Quality Impact

PP Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^ (Marine Section)
S6.3.1	S6.2.1	<ul style="list-style-type: none"> 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. 	Yes
S6.3.1	S6.2.1	<ul style="list-style-type: none"> 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. 	Yes
S6.3.1- S6.3.2	S6.2.1	<ul style="list-style-type: none"> 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. 	Yes
S6.3.1	S6.2.1	<ul style="list-style-type: none"> 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. 	N/A
S6.3.1	S6.2.1	<ul style="list-style-type: none"> 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. 	Yes
S6.3.1	S6.2.1	<ul style="list-style-type: none"> 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. 	Yes
S6.3.1	S6.2.1	<ul style="list-style-type: none"> 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 	N/A

PP Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^ (Marine Section)
		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.	
S6.3.1	S6.2.1	<ul style="list-style-type: none"> 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
S6.3.1	S6.2.1	<ul style="list-style-type: none"> 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. 	N/A
S6.3.1	S6.2.1	<ul style="list-style-type: none"> 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. 	N/A
S6.3.1	S6.2.1	<ul style="list-style-type: none"> Manholes (including newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system, and to prevent storm run-off from getting into foul sewers. Discharge of surface run-off into foul sewers must always be prevented in order not to unduly overload the foul sewerage system. 	N/A
S6.3.1	S6.2.1	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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; The barge transporting the excavated marine-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 Monitoring of the barge loading shall be conducted to ensure that loss of material does not take place during transportation. Transport barges or vessels shall be equipped with automatic self-monitoring devices as specified by the Director of Environmental Protection (DEP). 	Yes
S6.3.1	S6.2.1	<ul style="list-style-type: none"> 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. 	Yes

PP Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^ (Marine Section)
S6.3.1	S6.2.1	<ul style="list-style-type: none"> 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. 	N/A
S6.3.1	S6.2.1	<ul style="list-style-type: none"> 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 on-site 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
S6.3.1	S6.2.1	<ul style="list-style-type: none"> 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 construction workforce. A licensed waste collector should be deployed to clean the chemical toilets on a regular basis. 	Yes
S6.3.1	S6.2.1	<ul style="list-style-type: none"> 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. 	Yes
S6.3.1	S6.2.1	<ul style="list-style-type: none"> 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. 	Yes
S6.3.1	S6.2.1	<ul style="list-style-type: none"> 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. 	Yes
S6.3.1	S6.2.1	<ul style="list-style-type: none"> 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. 	Yes

Recommended Mitigation Measures for Waste Management

PP Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^ (Marine Section)
S6.4.1- S6.4.2	S7.2.1	<u>Good Site Practices:</u>	
		<ul style="list-style-type: none"> 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. 	Yes
		<ul style="list-style-type: none"> Training of site personnel in site cleanliness, concepts of waste reduction, reuse and recycling, proper waste management and chemical waste handling procedures. 	Yes
		<ul style="list-style-type: none"> Provision of sufficient waste reception/ disposal points, and regular collection of waste. 	Obs
		<ul style="list-style-type: none"> 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. 	Yes
		<ul style="list-style-type: none"> Provision of regular cleaning and maintenance programme for drainage systems and sumps. 	Yes
S6.4.1	S7.2.1	<ul style="list-style-type: none"> Adoption of a recording system for the amount of wastes generated, recycled and disposed (including the disposal sites). 	Yes
		<ul style="list-style-type: none"> Preparation of Waste Management Plan (WMP), as part of the Environmental Management Plan (EMP). 	Yes
		<u>Waste Reduction Measures:</u>	
		<ul style="list-style-type: none"> 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
		<ul style="list-style-type: none"> 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. 	N/A
		<ul style="list-style-type: none"> Recycle any unused chemicals or those with remaining functional capacity. 	N/A
S6.4.1	S7.2.1	<ul style="list-style-type: none"> Maximise the use of reusable steel formwork to reduce the amount of C&D materials. 	Yes
		<ul style="list-style-type: none"> Adopt proper storage and site practices to minimise the potential for damage to, or contamination of construction materials. 	Yes
		<ul style="list-style-type: none"> Plan the delivery and stock of construction materials carefully to minimise the amount of waste generated. 	Yes
		<ul style="list-style-type: none"> Minimise over ordering and wastage through careful planning during purchasing of construction materials. 	Yes
S6.4.1	S7.2.1	<u>C&D materials:</u>	Yes
S6.4.1	S7.2.1	<ul style="list-style-type: none"> The C&D materials generated should be sorted on-site into inert C&D materials (that is, public fill) and non-inert (C&D waste). 	
S6.4.1	S7.2.1	<ul style="list-style-type: none"> To minimise the impact resulting from collection and transportation of C&D materials as far as practicable, C&D waste, such as wood, plastic, steel and other metals should be reused or recycled and, as a last resort, disposed to landfill. 	N/A

PP Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^ (Marine Section)
S6.4.1	S7.2.1	<ul style="list-style-type: none"> 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. 	Yes
		<ul style="list-style-type: none"> Covering materials during heavy rainfall. 	N/A
		<ul style="list-style-type: none"> Locating stockpiles to minimise potential visual impacts. 	Yes
		<ul style="list-style-type: none"> Minimising land intake of stockpile areas as far as possible. 	N/A
		<ul style="list-style-type: none"> 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&D materials. 	N/A
		<ul style="list-style-type: none"> 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. 	Yes
S6.4.1	S7.2.1	<u>General Refuse:</u> <ul style="list-style-type: none"> 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
		<ul style="list-style-type: none"> 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. 	N/A
		<ul style="list-style-type: none"> 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. 	N/A
S6.4.1- S6.4.2	S7.2.1	<u>Chemical Waste:</u> <ul style="list-style-type: none"> 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 <i>Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes</i>. 	Yes
		<ul style="list-style-type: none"> 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. 	Yes
		<ul style="list-style-type: none"> Any unused chemicals or those with remaining functional capacity should be collected for reuse as far as practicable. 	Yes
		<ul style="list-style-type: none"> 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
		<u>Sediment:</u>	Yes

PP Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^ (Marine Section)
S6.4.1 & S6.4.3	S7.2.1	<ul style="list-style-type: none"> The sediment should be excavated, handled, treated, transported and/or disposed of in a manner that would minimise adverse environmental impacts. 	Yes
		<ul style="list-style-type: none"> Relevant ordinances (such as Waste Disposal Ordinance, Air Pollution Ordinance (Construction Dust) Regulation and Water Pollution Control Ordinance) shall be complied with during the excavation and handling of the sediment. 	Yes
S6.4.1	S7.2.1	<ul style="list-style-type: none"> 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
S6.4.1	S7.2.1	<ul style="list-style-type: none"> 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). 	N/A
S6.4.1, 6.4.3	S7.2.1	<ul style="list-style-type: none"> 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. 	N/A
		<ul style="list-style-type: none"> 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. 	Yes
S6.4.1	S7.2.1	<ul style="list-style-type: none"> 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). 	N/A
		<ul style="list-style-type: none"> 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 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). 	Yes
		<ul style="list-style-type: none"> 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 	Yes

PP Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^ (Marine Section)
		on trucks or barges. Loading of the excavated sediment to the barge shall be controlled to avoid splashing and overflowing of the sediment slurry to the surrounding water.	
		<ul style="list-style-type: none"> The barge transporting the sediments to the designated disposal sites shall be equipped with tight fitting seals to prevent leakage and shall not be filled to a level that would cause overflow of materials or laden water during loading or transportation. In addition, monitoring of the barge loading shall be conducted to ensure that loss of material does not take place during transportation. Transport barges or vessels shall be equipped with automatic self-monitoring devices as specified by the DEP. 	Yes
S6.4.1	S7.2.1	<p><u>Potential Floating Refuse:</u></p> <ul style="list-style-type: none"> 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

Recommended Mitigation Measures for Marine Ecological Impact

PP Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^ (Marine Section)
-	-	<ul style="list-style-type: none"> No underwater percussive piling shall be conducted in this Project 	Yes
S6.5.1	S8.2.1	<ul style="list-style-type: none"> Based upon a precautionary approach, a speed limit of 10 knots should be strictly enforced on all construction-related vessels. 	Yes
S6.5.1	S8.2.1	<ul style="list-style-type: none"> 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. 	Yes

Recommended Mitigation Measures for Landscape and Visual Impact

PP Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^ (Marine Section)
S6.6.1	S9.3.1	<ul style="list-style-type: none"> All affected trees will be felled and compensated, no transplantation is required. 	N/A
S6.6.1	S9.3.1	<ul style="list-style-type: none"> Optimising construction activities, e.g. minimising extent of temporary works area, installing site hoardings and minimising illumination on non-target areas. 	Yes
S6.6.1	S9.3.1	<ul style="list-style-type: none"> Minimise construction periods where possible. 	Yes
S6.6.1	S9.3.1	<ul style="list-style-type: none"> Early establishment of planting areas as far as appropriate. 	N/A

PP Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^ (Marine Section)
S6.6.1	S9.3.1	<ul style="list-style-type: none"> Erection of decorative mesh screen or construction hoardings. 	N/A
S6.6.1	S9.3.1	<ul style="list-style-type: none"> Control of night-time lighting. 	N/A
S6.6.1	S9.3.1	<ul style="list-style-type: none"> Temporary vertical greening, screen / buffer at-grade planting to soften the engineering structure of construction works. 	N/A
S6.6.1	S9.3.1	<ul style="list-style-type: none"> Tree preservation in accordance with Development Bureau Technical Circular (Works) No. 4/2020 (ref: DEVB(GLTM) 200/2/1/1). 	N/A
S6.6.1	S9.3.1	<ul style="list-style-type: none"> Proposed tree felling / tree compensation. 	N/A
Others			
PP Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^ (Marine Section)
-	-	<ul style="list-style-type: none"> 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. 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). 	Yes
-	-	<ul style="list-style-type: none"> The required licences should be obtained by the Contractor (including CNP (if any), WPCO licence, etc. 	N/A

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