

Airport City Link

Monthly EM&A Report for September 2022 October 2022 Mott MacDonald 3/F Manulife Place 348 Kwun Tong Road Kwun Tong Kowloon Hong Kong

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Airport Authority Hong Kong

Airport City Link

Monthly EM&A Report for September 2022

October 2022

This Submission of Construction Phase Monthly Environmental Monitoring and Audit (EM&A) Report for September 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:

Mum Clea

Ir Thomas Chan Environmental Team Leader (ETL) Mott MacDonald Hong Kong Limited

Date

12 October 2022



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<u>By Email</u>

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

Attn: Alan Chan (Manager, Civil)

12 October 2022

Dear Sir,

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

Monthly Environmental and Audit (EM&A) Report for September 2022

Reference is made to the Environmental Team's submission of Monthly EM&A Report for July and Augsut 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 12 October 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 October 2022.

This is the 2nd 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 30 September 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	13
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 Limit 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 SKYCITY, the Project serves as a connection bridge providing shuttle services and pedestrian pathway.

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

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

The construction phase EM&A programme of the Project started on 26 July 2022. The construction of marine section was commenced on 26 July 2022, while the construction of the land section tentatively commences in October 2022.

This is the 2nd Monthly EM&A report summarising the key findings of the construction phase EM&A programme from 1 to 30 September 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**.

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

Table 1.1: Contact Information of Key Personnel

Party	Position	Name	Telephone
(AECOM Asia Company Limited)	Deputy Independent Environmental Checker	Lemon Lam	3922 9381
Main Contractor – Marine Section	Senior Project Manager	Brian Ho	9041 7535
(Gammon Engineering & Construction Company Limited)	Environmental Officer	Elena Lai	6841 3324
Main Contractor – Land Section	Project Manager	Kingsley Chiang	9424 8437
(China State Construction Engineering (HK) Ltd.)	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 October 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 midebb tides, at 5 water quality monitoring stations. Samples were taken at three depths, namely, 1m below water surface, mid-depth and 1m above sea bed, except where the water depth less than 6m, the mid-depth station was omitted. For locations with water depth less than 3m, only the mid-depth station was monitored. Duplicate in-situ measurements and water samples were collected from each independent monitoring event for all parameters to ensure a robust statistically interpretable dataset.

2.2.2 Monitoring Locations

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

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

Table 2.1: Locations of Marine Water Quality Monitoring Stations

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.

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.

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

Table 2.2: Impact Water Quality Monitoring Equipment

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.

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

Notes:

1. For DO measurement, non-compliance occurs when the monitoring result is lower than the limits.

2. For parameters other than DO, non-compliance of water quality occurs when the monitoring result is higher than the limits.

Depth-averaged results are used unless specified otherwise. 3

Impact station M3 is represents the impact station SR1A of "Expansion of Hong Kong International Airport into 4 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.

Water Quality Monitoring Results 2.4

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 Limit 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 Sep 2022	SS	M1	Flood tide	Limit Level

As informed by the contractor, construction activities were only conducted at Pier 5 and near the Third Runway Project Site Office (TPSO) pier of Airport Authority Hong Kong (AAHK), no construction activity was carried out at other piers during the flood tide. No discharge and spillage incidents were recorded on 8 Sep 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. Also, no exceedance of SS was found on 8 Sep 2022 at ebb tide for the same construction activities.

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 Limit 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 6, 13, 20 and 27 September 2022 for marine section. Joint IEC site inspection for marine section was carried out on 6 September 2022.

Monthly landscape and visual site audit was carried out on 6 September 2022.

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

Inspection Date	Key Observations / Reminders	Recommendations / Actions	Close-Out Date
6 Sep 2022	Defect was observed at the silt curtain installed at Pier 6 and refuse was trapped inside the silt curtain enclosure.	The Contractor should arrange maintenance to ensure the silt curtain at good condition and clear the refuse trapped.	13 Sep 2022
6 Sep 2022	Mitigation measures should be implemented properly to avoid chemical spill (Reminder).	The Contractor was reminded to provide a drip tray under the junction of pipeline to the generator to contain any chemical spill at Pier 6.	6 Sep 2022
6 Sep 2022	Mitigation measures should be implemented properly to avoid oil spillage (Reminder).	The Contractor was reminded to properly treat and dispose the oil spill from the crane as chemical waste and provide maintenance for the crane to avoid oil spillage at Gammon 39.	6 Sep 2022
6 Sep 2022	Mitigation measures should be implemented properly to avoid any refuse from getting into sea (Reminder).	The Contractor was reminded to provide secured receptacles with cover for collection of refuse on temporary access platforms to avoid any refuse from getting into sea under strong wind	6 Sep 2022
13 Sep 2022	A hole was observed at the drip tray under the generator at Gammon 28.	The Contractor should seal the hole to avoid chemical leakage.	20 Sep 2022
20 Sep 2022	Measures to prevent construction debris from falling into sea was inadequate at Pier 4.	The Contractor should provide sandbags bunding at the edge of temporary access platform as preventive measures.	27 Sep 2022
20 Sep 2022	Muddy water was observed at the access platform of Pier 5.	The Contractor should clean up the muddy water and seal up all gaps between sheet pipes to prevent muddy runoff into the sea.	27 Sep 2022

Marine Section

27 Sep 2022	Mitigation measures should be implemented properly to maintain the site clean (Reminder).	The Contractor was reminded to provide regular cleaning of general refuse and construction debris at temporary access platform.	27 Sep 2022
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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 Limit 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.**

Reporting Period	Environmental Complaints	Notifications of Summons	Successful Prosecutions
This reporting period (Sep 2022)	0	0	0
From commencement date of construction to end of reporting period	0	0	0

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

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 (October 2022) are summarized in **Table 4.1**.

Table 4.1: Construction Activities for the Next Reporting Period

Marine Section	
Period	Description of Activities
Oct 2022	 Plant mobilization and material delivery for marine bored piling works Marine 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 Limit 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.

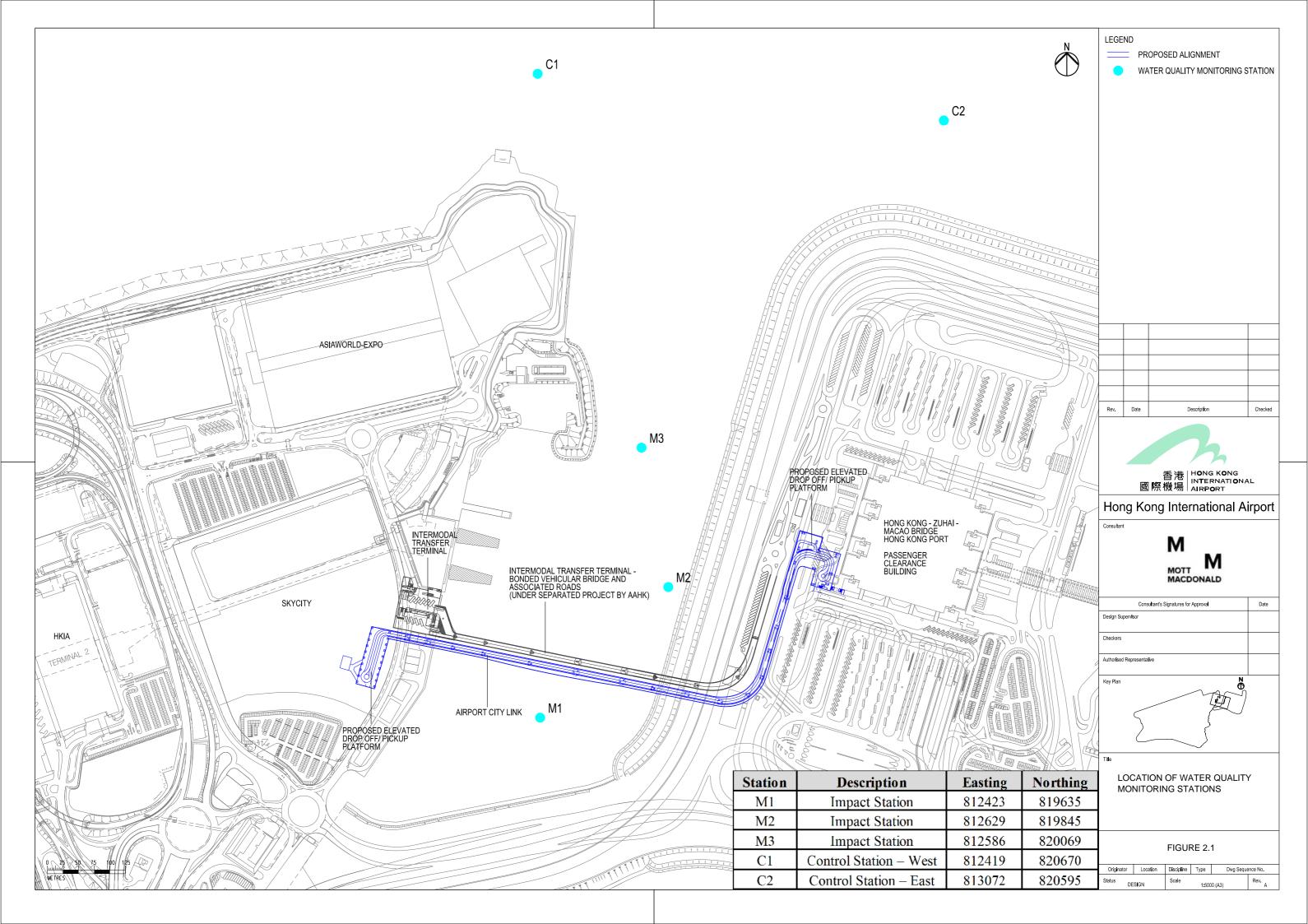
Notifications of Summons and Successful Prosecutions

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

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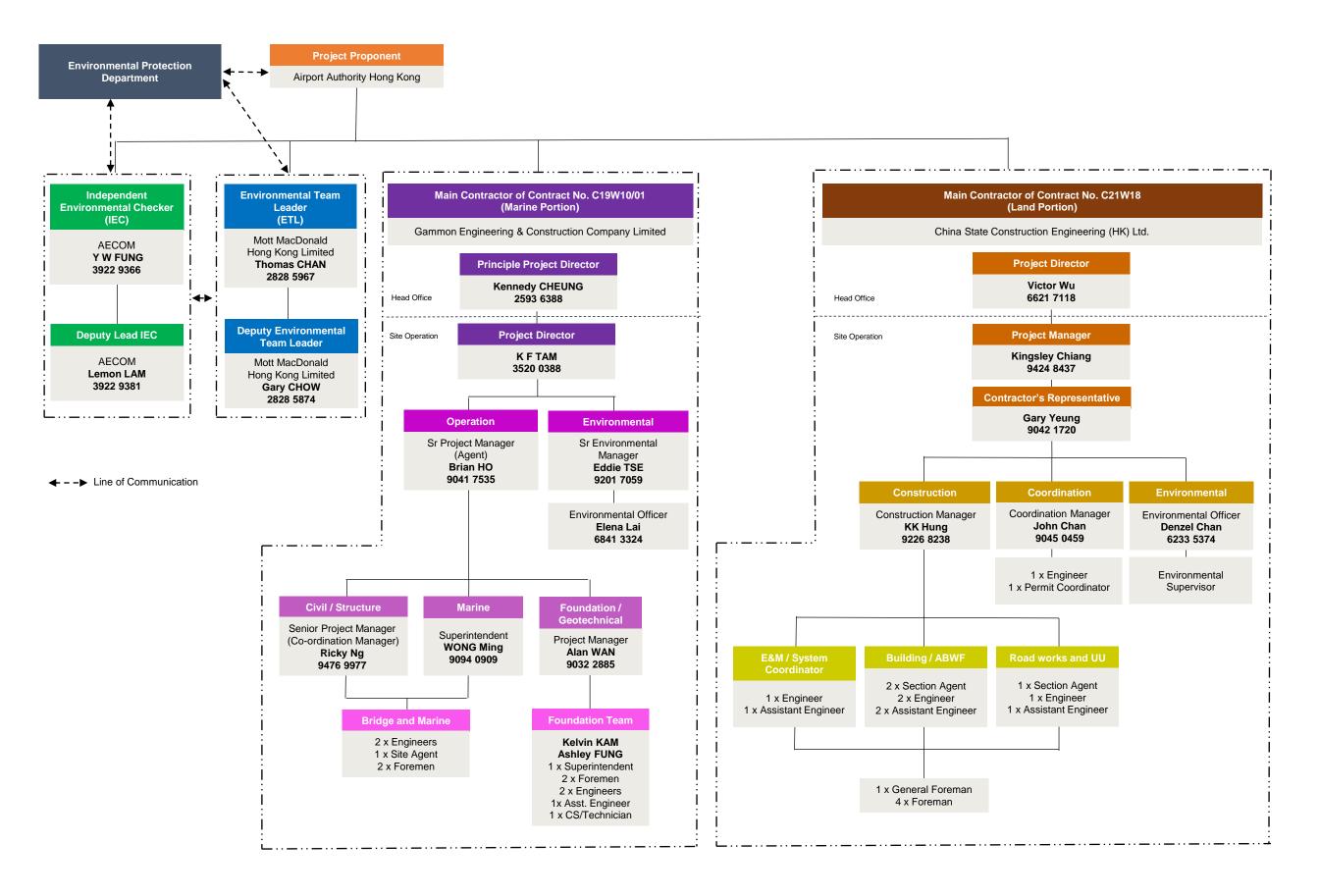
Figure

Figure 2.1 Water Quality Monitoring Locations



Appendices

Appendix A. Project Organisation



Appendix B. Construction Works Programme

		CI	30010/	UI - AUL		y 1710	yranni	ne Rev.A Updated as 3	o September 2022	
tivity ID Act	tivity Name		Orig Dur	Start	Finish	Total Float	Physical % Complete	Sep	202 Oct	Nov
C19W10/01 - ACL - Monthly Program	mme Rev.A Updated as 30 September 2022	2				1 1		8	9	10
Contract Dates										
Project Key Date			0	00 5 1 00 4		1 1	4000/			
	mmencement of the Works		0	26-Feb-22 A	00.11.00.4		100%			
	mpletion of Piling Works in ITTB (Pier 1)		0		26-Jul-22 A	-26	100%			
19W10.A.C0W745 Con Preconstruction Works	mpletion of the Works		0		24-Apr-24*	-20	0%			
Statutory Submission										
Nevigation Channel Diversion Sch	hedule									
Mobilization of Plant and Equipment	ent									
Erection of Working Platform						1 1				
	atform for Pier 5		15	23-Mar-22 A	09-Apr-22 A		100%			
	atform for Pier 6		15	01-Apr-22 A	29-Apr-22 A		100%			
	atform for Pier 4		15	11-Apr-22 A	20-Apr-22 A		100%			
	atform for Pier 8 (Stage 1)		15	20-Apr-22 A	10-May-22 A	1	100%	Platform for Pier 7		
	atform for Pier 7 atform for Pier 3		15	30-Sep-22	20-Oct-22 20-Oct-22	1 35	0%	Platform for Pier 3		
	moval of Platform for Pier 8 (Stage 1)		15	30-Sep-22 28-Nov-22	03-Dec-22	18	0%			Removal of Platform fo
	atform for Pier 8 (Stage 2)		10	05-Dec-22	15-Dec-22	18	0%			
Marine Piling Works	alloffit for Fiel 6 (Stage 2)		10	03-Dec-22	TJ-Dec-22	10	0 %			
Submission of BA10 for the Com	mencement of Plling Works									
1st Pile Group										
ACL P5 (47m)										
19W10.H.VD0A60 Pre-	e-Drilling for P5 Bored Plle		10	30-Apr-22 A	14-May-22 A		100%			
19W10.H.VD0B110 Fou	unding Assessment Report		6	07-Jun-22 A	17-Jun-22 A		100%			
Piling Works										
Pile 1			40	00.1.1.00.1	05 4 00 4		4000/			
	sing Installation and Soil Excavation		10	26-Jul-22 A	05-Aug-22 A	_	100%			
	D Rock Drilling	and Dashfilling	6	19-Sep-22 A	24-Sep-22 A	40	100%	RCD Rock Drilling		
	-Lifting, Steel Cage Installation, Concreting a	and Backfilling	6	24-Sep-22 A	03-Oct-22	-19	0%	e Installation, Concreting and Backfilling		
Pile 2 19W10.H.VD0A80 Cas	sing Installation and Soil Excavation		10	26-Jul-22 A	05-Aug-22 A		100%			
	D Rock Drilling		11	22-Aug-22 A	02-Sep-22 A		100%			
	-Lifting, Steel Cage Installation, Concreting a	and Backfilling	6	03-Sep-22 A	09-Sep-22 A		100%			
Pile 3							,			
	sing Installation and Soil Excavation		10	26-Jul-22 A	05-Aug-22 A		100%			
19W10.H.VD0B160 RCI	D Rock Drilling		6	06-Aug-22 A	11-Aug-22 A		100%			
19W10.H.VD0B170 Air-	-Lifting, Steel Cage Installation, Concreting a	and Backfilling	6	15-Aug-22 A	20-Aug-22 A		100%			
Sonic & Interface Core Test f	for ACL P5									
ACL P6 (57m)										
	e-Drilling for P6 Bored Plle		10	16-May-22 A	02-Jun-22 A		100%			
	unding Assessment Report		6	07-Jun-22 A	17-Jun-22 A		100%			
Piling Works Pile 1										
	sing Installation and Soil Excavation		10	26-Jul-22 A	16-Aug-22 A	Í	100%			
	D Rock Drilling		6	24-Sep-22 A	03-Oct-22	-25	0%	RCD Rock Drilling		
	-Lifting, Steel Cage Installation, Concreting a	and Backfilling	6	05-Oct-22	11-Oct-22	-25		Air-Lifting, Steel Cage Installation, Concreting and Bac	kfilling	
Pile 2							- ,-			
	sing Installation and Soil Excavation		10	26-Jul-22 A	16-Aug-22 A		100%			
19W10.H.VD0B70 RCI	D Rock Drilling		6	02-Sep-22 A	09-Sep-22 A		100%	ng 📃		
19W10.H.VD0B80 Air-	-Lifting, Steel Cage Installation, Concreting a	and Backfilling	6	12-Sep-22 A	17-Sep-22 A		100%	eting and Backfilling		
Pile 3										
19W10.H.VD0A50 Cas	sing Installation and Soil Excavation		10	26-Jul-22 A	16-Aug-22 A		100%			
19W10.H.VD0B090 RCI	D Rock Drilling		6	16-Aug-22 A	22-Aug-22 A		100%			
19W10.H.VD0B100 Air-	-Lifting, Steel Cage Installation, Concreting a	and Backfilling	6	22-Aug-22 A	01-Sep-22 A		100%			
Sonic & Interface Core Test for										
Testing and Statutory Document	nt Submission for Completion									
Actual LOE	Crit Milestone			Project		W10	/01-0/	VP-A-M07	Data Date: 30-Sep-22	Date
Remaining LOE	Actual Milestone	_		-					Printed: 05-Oct-22 10:59	26-Feb-22 Initial
Actual Work			hree-N	/Ionth Ro	Iling Prog	gram	me (as	of 31 August 2022)	Layout: C19W10/01 ACL 3MR M7	10-May-22 Detail
Remaining Work	Finish Constraint					Page 1	•	- ·	TASK filter: All Activities	31-May-22 3MR
Critical Remaining Work	No Predecessors No Successors									
 Milestone 	No Successors									

	Nev			
	Nov 10		Dec 11	
	10		11	
of Plat	tform for Pier 8 (Stage	:1)		
		Pier 8 (Stage 2)		
-				
<u> </u>	Revis	sion	Checked	Approved
, 				
22	Initial Works Prog	gramme	DW	BH
22	Detailed Works F	Programme	DW	BH
			DW	RN
	ISMR		000	
22	3MR			
	3MR			

	Activity Name	Orig Dur	Start	Finish	Float	Physical % Complete	Sep	2022 Oct	2	Nov
Application of P5 and P6 Sup	perstructure Concent						8	9		10
nd Pile Group										
ACL P4 (43m)							1			
19W10.H.VD0A390 F	Pre-Drilling for P4 Bored Plle	10	04-Jun-22 A	16-Jun-22 A		100%				
19W10.H.VD0B720 F	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	05-Oct-22	62	50%				
	RCD Rock Drilling	5	06-Oct-22	11-Oct-22	68	0%	RCD R	ock þrilling		
	Air-Lifting, Steel Cage Installation, Concreting and Backfilling	5	13-Oct-22	18-Oct-22	68	0%	Air-Lifting, Steel Cage Installation, Co			
Pile 2			10 000 22	TO OUL EE	00	070				
	Casing Installation and Soil Excavation	6	16-Aug-22 A	12-Sep-22 A		100%				
19W10.H.VD0B750 F	RCD Rock Drilling	5	13-Sep-22 A	17-Sep-22 A		100%	RCD Rock Drilling			
19W10.H.VD0B760 A	Air-Lifting, Steel Cage Installation, Concreting and Backfilling	5	19-Sep-22 A	24-Sep-22 A		100%	ation, Concreting and Backfilling			
Pile 3				,						
19W10.H.VD0A420	Casing Installation and Soil Excavation	6	16-Aug-22 A	06-Dec-22	42	50%				
19W10.H.VD0B770 F	RCD Rock Drilling	5	07-Dec-22	12-Dec-22	53	0%]			
19W10.H.VD0B780	Air-Lifting, Steel Cage Installation, Concreting and Backfilling	5	13-Dec-22	17-Dec-22	53	0%]		Air-Lifting	, Steel C
Sonic & Interface Core Te	st for ACL P4									
ACL P3 (26m)									_	
	Pre-Drilling for P3 Bored Plle	9	21-Oct-22	31-Oct-22	35	0%		Pre-Drilling for P3 Bored Plle	J	
	Founding Assessment Report	6	01-Nov-22	07-Nov-22	35	0%		Founding Assessment Report		
Piling Works										
Pile 1 19W10.H.VD0A450 (Pasian Installation and Pail Evenuation	6	08-Nov-22	14-Nov-22	35	00/	-	Casing Installation and Soil	Execution	_
	Casing Installation and Soil Excavation	6 5	15-Nov-22	14-1NOV-22 19-Nov-22	35	0%	-	Casing installation and Soli	RCD Rock Drillin	
	RCD Rock Drilling					0%	-	Air-Lifting, Steel Cage Inst		•
19W10.H.VD0B820 A Pile 2	Air-Lifting, Steel Cage Installation, Concreting and Backfilling	5	21-Nov-22	25-Nov-22	35	0%			anation, concreany an	a Dackiii
	Casing Installation and Soil Excavation	6	26-Nov-22	02-Dec-22	35	0%		···- <mark>-</mark> {	Casing Installation	and So
	RCD Rock Drilling	5	03-Dec-22	02-Dec-22 08-Dec-22	35	0%			ousing mistaliator	
	Air-Lifting, Steel Cage Installation, Concreting and Backfilling	5	09-Dec-22	14-Dec-22	35	0%			Air-Lifting, Steel	Cage Ins
Pile 3		3	00 000 22	14 000 22	00	070			, in 21111g, 01001	ougo in
	Casing Installation and Soil Excavation	6	15-Dec-22	21-Dec-22	35	0%				
	RCD Rock Drilling	5	22-Dec-22	29-Dec-22	35	0%				
19W10.H.VD0B860 A	Air-Lifting, Steel Cage Installation, Concreting and Backfilling	5	30-Dec-22	05-Jan-23	35	0%				
Sonic & Interface Core Te	st for ACL P3			,						
Testing and Statutory Docum	nent Submission for Completion									
Application of P4 and P3 Sup	perstructure Concent									
rd Pile Group										
ACL P7 (66m) 19W10.H.VD0A130	Pre-Drilling for P7 Bored Plle	10	31-May-22 A	23-Jun-22 A		100%				
	Founding Assessment Report	6	14-Jul-22 A	23-Jul-22 A		100 %				
Piling Works	ounding Assessment Report	0	14-JUI-22 A	ZI-JUI-ZZ A		100 /0				
Pile 1										
	Casing Installation and Soil Excavation	10	27-Oct-22	07-Nov-22	1	0%	1	Casing Installation and Soil Excavation		
	RCD Rock Drilling	6	08-Nov-22	14-Nov-22	1	0%	1	RCD R	ock Drilling	
	Air-Lifting, Steel Cage Installation, Concreting and Backfilling	6	15-Nov-22	21-Nov-22	1	0%	1	Air-Lifting, Steel Cage Installation, Co	oncreting and Backfillin	.g
Pile 2							1			
	Casing Installation and Soil Excavation	10	22-Nov-22	02-Dec-22	1	0%		Ca	ising Installation and S	oil Exca
19W10.H.VD0B300 F	RCD Rock Drilling	6	03-Dec-22	09-Dec-22	1	0%	1			
19W10.H.VD0B310	Air-Lifting, Steel Cage Installation, Concreting and Backfilling	6	16-Dec-22	23-Dec-22	1	0%	1		Air-	Lifting, S
Pile 3										
19W10.H.VD0A160	Casing Installation and Soil Excavation	10	23-Dec-22	07-Jan-23	1	0%				
19W10.H.VD0B320 F	RCD Rock Drilling	6	07-Jan-23	14-Jan-23	11	0%				
19W10.H.VD0B330	Air-Lifting, Steel Cage Installation, Concreting and Backfilling	6	14-Jan-23	25-Jan-23	11	0%				
Sonic & Interface Core Te	st for ACL P7									
ACL P8 (61m)										
	Crit Milestone		Draias		1/1/1	עם 10/1		Data Date: 30-Sep-22	Date	
Actual LOE		1	LICIEC	UD: U19		៸៸៶៸៸	VP-A-M07	Printed: 05-Oct-22 10:59	26-Feb-22	Initial
Actual LOE Remaining LOE	Actual Milestone		-					Finited. 05-061-22 10.55		\leftarrow
	 Actual Milestone Start Constraint 	Three-N	-					Layout: C19W10/01 ACL 3MR M7	10-May-22	
Remaining LOE		Three-N	-	olling Prog		ime (as	of 31 August 2022)		10-May-22	Detai 3MR

22		Nov		Dec	
+		10		Dec	
				-	
					
			RCD Rock Drilling		
	Air-Lifting	, Steel Cage Installati	on, Concreting and I	Backfilling	
_					
-					
l Exc	avation				
	RCD Rock Drillin	g 📃			
tallat	ion, Concreting an	d Backfilling			
	Casing Installation	and Soil Excavation			
		RCD F	Rock Drilling		
	Air-Lifting, Steel	Cage Installation, Cor	ncreting and Backfill	ing 📃	
		Casir	ng Installation and S		
				RCD Rock Dr	
		/	Air-Lifting, Steel Cag	e Installation, Concre	ting and Backfilling
	Drilling				
oncre	eting and Backfillin	g			
			<u></u>		
asıng	Installation and S				
			Rock Drilling		
	Air-	Lifting, Steel Cage Ins	stallation, Concreting	and Backfilling	
			Cooling Inc	tallation and Soil Exca	avation
			Casing ins		
				Air Liffing Ot-	RCD F
				AII-LIIUNG, STE	el Cage Installation, Co
	Date	Revis	sion	Checked	Approved
	26-Feb-22	Initial Works Prog		DW	Approved BH
		Detailed Works Prog		DW	BH
	10-May-22	3MR	logiallille	DW	RN
	31-May-22				
					┼────┤

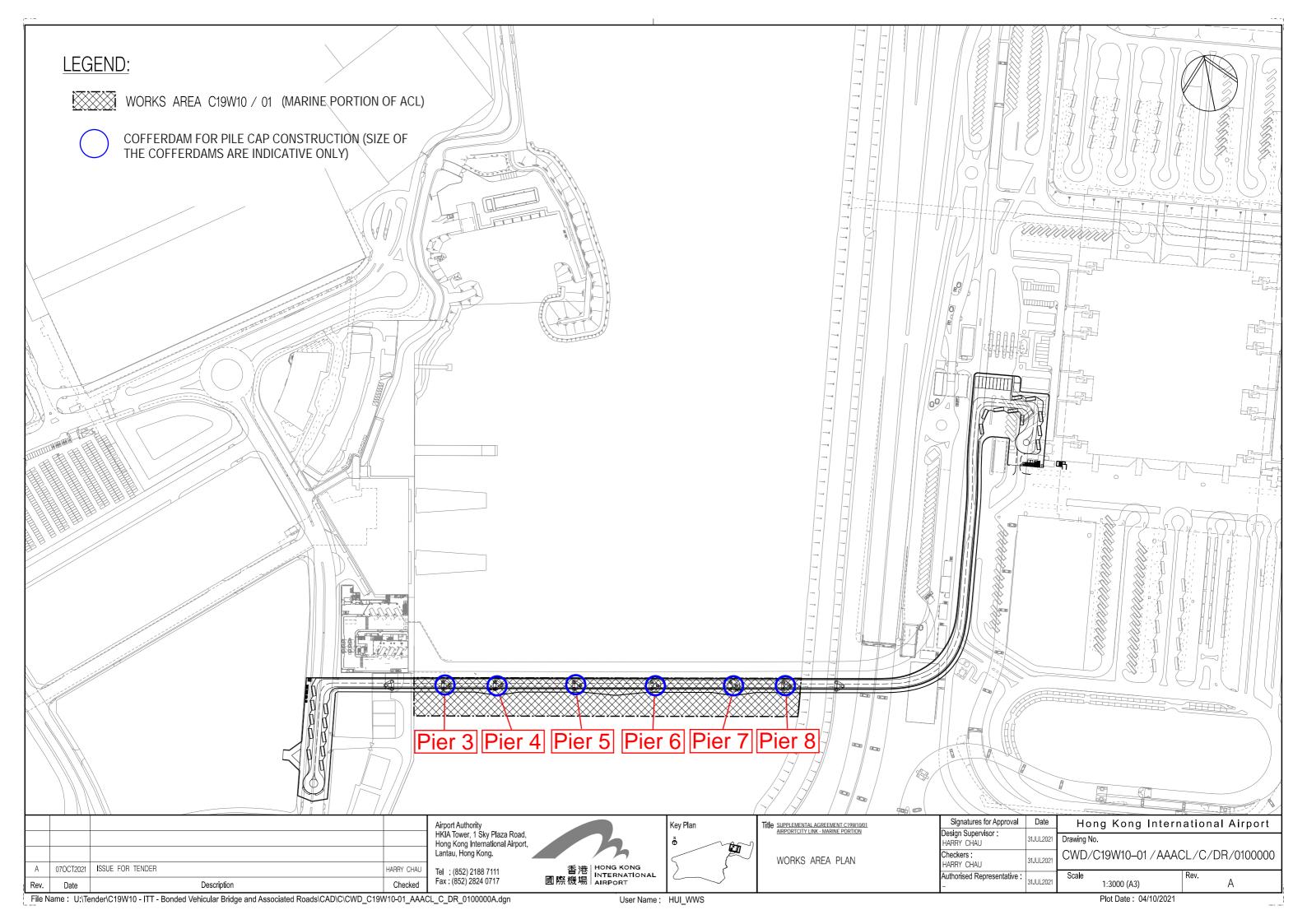
vity ID	Activity Name	Orig Dur	Start	Finish	Total Float	Physical % Complete	Sep	2022 Oct
1						•	8	9
19W10.H.VD0A170	Pre-Drilling for P8 Bored Plle (by Jack Up Barge)	9	19-May-22 A	06-Jul-22 A		100%		
19W10.H.VD0B340	Founding Assessment Report	6	14-Jul-22 A	21-Jul-22 A		100%		
Piling Works								
Pile 1					1.1			
19W10.H.VD0A180	Casing Installation and Soil Excavation	10	22-Sep-22 A	26-Oct-22	1		asing Installation and Soil Excavation	
19W10. H. VD0B350	RCD Rock Drilling	6	27-Oct-22	02-Nov-22	7	0%		RCD Rock Drilling
19W10.H.VD0B360	Air-Lifting, Steel Cage Installation, Concreting and Backfilling	5	03-Nov-22	08-Nov-22	7	0%		Air-Lifting, Steel Cage Installation, Concreting and Backfilling
Pile 2								
19W10.H.VD0A190	Casing Installation and Soil Excavation	10	22-Sep-22 A	14-Nov-22	7	0%	asing Installation and Soil Excavation	
19W10.H.VD0B370	RCD Rock Drilling	6	15-Nov-22	21-Nov-22	18	0%		RCD R
19W10.H.VD0B380	Air-Lifting, Steel Cage Installation, Concreting and Backfilling	5	22-Nov-22	26-Nov-22	18	0%		Air-Lifting, Steel Cage Installation, Co
Pile 3								
19W10.H.VD0A200	Casing Installation and Soil Excavation	10	07-Jan-23	19-Jan-23	1	0%		
19W10.H.VD0B390	RCD Rock Drilling	6	19-Jan-23	30-Jan-23	1	0%		
19W10.H.VD0B400	Air-Lifting, Steel Cage Installation, Concreting and Backfilling	5	30-Jan-23	04-Feb-23	1	0%		
Sonic & Interface Core	Test for ACL P8							
Testing and Statutory Do	cument Submission for Completion							
Application of P7 and P8	Superstructure Concent							
Marine Substructure Works								
Marine Viaduct Erection								
Installation of Drainage Pipe								
Sealing Up the Temporary (Opening on Deck							
Viaduct Parapet Erection								
Erectdion of Staircase								

Adual LOE Remaining LOE Adual Work Remaining Work Critical Remaining Work Milestone	◆ ♥ ♥	 ◆ Crit Milestone ◆ Actual Milestone Start Constraint ♥ Finish Constraint No Predecessors ♦ No Successors 	Project ID: C19W10/01-DWP-A-M07 Three-Month Rolling Programme (as of 31 August 2022) Page 3 of 3	Data Date: 30-Sep-22 Printed: 05-Oct-22 10:59 Layout: C19W10/01 ACL 3MR M7 TASK filter: All Activities	Date 26-Feb-2 10-May-2 31-May-2
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	Nov		Dec	
	10		11	
Drillin	g 💶 🔤			
	and Backfilling			
			Casin	g Installation and Soil
				A := 1 :51:-
				Air-Liftir
		aian	Chapterd	Approved
9 22	Revi Initial Works Pro		Checked DW	Approved BH
22 22	Detailed Works Pro	Programme	DW	BH
22	3MR		DW	RN

Appendix C. Construction Works Area

Marine Section



Appendix D. Environmental Site Inspection and Monitoring Schedule

ACL Environmental Monitoring and Site Inspection Schedule for Sep 2022

Sep-22 Sunday Saturday Monday Tuesday Thursday Friday 1 2 3 Water Quality Monitoring Water Quality Monitoring mid- ebb: mid- ebb: 16:00 17:47 nid- flood: 9:52 nid- flood: 12:18 4 5 6 7 8 9 10 Environmental Site Inspection Water Quality Monitoring Water Quality Monitoring Water Quality Monitoring mid- ebb: nid- ebb: 11:23 mid- ebb: 12:59 9:15 mid-flood: nid- flood: nid- flood: 17:29 18:48 19:53 17 11 12 13 14 15 16 Environmental Site Inspection Water Quality Monitoring Water Quality Monitoring Water Quality Monitoring mid- ebb: nid- ebb: mid- ebb: 14:51 15:54 17:07 nid- flood: nid- flood: mid- flood: 8:39 10:12 12:28 20 21 22 23 24 18 19 **Environmental Site Inspection** Water Quality Monitoring Water Quality Monitoring Water Quality Monitoring mid- ebb: mid- flood: mid- ebb: nid- ebb: 9:01 11:00 12:16 mid- flood: 21:48 nid- flood: 18:56 18:17 25 26 27 28 29 30 **Environmental Site Inspection** Water Quality Monitoring Water Quality Monitoring mid- ebb: mid- ebb: 13:54 15:05 mid- flood: nid- flood: 7:39 9:08 Notes:

ACL Environmental Monitoring and Site Inspection Schedule for Oct 2022

Oct-22

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturde	зy
						1	
						Water Quality I	Monitoring
						mid- ebb:	16:40
						mid- flood:	11:13
2	3	4	5	6	7	8	
		Water Quality Monitoring	Environmental Site Inspection	Water Quality Monitoring		Water Quality	Monitoring
		mid- ebb: 7:23		mid- ebb: 10:12		mid- ebb:	11:54
		mid-flood: 20:21		mid-flood: 17:42		mid- flood:	18:41
9	10	11 Environmental Site Inspection	12	13	14	15	
		Water Quality Monitoring		Water Quality Monitoring		Water Quality	Monitorina
		mid- ebb: 13:48		mid- ebb: 14:54		mid- ebb:	16:00
		mid- flood: 7:48		mid- flood: 9:19		mid- flood:	11:05
16	17	18	19	20	21	22	
		Environmental Site Inspection					
		Water Quality Monitoring		Water Quality Monitoring		Water Quality	Monitoring
		mid- ebb: 6:20		mid- ebb: 9:14		mid- ebb:	11:00
		mid-flood: 19:11		mid-flood: 17:10		mid- flood:	17:42
23	24	25	26	27	28	29	
		Environmental Site Inspection					
		Water Quality Monitoring		Water Quality Monitoring		Water Quality	
		mid- ebb: 12:52		mid- ebb: 14:13		mid- ebb:	15:44
		mid- flood: 6:51		mid-flood: 8:26		mid- flood:	10:20
30	31	Notes:					

Appendix E. Calibration Certificates



REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No.	
Date of Issue	
Page No.	

: R-BB060021 : 13 June 2022 : 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 Attn :

PART B - SAMPLE INFORMATION

Name of Equipment :	YSI ProDSS (Multi-Parameters)	
Manufacturer :	YSI (a xylem brand)	
Serial Number :	16H104233	
Date of Received :	10 June 2022	
Date of Calibration :	10 June 2022	
Date of Next Calibration :	09 September 2022	

PART C - REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Test Parameter	Reference Method
Turbidity	APHA 21e 2130B
Dissolved oxygen	APHA 21e 4500 O
pH value	APHA 21e 4500 H+
Salinity	APHA 21e 2520B
Temperature	Section 6 of international Accreditation New Zealand Technical Guide no. 3 Second edition March
-	2008: Working Thermometer Calibration Procedure
Conductivity	APHA 21e 2510B

PART D - CALIBRATION RESULT

(1) Turbidity

EXPECTED READING (NTU)	DISPLAY READING (NTU)	TOLERANCE (%)	RESULT
0	0.03		Satisfactory
10	9.98	-0.2	Satisfactory
20	20.16	0.8	Satisfactory
100	107.6	7.6	Satisfactory
800	796	-0.5	Satisfactory

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

(2) Dissolved oxygen

EXPECTED READING (MG/L)	DISPLAY READING (MG/L)	TOLERANCE	RESULT
7.78	7.81	0.03	Satisfactory
4.72	4.92	0.20	Satisfactory
2.60	2.38	-0.22	Satisfactory
0.09	0.30	0.21	Satisfactory

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

(3) pH value

TARGET (PH UNIT)	DISPLAY READING (PH UNIT)	TOLERANCE	RESULT
		18 <u>-</u>	

--- CONTINUED ON NEXT PAGE ---

AUTHORIZED SIGNATORY:

LEE Chun-ning Assistant Manager (Chemical Testing)

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No.

: R-BB060021

	Date of Issue : 13 June	: 13 June 2	022
	Page No.	: 2 of 2	
TARGET (PH UNIT)	DISPLAY READING (PH UNIT)	TOLERANCE	RESULT
4.00	3.96	-0.04	Satisfactory
7.42	7.48	0.06	Satisfactory
10.01	9.95	-0.06	Satisfactory

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

(4) Salinity

EXPECTED READING (G/L)	DISPLAY READING (G/L)	TOLERANCE (%)	RESULT
10	9.92	-0.80	Satisfactory
20	20.20	1.00	Satisfactory
30	30.22	0.73	Satisfactory

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

(5) Temperature

READING OF REF. THERMOMETER (°C)	DISPLAY READING (°C)	TOLERANCE	RESULT
10	10	0	Satisfactory
20	20	0	Satisfactory
40	. 40	0	Satisfactory

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

(6) Conductivity

EXPECTED READING (MS/CM AT 25°C)	DISPLAY READING	TOLERANCE (%)	RESULT
146.9	137.1	-6.67	Satisfactory
1412	1328.2	-5.93	Satisfactory
12890	12567.8	-2.50	Satisfactory
58670	57574	-1.87	Satisfactory
111900	109783	-1.89	Satisfactory

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

Remark(s)

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

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

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

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

--- END OF REPORT ----



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

REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No. Date of Issue Page No. : R-BB070113 : 28 July 2022 : 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

Reference Method
APHA 21e 4500 H+
Section 6 of international Accreditation New Zealand Technical Guide no. 3 Second edition March
2008: Working Thermometer Calibration Procedure
APHA 21e 2520B
APHA 21e 4500 O
APHA 21e 2130B
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 \pm 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 $\pm\,2.0$ ($^{\circ}C$)

(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 \pm 10.0 (%)

--- CONTINUED ON NEXT PAGE ---

AUTHORIZED SIGNATORY:

LEE Chun-ning

Assistant Manager (Chemical Testing)

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No.	:R-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 \pm 10.0 (%)

(6) Conductivity

Expected Reading (µS/cm at 25°C)	Display Reading (µS/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 \pm 10.0 (%)

Remark(s)

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

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

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

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

--- END OF REPORT ----

Appendix F. Event and Action Plan

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

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

		Ac	tion	
Event	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	 Repeat <i>in-situ</i> measurement to confirm findings; Identify reasons for non-compliance and source(s) of impact; Inform IEC, Contractor and EPD; Check monitoring data, all plant, equipment and Contractor's working methods; Discuss mitigation measures with IEC, AAHK / PM and Contractor; Ensure mitigation measures are implemented; Increase the monitoring frequency to daily until no exceedance of Limit level for two consecutive days. 	PM accordingly; 3. Assess the effectiveness of implemented mitigation measures.	 and Contractor on the proposed mitigation measures 2. Request Contractor to critically review th working methods; 3. Make agreement on the mitigation measures to be implemented; 4. Assess the 	 and confirm notification of non- compliance in writing; e 2. Rectify unacceptabl practices; 3. Check all plant and equipment; 4. Consider changes of working method; 5. Discuss with ET, IE and AAHK / PM and propose mitigation measures to IEC ar AAHK / PM within 3 working days; 6. Implement the agreed mitigation measures:

Appendix G. Monitoring Data and Graphical Plots

Water Quality Monitoring

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

Monitoring	Weather	Sea Condition	Sampling		Sampling Dep	th (m)	Water Te	emperature (°C)	pl	н	Salin	ity (ppt)	DO Satur	ation (%)	Dissolved ((mg/l		Turbidity	(NTU)	Suspende (mg				
Station	Condition		Time	(m)			Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			
					Surface	1.0	28.8	28.8	8.1	8.1	23.6	23.5	73.8	73.8	5.0		3.0		3.1				
					Guildoc	1.0	28.8	20.0	8.1	0.1	23.4	20.0	73.8	70.0	4.9	5.0	3.0		3.4	1			
C1	Misty	Moderate	14:29	9.8	Middle	4.9	28.7	28.8	8.1	8.1	23.9	23.8	73.8	73.8	5.0	0.0	4.6	4.5	4.2	4.0			
01	moty	modelate		0.0		4.9	28.8	2010	8.1	0.1.	23.6	20.0	73.8		5.0		4.5		3.9				
					Bottom	8.8	28.4	28.6	8.1	8.1	24.0	24.4	77.7	77.7	5.3	5.3	5.8		4.5	1			
						8.8	28.8		8.1		24.8		77.7		5.2		5.8		5.0	Ļ			
					Surface	1.0	28.7	28.8	8.1	8.1	23.8	23.6	72.2	71.9	4.9		1.3		3.0	4			
						1.0	28.8		8.1		23.4		71.6		4.9	4.9	1.4		3.3	4			
C2	Misty	Moderate	14:48	8.4	Middle	4.2	28.6	28.7	8.1	8.1	24.0	23.8	72.2	72.0	4.9		2.5	2.4	3.9	4.0			
						4.2	28.7		8.1		23.6		71.7		4.9		2.4		3.6	4			
					Bottom	7.4	7.4 28.7 28.7	28.7	8.1 8.1	8.1	23.9	23.8	74.4 72.3	73.4	5.0	5.0	3.3		4.8 5.2	1			
				[28.7				23.6				4.9 4.9		3.3		5.2 8.4	┝───			
					Surface	1.0	28.6 28.7		8.1 8.1		24.2 24.2	24.2	72.5 70.6	71.6	4.9		3.9 3.9		8.5	Í			
						-	-		-		-				4.0	4.9	-		-	1			
M1	Misty	Moderate	14:41	4.8	Middle	-	-	-	-	-	-	-	-			-	-	4.0	-	8.0			
						3.8	28.6		8.1		24.2		75.0		5.1		4.0		- 7.8	1			
					Bottom	3.8	28.7	28.7	8.1	8.1	24.2	24.2	71.8	73.4	4.9	5.0	4.1		7.4	i i			
						1.0	28.4		8.1		24.5		73.5		5.0		5.6		4.6				
					Surface	1.0	28.3	28.4	8.1	8.1	24.6	24.6	73.5	73.5	4.9		5.5		4.3	i			
						-	-		-		-		-		-	5.0	-		-				
M2	Misty	Moderate	14:37	4.2	Middle	-	-	-	-	-	-	-	-	-	-		-	5.9	-	5.2			
					Dattan	3.2	28.2	00.0	8.1	8.1	24.3	24.4	72.6	70.0	5.0	5.0	6.3		5.7	1			
					Bottom	3.2	28.4	28.3	8.1	8.1	24.5	24.4	72.6	72.6	4.9	5.0	6.3		6.0	Í			
					Surface	1.0	28.5	28.6	8.1	0.4	24.3	24.3	67.5	67.1	4.6		4.3		4				
					Sunace	1.0	28.6	20.0	8.1	8.1	24.2	24.3	66.7	07.1	4.5	4.6	4.2		4	i			
M3	Misty	Modorato	14.22	6.4	Middlo	3.2	28.5	28.6	91 244	24.4	67.3	67.1	4.6	4.0	6.5	6.1	5	5					
IVIS	IVIISLY	Moderate	Moderate 14:33	Noderate 14:33	Moderate 14:33	derate 14:33	4:33 6.4	Middle	3.2	28.6	20.0	8.1	0.1	24.3	24.4	66.8	07.1	4.5		6.6	0.1	5	5
					Bottom	5.4	28.7	28.6	8.1	8.1	24.1	24.3	68.7	68.2	4.7	4.7	7.4		6	j			
			1		Bollom	5.4	28.5	20.0	8.1	0.1	24.4	24.5	67.7	00.2	4.6	4.7	7.5	1	6	i i			

DA: Depth-averaged

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

Water Quality Monitoring

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

		ioning Resu			01 September 22	auning mia	11000																												
Monitoring	Weather	Sea Condition	Sampling		Sampling Dep	th (m)	Water Te	emperature (°C)	F	рH	Salin	ity (ppt)	DO Satu	ration (%)	Dissolved (mg/l		Turbidity	(NTU)	Suspende (mg.																
Station	Condition		Time	(m)			Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA															
					Surface	1.0	28.4	28.4	8.0	8.0	23.6	23.8	78.6	78.5	5.4		3.3		2.2																
					Gunace	1.0	28.3	20.4	8.0	0.0	24.0	20.0	78.4	70.0	5.3	5.2	3.3		2.1	1															
C1	Misty	Moderate	09:18	8.2	Middle	4.1	28.2	28.3	8.0	8.0	24.0	24.0	75.6	75.3	5.1	0.2	4.9	4.1	2.9	2.8															
				-		4.1	28.3		8.0		24.0		75.0		5.1		5.0		2.6	1															
					Bottom	7.2	28.3	28.4	8.0	8.0	24.0	23.9	74.5	74.5	5.0	5.1	4.0		3.6	1															
		1				7.2	28.4		8.0		23.7		74.5		5.1		4.2		3.3	┝───															
					Surface	1.0 1.0	28.3 28.1	28.2	8.0 8.0	8.0	23.8 24.4	24.1	67.2 67.0	67.1	4.6 4.6	-	4.1 4.1		2.7 2.5	1															
						4.8	28.1		8.0		24.4		66.4		4.6	4.5	4.1 5.1		2.5 3.1	i															
C2	Misty	Moderate	09:01	9.6	Middle	4.8	28.1	28.0	8.0	8.0	24.0	24.6	66.1	66.3	4.4		5.1	5.1	2.9	3.0															
					_	8.6	27.9		8.0		25.0		68.5		4.7		6.1		3.6	1															
					Bottom	8.6	28.3	28.1	8.0	8.0 8.0	23.6		68.8	68.7	4.7	4.7	6.0		3.4	i															
					Surface	1.0	28.1	28.3	8.0	8.0	23.5	23.4	80.1	80.2	5.4		6.4		8.7																
					Sunace	1.0	28.5	20.3	8.0	0.0	23.3	23.4	80.2	00.2	5.4	5.4	6.5		8.3																
M1	Misty	Moderate	09:08	5.0	Middle	-	-	-	-	-	-	-	-	╡╶┝	-	5.4	-	6.7	-	7.1															
	whicey	modorato	00.00	0.0	middio	-	-	29.1		-		-		-		-		-	0.1	-	1														
					Bottom	4.0	27.8		8.0	8.0	23.8	23.6	78.4	78.2	5.3	5.3	7.0		5.8	1															
				1		4.0	28.4		8.0		23.4		78.0		5.3		7.0		5.5	<u> </u>															
					Surface	1.0	28.5 28.5	28.5	8.0 8.0	8.0	23.6 23.6	23.6	75.0 75.1	75.1	5.1 5.1	-	5.8 5.9		3.1 3.4	1															
						1.0					23.0		-		-	5.1	5.9			1															
M2	Misty	Moderate	09:11	5.8	Middle	-	-	-	-	-	-	-	-	-	-	-	-	6.1	-	2.9															
						4.8	28.5		8.0		23.5		- 77.5		5.2		6.4		2.3	i															
					Bottom	4.8	28.5	28.5	8.0	8.0	23.6	23.6	77.4	77.5	5.2	5.2	6.4		2.6	i															
						1.0	28.4		8.0		23.3		76.4		5.2	<u> </u>	1.5		2	<u> </u>															
					Surface	1.0	28.4	28.4	8.0	8.0	23.1	23.2	76.8	76.6	5.2		1.5		2	i –															
M3	Mich	Moderate	00:14	6.2	Middle	3.1	28.3			8.0	8.0	23.4	23.3	72.5	72.6	5.0	5.1	2.9	2.5	2	2														
IVIS	Misty Mod	woderate	oderate 09:14	09:14	4 6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	Middle	3.1	28.4	28.4	8.0	8.0	23.2	23.3	72.6	12.0	4.9	1	2.9	2.5	2	2
					Bottom	5.2	28.3	28.4	8.0	8.0	23.3	23.3	75.7	75.4	5.2	5.2	3.0		2	1															
					Dollom	5.2	28.4	20.4	8.0	0.0	23.3	20.0	75.1	73.4	5.1	5.2	3.1		2	1															

DA: Depth-averaged

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

Water Quality Monitoring

Water Quality Monitoring Results on 03 September 22 during Mid-Ebb Tide

Monitoring	Weather	Sea Condition	Sampling		Sampling Dep	~~~~		emperature (°C)	р	эΗ	Salin	ity (ppt)	DO Satur	ration (%)	Dissolved (mg/l		Turbidity	(NTU)	Suspende (mg																	
Station	Condition		Time	(m)			Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA																
					Surface	1.0	27.5	27.5	8.0	8.0	27.1	27.1	70.4	70.4	4.8		4.1		3.4																	
					Gundoo	1.0	27.5	21.0	8.0	0.0	27.1	27.1	70.4	70.1	4.8	4.6	4.2		3.1	1																
C1	Sunny	Rough	16:41	10.6	Middle	5.3	27.2	27.2	8.0	8.0	27.5	27.5	64.5	64.6	4.4		4.4	5.6	2.6	2.7																
						5.3	27.2		8.0		27.5		64.6		4.4		4.3		2.9	1																
					Bottom	9.6	26.6	26.6	8.0	8.0	28.4	28.4	56.6	56.6	3.9	3.9	8.1		2.1	1																
						9.6	26.6		8.0		28.4	-	56.5		3.9		8.2		2.3	<u> </u>																
					Surface	1.0	27.1	27.2	8.0	8.0	27.5	27.5	64.3	64.3	4.4	-	5.8		2.1	1																
						1.0	27.2		8.0		27.5		64.2		4.4	4.2	5.7		2.3	1																
C2	Sunny	Rough	17:11	9.7	Middle	4.9	26.7	26.7	8.0 8.0	8.0	28.2	28.2	58.8	58.8	4.0	_	9.4	8.1	2.5 2.7	2.6																
	-	_				4.9	26.7				28.2		58.7		4.0		9.4			ł																
					Bottom	8.7 8.7	26.5 26.5	26.5	8.0 8.0	8.0	28.6 28.6	28.6	57.7 57.7 57.	57.7	4.0	4.0	9.1		2.9 3.2	1																
	1	1				1.0	26.5				28.6		64.3	1	4.0		9.1 4.8		3.2																	
					Surface	1.0	27.7	27.7	8.0 8.0	8.0	26.1	26.1	64.2	64.3	4.4		4.8		3.0	1																
																-	-		-		- 20.1		-		-	4.4	-			1						
M1	Sunny	Moderate	16:56	5.4	Middle	-	-	-		-	-	-				-		4.7		2.5																
		Moderate	Moderate				4.4	27.7		8.0		26.2		65.2		4.4		4.6		1.8	1															
					Bottom	4.4	27.7	27.7	8.0		8.0 26.2	26.2	65.0	65.1	4.4	4.4	4.6		1.9	ł																
						1.0	27.9		8.0		26.1		67.2		4.6		5.4		2.6																	
					Surface	1.0	27.9	27.9	8.0	8.0	26.1	26.1	67.5	67.4	4.6		5.4		2.3	ł																
			47.04	5.0		-	- 1		-		-		-		-	4.6	-		-																	
M2	Sunny	Moderate	17:01	5.2	Middle	-	-	-	-	-	-	-	-		-		-	6.2	-	2.1																
					Bottom	4.2	27.3	27.3	8.0	8.0	27.0	26.9	65.7	65.7	4.5	4.5	7.0		1.7	ł																
					Bollom	4.2	27.3	27.5	8.0	0.0	26.8	20.9	65.7	05.7	4.5	4.5	6.9		1.9	1																
					Surface	1.0	27.9	27.9	8.0	8.0	26.1	26.1	67.7	67.7	4.6		4.9		3	1																
					Suilace	1.0	27.9	21.3	8.0	0.0	26.1	20.1	67.7	07.7	4.6	4.4	4.9		3	l																
M3	Sunny	Rough	16.47	7.5	Middle	3.8	27.0	27.0	8.0	8.0	27.4	27.5	61.9	61.8	4.2	4.4	6.2	6.3	2	2																
NIO NIO	Conny	rtougn	Rough 16:47	16:47 7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	Middle	3.8	27.0	21.0	8.0	0.0	27.5	21.0	61.7	01.0	4.2		6.2	0.0	2	-
				Bottom	6.5	26.6	26.6	8.0	8.0	28.3	28.3	60.2	60.1	4.1	4.1	7.8		1	1																	
	1				Dottoin	6.5	26.6	20.0	8.0	0.0	28.3	20.0	60.0	00.1	4.1		7.7		2	1																

DA: Depth-averaged

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

Water Quality Monitoring

 Water Quality Monitoring Results on
 03 September 22
 during Mid-Flood Tide

	inty morn	toring Resu			03 September 22	uuning miu	11000	lue												
Monitoring	Weather	Sea Condition	Sampling		Sampling Dep	th (m)	Water Te	emperature (°C)	F	ъH	Salin	ity (ppt)	DO Satu	ation (%)	Dissolved (mg/		Turbidity	(NTU)	Suspende (mg/	
Station	Condition		Time	(m)			Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	27.8	27.8	8.0	8.0	26.2	26.2	75.3	75.3	5.1		2.6		3.0	
					Gunace	1.0	27.8	27.0	8.0	0.0	26.2	20.2	75.3	10.0	5.1	4.7	2.6		2.8	
C1	Sunny	Moderate	11:59	8.5	Middle	4.3	26.8	26.8	8.0	8.0	27.9	27.9	62.0	62.0	4.2		8.4	4.9	2.5	2.5
	,					4.3	26.8		8.0		27.9		62.0		4.2		8.3		2.4	
					Bottom	7.5	26.6	26.6	8.0	8.0	28.4	28.4	61.1	61.1	4.2	4.2	4.0		2.1	
						7.5	26.6		8.0		28.4		61.0	1	4.2		3.7		2.2	
					Surface	1.0 1.0	27.3 27.4	27.4	8.0 8.0	8.0	26.9 26.8	26.9	72.7 72.6	72.7	5.0 5.0	-	5.0 4.5		2.1 2.3	
						4.5	26.7		8.0		20.0		67.7		3.0 4.6	4.8	6.2		2.3	
C2	Sunny	Moderate	11:31	8.9	Middle	4.5	26.7	26.7	8.0	8.0	28.1	28.1	67.7	67.7	4.6	-	6.2	6.4	3.1	2.9
					-	7.9	26.7		8.0		28.2		62.9		4.3		8.3		3.6	
					Bottom	7.9	26.7	26.7	8.0	8.0	28.2	28.2	62.8	62.9	4.3	4.3	8.3		3.3	
					Surface	1.0	27.7	27.7	8.0	8.0	26.1	26.1	65.9	65.9	4.5		5.1		2.2	
					Sunace	1.0	27.7	21.1	8.0	0.0	26.1	20.1	65.8	05.9	4.5	4.5	5.2		2.4	
M1	Sunny	Moderate	11:44	4.2	Middle	-	-	-	-	-	-	-	-		-	4.0	-	4.8	-	2.6
	o anny	moderate			maaro	-	-		-		-		-		-		-		-	2.0
					Bottom	3.2	27.7	27.7	8.0	8.0	26.1	26.1	69.4	69.3	4.7	4.7	4.5		2.7	
						3.2	27.7		8.0		26.1		69.1	1	4.7		4.5		3.0	
					Surface	1.0	27.6 27.6	27.6	8.0 8.0	8.0	26.1 26.1	26.1	66.5 66.5	66.5	4.5 4.5	-	4.7 4.7		3.3 2.9	
						1.0	- 27.0		- 0.0		20.1		- 00.5	-	4.5	4.5	4.7		- 2.9	
M2	Sunny	Moderate	11:41	4.2	Middle	-	-	-	-	-	-	-	-		-	-	-	4.8	-	2.7
						3.2	27.6		8.0		26.2		65.5		4.5		4.9		2.3	
					Bottom	3.2	27.6	27.6	8.0	8.0	26.2	26.2	65.5	65.5	4.5	4.5	4.9		2.0	
					<u> </u>	1.0	27.6		8.0		26.1		74.2	= 1.0	5.1		3.4		3	
					Surface	1.0	27.6	27.6	8.0	8.0	26.1	26.1	74.2	74.2	5.1	5.0	3.4		3	
M3	Sunny	Moderate	11:51	7.8	Middle	3.9	27.5	27.5	8.0	8.0	26.1	26.1	71.2	71.2	4.9	5.0	3.8	5.4	2	2
IVIS	Sunny	wouerate	11.51	1.0	IVIIQUIE	3.9	27.5	27.5	8.0	0.0	26.1	20.1	71.1	/1.2	4.9		3.8	0.4	2	2
					Bottom	6.8	27.2	27.2	8.0	8.0	26.6	26.6	65.9	65.9	4.5	4.5	9.0		2	
					Dottom	6.8	27.2	21.2	8.0	0.0	26.6	20.0	65.8	00.5	4.5	7.0	8.9		2	

DA: Depth-averaged

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

Water Quality Monitoring

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

Monitoring	Weather	Sea Condition		Water Depth	Sampling Dep	oth (m)	Water T	emperature (°C)	p	ъH	Salin	ity (ppt)	DO Satur	ration (%)	Dissolved ((mg/l		Turbidity((NTU)	Suspende (mg/	
Station	Condition		Time	(m)			Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	27.4	27.5	8.3	8.3	27.3	27.2	115.5	115.5	7.9		1.1		6.0	
					Cunado	1.0	27.5	21.0	8.2	0.0	27.1	27.2	115.5	110.0	7.7	7.4	1.1		5.6	1
C1	Misty	Moderate	08:49	9.6	Middle	4.8	27.3	27.4	8.3	8.3	27.4	27.3	102.6	102.6	7.0		1.7	1.7	6.2	6.3
						4.8	27.5		8.2		27.2		102.6		7.0		1.6		6.4	
					Bottom	8.6	27.3	27.4	8.3	8.3	27.5	27.4	106.8	106.6	7.3	7.3	2.5		6.7	1
						8.6	27.5		8.3		27.2		106.4		7.2	_	2.4		7.0	
					Surface	1.0	27.5	27.6	8.3	8.3	26.9	26.9	121.6	121.4	8.3		1.0		5.8	1
						1.0	27.6		8.3		26.8		121.2		8.1	7.9	1.0		6.2	1
C2	Misty	Moderate	08:31	9.6	Middle	4.8	27.2	27.4	8.3	8.3	27.2	27.0	111.0	111.1	7.6		1.1	1.1	6.8	6.6
						4.8	27.6		8.3		26.8		111.1		7.5		1.1		6.5	1
					Bottom	8.6	27.0 27.6	27.3	8.3 8.3	8.3	27.2	27.0	112.8	112.7	7.7	7.7	1.2		7.0 7.3	1
			1			8.6					26.8		112.6	1	7.7		1.3			
					Surface	1.0 1.0	27.1 27.3	27.2	8.2 8.2	8.2	27.6 27.5	27.6	97.9 96.8	97.4	6.7 6.6		1.5 1.6		7.8 7.5	1
							- 21.3				- 27.5		90.0			6.7	-			1
M1	Misty	Moderate	08:38	4.8	Middle	-	-	-	-	-	-	-			-		-	2.1	-	7.0
						3.8	27.0		8.2		26.8		98.7		6.8		2.6		6.5	1
					Bottom	3.8	27.0	27.1	8.2	8.2	27.6	27.2	99.2	99.0	6.8	6.8	2.6		6.3	1
			1			1.0	27.0		8.2		28.0		94.4	1	6.4		2.0		6.4	
					Surface	1.0	27.1	27.1	8.2	8.2	28.0	28.0	92.6	93.5	6.3		2.0		6.2	1
						-	-		-		-		-		-	6.4	-		-	
M2	Misty	Moderate	08:41	5.8	Middle	-	-	-	-	-	-	-	-	- 1	-		-	2.5	-	6.1
					Detterr	4.8	26.9	07.0	8.2	0.0	28.1	28.1	96.8	95.9	6.6	6.6	2.9		5.7	1
					Bottom	4.8	27.0	27.0	8.2	8.2	28.0	28.1	95.0	95.9	6.5	6.6	3.0		6.0	1
					Surface	1.0	27.1	27.1	8.2	0.0	27.9	27.9	96.7	95.8	6.6		2.7		7	
					Sunace	1.0	27.1	27.1	8.2	8.2	27.8	21.9	94.9	95.6	6.5	6.3	2.6		7	1
M3	Misty	Moderate	08:45	6.2	Middle	3.1	27.1	27.1	8.1	8.1	28.2	28.1	89.3	87.1	6.1	0.3	3.3	3.5	6	6
IVIO	iviisty	wouerate	00.40	0.2	IVIIGUIE	3.1	27.1	27.1	8.1	0.1	28.0	20.1	84.8	07.1	5.8		3.3	3.0	7	U
					Bottom	5.2	27.1	27.1	8.1	8.2	28.0	27.9	95.5	94.6	6.5	6.5	4.6		6	1
	1		1		Bollom	5.2	27.1	27.1	8.2	0.2	27.8	21.3	93.6	34.0	6.4	0.5	4.7		5	i

DA: Depth-averaged

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

Water Quality Monitoring

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

Monitoring	Weather	Sea Condition	Sampling		Sampling Dep			emperature (°C)	p	эΗ	Salin	ity (ppt)	DO Satu	ation (%)	Dissolved ((mg/l		Turbidity((NTU)	Suspende (mg/	
Station	Condition		Time	(m)	5 f		Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	28.1	28.1	8.4	8.5	27.3	27.3	146.5	146.3	9.8		1.1		6.2	
					Guildoo	1.0	28.1	20.1	8.5	0.0	27.3	21.0	146.0	110.0	9.7	9.7	1.0		6.5	ł
C1	Misty	Moderate	16:02	9.8	Middle	4.9	28.0	28.1	8.4	8.5	27.5	27.4	144.8	144.7	9.7		1.3	1.6	5.9	5.8
	-					4.9	28.1		8.5		27.3		144.6		9.6		1.2		5.6	ł
					Bottom	8.8 8.8	28.0 28.1	28.1	8.4 8.5	8.5	27.4 27.3	27.4	141.2 141.5	141.4	9.5 9.4	9.5	2.5 2.4		5.3 5.0	ł
						1.0	26.1		8.2		27.3		141.5		9.4 7.5		3.6		5.0 6.7	
					Surface	1.0	27.2	27.3	8.2	8.2	28.4	28.4	109.8	110.1	7.4		3.7		6.3	ł
00			10.01		N.4. 1 11	4.2	26.6	07.0	8.2		28.8		102.4	404.0	7.0	7.2	4.6		5.6	
C2	Misty	Moderate	16:21	8.4	Middle	4.2	27.3	27.0	8.2	8.2	28.4	28.6	100.1	101.3	6.8	1	4.6	4.4	6.0	5.8
					Bottom	7.4	26.6	27.0	8.2	8.2	28.8	28.6	105.6	105.9	7.2	7.2	5.0		5.4	i
		-			Bottom	7.4	27.3	21.0	8.2	0.2	28.4	20.0	106.1	105.5	7.2	1.2	5.0		5.0	<u> </u>
					Surface	1.0	28.4	28.4	8.6	8.6	27.0	27.1	161.6	161.4	10.8		3.2		6.1	ł
						1.0	28.4		8.6		27.1		161.1		10.8	10.8	3.3		5.8	ł
M1	Misty	Moderate	16:07	5.0	Middle	-	-	-	-	-	-	-	-		-	-	-	3.7	-	5.5
						4.0	28.4		- 8.6		- 26.5		- 134.4		- 9.0		4.2		4.9	ł
					Bottom	4.0	28.4	28.4	8.6	8.6	27.1	26.8	134.1	134.3	8.9	9.0	4.1		5.2	ł
					Quitaa	1.0	28.4	00.4	8.5	0.5	27.6	07.0	136.5	400.0	9.1		6.0		5.2	
					Surface	1.0	28.4	28.4	8.4	8.5	27.6	27.6	136.0	136.3	9.0	9.1	5.9		5.0	ł
M2	Misty	Moderate	16:11	4.2	Middle	-	-		-		-		-	_	-	9.1	-	5.1	-	4.7
IVIZ	wiisty	Woderate	10.11	7.2	Middle	-	-		-		-		-		-		-	5.1	-	4.7
					Bottom	3.2	28.5	28.5	8.5	8.5	27.4	27.5	123.2	123.2	8.2	8.2	4.3		4.4	ł
						3.2	28.4		8.4		27.6		123.2		8.2		4.2		4.2	<u> </u>
					Surface	1.0	28.3	28.2	8.4	8.4	27.4	27.5	145.8	145.7	9.8	-	4.6		7	I
						1.0 3.2	28.1 28.3		8.4		27.5		145.6 145.0		9.7 9.7	9.7	4.7 5.3		6	I
M3	Misty	Moderate	16:16	6.4	Middle	3.2	28.3	28.2	8.4 8.4	8.4	27.4 27.5	27.5	145.0	145.2	9.7 9.7	-	5.3	5.3	<u>6</u>	6
						5.4	28.4		8.4		27.5		145.4		9.7		6.1		5	I
					Bottom	5.4	28.2	28.3	8.4	8.4	27.4	27.3	144.2	144.4	9.6	9.7	6.0		5	ł

DA: Depth-averaged

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

Water Quality Monitoring

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

Monitoring	Weather	Sea Condition		Water Depth	Sampling Dep	th (m)	Water Te	emperature (°C)	F	ъН	Salin	ity (ppt)	DO Satur	ration (%)	Dissolved ((mg/L		Turbidity	(NTU)	Suspende (mg/	
Station	Condition		Time	(m)			Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	27.3	27.3	8.2	8.2	28.6	28.6	93.6	93.2	6.3		6.8		6.1	
					Guildee	1.0	27.3	27.5	8.2	0.2	28.6	20.0	92.8	55.2	6.3	6.3	6.7		6.5	1
C1	Misty	Moderate	10:56	8.2	Middle	4.1	27.3	27.3	8.2	8.2	28.6	28.6	93.7	93.5	6.3	0.0	7.5	7.4	7.5	7.6
•						4.1	27.3		8.2		28.6		93.3		6.3		7.5		8.0	
					Bottom	7.2	27.3	27.3	8.2	8.2	28.6	28.6	94.3	94.0	6.4	6.4	8.0		8.7	1
						7.2	27.3		8.2		28.6		93.6		6.3		8.1		8.5	
					Surface	1.0	27.5 27.6	27.6	8.2 8.2	8.2	28.5 28.5	28.5	94.8 93.6	94.2	6.4 6.3		4.6		6.7	1
						1.0 4.7	-						93.6 95.3		6.3 6.4	6.4	4.7 6.0		7.0	1
C2	Misty	Moderate	10:38	9.4	Middle	4.7	27.5 27.6	27.6	8.2 8.2	8.2	28.5 28.5	28.5	95.3 94.0	94.7	6.3		6.0 6.0	5.9	7.4 7.8	7.6
						8.4	27.6		8.2		28.5		94.0 96.2		6.5		7.0		8.4	1
					Bottom	8.4	27.6	27.6	8.2	8.2	28.5	28.5	94.3	95.3	6.4	6.5	6.9		8.0	1
						1.0	27.5		8.3		28.6		99.4		6.7		4.0		7.8	
					Surface	1.0	27.5	27.5	8.3	8.3	28.6	28.6	98.4	98.9	6.6		4.0		7.5	1
M1	Mater	Madausta	40.45	5.0	Middle	-	-		-		-		-		-	6.7	-		-	7.0
IMT	Misty	Moderate	10:45	5.0	IVIIdale	-	-	-	-	-	-	-	-	-	-		-	4.1	-	7.2
					Bottom	4.0	27.5	27.5	8.3	8.3	28.6	28.6	100.0	99.6	6.7	6.7	4.1		6.6	1
					Bollom	4.0	27.5	21.5	8.3	0.5	28.6	20.0	99.1	99.0	6.7	0.7	4.1		6.9	. <u> </u>
					Surface	1.0	27.4	27.5	8.2	8.2	28.7	28.7	99.0	98.5	6.7		4.3		11.2	1
					Cullabo	1.0	27.5	2.10	8.2	0.2	28.6	2011	97.9	00.0	6.6	6.7	4.3		11.6	1
M2	Misty	Moderate	10:48	4.2	Middle	-	-	-	-	-	-	-	-	-	-		-	4.8	-	10.6
	,					-	-		-		-		-		-		-		-	1
					Bottom	3.2	27.4	27.4	8.2	8.2	28.7	28.7	99.5	99.0	6.7	6.7	5.3		10.0	1
						3.2	27.4		8.2		28.7		98.5		6.6		5.3		9.6	
					Surface	1.0	27.4 27.4	27.4	8.2 8.2	8.2	28.6 28.6	28.6	96.5 95.0	95.8	6.5 6.4		6.0 5.9		9 10	1
						3.3	27.4		8.2		28.8		95.0		6.6	6.5	6.2		10	1
M3	Misty	Moderate	10:52	6.6	Middle	3.3	27.1	27.3	8.2	8.2	28.6	28.7	97.0	96.0	6.4		6.2	6.4	10	10
						5.6	26.9		8.2		29.0		98.1		6.7		7.1		12	1
					Bottom	5.6	20.3	27.2	8.2	8.2	28.6	28.8	95.3	96.7	6.4	6.6	7.1		11	1

DA: Depth-averaged

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

Water Quality Monitoring

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

	inty morn	ioning nesu			Vo September 22	during mid	11000 1	luc												
Monitoring	Weather	Sea Condition	Sampling		Sampling Dep	th (m)	Water Te	emperature (°C)	F	рH	Salin	ity (ppt)	DO Satu	ration (%)	Dissolved (mg/l		Turbidity	(NTU)	Suspende (mg.	
Station	Condition		Time	(m)		()	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	27.7	27.7	8.2	8.2	28.3	28.4	97.6	97.0	6.6		3.2		6.7	
					Sunace	1.0	27.7	27.7	8.2	0.2	28.4	20.4	96.4	97.0	6.5	6.6	3.2		7.0	1
C1	Misty	Moderate	17:11	9.4	Middle	4.7	27.7	27.7	8.2	8.2	28.4	28.4	97.8	97.2	6.6	0.0	4.7	3.9	6.4	6.3
01	moty	modelate		0.1	Wildelo	4.7	27.7	21.1	8.2	0.2	28.4	20.1	96.6	07.2	6.5		4.6	0.0	6.2	0.0
					Bottom	8.4	27.7	27.7	8.2	8.2	28.4	28.4	98.4	97.8	6.6	6.6	4.0		5.5	1
						8.4	27.7		8.2		28.3		97.2		6.5		3.9		5.9	Ļ
					Surface	1.0	27.7	27.7	8.2	8.2	28.3	28.4	96.4	96.0	6.5	-	4.5		7.4	1
						1.0	27.7		8.2		28.4		95.6		6.4	6.5	4.5		7.7	4
C2	Misty	Moderate	17:29	8.6	Middle	4.3 4.3	27.6 27.7	27.7	8.2 8.2	8.2	28.5 28.4	28.5	96.9 95.9	96.4	6.5 6.4	-	5.5 5.6	5.6	6.5 6.2	6.5
						7.6	27.7		8.2		28.5		95.9		6.6		6.8		5.7	i i
					Bottom	7.6	27.7	27.7	8.2	8.2	28.3	28.4	96.4	97.4	6.5	6.6	6.7		5.5	i i
					<u> </u>	1.0	27.7	07.7	8.2		28.6	00.0	97.4	00.0	6.5		5.9		19.6	
					Surface	1.0	27.7	27.7	8.2	8.2	28.6	28.6	96.2	96.8	6.5	6.5	6.0		19.1	i
M1	Misty	Moderate	17:20	5.8	Middle	-	-	-	-	_	-	-	-		-	0.5	-	6.1	-	20.5
IVII	wiisty	woderate	17.20	5.0	Wilddie	-	-		-		-	_	-		-		-	0.1	-	20.5
					Bottom	4.8	27.7	27.7	8.2	8.2	28.6	28.6	98.6	97.8	6.6	6.6	6.3		21.3	1
						4.8	27.7		8.2	-	28.6		97.0		6.5		6.3		21.8	<u> </u>
					Surface	1.0	27.6	27.6	8.2	8.2	28.6	28.6	94.0	93.5	6.3		6.4		6.8	4
						1.0	27.6		8.2		28.6		93.0		6.3	6.3	6.3		6.6	1
M2	Misty	Moderate	17:24	5.2	Middle	-	-	-	-	-	-	-	-		-	-	-	7.0	-	7.5
						4.2	- 27.5		- 8.2		- 28.4		- 96.1		- 6.5		- 7.6		- 8.5	i
					Bottom	4.2	27.5	27.6	8.2	8.2	28.6	28.5	90.1	94.8	6.3	6.4	7.6		8.2	Í
						1.0	27.6		8.2		28.6		96.0		6.5		6.8		31	<u> </u>
					Surface	1.0	27.6	27.6	8.2	8.2	28.6	28.6	95.1	95.6	6.4	1	7.6		31	i
			17.10		N (1)	3.0	27.6	07.0	8.2		28.6	00.0	96.3	05.0	6.5	6.5	7.3		26	
M3	Misty	Moderate	17:16	6.0	Middle	3.0	27.6	27.6	8.2	8.2	28.6	28.6	95.3	95.8	6.4	1	7.3	7.5	25	26
					Bottom	5.0	27.6	27.6	8.2	8.2	28.6	28.6	96.8	96.1	6.5	6.5	8.1		22	i –
					BOILOTT	5.0	27.6	27.0	8.2	0.2	28.6	20.0	95.4	90.1	6.4	0.0	8.0		23	1

DA: Depth-averaged

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

Water Quality Monitoring

Water Quality Monitoring Results on 10 September 22 during Mid-Ebb Tide

		toring head			To September 22	during init														
Monitoring	Weather	Sea Condition	Sampling		Sampling Dep	th (m)	Water Te	emperature (°C)	р	Η	Salin	ity (ppt)	DO Satur	ation (%)	Dissolved (mg/l		Turbidity	(NTU)	Suspende (mg	
Station	Condition		Time	(m)			Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	28.2	28.2	8.1	8.1	30.1	30.2	85.2	84.8	5.6		10.7		5.8	
					Sullace	1.0	28.2	20.2	8.1	0.1	30.2	30.2	84.4	04.0	5.6	5.6	10.5		4.5	j
C1	Cloudy	Moderate	12:19	10.6	Middle	5.3	28.1	28.1	8.1	8.1	30.2	30.2	84.4	84.4	5.6	5.0	12.3	12.4	7.4	5.6
01	Cloudy	Woderate	12.15	10.0	Middle	5.3	28.1	20.1	8.1	0.1	30.2	00.2	84.3	04.4	5.6		12.3	12.7	5.8	0.0
					Bottom	9.6	28.1	28.2	8.1	8.1	30.2	30.2	84.8	84.8	5.6	5.6	14.4		5.7	1
					Dottom	9.6	28.2	20.2	8.1	0	30.2	00.2	84.8	0.110	5.6	0.0	14.2		4.6	ļ
					Surface	1.0	28.3	28.3	8.1	8.1	30.1	30.2	86.9	86.2	5.7		10.0		5.2	1
						1.0	28.2		8.1		30.2		85.4		5.6	5.7	9.2		5.1	1
C2	Cloudy	Moderate	11:56	10.8	Middle	5.4	28.1	28.1	8.0	8.1	30.2	30.2	86.5	85.8	5.7		9.7	10.7	3.6	5.2
	,					5.4	28.1		8.1		30.2		85.1		5.6		9.5		5.0	4
					Bottom	9.8	28.1	28.1	8.0	8.1	30.2	30.2	88.3	86.9	5.8	5.7	12.9		6.4	4
	1					9.8	28.1		8.1		30.2		85.5		5.6		13.0		5.8	<u> </u>
					Surface	1.0	28.2 28.2	28.2	8.1 8.1	8.1	30.6	30.6	80.7	80.8	5.3	-	7.7		7.3	1
						1.0	-		-		30.6		80.9		5.3	5.3	7.6		8.2	i
M1	Cloudy	Moderate	12:10	5.7	Middle	-	-	-	-	-	-	-	-	-	-	-	-	7.9	-	7.5
						- 4.7	28.2		- 8.0		30.6		- 80.7		- 5.3		- 8.2		7.0	i
					Bottom	4.7	28.2	28.2	8.1	8.1	30.6	30.6	80.7	80.8	5.3	5.3	8.2		7.0	i i
						1.0	28.3		8.1		30.6		81.2		5.3		5.3		9.2	<u> </u>
					Surface	1.0	28.2	28.3	8.1	8.1	30.6	30.6	80.1	80.7	5.3		5.4		11.4	1
						-	-		-		-		-		-	5.3	-		-	1
M2	Cloudy	Moderate	12:06	5.4	Middle	-	-	-	-	-	-	-	-	-	-		-	5.8	-	10.8
					D	4.4	28.2		8.0		30.6		79.4		5.2		6.2		12.6	i
					Bottom	4.4	28.2	28.2	8.1	8.1	30.6	30.6	80.9	80.2	5.3	5.3	6.3		9.8	i
					0 /	1.0	28.3	00.0	8.1		30.4	00.4	84.5	00.0	5.6		7.0		10	
					Surface	1.0	28.2	28.3	8.1	8.1	30.4	30.4	83.2	83.9	5.5	5.5	7.8		8	i
M3	Cloudy	Moderate	12:13	7.5	Middle	3.8	28.1	28.1	8.0	8.1	30.6	30.6	79.7	80.6	5.3	5.5	9.6	9.2	10	9
IVIS	Cioudy	woderate	12:13	6. Y	widdie	3.8	28.1	20.1	8.1	0.1	30.6	30.0	81.4	0.00	5.4	1	9.5	9.2	10	9
					Bottom	6.5	28.2	28.2	8.0	8.1	30.5	30.6	78.9	77.8	5.2	5.2	10.5		10	i –
					BOILOITI	6.5	28.1	20.2	8.1	0.1	30.7	30.0	76.7	11.0	5.1	J.2	10.5]	8	i

DA: Depth-averaged

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

Water Quality Monitoring

 Water Quality Monitoring Results on
 10 September 22
 during Mid-Flood Tide

		toring Resu			To September 22	uunng mu		lue												
Monitoring	Weather	Sea Condition	Sampling		Sampling Dep	th (m)	Water Te	emperature (°C)	F	рН	Salin	ity (ppt)	DO Satur	ation (%)	Dissolved (mg/l		Turbidity	(NTU)	Suspende (mg.	
Station	Condition		Time	(m)	Camping 2 op		Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	28.4	28.4	8.1	8.2	30.1	30.2	85.5	85.1	5.6		8.2		9.9	
					Suilace	1.0	28.3	20.4	8.2	0.2	30.2	30.2	84.6	05.1	5.6	5.6	8.9		7.9	l
C1	Cloudy	Moderate	18:42	10.4	Middle	5.2	28.2	28.2	8.1	8.2	30.3	30.3	83.7	83.5	5.5	0.0	10.4	11.0	6.6	8.6
•					Inidato	5.2	28.2	2012	8.2	0.2	30.3	00.0	83.2	00.0	5.5		10.9		6.6	1
					Bottom	9.4	28.2	28.2	8.1	8.2	30.3	30.3	83.8	83.5	5.5	5.5	14.0		10.4	ł
						9.4	28.2		8.2		30.3		83.1		5.5		13.3		10.1	
					Surface	1.0	28.4	28.4	8.1	8.2	30.1	30.2	84.4	84.4	5.6	_	7.9		9.4	ł
						1.0	28.3		8.2		30.2		84.3		5.5	5.4	7.9		9.5	ł
C2	Cloudy	Moderate	19:04	10.1	Middle	5.1 5.1	28.3 28.3	28.3	8.1 8.2	8.2	30.4 30.4	30.4	80.5 81.1	80.8	5.3 5.3	-	8.2 8.3	9.9	10.3 8.6	8.9
						9.1	28.3		8.1		30.4		78.9		5.2		0.3 13.6		8.2	ł
					Bottom	9.1	28.3	28.3	8.2	8.2	30.4	30.4	78.0	78.5	5.1	5.2	13.2		7.3	ł
						1.0	28.4		8.1		30.3		82.3		5.4		7.9		7.7	[
					Surface	1.0	28.4	28.4	8.1	8.1	30.3	30.3	82.2	82.3	5.4		7.4		9.4	ł
M1	Claudy	Moderate	18:53	5.5	Middle	-	-		-		-		-		-	5.4	-	10.4	-	8.1
IVI1	Cloudy	woderate	18:53	5.5	IVIIdale	-	-	-	-	-	-	-	-	- 1	-		-	10.4	-	8.1
					Bottom	4.5	28.6	28.5	8.0	8.1	30.3	30.3	79.4	78.4	5.2	5.2	13.0		7.4	l
					Dottom	4.5	28.4	20.5	8.1	0.1	30.3	00.0	77.4	70.4	5.1	0.2	13.1		8.0	I
					Surface	1.0	28.4	28.4	8.1	8.1	30.4	30.4	83.6	83.7	5.5		9.2		6.9	1
						1.0	28.4		8.1		30.4		83.8		5.5	5.5	9.2		8.2	ł
M2	Cloudy	Moderate	18:56	5.6	Middle	-	-	-	-	-	-	-	-		-		-	11.0	-	6.7
	,					-	-		-		-		-		-		-		-	
					Bottom	4.6	28.3	28.4	8.1	8.1	30.5	30.5	82.8	83.4	5.4	5.5	13.0		5.3	ł
				1		4.6	28.4		8.1		30.4		83.9	1	5.5		12.4		6.3	
					Surface	1.0	28.4	28.4	8.1	8.1	30.3	30.3	83.2	83.3	5.5	_	10.5		6	ł
						1.0 3.5	28.3		8.1		30.3		83.3 81.8		5.5 5.4	5.5	10.6		5	ł
M3	Cloudy	Moderate	18:49	7.0	Middle	3.5	28.3 28.3	28.3	8.1 8.1	8.1	30.4 30.4	30.4	81.8 81.7	81.8	5.4	-	10.9 10.6	11.1	6 5	6
						6.0	28.3		8.1		30.4		79.0		5.4		10.6		5 6	ł
					Bottom	6.0	28.3	28.3	8.1	8.1	30.3	30.4	79.0 80.5	79.8	5.2	5.3	11.9		6	ł
						0.0	20.3		0.1		30.3		00.5		0.0		11.0		0	<u> </u>

DA: Depth-averaged

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

Water Quality Monitoring

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

		toring Resu			13 September 22	uunny mu		6												
Monitoring	Weather	Sea Condition		Water Depth	Sampling Dep	th (m)	Water Te	mperature (°C)	p	эΗ	Salin	ity (ppt)	DO Satur	ation (%)	Dissolved ((mg/l		Turbidity	(NTU)	Suspende (mg	
Station	Condition		Time	(m)		· · · · ·	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	28.9	28.9	8.2	8.2	26.7	26.7	85.4	85.1	5.7		5.6		6.3	
					Sullace	1.0	28.9	20.9	8.2	0.2	26.7	20.7	84.8	00.1	5.6	5.6	5.8		6.2]
C1	Cloudy	Moderate	13:33	11.1	Middle	5.6	28.6	28.6	8.2	8.2	27.1	27.1	82.4	81.8	5.5	0.0	10.2	10.3	8.8	6.9
01	cloudy	modorato	10.00		Middlo	5.6	28.6	20.0	8.2	0.2	27.1	27.1	81.1	01.0	5.4		10.2	10.0	6.5	0.0
					Bottom	10.1	28.6	28.6	8.2	8.2	27.2	27.2	83.0	82.9	5.5	5.5	15.0		6.8	1
					Dottom	10.1	28.6	2010	8.2	0.2	27.1		82.8	02.0	5.5	0.0	15.0		6.9	Ļ
					Surface	1.0	28.8	28.9	8.2	8.2	26.9	26.9	84.1	83.9	5.6		7.2		4.8	1
						1.0	28.9		8.2	-	26.8		83.6		5.6	5.5	7.0		6.6	1
C2	Cloudy	Moderate	13:57	11.2	Middle	5.6	28.4	28.4	8.2	8.2	27.6	27.7	82.1	81.3	5.5		11.8	10.8	11.9	7.1
						5.6	28.3		8.2		27.8		80.4		5.4		10.9		7.2	4
					Bottom	10.2	28.0	28.2	8.2	8.2	28.4	28.2	76.2	74.9	5.1	5.0	13.6		5.8	4
		1		1		10.2	28.3		8.2		27.9		73.5		4.9		14.0		6.3	<u> </u>
					Surface	1.0	28.8 28.6	28.7	8.2 8.2	8.2	27.2 27.3	27.3	81.1 79.7	80.4	5.4 5.3	-	7.5		5.9 4.6	1
									0.Z		27.3					5.4	8.9			1
M1	Cloudy	Moderate	13:42	5.8	Middle	-	-	-	-	-	-	-	-	-	-	-	-	8.4	-	4.9
						4.8	28.5		- 8.1		27.3		78.0		5.2		- 8.8		4.6	1
					Bottom	4.8	28.7	28.6	8.2	8.2	27.3	27.3	80.9	79.5	5.4	5.3	8.2		4.5	1
						1.0	28.7		8.1		27.2		80.9		5.4		7.1		5.2	<u> </u>
					Surface	1.0	28.8	28.8	8.1	8.1	27.2	27.2	82.3	81.6	5.5		7.4		4.9	1
						-	-		-		-		-		-	5.5	-		-	
M2	Cloudy	Moderate	13:47	5.4	Middle	-	-	-	-	-	-	-	-	-	-		-	7.5	-	5.4
					Bottom	4.4	28.6	28.7	8.1	8.1	27.3	27.3	79.9	79.4	5.3	5.3	7.6		6.1	1
					Bottom	4.4	28.8	28.7	8.1	8.1	27.2	27.3	78.9	79.4	5.2	5.3	7.8		5.4	1
					Surface	1.0	28.7	28.7	8.2	8.2	27.2	27.2	81.6	81.7	5.4		7.6		6	
					Sunace	1.0	28.7	20.1	8.2	0.2	27.2	21.2	81.7	01.7	5.4	5.3	7.9		6	i
M3	Cloudy	Moderate	13:38	7.4	Middle	3.7	28.4	28.5	8.2	8.2	27.3	27.3	79.1	78.8	5.3	5.5	12.6	11.4	6	6
NIS	Cioudy	wouerate	13.30	7.4		3.7	28.5	20.5	8.2	0.2	27.3	21.5	78.5	10.0	5.2		12.8	11.4	6	Ŭ
					Bottom	6.4	28.4	28.5	8.2	8.2	27.3	27.3	83.7	81.0	5.2	5.2	13.6		7	i i
	1				Bottom	6.4	28.5	20.0	8.2	0.2	27.3	21.5	78.3	01.0	5.2	5.2	13.8		6	i

DA: Depth-averaged

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

Water Quality Monitoring

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

Pr Sea Condition	Sampling Time	Water Depth (m)	Sampling Dep	th (m)	Water Te	emperature (°C)		рH	Salin	ity (ppt)	DO Satur	(0/)	Dissolved	Oxygen	Turbidity(Suspende	d Solids
	Time	(m)	eamping 2 op				ł	P 11	Jain	ity (ppt)	DO Salui	alion (%)	(mg/l	_)	Turbluity	N10)	(mg/	
					Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
			Surface	1.0	28.4	28.4	8.1	8.1	27.1	27.1	79.2	78.9	5.3		13.5		3.2	í
			Guilace	1.0	28.4	20.4	8.1	0.1	27.1	27.1	78.6	10.5	5.3	5.3	13.3		4.0	l
/ Moderate	09:18	11.0	Middle	5.5	28.4	28.4	8.1	81	27.2	27.2	79.3	78.9		0.0	12.3	9.9	10.0	5.9
					-	2011	-	0.1			-	1010	-					1
			Bottom			28.4		8.1		27.2		80.8		5.4	-			1
					-		-								_			
			Surface			28.4		8.1		27.0		80.1		-				ł
			-											5.3				ł
/ Moderate	08:57	10.6	Middle			28.4		8.1		27.1		79.7		-		11.2		11.5
					-		-								-			ł
			Bottom			28.4		8.1		27.1		79.7		5.4				ł
													-					
			Surface	1.0	28.4	28.4	8.1	8.1	27.4	27.4	74.2	74.6	5.0		6.8		6.1	ł
Madarata	00.00	5.0	Middle	-	-		-		-		-		-	5.0	-	<u> </u>	-	5.4
woderate	09:08	5.9	ivildale	-	-	-	-	-	-	-	-	-	-		-	0.0	-	5.4
			Bottom	4.9	28.4	28.4	8.1	81	27.4	27 4	76.1	75.3	5.1	51	6.8			1
			Bottom	4.9	-	20.4		0.1		21.4	74.4	10.0		0.1			_	<u> </u>
			Surface			28.4		8.1		27.3		75.4		-				ł
				1.0	28.4		8.1	-	27.3	-	74.8		5.0	5.1	8.8		11.8	ł
Moderate	09:05	5.8	Middle	-	-	-	-	-	-	-	-	-	-		-	10.7	-	12.6
				-	-		-		-		-		-		-		-	ł
			Bottom			28.4		8.1		27.3		77.0		5.2				ł
												1	-		-			<u> </u>
			Surface			28.5		8.1		26.8		79.0		-				ł
							-							5.2				ł
/ Moderate	09:13	7.0	Middle		-	28.4		8.1		27.1		76.5	-			5.7		10
	1												-					ł
	1		Bottom			28.4		8.1		27.3		72.8		4.9				l
	y Moderate y Moderate	y Moderate 08:57 y Moderate 09:08 y Moderate 09:08	y Moderate 08:57 10.6 y Moderate 09:08 5.9 y Moderate 09:05 5.8	y Moderate 08:57 10.6 Bottom Moderate 08:57 10.6 Middle Bottom Moderate 09:08 5.9 Middle Bottom 9 Moderate 09:08 5.9 Middle Bottom 9 Moderate 09:05 5.8 Middle Bottom 9 Moderate 09:05 5.8 Surface 9 Moderate 09:05 5.8 Middle Bottom 9 Moderate 09:05 5.8 Middle Bottom 9 Moderate 09:13 7.0 Middle	y Middle 5.5 Bottom 10.0 Bottom 10.0 y Moderate 08:57 10.6 Surface 1.0 y Moderate 08:57 10.6 Surface 1.0 y Moderate 08:57 10.6 Middle 5.3 y Moderate 08:57 10.6 Middle 5.3 y Moderate 09:08 5.9 Surface 1.0 y Moderate 09:08 5.9 Surface 1.0 y Moderate 09:05 5.8 Surface 1.0 y Moderate 09:05 5.8 Surface 1.0 y Moderate 09:05 5.8 Middle - y Moderate 09:05 5.8 Middle - y Moderate 09:05 7.0 Middle 3.5 y Moderate 09:13 7.0 Middle 3.5	y Moderate 09:18 11.0 Middle 5.5 28.4 Bottom 10.0 28.4 10.0 28.4 10.0 28.4 10.0 28.4 10.0 28.4 1.0 28.4 1.0 28.4 5.3 28.4 5.3 28.4 9.6 28.4 9.6 28.4 9.6 28.4 9.6 28.4 9.6 28.4 9.6 28.4 9.6 28.4 1.0 28.4 9.6 28.4 9.6 28.4 9.6 28.4 9.6 28.4 1.0 28.5 2.8 A 1.0 28.5 1.0 28.5	y Moderate 09:18 11.0 Middle 5.5 28.4 23.4 Bottom 10.0 28.4 28.4 28.4 28.4 y Moderate 08:57 10.6 Surface 1.0 28.4 28.4 y Moderate 08:57 10.6 Middle 5.3 28.4 28.4 y Moderate 08:57 10.6 Middle 5.3 28.4 28.4 y Moderate 08:57 10.6 Middle 5.3 28.4 28.4 y Moderate 09:08 5.9 Surface 1.0 28.4 28.4 y Moderate 09:08 5.9 Middle - - - Bottom 4.9 28.4 28.4 28.4 28.4 28.4 y Moderate 09:05 5.8 Middle - - - Bottom 4.8 28.4 28.4 - - -<	y Moderate 09:18 11.0 Middle 5.5 28.4 28.4 8.1 Bottom 10.0 28.4 28.4 8.1 8.1 y Moderate 08:57 10.6 Surface 1.0 28.4 28.4 8.1 y Moderate 08:57 10.6 Surface 1.0 28.4 28.4 8.1 y Moderate 08:57 10.6 Surface 1.0 28.4 28.4 8.1 y Moderate 08:57 10.6 Surface 1.0 28.4 28.4 8.1 y Moderate 09:08 5.9 Surface 1.0 28.4 28.4 8.1 y Moderate 09:08 5.9 Surface 1.0 28.4 28.4 8.1 y Moderate 09:05 5.8 Surface 1.0 28.4 28.4 8.1 y Moderate 09:05 5.8 Surface 1.	y Moderate 09.18 11.0 Middle 5.5 28.4 28.4 8.1 8.1 Bottom 10.0 28.4 28.4 28.4 8.1 8.1 8.1 y Moderate 08:57 10.6 Surface 10.0 28.4 28.4 8.1 8.1 y Moderate 08:57 10.6 Surface 1.0 28.4 28.4 28.4 8.1 8.1 y Moderate 08:57 10.6 Middle 5.3 28.4 28.4 8.1 8.1 y Moderate 08:57 10.6 Surface 1.0 28.4 28.4 8.1 8.1 y Moderate 09:08 5.9 Surface 1.0 28.4 28.4 8.1 8.1 y Moderate 09:05 5.8 Surface 1.0 28.4 28.4 8.1 8.1 y Moderate 09:05 5.8 Middle -	y Moderate 09:18 11.0 Middle 5.5 28.4 28.4 8.1 8.1 27.2 Bottom 10.0 28.4 28.4 8.1 8.1 8.1 27.2 27.1 y Moderate 08:57 10.6 Surface 10.0 28.4 28.4 8.1 8.1 27.2 27.1 y Moderate 08:57 10.6 Surface 1.0 28.4 28.4 8.1 8.1 27.0 27.1 27.	y Moderate 09:18 11.0 Middle 5.5 28.4 28.4 8.1 8.1 27.2 27.2 Bottom 10.0 28.4 28.4 8.1 8.1 27.2 27.2 27.2 y Moderate 08:57 10.6 Surface 1.0 28.4 28.4 8.1 8.1 27.0 27.1 27	y Middle 5.5 28.4 28.4 8.1 8.1 27.2 27.2 78.4 Bottom 10.0 28.4 28.4 8.1 8.1 8.1 27.2 27.2 78.4 y Moderate 08.57 10.6 Surface 1.0 28.4 28.4 8.1 8.1 27.2 27.2 78.9 y Moderate 08.57 10.6 Surface 1.0 28.4 28.4 8.1 8.1 27.0 27.0 78.9 y Moderate 08.57 10.6 Middle 5.3 28.4 28.4 8.1 8.1 27.0 27.0 79.9 Moderate 08.57 10.6 Middle 5.3 28.4 28.4 8.1 8.1 27.0 27.1 79.8 Bottom 9.6 28.4 28.4 8.1 8.1 27.4 27.4 74.9 y Moderate 09.08 5.9 Middle -	y Moderate 09.18 11.0 Middle 5.5 28.4 28.4 8.1 27.2 27.2 78.4 78.9 Bottom 10.0 28.4 28.4 8.1 8.1 27.2 27.2 78.4 78.9 80.8 y Moderate 08.57 10.6 Surface 1.0 28.4 28.4 8.1 8.1 27.0 70.9 80.3 79.9 80.1 y Moderate 08.57 10.6 Middle 5.3 28.4 28.4 8.1 8.1 27.0 27.1 77.0 80.3 79.7 y Moderate 08.57 10.6 Middle 5.3 28.4 28.4 8.1 8.1 27.1 27.1 79.4 79.7 79.7 y Moderate 09:08 5.9 Middle - - - - - - - - - - - - - - - -	y Middle 5.5 28.4 26.4 8.1 27.2 27.2 78.4 78.9 5.2 Bottom 10.0 28.4 28.4 8.1 8.1 27.2 27.2 78.9 80.8 5.5 y Moderate 08:57 10.6 Surface 1.0 28.4 28.4 8.1 8.1 27.1 27.0 27.0 78.9 80.8 5.5 y Moderate 08:57 10.6 Surface 1.0 28.4 28.4 8.1 8.1 27.0 27.1 79.8 79.7 5.3 Bottom 9.6 28.4 28.4 8.1 8.1 27.0 27.1 79.8 79.7 5.3 Bottom 9.6 28.4 28.4 8.1 8.1 27.1 27.4 79.4 79.7 5.3 Moderate 09:08 5.9 Middle - - - - - - - - - -	y Moderate 09:18 11.0 Middle 5.5 28.4 28.4 8.1 8.1 27.2 27.2 27.2 79.3 78.9 5.3 y Moderate 09:18 11.0 28.4 28.4 8.1 8.1 27.2 27.2 27.2 27.2 78.9 5.3 5.4 y Moderate 08:57 10.6 Surface 10.0 28.4 28.4 8.1 8.1 27.2 27.2 27.2 27.0 78.9 5.3 5.4 y Moderate 08:57 10.6 Surface 10.0 28.4 28.4 8.1 8.1 27.0 </td <td>y Moderate 09:18 11.0 Middle 5.5 28.4 28.4 8.1 8.1 27.2 27.2 79.3 78.9 5.3 5.3 11.9 Bottom 10.0 28.4 28.4 8.1 8.1 27.2 27.2 78.4 78.9 5.3 5.3 5.4 40.0 y Moderate 06:57 10.6 Surface 10.0 28.4 28.4 8.1 8.1 27.0 27.0 79.3 80.8 5.3 5.4 40.0 y Moderate 06:57 10.6 Middle 5.3 28.4 28.4 8.1 8.1 27.0 27.0 79.9 80.1 5.3 79.9 80.1 5.3 79.7 5.3 79.4 79.7 5.3 79.4 79.7 75.3 79.4 79.7 75.3 79.4 79.7 75.3 79.4 79.7 75.3 79.4 79.7 75.3 79.7 75.3 79.7 75.3</td> <td>y Moderate 09:18 11.0 Middle 5.5 28.4 28.4 8.1 8.1 27.2 27.2 78.4 78.9 5.5 5.5 11.9 9.9 Moderate 09:18 11.0 Middle 5.5 28.4 28.4 8.1 8.1 27.2 27.2 78.4 78.9 5.5 5.6 4.0 4.0 Moderate 08:57 10.6 Surface 10.0 28.4 28.4 8.1 8.1 27.1 27.0 78.9 80.1 5.3 5.4 4.0 Moderate 08:57 10.6 Surface 10.0 28.4 28.4 8.1 8.1 27.0 27.0 78.9 80.1 5.3 5.4 4.0 Moderate 08:57 10.6 Surface 10.0 28.4 28.4 8.1 8.1 27.0 27.1 78.6 78.7 5.3 5.4 11.1 Moderate 09:08 5.9 Middle</td> <td>y Moderate 09:18 11.0 Middle 5.5 28.4 28.4 8.1 8.1 27.2 27.2 78.4 78.9 5.3 1.0 10.0 5.5 28.4 28.4 8.1 8.1 27.2 27.2 78.4 78.9 5.3 5.2 11.9 6.6 6.7 5.6 6.7 11.9 6.7 11.9 6.7 11.9 6.7 11.9 6.7 11.9 6.7 11.9 6.7 11.9 6.7 11.9 6.7 11.9 6.7 11.9 6.7 11.9 6.7 11.9 6.7 11.9 11.9 11.0 28.4 28.4 8.1 8.1 27.1 27.0 27.0 27.0 27.0 27.0 27.0 27.0 27.0 27.0 27.0 27.0 27.1 27.1 27.1 27.1 27.1 27.1 27.1 27.1 27.1 27.1 27.1 27.1 27.1 27.1 27.1 27.1 27.1 2</td>	y Moderate 09:18 11.0 Middle 5.5 28.4 28.4 8.1 8.1 27.2 27.2 79.3 78.9 5.3 5.3 11.9 Bottom 10.0 28.4 28.4 8.1 8.1 27.2 27.2 78.4 78.9 5.3 5.3 5.4 40.0 y Moderate 06:57 10.6 Surface 10.0 28.4 28.4 8.1 8.1 27.0 27.0 79.3 80.8 5.3 5.4 40.0 y Moderate 06:57 10.6 Middle 5.3 28.4 28.4 8.1 8.1 27.0 27.0 79.9 80.1 5.3 79.9 80.1 5.3 79.7 5.3 79.4 79.7 5.3 79.4 79.7 75.3 79.4 79.7 75.3 79.4 79.7 75.3 79.4 79.7 75.3 79.4 79.7 75.3 79.7 75.3 79.7 75.3	y Moderate 09:18 11.0 Middle 5.5 28.4 28.4 8.1 8.1 27.2 27.2 78.4 78.9 5.5 5.5 11.9 9.9 Moderate 09:18 11.0 Middle 5.5 28.4 28.4 8.1 8.1 27.2 27.2 78.4 78.9 5.5 5.6 4.0 4.0 Moderate 08:57 10.6 Surface 10.0 28.4 28.4 8.1 8.1 27.1 27.0 78.9 80.1 5.3 5.4 4.0 Moderate 08:57 10.6 Surface 10.0 28.4 28.4 8.1 8.1 27.0 27.0 78.9 80.1 5.3 5.4 4.0 Moderate 08:57 10.6 Surface 10.0 28.4 28.4 8.1 8.1 27.0 27.1 78.6 78.7 5.3 5.4 11.1 Moderate 09:08 5.9 Middle	y Moderate 09:18 11.0 Middle 5.5 28.4 28.4 8.1 8.1 27.2 27.2 78.4 78.9 5.3 1.0 10.0 5.5 28.4 28.4 8.1 8.1 27.2 27.2 78.4 78.9 5.3 5.2 11.9 6.6 6.7 5.6 6.7 11.9 6.7 11.9 6.7 11.9 6.7 11.9 6.7 11.9 6.7 11.9 6.7 11.9 6.7 11.9 6.7 11.9 6.7 11.9 6.7 11.9 6.7 11.9 6.7 11.9 11.9 11.0 28.4 28.4 8.1 8.1 27.1 27.0 27.0 27.0 27.0 27.0 27.0 27.0 27.0 27.0 27.0 27.0 27.1 27.1 27.1 27.1 27.1 27.1 27.1 27.1 27.1 27.1 27.1 27.1 27.1 27.1 27.1 27.1 27.1 2

DA: Depth-averaged

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

Water Quality Monitoring

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

Monitoring	Weather	Sea Condition	Sampling		Sampling Dep	~~~~~		mperature (°C)	p	эΗ	Salin	ity (ppt)	DO Satur	ration (%)	Dissolved ((mg/l		Turbidity	(NTU)	Suspende (mg	
Station	Condition		Time	(m)	Camping 2 op		Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	29.6	29.7	8.2	8.2	29.0	28.9	93.7	94.3	6.1		2.9		4.2	
					Sullace	1.0	29.8	23.1	8.2	0.2	28.8	20.3	94.8	34.3	6.1	5.8	3.1		3.8	1
C1	Cloudy	Moderate	14:30	10.6	Middle	5.3	29.2	29.2	8.1	8.2	29.4	29.6	83.8	84.3	5.5	0.0	5.6	6.7	6.9	6.2
01	cloudy	moderate			indato	5.3	29.1	2012	8.2	0.2	29.8	2010	84.7	0.10	5.5		5.9	0	6.5	0
					Bottom	9.6	29.0	29.0	8.1	8.2	29.9	29.9	82.6	81.9	5.4	5.4	11.2		8.0	1
						9.6	29.0		8.2	-	29.9		81.1		5.3		11.2		7.9	Ļ
					Surface	1.0	29.3	29.3	8.1	8.1	29.4	29.5	84.4	84.6	5.5		6.7		9.4	4
						1.0	29.2		8.1		29.6		84.8		5.5	5.3	7.0		9.1	4
C2	Cloudy	Moderate	14:51	10.1	Middle	5.1	29.0	29.0	8.1 8.1	8.1	29.9	30.0	79.0	78.7	5.2	-	8.5	7.9	7.6	7.8
	-					5.1	29.0				30.0		78.4		5.1		8.7		8.0	1
					Bottom	9.1	28.9	29.0	8.1 8.1	8.1	30.1	30.0	80.2	79.4	5.2	5.2	8.2		6.6 6.2	1
						9.1	29.1 29.6				29.8		78.6		5.1		8.2 6.0		5.7	┝───
					Surface	1.0	29.6	29.6	8.1 8.1	8.1	29.4 29.4	29.4	85.3 84.1	84.7	5.5 5.5	-	6.6		5.7	1
						-	- 29.0		-		- 29.4				5.5	5.5	-		- 5.0	1
M1	Cloudy	Moderate	14:41	5.8	Middle	-	-	-	-	-	-	-	-		-	-	-	6.8		6.0
						4.8	29.5		8.1		29.5		84.6		- 5.5		7.4		6.5	1
					Bottom	4.8	29.5	29.5	8.1	8.1	29.5	29.5	83.3	84.0	5.4	5.5	7.4		6.0	1
						1.0	29.6		8.2		29.3		88.3		5.7		4.7		8.6	
					Surface	1.0	29.5	29.6	8.1	8.2	29.4	29.4	87.2	87.8	5.7	1	5.0		9.0	1
	<u>.</u>					-	-		-		-		-		-	5.7	-		-	
M2	Cloudy	Moderate	14:44	5.8	Middle	-	-	-	-	-	-	-	-	-	-	1	-	4.8	-	7.8
					Dettern	4.8	29.4	29.5	8.2	8.2	29.4	29.4	88.9	86.9	5.8	5.7	4.5		7.0	1
					Bottom	4.8	29.6	29.5	8.1	8.2	29.3	29.4	84.8	60.9	5.5	5.7	4.8		6.7	1
					Surface	1.0	29.3	29.3	8.2	8.2	29.4	29.4	85.7	84.6	5.6		8.5		4	
					Suilace	1.0	29.3	23.3	8.1	0.2	29.4	23.4	83.5	04.0	5.4	5.5	8.5		4	i i
M3	Cloudy	Moderate	14:36	6.8	Middle	3.4	29.3	29.2	8.1	8.1	29.4	29.5	84.4	82.6	5.5	5.5	8.5	9.8	4	5
NIO NIO	Cioudy	moderate	17.00	0.0	Middle	3.4	29.1	20.2	8.1	0.1	29.6	20.0	80.8	02.0	5.3		8.2	5.5	5	Ŭ
					Bottom	5.8	29.1	29.2	8.1	8.1	29.6	29.6	82.9	81.9	5.4	5.4	12.6		7	1
	1				Bottom	5.8	29.2	20.2	8.1	0.1	29.5	20.0	80.8	01.0	5.3	0.1	12.5		7	i i

DA: Depth-averaged

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

Water Quality Monitoring

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

Water Qua		toring Resu		1	15 September 22	during mid	110001						1				1			
Monitoring	Weather	Sea Condition	Sampling		Sampling Dep	th (m)	Water Te	emperature (°C)	P	эΗ	Salin	ity (ppt)	DO Satu	ation (%)	Dissolved ((mg/l		Turbidity((NTU)	Suspende (mg/	
Station	Condition		Time	(m)			Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	29.2	29.2	8.1	8.1	29.1	29.1	83.7	83.8	5.5		5.8		8.5	
					Guilace	1.0	29.2	23.2	8.1	0.1	29.0	23.1	83.9	00.0	5.5	5.5	6.1		8.6	
C1	Cloudy	Moderate	09:57	10.8	Middle	5.4	29.1	29.1	8.1	8.1	29.2	29.3	83.2	83.1	5.4	0.0	5.9	5.2	9.2	9.1
	,				maaro	5.4	29.1	2011	8.1	0	29.3	2010	83.0		5.4		5.4		8.9	
					Bottom	9.8	29.1	29.1	8.1	8.1	29.3	29.3	83.3	83.4	5.4	5.5	4.0		9.7	
	-					9.8	29.1	-	8.1	-	29.2		83.5		5.5		4.2		9.5	
					Surface	1.0	29.2	29.2	8.1	8.1	28.8	29.0	85.9	85.7	5.6		5.3		11.4	
						1.0	29.1		8.1		29.1		85.4		5.6	5.6	6.2		11.3	
C2	Cloudy	Moderate	09:37	10.1	Middle	5.1 5.1	29.1 29.1	29.1	8.1 8.1	8.1	29.3 29.3	29.3	85.0 85.1	85.1	5.6 5.6	-	7.1 7.1	6.9	13.6 13.2	13.3
						9.1	29.1		8.1		29.3		85.1	-	5.6		7.1		13.2	
					Bottom	9.1	29.1	29.1	8.1	8.1	29.3	29.3	85.2	84.1	5.6	5.5	7.7		15.3	
						1.0	29.2		8.1		29.6		76.9		5.0		8.1		8.7	
					Surface	1.0	29.2	29.2	8.1	8.1	29.6	29.6	76.0	76.5	5.0		8.6		8.6	
M1	Olavaha	Madausta	00.40	5.0	N Al al all a	-	-		-		-		-		-	5.0	-	7.0	-	
IVIT	Cloudy	Moderate	09:48	5.9	Middle	-	-	-	-	-	-	-	-	- 1	-	1	-	7.9	-	9.3
					Bottom	4.9	29.2	29.2	8.1	8.1	29.7	29.7	78.8	77.6	5.1	5.1	7.3		10.1	
					Dottom	4.9	29.2	23.2	8.1	0.1	29.6	23.1	76.4	11.0	5.0	5.1	7.4		9.7	
					Surface	1.0	29.2	29.3	8.1	8.1	29.3	29.3	79.4	79.5	5.2		10.0		8.9	
						1.0	29.3		8.1		29.2		79.6		5.2	5.2	10.7		8.6	
M2	Cloudy	Moderate	09:45	5.6	Middle	-	-	-	-	-	-	-	-		-		-	10.6	-	7.0
	,					-	-		-		-		-		-		-		-	
					Bottom	4.6	29.2	29.2	8.1	8.1	29.4	29.4	80.4	79.6	5.2	5.2	11.1		5.5	
						4.6	29.2		8.1		29.4		78.7	1	5.1		10.7		5.1	
					Surface	1.0	29.3	29.4	8.1	8.1	28.8	28.8	85.1	86.2	5.6 5.7		4.5		4	
						1.0	29.4		8.1		28.7		87.2		5.7	5.5	4.0		5 5	
M3	Cloudy	Moderate	09:53	6.5	Middle	3.3	29.2 29.2	29.2	8.1 8.1	8.1	29.1 29.1	29.1	83.8 81.4	82.6	5.5	4	4.1 4.0	4.9	5	6
						5.5	29.2		8.1		29.1		78.2	<u> </u>	5.3		4.0 6.2		6 7	
					Bottom	5.5	29.1	29.2	8.1	8.1	29.4	29.2	80.1	79.2	5.1	5.2	6.6		7	
		1	1			0.0	29.3		0.1		29.0		0U. I		5.Z		0.0		1	

DA: Depth-averaged

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

Water Quality Monitoring

Water Quality Monitoring Results on 17 September 22 during Mid-Ebb Tide

Water Qua		loning Resu		1	17 September 22			e			1				Dissolved	0.00000			Suspende	
Monitoring	Weather	Sea Condition		Water Depth	Sampling Dep	th (m)	Water Te	mperature (°C)	P	ъH	Salin	ity (ppt)	DO Satur	ation (%)	Dissolved ((mg/l		Turbidity	(NTU)	Suspende (mg	
Station	Condition		Time	(m)			Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	29.3	29.4	8.2	8.2	29.1	29.1	96.0	96.3	6.3		6.2		1.8	
					Guildoo	1.0	29.4	20.1	8.2	0.2	29.0	20.1	96.6	00.0	6.2	6.2	6.3		2.9	
C1	Misty	Moderate	15:48	9.4	Middle	4.7	29.1	29.2	8.2	8.2	29.9	29.6	95.6	95.6	6.2		7.1	7.2	1.9	2.1
	,					4.7	29.3		8.2		29.2		95.6		6.2		7.2		2.2	
					Bottom	8.4 8.4	29.1 29.4	29.3	8.2 8.2	8.2	30.0 29.1	29.6	95.8 95.4	95.6	6.2 6.2	6.2	8.0 8.1		2.4 1.5	
						1.0	29.4		8.2		30.2		95.4 84.3		5.5		5.0		3.2	
					Surface	1.0	29.7	29.4	8.2	8.2	28.7	29.5	84.0	84.2	5.5		5.0		2.6	
00			10.00		N 41 1 11	4.0	29.0	00.0	8.2		30.2	00.7	84.7		5.5	5.5	6.9		3.5	
C2	Misty	Moderate	16:03	8.0	Middle	4.0	29.5	29.3	8.2	8.2	29.2	29.7	84.1	84.4	5.5	1	6.8	6.6	3.7	3.4
					Bottom	7.0	29.0	29.3	8.2	8.3	30.1	29.3	88.0	88.1	5.7	5.7	7.9		3.1	
					Dollom	7.0	29.5	29.3	8.3	0.5	28.5	29.5	88.1	00.1	5.7	5.7	7.9		4.4	
					Surface	1.0	29.5	29.6	8.2	8.2	28.9	28.8	91.8	92.1	6.0		7.6		3.8	
						1.0	29.7		8.2		28.7		92.3		6.0	6.0	7.7		2.9	
M1	Misty	Moderate	15:58	5.2	Middle	-	-	-	-	-	-	-	-	-	-		-	7.9	-	3.1
	-					-	-		-		-		-		-		-		-	
					Bottom	4.2	29.5 29.7	29.6	8.2 8.2	8.2	29.0 28.7	28.9	97.2 93.3	95.3	6.3 6.1	6.2	8.1 8.0		2.9 2.9	
						1.0	30.1		8.2		28.4		101.8		6.6		4.8		3.0	
					Surface	1.0	30.1	30.1	8.2	8.2	28.4	28.4	101.7	101.8	6.6		4.8		3.2	
M2	Misty	Madavata	15:56	5.6	Middle	-	- 1		-		-		-		-	6.6	-	5.2	-	3.1
IVIZ	iviisty	Moderate	15:56	5.6	Middle	-	-	-	-	-	-	-	-	-	-		-	5.2	-	3.1
					Bottom	4.6	30.1	30.1	8.3	8.3	28.4	28.4	102.4	102.2	6.6	6.6	5.5		3.4	
					Dottom	4.6	30.1	00.1	8.2	0.0	28.4	20.1	102.0	102.2	6.6	0.0	5.6		2.9	
					Surface	1.0	29.2	29.3	8.2	8.2	29.5	29.4	91.5	91.6	6.0		4.2		3	
						1.0	29.3		8.2		29.3		91.6		5.9	6.0	4.3		4	
M3	Misty	Moderate	15:52	6.0	Middle	3.0 3.0	29.0 29.2	29.1	8.2 8.2	8.2	29.9 29.5	29.7	95.6 95.0	95.3	6.1 6.1		5.9 5.8	5.5	3	3
						5.0	29.2		8.2		29.5 29.7		95.0 95.7		6.1		5.8 6.4		3	
					Bottom	5.0	20.9	29.1	8.2	8.2	29.4	29.6	95.4	95.6	6.1	6.2	6.3		4	
	1	1		1		5.0	23.0		0.2		23.4		50.4		0.1	1	0.5		4	

DA: Depth-averaged

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

Water Quality Monitoring

Water Quality Monitoring Results on 17 September 22 during Mid-Flood Tide

		ioning Resu			17 September 22	uuning miu	11000 1	lue												
Monitoring	Weather	Sea Condition	Sampling		Sampling Dep	oth (m)	Water Te	emperature (°C)	p	Η	Salin	ity (ppt)	DO Satu	ation (%)	Dissolved ((mg/l		Turbidity((NTU)	Suspende (mg/	
Station	Condition		Time	(m)		()	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	29.4	29.5	8.1	8.2	28.4	28.2	95.9	96.9	6.3		2.3		3.7	[
					Sullace	1.0	29.5	29.5	8.2	0.2	27.9	20.2	97.8	90.9	6.4	6.2	2.3		2.9	j
C1	Misty	Moderate	11:52	8.0	Middle	4.0	29.3	29.4	8.1	8.1	29.0	28.5	89.7	91.8	5.9	0.2	3.0	3.2	2.5	2.8
0.	moty	moderate		0.0	Middlo	4.0	29.5	20.1	8.1	0.1	28.0	20.0	93.9	01.0	6.1		3.1	0.2	2.0	
					Bottom	7.0	29.3	29.4	8.1	8.1	29.1	28.6	95.8	95.9	6.2	6.3	4.0		2.0	1
					Dottom	7.0	29.5	20.1	8.1	0.1	28.0	20.0	95.9	00.0	6.3	0.0	4.2		3.4	ļ
					Surface	1.0	29.7	29.8	8.2	8.2	27.5	27.3	108.7	108.1	7.1		2.0		5.3	1
						1.0	29.8		8.2		27.1		107.4		7.0	6.8	1.9		4.6	1
C2	Misty	Moderate	11:35	9.2	Middle	4.6	29.6	29.7	8.2	8.2	28.0	28.1	101.7	100.3	6.6		2.3	2.2	5.5	5.4
	,					4.6	29.7		8.2		28.1		98.8		6.4		2.3		5.0	4
					Bottom	8.2	29.6	29.7	8.2	8.2	27.9	28.5	102.6	102.4	6.7	6.7	2.3		6.7	1
		1				8.2	29.8		8.2		29.1		102.1		6.6		2.3		5.4	<u> </u>
					Surface	1.0	29.7 29.7	29.7	8.2 8.2	8.2	27.4 27.4	27.4	98.7 98.9	98.8	6.5 6.5		7.1 7.2		5.9 5.4	i i
						-	29.7		0.Z -		27.4		96.9	-	0.0 -	6.5	1.2		- -	1
M1	Misty	Moderate	11:41	5.0	Middle	-	-	-	-	-	-	-	-		-		-	7.6	-	5.4
						4.0	29.6		8.2		27.5		101.1		6.6		8.0		5.6	i i
					Bottom	4.0	29.7	29.7	8.2	8.2	27.4	27.5	99.3	100.2	6.5	6.6	8.1		4.6	1
						1.0	29.7		8.2		28.1		95.6		6.2	İ.	5.1		5.6	
					Surface	1.0	29.7	29.7	8.2	8.2	28.0	28.1	94.5	95.1	6.2		5.2		4.6	i
						-	-		-		-		-		-	6.2	-		-	1
M2	Misty	Moderate	11:43	4.6	Middle	-	-	-	-	-	-	-	-	1 -	-		-	5.8	-	5.0
					5	3.6	29.7		8.2		28.1		97.8		6.4		6.5		5.2	i i
					Bottom	3.6	29.7	29.7	8.2	8.2	28.1	28.1	95.2	96.5	6.2	6.3	6.4		4.5	i i
					Queta as	1.0	29.7	00.0	8.2	0.0	27.3	07.0	106.7	400.7	7.0		2.0		7	
					Surface	1.0	29.9	29.8	8.2	8.2	26.7	27.0	106.7	106.7	6.9	6.8	2.0		7	i i
M3	Misty	Moderate	11:47	6.8	Middle	3.4	29.6	29.7	8.2	8.2	27.5	27.2	102.3	102.4	6.7	0.8	3.1	3.1	4	5
IVIO	IVIISLY	wouerate	11.47	0.0	IVIIQUIE	3.4	29.8	29.1	8.2	0.2	26.8	21.2	102.5	102.4	6.7		3.2	3.1	4	5
					Bottom	5.8	29.6	29.7	8.2	8.2	27.6	27.3	101.5	101.6	6.6	6.6	4.2		4	1
					Dollom	5.8	29.8	23.1	8.2	0.2	27.0	21.5	101.6	101.0	6.6	0.0	4.1		5	i

DA: Depth-averaged

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

Water Quality Monitoring

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

Monitoring	Weather	Sea Condition	Sampling		Sampling Dep	th (m)	Water Te	mperature (°C)	p	эΗ	Salin	ity (ppt)	DO Satur	ation (%)	Dissolved (mg/l		Turbidity	(NTU)	Suspende (mg	
Station	Condition		Time	(m)	Camping 2 op	()	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	29.4	29.4	8.4	8.4	27.1	27.1	112.1	112.2	7.4		1.5		2.2	
					Guilace	1.0	29.4	23.4	8.4	0.4	27.1	27.1	112.3	112.2	7.4	6.5	1.4		2.4	1
C1	Cloudy	Moderate	09:13	10.5	Middle	5.3	29.1	29.1	8.2	8.2	28.7	28.8	84.3	84.0	5.5	0.0	5.0	4.7	2.7	2.8
01	Cloudy	moderate	00.10	10.0		5.3	29.1	2011	8.2	0.2	28.8	20.0	83.7	01.0	5.5		5.0		2.9	2.0
					Bottom	9.5	28.8	28.9	8.2	8.2	30.8	31.1	71.6	72.2	4.7	4.7	7.6		3.2	1
						9.5	28.9		8.1		31.4		72.8		4.7		7.6		3.4	Ļ
					Surface	1.0	29.4	29.4	8.3	8.3	27.5	27.7	104.9	104.3	6.9	_	1.7		2.9	1
						1.0	29.4	-	8.3		27.9		103.6		6.8	6.0	2.0		3.2	1
C2	Cloudy	Moderate	08:51	10.4	Middle	5.2	29.1	29.1	8.1	8.1	29.0	29.1	78.9	78.8	5.2		3.4	3.5	3.6	3.7
						5.2	29.0		8.1		29.1		78.6		5.2		4.2		3.9	4
					Bottom	9.4	28.4	28.7	8.1	8.1	32.1	31.8	67.4	69.3	4.4	4.5	4.9		4.3	4
						9.4	28.9		8.1		31.5		71.1		4.6		4.7		4.0	<u> </u>
					Surface	1.0	29.6 29.6	29.6	8.4 8.4	8.4	27.8 27.8	27.8	111.0 110.1	110.6	7.3 7.2	-	2.7 2.9		2.8 3.0	1
									-				-			7.3				1
M1	Cloudy	Moderate	09:03	5.9	Middle	-	-	-	-	-	-	-	-	-	-	-	-	4.6	-	3.2
						4.9	29.2		8.2		29.5		- 79.8		- 5.2		6.2		3.6	1
					Bottom	4.9	29.2	29.2	8.2	8.2	29.3	29.7	80.0	79.9	5.2	5.2	6.5		3.0	1
						1.0	29.8		8.4		27.4		119.5		7.8		1.5		2.9	
					Surface	1.0	29.8	29.8	8.4	8.4	27.2	27.3	117.3	118.4	7.7		1.6		2.6	1
						-	-		-		-		-		-	7.8	-		-	1
M2	Cloudy	Moderate	08:59	5.8	Middle	-	-	-	-	-	-	-	-	-	-		-	4.1	-	3.1
					5.4	4.8	29.1		8.2		30.0		78.7		5.1		6.5		3.5	1
					Bottom	4.8	28.9	29.0	8.1	8.2	30.7	30.4	72.6	75.7	5.0	5.1	6.9		3.2	1
					Quitan	1.0	29.7	00.7	8.3	0.0	27.6	07.0	116.8	447.0	7.6		1.6		3	
					Surface	1.0	29.7	29.7	8.3	8.3	27.6	27.6	117.8	117.3	7.7	7.3	1.5		3	i –
M3	Cloudy	Moderate	09:08	7.0	Middle	3.5	29.5	29.5	8.3	8.3	28.0	28.0	106.2	107.1	6.9	1.3	2.6	4.2	4	4
IVIS	Cioudy	wouerate	09.00	7.0	IVIIUUIE	3.5	29.5	29.0	8.3	0.3	27.9	20.0	107.9	107.1	7.1	1	2.1	4.2	3	4
					Bottom	6.0	29.0	29.0	8.2	8.2	30.0	30.1	76.4	75.9	5.0	5.0	8.6		4	j –
					Bollom	6.0	29.0	29.0	8.1	0.2	30.1	50.1	75.4	75.9	4.9	5.0	8.9		5	1

DA: Depth-averaged

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

Water Quality Monitoring

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

matci dau		toring Resu			zu September zz	during line	11000	luc												
Monitoring	Weather	Sea Condition	Sampling		Sampling Dep	th (m)	Water Te	emperature (°C)	F	рH	Salin	ity (ppt)	DO Satu	ration (%)	Dissolved (mg/		Turbidity	(NTU)	Suspende (mg	
Station	Condition		Time	(m)			Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	29.6	29.6	8.4	8.4	28.0	28.1	121.1	120.6	7.9		2.9		4.0	
					Gunace	1.0	29.5	23.0	8.4	0.4	28.2	20.1	120.1	120.0	7.8	6.5	3.5		3.7	l
C1	Cloudy	Moderate	20:30	10.3	Middle	5.2	29.1	29.1	8.1	8.1	29.5	29.5	77.5	77.2	5.1	0.0	5.3	4.2	3.2	3.4
•	,					5.2	29.1	2011	8.1	0.1.	29.5	2010	76.8		5.0		5.2		3.6	1
					Bottom	9.3	28.6	28.8	8.1	8.1	31.3	31.4	70.0	70.4	4.6	4.6	4.0		3.1	1
						9.3	28.9		8.1		31.4		70.8		4.6		4.2		2.9	<u> </u>
					Surface	1.0	29.6	29.6	8.5	8.5	27.6	27.7	142.6	140.6	9.3	-	1.4		2.7	ł
						1.0	29.6		8.5		27.7		138.6		9.1	7.1	1.3		3.0	ł
C2	Cloudy	Moderate	20:51	10.5	Middle	5.3	29.0 28.9	29.0	8.1 8.1	8.1	29.9	30.0	77.9 70.2	74.1	5.1 5.0		5.4 5.5	3.8	3.6 3.4	3.7
						5.3 9.5	28.9				30.1		69.1		5.0 4.5		5.5 4.5		3.4 4.8	ł
					Bottom	9.5	28.9	28.9	8.1 8.1	8.1	30.5 30.3	30.4	71.0	70.1	4.5	4.6	4.5		4.0	ł
						1.0	29.6		8.4		28.3		113.7		7.4		3.3		2.5	
					Surface	1.0	29.7	29.7	8.3	8.4	28.1	28.2	115.2	114.5	7.5	-	3.7		2.7	ł
•••						-	-		-		-		-		-	7.5	-		-	
M1	Cloudy	Moderate	20:41	5.6	Middle	-	-	-	-	-	-	-	-	-	-		-	5.1	-	2.9
					Bottom	4.6	29.3	29.5	8.2	8.3	29.2	28.8	87.2	94.1	5.7	5.7	6.8		3.1	ł
					Bollom	4.6	29.6	29.5	8.3	0.3	28.4	20.0	100.9	94.1	5.6	5.7	6.7		3.3	1
					Surface	1.0	29.7	29.7	8.3	8.4	28.1	28.1	118.4	120.2	7.7		6.0		3.4	1
					Odilace	1.0	29.7	25.1	8.4	0.4	28.1	20.1	121.9	120.2	7.9	7.8	5.2		3.2	1
M2	Cloudy	Moderate	20:44	5.4	Middle		-	_	-	-	-	-	-		-	7.0	-	4.6	-	3.0
1112	Cloudy	modorato	20.11	0.1	middio		-		-		-		-		-		-	1.0	-	0.0
					Bottom	4.4	29.6	29.6	8.3	8.3	28.3	28.5	105.7	107.5	6.9	7.0	3.7		2.7	1
					Bottom	4.4	29.5	20.0	8.3	0.0	28.6	2010	109.2		7.1		3.6		2.8	
					Surface	1.0	29.7	29.7	8.5	8.5	27.8	27.7	133.6	134.7	8.7		2.0		4	ł
						1.0	29.7		8.4		27.5		135.8		8.9	8.3	1.9		4	ł
M3	Cloudy	Moderate	20:37	7.0	Middle	3.5	29.6	29.7	8.3	8.4	28.3	28.1	120.3	125.1	7.8	-	3.0	5.0	3	3
						3.5	29.7		8.4		27.8		129.9		7.6		2.8		3	ł
					Bottom	6.0	29.5	29.3	8.3	8.3	28.7	29.1	103.2	93.6	5.7	5.6	10.2		3	ł
						6.0	29.1		8.2		29.5		84.0	1	5.5	1	10.2		2	

DA: Depth-averaged

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

Water Quality Monitoring

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

water Qua		ioning Resi			zz September zz															
Monitoring	Weather	Sea Condition		Water Depth	Sampling Dep	th (m)	Water Te	emperature (°C)		pН	Salin	ity (ppt)	DO Satur	ration (%)	Dissolved ((mg/l		Turbidity	(NTU)	Suspende (mg/	
Station	Condition		Time	(m)	Camping 2 op		Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	28.1	28.1	8.3	8.3	27.9	27.9	97.7	97.1	6.5		2.8		3.6	
					Sunace	1.0	28.1	20.1	8.3	0.5	27.9	21.5	96.5	37.1	6.5	6.5	2.8		3.8	
C1	Fine	Moderate	10:52	9.0	Middle	4.5	28.1	28.1	8.3	8.3	27.9	27.9	97.9	97.6	6.6	0.0	2.9	3.0	4.4	4.2
01	1 110	modorato	10.02	0.0		4.5	28.1	20.1	8.3	0.0	27.9	21.0	97.2	01.0	6.5		3.0	0.0	4.0	
					Bottom	8.0	28.1	28.1	8.3	8.3	28.0	28.0	99.8	98.6	6.7	6.6	3.2		4.6	
						8.0	28.1		8.3		27.9		97.4		6.5		3.2		4.8	
					Surface	1.0	28.0	28.1	8.2	8.2	28.1	28.1	87.8	89.4	5.9	-	6.1		4.4	
						1.0	28.1		8.2		28.1		91.0		6.1	6.0	6.0		4.6	i.
C2	Fine	Moderate	10:35	8.2	Middle	4.1	27.7	27.9	8.2	8.2	28.3	28.2	88.6	88.1	6.0	_	7.1	7.1	4.3	4.3
						4.1	28.1		8.2		28.1		87.6		5.9		7.2		4.2	i.
					Bottom	7.2	27.5 28.1	27.8	8.2 8.2	8.2	28.4 28.1	28.3	92.2 88.3	90.3	6.2 5.9	6.1	8.1 8.0		4.2 4.1	
						1.0	28.1		8.2		28.3		85.8		5.9		3.8		4.1	
					Surface	1.0	28.0	27.9	8.2	8.2	28.1	28.2	81.8	83.8	5.5	-	3.9		5.1	
						-	-		-		-		-		-	5.7	-		-	
M1	Fine	Moderate	10:41	5.0	Middle	-	-	-	-	-	-	-	-		-	-	-	4.4	-	4.3
					D	4.0	27.5		8.2		28.6		87.9		5.9		5.0		3.5	
					Bottom	4.0	27.9	27.7	8.2	8.2	28.2	28.4	85.5	86.7	5.7	5.8	5.0		3.9	
					Surface	1.0	27.8	27.9	8.2	8.2	28.4	28.3	87.1	87.1	5.9		4.3		4.0	
					Sunace	1.0	28.0	27.9	8.2	0.2	28.2	20.3	87.1	07.1	5.9	5.9	4.4		3.6	
M2	Fine	Moderate	10:44	5.4	Middle	-	-	_	-	_	-	-	-		-	5.5	-	5.1	-	4.1
1112	1 IIIC	Moderate	10.44	0.4	Wilddie	-	-		-		-		-		-		-	0.1	-	
					Bottom	4.4	27.4	27.7	8.2	8.2	28.5	28.4	92.6	92.6	6.3	6.3	5.9		4.2	1
						4.4	28.0		8.2		28.2		92.6		6.2		5.8		4.5	
					Surface	1.0	28.0	28.1	8.2	8.2	28.3	28.2	82.2	82.9	5.5	4	4.2		6	
						1.0	28.1		8.2		28.1		83.6		5.6	5.5	4.1		6	
M3	Fine	Moderate	10:48	7.2	Middle	3.6	27.9	28.0	8.2	8.2	28.4	28.3	80.6	81.9	5.4	4	5.4	5.3	7	7
						3.6	28.1		8.2		28.1		83.1		5.6		5.4		7	
					Bottom	6.2	27.7	27.9	8.2	8.2	28.5	28.4	82.9	82.9	5.6	5.6	6.4		8	
						6.2	28.0		8.2		28.3		82.9		5.5	1	6.5		8	

DA: Depth-averaged

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

Water Quality Monitoring

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

matci Quu		toring Resu			zz September zz	during mid	11000 1													
Monitoring	Weather	Sea Condition		Water Depth	Sampling Dept	th (m)	Water Te	mperature (°C)	р	н	Salin	ity (ppt)	DO Satu	ration (%)	Dissolved ((mg/l		Turbidity((NTU)	Suspende (mg/	
Station	Condition		Time	(m)			Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	28.5	28.5	8.3	8.3	27.8	27.8	98.1	97.8	6.5		3.8		4.2	
					Guilace	1.0	28.5	20.5	8.3	0.5	27.8	21.0	97.4	37.0	6.5	6.5	3.7		4.4	l
C1	Fine	Moderate	16:50	9.4	Middle	4.7	28.5	28.5	8.3	8.3	27.8	27.8	98.3	98.0	6.5	0.0	4.8	4.2	4.7	4.9
						4.7	28.5		8.3		27.8	-	97.7		6.5		4.9		5.0	ł
					Bottom	8.4	28.5	28.5	8.3	8.3	27.8	27.8	99.1	98.6	6.6	6.6	4.0		5.3	ł
						8.4	28.5 28.6		8.3		27.8		98.0		6.5 6.7		4.1 1.5		5.7 4.0	
					Surface	1.0	28.0	28.5	8.3 8.3	8.3	27.7 27.9	27.8	101.5 101.5	101.5	6.8	-	1.5		4.0	ł
_						4.0	28.6		8.3		27.7		101.0		6.8	6.8	2.5		4.9	ł
C2	Fine	Moderate	17:08	8.0	Middle	4.0	28.4	28.5	8.3	8.3	27.9	27.8	103.1	103.1	6.8		2.5	2.6	5.3	5.0
					Dettern	7.0	28.5	28.6	8.3	8.3	27.8	27.8	99.9	99.9	6.6	6.7	3.8		5.8	ł
					Bottom	7.0	28.6	28.0	8.3	0.3	27.8	27.8	99.9	99.9	6.7	0.7	3.9		5.5	1
					Surface	1.0	28.5	28.5	8.3	8.3	28.2	28.2	91.7	91.2	6.1		5.8		8.3	1
						1.0	28.5	2010	8.3	0.0	28.2	20.2	90.7	0.1.2	6.0	6.1	5.8		8.6	ł
M1	Fine	Moderate	16:59	4.8	Middle	-		-	-	-	-	-	-		-		-	6.0	-	8.1
						-	-		-		-		-		-		-		-	ł
					Bottom	3.8 3.8	28.5 28.5	28.5	8.3 8.3	8.3	28.1 28.2	28.2	94.5 91.3	92.9	6.3 6.1	6.2	6.1 6.2		7.7 7.9	ł
			1			1.0	28.0		8.3		28.3		91.0		6.1		4.1		4.4	
					Surface	1.0	28.4	28.2	8.3	8.3	28.1	28.2	91.1	91.1	6.1		4.1		4.6	ł
	-		47.00	5.0	N.41 1 11	-	- 1		-		-		-		-	6.1	-		-	10
M2	Fine	Moderate	17:02	5.6	Middle	-	-	-	-	-	-	-	-	-	-		-	4.8	-	4.3
					Bottom	4.6	27.8	28.0	8.3	8.3	28.6	28.4	97.3	97.3	6.5	6.5	5.4		4.0	ł
					Bollom	4.6	28.2	28.0	8.3	0.5	28.2	20.4	97.3	97.5	6.5	0.5	5.4		4.2	L
					Surface	1.0	28.5	28.5	8.3	8.3	27.9	27.9	99.4	97.8	6.6		3.5		6	1
						1.0	28.5	20.0	8.3	0.0	27.9	0	96.2	0.10	6.4	6.4	3.4		5	l
M3	Fine	Moderate	16:55	6.0	Middle	3.0	28.5	28.5	8.3	8.3	27.9	27.9	94.1	94.2	6.3		4.4	4.4	6	6
						3.0	28.5		8.3		27.9		94.2		6.3		4.4		6	I
					Bottom	5.0 5.0	28.4 28.5	28.5	8.3 8.3	8.3	28.0 27.9	28.0	93.3 96.1	94.7	6.2	6.3	5.5 5.4		6	I
	l	1				5.0	28.5		ბ.პ		21.9		96.1		6.4		5.4		Ь	<u> </u>

DA: Depth-averaged

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

Water Quality Monitoring

Water Quality Monitoring Results on 24 September 22 during Mid-Ebb Tide

Monitoring	Weather	Sea Condition	Sampling		Sampling Dep	th (m)	Water Te	mperature (°C)	р	Н	Salin	ity (ppt)	DO Satur	ation (%)	Dissolved (mg/l		Turbidity	(NTU)	Suspende (mg	
Station	Condition		Time	(m)			Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	28.1	28.2	8.2	8.2	27.8	27.8	80.9	80.7	5.6		6.7		5.5	
					Odilace	1.0	28.2	20.2	8.2	0.2	27.8	27.0	80.5	00.7	5.6	5.6	6.8		5.8	1
C1	Fine	Moderate	12:01	9.0	Middle	4.5	28.1	28.2	8.2	8.2	27.9	27.9	82.0	81.3	5.7	0.0	7.7	7.7	6.8	6.5
01		moderate		010	maaro	4.5	28.2	2012	8.2	0.2	27.8	2.1.0	80.5	0110	5.6		7.6		6.4	
					Bottom	8.0	28.1	28.2	8.2	8.2	27.9	27.9	83.6	82.2	5.8	5.7	8.7		7.4	4
						8.0	28.2	-	8.2	-	27.8	_	80.7		5.6		8.8		7.1	<u> </u>
					Surface	1.0	28.2	28.2	8.3	8.3	27.7	27.8	85.0	83.8	5.9		6.1		8.1	4
						1.0	28.2		8.3		27.8		82.6		5.7	5.9	6.2		8.5	4
C2	Fine	Moderate	11:43	8.0	Middle	4.0	28.1	28.2	8.3 8.3	8.3	27.9	27.8	85.9	84.8	6.0		7.0	7.1	7.0	7.3
						4.0	28.2				27.7		83.7		5.8		7.1		7.2	i i
					Bottom	7.0	28.0	28.1	8.3 8.3	8.3	27.9	27.8	88.3	86.5	6.1	6.0	8.0		6.3 6.6	1
							28.2 28.2				27.7		84.6		5.9		8.1 5.1		6.6 7.2	<u> </u>
					Surface	1.0	28.2	28.2	8.2 8.2	8.2	28.0 28.1	28.1	86.5 86.5	86.5	6.0 6.0	-	5.1 5.1		6.8	i i
						-	- 20.2		-		- 20.1				0.0	6.0	-		0.0	i i
M1	Fine	Moderate	11:50	4.6	Middle	-	-	-	-	-	-	-	-	-		-	-	5.9		7.6
						3.6	28.1		8.2		28.2		88.9		6.1		6.6		8.4	i i
					Bottom	3.6	28.2	28.2	8.2	8.2	28.0	28.1	88.9	88.9	6.1	6.1	6.6		8.0	1
						1.0	28.1		8.2		28.2		87.0		6.1		7.5		6.9	
					Surface	1.0	28.1	28.1	8.2	8.2	28.3	28.3	87.0	87.0	6.0	1	7.4		6.7	i i
	-					-	-		-		-		-		-	6.1	-		-	
M2	Fine	Moderate	11:53	5.0	Middle	-	-	-	-	-	-	-	-	-	-		-	7.8	-	6.6
					Dettern	4.0	28.1	28.1	8.2	8.2	28.2	28.3	89.7	89.7	6.2	6.3	8.1		6.4	i i
					Bottom	4.0	28.1	20.1	8.2	8.2	28.3	28.3	89.7	69.7	6.3	0.3	8.0		6.4	i i
					Surface	1.0	28.2	28.2	8.2	8.2	27.9	27.9	88.0	86.5	6.1		6.9		5	í T
					Sunace	1.0	28.2	20.2	8.2	0.2	27.9	21.3	84.9	00.0	5.9	6.0	6.9		5	i
M3	Fine	Moderate	11:56	7.2	Middle	3.6	28.1	28.2	8.2	8.2	28.0	28.0	89.7	87.8	6.2	0.0	7.5	7.4	6	6
1010	1 110	moderate	11.50	1.2	wildule	3.6	28.2	20.2	8.2	0.2	27.9	20.0	85.8	07.0	5.9		7.5	·.+	6	l U
					Bottom	6.2	28.1	28.2	8.2	8.2	28.0	28.0	91.7	89.5	6.0	6.1	7.9		7	1
					Dottom	6.2	28.2	20.2	8.2	0.2	27.9	20.0	87.3	00.0	6.1	0.1	7.9		7	í

DA: Depth-averaged

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

Water Quality Monitoring

Water Quality Monitoring Results on 24 September 22 during Mid-Flood Tide

		toring resu			24 September 22	uaning inia		lue												
Monitoring	Weather	Sea Condition	Sampling		Sampling Dep	oth (m)	Water Te	emperature (°C)	þ	рН	Salin	ity (ppt)	DO Satu	ation (%)	Dissolved (mg/l		Turbidity	(NTU)	Suspende (mg/	
Station	Condition		Time	(m)			Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	28.3	28.3	8.2	8.2	27.6	27.6	90.3	90.3	6.1		6.1		7.5	
					Gunace	1.0	28.3	20.5	8.2	0.2	27.6	27.0	90.3	30.3	6.2	6.2	6.2		7.7	l
C1	Fine	Moderate	17:32	9.0	Middle	4.5	28.3	28.3	8.2	8.2	27.6	27.6	92.0	92.0	6.3	0.2	7.8	6.0	6.9	6.8
						4.5	28.3	20:0	8.2	0.2	27.6	2.1.0	92.0	02.0	6.2		7.7		6.5	1
					Bottom	8.0	28.3	28.3	8.2	8.2	27.6	27.6	93.7	93.7	6.4	6.4	4.0		6.1	ł
						8.0	28.3		8.2		27.6		93.7		6.3		4.0		5.8	
					Surface	1.0	28.3	28.3	8.2 8.2	8.2	27.5	27.5	91.6	90.6	6.2	_	6.6		8.0	ł
						1.0	28.3				27.5		89.5		6.1	6.2	6.5		7.6	ł
C2	Fine	Moderate	17:48	7.8	Middle	3.9 3.9	28.3 28.3	28.3	8.2 8.2	8.2	27.5 27.5	27.5	92.8 89.9	91.4	6.3 6.1	-	7.0 7.1	7.1	7.0 6.8	7.0
						6.8	28.3		8.2		27.5		94.4		6.4		7.6		6.4	ł
					Bottom	6.8	28.3	28.3	8.2	8.2	27.5	27.5	91.0	92.7	6.2	6.3	7.5		6.1	ł
						1.0	28.3		8.2		27.9		88.6		6.0		7.1		7.1	[
					Surface	1.0	28.3	28.3	8.2	8.2	27.9	27.9	86.2	87.4	5.9	6.0	7.2		6.7	ł
M1	Fine	Moderate	17:40	4.8	Middle	-	-		-		-	-	-	_	-	6.0	-	7.7	-	5.9
IVII	Fille	woderate	17.40	4.0	Middle	-	-	-	-	-	-	-	-	-	-		-	1.1	-	5.9
					Bottom	3.8	28.2	28.3	8.2	8.2	27.9	27.9	92.3	90.1	6.3	6.2	8.3		5.0	1
		-			Bottom	3.8	28.3	20.0	8.2	0.2	27.9	21.0	87.8	00.1	6.0	0.2	8.2		4.8	<u> </u>
					Surface	1.0	28.3	28.3	8.2	8.2	27.9	27.9	89.1	87.3	6.1	_	8.0		8.0	ł
						1.0	28.3		8.2	-	27.8		85.4		5.8	6.0	8.0		7.6	ł
M2	Fine	Moderate	17:43	5.6	Middle	-	-	-	-	-	-	-	-		-		-	8.6	-	7.1
						-	-		-		-		-		-		-		-	1
					Bottom	4.6	28.2	28.3	8.2	8.2	27.9	27.9	92.3	90.3	6.3	6.2	9.2		6.6	ł
			1			4.6	28.3		8.2		27.9		88.3	1	6.0		9.3		6.2	ļ
					Surface	1.0	28.3 28.3	28.3	8.2 8.2	8.2	27.9 27.8	27.9	86.4 85.3	85.9	5.9 5.8	-	4.4		7	1
						3.1	28.3		8.2		27.8		85.9		5.8	5.8	4.4 5.6		6	ł
M3	Fine	Moderate	17:37	6.2	Middle	3.1	28.3	28.3	8.2	8.2	27.9	27.9	85.9	85.1	5.8	-	5.5	5.4	6	6
						5.2	28.3		8.2		28.0		87.4		5.9		6.2		5	ł
					Bottom	5.2	28.3	28.3	8.2	8.2	27.9	28.0	86.3	86.9	5.9	5.9	6.1		5	ł
	1	1	1		L	0.2	20.0		0.2		21.5		00.0	1	0.0	L	0.1			

DA: Depth-averaged

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

Water Quality Monitoring

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

Monitoring	Weather	Sea Condition	Sampling		Sampling Dep	oth (m)	Water Te	emperature (°C)	p	эΗ	Salin	ity (ppt)	DO Satur	ation (%)	Dissolved ((mg/l		Turbidity	(NTU)	Suspende (mg	
Station	Condition		Time	(m)	Carrient g Dop		Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	28.2	28.2	8.1	8.1	28.1	28.1	79.2	79.1	5.2		6.6		7.4	
						1.0	28.2	20.2	8.1	0.1	28.1	20.1	79.0	70.1	5.2	5.2	6.5		7.2	l
C1	Fine	Moderate	12:23	9.2	Middle	4.6	28.2	28.2	8.1	8.2	28.1	28.2	79.8	78.5	5.3	-	7.3	7.3	6.8	6.8
			-	-		4.6	28.2		8.2	-	28.2	-	77.1		5.1		7.3	-	6.6	
					Bottom	8.2	28.2	28.2	8.1	8.2	28.1	28.1	82.3	80.1	5.5	5.4	8.0		6.2	1
						8.2	28.2		8.2		28.1		77.9	1	5.2		8.0		6.4	
					Surface	1.0	28.1 28.1	28.1	8.1 8.2	8.2	28.2 28.2	28.2	76.4 75.0	75.7	5.0		4.2		7.2	1
						1.0	-		-						5.0	5.0	4.2		7.0	1
C2	Fine	Moderate	12:40	7.8	Middle	3.9 3.9	28.1 28.1	28.1	8.1 8.1	8.1	28.3 28.2	28.3	76.8 75.5	76.2	5.1 5.0	-	5.2 5.2	5.5	7.3 7.5	7.4
						6.8	28.1		8.1		28.3		75.5		5.3		7.0		7.9	1
					Bottom	6.8	28.1	28.1	8.1	8.1	28.2	28.3	76.2	77.9	5.1	5.2	6.9		7.7	1
						1.0	28.2		8.1		28.1		80.0		5.3		7.0		7.4	
					Surface	1.0	28.2	28.2	8.1	8.1	28.1	28.1	80.0	80.0	5.3	-	7.1		7.2	1
• • •						-	-		-		-		-		-	5.3	-		-	
M1	Fine	Moderate	12:31	5.6	Middle	-	-	-	-	-	-	-	-	- 1	-		-	7.8	-	7.0
					Bottom	4.6	28.1	28.2	8.1	8.1	28.1	28.1	84.4	84.4	5.6	5.6	8.5		6.7	1
					Bollom	4.6	28.2	28.2	8.1	0.1	28.1	28.1	84.4	84.4	5.6	5.0	8.5		6.5	1
					Surface	1.0	28.2	28.2	8.1	8.1	28.2	28.2	79.2	79.2	5.2		6.3		6.4	
					Guilace	1.0	28.2	20.2	8.1	0.1	28.2	20.2	79.2	13.2	5.2	5.2	6.2		6.7	1
M2	Fine	Moderate	12:34	5.6	Middle	-	-	-	-	-	-	-	-	-	-	0.2	-	6.9	-	6.9
1112	1 110	modorato	12.01	0.0		-	-		-		-		-		-		-	0.0	-	0.0
					Bottom	4.6	28.2	28.2	8.1	8.1	28.1	28.2	84.9	84.9	5.6	5.7	7.5		7.1	ł
						4.6	28.2	-	8.1	-	28.2	-	84.9		5.7	-	7.4		7.2	
					Surface	1.0	28.1	28.1	8.1	8.1	28.1	28.1	74.0	73.9	5.0	-	6.0		8	1
						1.0	28.1		8.1		28.1		73.7		4.9	5.0	6.1		8	l
M3	Fine	Moderate	12:28	6.0	Middle	3.0	28.1	28.1	8.1 8.1	8.1	28.1 28.1	28.1	74.3	74.0	5.0	-	7.1 7.2	7.2	7	7
						3.0 5.0	28.1 28.1		-		-		73.7 74.6		4.9		7.2 8.5		6	l
					Bottom			28.1	8.1 8.1	8.1	28.1	28.1		74.2	5.0	5.0	8.5 8.4		6	l
		1				5.0	28.1		8.1		28.1		73.8		4.9	1	ö.4			1

DA: Depth-averaged

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

Water Quality Monitoring

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

Monitoring	Weather	Sea Condition	Sampling		Sampling Dep	oth (m)	Water Te	emperature (°C)	P	эΗ	Salin	ity (ppt)	DO Satu	ration (%)	Dissolved (mg/l		Turbidity	(NTU)	Suspende (mg/	
Station	Condition		Time	(m)		()	Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	28.1	28.1	8.1	8.1	28.2	28.2	77.0	77.1	5.2		6.2		7.2	
						1.0	28.1	-	8.1	-	28.2	-	77.2		5.1	5.2	6.2		7.1	1
C1	Fine	Moderate	08:43	9.2	Middle	4.6	28.1	28.1	8.1	8.1	28.2	28.2	77.8	77.6	5.2	_	7.4	5.9	7.6	7.6
						4.6 8.2	28.1 28.1		8.1 8.1		28.2 28.2		77.4 81.5		5.2 5.5		7.5 4.0		7.4 8.2	1
					Bottom	8.2	28.1	28.1	8.1	8.1	28.2	28.2	80.4	81.0	5.5	5.5	4.0		7.9	1
					<u> </u>	1.0	28.1		8.1		28.1		76.4		5.1	1	7.6		6.7	
					Surface	1.0	28.1	28.1	8.1	8.1	28.1	28.1	74.8	75.6	5.0	- A	7.7		6.5	1
C2	Fine	Moderate	08:25	7.8	Middle	3.9	28.0	28.1	8.0	8.1	28.1	28.1	77.1	76.1	5.2	- 5.1	8.1	8.3	7.2	7.1
02	T IIIC	Moderate	00.20	7.0	Middle	3.9	28.1	20.1	8.1	0.1	28.1	20.1	75.0	70.1	5.0		8.1	0.0	6.8	7.1
					Bottom	6.8	28.0	28.1	8.0	8.1	28.1	28.1	78.3	76.9	5.2	5.2	9.1		7.7	1
	-					6.8	28.1	-	8.1	-	28.1	-	75.5		5.1	_	9.0		7.4	
					Surface	1.0 1.0	28.0 28.0	28.0	8.0 8.1	8.1	28.1 28.1	28.1	77.5 76.9	77.2	5.2 5.0	-	5.1 5.2		8.4 8.0	1
						-	- 20.0		0.1		20.1		-		5.0	5.1	5.2		- 0.0	1
M1	Fine	Moderate	08:31	4.6	Middle	-	-	-	-	-	-	-	-	-	-		-	5.6	-	7.9
					D-#	3.6	28.0	00.0	8.0	0.4	28.1	28.1	82.0	82.1	5.5	5.5	6.1		7.5	1
					Bottom	3.6	28.0	28.0	8.1	8.1	28.1	28.1	82.1	82.1	5.5	5.5	6.1		7.6	
					Surface	1.0	28.0	28.0	8.0	8.1	28.2	28.2	77.3	77.3	5.2		7.6		6.7	
					Guildoo	1.0	28.0	20.0	8.1	0.1	28.2	20.2	77.2	11.0	5.1	5.2	7.7		7.0	1
M2	Fine	Moderate	08:35	5.0	Middle	-	-	-	-	-	-	-	-	-	-	0.2	-	7.9	-	7.7
						-	-		-		-		-		-		-		-	1
					Bottom	4.0	28.0 28.0	28.0	8.0 8.0	8.0	28.2 28.2	28.2	81.3	81.2	5.5 5.4	5.5	8.2		8.7 8.2	1
						4.0	28.0		8.0		28.2		81.0 75.9		5.4		8.1 5.2		8.Z 7	
					Surface	1.0	28.0	28.1	8.1	8.1	28.1	28.1	75.9	75.7	5.0		5.2		7	1
						3.8	28.0		8.0		28.1		77.5		5.2	5.1	6.7		7	_
M3	Fine	Moderate	08:38	7.6	Middle	3.8	28.1	28.1	8.0	8.0	28.1	28.1	78.6	78.1	5.2		6.7	6.5	7	7
					Bottom	6.6	28.0	28.0	8.0	8.0	28.1	28.1	81.1	81.3	5.4	5.4	7.6		7	1
	1				DUILUITI	6.6	28.0	20.0	8.0	0.0	28.1	20.1	81.4	01.3	5.4	5.4	7.7		8	1

DA: Depth-averaged

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

Water Quality Monitoring

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

mater Qua		loning Kesu				during mid		C							Dissolved	Ovvaon			Suspende	od Solide
Monitoring	Weather	Sea Condition	Sampling	Water Depth	Sampling Dep	th (m)	Water Te	mperature (°C)	pł	Н	Salin	ity (ppt)	DO Satur	ation (%)	mg/l		Turbidity	(NTU)	Suspende (mg	
Station	Condition		Time	(m)		()	Value	Average	Value A	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	27.7	27.8	8.2	8.2	29.0	29.0	85.5	84.8	5.7		5.1		8.3	
					Canado	1.0	27.8	2110	8.2	0.2	28.9	2010	84.1	0.10	5.6	5.7	5.2		8.1	1
C1	Fine	Moderate	13:26	9.0	Middle	4.5	27.7	27.7	8.2	8.2	29.0	29.0	86.1	85.4	5.8	-	6.6	6.3	9.4	9.4
						4.5	27.7		8.2		29.0		84.6		5.7		6.5	-	9.8	
					Bottom	8.0	27.7 27.7	27.7	8.2 8.2	8.2	29.0	29.0	87.7 85.2	86.5	5.9 5.7	5.8	7.2 7.2	-	10.4	4
			1			8.0	27.7		8.2		29.0 29.0		85.2 83.8		5.7		6.9		10.2 10.7	
					Surface	1.0	27.8	27.8	8.1	8.2	29.0	29.0	82.9	83.4	5.5	-	7.0	-	11.0	1
						4.5	27.0		8.2		29.0		83.8		5.6	5.6	7.6	-	9.4	1
C2	Fine	Moderate	13:48	9.0	Middle	4.5	27.8	27.8	8.1	8.2	29.0	29.0	83.2	83.5	5.6		7.6	7.2	9.8	9.8
						8.0	27.7		8.2		29.0		84.9		5.7		7.0		8.7	
					Bottom	8.0	27.8	27.8	8.1	8.2	29.0	29.0	83.8	84.4	5.6	5.7	7.0		9.0	
					Surface	1.0	27.7	27.7	8.2	8.2	28.8	28.8	91.4	91.4	6.1		6.5		9.5	
					Sunace	1.0	27.7	21.1	8.1	0.2	28.8	20.0	91.4	91.4	6.0	6.1	6.6		9.9	
M1	Fine	Moderate	13:37	4.2	Middle	-	-	_	-	-	-		-	_	-	0.1	-	6.9	-	10.0
	1 110	modorato	10.07		middlo	-	-		-		-		-		-		-	0.0	-	10.0
					Bottom	3.2	27.6	27.7	8.2	8.2	28.5	28.7	94.1	94.1	6.3	6.3	7.1		10.1	1
			-			3.2	27.7		8.2	-	28.8	-	94.1	-	6.3		7.2		10.6	<u> </u>
					Surface	1.0	27.7 27.7	27.7	8.2 8.2	8.2	28.8 28.8	28.8	86.2	84.9	5.8	-	8.5	-	9.9	4
						1.0			8.2		28.8		83.5		5.6	5.7	8.5	-	9.5	1
M2	Fine	Moderate	13:41	5.6	Middle	-	-	-	-	-	-	-	-	-			-	7.5	-	9.2
						4.6	27.8		8.2		28.8		88.7		5.9		6.6	-	8.5	1
					Bottom	4.6	27.0	27.8	8.2	8.2	28.8	28.8	86.3	87.5	5.7	5.8	6.5		9.0	1
						1.0	27.7		8.2		28.8		86.3		5.8		7.8		10	
					Surface	1.0	27.8	27.8	8.2	8.2	28.8	28.8	87.1	86.7	5.9		7.8	1	10	1
MO	Fine	Madarata	10.00	6.4	Middle	3.2	27.7	27.7	8.2	8.2	28.9	20.0	87.1	00.0	5.8	5.9	8.2	8.4	9	10
M3	Fine	Moderate	13:32	6.4	Middle	3.2	27.7	21.1	8.2	ð.2	28.8	28.9	89.5	88.3	6.1	1	8.2	8.4	10	10
					Bottom	5.4	27.7	27.7	8.2	8.2	28.8	28.8	89.5	89.3	6.0	6.0	9.0	1	9	
					DOLLOITI	5.4	27.7	21.1	8.2	0.2	28.8	20.0	89.0	09.3	6.0	0.0	9.1]	9	1

DA: Depth-averaged

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

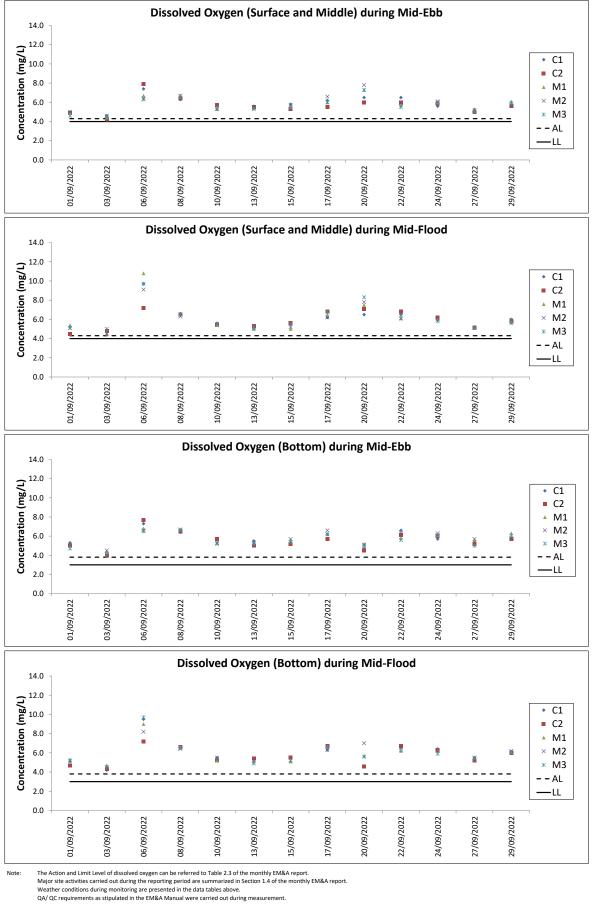
Water Quality Monitoring

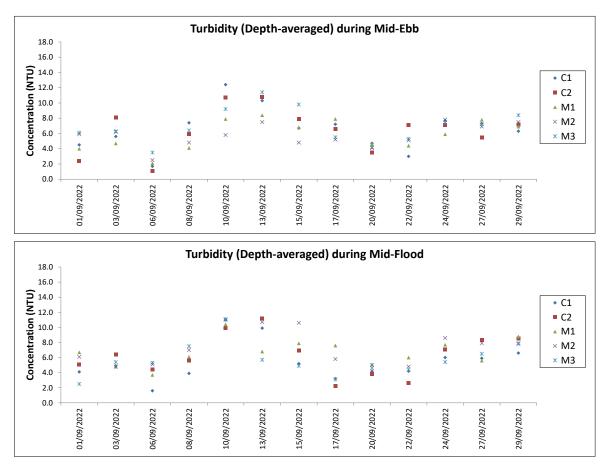
 Water Quality Monitoring Results on
 29 September 22
 during Mid-Flood Tide

		toring Resu			29 September 22	during mid	11000 1													
Monitoring	Weather	Sea Condition	Sampling		Sampling Dep	th (m)	Water Te	emperature (°C)	-	рH	Salin	ity (ppt)	DO Satu	ration (%)	Dissolved (mg/l		Turbidity	(NTU)	Suspende (mg/	
Station	Condition		Time	(m)			Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA
					Surface	1.0	27.7	27.7	8.1	8.1	28.9	28.9	87.8	87.7	5.9		7.3		9.4	í
					Gunace	1.0	27.7	21.1	8.1	0.1	28.9	20.3	87.6	07.7	5.9	6.0	7.2		9.6	l
C1	Rainy	Moderate	09:41	9.0	Middle	4.5	27.7	27.7	8.1	8.1	28.9	28.9	89.4	89.7	6.0	0.0	8.5	6.6	10.2	10.1
•						4.5	27.7		8.1	0.1.	28.9	2010	90.0		6.0		8.5		9.9	1
					Bottom	8.0	27.7	27.7	8.1	8.1	28.9	28.9	91.6	91.6	6.1	6.1	4.0		11.0	1
						8.0	27.7		8.1		28.9		91.5		6.1		4.2		10.7	
					Surface	1.0	27.6	27.7	8.0	8.0	28.8	28.8	85.3	85.5	5.7	-	7.0		7.5	1
						1.0	27.7		8.0		28.8		85.6		5.7	5.8	7.1		7.9	ł
C2	Rainy	Moderate	09:23	7.6	Middle	3.8 3.8	27.6 27.6	27.6	8.0 8.0	8.0	28.8 28.8	28.8	87.2 87.0	87.1	5.9 5.8	-	8.9 8.9	8.5	8.7 8.2	8.5
						6.6	27.6		8.1		28.8		89.0		6.0		9.5		9.0	ł
					Bottom	6.6	27.6	27.6	8.0	8.1	28.8	28.8	89.4	89.2	6.0	6.0	9.4		9.4	I
						1.0	27.6		8.0		28.7		87.3		5.9		8.1		9.9	
					Surface	1.0	27.6	27.6	8.0	8.0	28.7	28.7	87.4	87.4	5.9		8.0		9.5	ł
M1	Rainy	Moderate	09:30	5.0	Middle	-	-	_	-		-	-	-		-	5.9	-	8.8	-	10.3
IVII	Railly	woderate	09.30	5.0	Middle	-	-	-	-	-	-	-	-	-	-		-	0.0	-	10.5
					Bottom	4.0	27.6	27.6	8.0	8.0	28.7	28.7	90.6	90.6	6.1	6.1	9.5		10.7	1
		-			Bottom	4.0	27.6	21.0	8.0	0.0	28.7	20.1	90.5	00.0	6.1	0.1	9.5		11.1	<u> </u>
					Surface	1.0	27.5	27.5	8.1	8.1	28.7	28.8	87.5	87.3	5.9		7.1		10.7	ł
						1.0	27.5	-	8.1	-	28.8		87.0		5.8	5.9	7.2		10.9	ł
M2	Rainy	Moderate	09:33	5.2	Middle	-	-	-	-	-	-	-	-		-		-	7.8	-	10.4
						-	-		-		-		-		-		-		-	ł
					Bottom	4.2	27.5	27.5	8.1	8.1	28.4	28.6	91.5	91.5	6.2 6.1	6.2	8.5		10.1	ł
						4.2	27.5		8.1		28.7		91.4		-		8.4		9.8	<u> </u>
					Surface	1.0 1.0	27.6 27.6	27.6	8.1 8.1	8.1	28.7 28.7	28.7	82.2 82.6	82.4	5.5 5.5	-	7.1 7.1		9 10	ł
						3.4	27.6		8.1		28.7		83.8		5.6	5.6	7.1		9	ł
M3	Rainy	Moderate	09:37	6.8	Middle	3.4	27.6	27.6	8.1	8.1	28.7	28.7	83.1	83.5	5.6	1	7.8	7.9	9	9
						5.8	27.6		8.1		28.6		90.4		6.1		8.7		9	ł
					Bottom	5.8	27.6	27.6	8.1	8.1	28.7	28.7	90.4	90.4	6.1	6.1	8.6		9	ł

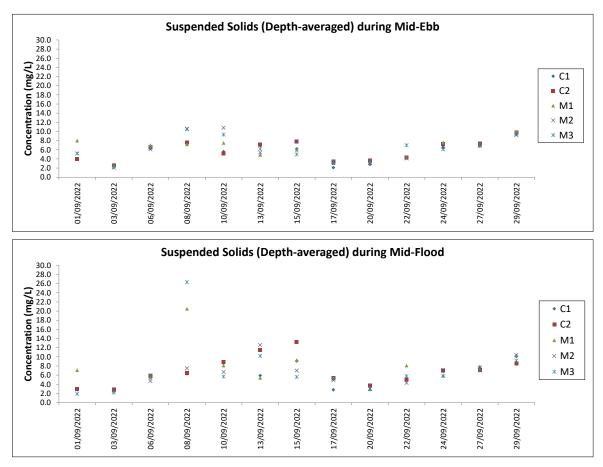
DA: Depth-averaged

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





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. Note

Appendix H. Waste Flow Table

Marine Section

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

		Actual Quar		C&D Materials (e s) <i>e.g. broken co</i>	0	vated waste)	Ac	tual Quantities	of Non-inert C8	D Waste (tonn	es)		
Month	Excavated Waste (tonnes)	(a) Total inert C&D material generated (a) = (b) + (c) + (d) + (e)	(b) Reused in contract	(c) Reused in other projects	(d) Sent to recycling company	(e) Disposed to public fill	(f) Recycled scrap metal	(g) Reused / recycled timber	(h) Chemical waste	(i) Other waste disposed to landfill	(j) Total non- inert C&D material generated (j) = (f) + (g) + (h) + (i)	(k) Total recyclable waste (k) = (b) + (c) + (d) + (f) + (g)	(I) Total construction waste generated (I) = (a) + (j)
Apr-22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
May-22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jun-22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jul-22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug-22	2591.67	2591.67	0.00	0.00	1584.00	1007.67	0.00	0.00	0.00	0.00	0.00	1584.00	2591.67
Sep-22	1340.00	1340.00	0.00	0.00	1340.00	0.00	0.00	0.00	0.36	0.00	0.36	1340.00	1340.36
Total	2591.67	3931.67	0.00	0.00	2924.00	1007.67	0.00	0.00	0.36	0.00	0.36	2924.00	3932.03

*Chemical waste, Wasted oil density 0.9kg/L

Appendix I. Status of Environmental Permits and Licences

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	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 –	EP/MD/23-035	30 Aug 2022	29 Sep 2022	N/A
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 (Sep 2022)

Recommended Mitigation Measures for Air Quality Impact

PP Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^
			(Marine Section)
		 Relevant control measures as required in the Air Pollution Control (Construction Dust) Regulation shall be implemented to minimise dust impact. 	N/A
		Skip hoist for material transport should be totally enclosed by impervious sheeting.	N/A
		• All dusty materials should be sprayed with water prior to any loading, unloading or transfer operation to maintain the dusty materials wet.	N/A
		All stockpiles of aggregate or spoil should be covered and/or water applied.	N/A
S6.1.1	S4.2.1	• The height from which excavated materials are dropped should be controlled to a minimum practical height to limit fugitive dust generation from unloading.	Yes
		• Immediately before leaving a construction site, every vehicle shall be washed to remove any dusty materials from its body and wheels.	N/A
		 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
		• 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.	Yes
Recomme	nded Mitiga	tion Measures for Noise Impact	
PP Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures
	Rei.		(Marine Section)
		 Only well-maintained plant should be operated on-site and plant should be serviced regularly. 	Yes
		Silencers or mufflers on construction plant should be utilised.	Yes
		Mobile plant should be sited as far away from sensitive uses as possible.	Yes
S6.2.1	S5.2.1	• 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
		• 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

		 Material stockpiles and other structures such as site hoarding should be effectively utilised to screen noise from on- site construction activities. 	N/A
		 Noisy construction activities such as road breaking, should be scheduled to less sensitive hours during the day, e.g. midday. 	Yes
Recomme	nded Mitiga	ation Measures for Water Quality Impact	
PP Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^ (Marine Section)
S6.3.1	S6.2.1	 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	 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	• To minimise any adverse water quality impact during the excavation of sediment, a funnel should be placed at the top of pile casing during excavation and silt curtains should be deployed to completely enclose the cofferdam and steel pile casing. Silt curtains should be deployed prior to installation of temporary platform on barge, cofferdam and steel pile casing. Silt curtains should only be removed after completion of pile caps and piers. The Contractor should be responsible for the design, installation and maintenance of the silt curtain to minimise the impacts on water quality. The design and specification of the silt curtains should be submitted by the Contractor to the Project Manager or Project Manager's Representative of AAHK for approval. The marine bridge piers should not be constructed at the same time to avoid adverse hydrodynamic impact due to flow blockage increase during the interim construction stages. All vessels should be sized such that adequate clearance is maintained between vessels and the sea bed at all states of the tide to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash.	Obs
S6.3.1	S6.2.1	 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	 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	• 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	 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	• 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	• 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	 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	 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		• 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:	
	S6.2.1	 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 	Yes
		 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). 	
S6.3.1	S6.2.1	• 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	• 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	• 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	 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	• 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	 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	 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	• 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.	Obs/ Rem

Recommended Mitigation Measures for Waste Management

PP Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^
	Rei.		(Marine Section)
		Good Site Practices: 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
		 Training of site personnel in site cleanliness, concepts of waste reduction, reuse and recycling, proper waste management and chemical waste handling procedures. 	Yes
S6.4.1-	07.0.4	Provision of sufficient waste reception/ disposal points, and regular collection of waste.	Rem
S6.4.2	S7.2.1	 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
		Provision of regular cleaning and maintenance programme for drainage systems and sumps.	Yes
		 Adoption of a recording system for the amount of wastes generated, recycled and disposed (including the disposal sites). 	Yes
		• Preparation of Waste Management Plan (WMP), as part of the Environmental Management Plan (EMP).	Yes
		Waste Reduction Measures:	
		 Segregate and store different types of construction related waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal. 	Yes
		 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
S6.4.1	S7.2.1	Recycle any unused chemicals or those with remaining functional capacity.	N/A
		 Maximise the use of reusable steel formwork to reduce the amount of C&D materials. 	Yes
		 Adopt proper storage and site practices to minimise the potential for damage to, or contamination of construction materials. 	Yes
		Plan the delivery and stock of construction materials carefully to minimise the amount of waste generated.	Yes
		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> 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).	Yes
S6.4.1	\$7.2.1	• 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? ^
	Rei.		(Marine Section)
		 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
		Covering materials during heavy rainfall.	N/A
		Locating stockpiles to minimise potential visual impacts.	Yes
S6.4.1	S7.2.1	Minimising land intake of stockpile areas as far as possible.	N/A
		 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
		 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
		<u>General Refuse:</u> • 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
S6.4.1	S7.2.1	• 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
		• 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
		<u>Chemical Waste:</u> If chemical wastes were to be produced, the Contractor would be required to register with the EPD as a Chemical Waste Producer, and to follow the guidelines stated in the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes. 	Yes
S6.4.1- S6.4.2	S7.2.1	• 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
		• Any unused chemicals or those with remaining functional capacity should be collected for reuse as far as practicable.	Yes
		• 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
		Sediment:	Yes

PP Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^
		• The sediment should be excavated, handled, treated, transported and/or disposed of in a manner that would minimise	(Marine Section)
		 adverse environmental impacts. 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 & S6.4.3	S7.2.1	• The temporary stockpiling area should be placed within earth bunds or sand bags to prevent leachate from entering the ground, nearby drains and surrounding water bodies. The temporary stockpiling area should be completely paved in order to avoid contamination to underlying soil or groundwater. Separate and clearly defined areas should be provided for stockpiling of contaminated and uncontaminated materials. Leachate, if any, should be collected, treated and discharged according to the Water Pollution Control Ordinance (WPCO). In order to minimise the exposure to contaminated materials, workers shall, if necessary, wear appropriate personal protective equipments (PPE) when handling contaminated sediments. Adequate washing and cleaning facilities shall also be provided on site.	Yes
S6.4.1	S7.2.1	 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	• 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
		• 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
		 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
S6.4.1	S7.2.1	• 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 contaminated and uncontaminated materials. Leachate, if any, should be collected and discharged according to the Water Pollution Control Ordinance (WPCO).	Obs/ Rem
		 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? ^
	Rei.		(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.	
		• 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	 Potential Floating Refuse: Proper management and education should be given to construction site workers such that accidental release or intentional disposal would be avoided. The refuse should be stored in enclosed bin to avoid adverse impacts to the surroundings including marine environment. Regular checking should also be carried out to ensure that the refuse is stored properly. 	Yes
Recomme	nded Mitiga	tion Measures for Marine Ecological Impact	
PP Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures
			(Marine Section)
-	-	No underwater percussive piling shall be conducted in this Project	Yes
S6.5.1	S8.2.1	 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	 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
Recomme	nded Mitiga	tion Measures for Landscape and Visual Impact	
PP Ref.	EM&A	Recommended Mitigation Measures	Mitigation Measures
	Ref.		(Marine Section)
S6.6.1	S9.3.1	All affected trees will be felled and compensated, no transplantation is required.	N/A
S6.6.1	S9.3.1	 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	Minimise construction periods where possible.	Yes
S6.6.1	S9.3.1	Early establishment of planting areas as far as appropriate.	N/A

PP Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^
	Rei.		(Marine Section)
S6.6.1	S9.3.1	 Erection of decorative mesh screen or construction hoardings. 	N/A
S6.6.1	S9.3.1	Control of night-time lighting.	N/A
S6.6.1	S9.3.1	 Temporary vertical greening, screen / buffer at-grade planting to soften the engineering structure of construction works. 	N/A
S6.6.1	S9.3.1	 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	 Proposed tree felling / tree compensation. 	N/A
Others			
PP Ref.	EM&A Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^
	iter.		(Marine Section)
-	-	 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
-	-	 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