

Expansion of Hong Kong International Airport into a Three-Runway System

Construction Phase Monthly EM&A
Report No. 86
(For February 2023)

March 2023

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**This Monthly EM&A Report No. 86 has been reviewed and certified by
the Environmental Team Leader (ETL) in accordance with
Condition 3.5 of Environmental Permit No. EP-489/2014.**

Certified by:

A handwritten signature in black ink, appearing to read 'Terence Kong', written in a cursive style.

Terence Kong
Environmental Team Leader (ETL)
Mott MacDonald Hong Kong Limited

Date 14 March 2023



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By Email

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

Attn: Mr. Lawrence Tsui, Principal Manager, Environmental Compliance

14 March 2023

Dear Sir,

Contract No. 3102
3RS Independent Environmental Checker Consultancy Services

Submission of Monthly EM&A Report No. 86 (February 2023)

Reference is made to the Environmental Team's submission of the Monthly EM&A Report No. 86 under Condition 3.5 of the Environmental Permit No. EP-489/2014 certified by the ET Leader on 14 March 2023.

We would like to inform you that we have no adverse comment and verify the captioned submission in accordance with the requirement stipulated in Condition 3.5 of EP-489/2014.

Should you have any query, please feel free to contact the undersigned at 3922 9141.

Yours faithfully,
AECOM Asia Co. Ltd.

Roy Man
Independent Environmental Checker

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Abbreviations

3RS	Three-Runway System
AAHK	Airport Authority Hong Kong
AECOM	AECOM Asia Company Limited
AFCD	Agriculture, Fisheries and Conservation Department
AIS	Automatic Information System
ANI	Encounter Rate of Number of Dolphins
APM	Automated People Mover
AW	Airport West
BHS	Baggage Handling System
C&D	Construction and Demolition
CAP	Contamination Assessment Plan
CAR	Contamination Assessment Report
CTCC	Construction Traffic Control Centre
CWD	Chinese White Dolphin
DCM	Deep Cement Mixing
DEZ	Dolphin Exclusion Zone
DO	Dissolved Oxygen
EIA	Environmental Impact Assessment
EM&A	Environmental Monitoring & Audit
EP	Environmental Permit
EPD	Environmental Protection Department
EPSS	Emergency Power Supply Systems
ET	Environmental Team
FCZ	Fish Culture Zone
HKBCF	Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities
HKIA	Hong Kong International Airport
HOKLAS	Hong Kong Laboratory Accreditation Scheme
HSF	High Speed Ferry
HVS	High Volume Sampler
IEC	Independent Environmental Checker
LKC	Lung Kwu Chau
MMHK	Mott MacDonald Hong Kong Limited
MMWP	Marine Mammal Watching Plan
MSS	Maritime Surveillance System
MTRMP-CAV	Marine Travel Routes and Management Plan for Construction and Associated Vessel
NEL	Northeast Lantau
NWL	Northwest Lantau
PAM	Passive Acoustic Monitoring
PM	Project Manager
SC	Sha Chau
SCZ	Speed Control Zone
SCLKCMP	Sha Chau and Lung Kwu Chau Marine Park
SS	Suspended Solids
SSSI	Site of Special Scientific Interest
STG	Encounter Rate of Number of Dolphin Sightings

SWL	Southwest Lantau
T2	Terminal 2
The Project	The Expansion of Hong Kong International Airport into a Three-Runway System
The SkyPier Plan	Marine Travel Routes and Management Plan for High Speed Ferries of SkyPier
The Manual	The Updated EM&A Manual
TSP	Total Suspended Particulates
WL	West Lantau
WMP	Waste Management Plan

Executive summary

The “Expansion of Hong Kong International Airport into a Three-Runway System” (the Project) serves to meet the future air traffic demands at Hong Kong International Airport (HKIA). On 7 November 2014, the Environmental Impact Assessment (EIA) Report (Register No.: AEIAR-185/2014) for the Project was approved and an Environmental Permit (EP) (Permit No.: EP-489/2014) was issued for the construction and operation of the Project.

Airport Authority Hong Kong (AAHK) commissioned Mott MacDonald Hong Kong Limited (MMHK) to undertake the role of Environmental Team (ET) for carrying out the Environmental Monitoring & Audit (EM&A) works during the construction phase of the Project in accordance with the Updated EM&A Manual (the Manual).

This is the 86th Construction Phase Monthly EM&A Report for the Project which summarises the monitoring results and audit findings of the EM&A programme during the reporting period from 1 to 28 February 2023.

Key Activities in the Reporting Period

The key activities of the Project carried out in the reporting period are located in reclamation areas and existing airport island respectively. Works in the reclamation areas included seawall construction, filling and land-based ground improvement work, together with taxiways, concourse and associated works. Land-based works on existing airport island involved mainly airfield works, Terminal 2 expansion works, modification and tunnel work for Automated People Mover (APM) and Baggage Handling System (BHS), and preparation work for utilities, with activities include road and drainage works, cable ducting, demolition, piling, and excavation works.

EM&A Activities Conducted in the Reporting Period

The monthly EM&A programme was undertaken in accordance with the Manual of the Project. Summary of the monitoring activities during this reporting period is presented as below:

Monitoring Activities	Number of Sessions
1-hour Total Suspended Particulates (TSP) air quality monitoring	30
Noise monitoring	16
Water quality monitoring	12
Vessel line-transect surveys for Chinese White Dolphin (CWD) monitoring	2
Land-based theodolite tracking survey effort for CWD monitoring	2

Environmental auditing works, including weekly site inspections of construction works conducted by the ET and bi-weekly site inspections conducted by the Independent Environmental Checker (IEC), audit of SkyPier High Speed Ferries (HSF), audit of construction and associated vessels, and audit of implementation of Marine Mammal Watching Plan (MMWP) and Dolphin Exclusion Zone (DEZ) Plan, were conducted in the reporting period. Based on the information including ET’s observations, records of Maritime Surveillance System (MSS), and contractors’ site records, it is noted that environmental pollution control and mitigation measures were properly implemented and construction activities of the Project in the reporting period did not introduce adverse impacts to the sensitive receivers.

Snapshots of EM&A Activities in the Reporting Period

		
<p>Refresher Training of ET's Monitoring Team on CWD Monitoring hold by CWD Experts</p>	<p>Noise Impact Monitoring conducted by ET in Tin Sum Village House</p>	<p>Inspection of Contractor's Wastewater Treatment Facility by ET</p>

Results of Impact Monitoring

The monitoring works for construction dust, construction noise, water quality, construction waste, landscape & visual, and CWD were conducted during the reporting period in accordance with the Manual.

Monitoring results of construction dust, construction noise, construction waste and CWD did not trigger the corresponding Action and Limit Levels in the reporting period.

The water quality monitoring results for all parameters, except suspended solids (SS), obtained during the reporting period were within the corresponding Action and Limit Levels stipulated in the EM&A programme. Relevant investigation and follow-up actions will be conducted according to the EM&A programme if the corresponding Action and Limit Levels are triggered. For SS, one of the testing results triggered the relevant Action Level, and corresponding investigation was conducted accordingly. The investigation finding revealed that the case was not related to the Project. To conclude, the construction activities in the reporting period did not introduce adverse impact to all water quality sensitive receivers.

Summary of Upcoming Key Issues

Reclamation Works:

Contract 3206 Main Reclamation Works

- Backfilling works.

Airfield Works

Contract 3302 Eastern Vehicular Tunnel Advance Works

- Construction of tunnel structure;
- Pipe and drainage diversion works;
- Utilities and backfilling works; and
- Stockpiling.

Contract 3305 Airfield Ground Lighting System

- Enhanced vehicular warning light hardware installation; and
- Rectification work for airfield ground lighting system.

Contract 3306 Observation Facility Control System Supporting Interim 2RS and 3RS

- Equipment installation.

Contract 3307 Fire Training Facility

- Architectural, builder's and finishing works; and
- Drainage and utilities works;

Contract 3308 Foreign Object Debris Detection System

- Rectification work for handover sensor system.

Contract 3310 North Runway Modification Works

- Architectural, builder's work and finishing works;
- Excavation works;
- Seawall construction;
- Construction of stormwater drainage;
- Construction of walls and slabs;
- Jet grouting and asphalt paving works;
- Installation of pipe piles; and
- Backfilling works.

Third Runway Concourse:

Contract 3403 New Integrated Airport Centres Building and Civil Works

- Roofing installation of covered walkway; and
- Demolition works.

Contract 3404 Integrated Airport Control System

- System maintenance.

Contract 3405 Third Runway Concourse Foundation and Substructure Works

- Bored piling;
- Structure works;
- Excavation; and
- Road formation.

Contract 3408 Third Runway Concourse and Apron Works

- Building services and Architectural, builder's work and finishing works;
- Foundation Works for Concrete Batching Plant;
- Reinforced concrete works; and
- Excavation.

Terminal 2 Expansion:

Contract 3508 Terminal 2 Expansion Works

- Bridge demolition, hoarding erection;
- Viaduct pier and temporary road construction;
- Pump station and electrical station works; and
- Architectural, builder's work and finishing works.

Automated People Mover (APM) and Baggage Handling System (BHS):

Contract 3601 New Automated People Mover System (TRC Line)

- Guidebeam installation.

Contract 3602 Existing APM System Modification Works

- Erection and fixing of power rail; and
- Concrete plinth construction.

Contract 3603 Baggage Handling System (BHS)

- BHS installation.

Construction Support (Facilities):

Contract 3721 Construction Support Infrastructure Works

- Watermain connection works;
- Sewage phasing works for fire training facility.

Airport Support Infrastructure:

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Backfilling works;
- Wall construction.

Contract 3802 APM and BHS Tunnels and Related Works

- Excavation and lateral supports;
- Box Culvert Construction;
- Tunnel construction;
- Electrical and mechanical works; and
- Architectural, builder's work and finishing works.

Contract 3804 East and Landside Fire Stations

- Site setup and formation works;
- Preparation works of bored pile;
- Excavation and concreting; and
- Ground Investigation works.

Construction Support (Services / Licences):

Contract 3901A Concrete Batching Facility

- Operation of concrete batching plant and material conveyor belt.

Contract 3901B Concrete Batching Facility

- Operation of concrete batching plant and material conveyor belt.

Contract 3908 Quay Management Services

- Provision of services of site management and logistic control of 3RS quays; and
- Provision of flat top barge and vehicle delivery services between the launching point in Hong Kong and 3RS quays.

Contract 3913 Asphalt Batching Plant

- Operation of asphalt batching plant.

Summary Table

The following table summarises the key findings of the EM&A programme during the reporting period:

	Yes	No	Details	Analysis / Recommendation / Remedial Actions
Breach of Limit Level [^]	√		No breach of Limit Level was recorded.	Nil
Breach of Action Level [^]	√		No breach of Action Level was recorded.	Nil
Complaint Received		√	A complaint regarding dust nuisance was received on 19 December 2022.	ET requested the related contractors to provide information regarding the complaint. The relevant contractor informed there was an alarm fault which led to the incident. The system was rectified by the contractor and no observation regarding dust nuisance was recorded during the subsequent joint site inspection and regular site inspections. All contractors were reminded to properly implement dust mitigation measures in their works sites in accordance with the implementation schedule in the Updated EM&A Manual. Hence, the case was considered closed.
Notification of any summons and status of prosecutions		√	No notification of summons nor prosecution was received.	Nil
Change that affect the EM&A		√	There was no change to the construction works that may affect the EM&A.	Nil

Note:

[^] Only triggering of Action or Limit Level found related to Project works is counted as Breach of Action or Limit Level.

1 Introduction

1.1 Background

On 7 November 2014, the Environmental Impact Assessment (EIA) Report (Register No.: AEIAR-185/2014) for the “Expansion of Hong Kong International Airport into a Three-Runway System” (the Project) was approved and an Environmental Permit (EP) (Permit No.: EP-489/2014) was issued for the construction and operation of the Project.

Airport Authority Hong Kong (AAHK) commissioned Mott MacDonald Hong Kong Limited (MMHK) to undertake the role of Environmental Team (ET) for carrying out the Environmental Monitoring & Audit (EM&A) works during the construction phase of the Project in accordance with the Updated EM&A Manual (the Manual) submitted under EP Condition 3.1¹. AECOM Asia Company Limited (AECOM) was employed by AAHK as the Independent Environmental Checker (IEC) for the Project.

The Project covers the expansion of the existing airport into a three-runway system (3RS) with key project components comprising land formation of about 650 ha and all associated facilities and infrastructure including taxiways, aprons, aircraft stands, a passenger concourse, an expanded Terminal 2, all related airside and landside works and associated ancillary and supporting facilities. The submarine aviation fuel pipelines and submarine power cables also require diversion as part of the works.

Construction of the Project is to proceed in the general order of diversion of the submarine aviation fuel pipelines, diversion of the submarine power cables, land formation, and construction of infrastructure, followed by construction of superstructures.

The summary of construction works programme can be referred to **Section 1.4**.

1.2 Scope of this Report

This is the 86th Construction Phase Monthly EM&A Report for the Project which summarises the key findings of the EM&A programme during the reporting period from 1 to 28 February 2023.

1.3 Project Organisation

The Project’s organisation structure presented in Appendix B of the Construction Phase Monthly EM&A Report No.1 remained unchanged during the reporting period. Contact details of the key personnel are presented in **Table 1.1**.

Table 1.1: Contact Information of Key Personnel

Party	Position	Name	Telephone
Project Manager’s Representative (Airport Authority Hong Kong)	Principal Manager, Environmental Compliance, Sustainability	Lawrence Tsui	2183 2734
Environmental Team (ET) (Mott MacDonald Hong Kong Limited)	Environmental Team Leader	Terence Kong	2828 5919

¹ The Manual is available on the Project’s dedicated website (accessible at: <http://env.threerunwaysystem.com/en/index.html>).

Party	Position	Name	Telephone
	Deputy Environmental Team Leaders	Heidi Yu	2828 5704
		Ken Wong	2828 5817
Independent Environmental Checker (IEC) (AECOM Asia Company Limited)	Independent Environmental Checker	Roy Man	3922 9141
		Deputy Independent Environmental Checker	Jackel Law

Reclamation Works:

Party	Position	Name	Telephone
Contract 3206 Main Reclamation Works (ZHEC-CCCC-CDC Joint Venture)	Project Manager	Alan Mong	3763 1352
		Environmental Officer	Zhang Bin Wang

Airfield Works:

Party	Position	Name	Telephone
Contract 3302 Eastern Vehicular Tunnel Advance Works (China Road and Bridge Corporation)	Project Manager	Dickey Yau	5699 4503
		Environmental Officer	Dennis Ho
Contract 3305 Airfield Ground Lighting System (ADB Safegate Hong Kong Limited)	Project Manager	Allam Al-Turk	2944 9725
		Environmental Officer	Ivan Ting
Contract 3306 Observation Facility Control System Supporting Interim 2RS and 3RS (Chinney Alliance Engineering Limited)	Project Director	Dennis Yam	9551 9920
		Environmental Officer	Richard Liu
Contract 3307 Fire Training Facility (Paul Y. Construction Company Limited)	Project Manager	Ken Tang	9640 5397
		Environmental Officer	Ferddy Leung
Contract 3308 Foreign Object Debris Detection System (DAS Aviation Services Group)	Project Manager	Jeffrey Yau	9873 7422
Contract 3310 North Runway Modification Works (China State Construction Engineering (Hong Kong) Ltd.)	Project Manager	Kingsley Chiang	9424 8437
		Environmental Officer	Federick Wong

Third Runway Concourse:

Party	Position	Name	Telephone
Contract 3402 New Integrated Airport Centres Enabling Works (Wing Hing Construction Co., Ltd.)	Project Manager	Wyman Lau	6112 9753
	Health Safety Environmental Manager	Mike Leung	6625 2550
Contract 3403 New Integrated Airport Centres Building and Civil Works (Sun Fook Kong Construction Limited)	Project Manager	Alice Leung	9220 3162
	Environmental Officer	Ray Cheung	9785 1566
Contract 3404 Integrated Airport Control System (Shun Hing Systems Integration Co., Ltd.)	Project Manager	Andy Ng	9102 2739
	Safety Officer	Keith Chau	9620 7515
Contract 3405 Third Runway Concourse Foundation and Substructure Works (China Road and Bridge Corporation – Bachy Soletanche Group Limited – LT Sambo Co., Ltd. Joint Venture)	Project Manager	Francis Choi	9423 3469
	Environmental Officer	Jacky Lai	9028 8975
Contract 3408 Third Runway Concourse and Apron Works (Beijing Urban Construction Group Company Limited and Chevalier (Construction) Company Limited Joint Venture)	Assistant Project Manager	Qian Zhang	5377 7976
	Environmental Officer	Malcolm Leung	7073 7559

Terminal 2 (T2) Expansion:

Party	Position	Name	Telephone
Contract 3508 Terminal 2 Expansion Works (Gammon Engineering & Construction Company Limited)	Project Director	Richard Ellis	6201 5637
	Environmental Officer	Fanny Law	6184 4650

Automated People Mover (APM) and Baggage Handling System (BHS):

Party	Position	Name	Telephone
Contract 3601 New Automated People Mover System (TRC Line) (CRRP Puzhen Bombardier Transportation Systems Limited and CRRP Nanjing Puzhen Co., Ltd. Joint Venture)	Project Manager	Hongdan Wei	158 6180 9450
	Environmental Officer	H Y Yue	9185 8186

Party	Position	Name	Telephone
Contract 3602 Existing APM System Modification Works (Niigata Transys Co., Ltd.)	Project Manager	Kunihiro Tatecho	9755 0351
	Environmental Officer	Y M Tong	5316 9801
Contract 3603 3RS Baggage Handling System (VISH Consortium)	Project Manager	K C Ho	9272 9626
	Environmental Officer	Richard Ng	9802 9577

Construction Support (Facilities):

Party	Position	Name	Telephone
Contract 3721 Construction Support Infrastructure Works (China State Construction Engineering (Hong Kong) Ltd.)	Site Agent	Thomas Lui	9011 5340
	Environmental Officer	John Mak	6273 8703
Contract 3728 Minor Site Works (Shun Yuen Construction Company Limited)	Contract Manager	C K Liu	9194 8739
	Environmental Officer	Dan Leung	6856 5899
Contract 3733 Emergency Repair Service (Wing Hing Construction Co., Ltd.)	Project Manager	Michael Kan	9206 0550
	Safety Health Environmental Manager	Mike Leung	6625 2550

Airport Support Infrastructure:

Party	Position	Name	Telephone
Contract 3801 APM and BHS Tunnels on Existing Airport Island (China State Construction Engineering (Hong Kong) Ltd.)	Project Manager	Kingsley Chiang	9424 8437
	Environmental Officer	Eunice Kwok	9243 1331
Contract 3802 APM and BHS Tunnels and Related Works (Gammon Construction Limited)	Project Director	John Adams	6111 6989
	Environmental Officer	Phoebe Ng	9869 1105
Contract 3804 East and Landside Fire Stations (Beijing Urban Construction Group Construction Limited - Beijing Urban Construction International Construction Limited - Kin Shing)	Project Manager	Mr. Zhang Xianda	4661 6818
	Environmental Officer	Ms. Kimberly Wong	5542 1669

Party	Position	Name	Telephone
(Leung's General Contractors Ltd Joint Venture)			

Construction Support (Services / Licences):

Party	Position	Name	Telephone
Contract 3901A Concrete Batching Facility (K. Wah Concrete Company Limited)	Project Manager	Benedict Wong	9553 2806
	Environmental Officer	C P Fung	9874 2872
Contract 3901B Concrete Batching Facility (Gammon Construction Limited)	General Manager	Gabriel Chan	2435 3260
	Environmental Officer	Rex Wong	2695 6319
Contract 3908 Quay Management Services (Gitanes – Crown Asia Joint Venture)	Project Manager	Mr. Ian Li	9750 6438
	Environmental Officer	Mr. Tang Kai Fun	9406 3526
Contract 3913 Asphalt Batching Plant (SPR Joint Venture)	Project Manager	Xie Yi Sheng	6580 6005
	Environmental Officer	Kenneth Chan	9300 2182

1.4 Summary of Construction Works

The key activities of the Project carried out in the reporting period are located in reclamation areas and existing airport island respectively. Works in the reclamation areas included seawall construction, filling and land-based ground improvement work, together with taxiways, concourse and associated works. Land-based works on existing airport island involved mainly airfield works, Terminal 2 expansion works, modification and tunnel work for Automated People Mover (APM) and Baggage Handling System (BHS), and preparation work for utilities, with activities include road and drainage works, cable ducting, demolition, piling, and excavation works.

The locations of key construction activities are presented in **Figure 1.1**. **Figure 1.2** presents the latest layout of enhanced silt curtain deployed.

1.5 Summary of EM&A Programme Requirements

The status for all environmental aspects are presented in **Table 1.2**. The EM&A requirements remained unchanged during the reporting period.

Table 1.2: Summary of Status of All Environmental Aspects under the Updated EM&A Manual

Parameters	EM&A Requirements	Status
Air Quality		
Baseline Monitoring	At least 14 consecutive days before commencement of construction work	The baseline air quality monitoring result was reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	At least 3 times every 6 days	On-going
Noise		
Baseline Monitoring	Daily for a period of at least two weeks prior to the commencement of construction works	The baseline noise monitoring result was reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	Weekly	On-going

Parameters	EM&A Requirements	Status
Water Quality		
General Baseline Water Quality Monitoring for reclamation, water jetting and field joint works	Three days per week, at mid-flood and mid-ebb tides, for at least four weeks prior to the commencement of marine works.	The baseline water quality monitoring result was reported in Baseline Water Quality Monitoring Report and submitted to EPD under EP Condition 3.4.
General Impact Water Quality Monitoring for reclamation, water jetting and field joint works	Three days per week, at mid-flood and mid-ebb tides.	On-going for reclamation works. General impact water quality monitoring for water jetting works was completed on 23 May 2017.
Initial Intensive Deep Cement Mixing (DCM) Water Quality Monitoring	At least four weeks	The Initial Intensive DCM Monitoring Report was submitted and approved by EPD in accordance with the Detailed Plan on DCM.
Regular DCM Water Quality Monitoring	Three times per week until completion of DCM works.	Due to the completion of all marine-based DCM works within April 2022, regular DCM monitoring was ceased at all monitoring stations starting from 28 April 2022 and would be resumed if there are marine-based DCM works in the coming future.
Sewerage and Sewage Treatment		
Methodology for carrying out annual sewage flow monitoring for concerned gravity sewer	Methodology to be prepared and submitted to EPD one year before the scheduled commencement of operation of the proposed third runway	The proposed methodology of the annual sewage flow monitoring was approved by EPD. The annual flow monitoring was started from June 2021 and completed in 2022.
Details of the routine H ₂ S monitoring system for the sewerage system of 3RS	Details to be prepared and submitted to EPD at least one year before commencement of the operation of 3RS	The details of the routine H ₂ S monitoring system will be prepared and submitted to EPD at least one year before commencement of operation of 3RS.
Waste Management		
Waste Monitoring	At least weekly	On-going
Land Contamination		
Supplementary Contamination Assessment Plan (CAP)	At least 3 months before commencement of any soil remediation works.	The Supplementary CAP was submitted and approved by EPD under EP Condition 2.20.
Contamination Assessment Report (CAR) for Golf Course	CAR to be submitted for golf course	The CAR for Golf Course was submitted and accepted by EPD.
Contamination Assessment Reports (CAR) for Terminal 2 Emergency Power Supply Systems	CAR to be submitted for Terminal 2 Emergency Power Supply Systems	The CARs for Terminal 2 Emergency Power Supply Systems were submitted and accepted by EPD.
Terrestrial Ecology		
Pre-construction Egretty Survey Plan	Once per month in the breeding season between April and July, prior to the commencement of HDD drilling works.	The Egretty Survey Plan was submitted and approved by EPD under EP Condition 2.14.
Ecological Monitoring	Monthly monitoring during the HDD construction works period from August to March.	The terrestrial ecological monitoring at Sheung Sha Chau was completed in January 2019.
Marine Ecology		
Pre-Construction Phase Coral Dive Survey	Prior to marine construction works	The Coral Translocation Plan was submitted and approved by EPD under EP Condition 2.12.
Coral Translocation	-	The coral translocation was completed.
Post-Translocation Coral Monitoring	As per an enhanced monitoring programme based on the Coral Translocation Plan	The post-translocation monitoring programme according to the Coral Translocation Plan was completed in April 2018.
Chinese White Dolphins (CWD)		

Parameters	EM&A Requirements	Status
Baseline Monitoring	6 months of baseline surveys before the commencement of land formation related construction works. Vessel line transect surveys: Two full surveys per month; Land-based theodolite tracking surveys: Two days per month at the Sha Chau station and two days per month at the Lung Kwu Chau station; and Passive Acoustic Monitoring (PAM): For the whole duration of baseline period.	Baseline CWD results were reported in the CWD Baseline Monitoring Report and submitted to EPD in accordance with EP Condition 3.4.
Impact Monitoring	Vessel line transect surveys: Two full surveys per month; Land-based theodolite tracking surveys: One day per month at the Sha Chau station and one day per month at the Lung Kwu Chau station; and PAM: For the whole duration for land formation related construction works.	On-going
Landscape & Visual		
Landscape & Visual Plan	At least 3 months before the commencement of construction works on the formed land of the Project.	The Landscape & Visual Plan was submitted and approved by EPD under EP Condition 2.18
Baseline Monitoring	One-off survey within the Project site boundary prior to commencement of any construction works	The baseline landscape & visual monitoring result was reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	Weekly	On-going
Environmental Auditing		
Regular site inspection	Weekly	On-going
Marine Mammal Watching Plan (MMWP) implementation measures	Monitor and check	On-going
Dolphin Exclusion Zone (DEZ) Plan implementation measures	Monitor and check	On-going
SkyPier High Speed Ferries (HSF) implementation measures	Monitor and check	On-going
Construction and Associated Vessels Implementation measures	Monitor and check	On-going
Silt Curtain Deployment Plan implementation measures	Monitor and check	On-going
Spill Response Plan implementation measures	Monitor and check	On-going
Complaint Hotline and Email channel	Construction phase	On-going
Environmental Log Book	Construction phase	On-going

Taking into account the construction works in this reporting period, impact monitoring of air quality, noise, water quality, waste management, landscape & visual, and CWD were carried out in the reporting period.

The EM&A programme also involved weekly site inspections and related auditing conducted by the ET for checking the implementation of the required environmental mitigation measures recommended in the approved EIA Report. To promote the environmental awareness and

enhance the environmental performance of the contractors, regular environmental management meetings were conducted during the reporting period, which are summarised as below:

- Seventeen environmental management meetings for EM&A review with works contracts: 9, 10, 16, 17, 21, 22, 24, 27 and 28 February 2023.

The EM&A programme has been following the recommendations presented in the approved EIA Report and the Manual. A summary of implementation status of the environmental mitigation measures for the construction phase of the Project during the reporting period is provided in **Appendix A**.

2 Air Quality Monitoring

Air quality monitoring of 1-hour Total Suspended Particulates (TSP) was conducted three times every six days at two representative monitoring stations in the vicinity of air sensitive receivers in Tung Chung and villages in North Lantau in accordance with the Manual. **Table 2.1** describes the details of the monitoring stations. **Figure 2.1** shows the locations of the monitoring stations.

Table 2.1: Locations of Impact Air Quality Monitoring Stations

Monitoring Station	Location
AR1A	Man Tung Road Park
AR2	Village House at Tin Sum

2.1 Action and Limit Levels

In accordance with the Manual, baseline air quality monitoring of 1-hour TSP levels at the two air quality monitoring stations were established as presented in the Baseline Monitoring Report. The Action and Limit Levels of the air quality monitoring stipulated in the EM&A programme for triggering the relevant investigation and follow-up procedures under the programme are provided in **Table 2.2**.

Table 2.2: Action and Limit Levels of Air Quality Monitoring

Monitoring Station	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
AR1A	306	500
AR2	298	

2.2 Monitoring Equipment

Portable direct reading dust meter was used to carry out the air quality monitoring. Details of equipment used in the reporting period are given in **Table 2.3**.

Table 2.3: Air Quality Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Portable direct reading dust meter (Laser dust monitor)	SIBATA LD-3B-1 (Serial No. 597337)	11 May 2022	Monthly EM&A Report No. 77, Appendix D
	SIBATA LD-3B-2 (Serial No. 296098)	16 Sep 2022	Monthly EM&A Report No. 83, Appendix D

2.3 Monitoring Methodology

2.3.1 Measuring Procedure

The measurement procedures involved in the impact air quality monitoring can be summarised as follows:

- a. The portable direct reading dust meter was mounted on a tripod at a height of 1.2m above the ground.
- b. Prior to the measurement, the equipment was set up for 1 minute span check and 6 second background check.

- c. The one hour dust measurement was started. Site conditions and dust sources at the nearby area were recorded on a record sheet.
- d. When the measurement completed, the “Count” reading per hour was recorded for result calculation.

2.3.2 Maintenance and Calibration

The portable direct reading dust meter is calibrated every year against high volume sampler (HVS) to check the validity and accuracy of the results measured by direct reading method. The calibration record of the HVS provided in Appendix D of the Monthly EM&A Report No. 77 and the calibration certificates of portable direct reading dust meters listed in **Table 2.3** are valid in the reporting period.

2.4 Summary of Monitoring Results

The air quality monitoring schedule involved in the reporting period is provided in **Appendix B**.

The air quality monitoring results in the reporting period are summarised in **Table 2.4**. Detailed impact monitoring results are presented in **Appendix C**.

Table 2.4: Summary of Air Quality Monitoring Results

Monitoring Station	1-hr TSP Concentration Range ($\mu\text{g}/\text{m}^3$)	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
AR1A	14 - 56	306	500
AR2	10 - 32	298	

The monitoring results were within the corresponding Action and Limit Levels at all monitoring stations in the reporting period.

General meteorological conditions throughout the impact monitoring period were recorded. Wind data including wind speed and wind direction for each monitoring day were collected from the Chek Lap Kok Wind Station.

2.5 Conclusion

No dust emission source was observed at the monitoring stations during the monitoring sessions. As the sensitive receivers were far away from the construction activities, with the implementation of dust control measures, there was no adverse impact at the sensitive receivers attributable to the works of the Project.

3 Noise Monitoring

Noise monitoring in the form of 30-minute measurements of L_{eq} , L_{10} , and L_{90} levels was conducted once per week between 0700 and 1900 on normal weekdays at four representative monitoring stations in the vicinity of noise sensitive receivers in Tung Chung and villages in North Lantau in accordance with the Manual. **Table 3.1** describes the details of the monitoring stations. **Figure 2.1** shows the locations of the monitoring stations.

Table 3.1: Locations of Impact Noise Monitoring Stations

Monitoring Station	Location	Type of measurement
NM1A	Man Tung Road Park	Free field
NM2 ⁽¹⁾	Tung Chung West Development	To be determined
NM3A ⁽²⁾	Site Office	Facade
NM4	Ching Chung Hau Po Woon Primary School	Free field
NM5	Village House in Tin Sum	Free field
NM6	House No. 1, Sha Lo Wan	Free field

Notes:

- (1) As described in Section 4.3.3 of the Manual, noise monitoring at NM2 will only commence after occupation of the future Tung Chung West Development.
- (2) According to Section 4.3.3 of the Manual, the noise monitoring at NM3A was temporarily suspended starting from 1 September 2018 and would be resumed with the completion of the Tung Chung East Development.

3.1 Action and Limit Levels

In accordance with the Manual, baseline noise levels at the noise monitoring stations were established as presented in the Baseline Monitoring Report. The Action and Limit Levels of the noise monitoring stipulated in the EM&A programme for triggering the relevant investigation and follow-up procedures under the programme are provided in **Table 3.2**.

Table 3.2: Action and Limit Levels for Noise Monitoring

Monitoring Stations	Time Period	Action Level	Limit Level, $L_{eq}(30mins)$ dB(A)
NM1A, NM2, NM3A, NM4, NM5 and NM6	0700-1900 hours on normal weekdays	When one documented complaint is received from any one of the sensitive receivers	75dB(A) ⁽¹⁾

Note:

- (1) The Limit Level for NM4 is reduced to 70dB(A) for being an educational institution. During school examination period, the Limit Level is further reduced to 65dB(A).

3.2 Monitoring Equipment

Noise monitoring was performed using sound level meter at each designated monitoring station. The sound level meters deployed comply with the International Electrotechnical Commission Publications 651:1979 (Type 1) and 804:1985 (Type 1) specifications. Acoustic calibrator was used to check the sound level meters by a known sound pressure level for field measurement. Details of equipment used in the reporting period are given in **Table 3.3**.

Table 3.3: Noise Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Integrated Sound Level Meter	Rion NL-52 (Serial No. 00998505)	22 Mar 2022	Monthly EM&A Report No. 75, Appendix D
Integrated Sound Level Meter	Rion NL-52 (Serial No. 01287679)	10 Oct 2022	Monthly EM&A Report No. 82, Appendix D
Acoustic Calibrator	Castle GA607 (Serial No. 040162)	22 Mar 2022	Monthly EM&A Report No. 75, Appendix D
Acoustic Calibrator	Casella CEL-120 (Serial No. 2383737)	18 Jun 2022	Monthly EM&A Report No. 79, Appendix D

3.3 Monitoring Methodology

3.3.1 Monitoring Procedure

The monitoring procedures involved in the noise monitoring can be summarised as follows:

- a. The sound level meter was set on a tripod at least a height of 1.2m above the ground for free-field measurements at monitoring stations NM1A, NM4, NM5 and NM6. A correction of +3dB(A) was applied to the free field measurements.
- b. Façade measurements were made at the monitoring station NM3A.
- c. Parameters such as frequency weighting, time weighting and measurement time were set.
- d. Prior to and after each noise measurement, the meter was calibrated using the acoustic calibrator. If the difference in the calibration level before and after measurement was more than 1dB(A), the measurement would be considered invalid and repeat of noise measurement would be required after re-calibration or repair of the equipment.
- e. During the monitoring period, L_{eq} , L_{10} and L_{90} were recorded. In addition, site conditions and noise sources were recorded on a record sheet.
- f. Noise measurement results, when higher than the baseline monitoring levels, were corrected with reference to the baseline monitoring levels.
- g. Observations were recorded when high intrusive noise (e.g. dog barking, helicopter noise) was observed during the monitoring.

3.3.2 Maintenance and Calibration

The maintenance and calibration procedures are summarised below:

- h. The microphone head of the sound level meter was cleaned with soft cloth at regular intervals.
- i. The meter and calibrator were sent to the supplier or laboratory accredited under Hong Kong Laboratory Accreditation Scheme (HOKLAS) to check and calibrate at yearly intervals.

Calibration certificates of the sound level meters and acoustic calibrators used in the noise monitoring listed in **Table 3.3** are valid in the reporting period.

3.4 Summary of Monitoring Results

The noise monitoring schedule involved in the reporting period is provided in **Appendix B**.

The noise monitoring results in the reporting period are summarised in **Table 3.4**. Detailed impact monitoring results are presented in **Appendix C**.

Table 3.4: Summary of Construction Noise Monitoring Results

Monitoring Station	Noise Level Range, dB(A)	Limit Level, dB(A)
	L _{eq} (30mins)	L _{eq} (30mins)
NM1A ⁽¹⁾	60 - 73	75
NM4 ^{(1) (3)}	60 - 65	70 ⁽²⁾
NM5 ^{(1) (3)}	58 - 61	75
NM6 ^{(1) (3)}	65 - 68	75

Notes:

- (1) +3dB(A) Façade correction included;
- (2) The limit level will be reduced to 65dB(A) during school examination periods at NM4. No school examination took place during this reporting period.
- (3) Some of the noise measurement results were higher than the baseline monitoring levels. In order to reduce the influence of non-Project related noise on the monitoring results, these measurement results were corrected with reference to the baseline monitoring results.

No complaints were received from any sensitive receiver that triggered the Action Level. All monitoring results were also within the corresponding Limit Levels at all monitoring stations in the reporting period.

3.5 Conclusion

As the construction activities were far away from the monitoring stations, major sources of noise dominating the monitoring stations observed during the construction noise impact monitoring were traffic noise near NM1A, school activities near NM4 and aircraft noise near NM6 during this reporting period. It is considered that the monitoring work during the reporting period was effective and there was no adverse impact attributable to the Project activities.

4 Water Quality Monitoring

Water quality monitoring of DO, pH, temperature, salinity, turbidity, and suspended solids (SS) was conducted three days per week, at mid-ebb and mid-flood tides, at a total of 14 water quality monitoring stations, comprising 6 impact (IM) stations, 5 sensitive receiver (SR) stations and 3 control (C) stations in the vicinity of water quality sensitive receivers around the airport island in accordance with the Manual. The purpose of water quality monitoring at the IM stations is to promptly capture any potential water quality impact from the Project before it could become apparent at sensitive receivers (represented by the SR stations). **Table 4.1** describes the details of the monitoring stations. **Figure 4.1** shows the locations of the monitoring stations.

Table 4.1: Monitoring Locations of Impact Water Quality Monitoring

Monitoring Station	Description	Coordinates		Parameters
		Easting	Northing	
C1	Control Station	804247	815620	<u>General Parameters</u>
C2	Control Station	806945	825682	DO, pH,
C3 ⁽²⁾	Control Station	817803	822109	Temperature, Salinity, Turbidity, SS
IM1 ⁽⁴⁾	Impact Station	806458	818351	
IM2 ⁽⁴⁾	Impact Station	806236	819183	
IM7 ⁽⁴⁾	Impact Station	806835	821349	
IM10 ⁽⁴⁾	Impact Station	809838	822240	
IM11 ⁽⁴⁾	Impact Station	810545	821501	
IM12 ⁽⁴⁾	Impact Station	811519	821162	
SR1A ⁽¹⁾	Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities (HKBCF) Seawater Intake for cooling	812660	819977	<u>General Parameters</u> DO, pH, Temperature, Salinity, Turbidity, SS
SR2	Planned marine park / hard corals at The Brothers / Tai Mo To	814166	821463	<u>General Parameters</u> DO, pH, Temperature, Salinity, Turbidity, SS
SR3	Sha Chau and Lung Kwu Chau Marine Park / fishing and spawning grounds in North Lantau	807571	822147	<u>General Parameters</u> DO, pH, Temperature, Salinity, Turbidity, SS
SR4A	Sha Lo Wan	807810	817189	
SR8 ⁽³⁾	Seawater Intake for cooling at Hong Kong International Airport (East)	811623	820390	

Notes:

- (1) With the operation of HKBCF, water quality monitoring at SR1A station was commenced on 25 October 2018. To better reflect the water quality in the immediate vicinity of the intake, the monitoring location of SR1A has been shifted closer to the intake starting from 5 January 2019.
- (2) According to the Baseline Water Quality Monitoring Report, C3 station is not adequately representative as a control station of impact/ SR stations during the flood tide. The control reference has been changed from C3 to SR2 from 1 September 2016 onwards.
- (3) The monitoring location for SR8 is subject to further changes due to silt curtain arrangements and the progressive relocation of this seawater intake.
- (4) With the seawall completion and removal of enhanced open sea silt curtains, these monitoring stations were relocated back to their original locations. For IM2, there was minor adjustment of the monitoring location.

4.1 Action and Limit Levels

In accordance with the Manual, baseline water quality levels at the representative water quality monitoring stations were established as presented in the Baseline Water Quality Monitoring Report. The Action and Limit Levels of general water quality monitoring stipulated in the EM&A programme for triggering the relevant investigation and follow-up procedures under the programme are provided in **Table 4.2**. The control and impact stations during ebb tide and flood tide for general water quality monitoring are presented in **Table 4.3**.

Table 4.2: Action and Limit Levels for General Water Quality Monitoring

Parameters		Action Level (AL)		Limit Level (LL)	
Action and Limit Levels for general water quality monitoring (excluding SR1A & SR8)					
General Water Quality Monitoring	DO in mg/l (Surface, Middle & Bottom)	Surface and Middle		Surface and Middle	
		4.5mg/l		4.1mg/l	
		Bottom		Bottom	
		3.4mg/l		2.7mg/l	
	Suspended Solids (SS) in mg/l	23	or 120% of upstream control station at the same tide of the same day, whichever is higher	37	or 130% of upstream control station at the same tide of the same day, whichever is higher
	Turbidity in NTU	22.6		36.1	
Action and Limit Levels SR1A					
	SS (mg/l)	33		42	
Action and Limit Levels SR8					
	SS (mg/l)	52		60	

Notes:

- (1) For DO measurement, non-compliance occurs when monitoring result is lower than the limits.
- (2) For parameters other than DO, non-compliance of water quality results when monitoring results is higher than the limits.
- (3) Depth-averaged results are used unless specified otherwise.

Table 4.3: The Control and Impact Stations during Flood Tide and Ebb Tide for General Water Quality Monitoring

Control Station	Impact Stations
Flood Tide	
C1	IM1, IM2, IM7, SR3
SR2 ⁽¹⁾	IM7, IM10, IM11, IM12, SR1A, SR3, SR4A, SR8
Ebb Tide	
C1	SR4A
C2	IM1, IM2, IM7, IM10, IM11, IM12, SR1A, SR2, SR3, SR8

Note:

- (1) As per findings of Baseline Water Quality Monitoring Report, the control reference has been changed from C3 to SR2 from 1 September 2016 onwards.

4.2 Monitoring Equipment

Table 4.4 summarises the equipment used in the reporting period for monitoring of specific water quality parameters under the water quality monitoring programme.

Table 4.4: Water Quality Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Multifunctional Meter (measurement of DO, pH, temperature, salinity and turbidity)	YSI ProDSS (Serial No. 16H104234)	20 Dec 2022	Monthly EM&A Report No. 84, Appendix E
	YSI ProDSS (Serial No. 17E100747)	20 Dec 2022	Monthly EM&A Report No. 84, Appendix E

Other equipment used as part of the impact water quality monitoring programme are listed in **Table 4.5**.

Table 4.5: Other Monitoring Equipment

Equipment	Brand and Model
Water Sampler	Van Dorn Water Sampler
Positioning Device (measurement of GPS)	Garmin eTrex Vista HCx
Current Meter (measurement of current speed and direction, and water depth)	Sontek HydroSurveyor

4.3 Monitoring Methodology

4.3.1 Measuring Procedure

Water quality monitoring samples were taken at three depths (at 1m below surface, at mid-depth, and at 1m above bottom) for locations with water depth >6m. For locations with water depth between 3m and 6m, water samples were taken at two depths (surface and bottom). For locations with water depth <3m, only the mid-depth was taken. Duplicate water samples were taken and analysed.

The water samples for all monitoring parameters were collected, stored, preserved and analysed according to the Standard Methods, APHA 22nd ed. and/or other methods as agreed by the EPD. In-situ measurements at monitoring locations including temperature, pH, DO, turbidity, salinity, and water depth were collected by equipment listed in **Table 4.4** and **Table 4.5**. Water samples for SS analysis were stored in high density polythene bottles with no preservative added, packed in ice (cooled to 4°C without being frozen), delivered to the laboratory within 24 hours of collection.

4.3.2 Maintenance and Calibration

Calibration of In-situ Instruments

All in-situ monitoring instrument was 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 a DO meter was carried out before commencement of monitoring and after completion of all measurements each day. Calibration was not conducted at each monitoring location as daily calibration is adequate for the type of DO meter employed. 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. In addition, the turbidity probe was calibrated at least twice per month to establish the relationship between turbidity readings (in NTU) and levels of SS (in mg/l).

Calibration certificates of the monitoring equipment used in the reporting period are listed in **Table 4.4**.

4.3.3 Laboratory Measurement / Analysis

Analysis of SS have been carried out by a HOKLAS accredited laboratory, ALS Technichem (HK) Pty Ltd (Reg. No. HOKLAS 066). Sufficient water samples were collected at all the monitoring stations for carrying out the laboratory SS determination. The SS determination works were started within 24 hours after collection of the water samples. The analysis of SS have followed the standard methods summarised in **Table 4.6**. The QA/QC procedures for laboratory measurement/ analysis of SS were presented in Appendix F of the Construction Phase Monthly EM&A Report No.8.

Table 4.6: Laboratory Measurement/ Analysis of SS

Parameters	Instrumentation	Analytical Method	Reporting Limit
SS	Analytical Balance	APHA 2540D	2mg/l

4.4 Summary of Monitoring Results

The water quality monitoring schedule for the reporting period is updated and provided in **Appendix B**.

The water quality monitoring results for all parameters, except SS, obtained during the reporting period were within their corresponding Action and Limit Levels. The detailed monitoring results are presented in **Appendix C**.

For SS, one of the testing results triggered the corresponding Action Level, and investigation was conducted accordingly.

Table 4.7 presents the summary of the SS compliance status at IM and SR stations during mid-flood tide for the reporting month.

Table 4.7: Summary of SS Compliance Status (Mid-Flood Tide)

	IM1	IM2	IM7	IM10	IM11	IM12	SR1A	SR3	SR4A	SR8
02/02/2023										
04/02/2023										
07/02/2023										
09/02/2023										
11/02/2023										
14/02/2023										
16/02/2023										
18/02/2023										
21/02/2023										
23/02/2023										
25/02/2023										
28/02/2023										
No. of result triggering Action or Limit Level	0	1	0	0	0	0	0	0	0	0

Note: Detailed results are presented in **Appendix C**.

Legend:

	The monitoring results were within the corresponding Action and Limit Levels
	Monitoring result triggered the Action Level at monitoring station located upstream of the Project based on dominant tidal flow
	Upstream station with respect to the Project during the respective tide based on dominant tidal flow

Monitoring result triggered the corresponding Action Level on one monitoring day. In accordance with Event and Action Plan stipulated in the Manual, IEC and Contractors were informed when the corresponding Action Level was triggered.

Details of the Project's marine construction activities and site observations of the concerned monitoring days were collected. Findings were summarised in **Table 4.8**.

Table 4.8: Summary of Findings from Investigation of SS Monitoring Result

Date	Marine construction works nearby	Approximate distance from marine construction works	Status of water quality measures (if applicable)	Construction vessels in the vicinity	Turbidity / Silt plume observed near the monitoring station	Action or Limit Level triggered due to Project
21/2/2023	Sea wall construction	1.22 km	N/A	No	No	No

On 21 February 2023, IM2 was located upstream of the Project during flood tide. No silt plume, construction vessel, spillage incident or specific observation at outfalls were observed in the vicinity when monitoring was undertaken at the monitoring station. Therefore, the case was considered unlikely due to the Project.

4.5 Conclusion

During the reporting period, it is noted that most of the monitoring results were within their corresponding Action and Limit Levels, while one SS measurement result triggered the corresponding Action Level, investigation was conducted accordingly..

Based on the investigation findings, the result that triggered the corresponding Action Level was not due to the project. Therefore, the Project did not cause adverse impact at the water quality sensitive receivers. All required actions under the Event and Action Plan were followed. The case appeared to be due to natural fluctuation or other sources not related to the Project.

Nevertheless, as part of the EM&A programme, the construction methods and mitigation measures for water quality will continue to be monitored and opportunities for further enhancement will continue to be explored and implemented where possible, to strive for better protection of water quality and the marine environment.

In the meantime, the contractors were reminded to implement and maintain all mitigation measures as recommended in the Manual during weekly site inspection and regular environmental management meetings.

5 Waste Management

In accordance with the Manual, the waste generated from construction activities was audited once per week to determine if wastes are being managed in accordance with the Waste Management Plan (WMP) prepared for the Project, contract-specific WMP, and any statutory and contractual requirements. All aspects of waste management including waste generation, storage, transportation and disposal were assessed during the audits.

5.1 Action and Limit Levels

The Action and Limit Levels of the construction waste are provided in **Table 5.1**.

Table 5.1: Action and Limit Levels for Construction Waste

Monitoring Stations	Action Level	Limit Level
Construction Area	When one valid documented complaint is received	Non-compliance of the WMP, contract-specific WMPs, any statutory and contractual requirements

5.2 Waste Management Status

Weekly monitoring on all works contracts were carried out by the ET to check and monitor the implementation of proper waste management practices during the construction phase.

Recommendations made included provision and maintenance of proper chemical waste storage area, as well as handling, segregation, and regular disposal of general refuse. The contractors have taken actions to implement the recommended measures. Waste management audits were carried out by ET according to the requirement of the Waste Management Plan, Updated EM&A Manual and the implementation schedule of the waste management mitigation measures in **Appendix A**.

Based on updated contractors' information, construction waste generated in the reporting period is summarised in **Table 5.2**. ET and IEC have carried out site audits regularly and reviewed the trip ticket system. Dedicated areas for sorting of materials are established on site. Recyclable materials such as steel bar, metal strip, aluminium, paper and plastic are sorted on-site and transported off-site for recycling during this reporting period.

Table 5.2: Construction Waste Statistics

	C&D Material Stockpiled for Reuse or Recycle ⁽¹⁾ (m ³)	C&D Material Reused in the Project (m ³)	C&D Material Reused in other Projects (m ³)	C&D Material Transferred to Public Fill (m ³)	Chemical Waste (kg)	Chemical Waste (l)	General Refuse (tonne)
February 2023 ⁽²⁾	623	0	2,225	7,639	0	0	2,833

Notes:

- (1) C&D refers to Construction and Demolition.
- (2) The data was based on the information provided by contractors up to the submission date of this Monthly EM&A Report, and might be updated in the forthcoming Monthly EM&A Report.

There were no complaints, non-compliance of the WMP, contract-specific WMPs, statutory and contractual requirements that triggered Action and Limit Levels in the reporting period.

5.3 Marine Sediment Management

Marine sediment is managed according to the EIA Report, Updated EM&A Manual, Waste Management Plan and the proposal of Further Development on Treatment Level / Details and the Reuse Mode for Marine Sediment (hereinafter referred to as “Further Development Proposal”) of the Project. The sampling process, storage conditions of the excavated marine sediment, treatment process, final backfilling location as well as associated records were inspected and checked by ET and verified by IEC to ensure they were in compliance with the requirements as stipulated in the Waste Management Plan and Further Development Proposal.

Only backfilling works for treated marine sediment was conducted during the reporting period. The details of the marine sediment sampling, treatment and backfilling can be referred to Annual EM&A Report No.6.

6 Chinese White Dolphin Monitoring

In accordance with the Manual, CWD monitoring by small vessel line-transect survey supplemented by land-based theodolite tracking survey and passive acoustic monitoring should be conducted during construction phase.

The small vessel line-transect survey should be conducted at a frequency of two full surveys per month, while land-based theodolite tracking survey should be conducted at a frequency of one day per month per station at Sha Chau (SC) and Lung Kwu Chau (LKC) during the construction phase as stipulated in the Manual.

6.1 Action and Limit Levels

The Action and Limit Levels for CWD monitoring were formulated by the action response approach using the running quarterly dolphin encounter rates STG and ANI derived from the baseline monitoring data, as presented in the CWD Baseline Monitoring Report. The derived values of Action and Limit Levels for CWD monitoring were summarised in **Table 6.1**.

Table 6.1: Derived Values of Action and Limit Levels for Chinese White Dolphin Monitoring

NEL, NWL, AW, WL and SWL as a Whole	
Action Level ⁽³⁾	Running quarterly ⁽¹⁾ STG < 1.86 & ANI < 9.35
Limit Level ⁽³⁾	Two consecutive running quarterly ⁽²⁾ (3-month) STG < 1.86 & ANI < 9.35

Notes: (referring to the baseline monitoring report)

- (1) Action Level – running quarterly encounter rates STG & ANI of this month will be calculated from the reporting period and the two preceding survey months.
- (2) Limit Level – two consecutive running quarters mean both the running quarterly encounter rates of the preceding month and the running quarterly encounter rates of this month.
- (3) Action Level and/or Limit Level will be triggered if both STG and ANI fall below the criteria.

6.2 CWD Monitoring Transects and Stations

6.2.1 Small Vessel Line-transect Survey

Small vessel line-transect surveys were conducted along the transects covering Northeast Lantau (NEL), Northwest Lantau (NWL), Airport West (AW), West Lantau (WL) and Southwest Lantau (SWL) areas as proposed in the Manual, which are consistent with the Agriculture, Fisheries and Conservation Department (AFCD) long-term monitoring programme (except the addition of AW). The AW transect has not been previously surveyed in the AFCD programme due to the restrictions of HKIA Approach Area, nevertheless, this transect was established during the EIA of the 3RS Project and refined in the Manual with the aim to collect project specific baseline information within the HKIA Approach Area to fill the data gap that was not covered by the AFCD programme. This also provided a larger sample size for estimating the density, abundance and patterns of movements in the broader study area of the project.

The planned vessel survey transect lines following the waypoints set for construction phase monitoring as proposed in the Manual are depicted in **Figure 6.1** with the waypoint coordinates of all transect lines given in **Table 6.2**, which are subject to on-site refinement based on the actual survey conditions and constraints.

Table 6.2: Coordinates of Transect Lines in NEL, NWL, AW, WL and SWL Survey Areas

Waypoint	Easting	Northing	Waypoint	Easting	Northing
NEL					
1S	813525	820900	6N	818568	824433
1N	813525	824657	7S	819532	821420
2S	814556	818449	7N	819532	824209
2N	814559	824768	8S	820451	822125
3S	815542	818807	8N	820451	823671
3N	815542	824882	9S	821504	822371
4S	816506	819480	9N	821504	823761
4N	816506	824859	10S	822513	823268
5S	817537	820220	10N	822513	824321
5N	817537	824613	11S	823477	823402
6S	818568	820735	11N	823477	824613
NWL					
1S	804671	814577	5S	808504	821735
1N	804671	831404	5N	808504	828602
2Sb	805475	815457	6S	809490	822075
2Nb	805476	818571	6N	809490	825352
2Sa	805476	820770	7S	810499	822323
2Na	805476	830562	7N	810499	824613
3S	806464	821033	8S	811508	821839
3N	806464	829598	8N	811508	824254
4S	807518	821395	9S	812516	821356
4N	807518	829230	9N	812516	824254
AW					
1W	804733	818205	2W	805045	816912
1E	806708	818017	2E	805960	816633
WL					
1W	800600	805450	7W	800400	811450
1E	801760	805450	7E	802400	811450
2W	800300	806450	8W	800800	812450
2E	801750	806450	8E	802900	812450
3W	799600	807450	9W	801500	813550
3E	801500	807450	9E	803120	813550
4W	799400	808450	10W	801880	814500
4E	801430	808450	10E	803700	814500
5W	799500	809450	11W	802860	815500
5E	801300	809450	12S/11E	803750	815500
6W	799800	810450	12N	803750	818500
6E	801400	810450			
SWL					
1S	802494	803961	6S	807467	801137
1N	802494	806174	6N	807467	808458
2S	803489	803280	7S	808553	800329
2N	803489	806720	7N	808553	807377
3S	804484	802509	8S	809547	800338
3N	804484	807048	8N	809547	807396
4S	805478	802105	9S	810542	800423
4N	805478	807556	9N	810542	807462
5S	806473	801250	10S	811446	801335
5N	806473	808458	10N	811446	809436

6.2.2 Land-based Theodolite Tracking Survey

Land-based theodolite tracking survey stations were set up at two locations, one facing east/south/west on the southern slopes of Sha Chau (SC), and the other facing north/northeast/northwest at Lung Kwu Chau (LKC). The stations (D and E) are depicted in **Figure 6.2** and shown in **Table 6.3** with position coordinates, height of station and approximate distance of consistent theodolite tracking capabilities for CWD.

Table 6.3: Land-based Theodolite Survey Station Details

Stations	Location	Geographical Coordinates	Station Height (m)	Approximate Tracking Distance (km)
D	Sha Chau (SC)	22° 20' 43.5" N 113° 53' 24.66" E	45.66	2
E	Lung Kwu Chau (LKC)	22° 22' 44.83" N 113° 53' 0.2" E	70.40	3

6.3 CWD Monitoring Methodology

6.3.1 Small Vessel Line-transect Survey

Small vessel line-transect surveys provided data for density and abundance estimation and other assessments using distance-sampling methodologies, specifically, line-transect methods.

The surveys involved small vessel line-transect data collection and have been designed to be similar to, and consistent with, previous surveys for the AFCD for their long-term monitoring of small cetaceans in Hong Kong. The survey was designed to provide systematic, quantitative measurements of density, abundance and habitat use.

As mentioned in **Section 6.2.1**, the transects covered NEL, NWL, AW, WL and SWL areas as proposed in the Manual, which are consistent with the AFCD long-term monitoring programme (except AW). There are two types of transect lines:

- Primary transect lines: the parallel and zigzag transect lines as shown in **Figure 6.1**; and
- Secondary transect lines: transect lines connecting between the primary transect lines and going around islands.

All data collected on both primary and secondary transect lines were used for analysis of sighting distribution, group size, activities including association with fishing boat, and mother-calf pairs. Only on-effort data collected under favourable conditions of Beaufort 0-3 and visibility of approximately 1200 m or beyond were used for analysis of the CWD encounter rates.

A 15-20m vessel with a flying bridge observation platform about 4 to 5m above water level and unobstructed forward view, and a team of three to four observers were deployed to undertake the surveys. Two observers were on search effort at all times when following the transect lines with a constant speed of 7 to 8 knots (i.e. 13 to 15 km per hour), one using 7X handheld binoculars and the other using unaided eyes and recording data.

During on-effort survey periods, the survey team recorded effort data including time, position (waypoints), weather conditions (Beaufort sea state and visibility) and distance travelled in each series with assistance of a handheld GPS device. The GPS device also continuously and automatically logged data including time, position (latitude and longitude) and vessel speed throughout the entire survey.

When CWDs were seen, the survey team was taken off-effort, the dolphins were approached and photographed for photo-ID information (using a Canon 7D [or similar] camera and long 300 mm+

telephoto lens), then followed until they were lost from view. At that point, the boat returned (off effort) to the survey line at the closest point after obtaining photo records of the dolphin group and began to survey on effort again.

Focal follows of dolphins would be used for providing supplementary information only where practicable (i.e. when individual dolphins or small stable groups of dolphins with at least one member that could be readily identifiable with unaided eyes during observations and weather conditions are favourable). These would involve the boat following (at an appropriate distance to minimise disturbance) an identifiable individual dolphin for an extended period of time, and collecting detailed data on its location, behaviour, response to vessels, and associates.

6.3.2 Photo Identification

CWDs can be identified by their unique features like presence of scratches, nick marks, cuts, wounds, deformities of their dorsal fin and distinguished colouration and spotting patterns.

When CWDs were observed, the survey team was taken off-effort, the dolphins were approached and photographed for photo-ID information (using a Canon 7D [or similar] camera and long 300 mm+ telephoto lens). The survey team attempted to photograph both sides of every single dolphin in the group as the colouration and spotting pattern on both sides may not be identical. The photos were taken at the highest available resolution and stored on Compact Flash memory cards for transferring into a computer.

All photos taken were initially examined to sort out those containing potentially identifiable individuals. These sorted-out images would then be examined in detail and compared to the CWD photo-identification catalogue established for 3RS Project during the baseline monitoring stage.

6.3.3 Land-based Theodolite Tracking Survey

Land-based theodolite tracking survey obtains fine-scale information on the time of day and movement patterns of the CWDs. A digital theodolite (Sokkia/Sokkisha Model DT5 or similar equipment) with 30-power magnification and 5-s precision was used to obtain the vertical and horizontal angle of each dolphin and vessel position. Angles were converted to geographic coordinates (latitude and longitude) and data were recorded using *Pythagoras* software, Version 1.2. This method delivers precise positions of multiple spatially distant targets in a short period of time. The technique is fully non-invasive, and allows for time and cost-effective descriptions of dolphin habitat use patterns at all times of daylight.

Three surveyors (one theodolite operator, one computer operator, and one observer) were involved in each survey. Observers searched for dolphins using unaided eyes and handheld binoculars (7X50). Theodolite tracking sessions were initiated whenever an individual CWD or group of CWDs was located. Where possible, a distinguishable individual was selected, based on colouration, within the group. The focal individual was then continuously tracked via the theodolite, with a position recorded each time the dolphin surfaced. In case an individual could not be positively distinguished from other members, the group was tracked by recording positions based on a central point within the group whenever the CWD surfaced. Tracking continued until animals were lost from view; moved beyond the range of reliable visibility (>1-3km, depending on station height); or environmental conditions obstructed visibility (e.g., intense haze, Beaufort sea state >4, or sunset), at which time the research effort was terminated. In addition to the tracking of CWD, all vessels that moved within 2-3km of the station were tracked, with effort made to obtain at least two positions for each vessel.

Theodolite tracking included focal follows of CWD groups and vessels. Priority was given to tracking individual or groups of CWD. The survey team also attempted to track all vessels moving within 1 km of the focal CWD.

6.4 Monitoring Results and Observations

6.4.1 Small Vessel Line-transect Survey

Survey Effort

Within this reporting period, two complete sets of small vessel line-transect surveys were conducted on the 7, 8, 13, 14, 16, 20, 21 and 22 February 2023 covering all transects in NEL, NWL, AW, WL and SWL survey areas for twice.

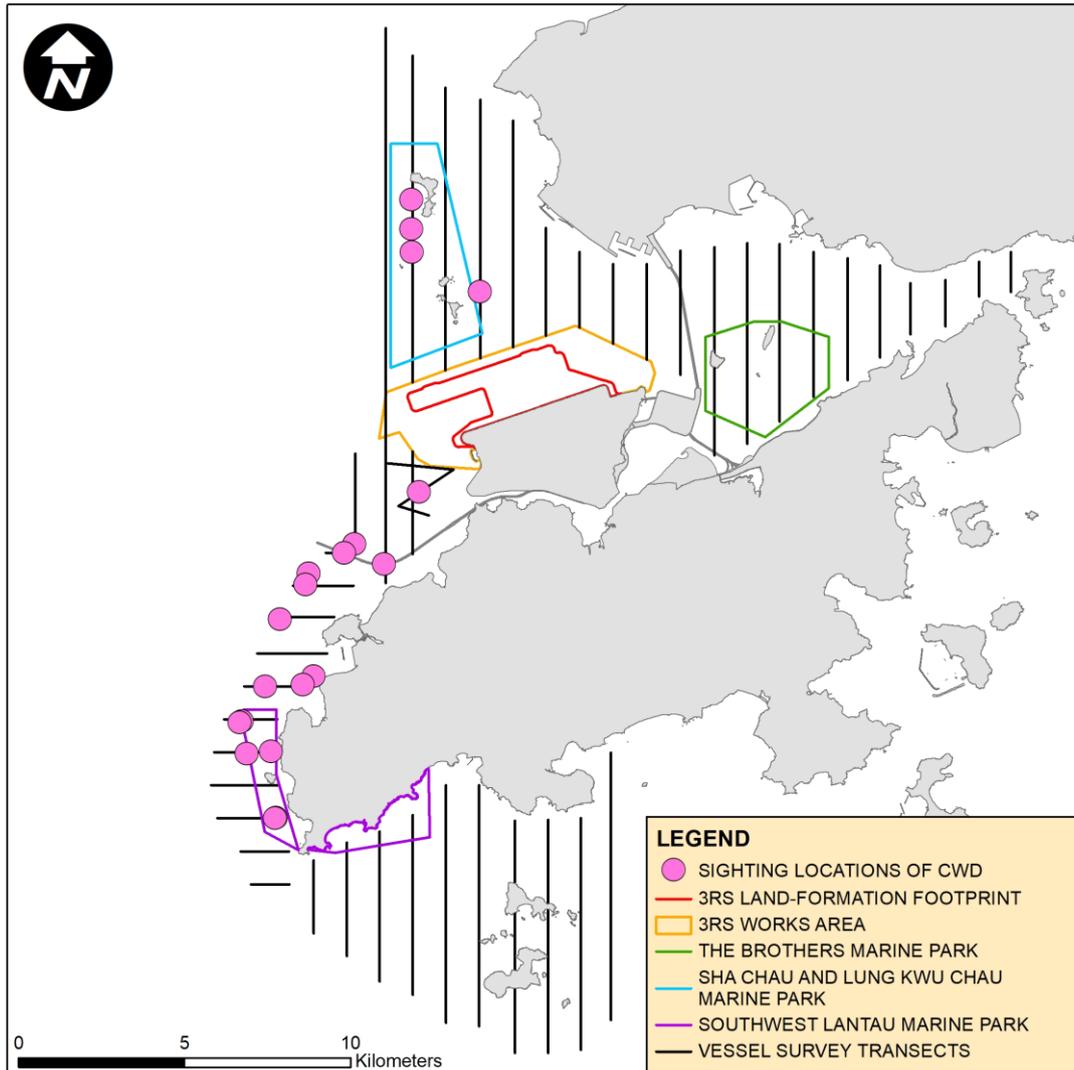
A total of around 446.54 km of survey effort was collected from these surveys and around 434.91 km of these survey effort was being conducted under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of the survey effort are given in **Appendix C**.

Sighting Distribution

In the current reporting period, 20 sightings with 72 dolphins were sighted. All these sightings were on-effort records under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of cetacean sightings are presented in **Appendix C**.

Distribution of all CWD sightings recorded in the current reporting period is illustrated in **Figure 6.3**. In NWL, four CWD groups were recorded around SC and LKC, while two CWD groups were recorded at the southwestern part of the survey area. In WL, CWD sightings were scattered across the survey area. There was no CWD sighting recorded in SWL and NEL survey areas during the reporting period.

Figure 6.3: Sightings Distribution of Chinese White Dolphins



Remarks: (1) Please note that there are 20 pink circles on the map indicating the sighting locations of CWDs. Some of them were very close to each other and therefore may appear overlapped on this distribution map. (2) Marine park excludes land area and the landward boundary generally follows the high water mark along the coastline.

Encounter Rate

Two types of dolphin encounter rates were calculated based on the vessel survey data. They included the number of dolphin sightings per 100 km survey effort (STG) and total number of dolphins per 100 km survey effort (ANI) in the whole survey area (i.e. NEL, NWL, AW, WL and SWL). In the calculation of dolphin encounter rates, only survey data collected under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility) were used. The formulae used for calculation of the encounter rates are shown below:

Encounter Rate by Number of Dolphin Sightings (STG)

$$STG = \frac{\text{Total No. of On – effort Sightings}}{\text{Total Amount of Survey Effort (km)}} \times 100$$

Encounter Rate by Number of Dolphins (ANI)

$$ANI = \frac{\text{Total No. of Dolphins from On – effort Sightings}}{\text{Total Amount of Survey Effort (km)}} \times 100$$

(Notes: Only data collected under Beaufort 3 or below condition were used)

In this reporting period, a total of around 434.91 km of survey effort was conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 20 on-effort sightings with 72 dolphins were sighted under such condition. Calculation of the encounter rates for the month are shown in **Appendix C**.

For the running quarter of the reporting period (i.e., from December 2022 to February 2023), a total of around 1291.64 km of survey effort was conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 33 on-effort sightings and a total number of 110 dolphins from on-effort sightings were obtained under such condition. Calculation of the running quarterly encounter rates are shown in **Appendix C**.

The STG and ANI of CWD in the whole survey area (i.e. NEL, NWL, AW, WL and SWL) during the reporting period and during the running quarter are presented in **Table 6.4** below and compared with the Action Level. Although the running quarterly encounter rate ANI falls below the Action Level, the Action Level is not triggered as the running quarterly STG remains above the Action Level.

Table 6.4: Comparison of CWD Encounter Rates of the Whole Survey Area with Action Levels

	Encounter Rate (STG)	Encounter Rate (ANI)
February 2023	4.60	16.56
Running Quarter from December 2022 to February 2023 ⁽¹⁾	2.55	8.52
Action Level	Running quarterly ⁽¹⁾ STG < 1.86 & ANI < 9.35	

Note: (1) Running quarterly encounter rates STG & ANI were calculated from data collected in the reporting period and the two preceding survey months, containing six sets of transect surveys for all monitoring areas. Action Level will be triggered if both STG and ANI fall below the criteria.

Group Size

In the current reporting period, 20 groups of 72 dolphins in total were sighted, and the average group size of CWDs was 3.6 dolphins per group. The number of CWD sightings with small group size (i.e. 1-2 dolphins) and CWD sightings with medium group size (i.e. 3-9 dolphins) were similar. There was one CWD sighting with large group size (i.e. 10 or more dolphins) which was recorded in NWL area in the current reporting period.

Activities and Association with Fishing Boats

There were four CWD sightings recorded engaging in foraging activities in the current reporting period in NWL and WL survey areas. One of these CWD sightings was observed associated with an operating purse seiner in WL.

Mother-calf Pair

In this reporting period, there were four sightings with the presences of mother-and-unspotted juvenile pair. Two of these sightings were recorded in NWL, while another two were recorded in WL.

6.4.2 Photo Identification

In the current reporting period, a total number of 43 different CWD individuals were identified for totally 49 times. A summary of photo identification works is presented in **Table 6.5**. Representative photos of these individuals are given in **Appendix C**.

Table 6.5: Summary of Photo Identification

Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area	Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area
NLMM001	20-Feb-23	1	NWL	SLMM031	21-Feb-23	5	WL
NLMM009	16-Feb-23	2	NWL		22-Feb-23	10	WL
		3	NWL	SLMM035	22-Feb-23	8	WL
NLMM013	21-Feb-23	1	WL			10	WL
NLMM015	16-Feb-23	3	NWL	SLMM037	22-Feb-23	10	WL
NLMM016	16-Feb-23	3	NWL	SLMM044	21-Feb-23	4	WL
NLMM020	16-Feb-23	1	NWL	SLMM058	21-Feb-23	2	WL
NLMM027	16-Feb-23	4	NWL		22-Feb-23	3	WL
	22-Feb-23	1	AW	SLMM071	16-Feb-23	1	NWL
NLMM040	16-Feb-23	1	NWL	SLMM073	22-Feb-23	6	WL
NLMM041	16-Feb-23	1	NWL	SLMM074	22-Feb-23	3	WL
NLMM052	16-Feb-23	2	NWL	WLMM007	22-Feb-23	6	WL
		3	NWL	WLMM028	16-Feb-23	1	NWL
NLMM055	21-Feb-23	1	WL	WLMM029	22-Feb-23	3	WL
NLMM060	16-Feb-23	1	NWL	WLMM056	22-Feb-23	7	WL
NLMM065	16-Feb-23	3	NWL	WLMM063	16-Feb-23	1	NWL
NLMM078	22-Feb-23	9	WL	WLMM065	22-Feb-23	7	WL
NLMM088	20-Feb-23	1	NWL	WLMM070	22-Feb-23	4	WL
SLMM002	22-Feb-23	7	WL	WLMM079	22-Feb-23	7	WL
SLMM003	22-Feb-23	7	WL	WLMM080	21-Feb-23	1	WL
SLMM007	22-Feb-23	6	WL	WLMM114	22-Feb-23	6	WL
SLMM010	22-Feb-23	9	WL	WLMM135	22-Feb-23	2	WL
SLMM014	22-Feb-23	10	WL	WLMM141	21-Feb-23	1	WL
SLMM025	21-Feb-23	4	WL	WLMM147	22-Feb-23	7	WL
SLMM030	16-Feb-23	1	NWL				

6.4.3 Land-based Theodolite Tracking Survey

Survey Effort

Land-based theodolite tracking surveys were conducted at SC on 15 February 2023 and at LKC on 23 February 2023, with a total of two days of land-based theodolite tracking survey effort accomplished in this reporting period. No CWDs were tracked neither off LKC Station nor SC

station during the reporting period. Information of survey effort and CWD groups are presented in **Table 6.6**. Details of the survey effort are presented in **Appendix C**.

Table 6.6: Summary of Survey Effort and CWD Group of Land-based Theodolite Tracking

Land-based Station	No. of Survey Sessions	Survey Effort (hh:mm)	No. of CWD Groups Sighted	CWD Group Sighting per Survey Hour
Lung Kwu Chau (LKC)	1	6:00	0	0
Sha Chau (SC)	1	6:00	0	0
TOTAL	2	12:00	0	0

6.5 Progress Update on Passive Acoustic Monitoring

Underwater acoustic monitoring using Passive Acoustic Monitoring (PAM) should be undertaken during land formation related construction works. Both C-POD and F-POD are considered as effective PAM devices in detecting CWD occurrence, and F-POD was the main PAM device deployed where feasible. During this reporting period, the F-POD was remained underwater and positioned at south of Sha Chau Island inside the SCLKCMP (**Figure 6.4**). The PAM device was last retrieved on 30 December 2022 and the next re-deployment is scheduled in early-March 2023. Acoustic data would be reviewed to give an indication of CWD occurrence patterns and anthropogenic noise information. Analysis would involve use of proprietary software for objective automated data analyses and experienced analysts to perform visual validation for assessment of dolphin detection. As the period of data collection and analysis takes about four months, PAM results could not be reported in monthly intervals but report for supplementing the annual CWD monitoring analysis.

6.6 Site Audit for CWD-related Mitigation Measures

During the reporting period, one dolphin observation station and teams of at least two dolphin observers were deployed by the contractor for continuous monitoring of the DEZ for seawall construction works in accordance with the DEZ Plan. Trainings for the proposed dolphin observers on the implementation of DEZ monitoring were provided by the ET, with a cumulative total of 704 individuals being trained and the training records kept by the ET. From the contractors' records, no dolphin or other marine mammals were observed within or around the silt curtain during this reporting month. These contractors' records were also audited by the ET during site inspection.

Audits of acoustic decoupling measures for construction vessels were carried out during weekly site inspection and the observations are summarised in **Section 7.1**. Audits of SkyPier high speed ferries route diversion and speed control and construction vessel management are presented in **Section 7.4** and **Section 7.5** respectively.

6.7 Timing of reporting CWD Monitoring Results

Detailed analysis of CWD monitoring results collected by small vessel line-transect survey will be provided in future quarterly reports. Detailed analysis of CWD monitoring results collected by land-based theodolite tracking survey and PAM will be provided in future annual reports after a larger sample size of data has been collected.

6.8 Summary of CWD Monitoring

Monitoring of CWD was conducted with two complete sets of small vessel line-transect surveys and two days of land-based theodolite tracking survey effort. The running quarterly encounter rates STG and ANI in the reporting period did not trigger the Action Level for CWD monitoring.

7 Environmental Site Inspection and Audit

7.1 Environmental Site Inspection

Site inspections of the construction works to audit the implementation of proper environmental pollution control and mitigation measures for the Project were conducted by ET and IEC on a weekly and bi-weekly basis, respectively. The weekly site inspection schedule of the construction works is provided in **Appendix B**. Besides, ad-hoc site inspections were also conducted by ET and IEC if environmental problems were identified, or subsequent to receipt of an environmental complaint, or as part of the investigation work. These site inspections provided a direct means to reinforce the specified environmental protection requirements and pollution control measures in construction sites.

During site inspections, environmental situation, status of implementation of pollution control and mitigation measures were observed. Environmental documents and site records, including waste disposal record, maintenance record of environmental equipment, and relevant environmental permit and licences, were also checked on site. Observations were recorded in the site inspection checklist and passed to the contractor together with the recommended mitigation measures where necessary in order to advise contractors on environmental improvement, awareness and on-site enhancement measures. The observations were made with reference to the following information during the site inspections:

- The EIA and EM&A requirements;
- Relevant environmental protection laws, guidelines, and practice notes;
- The EP conditions and other submissions under the EP;
- Monitoring results of EM&A programme;
- Works progress and programme;
- Proposal of individual works;
- Contract specifications on environmental protection; and
- Previous site inspection results.

Good site practices were observed in site inspections during the reporting period. Advice was given when necessary to ensure the construction workforce were familiar with relevant procedures, and to maintain good environmental performance on site. Regular toolbox talks on environmental issues were organised for the construction workforce by the contractors to ensure understanding and proper implementation of environmental protection and pollution control mitigation measures.

A summary of implementation status of the environmental mitigation measures for the construction phase of the Project during the reporting period is provided in **Appendix A**.

7.2 Landscape and Visual Mitigation Measures

Implementation of applicable landscape and visual mitigation measures (reference to the environmental protection measures CM1 – CM10 in **Appendix A**) was monitored in accordance with the Manual. All measures undertaken by both the contractor and the landscape contractor during the construction phase and first year of the operation phase shall be audited by a landscape architect, as a member of the ET, on a regular basis to ensure compliance with the intended aims of the measures. Site inspections shall be undertaken at least once every two months during the operation phase.

The implementation status of the environmental protection measures is summarized below in **Table 7.1**. Examples of landscape and visual mitigation measures are shown in **Table 7.2**. The

monitoring programme for detailed design, construction, establishment works and long term management (10 years) stages is presented in **Table 7.3**. Event and Action Plan for Landscape and Visual impacts is stated in **Table 7.4**.

Table 7.1: Landscape and Visual – Construction Phase Audit Summary

Landscape and Visual Mitigation Measures during Construction	Implementation Status	Relevant Contract(s) in the Reporting Period
CM1- The construction area and contractor’s temporary works areas shall be minimised to avoid impacts on adjacent landscape.	The implementation of mitigation measures was checked by ET during weekly site inspection and reported by the Contractors during the monthly Environmental Management Meetings. Implementation of the measures CM5, CM6 and CM7 by Contractors was observed.	All works contracts
CM2 – Reduction of construction period to practical minimum		
CM3 – Phasing of the construction stage to reduce visual impacts during the construction phase.		
CM4 – Construction traffic (land and sea) including construction plants, construction vessels and barges shall be kept to a practical minimum.		
CM5 – Erection of decorative mesh screens or construction hoardings around works areas in visually unobtrusive colours.		
CM6 – Avoidance of excessive height and bulk of site buildings and structures		
CM7 – Control of night-time lighting by hooding all lights and through minimisation of night working periods		
CM8 – All existing trees shall be carefully protected during construction. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in contractor’s works areas	Tree Protection Specifications were provided in the relevant Contract Specifications respectively for implementation by the Contractors under the Project. The Contractors’ performance on the implementation of the tree maintenance and protection measures were observed and checked by the ET weekly during construction period.	3302, 3508, 3801

Landscape and Visual Mitigation Measures during Construction	Implementation Status	Relevant Contract(s) in the Reporting Period
<p>CM9 – Trees unavoidably affected by the works shall be transplanted where practical. A detailed Tree Transplanting Specification shall be provided in the Contract Specification, if applicable. Sufficient time for necessary tree root and crown preparation periods shall be allowed in the project programme</p>	<p>Tree Transplanting Specifications were provided in the relevant Contract Specifications respectively for implementation by the Contractors under the Project where trees would unavoidably be affected by the construction works.</p> <p>The Contractors were required to submit Method Statements for tree transplanting prior to the transplanting works. Tree inspections were conducted by ET to check the tree transplanting works implemented by the Contractors on site.</p> <p>The Contractors' performance on the implementation of trees maintenance and protection measures on transplanted trees were observed and checked by the ET bi-monthly during the 12-month establishment period after the completion of each batch of transplanting works.</p> <p>Long term management of the transplanted trees was currently monitored by ET annually.</p>	3508, 3801
<p>CM10 – Land formation works shall be followed with advanced hydroseeding around taxiways and runways as soon as practical</p>	<p>The advanced hydroseeding works around taxiways and runways were partially completed at this stage and would resume in next phase.</p>	To be implemented

Table 7.2: Examples of Landscape and Visual Mitigation Measures in the Reporting Periods

		
<p>Erection of site hoardings around works area in unobtrusive colours (CM5)</p>	<p>Avoidance of excessive height and bulk of site buildings (CM6)</p>	<p>Control of night-time lighting using light hooding and minimisation of night working period (CM7)</p>
		
<p>General view of tree protection zone for retained tree (CM8)</p>	<p>General view of a transplanted tree (CM9)</p>	

In accordance with the Updated EM&A Manual, all existing trees shall be protected carefully during construction. Trees unavoidably affected by the works shall be transplanted where practical. In this reporting period, the cumulative total number of retained trees and transplanted trees under the Project remained unchanged (i.e. 49 and 26 respectively) comparing to the previous reporting period. Details of the retained trees, transplanted trees and to-be-transplanted trees under the Project are summarized in **Table 7.5**. Details of the retained trees are to be discussed in the Quarterly EM&A reports.

Table 7.3: Monitoring Programme for Landscape and Visual

Stage	Monitoring Task	Monitoring Report	Form of Approval	Frequency
Detailed Design	Checking of design works against the recommendations of the landscape and visual impact assessments within the EIA shall be undertaken during detailed design and tender stage, to ensure that they fulfil the intention of the mitigation measures. Any changes to the design, including design changes on site shall also be checked.	Report by AAHK / PM confirming that the design conforms to requirements of EP.	Approved by Client	At the end of the Detailed Design Phase
Construction	Checking of the contractor's operations during the construction period.	Report on Contractor's compliance, by ET	Counter signature of report by IEC	Weekly
Establishment Works	Checking of the planting works during the twelve-month Establishment Period after completion of each batch of transplanting works.	Report on Contractor's compliance, by ET	Counter signature of report by IEC	Every two months
Long Term Management (10 year)	Monitoring of the long-term management of the planting works in the period up to 10 years after completion of each batch of transplanting works.	Report on Compliance by ET or Maintenance Agency as appropriate	Counter signature of report by Management Agency	Annually

Table 7.4: Event and Action Plan for Landscape and Visual

Event Action Level	Action			
	ET	IEC	AAHK / PM	Contractor
Design Check	Check final design conforms to the requirements of EP and prepare report.	Check report. Recommend remedial design if necessary.	Undertake remedial design if necessary.	
Non-conformity on one occasion	Identify source. Inform IEC and AAHK / PM.	Check report. Check Contractor's working method.	Notify Contractor.	Amend working methods to prevent

Event Action Level	Action			
	Discuss remedial actions with IEC, AAHK / PM and Contractor. Monitor remedial actions until rectification has been completed.	Discuss with ET and Contractor on possible remedial measures. Advise AAHK / PM on effectiveness of proposed remedial measures. Check implementation of remedial measures.	Ensure remedial measures are properly implemented.	recurrence of non-conformity. Rectify damage and undertake additional action necessary.
Repeated Non-conformity	Identify source. Inform IEC and AAHK / PM. Increase monitoring frequency. Discuss remedial actions with IEC, AAHK / PM and Contractor. Monitor remedial actions until rectification has been completed. If non-conformity stops, cease additional monitoring.	Check monitoring report. Check Contractor's working method. Discuss with ET and Contractor on possible remedial measures. Advise AAHK / PM on effectiveness of proposed remedial measures. Supervise implementation of remedial measures.	Notify Contractor. Ensure remedial measures area properly implemented.	Amend working methods to prevent recurrence of non-conformity. Rectify damage and undertake additional action necessary.

Table 7.5: Summary of the Number of Retained, Transplanted and To-be-transplanted Trees in the Reporting Period

Existing					
Contract	Retain (nos.)	Transplanted (nos.)		To-be-transplanted (nos.)	
		Establishment Period	Maintenance Period		
3302	9	0	0	0	
3503	0	0	9	0	
3508 ⁽¹⁾	37	0	12	0	
3602	0	0	0	0	
3801	3	0	5 ⁽²⁾	0	
Grand Total	49	0	26	0	

Notes:

- (1) As some of the site areas have been handed over to Contract 3508, Contractor of Contract 3508 is currently managing the trees that are located within their site area. Existing trees to be managed by Contract 3508 is subject to change after initial tree surveys for each batch of site areas have been conducted by the Contractor.
- (2) Three transplanted trees (CT1194, CT1794 and CT1795) were subsequently felled after transplantation. Please refer to **Table 7.6** for details.

Summary of the updated transplanted trees and photos are presented in **Table 7.6**.

Table 7.6: Summary of the Transplanted Trees Updated in the Reporting Period

Tree ID	Transplant Date	Management Stage	Management Agency	Remarks
CT276	3 May 2018	<u>Long Term Management period</u> Jun 2019 – May 2028	Southern Landside Petrol Filling Station	Establishment Period was completed. Next inspection will be conducted in February 2024. Photos of the last inspection in February 2023 were shown in Table 7.7 .
CT1253	4 May 2018	<u>Long Term Management period</u> Jun 2019 – May 2028	Southern Landside Petrol Filling Station	
T835	22 Jan 2020	<u>Long Term Management period</u> Feb 2021 – Jan 2030	AAHK	Establishment Period was completed. Next inspection will be conducted in February 2024. Photos of the last inspection in February 2023 were shown in Table 7.7 .
T836	13 Dec 2019	<u>Long Term Management period</u> Feb 2021 – Jan 2030	AAHK	
T838	22 Jan 2020	<u>Long Term Management period</u> Feb 2021 – Jan 2030	AAHK	
T812	21 Dec 2020	<u>Long Term Management period</u> Jan 2022 – Dec 2031	AAHK	Establishment Period was completed. Next inspection will be conducted in December 2023. Photos of the last inspection in December 2022 can be referred to Table 7.7 of the Construction Phase Monthly EM&A Report No.84.
T814	20 Dec 2020	<u>Long Term Management period</u> Jan 2022 – Dec 2031	AAHK	
T815	15 Dec 2020	<u>Long Term Management period</u> Jan 2022 – Dec 2031	AAHK	
T829	18 Dec 2020	<u>Long Term Management period</u> Jan 2022 – Dec 2031	AAHK	
T830	14 Dec 2020	<u>Long Term Management period</u> Jan 2022 – Dec 2031	AAHK	
T831	19 Dec 2020	<u>Long Term Management period</u> Jan 2022 – Dec 2031	AAHK	
T1493	6 Jul 2021	<u>Long Term Management period</u> Aug 2022 – Jul 2031	Contract 3508	Establishment Period was completed. Next inspection will be conducted in July 2023. Photos of the last inspection in July 2022 can be referred to Table 7.7 of the Construction Phase Monthly EM&A Report No.79.
T1494	6 Jul 2021	<u>Long Term Management period</u> Aug 2022 – Jul 2031	Contract 3508	
T1495	10 Jul 2021	<u>Long Term Management period</u> Aug 2022 – Jul 2031	Contract 3508	
T1496	5 Jul 2021	<u>Long Term Management period</u> Aug 2022 – Jul 2031	Contract 3508	
T1497	5 Jul 2021	<u>Long Term Management period</u> Aug 2022 – Jul 2031	Contract 3508	
T1498	29 Jun 2021	<u>Long Term Management period</u> Aug 2022 – Jul 2031	Contract 3508	
T1499	29 Jun 2021	<u>Long Term Management period</u> Aug 2022 – Jul 2031	Contract 3508	
T1500	30 Jun 2021	<u>Long Term Management period</u> Aug 2022 – Jul 2031	Contract 3508	
T1501	30 Jun 2021	<u>Long Term Management period</u> Aug 2022 – Jul 2031	Contract 3508	
T1502	5 Jul 2021	<u>Long Term Management period</u>	Contract 3508	

Tree ID	Transplant Date	Management Stage	Management Agency	Remarks
		Aug 2022 – Jul 2031		
T1503	6 Jul 2021	<u>Long Term Management period</u> Aug 2022 – Jul 2031	Contract 3508	
T1504	24 Jun 2021	<u>Long Term Management period</u> Aug 2022 – Jul 2031	Contract 3508	
CT1194	4 May 2018	<u>Long Term Management period</u> Jun 2019 – May 2028	Southern Landside Petrol Filling Station	Establishment Period was completed. Uprooted and collapsed due to Typhoon Higos on 18 August 2020. Tree removal was conducted as recommended by tree specialist of the contractor of Southern Landside Petrol Filling Station.
CT1794	3 May 2018	<u>Long Term Management period</u> Jun 2019 – May 2028	AsiaWorld-Expo	Establishment Period was completed. The tree within the land parcel was acquired by the government for construction of emergency hospital to handle COVID19 pandemic at AsiaWorld-Expo. The tree was felled in late 2020.
CT1795	3 May 2018	<u>Long Term Management period</u> Jun 2019 – May 2028	AsiaWorld-Expo	Establishment Period was completed. The tree within the land parcel was acquired by the government for construction of emergency hospital to handle COVID19 pandemic at AsiaWorld-Expo. The tree was felled in late 2020.

Table 7.7: Photos of the Existing Transplanted Trees Inspected in this Reporting Month

Under 10-year Long-term Management:		
		
CT276	CT1253	T835
		
T836	T838	

7.3 Land Contamination Assessment

The Supplementary CAP was submitted to EPD pursuant to EP Condition 2.20. The CARs for Golf Course and T2 Emergency Power Supply Systems (EPSS) were submitted to EPD in accordance with EP Condition 1.9 and the Supplementary CAP in which no land contamination issues were identified. EPD has issued no further comment for aforesaid CARs. No leakage was found after the removal of underground fuel pipelines of T2 EPSS and all required additional photos have been submitted to EPD.

According to the approved supplementary CAP, there are 3 remaining locations where site re-appraisal / additional site investigation are proposed. Based on the latest construction information, there is no development programme for these locations at this stage. As such, the status of site re-appraisal/ additional site investigation shall be further updated upon latest development programme is available.

7.4 Audit of SkyPier High Speed Ferries

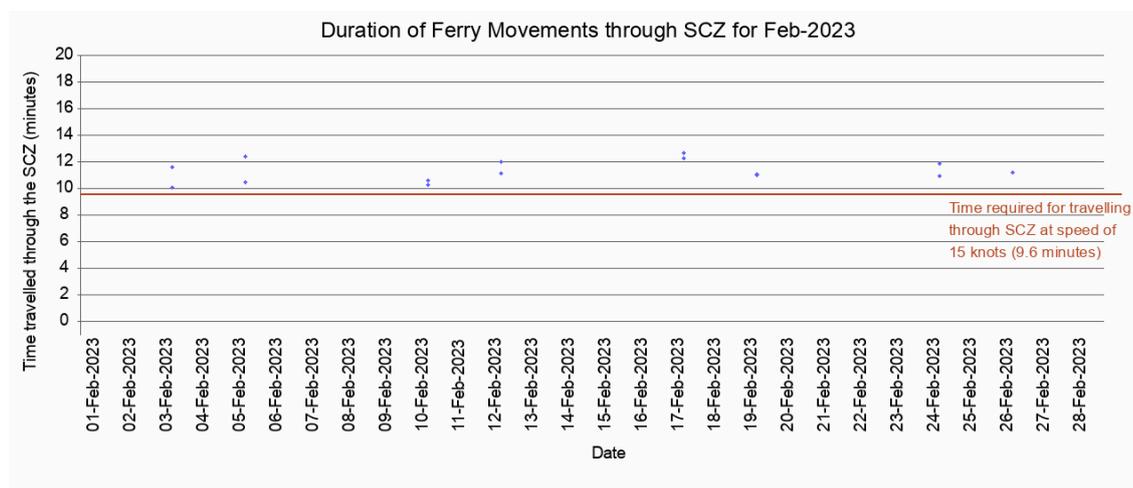
The Marine Travel Routes and Management Plan for High Speed Ferries of SkyPier (the SkyPier Plan) was submitted to the Advisory Council on the Environment for comment and subsequently submitted to and approved by EPD in November 2015 under EP Condition 2.10. The approved SkyPier Plan is available on the dedicated website of the Project. In the SkyPier Plan, AAHK has committed to implement the mitigation measure of requiring HSFs of SkyPier travelling between

HKIA and Zhuhai / Macau to start diverting the route with associated speed control across the area, i.e. Speed Control Zone (SCZ), with high CWD abundance. The route diversion and speed restriction at the SCZ have been implemented since 28 December 2015.

Key audit findings for the SkyPier HSF travelling to/from Macau against the requirements of the SkyPier Plan during the reporting period are summarised in **Table 7.8**. The daily movement of all SkyPier HSFs, including those not using the diverted route, in this reporting period (i.e., 22 to 25 daily movements) were within the maximum daily cap of 125 daily movements. Status of compliance with the annual daily average of 99 movements will be further reviewed in the Annual EM&A Report.

In total, 16 ferry movements between HKIA SkyPier and Macau were recorded in February 2023 and the data are presented in **Appendix F**. The time spent by the SkyPier HSF travelling through the SCZ in February 2023 was presented in **Figure 7.1**. It will take 9.6 minutes to travel through the SCZ when the SkyPier HSFs adopt the maximum allowable speed of 15 knots within the SCZ. **Figure 7.1** shows that the SkyPier HSF spent more than 9.6 minutes to travel through the SCZ.

Figure 7.1: Duration of the SkyPier HSFs travelling through the SCZ for February 2023



Note: Data above the red line indicated that the time spent by the SkyPier HSFs travelling through the SCZ is more than 9.6 minutes, which is in compliance with the SkyPier Plan.

A total of one ferry was recorded with minor route deviation on 26 February 2023. Notice was sent to the ferry operator and the case is under ET investigation by ET.

Table 7.8: Summary of Key Audit Findings against the SkyPier Plan

Requirements in the SkyPier Plan	1 to 28 February 2023
Total number of ferry movements recorded and audited for HSF to/from Macau	16
Use diverted route and enter / leave SCZ through Gate Access Points	1 deviation
Speed control in speed control zone	The average speed of all HSFs travelling through the SCZ ranged from 10.7 to 13.5 knots. All HSFs had travelled through the SCZ with average speed under 15 knots in compliance with the SkyPier Plan. The time used by HSFs to travel through SCZ is presented in Figure 7.1 .

Requirements in the SkyPier Plan

1 to 28 February 2023

A maximum daily cap of 125 movements for all SkyPier HSFs including those not using diverted route	22 to 25 daily movements
--	--------------------------

7.5 Audit of Construction and Associated Vessels

The updated MTRMP-CAV was approved by EPD on 31 May 2022 under EP Condition 2.9. The approved Plan is available on the dedicated website of the Project.

ET carried out the following actions during the reporting period:

- The MSS automatically recorded deviation cases such as speeding, entering no entry zone and not travelling through the designated gate. ET conducted checking to ensure the MSS records deviation cases accurately.
- Deviations such as speeding in the works area, entered no entry zone, and entering from non-designated gates were identified. All the concerned contractors were reminded to comply with the requirements of the MTRMP-CAV during the bi-weekly Construction Traffic Control Centre (CTCC) audit.
- Three-month rolling programmes (one month record and three months forecast) for construction vessel activities were received from the contractors in order to help maintain the number of construction and associated vessels on site to a practicable minimal level.

7.6 Implementation of Dolphin Exclusion Zone

The DEZ Plan was submitted in accordance with EP Condition 3.1 (v) requirement and Section 10.3 of the Manual, and approved in April 2016 by EPD. The ET checked the contractors' dolphin sighting record and relevant records to audit the implementation of DEZ and there was no finding.

During the reporting period, there was no dolphin sightings within the DEZ.

7.7 Status of Submissions under Environmental Permits

The current status of submissions under the EP up to the reporting period is presented in **Table 7.9**.

Table 7.9: Status of Submissions under Environmental Permit

EP Condition	Submission	Status
2.1	Complaint Management Plan	
2.4	Management Organizations	
2.5	Construction Works Schedule and Location Plans	
2.7	Marine Park Proposal	
2.8	Marine Ecology Conservation Plan	
2.9	Marine Travel Routes and Management Plan for Construction and Associated Vessels	
2.10	Marine Travel Routes and Management Plan for High Speed Ferries of SkyPier	Accepted / approved by EPD
2.11	Marine Mammal Watching Plan	
2.12	Coral Translocation Plan	
2.13	Fisheries Management Plan	
2.14	Egretty Survey Plan	
2.15	Silt Curtain Deployment Plan	
2.16	Spill Response Plan	
2.17	Detailed Plan on Deep Cement Mixing	

EP Condition	Submission	Status
2.18	Landscape & Visual Plan	
2.19	Waste Management Plan	
2.20	Supplementary Contamination Assessment Plan	
3.1	Updated EM&A Manual	
3.4	Baseline Monitoring Reports	

7.8 Compliance with Other Statutory Environmental Requirements

During the reporting period, environmental related licenses and permits required for the construction activities were checked. No non-compliance with environmental statutory requirements was recorded. The latest statuses of the environmental licenses and permits in the reporting period are presented in **Appendix D**.

7.9 Analysis and Interpretation of Complaints, Notification of Summons and Status of Prosecutions

7.9.1 Complaints

Complaint received in the previous reporting period

A complaint regarding dust nuisance at the Western Quay was received on 19 December 2022. The case was investigated by ET in accordance with the Manual and the Complaint Management Plan of the Project. The ET recognized the location, identified related contractors and requested them to provide information regarding the complaint. According to the information received, an alarm fault led to the dust nuisance incident and the system was rectified subsequently. During post-incident inspections, no dust nuisance was observed and that the faulty flashlight of the related alarm system was repaired. The ET would continue to remind all 3RS contractors to properly implement dust mitigation measures in their works sites in accordance with the implementation schedule in the Updated EM&A Manual. Hence, the case was considered closed.

7.9.2 Notifications of Summons or Status of Prosecution

Neither notification of summons nor prosecution was received during the reporting period.

7.9.3 Cumulative Statistics

Cumulative statistics on complaints, notifications of summons and status of prosecutions are summarised in **Appendix E**.

8 Future Key Issues and Other EIA & EM&A Issues

8.1 Construction Programme for the Coming Reporting Period

Key activities anticipated in the next reporting period for the Project will include the following:

Reclamation Works:

Contract 3206 Main Reclamation Works

- Backfilling works.

Airfield Works:

Contract 3302 Eastern Vehicular Tunnel Advance Works

- Construction of tunnel structure;
- Pipe and drainage diversion works;
- Utilities and backfilling works; and
- Stockpiling.

Contract 3305 Airfield Ground Lighting System

- Enhanced vehicular warning light hardware installation; and
- Rectification work for airfield ground lighting system.

Contract 3306 Observation Facility Control System Supporting Interim 2RS and 3RS

- Equipment installation.

Contract 3307 Fire Training Facility

- Architectural, builder's and finishing works; and
- Drainage and utilities works;

Contract 3308 Foreign Object Debris Detection System

- Rectification work for handover sensor system.

Contract 3310 North Runway Modification Works

- Architectural, builder's work and finishing works;
- Excavation works;
- Seawall construction;
- Construction of stormwater drainage;
- Construction of walls and slabs;
- Jet grouting and asphalt paving works;
- Installation of pipe piles; and
- Backfilling works.

Third Runway Concourse

Contract 3403 New Integrated Airport Centres Building and Civil Works

- Roofing installation of covered walkway; and
- Demolition works.

Contract 3404 Integrated Airport Control System

- System maintenance.

Contract 3405 Third Runway Concourse Foundation and Substructure Works

- Bored piling;
- Structure works;
- Excavation; and
- Road formation.

Contract 3408 Third Runway Concourse and Apron Works

- Building services and Architectural, builder's work and finishing Works;
- Foundation Works for Concrete Batching Plant;
- Reinforced concrete works; and
- Excavation.

Terminal 2 Expansion:

Contract 3508 Terminal 2 Expansion Works

- Bridge demolition, hoarding erection;
- Viaduct Pier and temporary road construction;
- Pump station and electrical station works; and
- Architectural, builder's work and finishing works.

Automated People Mover (APM) and Baggage Handling System (BHS):

Contract 3601 New Automated People Mover System (TRC Line)

- Guidebeam installation.

Contract 3602 Existing APM System Modification Works

- Erection and fixing of power rail; and
- Concrete plinth construction.

Contract 3603 Baggage Handling System (BHS)

- BHS installation.

Construction Support (Facilities):

Contract 3721 Construction Support Infrastructure Works

- Watermain connection works;
- Sewage phasing works for fire training facility.

Airport Support Infrastructure:

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Backfilling works;
- Wall construction.

Contract 3802 APM and BHS Tunnels and Related Works

- Excavation and lateral supports;
- Box Culvert Construction;
- Tunnel construction;
- Electrical and mechanical works; and
- Architectural, builder's work and finishing works.

Contract 3804 East and Landside Fire Stations

- Site setup and formation works;
- Preparation works of bored pile;
- Excavation and concreting; and

- Ground Investigation works.

Construction Support (Services / Licenses):

Contract 3901A Concrete Batching Facility

- Operation of concrete batching plant and material conveyor belt.

Contract 3901B Concrete Batching Facility

- Operation of concrete batching plant and material conveyor belt.

Contract 3908 Quay Management Services

- Provision of services of site management and logistic control of 3RS quays; and
- Provision of flat top barge and vehicle delivery services between the launching point in Hong Kong and 3RS quays.

Contract 3913 Asphalt Batching Plant

- Operation of asphalt batching plant.

8.2 Key Environmental Issues for the Coming Reporting Period

The key environmental issues for the Project in the coming reporting period expected to be associated with the construction activities include:

- Generation of dust from construction works and stockpiles;
- Noise from operating equipment and machinery on-site;
- Generation of site surface runoffs and wastewater from activities on-site;
- DEZ monitoring for seawall construction;
- Implementation of MMWP for silt curtain deployment;
- Sorting, recycling, storage and disposal of general refuse and construction waste;
- Reuse of treated marine sediments from piling and excavation works;
- Management of chemicals and avoidance of oil spillage on-site; and
- Acoustic decoupling measures for equipment on marine vessels.

The implementation of required mitigation measures by the contractors will be monitored by the ET.

8.3 Monitoring Schedule for the Coming Reporting Period

A tentative schedule of the planned environmental monitoring work in the next reporting period is provided in **Appendix B**.

8.4 Review of the Key Assumptions Adopted in the EIA Report

With reference to Appendix E of the Manual, it is noted that the key assumptions adopted in approved EIA report for the construction phase are still valid and no major changes are involved. The environmental mitigation measures recommended in the approved EIA Report remain applicable and shall be implemented in undertaking construction works for the Project.

9 Conclusion and Recommendation

The key activities of the Project carried out in the reporting period are located in reclamation areas and existing airport island respectively. Works in the reclamation areas included seawall construction, filling and land-based ground improvement work, together with taxiways, concourse and associated works. Land-based works on existing airport island involved mainly airfield works, Terminal 2 expansion works, modification and tunnel work for Automated People Mover (APM) and Baggage Handling System (BHS), and preparation work for utilities, with activities include road and drainage works, cable ducting, demolition, piling, and excavation works.

All the monitoring works for construction dust, construction noise, water quality, construction waste, landscape & visual, and CWD were conducted during the reporting period in accordance with the Manual.

Monitoring results of construction dust, construction noise, construction waste and CWD did not trigger the corresponding Action and Limit Levels during the reporting period.

The water quality monitoring results for all parameters, except SS, obtained during the reporting period were within the corresponding Action and Limit Levels stipulated in the EM&A programme. Relevant investigation and follow-up actions will be conducted according to the EM&A programme if the corresponding Action and Limit Levels are triggered. For SS, one of the testing results triggered the relevant Action Level, and the corresponding investigation was conducted accordingly. The investigation findings concluded that the case was not related to the Project. To conclude, the construction activities in the reporting period did not introduce adverse impact to all water quality sensitive receivers.

Weekly site inspections of the construction works were carried out by the ET to audit the implementation of proper environmental pollution control and mitigation measures for the Project. Bi-weekly site inspections were also conducted by the IEC. Site inspection findings were recorded in the site inspection checklists and provided to the contractors to follow up.

On the implementation of the SkyPier Plan, the daily movements of all SkyPier HSFs in the reporting period, including those not using the diverted route, were in the range of 22 to 25 daily movements, which are within the maximum daily cap of 125 daily movements. A total of 16 HSFs movements under the SkyPier Plan were recorded in the reporting period. The average speed of all HSFs travelling through the SCZ ranged from 10.7 to 13.5 knots. All HSFs had travelled through the SCZ with average speed under 15 knots in compliance with the SkyPier Plan. One deviation from the diverted route in February 2023 was recorded in the HSF monitoring and is under investigation by the ET. In summary, the ET and IEC have audited the HSF movements against the SkyPier Plan and conducted follow up investigations or actions accordingly.

On the implementation of MTRMP-CAV, the MSS automatically recorded the deviation case such as speeding, entering no entry zone and not travelling through the designated gates. ET conducted checking to ensure the MSS records all deviation cases accurately. Deviations including speeding in the works area, entered no entry zone, and entry from non-designated gates were reviewed by ET. All the concerned captains were reminded by the contractor's CTCC representative to comply with the requirements of the MTRMP-CAV. The ET reminded contractors that all vessels shall avoid entering the no-entry zone, in particular the Brothers Marine Park and the Sha Chau & Lung Kwu Chau Marine Park. Three-month rolling programmes for construction vessel activities, which ensures the proposed vessels are necessary and minimal through good planning, were also received from contractors.

Figures

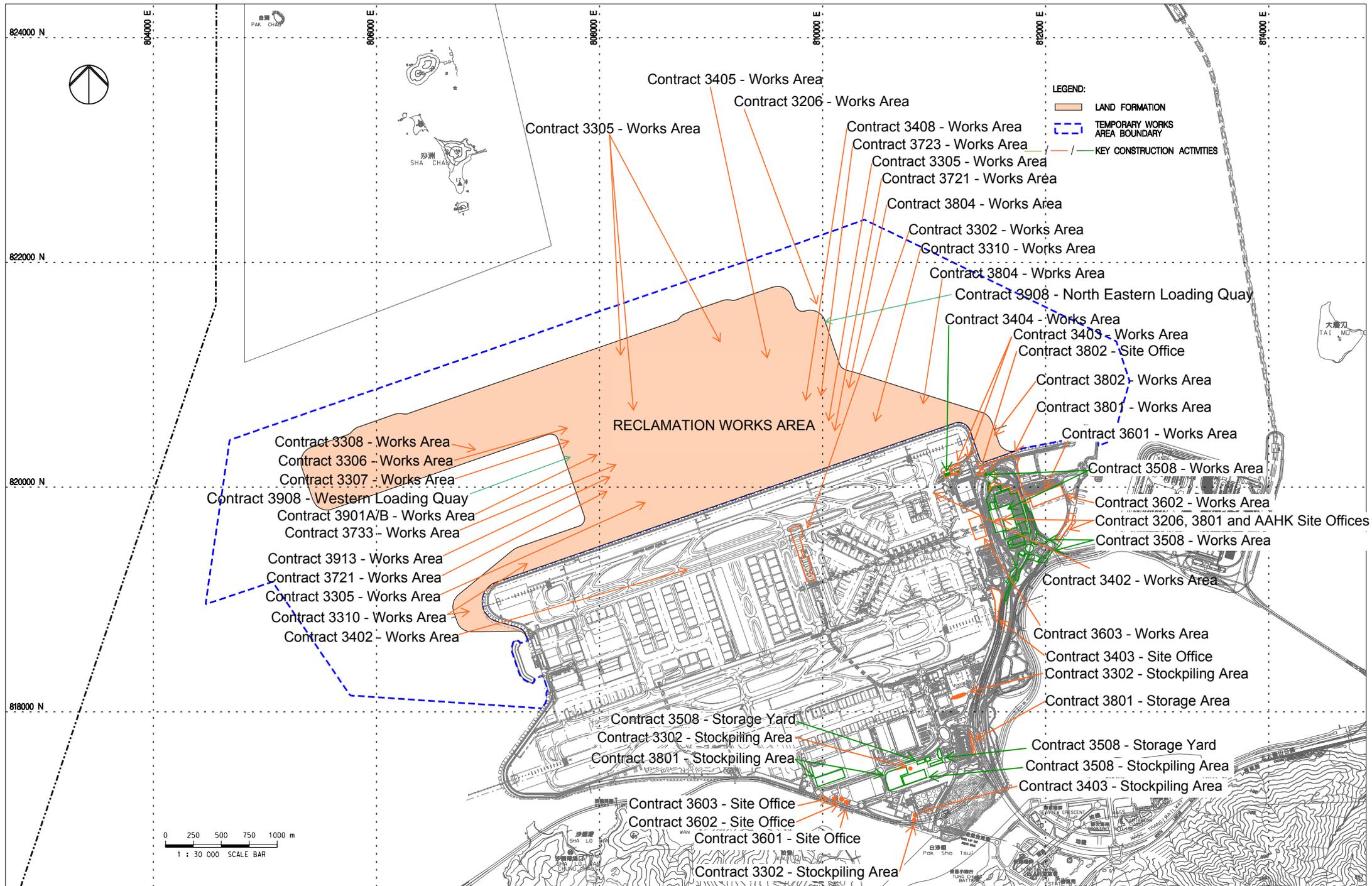


FIGURE 1.1 LOCATIONS OF KEY CONSTRUCTION ACTIVITIES

Note: The locations are for indicative purpose. The actual construction work locations are in accordance with the construction work programme.

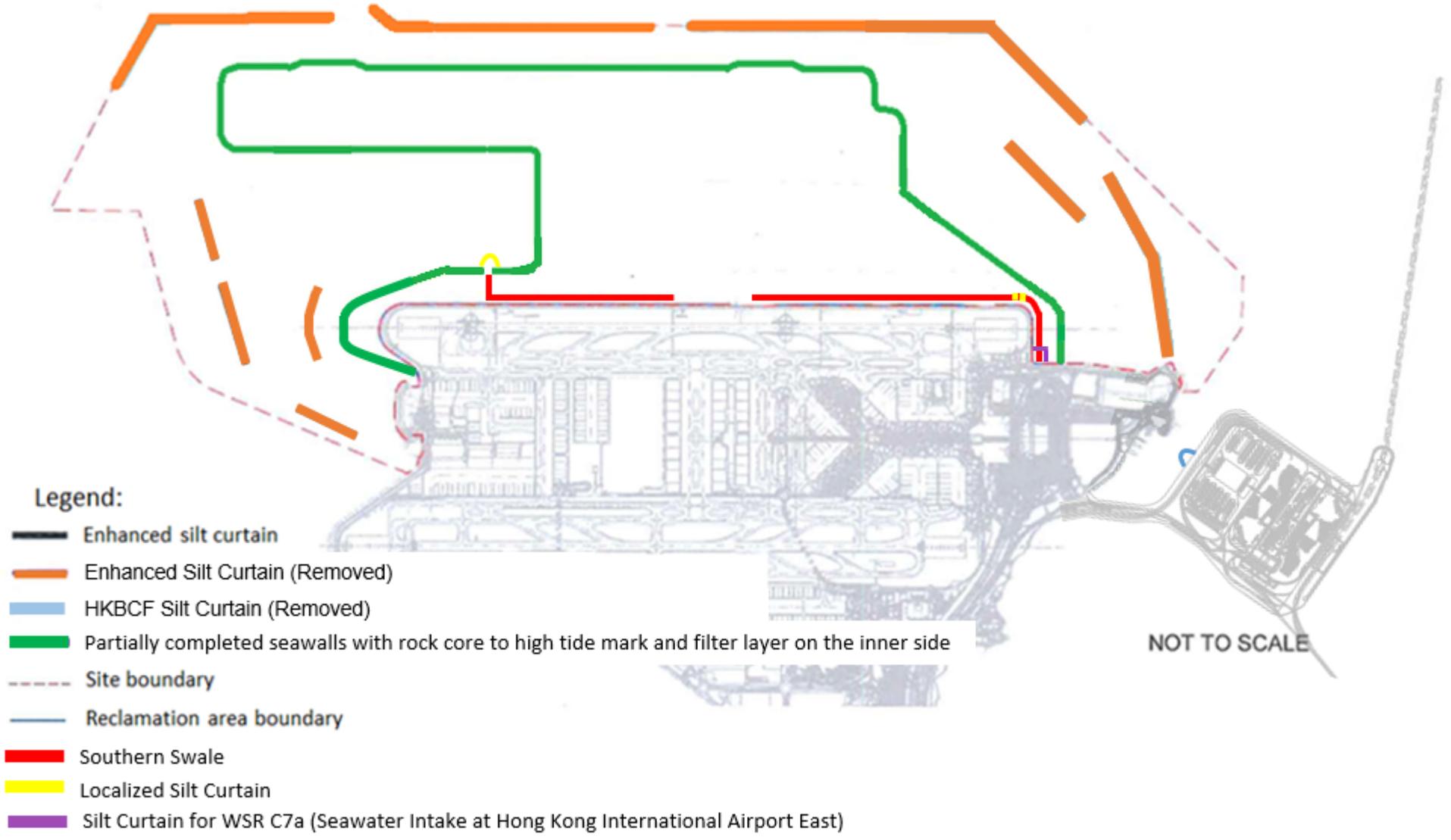


Figure 1.2 Latest Layout of the Silt Curtain with 3RS Reclamation Land Area

Note: The locations are for indicative purpose. The actual construction work locations are in accordance with the construction work programme.



80000 E

80000 E

81000 E

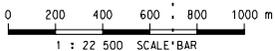
82000 E

84000 E

82000 N

81800 N

- LEGEND:
- LAND FORMATION
 - NOISE MONITORING STATION (UPDATED EM&A MANUAL)
 - AIR QUALITY MONITORING STATION (UPDATED EM&A MANUAL)
 - CHEK LAP KOK WIND STATION



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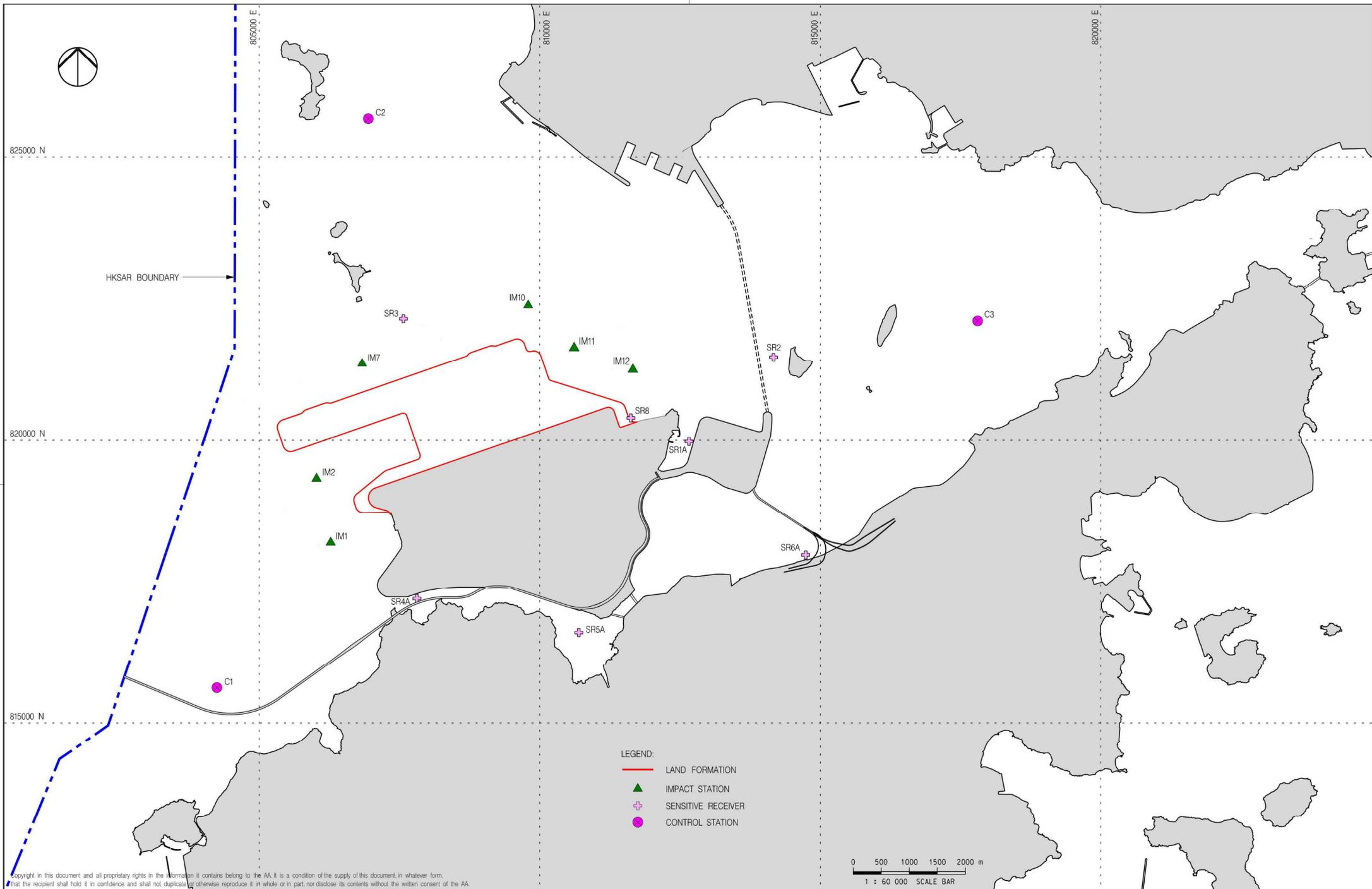
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B	29JAN16	GENERAL REVISION	RO
C	11FEB16	GENERAL REVISION	RO
D	29OCT18	GENERAL REVISION	SH



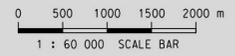
Title
LOCATIONS OF AIR AND NOISE MONITORING STATIONS AND CHEK LAP KOK WIND STATION

Consultant's Signatures for Approval		Date
Design	TK	29OCT18
Checkers	TK	29OCT18
Approver	EC	29OCT18

EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM	
Drawing No.	Scale at A3 1 : 22500
FIGURE 2.1	Rev. D

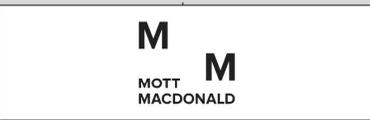


- LEGEND:
- LAND FORMATION
 - ▲ IMPACT STATION
 - + SENSITIVE RECEIVER
 - CONTROL STATION



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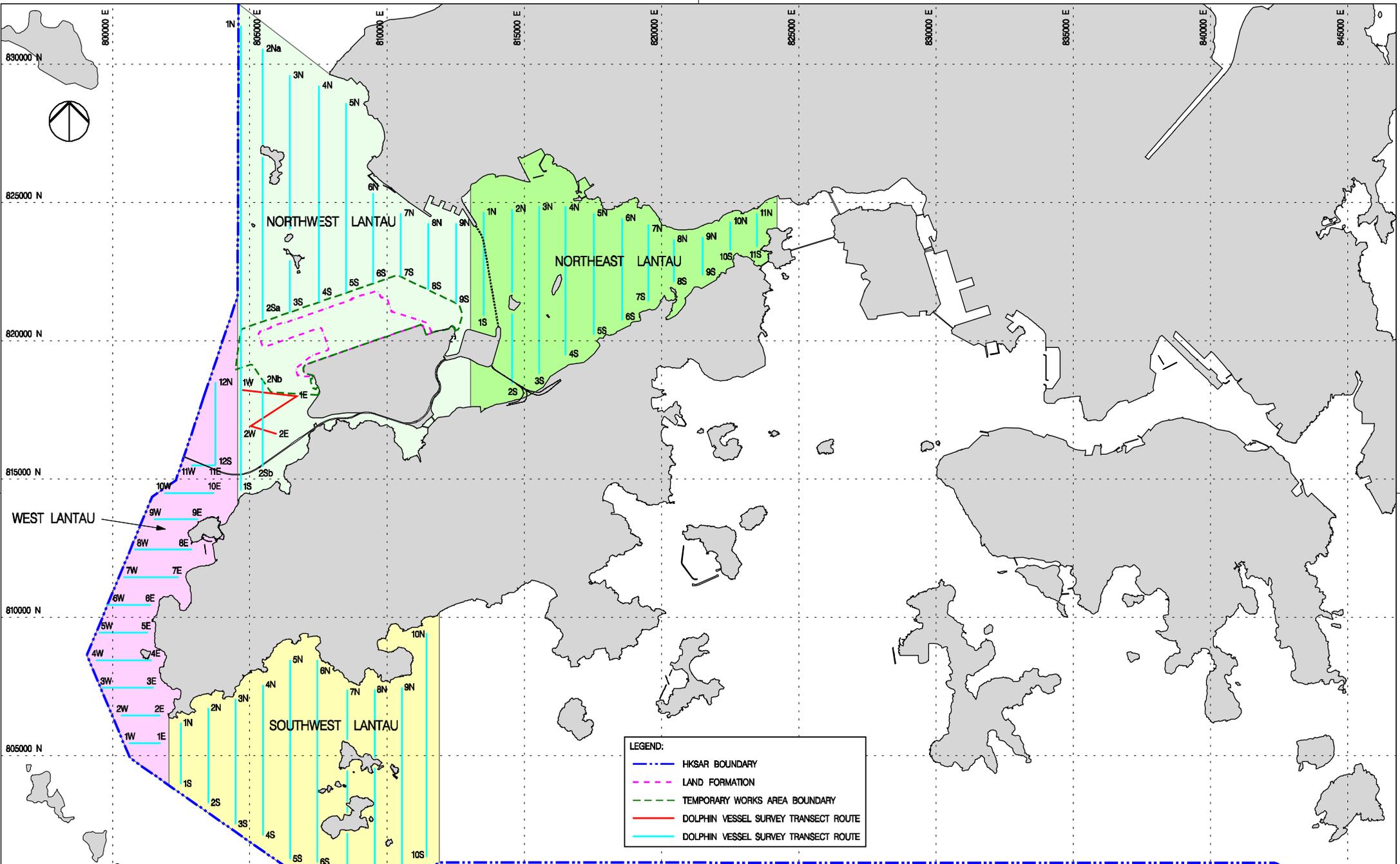
Rev.	Date	Description	Checked
A	21AUG19	FIRST ISSUE	VL



Title
WATER QUALITY MONITORING STATIONS

Consultant's Signatures for Approval		Date
Design	DC	21AUG19
Checkers	DC / TK	21AUG19
Approver	EC	21AUG19

EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM	
Drawing No.	Scale at A3 1 : 60000
FIGURE 4.1	Rev. A



Remarks: Transects for operation phase monitoring subject to refinement based on the actual boundaries for the extension of Hong Kong International Airport Approach Areas (HKIAAA) and 3RS Marine Park

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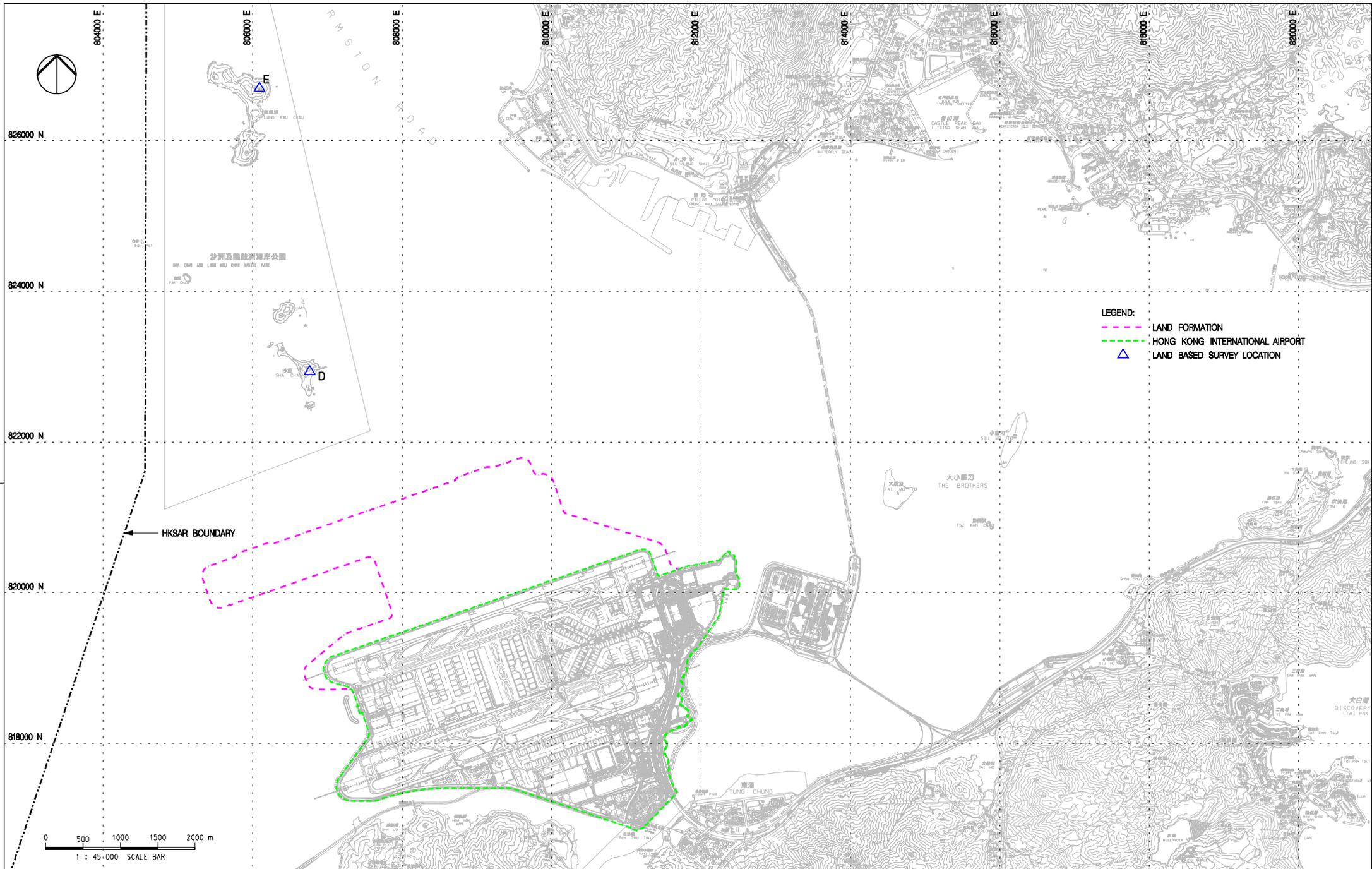
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C	06FEB17	GENERAL REVISION	JT
D	01MAR17	GENERAL REVISION	JT
E	28OCT18	GENERAL REVISION	SH
F	04APR19	GENERAL REVISION	SH



**VESSEL BASED DOLPHIN MONITORING
TRANSECTS IN CONSTRUCTION,
POST-CONSTRUCTION AND OPERATION PHASES**

Consultant's Signatures for Approval		Date
Design	JC	04APR19
Checkers	JC / TK	04APR19
Approver	EC	04APR19

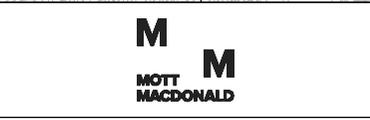
EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM	
Drawing No.	Scale at A3 1 : 125000
FIGURE 6.1	Rev. F



- LEGEND:**
- LAND FORMATION
 - HONG KONG INTERNATIONAL AIRPORT
 - △ LAND BASED SURVEY LOCATION

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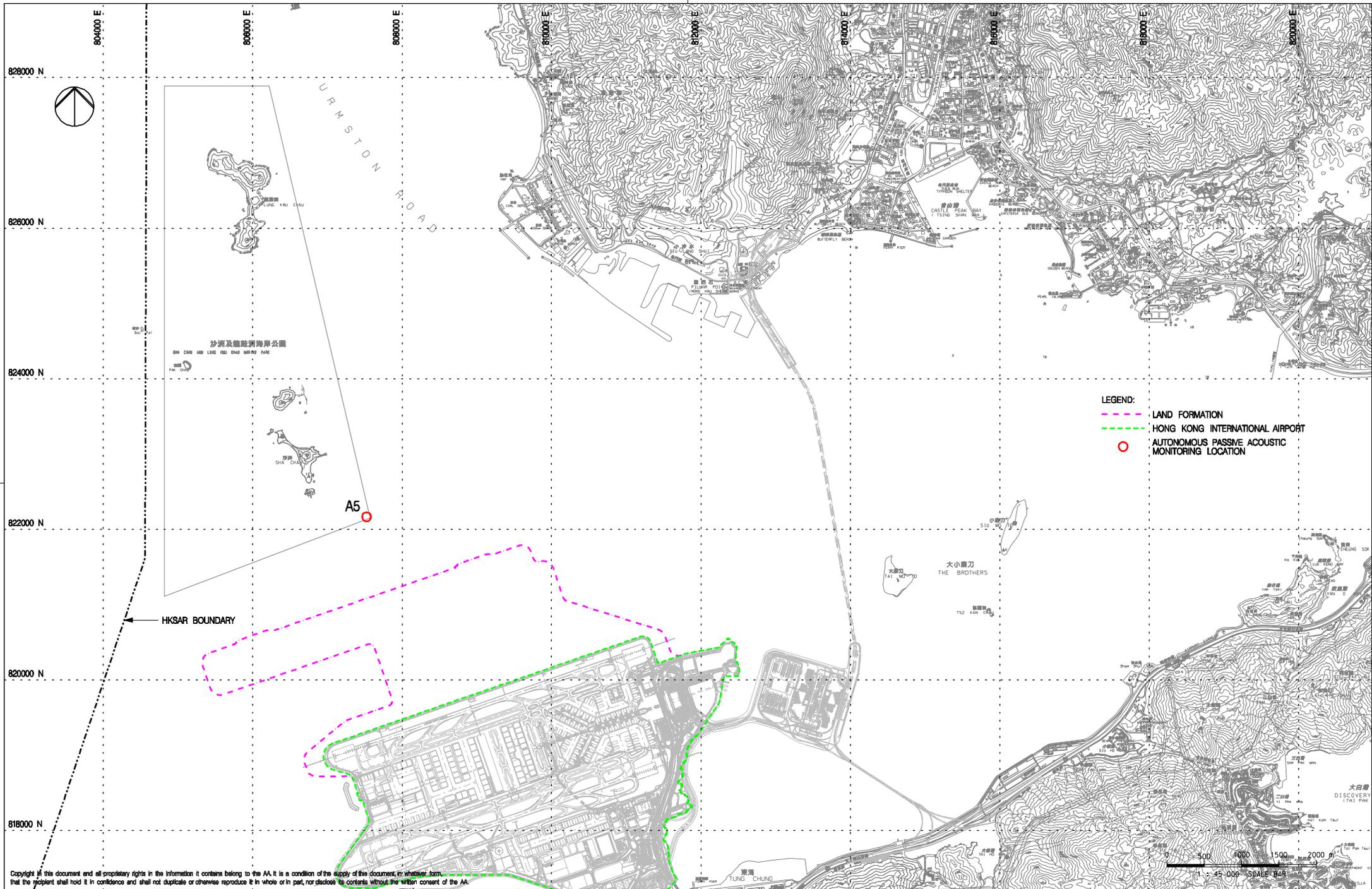
Rev.	Date	Description	Checked
A	02DEC15	FIRST ISSUE	JC
B	08FEB17	GENERAL REVISION	JC
C	29OCT18	GENERAL REVISION	SH



Title
**LAND BASED DOLPHIN MONITORING
 IN BASELINE AND CONSTRUCTION PHASES**

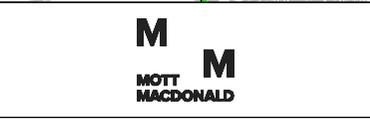
Consultant's Signatures for Approval		Date
Design	JC	29OCT18
Checkers	JC / TK	29OCT18
Approver	EC	29OCT18

EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM		Scale at A3
Drawing No.	FIGURE 6.2	1 : 45000
Rev.	C	



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A	29AUG17	FIRST ISSUE	JT
B	10OCT17	GENERAL REVISION	PL
C	29OCT18	GENERAL REVISION	SH



Title
LOCATION FOR AUTONOMOUS PASSIVE ACOUSTIC MONITORING

Consultant's Signatures for Approval		Date
Design	JC	29OCT18
Checkers	JC / TK	29OCT18
Approver	EC	29OCT18

EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM
Drawing No.
FIGURE 6.4
Scale at A3
1:45000
Rev. C

Appendix A. Environmental Mitigation Implementation Schedule (EMIS) for Construction Phase

Environmental Mitigation Implementation Schedule (EMIS) for Construction Phase

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
Air Quality Impact – Construction Phase					
5.2.6.2	2.1	-	Dust Control Measures <ul style="list-style-type: none"> Water spraying for 12 times a day or once every two hours for 24-hour working at all active works area. 	Within construction site / Duration of the construction phase	I
5.2.6.3	2.1	-	<ul style="list-style-type: none"> Covering of at least 80% of the stockpiling area by impervious sheets. Water spraying of all dusty materials immediately prior to any loading transfer operation so as to keep the dusty material wet during material handling. 	Within construction site / Duration of the construction phase	I
5.2.6.4	2.1	-	Dust control practices as stipulated in the Air Pollution Control (Construction Dust) Regulation should be adopted. These practices include: Good Site Management <ul style="list-style-type: none"> Good site management is important to help reducing potential air quality impact down to an acceptable level. As a general guide, the Contractor should maintain high standard of housekeeping to prevent emission of fugitive dust. Loading, unloading, handling and storage of raw materials, wastes or by-products should be carried out in a manner so as to minimise the release of visible dust emission. Any piles of materials accumulated on or around the work areas should be cleaned up regularly. Cleaning, repair and maintenance of all plant facilities within the work areas should be carried out in a manner minimising generation of fugitive dust emissions. The material should be handled properly to prevent fugitive dust emission before cleaning. 	Within construction site / Duration of the construction phase	I
			Disturbed Parts of the Roads <ul style="list-style-type: none"> Each and every main temporary access should be paved with concrete, bituminous hardcore materials or metal plates and kept clear of dusty materials; or Unpaved parts of the road should be sprayed with water or a dust suppression chemical so as to keep the entire road surface wet. 	Within construction site / Duration of the construction phase	I
			Exposed Earth <ul style="list-style-type: none"> Exposed earth should be properly treated by compaction, hydroseeding, vegetation planting or seating with latex, vinyl, bitumen within six months after the last construction activity on the site or part of the site where the exposed earth lies. 	Within construction site / Duration of the construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<p>Loading, Unloading or Transfer of Dusty Materials</p> <ul style="list-style-type: none"> All dusty materials should be sprayed with water immediately prior to any loading or transfer operation so as to keep the dusty material wet. 	Within construction site / Duration of the construction phase	
			<p>Debris Handling</p> <ul style="list-style-type: none"> Any debris should be covered entirely by impervious sheeting or stored in a debris collection area sheltered on the top and the three sides; and Before debris is dumped into a chute, water should be sprayed so that it remains wet when it is dumped. 	Within construction site / Duration of the construction phase	
			<p>Transport of Dusty Materials</p> <ul style="list-style-type: none"> Vehicle used for transporting dusty materials/spoils should be covered with tarpaulin or similar material. The cover should extend over the edges of the sides and tailboards. 	Within construction site / Duration of the construction phase	
			<p>Wheel washing</p> <ul style="list-style-type: none"> Vehicle wheel washing facilities should be provided at each construction site exit. Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels. 	Within construction site / Duration of the construction phase	
			<p>Use of vehicles</p> <ul style="list-style-type: none"> The speed of the trucks within the site should be controlled to about 10km/hour in order to reduce adverse dust impacts and secure the safe movement around the site; Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels; and Where a vehicle leaving the construction site is carrying a load of dusty materials, the load should be covered entirely by clean impervious sheeting to ensure that the dusty materials do not leak from the vehicle. 	Within construction site / Duration of the construction phase	
			<p>Site hoarding</p> <ul style="list-style-type: none"> Where a site boundary adjoins a road, street, service lane or other area accessible to the public, hoarding of not less than 2.4m high from ground level should be provided along the entire length of that portion of the site boundary except for a site entrance or exit. 	Within construction site / Duration of the construction phase	
5.2.6.5	2.1	-	<p>Best Practices for Concrete Batching Plant</p> <p>The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Cement Works (Concrete Batching Plant) BPM 3/2 as well as in the future Specified Process licence should be adopted. The best practices are recommended to be applied to both the land based and floating concrete batching plants. Best practices include:</p> <p>Cement and other dusty materials</p>	Within Concrete Batching Plant / Duration of the construction phase	

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> ▪ The loading, unloading, handling, transfer or storage of cement, pulverised fuel ash (PFA) and/or other equally dusty materials shall be carried in a totally enclosed system acceptable to EPD. All dust-laden air or waste gas generated by the process operations shall be properly extracted and vented to fabric filtering system to meet the required emission limit; ▪ Cement, PFA and/or other equally dusty materials shall be stored in storage silo fitted with audible high-level alarms to warn of over-filling. The high-level alarm indicators shall be interlocked with the material filling line such that in the event of the silo approaching an overfilling condition, an audible alarm will operate, and after 1 minute or less the material filling line will be closed; ▪ Vents of all silos shall be fitted with fabric filtering system to meet the required emission limit; ▪ Vents of cement/PFA weighing scale shall be fitted with fabric filtering system to meet the required emission limit; and ▪ Seating of pressure relief valves of all silos shall be checked, and the valves re-seated if necessary, before each delivery. 		
			<p>Other raw materials</p> <ul style="list-style-type: none"> ▪ The loading, unloading, handling, transfer or storage of other raw materials which may generate airborne dust emissions such as crushed rock, sand, stone aggregate, shall be carried out in such a manner to prevent or minimize dust emissions; ▪ The materials shall be adequately wetted prior to and during the loading, unloading and handling operations. Manual or automatic water spraying system shall be provided at all unloading areas, stockpiles and material discharge points; ▪ All receiving hoppers for unloading relevant materials shall be enclosed on three sides up to 3 m above the unloading point. In no case shall these hoppers be used as the material storage devices; ▪ The belt conveyor for handling materials shall be enclosed on top and two sides with a metal board at the bottom to eliminate any dust emission due to wind-whipping effect. Other type of enclosure will also be accepted by EPD if it can be demonstrated that the proposed enclosure can achieve same performance; ▪ All conveyor transfer points shall be totally enclosed. Openings for the passage of conveyors shall be fitted with adequate flexible seals; ▪ Scrapers shall be provided at the turning points of all conveyors to remove dust adhered to the belt surface; ▪ Conveyors discharged to stockpiles of relevant materials shall be arranged to minimize free fall as far as practicable. All free falling transfer points from conveyors to stockpiles shall be enclosed with chute(s) and water sprayed; ▪ Aggregates with a nominal size less than or equal to 5 mm should be stored in totally enclosed structure such as storage bin and should not be handled in open area. Where there is sufficient buffer area surrounding the concrete batching plant, ground stockpiling may be used; 	<p>Within Concrete Batching Plant / Duration of the construction phase</p>	<p>I</p>

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> ▪ The stockpile shall be enclosed at least on top and three sides and with flexible curtain to cover the entrance side; ▪ Aggregates with a nominal size greater than 5 mm should preferably be stored in a totally enclosed structure. If open stockpiling is used, the stockpile shall be enclosed on three sides with the enclosure wall sufficiently higher than the top of the stockpile to prevent wind whipping; and ▪ The opening between the storage bin and weighing scale of the materials shall be fully enclosed. 		
			<p>Loading of materials for batching</p> <ul style="list-style-type: none"> ▪ Concrete truck shall be loaded in such a way as to minimise airborne dust emissions. The following control measures shall be implemented: <ol style="list-style-type: none"> (a) Pre-mixing the materials in a totally enclosed concrete mixer before loading the materials into the concrete truck is recommended. All dust-laden air generated by the pre-mixing process as well as the loading process shall be totally vented to fabric filtering system to meet the required emission limit; and (b) If truck mixing batching or other types of batching method is used, effective dust control measures acceptable to EPD shall be adopted. The dust control measures must have been demonstrated to EPD that they are capable to collect and vent all dust-laden air generated by the material loading/mixing to dust arrestment plant to meet the required emission limit. ▪ The loading bay shall be totally enclosed during the loading process. 	Within Concrete Batching Plant / Duration of the construction phase	
			<p>Vehicles</p> <ul style="list-style-type: none"> ▪ All practicable measures shall be taken to prevent or minimize the dust emission caused by vehicle movement; and ▪ All access and route roads within the premises shall be paved and adequately wetted. 	Within Concrete Batching Plant / Duration of the construction phase	
			<p>Housekeeping</p> <ul style="list-style-type: none"> ▪ A high standard of housekeeping shall be maintained. All spillages or deposits of materials on ground, support structures or roofs shall be cleaned up promptly by a cleaning method acceptable to EPD. Any dumping of materials at open area shall be prohibited. 	Within Concrete Batching Plant / Duration of the construction phase	
5.2.6.6	2.1	-	<p>Best Practices for Asphaltic Concrete Plant</p> <p>The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Tar and Bitumen Works (Asphaltic Concrete Plant) BPM 15 (94) as well as in the future Specified Process licence should be adopted. These include:</p> <p>Design of Chimney</p> <ul style="list-style-type: none"> ▪ The chimney shall not be less than 3 metres plus the building height or 8 metres above ground level, whichever is the greater; ▪ The efflux velocity of gases from the main chimney shall not be less than 12 m/s at full load condition; 	Within Concrete Batching Plant / Duration of the construction phase	

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> ▪ The flue gas exit temperature shall not be less than the acid dew point; and ▪ Release of the chimney shall be directed vertically upwards and not be restricted or deflected. 		
			<p>Cold feed side</p> <ul style="list-style-type: none"> ▪ The aggregates with a nominal size less than or equal to 5 mm shall be stored in totally enclosed structure such as storage bin and shall not be handled in open area; ▪ Where there is sufficient buffer area surrounding the plant, ground stockpiling may be used. The stockpile shall be enclosed at least on top and three sides and with flexible curtain to cover the entrance side. If these aggregates are stored above the feeding hopper, they shall be enclosed at least on top and three sides and be wetted on the surface to prevent wind-whipping; ▪ The aggregates with a nominal size greater than 5 mm should preferably be stored in totally enclosed structure. Aggregates stockpile that is above the feeding hopper shall be enclosed at least on top and three sides. If open stockpiling is used, the stockpiles shall be enclosed on three sides with the enclosure wall sufficiently higher than the top of the stockpile to prevent wind whipping; ▪ Belt conveyors shall be enclosed on top and two sides and provided with a metal board at the bottom to eliminate any dust emission due to the wind-whipping effect. Other type of enclosure will also be accepted by EPD if it can be demonstrated that the proposed enclosure can be achieve the same performance; ▪ Scrapers shall be provided at the turning points of all belt conveyors inside the chute of the transfer points to remove dust adhered to the belt surface; ▪ All conveyor transfer points shall be totally enclosed. Openings for the passages of conveyors shall be fitted with adequate flexible seals; and ▪ All materials returned from dust collection system shall be transferred in enclosed system and shall be stored inside bins or enclosures. 	<p>Within Concrete Batching Plant / Duration of the construction phase</p>	
			<p>Hot feed side</p> <ul style="list-style-type: none"> ▪ The inlet and outlet of the rotary dryer shall be enclosed and ducted to a dust extraction and collection system such as a fabric filter. The particulate and gaseous concentration at the exhaust outlet of the dust collector shall not exceed the required limiting values; ▪ The bucket elevator shall be totally enclosed and the air be extracted and ducted to a dust collection system to meet the required particulates limiting value; ▪ All vibratory screens shall be totally enclosed and dust tight with close-fitted access inspection opening. Gaskets shall be installed to seal off any cracks and edges of any inspection openings; ▪ Chutes for carrying hot material shall be rigid and preferably fitted with abrasion resistant plate inside. They shall be inspected daily for leakages; ▪ All hot bins shall be totally enclosed and dust tight with close-fitted access inspection opening. Gaskets shall be installed to seal off any cracks and edges of any inspection openings. The air shall be extracted and ducted to a dust collection system to meet the required particulates limiting value; and 	<p>Within Concrete Batching Plant / Duration of the construction phase</p>	

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> Appropriate control measures shall be adopted in order to meet the required bitumen emission limit as well as the ambient odour level (2 odour units). 		
			<p>Material transportation</p> <ul style="list-style-type: none"> The loading, unloading, handling, transfer or storage of other raw materials which may generate airborne dust emissions such as crushed rocks, sands, stone aggregates, reject fines, shall be carried out in such a manner as to minimize dust emissions; Roadways from the entrance of the plant to the product loading points and/or any other working areas where there are regular movements of vehicles shall be paved or hard surfaced; and Haul roads inside the Works shall be adequately wetted with water and/or chemical suppressants by water trucks or water sprayers. 	Within Concrete Batching Plant / Duration of the construction phase	
			<p>Control of emissions from bitumen decanting</p> <ul style="list-style-type: none"> The heating temperature of the particular bitumen type and grade shall not exceed the corresponding temperature limit of the same type listed in Appendix 1 of the Guidance Note; Tamper-free high temperature cut-off device shall be provided to shut off the fuel supply or electricity in case the upper limit for bitumen temperature is reached; Proper chimney for the discharge of bitumen fumes shall be provided at high level; The emission of bitumen fumes shall not exceed the required emission limit; and The air-to-fuel ratio shall be properly controlled to allow complete combustion of the fuel. The fuel burners, if any, shall be maintained properly and free from carbon deposits in the burner nozzles. 	Within Concrete Batching Plant / Duration of the construction phase	
			<p>Liquid fuel</p> <ul style="list-style-type: none"> The receipt, handling and storage of liquid fuel shall be carried out so as to prevent the release of emissions of organic vapours and/or other noxious and offensive emissions to the air. 	Within Concrete Batching Plant / Duration of the construction phase	
			<p>Housekeeping</p> <ul style="list-style-type: none"> A high standard of housekeeping shall be maintained. Waste material, spillage and scattered piles gathered beneath belt conveyors, inside and around enclosures shall be cleared frequently. The minimum clearing frequency is on a weekly basis. 	Within Concrete Batching Plant / Duration of the construction phase	
5.2.6.7	2.1	-	<p>Best Practices for Rock Crushing Plants</p> <p>The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Mineral Works (Stone Crushing Plant) BPM 11/1 (95) as well as in the future Specified Process licence should be adopted. These include:</p> <p>Crushers</p>	Within Concrete Batching Plant / Duration of the construction phase	N/A as there was no rock crushing plant at this stage

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> ▪ The outlet of all primary crushers, and both inlet and outlet of all secondary and tertiary crushers, if not installed inside a reasonably dust tight housing, shall be enclosed and ducted to a dust extraction and collection system such as a fabric filter; ▪ The inlet hopper of the primary crushers shall be enclosed on top and 3 sides to contain the emissions during dumping of rocks from trucks. The rock while still on the trucks shall be wetted before dumping; ▪ Water sprayers shall be installed and operated in strategic locations at the feeding inlet of crushers; and ▪ Crusher enclosures shall be rigid and be fitted with self-closing doors and close-fitting entrances and exits. Where conveyors pass through the crusher enclosures, flexible covers shall be installed at entries and exits of the conveyors to the enclosure. 		
			<p>Vibratory screens and grizzlies</p> <ul style="list-style-type: none"> ▪ All vibratory screens shall be totally enclosed in a housing. Screenhouses shall be rigid and reasonably dust tight with self-closing doors or close-fitted entrances and exits for access. Where conveyors pass through the screenhouse, flexible covers shall be installed at entries and exits of the conveyors to the housing. Where containment of dust within the screenhouse structure is not successful then a dust extraction and collection system shall be provided; and ▪ All grizzlies shall be enclosed on top and 3 sides and sufficient water sprayers shall be installed at their feeding and outlet areas. 	<p>Within Concrete Batching Plant / Duration of the construction phase</p>	<p>N/A as there was no rock crushing plant at this stage</p>
			<p>Belt conveyors</p> <ul style="list-style-type: none"> ▪ Except for those conveyors which are placed within a totally enclosed structure such as a screenhouse or those erected at the ground level, all conveyors shall be totally enclosed with windshield on top and 2 sides; ▪ Effective belt scraper such as the pre-cleaner blades made by hard wearing materials and provided with pneumatic tensioner, or equivalent device, shall be installed at the head pulley of designated conveyor as required to dislodge fine dust particles that may adhere to the belt surface and to reduce carry-back of fine materials on the return belt. Bottom plates shall also be provided for the conveyor unless it has been demonstrated that the corresponding belt scraper is effective and well maintained to prevent falling material from the return belt; and <p>Except for those transfer points which are placed within a totally enclosed structure such as a screenhouse, all transfer points to and from conveyors shall be enclosed. Where containment of dust within the enclosure is not successful, then water sprayers shall be provided. Openings for any enclosed structure for the passage of conveyors shall be fitted with flexible seals.</p>	<p>Within Concrete Batching Plant / Duration of the construction phase</p>	<p>N/A as there was no rock crushing plant at this stage</p>
			<p>Storage piles and bins</p> <ul style="list-style-type: none"> ▪ Where practicable, free falling transfer points from conveyors to stockpiles shall be fitted with flexible curtains or be enclosed with chutes designed to minimize the drop height. Water sprays shall also be used where required. 	<p>Within Concrete Batching Plant / Duration of the construction phase</p>	<p>N/A as there was no rock crushing plant at this stage</p>

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> The surface of all surge piles and stockpiles of blasted rocks or aggregates shall be kept sufficiently wet by water spraying wherever practicable; All open stockpiles for aggregates of size in excess of 5 mm shall be kept sufficiently wet by water spraying where practicable; or The stockpiles of aggregates 5 mm in size or less shall be enclosed on 3 sides or suitably located to minimize wind-whipping. Save for fluctuations in stock or production, the average stockpile shall stay within the enclosure walls and in no case the height of the stockpile shall exceed twice the height of the enclosure walls; and Scattered piles gathered beneath belt conveyors, inside and around enclosures shall be cleared regularly. 		
			<p>Rock drilling equipment</p> <ul style="list-style-type: none"> Appropriate dust control equipment such as a dust extraction and collection system shall be used during rock drilling activities. 	Within Concrete Batching Plant / Duration of the construction phase	N/A as there was no rock crushing plant at this stage
Hazard to Human Life – Construction Phase					
Table 6.40	3.2	-	<ul style="list-style-type: none"> Precautionary measures should be established to request barges to move away during typhoons. 	Construction Site / Construction Period	I
Table 6.40	3.2	-	<ul style="list-style-type: none"> An appropriate marine traffic management system should be established to minimize risk of ship collision. 	Construction Site / Construction Period	I
Table 6.40	3.2	-	<ul style="list-style-type: none"> Location of all existing hydrant networks should be clearly identified prior to any construction works. 	Construction Site / Construction Period	I
Noise Impact – Construction Phase					
7.5.6	4.3	-	<p>Good Site Practice</p> <p>Good site practice and noise management can significantly reduce the impact of construction site activities on nearby NSRs. The following package of measures should be followed during each phase of construction:</p> <ul style="list-style-type: none"> only well-maintained plant to be operated on-site and plant should be serviced regularly during the construction works; machines and plant that may be in intermittent use to be shut down between work periods or should be throttled down to a minimum; plant known to emit noise strongly in one direction, should, where possible, be orientated to direct noise away from the NSRs; mobile plant should be sited as far away from NSRs as possible; and material stockpiles and other structures to be effectively utilised, where practicable, to screen noise from on-site construction activities. 	Within the Project site / During construction phase / Prior to commencement of operation	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
7.5.6	4.3	-	Adoption of QPME <ul style="list-style-type: none"> QPME should be adopted as far as applicable. 	Within the Project site / During construction phase / Prior to commencement of operation	I
7.5.6	4.3	-	Use of Movable Noise Barriers <ul style="list-style-type: none"> Movable noise barriers should be placed along the active works area and mobile plants to block the direct line of sight between PME and the NSRs. 	Within the Project site / During construction phase / Prior to commencement of operation	I
7.5.6	4.3	-	Use of Noise Enclosure/ Acoustic Shed <ul style="list-style-type: none"> Noise enclosure or acoustic shed should be used to cover stationary PME such as air compressor and generator. 	Within the Project site / During construction phase / Prior to commencement of operation	I
Water Quality Impact – Construction Phase					
8.8.1.2 and 8.8.1.3	5.1	2.26	Marine Construction Activities <u>General Measures to be Applied to All Works Areas</u> <ul style="list-style-type: none"> Barges or hoppers shall not be filled to a level which will cause overflow of materials or pollution of water during loading or transportation; Use of Lean Material Overboard (LMOB) systems shall be prohibited; Excess materials shall be cleaned from the decks and exposed fittings of barges and hopper dredgers before the vessels are moved; Plants should not be operated with leaking pipes and any pipe leakages shall be repaired quickly; Adequate freeboard shall be maintained on barges to reduce the likelihood of decks being washed by wave action; All vessels shall be sized such that adequate clearance is maintained between vessels and the seabed at all states of the tide to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash; The works shall not cause foam, oil, grease, litter or other objectionable matter to be present in the water within and adjacent to the works site; and For ground improvement activities including DCM, the wash water from cleaning of the drilling shaft should be appropriately treated before discharge. The Contractor should ensure the wastewater meets the WPCO/TM requirements before discharge. No direct discharge of contaminated water is permitted. 	Within construction site / Duration of the construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<p><u>Specific Measures to be Applied to All Works Areas</u></p> <ul style="list-style-type: none"> ▪ The daily maximum production rates shall not exceed those assumed in the water quality assessment in the EIA report; ▪ A maximum of 10 % fines content to be adopted for sand blanket and 20 % fines content for marine filling below +2.5 mPD prior to substantial completion of seawall (until end of Year 2017) shall be specified in the works contract document; ▪ An advance seawall of at least 200m to be constructed (comprising either rows of contiguous permanent steel cells completed above high tide mark or partially completed seawalls with rock core to high tide mark and filter layer on the inner side) prior to commencement of marine filling activities; 	<p>Within construction site / Duration of the construction phase</p>	<p>I – For marine filling</p> <p>C – Completed in Nov 2020 for sand blanket</p> <p>C – Completed in May 2018</p>
			<ul style="list-style-type: none"> ▪ Closed grab dredger shall be used to excavate marine sediment; ▪ Silt curtains surrounding the closed grab dredger shall be deployed in accordance with the Silt Curtain Deployment Plan; and 		<p>I</p> <p>(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)</p>
			<ul style="list-style-type: none"> ▪ The Silt Curtain Deployment Plan shall be implemented. 		<p>I</p>
			<p><u>Specific Measures to be Applied to Land Formation Activities prior to Commencement of Marine Filling Works</u></p> <ul style="list-style-type: none"> ▪ Double layer 'Type III' silt curtains to be applied around the active eastern works areas prior to commencement of sand blanket laying activities. The silt curtains shall be configured to minimise SS release during ebb tides. A silt curtain efficiency test shall be conducted to validate the performance of the silt curtains; ▪ Double layer silt curtains to enclose WSRs C7a and silt screens installed at the intake points for both WSR C7a and C8 prior to commencement of construction; and 	<p>Within construction site / Duration of the construction phase</p>	<p>N/A</p> <p>(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)</p> <p>I – For C7a</p> <p>C – Completed in Dec 2021 for C8</p> <p>*(The requirement of silt curtain / screen has been modified. The details can be referred to Silt Curtain Deployment Plan)</p>
			<ul style="list-style-type: none"> ▪ The silt curtains and silt screens should be regularly checked and maintained. 		<p>I</p>

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<p><u>Specific Measures to be Applied to Land Formation Activities during Marine Filling Works</u></p> <ul style="list-style-type: none"> Double layer 'Type II' or 'Type III' silt curtains to be applied around the eastern openings between partially completed seawalls prior to commencement of marine filling activities. The silt curtains shall be configured to minimise SS release during ebb tides; 	Within construction site / Duration of the construction phase	I *(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)
			<ul style="list-style-type: none"> Double layer silt curtains to be applied at the south-western opening prior to commencement of marine filling activities; 		N/A (The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)
			<ul style="list-style-type: none"> Double layer silt curtain to enclose WSR C7a and silt screens installed at the intake points for both WSR C7a and C8 prior to commencement of marine filling activities; and 		I – For C7a C – Completed in Dec 2021 for C8 (The requirement of silt curtain / screen has been modified. The details can be referred to Silt Curtain Deployment Plan)
			<ul style="list-style-type: none"> The silt curtains and silt screens should be regularly checked and maintained. 		I
			<p><u>Specific Measures to be Applied to the Field Joint Excavation Works for the Submarine Cable Diversion</u></p> <ul style="list-style-type: none"> Only closed grabs designed and maintained to avoid spillage shall be used and should seal tightly when operated. Excavated materials shall be disposed at designated marine disposal area in accordance with the Dumping at Sea Ordinance (DASO) permit conditions; and Silt curtains surrounding the closed grab dredger to be deployed as a precautionary measure. 	Within construction site / Duration of the construction phase	N/A – the field joint excavation works for the submarine cable diversion will no longer be conducted anymore
8.8.1.4	5.1	-	<p>Modification of the Existing Seawall</p> <ul style="list-style-type: none"> Silt curtains shall be deployed around the seawall modification activities to completely enclose the active works areas, and care should be taken to avoid splashing of rockfill / rock armour into the surrounding marine environment. For the connecting sections with the existing outfalls, works for these connection areas should be undertaken during the dry season in order that individual drainage culvert cells may be isolated for interconnection works. 	At the existing northern seawall / Duration of the construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
8.8.1.5	5.1	-	<p>Construction of New Stormwater Outfalls and Modifications to Existing Outfalls</p> <ul style="list-style-type: none"> During operation of the temporary drainage channel, runoff control measures such as bunding or silt fence shall be provided on both sides of the channel to prevent accumulation and release of SS via the temporary channel. Measures should also be taken to minimise the ingress of site drainage into the culvert excavations. 	Within construction site / Duration of the construction phase	I
8.8.1.6 8.8.1.7	5.1	2.27	<p>Piling Activities for Construction of New Runway Approach Lights and HKIAAA Marker Beacons</p> <p>Silt curtains shall be deployed around the piling activities to completely enclose the piling works and care should be taken to avoid spillage of excavated materials into the surrounding marine environment.</p>	Within construction site / Duration of the construction phase	<p>C – For approach lights</p> <p>N/A for marker beacons as HKIAAA Marker Beacons would be replaced by buoys</p> <p>C – Completed in Oct 2021</p>
			<p><u>For construction of the eastern approach lights at the CMPs</u></p> <ul style="list-style-type: none"> Ground improvement via DCM using a close-spaced layout shall be completed prior to commencement of piling works; Steel casings shall be installed to enclose the excavation area prior to commencement of excavation; The excavated materials shall be removed using a closed grab within the steel casings; No discharge of the cement mixed materials into the marine environment will be allowed; and Excavated materials shall be treated and reused on-site. 		
8.8.1.8	5.1	-	<p>Construction of Site Runoff and Drainage</p> <p>The site practices outlined in ProPECC Note PN 1/94 should be followed as far as practicable in order to minimise surface runoff and the chance of erosion. The following measures are recommended:</p>	Within construction site / Duration of the construction phase	
			<ul style="list-style-type: none"> Install perimeter cut-off drains to direct off-site water around the site and implement internal drainage, erosion and sedimentation control facilities. Channels, earth bunds or sandbag barriers should be provided on site to direct storm water to silt removal facilities. The design of the temporary on-site drainage system should be undertaken by the Contractors prior to the commencement of construction (for works areas located on the existing Airport island) or as soon as the new land is completed (for works areas located on the new landform); Sand/silt removal facilities such as sand/silt traps and sediment basins should be provided to remove sand/silt particles from runoff to meet the requirements of the TM-DSS standards under the WPCO. The design of efficient silt removal facilities should make reference to the guidelines in Appendix A1 of ProPECC Note PN 1/94. Sizes may vary depending upon the flow rate. The detailed design of the sand/silt traps should be undertaken by the Contractors prior to the commencement of construction; 		I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> ▪ All drainage facilities and erosion and sediment control structures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly during rainstorms. Deposited silt and grit should be regularly removed, at the onset of and after each rainstorm to ensure that these facilities are functioning properly; 		
			<ul style="list-style-type: none"> ▪ Measures should be taken to minimize the ingress of site drainage into excavations. If excavation of trenches in wet periods is necessary, they should be dug and backfilled in short sections wherever practicable. Water pumped out from foundation excavations should be discharged into storm drains via silt removal facilities; 		
			<ul style="list-style-type: none"> ▪ In the event that contaminated groundwater is identified at excavation areas, this should be treated on-site using a suitable wastewater treatment process. The effluent should be treated according to the requirements of the TM-DSS standards under the WPCO prior to discharge to foul sewers or collected for proper disposal off-site. No direct discharge of contaminated groundwater is permitted; and 		
			<ul style="list-style-type: none"> ▪ All vehicles and plant should be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. An adequately designed and sited wheel washing facility should be provided at construction site exits. Wash-water should have sand and silt settled out and removed regularly to ensure the continued efficiency of the process. The section of access road leading to, and exiting from, the wheel-wash bay to the public road should be paved with sufficient backfall toward the wheel-wash bay to prevent vehicle tracking of soil and silty water to public roads and drains. All washwater should be treated according to the requirements of the TM-DSS standards under the WPCO prior to discharge. 		
			<ul style="list-style-type: none"> ▪ Open stockpiles of construction materials or construction wastes on-site should be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to prevent the construction materials, soil, silt or debris from washing away into the drainage system; 		
			<ul style="list-style-type: none"> ▪ Manholes (including newly constructed ones) should be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system and to prevent stormwater runoff being directed into foul sewers; and 		
			<ul style="list-style-type: none"> ▪ Precautionary measures should be taken at any time of the year when rainstorms are likely. Actions to be taken when a rainstorm is imminent or forecasted are summarized in Appendix A2 of ProPECC Note PN 1/94. This includes actions to be taken during and/or after rainstorms. Particular attention should be paid to the control of silty surface runoff during storm events. 		
8.8.1.9	5.1	-	<p>Sewage Effluent from Construction Workforce</p> <ul style="list-style-type: none"> ▪ Temporary sanitary facilities, such as portable chemical toilets, should be employed on-site where necessary to handle sewage from the workforce. A licensed contractor should be employed to provide appropriate and adequate portable toilets and be responsible for appropriate disposal and maintenance. 	Within construction site / During construction phase	

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
8.8.1.10 8.8.1.11	5.1		<p>General Construction Activities</p> <ul style="list-style-type: none"> Construction solid waste, debris and refuse generated on-site should be collected, handled and disposed of properly to avoid entering any nearby storm water drain. Stockpiles of cement and other construction materials should be kept covered when not being used; and Oils and fuels should only be stored in designated areas which have pollution prevention facilities. To prevent spillage of fuels and solvents to any nearby storm water drain, all fuel tanks and storage areas should be provided with locks and be sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank. The bund should be drained of rainwater after a rain event. 	Within construction site / During construction phase	I
8.8.1.12 8.8.1.13	5.1	2.28	<p>Drilling Activities for the Submarine Aviation Fuel Pipelines</p> <p>To prevent potential water quality impacts at Sha Chau, the following measures shall be applied:</p> <ul style="list-style-type: none"> A 'zero-discharge' policy shall be applied for all activities to be conducted at Sha Chau; No bulk storage of chemicals shall be permitted; and A containment pit shall be constructed around the drill holes. This containment pit shall be lined with impermeable lining and bunded on the outside to prevent inflow from off-site areas. 	Within construction site / During construction phase	C – Completed in Jan 2019
			<p>At the airport island side of the drilling works, the following measures shall be applied for treatment of wastewater:</p> <ul style="list-style-type: none"> During pipe cleaning, appropriate desilting or sedimentation device should be provided on site for treatment before discharge. The Contractor should ensure discharge water from the sedimentation tank meet the WPCO/TM requirements before discharge; and Drilling fluid used in drilling activities should be reconditioned and reused as far as possible. Temporary enclosed storage locations should be provided on-site for any unused chemicals that needs to be transported away after all the related construction activities are completed. The requirements in ProPECC Note PN 1/94 should be adhered to in the handling and disposal of bentonite slurries. 	Within construction site / During construction phase	C – Completed in Jan 2019
Waste Management Implication – Construction Phase					
10.5.1.1	7.1	-	<p>Opportunities to minimise waste generation and maximise the reuse of waste materials generated by the project have been incorporated where possible into the planning, design and construction stages, and the following measures have been recommended:</p> <ul style="list-style-type: none"> The relevant construction methods (particularly for the tunnel works) and construction programme have been carefully planned and developed to minimise the extent of excavation and to maximise the on-site reuse of inert C&D materials generated by the project as far as practicable. Temporary stockpiling areas will also be provided to facilitate on-site reuse of inert C&D materials; Priority should be given to collect and reuse suitable inert C&D materials generated from other concurrent projects and the Government's PFRF as fill materials for the proposed land formation works; 	Project Site Area / During design and construction phase	I
					I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> ▪ Only non-dredged ground improvement methods should be adopted in order to completely avoid the need for dredging and disposal of marine sediment for the proposed land formation work; 		
			<ul style="list-style-type: none"> ▪ Excavation work for constructing the APM tunnels, BHS tunnels and airside tunnels will not be down to the CMPs beneath the fill materials in order to avoid excavating any sediments; and 		
			<ul style="list-style-type: none"> ▪ For the marine sediments expected to be excavated from the piling works of TRC, APM & BHS tunnels, airside tunnels and other facilities on the proposed land formation area, piling work of marine sections of the approach lights and HKIAAAA beacons, basement works for some of T2 expansion area and excavation works for the proposed APM depot should be treated and reused on-site as backfilling materials, although required treatment level / detail and the specific re-use mode are under development. 		
10.5.1.1	7.1	-	<p>The following good site practices should be performed during the construction activities include:</p> <ul style="list-style-type: none"> ▪ Nomination of an approved person, such as a site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site; ▪ Training of site personnel in proper waste management and chemical waste handling procedures; ▪ Provision of sufficient waste disposal points and regular collection for disposal; ▪ Appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks by tarpaulin/ similar material or by transporting wastes in enclosed containers. The cover should be extended over the edges of the sides and tailboards; ▪ Stockpiles of C&D materials should be kept wet or covered by impervious sheets to avoid wind-blown dust; ▪ All dusty materials including C&D materials should be sprayed with water immediately prior to any loading transfer operation so as to keep the dusty material wet during material handling at the barging points/ stockpile areas; ▪ C&D materials to be delivered to and from the project site by barges or by trucks should be kept wet or covered to avoid wind-blown dust; ▪ The speed of the trucks including dump trucks carrying C&D or waste materials within the site should be controlled to about 10 km/hour in order to reduce the adverse dust impact and secure the safe movement around the site; and ▪ To avoid or minimise dust emission during transport of C&D or waste materials within the site, each and every main temporary access should be paved with concrete, bituminous hardcore materials or metal plates and kept clear of dusty materials. Unpaved parts of the road should be sprayed with water or a dust suppression chemical so as to keep the entire road surface wet. 	Project Site Area / Construction Phase	
10.5.1.3	7.1	-	<p>The following practices should be performed to achieve waste reduction include:</p> <ul style="list-style-type: none"> ▪ Use of steel or aluminium formworks and falseworks for temporary works as far as practicable; 	Project Site Area / Construction Phase	

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> ▪ Adoption of repetitive design to allow reuse of formworks as far as practicable; ▪ Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal; ▪ Encourage collection of aluminium cans, PET bottles and paper by providing separate labelled bins to enable these wastes to be segregated from other general refuse generated by the work force; ▪ Any unused chemicals or those with remaining functional capacity should be collected for reused as far as practicable; ▪ Proper storage and site practices to minimise the potential for damage or contamination of construction materials; and ▪ Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste. 		
10.5.1.5	7.1		Inert and non-inert C&D materials should be handled and stored separately to avoid mixing the two types of materials.	Project Site Area / Construction Phase	I
10.5.1.5	7.1	-	Any recyclable materials should be segregated from the non-inert C&D materials for collection by reputable licensed recyclers whereas the non-recyclable waste materials should be disposed of at the designated landfill site by a reputable licensed waste collector.	Project Site Area / Construction Phase	I
10.5.1.6	7.1	-	A trip-ticket system promulgated shall be developed in order to monitor the off-site delivery of surplus inert C&D materials that could not be reused on-site for the proposed land formation work at the PFRF and to control fly tipping.	Project Site Area / Construction Phase	I
10.5.1.6	7.1	2.32	The Contractor should prepare and implement a Waste Management Plan detailing various waste arising and waste management practices.	Construction Phase	I
10.5.1.16	7.1	-	<p>The following mitigation measures are recommended during excavation and treatment of the sediments:</p> <ul style="list-style-type: none"> ▪ On-site remediation should be carried out in an enclosed area in order to minimise odour/dust emissions; ▪ The loading, unloading, handling, transfer or storage of treated and untreated sediment should be carried out in such a manner to prevent or minimise dust emissions; ▪ All practical measures, including but not limited to speed control for vehicles, should be taken to minimise dust emission; ▪ Good housekeeping should be maintained at all times at the sediment treatment facility and storage area; ▪ Treated and untreated sediment should be clearly separated and stored separately; and ▪ Surface runoff from the enclosed area should be properly collected and stored separately, and then properly treated to levels in compliance with the relevant effluent standards as required by the Water Pollution Control Ordinance before final discharge. 	Project Site Area / Construction Phase	I I I I I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
10.5.1.18	7.1	-	<p>The marine sediments to be removed from the cable field joint area would be disposed of at the designated disposal sites to be allocated by the MFC. The following mitigation measures should be strictly followed to minimise potential impacts on water quality during transportation of the sediments requiring Type 1 disposal:</p> <ul style="list-style-type: none"> Bottom opening of barges shall be fitted with tight fitting seals to prevent leakage of material; 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 EPD; and Barges or hopper barges shall not be filled to a level that would cause the overflow of materials or sediment laden water during loading or transportation. 	Project Site Area / Construction Phase	N/A – the field joint excavation works for the submarine cable diversion will no longer be conducted anymore
10.5.1.19	7.1	-	<p>Contractor should register with the EPD as a chemical waste producer and to follow the relevant guidelines. The following measures should be implemented:</p> <ul style="list-style-type: none"> Good quality containers compatible with the chemical wastes should be used; Incompatible chemicals should be stored separately; Appropriate labels must be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the chemical waste, such as explosive, flammable, oxidizing, irritant, toxic, harmful, corrosive, etc.; and The contractor will use a licensed collector to transport and dispose of the chemical wastes at the approved Chemical Waste Treatment Centre or other licensed recycling facilities, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation. 	Project Site Area / Construction Phase	I
10.5.1.20	7.1	-	<p>General refuse should be stored in enclosed bins or compaction units separated from inert C&D material. A reputable waste collector should be employed by the contractor to remove general refuse from the site for disposal at designated landfill sites. An enclosed and covered area should be provided to reduce the occurrence of 'windblown' light material.</p>	Project Site Area / Construction Phase	I
10.5.1.21	7.1	-	<p>The construction contractors will be required to regularly check and clean any refuse trapped or accumulated along the newly constructed seawall. Such refuse will then be stored and disposed of together with the general refuse.</p>	Project Site Area / Construction Phase	I
Land Contamination – Construction Phase					
11.10.1.2 to 11.10.1.3	8.1	2.32	<p>For areas inaccessible during site reconnaissance survey</p> <ul style="list-style-type: none"> Further site reconnaissance would be conducted once the areas are accessible in order to identify any land contamination concern for the areas. 	Project Site Area inaccessible during site reconnaissance / Prior to Construction Phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> ▪ Subject to further site reconnaissance findings, a supplementary Contamination Assessment Plan (CAP) for additional site investigation (SI) (if necessary) may be prepared and submitted to EPD for endorsement prior to the commencement of SI at these areas. ▪ After completion of SI, the Contamination Assessment Report (CAR) will be prepared and submitted to EPD for approval prior to start of the proposed construction works at the golf course, the underground and above-ground fuel storage tank areas, emergency power generation units, airside petrol filling station and fuel tank room. ▪ Should remediation be required, Remediation Action Plan (RAP) and Remediation Report (RR) will be prepared for EPD's approval prior to commencement of the proposed remediation and any construction works respectively. 		<p>C – Completed in Jan 2018</p> <hr/> <p>I</p> <p>*(CAR for golf course and Terminal 2 emergency power supply system nos. 1, 2, 3, 4 and 5 were submitted to EPD)</p> <hr/> <p>N/A as no remediation was required.</p>
11.8.1.2	8.1	-	<p>If contaminated soil is identified, the following mitigation measures are for the excavation and transportation of contaminated materials (if any):</p> <ul style="list-style-type: none"> ▪ To minimize the incidents of construction workers coming in contact with any contaminated materials, bulk earth-moving excavation equipment should be employed; ▪ Contact with contaminated materials can be minimised by wearing appropriate clothing and personal protective equipment such as gloves and masks (especially when working directly with contaminated material), provision of washing facilities and prohibition of smoking and eating on site; ▪ Stockpiling of contaminated excavated materials on site should be avoided as far as possible; ▪ The use of any contaminated soil for landscaping purpose should be avoided unless pre-treatment was carried out; ▪ Vehicles containing any excavated materials should be suitably covered to reduce dust emissions and/or release of contaminated wastewater; ▪ Truck bodies and tailgates should be sealed to prevent any discharge; ▪ Only licensed waste haulers should be used to collect and transport contaminated material to treatment/disposal site and should be equipped with tracking system to avoid fly tipping; ▪ Speed control for trucks carrying contaminated materials should be exercised. 8km/h is the recommended speed limit; ▪ Strictly observe all relevant regulations in relation to waste handling, such as Waste Disposal Ordinance (Cap 354), Waste Disposal (Chemical Waste) (General) Regulation (Cap 354) and obtain all necessary permits where required; and ▪ Maintain records of waste generation and disposal quantities and disposal arrangements. 	Project Site Area / Construction Phase	N/A as no contaminated soil was found.

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
Terrestrial Ecological – Construction Phase					
12.10.1.1	9.2	2.14	Pre-construction Egretty Survey <ul style="list-style-type: none"> Conduct ecological survey for Sha Chau egretty to update the latest boundary of the egretty. 	Breeding season (April - July) prior to commencement of HDD drilling works at HKIA	C – Completed in Jan 2019
12.7.2.3 and 12.7.2.6	9.1	2.30	Avoidance and Minimisation of Direct Impact to Egretty <ul style="list-style-type: none"> The daylighting location will avoid direct encroachment to the Sheung Sha Chau egretty. The daylighting location and mooring of flat top barge, if required, will be kept away from the egretty; In any event, controls such as demarcation of construction site boundary and confining the lighting within the site will be practised to minimise disturbance to off-site habitat at Sheung Sha Chau Island; and The containment pit at the daylighting location shall be covered or camouflaged. 	During construction phase at Sheung Sha Chau Island	C – Completed in Jan 2019
12.7.2.5	9.1	2.30	Preservation of Nesting Vegetation <ul style="list-style-type: none"> The proposed daylighting location and the arrangement of connecting pipeline will avoid the need of tree cutting, therefore the trees that are used by ardeids for nesting will be preserved. 	During construction phase at Sheung Sha Chau Island	C – Completed in Jan 2019
12.7.2.4 and 12.7.2.6	9.1	2.30	Timing the Pipe Connection Works outside Ardeid's Breeding Season <ul style="list-style-type: none"> All HDD and related construction works on Sheung Sha Chau Island will be scheduled outside the ardeids' breeding season (between April and July). No night-time construction work will be allowed on Sheung Sha Chau Island during all seasons. 	During construction phase at Sheung Sha Chau Island	C – Completed in Jan 2019
12.10.1.1	9.3	-	Ecological Monitoring <ul style="list-style-type: none"> During the HDD construction works period from August to March, ecological monitoring will be undertaken monthly at the HDD daylighting location on Sheung Sha Chau Island to identify and evaluate any impacts with appropriate actions taken as required to address and minimise any adverse impact found. 	at Sheung Sha Chau Island	C – Completed in Jan 2019
Marine Ecological Impact – Pre-construction Phase					
13.11.4.1	10.2.2	-	<ul style="list-style-type: none"> Pre-construction phase Coral Dive Survey. 	HKIAAA artificial seawall	C – Completed in Jan 2016
Marine Ecological Impact – Construction Phase					
13.11.1.3 to 13.11.1.6	-	-	Minimisation of Land Formation Area <ul style="list-style-type: none"> Minimise the overall size of the land formation needed for the additional facilities to minimise the overall loss of habitat for marine resources, especially the CWD population. 	Land formation footprint / during detailed design phase to completion of construction	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
13.11.1.7 to 13.11.1.10	-	2.31	<p>Use of Construction Methods with Minimal Risk/Disturbance</p> <ul style="list-style-type: none"> Use of non-dredge method for the main land formation and ancillary works including the diversion of the aviation fuel pipeline to the AFRF; <hr/> <ul style="list-style-type: none"> Use of Deep Cement Mixing (DCM) method instead of conventional seabed dredging for the land formation works to reduce the risk of negative impacts through the elevation of suspended solids and contaminants on CWDs, fisheries and the marine environment; <hr/> <ul style="list-style-type: none"> Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; <hr/> <ul style="list-style-type: none"> Avoid bored piling during CWD peak calving season (Mar to Jun); <hr/> <ul style="list-style-type: none"> Prohibition of underwater percussive piling; and <hr/> <ul style="list-style-type: none"> Use of horizontal directional drilling (HDD) method and water jetting methods for placement of submarine cables and pipelines to minimise the disturbance to the CWDs and other marine ecological resources. 	During construction phase at marine works area	<p>C – Completed in Jan 2019 for diversion of aviation fuel pipeline</p> <hr/> <p>I</p> <hr/> <p>C – Completed in Oct 2021 for new approach lights N/A for marker beacons as HKIAAAA Marker Beacons would be replaced by buoys</p> <hr/> <p>I</p> <hr/> <p>C – Completed in Jan 2019 for HDD works</p>
13.11.2.1 to 13.11.2.7	-	-	<p>Mitigation for Indirect Disturbance due to Deterioration of Water Quality</p> <ul style="list-style-type: none"> Water quality mitigation measures during construction phases include consideration of alternative construction methods, deployment of silt curtain and good site practices; <hr/> <ul style="list-style-type: none"> Alternative construction methods including use of non-dredge methods for ground improvement (e.g. Deep Cement Mixing (DCM), prefabricated vertical drains (PVD), sand compaction piles, steel cells, stone columns and vertical sand drains); <hr/> <ul style="list-style-type: none"> Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and <hr/> <ul style="list-style-type: none"> Use of horizontal directional drilling (HDD) method and water jetting methods for placement of undersea cables and pipelines to minimise the disturbance to the CWDs and other marine ecological resources. 	All works area during the construction phase	<p>I</p> <hr/> <p>I</p> <hr/> <p>C – Completed in Oct 2021 for new approach lights</p> <hr/> <p>C – Completed in Jan 2019 for HDD works</p>
13.11.1.12	-	-	<p>Strict Enforcement of No-Dumping Policy</p>	All works area during the construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> ▪ A policy prohibiting dumping of wastes, chemicals, oil, trash, plastic, or any other substance that would potentially be harmful to dolphins and/or their habitat in the work area; ▪ Mandatory educational programme of the no-dumping policy be made available to all construction site personnel for all project-related works; ▪ Fines for infractions should be implemented; and ▪ Unscheduled, on-site audits shall be implemented. 		
13.11.1.13	-	-	<p>Good Construction Site Practices</p> <ul style="list-style-type: none"> ▪ Regular inspection of the integrity and effectiveness of all silt curtains and monitoring of effluents to ensure that any discharge meets effluent discharge guidelines; ▪ Keep the number of working or stationary vessels present on-site to the minimum anytime; and ▪ Unscheduled, on-site audits for all good site practice restrictions should be conducted, and fines or penalties sufficient to be an effective deterrent need to be levied against violators. 	All works area during the construction phase	I
13.11.1.3 to 13.11.1.6	-	-	<p>Minimisation of Land Formation Area</p> <ul style="list-style-type: none"> ▪ Minimise the overall size of the land formation needed for the additional facilities to minimise the overall loss of habitat for marine resources, especially the CWD population. 	Land formation footprint / during detailed design phase to completion of construction	I
13.11.5.4 to 13.11.5.13	10.3.1	-	<p>SkyPier High Speed Ferries' Speed Restrictions and Route Diversions</p> <ul style="list-style-type: none"> ▪ SkyPier HSFs operating to / from Zhuhai and Macau would divert north of SCLKC Marine Park with a 15 knot speed limit to apply for the part-journeys that cross high CWD abundance grid squares as indicatively shown in Drawing No. MCL/P132/EIA/13-023 of the EIA Report. Both the alignment of the northerly route and the portion of routings to be subject to the speed limit of 15 knots shall be finalised prior to commencement of construction based on the future review of up-to-date CWD abundance and EM&A data and taking reference to changes in total SkyPier HSF numbers; and ▪ A maximum of 10 knots will be enforced through the designated SCLKC Marine Park area at all times. <p>Other mitigation measures</p> <ul style="list-style-type: none"> ▪ The ET will audit various parameters including actual daily numbers of HSFs, compliance with the 15-knot speed limit in the speed control zone and diversion compliance for SkyPier HSFs operating to / from Zhuhai and Macau; and ▪ The effectiveness of the CWD mitigation measures after implementation of initial six month SkyPier HSF diversion and speed restriction will be reviewed. 	Area between the footprint and SCLKC Marine Park during construction phase	I
13.11.5.14 to 13.11.5.18	10.3.1	2.31	<p>Dolphin Exclusion Zone</p> <ul style="list-style-type: none"> ▪ Establishment of a 24 hr Dolphin Exclusion Zone (DEZ) with a 250 m radius around the land formation works areas; 	Marine waters around land formation works area during construction phase	I C – Completed in Sep 2016

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> A DEZ would also be implemented during ground improvement works (e.g. DCM), water jetting works for submarine cables diversion, open trench dredging at the field joint locations and seawall construction; and A DEZ would also be implemented during bored piling work but as a precautionary measure only. 		I C – Completed in Oct 2021 for the bored piling work of New approach lights
13.11.5.19	10.4	2.31	Acoustic Decoupling of Construction Equipment <ul style="list-style-type: none"> Air compressors and other noisy equipment that must be mounted on steel barges should be acoustically-decoupled to the greatest extent feasible, for instance by using rubber or air-filled tyres; and Specific acoustic decoupling measures shall be specified during the detailed design of the project for use during the land formation works. 	Around coastal works area during construction phase	I
13.11.5.20	10.6.1	2.29	Spill Response Plan <ul style="list-style-type: none"> An oil and hazardous chemical spill response plan is proposed to be established during the construction phase as a precautionary measure so that appropriate actions to prevent or reduce risks to CWDs can be undertaken in the event of an accidental spillage. 	Construction phase	I
13.11.5.21 to 13.11.5.23	10.6.1	-	Construction Vessel Speed Limits and Skipper Training <ul style="list-style-type: none"> A speed limit of 10 knots should be strictly observed for construction vessels at areas with the highest CWD densities (as currently indicated by the 1x1km grid squares in Figure 6 of Appendix 13.2 of EIA report). Vessels traversing through the work areas should be required to use predefined and regular routes (which would presumably become known to resident dolphins) to reduce disturbance to cetaceans due to vessel movements. Specific marine routes shall be specified by the Contractor prior to construction commencing. 	All areas north and west of Lantau Island during construction phase	I
Fisheries Impact – Construction Phase					
14.9.1.2 to 14.9.1.5	-	-	Minimisation of Land Formation Area <ul style="list-style-type: none"> Minimise the overall size of the land formation needed for the additional facilities to minimise the overall loss of habitat for fisheries resources. 	Land formation footprint / during detailed design phase to completion of construction	I
14.9.1.6	-	-	Use of Construction Methods with Minimal Risk/Disturbance <ul style="list-style-type: none"> Use of non-dredge method for the main land formation and ancillary works including the diversion of the aviation fuel pipeline to the AFRF; 	During construction phase at marine works area	C – Completed in Jan 2019 for diversion of aviation fuel pipeline

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> Use of Deep Cement Mixing (DCM) method instead of conventional seabed dredging for the land formation works to reduce the risk of negative impacts through the elevation of suspended solids and contaminants on fisheries and the marine environment; Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and 		<p>I</p> <hr/> <p>C – Completed in Oct 2021 for new approach lights N/A for marker beacons as HKIAAAA Marker Beacons would be replaced by buoys</p> <hr/> <p>C – Completed in Jan 2019 for HDD works</p>
14.9.1.11	-		<p>Strict Enforcement of No-Dumping Policy</p> <ul style="list-style-type: none"> A policy prohibiting dumping of wastes, chemicals, oil, trash, plastic, or any other substance that would potentially be harmful to dolphins and/or their habitat in the work area; Mandatory educational programme of the no-dumping policy be made available to all construction site personnel for all project-related works; Fines for infractions should be implemented; and Unscheduled, on-site audits shall be implemented. 	All works area during the construction phase	I
14.9.1.12	-		<p>Good Construction Site Practices</p> <ul style="list-style-type: none"> Regular inspection of the integrity and effectiveness of all silt curtains and monitoring of effluents to ensure that any discharge meets effluent discharge guidelines; Keep the number of working or stationary vessels present on-site to the minimum anytime; and Unscheduled, on-site audits for all good site practice restrictions should be conducted, and fines or penalties sufficient to be an effective deterrent need to be levied against violators. 	All works area during the construction phase	I
14.9.1.13 to 14.9.1.18	-		<p>Mitigation for Indirect Disturbance due to Deterioration of Water Quality</p> <ul style="list-style-type: none"> Water quality mitigation measures during construction phases include consideration of alternative construction methods, deployment of silt curtain and good site practices; Alternative construction methods including use of non-dredge methods for ground improvement (e.g. Deep Cement Mixing (DCM), prefabricated vertical drains (PVD), sand compaction piles, steel cells, stone columns and vertical sand drains); 	All works area during the construction phase	<p>I</p> <hr/> <p>I</p>

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<ul style="list-style-type: none"> Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and 		C – Completed in Oct 2021 for new approach lights N/A for marker beacons as HKIAAAA Marker Beacons would be replaced by buoys
			<ul style="list-style-type: none"> Use of horizontal directional drilling (HDD) method and water jetting methods for placement of undersea cables and pipelines to minimise the disturbance to fisheries resources. 		C – Completed on Jan 2019 for HDD work
Landscape and Visual Impact – Construction Phase					
Table 15.6	12.3	-	CM1 - The construction area and contractor’s temporary works areas should be minimised to avoid impacts on adjacent landscape.	All works areas for duration of works; Upon handover and completion of works.	I
Table 15.6	12.3	-	CM2 - Reduction of construction period to practical minimum.	All works areas for duration of works; Upon handover and completion of works.	I
Table 15.6	12.3	-	CM3 - Phasing of the construction stage to reduce visual impacts during the construction phase.	All works areas for duration of works; Upon handover and completion of works.	I
Table 15.6	12.3	-	CM4 - Construction traffic (land and sea) including construction plants, construction vessels and barges should be kept to a practical minimum.	All works areas for duration of works; Upon handover and completion of works.	I
Table 15.6	12.3	-	CM5 - Erection of decorative mesh screens or construction hoardings around works areas in visually unobtrusive colours.	All works areas for duration of works; Upon handover and completion of works. – may be disassembled in phases.	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
Table 15.6	12.3	-	CM6 - Avoidance of excessive height and bulk of site buildings and structures.	New passenger concourse, terminal 2 expansion and other proposed airport related buildings and structures under the project; Upon handover and completion of works.	I
Table 15.6	12.3	-	CM7 - Control of night-time lighting by hooding all lights and through minimisation of night working periods.	All works areas for duration of works; Upon handover and completion of works. – may be disassembled in phases.	I
Table 15.6	12.3	-	CM8 - All existing trees shall be carefully protected during construction. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in contractor's works areas.	All existing trees to be retained; Upon handover and completion of works.	I
Table 15.6	12.3	-	CM9 - Trees unavoidably affected by the works shall be transplanted where practical. A detailed Tree Transplanting Specification shall be provided in the Contract Specification, if applicable. Sufficient time for necessary tree root and crown preparation periods shall be allowed in the project programme.	All existing trees to be affected by the works; Upon handover and completion of works.	I
Table 15.6	12.3	-	CM10 - Land formation works shall be followed with advanced hydroseeding around taxiways and runways as soon as practical.	All affected existing grass areas around runways and verges/Duration of works; Upon handover and completion of works.	To be implemented *(The advanced hydroseeding works around taxiways and runways were partially completed at this stage and would resume in next phase)
Cultural Heritage Impact – Construction Phase					
Not applicable to the construction stage of this project.					
Health Impact – Aircraft Emissions					

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures	Timing of completion of measures	Mitigation Measures Implemented?^
Not applicable to the construction stage of this project.						
Health Impact – Aircraft Noise						
Not applicable to the construction stage of this project.						

Notes:

- “ - ” For items denoted as “ - ” provided under the columns of EM&A Ref. or EP Condition, environmental protection measures should be referred to the relevant paragraph(s) / table(s) in the approved EIA Report.
- “ I ” Implemented and on-going where applicable.
- “ N/A ” Not applicable to the construction works implemented during the reporting month.
- “ ^ ” Checked by ET through site inspection and record provided by the Contractor.

Appendix B. Monitoring Schedule

Monitoring Schedule of This Reporting Period

Feb-23

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1 Site Inspection	2 Site Inspection AR1A, AR2 NM1A, NM5 WQ General mid-ebb: 23:48 mid-flood: 11:29	3 Site Inspection NM4, NM6	4 WQ General mid-ebb: 12:42 mid-flood: 07:46
5	6 Site Inspection	7 Site Inspection CWD Survey (Vessel) WQ General mid-ebb: 14:12 mid-flood: 08:58	8 CWD Survey (Vessel) AR1A, AR2 NM1A, NM5	9 Site Inspection NM4, NM6 WQ General mid-ebb: 15:12 mid-flood: 09:40	10 Site Inspection	11 WQ General mid-ebb: 16:25 mid-flood: 10:28
12	13 Site Inspection CWD Survey (Vessel)	14 Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM5 WQ General mid-ebb: 06:07 mid-flood: 12:06	15 CWD Survey (Land-based)	16 Site Inspection CWD Survey (Land-based) NM4, NM6 WQ General mid-ebb: 22:09 mid-flood: 09:32	17 Site Inspection	18 WQ General mid-ebb: 00:04 mid-flood: 06:54
19	20 Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM5	21 Site Inspection CWD Survey (Vessel) WQ General mid-ebb: 14:13 mid-flood: 08:41	22	23 Site Inspection NM4, NM6 WQ General mid-ebb: 15:31 mid-flood: 09:41	24 Site Inspection CWD Survey (Vessel)	25 AR1A, AR2 WQ General mid-ebb: 16:49 mid-flood: 10:23
26	27 Site Inspection	28 Site Inspection CWD Survey (Vessel) WQ General mid-ebb: 20:06 mid-flood: 07:08				
Notes: CWD - Chinese White Dolphin Air quality and Noise Monitoring Station WQ - Water Quality NM1A/AR1A - Man Tung Road Park NM4 - Ching Chung Hau Po Woon Primary School NM5/AR2 - Village House, Tin Sum NM6 - House No. 1, Sha Lo Wan						

Tentative Monitoring Schedule of Next Reporting Period

Mar-23

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1 CWD Survey (Vessel)	2 3302, 3305, 3310, 3403, 3601 3602, 3603, 3908, 3913 CWD Survey (Vessel) NM4, NM6 WQ General & Regular DCM mid-ebb: 22:40 mid-flood: 10:16	3 3721, 3733, 3804, 3907A, 3907B 3907C, 3920 CWD Survey (Vessel) CWD Survey (Land-based) AR1A, AR2 NM1A, NM5	4 WQ General & Regular DCM mid-ebb: 12:07 mid-flood: 6:56
5	6 3405, 3408, 3802 CWD Survey (Vessel)	7 3206, 3307, 3508, 3801, 3901AB CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 13:20 mid-flood: 7:51	8	9 3302, 3305, 3310, 3403, 3601 3602, 3603, 3908, 3913 CWD Survey (Vessel) AR1A, AR2 NM1A, NM5 WQ General & Regular DCM mid-ebb: 14:13 mid-flood: 8:28	10 3721, 3733, 3804 CWD Survey (Vessel) NM4, NM6	11 WQ General & Regular DCM mid-ebb: 15:17 mid-flood: 9:09
12	13 3405, 3408, 3802 CWD Survey (Vessel)	14 3206, 3307, 3508, 3801, 3901AB WQ General & Regular DCM mid-ebb: 17:38 mid-flood: 10:28	15 CWD Survey (Land-based) AR1A, AR2 NM1A, NM5	16 3302, 3305, 3310, 3403, 3601 3602, 3603, 3728, 3908, 3913 WQ General & Regular DCM mid-ebb: 20:26 mid-flood: 7:33	17 3721, 3733, 3804 NM4, NM6	18 WQ General & Regular DCM mid-ebb: 11:14 mid-flood: 15:53
19	20 3405, 3408, 3802	21 3206, 3307, 3508, 3801, 3901AB AR1A, AR2 NM1A, NM5 WQ General & Regular DCM mid-ebb: 13:13 mid-flood: 7:28	22	23 3302, 3305, 3310, 3403, 3601 3602, 3603, 3908, 3913 WQ General & Regular DCM mid-ebb: 14:19 mid-flood: 8:17	24 3721, 3733, 3804 NM4, NM6	25 WQ General & Regular DCM mid-ebb: 15:29 mid-flood: 8:59
26	27 3405, 3408, 3802 AR1A, AR2 NM1A, NM5	28 3206, 3307, 3508, 3801, 3901AB WQ General & Regular DCM mid-ebb: 17:47 mid-flood: 9:54	29	30 3302, 3305, 3310, 3403, 3601 3602, 3908, 3913 WQ General & Regular DCM mid-ebb: 20:26 mid-flood: 7:45	31 3603, 3721, 3733, 3804 NM4, NM6	
Notes: Contract Number - Site Inspection CWD - Chinese White Dolphin Air quality and Noise Monitoring Station WQ - Water Quality NM1A/AR1A - Man Tung Road Park NM4 - Ching Chung Hau Po Woon Primary School NM5/AR2 - Village House, Tin Sum NM6 - House No. 1, Sha Lo Wan						

Appendix C. Monitoring Results

Air Quality Monitoring Results

1-hour TSP Results

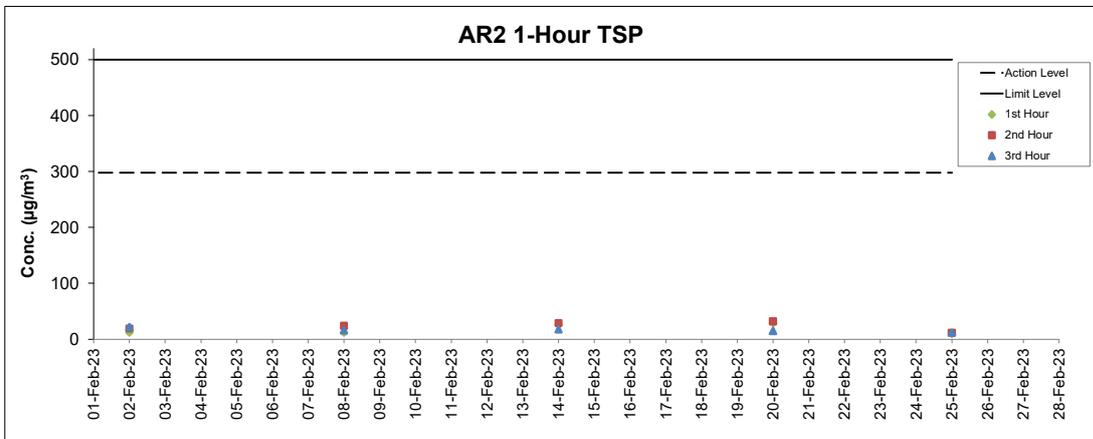
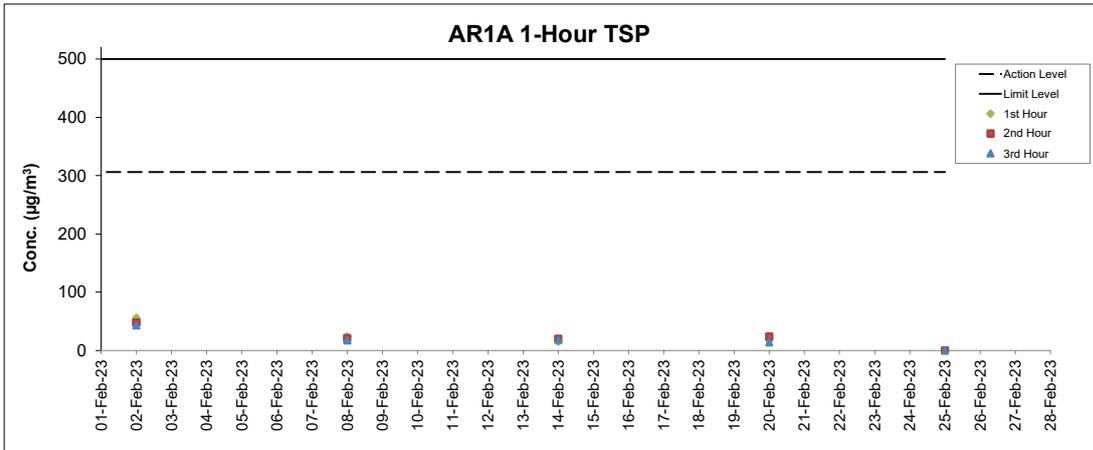
Station: AR1A- Man Tung Road Park

Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP ($\mu\text{g}/\text{m}^3$)	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
2-Feb-23	8:12	Cloudy	1.9	235	18	306	500
2-Feb-23	9:12	Cloudy	1.4	Variable	20	306	500
2-Feb-23	10:12	Cloudy	4.7	57	14	306	500
8-Feb-23	14:54	Cloudy	6.1	79	56	306	500
8-Feb-23	15:54	Cloudy	5.8	78	48	306	500
8-Feb-23	16:54	Cloudy	4.7	93	43	306	500
14-Feb-23	8:17	Sunny	4.7	39	24	306	500
14-Feb-23	9:17	Sunny	4.4	7	21	306	500
14-Feb-23	10:17	Sunny	4.7	45	17	306	500
20-Feb-23	8:21	Sunny	1.1	191	15	306	500
20-Feb-23	9:21	Sunny	2.2	56	20	306	500
20-Feb-23	10:21	Sunny	1.4	38	18	306	500
25-Feb-23	8:15	Sunny	4.4	33	17	306	500
25-Feb-23	9:15	Sunny	4.2	24	24	306	500
25-Feb-23	10:15	Sunny	6.9	40	14	306	500

1-hour TSP Results

Station: AR2- Village House, Tin Sum

Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP ($\mu\text{g}/\text{m}^3$)	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
2-Feb-23	12:34	Cloudy	9.4	95	12	298	500
2-Feb-23	13:34	Cloudy	10.0	100	19	298	500
2-Feb-23	14:34	Cloudy	10.6	97	22	298	500
8-Feb-23	15:11	Cloudy	5.3	79	12	298	500
8-Feb-23	16:11	Cloudy	5.8	75	24	298	500
8-Feb-23	17:11	Cloudy	4.7	89	16	298	500
14-Feb-23	13:00	Sunny	5.6	349	26	298	500
14-Feb-23	14:00	Sunny	4.2	321	29	298	500
14-Feb-23	15:00	Sunny	6.1	319	18	298	500
20-Feb-23	12:31	Sunny	3.6	255	29	298	500
20-Feb-23	13:31	Sunny	4.4	249	32	298	500
20-Feb-23	14:31	Sunny	3.9	252	15	298	500
25-Feb-23	13:36	Sunny	5.8	324	10	298	500
25-Feb-23	14:36	Sunny	5.3	346	12	298	500
25-Feb-23	15:36	Sunny	5.0	350	12	298	500



Notes

1. Major site activities carried out during the reporting period are summarized in Section 1.4 of the monthly EM&A report.
2. Weather conditions during monitoring are presented in the data tables above.
3. QA/QC requirements as stipulated in the EM&A Manual were carried out during measurement.

Noise Monitoring Results

Noise Measurement Results

Station: NM1A- Man Tung Road Park

Date	Weather	Time	Measured		L _{eq(30mins)} dB(A) ^
			L ₁₀ dB(A)	L ₉₀ dB(A)	
2-Feb-23	Cloudy	9:13	63.7	59.6	65
2-Feb-23	Cloudy	9:18	63.6	60.4	
2-Feb-23	Cloudy	9:23	62.9	59.4	
2-Feb-23	Cloudy	9:28	62.4	58.9	
2-Feb-23	Cloudy	9:33	62.6	59.5	
2-Feb-23	Cloudy	9:38	63.8	59.4	
8-Feb-23	Cloudy	14:53	61.2	51.7	60
8-Feb-23	Cloudy	14:58	60.0	52.6	
8-Feb-23	Cloudy	15:03	60.4	53.0	
8-Feb-23	Cloudy	15:08	59.5	53.1	
8-Feb-23	Cloudy	15:13	59.1	53.3	
8-Feb-23	Cloudy	15:18	57.2	51.2	
14-Feb-23	Sunny	8:19	71.3	69.8	73
14-Feb-23	Sunny	8:24	70.8	69.6	
14-Feb-23	Sunny	8:29	71.4	69.7	
14-Feb-23	Sunny	8:34	70.9	69.7	
14-Feb-23	Sunny	8:39	71.4	69.8	
14-Feb-23	Sunny	8:44	70.7	69.5	
20-Feb-23	Sunny	9:22	62.2	58.2	64
20-Feb-23	Sunny	9:27	62.1	58.3	
20-Feb-23	Sunny	9:32	62.9	58.1	
20-Feb-23	Sunny	9:37	62.3	58.1	
20-Feb-23	Sunny	9:42	62.5	58.6	
20-Feb-23	Sunny	9:47	62.2	58.3	

Remarks:

(^) +3dB (A) correction in Leq(30mins) dB(A) was applied to free-field measurement.

Noise Measurement Results

Station: NM4- Ching Chung Hau Po Woon Primary School

Date	Weather	Time	Measured		L _{eq(30mins)} dB(A) ^
			L ₁₀ dB(A)	L ₉₀ dB(A)	
3-Feb-23	Sunny	11:15	61.8	57.5	64
3-Feb-23	Sunny	11:20	60.5	57.0	
3-Feb-23	Sunny	11:25	61.3	57.2	
3-Feb-23	Sunny	11:30	62.7	58.0	
3-Feb-23	Sunny	11:35	61.4	57.6	
3-Feb-23	Sunny	11:40	62.1	57.8	
9-Feb-23	Sunny	13:55	68.6	60.9	60*
9-Feb-23	Sunny	14:00	69.1	60.7	
9-Feb-23	Sunny	14:05	68.0	60.2	
9-Feb-23	Sunny	14:10	67.2	62.4	
9-Feb-23	Sunny	14:15	63.9	58.3	
9-Feb-23	Sunny	14:20	64.5	59.2	
16-Feb-23	Sunny	13:18	69.1	58.9	65
16-Feb-23	Sunny	13:23	62.4	58.1	
16-Feb-23	Sunny	13:28	60.6	56.9	
16-Feb-23	Sunny	13:33	60.6	57.3	
16-Feb-23	Sunny	13:38	63.4	58.2	
16-Feb-23	Sunny	13:43	61.1	57.6	
23-Feb-23	Sunny	13:02	63.7	59.7	60*
23-Feb-23	Sunny	13:07	70.5	59.7	
23-Feb-23	Sunny	13:12	62.4	59.4	
23-Feb-23	Sunny	13:17	64.2	59.6	
23-Feb-23	Sunny	13:22	62.2	58.8	
23-Feb-23	Sunny	13:27	63.2	58.7	

Remarks:

(^) +3dB (A) correction in Leq(30mins) dB(A) was applied to free-field measurement.

(*) The measurement result was corrected with reference to the baseline monitoring levels.

Noise Measurement Results

Station: NM5- Village House, Tin Sum

Date	Weather	Time	Measured		L _{eq(30mins)} dB(A) ^
			L ₁₀ dB(A)	L ₉₀ dB(A)	
2-Feb-23	Cloudy	11:42	56.6	51.6	58
2-Feb-23	Cloudy	11:47	57.3	50.8	
2-Feb-23	Cloudy	11:52	56.3	51.7	
2-Feb-23	Cloudy	11:57	55.6	51.5	
2-Feb-23	Cloudy	12:02	56.1	50.9	
2-Feb-23	Cloudy	12:07	57.6	51.5	
8-Feb-23	Cloudy	15:36	57.6	52.2	61*
8-Feb-23	Cloudy	15:41	56.6	52.7	
8-Feb-23	Cloudy	15:46	56.6	52.2	
8-Feb-23	Cloudy	15:51	61.5	52.7	
8-Feb-23	Cloudy	15:56	61.8	60.6	
8-Feb-23	Cloudy	16:01	61.8	54.2	
14-Feb-23	Sunny	12:16	60.2	55.0	59*
14-Feb-23	Sunny	12:21	61.3	54.9	
14-Feb-23	Sunny	12:26	61.6	56.1	
14-Feb-23	Sunny	12:31	59.8	54.4	
14-Feb-23	Sunny	12:36	60.3	55.9	
14-Feb-23	Sunny	12:41	59.8	56.0	
20-Feb-23	Sunny	13:42	60.3	56.0	61*
20-Feb-23	Sunny	13:47	60.6	56.0	
20-Feb-23	Sunny	13:52	60.7	56.0	
20-Feb-23	Sunny	13:57	62.5	59.4	
20-Feb-23	Sunny	14:02	62.5	58.6	
20-Feb-23	Sunny	14:07	62.6	59.4	

Remarks:

(^) +3dB (A) correction in Leq(30mins) dB(A) was applied to free-field measurement.

(*) The measurement result was corrected with reference to the baseline monitoring levels.

Noise Measurement Results

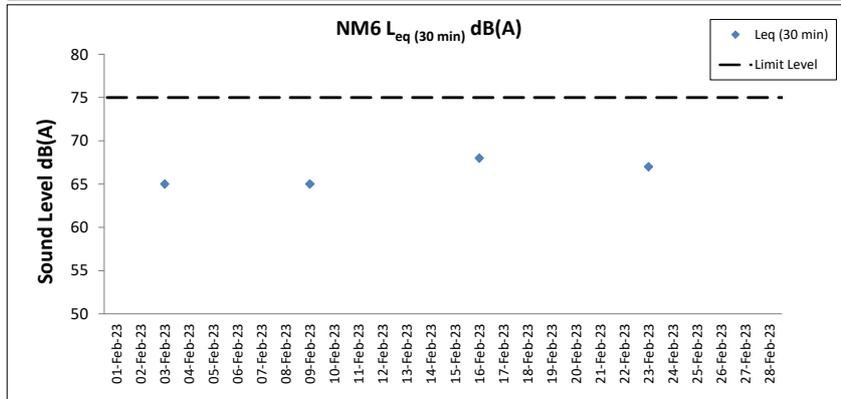
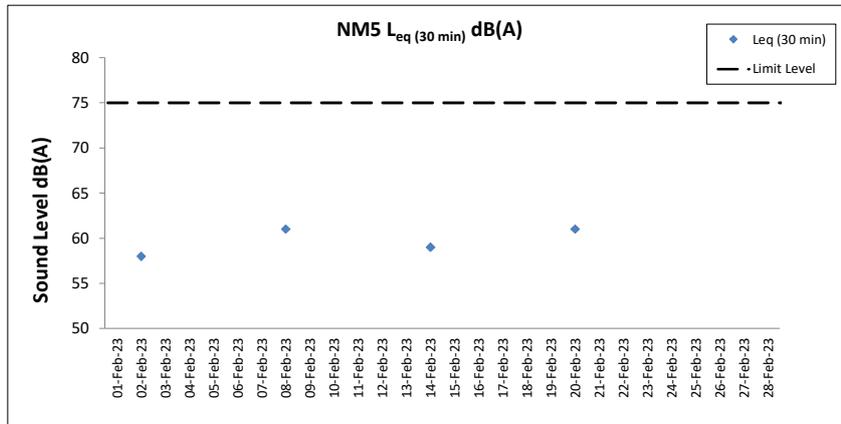
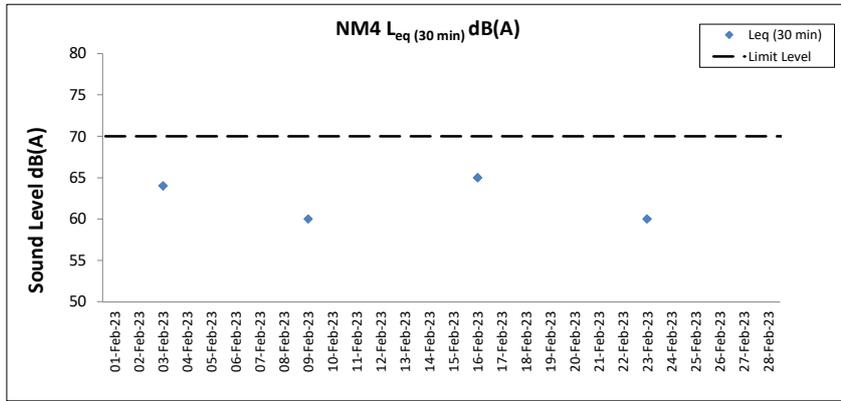
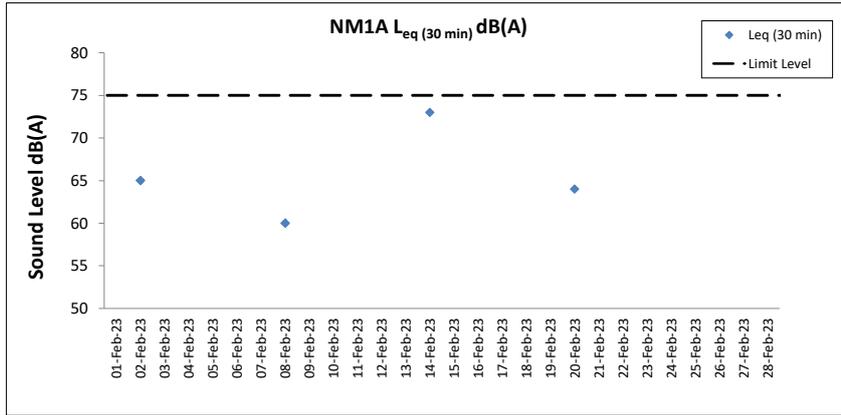
Station: NM6- House No.1 Sha Lo Wan

Date	Weather	Time	Measured		L _{eq(30mins)} dB(A) ^
			L ₁₀ dB(A)	L ₉₀ dB(A)	
3-Feb-23	Sunny	9:41	67.1	57.7	65
3-Feb-23	Sunny	9:46	63.0	54.0	
3-Feb-23	Sunny	9:51	62.7	51.2	
3-Feb-23	Sunny	9:56	63.3	54.4	
3-Feb-23	Sunny	10:01	67.2	54.3	
3-Feb-23	Sunny	10:06	60.1	53.3	
9-Feb-23	Sunny	15:39	62.8	49.1	65
9-Feb-23	Sunny	15:44	72.3	53.5	
9-Feb-23	Sunny	15:49	54.5	45.3	
9-Feb-23	Sunny	15:54	67.2	46.0	
9-Feb-23	Sunny	15:59	57.2	50.1	
9-Feb-23	Sunny	16:04	61.5	48.0	
16-Feb-23	Sunny	15:44	72.0	57.7	68
16-Feb-23	Sunny	15:49	69.6	52.8	
16-Feb-23	Sunny	15:54	65.7	50.5	
16-Feb-23	Sunny	15:59	60.1	46.9	
16-Feb-23	Sunny	16:04	61.7	47.6	
16-Feb-23	Sunny	16:09	65.2	51.5	
23-Feb-23	Sunny	15:41	68.0	52.4	67
23-Feb-23	Sunny	15:46	55.5	46.3	
23-Feb-23	Sunny	15:51	53.2	46.1	
23-Feb-23	Sunny	15:56	68.1	46.4	
23-Feb-23	Sunny	16:01	65.2	45.1	
23-Feb-23	Sunny	16:06	50.6	44.2	

Remarks:

(^) +3dB (A) correction in Leq(30mins) dB(A) was applied to free-field measurement.

(*) The measurement result was corrected with reference to the baseline monitoring levels.



Notes

1. Major site activities carried out during the reporting period are summarized in Section 1.4 of the monthly EM&A report.
2. Weather conditions during monitoring are presented in the data tables above.
3. QA/QC requirements as stipulated in the EM&A Manual were carried out during measurement.

Water Quality Monitoring Results

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA				
C1	Fine	Rough	23:25	8.2	Surface	1.0	0.5	211	16.9	8.3	8.3	31.2	31.2	135.2	135.1	10.9	10.5	3.5	4.4	2	3	815619	804242	
						1.0	0.5	210	16.8	8.3	8.3	31.2	31.2	134.9	135.1	10.8	10.5	3.5	4.4	3				
					Middle	4.1	0.5	202	16.7	8.3	8.3	31.3	31.3	129.1	126.5	10.4	10.0	4.4	4.4	3				
						4.1	0.5	209	16.6	8.3	8.3	31.3	31.3	123.8	126.5	10.0	10.0	4.4	4.4	3				
					Bottom	7.2	0.5	207	16.6	8.3	8.3	31.4	31.4	120.9	120.1	9.7	9.7	5.2	9.7	4				
						7.2	0.5	208	16.6	8.3	8.3	31.4	31.4	119.3	120.1	9.6	9.7	5.9	9.7	5				
C2	Fine	Rough	22:11	10.8	Surface	1.0	0.5	162	17.4	8.3	8.3	29.8	29.9	153.1	153.1	12.3	12.3	2.3	3.5	3	3	825705	806954	
						1.0	0.6	165	17.4	8.3	8.3	29.9	29.9	153.0	153.1	12.3	12.3	2.4	3.5	3				
					Middle	5.4	0.5	169	17.2	8.3	8.3	30.3	30.3	151.7	151.8	12.2	12.2	2.5	3.5	3				
						5.4	0.5	175	17.3	8.3	8.3	30.2	30.2	151.9	151.8	12.2	12.2	2.4	3.5	3				
					Bottom	9.8	0.5	181	16.9	8.3	8.3	31.1	31.1	135.1	135.2	10.8	10.9	5.7	10.9	3				
						9.8	0.5	175	16.9	8.3	8.3	31.1	31.1	135.2	135.2	10.9	10.9	5.6	10.9	3				
C3	Fine	Rough	23:23	10.2	Surface	1.0	0.4	87	16.4	7.9	7.9	32.3	32.3	109.7	109.5	8.8	8.8	1.2	1.6	3	3	822096	817819	
						1.0	0.4	80	16.4	7.9	7.9	32.3	32.3	109.2	109.5	8.8	8.8	1.2	1.6	3				
					Middle	5.1	0.3	67	16.3	7.9	7.9	32.4	32.4	107.8	107.8	8.7	8.7	1.5	1.6	3				
						5.1	0.3	67	16.3	7.9	7.9	32.4	32.4	107.8	107.8	8.7	8.7	1.4	1.6	3				
					Bottom	9.2	0.3	70	16.2	7.9	7.9	32.4	32.3	105.8	103.5	8.6	8.4	2.2	8.4	3				
						9.2	0.3	74	16.1	7.9	7.9	32.2	32.3	101.2	103.5	8.2	8.4	2.2	8.4	3				
IM1	Fine	Rough	23:02	6.3	Surface	1.0	0.4	184	17.2	8.3	8.3	31.3	31.3	129.6	129.6	10.3	10.2	3.5	5.5	2	3	818350	806464	
						1.0	0.4	188	17.2	8.3	8.3	31.3	31.3	129.5	129.6	10.3	10.2	3.5	5.5	3				
					Middle	3.2	0.4	175	17.2	8.3	8.3	31.3	31.3	127.6	127.2	10.2	10.2	3.2	5.5	2				
						3.2	0.4	169	17.2	8.3	8.3	31.3	31.3	126.8	127.2	10.1	10.2	3.2	5.5	2				
					Bottom	5.3	0.3	175	17.2	8.3	8.3	31.3	31.2	120.7	120.5	9.6	9.6	9.2	9.6	4				
						5.3	0.3	180	17.3	8.3	8.3	31.2	31.2	120.2	120.5	9.6	9.6	9.9	9.6	3				
IM2	Fine	Rough	22:59	6.5	Surface	1.0	0.4	191	17.2	8.3	8.3	31.3	31.3	126.9	126.9	10.1	10.0	3.6	4.3	2	3	819192	806246	
						1.0	0.4	189	17.2	8.3	8.3	31.3	31.3	126.8	126.9	10.1	10.0	3.6	4.3	3				
					Middle	3.3	0.4	196	17.2	8.3	8.3	31.3	31.3	124.4	123.9	9.9	9.9	3.8	4.3	3				
						3.3	0.4	194	17.2	8.3	8.3	31.3	31.3	123.3	123.9	9.8	9.9	3.9	4.3	3				
					Bottom	5.5	0.4	202	17.2	8.3	8.3	31.3	31.3	117.6	117.3	9.4	9.4	5.6	9.4	4				
						5.5	0.4	204	17.2	8.3	8.3	31.3	31.3	116.9	117.3	9.3	9.4	5.5	9.4	4				
IM7	Fine	Rough	22:38	7.9	Surface	1.0	0.2	165	17.2	8.3	8.3	30.1	30.1	134.0	134.0	10.8	10.4	2.2	3.0	3	3	821364	806816	
						1.0	0.2	165	17.2	8.3	8.3	30.1	30.1	133.9	134.0	10.7	10.4	2.3	3.0	4				
					Middle	4.0	0.2	153	17.0	8.3	8.3	30.7	30.8	125.6	125.3	10.1	10.0	3.0	3.0	3				
						4.0	0.2	153	17.0	8.3	8.3	30.8	30.8	125.0	125.3	10.0	10.0	3.1	3.0	4				
					Bottom	6.9	0.2	148	17.0	8.3	8.3	31.2	31.2	119.9	119.2	9.6	9.6	3.6	9.6	3				
						6.9	0.2	148	17.0	8.3	8.3	31.2	31.2	118.4	119.2	9.5	9.6	3.9	9.6	3				

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)		
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA						
IM10	Fine	Rough	22:17	8.4	Surface	1.0	0.5	104	17.0	17.0	8.0	8.0	30.3	30.3	136.1	136.0	11.0	10.9	1.0	1.8	3	4	822230	809833		
						1.0	0.5	107	17.0		8.0	8.0	30.3	30.3	135.9	136.0	10.9		1.0		3					
					Middle	4.2	0.5	115	17.0	17.0	8.0	8.0	30.3	30.3	135.5	135.4	10.9	10.9	1.7	1.8	4				4	5
						4.2	0.4	114	17.0		8.0	8.0	30.3	30.3	135.2	135.4	10.9		1.7		4					
					Bottom	7.4	0.4	123	17.0	17.0	8.0	8.0	30.5	30.3	134.7	134.6	10.8	10.9	2.8	1.8	5				4	5
						7.4	0.5	121	17.0		8.0	8.0	30.0	30.3	134.5	134.6	10.9		2.7		6					
IM11	Fine	Rough	22:26	9.2	Surface	1.0	0.6	96	16.7	16.7	8.0	8.0	32.2	32.2	129.1	128.8	10.3	10.1	1.0	1.5	4	3	821495	810522		
						1.0	0.6	95	16.7		8.0	8.0	32.2	32.2	128.4	128.8	10.3		1.1		3					
					Middle	4.6	0.6	93	16.7	16.8	8.0	8.0	32.1	32.1	124.1	123.6	9.9	9.3	1.4	1.5	3				3	3
						4.6	0.6	94	16.8		8.0	8.0	32.1	32.1	123.0	123.6	9.8		1.5		2					
					Bottom	8.2	0.6	73	16.8	16.8	8.0	8.0	32.1	32.1	116.2	115.6	9.3	9.3	2.0	1.5	2				3	2
						8.2	0.5	69	16.8		8.0	8.0	32.1	32.1	114.9	115.6	9.2		2.0		2					
IM12	Fine	Rough	22:31	9.6	Surface	1.0	0.6	102	16.6	16.6	8.0	8.0	32.2	32.2	133.0	131.1	10.7	10.4	1.0	1.7	3	3	821142	811536		
						1.0	0.6	101	16.6		8.0	8.0	32.2	32.2	129.1	128.8	10.4		1.1		3					
					Middle	4.8	0.6	106	16.6	16.6	8.0	8.0	32.1	32.1	126.5	126.2	10.2	9.7	1.7	1.7	3				3	3
						4.8	0.6	107	16.6		8.0	8.0	32.1	32.1	125.9	126.2	10.1		1.7		4					
					Bottom	8.6	0.6	91	16.4	16.4	8.0	8.0	32.2	32.3	122.2	119.9	9.8	9.7	2.5	1.7	4				3	4
						8.6	0.6	95	16.4		8.0	8.0	32.3	32.3	117.5	119.9	9.5		2.4		3					
SR1A	Fine	Rough	22:51	4.8	Surface	1.0	0.0	87	16.6	16.6	8.0	8.0	32.1	32.1	132.7	132.5	10.7	10.7	1.3	1.6	3	3	819972	812657		
						1.0	0.0	94	16.5		8.0	8.0	32.1	32.1	132.3	132.5	10.6		1.3		4					
					Middle	2.4	0.0	102	-	-	-	-	-	-	-	-	-	10.5	-	1.6	-				3	-
						2.4	0.0	98	-		-	-	-	-	-	-	-		-		-					-
					Bottom	3.8	0.1	93	16.6	16.6	8.0	8.0	32.0	32.0	130.3	130.2	10.5	10.5	1.9	1.6	3				3	3
						3.8	0.0	94	16.6		8.0	8.0	32.0	32.0	130.1	130.2	10.5		1.9		3					
SR2	Fine	Rough	23:04	5.2	Surface	1.0	0.4	37	16.5	16.5	8.1	8.1	32.3	32.4	129.1	128.4	10.4	10.4	1.0	1.1	4	4	821451	814150		
						1.0	0.4	41	16.4		8.1	8.1	32.4	32.4	127.7	127.7	10.3		1.0		3					
					Middle	-	0.5	50	-	-	-	-	-	-	-	-	-	9.2	-	1.1	-				4	-
						-	0.5	51	-		-	-	-	-	-	-	-		-		-					
					Bottom	4.2	0.5	61	16.1	16.1	8.1	8.1	32.6	32.6	115.1	113.8	9.3	9.2	1.2	1.1	4				4	4
						4.2	0.5	64	16.1		8.1	8.1	32.6	32.6	112.4	113.8	9.1		1.3		4					
SR3	Fine	Rough	22:31	8.8	Surface	1.0	0.5	145	17.2	17.2	8.3	8.3	30.1	30.1	136.4	136.4	11.0	10.6	3.2	4.6	3	3	822147	807579		
						1.0	0.5	150	17.2		8.3	8.3	30.1	30.1	136.4	136.4	10.9		3.3		3					
					Middle	4.4	0.5	138	17.0	17.0	8.3	8.3	31.0	31.0	126.6	126.1	10.2	9.5	3.1	4.6	3				3	3
						4.4	0.5	136	17.0		8.3	8.3	31.0	31.0	125.6	126.1	10.1		3.5		3					
					Bottom	7.8	0.5	139	17.0	17.0	8.3	8.3	31.0	31.0	118.6	118.4	9.5	9.5	7.4	4.6	3				3	3
						7.8	0.5	132	17.0		8.3	8.3	31.0	31.0	118.2	118.4	9.5		7.4		3					
SR4A	Fine	Rough	23:54	9.5	Surface	1.0	0.1	7	17.2	17.2	8.3	8.3	31.3	31.3	134.6	133.0	10.7	10.3	3.9	4.4	4	4	817165	807823		
						1.0	0.1	13	17.1		8.3	8.3	31.3	31.3	131.4	133.0	10.5		4.0		5					
					Middle	4.8	0.0	11	16.9	16.9	8.3	8.3	31.5	31.5	126.0	125.7	10.1	9.6	4.6	4.4	4				4	4
						4.8	0.1	16	16.9		8.3	8.3	31.5	31.5	125.4	125.7	10.0		4.6		3					
					Bottom	8.5	0.0	30	16.9	17.0	8.3	8.3	31.5	31.5	120.0	119.8	9.6	9.6	4.8	4.4	2				4	2
						8.5	0.0	26	17.0		8.3	8.3	31.5	31.5	119.6	119.8	9.6		4.7		3					
SR8	Fine	Rough	22:35	4.6	Surface	1.0	-	-	16.7	16.7	8.0	8.0	32.2	32.2	118.3	117.8	9.5	9.5	1.1	1.2	2	4	820398	811638		
						1.0	-	-	16.7		8.0	8.0	32.2	32.2	117.2	117.8	9.4		1.1		4					
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	8.9	-	1.2	-				4	-
						-	-	-	-		-	-	-	-	-	-	-		-		-					
					Bottom	3.6	-	-	16.6	16.6	8.0	8.0	32.2	32.2	111.6	110.3	9.0	8.9	1.4	1.2	4				4	4
						3.6	-	-	16.6		8.0	8.0	32.2	32.2	108.9	110.3	8.7		1.3		5					

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)			
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA							
C1	Fine	Rough	11:52	8.0	Surface	1.0	0.0	187	16.8	16.8	8.3	8.3	31.0	31.0	137.5	137.4	11.1	10.8	3.2	4.9	2	3	815638	804263			
						1.0	0.1	181	16.8		8.3	8.3	31.0	31.0	137.3	137.4	11.1		3.2		3						
					Middle	4.0	0.0	202	16.6	16.6	8.3	8.3	31.3	31.3	129.4	129.1	10.4	10.2	4.7	10.2	5.0				10.2	3	5
						4.0	0.0	198	16.6		8.3	8.3	31.3	31.3	128.8	126.5	10.4		6.5		4						
					Bottom	7.0	0.0	204	16.6	16.6	8.3	8.3	31.3	31.3	126.5	126.5	10.2	10.2	6.7	10.2	6.7				10.2	5	
						7.0	0.0	199	16.6		8.3	8.3	31.3	31.3	126.4	126.5	10.2		6.7								
C2	Fine	Rough	13:13	11.2	Surface	1.0	0.1	179	17.3	17.3	8.3	8.3	29.7	29.7	142.7	142.5	11.5	10.8	2.2	3.7	4	5	825659	806955			
						1.0	0.1	180	17.3		8.3	8.3	29.7	29.7	142.2	142.5	11.4		2.2		5						
					Middle	5.6	0.1	185	16.9	16.9	8.2	8.2	31.1	31.1	127.0	126.9	10.2	10.0	5.3	10.0	5.4				10.0	4	
						5.6	0.1	188	16.9		8.2	8.2	31.1	31.1	126.7	124.4	10.2		3.5		5						
					Bottom	10.2	0.0	157	16.9	16.9	8.2	8.2	31.1	31.1	124.4	124.1	10.0	10.0	3.8	10.0	3.8				10.0	6	
						10.2	0.0	154	16.9		8.2	8.2	31.1	31.1	123.8	124.1	9.9		3.8								
C3	Fine	Rough	12:06	11.8	Surface	1.0	0.1	87	16.5	16.5	7.6	7.5	31.8	31.8	109.9	109.9	8.9	8.8	1.0	1.1	2	3	822118	817817			
						1.0	0.1	94	16.5		7.5	7.5	31.8	31.8	109.8	109.9	8.8		1.1		2						
					Middle	5.9	0.0	107	16.5	16.5	7.5	7.5	31.7	31.7	107.9	107.9	8.7	8.6	1.1	8.6	1.1				8.6	3	
						5.9	0.1	111	16.5		7.5	7.5	31.7	31.7	107.8	107.9	8.7		1.2		4						
					Bottom	10.8	0.1	77	16.5	16.5	7.4	7.4	31.7	31.7	107.2	107.1	8.6	8.6	1.2	8.6	1.2				8.6	4	
						10.8	0.1	71	16.5		7.4	7.4	31.7	31.7	107.0	107.1	8.6		1.2								
IM1	Fine	Rough	12:07	6.4	Surface	1.0	0.1	148	17.1	17.1	8.3	8.3	31.1	31.1	131.9	131.8	10.5	10.2	4.4	6.3	3	2	818344	806463			
						1.0	0.1	152	17.1		8.3	8.3	31.1	31.1	131.7	131.8	10.5		4.6		2						
					Middle	3.2	0.1	164	16.9	16.9	8.3	8.3	31.3	31.3	123.4	123.2	9.9	9.0	4.9	9.0	4.8				9.0	3	
						3.2	0.1	159	16.9		8.3	8.3	31.3	31.3	123.0	123.2	9.9		4.8		3						
					Bottom	5.4	0.0	175	16.7	16.7	8.2	8.2	31.4	31.4	112.1	112.1	9.0	9.0	9.6	9.0	9.6				9.0	<2	
						5.4	0.0	169	16.7		8.2	8.2	31.4	31.4	112.0	112.0	9.0		9.7		<2						
IM2	Fine	Rough	12:11	6.7	Surface	1.0	0.0	169	17.1	17.1	8.3	8.3	31.2	31.2	136.7	136.6	10.9	10.8	3.2	4.0	2	3	819181	806220			
						1.0	0.1	171	17.1		8.3	8.3	31.2	31.2	136.4	136.6	10.9		3.2		3						
					Middle	3.4	0.0	172	16.8	16.8	8.3	8.3	31.4	31.4	132.9	132.6	10.7	10.1	3.9	10.1	3.9				10.1	3	
						3.4	-	164	16.8		8.3	8.3	31.4	31.4	132.3	126.2	10.6		5.0		4						
					Bottom	5.7	0.0	183	16.8	16.8	8.3	8.3	31.4	31.4	126.2	126.2	10.1	9.7	5.0	9.7	5.0				9.7	5	
						5.7	0.1	185	16.8		8.3	8.3	31.4	31.4	126.1	126.2	10.1		5.0								
IM7	Fine	Rough	12:35	8.0	Surface	1.0	0.1	148	17.2	17.2	8.3	8.3	29.8	29.9	135.2	134.9	10.9	10.5	2.3	2.5	2	4	821338	806820			
						1.0	0.1	149	17.1		8.3	8.3	29.9	29.9	134.6	134.9	10.8		2.3		3						
					Middle	4.0	0.1	152	16.9	16.9	8.3	8.3	31.0	31.0	126.6	126.4	10.2	9.7	2.5	9.7	2.5				9.7	3	
						4.0	0.1	156	16.9		8.3	8.3	31.0	31.0	126.2	120.5	10.1		2.7		4						
					Bottom	7.0	0.0	133	16.9	16.9	8.3	8.3	31.1	31.1	120.6	120.5	9.7	9.7	2.7	9.7	2.7				9.7	5	
						7.0	0.0	132	16.9		8.3	8.3	31.1	31.1	120.3	120.5	9.7		2.8		4						

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA				
IM10	Fine	Rough	13:10	8.8	Surface	1.0	0.0	244	16.7	16.7	8.0	8.0	31.8	31.8	131.2	130.8	10.5	10.3	1.1	1.2	4	4	822248	809856
						1.0	0.0	242	16.7		8.0	8.0	31.8	31.8	130.3	130.8	10.5		1.1		3			
					Middle	4.4	0.0	239	16.7	16.8	7.9	7.9	32.0	32.0	125.8	124.7	10.1	9.2	1.2	4				
						4.4	0.0	241	16.8		7.9	7.9	32.0	32.0	123.6	124.7	9.9		1.2	4				
					Bottom	7.8	0.0	243	16.9	17.0	7.9	7.9	31.9	31.8	115.5	115.2	9.2	9.2	1.2	4				
						7.8	0.0	249	17.0		7.9	7.9	31.8	31.8	114.8	115.2	9.2		1.2	5				
IM11	Fine	Rough	13:05	8.0	Surface	1.0	0.1	95	16.6	16.6	8.0	8.0	32.2	32.2	129.8	129.5	10.4	10.1	1.0	1.2	4	5	821508	810551
						1.0	0.0	97	16.6		8.0	8.0	32.2	32.2	129.1	129.5	10.4		1.1		4			
					Middle	4.0	0.0	104	16.9	16.9	8.0	8.0	32.0	31.9	122.8	122.5	9.8	9.3	1.1	5				
						4.0	0.1	106	16.9		8.0	8.0	31.9	31.9	122.1	122.5	9.7		1.1	5				
					Bottom	7.0	0.0	78	17.2	17.2	8.0	8.0	31.7	31.7	117.9	117.0	9.4	9.3	1.6	6				
						7.0	0.0	84	17.2		8.0	8.0	31.7	31.7	116.1	117.0	9.2		1.5	7				
IM12	Fine	Rough	13:00	7.6	Surface	1.0	0.0	113	16.6	16.6	7.9	7.9	32.2	32.2	124.8	124.6	10.0	9.9	1.1	1.3	3	3	821158	811535
						1.0	0.1	118	16.6		7.9	7.9	32.2	32.2	124.3	124.6	10.0		1.1		4			
					Middle	3.8	0.0	130	16.6	16.6	7.9	7.9	32.2	32.2	121.2	121.3	9.7	8.7	1.3	3				
						3.8	0.0	130	16.6		7.9	7.9	32.2	32.2	121.3	121.3	9.7		1.2	3				
					Bottom	6.6	0.0	108	16.6	16.6	7.9	7.9	32.2	32.1	109.6	108.6	8.8	8.7	1.4	3				
						6.6	0.0	109	16.6		7.9	7.9	32.1	32.1	107.5	108.6	8.6		1.4	2				
SR1A	Fine	Rough	12:37	4.6	Surface	1.0	0.0	178	16.5	16.5	7.9	7.9	32.0	32.0	116.9	116.3	9.4	9.4	1.3	1.4	4	4	819977	812661
						1.0	0.0	182	16.5		7.9	7.9	32.0	32.0	115.7	116.3	9.3		1.4		4			
					Middle	2.3	0.0	167	-	-	-	-	-	-	-	-	-	8.7	-	-				
						2.3	0.1	172	-		-	-	-	-	-	-	-		-	-	-			
					Bottom	3.6	0.0	166	16.5	16.5	7.9	7.8	32.1	32.0	107.7	107.0	8.7	8.7	1.5	4				
						3.6	0.1	161	16.5		7.8	7.8	32.0	32.0	106.3	107.0	8.6		1.6	3				
SR2	Fine	Rough	12:25	5.6	Surface	1.0	0.1	85	16.6	16.6	7.8	7.8	32.1	32.1	121.8	120.0	9.8	9.7	1.7	1.9	5	4	821443	814172
						1.0	0.1	90	16.5		7.8	7.8	32.1	32.1	118.1	120.0	9.5		1.7		4			
					Middle	-	0.1	60	-	-	-	-	-	-	-	-	-	8.4	-	-				
						-	0.1	59	-		-	-	-	-	-	-	-		-	-				
					Bottom	4.6	0.0	64	16.5	16.5	7.8	7.8	32.2	32.2	104.1	103.7	8.4	8.4	2.1	3				
						4.6	0.0	65	16.5		7.8	7.8	32.2	32.2	103.2	103.7	8.3		2.1	4				
SR3	Fine	Rough	12:42	8.2	Surface	1.0	0.0	186	17.3	17.3	8.2	8.2	29.3	29.3	137.1	137.0	11.0	10.6	2.0	4.5	3	3	822148	807583
						1.0	0.0	181	17.3		8.2	8.2	29.3	29.3	136.9	137.0	11.0		2.0		2			
					Middle	4.1	0.1	184	17.0	17.0	8.2	8.2	30.4	30.5	126.5	126.3	10.2	10.0	2.6	3				
						4.1	0.1	186	17.0		8.2	8.2	30.5	30.5	126.0	126.3	10.1		2.7	3				
					Bottom	7.2	0.1	197	17.0	17.0	8.2	8.2	30.9	30.9	124.2	124.1	10.0	9.7	8.9	3				
						7.2	0.1	199	17.0		8.2	8.2	30.9	30.9	123.9	124.1	9.9		8.9	4				
SR4A	Fine	Rough	11:31	8.6	Surface	1.0	0.0	265	17.1	17.1	8.3	8.3	31.5	31.5	129.2	129.2	10.3	10.1	4.0	4.2	4	4	817185	807801
						1.0	0.1	268	17.1		8.3	8.3	31.5	31.5	129.1	129.2	10.3		4.0		5			
					Middle	4.3	-	250	16.9	16.9	8.3	8.3	31.6	31.6	124.4	124.2	9.9	9.7	4.3	3				
						4.3	0.0	256	16.9		8.3	8.3	31.6	31.6	124.0	124.2	9.9		4.3	4				
					Bottom	7.6	0.0	264	16.9	17.0	8.3	8.3	31.6	31.6	121.0	120.7	9.7	8.7	4.2	3				
						7.6	0.0	264	17.0		8.3	8.3	31.6	31.6	120.3	120.7	9.6		4.3	2				
SR8	Fine	Rough	12:54	4.8	Surface	1.0	-	-	16.7	16.8	7.9	7.9	32.1	32.1	127.7	127.4	10.2	10.2	1.8	1.9	3	3	820411	811624
						1.0	-	-	16.8		7.9	7.9	32.1	32.1	127.1	127.4	10.2		1.7		3			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	8.7	-	-				
						-	-	-	-		-	-	-	-	-	-	-		-	-				
					Bottom	3.8	-	-	17.4	17.5	7.9	7.9	31.6	31.5	110.9	109.9	8.8	8.7	2.0	3				
						3.8	-	-	17.5		7.9	7.9	31.5	31.5	108.9	109.9	8.6		2.1	4				

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

Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
C1	Cloudy	Rough	13:00	8.8	Surface	1.0	0.1	194	16.9	8.1	8.1	31.9	31.9	135.6	135.6	10.8	10.8	3.4	3.2	6	7	815601	804235	
						1.0	0.0	189	16.9	8.1	8.1	31.9	31.9	135.6	135.6	10.8	10.8	3.4	3.2	6				
					Middle	4.4	0.1	181	16.9	8.1	8.1	31.9	31.9	134.4	134.4	10.7	10.7	3.3	3.2	6				
						4.4	0.1	177	16.9	8.1	8.1	31.9	31.9	134.3	134.3	10.7	10.7	3.3	3.2	7				
					Bottom	7.8	0.0	162	16.9	8.1	8.1	31.9	31.9	133.1	133.1	10.6	10.6	3.0	3.2	8				
						7.8	0.0	158	16.9	8.1	8.1	31.9	31.9	133.1	133.1	10.6	10.6	3.0	3.2	7				
C2	Rainy	Rough	11:10	9.5	Surface	1.0	0.1	1	16.7	8.1	8.1	31.7	31.7	138.4	138.4	11.1	11.1	3.1	3.2	6	6	825658	806944	
						1.0	0.1	2	16.7	8.1	8.1	31.7	31.7	138.3	138.3	11.1	11.1	3.1	3.2	5				
					Middle	4.8	0.2	11	16.7	8.1	8.1	31.7	31.7	137.7	137.7	11.1	11.1	2.8	3.2	5				
						4.8	0.2	16	16.7	8.1	8.1	31.7	31.7	137.7	137.7	11.1	11.1	2.9	3.2	6				
					Bottom	8.5	0.2	349	16.7	8.1	8.1	31.7	31.7	136.9	136.9	11.0	11.0	3.6	3.2	6				
						8.5	0.1	355	16.7	8.1	8.1	31.7	31.7	136.9	136.9	11.0	11.0	3.5	3.2	6				
C3	Rainy	Rough	12:11	11.0	Surface	1.0	0.1	92	17.1	7.8	7.8	31.3	31.3	119.2	119.0	9.5	9.3	2.0	3.5	6	6	822126	817798	
						1.0	0.0	93	17.1	7.8	7.8	31.3	31.3	118.7	119.0	9.5	9.3	2.1	3.5	7				
					Middle	5.5	0.1	101	17.0	7.8	7.8	31.1	31.1	113.2	113.0	9.1	9.3	3.9	3.5	6				
						5.5	0.1	97	17.0	7.8	7.8	31.1	31.1	112.8	113.0	9.0	9.3	3.8	3.5	7				
					Bottom	10.0	0.1	67	16.9	7.9	7.9	31.2	31.3	111.5	111.4	8.9	8.9	4.5	3.5	5				
						10.0	0.2	63	16.9	7.9	7.9	31.3	31.3	111.3	111.4	8.9	8.9	4.4	3.5	6				
IM1	Cloudy	Rough	12:28	7.7	Surface	1.0	0.1	87	16.7	8.1	8.1	31.7	31.7	138.6	138.6	11.1	11.1	3.0	3.4	8	8	818329	806458	
						1.0	0.1	89	16.7	8.1	8.1	31.7	31.7	138.6	138.6	11.1	11.1	3.1	3.4	7				
					Middle	3.9	0.0	97	16.7	8.1	8.1	31.7	31.7	137.8	137.8	11.1	11.1	3.3	3.4	7				
						3.9	0.1	91	16.7	8.1	8.1	31.7	31.7	137.8	137.8	11.1	11.1	3.3	3.4	7				
					Bottom	6.7	0.0	56	16.7	8.1	8.1	31.7	31.7	137.2	137.2	11.0	11.0	3.8	3.4	9				
						6.7	0.0	58	16.7	8.1	8.1	31.7	31.7	137.2	137.2	11.0	11.0	3.7	3.4	10				
IM2	Cloudy	Rough	12:16	7.8	Surface	1.0	0.1	47	16.7	8.1	8.1	31.7	31.7	137.4	137.4	11.0	11.0	3.5	3.6	6	7	819203	806225	
						1.0	0.1	44	16.7	8.1	8.1	31.7	31.7	137.4	137.4	11.0	11.0	3.5	3.6	6				
					Middle	3.9	0.1	49	16.7	8.1	8.1	31.7	31.7	136.1	136.1	10.9	10.9	3.6	3.6	7				
						3.9	0.1	43	16.7	8.1	8.1	31.7	31.7	136.0	136.1	10.9	10.9	3.6	3.6	6				
					Bottom	6.8	0.1	61	16.7	8.1	8.1	31.7	31.7	133.5	133.5	10.7	10.7	3.7	3.6	7				
						6.8	0.1	61	16.7	8.1	8.1	31.7	31.7	133.4	133.5	10.7	10.7	3.8	3.6	7				
IM7	Rainy	Rough	11:47	7.9	Surface	1.0	0.1	48	16.6	8.1	8.1	31.7	31.7	140.6	140.6	11.3	11.2	3.5	4.6	9	7	821368	806839	
						1.0	0.2	52	16.6	8.1	8.1	31.7	31.7	140.6	140.6	11.3	11.2	3.4	4.6	8				
					Middle	4.0	0.2	46	16.6	8.1	8.1	31.7	31.7	136.9	136.9	11.0	11.0	5.3	4.6	7				
						4.0	0.2	42	16.6	8.1	8.1	31.7	31.7	136.8	136.9	11.0	11.0	5.4	4.6	6				
					Bottom	6.9	0.1	30	16.6	8.1	8.1	31.7	31.7	136.4	136.4	11.0	11.0	4.8	4.6	5				
						6.9	0.1	29	16.6	8.1	8.1	31.7	31.7	136.4	136.4	11.0	11.0	4.9	4.6	6				

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)							
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			Value	DA					
IM10	Rainy	Rough	11:07	8.0	Surface	1.0	0.1	306	17.2	17.2	8.0	8.0	30.8	30.8	129.8	129.6	10.4	10.1	1.0	1.1	6	6	822244	809822							
						1.0	0.1	308	17.2		8.0	8.0	30.8	30.8	129.3	129.6	10.3		1.1		6										
					Middle	4.0	0.2	311	17.0	17.0	8.0	8.0	31.0	31.0	125.8	123.2	10.1		1.1		6										
						4.0	0.2	316	16.9		8.0	8.0	31.0	31.0	120.5	123.2	9.7		1.2		5										
					Bottom	7.0	0.1	320	16.7	16.7	8.0	8.0	31.2	31.2	116.7	116.8	9.4		9.4		1.2				6						
						7.0	0.1	319	16.7		8.0	8.0	31.2	31.2	116.9	116.8	9.4		9.4		1.1				5						
IM11	Rainy	Rough	11:12	9.2	Surface	1.0	0.1	319	17.2	17.2	8.0	8.0	30.9	30.9	128.7	128.5	10.3	10.2	1.4	1.6	5	6	821511	810540							
						1.0	0.0	316	17.2		8.0	8.0	30.9	30.9	128.2	128.5	10.3		1.4		6										
					Middle	4.6	0.0	327	16.9	16.9	8.0	8.0	31.2	31.2	125.0	124.4	10.0		1.6		6										
						4.6	0.0	323	16.8		8.0	8.0	31.2	31.2	123.7	124.4	10.0		1.5		5										
					Bottom	8.2	0.0	290	16.6	16.6	8.0	8.0	31.4	31.4	116.1	115.3	9.4		9.3		1.9				7						
						8.2	0.0	290	16.5		8.0	8.0	31.4	31.4	114.4	115.3	9.2		9.3		1.8				6						
IM12	Rainy	Rough	11:19	7.8	Surface	1.0	0.0	303	17.2	17.2	8.0	8.0	30.9	30.9	126.9	126.5	10.1	9.9	1.1	1.5	10	8	821150	811517							
						1.0	0.1	304	17.2		8.0	8.0	30.9	30.9	126.0	126.5	10.1		1.1		9										
					Middle	3.9	0.1	291	17.2	17.2	8.0	8.0	30.9	30.9	122.8	121.7	9.8		1.3		7										
						3.9	0.0	286	17.2		8.0	8.0	30.9	30.9	120.6	121.7	9.6		1.4		6										
					Bottom	6.8	0.1	318	17.2	17.2	8.0	8.0	30.8	30.8	114.3	113.8	9.1		9.1		2.0				7						
						6.8	0.1	321	17.2		8.0	8.0	30.9	30.8	113.2	113.8	9.0		9.1		2.0				6						
SR1A	Rainy	Rough	11:39	5.6	Surface	1.0	0.0	165	17.4	17.4	8.0	8.0	31.1	31.1	132.5	132.3	10.5	10.5	1.9	2.0	6	6	819978	812654							
						1.0	0.1	166	17.4		8.0	8.0	31.1	31.1	132.0	132.3	10.5		1.9		7										
					Middle	2.8	0.1	170	-	-	-	-	-	-	-	-	-		-		-				-	-	-	-	-	-	-
						2.8	0.0	166	-		-	-	-	-	-	-	-		-		-				-	-	-	-	-	-	-
					Bottom	4.6	0.0	177	17.4	17.4	8.0	8.0	31.1	31.1	131.0	130.9	10.4		10.4		2.1				5						
						4.6	0.0	173	17.4		8.0	8.0	31.1	31.1	130.7	130.9	10.4		10.4		2.2				6						
SR2	Rainy	Rough	11:51	5.6	Surface	1.0	0.0	42	17.2	17.2	8.0	8.0	30.9	30.9	123.2	122.5	9.9	9.8	1.3	1.4	5	6	821464	814162							
						1.0	0.0	35	17.2		8.0	8.0	30.9	30.9	121.7	122.5	9.7		1.2		6										
					Middle	-	0.1	40	-	-	-	-	-	-	-	-	-		-		-				-	-	-	-	-	-	-
						-	-	33	-		-	-	-	-	-	-	-		-		-				-	-	-	-	-	-	-
					Bottom	4.6	0.1	54	17.1	17.2	8.0	8.0	31.0	31.0	113.1	112.1	9.0		9.0		1.6				6						
						4.6	0.0	57	17.2		8.0	8.0	30.9	30.9	111.0	112.1	8.9		9.0		1.6				6						
SR3	Rainy	Rough	11:35	8.8	Surface	1.0	0.2	1	16.6	16.6	8.1	8.1	31.7	31.7	139.8	139.8	11.2	11.2	3.5	4.5	6	6	822137	807583							
						1.0	0.2	7	16.6		8.1	8.1	31.7	31.7	139.8	139.8	11.2		3.5		6										
					Middle	4.4	0.2	351	16.6	16.6	8.1	8.1	31.7	31.7	139.1	139.1	11.2		11.2		3.9				7						
						4.4	0.2	344	16.6		8.1	8.1	31.7	31.7	139.1	139.1	11.2		11.2		3.9				6						
					Bottom	7.8	0.2	31	16.6	16.6	8.1	8.1	31.7	31.7	135.4	135.5	10.9		10.9		6.0				6						
						7.8	0.2	31	16.6		8.1	8.1	31.7	31.7	135.5	135.5	10.9		10.9		6.1				7						
SR4A	Cloudy	Moderate	13:26	10.3	Surface	1.0	0.0	298	16.9	16.9	8.1	8.1	31.9	31.9	140.8	140.8	11.3	11.1	2.5	2.7	7	8	817176	807823							
						1.0	0.0	294	16.9		8.1	8.1	31.9	31.9	140.8	140.8	11.3		2.5		8										
					Middle	5.2	0.0	293	16.9	16.9	8.1	8.1	31.9	31.9	136.8	136.8	10.9		10.9		2.7				8						
						5.2	0.0	297	16.9		8.1	8.1	31.9	31.9	136.8	136.8	10.9		10.9		2.7				7						
					Bottom	9.3	0.0	273	16.9	16.9	8.1	8.1	31.9	31.9	136.5	136.5	10.9		10.9		2.8				8						
						9.3	0.0	275	16.9		8.1	8.1	31.9	31.9	136.4	136.5	10.9		10.9		2.8				9						
SR8	Rainy	Rough	11:23	4.6	Surface	1.0	-	-	16.9	16.9	8.0	8.0	31.2	31.2	125.1	124.2	10.1	10.0	1.1	1.2	5	7	820384	811607							
						1.0	-	-	16.8		8.0	8.0	31.2	31.2	123.3	124.2	9.9		1.1		6										
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-				-	-	-	-	-	-	
						-	-	-	-		-	-	-	-	-	-	-		-		-				-	-	-	-	-	-	-
					Bottom	3.6	-	-	16.6	16.6	8.0	8.0	31.3	31.0	114.9	113.8	9.3		9.2		1.3				7						
						3.6	-	-	16.5		8.0	8.0	30.8	31.0	112.6	113.8	9.1		9.2		1.3				8						

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

Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)			
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA					
C1	Cloudy	Rough	07:11	8.3	Surface	1.0	0.3	44	16.7	16.7	7.9	7.9	31.7	31.7	136.0	136.1	10.9	10.9	10.9	2.2	3.0	6	7	815643	804264		
						1.0	0.3	49	16.7		7.9		31.7		136.1		10.9				3.0					7	
					Middle	4.2	0.3	21	16.7	16.7	7.9	7.9	31.7	31.7	135.7	135.7	10.9	10.9	10.9	10.9	2.0	6	7			6	7
						4.2	0.3	18	16.7		7.9		31.7		135.7		10.9		2.0		7						
					Bottom	7.3	0.3	25	16.7	16.7	7.9	7.9	31.7	31.7	135.2	135.2	10.9	10.9	10.9	10.9	1.6	6	7			6	7
						7.3	0.3	26	16.7		7.9		31.7		135.2		10.9		1.6		7						
C2	Cloudy	Rough	08:40	9.2	Surface	1.0	0.3	354	16.7	16.7	8.1	8.1	31.7	31.7	137.7	137.6	11.1	11.1	11.0	3.6	3.3	7	7	825673	806964		
						1.0	0.3	356	16.7		8.1		31.7		137.6		11.1				3.3					7	
					Middle	4.6	0.3	334	16.7	16.7	8.1	8.1	31.7	31.7	136.2	136.2	10.9	10.9	10.9	10.9	3.6	7	7			7	7
						4.6	0.4	340	16.7		8.1		31.7		136.2		10.9		3.6		7						
					Bottom	8.2	0.3	9	16.7	16.7	8.1	8.1	31.7	31.7	135.2	135.2	10.9	10.9	10.9	10.9	4.0	8	7			7	7
						8.2	0.3	10	16.7		8.1		31.7		135.2		10.9		4.0		7						
C3	Rainy	Rough	08:10	11.8	Surface	1.0	0.4	269	17.1	17.1	8.1	8.1	31.3	31.3	124.1	123.8	9.9	9.9	9.6	3.1	2.2	8	7	822125	817814		
						1.0	0.5	274	17.1		8.1		31.3		123.8		9.9				2.1					7	
					Middle	5.9	0.4	280	17.0	17.0	8.1	8.1	31.4	31.4	115.5	115.4	9.2	9.2	9.2	9.1	3.1	6	7			6	7
						5.9	0.4	272	17.0		8.1		31.4		115.3		9.2		3.1		7						
					Bottom	10.8	0.5	278	17.0	17.0	8.1	8.1	31.4	31.4	113.7	113.5	9.1	9.1	9.1	9.1	4.1	6	7			6	7
						10.8	0.5	270	17.0		8.1		31.4		113.3		9.1		4.0		6						
IM1	Cloudy	Rough	07:40	7.3	Surface	1.0	0.2	9	16.9	16.9	8.0	8.0	31.9	31.9	133.8	133.8	10.7	10.7	10.7	2.1	1.8	7	7	818349	806463		
						1.0	0.1	14	16.9		8.0		31.9		133.8		10.7				1.8					7	
					Middle	3.7	0.2	20	16.9	16.9	8.0	8.0	31.9	31.9	132.9	132.9	10.6	10.6	10.6	10.6	2.3	6	7			6	7
						3.7	0.2	12	16.9		8.0		31.9		132.9		10.6		2.3		7						
					Bottom	6.3	0.2	13	16.9	16.9	8.0	8.0	31.9	31.9	130.2	130.1	10.4	10.4	10.4	10.4	2.2	6	7			6	7
						6.3	0.1	6	16.9		8.0		31.9		130.0		10.4		2.2		7						
IM2	Cloudy	Rough	07:49	7.4	Surface	1.0	0.2	8	16.9	16.9	8.0	8.0	31.9	31.9	134.8	134.8	10.8	10.8	10.8	2.3	1.8	5	6	819179	806225		
						1.0	0.2	10	16.9		8.0		31.9		134.8		10.8				1.8					6	
					Middle	3.7	0.2	30	16.9	16.9	8.0	8.0	31.9	31.9	134.5	134.5	10.7	10.7	10.7	10.7	1.9	6	7			6	7
						3.7	0.2	35	16.9		8.0		31.9		134.5		10.7		2.0		6						
					Bottom	6.4	0.2	33	16.9	16.9	8.0	8.0	31.9	31.9	134.2	134.2	10.7	10.7	10.7	10.7	3.1	8	7			8	7
						6.4	0.1	28	16.9		8.0		31.9		134.2		10.7		3.2		7						
IM7	Cloudy	Rough	08:14	7.6	Surface	1.0	0.1	319	16.7	16.7	8.1	8.1	31.8	31.8	134.6	134.6	10.8	10.8	10.8	3.7	3.7	9	8	821326	806841		
						1.0	0.1	323	16.7		8.1		31.8		134.6		10.8				3.7					8	
					Middle	3.8	0.1	322	16.7	16.7	8.1	8.1	31.8	31.8	133.7	133.7	10.7	10.7	10.7	10.7	3.2	8	9			8	9
						3.8	0.1	317	16.7		8.1		31.8		133.7		10.7		3.3		9						
					Bottom	6.6	0.1	309	16.7	16.7	8.1	8.1	31.8	31.8	132.6	132.6	10.7	10.7	10.7	10.6	4.2	7	7			7	7
						6.6	0.1	306	16.7		8.1		31.8		132.6		10.6		4.2		7						

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA				
IM10	Rainy	Rough	09:24	8.8	Surface	1.0	0.3	302	<u>17.2</u>	8.0	8.0	<u>30.8</u>	30.8	<u>128.4</u>	128.2	10.3	10.2	1.2	1.4	7	7	822241	809818	
						1.0	0.4	298	17.2	8.0	8.0	<u>30.8</u>	30.8	<u>127.9</u>	10.2	1.3		8						
					Middle	4.4	0.3	273	<u>17.2</u>	8.0	8.0	<u>30.8</u>	30.8	<u>126.0</u>	125.7	10.1		1.4		6				
						4.4	0.3	273	17.2	8.0	8.0	<u>30.8</u>	30.8	<u>125.4</u>	10.0	1.4		6						
					Bottom	7.8	0.2	303	<u>17.2</u>	8.0	8.0	<u>30.8</u>	30.8	<u>116.2</u>	115.4	9.3		1.7		6				
						7.8	0.2	303	17.2	8.0	8.0	<u>30.8</u>	30.8	<u>114.6</u>	9.2	1.6		6						
IM11	Rainy	Rough	09:20	7.8	Surface	1.0	0.4	281	<u>17.2</u>	8.0	8.0	<u>30.9</u>	30.9	<u>126.1</u>	125.8	10.1	9.9	1.0	1.1	8	7	821500	810530	
						1.0	0.4	282	17.2	8.0	8.0	<u>30.9</u>	30.9	<u>125.4</u>	10.0	1.1		7						
					Middle	3.9	0.4	279	<u>17.2</u>	8.0	8.0	<u>30.9</u>	30.9	<u>123.1</u>	122.6	9.8		1.1		8				
						3.9	0.5	272	17.2	8.0	8.0	<u>30.9</u>	30.9	<u>122.1</u>	9.8	1.1		7						
					Bottom	6.8	0.4	255	<u>17.2</u>	8.0	8.0	<u>30.8</u>	30.8	<u>113.0</u>	112.4	9.0		1.3		7				
						6.8	0.3	249	17.2	8.0	8.0	<u>30.8</u>	30.8	<u>111.7</u>	8.9	1.2		6						
IM12	Rainy	Rough	09:03	7.6	Surface	1.0	0.4	289	<u>17.2</u>	8.0	8.0	<u>30.9</u>	30.9	<u>128.2</u>	128.0	10.2	10.1	1.2	1.3	5	6	821174	811523	
						1.0	0.4	283	17.2	8.0	8.0	<u>30.9</u>	30.9	<u>127.8</u>	10.2	1.2		5						
					Middle	3.8	0.3	273	<u>17.2</u>	8.0	8.0	<u>30.9</u>	30.9	<u>125.6</u>	125.2	10.0		1.3		7				
						3.8	0.3	279	17.2	8.0	8.0	<u>30.9</u>	30.9	<u>124.8</u>	10.0	1.3		6						
					Bottom	6.6	0.3	266	<u>17.2</u>	8.0	8.0	<u>30.8</u>	30.8	<u>116.8</u>	116.0	9.3		1.6		7				
						6.6	0.4	265	17.2	8.0	8.0	<u>30.8</u>	30.8	<u>115.1</u>	9.2	1.6		6						
SR1A	Rainy	Rough	08:43	4.4	Surface	1.0	0.0	215	<u>17.0</u>	8.1	8.1	<u>31.4</u>	31.4	<u>125.3</u>	124.5	10.0	10.0	1.0	1.5	6	7	819976	812656	
						1.0	0.1	221	16.9	8.1	8.1	<u>31.5</u>	31.4	<u>123.6</u>	9.9	1.1		6						
					Middle	2.2	0.0	222	-	-	-	-	-	-	-	-		-		-				
						2.2	0.1	220	-	-	-	-	-	-	-	-		-		-				
					Bottom	3.4	0.0	211	<u>16.5</u>	8.1	8.1	<u>31.6</u>	30.8	<u>113.2</u>	111.7	9.1		1.9		7				
						3.4	0.0	203	16.4	8.1	8.1	<u>29.9</u>	30.8	<u>110.2</u>	8.9	2.0		8						
SR2	Rainy	Rough	08:31	4.6	Surface	1.0	0.0	313	<u>17.2</u>	8.0	8.0	<u>31.0</u>	31.0	<u>120.6</u>	117.7	9.6	9.4	1.2	1.4	6	7	821463	814146	
						1.0	0.0	318	17.2	8.0	8.0	<u>31.0</u>	31.0	<u>114.7</u>	9.2	1.2		6						
					Middle	-	0.0	321	-	-	-	-	-	-	-	-		-		-				
						-	0.0	324	-	-	-	-	-	-	-	-		-		-				
					Bottom	3.6	0.1	316	<u>17.2</u>	8.0	8.0	<u>31.0</u>	30.9	<u>111.7</u>	110.6	8.9		1.5		7				
						3.6	0.1	322	17.2	8.0	8.0	<u>30.8</u>	30.9	<u>109.5</u>	8.8	1.6		8						
SR3	Cloudy	Rough	08:26	8.4	Surface	1.0	0.2	340	<u>16.7</u>	8.0	8.0	<u>31.8</u>	31.8	<u>135.3</u>	135.3	10.9	10.9	3.1	3.6	7	7	822147	807577	
						1.0	0.2	337	16.7	8.0	8.0	<u>31.8</u>	31.8	<u>135.3</u>	10.9	3.2		8						
					Middle	4.2	0.2	324	<u>16.7</u>	8.1	8.1	<u>31.8</u>	31.8	<u>135.2</u>	135.2	10.9		3.3		7				
						4.2	0.2	321	16.7	8.1	8.1	<u>31.8</u>	31.8	<u>135.2</u>	10.9	3.3		7						
					Bottom	7.4	0.3	309	<u>16.7</u>	8.1	8.1	<u>31.8</u>	31.8	<u>134.5</u>	134.5	10.8		4.4		7				
						7.4	0.3	311	16.7	8.1	8.1	<u>31.8</u>	31.8	<u>134.5</u>	10.8	4.4		7						
SR4A	Cloudy	Moderate	06:39	9.7	Surface	1.0	0.0	219	<u>16.7</u>	7.8	7.8	<u>31.7</u>	31.7	<u>135.9</u>	135.9	10.9	10.9	1.0	1.3	6	7	817196	807808	
						1.0	0.0	221	16.7	7.8	7.8	<u>31.7</u>	31.7	<u>135.9</u>	10.9	1.1		5						
					Middle	4.9	0.0	224	<u>16.7</u>	7.9	7.9	<u>31.7</u>	31.7	<u>134.9</u>	134.9	10.8		1.5		7				
						4.9	0.0	225	16.7	7.9	7.9	<u>31.7</u>	31.7	<u>134.9</u>	10.8	1.5		8						
					Bottom	8.7	0.0	218	<u>16.7</u>	7.9	7.9	<u>31.7</u>	31.7	<u>133.3</u>	133.3	10.7		1.5		8				
						8.7	0.0	212	16.7	7.9	7.9	<u>31.7</u>	31.7	<u>133.2</u>	10.7	1.5		7						
SR8	Rainy	Rough	08:58	5.2	Surface	1.0	-	-	<u>17.0</u>	8.0	8.0	<u>31.1</u>	31.1	<u>124.7</u>	122.4	10.0	9.8	1.0	1.2	6	7	820408	811608	
						1.0	-	-	16.9	8.0	8.0	<u>31.1</u>	31.1	<u>120.1</u>	9.6	1.1		7						
					Middle	-	-	-	-	-	-	-	-	-	-	-		-		-				
						-	-	-	-	-	-	-	-	-	-	-		-		-				
					Bottom	4.2	-	-	<u>16.7</u>	8.0	8.0	<u>31.3</u>	30.8	<u>113.6</u>	111.8	9.1		1.3		7				
						4.2	-	-	16.7	8.0	8.0	<u>30.4</u>	30.8	<u>110.0</u>	8.9	1.3		7						

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)		
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA				
C1	Cloudy	Moderate	13:46	8.8	Surface	1.0	0.1	188	17.5	17.5	8.2	8.2	29.9	29.9	132.4	132.2	10.6	10.4	5.1	7.8	4	3	815638	804266		
						1.0	0.1	182	17.5		8.2		29.9		131.9		10.6		5.6		3					
					Middle	4.4	0.1	210	17.4	17.4	8.2	8.2	30.0	30.0	128.4	128.1	10.3	10.2	8.5	9.6	4				9.6	3
						4.4	0.1	206	17.4		8.2		30.0		127.7		10.2		3							
					Bottom	7.8	0.1	205	17.5	17.5	8.2	8.2	30.0	30.0	120.6	120.4	9.6	9.6	9.9	9.6	2				9.8	2
						7.8	0.1	200	17.5		8.2		30.0		120.2		9.6		3							
C2	Cloudy	Moderate	12:33	11.3	Surface	1.0	0.1	25	17.7	17.7	8.2	8.2	29.3	29.3	138.4	138.3	11.1	11.0	1.7	6.9	4	4	825698	806942		
						1.0	0.1	25	17.7		8.2		29.4		138.1		11.0		1.7		5					
					Middle	5.7	0.1	11	17.6	17.6	8.2	8.2	29.8	29.8	136.6	136.6	10.9	10.9	5.8	10.9	3				10.9	3
						5.7	0.2	10	17.6		8.2		29.8		136.5		10.9		4							
					Bottom	10.3	0.1	30	17.6	17.6	8.3	8.3	29.9	29.9	136.4	136.4	10.9	10.9	13.1	10.9	3				10.9	3
						10.3	0.1	24	17.6		8.3		29.9		136.4		10.9		2							
C3	Sunny	Calm	14:18	11.4	Surface	1.0	0.2	102	17.4	17.4	8.0	8.0	31.1	31.1	137.4	137.4	10.9	10.7	2.5	4.4	3	4	822109	817793		
						1.0	0.2	98	17.4		8.0		31.1		137.4		10.9		2.5		3					
					Middle	5.7	0.3	85	17.1	17.1	8.0	8.0	31.3	31.3	131.6	131.6	10.5	10.5	3.7	9.7	3				9.7	3
						5.7	0.3	85	17.1		8.0		31.3		131.5		10.5		4							
					Bottom	10.4	0.3	70	16.9	16.9	7.9	7.9	31.6	31.6	120.9	120.9	9.7	9.7	6.9	9.7	5				9.7	4
						10.4	0.3	75	16.9		7.9		31.6		120.9		9.7		4							
IM1	Cloudy	Moderate	13:26	6.4	Surface	1.0	0.0	124	17.6	17.6	8.2	8.2	29.6	29.6	138.3	138.1	11.1	10.7	3.7	9.3	5	4	818345	806480		
						1.0	0.1	131	17.6		8.2		29.6		137.9		11.0		4.0		4					
					Middle	3.2	0.1	125	17.6	17.6	8.2	8.2	30.0	30.0	128.7	128.6	10.3	10.3	11.0	9.7	4				9.7	4
						3.2	0.1	122	17.6		8.2		30.0		128.4		10.2		5							
					Bottom	5.4	0.1	134	17.7	17.8	8.2	8.2	29.9	29.9	123.5	121.3	9.8	9.7	12.7	9.7	3				9.7	3
						5.4	0.1	128	17.8		8.2		29.9		119.0		9.5		4							
IM2	Cloudy	Moderate	13:22	7.2	Surface	1.0	0.0	77	17.6	17.6	8.2	8.2	29.8	29.8	134.0	133.4	10.7	10.4	6.8	10.0	2	3	819175	806232		
						1.0	0.0	83	17.6		8.2		29.9		132.8		10.6		7.4		3					
					Middle	3.6	0.1	84	17.6	17.6	8.2	8.2	29.9	29.9	127.3	127.0	10.2	10.1	9.5	9.9	2				9.9	2
						3.6	0.0	82	17.6		8.2		29.9		126.6		10.1		3							
					Bottom	6.2	0.0	60	17.6	17.6	8.2	8.2	30.0	29.9	124.7	124.5	9.9	9.9	13.1	9.9	4				9.9	4
						6.2	0.0	66	17.6		8.2		29.9		124.3		9.9		3							
IM7	Cloudy	Moderate	13:03	7.9	Surface	1.0	0.2	66	17.8	17.8	8.2	8.2	29.4	29.5	134.9	134.8	10.8	10.4	1.6	3.1	2	2	821346	806824		
						1.0	0.2	66	17.7		8.2		29.5		134.6		10.7		1.8		2					
					Middle	4.0	0.2	65	17.7	17.7	8.2	8.2	30.0	30.0	127.1	126.9	10.1	10.1	3.5	10.0	3				10.0	3
						4.0	0.2	72	17.7		8.2		30.0		126.7		10.1		2							
					Bottom	6.9	0.2	59	17.7	17.7	8.2	8.2	30.0	30.0	125.0	124.7	10.0	9.9	3.8	9.9	2				9.9	2
						6.9	0.2	58	17.7		8.2		30.0		124.4		9.9		3							

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)			
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA					
IM10	Sunny	Moderate	12:31	9.1	Surface	1.0	0.1	28	17.4	17.4	7.9	7.9	29.7	29.7	140.5	140.5	11.3	11.3	11.2	1.5	2.0	3	822244	809833			
						1.0	0.0	20	17.4	7.9	7.9	29.7	29.7	140.5	140.5	11.3	11.3	11.2	1.5	2.0	3						
					Middle	4.6	0.0	26	17.3	17.3	7.9	7.9	30.4	30.4	138.3	138.3	11.1	11.1	11.1	2.0	2.0	3					
						4.6	-	30	17.3	17.3	7.9	7.9	30.4	30.4	138.2	138.2	11.1	11.1	11.1	2.0	2.0	3					
					Bottom	8.1	0.0	39	17.2	17.2	7.8	7.8	30.7	30.7	134.3	134.3	10.8	10.8	10.8	2.4	2.4	3					
						8.1	0.1	41	17.2	17.2	7.8	7.8	30.7	30.7	134.2	134.2	10.7	10.7	10.8	2.4	2.4	2					
IM11	Sunny	Moderate	12:45	8.2	Surface	1.0	0.0	77	17.4	17.4	8.0	8.0	30.6	30.6	138.8	138.7	11.1	11.1	11.1	2.9	2.0	2	821517	810565			
						1.0	0.0	83	17.4	17.4	8.0	8.0	30.6	30.6	138.6	138.7	11.1	11.1	11.1	2.9	2.0	2					
					Middle	4.1	0.1	56	17.4	17.4	8.0	8.0	30.7	30.7	137.5	137.4	11.0	11.0	11.0	1.4	2.0	4					
						4.1	0.0	52	17.4	17.4	8.0	8.0	30.7	30.7	137.3	137.4	11.0	11.0	11.0	1.5	2.0	3					
					Bottom	7.2	0.1	50	17.2	17.2	8.0	8.0	30.7	30.7	134.4	134.4	10.8	10.8	10.8	1.8	2.0	4					
						7.2	0.0	54	17.2	17.2	8.0	8.0	30.7	30.7	134.3	134.4	10.8	10.8	10.8	1.8	2.0	3					
IM12	Sunny	Moderate	12:54	7.9	Surface	1.0	0.1	83	17.2	17.2	8.0	8.0	30.6	30.6	138.8	138.8	11.1	11.1	11.0	1.9	2.1	3	821175	811507			
						1.0	0.2	78	17.2	17.2	8.0	8.0	30.6	30.6	138.7	138.8	11.1	11.1	11.0	2.0	2.1	4					
					Middle	4.0	0.2	83	17.2	17.2	8.0	8.0	30.7	30.7	135.1	135.0	10.8	10.8	11.0	1.8	2.1	3					
						4.0	0.2	88	17.2	17.2	8.0	8.0	30.7	30.7	134.9	135.0	10.8	10.8	11.0	1.8	2.1	3					
					Bottom	6.9	0.1	65	17.1	17.1	8.0	8.0	30.8	30.8	132.6	132.6	10.6	10.6	10.6	2.5	2.1	3					
						6.9	0.2	60	17.1	17.1	8.0	8.0	30.8	30.8	132.5	132.6	10.6	10.6	10.6	2.5	2.1	3					
SR1A	Sunny	Calm	13:39	4.2	Surface	1.0	0.0	24	17.2	17.2	8.0	8.0	30.6	30.6	138.4	138.3	11.1	11.1	11.1	1.0	1.3	3	819981	812663			
						1.0	0.1	26	17.2	17.2	8.0	8.0	30.6	30.6	138.2	138.3	11.1	11.1	11.1	1.0	1.3	4					
					Middle	2.1	0.0	359	-	-	-	-	-	-	-	-	-	-	-	-	-	-			1.3	-	3
						2.1	0.1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-			1.3	-	3
					Bottom	3.2	0.0	355	17.3	17.3	8.0	8.0	31.1	31.1	127.6	127.5	10.2	10.2	10.2	1.5	1.3	3					
						3.2	0.0	353	17.3	17.3	8.0	8.0	31.1	31.1	127.3	127.5	10.1	10.2	10.2	1.5	1.3	3					
SR2	Sunny	Calm	13:55	4.7	Surface	1.0	0.2	69	17.2	17.2	8.0	8.0	30.7	30.7	138.0	138.0	11.0	11.0	11.0	1.4	1.6	4	821442	814154			
						1.0	0.2	75	17.2	17.2	8.0	8.0	30.7	30.7	137.9	138.0	11.0	11.0	11.0	1.4	1.6	5					
					Middle	-	0.2	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-			1.6	-	4
						-	0.2	65	-	-	-	-	-	-	-	-	-	-	-	-	-	-			1.6	-	4
					Bottom	3.7	0.2	57	17.2	17.2	8.0	8.0	30.8	30.8	135.4	135.4	10.8	10.8	10.8	1.7	1.6	3					
						3.7	0.2	58	17.2	17.2	8.0	8.0	30.8	30.8	135.3	135.4	10.8	10.8	10.8	1.7	1.6	2					
SR3	Cloudy	Moderate	12:57	8.8	Surface	1.0	0.1	41	17.7	17.7	8.3	8.3	29.0	29.1	138.5	138.3	11.1	11.0	11.0	0.5	0.9	3	822134	807584			
						1.0	0.1	47	17.7	17.7	8.3	8.3	29.1	29.1	138.0	138.3	11.0	11.0	11.0	0.6	0.9	2					
					Middle	4.4	0.1	38	17.6	17.6	8.3	8.3	29.6	29.6	136.2	136.1	10.9	10.9	10.9	1.0	0.9	3					
						4.4	0.1	44	17.6	17.6	8.3	8.3	29.6	29.6	136.0	136.1	10.9	10.9	10.9	1.0	0.9	3					
					Bottom	7.8	0.1	22	17.6	17.6	8.3	8.3	29.9	29.9	135.1	135.1	10.8	10.8	10.8	1.2	0.9	4					
						7.8	0.1	24	17.6	17.6	8.3	8.3	29.9	29.9	135.0	135.1	10.8	10.8	10.8	1.2	0.9	3					
SR4A	Cloudy	Moderate	14:12	8.6	Surface	1.0	0.0	68	17.7	17.7	8.3	8.3	29.9	29.9	135.8	135.7	10.8	10.8	10.5	2.6	3.3	4	817186	807811			
						1.0	0.0	66	17.7	17.7	8.3	8.3	29.9	29.9	135.6	135.7	10.8	10.8	10.5	2.6	3.3	3					
					Middle	4.3	0.0	88	17.7	17.7	8.3	8.3	30.0	30.0	127.0	126.8	10.1	10.1	10.1	3.4	3.3	3					
						4.3	0.0	80	17.7	17.7	8.3	8.3	30.1	30.0	126.6	126.8	10.1	10.1	10.1	3.4	3.3	3					
					Bottom	7.6	0.0	70	17.7	17.7	8.3	8.3	30.1	30.0	121.8	121.5	9.7	9.7	9.7	3.8	3.3	2					
						7.6	0.0	67	17.7	17.7	8.3	8.3	30.0	30.0	121.1	121.5	9.6	9.6	9.7	3.9	3.3	3					
SR8	Sunny	Calm	13:02	4.4	Surface	1.0	-	-	17.4	17.4	8.0	8.0	30.6	30.6	136.0	136.0	10.9	10.9	10.9	1.5	1.7	2	820412	811615			
						1.0	-	-	17.4	17.4	8.0	8.0	30.6	30.6	136.0	136.0	10.9	10.9	10.9	1.5	1.7	4					
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			1.7	-	3
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			1.7	-	3
					Bottom	3.4	-	-	17.1	17.1	8.0	8.0	30.7	30.7	133.2	133.2	10.7	10.7	10.7	1.9	1.7	3					
						3.4	-	-	17.1	17.1	8.0	8.0	30.7	30.7	133.2	133.2	10.7	10.7	10.7	1.9	1.7	3					

DA: Depth-Averaged
 Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
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Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)				
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA								
C1	Cloudy	Moderate	08:55	8.4	Surface	1.0	0.3	42	17.6	17.6	8.2	8.2	29.5	29.5	134.4	134.2	10.8	10.5	3.8	8.1	4	4	815608	804264				
						1.0	0.3	48	17.6		8.2		29.5		133.9		10.7		4.0		6							
					Middle	4.2	0.4	38	17.5	17.5	8.2	8.2	29.8	29.8	129.5	127.2	10.4	9.9	10.0	9.9	10.0	9.9			10.0	9.7	4	3
						4.2	0.3	38	17.5		8.2		29.8		124.8		10.0		10.8		5							
					Bottom	7.4	0.4	22	17.5	17.5	8.2	8.2	29.8	29.8	123.0	122.7	9.9	9.8	9.9	9.8	9.9	9.8			10.0	9.7	3	3
						7.4	0.4	25	17.5		8.2		29.8		122.4		122.7		9.8		9.9				9.7		3	
C2	Cloudy	Moderate	10:15	11.5	Surface	1.0	0.3	356	17.7	17.7	8.3	8.3	29.3	29.4	133.8	133.6	10.7	10.6	1.0	10.6	3	3	825671	806930				
						1.0	0.3	1	17.7		8.3		29.4		133.3		10.7		1.1		3							
					Middle	5.8	0.3	352	17.6	17.6	8.3	8.3	29.9	29.9	130.5	130.3	10.4	9.9	10.4	9.9	9.6	9.9			9.6	9.6	3	3
						5.8	0.2	348	17.6		8.3		29.9		130.1		10.4		2.5		3							
					Bottom	10.5	0.3	14	17.6	17.6	8.3	8.3	29.8	29.8	124.3	124.1	9.9	9.9	9.9	9.9	9.9	9.9			9.6	9.6	4	4
						10.5	0.3	6	17.6		8.3		29.8		123.9		124.1		9.9		9.6				4			
C3	Sunny	Calm	07:47	12.2	Surface	1.0	0.4	271	17.1	17.1	8.0	8.0	30.9	30.9	132.7	132.6	10.6	10.5	3.3	10.5	5	4	822118	817781				
						1.0	0.4	269	17.1		8.0		30.9		132.5		10.6		3.3		4							
					Middle	6.1	0.4	278	17.0	17.0	8.0	8.0	31.0	31.0	130.1	130.1	10.4	10.4	10.4	10.4	5.0	10.4			4	4		
						6.1	0.4	271	17.0		8.0		31.0		130.1		10.4		5.1		4							
					Bottom	11.2	0.3	239	17.0	17.0	8.0	8.0	31.0	31.0	129.6	129.7	10.4	10.4	10.4	10.4	7.7	10.4			3	4		
						11.2	0.3	237	17.0		8.0		31.0		129.7		129.7		10.4		7.8				4			
IM1	Cloudy	Moderate	09:18	6.9	Surface	1.0	0.3	29	17.5	17.5	8.2	8.2	29.8	29.8	133.6	133.5	10.7	10.7	7.6	10.7	4	2	818341	806434				
						1.0	0.2	31	17.5		8.2		29.8		133.4		10.7		7.5		2							
					Middle	3.5	0.2	23	17.6	17.6	8.2	8.2	29.9	29.9	132.7	132.7	10.6	10.6	10.6	10.6	7.5	10.6			2	2		
						3.5	0.2	30	17.6		8.2		29.9		132.6		10.6		6.9		2							
					Bottom	5.9	0.3	33	17.6	17.6	8.2	8.2	30.0	30.0	125.6	125.5	10.0	10.0	10.0	10.0	10.3	10.0			3	2		
						5.9	0.3	33	17.6		8.2		30.0		125.4		125.5		10.0		10.9				2			
IM2	Cloudy	Moderate	09:23	7.4	Surface	1.0	0.3	21	17.6	17.6	8.2	8.2	29.8	29.8	131.0	130.7	10.5	10.3	6.8	10.3	2	2	819162	806219				
						1.0	0.3	26	17.6		8.2		29.8		130.4		10.4		7.1		2							
					Middle	3.7	0.3	34	17.6	17.6	8.2	8.2	30.0	30.0	128.3	128.0	10.2	10.2	10.2	10.2	8.8	10.2			3	4		
						3.7	0.3	36	17.6		8.2		30.0		127.7		128.0		9.1		4							
					Bottom	6.4	0.3	356	17.6	17.6	8.2	8.2	30.0	30.0	125.4	125.2	10.0	10.0	10.0	10.0	8.5	10.0			4	4		
						6.4	0.2	348	17.6		8.2		30.0		125.0		125.2		10.0		8.3				4			
IM7	Cloudy	Moderate	09:43	8.2	Surface	1.0	0.3	24	17.7	17.7	8.2	8.2	29.4	29.4	134.2	134.0	10.7	10.6	1.6	10.6	3	3	821327	806832				
						1.0	0.3	31	17.7		8.2		29.5		133.8		10.7		1.6		3							
					Middle	4.1	0.2	5	17.6	17.6	8.2	8.2	30.0	30.0	131.4	131.4	10.5	10.5	10.5	10.5	3.1	10.5			4	3		
						4.1	0.2	3	17.6		8.2		30.0		131.3		10.5		3.0		3							
					Bottom	7.2	0.2	5	17.6	17.6	8.2	8.2	30.0	30.0	130.2	130.2	10.4	10.4	10.4	10.4	3.4	10.4			3	4		
						7.2	0.2	5	17.6		8.2		30.0		130.1		130.2		10.4		3.4				4			

DA: Depth-Averaged

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

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Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)		
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA				
IM10	Sunny	Calm	09:37	9.7	Surface	1.0	0.3	310	17.2	17.2	8.0	8.0	29.8	29.8	138.4	138.4	11.1	11.1	2.9	3.7	3	4	822224	809819		
						1.0	0.3	314	17.2		8.0	8.0	29.8	29.8	138.4	138.4	11.1	11.1	2.9		3					
					Middle	4.9	0.3	288	17.2	17.2	8.0	8.0	30.8	30.8	134.6	134.6	10.8	10.8	3.9	11.0	4				3	4
						4.9	0.3	289	17.2		8.0	8.0	30.8	30.8	134.6	134.6	10.8	10.8	3.9		4					
					Bottom	8.7	0.3	299	17.2	17.2	8.0	8.0	30.8	30.8	131.2	131.2	10.5	10.5	4.2	10.5	5				4	4
						8.7	0.3	298	17.2		8.0	8.0	30.8	30.8	131.1	131.1	10.5	10.5	4.3		4					
IM11	Sunny	Calm	09:23	8.2	Surface	1.0	0.4	275	17.2	17.2	8.0	8.0	30.7	30.7	136.6	136.6	10.9	10.9	2.7	3.2	4	4	821504	810526		
						1.0	0.3	269	17.2		8.0	8.0	30.7	30.7	136.5	136.5	10.9	10.9	2.7		4					
					Middle	4.1	0.4	302	17.1	17.1	8.0	8.0	30.7	30.7	135.5	135.5	10.9	10.9	3.4	10.9	4				3	4
						4.1	0.4	302	17.1		8.0	8.0	30.7	30.7	135.5	135.5	10.9	10.9	3.4		3					
					Bottom	7.2	0.4	268	17.1	17.1	8.0	8.0	30.8	30.8	133.6	133.6	10.7	10.7	3.3	10.7	3				4	4
						7.2	0.4	273	17.1		8.0	8.0	30.8	30.8	133.4	133.4	10.7	10.7	3.4		4					
IM12	Sunny	Calm	09:11	8.7	Surface	1.0	0.4	276	17.2	17.2	8.0	8.0	30.6	30.6	137.8	137.8	11.0	11.0	1.8	2.0	4	4	821150	811501		
						1.0	0.4	276	17.2		8.0	8.0	30.6	30.6	137.7	137.7	11.0	11.0	1.8		5					
					Middle	4.4	0.4	268	17.1	17.1	8.0	8.0	30.8	30.8	134.4	134.4	10.8	10.8	1.9	10.9	3				4	4
						4.4	0.4	274	17.1		8.0	8.0	30.8	30.8	134.3	134.3	10.8	10.8	2.0		4					
					Bottom	7.7	0.4	259	17.1	17.1	8.0	8.0	30.8	30.8	132.2	132.2	10.6	10.6	2.2	10.6	4				2	4
						7.7	0.3	262	17.1		8.0	8.0	30.8	30.8	132.1	132.1	10.6	10.6	2.3		2					
SR1A	Sunny	Calm	08:26	4.8	Surface	1.0	0.0	189	17.2	17.2	8.0	8.0	30.4	30.4	131.8	131.8	10.6	10.6	1.4	1.8	3	4	819972	812655		
						1.0	0.0	188	17.2		8.0	8.0	30.5	30.4	131.7	131.7	10.6	10.6	1.4		4					
					Middle	2.4	0.0	206	-	-	-	-	-	-	-	-	-	-	-	10.6	-				4	4
						2.4	0.0	199	-		-	-	-	-	-	-	-	-	-		-					
					Bottom	3.8	0.0	198	17.2	17.2	8.0	8.0	30.9	30.9	125.1	125.1	10.0	10.0	2.2	10.0	4				4	4
						3.8	0.1	201	17.2		8.0	8.0	30.9	30.9	125.1	125.1	10.0	10.0	2.1		4					
SR2	Sunny	Calm	08:06	5.1	Surface	1.0	0.1	249	17.1	17.1	8.0	8.0	30.8	30.8	135.9	135.9	10.9	10.9	1.5	2.0	4	4	821457	814159		
						1.0	0.1	256	17.1		8.0	8.0	30.8	30.8	135.9	135.9	10.9	10.9	1.5		3					
					Middle	-	0.1	270	-	-	-	-	-	-	-	-	-	-	-	10.9	-				4	4
						-	0.1	264	-		-	-	-	-	-	-	-	-	-		-					
					Bottom	4.1	0.1	274	17.1	17.1	8.0	8.0	30.8	30.8	134.3	134.3	10.8	10.8	2.4	10.8	4				4	4
						4.1	0.1	279	17.1		8.0	8.0	30.8	30.8	134.2	134.2	10.7	10.7	2.4		4					
SR3	Cloudy	Moderate	09:49	8.8	Surface	1.0	0.4	339	17.7	17.7	8.2	8.2	28.7	28.7	139.3	139.2	11.2	11.1	0.1	1.1	3	3	822168	807555		
						1.0	0.4	336	17.7		8.2	8.2	28.8	28.7	139.1	139.1	11.1	11.1	0.1		3					
					Middle	4.4	0.3	349	17.6	17.6	8.2	8.2	29.4	29.5	135.6	135.6	10.8	10.8	1.5	10.9	3				2	4
						4.4	0.3	342	17.6		8.2	8.2	29.5	29.5	131.6	131.6	10.5	10.5	1.6		2					
					Bottom	7.8	0.3	330	17.6	17.6	8.2	8.2	29.8	29.8	129.8	129.8	10.4	10.4	1.6	10.4	2				3	4
						7.8	0.3	323	17.6		8.2	8.2	29.8	29.8	129.4	129.4	10.3	10.3	1.6		3					
SR4A	Cloudy	Moderate	08:27	8.6	Surface	1.0	0.0	193	17.6	17.6	8.2	8.2	30.2	30.2	131.5	131.4	10.5	10.5	5.6	5.4	2	3	817182	807811		
						1.0	0.1	185	17.6		8.2	8.2	30.2	30.2	131.3	131.3	10.5	10.5	5.6		4					
					Middle	4.3	0.0	224	17.6	17.6	8.1	8.1	30.2	30.2	129.8	129.7	10.3	10.3	5.3	10.4	3				2	4
						4.3	0.1	216	17.6		8.1	8.1	30.2	30.2	129.5	129.5	10.3	10.3	5.3		2					
					Bottom	7.6	0.0	231	17.7	17.7	8.1	8.1	30.2	30.2	128.2	128.1	10.2	10.2	5.4	10.2	2				3	4
						7.6	0.0	227	17.7		8.1	8.1	30.2	30.2	127.9	127.9	10.2	10.2	5.6		3					
SR8	Sunny	Calm	08:59	5.3	Surface	1.0	-	-	17.3	17.3	8.0	8.0	30.5	30.5	136.2	136.2	10.9	10.9	1.2	1.8	3	4	820387	811629		
						1.0	-	-	17.3		8.0	8.0	30.5	30.5	136.2	136.2	10.9	10.9	1.2		4					
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.9	-				4	4
						-	-	-	-		-	-	-	-	-	-	-	-	-		-					
					Bottom	4.3	-	-	17.2	17.2	8.0	8.0	30.8	30.8	132.8	132.8	10.6	10.6	2.5	10.6	4				5	4
						4.3	-	-	17.2		8.0	8.0	30.8	30.8	132.7	132.7	10.6	10.6	2.4		5					

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

Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
C1	Cloudy	Moderate	15:03	8.0	Surface	1.0	0.2	196	17.8	8.4	8.4	31.3	31.3	124.3	124.4	9.8	9.7	5.9	6.2	4	4	815636	804263	
						1.0	0.1	196	17.8	8.4	8.4	31.3	31.3	124.4	124.4	9.8	9.7	6.2	6.2	4				
					Middle	4.0	0.2	190	17.7	8.4	8.4	31.3	31.3	119.9	119.8	9.5	9.3	7.5	7.8	4				4
						4.0	0.2	185	17.7	8.4	8.4	31.3	31.3	119.6	119.6	9.5	9.3	7.8	7.8	4				
					Bottom	7.0	0.2	207	17.7	8.4	8.4	31.3	31.3	117.8	117.4	9.3	9.3	5.0	5.0	4				4
						7.0	0.2	201	17.7	8.4	8.4	31.3	31.3	116.9	117.4	9.2	9.3	5.0	5.0	4				
C2	Cloudy	Moderate	13:39	11.7	Surface	1.0	0.0	58	18.2	8.4	8.4	28.9	28.9	124.0	124.0	9.8	9.6	0.1	3.9	4	5	825683	806923	
						1.0	0.1	61	18.1	8.4	8.4	28.9	28.9	124.0	124.0	9.8	9.6	0.1	3.9	3				
					Middle	5.9	0.0	68	17.9	8.3	8.3	29.7	29.7	118.7	118.6	9.4	9.4	5.4	5.4	4				5
						5.9	0.1	62	17.9	8.3	8.3	29.7	29.7	118.5	118.6	9.4	9.4	5.7	5.7	4				
					Bottom	10.7	0.1	46	17.8	8.3	8.3	29.8	29.8	117.9	117.9	9.4	9.4	6.0	6.0	4				5
						10.7	0.0	47	17.8	8.3	8.3	29.8	29.8	117.8	117.9	9.4	9.4	6.1	6.1	4				
C3	Fine	Calm	14:37	11.0	Surface	1.0	0.3	88	17.3	8.0	8.0	30.9	30.9	115.2	115.1	9.2	9.0	1.4	3.1	5	5	822086	817789	
						1.0	0.3	83	17.2	8.0	8.0	30.9	30.9	114.9	114.9	9.2	9.0	1.4	3.1	6				
					Middle	5.5	0.3	83	17.2	8.0	8.0	30.8	30.8	112.7	110.7	9.0	8.7	3.8	3.8	4				5
						5.5	0.3	84	17.2	8.1	8.1	30.8	30.8	108.6	108.6	8.7	8.7	3.9	3.9	4				
					Bottom	10.0	0.3	81	17.2	8.1	8.1	30.7	30.7	108.3	107.6	8.7	8.7	4.0	4.0	4				5
						10.0	0.3	79	17.2	8.1	8.1	30.7	30.7	106.9	107.6	8.6	8.7	4.1	4.1	4				
IM1	Cloudy	Moderate	14:41	6.6	Surface	1.0	0.1	192	17.8	8.4	8.4	30.7	30.7	119.0	118.9	9.4	9.4	4.4	5.1	5	5	818342	806447	
						1.0	0.1	184	17.8	8.4	8.4	30.7	30.7	118.8	118.9	9.4	9.4	4.5	4.5	6				
					Middle	3.3	0.0	195	17.6	8.3	8.3	30.8	30.8	117.5	117.4	9.3	9.3	5.1	5.1	4				5
						3.3	0.1	194	17.6	8.3	8.3	30.8	30.8	117.3	117.3	9.3	9.3	5.2	5.2	4				
					Bottom	5.6	0.1	198	17.6	8.3	8.3	30.9	30.8	111.4	111.2	8.8	8.8	5.5	5.5	4				5
						5.6	0.1	196	17.6	8.3	8.3	30.8	30.8	110.9	111.2	8.8	8.8	6.0	6.0	4				
IM2	Cloudy	Moderate	14:36	6.8	Surface	1.0	0.0	143	17.8	8.4	8.4	30.6	30.6	118.4	118.4	9.4	9.3	5.3	9.1	3	5	819192	806215	
						1.0	0.0	147	17.8	8.4	8.4	30.6	30.6	118.3	118.4	9.4	9.3	5.4	5.4	4				
					Middle	3.4	0.1	137	17.6	8.4	8.4	30.7	30.7	116.1	116.1	9.2	9.2	7.2	7.2	5				5
						3.4	0.1	134	17.6	8.4	8.4	30.7	30.7	116.0	116.0	9.2	9.2	6.8	6.8	5				
					Bottom	5.8	0.0	113	17.7	8.3	8.3	30.8	30.8	109.9	109.7	8.7	8.7	15.0	15.0	5				6
						5.8	0.0	111	17.7	8.3	8.3	30.8	30.8	109.4	109.7	8.7	8.7	14.8	14.8	6				
IM7	Cloudy	Moderate	14:16	7.6	Surface	1.0	0.1	68	18.1	8.4	8.4	29.1	29.1	122.2	122.2	9.7	9.5	0.3	0.5	4	6	821362	806844	
						1.0	0.1	70	18.1	8.4	8.4	29.1	29.1	122.2	122.2	9.7	9.5	0.3	0.3	4				
					Middle	3.8	0.1	76	17.9	8.3	8.3	29.6	29.6	116.3	116.2	9.3	9.3	0.5	0.5	6				6
						3.8	0.1	73	17.9	8.3	8.3	29.6	29.6	116.1	116.2	9.2	9.2	0.6	0.6	5				
					Bottom	6.6	0.2	62	17.8	8.3	8.3	29.8	29.8	108.0	107.9	8.6	8.6	0.5	0.5	7				8
						6.6	0.2	66	17.8	8.3	8.3	29.8	29.8	107.7	107.9	8.6	8.6	0.6	0.6	8				

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Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			Value
IM10	Fine	Calm	13:28	8.0	Surface	1.0	0.1	26	17.5	17.5	7.9	7.9	29.5	29.5	116.1	115.7	9.3	9.1	1.0	1.5	5	5	822236	809841	
						1.0	0.1	32	17.5		7.9		29.5		115.3		9.3		1.1		5				
					Middle	4.0	0.0	23	17.4	17.4	7.9	7.9	29.4	29.3	109.9	109.5	8.8	8.6	1.4	8.6	5				5
						4.0	0.0	19	17.4		7.9		29.3		109.1		8.8		1.5		5				
					Bottom	7.0	0.1	58	17.4	17.4	7.8	7.8	29.1	29.0	107.2	106.7	8.6	8.6	2.0	8.6	4				4
						7.0	0.1	57	17.4		7.8		28.9		106.1		8.5		2.0		4				
IM11	Fine	Calm	13:40	9.2	Surface	1.0	0.1	82	17.5	17.5	8.0	8.0	29.9	29.9	117.6	117.6	9.4	9.4	2.1	2.8	4	5	821516	810543	
						1.0	0.1	88	17.5		8.0		29.9		117.5		9.4		2.2		4				
					Middle	4.6	0.1	81	17.5	17.5	8.0	8.0	29.9	29.9	117.1	117.1	9.4	9.3	3.0	9.3	4				5
						4.6	0.1	84	17.5		8.0		29.9		117.0		9.4		2.9		5				
					Bottom	8.2	0.1	69	17.5	17.5	8.0	8.0	29.9	29.9	116.9	116.9	9.3	9.3	3.4	9.3	5				5
						8.2	0.1	67	17.5		8.0		29.9		116.9		9.3		3.4		5				
IM12	Fine	Calm	13:46	9.6	Surface	1.0	0.1	98	17.4	17.4	8.0	8.0	30.0	30.0	116.7	116.6	9.3	9.3	1.3	2.3	4	5	821147	811533	
						1.0	0.1	100	17.4		8.0		30.0		116.5		9.3		1.3		4				
					Middle	4.8	0.1	103	17.4	17.4	8.0	8.1	29.8	29.8	115.8	115.6	9.3	8.8	2.4	8.8	4				5
						4.8	0.1	103	17.4		8.1		29.8		115.4		9.2		2.4		5				
					Bottom	8.6	0.1	76	17.4	17.4	8.1	8.1	29.7	29.7	110.0	109.7	8.8	8.8	3.3	8.8	6				6
						8.6	0.1	81	17.4		8.1		29.7		109.3		8.8		3.3		6				
SR1A	Fine	Calm	14:06	5.4	Surface	1.0	0.0	54	17.6	17.6	8.0	8.0	30.3	30.3	114.1	114.1	9.1	9.1	1.9	2.2	5	5	819980	812654	
						1.0	0.1	49	17.6		8.0		30.3		114.1		9.1		1.8		4				
					Middle	2.7	0.0	46	-	-	-	-	-	-	-	-	-	9.1	-	9.1	-				5
						2.7	0.0	50	-		-		-		-		-		-		-				
					Bottom	4.4	0.0	56	17.6	17.6	8.0	8.0	30.3	30.3	114.0	114.0	9.1	9.1	2.5	9.1	5				5
						4.4	0.0	61	17.6		8.0		30.3		114.0		9.1		2.5		6				
SR2	Fine	Calm	14:19	5.0	Surface	1.0	0.2	55	17.5	17.5	8.0	8.0	30.1	30.0	114.6	114.1	9.2	9.2	1.8	2.0	5	5	821460	814185	
						1.0	0.2	49	17.5		8.0		30.0		113.6		9.1		1.8		4				
					Middle	-	0.1	39	-	-	-	-	-	-	-	-	-	9.2	-	9.2	-				5
						-	0.1	43	-		-		-		-		-		-		-				
					Bottom	4.0	0.1	42	17.5	17.5	8.1	8.1	29.9	29.9	106.5	106.0	8.5	8.5	2.3	8.5	6				5
						4.0	0.1	39	17.5		8.0		29.9		105.4		8.4		2.2		5				
SR3	Cloudy	Moderate	14:08	9.2	Surface	1.0	0.1	102	18.0	18.0	8.4	8.4	29.3	29.3	119.2	119.1	9.5	9.3	1.1	2.6	4	4	822126	807560	
						1.0	0.1	96	18.0		8.4		29.3		118.9		9.4		1.1		4				
					Middle	4.6	0.1	106	17.9	17.9	8.3	8.3	29.8	29.8	115.3	115.2	9.2	8.7	2.9	8.7	4				4
						4.6	0.1	104	17.9		8.3		29.8		115.0		9.1		3.1		5				
					Bottom	8.2	0.1	104	17.9	17.9	8.3	8.3	29.8	29.8	110.1	109.9	8.7	8.7	3.5	8.7	4				4
						8.2	0.1	105	17.9		8.3		29.8		109.7		8.7		3.6		5				
SR4A	Cloudy	Moderate	15:31	8.8	Surface	1.0	0.0	73	17.8	17.8	8.4	8.4	30.5	30.5	119.6	119.5	9.5	9.5	4.7	5.4	5	5	817207	807833	
						1.0	0.0	77	17.8		8.4		30.5		119.4		9.5		4.8		5				
					Middle	4.4	0.1	71	17.7	17.7	8.4	8.4	30.6	30.6	118.2	118.2	9.4	8.9	5.4	8.9	5				5
						4.4	0.0	74	17.7		8.4		30.6		118.1		9.4		5.5		5				
					Bottom	7.8	0.0	70	17.7	17.7	8.4	8.4	30.6	30.6	111.9	111.7	8.9	8.9	5.9	8.9	6				5
						7.8	0.0	67	17.7		8.4		30.6		111.4		8.8		5.9		5				
SR8	Fine	Calm	13:51	5.8	Surface	1.0	-	-	17.6	17.6	8.1	8.1	29.8	29.8	113.9	113.9	9.1	9.1	1.8	2.6	4	4	820371	811622	
						1.0	-	-	17.5		8.1		29.7		113.8		9.1		1.9		3				
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	9.1	-	9.1	-				4
						-	-	-	-		-		-		-		-		-		-				
					Bottom	4.8	-	-	17.4	17.4	8.0	8.0	29.3	29.1	106.4	105.0	8.6	8.5	3.4	8.5	5				5
						4.8	-	-	17.4		8.0		29.0		103.5		8.3		3.4		4				

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

Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)		
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA				
C1	Cloudy	Moderate	09:28	8.8	Surface	1.0	0.4	39	17.5	17.5	8.2	8.2	30.6	30.6	117.4	117.3	9.3	9.3	5.5	8.6	4	5	815634	804269		
						1.0	0.3	34	17.5		8.2		30.6		117.2		9.3		6.1		4					
					Middle	4.4	0.3	30	17.5	17.5	8.2	8.2	30.6	30.6	115.5	115.4	9.2	9.2	10.8	9.2	4				9.3	4
						4.4	0.3	34	17.5		8.2		30.6		115.3		9.2		10.2		5					
					Bottom	7.8	0.3	23	17.5	17.6	8.2	8.2	30.4	30.4	107.1	106.6	8.5	8.5	9.3	8.4	8.5				9.3	5
						7.8	0.3	18	17.6		8.2		30.4		106.1		8.4		9.7		5					
C2	Cloudy	Moderate	10:50	11.2	Surface	1.0	0.3	341	17.9	17.9	8.3	8.3	29.0	29.0	123.2	123.2	9.8	9.8	1.0	9.6	4	5	825705	806955		
						1.0	0.4	346	17.9		8.3		29.0		123.2		9.8		1.0		4					
					Middle	5.6	0.4	351	17.8	17.8	8.3	8.3	29.2	29.2	118.3	118.2	9.4	9.4	1.2	9.3	4				9.3	4
						5.6	0.4	353	17.8		8.3		29.2		118.1		9.4		1.2		5					
					Bottom	10.2	0.3	331	17.8	17.8	8.3	8.3	29.2	29.2	116.9	116.7	9.3	9.3	12.1	9.3	9.3				9.3	5
						10.2	0.4	328	17.8		8.3		29.1		116.5		9.3		13.3		6					
C3	Fine	Calm	10:01	10.0	Surface	1.0	0.5	251	17.3	17.3	7.9	7.9	30.4	30.4	117.3	117.2	9.4	9.4	2.4	9.3	5	4	822100	817810		
						1.0	0.5	245	17.3		7.9		30.5		117.0		9.4		2.5		4					
					Middle	5.0	0.5	254	17.2	17.2	7.9	7.9	30.5	30.5	115.5	115.4	9.2	9.2	3.1	9.0	4				9.0	4
						5.0	0.4	252	17.2		7.9		30.5		115.2		9.2		3.2		4					
					Bottom	9.0	0.5	283	17.2	17.2	7.9	7.9	30.4	30.3	112.4	112.3	9.0	9.0	4.6	9.0	9.0				9.0	4
						9.0	0.5	286	17.2		7.9		30.3		112.1		9.0		4.6		4					
IM1	Cloudy	Moderate	09:49	6.2	Surface	1.0	0.2	13	17.6	17.6	8.3	8.3	30.4	30.4	113.9	113.8	9.1	8.9	11.8	8.9	4	5	818349	806447		
						1.0	0.2	19	17.6		8.3		30.4		113.7		9.0		11.1		3					
					Middle	3.1	0.2	24	17.6	17.6	8.3	8.3	30.4	30.4	110.7	110.6	8.8	8.8	10.9	8.7	4				8.7	5
						3.1	0.2	19	17.6		8.3		30.4		110.5		8.8		10.5		4					
					Bottom	5.2	0.2	10	17.6	17.6	8.3	8.3	30.4	30.4	109.1	108.9	8.7	8.7	12.0	8.7	8.7				8.7	7
						5.2	0.2	6	17.6		8.3		30.4		108.7		8.7		11.1		6					
IM2	Cloudy	Moderate	09:55	6.9	Surface	1.0	0.2	12	17.7	17.7	8.3	8.3	30.3	30.3	116.4	116.4	9.2	9.2	6.9	9.2	5	6	819195	806220		
						1.0	0.2	16	17.7		8.3		30.3		116.3		9.2		7.2		5					
					Middle	3.5	0.2	33	17.6	17.6	8.3	8.3	30.4	30.4	115.2	115.2	9.2	9.2	7.9	9.1	4				9.1	5
						3.5	0.2	27	17.6		8.3		30.4		115.2		9.2		7.9		6					
					Bottom	5.9	0.2	9	17.6	17.6	8.3	8.3	30.4	30.4	113.8	113.8	9.1	9.1	10.0	9.0	9.1				9.0	6
						5.9	0.2	8	17.6		8.3		30.4		113.7		9.0		9.5		7					
IM7	Cloudy	Moderate	10:18	7.8	Surface	1.0	0.2	4	17.9	17.9	8.3	8.3	28.8	28.8	121.8	121.7	9.7	9.7	0.2	9.7	4	6	821341	806851		
						1.0	0.2	3	17.9		8.3		28.8		121.5		9.7		0.2		6					
					Middle	3.9	0.2	9	17.9	17.9	8.3	8.3	29.2	29.2	120.5	120.4	9.6	9.6	1.4	9.6	5				9.6	5
						3.9	0.2	9	17.9		8.3		29.2		120.3		9.6		1.6		6					
					Bottom	6.8	0.3	2	17.8	17.8	8.3	8.3	29.9	29.9	113.2	113.2	9.0	9.0	3.7	9.0	9.0				9.0	6
						6.8	0.3	357	17.8		8.3		29.9		113.1		9.0		3.7		6					

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)				
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			Value	DA		
IM10	Fine	Calm	11:02	8.4	Surface	1.0	0.3	305	17.4	17.4	7.9	7.9	30.5	30.5	115.4	115.4	9.2	9.2	2.0	3.3	5	5	822226	809814				
						1.0	0.3	299	17.4		7.9		30.5		114.6		9.2		2.0		5							
					Middle	4.2	0.3	311	17.4	7.9	7.9	30.5	114.4	114.5	9.1	3.7	6											
						4.2	0.3	307	17.4	7.9	30.5	114.4	114.5	9.1	3.8	5												
					Bottom	7.4	0.3	275	17.4	7.9	7.9	30.5	108.6	108.4	8.7	4.2	6											
						7.4	0.4	267	17.4	7.9	30.5	108.2	108.4	8.6	4.3	5												
IM11	Fine	Calm	10:55	7.4	Surface	1.0	0.3	287	17.4	17.4	7.9	7.9	30.5	30.5	113.8	113.7	9.1	9.1	2.9	3.6	4	4	821523	810565				
						1.0	0.3	294	17.4		7.9		30.5		113.6		9.1		2.8		4							
					Middle	3.7	0.3	269	17.3	7.9	7.9	30.5	112.8	112.6	9.0	3.8	4											
						3.7	0.3	270	17.3	7.9	30.5	112.4	112.6	9.0	3.8	4												
					Bottom	6.4	0.3	300	17.3	7.9	7.9	30.5	106.6	106.3	8.5	4.1	4											
						6.4	0.3	292	17.4	7.9	30.5	106.0	106.3	8.5	4.2	4												
IM12	Fine	Calm	10:50	7.6	Surface	1.0	0.4	293	17.3	17.3	8.0	8.0	30.4	30.4	113.0	113.0	9.0	8.9	1.0	1.8	7	6	821181	811497				
						1.0	0.4	288	17.3		8.0		30.4		112.9		9.0		1.1		6							
					Middle	3.8	0.3	293	17.3	8.0	8.0	30.4	110.4	110.2	8.8	1.9	5											
						3.8	0.3	297	17.4	8.0	30.4	109.9	110.2	8.8	1.8	6												
					Bottom	6.6	0.3	268	17.4	8.0	8.0	30.3	106.5	105.7	8.5	2.4	4											
						6.6	0.4	263	17.4	8.0	30.3	104.8	105.7	8.4	2.5	5												
SR1A	Fine	Calm	10:29	4.6	Surface	1.0	0.0	175	17.7	17.8	7.9	7.9	30.3	30.3	107.7	107.5	8.5	8.5	1.6	1.6	4	5	819972	812656				
						1.0	0.0	175	17.8		7.9		30.3		107.2		8.5		1.6		3							
					Middle	2.3	0.0	178	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-
						2.3	0.0	182	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	
					Bottom	3.6	0.0	184	17.9	7.9	7.9	30.2	100.8	100.8	8.0	1.6	6											
						3.6	0.0	177	18.0	7.9	7.9	30.0	100.7	100.8	8.0	1.6	5											
SR2	Fine	Calm	10:18	4.2	Surface	1.0	0.0	247	17.4	17.4	7.9	7.9	30.4	30.4	109.5	109.4	8.7	8.7	2.0	2.0	5	5	821442	814174				
						1.0	0.1	245	17.4		7.9		30.4		109.2		8.7		2.0		4							
					Middle	-	0.1	253	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	
						-	0.1	260	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-		
					Bottom	3.2	0.1	278	17.5	7.9	7.9	30.3	106.0	104.8	8.5	2.1	5											
						3.2	0.0	282	17.5	7.9	7.9	29.1	103.6	104.8	8.3	2.1	4											
SR3	Cloudy	Moderate	10:25	9.2	Surface	1.0	0.3	339	18.0	18.0	8.3	8.3	28.9	28.9	123.6	123.6	9.9	9.8	0.3	0.7	4	5	822156	807570				
						1.0	0.3	343	18.0		8.3		28.9		123.5		9.8		0.3		5							
					Middle	4.6	0.3	332	17.9	8.3	8.3	29.1	122.5	122.5	9.8	0.8	4											
						4.6	0.3	338	17.9	8.3	29.1	122.5	122.5	9.8	0.8	5												
					Bottom	8.2	0.3	324	17.8	8.3	8.3	29.3	117.1	117.0	9.3	1.1	5											
						8.2	0.3	327	17.8	8.3	29.3	116.9	117.0	9.3	1.1	6												
SR4A	Cloudy	Moderate	09:00	9.2	Surface	1.0	0.0	197	17.8	17.8	8.2	8.2	30.3	30.3	118.8	118.8	9.4	9.4	1.7	2.4	6	6	817196	807790				
						1.0	0.0	198	17.8		8.2		30.3		118.8		9.4		1.7		7							
					Middle	4.6	0.0	187	17.7	8.2	8.2	30.4	118.7	118.7	9.4	1.9	5											
						4.6	-	186	17.7	8.2	30.4	118.7	118.7	9.4	1.9	6												
					Bottom	8.2	0.1	210	17.6	8.2	8.2	30.5	115.4	115.4	9.2	3.6	5											
						8.2	0.1	209	17.6	8.2	30.5	115.3	115.4	9.2	3.5	4												
SR8	Fine	Calm	10:46	5.8	Surface	1.0	-	-	17.5	17.5	7.9	7.9	30.4	30.3	110.3	110.1	8.8	8.8	1.0	1.6	5	4	820406	811637				
						1.0	-	-	17.5		7.9		30.3		109.9		8.8		1.1		4							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-		
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-			
					Bottom	4.8	-	-	17.7	7.9	7.9	30.0	104.5	102.6	8.3	2.3	4											
						4.8	-	-	17.7	7.9	29.8	100.7	102.6	8.0	2.2	4												

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)		
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			Value	DA
C1	Cloudy	Moderate	16:06	8.6	Surface	1.0	0.2	209	17.7	17.7	7.9	7.9	31.9	31.9	114.3	114.2	9.0	8.9	4.3	6.6	2	3	815605	804248		
						1.0	0.2	204	17.7		7.9		31.9		114.1		9.0		4.4		2					
					Middle	4.3	0.2	218	17.6	17.6	7.9	7.9	32.0	32.0	112.6	112.5	8.9	8.6	4.8	8.6	10.4	8.6			3	3
						4.3	0.2	219	17.6		7.9		32.0		112.3		8.8		4.8		3					
					Bottom	7.6	0.2	192	17.6	17.6	7.8	7.8	32.1	32.1	108.7	108.7	8.6	8.6	10.4	8.6	10.7	8.6			3	3
						7.6	0.2	195	17.6		7.8		32.1		108.6		8.6		10.7		4					
C2	Cloudy	Rough	14:41	10.4	Surface	1.0	0.1	168	18.4	18.4	7.8	7.8	29.0	29.0	113.6	113.6	9.0	8.9	1.7	3.9	3	3	825660	806944		
						1.0	0.1	167	18.3		7.8		29.0		113.6		9.0		1.8		4					
					Middle	5.2	-	141	18.1	18.1	7.8	7.8	29.6	29.6	111.5	111.4	8.8	8.6	3.9	8.6	4.0	8.6			2	3
						5.2	0.0	141	18.1		7.8		29.7		111.3		8.8		4.0		2					
					Bottom	9.4	0.0	139	18.1	18.1	7.7	7.7	30.0	30.0	109.0	108.9	8.6	8.6	5.8	8.6	5.9	8.6			<2	3
						9.4	0.0	131	18.1		7.7		29.9		108.8		8.6		5.9		<2					
C3	Misty	Rough	15:54	11.0	Surface	1.0	0.3	88	18.2	18.2	8.0	8.0	30.3	30.3	109.0	108.9	8.6	8.5	1.1	1.5	3	3	822109	817819		
						1.0	0.4	85	18.2		8.0		30.3		108.8		8.6		1.1		2					
					Middle	5.5	0.3	78	18.1	18.1	8.0	7.9	30.4	30.4	107.9	105.8	8.5	8.1	1.2	8.1	2.0	8.1			3	3
						5.5	0.3	83	18.1		7.9		30.4		103.7		8.2		1.3		3					
					Bottom	10.0	0.3	103	18.1	18.1	7.9	7.9	30.4	30.4	102.4	102.0	8.1	8.1	2.1	8.1	2.1	8.1			5	3
						10.0	0.3	103	18.1		7.9		30.4		101.6		8.0		2.1		4					
IM1	Cloudy	Moderate	15:44	6.5	Surface	1.0	0.1	188	18.0	18.0	7.9	7.9	31.1	31.1	114.8	114.8	9.0	9.0	6.3	7.6	7	6	818371	806446		
						1.0	0.1	184	17.9		7.9		31.1		114.7		9.0		6.6		6					
					Middle	3.3	0.1	191	17.8	17.8	7.9	7.9	31.3	31.3	114.0	114.0	9.0	8.6	6.9	8.6	7.0	8.6			6	6
						3.3	0.1	197	17.8		7.9		31.3		113.9		9.0		7.0		5					
					Bottom	5.5	0.1	154	17.7	17.7	7.8	7.8	31.3	31.3	109.2	109.0	8.6	8.6	9.4	8.6	9.4	8.6			5	6
						5.5	0.1	153	17.7		7.8		31.3		108.7		8.6		9.4		4					
IM2	Cloudy	Moderate	15:39	6.8	Surface	1.0	0.0	157	18.0	18.0	7.9	7.9	30.9	30.9	116.7	116.7	9.2	9.2	6.4	6.1	6	5	819187	806249		
						1.0	0.0	161	18.0		7.9		30.9		116.7		9.2		6.2		5					
					Middle	3.4	0.1	155	17.9	17.9	7.9	7.9	31.1	31.2	116.1	116.1	9.1	9.0	6.0	9.0	6.1	9.0			5	5
						3.4	0.1	150	17.9		7.9		31.2		116.0		9.1		6.1		5					
					Bottom	5.8	0.1	173	17.7	17.8	7.9	7.9	31.3	31.3	114.5	114.5	9.0	9.0	6.1	9.0	6.1	9.0			5	5
						5.8	0.2	176	17.8		7.9		31.3		114.5		9.0		6.1		4					
IM7	Cloudy	Rough	15:20	8.0	Surface	1.0	0.1	116	18.4	18.4	7.9	7.9	29.2	29.2	113.4	113.4	9.0	8.8	2.2	2.4	2	3	821355	806825		
						1.0	0.1	121	18.4		7.9		29.2		113.3		8.9		2.2		2					
					Middle	4.0	0.1	91	18.1	18.1	7.8	7.8	30.2	30.2	109.9	109.8	8.7	8.5	2.4	8.5	2.4	8.5			3	3
						4.0	0.1	85	18.1		7.8		30.2		109.6		8.6		2.4		3					
					Bottom	7.0	0.1	97	18.1	18.1	7.8	7.8	30.2	30.2	107.8	107.8	8.5	8.5	2.4	8.5	2.4	8.5			3	3
						7.0	0.2	103	18.1		7.8		30.2		107.7		8.5		2.4		3					

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)				
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA						
IM10	Misty	Rough	14:42	8.6	Surface	1.0	0.1	74	18.7	18.7	8.0	8.0	29.2	29.2	109.6	109.5	8.6	8.6	1.0	1.5	4	4	822216	809854				
						1.0	0.1	73	18.7		8.0	8.0	29.2	29.2	109.4	109.5	8.6		1.1		5							
					Middle	4.3	0.1	61	18.7	8.0	8.0	29.2	29.1	108.8	108.7	8.5	8.5	1.7	4									
						4.3	0.2	62	18.7	8.0	8.0	29.1	29.1	108.5	108.7	8.5	8.5	1.6	2									
					Bottom	7.6	0.1	54	18.8	8.0	8.0	29.1	29.1	108.1	108.0	8.5	8.5	1.8	3									
						7.6	0.1	54	18.8	8.0	8.0	29.0	29.1	107.9	108.0	8.5	8.5	1.8	3									
IM11	Misty	Rough	14:53	9.0	Surface	1.0	0.2	67	18.5	18.5	8.0	8.0	29.4	29.4	109.8	109.8	8.6	8.5	1.0	1.2	3	3	821520	810525				
						1.0	0.2	72	18.5		8.0	8.0	29.4	29.4	109.8	109.8	8.6		1.1		3							
					Middle	4.5	0.2	94	18.5	8.0	8.0	29.4	29.4	105.4	105.3	8.3	8.3	1.2	3									
						4.5	0.2	88	18.5	8.0	8.0	29.4	29.4	105.1	105.3	8.3	8.3	1.2	3									
					Bottom	8.0	0.2	70	18.5	7.9	7.9	29.4	29.4	103.2	102.8	8.1	8.1	1.2	3									
						8.0	0.2	71	18.5	7.9	7.9	29.4	29.4	102.4	102.8	8.1	8.1	1.3	4									
IM12	Misty	Rough	15:01	9.4	Surface	1.0	0.1	85	18.5	18.5	8.0	8.0	29.4	29.4	109.9	109.8	8.6	8.4	1.0	1.5	3	4	821168	811532				
						1.0	0.1	82	18.5		8.0	8.0	29.4	29.4	109.7	109.8	8.6		1.1		4							
					Middle	4.7	0.2	96	18.5	8.0	8.0	29.3	29.3	105.1	104.9	8.3	8.3	1.3	3									
						4.7	0.2	101	18.5	8.0	8.0	29.3	29.3	104.6	104.9	8.2	8.2	1.3	4									
					Bottom	8.4	0.2	69	18.5	7.9	7.9	29.3	29.3	102.5	102.1	8.1	8.1	2.3	4									
						8.4	0.2	71	18.5	7.9	7.9	29.3	29.3	101.6	102.1	8.0	8.1	2.2	5									
SR1A	Misty	Rough	15:21	4.8	Surface	1.0	-	101	18.8	18.8	8.0	8.0	29.5	29.5	106.2	106.2	8.3	8.3	1.3	1.4	4	3	819973	812660				
						1.0	0.0	94	18.8		8.0	8.0	29.5	29.5	106.1	106.2	8.3		1.4		2							
					Middle	2.4	0.1	81	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-
						2.4	-	83	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-
					Bottom	3.8	0.0	124	18.8	8.0	8.0	29.5	29.5	105.7	105.6	8.3	8.3	1.5	3									
						3.8	0.0	119	18.8	8.0	8.0	29.5	29.5	105.5	105.6	8.2	8.3	1.5	3									
SR2	Misty	Rough	15:34	5.8	Surface	1.0	0.1	58	18.7	18.7	8.0	8.0	29.5	29.5	109.7	109.5	8.6	8.6	1.1	1.4	2	3	821468	814165				
						1.0	0.1	50	18.7		8.0	8.0	29.5	29.5	109.3	109.5	8.6		1.2		2							
					Middle	-	0.1	61	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	
						-	0.1	62	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	
					Bottom	4.8	0.2	44	18.7	8.0	8.0	29.5	29.5	103.2	102.8	8.1	8.1	1.8	3									
						4.8	0.2	41	18.7	8.0	8.0	29.5	29.5	102.3	102.8	8.0	8.1	1.7	3									
SR3	Cloudy	Rough	15:13	8.6	Surface	1.0	0.1	109	18.3	18.3	7.9	7.9	29.1	29.1	113.8	113.8	9.0	8.9	2.3	3.4	3	3	822148	807581				
						1.0	0.1	110	18.3		7.9	7.9	29.1	29.1	113.7	113.8	9.0		2.3		4							
					Middle	4.3	0.1	105	18.2	7.9	7.9	29.8	29.8	111.0	110.9	8.8	8.8	3.8	3									
						4.3	0.1	103	18.2	7.9	7.9	29.9	29.9	110.7	110.9	8.7	8.7	3.8	3									
					Bottom	7.6	0.0	102	18.2	7.8	7.8	29.9	29.9	108.7	108.7	8.6	8.6	4.1	2									
						7.6	0.1	97	18.2	7.8	7.8	29.9	29.9	108.6	108.7	8.6	8.6	4.0	3									
SR4A	Cloudy	Moderate	16:34	8.8	Surface	1.0	0.0	37	18.2	18.2	7.9	7.9	30.6	30.6	119.0	118.9	9.3	9.2	4.2	4.8	5	4	817184	807800				
						1.0	0.0	34	18.2		7.9	7.9	30.7	30.7	118.7	118.9	9.3		4.3		5							
					Middle	4.4	0.0	29	18.1	7.9	7.9	30.7	30.7	116.3	116.3	9.2	9.1	4.9	4									
						4.4	0.0	35	18.1	7.9	7.9	30.7	30.7	116.2	116.3	9.1	9.1	4.9	4									
					Bottom	7.8	0.0	23	18.1	7.9	7.9	30.7	30.7	115.2	115.1	9.1	9.1	5.1	3									
						7.8	0.0	24	18.1	7.9	7.9	30.7	30.7	114.9	115.1	9.0	9.1	5.2	4									
SR8	Misty	Rough	15:06	4.4	Surface	1.0	-	-	18.7	18.7	8.0	8.0	29.3	29.3	104.8	104.4	8.2	8.2	1.1	1.9	4	4	820378	811634				
						1.0	-	-	18.6		8.0	8.0	29.3	29.3	104.0	104.4	8.2		1.2		3							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-		
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-		
					Bottom	3.4	-	-	18.5	18.6	7.9	7.9	29.4	29.3	101.9	101.4	8.0	8.0	2.7	4								
						3.4	-	-	18.6	18.6	7.9	7.9	29.2	29.3	100.9	101.4	7.9	8.0	2.6	4								

DA: Depth-Averaged
 Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
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Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)		
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			Value	DA
C1	Cloudy	Moderate	09:49	8.8	Surface	1.0	0.2	33	17.8	17.8	8.0	8.0	30.7	30.7	115.4	115.3	9.1	9.0	7.3	8.5	8	6	815619	804259		
						1.0	0.2	38	17.8		8.0		30.7		115.2		9.1		8.0							
					Middle	4.4	0.3	27	17.7	17.7	8.0	8.0	30.8	30.8	113.2	113.1	9.0	8.8	8.8	8.8	7				8.8	7
						4.4	0.3	33	17.7		8.0		30.8		113.0		8.9		8.3							
					Bottom	7.8	0.2	17	17.8	17.8	8.1	8.1	30.8	30.7	111.1	111.0	8.8	8.8	9.7	8.8	5				8.8	5
						7.8	0.3	19	17.8		8.1		30.7		110.8		8.8		9.2		4					
C2	Cloudy	Rough	11:09	10.7	Surface	1.0	0.4	344	18.1	18.1	8.0	8.0	28.5	28.5	113.3	113.3	9.0	9.0	1.5	2.6	3	3	825670	806958		
						1.0	0.4	350	18.1		8.0		28.5		113.2		9.0		1.6		3					
					Middle	5.4	0.4	331	18.1	18.1	7.9	7.9	28.6	28.6	111.4	111.3	8.9	8.9	2.5	8.7	2				8.7	2
						5.4	0.4	334	18.1		7.9		28.6		111.2		8.9		2.6		3					
					Bottom	9.7	0.3	4	18.1	18.1	7.9	7.9	28.7	28.7	109.5	109.5	8.7	8.7	3.6	8.7	<2				8.7	<2
						9.7	0.3	6	18.1		7.9		28.7		109.4		8.7		4.0		<2					
C3	Misty	Moderate	10:57	10.4	Surface	1.0	0.5	251	18.0	18.0	8.1	8.1	30.4	30.4	105.4	105.1	8.3	8.2	1.5	1.8	3	3	822129	817789		
						1.0	0.4	249	18.0		8.1		30.4		104.7		8.3		1.4		2					
					Middle	5.2	0.5	244	18.0	18.0	8.1	8.1	30.4	30.4	103.9	103.5	8.2	8.1	1.8	8.0	2				8.0	2
						5.2	0.6	248	18.0		8.1		30.4		103.0		8.1		1.9		3					
					Bottom	9.4	0.4	241	18.0	18.0	8.1	8.1	30.4	30.4	101.6	101.2	8.0	8.0	2.1	8.0	3				8.0	3
						9.4	0.5	237	18.0		8.1		30.4		100.8		8.0		2.2		3					
IM1	Cloudy	Moderate	10:10	6.5	Surface	1.0	0.2	1	17.9	17.9	8.0	8.0	30.4	30.4	111.2	111.1	8.8	8.8	3.1	9.4	4	4	818352	806464		
						1.0	0.1	359	17.9		8.0		30.4		111.0		8.8		3.1		5					
					Middle	3.3	0.2	21	17.8	17.8	8.0	8.0	30.5	30.5	109.5	109.4	8.7	8.7	12.7	8.5	3				8.5	3
						3.3	0.2	23	17.8		8.0		30.5		109.2		8.7		11.6		4					
					Bottom	5.5	0.2	30	17.8	17.8	8.0	8.0	30.5	30.5	107.1	107.0	8.5	8.5	12.9	8.5	3				8.5	3
						5.5	0.1	25	17.8		8.0		30.5		106.9		8.5		12.8		3					
IM2	Cloudy	Moderate	10:14	6.7	Surface	1.0	0.1	330	17.9	17.9	8.0	8.0	30.2	30.2	112.2	112.1	8.9	8.8	7.1	9.6	2	4	819168	806236		
						1.0	0.1	334	17.9		8.0		30.2		112.0		8.9		7.3		4					
					Middle	3.4	0.1	326	17.8	17.8	8.0	8.0	30.3	30.3	110.5	110.5	8.8	8.7	10.7	8.7	4				8.7	4
						3.4	0.2	333	17.8		8.0		30.4		110.4		8.7		11.0		3					
					Bottom	5.7	0.1	0	17.8	17.8	8.0	8.0	30.4	30.3	109.6	109.5	8.7	8.7	10.7	8.6	4				8.6	4
						5.7	0.1	2	17.8		8.0		30.3		109.4		8.7		11.0		4					
IM7	Cloudy	Rough	10:34	7.5	Surface	1.0	0.1	322	18.1	18.1	8.0	8.0	29.0	29.0	111.4	111.4	8.9	8.8	1.7	2.1	<2	2	821364	806854		
						1.0	0.1	328	18.1		8.0		29.0		111.3		8.8		1.7		<2					
					Middle	3.8	0.2	320	18.0	18.0	8.0	8.0	29.1	29.1	110.5	110.5	8.8	8.8	2.0	8.6	2				8.6	2
						3.8	0.1	312	18.0		8.0		29.2		110.4		8.8		2.0		2					
					Bottom	6.5	0.2	316	18.0	18.0	7.9	7.9	29.3	29.2	108.2	108.2	8.6	8.6	2.6	8.6	3				8.6	3
						6.5	0.1	313	18.0		7.9		29.2		108.2		8.6		2.6		2					

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Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
IM10	Misty	Rough	12:08	8.6	Surface	1.0	0.2	285	18.7	18.7	8.0	8.0	29.3	29.3	109.0	108.9	8.6	8.5	1.0	1.1	3	3	822258	809830
						1.0	0.2	292	18.6		8.0	8.0	29.3	29.3	108.8	108.9	8.5		1.1		3			
					Middle	4.3	0.3	316	18.6	18.6	8.0	7.9	29.4	29.4	107.9	107.8	8.5	8.0	1.1	3				
						4.3	0.3	323	18.5		7.9	7.9	29.4	29.4	107.7	107.8	8.5		1.1	3				
					Bottom	7.6	0.2	311	18.5	18.5	7.9	7.9	29.5	29.5	102.3	101.8	8.0	8.0	1.2	4				
						7.6	0.2	305	18.5		7.9	7.9	29.5	29.5	101.2	101.8	8.0		1.2	3				
IM11	Misty	Rough	11:54	7.2	Surface	1.0	0.4	274	18.5	18.5	8.0	8.0	29.4	29.4	109.5	109.4	8.6	8.6	1.6	2.4	4	4	821504	810562
						1.0	0.4	274	18.5		8.0	8.0	29.4	29.4	109.3	109.4	8.6		1.5		3			
					Middle	3.6	0.4	270	18.5	18.5	7.9	7.9	29.4	29.4	108.3	108.1	8.5	8.1	2.7	4				
						3.6	0.4	263	18.5		7.9	7.9	29.4	29.4	107.8	108.1	8.5		2.8	4				
					Bottom	6.2	0.4	263	18.5	18.5	7.9	7.9	29.4	29.3	102.8	101.9	8.1	8.1	3.1	5				
						6.2	0.4	269	18.5		7.9	7.9	29.3	29.3	100.9	101.9	8.0		3.0	6				
IM12	Misty	Rough	11:49	7.2	Surface	1.0	0.4	283	18.5	18.5	8.0	8.0	29.3	29.3	110.4	110.3	8.7	8.7	1.3	2.2	3	4	821148	811526
						1.0	0.4	285	18.5		8.0	8.0	29.3	29.3	110.2	110.3	8.7		1.2		4			
					Middle	3.6	0.4	290	18.5	18.5	8.0	8.0	29.3	29.3	109.9	109.5	8.7	8.5	2.2	4				
						3.6	0.3	290	18.5		8.0	8.0	29.3	29.3	109.1	109.5	8.6		2.2	4				
					Bottom	6.2	0.3	302	18.5	18.5	7.9	7.9	29.4	29.4	107.9	107.5	8.5	8.5	3.2	5				
						6.2	0.4	303	18.5		7.9	7.9	29.4	29.4	107.1	107.5	8.4		3.1	4				
SR1A	Misty	Moderate	11:27	4.8	Surface	1.0	0.0	194	18.7	18.7	7.9	7.9	29.5	29.5	105.6	105.2	8.3	8.3	2.0	2.0	4	4	819974	812656
						1.0	-	189	18.7		7.9	7.9	29.5	29.5	104.7	105.2	8.2		1.9		3			
					Middle	2.4	0.0	207	-	-	-	-	-	-	-	-	-	-	-	-				
						2.4	0.0	200	-		-	-	-	-	-	-	-		-	-				
					Bottom	3.8	0.0	174	18.6	18.6	7.9	7.9	29.5	29.5	100.4	99.9	7.9	7.9	2.1	4				
						3.8	-	169	18.6		7.9	7.9	29.5	29.5	99.4	99.9	7.8		2.1	4				
SR2	Misty	Moderate	11:16	4.2	Surface	1.0	0.1	269	18.5	18.5	7.9	7.9	29.4	29.4	102.7	102.4	8.1	8.1	1.7	1.8	3	4	821457	814149
						1.0	0.1	265	18.5		7.9	7.9	29.4	29.4	102.1	102.4	8.0		1.6		4			
					Middle	-	0.1	273	-	-	-	-	-	-	-	-	-	-	-	-				
						-	0.1	271	-		-	-	-	-	-	-	-		-	-				
					Bottom	3.2	0.1	249	18.5	18.5	7.9	7.9	29.4	29.4	99.6	98.9	7.8	7.8	2.0	4				
						3.2	0.1	244	18.5		7.9	7.9	29.3	29.4	98.2	98.9	7.7		2.1	4				
SR3	Cloudy	Rough	10:42	8.5	Surface	1.0	0.3	316	18.1	18.1	8.0	8.0	28.9	28.9	111.1	111.0	8.8	8.8	2.8	5.1	3	3	822138	807559
						1.0	0.3	318	18.1		8.0	8.0	29.0	29.0	110.9	111.0	8.8		2.9		3			
					Middle	4.3	0.3	323	18.1	18.1	7.9	7.9	29.1	29.1	109.3	109.3	8.7	8.6	5.3	3				
						4.3	0.3	315	18.1		7.9	7.9	29.1	29.1	109.2	109.3	8.7		5.6	3				
					Bottom	7.5	0.2	308	18.1	18.1	7.9	7.9	29.1	29.1	107.9	107.9	8.6	8.6	6.9	2				
						7.5	0.2	302	18.1		7.9	7.9	29.1	29.1	107.9	107.9	8.6		7.0	3				
SR4A	Cloudy	Moderate	09:22	8.8	Surface	1.0	0.0	197	18.1	18.1	8.0	8.0	30.4	30.4	108.3	108.3	8.5	8.5	4.8	4.2	6	6	817200	807805
						1.0	0.0	197	18.1		8.0	8.0	30.4	30.4	108.2	108.3	8.5		4.7		6			
					Middle	4.4	0.0	172	18.1	18.1	8.0	8.0	30.4	30.4	107.4	107.4	8.5	8.4	4.0	6				
						4.4	0.0	172	18.1		8.0	8.0	30.4	30.4	107.3	107.4	8.5		3.9	6				
					Bottom	7.8	0.0	187	18.1	18.1	8.0	8.0	30.4	30.4	107.1	107.1	8.4	8.4	3.9	7				
						7.8	0.1	180	18.1		8.0	8.0	30.4	30.4	107.1	107.1	8.4		3.9	7				
SR8	Misty	Moderate	11:44	5.0	Surface	1.0	-	-	18.5	18.5	7.9	7.9	29.4	29.4	107.1	105.3	8.4	8.3	1.1	1.4	2	2	820400	811604
						1.0	-	-	18.5		7.9	7.9	29.4	29.4	103.5	105.3	8.2		1.2		3			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
						-	-	-	-		-	-	-	-	-	-	-		-	-				
					Bottom	4.0	-	-	18.5	18.5	7.9	7.9	29.4	29.4	101.4	101.0	8.0	8.0	1.8	2				
						4.0	-	-	18.5		7.9	7.9	29.4	29.4	100.6	101.0	7.9		1.7	2				

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

Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)		
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			Value	DA
C1	Fine	Rough	05:05	7.3	Surface	1.0	0.0	135	18.9	18.9	8.1	8.1	29.4	29.4	102.2	102.2	8.0	8.0	4.4	5.9	3	3	815638	804241		
						1.0	0.0	131	18.9		8.1		29.4		102.1		8.0		4.5		4					
					Middle	3.7	0.0	150	18.9	18.9	8.1	8.1	29.5	29.5	101.7	101.7	7.9	7.9	5.6	7.8	2				7.8	2
						3.7	0.0	151	18.9		8.1		29.5		101.7		7.9		5.6		2					
					Bottom	6.3	0.0	133	18.9	18.9	8.1	8.1	29.6	29.6	100.6	100.6	7.8	7.8	7.8	7.9	2				7.9	2
						6.3	0.0	139	18.9		8.1		29.6		100.6		7.8		7.8		3					
C2	Fine	Rough	06:33	8.2	Surface	1.0	0.2	164	19.2	19.2	8.2	8.2	28.6	28.6	105.3	105.3	8.2	8.2	2.2	3.1	<2	4	825701	806926		
						1.0	0.3	159	19.2		8.2		28.6		105.3		8.2		2.2		<2					
					Middle	4.1	0.2	158	19.1	19.1	8.2	8.2	28.9	28.9	104.3	104.3	8.1	8.1	3.3	7.9	3				7.9	3
						4.1	0.2	154	19.1		8.2		28.9		104.3		8.1		3.3		3					
					Bottom	7.2	0.2	201	19.0	19.0	8.2	8.2	29.4	29.4	101.8	101.8	7.9	7.9	3.9	7.9	6				7.9	6
						7.2	0.2	203	19.0		8.2		29.4		101.8		7.9		3.9		6					
C3	Fine	Rough	04:50	9.4	Surface	1.0	0.1	283	18.6	18.6	8.0	8.0	30.2	30.2	101.5	101.5	7.9	7.9	2.5	4.0	4	5	822102	817812		
						1.0	0.1	287	18.6		8.0		30.2		101.4		7.9		2.5		5					
					Middle	4.7	0.1	278	18.6	18.6	8.0	8.0	30.3	30.3	100.6	100.6	7.9	7.9	3.4	7.7	5				7.7	6
						4.7	0.1	284	18.6		8.0		30.3		100.5		7.8		3.4		6					
					Bottom	8.4	0.1	295	18.4	18.4	7.9	7.9	30.8	30.8	99.1	99.1	7.7	7.7	6.1	7.7	4				7.7	4
						8.4	0.2	287	18.4		7.9		30.8		99.0		7.7		6.2		4					
IM1	Fine	Moderate	05:30	6.8	Surface	1.0	0.1	194	19.2	19.2	8.2	8.2	28.7	28.7	104.3	104.3	8.1	8.1	2.1	2.8	6	6	818338	806465		
						1.0	0.1	193	19.2		8.2		28.7		104.3		8.1		2.2		7					
					Middle	3.4	0.0	204	19.3	19.3	8.2	8.2	28.8	28.8	102.5	102.5	8.0	8.0	3.4	7.8	6				7.8	4
						3.4	0.0	200	19.3		8.2		28.8		102.5		8.0		3.4		4					
					Bottom	5.8	0.1	190	19.0	19.0	8.1	8.1	29.6	29.6	100.4	100.4	7.8	7.8	2.8	7.8	6				7.8	6
						5.8	0.1	190	19.0		8.1		29.6		100.4		7.8		2.9		4					
IM2	Fine	Moderate	05:37	7.2	Surface	1.0	0.0	196	19.4	19.4	8.2	8.2	27.8	27.8	105.0	105.0	8.2	8.2	3.3	4.7	4	4	819201	806231		
						1.0	0.0	197	19.4		8.2		27.8		105.0		8.2		3.3		2					
					Middle	3.6	0.1	181	19.4	19.4	8.2	8.2	27.9	27.9	104.8	104.8	8.2	8.2	4.3	7.7	5				7.7	5
						3.6	0.1	174	19.4		8.2		27.9		104.8		8.2		4.4		4					
					Bottom	6.2	0.1	178	19.4	19.4	8.1	8.1	28.9	28.9	99.6	99.6	7.7	7.7	6.5	7.7	5				7.7	5
						6.2	0.1	174	19.4		8.1		29.0		99.6		7.7		6.5		4					
IM7	Fine	Rough	05:58	6.9	Surface	1.0	0.1	173	19.1	19.1	8.2	8.2	28.9	28.9	103.0	103.0	8.0	7.9	4.2	5.8	4	5	821363	806848		
						1.0	0.1	166	19.1		8.2		28.9		103.0		8.0		4.2		3					
					Middle	3.5	0.1	198	18.9	18.9	8.1	8.1	29.7	29.7	100.3	100.3	7.8	7.8	5.6	7.8	3				7.8	3
						3.5	0.1	200	18.9		8.1		29.7		100.2		7.8		5.7		4					
					Bottom	5.9	0.1	164	18.9	18.9	8.1	8.1	29.7	29.7	100.1	100.1	7.8	7.8	7.5	7.8	8				7.8	8
						5.9	0.1	160	18.9		8.1		29.7		100.1		7.8		7.5		6					

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Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
IM10	Fine	Rough	06:27	8.3	Surface	1.0	0.1	112	19.2	8.2	8.2	28.8	28.8	104.3	104.3	8.1	8.0	5.1	3.1	7	5	822250	809844	
						1.0	0.1	114	19.2	8.2	8.2	28.8	28.8	104.2	104.3	8.1			3.2	5				
					Middle	4.2	0.1	108	19.0	8.1	8.1	29.3	29.3	101.6	101.6	7.9			5.8	6				
						4.2	0.1	103	19.0	8.1	8.1	29.3	29.3	101.5	101.6	7.9			5.8	4				
					Bottom	7.3	0.2	98	19.0	8.1	8.1	29.4	29.4	100.8	100.8	7.9			6.4	3				
						7.3	0.2	102	19.0	8.1	8.1	29.4	29.4	100.8	100.8	7.9			6.4	3				
IM11	Fine	Rough	06:13	7.7	Surface	1.0	0.0	114	19.3	8.2	8.2	27.9	27.9	105.4	105.4	8.2	8.1	5.6	4.3	4	4	821489	810547	
						1.0	0.0	119	19.3	8.2	8.2	27.9	27.9	105.4	105.4	8.2			4.3	2				
					Middle	3.9	0.1	97	19.0	8.1	8.1	29.4	29.4	101.0	101.0	7.9			5.4	3				
						3.9	0.0	102	19.0	8.1	8.1	29.5	29.5	100.9	100.9	7.9			5.4	4				
					Bottom	6.7	0.1	87	18.9	8.1	8.1	29.6	29.6	99.6	99.6	7.8			7.2	3				
						6.7	0.1	85	18.9	8.1	8.1	29.6	29.6	99.6	99.6	7.8			7.3	5				
IM12	Fine	Rough	06:02	7.9	Surface	1.0	0.1	102	19.1	8.2	8.2	28.9	28.9	103.6	103.6	8.1	8.0	4.2	2.7	<2	2	821173	811502	
						1.0	0.1	103	19.1	8.2	8.2	28.9	28.9	103.5	103.6	8.1			2.7	<2				
					Middle	4.0	0.0	108	19.0	8.1	8.1	29.5	29.5	101.5	101.5	7.9			3.4	3				
						4.0	0.0	110	19.0	8.1	8.1	29.5	29.5	101.5	101.5	7.9			3.5	2				
					Bottom	6.9	0.1	111	18.9	8.1	8.1	29.7	29.7	100.9	100.9	7.9			6.4	3				
						6.9	0.0	111	18.9	8.1	8.1	29.7	29.7	100.9	100.9	7.9			6.4	2				
SR1A	Fine	Moderate	05:19	4.2	Surface	1.0	0.0	355	19.2	8.2	8.2	28.7	28.7	104.3	104.3	8.1	8.1	4.8	4.5	5	4	819972	812664	
						1.0	0.0	351	19.2	8.2	8.2	28.7	28.7	104.2	104.3	8.1			4.5	5				
					Middle	2.1	0.0	342	-	-	-	-	-	-	-	-			-	-				
						2.1	0.0	348	-	-	-	-	-	-	-	-			-	-				
					Bottom	3.2	-	334	19.1	8.1	8.1	29.1	29.1	102.1	102.1	8.0			5.1	3				
						3.2	0.0	332	19.1	8.1	8.1	29.1	29.1	102.1	102.1	8.0			5.2	3				
SR2	Fine	Rough	05:08	4.3	Surface	1.0	0.1	336	18.9	8.1	8.1	29.4	29.4	102.8	102.8	8.0	8.0	4.0	3.3	2	3	821479	814178	
						1.0	0.0	336	18.9	8.1	8.1	29.4	29.4	102.8	102.8	8.0			3.3	3				
					Middle	-	0.1	333	-	-	-	-	-	-	-	-			-	-				
						-	0.1	337	-	-	-	-	-	-	-	-			-	-				
					Bottom	3.3	0.1	321	18.9	8.1	8.1	29.6	29.6	101.9	101.9	8.0			4.7	3				
						3.3	0.1	322	18.9	8.1	8.1	29.6	29.6	101.9	101.9	8.0			4.8	5				
SR3	Fine	Rough	06:06	7.1	Surface	1.0	0.1	166	19.3	8.2	8.2	27.9	27.9	105.9	105.9	8.3	8.2	3.0	3.2	2	3	822144	807583	
						1.0	0.2	163	19.3	8.2	8.2	27.9	27.9	105.8	105.8	8.3			3.2	3				
					Middle	3.6	0.1	182	19.2	8.2	8.2	28.6	28.6	104.2	104.2	8.1			3.3	4				
						3.6	0.1	182	19.3	8.2	8.2	28.6	28.6	104.2	104.2	8.1			3.3	4				
					Bottom	6.1	0.1	154	18.9	8.1	8.1	29.6	29.6	101.2	101.2	7.9			2.7	3				
						6.1	0.0	152	18.9	8.1	8.1	29.6	29.6	101.2	101.2	7.9			2.7	4				
SR4A	Fine	Moderate	04:35	8.9	Surface	1.0	0.0	300	18.6	8.1	8.1	30.1	30.1	101.7	101.7	7.9	7.9	7.0	5.2	2	3	817210	807789	
						1.0	0.0	293	18.6	8.1	8.1	30.1	30.1	101.7	101.7	7.9			5.2	3				
					Middle	4.5	0.1	320	18.6	8.1	8.1	30.2	30.2	101.4	101.4	7.9			6.3	2				
						4.5	0.0	327	18.6	8.1	8.1	30.2	30.2	101.4	101.4	7.9			6.4	2				
					Bottom	7.9	0.0	281	18.6	8.0	8.0	30.6	30.6	100.4	100.4	7.8			9.6	2				
						7.9	0.0	278	18.6	8.0	8.0	30.6	30.6	100.4	100.4	7.8			9.5	4				
SR8	Fine	Moderate	05:52	4.2	Surface	1.0	-	-	19.4	8.2	8.2	28.5	28.5	104.3	104.3	8.1	8.1	7.2	5.2	2	3	820383	811606	
						1.0	-	-	19.4	8.2	8.2	28.5	28.5	104.3	104.3	8.1			5.2	3				
					Middle	-	-	-	-	-	-	-	-	-	-	-			-	-				
						-	-	-	-	-	-	-	-	-	-	-			-	-				
					Bottom	3.2	-	-	19.3	8.2	8.2	28.9	28.9	103.3	103.3	8.0			9.2	3				
						3.2	-	-	19.3	8.2	8.2	28.9	28.9	103.2	103.3	8.0			9.3	3				

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Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)		
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA				
C1	Fine	Rough	12:08	8.4	Surface	1.0	0.3	42	18.8	18.8	8.2	8.2	29.9	29.9	102.8	102.8	8.0	8.0	8.0	5.5	3.7	4	3	815627	804266	
						1.0	0.3	44	18.8		8.2		29.9		102.8		8.0				3.8					
					Middle	4.2	0.3	27	18.7	18.7	8.2	8.2	30.0	30.0	102.3	102.3	8.0	8.0	8.0	7.9	7.9	7.9	4.6			3
						4.2	0.3	25	18.7		8.2		30.0		102.3		8.0		4.6							
					Bottom	7.4	0.3	19	18.7	18.7	8.1	8.1	30.1	30.1	101.5	101.5	7.9	7.9	7.9	7.9	7.9	7.9	8.2			2
						7.4	0.2	14	18.7		8.1		30.1		101.5		7.9		8.3							
C2	Fine	Rough	10:28	8.9	Surface	1.0	0.1	211	19.3	19.3	8.2	8.2	28.1	28.1	105.3	105.3	8.2	8.1	8.1	3.6	4.2	3	3	825691	806930	
						1.0	0.1	205	19.3		8.2		28.1		105.3		8.2				4.3					
					Middle	4.5	0.0	204	19.1	19.1	8.2	8.2	29.3	29.3	102.2	102.2	8.0	8.0	8.0	7.9	7.9	7.9	3.7			3
						4.5	0.1	208	19.1		8.2		29.3		102.2		8.0		3.7							
					Bottom	7.9	0.1	197	19.0	19.0	8.1	8.1	29.4	29.4	101.6	101.6	7.9	7.9	7.9	7.9	7.9	7.9	2.9			3
						7.9	0.1	196	19.0		8.1		29.4		101.6		7.9		2.9							
C3	Fine	Moderate	12:26	10.5	Surface	1.0	0.4	269	18.5	18.5	8.1	8.1	30.6	30.6	100.8	100.8	7.9	7.8	7.8	1.8	1.0	3	3	822096	817806	
						1.0	0.4	269	18.5		8.1		30.6		100.8		7.9				1.1					
					Middle	5.3	0.4	247	18.3	18.3	8.1	8.1	31.1	31.1	98.7	98.7	7.7	7.7	7.7	7.7	7.7	7.7	1.5			4
						5.3	0.4	241	18.3		8.1		31.1		98.7		7.7		1.5							
					Bottom	9.5	0.4	273	18.3	18.3	8.1	8.1	31.1	31.1	98.4	98.4	7.7	7.7	7.7	7.7	7.7	7.7	3.0			4
						9.5	0.4	267	18.3		8.1		31.1		98.4		7.7		2.9							
IM1	Fine	Moderate	11:40	7.2	Surface	1.0	0.1	17	19.5	19.5	8.2	8.2	28.7	28.7	102.6	102.6	8.0	7.9	7.9	4.0	1.6	2	3	818335	806457	
						1.0	0.1	13	19.5		8.2		28.7		102.6		8.0				1.6					
					Middle	3.6	0.2	6	19.2	19.3	8.2	8.2	29.2	29.2	101.0	101.1	7.8	7.8	7.8	7.8	7.8	7.8	4.1			2
						3.6	0.2	10	19.3		8.2		29.2		101.1		7.8		4.0							
					Bottom	6.2	0.2	25	18.8	18.8	8.1	8.1	29.9	29.9	100.2	100.2	7.8	7.8	7.8	7.8	7.8	7.8	6.3			3
						6.2	0.1	25	18.8		8.1		29.9		100.2		7.8		6.3							
IM2	Fine	Moderate	11:27	7.2	Surface	1.0	0.1	349	19.4	19.4	8.2	8.2	28.6	28.6	103.7	103.7	8.1	8.0	8.0	2.5	1.3	2	3	819160	806220	
						1.0	0.1	352	19.4		8.2		28.6		103.7		8.1				1.3					
					Middle	3.6	0.0	334	18.8	18.8	8.2	8.2	29.8	29.8	100.6	100.6	7.8	7.8	7.8	7.8	7.8	7.8	2.7			3
						3.6	0.0	328	18.8		8.2		29.8		100.6		7.8		2.7							
					Bottom	6.2	0.1	337	18.8	18.8	8.2	8.2	29.9	29.9	100.7	100.7	7.9	7.9	7.9	7.9	7.9	7.9	3.5			2
						6.2	0.1	332	18.8		8.2		29.9		100.7		7.9		3.6							
IM7	Fine	Rough	11:06	7.4	Surface	1.0	0.1	251	19.3	19.3	8.2	8.2	28.8	28.7	102.7	102.7	8.0	7.9	7.9	7.3	6.2	2	2	821337	806821	
						1.0	0.1	244	19.3		8.2		28.7		102.7		8.0				6.3					
					Middle	3.7	0.1	275	19.0	19.0	8.1	8.1	29.4	29.4	100.7	100.7	7.8	7.8	7.8	7.8	7.8	7.8	7.5			<2
						3.7	0.1	271	19.0		8.1		29.4		100.7		7.8		7.5							
					Bottom	6.4	0.1	283	18.9	18.9	8.1	8.1	29.7	29.7	98.5	98.5	7.7	7.7	7.7	7.7	7.7	7.7	8.2			<2
						6.4	0.2	280	18.9		8.1		29.7		98.5		7.7		8.2							

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)		
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			Value	DA
IM10	Fine	Rough	10:41	8.3	Surface	1.0	0.1	279	19.2	19.2	8.2	8.2	28.5	28.5	103.5	103.4	8.1	8.0	1.2	2.5	<2	822226	809861			
						1.0	0.1	272	19.2		8.2	8.2	28.5	28.5	103.3	103.4	8.1		1.3		<2					
					Middle	4.2	0.1	260	19.0	19.0	8.1	8.1	29.3	29.3	101.1	101.1	7.9	8.0	2.3	<2						
						4.2	0.1	264	19.0		8.1	8.1	29.3	29.3	101.0	101.0	7.9		2.4	<2						
					Bottom	7.3	0.2	265	19.0	19.0	8.1	8.1	29.4	29.4	100.1	100.1	7.8	7.8	3.8	<2						
						7.3	0.2	261	19.0		8.1	8.1	29.4	29.4	100.1	100.1	7.8		3.9	<2						
IM11	Fine	Rough	10:56	8.1	Surface	1.0	0.3	257	19.3	19.3	8.2	8.2	28.6	28.6	104.8	104.8	8.2	8.1	3.3	3.3	2	821477	810545			
						1.0	0.2	251	19.3		8.2	8.2	28.6	28.6	104.8	104.8	8.2		3.3		2					
					Middle	4.1	0.2	251	19.1	19.1	8.2	8.2	29.1	29.1	102.6	102.6	8.0	8.0	2.6		2					
						4.1	0.2	253	19.1		8.2	8.2	29.1	29.1	102.6	102.6	8.0		2.6		3					
					Bottom	7.1	0.2	291	19.0	19.0	8.1	8.1	29.6	29.6	99.4	99.4	7.7	7.7	3.9		2					
						7.1	0.2	283	19.0		8.1	8.1	29.6	29.6	99.3	99.3	7.7		3.9		3					
IM12	Fine	Rough	11:06	8.4	Surface	1.0	0.2	273	19.0	19.0	8.2	8.2	29.1	29.1	103.0	103.0	8.0	8.0	1.1	1.6	3	821139	811500			
						1.0	0.2	276	19.0		8.2	8.2	29.1	29.1	102.9	103.0	8.0		1.2		2					
					Middle	4.2	0.2	295	18.9	18.9	8.1	8.1	29.5	29.5	101.4	101.4	7.9	8.0	1.3		2					
						4.2	0.2	289	18.9		8.1	8.1	29.5	29.5	101.4	101.4	7.9		1.3		3					
					Bottom	7.4	0.2	274	18.9	18.9	8.1	8.1	29.6	29.6	99.2	99.2	7.7	7.7	2.5		3					
						7.4	0.2	276	18.9		8.1	8.1	29.6	29.6	99.1	99.1	7.7		2.5		2					
SR1A	Fine	Moderate	11:42	4.8	Surface	1.0	-	208	19.5	19.5	8.1	8.1	28.9	28.9	99.2	99.2	7.7	7.7	5.0	5.8	3	819972	812658			
						1.0	0.1	206	19.5		8.1	8.1	28.9	28.9	99.1	99.1	7.7		5.0		2					
					Middle	2.4	0.0	209	-	-	-	-	-	-	-	-	-	-	-		-			-	-	2
						2.4	0.0	215	-		-	-	-	-	-	-	-	-	-		-			-		-
					Bottom	3.8	0.0	212	19.5	19.5	8.1	8.1	28.9	28.9	98.7	98.7	7.6	7.6	6.5		2					
						3.8	0.0	216	19.5		8.1	8.1	28.9	28.9	98.7	98.7	7.6		6.6		2					
SR2	Fine	Moderate	12:03	5.2	Surface	1.0	0.1	275	18.8	18.8	8.2	8.2	29.9	29.9	103.1	103.1	8.0	8.0	1.7	1.5	4	821449	814175			
						1.0	0.1	280	18.8		8.2	8.2	29.9	29.9	103.1	103.1	8.0		1.7		4					
					Middle	-	0.1	274	-	-	-	-	-	-	-	-	-	-	-		-			-	-	3
						-	0.1	273	-		-	-	-	-	-	-	-	-	-		-			-		
					Bottom	4.2	0.1	255	18.7	18.7	8.2	8.2	30.0	30.0	102.5	102.5	8.0	8.0	1.3		2					
						4.2	0.0	253	18.7		8.2	8.2	30.0	30.0	102.5	102.5	8.0		1.3		3					
SR3	Fine	Rough	10:49	7.9	Surface	1.0	0.1	239	19.0	19.0	8.2	8.2	29.2	29.2	103.3	103.3	8.1	8.1	2.7	3.9	3	822137	807589			
						1.0	0.0	240	19.0		8.2	8.2	29.2	29.2	103.3	103.3	8.1		2.7		3					
					Middle	4.0	0.0	235	19.0	19.0	8.2	8.2	29.3	29.3	102.5	102.5	8.0	8.0	3.6		4					
						4.0	0.0	228	19.0		8.2	8.2	29.3	29.3	102.4	102.4	8.0		3.6		2					
					Bottom	6.9	0.1	248	18.9	18.9	8.2	8.2	29.6	29.6	101.2	101.2	7.9	7.9	5.4		3					
						6.9	0.1	244	18.9		8.2	8.2	29.6	29.6	101.2	101.2	7.9		5.5		2					
SR4A	Fine	Moderate	12:31	9.6	Surface	1.0	0.0	239	18.5	18.5	8.1	8.1	30.6	30.6	101.1	101.1	7.9	7.9	3.3	4.5	2	817174	807823			
						1.0	0.0	246	18.5		8.1	8.1	30.6	30.6	101.1	101.1	7.9		3.3		4					
					Middle	4.8	0.0	245	18.5	18.5	8.1	8.1	30.6	30.6	100.4	100.4	7.8	7.8	4.3		4					
						4.8	0.1	249	18.5		8.1	8.1	30.6	30.6	100.4	100.4	7.8		4.4		2					
					Bottom	8.6	0.0	261	18.3	18.3	8.1	8.1	31.1	31.1	99.0	99.0	7.7	7.8	5.7		3					
						8.6	0.0	259	18.3		8.1	8.1	31.1	31.1	99.0	99.0	7.8		5.8		4					
SR8	Fine	Moderate	11:14	4.9	Surface	1.0	-	-	19.4	19.4	8.2	8.2	28.6	28.6	103.5	103.5	8.0	8.0	4.3	5.6	3	820384	811639			
						1.0	-	-	19.4		8.2	8.2	28.6	28.6	103.4	103.4	8.0		4.4		2					
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-			-	-	3
						-	-	-	-		-	-	-	-	-	-	-	-	-		-			-		
					Bottom	3.9	-	-	19.1	19.1	8.2	8.2	29.2	29.2	101.9	101.9	7.9	7.9	6.8		3					
						3.9	-	-	19.1		8.2	8.2	29.2	29.2	101.8	101.8	7.9		6.8		4					

DA: Depth-Averaged

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

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Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			Value
C1	Cloudy	Moderate	21:54	8.7	Surface	1.0	0.4	208	17.4	17.4	7.8	7.8	32.7	32.7	98.1	98.1	7.7	7.7	7.7	8.2	8.2	<2	<2	815613	804261
						1.0	0.4	202	17.4		7.8	7.8	32.7	32.7	98.1	98.1	7.7					7.7			
					Middle	4.4	0.5	196	17.4	17.4	7.8	7.8	32.7	32.7	98.2	98.3	7.7	7.7	7.7	10.2	10.2	<2	<2		
						4.4	0.4	201	17.4		7.8	7.8	32.7	32.7	98.3	98.3	7.7					7.7			
					Bottom	7.7	0.4	227	17.4	17.4	7.8	7.8	32.7	32.7	99.8	100.0	7.9	7.9	7.9	7.1	7.1	<2	<2		
						7.7	0.5	223	17.4		7.8	7.8	32.7	32.7	100.1	100.0	7.9			7.9		8.0			
C2	Cloudy	Moderate	20:41	11.7	Surface	1.0	0.4	164	17.8	17.8	7.8	7.8	31.1	31.1	99.0	99.0	7.8	7.8	7.8	6.0	6.0	3	3	825703	806924
						1.0	0.4	158	17.8		7.8	7.8	31.1	31.1	99.0	99.0	7.8					7.8			
					Middle	5.9	0.4	178	17.7	17.7	7.8	7.8	31.6	31.6	98.8	98.8	7.8	7.8	7.8	10.5	10.6	3	3		
						5.9	0.4	178	17.7		7.8	7.8	31.6	31.6	98.8	98.8	7.8			7.8		10.6			
					Bottom	10.7	0.4	173	17.7	17.7	7.8	7.8	31.9	31.8	98.5	98.5	7.8	7.8	7.8	6.7	6.8	2	3		
						10.7	0.4	174	17.7		7.8	7.8	31.8	31.8	98.5	98.5	7.8			7.8		6.8			
C3	Misty	Calm	21:32	11.0	Surface	1.0	0.4	87	18.0	18.0	7.9	7.9	31.5	31.5	99.1	99.2	7.8	7.8	7.8	1.7	1.7	2	2	822107	817826
						1.0	0.5	84	18.0		7.9	7.9	31.5	31.5	99.2	99.2	7.8					7.8			
					Middle	5.5	0.4	82	18.0	18.0	7.9	7.9	31.5	31.5	99.3	99.3	7.8	7.8	7.8	1.8	1.8	2	2		
						5.5	0.4	88	18.0		7.9	7.9	31.5	31.5	99.3	99.3	7.8			7.8		1.8			
					Bottom	10.0	0.4	58	18.0	18.0	8.0	8.0	31.5	31.5	99.7	99.9	7.8	7.8	7.8	2.0	2.1	2	2		
						10.0	0.4	62	18.0		8.0	8.0	31.5	31.5	100.0	99.9	7.8			7.8		2.1			
IM1	Cloudy	Moderate	21:34	6.8	Surface	1.0	0.3	200	17.6	17.6	7.8	7.8	32.4	32.4	101.9	101.9	8.0	8.0	8.0	4.1	4.1	<2	<2	818362	806444
						1.0	0.3	200	17.6		7.8	7.8	32.4	32.4	101.8	101.8	8.0					8.0			
					Middle	3.4	0.3	179	17.6	17.6	7.8	7.8	32.5	32.5	101.4	101.4	8.0	8.0	8.0	4.1	4.3	<2	<2		
						3.4	0.3	171	17.6		7.8	7.8	32.5	32.5	101.4	101.4	8.0			8.0		4.3			
					Bottom	5.8	0.3	214	17.5	17.5	7.9	7.9	32.6	32.6	101.7	101.8	8.0	8.0	8.0	6.5	6.5	<2	<2		
						5.8	0.3	221	17.5		7.9	7.9	32.6	32.6	101.9	101.9	8.0			8.0		6.5			
IM2	Cloudy	Moderate	21:30	7.2	Surface	1.0	0.3	188	17.6	17.6	7.8	7.8	32.3	32.3	101.5	101.5	8.0	8.0	8.0	5.3	5.3	2	2	819203	806214
						1.0	0.3	190	17.6		7.8	7.8	32.3	32.3	101.5	101.5	8.0					8.0			
					Middle	3.6	0.3	185	17.6	17.6	7.8	7.8	32.5	32.5	100.9	100.9	7.9	7.9	7.9	3.3	3.5	2	2		
						3.6	0.3	187	17.6		7.8	7.8	32.5	32.5	100.9	100.9	7.9			7.9		3.5			
					Bottom	6.2	0.3	200	17.5	17.5	7.8	7.8	32.6	32.6	101.2	101.3	8.0	8.0	8.0	11.0	10.5	2	2		
						6.2	0.3	194	17.5		7.8	7.8	32.6	32.6	101.3	101.3	8.0			8.0		10.5			
IM7	Cloudy	Moderate	21:10	7.8	Surface	1.0	0.2	154	17.8	17.8	7.8	7.8	31.5	31.6	99.9	99.9	7.9	7.9	7.9	0.9	0.9	3	3	821354	806828
						1.0	0.2	156	17.8		7.8	7.8	31.6	31.6	99.9	99.9	7.9					7.9			
					Middle	3.9	0.2	181	17.7	17.7	7.8	7.8	31.9	31.9	99.9	100.0	7.9	7.9	7.9	0.9	1.0	3	3		
						3.9	0.2	176	17.7		7.8	7.8	32.0	32.0	100.0	100.0	7.9			7.9		1.0			
					Bottom	6.8	0.3	172	17.6	17.6	7.8	7.8	32.2	32.2	101.0	101.1	8.0	8.0	8.0	1.2	1.2	4	3		
						6.8	0.2	178	17.6		7.8	7.8	32.2	32.2	101.2	101.1	8.0			8.0		1.2			

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Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)			
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			Value	DA	
IM10	Misty	Calm	20:27	8.8	Surface	1.0	0.3	97	18.3	18.3	7.9	7.9	30.5	30.5	101.8	101.9	8.0	8.0	1.0	8.0	2	2	822222	809857			
						1.0	0.4	94	18.3	7.9	7.9	30.5	30.5	101.9	101.9	8.0	8.0	1.1	8.0	2	2						
					Middle	4.4	0.3	103	18.1	18.1	7.9	7.9	30.7	30.7	101.7	101.7	8.0	8.0	1.2	8.0	<2	2			<2	2	
						4.4	0.3	101	18.1	18.1	7.9	7.9	30.7	30.7	101.6	101.7	8.0	8.0	1.1	8.0	<2	2			<2	2	
					Bottom	7.8	0.4	94	18.1	18.1	7.9	7.9	30.9	30.9	101.7	101.7	8.0	8.0	1.6	8.0	2	8.0			2	2	
						7.8	0.3	96	18.1	18.1	7.9	7.9	30.9	30.9	101.7	101.7	8.0	8.0	1.5	8.0	3	8.0			3	2	
IM11	Misty	Calm	20:34	9.2	Surface	1.0	0.4	83	18.2	18.2	8.0	8.0	30.5	30.5	105.3	105.4	8.3	8.3	1.0	8.3	2	2	821493	810566			
						1.0	0.4	77	18.2	8.0	8.0	30.5	30.5	105.5	105.4	8.3	8.3	1.1	8.3	2	2						
					Middle	4.6	0.4	107	18.1	18.1	8.0	8.0	30.6	30.6	106.1	106.3	8.3	8.3	1.4	8.3	<2	2			<2	2	
						4.6	0.4	109	18.1	18.1	8.0	8.0	30.6	30.6	106.4	106.3	8.4	8.4	1.4	8.5	<2	2			<2	2	
					Bottom	8.2	0.3	85	18.1	18.1	8.0	8.0	30.6	30.6	107.8	108.1	8.5	8.5	2.9	8.5	2	8.5			2	2	
						8.2	0.4	88	18.1	18.1	8.0	8.0	30.6	30.6	108.4	108.1	8.5	8.5	2.8	8.5	2	8.5			2	2	
IM12	Misty	Calm	20:40	9.0	Surface	1.0	0.5	87	18.2	18.2	8.0	8.0	30.6	30.6	105.0	105.2	8.3	8.3	1.0	8.3	2	2	821180	811540			
						1.0	0.5	92	18.1	18.1	8.0	8.0	30.6	30.6	105.3	105.2	8.3	8.3	1.1	8.3	3	8.3			3		
					Middle	4.5	0.4	90	18.1	18.1	8.0	8.0	30.6	30.6	105.8	106.0	8.3	8.3	1.2	8.3	3	8.3			3		
						4.5	0.4	87	18.1	18.1	8.0	8.0	30.7	30.7	106.2	106.0	8.4	8.4	1.1	8.4	3	8.4			3		
					Bottom	8.0	0.4	94	18.1	18.2	8.0	8.0	30.7	30.7	107.1	107.5	8.4	8.5	1.3	8.4	3	8.5			3	3	
						8.0	0.4	93	18.2	18.2	8.0	8.0	30.7	30.7	107.8	107.5	8.5	8.5	1.3	8.5	3	8.5			3	3	
SR1A	Misty	Calm	20:53	4.2	Surface	1.0	-	73	18.3	18.3	7.9	7.9	30.2	30.2	99.6	99.7	7.8	7.8	2.0	7.8	2	2	819972	812664			
						1.0	0.0	65	18.3	18.3	7.9	7.9	30.2	30.2	99.7	99.7	7.8	7.8	1.9	7.8	2	7.8			2		
					Middle	2.1	0.1	72	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	3
						2.1	0.1	66	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	3
					Bottom	3.2	0.0	83	18.3	18.3	7.9	7.9	30.3	30.3	99.9	100.0	7.9	7.9	2.2	7.9	4	7.9			4	4	
						3.2	-	85	18.3	18.3	7.9	7.9	30.3	30.3	100.0	100.0	7.9	7.9	2.2	7.9	4	7.9			4	4	
SR2	Misty	Calm	21:12	5.4	Surface	1.0	0.4	46	18.2	18.2	8.0	8.0	30.7	30.7	105.4	105.6	8.3	8.3	1.0	8.3	4	3	821466	814142			
						1.0	0.4	39	18.1	18.2	8.0	8.0	30.8	30.8	105.7	105.6	8.3	8.3	1.1	8.3	3	8.3			3		
					Middle	-	0.4	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	3
						-	0.4	57	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	3
					Bottom	4.4	0.4	57	18.1	18.1	8.0	8.0	30.8	30.8	106.3	106.7	8.4	8.4	2.1	8.4	2	8.4			2	2	
						4.4	0.4	53	18.1	18.1	8.0	8.0	30.8	30.8	107.0	107.0	8.4	8.4	2.2	8.4	2	8.4			2	2	
SR3	Cloudy	Moderate	21:01	9.0	Surface	1.0	0.4	143	17.8	17.8	7.8	7.8	31.0	31.0	100.4	100.5	7.9	7.9	0.2	7.9	3	2	822136	807562			
						1.0	0.4	141	17.8	17.8	7.8	7.8	31.0	31.0	100.5	100.5	7.9	7.9	0.2	7.9	2	7.9			2		
					Middle	4.5	0.4	175	17.7	17.7	7.8	7.8	31.5	31.5	101.3	101.3	8.0	8.0	0.7	8.0	3	8.0			3		
						4.5	0.4	169	17.7	17.7	7.8	7.8	31.6	31.5	101.3	101.3	8.0	8.0	0.7	8.0	2	8.0			2		
					Bottom	8.0	0.4	165	17.6	17.6	7.9	7.9	31.9	31.9	101.2	101.2	8.0	8.0	0.9	8.0	2	8.0			2		
						8.0	0.4	159	17.6	17.6	7.9	7.9	31.8	31.9	101.2	101.2	8.0	8.0	0.8	8.0	2	8.0			2		
SR4A	Cloudy	Moderate	22:19	8.8	Surface	1.0	0.0	76	17.8	17.8	7.8	7.8	31.8	31.8	100.9	100.9	7.9	7.9	1.2	7.9	2	3	817172	807828			
						1.0	0.1	74	17.8	17.8	7.8	7.8	31.8	31.8	100.9	100.9	7.9	7.9	1.2	7.9	3	7.9			3		
					Middle	4.4	-	89	17.7	17.7	7.8	7.8	32.3	32.3	100.4	100.4	7.9	7.9	1.9	7.9	<2	7.9			<2	2	
						4.4	0.0	84	17.6	17.7	7.8	7.8	32.3	32.3	100.3	100.3	7.9	7.9	2.0	7.9	<2	7.9			<2	2	
					Bottom	7.8	0.0	55	17.6	17.6	7.8	7.8	32.3	32.3	100.4	100.5	7.9	7.9	2.6	7.9	2	7.9			2		
						7.8	0.0	53	17.6	17.6	7.8	7.8	32.3	32.3	100.5	100.5	7.9	7.9	2.5	7.9	2	7.9			2		
SR8	Misty	Calm	20:45	4.6	Surface	1.0	-	-	18.2	18.2	8.0	8.0	30.6	30.6	106.4	106.6	8.4	8.4	1.1	8.4	3	2	820388	811641			
						1.0	-	-	18.2	18.2	8.0	8.0	30.6	30.6	106.7	106.6	8.4	8.4	1.1	8.4	2	8.4			2		
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	3
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	3
					Bottom	3.6	-	-	18.1	18.1	8.0	8.0	30.6	30.6	107.6	108.0	8.5	8.5	2.1	8.5	2	8.5			2	2	
						3.6	-	-	18.1	18.1	8.0	8.0	30.6	30.6	108.3	108.0	8.5	8.5	2.2	8.5	3	8.5			3	2	

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			Value
C1	Cloudy	Moderate	09:05	8.8	Surface	1.0	0.0	50	17.4	17.4	7.8	7.8	32.7	32.7	99.4	99.4	7.8	7.8	5.7	7.9	2	2	815634	804245	
						1.0	0.1	55	17.4	7.8	7.8	32.7	32.7	99.4	99.4	7.8	7.8	5.8	7.9	2	2				
					Middle	4.4	0.1	54	17.4	7.8	7.8	32.7	32.7	99.4	99.5	7.8	7.8	6.4	7.9	3	2	3			2
						4.4	0.1	49	17.4	7.8	7.9	32.7	32.7	99.5	99.5	7.8	7.9	6.6	7.9	2	2	2			2
					Bottom	7.8	0.0	35	17.4	7.9	7.9	32.7	32.7	100.3	100.4	7.9	7.9	11.3	7.9	<2	<2	<2			<2
						7.8	0.0	32	17.4	7.9	7.9	32.7	32.7	100.5	100.4	7.9	7.9	11.8	7.9	<2	<2	<2			<2
C2	Cloudy	Moderate	10:25	11.4	Surface	1.0	0.1	175	17.8	17.8	7.8	7.8	31.1	31.1	99.6	99.6	7.9	7.9	0.4	7.9	3	3	825679	806960	
						1.0	0.1	176	17.8	7.8	7.8	31.1	31.1	99.6	99.6	7.9	7.9	0.4	7.9	2	2				
					Middle	5.7	0.1	178	17.7	7.8	7.8	31.3	31.3	99.6	99.6	7.9	7.9	0.6	7.9	3	2	3			2
						5.7	0.1	183	17.7	7.8	7.9	31.4	31.9	99.5	99.5	7.9	7.8	0.6	7.8	2	2	2			2
					Bottom	10.4	0.1	152	17.6	7.9	7.9	31.9	31.9	99.5	99.5	7.8	7.8	5.2	7.8	3	3	3			3
						10.4	0.1	154	17.6	7.9	7.9	31.9	31.9	99.5	99.5	7.8	7.8	5.7	7.8	4	4	4			4
C3	Misty	Moderate	10:08	11.0	Surface	1.0	0.1	71	18.0	18.0	7.9	7.9	31.5	31.5	98.7	98.7	7.7	7.8	1.0	7.9	6	4	822124	817799	
						1.0	0.1	66	18.0	7.9	7.9	31.5	31.5	98.7	98.7	7.7	7.8	1.1	7.9	5	2				
					Middle	5.5	0.1	71	18.0	7.9	7.9	31.5	31.5	99.1	99.2	7.8	7.8	1.1	7.9	2	2	2			2
						5.5	0.0	70	18.0	7.9	7.9	31.5	31.5	99.3	99.3	7.8	7.8	1.2	7.9	2	2	2			2
					Bottom	10.0	0.1	104	18.0	7.9	7.9	31.5	31.5	100.1	100.2	7.8	7.9	1.6	7.9	3	3	3			3
						10.0	0.1	108	18.0	7.9	7.9	31.5	31.5	100.3	100.3	7.9	7.9	1.5	7.9	3	3	3			3
IM1	Cloudy	Moderate	09:30	6.7	Surface	1.0	0.1	149	17.6	17.6	7.8	7.8	32.4	32.4	100.6	100.6	7.9	7.9	1.4	7.9	4	3	818333	806440	
						1.0	0.0	143	17.6	7.8	7.8	32.4	32.4	100.6	100.6	7.9	7.9	1.4	7.9	4	2				
					Middle	3.4	0.0	175	17.6	7.8	7.8	32.4	32.4	100.0	100.0	7.9	7.9	2.0	7.9	3	2	3			2
						3.4	0.1	174	17.6	7.8	7.8	32.4	32.4	100.0	100.0	7.9	7.9	2.1	7.9	2	2	2			2
					Bottom	5.7	0.0	138	17.5	7.8	7.8	32.5	32.5	99.6	99.6	7.8	7.8	5.3	7.8	<2	<2	<2			<2
						5.7	0.0	130	17.5	7.8	7.8	32.5	32.5	99.6	99.6	7.8	7.8	5.6	7.8	<2	<2	<2			<2
IM2	Cloudy	Moderate	09:36	7.2	Surface	1.0	0.0	102	17.6	17.6	7.8	7.8	32.3	32.3	100.1	100.1	7.9	7.9	1.7	7.9	<2	<2	819192	806232	
						1.0	0.0	106	17.6	7.8	7.8	32.3	32.3	100.0	100.0	7.9	7.9	1.8	7.9	<2	<2				
					Middle	3.6	0.1	99	17.6	7.8	7.8	32.4	32.4	99.7	99.7	7.8	7.8	2.4	7.8	<2	<2	<2			<2
						3.6	0.0	105	17.6	7.8	7.8	32.5	32.5	99.6	99.6	7.8	7.8	2.6	7.8	<2	<2	<2			<2
					Bottom	6.2	0.0	130	17.6	7.8	7.8	32.5	32.5	99.4	99.5	7.8	7.8	3.2	7.8	<2	<2	<2			<2
						6.2	0.0	132	17.6	7.8	7.8	32.5	32.5	99.5	99.5	7.8	7.8	3.3	7.8	<2	<2	<2			<2
IM7	Cloudy	Moderate	09:57	8.2	Surface	1.0	0.1	131	17.8	17.8	7.8	7.8	31.2	31.3	99.7	99.7	7.9	7.9	0.5	7.9	<2	<2	821359	806826	
						1.0	0.1	131	17.8	7.8	7.8	31.3	31.3	99.7	99.7	7.9	7.9	0.5	7.9	<2	<2				
					Middle	4.1	0.1	131	17.7	7.8	7.8	32.1	32.1	99.5	99.6	7.8	7.8	1.1	7.8	<2	<2	<2			<2
						4.1	0.1	132	17.6	7.9	7.9	32.1	32.1	99.6	99.6	7.8	7.8	1.2	7.8	<2	<2	<2			<2
					Bottom	7.2	0.0	152	17.6	7.9	7.9	32.2	32.2	99.9	100.0	7.9	7.9	1.5	7.9	2	2	2			2
						7.2	0.0	146	17.6	7.9	7.9	32.2	32.2	100.0	100.0	7.9	7.9	1.5	7.9	2	2	2			2

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

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

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Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)					
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			Value	DA			
IM10	Misty	Moderate	11:12	8.4	Surface	1.0	0.1	130	18.2	18.2	7.9	7.9	30.5	30.5	103.0	103.2	8.1	8.2	1.1	1.2	2	2	822223	809853					
						1.0	0.1	134	18.2		7.9		30.5		103.3		8.1		1.0		2								
					Middle	4.2	0.1	121	18.2	8.0	8.0	30.6	30.6	104.0	104.2	8.2	8.2	1.1	1.2	<2	2								
						4.2	0.1	118	18.2	8.0	8.0	30.6	30.6	104.3	104.2	8.2	8.2	1.2	1.2	<2	2								
					Bottom	7.4	0.1	138	18.2	8.0	8.0	30.6	30.6	105.2	105.6	8.3	8.3	1.6	1.6	<2	2								
						7.4	0.1	131	18.2	8.0	8.0	30.6	30.6	105.9	105.6	8.3	8.3	1.5	1.5	<2	2								
IM11	Misty	Moderate	11:05	7.4	Surface	1.0	0.1	103	18.1	18.1	8.0	8.0	30.5	30.5	103.0	103.1	8.1	8.2	1.1	1.5	3	3	821482	810562					
						1.0	0.0	104	18.1		8.0		30.5		103.2		8.1		1.1		3								
					Middle	3.7	0.1	110	18.1	8.0	8.0	30.6	30.6	103.8	104.0	8.2	8.2	1.4	1.5	2	2								
						3.7	0.1	109	18.1	8.0	8.0	30.6	30.6	104.1	104.0	8.2	8.2	1.5	1.5	2	2								
					Bottom	6.4	0.1	103	18.1	8.0	8.0	30.6	30.6	105.1	105.5	8.3	8.3	2.1	2.1	2	2								
						6.4	0.1	102	18.1	8.0	8.0	30.6	30.6	105.8	105.5	8.3	8.3	2.2	2.2	3	3								
IM12	Misty	Moderate	10:59	7.2	Surface	1.0	0.1	89	18.1	18.1	8.0	8.0	30.7	30.7	103.3	103.4	8.1	8.2	1.0	1.6	2	3	821169	811496					
						1.0	0.2	91	18.1		8.0		30.7		103.4		8.1		1.1		3								
					Middle	3.6	0.1	95	18.1	8.0	8.0	30.7	30.7	104.0	104.2	8.2	8.2	1.3	1.3	3	3								
						3.6	0.1	101	18.1	8.0	8.0	30.7	30.7	104.4	104.2	8.2	8.2	1.3	1.3	3	3								
					Bottom	6.2	0.1	92	18.1	8.0	8.0	30.7	30.7	105.4	105.9	8.3	8.4	2.3	2.3	3	3								
						6.2	0.1	89	18.1	8.0	8.0	30.7	30.7	106.3	105.9	8.4	8.4	2.4	2.4	2	2								
SR1A	Misty	Moderate	10:39	5.0	Surface	1.0	0.0	186	18.2	18.2	7.9	7.9	30.3	30.3	103.5	103.7	8.1	8.2	1.0	1.1	<2	<2	819983	812655					
						1.0	0.0	183	18.2		7.9		30.3		103.9		8.2		1.1		<2								
					Middle	2.5	0.0	175	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	<2	<2	
						2.5	0.0	181	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	<2	<2	
					Bottom	4.0	-	188	18.1	7.9	7.9	30.4	30.2	105.6	105.6	8.3	8.3	1.2	1.2	3	3								
						4.0	0.0	190	18.2	8.0	7.9	30.1	30.2	105.6	105.6	8.3	8.3	1.3	1.3	2	2								
SR2	Misty	Moderate	10:28	4.4	Surface	1.0	0.1	42	18.2	18.2	7.9	7.9	30.7	30.7	103.6	103.7	8.1	8.2	1.7	2.1	2	2	821459	814169					
						1.0	0.1	37	18.2		7.9		30.7		103.8		8.2		1.6		2								
					Middle	-	0.0	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	2	2
						-	0.1	39	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	2	2
					Bottom	3.4	0.0	66	18.2	7.9	7.9	30.7	30.7	104.1	104.2	8.2	8.2	2.6	2.6	2	2								
						3.4	0.0	65	18.2	7.9	7.9	30.7	30.7	104.3	104.2	8.2	8.2	2.6	2.6	2	2								
SR3	Cloudy	Moderate	10:04	9.2	Surface	1.0	0.1	151	17.8	17.8	7.8	7.8	31.1	31.1	101.1	101.2	8.0	8.0	0.3	1.2	<2	3	822135	807569					
						1.0	0.1	150	17.8		7.8		31.1		101.2		8.0		0.3		<2								
					Middle	4.6	0.0	156	17.6	7.8	7.8	31.8	31.8	101.5	101.5	8.0	8.0	1.2	1.3	2	2								
						4.6	0.1	150	17.6	7.8	7.8	31.9	31.8	101.5	101.5	8.0	8.0	1.3	1.3	3	3								
					Bottom	8.2	0.1	141	17.6	7.8	7.8	32.1	32.1	101.8	101.8	8.0	8.0	2.0	2.0	4	4								
						8.2	0.0	141	17.6	7.8	7.8	32.1	32.1	101.8	101.8	8.0	8.0	2.1	2.1	4	4								
SR4A	Cloudy	Moderate	08:37	8.8	Surface	1.0	0.0	302	17.6	17.6	7.9	7.9	31.4	31.4	100.1	100.1	7.9	7.9	10.9	6.0	<2	2	817185	807832					
						1.0	0.0	302	17.6		7.9		31.4		100.1		7.9		11.0		<2								
					Middle	4.4	0.0	314	17.6	7.8	7.8	31.9	31.9	99.7	99.7	7.9	7.9	3.5	3.5	<2	<2								
						4.4	0.0	310	17.6	7.8	7.8	31.9	31.9	99.7	99.7	7.9	7.9	3.5	3.5	<2	<2								
					Bottom	7.8	0.1	320	17.6	7.8	7.8	31.9	31.9	99.8	99.8	7.9	7.9	3.6	3.6	3	3								
						7.8	0.1	314	17.6	7.8	7.8	31.9	31.9	99.8	99.8	7.9	7.9	3.6	3.6	2	2								
SR8	Misty	Moderate	10:55	4.8	Surface	1.0	-	-	18.2	18.2	8.0	8.0	30.6	30.6	104.0	104.2	8.2	8.2	1.3	1.7	<2	<2	820371	811600					
						1.0	-	-	18.2		8.0		30.6		104.3		8.2		1.3		<2								
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	<2	<2
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	<2	<2
					Bottom	3.8	-	-	18.1	18.1	8.0	8.0	30.5	30.6	105.3	105.5	8.3	8.3	2.1	2.1	2	2							
						3.8	-	-	18.1	18.1	8.0	8.0	30.6	30.6	105.6	105.5	8.3	8.3	2.1	2.1	2	2							

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

Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
C1	Fine	Moderate	23:46	8.5	Surface	1.0	0.5	N/A	17.9	17.9	7.9	7.9	31.6	31.7	99.2	99.1	7.8	7.8	7.8	8.4	5.7	5	815634	804254
						1.0	0.5	N/A	17.9		7.9		31.7		98.9		7.8				6.2			
					Middle	4.3	0.6	N/A	17.8	17.8	7.9	7.9	32.1	32.1	98.6	98.7	7.7	7.7	9.5	4	6			
						4.3	0.6	N/A	17.8		7.9		32.0		98.7		7.7		9.5					
					Bottom	7.5	0.5	N/A	17.8	17.8	7.9	7.9	32.0	32.0	99.7	99.9	7.8	7.8	9.7	6	6			
						7.5	0.5	N/A	17.8		7.9		32.0		100.0		7.8		9.8		5			
C2	Fine	Moderate	22:36	11.1	Surface	1.0	0.4	164	18.0	18.0	7.9	7.9	31.2	31.2	99.1	99.1	7.8	7.8	7.8	3.4	2.2	3	825686	806933
						1.0	0.4	165	18.0		7.9		31.3		99.1		7.8				2.5			
					Middle	5.6	0.3	187	17.9	17.9	7.9	7.9	31.9	32.0	99.0	99.0	7.8	7.8	3.8	6	6			
						5.6	0.4	184	17.9		7.9		32.0		98.9		7.8		3.9		2			
					Bottom	10.1	0.4	166	17.9	17.9	7.9	7.9	32.0	32.0	98.5	98.5	7.7	7.7	4.0	3	3			
						10.1	0.3	160	17.9		7.9		32.0		98.4		7.7		3.9		2			
C3	Fine	Calm	23:24	11.0	Surface	1.0	0.5	89	18.4	18.4	8.0	8.0	31.4	31.4	96.9	96.9	7.6	7.6	7.6	1.4	1.1	4	822124	817803
						1.0	0.5	81	18.3		8.0		31.4		96.8		7.6				1.1			
					Middle	5.5	0.5	89	18.3	18.3	8.0	8.0	31.4	31.4	96.7	96.7	7.5	7.5	1.2	2	2			
						5.5	0.4	96	18.3		8.0		31.4		96.7		7.6		1.2		3			
					Bottom	10.0	0.4	92	18.2	18.3	8.0	8.0	31.4	31.4	96.8	96.9	7.6	7.6	1.8	2	2			
						10.0	0.5	96	18.3		8.0		31.4		96.9		7.6		1.9		2			
IM1	Fine	Moderate	23:22	6.0	Surface	1.0	0.3	180	17.9	17.9	7.9	7.9	31.9	31.9	101.7	101.7	8.0	7.9	7.9	5.4	4.1	3	818353	806478
						1.0	0.2	181	17.9		7.9		32.0		101.7		8.0				4.1			
					Middle	3.0	0.3	173	17.8	17.8	7.9	7.9	32.3	32.3	98.6	98.7	7.7	7.7	3.9	4	4			
						3.0	0.2	175	17.8		7.9		32.3		98.7		7.7		4.0		4			
					Bottom	5.0	0.3	202	17.7	17.7	7.7	7.7	32.4	32.4	99.0	99.1	7.8	7.8	8.2	4	4			
						5.0	0.3	207	17.7		7.7		32.4		99.2		7.8		8.0		4			
IM2	Fine	Moderate	23:17	6.5	Surface	1.0	0.3	187	18.0	18.0	7.9	7.9	31.8	31.8	100.1	100.0	7.8	7.8	7.8	6.0	4.4	5	819162	806256
						1.0	0.3	181	18.0		7.9		31.8		99.8		7.8				4.4			
					Middle	3.3	0.3	188	17.8	17.8	7.9	7.9	32.2	32.2	98.1	98.1	7.7	7.7	5.6	4	4			
						3.3	0.3	182	17.8		7.9		32.2		98.0		7.7		5.8		3			
					Bottom	5.5	0.3	209	17.8	17.8	7.8	7.8	32.4	32.4	98.8	98.9	7.7	7.8	7.7	5	5			
						5.5	0.3	208	17.8		7.8		32.4		98.9		7.8		8.0		4			
IM7	Fine	Moderate	23:01	8.3	Surface	1.0	0.3	169	18.0	18.0	7.9	7.9	31.6	31.6	98.6	98.6	7.7	7.7	7.7	2.8	2.5	2	821346	806822
						1.0	0.2	166	18.0		7.9		31.7		98.5		7.7				2.6			
					Middle	4.2	0.3	171	17.9	17.9	7.8	7.8	32.2	32.2	98.6	98.7	7.7	7.7	3.0	2	2			
						4.2	0.2	168	17.9		7.8		32.2		98.8		7.7		3.0		2			
					Bottom	7.3	0.3	176	17.9	17.9	7.8	7.8	32.2	32.2	99.1	99.2	7.8	7.8	2.9	2	2			
						7.3	0.3	182	17.9		7.8		32.2		99.3		7.8		2.9		2			

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

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

Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)		
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			Value	DA
IM10	Fine	Calm	22:20	10.0	Surface	1.0	0.3	105	18.5	18.6	8.0	8.0	30.7	30.7	98.2	98.2	7.7	7.6	1.2	1.7	3	3	822250	809823		
						1.0	0.3	98	18.6		8.0	8.0	30.7	30.7	98.1	98.2	7.6		1.1		2					
					Middle	5.0	0.3	112	18.6	18.6	8.0	8.0	30.9	30.9	98.0	98.0	7.6	7.6	1.6	1.7	4				3	
						5.0	0.4	117	18.6		8.0	8.0	30.9	30.9	98.0	98.0	7.6		1.8		5					
					Bottom	9.0	0.4	114	18.6	18.6	8.0	8.0	30.9	30.9	98.1	98.1	7.6	7.6	2.1	1.7	2					3
						9.0	0.4	114	18.6		8.0	8.0	30.9	30.9	98.1	98.1	7.6		2.1		2					
IM11	Fine	Calm	22:28	9.4	Surface	1.0	0.4	98	18.5	18.5	8.0	8.0	30.6	30.7	98.4	98.3	7.7	7.7	1.2	1.6	4	3	821477	810560		
						1.0	0.4	92	18.4		8.0	8.0	30.7	30.7	98.2	98.3	7.7		1.3		5					
					Middle	4.7	0.4	93	18.4	18.4	8.0	8.0	31.0	31.0	97.7	97.6	7.6	7.6	1.7	1.6	3				3	
						4.7	0.4	88	18.4		8.0	8.0	31.1	31.0	97.5	97.6	7.6		1.8		3					
					Bottom	8.4	0.5	77	18.5	18.6	8.0	8.0	31.0	31.0	97.3	97.3	7.6	7.6	1.9	1.6	2					3
						8.4	0.5	73	18.6		8.0	8.0	30.9	31.0	97.3	97.3	7.6		1.9		2					
IM12	Fine	Calm	22:34	8.4	Surface	1.0	0.5	86	18.4	18.4	8.0	8.0	30.7	30.8	98.2	98.1	7.7	7.7	1.0	1.6	2	3	821138	811504		
						1.0	0.5	81	18.4		8.0	8.0	30.9	30.8	98.0	98.1	7.7		1.0		3					
					Middle	4.2	0.4	79	18.4	18.4	8.0	8.0	31.1	31.1	97.8	97.9	7.6	7.6	1.7	1.6	2				3	
						4.2	0.5	73	18.4		8.0	8.0	31.0	31.0	97.9	97.9	7.6		1.7		3					
					Bottom	7.4	0.4	100	18.7	18.8	8.0	8.0	30.8	30.7	99.0	99.1	7.7	7.7	2.0	1.6	3					3
						7.4	0.4	105	18.8		8.0	8.0	30.7	30.7	99.2	99.1	7.7		2.1		2					
SR1A	Fine	Calm	22:50	4.4	Surface	1.0	0.0	76	18.6	18.6	8.0	8.0	31.2	31.2	98.2	98.2	7.6	7.6	1.8	1.9	2	2	819974	812653		
						1.0	0.0	68	18.6		8.0	8.0	31.2	31.2	98.2	98.2	7.6		1.9		2					
					Middle	2.2	0.0	67	-	-	-	-	-	-	-	-	-	-	-	1.9	-				2	
						2.2	0.0	65	-		-	-	-	-	-	-	-		-		-					
					Bottom	3.4	0.0	78	18.5	18.5	8.0	8.0	31.2	31.2	98.3	98.3	7.6	7.6	2.0	1.9	2					2
						3.4	0.1	71	18.5		8.0	8.0	31.2	31.2	98.3	98.3	7.6		2.1		2					
SR2	Fine	Calm	23:07	5.6	Surface	1.0	0.6	32	18.4	18.4	8.0	8.0	31.2	31.2	98.3	98.2	7.7	7.7	1.1	1.2	<2	2	821447	814172		
						1.0	0.6	31	18.4		8.0	8.0	31.2	31.2	98.1	98.2	7.6		1.1		<2					
					Middle	-	0.5	38	-	-	-	-	-	-	-	-	-	-	-	1.2	-				2	
						-	0.5	43	-		-	-	-	-	-	-	-		-		-					
					Bottom	4.6	0.6	25	18.4	18.4	8.0	8.0	31.2	31.2	97.9	97.9	7.6	7.6	1.3	1.2	2					2
						4.6	0.6	31	18.4		8.0	8.0	31.2	31.2	97.9	97.9	7.6		1.3		2					
SR3	Fine	Moderate	22:50	9.4	Surface	1.0	0.4	144	17.9	17.9	7.9	7.9	31.3	31.4	98.6	98.6	7.7	7.7	2.3	2.5	4	3	822157	807549		
						1.0	0.4	144	17.9		7.9	7.9	31.5	31.4	98.6	98.6	7.7		2.5		4					
					Middle	4.7	0.4	171	17.9	17.9	7.9	7.9	31.7	31.7	98.3	98.3	7.7	7.7	2.8	2.5	3				3	
						4.7	0.4	166	17.9		7.9	7.9	31.7	31.7	98.2	98.3	7.7		2.7		4					
					Bottom	8.4	0.4	171	18.0	18.0	7.9	7.9	31.4	31.3	98.1	98.1	7.7	7.7	2.3	2.5	2					3
						8.4	0.4	164	18.0		7.9	7.9	31.3	31.3	98.1	98.1	7.7		2.1		3					
SR4A	Fine	Moderate	00:13	8.3	Surface	1.0	0.0	356	18.3	18.3	7.9	7.9	31.7	31.7	103.5	103.4	8.1	8.0	4.0	5.4	6	6	817194	807828		
						1.0	0.1	356	18.3		7.9	7.9	31.7	31.7	103.2	103.4	8.0		4.1		5					
					Middle	4.2	0.0	21	18.0	18.0	7.9	7.9	32.0	32.0	100.5	100.5	7.9	7.9	5.7	5.4	6				6	
						4.2	0.0	21	18.0		7.9	7.9	32.0	32.0	100.5	100.5	7.9		5.7		6					
					Bottom	7.3	0.1	2	17.9	17.9	7.8	7.8	32.1	32.1	100.4	100.5	7.9	7.9	6.3	5.4	5					6
						7.3	0.1	2	17.9		7.8	7.8	32.1	32.1	100.6	100.6	7.9		6.3		5					
SR8	Fine	Calm	22:39	4.6	Surface	1.0	-	-	18.9	19.0	8.0	8.0	30.6	30.7	97.7	97.7	7.6	7.6	1.1	1.2	4	4	820394	811625		
						1.0	-	-	19.0		8.0	8.0	30.7	30.7	97.6	97.6	7.5		1.1		3					
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.2	-				4	
						-	-	-	-		-	-	-	-	-	-	-		-		-					
					Bottom	3.6	-	-	19.1	19.2	8.0	8.0	30.6	30.5	97.4	97.4	7.5	7.5	1.3	1.2	4					4
						3.6	-	-	19.2		8.0	8.0	30.4	30.5	97.4	97.4	7.5		1.4		3					

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Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)				
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA						
C1	Fine	Moderate	07:11	8.3	Surface	1.0	0.4	21	17.9	17.9	7.9	7.9	31.7	31.7	99.6	99.5	7.8	7.8	4.6	5.6	4	3	815615	804224				
						1.0	0.4	14	17.9		7.9		31.7		99.3		7.8		4.8		4							
					Middle	4.2	0.4	40	17.8	17.8	7.9	7.9	32.1	32.1	97.9	97.9	7.7	7.7	5.7	7.6	3	7.6			4	3		
						4.2	0.4	38	17.8		7.9		32.1		97.9		7.7		5.6		2							
					Bottom	7.3	0.4	14	17.8	17.8	7.9	7.9	32.2	32.2	97.4	97.5	7.6	7.6	6.4	7.6	6.4	7.6			2	3		
						7.3	0.4	17	17.8		7.9		32.2		97.5		7.6		6.4		3							
C2	Fine	Moderate	08:30	11.4	Surface	1.0	0.4	338	18.2	18.2	7.9	7.9	30.5	30.5	98.8	98.8	7.8	7.8	1.8	4.4	4	825679	806938					
						1.0	0.4	344	18.2		7.9		30.5		98.8		7.8		2.0		2							
					Middle	5.7	0.3	342	17.9	17.9	7.9	7.9	31.9	31.9	98.5	98.5	7.7	7.7	3.9	7.7	2			7.7	2	3		
						5.7	0.4	335	17.9		7.9		31.9		98.4		7.7		4.0		3							
					Bottom	10.4	0.4	352	17.9	17.9	7.9	7.9	31.8	31.8	98.2	98.3	7.7	7.7	7.5	7.7	7.5			7.7	2	7.7	2	3
						10.4	0.4	348	17.9		7.9		31.7		98.3		7.7		7.5		2							
C3	Misty	Calm	07:01	11.2	Surface	1.0	0.5	251	18.4	18.4	8.1	8.1	31.4	31.4	98.2	98.2	7.7	7.7	0.9	1.3	3	822107	817808					
						1.0	0.5	252	18.4		8.1		31.4		98.2		7.7		0.9		2							
					Middle	5.6	0.5	256	18.3	18.3	8.1	8.1	31.4	31.4	97.6	97.6	7.6	7.6	1.5	7.6	1.5			7.6	2	7.6	2	2
						5.6	0.6	261	18.3		8.1		31.4		97.6		7.6		1.5		2							
					Bottom	10.2	0.5	266	18.3	18.3	8.1	8.1	31.4	31.4	97.6	97.6	7.6	7.6	1.5	7.6	1.5			7.6	3	7.6	2	2
						10.2	0.5	269	18.3		8.1		31.4		97.6		7.6		1.5		2							
IM1	Fine	Moderate	07:34	6.5	Surface	1.0	0.3	19	18.0	18.0	7.9	7.9	31.7	31.7	100.3	100.2	7.9	7.8	3.6	5.1	4	818370	806453					
						1.0	0.3	11	17.9		7.9		31.7		100.0		7.8		3.6		5							
					Middle	3.3	0.3	356	17.8	17.8	7.9	7.9	32.1	32.1	97.7	97.7	7.7	7.7	5.2	7.7	3			7.7	3	7.7	4	
						3.3	0.3	351	17.8		7.9		32.1		97.6		7.7		5.4		5							
					Bottom	5.5	0.3	7	17.8	17.8	7.9	7.9	32.2	32.2	98.0	98.1	7.7	7.7	6.5	7.7	6.5			7.7	3	7.7	6	
						5.5	0.3	1	17.8		7.9		32.2		98.1		7.7		6.5		6							
IM2	Fine	Moderate	07:38	6.6	Surface	1.0	0.3	3	17.8	17.8	7.9	7.9	31.9	31.9	98.8	98.7	7.8	7.7	3.7	6.4	5	819191	806243					
						1.0	0.3	0	17.8		7.9		31.9		98.6		7.7		3.8		5							
					Middle	3.3	0.2	22	17.8	17.8	7.9	7.9	32.2	32.3	97.2	97.2	7.6	7.6	6.3	7.6	6			7.6	6	7.6	5	
						3.3	0.3	27	17.7		7.9		32.3		97.1		7.6		6.4		5							
					Bottom	5.6	0.2	26	17.7	17.7	7.9	7.9	32.4	32.4	96.9	96.9	7.6	7.6	9.2	7.6	9.0			7.6	5	7.6	4	
						5.6	0.3	28	17.7		7.9		32.4		96.9		7.6		9.0		4							
IM7	Fine	Moderate	07:58	8.3	Surface	1.0	0.3	14	18.1	18.1	7.9	7.9	31.2	31.3	98.8	98.8	7.8	7.8	1.8	2.6	3	821363	806851					
						1.0	0.3	14	18.0		7.9		31.3		98.8		7.8		1.9		4							
					Middle	4.2	0.2	352	17.9	17.9	7.9	7.9	32.1	32.1	98.4	98.5	7.7	7.7	3.0	7.7	3			7.7	3	7.7	3	
						4.2	0.2	352	17.9		7.9		32.1		98.5		7.7		3.0		2							
					Bottom	7.3	0.2	349	17.9	17.9	7.8	7.8	32.1	32.1	99.0	99.1	7.8	7.8	2.9	7.8	2.9			7.8	3	7.8	3	
						7.3	0.2	354	17.9		7.8		32.1		99.1		7.8		2.9		2							

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Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
IM10	Misty	Calm	08:08	8.4	Surface	1.0	0.3	302	18.4	18.4	8.0	8.0	31.1	31.1	96.9	96.9	7.6	7.6	1.1	1.7	3	3	822227	809858
						1.0	0.3	296	18.4		8.0	8.0	31.1	31.1	96.8	96.8	7.6		1.1		2			
					Middle	4.2	0.4	288	18.5	18.6	8.0	8.0	31.0	31.0	96.8	96.8	7.5	7.5	1.3	1.3	3			
						4.2	0.4	294	18.6		8.0	8.0	30.9	31.0	96.8	96.8	7.5		1.3		2			
					Bottom	7.4	0.3	316	18.8	18.8	8.0	8.0	30.8	30.7	96.9	97.0	7.5	7.5	2.7	2.7	3			
						7.4	0.4	320	18.8		8.0	8.0	30.7	30.7	97.0	97.0	7.5		2.7		3			
IM11	Misty	Calm	08:00	7.4	Surface	1.0	0.5	269	18.5	18.5	8.0	8.0	30.8	30.8	98.5	98.4	7.7	7.6	1.1	1.2	3	3	821501	810557
						1.0	0.5	274	18.5		8.0	8.0	30.8	30.8	98.2	98.4	7.7		1.1		2			
					Middle	3.7	0.5	282	18.5	18.6	8.0	8.0	30.8	30.8	98.0	97.4	7.6	7.6	1.2	1.2	4			
						3.7	0.4	288	18.7		8.0	8.0	30.8	30.8	96.8	97.4	7.5		1.1		3			
					Bottom	6.4	0.4	291	18.7	18.8	8.0	8.0	30.8	30.8	96.5	96.4	7.5	7.5	1.2	1.2	3			
						6.4	0.4	284	18.9		8.0	8.0	30.8	30.8	96.2	96.4	7.5		1.2		2			
IM12	Misty	Calm	07:55	7.0	Surface	1.0	0.5	294	18.6	18.6	8.0	8.0	30.9	30.9	98.1	98.0	7.6	7.6	1.0	1.1	3	2	821185	811533
						1.0	0.5	291	18.6		8.0	8.0	30.9	30.9	97.8	98.0	7.6		1.0		3			
					Middle	3.5	0.5	267	18.6	18.7	8.0	8.0	31.0	30.9	97.2	97.1	7.6	7.6	1.1	1.1	2			
						3.5	0.5	269	18.7		8.0	8.0	30.9	30.9	96.9	97.1	7.5		1.1		2			
					Bottom	6.0	0.5	281	18.8	18.8	8.0	8.0	30.8	30.7	96.2	96.1	7.5	7.5	1.1	1.1	2			
						6.0	0.5	280	18.8		8.0	8.0	30.7	30.7	96.0	96.1	7.4		1.1		2			
SR1A	Misty	Calm	07:34	5.2	Surface	1.0	0.0	191	18.4	18.4	8.0	8.0	31.1	31.1	96.2	96.2	7.5	7.5	1.1	1.2	2	2	819982	812659
						1.0	0.1	186	18.4		8.0	8.0	31.1	31.1	96.2	96.2	7.5		1.1		2			
					Middle	2.6	0.0	204	-	-	-	-	-	-	-	-	-	-	-	-	-			
						2.6	0.0	200	-		-	-	-	-	-	-	-		-		-			
					Bottom	4.2	0.0	178	18.5	18.6	8.0	8.0	31.0	30.9	95.7	95.3	7.5	7.5	1.2	1.2	<2			
						4.2	0.0	181	18.6		8.0	8.0	30.7	30.9	94.9	95.3	7.4		1.2		<2			
SR2	Misty	Calm	07:21	4.8	Surface	1.0	0.0	255	18.4	18.4	8.1	8.1	31.4	31.4	98.2	98.2	7.7	7.7	0.9	1.0	<2	<2	821474	814182
						1.0	0.1	253	18.4		8.1	8.1	31.4	31.4	98.2	98.2	7.7		0.9		<2			
					Middle	-	0.1	252	-	-	-	-	-	-	-	-	-	-	-	-	-			
						-	0.1	247	-		-	-	-	-	-	-	-		-		-			
					Bottom	3.8	0.1	263	18.4	18.4	8.1	8.1	31.4	31.4	98.1	98.1	7.6	7.6	1.0	1.0	<2			
						3.8	0.1	261	18.4		8.1	8.1	31.4	31.4	98.1	98.1	7.6		1.0		<2			
SR3	Fine	Moderate	08:03	9.2	Surface	1.0	0.3	3	18.0	18.0	7.9	7.9	30.9	31.0	99.2	99.2	7.8	7.8	2.4	3.8	3	2	822169	807569
						1.0	0.3	7	18.0		7.9	7.9	31.1	31.0	99.2	99.2	7.8		2.6		3			
					Middle	4.6	0.3	347	17.9	17.9	7.9	7.9	31.8	31.8	99.6	99.6	7.8	7.8	4.2	4.4	<2			
						4.6	0.3	351	17.9		7.9	7.9	31.9	31.8	99.6	99.6	7.8		4.4		<2			
					Bottom	8.2	0.4	344	17.9	17.9	7.8	7.8	31.9	31.9	99.6	99.6	7.8	7.8	4.7	4.7	<2			
						8.2	0.4	350	17.9		7.8	7.8	31.9	31.9	99.6	99.6	7.8		4.7		<2			
SR4A	Fine	Moderate	06:44	8.6	Surface	1.0	0.0	250	17.9	18.0	7.9	7.9	31.6	31.6	100.8	100.8	7.9	7.9	4.8	5.4	<2	3	817209	807826
						1.0	0.0	252	18.0		7.9	7.9	31.6	31.6	100.7	100.8	7.9		4.7		<2			
					Middle	4.3	-	247	17.9	17.9	7.8	7.8	31.7	31.7	99.7	99.7	7.8	7.8	5.1	6.1	3			
						4.3	0.0	242	17.9		7.8	7.8	31.7	31.7	99.7	99.7	7.8		5.4		4			
					Bottom	7.6	0.0	217	17.8	17.8	7.9	7.9	31.7	31.7	98.6	98.6	7.8	7.8	6.4	6.5	3			
						7.6	0.0	216	17.8		7.9	7.9	31.7	31.7	98.6	98.6	7.8		6.5		4			
SR8	Misty	Calm	07:50	4.6	Surface	1.0	-	-	18.6	18.7	8.0	8.0	31.0	31.0	96.6	96.5	7.5	7.5	1.8	1.9	2	2	820371	811604
						1.0	-	-	18.7		8.0	8.0	31.0	31.0	96.4	96.5	7.5		1.8		2			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
						-	-	-	-		-	-	-	-	-	-	-		-		-			
					Bottom	3.6	-	-	18.8	18.8	8.0	8.0	30.7	30.5	96.2	96.2	7.5	7.5	2.0	2.0	3			
						3.6	-	-	18.8		8.0	8.0	30.3	30.5	96.2	96.2	7.5		2.0		2			

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Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)		
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA				
C1	Cloudy	Moderate	13:44	8.7	Surface	1.0	0.2	217	18.3	18.3	7.9	7.9	32.4	32.4	96.5	96.5	7.5	7.5	7.5	7.5	10.3	10	815603	804253		
						1.0	0.2	209	18.3	18.3	7.9	7.9	32.4	32.4	96.4	96.5	7.5	7.5	7.5	7.5	10.3	9				
					Middle	4.4	0.2	217	18.2	18.2	7.9	7.9	32.5	32.5	95.9	95.9	7.5	7.5	7.5	7.5	11.2	9			11.4	10
						4.4	0.2	222	18.2	18.2	7.9	7.9	32.5	32.5	95.9	95.9	7.5	7.5	7.5	7.5	11.2	9				
					Bottom	7.7	0.2	190	18.2	18.2	7.8	7.8	32.5	32.5	96.5	96.5	7.5	7.5	7.5	7.5	12.3	10			5.6	4
						7.7	0.2	189	18.2	18.2	7.8	7.8	32.5	32.5	96.5	96.5	7.5	7.5	7.5	7.5	12.7	10				
C2	Cloudy	Moderate	12:33	11.4	Surface	1.0	0.0	131	18.5	18.5	7.6	7.6	30.1	30.2	96.0	96.0	7.5	7.5	7.5	7.5	2.5	4	825680	806935		
						1.0	0.0	136	18.5	18.5	7.6	7.6	30.2	30.2	96.0	96.0	7.5	7.5	7.5	7.5	2.6	4				
					Middle	5.7	0.0	139	18.4	18.4	7.6	7.6	30.8	30.8	96.1	96.1	7.5	7.5	7.5	7.5	6.3	4			1.4	4
						5.7	0.1	137	18.4	18.4	7.6	7.6	30.8	30.8	96.1	96.1	7.5	7.5	7.5	7.5	6.4	3				
					Bottom	10.4	0.0	120	18.4	18.4	7.6	7.6	30.8	30.8	96.7	96.8	7.6	7.6	7.6	7.6	7.7	5			7.6	6
						10.4	0.0	114	18.4	18.4	7.6	7.6	30.8	30.8	96.8	96.8	7.6	7.6	7.6	7.6	7.9	6				
C3	Misty	Moderate	13:44	10.6	Surface	1.0	0.3	95	18.8	18.8	8.0	8.0	31.1	31.1	97.3	97.4	7.5	7.6	7.6	7.6	1.1	3	822114	817818		
						1.0	0.3	94	18.8	18.8	8.0	8.0	31.1	31.1	97.5	97.5	7.6	7.6	7.6	7.6	1.0	4				
					Middle	5.3	0.3	78	18.7	18.7	8.0	8.0	31.2	31.2	97.7	97.7	7.6	7.6	7.6	7.6	1.1	4			7.6	4
						5.3	0.3	79	18.7	18.7	8.0	8.0	31.2	31.2	97.7	97.7	7.6	7.6	7.6	7.6	1.2	4				
					Bottom	9.6	0.4	65	18.7	18.8	7.9	7.9	31.1	31.1	98.4	100.3	7.6	7.8	7.8	7.8	2.0	4			7.8	4
						9.6	0.4	72	18.8	18.8	7.9	7.9	31.1	31.1	102.1	100.3	7.9	7.8	7.8	7.8	1.9	3				
IM1	Cloudy	Moderate	13:21	7.2	Surface	1.0	0.0	145	18.5	18.5	7.9	7.9	31.6	31.6	98.0	98.0	7.6	7.6	7.6	7.6	7.6	11	818374	806474		
						1.0	0.0	137	18.5	18.5	7.9	7.9	31.6	31.6	98.0	98.0	7.6	7.6	7.6	7.6	7.6	7.6			11	
					Middle	3.6	0.1	166	18.3	18.3	7.9	7.9	31.7	31.7	97.5	97.5	7.6	7.6	7.6	7.6	8.9	9			7.6	10
						3.6	0.0	169	18.3	18.3	7.9	7.9	31.7	31.7	97.5	97.5	7.6	7.6	7.6	7.6	9.0	9				
					Bottom	6.2	0.1	140	18.2	18.2	7.8	7.8	31.9	31.9	97.7	97.7	7.6	7.6	7.6	7.6	13.6	8			7.6	9
						6.2	0.1	143	18.2	18.2	7.8	7.8	31.9	31.9	97.7	97.7	7.6	7.6	7.6	7.6	12.5	9				
IM2	Cloudy	Moderate	13:18	7.1	Surface	1.0	0.0	119	18.2	18.2	7.9	7.9	31.6	31.6	96.4	96.4	7.5	7.5	7.5	7.5	10.1	5	819170	806258		
						1.0	0.0	113	18.2	18.2	7.9	7.9	31.6	31.6	96.4	96.4	7.5	7.5	7.5	7.5	10.0	4				
					Middle	3.6	0.0	119	18.2	18.2	7.9	7.9	31.7	31.7	96.5	96.5	7.5	7.5	7.5	7.5	10.2	10			7.5	8
						3.6	0.1	115	18.2	18.2	7.9	7.9	31.7	31.7	96.5	96.5	7.5	7.5	7.5	7.5	10.2	10				
					Bottom	6.1	0.0	119	18.2	18.2	7.8	7.8	31.7	31.7	97.4	97.5	7.6	7.6	7.6	7.6	11.3	10			7.6	10
						6.1	0.1	119	18.2	18.2	7.8	7.8	31.7	31.7	97.6	97.5	7.6	7.6	7.6	7.6	11.0	11				
IM7	Cloudy	Moderate	12:57	8.0	Surface	1.0	0.2	71	18.7	18.7	7.8	7.8	30.3	30.3	97.4	97.4	7.6	7.6	7.6	7.6	2.4	5	821358	806842		
						1.0	0.2	64	18.7	18.7	7.8	7.8	30.3	30.3	97.3	97.3	7.6	7.6	7.6	7.6	2.5	4				
					Middle	4.0	0.3	90	18.4	18.4	7.8	7.8	30.8	30.8	96.4	96.4	7.5	7.5	7.5	7.5	3.4	5			7.6	4
						4.0	0.2	82	18.4	18.4	7.8	7.8	30.8	30.8	96.4	96.4	7.5	7.5	7.5	7.5	3.5	3				
					Bottom	7.0	0.2	93	18.3	18.3	7.8	7.8	31.0	31.0	96.2	96.3	7.5	7.5	7.5	7.5	4.8	4			7.5	3
						7.0	0.2	92	18.3	18.3	7.8	7.8	31.0	31.0	96.3	96.3	7.5	7.5	7.5	7.5	5.0	3				

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Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			
IM10	Misty	Moderate	12:33	10.0	Surface	1.0	0.1	47	18.8	18.8	8.0	8.0	30.4	30.4	100.2	100.3	7.8	7.8	1.6	1.7	4	4	822218	809853	
						1.0	0.2	42	18.8		8.0	8.0	30.4	30.4	100.3	100.3	7.8		1.5		4				
					Middle	5.0	0.1	49	18.8	18.8	8.0	8.0	30.4	30.4	100.4	100.5	7.8	7.9	1.7	2.0	4	3			4
						5.0	0.1	55	18.8		8.0	8.0	30.4	30.4	100.6	100.5	7.8		1.6		3				
					Bottom	9.0	0.1	80	18.8	18.8	8.0	8.0	30.4	30.4	100.9	101.0	7.8	7.9	2.0	2.0	4	3			4
						9.0	0.2	73	18.8		8.0	8.0	30.4	30.4	101.1	101.0	7.9		2.0		3				
IM11	Misty	Moderate	12:41	9.4	Surface	1.0	0.1	73	18.8	18.8	8.0	8.0	30.4	30.4	100.2	100.3	7.8	7.9	2.0	2.0	3	4	821505	810538	
						1.0	0.1	66	18.8		8.0	8.0	30.4	30.4	100.3	100.3	7.8		1.9		4				
					Middle	4.7	0.2	62	18.6	18.6	8.0	8.0	30.6	30.6	100.6	100.7	7.9	7.9	2.0	2.0	2	3			3
						4.7	0.2	55	18.5		8.0	8.0	30.6	30.6	100.7	100.7	7.9		2.0		3				
					Bottom	8.4	0.2	70	18.4	18.4	8.0	8.0	30.7	30.8	101.1	101.3	7.9	7.9	2.0	2.1	3	3			3
						8.4	0.1	72	18.3		8.0	8.0	30.8	30.8	101.4	101.3	7.9		2.1		3				
IM12	Misty	Moderate	12:48	8.2	Surface	1.0	0.2	86	18.8	18.8	8.0	8.0	30.4	30.5	101.0	101.1	7.9	7.9	1.4	1.7	3	4	821165	811532	
						1.0	0.2	82	18.7		8.0	8.0	30.5	30.5	101.1	101.1	7.9		1.5		4				
					Middle	4.1	0.2	81	18.6	18.6	8.0	8.0	30.6	30.6	101.5	101.6	7.9	7.9	1.7	1.9	2	5			3
						4.1	0.2	73	18.5		8.0	8.0	30.6	30.6	101.6	101.6	7.9		1.7		3				
					Bottom	7.2	0.2	106	18.4	18.5	8.0	8.0	30.6	30.5	102.3	102.3	8.0	8.1	1.9	2.0	5	5			5
						7.2	0.2	109	18.5		8.0	8.0	30.3	30.5	102.3	102.3	8.1		2.0		5				
SR1A	Misty	Moderate	13:10	4.8	Surface	1.0	0.0	17	19.1	19.1	8.0	8.0	30.4	30.4	97.5	97.5	7.5	7.5	1.1	1.1	4	4	819978	812662	
						1.0	0.0	20	19.1		8.0	8.0	30.4	30.4	97.5	97.5	7.5		1.1		4				
					Middle	2.4	0.0	11	-	-	-	-	-	-	-	-	-	7.5	-	1.1	-	4			-
						2.4	0.0	16	-		-	-	-	-	-	-	-		-		-				
					Bottom	3.8	0.0	4	19.1	19.1	8.0	8.0	30.4	30.4	97.6	97.6	7.6	7.6	1.1	1.2	4	4			4
						3.8	0.1	11	19.1		8.0	8.0	30.4	30.4	97.6	97.6	7.6		1.2		4				
SR2	Misty	Moderate	13:27	5.4	Surface	1.0	0.2	54	18.8	18.8	8.0	8.0	30.5	30.5	100.9	101.0	7.8	7.9	1.3	1.4	3	4	821470	814152	
						1.0	0.2	56	18.7		8.0	8.0	30.5	30.5	101.0	101.0	7.9		1.3		3				
					Middle	-	0.2	55	-	-	-	-	-	-	-	-	-	7.9	-	1.4	-	4			-
						-	0.2	62	-		-	-	-	-	-	-	-		-		-				
					Bottom	4.4	0.1	54	18.7	18.7	8.0	8.0	30.6	30.6	101.8	102.1	7.9	8.0	1.4	1.5	4	5			4
						4.4	0.2	51	18.7		8.0	8.0	30.6	30.6	102.3	102.1	8.0		1.5		5				
SR3	Cloudy	Moderate	12:50	8.6	Surface	1.0	0.2	68	18.3	18.3	7.9	7.9	31.0	31.0	96.1	96.1	7.5	7.5	12.3	13.5	11	13	822166	807577	
						1.0	0.2	63	18.3		7.9	7.9	31.0	31.0	96.0	95.9	7.5		12.6		12				
					Middle	4.3	0.2	57	18.3	18.3	7.9	7.9	31.0	31.0	95.9	95.9	7.5	7.5	12.7	13.5	12	13			13
						4.3	0.1	57	18.3		7.9	7.9	31.0	31.0	95.9	95.9	7.5		12.6		13				
					Bottom	7.6	0.1	59	18.3	18.3	7.8	7.8	31.0	31.0	95.9	96.0	7.5	7.5	16.0	15.2	13	14			14
						7.6	0.1	54	18.3		7.8	7.8	31.0	31.0	96.0	96.0	7.5		15.2		14				
SR4A	Cloudy	Moderate	14:13	8.6	Surface	1.0	0.0	40	18.5	18.5	7.8	7.8	31.2	31.2	97.2	97.2	7.6	7.6	7.4	7.8	10	10	817185	807817	
						1.0	0.1	37	18.5		7.8	7.8	31.2	31.2	97.2	97.2	7.6		7.5		10				
					Middle	4.3	0.0	10	18.4	18.4	7.8	7.8	31.2	31.2	97.0	97.0	7.6	7.6	7.9	8.0	10	10			
						4.3	0.0	10	18.4		7.8	7.8	31.2	31.2	97.0	97.0	7.6		8.0		10				
					Bottom	7.6	0.0	46	18.4	18.4	7.8	7.8	31.3	31.3	97.0	97.1	7.6	7.6	8.0	8.0	10	8			8
						7.6	0.0	39	18.4		7.8	7.8	31.3	31.3	97.1	97.1	7.6		8.0		8				
SR8	Misty	Moderate	13:02	5.0	Surface	1.0	-	-	18.8	18.8	8.0	8.0	30.6	30.6	102.0	102.0	7.9	7.9	1.2	1.6	4	3	820372	811609	
						1.0	-	-	18.7		8.0	8.0	30.6	30.6	102.0	102.0	7.9		1.3		4				
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	7.9	-	1.6	-	3			-
						-	-	-	-		-	-	-	-	-	-	-		-		-				
					Bottom	4.0	-	-	18.6	18.6	8.0	8.0	30.7	30.7	102.1	102.1	8.0	8.0	2.0	2.1	3	2			3
						4.0	-	-	18.5		8.0	8.0	30.7	30.7	102.1	102.1	8.0		2.1		2				

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

Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			
C1	Cloudy	Moderate	08:47	8.9	Surface	1.0	0.4	47	18.1	18.1	7.8	7.8	31.5	31.5	97.3	97.3	7.6	7.6	7.6	9.8	11.3	12	12	815630	804246
						1.0	0.3	44	18.1	7.8	7.6	31.5	97.3	7.6											
					Middle	4.5	0.4	14	18.1	18.1	7.8	7.8	31.5	31.5	96.9	96.9	7.6	7.6	7.6	10.6	11.2	11	10		
						4.5	0.3	9	18.1	7.8	7.8	31.5	96.9	7.6											
					Bottom	7.9	0.4	46	18.1	18.1	7.8	7.8	31.5	31.5	96.9	96.9	7.6	7.6	7.6	12.7	13.7	12			
						7.9	0.4	38	18.1	7.8	7.8	31.5	96.9	7.6											
C2	Cloudy	Moderate	10:04	10.9	Surface	1.0	0.5	341	18.5	18.5	7.8	7.8	30.2	30.2	94.8	94.8	7.4	7.4	7.5	3.1	5.5	5	5	825703	806947
						1.0	0.5	333	18.5	7.8	7.4	30.3	94.8	7.4											
					Middle	5.5	0.4	352	18.4	18.4	7.9	7.9	30.8	30.8	95.3	95.3	7.5	7.5	7.5	5.2	5.4	4	5		
						5.5	0.4	355	18.4	7.9	7.5	30.8	95.3	7.5											
					Bottom	9.9	0.4	7	18.3	18.3	7.8	7.8	31.0	31.0	96.1	96.1	7.5	7.5	7.5	7.8	8.3	5			
						9.9	0.4	359	18.3	7.8	7.8	30.9	96.2	7.5											
C3	Misty	Calm	09:13	11.4	Surface	1.0	0.5	263	18.7	18.7	8.0	8.0	31.3	31.3	94.8	94.8	7.3	7.3	7.3	1.2	1.2	4	3	822120	817795
						1.0	0.5	260	18.7	8.0	7.3	31.3	94.8	7.3											
					Middle	5.7	0.5	262	18.7	18.7	8.0	8.0	31.3	31.3	94.8	94.8	7.3	7.3	7.3	1.3	1.4	3			
						5.7	0.6	268	18.7	8.0	7.3	31.3	94.8	7.3											
					Bottom	10.4	0.4	286	18.7	18.7	8.0	8.0	31.3	31.3	94.9	95.0	7.4	7.4	7.4	1.3	1.2	4			
						10.4	0.4	279	18.7	8.0	7.4	31.3	95.0	7.4											
IM1	Cloudy	Moderate	09:09	6.4	Surface	1.0	0.2	14	18.1	18.1	7.9	7.9	31.5	31.5	96.3	96.3	7.5	7.5	7.5	14.1	13.3	18	19	818366	806474
						1.0	0.2	18	18.1	7.9	7.5	31.5	96.3	7.5											
					Middle	3.2	0.3	12	18.1	18.1	7.8	7.8	31.6	31.6	96.2	96.2	7.5	7.5	7.5	11.2	11.2	19			
						3.2	0.3	12	18.1	7.8	7.5	31.6	96.2	7.5											
					Bottom	5.4	0.3	26	18.1	18.1	7.9	7.9	31.5	31.5	96.2	96.2	7.5	7.5	7.5	14.4	14.4	20			
						5.4	0.2	27	18.1	7.9	7.5	31.5	96.2	7.5											
IM2	Cloudy	Moderate	09:12	7.2	Surface	1.0	0.3	29	18.2	18.2	7.9	7.9	31.5	31.5	96.4	96.5	7.5	7.5	7.6	12.6	13.2	24	24	819173	806219
						1.0	0.3	30	18.2	7.9	7.5	31.5	96.5	7.5											
					Middle	3.6	0.3	15	18.1	18.1	7.9	7.9	31.6	31.6	96.6	96.6	7.6	7.6	7.6	13.6	13.3	24			
						3.6	0.3	12	18.1	7.9	7.6	31.6	96.6	7.6											
					Bottom	6.2	0.4	28	18.1	18.1	7.8	7.8	31.6	31.6	97.4	97.5	7.6	7.6	7.6	13.5	13.7	24			
						6.2	0.4	31	18.1	7.8	7.6	31.6	97.5	7.6											
IM7	Cloudy	Moderate	09:32	7.8	Surface	1.0	0.3	17	18.6	18.6	7.8	7.8	30.4	30.4	96.7	96.7	7.6	7.6	7.6	2.5	3.7	8	7	821359	806856
						1.0	0.3	23	18.6	7.8	7.6	30.4	96.7	7.6											
					Middle	3.9	0.3	20	18.4	18.4	7.9	7.9	30.7	30.7	96.3	96.3	7.5	7.5	7.5	3.8	3.9	7			
						3.9	0.4	19	18.4	7.9	7.5	30.7	96.3	7.5											
					Bottom	6.8	0.3	7	18.4	18.4	7.9	7.9	30.9	30.9	96.3	96.3	7.5	7.5	7.5	4.7	4.8	5			
						6.8	0.3	11	18.4	7.9	7.5	30.9	96.3	7.5											

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)		
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			Value	DA
IM10	Misty	Calm	10:15	8.6	Surface	1.0	0.3	310	18.8	18.8	8.0	8.0	30.4	30.4	99.9	99.9	7.8	7.8	1.0	1.4	4	4	822219	809824		
						1.0	0.3	305	18.8		8.0	8.0	30.4	30.4	99.9	99.9	7.8									
					Middle	4.3	0.4	293	18.8	18.8	8.0	8.0	30.4	30.4	99.9	99.9	7.8	7.8	1.1	3	4	5			3	4
						4.3	0.4	290	18.8		8.0	8.0	30.4	30.4	99.9	99.9	7.8									
					Bottom	7.6	0.3	277	18.8	18.8	8.0	8.0	30.4	30.4	100.0	100.0	7.8	7.8	1.9	3	4	3			3	4
						7.6	0.3	275	18.8		8.0	8.0	30.4	30.4	100.0	100.0	7.8									
IM11	Misty	Calm	10:08	9.2	Surface	1.0	0.4	279	18.8	18.8	8.0	8.0	30.4	30.4	98.7	98.7	7.7	7.7	1.5	1.8	4	5	821506	810532		
						1.0	0.4	279	18.8		8.0	8.0	30.4	30.4	98.7	98.7	7.7									
					Middle	4.6	0.4	303	18.8	18.8	8.0	8.0	30.4	30.4	98.9	98.9	7.7	7.7	1.7	3	4	3			4	
						4.6	0.4	298	18.8		8.0	8.0	30.4	30.4	98.9	98.9	7.7									
					Bottom	8.2	0.4	260	18.8	18.8	8.0	8.0	30.4	30.4	99.1	99.2	7.7	7.7	2.3	7	4	7			7	4
						8.2	0.4	257	18.8		8.0	8.0	30.4	30.4	99.2	99.2	7.7									
IM12	Misty	Calm	10:02	7.2	Surface	1.0	0.3	279	18.9	18.9	8.0	8.0	30.4	30.4	98.9	98.9	7.7	7.7	1.7	2.6	4	4	821150	811502		
						1.0	0.3	285	18.9		8.0	8.0	30.4	30.4	98.9	98.9	7.7									
					Middle	3.6	0.4	299	18.9	18.9	7.9	7.9	30.3	30.3	99.1	99.2	7.7	7.7	2.1	3	4	4			5	
						3.6	0.4	303	18.9		7.9	7.9	30.3	30.3	99.2	99.2	7.7									
					Bottom	6.2	0.4	272	18.9	18.9	7.9	7.9	30.3	30.2	99.5	99.6	7.7	7.8	4.0	4	5	4			4	
						6.2	0.3	268	18.9		7.9	7.9	30.2	30.2	99.7	99.6	7.8									
SR1A	Misty	Calm	09:41	4.8	Surface	1.0	-	230	18.9	18.9	8.0	8.0	30.4	30.4	99.8	99.9	7.7	7.8	1.2	1.6	3	4	819983	812654		
						1.0	0.0	233	18.9		8.0	8.0	30.4	30.4	100.0	100.0	7.8									
					Middle	2.4	0.0	222	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	4
						2.4	0.1	229	-		-	-	-	-	-	-	-									
					Bottom	3.8	0.1	242	18.9	18.9	8.0	8.0	30.3	30.3	100.5	100.8	7.8	7.8	2.0	4	3	4			3	
						3.8	0.0	238	18.9		8.0	8.0	30.4	30.3	101.1	100.8	7.8									
SR2	Misty	Calm	09:28	5.0	Surface	1.0	0.1	258	18.9	18.9	7.9	7.9	30.4	30.4	97.2	97.3	7.5	7.5	1.8	2.2	4	4	821465	814173		
						1.0	0.1	254	18.9		7.9	7.9	30.4	30.4	97.3	97.3	7.5									
					Middle	-	0.1	244	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	4
						-	0.1	244	-		-	-	-	-	-	-	-									
					Bottom	4.0	0.1	273	18.9	18.9	7.9	7.9	30.4	30.4	97.4	97.4	7.6	7.6	2.7	4	4	4			4	
						4.0	0.1	278	18.9		7.9	7.9	30.3	30.4	97.4	97.4	7.6									
SR3	Cloudy	Moderate	09:39	9.0	Surface	1.0	0.4	3	18.4	18.4	7.9	7.9	31.1	31.1	95.9	95.9	7.5	7.5	12.1	8.6	7	7	822150	807589		
						1.0	0.4	358	18.4		7.9	7.9	31.1	31.1	95.9	95.9	7.5									
					Middle	4.5	0.4	330	18.3	18.3	7.9	7.9	31.1	31.1	95.7	95.7	7.5	7.5	7.0	7	7	6			7	
						4.5	0.4	335	18.3		7.9	7.9	31.1	31.1	95.7	95.7	7.5									
					Bottom	8.0	0.4	326	18.3	18.3	7.8	7.8	31.1	31.1	96.2	96.3	7.5	7.5	6.9	8	7	8			7	
						8.0	0.5	328	18.3		7.8	7.8	31.1	31.1	96.3	96.3	7.5									
SR4A	Cloudy	Moderate	08:18	8.8	Surface	1.0	0.0	205	18.2	18.2	7.9	7.9	30.9	30.9	94.9	94.9	7.4	7.4	11.1	12.2	13	13	817198	807825		
						1.0	0.0	209	18.2		7.9	7.9	30.9	30.9	94.9	94.9	7.4									
					Middle	4.4	-	212	18.2	18.2	7.9	7.9	30.9	30.9	94.8	94.8	7.4	7.4	12.5	12	12	12			12	
						4.4	0.0	214	18.2		7.9	7.9	30.9	30.9	94.8	94.8	7.4									
					Bottom	7.8	0.0	209	18.2	18.2	7.9	7.9	30.9	30.9	94.8	94.8	7.4	7.4	12.7	14	14	14			14	
						7.8	0.0	209	18.2		7.9	7.9	30.9	30.9	94.7	94.7	7.4									
SR8	Misty	Calm	09:57	4.8	Surface	1.0	-	-	18.9	18.9	7.9	7.9	30.3	30.3	99.7	99.7	7.7	7.7	1.1	1.8	4	4	820407	811600		
						1.0	-	-	18.9		7.9	7.9	30.3	30.3	99.7	99.7	7.7									
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	4
						-	-	-	-		-	-	-	-	-	-	-									
					Bottom	3.8	-	-	18.9	18.9	7.9	7.9	30.3	30.3	99.7	99.6	7.7	7.7	2.5	3	3	3			3	
						3.8	-	-	18.9		7.9	7.9	30.3	30.3	99.4	99.4	7.7									

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)								
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			Value	DA						
C1	Cloudy	Moderate	15:12	8.2	Surface	1.0	0.4	211	18.7	18.7	8.1	8.1	31.3	31.3	99.6	99.6	7.7	7.8	6.0	8.2	3	4	815624	804266								
						1.0	0.4	207	18.7	18.7	8.1	8.1	31.4	31.3	99.5	99.6	7.7	7.8	6.1	8.2	4											
					Middle	4.1	0.4	227	18.6	18.6	8.1	8.1	31.6	31.6	100.1	100.2	7.8	7.8	7.9	7.8	7.9				3							
						4.1	0.4	223	18.6	18.6	8.1	8.1	31.6	31.6	100.3	100.2	7.8	7.8	8.0	7.9	8.0				4							
					Bottom	7.2	0.3	213	18.7	18.8	8.1	8.1	31.5	31.5	102.2	102.4	7.9	7.9	10.9	7.9	10.9				4							
						7.2	0.3	205	18.8	18.8	8.1	8.1	31.5	31.5	102.5	102.4	7.9	7.9	10.5	7.9	10.5				5							
					C2	Cloudy	Moderate	13:47	11.2	Surface	1.0	0.1	127	19.2	19.2	8.1	8.1	29.0	29.0	97.5	97.5				7.6	7.6	1.5	2.0	4	4	825689	806968
											1.0	0.1	124	19.2	19.2	8.1	8.1	29.0	29.0	97.5	97.5				7.6	7.6	1.6	7.6	1.6			
Middle	5.6	0.0	149	18.7						18.7	8.1	8.1	30.3	30.3	97.4	97.4	7.6	7.6	2.1	7.6	2.1	4										
	5.6	0.0	153	18.7						18.7	8.1	8.1	30.3	30.3	97.4	97.4	7.6	7.6	2.1	7.6	2.1	5										
Bottom	10.2	0.1	155	18.7						18.7	8.1	8.1	30.3	30.3	98.8	98.9	7.7	7.7	2.3	7.7	2.3	4										
	10.2	0.1	158	18.7						18.7	8.1	8.1	30.3	30.3	98.9	98.9	7.7	7.7	2.3	7.7	2.3	4										
C3	Misty	Calm	15:26	10.4						Surface	1.0	0.4	76	18.7	18.7	7.8	7.8	30.7	30.7	92.0	91.9	7.2	7.1	2.8	3.5	4	4	822124	817785			
											1.0	0.3	76	18.7	18.7	7.8	7.8	30.7	30.7	91.7	91.9	7.1	7.0	2.9	7.1	2.9						
					Middle	5.2	0.3	82	18.7	18.7	7.8	7.8	30.7	30.7	89.6	89.3	7.0	6.9	3.6	7.0	3.6	3										
						5.2	0.4	77	18.7	18.7	7.8	7.8	30.7	30.7	89.0	89.3	6.9	6.9	3.7	6.9	3.7	4										
					Bottom	9.4	0.3	70	18.7	18.7	7.8	7.8	30.7	30.7	83.6	82.9	6.5	6.5	4.1	6.5	4.1	4										
						9.4	0.3	68	18.7	18.7	7.8	7.8	30.7	30.7	82.2	82.9	6.4	6.4	4.2	6.4	4.2	3										
					IM1	Cloudy	Moderate	14:50	6.8	Surface	1.0	0.1	180	18.8	18.8	8.1	8.1	31.4	31.4	99.0	99.0	7.7	7.7	9.6	11.4	4				4	818330	806450
											1.0	0.1	185	18.8	18.8	8.1	8.1	31.4	31.4	99.0	99.0	7.7	7.7	10.0	7.7	10.0						
Middle	3.4	0.1	194	18.6						18.6	8.1	8.1	31.4	31.4	99.5	99.7	7.7	7.7	12.2	7.7	12.2	3										
	3.4	0.1	189	18.6						18.6	8.1	8.1	31.4	31.4	99.8	99.7	7.7	7.7	12.2	7.7	12.2	4										
Bottom	5.8	0.2	186	18.6						18.6	8.1	8.1	31.4	31.4	100.6	100.7	7.8	7.8	12.3	7.8	12.3	3										
	5.8	0.2	178	18.6						18.6	8.1	8.1	31.4	31.4	100.7	100.7	7.8	7.8	12.3	7.8	12.3	4										
IM2	Cloudy	Moderate	14:44	7.5						Surface	1.0	0.1	163	18.7	18.7	8.1	8.1	31.4	31.4	97.5	97.5	7.6	7.6	10.2	12.6	3	4	819163	806231			
											1.0	0.1	169	18.7	18.7	8.1	8.1	31.4	31.4	97.5	97.5	7.6	7.6	10.6	7.6	10.6						
					Middle	3.8	0.1	173	18.6	18.6	8.1	8.1	31.4	31.4	97.5	97.5	7.6	7.6	12.3	7.6	12.3	5										
						3.8	0.2	173	18.6	18.6	8.1	8.1	31.4	31.4	97.5	97.5	7.6	7.6	12.5	7.6	12.5	4										
					Bottom	6.5	0.1	188	18.7	18.7	8.1	8.1	31.5	31.5	97.7	97.8	7.6	7.6	15.0	7.6	15.0	5										
						6.5	0.1	195	18.7	18.7	8.2	8.1	31.5	31.5	97.8	97.8	7.6	7.6	15.3	7.6	15.3	5										
					IM7	Cloudy	Moderate	14:21	7.9	Surface	1.0	0.2	79	19.0	19.0	8.1	8.1	30.2	30.2	98.0	98.1	7.6	7.7	2.9	3.5	5				4	821352	806820
											1.0	0.2	76	18.9	18.9	8.1	8.1	30.2	30.2	98.1	98.1	7.6	7.7	3.0	7.7	3.0						
Middle	4.0	0.2	107	18.7						18.8	8.1	8.1	30.5	30.5	99.3	99.4	7.7	7.7	3.7	7.7	3.7	4										
	4.0	0.1	110	18.8						18.8	8.1	8.1	30.5	30.5	99.5	99.4	7.7	7.7	3.7	7.7	3.7	4										
Bottom	6.9	0.2	90	18.8						18.9	8.1	8.1	30.4	30.4	100.2	100.4	7.8	7.8	3.9	7.8	3.9	3										
	6.9	0.2	83	18.9						18.9	8.1	8.1	30.4	30.4	100.5	100.4	7.8	7.8	3.8	7.8	3.8	3										

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)			
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			Value	DA	
IM10	Misty	Calm	13:47	8.6	Surface	1.0	0.2	83	18.4	18.4	7.8	7.8	30.7	30.7	94.4	94.4	7.4	7.4	1.1	1.1	4	5	822232	809836			
						1.0	0.2	86	18.3	18.4	7.8	7.8	30.7	30.7	94.3	94.4	7.4	7.4	1.2	1.2	4						
					Middle	4.3	0.2	89	18.3	18.3	7.8	7.8	30.6	30.6	94.0	94.1	7.4	7.4	2.4	2.4	5				2.3		
						4.3	0.1	88	18.3	18.3	7.8	7.8	30.5	30.6	94.1	94.1	7.4	7.4	2.4	2.4	4						
					Bottom	7.6	0.1	58	18.6	18.7	7.8	7.8	30.2	30.2	95.3	95.6	7.4	7.5	3.4	3.4	5				2.3		
						7.6	0.1	53	18.8	18.7	7.8	7.8	30.1	30.2	95.8	95.6	7.5	7.5	3.3	3.3	5						
IM11	Misty	Calm	13:55	8.0	Surface	1.0	0.3	78	18.4	18.4	7.8	7.8	30.3	30.3	94.0	94.0	7.4	7.4	1.6	1.6	4	4	821503	810550			
						1.0	0.3	80	18.3	18.4	7.8	7.8	30.3	30.3	93.9	94.0	7.4	7.4	1.5	1.5	4						
					Middle	4.0	0.3	68	18.3	18.4	7.8	7.8	30.3	30.2	93.6	93.6	7.3	7.3	2.6	2.6	5				2.6		
						4.0	0.3	69	18.4	18.4	7.8	7.8	30.2	30.2	93.6	93.6	7.3	7.3	2.5	2.5	4						
					Bottom	7.0	0.3	66	18.8	18.9	7.8	7.8	29.8	29.7	93.7	93.7	7.3	7.3	3.6	3.6	4				2.6		
						7.0	0.3	59	18.9	18.9	7.8	7.8	29.7	29.7	93.7	93.7	7.3	7.3	3.5	3.5	4						
IM12	Misty	Calm	14:01	8.6	Surface	1.0	0.3	98	18.4	18.4	7.8	7.8	30.5	30.5	95.7	95.8	7.5	7.5	1.0	1.0	4	4	821139	811508			
						1.0	0.3	91	18.4	18.4	7.8	7.8	30.5	30.5	95.8	95.8	7.5	7.5	1.1	1.1	4						
					Middle	4.3	0.2	85	18.4	18.4	7.8	7.8	30.6	30.6	95.9	96.1	7.5	7.5	1.9	1.9	4				1.9		
						4.3	0.2	80	18.4	18.4	7.8	7.8	30.6	30.6	96.3	96.1	7.5	7.5	1.8	1.8	4						
					Bottom	7.6	0.3	113	18.4	18.5	7.8	7.8	30.6	30.5	96.5	96.6	7.6	7.6	2.8	2.8	4				1.9		
						7.6	0.2	115	18.5	18.5	7.8	7.8	30.5	30.5	96.7	96.6	7.6	7.6	2.8	2.8	5						
SR1A	Misty	Calm	14:49	4.2	Surface	1.0	0.0	16	18.6	18.6	7.8	7.8	31.0	31.0	95.1	95.1	7.4	7.4	2.1	2.1	3	4	819979	812662			
						1.0	0.0	16	18.6	18.6	7.8	7.8	31.0	31.0	95.1	95.1	7.4	7.4	2.1	2.1	4						
					Middle	2.1	0.1	15	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	2.6
						2.1	0.0	8	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	
					Bottom	3.2	0.0	34	18.6	18.6	7.8	7.8	31.0	31.0	95.2	95.2	7.4	7.4	3.0	3.0	4				2.6		
						3.2	0.1	40	18.6	18.6	7.8	7.8	31.0	31.0	95.2	95.2	7.4	7.4	3.0	3.0	4						
SR2	Misty	Calm	15:09	5.8	Surface	1.0	0.3	46	18.4	18.4	7.8	7.8	31.0	31.0	94.9	94.9	7.4	7.4	2.9	2.9	4	5	821485	814161			
						1.0	0.4	47	18.4	18.4	7.8	7.8	31.0	31.0	94.9	94.9	7.4	7.4	2.8	2.8	5						
					Middle	-	0.4	50	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	3.5
						-	0.3	46	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	
					Bottom	4.8	0.4	30	18.5	18.5	7.8	7.8	30.9	30.9	94.8	94.8	7.4	7.4	4.0	4.0	5				3.5		
						4.8	0.3	30	18.5	18.5	7.8	7.8	30.9	30.9	94.8	94.8	7.4	7.4	4.1	4.1	6						
SR3	Cloudy	Moderate	14:14	9.2	Surface	1.0	0.2	120	18.9	18.9	8.1	8.1	29.9	29.9	97.3	97.3	7.6	7.6	3.0	3.0	5	5	822158	807574			
						1.0	0.2	115	18.9	18.9	8.1	8.1	30.0	29.9	97.2	97.3	7.6	7.6	3.2	3.2	6						
					Middle	4.6	0.2	130	18.7	18.7	8.1	8.1	30.5	30.5	97.5	97.6	7.6	7.6	10.5	10.5	5				8.1		
						4.6	0.2	122	18.7	18.7	8.1	8.1	30.5	30.5	97.6	97.6	7.6	7.6	10.7	10.7	4						
					Bottom	8.2	0.1	132	18.8	18.8	8.1	8.1	30.2	30.2	99.7	99.7	7.8	7.8	10.5	10.5	4				8.1		
						8.2	0.2	125	18.8	18.8	8.1	8.1	30.2	30.2	99.7	99.7	7.8	7.8	10.5	10.5	3						
SR4A	Cloudy	Moderate	15:40	8.9	Surface	1.0	0.0	60	18.9	18.9	8.1	8.1	30.9	30.9	98.6	98.6	7.6	7.6	6.0	6.0	4	4	817165	807796			
						1.0	0.0	60	18.9	18.9	8.1	8.1	30.9	30.9	98.5	98.6	7.6	7.6	6.2	6.2	4						
					Middle	4.5	0.0	78	18.8	18.8	8.1	8.1	30.9	30.9	98.4	98.5	7.6	7.6	6.9	6.9	4				6.8		
						4.5	-	77	18.8	18.8	8.1	8.1	30.9	30.9	98.5	98.5	7.6	7.6	7.0	7.0	4						
					Bottom	7.9	0.0	67	18.7	18.7	8.1	8.1	30.9	30.9	98.5	98.6	7.7	7.7	7.5	7.5	3				6.8		
						7.9	0.0	69	18.7	18.7	8.1	8.1	30.9	30.9	98.6	98.6	7.7	7.7	7.4	7.4	4						
SR8	Misty	Calm	14:06	4.6	Surface	1.0	-	-	18.5	18.5	7.8	7.8	30.7	30.7	95.3	95.2	7.4	7.4	2.6	2.6	4	5	820371	811612			
						1.0	-	-	18.4	18.5	7.8	7.8	30.7	30.7	95.1	95.2	7.4	7.4	2.6	2.6	4						
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	3.1
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	
					Bottom	3.6	-	-	18.7	18.8	7.8	7.8	30.4	30.4	94.5	94.5	7.4	7.4	3.7	3.7	6				3.1		
						3.6	-	-	18.8	18.8	7.8	7.8	30.3	30.4	94.5	94.5	7.3	7.4	3.6	3.6	5						

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA		
C1	Cloudy	Moderate	09:41	8.4	Surface	1.0	0.4	33	18.6	18.6	8.1	8.1	31.3	31.3	96.4	96.4	7.5	7.6	8.9	9.7	4	4	815603	804224
						1.0	0.4	27	18.6	8.1	8.1	31.3	31.3	96.4	96.4	7.5	8.9							
					Middle	4.2	0.4	48	18.5	18.5	8.1	8.1	31.2	31.2	97.4	97.6	7.6	11.3						
						4.2	0.4	48	18.5	18.5	8.1	8.1	31.2	31.2	97.7	97.6	7.6	11.1						
					Bottom	7.4	0.4	54	18.5	18.5	8.1	8.1	31.2	31.2	98.4	98.5	7.7	7.7	9.0					
						7.4	0.4	58	18.5	18.5	8.1	8.1	31.2	31.2	98.6	98.5	7.7	7.7	8.9					
C2	Cloudy	Moderate	11:02	12.1	Surface	1.0	0.5	2	18.8	18.8	8.1	8.1	29.6	29.6	95.8	95.8	7.5	7.5	3.3	6.8	4	6	825677	806936
						1.0	0.5	357	18.8	18.8	8.1	8.1	29.6	29.6	95.8	95.8	7.5		3.4					
					Middle	6.1	0.5	8	18.6	18.6	8.1	8.1	30.5	30.5	95.7	95.8	7.5	7.7						
						6.1	0.4	0	18.6	18.6	8.1	8.1	30.5	30.5	95.8	95.8	7.5	8.1						
					Bottom	11.1	0.5	346	18.6	18.6	8.1	8.1	30.5	30.5	98.5	98.6	7.7	7.7	9.4					
						11.1	0.5	352	18.6	18.6	8.1	8.1	30.5	30.5	98.7	98.6	7.7	7.7	9.2					
C3	Misty	Calm	10:08	11.8	Surface	1.0	0.4	252	18.1	18.1	7.9	7.9	31.5	31.5	90.3	90.3	7.1	7.1	4.1	4.6	7	5	822128	817811
						1.0	0.4	259	18.1	18.1	7.9	7.9	31.5	31.5	90.3	90.3	7.1		4.2					
					Middle	5.9	0.5	245	18.1	18.1	7.9	7.9	31.5	31.5	90.1	90.1	7.1	4.5						
						5.9	0.5	250	18.1	18.1	7.9	7.9	31.5	31.5	90.1	90.1	7.1	4.5						
					Bottom	10.8	0.5	254	18.1	18.1	7.8	7.8	31.5	31.5	90.1	90.1	7.0	7.0	5.1					
						10.8	0.5	247	18.1	18.1	7.8	7.8	31.5	31.5	90.1	90.1	7.0	7.0	5.1					
IM1	Cloudy	Moderate	10:04	6.7	Surface	1.0	0.3	10	18.5	18.5	8.1	8.1	30.9	30.9	96.2	96.2	7.5	7.5	11.9	11.2	3	3	818366	806450
						1.0	0.3	14	18.5	18.5	8.1	8.1	30.9	30.9	96.2	96.2	7.5		11.0					
					Middle	3.4	0.3	7	18.5	18.5	8.1	8.1	30.9	30.9	96.5	96.6	7.5	9.9						
						3.4	0.3	6	18.5	18.5	8.1	8.1	30.9	30.9	96.6	96.6	7.5	9.5						
					Bottom	5.7	0.3	359	18.5	18.5	8.1	8.1	30.9	30.9	96.8	96.8	7.6	7.6	12.3					
						5.7	0.3	2	18.5	18.5	8.1	8.1	30.9	30.9	96.8	96.8	7.6	7.6	12.8					
IM2	Cloudy	Moderate	10:09	7.4	Surface	1.0	0.3	2	18.6	18.6	8.1	8.1	31.0	31.0	96.6	96.6	7.5	7.5	11.6	12.9	4	5	819185	806217
						1.0	0.3	355	18.6	18.6	8.1	8.1	31.0	31.0	96.6	96.6	7.5		12.0					
					Middle	3.7	0.3	19	18.6	18.6	8.1	8.1	31.0	31.0	96.5	96.5	7.5	13.7						
						3.7	0.2	25	18.6	18.6	8.1	8.1	31.0	31.0	96.5	96.5	7.5	13.7						
					Bottom	6.4	0.3	17	18.6	18.6	8.1	8.1	31.0	31.0	96.8	96.8	7.5	7.5	13.1					
						6.4	0.3	18	18.6	18.6	8.1	8.1	31.0	31.0	96.8	96.8	7.5	7.5	13.4					
IM7	Cloudy	Moderate	10:28	8.2	Surface	1.0	0.2	8	18.9	18.9	8.1	8.1	30.0	30.0	96.0	96.0	7.5	7.5	4.5	6.5	4	4	821341	806827
						1.0	0.3	2	18.9	18.9	8.1	8.1	30.0	30.0	96.0	96.0	7.5		4.5					
					Middle	4.1	0.3	2	18.7	18.7	8.1	8.1	30.6	30.6	96.0	96.1	7.5	6.9						
						4.1	0.3	8	18.7	18.7	8.1	8.1	30.6	30.6	96.1	96.1	7.5	7.0						
					Bottom	7.2	0.3	27	18.6	18.6	8.1	8.1	30.6	30.6	97.4	97.4	7.6	7.6	8.2					
						7.2	0.2	29	18.6	18.6	8.1	8.1	30.6	30.6	97.4	97.4	7.6	7.6	8.2					

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)						
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			Value	DA				
IM10	Misty	Calm	11:18	8.8	Surface	1.0	0.3	304	18.5	18.5	7.8	7.8	30.5	30.5	94.5	94.5	7.4	7.4	2.4	2.4	4	4	822259	809833						
						1.0	0.2	297	18.5	18.5	7.8	7.8	30.5	30.5	94.5	94.5	7.4	7.4	2.4	2.4	3									
					Middle	4.4	0.3	312	18.5	18.5	7.8	7.8	30.6	30.6	94.4	94.4	7.4	7.4	3.4	3.4	4				4					
						4.4	0.2	309	18.4	18.4	7.8	7.8	30.6	30.6	94.4	94.4	7.4	7.4	3.4	3.4	4				4					
					Bottom	7.8	0.3	299	18.4	18.4	7.8	7.8	30.6	30.6	95.3	95.4	7.5	7.5	4.0	4.0	5				5					
						7.8	0.4	300	18.4	18.4	7.8	7.8	30.6	30.6	95.4	95.4	7.5	7.5	4.0	4.0	6				6					
IM11	Misty	Calm	11:11	8.4	Surface	1.0	0.4	281	18.3	18.3	7.9	7.8	30.9	30.9	94.3	94.3	7.4	7.4	3.5	3.5	4	4	821494	810524						
						1.0	0.3	275	18.3	18.3	7.8	7.8	30.9	30.9	94.2	94.3	7.4	7.4	3.8	3.8	3									
					Middle	4.2	0.3	284	18.2	18.2	7.8	7.8	30.9	30.9	94.0	94.0	7.4	7.4	4.1	4.1	4				4					
						4.2	0.3	288	18.2	18.2	7.8	7.8	30.9	30.9	94.0	94.0	7.4	7.4	4.1	4.1	4				4					
					Bottom	7.4	0.4	264	18.2	18.2	7.8	7.8	30.8	30.8	94.6	94.7	7.4	7.4	5.1	5.1	5				5					
						7.4	0.4	265	18.2	18.2	7.8	7.8	30.8	30.8	94.8	94.7	7.4	7.4	5.2	5.2	4				4					
IM12	Misty	Calm	11:05	9.6	Surface	1.0	0.3	278	18.3	18.3	7.8	7.8	30.9	30.9	93.8	93.8	7.3	7.3	3.6	3.6	3	4	821169	811529						
						1.0	0.4	273	18.3	18.3	7.8	7.8	30.9	30.9	93.8	93.8	7.3	7.3	3.7	3.7	3									
					Middle	4.8	0.4	271	18.2	18.2	7.8	7.8	30.8	30.8	93.6	93.6	7.3	7.3	4.0	4.0	4				4					
						4.8	0.3	264	18.2	18.2	7.8	7.8	30.8	30.8	93.6	93.6	7.3	7.3	4.1	4.1	4				4					
					Bottom	8.6	0.3	263	18.3	18.3	7.8	7.8	30.7	30.7	94.6	94.7	7.4	7.4	5.1	5.1	5				5					
						8.6	0.3	269	18.3	18.3	7.8	7.8	30.7	30.7	94.8	94.7	7.4	7.4	5.2	5.2	4				4					
SR1A	Misty	Calm	10:40	4.8	Surface	1.0	-	201	18.2	18.2	7.8	7.8	31.1	31.1	93.4	93.4	7.3	7.3	2.3	2.3	4	4	819981	812654						
						1.0	0.0	195	18.2	18.2	7.8	7.8	31.1	31.1	93.4	93.4	7.3	7.3	2.3	2.3	4									
					Middle	2.4	0.0	194	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	2.8	4	819981	812654
						2.4	0.1	199	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-				
					Bottom	3.8	0.0	208	18.2	18.2	7.8	7.8	31.1	31.1	93.4	93.4	7.3	7.3	3.3	3.3	5				5					
						3.8	0.1	203	18.2	18.2	7.8	7.8	31.1	31.1	93.4	93.4	7.3	7.3	3.4	3.4	4				4					
SR2	Misty	Calm	10:29	4.4	Surface	1.0	0.1	249	18.3	18.3	7.8	7.8	30.8	30.8	93.7	93.7	7.3	7.3	2.6	2.6	6	5	821483	814188						
						1.0	0.1	246	18.3	18.3	7.8	7.8	30.8	30.8	93.7	93.7	7.3	7.3	2.5	2.5	5									
					Middle	-	0.1	231	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	3.1	5	821483	814188
						-	0.0	224	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-				
					Bottom	3.4	0.1	272	18.3	18.3	7.8	7.8	30.8	30.8	93.5	93.5	7.3	7.3	3.7	3.7	4				4					
						3.4	0.1	273	18.3	18.3	7.8	7.8	30.8	30.8	93.5	93.5	7.3	7.3	3.7	3.7	5				5					
SR3	Cloudy	Moderate	10:35	8.6	Surface	1.0	0.3	332	18.9	18.9	8.1	8.1	29.5	29.5	96.5	96.5	7.5	7.5	3.3	3.3	4	4	822131	807584						
						1.0	0.3	330	18.9	18.9	8.1	8.1	29.5	29.5	96.5	96.5	7.5	7.5	3.5	3.5	3									
					Middle	4.3	0.4	341	18.7	18.7	8.1	8.1	30.5	30.5	97.0	97.1	7.6	7.6	9.2	9.2	4				4					
						4.3	0.4	337	18.7	18.7	8.1	8.1	30.5	30.5	97.1	97.1	7.6	7.6	9.5	9.5	3				3					
					Bottom	7.6	0.4	9	18.7	18.7	8.1	8.1	30.2	30.2	99.7	99.7	7.8	7.8	10.2	10.2	5				5					
						7.6	0.4	4	18.7	18.7	8.1	8.1	30.2	30.2	99.7	99.7	7.8	7.8	10.2	10.2	4				4					
SR4A	Cloudy	Moderate	09:12	8.4	Surface	1.0	0.0	192	18.7	18.7	8.1	8.1	30.8	30.8	95.2	95.2	7.4	7.4	9.0	9.0	5	4	817178	807819						
						1.0	0.0	188	18.7	18.7	8.1	8.1	30.8	30.8	95.1	95.1	7.4	7.4	9.1	9.1	4									
					Middle	4.2	0.1	207	18.6	18.6	8.1	8.1	30.9	30.9	94.9	94.9	7.4	7.4	11.1	11.1	2				2					
						4.2	0.1	213	18.6	18.6	8.1	8.1	30.9	30.9	94.9	94.9	7.4	7.4	11.3	11.3	4				4					
					Bottom	7.4	0.0	230	18.6	18.6	8.2	8.2	30.9	30.9	95.1	95.1	7.4	7.4	11.8	11.8	3				3					
						7.4	0.0	233	18.6	18.6	8.2	8.2	30.9	30.9	95.1	95.1	7.4	7.4	11.8	11.8	3				3					
SR8	Misty	Calm	11:01	5.0	Surface	1.0	-	-	18.5	18.5	7.8	7.8	30.9	30.9	95.0	95.0	7.4	7.4	1.3	1.3	4	4	820413	811609						
						1.0	-	-	18.5	18.5	7.8	7.8	30.9	30.9	95.0	95.0	7.4	7.4	1.3	1.3	4									
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	1.9	4	820413	811609
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-				
					Bottom	4.0	-	-	18.5	18.6	7.8	7.8	30.6	30.6	95.5	95.6	7.5	7.5	2.4	2.4	3				3					
						4.0	-	-	18.6	18.6	7.8	7.8	30.5	30.5	95.7	95.7	7.5	7.5	2.4	2.4	3				3					

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)								
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA												
C1	Sunny	Rough	17:04	7.7	Surface	1.0	0.4	202	18.2	18.2	7.8	7.8	32.3	32.3	96.1	96.1	7.5	7.5	11.8	15	815623	804267										
						1.0	0.4	201	18.2	7.8	32.3	96.1	7.5																			
					Middle	3.9	0.4	224	18.2	7.8	7.8	32.2	32.2	95.9	95.9	7.5																
						3.9	0.4	226	18.2	7.8	7.8	32.2	32.2	95.9	95.9	7.5																
					Bottom	6.7	0.4	189	18.1	7.8	7.8	32.3	32.3	95.6	95.7	7.5																
						6.7	0.4	191	18.1	7.8	7.8	32.3	32.3	95.7	95.7	7.5																
					C2	Sunny	Rough	15:06	9.1	Surface	1.0	0.1	157	18.6	18.6	7.8	7.8						30.1	30.1	94.3	94.3	7.4	7.4	3.7	5	825680	806951
											1.0	0.1	153	18.6	7.8	30.1	94.3						7.4									
Middle	4.6	0.0	176	18.5						7.9	7.9	30.1	30.1	93.9	93.9	7.4																
	4.6	0.0	172	18.5						7.9	7.9	30.1	30.1	93.9	93.9	7.4																
Bottom	8.1	0.1	150	18.5						7.9	7.9	30.0	30.0	94.4	94.4	7.4																
	8.1	0.1	145	18.5						7.9	7.9	30.0	30.0	94.4	94.4	7.4																
C3	Misty	Moderate	16:17	9.0						Surface	1.0	0.4	90	18.7	18.7	8.1	8.1	31.1	31.1	92.3	92.3	7.2	7.2	4.6	6	822127	817792					
											1.0	0.4	91	18.7	8.1	31.1	92.3	7.2														
					Middle	4.5	0.4	65	18.7	8.1	8.1	31.1	31.1	92.7	92.7	7.2																
						4.5	0.4	64	18.7	8.1	8.1	31.1	31.1	92.7	92.7	7.2																
					Bottom	8.0	0.4	63	18.7	8.1	8.1	31.2	31.2	96.6	96.7	7.5																
						8.0	0.4	63	18.7	8.1	8.1	31.2	31.2	96.8	96.7	7.5																
					IM1	Sunny	Moderate	16:36	7.2	Surface	1.0	0.3	190	18.4	18.4	7.8	7.8	31.7	31.7	96.1	96.1	7.5						7.5	8.0	9	818363	806470
											1.0	0.3	192	18.4	7.8	31.7	96.1	7.5														
Middle	3.6	0.3	175	18.3						7.8	7.8	31.7	31.7	96.0	96.0	7.5																
	3.6	0.3	178	18.3						7.8	7.8	31.7	31.7	96.0	96.0	7.5																
Bottom	6.2	0.2	191	18.2						7.8	7.8	31.8	31.8	96.0	96.0	7.5																
	6.2	0.2	195	18.2						7.8	7.8	31.8	31.8	96.0	96.0	7.5																
IM2	Sunny	Moderate	16:24	8.3						Surface	1.0	0.3	185	18.4	18.4	7.9	7.9	31.5	31.5	96.1	96.1	7.5	7.5	8.8	9	819188	806252					
											1.0	0.3	179	18.4	7.9	31.5	96.1	7.5														
					Middle	4.2	0.3	178	18.3	7.9	7.9	31.5	31.5	96.0	96.0	7.5																
						4.2	0.2	173	18.3	7.9	7.9	31.5	31.5	96.0	96.0	7.5																
					Bottom	7.3	0.2	182	18.3	7.9	7.9	31.7	31.7	96.3	96.3	7.5																
						7.3	0.3	184	18.3	7.9	7.9	31.7	31.7	96.3	96.3	7.5																
					IM7	Sunny	Rough	15:49	8.5	Surface	1.0	0.2	111	18.5	18.5	7.9	7.9	30.2	30.2	94.8	94.8	7.4						7.4	4.4	5	821340	806819
											1.0	0.2	112	18.5	7.9	30.2	94.8	7.4														
Middle	4.3	0.2	133	18.5						7.9	7.9	30.7	30.7	94.5	94.5	7.4																
	4.3	0.2	131	18.5						7.9	7.9	30.7	30.7	94.5	94.5	7.4																
Bottom	7.5	0.2	113	18.4						7.8	7.8	30.9	30.8	94.9	95.0	7.4																
	7.5	0.2	120	18.4						7.8	7.8	30.8	30.8	95.1	95.0	7.4																

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Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)			
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA					
IM10	Misty	Moderate	15:05	9.8	Surface	1.0	0.2	74	19.0	19.0	8.0	8.0	30.1	30.1	92.5	92.5	7.2	7.2	3.3	4.6	4	4	822252	809847			
						1.0	0.3	68	19.0	8.0	8.0	30.1	30.1	92.4	92.5	7.2	7.2	3.3	4								
					Middle	4.9	0.2	82	19.0	8.0	8.0	30.1	30.1	92.5	92.6	7.2	7.2	5.0	4								
						4.9	0.3	76	19.0	8.0	8.0	30.1	30.1	92.6	92.6	7.2	7.2	5.0	5								
					Bottom	8.8	0.1	79	18.9	8.0	8.0	30.1	30.1	92.8	92.8	7.2	7.2	5.6	5								
						8.8	0.2	77	18.9	8.0	8.0	30.1	30.1	92.8	92.8	7.2	7.2	5.6	4								
IM11	Misty	Moderate	15:23	8.4	Surface	1.0	0.4	89	19.0	19.0	8.1	8.1	30.1	30.1	94.6	94.7	7.3	7.5	1.1	2.3	4	4	821487	810552			
						1.0	0.4	89	19.0	8.1	8.1	30.1	30.1	94.7	94.7	7.4	7.5	1.2	3								
					Middle	4.2	0.4	86	19.0	8.1	8.1	30.1	30.1	97.7	97.9	7.6	7.6	2.0	4								
						4.2	0.4	92	18.9	8.1	8.1	30.1	30.1	98.0	98.0	7.6	7.6	2.0	5								
					Bottom	7.4	0.4	81	18.8	8.0	8.0	30.3	30.3	99.1	99.2	7.7	7.7	3.9	5								
						7.4	0.3	84	18.7	8.0	8.0	30.3	30.3	99.3	99.2	7.7	7.7	3.8	5								
IM12	Misty	Moderate	15:28	8.0	Surface	1.0	0.3	101	19.0	19.0	8.1	8.1	30.1	30.1	95.2	95.3	7.4	7.5	2.0	2.9	5	5	821161	811539			
						1.0	0.4	98	19.0	8.1	8.1	30.1	30.1	95.3	95.3	7.4	7.5	2.0	4								
					Middle	4.0	0.3	104	19.0	8.0	8.0	30.1	30.1	97.0	97.1	7.5	7.5	2.9	5								
						4.0	0.4	101	19.0	8.0	8.0	30.1	30.1	97.1	97.1	7.5	7.5	2.9	4								
					Bottom	7.0	0.3	71	18.9	8.0	8.0	30.1	30.1	98.3	98.5	7.6	7.7	4.0	6								
						7.0	0.3	76	18.9	8.0	8.0	30.1	30.1	98.6	98.5	7.7	7.7	3.8	4								
SR1A	Misty	Moderate	15:41	5.2	Surface	1.0	0.0	33	19.0	19.0	8.0	8.0	30.1	30.1	93.9	93.9	7.3	7.3	1.1	1.5	4	5	819981	812665			
						1.0	0.0	38	19.0	8.0	8.0	30.1	30.1	93.9	93.9	7.3	7.3	1.2	4								
					Middle	2.6	0.1	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-
						2.6	-	56	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-
					Bottom	4.2	0.1	66	19.0	8.0	8.0	30.1	30.0	93.9	94.0	7.3	7.3	1.9	6								
						4.2	0.1	64	19.0	8.0	8.0	30.0	30.0	94.0	94.0	7.3	7.3	2.0	5								
SR2	Misty	Moderate	15:59	5.6	Surface	1.0	0.3	65	19.0	19.0	8.1	8.0	30.3	30.3	97.9	98.0	7.6	7.6	2.7	2.7	6	6	821471	814155			
						1.0	0.3	70	19.0	8.0	8.0	30.3	30.3	98.1	98.0	7.6	7.6	2.6	5								
					Middle	-	0.3	59	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-
						-	0.3	56	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-
					Bottom	4.6	0.3	48	19.1	8.0	8.0	30.2	30.1	99.3	99.5	7.7	7.7	2.7	7								
						4.6	0.2	45	19.2	8.0	8.0	30.1	30.1	99.6	99.5	7.7	7.7	2.8	6								
SR3	Sunny	Rough	15:35	8.6	Surface	1.0	0.2	147	18.4	18.4	7.8	7.8	30.8	30.8	94.4	94.4	7.4	7.4	7.6	9.0	10	10	822128	807549			
						1.0	0.2	147	18.4	7.8	7.8	30.8	30.8	94.4	94.4	7.4	7.4	7.6	9								
					Middle	4.3	0.2	150	18.3	7.8	7.8	30.8	30.8	94.2	94.2	7.4	7.4	9.6	10								
						4.3	0.2	152	18.3	7.8	7.8	30.8	30.8	94.2	94.2	7.4	7.4	9.9	10								
					Bottom	7.6	0.2	151	18.3	7.8	7.8	30.9	30.9	94.3	94.3	7.4	7.4	9.5	12								
						7.6	0.2	156	18.3	7.8	7.8	30.9	30.9	94.3	94.3	7.4	7.4	9.5	11								
SR4A	Sunny	Moderate	17:41	10.4	Surface	1.0	0.0	63	18.4	18.4	7.9	7.9	31.5	31.5	96.5	96.5	7.5	7.5	6.8	8.2	8	10	817202	807789			
						1.0	0.0	63	18.4	7.9	7.9	31.5	31.5	96.5	96.5	7.5	7.5	6.8	9								
					Middle	5.2	0.0	79	18.3	7.9	7.9	31.5	31.5	95.8	95.8	7.5	7.5	8.2	11								
						5.2	0.0	76	18.3	7.9	7.9	31.5	31.5	95.8	95.8	7.5	7.5	8.2	10								
					Bottom	9.4	0.0	78	18.3	7.9	7.9	31.4	31.4	96.1	96.1	7.5	7.5	9.7	10								
						9.4	0.0	72	18.3	7.9	7.9	31.4	31.4	96.1	96.1	7.5	7.5	9.7	11								
SR8	Misty	Moderate	15:32	5.0	Surface	1.0	-	-	19.0	19.0	8.0	8.0	30.0	30.0	98.5	98.6	7.7	7.7	1.8	2.1	5	6	820402	811600			
						1.0	-	-	19.0	8.0	8.0	30.0	30.0	98.7	98.7	7.7	7.7	1.7	6								
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	
					Bottom	4.0	-	-	18.8	8.0	8.0	30.1	30.1	101.3	101.7	7.9	7.9	2.6	7								
						4.0	-	-	18.8	8.0	8.0	30.1	30.1	102.0	101.7	7.9	7.9	2.5	6								

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity (NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA				
C1	Fine	Rough	09:36	7.1	Surface	1.0	0.2	29	18.2	18.2	7.8	7.8	31.4	31.4	95.0	95.0	7.4	7.4	9.2	10.9	16	17	815635	804267
						1.0	0.2	27	18.2	7.8	7.8	31.4	31.4	95.0	95.0	7.4	7.4	9.3	10.9					
					Middle	3.6	0.2	26	18.2	18.2	7.8	7.8	31.4	31.4	94.7	94.7	7.4	7.4	10.9	11.0				
						3.6	0.2	31	18.2	18.2	7.8	7.8	31.4	31.4	94.7	94.7	7.4	7.4	11.0	11.0				
					Bottom	6.1	0.2	16	18.2	18.2	7.8	7.8	31.3	31.3	94.7	94.7	7.4	7.4	12.6	12.6				
						6.1	0.2	12	18.2	18.2	7.8	7.8	31.3	31.3	94.7	94.7	7.4	7.4	12.6	12.6				
C2	Fine	Rough	11:27	8.5	Surface	1.0	0.4	3	18.5	18.5	7.8	7.8	30.1	30.1	94.1	94.1	7.4	7.4	2.6	2.8	4	4	825669	806941
						1.0	0.4	5	18.5	18.5	7.8	7.8	30.1	30.1	94.1	94.1	7.4	7.4	2.6	2.6				
					Middle	4.3	0.5	334	18.5	18.5	7.8	7.8	30.1	30.1	93.7	93.7	7.3	7.3	2.6	2.7				
						4.3	0.4	330	18.5	18.5	7.8	7.8	30.1	30.1	93.7	93.7	7.3	7.3	2.7	3.1				
					Bottom	7.5	0.5	349	18.4	18.4	7.8	7.8	30.1	30.1	93.6	93.6	7.3	7.3	3.1	3.1				
						7.5	0.4	352	18.4	18.4	7.8	7.8	30.1	30.1	93.6	93.6	7.3	7.3	3.1	3.1				
C3	Misty	Moderate	10:42	10.2	Surface	1.0	0.5	271	18.7	18.7	7.9	7.9	31.2	31.2	90.8	90.8	7.0	7.0	2.8	3.1	4	6	822127	817811
						1.0	0.5	275	18.7	18.7	7.9	7.9	31.2	31.2	90.8	90.8	7.0	7.0	2.8	2.8				
					Middle	5.1	0.5	276	18.7	18.7	7.9	7.9	31.2	31.2	91.2	91.2	7.1	7.1	3.1	3.0				
						5.1	0.5	272	18.7	18.7	7.9	7.9	31.2	31.2	91.2	91.2	7.1	7.1	3.0	3.5				
					Bottom	9.2	0.5	277	18.7	18.7	7.9	7.9	31.2	31.2	92.3	92.4	7.2	7.2	3.5	3.6				
						9.2	0.5	283	18.7	18.7	7.9	7.9	31.2	31.2	92.5	92.4	7.2	7.2	3.6	3.6				
IM1	Fine	Moderate	10:00	6.9	Surface	1.0	0.2	5	18.3	18.3	7.8	7.8	31.2	31.2	94.4	94.4	7.4	7.4	7.6	9.1	12	14	818349	806468
						1.0	0.2	7	18.3	18.3	7.8	7.8	31.2	31.2	94.4	94.4	7.4	7.4	7.7	7.7				
					Middle	3.5	0.2	36	18.3	18.3	7.9	7.9	31.2	31.2	94.5	94.5	7.4	7.4	7.6	7.6				
						3.5	0.2	41	18.3	18.3	7.9	7.9	31.2	31.2	94.5	94.5	7.4	7.4	7.6	7.6				
					Bottom	5.9	0.1	35	18.3	18.3	7.9	7.9	31.1	31.1	94.7	94.8	7.4	7.4	12.1	12.1				
						5.9	0.2	27	18.3	18.3	7.9	7.9	31.1	31.1	94.8	94.8	7.4	7.4	12.1	12.1				
IM2	Fine	Moderate	10:12	6.8	Surface	1.0	0.2	1	18.3	18.3	7.8	7.8	31.2	31.2	94.9	94.9	7.4	7.4	7.4	8.9	14	12	819178	806241
						1.0	0.2	0	18.3	18.3	7.8	7.8	31.2	31.2	94.8	94.8	7.4	7.4	7.3	7.3				
					Middle	3.4	0.1	4	18.3	18.3	7.9	7.9	31.2	31.2	94.8	94.8	7.4	7.4	9.5	9.5				
						3.4	0.1	1	18.3	18.3	7.9	7.9	31.2	31.2	94.8	94.8	7.4	7.4	9.5	9.5				
					Bottom	5.8	0.1	346	18.3	18.3	7.9	7.9	31.1	31.1	95.0	95.1	7.4	7.4	9.8	9.8				
						5.8	0.2	349	18.3	18.3	7.9	7.9	31.1	31.1	95.1	95.1	7.4	7.4	9.7	9.7				
IM7	Fine	Rough	10:43	8.2	Surface	1.0	0.2	331	18.4	18.4	7.8	7.8	30.2	30.2	94.2	94.2	7.4	7.4	2.9	4.5	6	8	821364	806832
						1.0	0.2	332	18.4	18.4	7.8	7.8	30.2	30.2	94.2	94.2	7.4	7.4	2.9	2.9				
					Middle	4.1	0.2	322	18.4	18.4	7.8	7.8	30.3	30.3	93.9	93.9	7.4	7.4	3.6	3.6				
						4.1	0.2	324	18.4	18.4	7.8	7.8	30.3	30.3	93.9	93.9	7.4	7.4	3.6	3.6				
					Bottom	7.2	0.2	323	18.3	18.3	7.8	7.8	30.9	30.9	93.8	93.8	7.3	7.3	7.0	7.0				
						7.2	0.2	325	18.3	18.3	7.8	7.8	30.9	30.9	93.8	93.8	7.3	7.3	7.0	7.0				

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA		
IM10	Misty	Moderate	11:49	9.0	Surface	1.0	0.3	301	19.0	19.0	8.0	8.0	30.1	30.1	94.3	94.4	7.3	7.4	4.6	5.5	4	822246	809815	
						1.0	0.3	296	19.0	8.0	30.1	94.5	7.3											
					Middle	4.5	0.3	295	18.9	8.0	8.0	30.1	30.1	95.9	96.0	7.5	4.7							
						4.5	0.3	295	18.9	8.0	30.1	96.1	7.5	5.4										
					Bottom	8.0	0.3	301	18.9	8.0	8.0	30.1	30.1	96.7	96.8	7.5	5.5							
						8.0	0.3	304	18.9	8.0	30.1	96.7	7.5	6.6										
IM11	Misty	Moderate	11:41	7.8	Surface	1.0	0.4	295	19.0	19.0	8.0	8.0	30.1	30.1	96.0	96.2	7.5	7.5	2.7	3.5	4	821486	810544	
						1.0	0.4	291	19.0	8.0	30.1	96.3	7.5											
					Middle	3.9	0.4	296	18.9	8.0	8.0	30.1	30.1	96.8	96.9	7.5	2.6							
						3.9	0.4	294	18.9	8.0	30.1	97.0	7.5	3.7										
					Bottom	6.8	0.3	274	18.9	8.0	8.0	30.1	30.1	97.9	98.0	7.6	3.8							
						6.8	0.3	280	18.9	8.0	30.1	98.1	7.6	4.0										
IM12	Misty	Moderate	11:36	8.4	Surface	1.0	0.4	293	19.0	19.0	8.0	8.0	30.1	30.1	94.4	94.5	7.3	7.4	4.7	5.4	4	821176	811501	
						1.0	0.3	296	18.9	8.0	30.1	94.5	7.3											
					Middle	4.2	0.4	286	18.9	8.0	8.0	30.1	30.1	95.5	95.7	7.4	4.8							
						4.2	0.4	292	18.9	8.0	30.1	95.8	7.4	5.3										
					Bottom	7.4	0.4	273	18.9	8.0	8.0	30.1	30.1	96.7	96.9	7.5	5.5							
						7.4	0.3	270	18.9	8.0	30.1	97.0	7.5	5.9										
SR1A	Misty	Moderate	11:13	4.2	Surface	1.0	0.0	197	18.9	18.9	8.0	8.0	29.9	29.9	97.9	98.0	7.6	7.6	2.7	3.0	4	819978	812655	
						1.0	-	194	18.9	8.0	30.0	98.1	7.6											
					Middle	2.1	0.0	198	-	-	-	-	-	-	-	-	-							-
						2.1	0.0	204	-	-	-	-	-	-	-	-	-							
					Bottom	3.2	0.1	178	18.9	8.0	8.0	30.0	30.0	99.3	99.7	7.7	3.3							
						3.2	0.0	176	18.9	8.0	30.0	100.0	7.8	3.3										
SR2	Misty	Moderate	11:00	5.8	Surface	1.0	0.1	289	18.8	18.8	8.0	8.0	30.5	30.5	93.5	93.6	7.3	7.3	5.7	5.9	4	821461	814147	
						1.0	0.1	287	18.8	8.0	30.5	93.6	7.3											
					Middle	-	0.1	272	-	-	-	-	-	-	-	-	-							
						-	0.0	274	-	-	-	-	-	-	-	-	-							
					Bottom	4.8	0.0	276	18.8	8.0	8.0	30.5	30.5	96.1	96.2	7.5	6.1							
						4.8	0.1	273	18.8	8.0	30.5	96.3	7.5	6.2										
SR3	Fine	Rough	10:58	8.6	Surface	1.0	0.3	346	18.5	18.5	7.8	7.8	30.2	30.2	94.4	94.4	7.4	7.4	1.9	2.3	4	822137	807591	
						1.0	0.3	343	18.5	7.8	30.2	94.4	7.4											
					Middle	4.3	0.3	320	18.5	7.8	7.8	30.1	30.1	93.8	93.8	7.4	1.8							
						4.3	0.3	321	18.5	7.8	30.1	93.8	7.4	2.1										
					Bottom	7.6	0.3	357	18.4	7.8	7.8	30.1	30.1	93.5	93.5	7.3	2.8							
						7.6	0.4	352	18.4	7.8	30.1	93.5	7.3	2.9										
SR4A	Fine	Moderate	08:56	9.9	Surface	1.0	0.0	248	18.4	18.4	7.8	7.8	31.2	31.2	91.9	91.9	7.2	7.2	5.3	6.1	7	817183	807807	
						1.0	0.1	246	18.4	7.8	31.2	91.9	7.2											
					Middle	5.0	0.1	249	18.4	7.9	7.9	31.2	31.2	91.7	91.7	7.2	5.4							
						5.0	0.1	252	18.4	7.9	31.2	91.7	7.2	6.0										
					Bottom	8.9	0.0	233	18.3	7.9	7.9	31.1	31.1	91.5	91.5	7.2	6.1							
						8.9	0.0	229	18.3	7.9	31.1	91.5	7.2	6.8										
SR8	Misty	Moderate	11:31	4.6	Surface	1.0	-	-	19.0	19.0	8.0	8.0	29.9	29.9	96.9	97.0	7.5	7.5	2.3	2.4	4	820404	811604	
						1.0	-	-	19.0	8.0	29.9	97.0	7.5											
					Middle	-	-	-	-	-	-	-	-	-	-	-	-							
						-	-	-	-	-	-	-	-	-	-	-	-							
					Bottom	3.6	-	-	19.0	8.0	8.0	29.9	29.9	97.9	98.0	7.6	2.5							
						3.6	-	-	19.0	8.0	29.9	98.1	7.6	2.5										

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)							
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			Value	DA					
C1	Cloudy	Moderate	19:56	8.1	Surface	1.0	0.3	213	18.7	18.7	8.1	8.1	31.7	31.7	99.9	99.8	7.7	7.7	3.0	5.2	3	5	815625	804230							
						1.0	0.3	206	18.6		8.1		31.7		99.6		7.7		3.0		4										
					Middle	4.1	0.4	222	18.5	18.5	8.1	8.1	31.9	32.0	98.6	98.6	7.6	7.6	5.2	7.6	5.6	7.2			5	5					
						4.1	0.4	217	18.5		8.1		32.0		98.5		7.6		5.6												
					Bottom	7.1	0.4	232	18.4	18.4	8.1	8.1	32.1	32.1	98.3	98.4	7.6	7.6	7.2	7.6	7.3	7.3			5	5					
						7.1	0.4	235	18.4		8.1		32.1		98.4		7.6		7.3		5										
					C2	Cloudy	Moderate	18:23	11.2	Surface	1.0	0.3	166	18.8	18.8	8.1	8.1	30.0	30.0	96.2	96.1	7.5			7.4	0.7	0.7	4	4	825670	806953
											1.0	0.3	168	18.8		8.1		30.1		95.9		7.5				4					
Middle	5.6	0.3	186	18.7						18.7	8.1	8.1	30.5	30.5	94.3	94.3	7.4	7.3	0.7	7.3	0.7	7.3	4	4							
	5.6	0.3	181	18.6							8.1		30.5		94.2		7.3		0.7		4										
Bottom	10.2	0.4	159	18.7						18.7	8.1	8.1	30.3	30.3	93.7	93.8	7.3	7.3	0.7	7.3	0.7	7.3	4	4							
	10.2	0.3	164	18.7							8.1		30.2		93.9		7.3		0.7		3										
C3	Misty	Calm	19:18	10.6						Surface	1.0	0.3	82	18.1	18.1	8.0	8.0	32.2	32.2	93.8	93.8	7.3	7.3	3.3	4.2	3	3	822107	817805		
											1.0	0.3	87	18.1		8.0		32.2		93.8		7.3		3.2		4					
					Middle	5.3	0.3	57	18.1	18.2	8.0	8.0	32.2	32.2	94.0	94.0	7.3	7.3	4.4	7.3	4.4	7.4	4	4							
						5.3	0.3	54	18.2		8.0		32.2		94.0		7.3		4.4		3										
					Bottom	9.6	0.3	81	18.4	18.5	8.0	8.0	31.9	31.9	95.4	97.6	7.4	7.6	5.0	7.7	5.1	7.7	2	3							
						9.6	0.4	87	18.5		8.0		31.9		99.8		7.7		5.1		3										
					IM1	Cloudy	Moderate	19:32	7.0	Surface	1.0	0.3	186	18.7	18.7	8.1	8.1	32.1	32.1	99.4	99.3	7.7	7.7	3.0	4.2	4	4			818341	806439
											1.0	0.3	187	18.7		8.1		32.1		99.2		7.7		5							
Middle	3.5	0.3	201	18.6						18.6	8.1	8.1	32.1	32.1	98.5	98.5	7.6	7.6	4.3	7.6	4.5	7.6	4	4							
	3.5	0.3	200	18.6							8.1		32.1		98.5		7.6		4												
Bottom	6.0	0.3	214	18.5						18.5	8.1	8.1	32.2	32.2	98.4	98.5	7.6	7.6	5.0	7.6	5.0	7.6	4	4							
	6.0	0.3	213	18.5							8.1		32.2		98.6		7.6		5.0		4										
IM2	Cloudy	Moderate	19:26	7.5						Surface	1.0	0.3	207	19.0	19.0	8.1	8.1	32.1	32.1	101.8	101.8	7.8	7.8	1.3	3.8	5	5	819182	806213		
											1.0	0.3	210	19.0		8.1		32.1		101.7		7.8		6							
					Middle	3.8	0.3	214	18.6	18.6	8.1	8.1	32.1	32.1	100.0	100.0	7.7	7.7	1.5	7.7	1.7	7.7	4	4							
						3.8	0.4	212	18.6		8.1		32.1		99.9		7.7		4												
					Bottom	6.5	0.3	202	18.6	18.6	8.0	8.0	32.2	32.1	100.2	100.3	7.7	7.8	8.4	7.8	8.4	7.8	4	4							
						6.5	0.3	203	18.6		8.0		32.1		100.4		7.8		8.4		4										
					IM7	Cloudy	Moderate	19:03	8.7	Surface	1.0	0.1	163	18.4	18.4	8.1	8.1	31.2	31.3	97.0	97.0	7.6	7.6	1.2	1.8	6	5			821358	806851
											1.0	0.1	164	18.4		8.1		31.3		97.0		7.6		5							
Middle	4.4	0.1	175	18.4						18.4	8.0	8.0	31.6	31.6	97.3	97.4	7.6	7.6	1.6	7.6	1.7	7.6	4	4							
	4.4	0.1	170	18.4							8.0		31.6		97.4		7.6		4												
Bottom	7.7	0.1	148	18.4						18.4	8.0	8.0	31.8	31.7	98.1	98.2	7.6	7.6	2.3	7.6	2.3	7.6	4	4							
	7.7	0.2	143	18.4							8.0		31.7		98.3		7.6		2.3		4										

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)					
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			Value	DA			
IM10	Misty	Calm	18:26	7.6	Surface	1.0	0.3	109	17.9	17.9	8.0	8.0	31.7	31.7	94.6	94.6	7.4	7.4	1.0	1.7	2	3	822220	809843					
						1.0	0.4	101	17.9		8.0		31.7		94.6		7.4		1.1		2								
					Middle	3.8	0.3	104	17.9	8.0	8.0	31.7	31.7	94.7	94.8	7.4	7.4	1.9	2										
						3.8	0.3	107	17.9	8.0	31.7	31.7	94.8	94.8	7.4	7.4	2.0	3											
					Bottom	6.6	0.4	112	17.9	8.0	8.0	31.7	31.7	94.9	95.0	7.4	7.5	2.3	3										
						6.6	0.4	116	17.9	8.0	31.7	31.7	95.0	95.0	7.5	7.5	2.3	3											
IM11	Misty	Calm	18:31	8.0	Surface	1.0	0.4	107	17.9	17.9	8.0	8.0	31.7	31.7	97.6	97.7	7.7	7.7	1.1	1.5	3	3	821492	810531					
						1.0	0.4	107	17.9		8.0		31.7		97.8		7.7		1.1		4								
					Middle	4.0	0.4	92	17.9	8.1	8.1	31.7	31.7	98.7	98.8	7.7	7.7	1.2	3										
						4.0	0.4	87	17.9	8.1	8.1	31.7	31.7	98.9	98.9	7.8	7.8	1.1	3										
					Bottom	7.0	0.4	82	17.9	8.1	8.1	31.7	31.7	99.7	99.9	7.8	7.9	2.2	2										
						7.0	0.4	75	17.9	8.1	8.1	31.7	31.7	100.1	100.1	7.9	7.9	2.2	2										
IM12	Misty	Calm	18:37	7.6	Surface	1.0	0.3	113	17.9	17.9	8.1	8.1	31.7	31.7	98.9	99.0	7.8	7.8	1.6	1.7	4	4	821139	811536					
						1.0	0.3	110	17.9		8.1		31.7		99.1		7.8		1.5		4								
					Middle	3.8	0.4	84	17.8	8.1	8.1	31.7	31.7	99.7	99.9	7.8	7.8	1.7	3										
						3.8	0.4	80	17.8	8.1	8.1	31.7	31.7	100.0	100.0	7.9	7.9	1.6	4										
					Bottom	6.6	0.4	87	17.8	8.1	8.1	31.7	31.7	101.2	101.4	8.0	8.0	1.8	3										
						6.6	0.4	85	17.8	8.1	8.1	31.7	31.7	101.6	101.6	8.0	8.0	1.8	3										
SR1A	Misty	Calm	18:49	4.2	Surface	1.0	0.0	68	18.0	18.0	8.0	8.0	31.8	31.8	93.5	94.2	7.3	7.4	2.0	2.1	4	4	819975	812653					
						1.0	0.1	62	18.0		8.0		31.8		94.8		7.4		2.1		5								
					Middle	2.1	0.1	69	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-	-
						2.1	0.1	63	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-	-
					Bottom	3.2	-	82	17.9	8.1	8.1	31.8	31.8	97.8	98.6	7.7	7.8	2.1	4										
						3.2	-	78	17.9	8.1	8.1	31.8	31.8	99.4	99.4	7.8	7.8	2.2	4										
SR2	Misty	Calm	18:57	5.2	Surface	1.0	0.3	47	18.1	18.1	8.1	8.1	31.9	31.9	100.3	100.4	7.8	7.9	1.2	1.4	3	3	821443	814188					
						1.0	0.3	45	18.1		8.1		31.9		100.5		7.9		1.3		3								
					Middle	-	0.3	47	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-	-
						-	0.2	51	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-	-
					Bottom	4.2	0.4	65	18.0	8.1	8.1	31.9	31.9	101.4	101.6	7.9	8.0	1.4	3										
						4.2	0.3	70	18.0	8.1	8.1	31.9	31.9	101.7	101.7	8.0	8.0	1.5	2										
SR3	Cloudy	Moderate	18:56	8.7	Surface	1.0	0.3	167	18.5	18.5	8.1	8.1	31.0	31.0	95.6	95.5	7.5	7.4	1.4	2.0	3	4	822145	807561					
						1.0	0.3	162	18.5		8.1		31.0		95.4		7.4		1.5		4								
					Middle	4.4	0.4	163	18.3	8.1	8.1	31.2	31.2	93.5	93.4	7.3	7.3	2.3	4										
						4.4	0.4	160	18.3	8.1	8.1	31.3	31.3	93.3	93.3	7.3	7.3	2.5	4										
					Bottom	7.7	0.3	142	18.4	8.0	8.0	31.5	31.5	92.7	92.7	7.2	7.2	2.1	5										
						7.7	0.3	145	18.4	8.0	8.0	31.5	31.5	92.7	92.7	7.2	7.2	2.1	5										
SR4A	Cloudy	Moderate	20:24	8.6	Surface	1.0	0.0	14	18.9	18.9	8.3	8.3	32.2	32.2	100.4	100.4	7.7	7.7	3.2	4.3	3	4	817197	807806					
						1.0	0.0	8	18.9		8.3		32.2		100.4		7.7		3.2		4								
					Middle	4.3	0.0	20	18.7	8.3	8.3	32.2	32.2	99.6	99.6	7.7	7.7	4.7	5										
						4.3	0.0	21	18.7	8.3	8.3	32.2	32.2	99.5	99.5	7.7	7.7	4.9	4										
					Bottom	7.6	0.1	3	18.7	8.2	8.2	32.2	32.2	99.8	99.9	7.7	7.7	5.0	5										
						7.6	0.0	9	18.7	8.2	8.2	32.2	32.2	100.0	100.0	7.7	7.7	4.9	5										
SR8	Misty	Calm	18:41	5.6	Surface	1.0	-	-	17.9	17.9	8.1	8.1	31.7	31.7	99.1	99.2	7.8	7.8	3.1	3.9	2	3	820399	811631					
						1.0	-	-	17.9		8.1		31.7		99.3		7.8		3.0		3								
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-	
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-	
					Bottom	4.6	-	-	17.9	8.1	8.1	31.7	31.7	100.8	101.2	7.9	8.0	4.8	3										
						4.6	-	-	17.9	8.1	8.1	31.7	31.7	101.5	101.5	8.0	8.0	4.9	3										

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

Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)		
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA			Value	DA
C1	Cloudy	Moderate	06:52	8.2	Surface	1.0	0.1	217	18.5	18.5	8.0	8.0	32.1	32.1	97.7	97.7	7.6	7.6	2.7	4.6	4	5	815609	804257		
						1.0	0.0	215	18.5		8.0		32.1		97.6		7.6		3.0		4					
					Middle	4.1	0.1	222	18.5	18.5	8.0	8.0	32.1	32.1	97.2	97.2	7.5	7.5	6.3	7.5	5				7.5	6
						4.1	0.1	217	18.5		8.0		32.1		97.2		7.5		6.5		4					
					Bottom	7.2	0.1	188	18.5	18.5	8.0	8.0	32.2	32.2	97.1	97.1	7.5	7.5	4.7	7.5	5				7.5	4.7
						7.2	0.1	184	18.5		8.0		32.2		97.1		7.5		5							
C2	Cloudy	Moderate	08:21	12.8	Surface	1.0	0.3	162	19.0	19.0	8.1	8.1	29.8	29.8	98.7	98.7	7.7	7.7	1.5	1.1	3	4	825666	806966		
						1.0	0.2	169	19.0		8.1		29.8		98.6		7.7		1.5		3					
					Middle	6.4	0.3	158	18.7	18.7	8.0	8.0	30.5	30.5	93.9	93.9	7.3	7.3	0.8	7.3	4				7.3	4
						6.4	0.3	162	18.7		8.0		30.5		93.8		7.3		0.8		4					
					Bottom	11.8	0.2	195	18.6	18.6	8.0	8.0	30.7	30.7	93.5	93.6	7.3	7.3	0.9	7.3	6				7.3	0.9
						11.8	0.2	202	18.6		8.0		30.7		93.6		7.3		0.9		6					
C3	Misty	Calm	07:54	11.0	Surface	1.0	0.1	23	18.1	18.1	8.1	8.1	31.5	31.5	91.8	91.8	7.2	7.2	1.0	1.2	3	4	822132	817816		
						1.0	0.1	25	18.1		8.1		31.5		91.7		7.2		1.1		3					
					Middle	5.5	0.1	12	18.1	18.1	8.1	8.1	31.5	31.5	91.6	91.6	7.2	7.2	1.1	7.2	4				7.2	4
						5.5	0.1	6	18.1		8.1		31.5		91.6		7.2		1.1		3					
					Bottom	10.0	0.0	24	18.1	18.1	8.1	8.1	31.5	31.5	91.9	92.0	7.2	7.2	1.4	7.2	5				7.2	1.4
						10.0	0.0	24	18.1		8.1		31.4		92.1		7.2		1.4		5					
IM1	Cloudy	Moderate	07:15	6.3	Surface	1.0	0.1	195	18.5	18.5	8.1	8.1	32.2	32.2	98.1	98.0	7.6	7.6	4.3	7.6	4	3	818355	806453		
						1.0	0.1	191	18.5		8.1		32.2		97.9		7.6		4.7		3					
					Middle	3.2	0.1	194	18.5	18.5	8.1	8.0	32.2	32.2	97.5	97.5	7.5	7.5	7.9	7.5	4				7.5	4
						3.2	0.1	194	18.5		8.0		32.2		97.4		7.5		7.9		3					
					Bottom	5.3	0.1	213	18.5	18.5	8.0	8.0	32.2	32.2	97.4	97.4	7.5	7.5	10.7	7.5	3				7.5	10.7
						5.3	0.1	217	18.5		8.0		32.2		97.4		7.5		10.3		3					
IM2	Cloudy	Moderate	07:21	7.0	Surface	1.0	0.1	208	18.6	18.6	8.0	8.0	32.1	32.1	97.8	97.8	7.6	7.6	3.6	7.6	3	3	819163	806229		
						1.0	0.1	209	18.6		8.0		32.2		97.7		7.6		3.6		2					
					Middle	3.5	0.1	219	18.5	18.5	8.0	8.0	32.2	32.2	97.4	97.4	7.5	7.5	4.2	7.5	2				7.5	4.0
						3.5	0.1	217	18.5		8.0		32.2		97.4		7.5		4.2		3					
					Bottom	6.0	0.1	217	18.5	18.5	8.0	8.0	32.2	32.2	98.0	98.1	7.6	7.6	6.6	7.6	4				7.6	6.6
						6.0	0.1	218	18.5		8.0		32.2		98.2		7.6		6.2		4					
IM7	Cloudy	Moderate	07:43	8.1	Surface	1.0	0.1	224	18.4	18.4	8.0	8.0	31.3	31.4	94.5	94.4	7.4	7.4	1.6	7.4	3	4	821329	806848		
						1.0	0.1	228	18.4		8.0		31.4		94.3		7.3		1.7		4					
					Middle	4.1	0.1	198	18.4	18.4	8.0	8.0	31.8	31.8	94.1	94.1	7.3	7.3	2.5	7.3	4				7.3	2.5
						4.1	0.1	199	18.4		8.0		31.8		94.1		7.3		2.6		4					
					Bottom	7.1	0.1	197	18.4	18.4	8.0	8.0	32.0	32.0	94.2	94.2	7.3	7.3	3.0	7.3	5				7.3	3.0
						7.1	0.1	190	18.4		8.0		32.0		94.2		7.3		3.0		4					

DA: Depth-Averaged

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

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

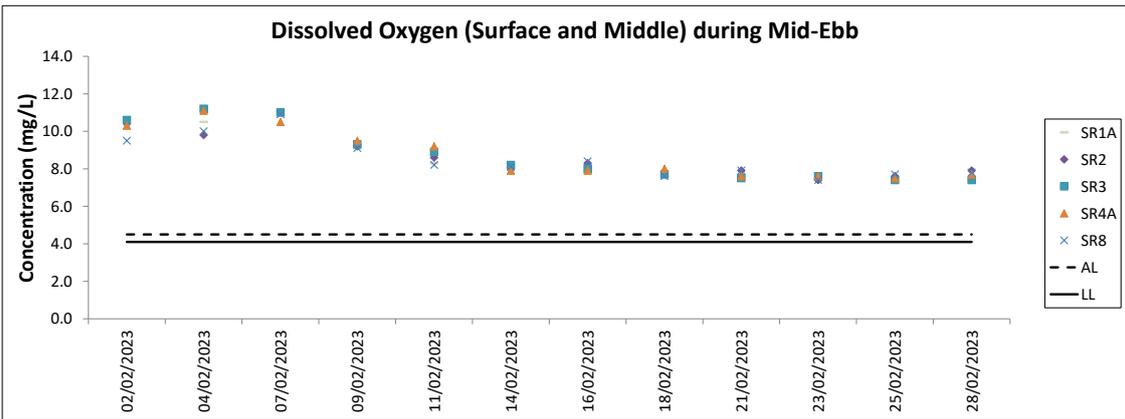
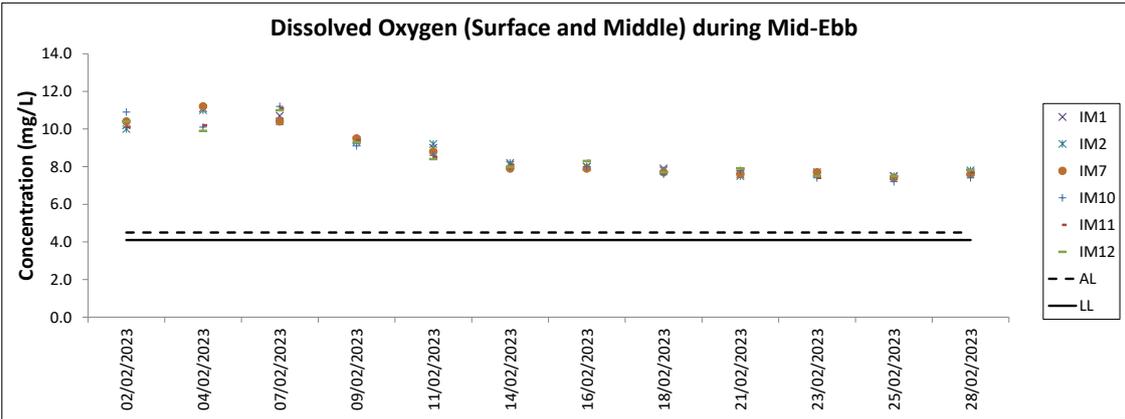
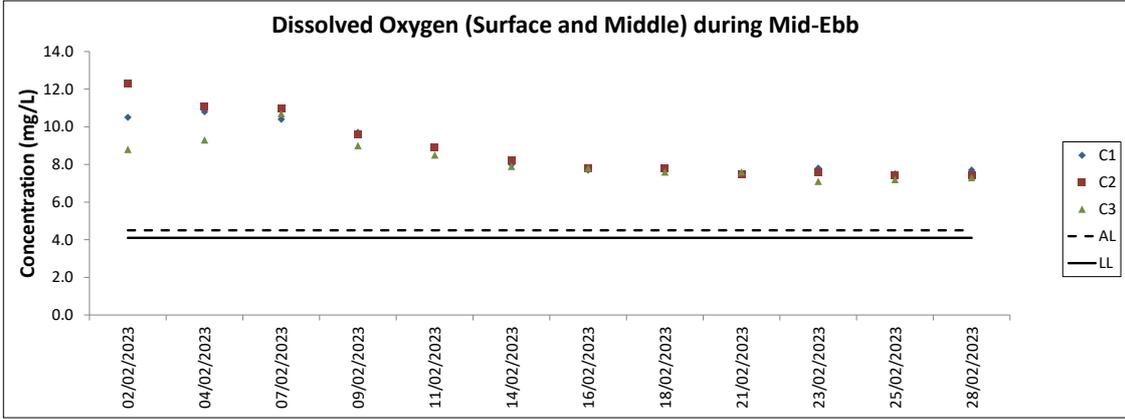
Expansion of Hong Kong International Airport into a Three-Runway System

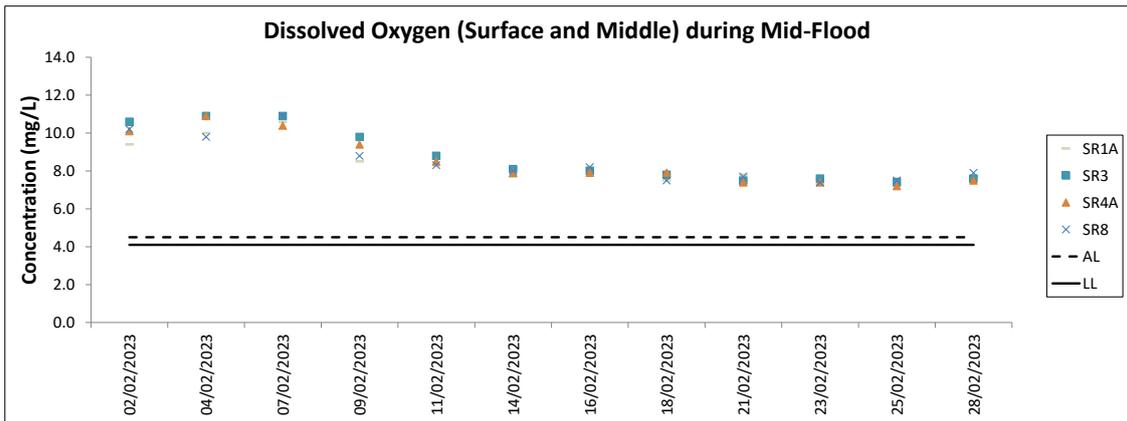
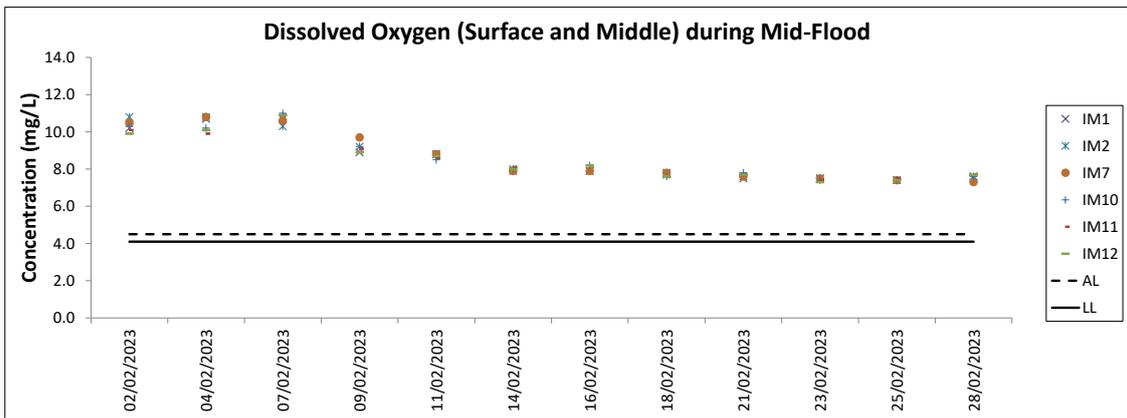
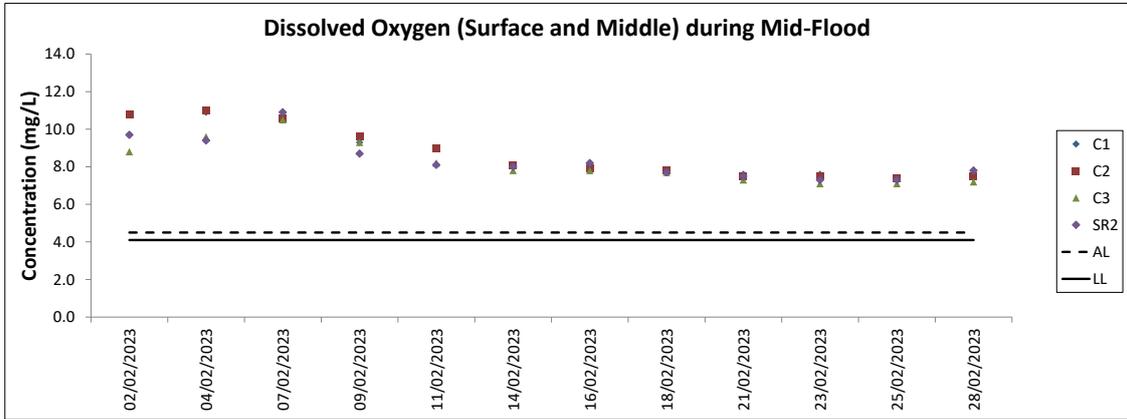
Water Quality Monitoring

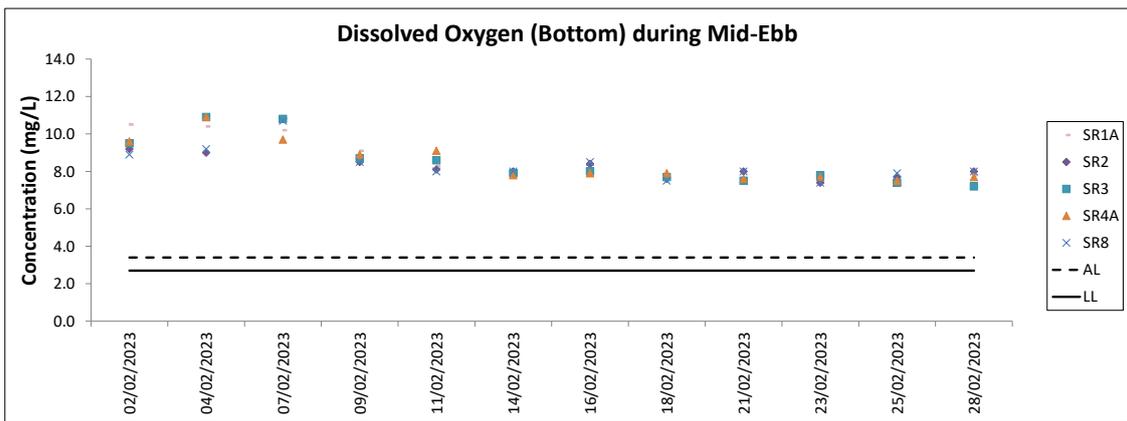
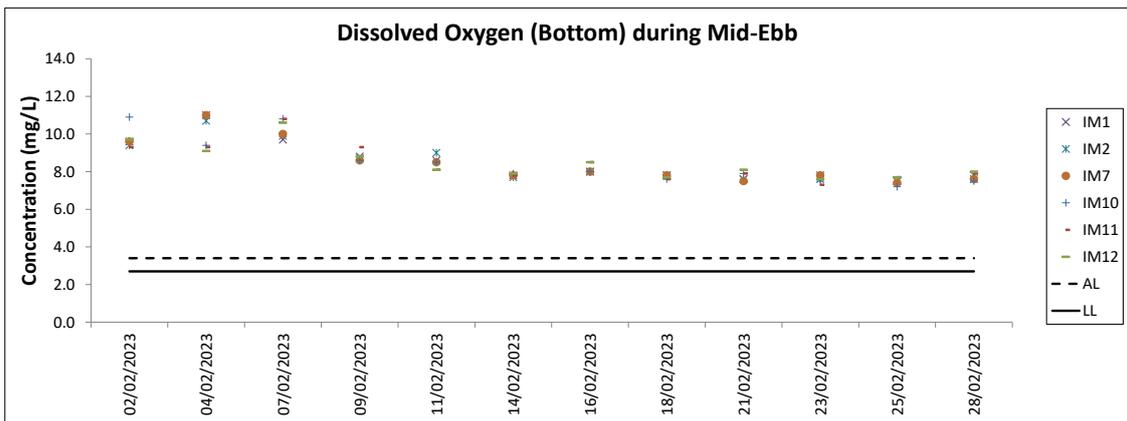
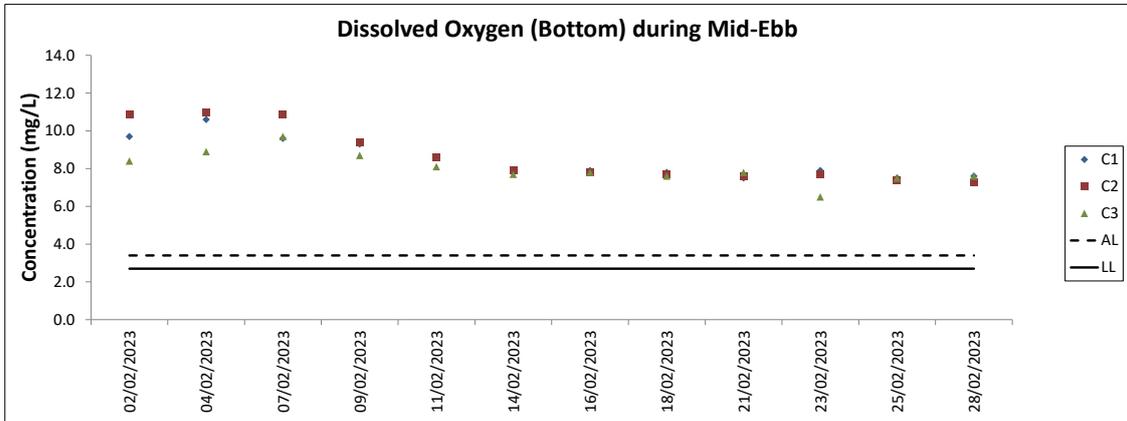
Water Quality Monitoring Results on 28 February 23 during Mid-Flood Tide

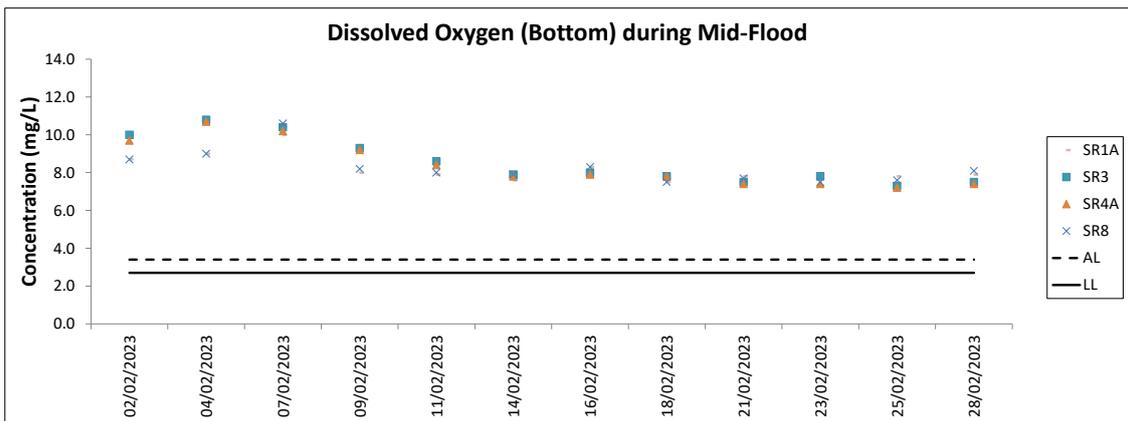
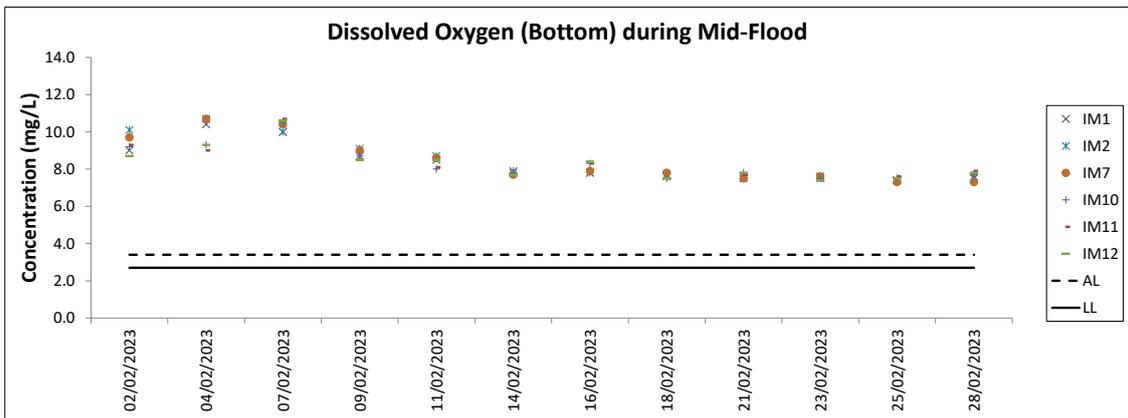
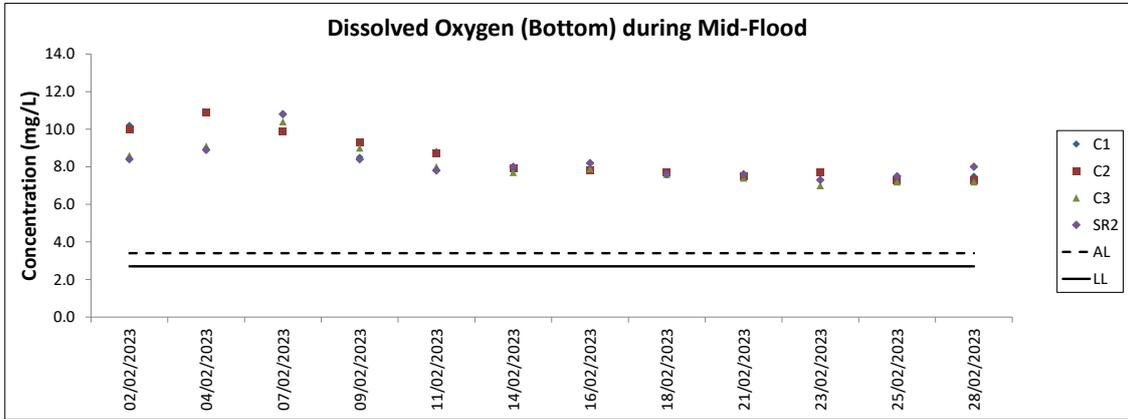
Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)		
									Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA				
IM10	Misty	Calm	08:51	8.0	Surface	1.0	0.0	145	17.9	17.9	8.0	8.0	31.7	31.7	96.1	96.3	7.5	7.6	1.9	2.1	4	4	822231	809828		
						1.0	0.0	150	17.9		8.0		31.7		96.4		7.6		1.9		4					
					Middle	4.0	0.0	160	17.9	8.0	8.0	31.7	31.7	97.4	97.5	7.7	7.7	2.0	5							
						4.0	0.1	158	17.9	8.0	31.7	31.7	97.5	97.5	7.7	7.7	2.1	4								
					Bottom	7.0	0.1	152	17.9	8.0	8.0	31.7	31.7	98.2	98.3	7.7	7.7	2.4	5							
						7.0	0.1	159	17.9	8.0	31.7	31.7	98.4	98.3	7.7	7.7	2.4	4								
IM11	Misty	Calm	08:47	9.0	Surface	1.0	0.0	151	18.0	18.0	8.0	8.0	31.7	31.7	97.2	97.4	7.6	7.7	1.7	2.2	3	3	821523	810561		
						1.0	0.0	148	18.0		8.0		31.7		97.5		7.6		1.8		3					
					Middle	4.5	0.0	156	17.9	8.0	8.0	31.7	31.7	98.3	98.4	7.7	7.7	2.0	3							
						4.5	-	157	17.9	8.0	31.7	31.7	98.5	98.4	7.7	7.7	2.1	3								
					Bottom	8.0	0.0	129	17.9	8.1	8.1	31.7	31.7	100.2	100.5	7.9	7.9	2.7	3							
						8.0	0.0	134	17.9	8.1	8.1	31.7	31.7	100.7	100.5	7.9	7.9	2.7	2							
IM12	Misty	Calm	08:42	8.4	Surface	1.0	0.0	92	17.9	17.9	8.1	8.1	31.7	31.7	97.3	97.5	7.6	7.7	1.7	1.8	3	821178	811541			
						1.0	0.1	95	17.9		8.1		31.7		97.6		7.7		1.7		3					
					Middle	4.2	0.1	108	17.8	8.1	8.1	31.7	31.7	98.4	98.6	7.7	7.7	1.8	3							
						4.2	0.1	108	17.8	8.1	31.7	31.7	98.7	98.6	7.8	7.8	1.7	3								
					Bottom	7.4	0.1	79	17.8	8.1	8.1	31.7	31.7	99.5	99.7	7.8	7.8	1.9	4							
						7.4	0.1	75	17.8	8.1	8.1	31.7	31.7	99.8	99.7	7.8	7.8	1.9	4							
SR1A	Misty	Calm	08:23	5.6	Surface	1.0	0.0	209	17.8	17.8	8.0	8.0	31.5	31.5	98.2	98.4	7.7	7.7	3.1	3.8	3	819980	812653			
						1.0	0.1	205	17.8		8.0		31.5		98.5		7.7		3.2		2					
					Middle	2.8	-	209	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	3
						2.8	0.0	204	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	3
					Bottom	4.6	-	198	17.8	8.0	8.0	31.5	31.5	100.5	100.6	7.9	7.9	4.6	3							
						4.6	0.0	196	17.8	8.0	8.0	31.5	31.5	100.6	100.6	7.9	7.9	4.5	3							
SR2	Misty	Calm	08:12	4.6	Surface	1.0	0.1	52	18.0	18.0	8.1	8.1	31.8	31.8	99.0	99.2	7.8	7.8	1.4	1.7	2	821472	814161			
						1.0	0.1	46	18.0		8.1		31.8		99.3		7.8		1.4		3					
					Middle	-	0.1	23	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	3
						-	0.1	25	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	3
					Bottom	3.6	0.0	61	17.9	8.1	8.1	31.7	31.7	101.0	101.6	7.9	8.0	2.0	3							
						3.6	0.0	55	18.0	8.1	8.1	31.7	31.7	102.1	101.6	8.0	8.0	2.0	3							
SR3	Cloudy	Moderate	07:50	8.4	Surface	1.0	0.1	176	18.8	18.8	8.1	8.1	30.3	30.4	97.5	97.5	7.6	7.6	3.5	1.9	4	822137	807548			
						1.0	0.2	178	18.7		8.1		30.4		97.4		7.6		3.5		3					
					Middle	4.2	0.1	179	18.4	8.1	8.1	31.1	31.1	95.9	95.9	7.5	7.5	1.0	4							
						4.2	0.1	181	18.4	8.1	31.1	31.1	95.8	95.9	7.5	7.5	1.0	3								
					Bottom	7.4	0.1	149	18.3	8.1	8.1	31.1	31.1	95.8	95.8	7.5	7.5	1.1	3							
						7.4	0.1	152	18.3	8.1	8.1	31.1	31.1	95.8	95.8	7.5	7.5	1.1	3							
SR4A	Cloudy	Moderate	06:33	9.4	Surface	1.0	0.0	307	18.4	18.4	8.1	8.1	32.0	32.0	97.0	97.0	7.5	7.5	2.3	3.5	3	817173	807824			
						1.0	0.0	312	18.4		8.1		32.0		97.0		7.5		2.4		2					
					Middle	4.7	0.0	286	18.3	8.1	8.1	32.1	32.1	96.2	96.2	7.5	7.5	3.8	4							
						4.7	0.0	282	18.3	8.1	32.1	32.1	96.1	96.2	7.5	7.5	3.8	4								
					Bottom	8.4	0.0	282	18.3	8.0	8.0	32.2	32.2	95.8	95.9	7.4	7.4	4.5	5							
						8.4	0.0	284	18.3	8.0	8.0	32.2	32.2	95.9	95.9	7.4	7.4	4.4	4							
SR8	Misty	Calm	08:38	4.8	Surface	1.0	-	-	17.6	17.6	8.1	8.1	32.0	32.0	99.6	99.8	7.8	7.9	1.1	1.2	2	820405	811602			
						1.0	-	-	17.6		8.1		32.0		99.9		7.9		1.2		3					
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	3
						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	3
					Bottom	3.8	-	-	17.4	8.1	8.1	32.1	32.1	101.4	101.6	8.0	8.1	1.3	4							
						3.8	-	-	17.4	8.1	8.1	32.2	32.1	101.8	101.6	8.1	8.1	1.3	3							

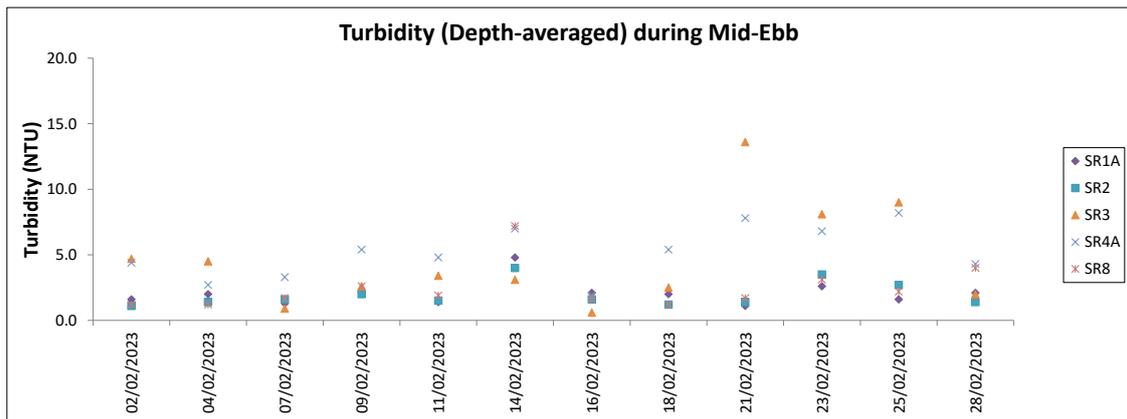
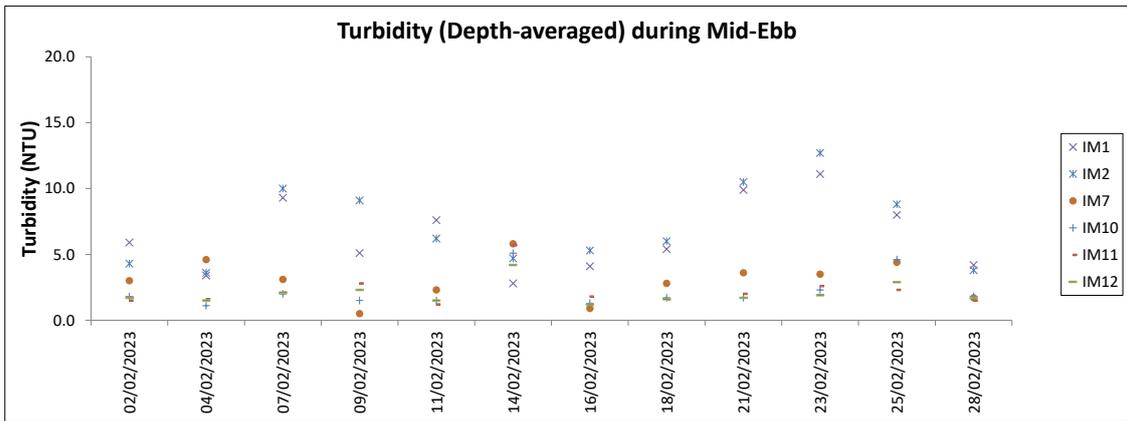
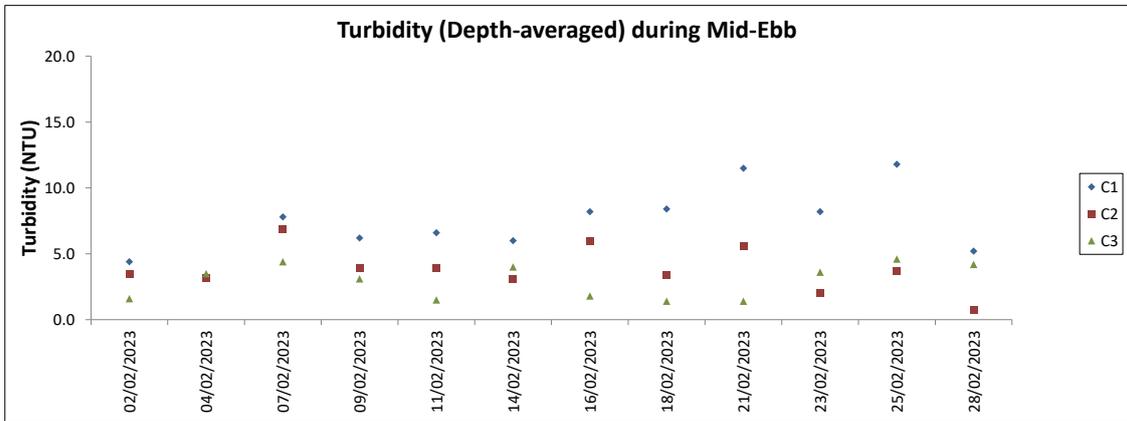
DA: Depth-Averaged
 Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
 Value exceeding Action Level is underlined; Value exceeding Limit Level is bolded and underlined



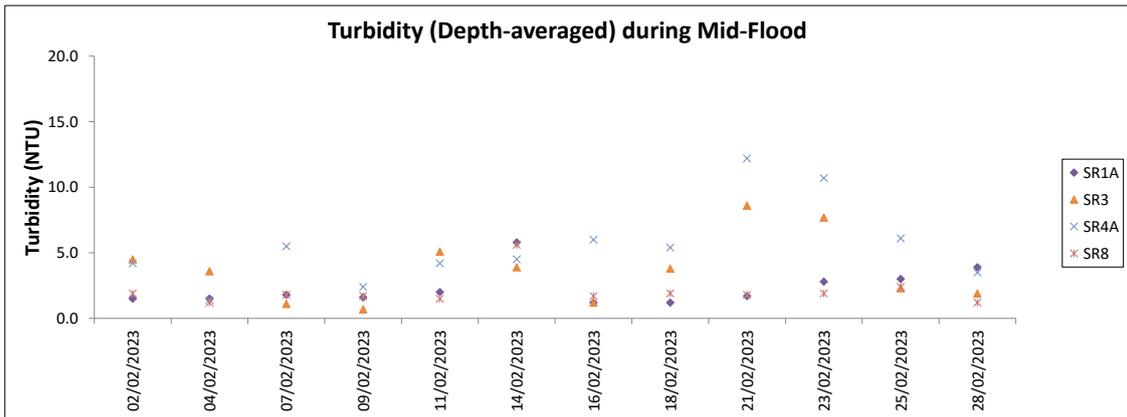
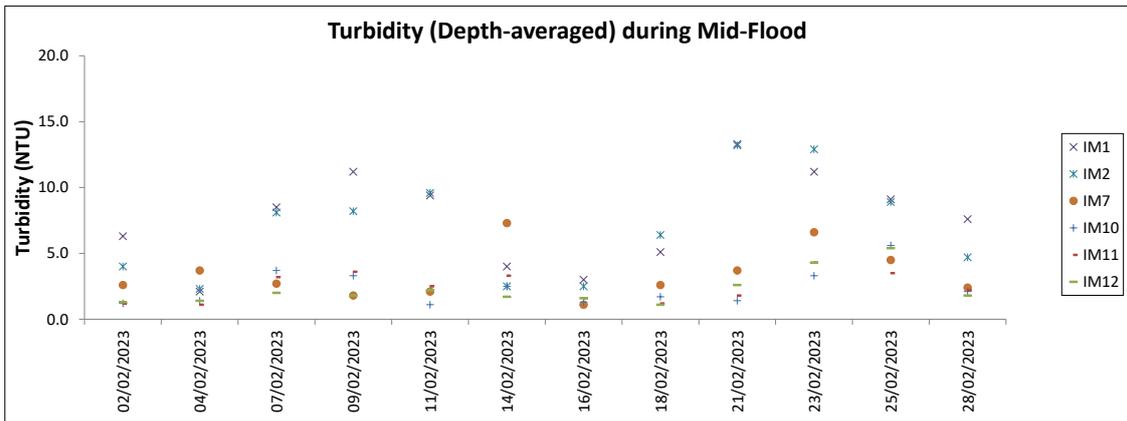
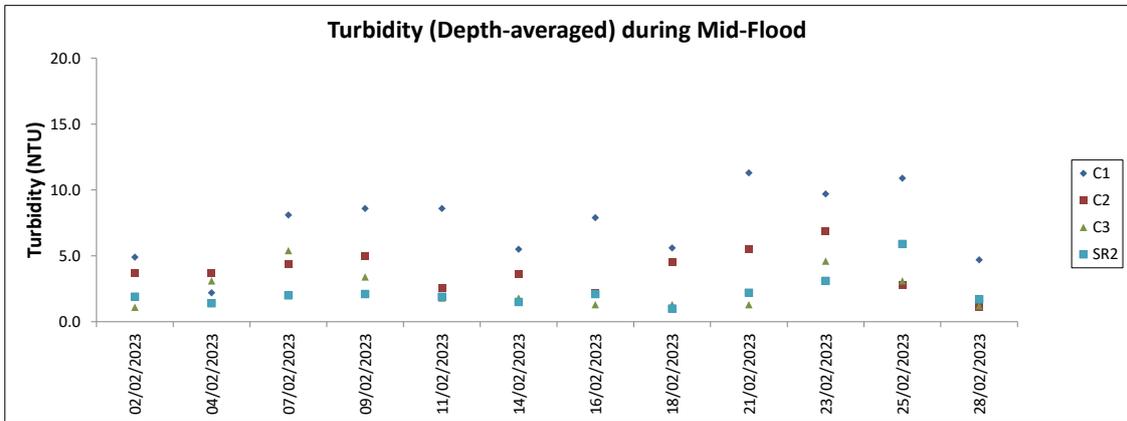




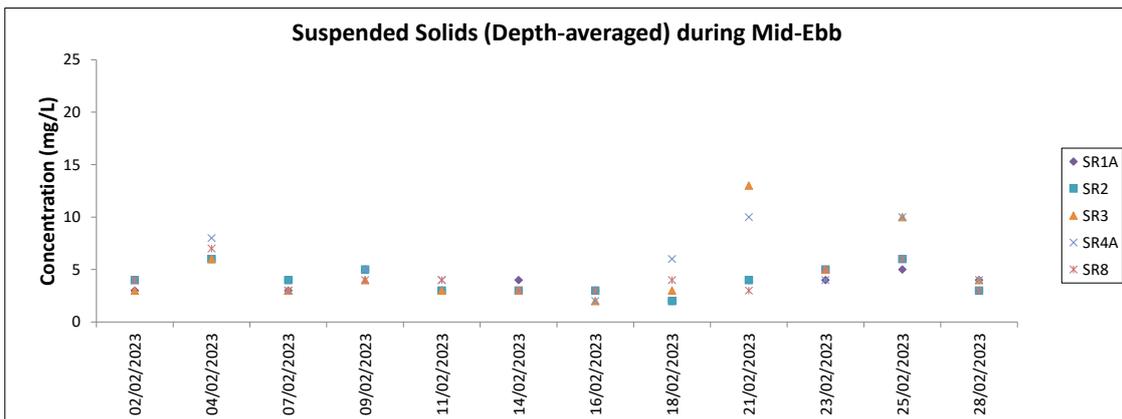
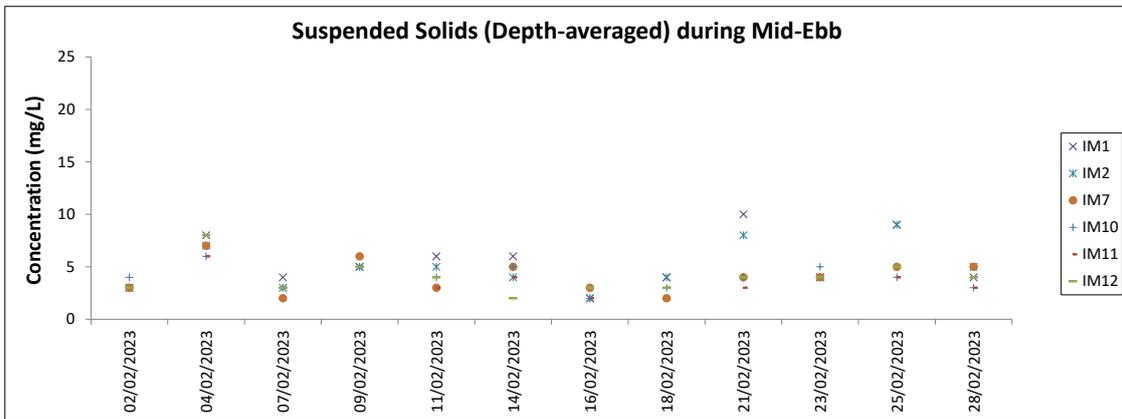
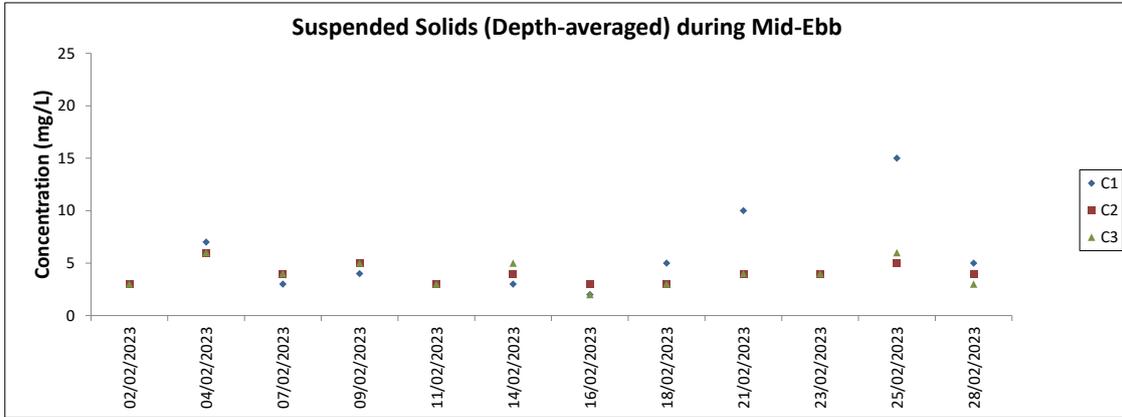




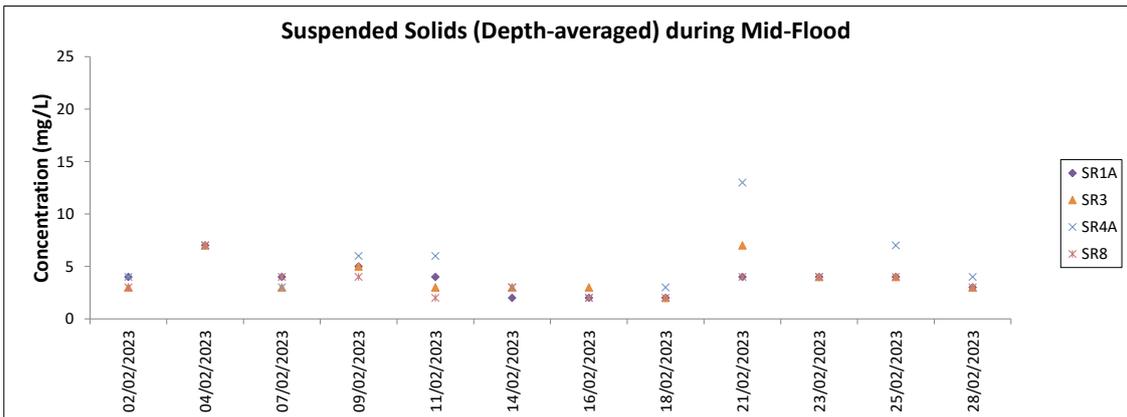
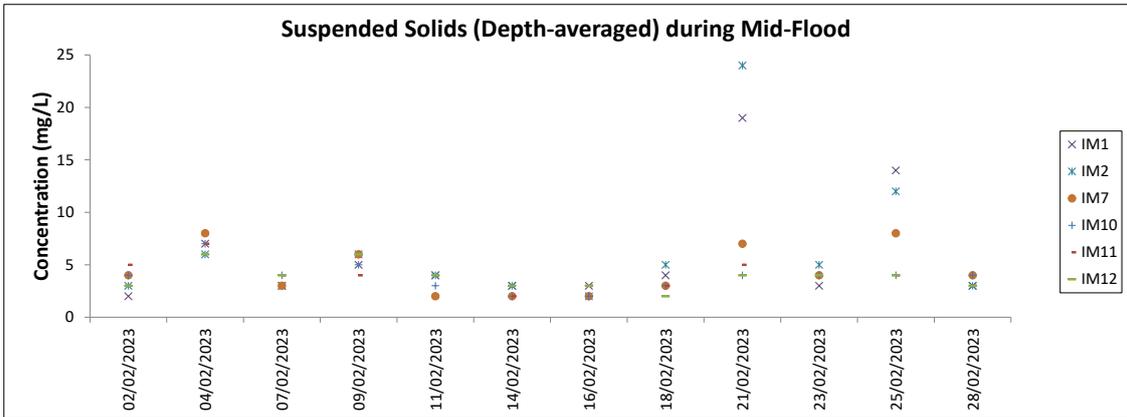
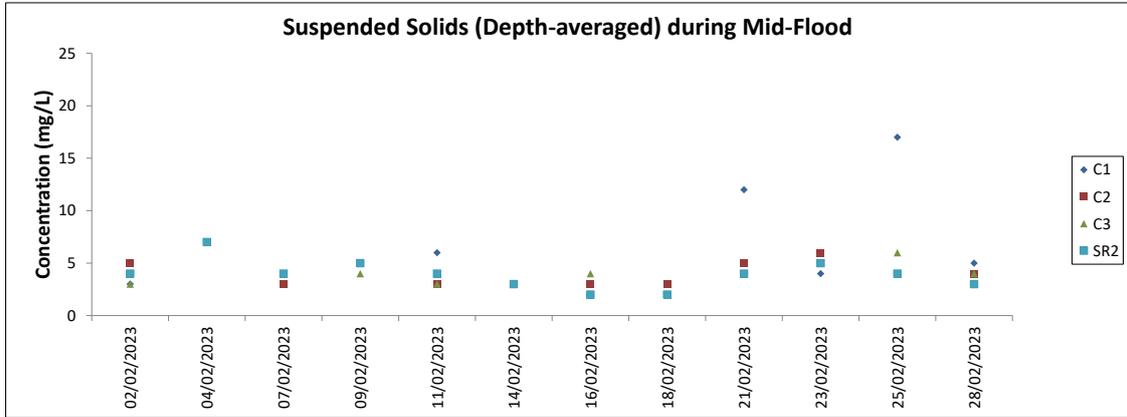
Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.



Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.



Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.



Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 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.

Chinese White Dolphin Monitoring Results

CWD Small Vessel Line-transect Survey

Survey Effort Data

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
16-Dec-22	NEL	2	32.000	WINTER	32166	3RS ET	P
16-Dec-22	NEL	3	5.130	WINTER	32166	3RS ET	P
16-Dec-22	NEL	2	10.070	WINTER	32166	3RS ET	S
19-Dec-22	NEL	2	21.500	WINTER	32166	3RS ET	P
19-Dec-22	NEL	3	16.020	WINTER	32166	3RS ET	P
19-Dec-22	NEL	2	5.070	WINTER	32166	3RS ET	S
19-Dec-22	NEL	3	5.110	WINTER	32166	3RS ET	S
20-Dec-22	NWL	2	5.240	WINTER	32166	3RS ET	P
20-Dec-22	NWL	3	57.300	WINTER	32166	3RS ET	P
20-Dec-22	NWL	2	1.100	WINTER	32166	3RS ET	S
20-Dec-22	NWL	3	10.600	WINTER	32166	3RS ET	S
21-Dec-22	AW	3	5.010	WINTER	32166	3RS ET	P
21-Dec-22	WL	3	8.326	WINTER	32166	3RS ET	P
21-Dec-22	WL	4	9.037	WINTER	32166	3RS ET	P
21-Dec-22	WL	5	1.900	WINTER	32166	3RS ET	P
21-Dec-22	WL	3	3.640	WINTER	32166	3RS ET	S
21-Dec-22	WL	4	7.527	WINTER	32166	3RS ET	S
22-Dec-22	SWL	3	52.578	WINTER	32166	3RS ET	P
22-Dec-22	SWL	4	1.400	WINTER	32166	3RS ET	P
22-Dec-22	SWL	2	0.850	WINTER	32166	3RS ET	S
22-Dec-22	SWL	3	14.360	WINTER	32166	3RS ET	S
22-Dec-22	SWL	4	1.200	WINTER	32166	3RS ET	S
28-Dec-22	SWL	2	30.360	WINTER	32166	3RS ET	P
28-Dec-22	SWL	3	22.450	WINTER	32166	3RS ET	P
28-Dec-22	SWL	2	12.320	WINTER	32166	3RS ET	S
28-Dec-22	SWL	3	2.700	WINTER	32166	3RS ET	S
29-Dec-22	AW	3	4.860	WINTER	32166	3RS ET	P
29-Dec-22	WL	3	14.870	WINTER	32166	3RS ET	P
29-Dec-22	WL	4	5.880	WINTER	32166	3RS ET	P
29-Dec-22	WL	3	9.380	WINTER	32166	3RS ET	S
29-Dec-22	WL	4	0.870	WINTER	32166	3RS ET	S
30-Dec-22	NWL	3	49.500	WINTER	32166	3RS ET	P
30-Dec-22	NWL	4	14.100	WINTER	32166	3RS ET	P
30-Dec-22	NWL	3	8.500	WINTER	32166	3RS ET	S
30-Dec-22	NWL	4	3.200	WINTER	32166	3RS ET	S
06-Jan-23	NWL	2	27.910	WINTER	32166	3RS ET	P
06-Jan-23	NWL	3	34.020	WINTER	32166	3RS ET	P
06-Jan-23	NWL	2	5.290	WINTER	32166	3RS ET	S
06-Jan-23	NWL	3	6.780	WINTER	32166	3RS ET	S
09-Jan-23	NWL	2	22.370	WINTER	32166	3RS ET	P
09-Jan-23	NWL	3	39.710	WINTER	32166	3RS ET	P
09-Jan-23	NWL	2	3.350	WINTER	32166	3RS ET	S
09-Jan-23	NWL	3	8.820	WINTER	32166	3RS ET	S
10-Jan-23	SWL	2	56.930	WINTER	32166	3RS ET	P
10-Jan-23	SWL	2	13.570	WINTER	32166	3RS ET	S
12-Jan-23	AW	2	2.890	WINTER	32166	3RS ET	P
12-Jan-23	AW	3	1.690	WINTER	32166	3RS ET	P

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
12-Jan-23	WL	2	17.170	WINTER	32166	3RS ET	P
12-Jan-23	WL	3	2.500	WINTER	32166	3RS ET	P
12-Jan-23	WL	2	9.830	WINTER	32166	3RS ET	S
12-Jan-23	WL	3	1.100	WINTER	32166	3RS ET	S
13-Jan-23	SWL	1	3.380	WINTER	32166	3RS ET	P
13-Jan-23	SWL	2	50.173	WINTER	32166	3RS ET	P
13-Jan-23	SWL	1	2.050	WINTER	32166	3RS ET	S
13-Jan-23	SWL	2	16.697	WINTER	32166	3RS ET	S
16-Jan-23	NEL	2	8.200	WINTER	32166	3RS ET	P
16-Jan-23	NEL	3	28.750	WINTER	32166	3RS ET	P
16-Jan-23	NEL	2	4.200	WINTER	32166	3RS ET	S
16-Jan-23	NEL	3	6.150	WINTER	32166	3RS ET	S
17-Jan-23	NEL	2	28.590	WINTER	32166	3RS ET	P
17-Jan-23	NEL	3	8.380	WINTER	32166	3RS ET	P
17-Jan-23	NEL	2	10.130	WINTER	32166	3RS ET	S
18-Jan-23	WL	3	15.140	WINTER	32166	3RS ET	P
18-Jan-23	WL	4	5.200	WINTER	32166	3RS ET	P
18-Jan-23	WL	3	7.360	WINTER	32166	3RS ET	S
18-Jan-23	WL	4	3.200	WINTER	32166	3RS ET	S
18-Jan-23	AW	2	4.760	WINTER	32166	3RS ET	P
07-Feb-23	SWL	1	2.430	WINTER	32166	3RS ET	P
07-Feb-23	SWL	2	43.158	WINTER	32166	3RS ET	P
07-Feb-23	SWL	3	8.780	WINTER	32166	3RS ET	P
07-Feb-23	SWL	2	12.322	WINTER	32166	3RS ET	S
07-Feb-23	SWL	3	3.000	WINTER	32166	3RS ET	S
08-Feb-23	NEL	2	22.760	WINTER	32166	3RS ET	P
08-Feb-23	NEL	3	14.500	WINTER	32166	3RS ET	P
08-Feb-23	NEL	2	7.170	WINTER	32166	3RS ET	S
08-Feb-23	NEL	3	2.970	WINTER	32166	3RS ET	S
13-Feb-23	SWL	2	51.784	WINTER	32166	3RS ET	P
13-Feb-23	SWL	3	1.500	WINTER	32166	3RS ET	P
13-Feb-23	SWL	2	16.273	WINTER	32166	3RS ET	S
14-Feb-23	NEL	2	26.770	WINTER	32166	3RS ET	P
14-Feb-23	NEL	3	9.330	WINTER	32166	3RS ET	P
14-Feb-23	NEL	4	1.180	WINTER	32166	3RS ET	P
14-Feb-23	NEL	2	8.820	WINTER	32166	3RS ET	S
14-Feb-23	NEL	3	0.800	WINTER	32166	3RS ET	S
16-Feb-23	NWL	2	10.780	WINTER	32166	3RS ET	P
16-Feb-23	NWL	3	51.368	WINTER	32166	3RS ET	P
16-Feb-23	NWL	2	3.860	WINTER	32166	3RS ET	S
16-Feb-23	NWL	3	7.940	WINTER	32166	3RS ET	S
20-Feb-23	NWL	2	11.500	WINTER	32166	3RS ET	P
20-Feb-23	NWL	3	50.750	WINTER	32166	3RS ET	P
20-Feb-23	NWL	2	4.200	WINTER	32166	3RS ET	S
20-Feb-23	NWL	3	7.850	WINTER	32166	3RS ET	S
21-Feb-23	AW	2	4.700	WINTER	32166	3RS ET	P
21-Feb-23	WL	2	4.530	WINTER	32166	3RS ET	P
21-Feb-23	WL	3	12.181	WINTER	32166	3RS ET	P
21-Feb-23	WL	4	2.220	WINTER	32166	3RS ET	P

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
21-Feb-23	WL	5	0.370	WINTER	32166	3RS ET	P
21-Feb-23	WL	2	5.229	WINTER	32166	3RS ET	S
21-Feb-23	WL	3	1.159	WINTER	32166	3RS ET	S
21-Feb-23	WL	4	3.810	WINTER	32166	3RS ET	S
22-Feb-23	AW	3	3.970	WINTER	32166	3RS ET	P
22-Feb-23	WL	3	15.367	WINTER	32166	3RS ET	P
22-Feb-23	WL	4	1.380	WINTER	32166	3RS ET	P
22-Feb-23	WL	3	7.158	WINTER	32166	3RS ET	S
22-Feb-23	WL	4	2.670	WINTER	32166	3RS ET	S

Notes: CWD monitoring survey data of the two preceding survey months are presented for reference only.

CWD Small Vessel Line-transect Survey

Sighting Data

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
20-Dec-22	1	0949	CWD	2	NWL	2	31	ON	3RS ET	22.3730	113.8705	WINTER	NONE	P
21-Dec-22	1	1136	CWD	2	WL	4	405	ON	3RS ET	22.2053	113.8389	WINTER	NONE	P
21-Dec-22	2	1205	CWD	7	WL	4	53	ON	3RS ET	22.1961	113.8409	WINTER	NONE	P
21-Dec-22	3	1218	CWD	1	WL	3	45	ON	3RS ET	22.1873	113.8408	WINTER	NONE	P
22-Dec-22	1	1038	FP	2	SWL	3	34	ON	3RS ET	22.1817	113.9362	WINTER	NONE	P
22-Dec-22	2	1042	FP	1	SWL	3	307	ON	3RS ET	22.1775	113.9358	WINTER	NONE	P
22-Dec-22	3	1116	FP	2	SWL	3	68	ON	3RS ET	22.1798	113.9280	WINTER	NONE	P
22-Dec-22	4	1152	FP	1	SWL	3	75	ON	3RS ET	22.1596	113.9180	WINTER	NONE	P
22-Dec-22	5	1231	FP	1	SWL	3	361	ON	3RS ET	22.1901	113.9062	WINTER	NONE	S
28-Dec-22	1	1314	CWD	3	SWL	2	707	ON	3RS ET	22.1687	113.8874	WINTER	GILLNETTER	P
28-Dec-22	2	1355	CWD	5	SWL	2	235	ON	3RS ET	22.1818	113.8788	WINTER	GILLNETTER	P
28-Dec-22	3	1501	CWD	2	SWL	3	137	ON	3RS ET	22.1716	113.8534	WINTER	NONE	S
29-Dec-22	1	1051	CWD	6	WL	3	11	ON	3RS ET	22.2417	113.8427	WINTER	NONE	P
06-Jan-23	1	1048	CWD	5	NWL	3	98	ON	3RS ET	22.2845	113.8776	WINTER	NONE	P
06-Jan-23	2	1303	CWD	3	NWL	3	399	ON	3RS ET	22.3944	113.8973	WINTER	PAIR TRAWLER	P
09-Jan-23	1	1013	CWD	2	NWL	2	51	ON	3RS ET	22.3058	113.8700	WINTER	NONE	P
09-Jan-23	2	1056	CWD	2	NWL	2	19	ON	3RS ET	22.2958	113.8777	WINTER	NONE	P
09-Jan-23	3	1144	CWD	4	NWL	3	351	ON	3RS ET	22.3661	113.8778	WINTER	NONE	P
13-Jan-23	1	1106	FP	2	SWL	2	7	ON	3RS ET	22.1527	113.9276	WINTER	NONE	P
13-Jan-23	2	1220	FP	1	SWL	2	64	ON	3RS ET	22.1579	113.8989	WINTER	NONE	S
13-Jan-23	3	1228	CWD	1	SWL	2	57	ON	3RS ET	22.1703	113.9076	WINTER	NONE	P
13-Jan-23	4	1327	FP	2	SWL	2	60	ON	3RS ET	22.1494	113.8887	WINTER	NONE	S
13-Jan-23	5	1516	CWD	2	SWL	2	56	ON	3RS ET	22.1940	113.8498	WINTER	NONE	P
07-Feb-23	1	1109	FP	3	SWL	2	143	ON	3RS ET	22.1557	113.9258	WINTER	NONE	P
07-Feb-23	2	1200	FP	3	SWL	2	76	ON	3RS ET	22.1520	113.9175	WINTER	NONE	P
07-Feb-23	3	1209	FP	7	SWL	2	47	ON	3RS ET	22.1418	113.9107	WINTER	NONE	S
07-Feb-23	4	1232	FP	2	SWL	2	64	ON	3RS ET	22.1770	113.9058	WINTER	NONE	P
07-Feb-23	5	1258	FP	6	SWL	2	39	ON	3RS ET	22.1976	113.8973	WINTER	NONE	P
07-Feb-23	6	1307	FP	1	SWL	2	380	ON	3RS ET	22.1823	113.8972	WINTER	NONE	P
13-Feb-23	1	1034	FP	1	SWL	2	14	ON	3RS ET	22.1841	113.9358	WINTER	NONE	P
13-Feb-23	2	1036	FP	5	SWL	2	10	ON	3RS ET	22.1815	113.9359	WINTER	NONE	P

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
13-Feb-23	3	1254	FP	2	SWL	2	74	ON	3RS ET	22.1731	113.8965	WINTER	NONE	P
13-Feb-23	4	1321	FP	1	SWL	2	109	ON	3RS ET	22.1754	113.8879	WINTER	NONE	P
13-Feb-23	5	1335	FP	2	SWL	2	60	ON	3RS ET	22.2072	113.8878	WINTER	NONE	P
13-Feb-23	6	1417	FP	2	SWL	2	17	ON	3RS ET	22.1751	113.8690	WINTER	NONE	P
16-Feb-23	1	1036	CWD	16	NWL	3	38	ON	3RS ET	22.2750	113.8697	WINTER	NONE	P
16-Feb-23	2	1151	CWD	2	NWL	3	56	ON	3RS ET	22.3604	113.8777	WINTER	NONE	P
16-Feb-23	3	1202	CWD	7	NWL	3	87	ON	3RS ET	22.3668	113.8776	WINTER	NONE	P
16-Feb-23	4	1325	CWD	2	NWL	3	129	ON	3RS ET	22.3496	113.8975	WINTER	NONE	P
20-Feb-23	1	1118	CWD	2	NWL	3	120	ON	3RS ET	22.3748	113.8775	WINTER	NONE	P
21-Feb-23	1	1020	CWD	4	WL	3	52	ON	3RS ET	22.2804	113.8611	WINTER	NONE	P
21-Feb-23	2	1027	CWD	1	WL	3	109	ON	3RS ET	22.2780	113.8581	WINTER	NONE	P
21-Feb-23	3	1036	CWD	3	WL	3	493	ON	3RS ET	22.2724	113.8478	WINTER	NONE	S
21-Feb-23	4	1126	CWD	2	WL	2	37	ON	3RS ET	22.2319	113.8284	WINTER	NONE	P
21-Feb-23	5	1206	CWD	1	WL	3	97	ON	3RS ET	22.2055	113.8383	WINTER	NONE	P
22-Feb-23	1	0941	CWD	3	AW	3	42	ON	3RS ET	22.2947	113.8799	WINTER	NONE	P
22-Feb-23	2	1031	CWD	3	WL	3	284	ON	3RS ET	22.2693	113.8469	WINTER	NONE	P
22-Feb-23	3	1050	CWD	3	WL	3	48	ON	3RS ET	22.2599	113.8395	WINTER	NONE	P
22-Feb-23	4	1125	CWD	2	WL	3	70	ON	3RS ET	22.2443	113.8493	WINTER	NONE	S
22-Feb-23	5	1137	CWD	1	WL	3	217	ON	3RS ET	22.2420	113.8461	WINTER	NONE	P
22-Feb-23	6	1150	CWD	4	WL	3	313	ON	3RS ET	22.2415	113.8352	WINTER	NONE	P
22-Feb-23	7	1206	CWD	7	WL	3	270	ON	3RS ET	22.2316	113.8277	WINTER	NONE	P
22-Feb-23	8	1221	CWD	2	WL	3	29	ON	3RS ET	22.2236	113.8368	WINTER	PURSE SEINER	S
22-Feb-23	9	1236	CWD	3	WL	3	361	ON	3RS ET	22.2230	113.8298	WINTER	NONE	P
22-Feb-23	10	1308	CWD	4	WL	3	55	ON	3RS ET	22.2054	113.8381	WINTER	NONE	P

Abbreviations: STG# = Sighting Number; GP SZ = Group Size; BEAU = Beaufort Sea State; PSD = Perpendicular Distance (in metres); N/A = Not Applicable; DEC LAT = Latitude (WGS84 in Decimal), DEC LON = Longitude (WGS84 in Decimal); BOAT ASSOC. = Fishing Boat Association; P/S = Primary Transect / Secondary Transect

Notes:

CWD monitoring survey data of the two preceding survey months are presented for reference only. No relevant figure or text will be mentioned in this monthly EM&A report.

Sighting data of finless porpoise (FP) are presented for reference only. No relevant figure or text will be mentioned in the monthly EM&A report. All FP sightings are excluded in calculation.

Calculation of the encounter rates STG and ANI in the whole survey area (NEL, NWL, AW, WL, SWL):

A total of 434.909 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 20 on-effort sightings and total number of 72 dolphins from on-effort sightings were collected under such condition. Calculation of the encounter rates in February 2023 are shown as below:

Encounter Rate by Number of Dolphin Sightings (STG) in February 2023

$$STG = \frac{20}{434.909} \times 100 = 4.60$$

Encounter Rate by Number of Dolphins (ANI) in February 2023

$$ANI = \frac{72}{434.909} \times 100 = 16.56$$

Calculation of the running quarterly STG and ANI in the whole survey area (NEL, NWL, AW, WL, SWL):

A total of 1291.643 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 33 on-effort sightings and total number of 110 dolphins from on-effort sightings were collected under such condition. Calculation of the running quarterly encounter rates are shown as below:

Running Quarterly Encounter Rate by Number of Dolphin Sightings (STG)

$$STG = \frac{33}{1291.643} \times 100 = 2.55$$

Running Quarterly Encounter Rate by Number of Dolphins (ANI)

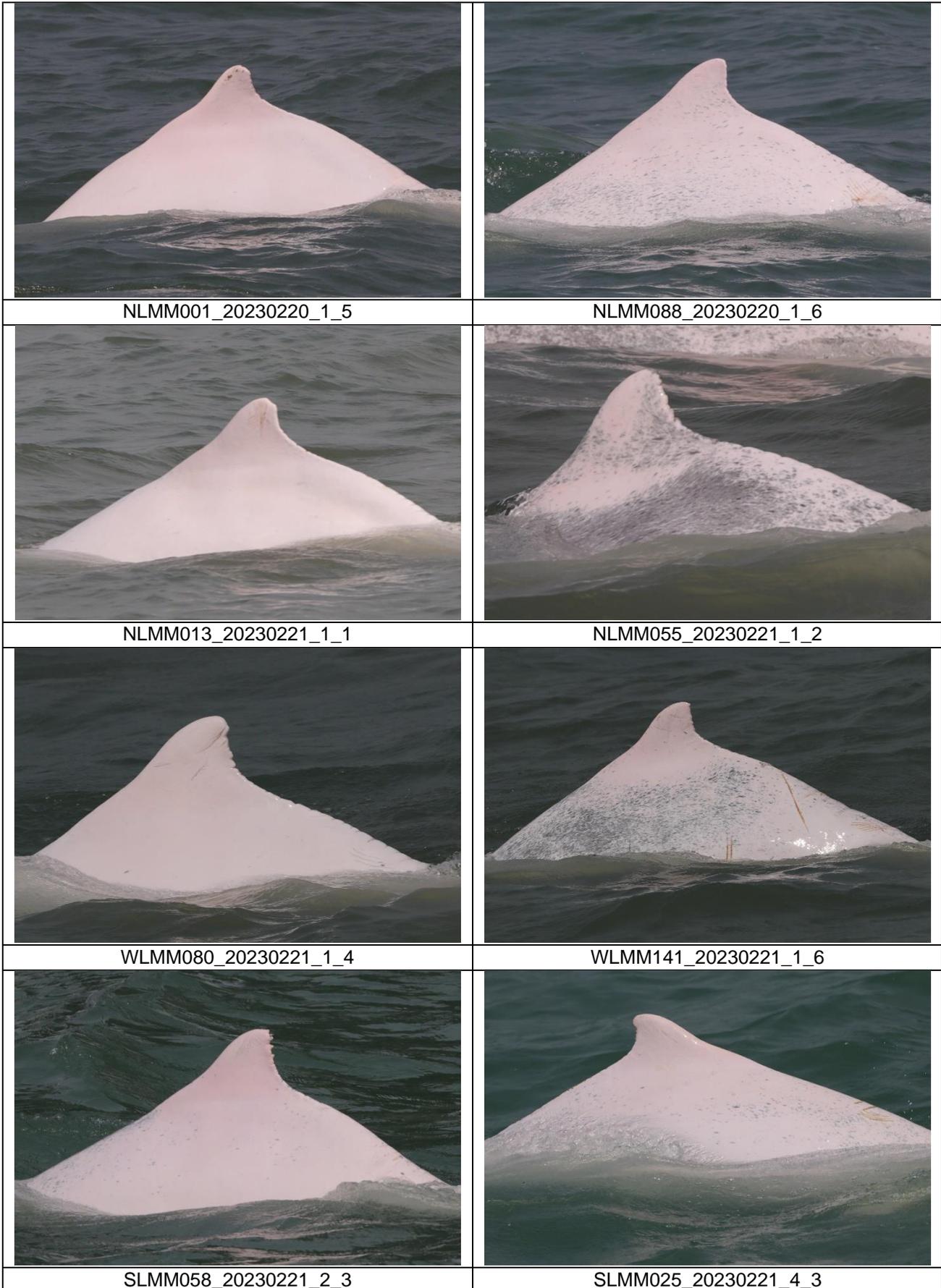
$$ANI = \frac{110}{1291.643} \times 100 = 8.52$$

CWD Small Vessel Line-transect Survey

Photo Identification

	
NLMM020_20230216_1_1	NLMM040_20230216_1_1
	
NLMM041_20230216_1_2	NLMM060_20230216_1_3
	
SLMM030_20230216_1_1	SLMM071_20230216_1_4
	
WLMM028_20230216_1_3	WLMM063_20230216_1_11

	
NLMM009_20230216_2_6	NLMM052_20230216_2_14
	
NLMM009_20230216_3_4	NLMM015_20230216_3_9
	
NLMM016_20230216_3_6	NLMM052_20230216_3_5
	
NLMM065_20230216_3_3	NLMM027_20230216_4_1



	
SLMM044_20230221_4_8	SLMM031_20230221_5_2
	
NLMM027_20230222_1_5	WLMM135_20230222_2_1
	
SLMM058_20230222_3_18	SLMM074_20230222_3_4
	
WLMM029_20230222_3_4	WLMM070_20230222_4_9

	
SLMM007_20230222_6_4	SLMM073_20230222_6_2
	
WLMM007_20230222_6_5	WLMM114_20230222_6_4
	
SLMM002_20230222_7_3	SLMM003_20230222_7_4
	
WLMM056_20230222_7_10	WLMM065_20230222_7_2

	
WLMM079_20230222_7_1	WLMM147_20230222_7_2
	
SLMM035_20230222_8_1	NLMM078_20230222_9_5
	
SLMM010_20230222_9_1	SLMM014_20230222_10_1
	
SLMM031_20230222_10_2	SLMM035_20230222_10_5

	
SLMM037_20230222_10_1	

Appendix D. Status of Environmental Permits and Licenses

	Description	Permit/ Reference No.	Status
EIAO	Environmental Permit	EP-489/2014	Approved on 7 Nov 2014

Contract No.	Description	Location	Permit/ Reference No.	Status
3206	Notification of Construction Work under APCO	Works area of 3206	409237	Receipt acknowledged by EPD on 25 Oct 2016
	Registration as Chemical Waste Producer	Site office of 3206	WPN 5213-951-Z4035-01	Completion of Registration on 18 Nov 2016
		Works area of 3206	WPN 5213-951-Z4035-02	Completion of Registration on 18 Nov 2016
	Construction Noise Permit (General Works)	Works Area of 3206	GW-RS0045-23	Valid from 30 Jan 2023 to 20 Jul 2023
	Bill Account for disposal	Works area of 3206	A/C 7026398	Approval granted from EPD on 16 Nov 2016
3302	Notification of Construction Work under APCO	Works area of 3302	484487	Receipt acknowledged by EPD on 20 Sep 2022
		Staging area of 3302	479482	Receipt acknowledged by EPD on 6 May 2022
			485105	Receipt acknowledged by EPD on 7 Oct 2022
			479481	Receipt acknowledged by EPD on 6 May 2022
	Registration as Chemical Waste Producer	Works area of 3302	5296-951-C4331-01	Completion of Registration on 4 Jan 2019
	Discharge License under WPCO	Works area of 3302	WT00034539-2019	Valid from 11 Mar 2020 to 31 Mar 2025
		Works area of 3302	WT00034541-2019	Valid from 14 Oct 2019 to 31 Oct 2024
	Bill Account for disposal	Works area of 3302	A/C 7032881	Approval granted from EPD on 8 Jan 2019
	Construction Noise Permit (General Works)	Works area of 3302	GW-RS0841-22	Valid from 20 Oct 2022 to 19 Apr 2023
			GW-RS0887-22	Valid from 3 Nov 2022 to 2 May 2023
3305	Notification of Construction Work under APCO	Works area of 3305	460857	Receipt acknowledged by EPD on 12 Oct 2020
	Registration as Chemical Waste Producer	Works area of 3305	5213-951-A3024-01	Completion of Registration on 13 Nov 2020
	Bill Account for disposal	Works area of 3305	A/C 7035360	Approval granted from EPD on 9 Oct 2019

Contract No.	Description	Location	Permit/ Reference No.	Status
	Construction Noise Permit (General Works)	Works area of 3305	GW-RS0965-22	Valid from 1 Dec 2022 to 31 May 2023
3306	Registration as Chemical Waste Producer	Works area of 3306	8335-951-C4434-01	Completion of Registration on 1 Apr 2020
	Bill Account for disposal	Works area of 3306	A/C 7035868	Approval granted from EPD on 27 Nov 2019
3307	Notification of Construction Work under APCO	Works area of 3307	487904	Receipt acknowledged by EPD on 30 Dec 2022
	Registration as Chemical Waste Producer	Works area of 3307	5211-951-P3379-01	Completion of Registration on 8 Jun 2020
	Discharge License under WPCO	Works area of 3307	WT00036926-2020	Valid from 31 Dec 2020 to 31 Dec 2025 The water discharge license was surrendered to EPD on 17 Feb 2023.
	Bill Account for disposal	Works area of 3307	A/C 7037129	Approval granted from EPD on 5 May 2020
	Construction Noise Permit (General Works)	Works area of 3307	GW-RS0586-22	Valid from 6 Aug 2022 to 5 Feb 2023
			GW-RS0066-23	Valid from 6 Feb 2023 to 5 Aug 2023
3308	Bill Account for disposal	Works area of 3308	A/C 7038988	Approval granted from EPD on 24 Nov 2020
3310	Notification of Construction Work under APCO	Works area of 3310	485057	Receipt acknowledged by EPD on 10 Dec 2021
	Registration as Chemical Waste Producer	Works area of 3310	5213-951-C4682-01	Completion of Registration on 21 Dec 2021
		Works area of 3310	5213-000-C3317-27	Completion of Registration on 31 Aug 2022
	Discharge License under WPCO	Works area of 3310	WT00039654-2021	Valid from 31 Dec 2021 to 31 Dec 2026
	Bill Account for disposal	Works area of 3310	A/C 7042793	Approval granted from EPD on 4 Jan 2022
	Construction Noise Permit (General Works)	Works area of 3310 (Existing airport)	GW-RS0997-22	Valid from 17 Nov 2022 to 14 May 2023
		Works area of 3310 (Reclamation area)	GW-RS1088-22	Valid from 15 Dec 2022 to 12 Jun 2023
		Tsing Chau Wan	GW-RW0703-22	Valid from 26 Nov 2022 to 25 May 2023
	Construction Noise Permit (Percussive Piling)	Works area of 3310 (Reclamation area)	PP-RS0017-22	Valid from 1 Oct 2022 to 31 Mar 2023
3402	Bill Account for disposal	Works area of 3402	A/C 7032577	Approval granted from EPD on 27 Nov 2018
3403	Notification of Construction Work under APCO	Works area of 3403	485039	Receipt acknowledged by EPD on 06 Oct 2022
		Works area of 3403 (with Area 17 and Area 15)	475369	Receipt acknowledged by EPD on 28 Dec 2021

Contract No.	Description	Location	Permit/ Reference No.	Status
	Registration as Chemical Waste Producer	Works area of 3403	WPN 5213-951-S4218-01	Completion of Registration on 9 Jan 2020
	Discharge License under WPCO	Works area of 3403	WT00035841-2020	Valid from 5 Jun 2020 to 30 Jun 2025 Approved variation on 9 Jun 2022
	Bill Account for disposal	Works area of 3403	A/C 7035267	Approval granted from EPD on 30 Sep 2019
	Construction Noise Permit (General Works)	Works area of 3403	GW-RS0655-22	Valid from 1 Sep 2022 to 28 Feb 2023
	Construction Noise Permit (Special Case)	Works area of 3403	GW-RS0137-23	Valid from 1 Mar 2023 to 31 May 2023
3404	Bill Account for disposal	Works area of 3404	A/C 7035158	Approval granted from EPD on 12 Sep 2019
3405	Notification of Construction Work under APCO	Works area of 3405	484926	Receipt acknowledged by EPD on 30 Sep 2022
	Registration as Chemical Waste Producer	Works area of 3405	WPN 5218-951-C4431-01	Completion of Registration on 12 Mar 2020
	Discharge License under WPCO	Works area of 3405	WT00037084-2020	Valid from 17 Mar 2021 to 31 Mar 2026
	Bill Account for disposal	Works area of 3405	A/C 7036796	Approval granted from EPD on 20 Mar 2020
	Construction Noise Permit (General Works)	Works area of 3405	GW-RS0788-22	Valid from 24 Sep 2022 to 19 Mar 2023
		Works area of 3405	GW-RS0154-23	Valid from 2 Mar 2023 to 27 Aug 2023
3408	Notification of Construction Work under APCO	Works area of 3408	461958	Receipt acknowledged by EPD on 17 Nov 2020
	Registration as Chemical Waste Producer	Works area of 3408	WPN 5218-951-B2621-01	Completion of Registration on 16 Jul 2021
	Discharge License under WPCO	Works area of 3408	WT00038836-2021	Valid from 27 Sep 2021 to 30 Sep 2026
	Bill Account for disposal	Works area of 3408	A/C 7039063	Approval granted from EPD on 2 Dec 2020
	Construction Noise Permit (General Works)	Works area of 3408	GW-RS0107-23	Valid from 16 Feb 2023 to 31 Jul 2023
3508	Notification of Construction Work under APCO	Works area of 3508	459017	Receipt acknowledged by EPD on 19 Aug 2020
			459469	Receipt acknowledged by EPD on 4 Sep 2020
		Works area of 3508 (Area J)	467132	Receipt acknowledged by EPD on 3 May 2021
	Registration as Chemical Waste Producer	Works area of 3508	WPN-5218-951-G2898-01	Completion of Registration on 28 Sep 2020
		Works area of 3508	WT00037209-2020	Valid from 28 Jan 2022 to 31 Mar 2026

Contract No.	Description	Location	Permit/ Reference No.	Status
	Discharge License under WPCO		WT00037523-2021	Valid from 24 Aug 2022 to 30 Apr 2026
			WT00037225-2020	Valid from 11 Jan 2022 to 30 Apr 2026
			WT00037549-2021	Valid from 1 Apr 2021 to 30 Apr 2026
	Bill Account for disposal	Works area of 3508	7038224	Approval granted from EPD on 8 Sep 2020
	Construction Noise Permit (General Works)	Works area of 3508	GW-RS1127-22	Valid from 2 Jan 2023 to 27 Jun 2023
		Works area of 3508	GW-RS1138-22	Valid from 30 Dec 2022 to 27 Jun 2023
		Works area of 3508	GW-RS1133-22	Valid from 6 Jan 2023 to 5 Jun 2023
	Construction Noise Permit (Special Case)	Works area of 3508	GW-RS1099-22	Valid from 1 Jan 2023 to 15 Feb 2023
		Works area of 3508	GW-RS0034-23	Valid from 22 Jan 2023 to 20 Apr 2023
		Works area of 3508	GW-RS0831-22	Valid from 12 Oct 2022 to 9 Apr 2023
		Works area of 3508	GW-RS0844-22	Valid from 14 Oct 2022 to 31 Mar 2023
		Works area of 3508	GW-RS0069-23	Valid from 1 Feb 2023 to 1 May 2023
3601	Notification of Construction Work under APCO	Works area of 3601	451762	Receipt acknowledged by EPD on 10 Dec 2019
	Registration as Chemical Waste Producer	Works area of 3601	WPN 7119-951-C4421-01	Completion of Registration on 9 Jan 2020
	Bill Account for disposal	Works area of 3601	A/C 7029991	Approval granted from EPD on 1 Feb 2018
	Construction Noise Permit (General Works)	Works area of 3601	GW-RS1059-22	Valid from 8 Dec 2022 to 7 May 2023
3602	Notification of Construction Work under APCO	Works area of 3602	421278	Receipt acknowledged by EPD on 18 Sep 2017
	Registration as Chemical Waste Producer	Works area of 3602	WPN 5296-951-N2673-01	Completion of Registration on 9 Oct 2017
		Site office of 3602	WPN 5296-951-N2673-02	Completion of Registration on 11 Dec 2017
	Bill Account for disposal	Works area of 3602	A/C 7028942	Approval granted from EPD on 6 Oct 2017
	Construction Noise Permit (General Works)	Works area of 3602	GW-RS0766-22	Valid from 28 Sep 2022 to 27 Mar 2023
3603	Notification of Construction Work under APCO	Site office of 3603	433604	Receipt acknowledged by EPD on 16 May 2018
	Registration as Chemical Waste Producer	Site office of 3603	5296-951-S4069-01	Completion of Registration on 22 Jan 2018
		Test Loop Site of 3603	8334-512-S4273-01	Completion of Registration on 17 Sep 2020

Contract No.	Description	Location	Permit/ Reference No.	Status
	Bill Account for disposal	Works area of 3603	A/C 7030002	Approval granted from EPD on 1 Feb 2018
	Construction Noise Permit (General Works)	Works area of 3603	GW-RS0335-22	Valid from 24 May 2022 to 23 Nov 2022
			GW-RS0922-22	Valid from 24 Nov 2022 to 23 May 2023
3721	Notification of Construction Work under APCO	Works area of 3721	448657	Receipt acknowledged by EPD on 02 Sep 2019
	Registration as Chemical Waste Producer	Works area of 3721	WPN 5218-951-C4412-01	Completion of Registration on 9 Dec 2019
	Bill Account for disposal	Works area of 3721	A/C 7035234	Approval granted from EPD on 25 Sep 2019
	Construction Noise Permit (General Works)	Works area of 3721	GW-RS0877-22	Valid from 23 Oct 2022 to 21 Feb 2023
			GW-RS0048-23	Valid from 30 Jan 2023 to 30 Jun 2023
3728	Registration as Chemical Waste Producer	Works area of 3728	WPN 5111-951-S3467-03	Completion of Registration on 7 May 2021
	Discharge License under WPCO	Works area of 3728	WT00037809-2021	Valid from 27 Jul 2021 to 31 Jul 2026
	Bill Account for disposal	Works area of 3728	A/C 7039409	Approval granted from EPD on 22 Jan 2021
3733	Notification of Construction Work under APCO	Works area of 3733	472772	Receipt acknowledged by EPD on 18 Oct 2021
	Registration as Chemical Waste Producer	Works area of 3733	474728	Receipt acknowledged by EPD on 9 Dec 2021
	Bill Account for disposal	Works area of 3733	7041945	Approval granted from EPD on 21 Oct 2021
	Construction Noise Permit (General Works)	Works area of 3733	GW-RS1028-22	Valid from 25 Nov 2022 to 22 May 2023
3801	Notification of Construction Work under APCO	Works area of 3801	488993	Receipt acknowledged by EPD on 2 Feb 2023
		Stockpiling area of 3801	454269	Receipt acknowledged by EPD on 12 Mar 2020
			450940	Receipt acknowledged by EPD on 13 Nov 2019
	Registration as Chemical Waste Producer	Works area of 3801	WPN 5296-951-C1169-53	Completion of Registration on 14 Aug 2018
	Discharge License under WPCO	Works area of 3801	WT00041429-2022	Valid from 16 Aug 2022 to 31 Aug 2027
		Stockpiling area of 3801	WT00037354-2021	Valid from 8 Mar 2021 to 31 Mar 2026
	Bill Account for disposal	Works area of 3801	A/C 7028254	Approval granted from EPD on 3 Jul 2017
	Construction Noise Permit (General Works)	Works area of 3801	GW-RS0744-22	Valid from 4 Sep 2022 to 28 Feb 2023

Contract No.	Description	Location	Permit/ Reference No.	Status
3802	Notification of Construction Work under APCO	Works area of 3802	458122	Receipt acknowledged by EPD on 14 Jul 2020
	Registration as Chemical Waste Producer	Works area of 3802	WPN 5218-951-G2895-01	Completion of Registration on 28 Aug 2020
		Works area of 3802 (Existing airport)	WPN 5218-951-G2945-01	Completion of Registration on 29 Sep 2020
	Discharge License under WPCO	Works area of 3802	WT00037032-2020	Valid from 25 May 2021 to 31 May 2026
		Works area of 3802 (Existing airport)	WT00039092-2021	Valid from 30 Nov 2021 to 31 Nov 2026
			WT00041807-2022	Valid from 3 Oct 2022 to 31 Oct 2027
	Bill Account for disposal	Works area of 3802	A/C 7037575	Approval granted from EPD on 15 Jun 2020
	Construction Noise Permit (General Works)	Works area of 3802	GW-RS0053-23	Valid from 30 Jan 2023 to 29 Jul 2023
			GW-RS0778-22	Valid from 24 Sep 2022 to 19 Mar 2023
		Works area of 3802 (Existing airport)	GW-RS1061-22	Valid from 5 Dec 2022 to 4 Jun 2023
Works area of 3802 (Ventilation building)		GW-RS0072-23	Valid from 1 Feb 2023 to 26 Jul 2023	
3804	Notification of Construction Work under APCO	Works area of 3804	487452	Receipt acknowledged by EPD on 14 Dec 2022
	Construction Noise Permit (General Works)	Works area of 3804 (3804/1A)	GW-RS0102-23	Valid from 15 Feb 2023 to 14 Aug 2023
	Registration as Chemical Waste Producer	Works area of 3804	WPN 5213-951-B2686-01	Completion of Registration on 4 Jan 2023
	Discharge License under WPCO	Works area of 3804	487903	Receipt acknowledged by EPD on 30 Dec 2022
	Bill Account for disposal	Works area of 3804	RW02507	Receipt acknowledged by EPD on 14 Dec 2022
3901A	Notification of Construction Work under APCO	Works area of 3901A	466883	Receipt acknowledged by EPD on 26 Apr 2021
	Air Pollution Control (Furnaces, Ovens and Chimneys) (Installation and Alteration) Regulations	Works area of 3901A	EP/RS/0000443 053	Approval granted on 11 Dec 2020
	Specified Process license under APCO	Works area of 3901A	L-3-261(1)	Valid from 14 Sep 2020 to 13 Sep 2024
	Landfill Disposal of Waste	Works area of 3901A	EP195/01/18	Valid from 20 June 2022 to 19 March 2023

Contract No.	Description	Location	Permit/ Reference No.	Status
	Concrete from Batching Plant			
	Registration as Chemical Waste Producer	Works area of 3901A	WPN 5218-951-K3400-01	Completion of Registration on 17 Jul 2020
	Bill Account for disposal	Works area of 3901A	A/C 7037889	Approval granted from EPD on 20 Jul 2020
	Construction Noise Permit (General Works)	Works area of 3901A	GW-RS0517-22	Valid from 5 Aug 2022 to 4 Feb 2023 Superseded by GW-RS0050-23
			GW-RS0050-23	Valid from 5 Feb 2023 to 4 Aug 2023
3901B	Notification of Construction Work under APCO	Works area of 3901B	466885	Receipt acknowledged by EPD on 26 Apr 2021
	Air Pollution Control (Furnaces, Ovens and Chimneys) (Installation and Alteration) Regulations	Works area of 3901B	EP/RS/0000438 488	Approval granted on 26 Jun 2020
	Specified Process license under APCO	Works area of 3901B	L-3-262(1)	Valid from 17 Nov 2020 to 16 Nov 2024
	Registration as Chemical Waste Producer	Works area of 3901B	WPN 5218-951-G2880-01	Completion of Registration on 17 Jan 2020
	Bill Account for disposal	Works area of 3901B	A/C 7032417	Approval granted from EPD on 13 Nov 2018
	Construction Noise Permit (General Works)	Works area of 3901B	GW-RS0552-22	Valid from 5 Aug 2022 to 4 Feb 2023 Superseded by GW-RS0070-23
			GW-RS0070-23	Valid from 5 Feb 2023 to 4 Aug 2023
3913	Specified Process license under APCO	Works area of 3913	L-15-040 (1)	Valid from 29 Mar 2021 to 28 Mar 2025
	Registration as Chemical Waste Producer	Works area of 3913	5213-951-S4405-01	Completion of Registration on 22 Jul 2022
	Bill Account for disposal	Works area of 3913	A/C 7044632	Approval granted from EPD on 18 Aug 2022
	Construction Noise Permit (General Works)	Works area of 3913	GW-RS0799-22	Valid from 24 Sep 2022 to 19 Mar 2023

Appendix E. Cumulative Statistics on Exceedances, Environmental Complaints, Notification of Summons and Status of Prosecutions

Statistics for Exceedances for 1-hour TSP, Noise, Water, Waste, CWD Monitoring

		Total no. recorded in the reporting period	Total no. recorded since the project commenced
1-hr TSP	Action	0	0
	Limit	0	0
Noise	Action	0	0
	Limit	0	0
Water	Action	0	0
	Limit	0	0
Waste	Action	0	1
	Limit	0	0
CWD	Action	0	0
	Limit	0	0

Remark: Exceedances, which are not project related, are not shown in this table.

Statistics for Complaints, Notifications of Summons and Prosecutions

Reporting Period	Cumulative Statistics		
	Complaints	Notifications of Summons	Prosecutions
This reporting period	0	0	0
From 28 December 2015 to end of the reporting period	58	2	2

Appendix F. Data of SkyPier HSF Movements to/from Macau (between 1 and 28 February 2023)

Data of SkyPier HSF Movements to/from Macau (between 1 and 28 February 2023)

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [YFT – Macao (Taipa)]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
3-Feb	10:23	8S192	YFT	Departure	13.5	-	-
3-Feb	15:39	8S913	YFT	Arrival	11.7	-	-
5-Feb	9:42	8S192	YFT	Departure	11.5	<= 5	< 1min
5-Feb	15:33	8S913	YFT	Arrival	13	-	-
10-Feb	10:00	8S192	YFT	Departure	12.8	-	-
10-Feb	15:36	8S913	YFT	Arrival	13.2	-	-
12-Feb	9:53	8S192	YFT	Departure	11.4	-	-
12-Feb	15:33	8S913	YFT	Arrival	12.2	-	-
17-Feb	9:47	8S192	YFT	Departure	10.7	-	-
17-Feb	15:35	8S913	YFT	Arrival	11.1	-	-
19-Feb	9:40	8S192	YFT	Departure	12.3	-	-
19-Feb	15:28	8S913	YFT	Arrival	12.4	-	-
24-Feb	9:41	8S192	YFT	Departure	11.4	-	-
24-Feb	15:26	8S913	YFT	Arrival	12.4	-	-
26-Feb	9:40	8S192	YFT	Departure	12.1	-	-
26-Feb	15:33	8S913	YFT	Arrival	12.1	-	-

Follow-up on instantaneous speeding

Referring to the data of SkyPier HSF movements in February 2023, instantaneous speeding (i.e. a sudden change in speed at over 15 knots for a short period of time) within the SCZ was recorded from 1 HSF movement of which the duration of the instantaneous speeding case was less than 1 minute. The AIS data and ferry operator response showed that the case was due to increasing the passing distance between own vessel and the large vessel to collision. The captain had reduced speed and maintained the speed at less than 15 knots after the incident.