

Environmental Permit No. FEP-01/571/2019/A

Proposed Golf Course Development at Tai Po Lot No. 246 Shuen Wan

Environmental Team Leader Certification

Reference Document

Document to be Certified: Monthly EM&A Report (Oct 2024)

Date of Report: November 2024

Date received by ETL: 11 November 2024

Reference EP Condition

Environmental Permit Condition: 3.5

The Permit Holder shall submit 1 hard copy and 1 electronic copy of Monthly EM&A Reports for the construction and operation phases of the Project to the Director, within 2 weeks after the end of the reporting month. The monthly EM&A Reports shall include an executive summary of all environmental audit results, together with actions taken in the event of non-compliance (exceedances) of the environmental quality performance limits (Action and Limit Levels), complaints received and emergency events relating to violation of environmental legislation (such as illegal dumping). The submissions shall be certified by the ET Leader and verified by the IEC as having complied with the requirements as set out in the EM&A Manual before submission to the Director. Additional copies of the Monthly EM&A Reports shall be provided upon request by the Director.

ETL Certification

I hereby certify that the above reference report complies with the above referenced condition of FEP-01/571/2019/A.



Mr. Calvin Leung
Environmental Team Leader

Date: 11 November 2024

Environmental Permit No. FEP-01/571/2019/A

Proposed Golf Course Development at Tai Po Lot No. 246 Shuen Wan

Independent Environmental Checker Verification

Reference Document

Document to be Verified: Monthly EM&A Report (Oct 2024)

Date of Report: November 2024

Date received by IEC: 11 November 2024

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IEC Verification

I hereby verify that the above reference report complies with the above referenced condition of FEP-01/571/2019/A.



Mr. Adi Lee
Independent Environmental Checker

Date: 11 November 2024

Tai Po Golf Club Limited

Proposed Golf Course Development at Tai Po Lot No. 246 Shuen Wan

Monthly EM&A Report No. 1 (for Oct 2024)

Reference: 289499-Monthly EM&A Report-001-01

This report takes into account the particular instructions and requirements of our client. It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 289499

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Executive Summary

This Monthly Environmental Monitoring and Audit (EM&A) Report is prepared for the proposed golf course development at Tai Po Town Lot. 246, Shuen Wan. This is the 1st Monthly E&MA Report for the Project which summaries the findings of the EM&A programme during the reporting period from 14th October 2024 to 31st October 2024.

Key Construction Activities in the Reporting Period

The construction activities of the project carried out in the reporting period are site preparation works including vegetation cutting, vegetation trimming, and site formation works.

Breaches of Action and Limit Levels

No Action and Limit Level exceedance was recorded for air quality and construction noise monitoring in the reporting month. 27 Action Level exceedances for Dissolved Oxygen (DO) and 32 Limit Level exceedances for Suspended Solids (SS) in marine water quality monitoring were recorded in the reporting month. All exceedances were not project related as no marine construction works being carried out according to the Environmental Permit (EP) Condition 2.38. In addition, no marine construction works observed by the Environmental Team during weekly site inspections and marine water samplings throughout the reporting period.

No corrective actions were required according to the Event-Action Plans.

Complaint, Notification of Summons and Successful Prosecution

No complaints were received in the reporting period. No notification of summons and successful prosecutions were recorded in the reporting period.

Reporting Changes

Not applicable.

Future Key Issues

The main works anticipated in the upcoming month are vegetation cutting, vegetation trimming, and site formation works.

1. Introduction

1.1 Project Background

- 1.1.1.1 In June 2017, the Chief Executive in Council has agreed in principle to the government proposal to grant a piece of land in Tai Po in exchange for its private land in Sha Lo Tung which has high ecological values. Under the non-in-situ land exchange proposal, the piece of land at the Shuen Wan Restored Landfill in Tai Po will be granted and the Sha Lo Tung site would be considered by government for active conservation management to avoid degradation and damage for long-term public enjoyment. This land exchange proposal is a unique, exceptional and isolated case, adding the idea is technically feasible as the private land ownership is largely unified under one entity and both Sha Lo Tung and the land at the landfill site, which has been planned for golf course development, are located in Tai Po, as shown in Figure 1 of FEP-01/571/2019/A (extracted as **Appendix 1.1**). The non-in-situ land exchange proposal has been completed in July 2022, and the Project Site has been handed over to the Project Proponent (PP).
- 1.1.1.2 The Project is a Designated Project (DP) under Environmental Impact Assessment Ordinance (EIAO), and an Environmental Impact Assessment (EIA) study was conducted in 2017. The *Shuen Wan Golf Course EIA Report* was approved by the Director of Environmental Protection (DEP) on 5 July 2019 (AEIAR-221/2019) (“the approved EIA Report”) with the Environmental Permit (EP, EP-571/2019) issued on 20 September 2019. An application of Further Environmental Permit (FEP) has been made by Tai Po Golf Club Limited (the PP) and FEP was issued on 29 November 2022 (FEP-01/571/2019). Besides, surrender of EP-571/2019 has been applied and approved on 9 December 2022. In addition, an application for variation of EP has been made on 16 May 2023 to amend FEP-01/571/2019, and the amended EP was issued on 6 June 2023 (FEP-01/571/2019/A).
- 1.1.1.3 In August 2023, Fugro Technical Services Limited (FTS) was commissioned to undertake the Environmental Team services for the construction of Shuen Wan Golf Course (the Project). The construction works and EM&A programme were commenced on 14th October 2024.

1.2 Purpose of the EM&A Report

- 1.2.1.1 The monthly EM&A report is prepared in accordance with the Clause 3.5 of the Environmental Permit No. FEP-01/571/2019/A. This monthly EM&A report presents the monitoring works conducted from 14 October 2024 to 31 October 2024. The purpose of this report is to summarise the findings in the EM&A of the project over the reporting period.

1.3 Structure of the EM&A Report

- 1.3.1.1 The structure of the EM&A Report is given below:
- | | |
|------------------|---|
| Section 1 | Introduces the project background and purposes of this EM&A report. |
| Section 2 | Presents the project organisation, construction programme and activities and status of environmental licenses, notification and permits of this reporting period. |

- Section 3** Presents the EM&A requirements of construction dust, construction noise, water quality, waste management, landfill gas, ecology, fisheries, landscape and visual.
- Section 4** Presents the implementation status of environmental mitigation measures.
- Section 5** Presents the monitoring and audit results of construction dust, construction noise, water quality, waste management, landfill gas, ecology, fisheries, and landscape and visual.
- Section 6** Presents the findings of environmental site inspections of this reporting period.
- Section 7** Reports the monitoring exceedances, environmental non-compliances, environmental complaints, environmental summons, and successful prosecutions (if any).
- Section 8** Presents key construction activities, related environmental issues anticipated in the next reporting month. The monitoring schedule for the next reporting period is also provided.
- Section 9** Summarises and concludes the findings. Recommendations are included where appropriate.

2. Project Information

2.1 Project Organization

2.1.1.1 The Project's organization structure is shown in **Appendix 2.1**. Contact details of the key personnel are summarized in **Table 2.1**.

Table 2.1 - Contact Information of Key Personnel

Party	Position	Name	Telephone
Project Management Team (Tai Po Golf Club Limited)	Senior Project Manager	Mr. Erik Chan	2638 8270
The Contractor (CR-Tapbo JV)	Managing Director	Mr. James Chow	9342 7607
Specialist Contractor (Hong Kong Landfill Restoration Group Limited)	Project Manager	Mr. Kenny Yu	2709 6992
Environmental Team (ET) (Fugro Technical Services Limited)	Environmental Team Leader	Mr. Calvin Leung	3565 4441
Ecologist (Ecosystems Limited)	Project Ecologist	Dr. Klinsmann Cheung	2553 0468
Registered Landscape Architect (H Plus Limited)	Director	Ms. Siuman Hung	2143 6721
Independent Environmental Checker (IEC) (Meinhardt Infrastructure and Environment Limited)	Technical Director	Mr. Adi Lee	2859 5443
Independent Environmental Checker (IEC) (Meinhardt Infrastructure and Environment Limited)	Senior Environmental Consultant	Ms. Yuk Lam	2859 5490
Independent Landfill Consultant (Meinhardt Infrastructure and Environment Limited)	Landfill Designer	Mr. Steve Mok	2859 5490
Independent Landfill Consultant (Meinhardt Infrastructure and Environment Limited)	Geotechnical Engineer	Mr. Roger Lee	2859 5490

2.2 Construction Programme and Activities

2.2.1.1 During the reporting period, construction works undertaken by the Contractor involved site preparation works including vegetation cutting, vegetation trimming, and site formation works. The project is now undergoing Phase I and the Construction Phasing Plan is attached in **Appendix 2.2**. The construction programme provided by the Contractor is attached in **Appendix 2.3**.

2.3 Status of Environmental Licences, Notifications and Permits

2.3.1.1 The current environmental licenses, notifications and/or permits are presented in **Table 2.2**.

Table 2.2 - Environmental Licenses, Notifications and Permits

Licenses/Notifications/Permits	Ref. No.	Validity Period	Remarks
Environmental Permit	FEP-01/571/2019/A	Throughout the Contract	Permit granted on 6 th June 2023

Licenses/Notifications/Permits	Ref. No.	Validity Period	Remarks
Notification Pursuant to Air Pollution (Construction Dust) Regulation	-	-	The contractor had applied to EPD on 3 rd September 2024 with reference number 10008759 and approval is pending.
Billing Account for Disposal of C&D Waste	Billing Account Number: 705255018	Throughout the Contract	-
Chemical Waste Producer Registration	-	-	The contractor had applied to EPD on 3 rd September 2024 with reference number 10008758 and approval is pending.
Water Discharge License	-	-	The contractor had applied to EPD on 3 rd September 2024 with reference number 100087587 and approval is pending.

2.4 Status of Submissions under Environmental Permit

2.4.1.1 The status of submissions under the Environmental Permit (EP) before and during the reporting period is presented in **Table 2.3**.

Table 2.3 - Status of Submissions under Environmental Permit

EP Condition	Submission	Status
FEP-01/571/2019/A		
2.1	Employment of Environmental Team (ET) • Minimum on-site time of ET	Approved
2.4	Employment of Ecologist	
2.5	Employment of Registered Landscape Architect (RLA)	
2.6	Employment of Independent Environmental Checker (IEC) • Minimum on-site time of IEC and the supporting team	
2.7	Proposal of IEC Reporting Mechanism	
2.10	Employment of Independent Landfill Consultant	
2.11	Employment of Specialist Contractor	
2.14	Tree Preservation, Transplantation and Compensation Plan (TPTCP)	
2.15	Construction Phasing Plan (CPP)	
2.17	Construction Dust Management Plan	
2.19	Land Contamination Assessment	
2.12	Management Organisations	Approved for the second version.
2.18	Powered Mechanical Equipment Restriction Zones Review Report (PMERZRR)	No submission is required.
2.13	Tree Survey Report	Approved for the first version.

EP Condition	Submission	Status
2.14	Tree Preservation, Transplantation and Compensation Plan	An updated version is pending for approval.
2.22	Updated Construction Phase Landfill Gas Hazard Assessment	Pending for approval
2.20	Design Plan	Under updating for approval
2.21	Works Plan	Resubmitted to Environmental Protection Department (EPD) for approval in October 2024.
2.23	Landscape and Visual Mitigation Plan	

3. Environmental Monitoring and Audit Requirements

3.1 Construction Dust Monitoring

3.1.1 Monitoring Stations

3.1.1.1 The Dust Monitoring Locations are summarised in **Table 3.1** and shown in **Appendix 3.1**.

Table 3.1 - Dust Monitoring Locations

Monitoring Station ID	Location
DM-1	Environmental Protection Department (EPD) Site Office
DM-2a	Near Fortune Garden Entrance
DM-3a	Outside Hung Hing Printing Centre

3.1.2 Monitoring Requirements and Schedule

3.1.2.1 In accordance with the EM&A Manual, 1-hour total suspended particulate (TSP) levels at the three air quality monitoring stations were established. **Table 3.2** summarizes the parameter and frequency of air quality monitoring. The detailed monitoring schedule is shown in **Appendix 3.2**. The Action and Limit Levels of the air quality monitoring are provided in **Table 3.3**. The Event and Action Plan for air quality during construction phase is given in **Appendix 3.3**.

Table 3.2 - Monitoring Parameter and Frequency (Air Quality)

Parameter	Frequency
1 hour TSP	1-hour sampling, at least 3 times per day for every 6 days.

Table 3.3 - Action and Limit Levels for 1-hour TSP

Monitoring Stations	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
DM-1	283	500
DM-2a	276	500
DM-3a	270	500

3.1.3 Monitoring Equipment

1- hour TSP

3.1.3.1 Portable direct reading dust meter was used to carry out the 1-hour TSP monitoring. The equipment used for TSP monitoring is summarized in **Table 3.4**.

Table 3.4 - 1-hr TSP Monitoring Equipment

Equipment	Manufacturer/ Brand	Model
Portable TSP Monitors	Sibata	LD-5R

Maintenance and Calibration

3.1.3.2 The dust meter should be calibrated at 1-year intervals. The calibration certificates are presented in **Appendix 3.4**.

3.1.4 Monitoring Procedure

3.1.4.1 The measuring procedures of the dust meter are in accordance with the Manufacturer's instruction manual as follows:

- 1) Pull up the air sampling inlet cover;
- 2) Change the Mode 0 to BG with once;
- 3) Push Start/Stop switch once;
- 4) Turn the knob to SENSI.ADJ and press it;
- 5) Push Start/Stop switch once;
- 6) Return the knob to the position MEASURE slowly;
- 7) Push the timer set switch to set measuring time;
- 8) Remove the cap and make a measurement;

3.2 Construction Noise Monitoring

3.2.1 Monitoring Stations

3.2.1.1 The Noise Monitoring Locations are summarised in **Table 3.5** and shown in **Appendix 3.1**.

Table 3.5 - Noise Monitoring Locations

Monitoring Station ID	Location	Type of Measurement
NM-1a	Near Fortune Garden Entrance	Façade
NM-2	Village House at 53 Ting Kok Road	Façade

3.2.2 Monitoring Requirements and Schedule

3.2.2.1 In accordance with the EM&A Manual, two noise monitoring stations were established. **Table 3.6** summarizes the parameter and frequency of noise monitoring. The detailed monitoring schedule is shown in **Appendix 3.2**. The Action and Limit Levels of the noise monitoring are provided in **Table 3.7**. The Event and Action Plan for noise during construction phase is given in **Appendix 3.3**.

Table 3.6 - Monitoring Parameter and Frequency (Noise)

Parameter	Frequency
L_{eq} , L_{10} and L_{90} (A-weighted)	Daily: L_{Aeq} (30 mins) between 0700 and 1900 Monday to Saturday for every week

Table 3.7 - Action and Limit Levels for Noise Impact Monitoring

Time Period	Action Level	Limit Level
0700 - 1900 hours on normal weekdays	When one documented complaint is received	75 dB(A) *

Note:

If works are to be carried out during restricted hours, the conditions stipulated in the construction noise permit issued by the Noise Control Authority have to be followed.

3.2.3 Monitoring Equipment

3.2.3.1 The equipment used for noise monitoring is summarized in **Table 3.8**:

Table 3.8 - Noise Monitoring Equipment

Manufacturer/ Brand	Model	Equipment
Casella	CEL-63X Series	Sound Level Meter
Casella	CEL-120/1	Sound Calibrator
Benetech	GM816	Wind Speed Anemometer

3.2.4 Monitoring Procedure

Measuring Methodology

3.2.4.1 The noise monitoring procedures are in accordance with the Manufacturer's instruction Manual as follows:

- The monitoring station will be set at a point 1m from the exterior of the sensitive receivers building façade and set at a position 1.2m above the ground;
- The battery condition will be checked to ensure good functioning of the meter;
- Parameters such as frequency weighting, the time weighting and the measurement time will be set as follows:
 - Frequency weighting: A
 - Time weighting: Fast
 - Measurement time: continue 5 minutes interval
- Prior to and after noise measurement, the meter shall be calibrated using the calibrator for 94.0 dB at 1000 Hz. If the difference in the calibration level before and after measurement is more than 1.0 dB, the measurement will be considered invalid and repeat of noise measurement is required after re-calibration or repair of the equipment;
- The wind speed at the monitoring station shall be checked with the portable wind meter. Noise monitoring should be cancelled in the presence of fog, rain, and wind with a steady speed exceeding 5 m/s, or wind with gusts exceeding 10 m/s;
- Noise measurement should be paused during periods of high intrusive noise if possible and observation shall be recorded when intrusive noise is not avoided; and
- At the end of the monitoring period, the A-weighted L_{eq} , L_{10} and L_{90} shall be recorded. In addition, site conditions and noise sources should be recorded on a standard record sheet.

Maintenance and Calibration

3.2.4.2 The Sound Level Meter (SLM) and Sound Level Calibrator should be calibrated at 1-year intervals. The calibration certificates are presented in **Appendix 3.4**.

3.3 Water Quality Monitoring

3.3.1 Monitoring Stations

3.3.1.1 The Water Quality Monitoring Locations are summarised in **Table 3.9** and shown in **Appendix 3.1**.

Table 3.9 - Proposed water quality monitoring locations

Monitoring Station ID	Description	Easting	Northing
WM-1	South of Project Site near Coral Sites	838145	834573
WM-2	West of Yim Tin Tsai Fish Culture Zone	839362	834856

3.3.2 Monitoring Requirements and Schedule

3.3.2.1 In accordance with the EM&A Manual, two water quality monitoring stations were established. **Table 3.10** summarizes the parameter and frequency of water quality monitoring. The detailed monitoring schedule is shown in **Appendix 3.2**. The Action and Limit Levels of the water quality monitoring are provided in **Table 3.11**. The Event and Action Plan for water quality during construction phase is given in **Appendix 3.3**.

Table 3.10 - Monitoring Parameters and Frequencies (Water Quality)

Parameter	Frequency ⁽¹⁾
In-situ Measurements ⁽²⁾	
Dissolved oxygen (DO)	3 days in a week
Dissolved oxygen saturation (DO%)	
Temperature	
Turbidity	
Salinity	
pH	
Laboratory Measurements ⁽²⁾	
Suspended Solids (SS)	3 days in a week

Notes:

[1] Intervals between 2 sets of monitoring not less than 36 hours.

[2] Monitoring at mid-flood and mid-ebb tides.

Table 3.11 - Action and Limit Levels for Water Quality Monitoring

Parameter(s) Station(s)	Construction Phase							
	DO (S&M) in mg/L		DO (B) in mg/L		SS (depth-averaged) in mg/L		Turbidity (depth-averaged) in NTU	
	AL	LL	AL	LL	AL	LL	AL	LL
Ebb Tide								
WM-1	6.23	4.00	5.06	2.00	3	4	1.00	1.21
WM-2	6.10	5.00	4.92	2.00	3	3	1.31	1.54
Flood Tide								
WM-1	6.36	4.00	5.46	2.00	2	3	0.96	1.12
WM-2	6.23	5.00	5.15	2.00	3	3	1.40	1.47

3.3.2.2 In general, where the difference in value between the first and second in-situ measurement of DO or turbidity parameters is more than 25% of the value of the first reading, the reading shall be discarded, and further readings should be taken.

3.3.3 Monitoring Equipment

- 3.3.3.1 The limits of detection for the in-situ equipment used and laboratory measurements are shown in **Table 3.12**.

Table 3.12 - Detection Limits and Precision for Water Quality Determinants

Parameters ⁽¹⁾	Unit	Measuring Equipment/Method	Detection Range	Accuracy
In-situ Measurements ⁽²⁾				
Dissolved oxygen (DO)	mg/L	YSI EXO-1 Multi-parameter Water Quality Meter	DO: 0-50mg/L	0 to 20mg/L±1% 20 to 50mg/L±5%
Dissolved oxygen saturation (DO%)	%	YSI EXO-1 Multi-parameter Water Quality Meter	0-500%	0 to 200%±1% 200 to 500% ±5%
Salinity	ppt	YSI EXO-1 Multi-parameter Water Quality Meter	0 to 70 ppt	±1.0%
Water temperature	°C	YSI EXO-1 Multi-parameter Water Quality Meter	-5 to 50°C	-5 to 35°C±0.01°C 35 to 50°C±0.05°C
pH	unit	YSI EXO-1 Multi-parameter Water Quality Meter	0 to 14 pH units	±0.2
Turbidity	NTU	YSI EXO-1 Multi-parameter Water Quality Meter	0-4000 NTU(FNU)	±2% (0 to 999) ±5% (1000 to 4000)
Volume	L	Water Sampler (Acrylic Beta Water Bottle Kit, Horizontal, 3.2L / 4.2L)	NA	NA
Positioning	m	DGPS (Simrad MX521B Smart Antenna with Simrad MX610 CDU)	NA	1m
Water Depth	m	Echo Sounder (Garmin ECHO 101)	Maximum depth: 1,500 feet (457.2 m)	±0.1m
Laboratory Measurement				
Suspended Solid (SS)	mg/L	APHA 2540-D	0.5 mg/L (Reporting Limit)	N/A

Notes:

[1] SS - Suspended Solid

[2] In-situ duplicate reading with ≤25% difference would be recalibrated.

Calibration

- 3.3.3.2 All in-situ monitoring instrument shall be checked, calibrated and certified by an environmental laboratory accredited under HOKLAS before use. Responses of sensors and electrodes shall be checked with certified standard solutions before each use. Wet bulb calibration for a DO meter shall be carried out before measurement at each monitoring location.
- 3.3.3.3 The calibration certificates are presented in **Appendix 3.4**.

3.3.4 Monitoring Procedure

Dissolved Oxygen, Dissolved Oxygen Saturation and Temperature Measuring Equipment

- 3.3.4.1 The dissolved oxygen (DO) measuring instruments should be portable and weatherproof. The equipment should complete with cable and sensor, and DC power source. It should be capable of measuring:

- a dissolved oxygen level in the range of 0-20 mg/l and 0-200% saturation; and
- a temperature of 0-45 degree Celsius.

3.3.4.2 The equipment should have a membrane electrode with automatic temperature compensation complete with a cable.

3.3.4.3 Should salinity compensation not be built-in to the DO equipment, in-situ salinity should be measured to calibrate the DO measuring instruments prior to each measurement.

Turbidity Measuring Equipment

3.3.4.4 The turbidity measuring instruments should be portable and weatherproof with DC power source. It should have a photoelectric sensor capable of measuring turbidity level between 0 – 1000 NTU (for example, Hach model 2100P or an approved similar instrument).

Salinity Measuring Equipment

3.3.4.5 A portable salinometer capable of measuring salinity in the range of 0 – 40 parts per thousand (ppt) should be provided for measuring salinity of the water at each monitoring location.

pH Measuring Equipment

3.3.4.6 A portable pH meter of measuring a pH range between 0.0 and 14.0 shall be provided under the specified conditions (for example Orion Model 250A or an approved similar equipment).

Positioning Equipment

3.3.4.7 A hand-held or boat-fixed type digital Differential Global Positioning System (DGPS) with way point bearing indication and Radio Technical Commission for Maritime (RTCM) Type 16 error message “screen pop-up” facilities (for real-time auto-display of error messages and DGPS corrections from the Hong Kong Hydrographic Office), or other equipment instrument of similar accuracy, should be provided and used during marine water monitoring to ensure the monitoring vessel is at the correct location before taking measurements.

Water Depth Detector

3.3.4.8 A portable, battery-operated echo sounder should be used for water depths determination at each designated monitoring station. The detector can either be hand-held or affixed to the bottom of the work boat, if the same vessel is to be used throughout the monitoring programme.

Water Sampling Equipment

- 3.3.4.9 Proper water samplers are required for monitoring. It should comprise a transparent PVC cylinder, with a capacity of not less than 2 litres, which can be effectively sealed with latex cups at both ends. The sampler should have a positive latching system to keep it open to prevent premature closure until released by a messenger when the sampler is at the selected water depth (for example, Kahlsico Water Sampler or an approved similar instrument).

Sample Containers and Storage

- 3.3.4.10 Water samples for Suspended Solids (SS) should be stored in high density polythene (HDPE) bottles with no preservative added, packed in ice (cooled to 4°C without being frozen) and shipment to the testing laboratory. The samples shall be delivered to the laboratory of collection and be analysed as soon as possible after collection.
- 3.3.4.11 The container types for holding water samples are presented in **Table 3.13**.

Table 3.13 - Container Types for Holding Water Samples

Test Parameter ⁽¹⁾	Container Type	Preservative
SS	HDPE Bottle	No

Note:

[1] SS - Suspended Solid

Calibration of In-Situ Instruments

- 3.3.4.12 The pH meter, DO meter and turbidimeter shall be checked and calibrated before use. DO meter and turbidimeter shall be certified by a laboratory accredited under HOKLAS or any other international accreditation scheme, and subsequently re-calibrated on quarterly basis (e.g. 3 monthly intervals) throughout all stages of the water quality monitoring. Responses of sensors and electrodes should be checked with certified standard solutions before each use. Wet bulb calibration for a DO meter shall be carried out before measurement at each monitoring station.

Back-up Equipment

- 3.3.4.13 Sufficient stocks of spare parts shall be maintained for replacements when necessary. Backup monitoring equipment shall also be made available so that monitoring can proceed uninterrupted even when some equipment is under maintenance, calibration, malfunction, etc.

Laboratory Measurement / Analysis

- 3.3.4.14 At least 3 replicate samples from each independent sampling event are required for the measurement (i.e. SS) which shall be carried out in a HOKLAS or international accredited laboratory.
- 3.3.4.15 Fugro Technical Services Limited (Registration No. HOKLAS 015) has been appointed to conduct the laboratory measurement or analysis of water sample in this project.

- 3.3.4.16 If the sampling water depth is more than 6m, sampling should be conducted at three water depths which are 1m below water surface, mid-depth, and 1m above the seabed. If the sampling water depth is less than 6m, the mid-depth may be omitted. If the water depth is less than 3m, only the mid-depth may be monitored.
- 3.3.4.17 Sufficient water samples shall be collected at the monitoring stations for carrying out the laboratory measurement and analysis. The laboratory determination work shall start within 24 hours after the collection of water samples.

3.4 Waste Management

3.4.1 Monitoring Requirements

- 3.4.1.1 Regular audits and site inspections as detailed in **Section 6** of this report should be carried out during construction phase by the Environmental Team to ensure that the recommended good site practices and other mitigation measures recommended in the EIA Report and in **Section 4** of this report are properly implemented by the Contractor. The audits should concern all aspects of on-site waste management practices including waste generation, storage, recycling, transport and disposal. Apart from site inspection, documents including licenses, permits, disposal and recycling records should be reviewed and audited for compliance with the legislation and contract requirements.

3.5 Landfill Gas Monitoring

3.5.1 Monitoring Requirements

- 3.5.1.1 Periodically during ground-works construction, the works area should be monitored by the site Safety Officer for oxygen, methane and carbon dioxide gas concentrations using appropriately calibrated portable gas detection equipment. Routine monitoring should be carried out in all excavations, manholes, chambers and any other confined spaces that may have been created. The monitoring frequency and areas to be monitored should be set down prior to commencement of ground-works by the Safety Officers. The monitoring requirement of excavations stated in the Landfill Gas Hazard Assessment Guidance Note (EPD/TR8/97) sections 8.25 to 8.27 will be followed. All measurements of LFG should be recorded and documented by a standard record form to be approved by the Environmental Protection Department (EPD). The form will detail the location, time of monitoring and equipment used, together with the gas concentrations measured to ensure all relevant data are recorded. LFG monitoring during construction phase will be reported in the monthly EM&A Reports.

- 3.5.1.2 The gas detection equipment should be appropriately calibrated and able to measure the following gases in the ranges indicated below:

Methane	0-100% LEL and 0-100% v/v
Carbon dioxide	0-100%
Oxygen	0-21%

- 3.5.1.3 Monitoring should be performed properly to make sure that the area is free of LFG before any man enters into the area.

- 3.5.1.4 All measurements in excavations should be made with the extended monitoring tube located not more than 10mm from the exposed ground surface. The monitoring should be undertaken by the Safety Officer.
- 3.5.1.5 For excavations deeper than 1m, measurements should be carried out:
- at the ground surface before excavation commences;
 - immediately before any worker enters the excavation;
 - at the beginning of each working day for the entire period the excavation remains open; and
 - periodically throughout the working day whilst workers are in the excavation.
- 3.5.1.6 For excavations between 0.3m and 1m deep, measurements should be carried out:
- directly after the excavation has been completed; and
 - periodically whilst the excavation remains open.
- 3.5.1.7 For excavations less than 0.3m deep, monitoring may be omitted, at the discretion of the Safety Officer or other appropriately competent environmental specialist.
- 3.5.1.8 Depending on the results of the measurements, actions required will vary and should be set down by the Safety Officer or other appropriately environmental specialist. As a minimum, these should encompass those actions specified in **Table 3.14**.

Table 3.14 – Actions in the event of LFG being detected in excavations

Parameter	Monitoring Results	Actions
Methane	>10% LEL (i.e. >0.5% v/v)	Prohibit hot works; Ventilate to restore methane to <10%LEL.
	>20% LEL (i.e. >1% v/v)	Stop works; Inform EPD and Landfill Contractor; Evacuate all personnel/prohibit entry; Increase ventilation to restore methane to <10% LEL.
Carbon dioxide	>0.5% v/v	Ventilate to restore carbon dioxide to <0.5% v/v.
	>1.5% v/v	Stop works; Inform EPD and Landfill Contractor; Evacuate all personnel/prohibit entry; Increase ventilation to restore carbon dioxide to <0.5% v/v.
Oxygen	<19%	Ventilation trench/void to restore oxygen to >19%
	<18%	Stop works; Inform EPD and Landfill Operator; Evacuate personnel/prohibit entry; Increase ventilation to restore oxygen to >19%

3.5.2 Monitoring Equipment

- 3.5.2.1. The equipment used for landfill gas monitoring as used by the site Safety Officer is summarized in **Table 3.15**. The calibration certificate as provided by the site Safety Officer is presented in **Appendix 3.4**.

Table 3.15 – Landfill Gas Monitoring Equipment

Manufacturer/ Brand	Model	Equipment
MRU	OPTIMA 7 Biogas	Handheld Biogas Analyzer

3.6 Ecology

3.6.1 Monitoring Requirements

- 3.6.1.1 During construction phase, roost surveys should be conducted on the Project Site to monitor utilisation of the preserved and/or the newly planted tree groups by Collared Crow and Black Kite.
- 3.6.1.2 **Collared Crow Pre-roost/Roost Survey:** Surveys of utilization of the preserved tree groups by Collared Crow will be conducted at least monthly during the Phase 1 and Phase 2 of the construction programme, and at least weekly during the Phase 3 of the construction programme. Surveys will be carried out at least one hour before sunset (making reference to information from the Hong Kong Observatory), and continued after sunset until the light condition is not sufficient for counting. Observations will be made from vantage points which can cover the preserved and/or the newly planted tree groups within the Project Site. Observations will be made with binoculars and spotting scope, and the number of Collared Crows utilizing the preserved and/or the newly planted tree groups will be counted. Locations of roost(s) will be marked on maps.
- 3.6.1.3 **Black Kite Pre-Roost/Roost Survey:** Surveys of utilization of the preserved and/or the newly planted tree groups by Black Kite will be conducted at least monthly during the construction phase. Surveys will be carried out at least one hour before sunset (making reference to the information from the Hong Kong Observatory), and continued after sunset until the light condition is not sufficient for counting. Observations will be made from vantage points which can cover the preserved and/or the newly planted tree groups within the Project Site. Observations will be made with binoculars and spotting scope, and the number of Black Kites utilizing the preserved and/or the newly planted tree groups will be counted. Locations of roost(s) will be marked on maps.
- 3.6.1.4 Site inspections as detailed in **Section 6** of this report and water quality monitoring as detailed in **Section 3.3 and Section 5.3** of this report during construction phase shall be carried out to monitor any malpractice leading to deterioration of water quality of the surrounding which may in turn affect marine ecology.

3.7 Fisheries

3.7.1 Audit Requirements

- 3.7.1.1 Site inspections during construction phase shall be carried out to monitor any malpractice leading to deterioration of water quality of the surrounding which may in turn affect the fisheries resources. Site inspection shall be undertaken by the Environmental Team at least once per week during the routine environmental audit as detailed in **Section 6** of this report. During construction phase, the proposed water quality monitoring programme stated in Section 6 of the EIA report will include the closest FCZ (i.e. Yim Tin Tsai FCZ, near Water Quality Monitoring Station WM-2). The locations of water quality monitoring station are presented in **Appendix 3.1**.

3.8 Landscape and Visual

3.8.1 Audits Requirements

- 3.8.1.1 Audits will be carried out during construction phase to ensure all the recommended landscape and visual mitigation measures in the EIA are properly and effectively implemented and to ensure compliance with the intended aims of the measures. The EM&A comprises of monitoring and auditing of proper site management to reduce visual nuisance, the protection of preserved and transplanted trees, advance tree transplanting and mitigation planting works, the implementation and establishment of compensatory planting through site audit programme. Site inspections as detailed in **Section 6** of this report should be undertaken by the ET at least twice a month during the construction period. The audit will be undertaken by a member of the Environmental Team who is a certified arborist or who has tree survey relevant experiences not less than 1 year for monitoring and auditing the landscape works, monthly during the construction period (construction phase).
- 3.8.1.2 The Event and Action Plan for landscape and visual during construction phase is given in **Appendix 3.3**.

4. Implementation Status of Environmental Mitigation Measures

4.1.1 Implementation Status of Environmental Mitigation Measures

- 4.1.1.1 The implementation statuses of Environmental Mitigation Measures are listed in **Appendix 4.1**.

5. Monitoring and Audit Results

5.1 Construction Dust Monitoring

5.1.1 Results and Observations

- 5.1.1.1 The monitoring data are summarized in **Table 5.1**. Detailed monitoring results of 1-hour TSP are presented in **Appendix 5.1**. Detailed weather conditions during the monitoring period are shown in **Appendix 5.4**.

Table 5.1 - Summary of 1-hour TSP Monitoring Results

Monitoring Stations	TSP Concentration, $\mu\text{g}/\text{m}^3$	
	Average	Range
DM-1	42	29 - 74
DM-2a	52	43 - 63
DM-3a	44	37 - 54

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

5.2 Construction Noise Monitoring

5.2.1 Results and Observations

- 5.2.1.1 The monitoring data are summarized in **Table 5.2**. Detailed monitoring results of 1-hour TSP are presented in **Appendix 5.1**. Detailed weather conditions during the monitoring period are shown in **Appendix 5.4**.

Table 5.2 - Summary of Noise Monitoring Results

Location	Parameter & Time	Min in dB(A)	Max in dB(A)	Average in dB(A)
Fortune Garden (NM-1a)	L_{Aeq} (30 mins) between 0700 and 1900	66.4	67.4	67.0
Village House at 53 Ting Kok Road (NM-2)	L_{Aeq} (30 mins) between 0700 and 1900	65.7	68.3	66.9

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

5.3 Water Quality Monitoring

5.3.1 Results and Observations

- 5.3.1.1 The monitoring data are summarized in **Table 5.3**. Detailed monitoring results are presented in **Appendix 5.1**. Detailed weather conditions during the monitoring period are shown in **Appendix 5.4**.

Table 5.3 - Summary of Water Quality Monitoring Results

		WM-1	WM-2		WM-1	WM-2
Parameter(s)		(Mid-Ebb)	(Mid-Ebb)		(Mid-Flood)	(Mid-Flood)
DO (Surface & Middle)	Min.	5.68	5.55		5.51	5.46

		WM-1	WM-2		WM-1	WM-2
Parameter(s)		(Mid-Ebb)	(Mid-Ebb)		(Mid-Flood)	(Mid-Flood)
in mg/L	Max.	7.95	6.88		7.77	7.07
	Mean	6.70	6.34		6.52	6.31
DO (Bottom) in mg/L	Min.	4.78	2.93		3.15	2.84
	Max.	6.37	5.51		6.53	5.30
	Mean	5.71	4.31		5.46	4.36
SS (depth-averaged) in mg/L	Min.	7	5		6	6
	Max.	15	10		10	7
	Mean	8	6		7	6
Turbidity (depth-averaged) in NTU	Min.	0.43	0.64		0.46	0.59
	Max.	0.87	1.00		0.93	0.98
	Mean	0.64	0.79		0.67	0.79

QA/QC results and detection limits

5.3.1.2 The QA/QC results of laboratory test and the parameters detection limits were shown in **Appendix 5.1**. The HOKLAS accreditation certification of the testing laboratory is presented in **Appendix 5.2**.

5.3.1.3 27 of the DO (Dissolved Oxygen) monitoring results triggered the corresponding Action Level throughout the reporting period. In accordance with Event and Action Plan stipulated in the Manual, IEC and Contractor were informed when the corresponding Action or Limit Levels were triggered. **Table 5.4** presents the summary of the DO compliance status at WM-1 and WM-2 stations during mid-ebb and mid-flood for the reporting period. Seasonal fluctuation may be the cause of non-compliance. All exceedances were project not related as no marine construction works being carried out according to the Environmental Permit (EP) Condition 2.38. In addition, no marine construction works observed by the Environmental Team during weekly site inspections and marine water samplings throughout the reporting period. Photo records during water sampling days are presented in **Appendix 5.3**. In the meantime, the contractors were reminded to implement and maintain all mitigation measures during weekly site inspection. Bund wall has been constructed along the seawall by the contractor for extra protection of water quality.

Table 5.4 - Summary of DO Compliance Status

Date	WM-1 DO (Surface & Middle) (Mid- Ebb)	WM-1 DO (Bottom) (Mid- Ebb)	WM-2 DO (Surfac e & Middle) (Mid- Ebb)	WM-2 DO (Bottom) (Mid- Ebb)	WM-1 DO (Surfac e & Middle) (Mid- Flood)	WM-1 DO (Bottom) (Mid- Flood)	WM-2 DO (Surfac e & Middle) (Mid- Flood)	WM-2 DO (Bottom) (Mid- Flood)
14/10/2024								
16/10/2024								
18/10/2024								
21/10/2024								
23/10/2024								
25/10/2024								
28/10/2024								
30/10/2024								
No. of results triggering Action Level	2	2	2	6	2	4	2	7

Date	WM-1 DO (Surface & Middle) (Mid- Ebb)	WM-1 DO (Bottom) (Mid- Ebb)	WM-2 DO (Surface & Middle) (Mid- Ebb)	WM-2 DO (Bottom) (Mid- Ebb)	WM-1 DO (Surface & Middle) (Mid- Flood)	WM-1 DO (Bottom) (Mid- Flood)	WM-2 DO (Surface & Middle) (Mid- Flood)	WM-2 DO (Bottom) (Mid- Flood)
Legend:								
	The monitoring results were within the corresponding Action and Limit Levels							
	Monitoring result triggered the Action Level							
	Monitoring result triggered the Limit Level							

5.3.1.4 All the SS (Suspended Solids) monitoring results triggered the corresponding Limit Level. In accordance with Event and Action Plan stipulated in the Manual, IEC and Contractor were informed when the corresponding Action or Limit Levels were triggered. **Table 5.5** presents the summary of the SS compliance status at WM-1 and WM-2 stations during mid-ebb and mid-flood for the reporting period. Seasonal fluctuation may be the cause of non-compliance. All exceedances were project not related as no marine construction works being carried out according to the Environmental Permit (EP) Condition 2.38. In addition, no marine construction works observed by the Environmental Team during weekly site inspections and marine water samplings throughout the reporting period. Photo records during water sampling days are presented in **Appendix 5.3**. In the meantime, the contractors were reminded to implement and maintain all mitigation measures during weekly site inspection. Bund wall has been constructed along the seawall by the contractor for extra protection of water quality.

Table 5.5 - Summary of SS Compliance Status

Date	WM-1 SS (depth-averaged) (Mid-Ebb)	WM-2 SS (depth-averaged) (Mid-Ebb)	WM-1 SS (depth-averaged) (Mid-Flood)	WM-2 SS (depth-averaged) (Mid-Flood)
14/10/2024				
16/10/2024				
18/10/2024				
21/10/2024				
23/10/2024				
25/10/2024				
28/10/2024				
30/10/2024	-	-	-	-
No. of results triggering Action or Limit Level	8	8	8	8
Legend:				
	The monitoring results were within the corresponding Action and Limit Levels			
	Monitoring result triggered the Action Level			
	Monitoring result triggered the Limit Level			

5.3.1.5. All turbidity monitoring results were within the corresponding Action and Limit Levels at all monitoring stations (WM-1 and WM-2) in the reporting period.

5.4 Waste Management

5.4.1 Waste Management Status

- 5.4.1.1. As informed by the contractor, no waste disposal of inert Construction and Demolition (C&D) materials, C&D waste and chemical waste in the reporting period. Contractor has been reminded to keep good record at site in order to have a clear presentation of waste disposal. In addition, the contractor has been reminded to register for chemical waste producer if they produce chemical waste.
- 5.4.1.2. The contractor had been reminded to place recycling bins at the site during weekly site inspection on 25th October 2024. Separate waste collection bins will be made available for collecting paper, metals and plastics by the contractor.

5.5 Landfill Gas Monitoring

5.5.1 Results and Observations

- 5.5.1.1 Based on information given by the site Safety Officer, Landfill Gas Monitoring Result in the reporting period is summarized in **Table 5.6**.

Table 5.6 - Landfill Gas Monitoring Results

Sampling Date	Location	Parameter	Monitoring Results
25th October 2024	Temporary Site Office	Methane	0.00% v/v
		Carbon dioxide	0.04% v/v
		Oxygen	20.97%

- 5.5.1.2. During the reporting period, there were no excavation activities deeper than 300mm on the site, so no excavation measurements were taken. The monitoring results taken at the temporary site office were within the corresponding action levels stipulated in **Table 3.14** in the reporting period.

5.6 Ecology

5.6.1 Results and Observations

- 5.6.1.1 Surveys of utilization of the preserved tree groups by Collared Crow and Black Kite were conducted on 31st October 2024. Pre-roost and roosting Collared Crow were found within the Project Site. A total 69 individuals of Collared Crow gathered together on a bare ground in the middle of the Project Site for about 15 minutes, which is considered as a pre-roost location. The Collared Crow then migrated to the southeastern edge of the Project Site as final roosting location, with a total number of 74 individuals. Information of the pre-roost and roosting location of Collared Crow is summarized in **Table 5.7**. While the vantage points for Collared Crow and Black Kite Monitoring and locations of pre-roost and roost of Collared Crow are shown in **Appendix 5.4**.

Table 5.7 - Summary of Pre-roost and Roost of Collared Crow and Black Kite

Species	Monitoring Date	Pre-roost individual (location [^])	Peak Time of Pre-roost	Roost individual (location [^])	Peak Time of Roost
Collared Crow	31 Oct 2024	69	18:00	74	18:15
Black Kite*	31 Oct 2024	-	-	-	-

* Only two Black Kites were observed soaring in the southern side of the Project Site

[^] Locations refer to **Appendix 5.4**

- 5.6.1.2. No pre-roosting behaviour from Black Kite was observed. Only two individuals of Black Kite were found soaring near the southern side of the Project Site for about 10 minutes and flew away from the Project Site. No roosting activity was observed. Location of the soaring Black Kite is shown in **Appendix 5.4**.
- 5.6.1.3. No other noticeable disturbance was observed at the pre-roost and roost of both Collared Crow and Black Kite during the monitoring period.
- 5.6.1.4. Site inspections as detailed in **Section 6** of this report and water quality monitoring as detailed in **Section 3.3** and **Section 5.3** of this report during construction phase were carried out to monitor any malpractice leading to deterioration of water quality of the surrounding which may in turn affect marine ecology.

5.7 Fisheries

5.7.1 Results and Observations

- 5.7.1.1 Site inspections as detailed in **Section 6** of this report and water quality monitoring as detailed in **Section 3.3** and **Section 5.3** of this report during construction phase were carried out to monitor any malpractice leading to deterioration of water quality of the surrounding which may in turn affect the fisheries resources.

5.8 Landscape and Visual

5.8.1 Results and Observations

- 5.8.1.1 Site inspections as detailed in **Section 6** of this report during construction phase were carried out to monitor and audit site management to reduce visual nuisance and to protect the preserved and transplanted trees.
- 5.8.1.2. The contractor had been reminded to strengthen preserved tree protection measures on 14th October 2024 during weekly site inspection. Additional fencing has been erected by the contractor to enhance tree protection.

6. Environmental Site Inspection and Audit

6.1.1.1 Site inspections were carried out on a weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures for the project.

6.1.1.2. In this reporting period, three site inspections were carried out on 14 (with IEC), 25 (with IEC), 29 (with IEC and EPD) October 2024. Details of observations recorded during the site inspections are presented in **Table 6.1**.

Table 6.1 - Observations of Site Inspection in this Reporting Period

Environmental Aspect	Date	Observations and Reminders	Follow-up Actions
Air Quality	29/10/2024	Stockpile should be covered for dust suppression.	The contractor will cover stockpiles for dust suppression.
Noise	Nil	Nil	Nil
Water Quality	14/10/2024	1. De-silting/Maintenance records should be displayed at the sedimentation tank/temporary wastewater treatment plant. 2. Extra precautions should be considered at seawall for preventing large quantities of suspended solids flushed to the sea.	1. De-silting/Maintenance records had been displayed at the sedimentation tank by the contractor on 21/10/2024. 2. Bund wall has been constructed along the seawall by the contractor.
	25/10/2024	Notices should be posted to remind the workers not to discharge any sewage or wastewater into the surrounding environment.	Notice has posted on the WetSep system to remind the workers not to discharge any sewage or wastewater into the surrounding environment.
	29/10/2024	Drip trays should be placed under chemical containers.	The contractor will place drip trays under chemical containers.
Waste Management	25/10/2024	Recycling bins should be placed to encourage recycling.	The contractor will place recycling bins in the site.
Landfill Gas Hazards	Nil	Nil	Nil
Ecology	Nil	Nil	Nil
Fisheries	Nil	Nil	Nil
Landscape and Visual	14/10/2024	Orange net or guiding measures should be maintained for tree protection in good condition.	Additional fencing has been erected by the contractor to enhance tree protection.
Permit and Licences	14/10/2024	Environmental Permit (EP) should be displayed at the site entrance.	EP had been posted in prominent location by the contractor on 17/10/2024.

7. Environmental Non-Compliance

7.1 Summary of Monitoring Exceedances

- 7.1.1.1 No Action and Limit Level exceedance was recorded for construction dust monitoring in this reporting period.
- 7.1.1.2 No Action and Limit Level exceedance was recorded for construction noise monitoring in this reporting period.
- 7.1.1.3 27 Action Level exceedances for Dissolved Oxygen (DO) and 32 Limit Level exceedances for Suspended Solids (SS) were recorded for water quality monitoring in this reporting period. All action and limit level exceedances were project not related as no marine construction activities being carried out according to the Environmental Permit (EP) Condition 2.38. In addition, no marine construction works observed by the Environmental Team during weekly site inspections and marine water samplings throughout the reporting period.

7.2 Summary of Environmental Non-Compliance

- 7.2.1.1. No environmental non-compliance was recorded in this reporting period.

7.3 Summary of Environmental Complaints

- 7.3.1.1. No complaints were received in this reporting period.

7.4 Summary of Environmental Summon and Successful Prosecution

- 7.4.1.1. No environmental summons and successful prosecutions were recorded in this reporting month.

8. Future Key Issues

- 8.1.1.1 The main works will be anticipated in the next reporting period are vegetation cutting, vegetation trimming, and site formation works.
- 8.1.1.2 The suggested mitigation measures corresponding to the main works in the next reporting period are listed as followings:
- (a) Water spraying every hour on exposed worksites and haul road to minimise dust impact at the nearby sensitive receivers.
 - (b) Cover or shelter any stockpile of dusty materials.
 - (c) Stockpiling area should be provided with covers and water spraying system to prevent materials from wind-blown or being washed away.
 - (d) Erect 3m high hoarding at the northern boundary of the Project Site during construction phase.
 - (e) Keep “Tree Protection Zone” to be fenced off from construction works.
 - (f) Properly sort and contain the chemicals used during the construction, such as fuel, oil, solvents and lubricants in a designated area with secondary containment to prevent spillage and contamination of the nearby water environment.
 - (g) Maintain the existing coastline without any alteration.
- 8.1.1.3 The monitoring schedule of next reporting period is presented in **Appendix 8.1**.

9. Conclusion and Recommendations

- 9.1.1.1. This 1st Monthly EM&A Report for the Proposed Golf Course Development at Tai Po Lot No. 246 Shuen Wan has summarized the monitoring results and audit findings of the EM&A programme under the issued Environmental Permit FEP-01/571/2019/A and in accordance with the EM&A Manual during the reporting period from 14/10/2024 to 31/10/2024.
- 9.1.1.2. The key construction activities carried out in the reporting period included vegetation cutting, vegetation trimming, and site formation works.
- 9.1.1.3. All the monitoring and audit works for construction dust, construction noise, water quality, waste, landfill gas, ecology, fisheries, landscape and visual were conducted during the reporting period in accordance with the WM&A Manual.
- 9.1.1.4. Monitoring results of construction dust, construction noise and landfill gas did not trigger the corresponding Action and Limit Levels during the reporting period. No other noticeable disturbance was observed at the pre-roost and roost of both Collared Crow and Black Kite during the monitoring period.
- 9.1.1.5. The water quality monitoring results for turbidity obtained during the reporting period were within the corresponding Action and Limit Levels stipulated in the EM&A programme. 27 Action Level exceedances for Dissolved Oxygen (DO) and 32 Limit Level exceedances for Suspended Solids (SS) were recorded for water quality monitoring in this reporting period. All action and limit level exceedances were project not related as no marine construction activities being carried out according to the Environmental Permit (EP) Condition 2.38. In addition, no marine construction works observed by the Environmental Team during weekly site inspections and marine water samplings throughout the reporting period.
- 9.1.1.6. Weekly site inspections of the construction works were carried out by the Environmental Team to audit the implementation of proper environmental pollution control and mitigation measures for the Project. Regular 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.

Appendix 1.1

Figure 1 in FEP-571/2019/A



Legend 圖例

- Project Location
工程項目位置
- 1.2 ha Core Roosting Area
1.2 公頃核心夜間棲息地
- *Aquilaria sinensis*
土沉香

Project Title
工程項目名稱

Shuen Wan Golf Course
船灣高爾夫球場

Figure 1
圖一

Project Location and Conceptual Layout Plan
工程項目位置及概念佈局圖

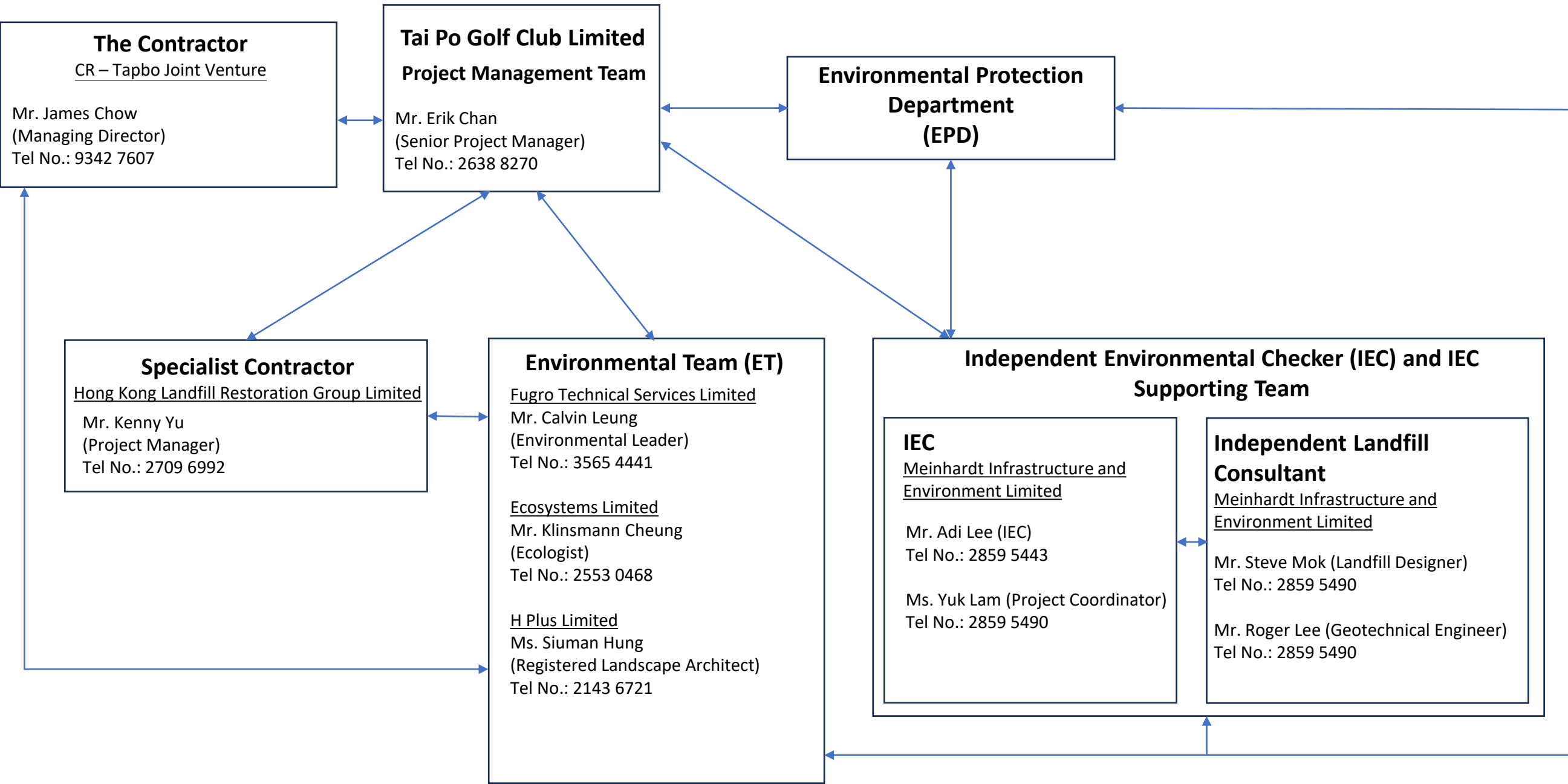
[This figure was prepared based on Figure 2.1 of EIA Report (Register No.: AEIAR-221/2019)]
[本圖是根據環境影響評估報告 (登記冊編號: AEIAR-221/2019) 圖 2.1 編制]

Environmental Permit No.:
環境許可證編號:
FEP-01/571/2019/A



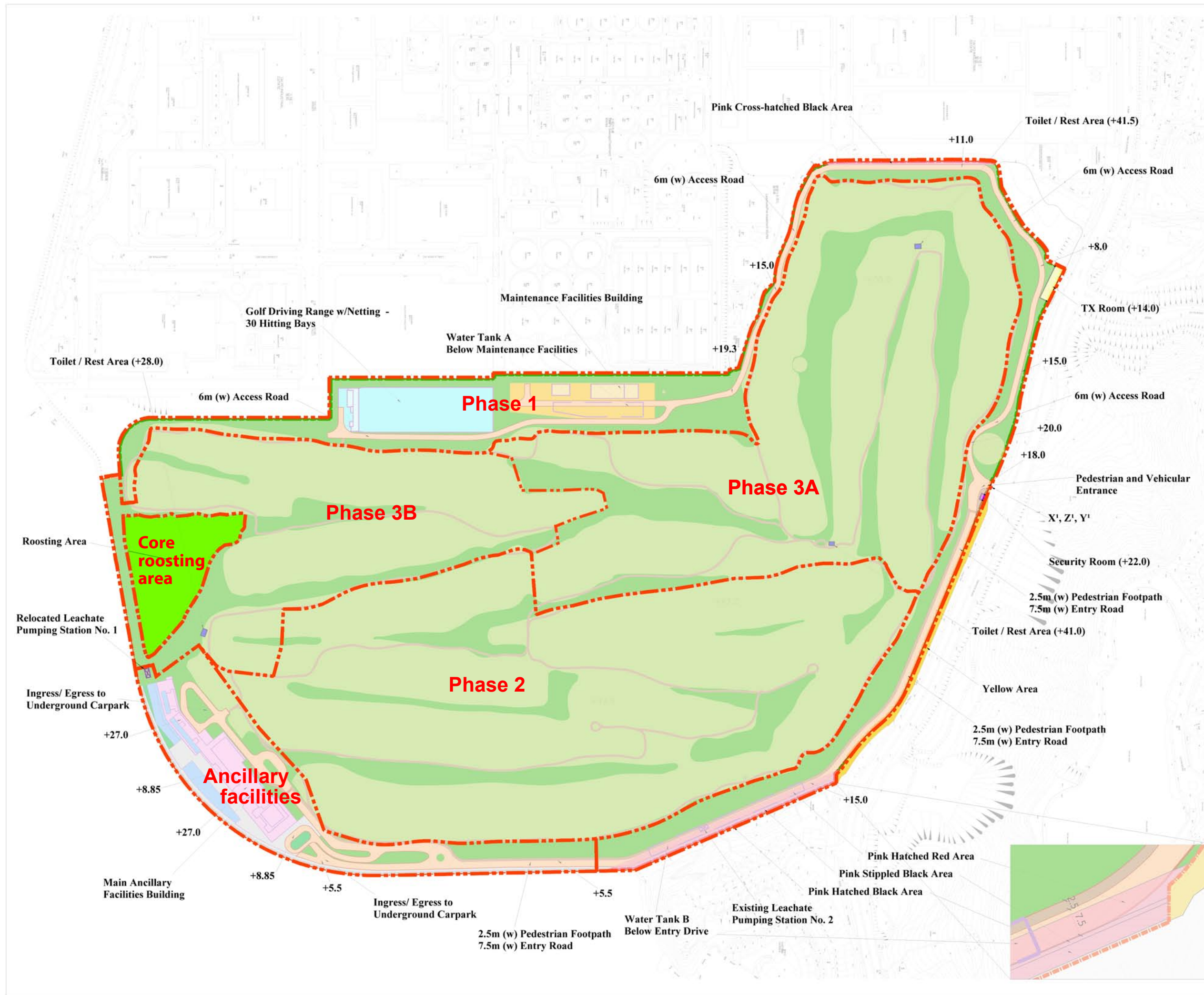
Appendix 2.1

Project Organization Chart



Appendix 2.2

Construction Phasing Plan



- LEGEND:
- MAIN ANCILLARY FACILITIES
 - GOLF DRIVING RANGE
 - TOILETS / REST AREA
 - TRANSFORMER ROOM
 - MAINTENANCE FACILITIES
 - SECURITY ROOM
 - UNDERGROUND WATER TANK A
 - UNDERGROUND WATER TANK B
 - PEDESTRIAN FOOTPATH
 - ROAD
 - OUTDOOR POOL / WATER FEATURES
 - LANDSCAPED TERRACE
 - GOLF HOLES
 - PLANTING AREA
 - SPECIAL TREE PRESERVED IN-SITU
 - SPECIAL TREE PROPOSED TO BE TRANSPLANTED
 - DEVELOPMENT SITE BOUNDARY
 - LEACHATE PUMPING STATION

DATE	23/11/2023	MLP SUBMISSION
DATE	23/11/2023	MLP SUBMISSION
DATE	23/11/2023	MLP SUBMISSION

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PROJECT / 工程項目
PROPOSED GOLF COURSE DEVELOPMENT
AT TAI PO TOWN LOT NO. 246
SHUN WAN, TING KOK, TAI PO

DRAWING / 圖名
INDICATIVE MASTER LAYOUT PLAN

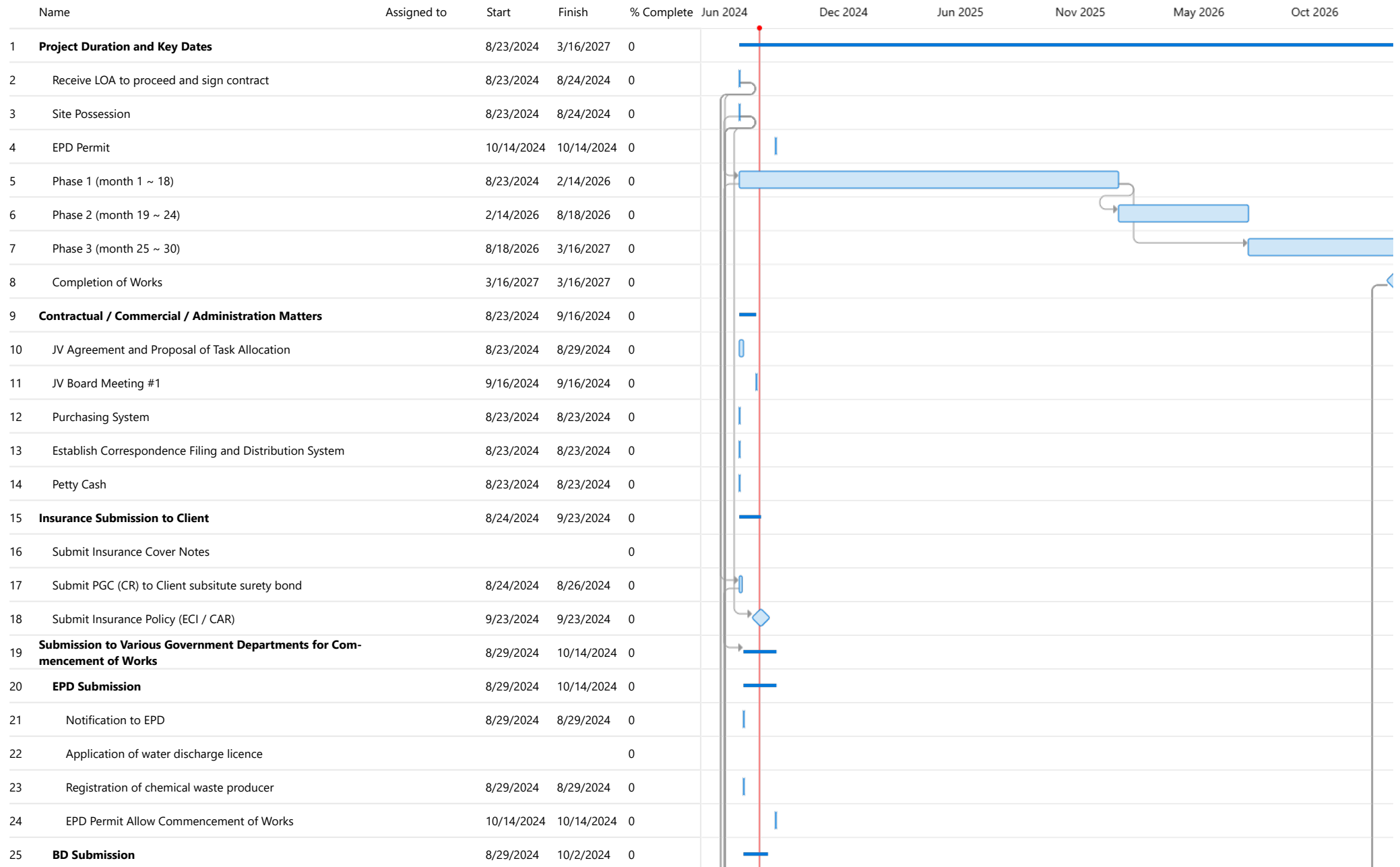
SCALE / 比例	JOB NUMBER / 工程編號
1: 4000	5973
DATE / 日期	DRAWING NUMBER / 圖號
XX/4/2023	MLP-01
DESIGNED / 設計	CHECKED / 審核
	APPROVED / 審定

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Appendix 2.3

Construction Programme

Tai Po Golf Course Programme v6 (Calendar Day)



Tai Po Golf Course Programme v6 (Calendar Day)

Name	Apr 2027	Sep 2027	Mar 2028	Aug 2028	Feb 2029	Jul 2029
1 Project Duration and Key Dates						
2 Receive LOA to proceed and sign contract						
3 Site Possession						
4 EPD Permit						
5 Phase 1 (month 1 ~ 18)						
6 Phase 2 (month 19 ~ 24)						
7 Phase 3 (month 25 ~ 30)						
8 Completion of Works						
9 Contractual / Commercial / Administration Matters						
10 JV Agreement and Proposal of Task Allocation						
11 JV Board Meeting #1						
12 Purchasing System						
13 Establish Correspondence Filing and Distribution System						
14 Petty Cash						
15 Insurance Submission to Client						
16 Submit Insurance Cover Notes						
17 Submit PGC (CR) to Client substitute surety bond						
18 Submit Insurance Policy (ECI / CAR)						
19 Submission to Various Government Departments for Commencement of Works						
20 EPD Submission						
21 Notification to EPD						
22 Application of water discharge licence						
23 Registration of chemical waste producer						
24 EPD Permit Allow Commencement of Works						
25 BD Submission						

Tai Po Golf Course Programme v6 (Calendar Day)

	Name	Assigned to	Start	Finish	% Complete	Jun 2024	Dec 2024	Jun 2025	Nov 2025	May 2026	Oct 2026
26	Site Supervision Plan		8/29/2024	8/31/2024	0						
27	Form BA8 Consent Submission		8/29/2024	9/25/2024	0						
28	Form BA10 Commencement Submission		9/26/2024	10/2/2024	0						
29	Other Departments or Authority		8/29/2024	9/27/2024	0						
30	Labour Department (Form LD202)		8/29/2024	9/4/2024	0						
31	Construction Industry Council (Form 1) 0.53%		8/29/2024	9/11/2024	0						
32	Pneumoconiosis Compensation Fund 0.15%		8/29/2024	9/11/2024	0						
33	WSD - Apply temporary water		8/29/2024	9/27/2024	0						
34	CLP - Apply temporary power		8/29/2024	9/27/2024	0						
35	Mobilizing on Site		8/23/2024	11/17/2024	0						
36	Install temporary lighting and power		8/24/2024	10/1/2024	0						
37	Setup Temporary Latrines		8/23/2024	9/1/2024	0						
38	Hire Water Tanker		8/24/2024	10/23/2024	0						
39	Clearing away rubbish during the progress of work		8/23/2024	9/30/2024	0						
40	Main Contractor Workshop, Office and Storage		9/1/2024	10/4/2024	0						
41	On-site Transportation		8/23/2024	9/30/2024	0						
42	Set up staff welfare facilities (microwave / fan / air con)		10/4/2024	11/3/2024	0						
43	Prepare visitor PPE		11/3/2024	11/17/2024	0						
44	Site Security		8/23/2024	9/5/2024	0						
45	Appointment of Security Company		8/23/2024	8/23/2024	0						
46	Setup Guardhouse		8/23/2024	9/5/2024	0						
47	Hoarding Erection		9/2/2024	9/26/2024	0						
48	Notice CLP		9/2/2024	9/3/2024	0						
49	Notice Telecom		9/2/2024	9/3/2024	0						
50	Site Clearing		9/2/2024	9/6/2024	0						

Tai Po Golf Course Programme v6 (Calendar Day)

	Name	Apr 2027	Sep 2027	Mar 2028	Aug 2028	Feb 2029	Jul 2029
26	Site Supervision Plan						
27	Form BA8 Consent Submission						
28	Form BA10 Commencement Submission						
29	Other Departments or Authority						
30	Labour Department (Form LD202)						
31	Construction Industry Council (Form 1) 0.53%						
32	Pneumoconiosis Compensation Fund 0.15%						
33	WSD - Apply temporary water						
34	CLP - Apply temporary power						
35	Mobilizing on Site						
36	Install temporary lighting and power						
37	Setup Temporary Latrines						
38	Hire Water Tanker						
39	Clearing away rubbish during the progress of work						
40	Main Contractor Workshop, Office and Storage						
41	On-site Transportation						
42	Set up staff welfare facilities (microwave / fan / air con)						
43	Prepare visitor PPE						
44	Site Security						
45	Appointment of Security Company						
46	Setup Guardhouse						
47	Hoarding Erection						
48	Notice CLP						
49	Notice Telecom						
50	Site Clearing						

Tai Po Golf Course Programme v6 (Calendar Day)

Name	Assigned to	Start	Finish	% Complete	Jun 2024	Dec 2024	Jun 2025	Nov 2025	May 2026	Oct 2026
51 Erect Hoarding		9/7/2024	9/26/2024	0						
52 Temporary Stockpiling Platform at +30mPD		8/23/2024	3/10/2025	0						
53 Forming temporary ppheripheral drainage		8/23/2024	3/10/2025	0						
54 Site Survey		8/25/2024	9/8/2024	0						
55 Appointment of Surveyor		8/25/2024	9/7/2024	0						
56 LiDAR Survey		9/7/2024	9/8/2024	0						
57 Monthly Site Survey Services				0						
58 Tree Felling and Transplantation		7/8/2024	11/20/2024	0						
59 Appointment of Tree Consultant		8/25/2024	9/7/2024	0						
60 Review Tree Felling Application (TRA)		9/8/2024	9/21/2024	0						
61 Receive Tree felling permit (within 60 days)		9/22/2024	11/20/2024	0						
62 Review Tree Preservation Plan		7/8/2024	7/28/2024	0						
63 Environmental		8/23/2024	9/23/2024	0						
64 Appointment of Environmental Consultant		8/23/2024	9/1/2024	0						
65 WetSep Design and Calculation		9/6/2024	9/20/2024	0						
66 Obtain final quotation of WetSep		9/21/2024	9/23/2024	0						
67 Wheel Washing Facility		8/26/2024	9/24/2024	0						
68 Temporary Wheel Washing System		8/26/2024	8/30/2024	0						
69 Newly Built Wheel Washing Basin		8/26/2024	9/24/2024	0						
70 Slope Work Subcontract		9/6/2024	9/27/2024	0						
71 Appointment of Subcontractor (Backfilling Material Mix)		9/6/2024	9/6/2024	0						
72 Purchasing of G&E Tensar Geogrid		9/27/2024	9/27/2024	0						
73 Phase 1 Construction (month 1 ~ 18)		10/14/2024	2/13/2026	0						
74 Construction Reinforced Fill Slope (Type A) (~80m)		10/14/2024	12/14/2024	0						
75 Preparing Selected Fill Material		10/14/2024	10/27/2024	0						

Tai Po Golf Course Programme v6 (Calendar Day)

Name	Apr 2027	Sep 2027	Mar 2028	Aug 2028	Feb 2029	Jul 2029
51 Erect Hoarding						
52 Temporary Stockpiling Platform at +30mPD						
53 Forming temporary pheripheral drainage						
54 Site Survey						
55 Appointment of Surveyor						
56 LiDAR Survey						
57 Monthly Site Survey Services						
58 Tree Felling and Transplantation						
59 Appointment of Tree Consultant						
60 Review Tree Felling Application (TRA)						
61 Receive Tree felling permit (within 60 days)						
62 Review Tree Preservation Plan						
63 Environmental						
64 Appointment of Environmental Consultant						
65 WetSep Design and Calculation						
66 Obtain final quotation of WetSep						
67 Wheel Washing Facility						
68 Temporary Wheel Washing System						
69 Newly Built Wheel Washing Basin						
70 Slope Work Subcontract						
71 Appointment of Subcontractor (Backfilling Material Mix)						
72 Purchasing of G&E Tensar Geogrid						
73 Phase 1 Construction (month 1 ~ 18)						
74 Construction Reinforced Fill Slope (Type A) (~80m)						
75 Preparing Selected Fill Material						

Tai Po Golf Course Programme v6 (Calendar Day)



Tai Po Golf Course Programme v6 (Calendar Day)

Name		Apr 2027	Sep 2027	Mar 2028	Aug 2028	Feb 2029	Jul 2029
76	Preparing Wall Base Level						
77	Concreting 500mm 20D/20 Concrete Binding						
78	Forming Backing of Slope						
79	Constructing 500mm Drainage Filter Layer						
80	Installing Sand Bag and Tensar Georid						
81	Construction Reinforced Fill Slope (Type B) (~530m)						
82	Preparing Selected Fill Material						
83	Preparing Wall Base Level						
84	Concreting 500mm 20D/20 Concrete Binding						
85	Forming Backing of Slope						
86	Constructing 500mm Drainage Filter Layer						
87	Installing Sand Bag and Tensar Georid						
88	Construction Reinforced Fill Slope (Type C) (~160m)						
89	Preparing Selected Fill Material						
90	Preparing Wall Base Level						
91	Concreting 500mm 20D/20 Concrete Binding						
92	Forming Backing of Slope						
93	Constructing 500mm Drainage Filter Layer						
94	Installing Sand Bag and Tensar Georid						
95	Construction Reinforced Fill Slope (Type D) (~450m)						
96	Preparing Selected Fill Material						
97	Preparing Wall Base Level						
98	Concreting 500mm 20D/20 Concrete Binding						
99	Forming Backing of Slope						
100	Constructing 500mm Drainage Filter Layer						

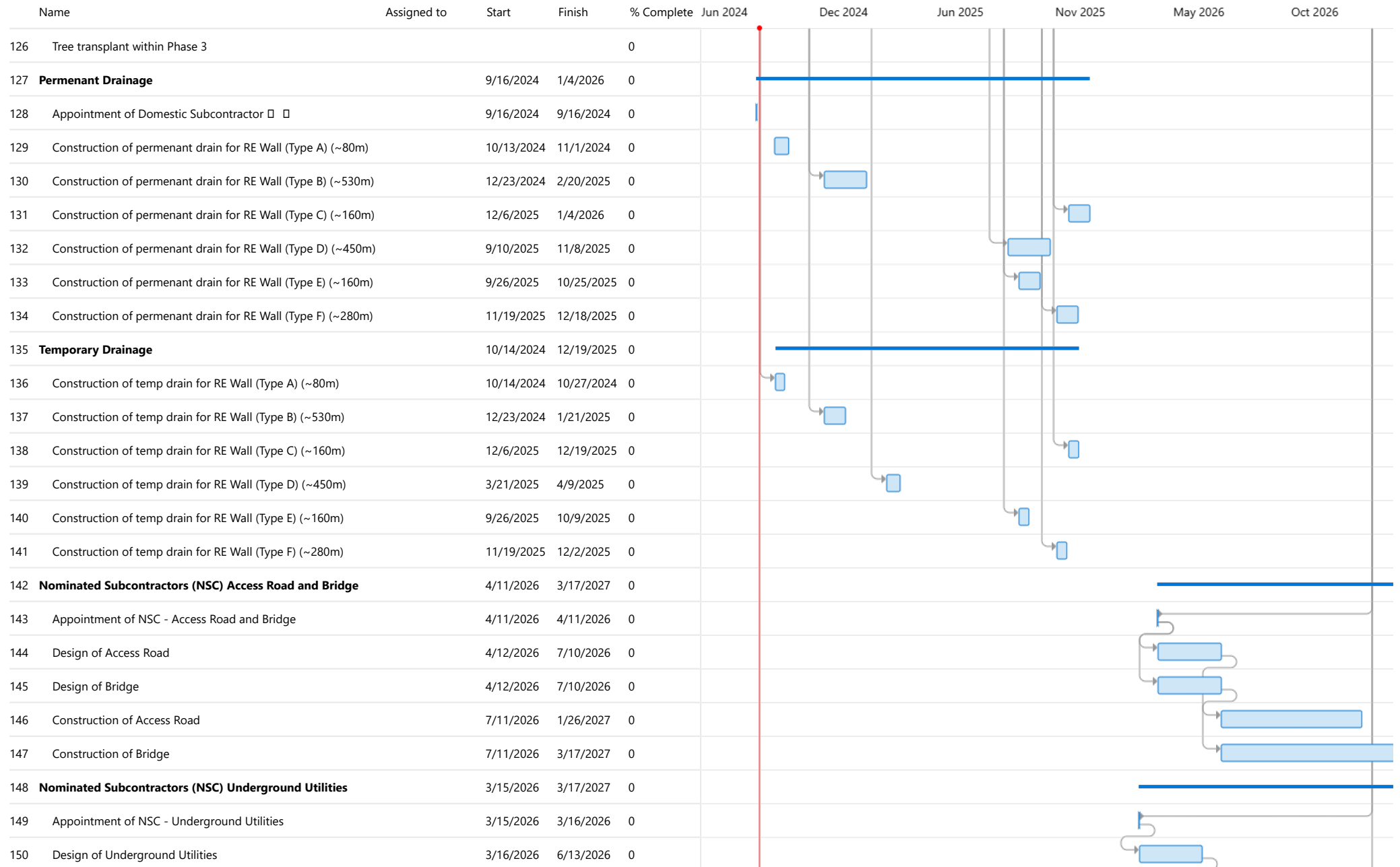
Tai Po Golf Course Programme v6 (Calendar Day)

Name		Assigned to	Start	Finish	% Complete	Jun 2024	Dec 2024	Jun 2025	Nov 2025	May 2026	Oct 2026
101	Installing Sand Bag and Tensar Georid		6/17/2025	9/9/2025	0						
102	Construction Reinforced Fill Slope (Type E) (~160m)		9/26/2025	12/17/2025	0						
103	Preparing Selected Fill Material		9/26/2025	10/2/2025	0						
104	Preparing Wall Base Level		9/26/2025	10/2/2025	0						
105	Concreting 500mm 20D/20 Concrete Binding		10/3/2025	10/5/2025	0						
106	Forming Backing of Slope		10/6/2025	10/15/2025	0						
107	Constructing 500mm Drainage Filter Layer		10/16/2025	10/18/2025	0						
108	Installing Sand Bag and Tensar Georid		10/19/2025	12/17/2025	0						
109	Construction Reinforced Fill Slope (Type F) (~280m)		11/19/2025	2/13/2026	0						
110	Preparing Selected Fill Material		11/19/2025	11/25/2025	0						
111	Preparing Wall Base Level		11/19/2025	11/25/2025	0						
112	Concreting 500mm 20D/20 Concrete Binding		11/26/2025	11/28/2025	0						
113	Forming Backing of Slope		11/29/2025	12/8/2025	0						
114	Constructing 500mm Drainage Filter Layer		12/9/2025	12/15/2025	0						
115	Installing Sand Bag and Tensar Georid		12/16/2025	2/13/2026	0						
116	Backfill to final site formation level (244,000 m3)		10/14/2024	9/28/2025	0						
117	Tree felling within Phase 1		10/14/2024	1/21/2025	0						
118	Tree transplant within Phase 1		10/14/2024	4/11/2025	0						
119	Phase 2 Construction (month 19 ~ 24)		2/15/2026	8/18/2026	0						
120	Backfill to final site formation level (289,300 m3)		2/15/2026	8/18/2026	0						
121	Tree felling within Phase 2		2/15/2026	2/15/2026	0						
122	Tree transplant within Phase 2				0						
123	Phase 3 Construction (month 25 ~ 30)		8/18/2026	3/16/2027	0						
124	Backfill to final site formation level (370,700 m3)		8/18/2026	3/16/2027	0						
125	Tree felling within Phase 3				0						

Tai Po Golf Course Programme v6 (Calendar Day)

Name	Apr 2027	Sep 2027	Mar 2028	Aug 2028	Feb 2029	Jul 2029
101	Installing Sand Bag and Tensar Georid					
102	Construction Reinforced Fill Slope (Type E) (~160m)					
103	Preparing Selected Fill Material					
104	Preparing Wall Base Level					
105	Concreting 500mm 20D/20 Concrete Binding					
106	Forming Backing of Slope					
107	Constructing 500mm Drainage Filter Layer					
108	Installing Sand Bag and Tensar Georid					
109	Construction Reinforced Fill Slope (Type F) (~280m)					
110	Preparing Selected Fill Material					
111	Preparing Wall Base Level					
112	Concreting 500mm 20D/20 Concrete Binding					
113	Forming Backing of Slope					
114	Constructing 500mm Drainage Filter Layer					
115	Installing Sand Bag and Tensar Georid					
116	Backfill to final site formation level (244,000 m3)					
117	Tree felling within Phase 1					
118	Tree transplant within Phase 1					
119	Phase 2 Construction (month 19 ~ 24)					
120	Backfill to final site formation level (289,300 m3)					
121	Tree felling within Phase 2					
122	Tree transplant within Phase 2					
123	Phase 3 Construction (month 25 ~ 30)					
124	Backfill to final site formation level (370,700 m3)					
125	Tree felling within Phase 3					

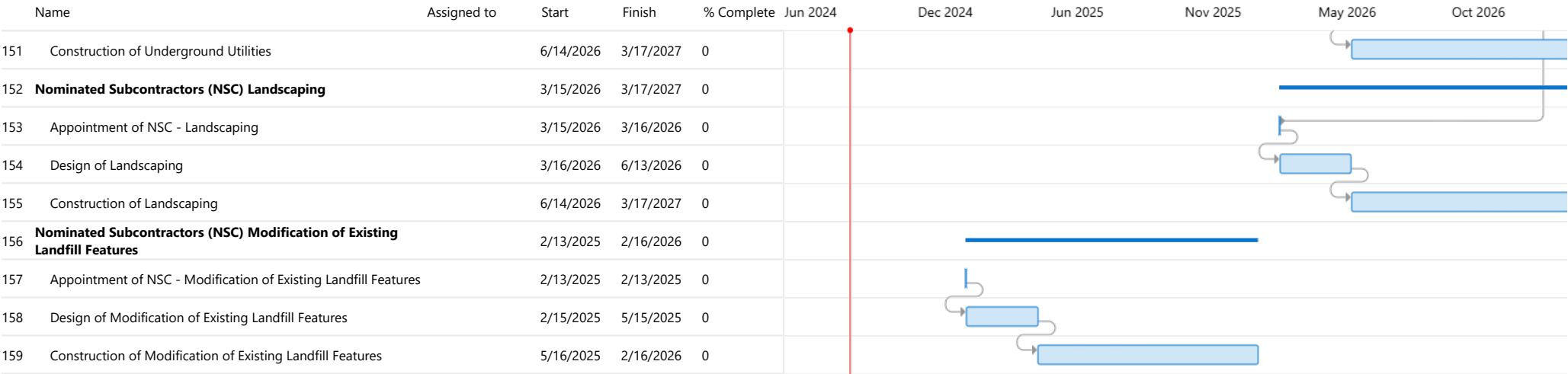
Tai Po Golf Course Programme v6 (Calendar Day)



Tai Po Golf Course Programme v6 (Calendar Day)

Name	Apr 2027	Sep 2027	Mar 2028	Aug 2028	Feb 2029	Jul 2029
126 Tree transplant within Phase 3						
127 Permenant Drainage						
128 Appointment of Domestic Subcontractor □ □						
129 Construction of permenant drain for RE Wall (Type A) (~80m)						
130 Construction of permenant drain for RE Wall (Type B) (~530m)						
131 Construction of permenant drain for RE Wall (Type C) (~160m)						
132 Construction of permenant drain for RE Wall (Type D) (~450m)						
133 Construction of permenant drain for RE Wall (Type E) (~160m)						
134 Construction of permenant drain for RE Wall (Type F) (~280m)						
135 Temporary Drainage						
136 Construction of temp drain for RE Wall (Type A) (~80m)						
137 Construction of temp drain for RE Wall (Type B) (~530m)						
138 Construction of temp drain for RE Wall (Type C) (~160m)						
139 Construction of temp drain for RE Wall (Type D) (~450m)						
140 Construction of temp drain for RE Wall (Type E) (~160m)						
141 Construction of temp drain for RE Wall (Type F) (~280m)						
142 Nominated Subcontractors (NSC) Access Road and Bridge ■						
143 Appointment of NSC - Access Road and Bridge						
144 Design of Access Road						
145 Design of Bridge						
146 Construction of Access Road						
147 Construction of Bridge]						
148 Nominated Subcontractors (NSC) Underground Utilities ■						
149 Appointment of NSC - Underground Utilities						
150 Design of Underground Utilities						

Tai Po Golf Course Programme v6 (Calendar Day)

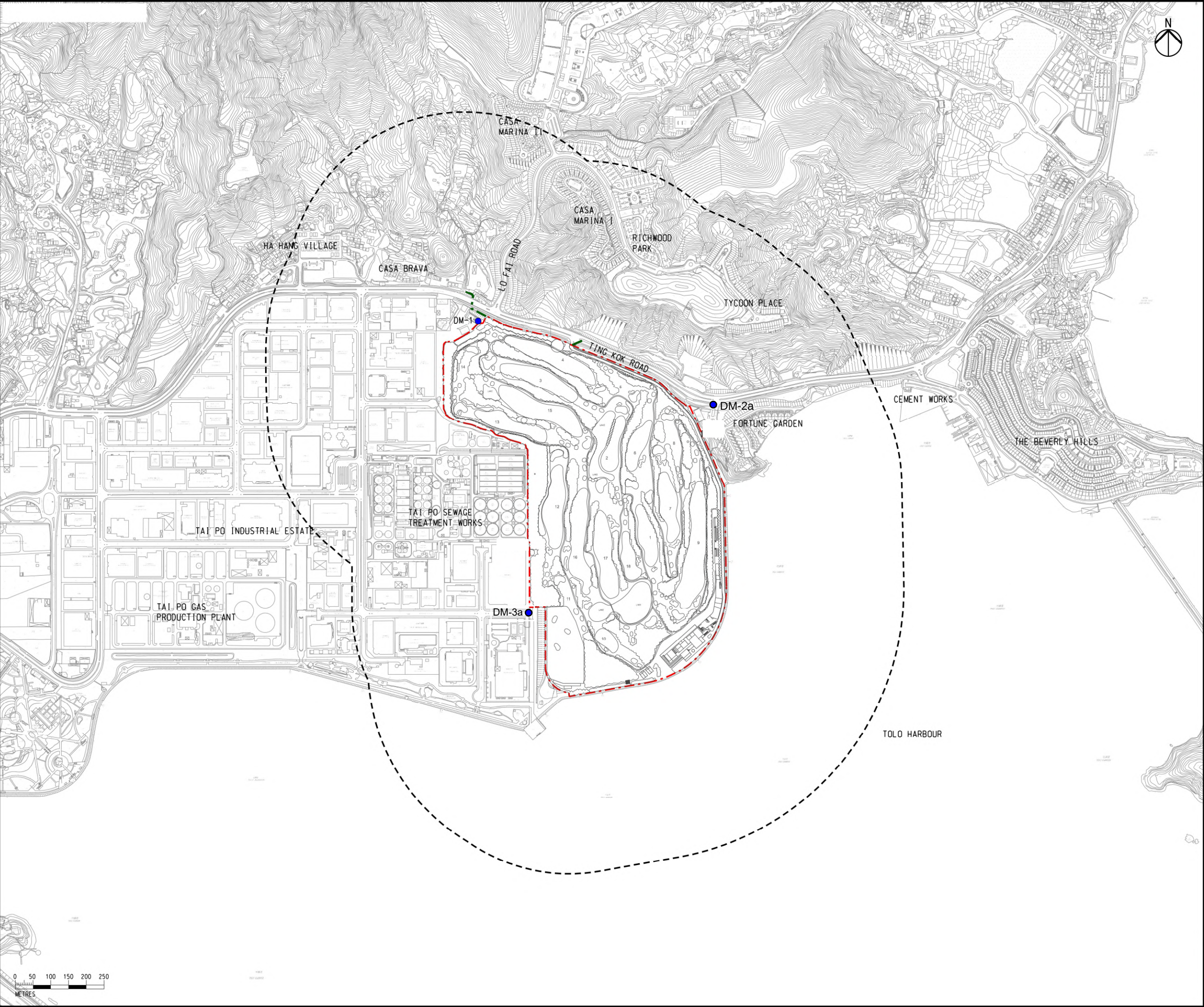


Tai Po Golf Course Programme v6 (Calendar Day)

Name		Apr 2027	Sep 2027	Mar 2028	Aug 2028	Feb 2029	Jul 2029
151	Construction of Underground Utilities						
152	Nominated Subcontractors (NSC) Landscaping						
153	Appointment of NSC - Landscaping						
154	Design of Landscaping						
155	Construction of Landscaping						
156	Nominated Subcontractors (NSC) Modification of Existing Landfill Features						
157	Appointment of NSC - Modification of Existing Landfill Features						
158	Design of Modification of Existing Landfill Features						
159	Construction of Modification of Existing Landfill Features						

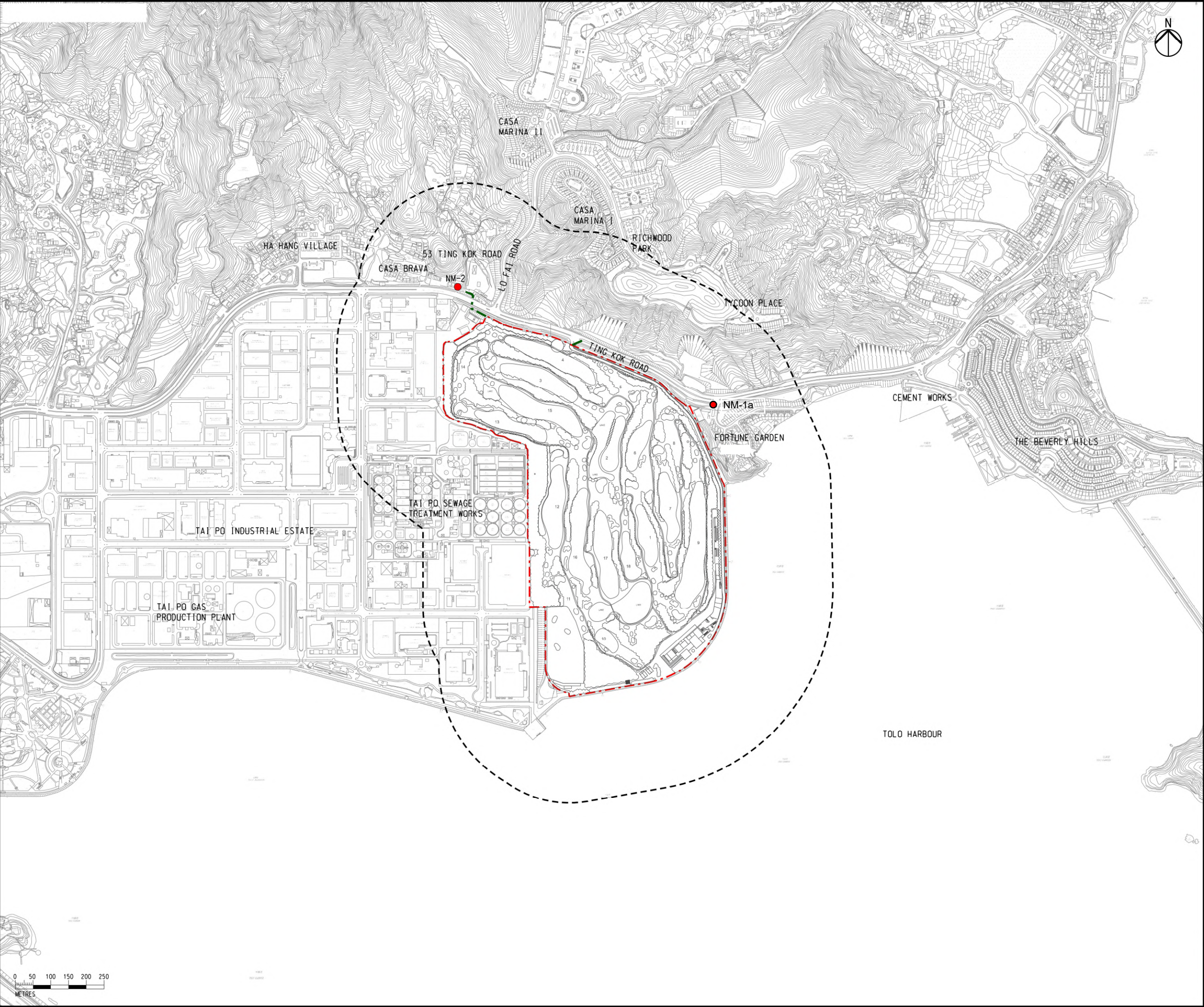
Appendix 3.1

Monitoring Locations and Stations



- LEGEND
- PROJECT BOUNDARY
 - 500m ASSESSMENT AREA
 - PROPOSED DRAINAGE / SEWERAGE / WATERWORKS OUTSIDE SITE BOUNDARY
 - DUST MONITORING STATION

Contract No. and Title	
Proposed Golf Course Development at Tai Po Lot No.246 Shuen Wan	
Drawing title	
Locations of Dust Monitoring Stations	
Figure 1.1	

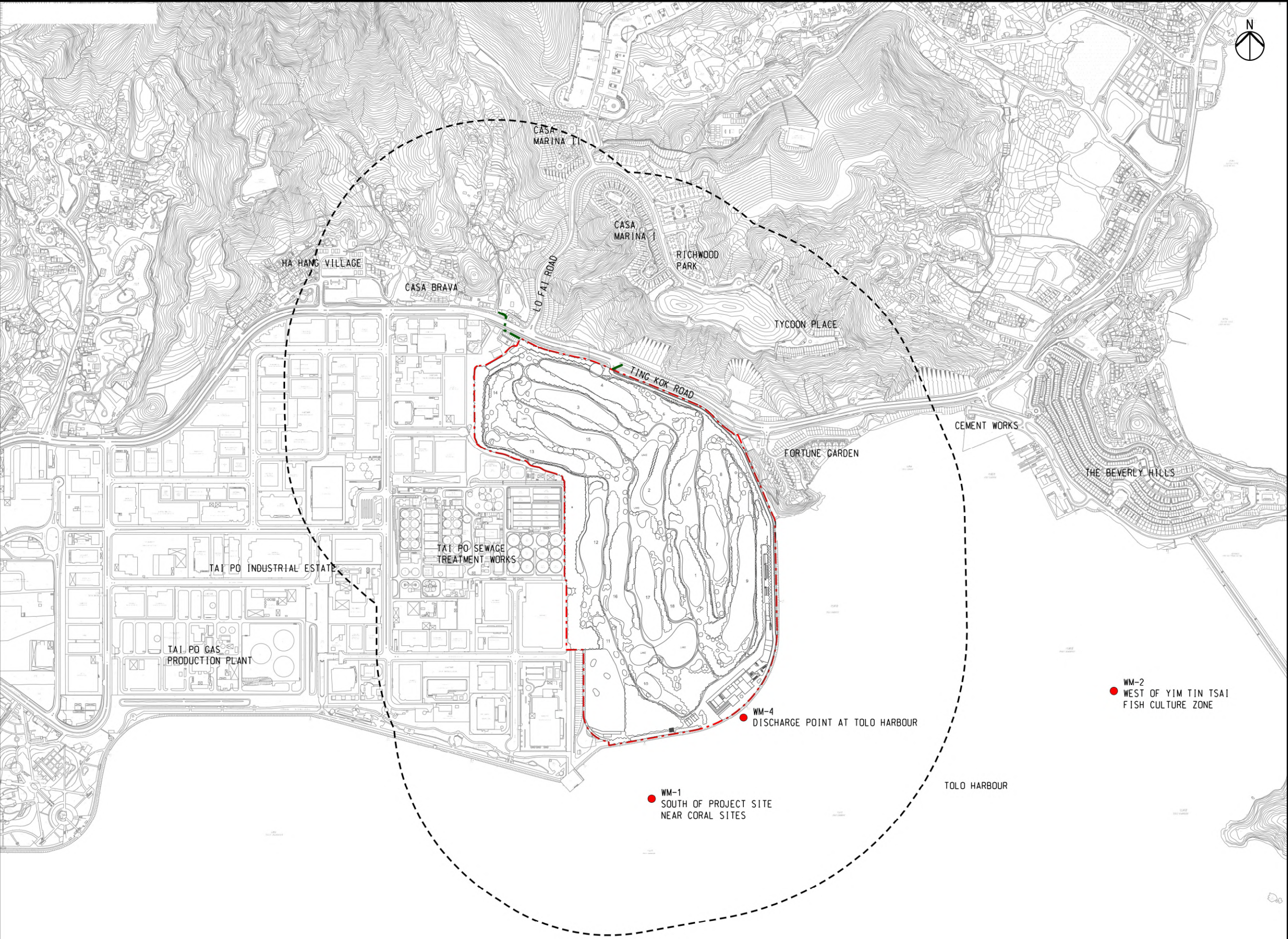


- LEGEND
- PROJECT BOUNDARY
 - 300m ASSESSMENT AREA
 - PROPOSED DRAINAGE / SEWERAGE / WATERWORKS OUTSIDE SITE BOUNDARY
 - NOISE MONITORING STATION

Contract No. and Title
Proposed Golf Course Development
at Tai Po Lot No. 246 Shuen Wan

Drawing title
Locations of Noise
Monitoring Stations

Figure 1.2



- LEGEND
- PROJECT BOUNDARY
 - 500m ASSESSMENT AREA
 - PROPOSED DRAINAGE / SEWERAGE / WATERWORKS OUTSIDE SITE BOUNDARY
 - WATER QUALITY MONITORING STATION

Contract No. and Title
Proposed Golf Course Development
at Tai Po Lot No.246 Shuen Wan

Drawing title
Locations of Water Quality
Monitoring Stations

Figure 1.3

Monitoring Station ID*	Description	Easting	Northing
WM-1	South of Project Site near Coral Sites	838145	834573
WM-2	West of Yim Tin Tsai Fish Culture Zone	839362	834856
WM-4	Bypass point at Tolo Harbour	838387	834786
WM-5	Southeast of the bypass point	839362	833994

* All stations in Environmental Monitoring and Audit Manual Table 7.4 except WM-3.

Appendix 3.2

Monitoring Schedule (October 2024)



2024

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
29	30	01	02	03	04	05
06	07	08	09	10	11	12
13	14 Water Quality Monitoring	15	16 Water Quality Monitoring	17	18 Air Quality Monitoring Noise Monitoring Water Quality Monitoring	19
20	21 Water Quality Monitoring	22	23 Water Quality Monitoring	24 Air Quality Monitoring Noise Monitoring	25 Water Quality Monitoring	26
27	28 Water Quality Monitoring	29	30 Air Quality Monitoring Noise Monitoring Water Quality Monitoring	31	01	02
03	04	Notes: Air Quality Monitoring Station: DM-1: EPD Site Office DM-2a: Near Fortune Garden Entrance DM-3a: Outside Hung Hing Printing Centre Noise Monitoring Station: NM-1a: Near Fortune Garden Entrance NM-2: Village House at 53 Ting Kok Road Water Quality Monitoring: WM-1: South of Project Site near Coral Sites WM-2: West of Yim Tin Tsai Fish Culture Zone Schedule may change due to unforeseen circumstances (adverse weather, etc)				

Appendix 3.3

Event and Action Plan

Event and Action Plan for Air Quality

Event	Action			
	ET	IEC	ER	Contractor
Action level exceedance for one sample	1. Repeat measurement to confirm finding; 2. If exceedance is confirmed, inform Contractor, IEC and ER; 3. Identify source(s), investigate the causes of exceedance and propose remedial measures; 4. Increase monitoring frequency.	1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET, ER and Contractor on possible remedial measures; 4. Review and advise the ET and ER on the effectiveness of the proposed remedial measures.	1. Confirm receipt of notification of exceedance in writing.	1. Identify source(s), investigate the causes of exceedance and propose remedial measures; 2. Implement remedial measures; 3. Amend working methods agreed with the ER as appropriate.
Action level exceedance for two or more consecutive samples	1. Repeat measurement to confirm finding; 2. If exceedance is confirmed, inform Contractor, IEC and ER; 3. Identify source(s), investigate the causes of exceedance and propose remedial measures; 4. Increase monitoring frequency to daily; 5. Advise the Contractor and ER on the effectiveness of the proposed remedial measures; 6. Discuss with IEC and Contractor on remedial actions required; 7. If exceedance continues, arrange meeting with IEC and	1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET, ER and Contractor on possible remedial measures; 4. Review and advise the ET and ER on the effectiveness of the proposed remedial measures; 5. Supervise Implementation of remedial measures.	1. Confirm receipt of notification of exceedance in writing; 2. In consultation with the ET and IEC agree with the Contractor on the remedial measures to be implemented; 3. Supervise implementation of remedial measures.	1. Identify source(s), investigate the causes of exceedance and propose remedial measures; 2. Submit proposals for remedial measures to the ER, ET and IEC within three working days of notification for agreement; 3. Implement the agreed proposals; 4. Amend proposal if appropriate.

Event and Action Plan for Air Quality

Event	Action			
	ET	IEC	ER	Contractor
	ER to discuss the remedial measures to be taken; 8. If exceedance stops, cease additional monitoring.			
Limit level exceedance for one sample	1. Repeat measurement to confirm finding; 2. If exceedance is confirmed, inform IEC, ER, Contractor and EPD; 3. Identify source(s), investigate the causes of exceedance and propose remedial measures; 4. Increase monitoring frequency to daily; 5. Discuss with the ER, IEC and Contractor on the remedial measures and assess effectiveness.	1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET, ER and Contractor on possible remedial measures; 4. Review and advise the ET and ER on the effectiveness of the proposed remedial measures; 5. Supervise implementation of remedial measures.	1. Confirm receipt of notification of exceedance in writing; 2. Review and agree on the remedial measures proposed by the Contractor; 3. Ensure remedial measures properly implemented.	1. Identify source(s), investigate the causes of exceedance and propose remedial measures 2. Take immediate action to avoid further exceedance; 3. Submit proposals for remedial actions to ER, ET and IEC within three working days of notification for agreement; 4. Implement the agreed proposals; 5. Amend proposal if appropriate.
Limit level exceedance for two or more consecutive samples	1. Repeat measurement to confirm finding; 2. If exceedance is confirmed, inform IEC, ER, Contractor and EPD; 3. Identify source(s), investigate the causes of exceedance and propose remedial measures;	1. Check monitoring data submitted by ET 2. Discuss amongst ER, ET, and Contractor on the potential remedial actions; 3. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly;	1. Confirm receipt of notification of exceedance in writing; 2. In consultation with the ET and IEC, agree with the Contractor on the remedial measures to be implemented; 3. Supervise the implementation of remedial measures;	1. Identify source(s), investigate the causes of exceedance and propose remedial measures 2. Take immediate action to avoid further exceedance; 3. Submit proposals for remedial actions to ER, IEC and ET within three working days of notification for agreement;

Event and Action Plan for Air Quality

Event	Action			
	ET	IEC	ER	Contractor
	4. Increase monitoring frequency to daily; 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; 6. Arrange meeting with IEC and ER to discuss the remedial actions to be taken; 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; 8. If exceedance stops, cease additional monitoring.	4. Supervise the implementation of remedial measures.	4. If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated.	4. Implement the agreed proposals; 5. Review and resubmit proposals if problem still not under control; 6. Stop the relevant portion of works as determined by the ER until the exceedance is abated.

Note:

ET – Environmental Team

IEC – Independent Environmental Checker

ER – Engineer's Representative

Event and Action Plan for Construction Noise

Event	Action			
	ET	IEC	ER	Contractor
Action Level Exceedance	1. Notify IEC, ER and Contractor; 2. Carry out investigation; 3. Report the results of investigation to the IEC, ER and Contractor; 4. Discuss with the Contractor and formulate remedial measures; 5. Increase monitoring frequency to check mitigation effectiveness.	1. Review the analysed results submitted by the ET; 2. Review the proposed remedial measures by the Contractor and advise the ER accordingly; 3. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Require Contractor to propose remedial measures for the analysed noise problem; 4. Ensure remedial measures are properly implemented	1. Submit noise mitigation proposals to IEC and ER; 2. Implement noise mitigation proposals.
Limit Level Exceedance	1. Identify source; 2. Inform IEC, ER, EPD and Contractor; 3. Repeat measurements to confirm findings; 4. Increase monitoring frequency; 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; 6. Inform IEC, ER and EPD the causes and actions taken for the exceedances; 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results;	1. Discuss amongst ER, ET, and Contractor on the potential remedial actions; 2. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly; 3. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Require Contractor to propose remedial measures for the analysed noise problem; 4. Ensure remedial measures properly implemented; 5. If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated.	1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC within 3 working days of notification; 3. Implement the agreed proposals; 4. Resubmit proposals if problem still not under control; 5. Stop the relevant portion of works as determined by the ER until the exceedance is abated.

Event and Action Plan for Construction Noise

Event	Action			
	ET	IEC	ER	Contractor
	8. If exceedance stops, cease additional monitoring.			

Note:

ET – Environmental Team

IEC – Independent Environmental Checker

ER – Engineer's Representative

Event and Action Plan for Water Quality

Event	Action			
	ET	IEC	ER	Contractor
Action level exceedance for one sampling day	1. Inform IEC, Contractor and ER; 2. Check monitoring data, all plant, equipment and Contractor's working methods; and 3. Discuss remedial measures with IEC and Contractor and ER.	1. Discuss with ET, ER and Contractor on the implemented mitigation measures; 2. Review proposals on remedial measures submitted by Contractor and advise the ER accordingly; and 3. Review and advise the ET and ER on the effectiveness of the implemented mitigation measures.	1. Discuss with IEC, ET and Contractor on the implemented mitigation measures; 2. Make agreement on the remedial measures to be implemented; 3. Supervise the implementation of agreed remedial measures.	1. Identify source(s) of impact; 2. Inform the ER and confirm notification of the non-compliance in writing; 3. Rectify unacceptable practice; 4. Check all plant and equipment; 5. Consider changes of working methods; 6. Discuss with ER, ET and IEC and purpose remedial measures to IEC and ER; and 7. Implement the agreed mitigation measures.
Action level exceedance for more than one consecutive sampling days	1. Repeat in-situ measurement on next day of exceedance to confirm findings; 2. Inform IEC, contractor and ER; 3. Check monitoring data, all plant, equipment and Contractor's working methods; 4. Discuss remedial measures with IEC, contractor and ER 5. Ensure remedial measures are implemented	1. Discuss with ET, Contractor and ER on the implemented mitigation measures; 2. Review the proposed remedial measures submitted by Contractor and advise the ER accordingly; and 3. Review and advise the ET and ER on the effectiveness of the implemented mitigation measures.	1. Discuss with ET, IEC and Contractor on the proposed mitigation measures; 2. Make agreement on the remedial measures to be implemented ; and 3. Discuss with ET, IEC and Contractor on the effectiveness of the implemented remedial measures.	1. Identify source(s) of impact; 2. Inform the ER and confirm notification of the non-compliance in writing; 3. Rectify unacceptable practice; 4. Check all plant and equipment and consider changes of working methods; 5. Discuss with ET, IEC and ER and submit proposal of remedial measures to ER and IEC within 3 working days of notification; and 6. Implement the agreed mitigation measures.

Event and Action Plan for Water Quality

Event	Action			
	ET	IEC	ER	Contractor
Limit level exceedance for one sampling day	1. Repeat measurement on next day of exceedance to confirm findings; 2. Inform IEC, contractor and ER; 3. Rectify unacceptable practice; 4. Check monitoring data, all plant, equipment and Contractor's working methods; 5. Consider changes of working methods; 6. Discuss mitigation measures with IEC, ER and Contractor; and 7. Ensure the agreed remedial measures are implemented	1. Discuss with ET, Contractor and ER on the implemented mitigation measures; 2. Review the proposed remedial measures submitted by Contractor and advise the ER accordingly; and 3. Review and advise the ET and ER on the effectiveness of the implemented mitigation measures.	1. Discuss with ET, IEC and Contractor on the implemented remedial measures; 2. Request Contractor to critically review the working methods; 3. Make agreement on the remedial measures to be implemented; and 4. Discuss with ET, IEC and Contractor on the effectiveness of the implemented remedial measures.	1. Identify source(s) of impact; 2. Inform the ER and confirm notification of the non-compliance in writing; 3. Rectify unacceptable practice; 4. Check all plant and equipment and consider changes of working methods; 5. Discuss with ET, IEC and ER and submit proposal of additional mitigation measures to ER and IEC within 3 working days of notification; and 6. Implement the agreed remedial measures.
Limit level exceedance for more than one consecutive sampling days	1. Inform IEC, contractor and ER; 2. Check monitoring data, all plant, equipment and Contractor's working methods; 3. Discuss mitigation measures with IEC, ER and Contractor; and 4. Ensure mitigation measures are implemented; and	1. Discuss with ET, Contractor and ER on the implemented mitigation measures; 2. Review the proposed remedial measures submitted by Contractor and advise the ER accordingly; and 3. Review and advise the ET and ER on the	1. Discuss with ET, IEC and Contractor on the implemented remedial measures; 2. Request Contractor to critically review the working methods; 3. Make agreement on the remedial measures to be implemented;	1. Identify source(s) of impact; 2. Inform the ER and confirm notification of the non-compliance in writing; 3. Rectify unacceptable practice; 4. Check all plant and equipment and consider changes of working methods; 5. Discuss with ET, IEC and ER and submit proposal of additional mitigation

Event and Action Plan for Water Quality

Event	Action			
	ET	IEC	ER	Contractor
	5. Increase the monitoring frequency to daily until no exceedance of Limit Level for two consecutive days	effectiveness of the implemented mitigation measures.	4. Discuss with ET and IEC on the effectiveness of the implemented mitigation measures; and 5. Consider and instruct, if necessary, the Contractor to slow down or to stop all or part of the dredging activities until no exceedance of Limit level.	measures to ER and IEC within 3 working days of notification; and 6. Implement the agreed remedial measures. 7. As directed by the ER, to slow down or stop all or part of the dredging activities until no exceedance of Limit level.

Note:

ET – Environmental Team

IEC – Independent Environmental Checker

ER – Engineer's Representative

Each step of actions required shall be implemented within 1 working days unless otherwise specified or agreed with EPD.

Event/Action Plan for Landscape and Visual

Event	Action			
	ET	IEC	ER	Contractor
Design Check	1. Check final design conforms to the requirements of EP and prepare report.	1. Check report. 2. Recommend remedial design if necessary.	1. Undertake remedial design if necessary.	N/A
Non-conformity on one occasion	1. Inform the IEC, ER and the Contractor 2. Discuss remedial actions with IEC, ER and Contractor 3. Monitor remedial actions until rectification has been completed	1. Check report. 2. Check Contractor's working method 3. Discuss with ET, ER and Contractor on possible remedial measures. 4. Advise ER on effective of proposed remedial measures. 5. Check implementation of remedial measures	1. Confirm receipt of notification of non-conformity in writing 2. Review and agree on the remedial measures proposed by the Contractor 3. Ensure remedial measures are properly implemented	1. Identify source and investigate the non-conformity 2. Amend working methods agreed with ER as appropriate 3. Rectify damage and undertake any necessary replacement
Repeated Non-conformity	1. Identify sources 2. Inform the Contractor, IEC and ER 3. Discuss inspection frequency 4. Discuss remedial actions with IEC, ER and Contractor 5. Monitor remedial actions until rectification has been completed	1. Check inspection report 2. Check Contractor's working method 3. Discuss with ET,ER and Contractor on possible remedial measures 4. Advise ER on effectiveness of proposed remedial measures	1. Notify the Contractor 2. In consultation with the ET and IEC, agree with the Contractor on the remedial measures to be implemented 3. Supervise implementation of remedial measures	1. Identify source and investigate the non-conformity 2. Amend working methods agreed with ER as appropriate 3. Rectify damage and undertake any necessary replacement. Stop relevant portion of works as determined by ER until the non-conformity is abated.

Event/Action Plan for Landscape and Visual

Event	Action			
	ET	IEC	ER	Contractor
	6. If non-conformity stops, cease additional monitoring			

Note:

ET – Environmental Team

IEC – Independent Environmental Checker

ER – Engineer's Representative

Appendix 3.4

Equipment Calibration Certificates

Report no. : 240029CA242014(4)

Page 1 of 1

CALIBRATION CERTIFICATE OF DUST METER

Client : Fugro Technical Services Limited

Project : Calibration Services

Client Supplied Information

Details of Unit Under Test, UUT -

Description : Laser Dust Monitor

Manufacturer : SIBATA

Model No. : LD-5R

Serial No. : 620480

Next Calibration Date : 13-Jun-2025

Laboratory Information

Details of Reference Equipment -

Description : Reference balance

Equipment ID. : C-065-5

Date of Calibration : 14-Jun-2024

Ambient Temperature : 30 °C

Calibration Location : Calibration Lab. of FTS

Method Used : By direct comparison the weight of dust particle trapped in a filter paper using high volume sampler (TSP method) for a certain period, with the reading of the UUT. They should be placed at the same location and powered on and off at the same time.

Calibration Results :

Reference concentration (mg/m ³)	Total count for 1 hour	CPM (Count per minute)
0.2438	4995	83.25
0.2650	5231	87.18
0.2044	4726	78.77

Remarks:

1. The equipment being used in this calibration is traceable to recognized National Standards.
2. The interpolation equation : Concentration (mg/m³) = K x UUT reading (CPM) where K = 0.002862
3. Correlation coefficient (r) : 0.9909

Checked by : 

Date : 12-8-2024

Certified by : 

Date : 15-8-2024

CA-R-297 (22/07/2009)

Leung Kwok Tai (Assistant Manager)

**** End of Report ****

Report no. : 240029CA242014(3)

Page 1 of 1

CALIBRATION CERTIFICATE OF DUST METER

Client : Fugro Technical Services Limited

Project : Calibration Services

Client Supplied Information

Details of Unit Under Test, UUT -

Description : Laser Dust Monitor

Manufacturer : SIBATA

Model No. : LD-5R

Serial No. : 761105

Next Calibration Date : 13-Jun-2025

Laboratory Information

Details of Reference Equipment -

Description : Reference balance

Equipment ID. : C-065-5

Date of Calibration : 14-Jun-2024

Ambient Temperature : 30 °C

Calibration Location : Calibration Lab. of FTS

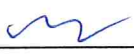
Method Used : By direct comparison the weight of dust particle trapped in a filter paper using high volume sampler (TSP method) for a certain period, with the reading of the UUT. They should be placed at the same location and powered on and off at the same time.

Calibration Results :

Reference concentration (mg/m ³)	Total count for 1 hour	CPM (Count per minute)
0.2438	5482	91.37
0.2650	5567	92.78
0.2044	5289	88.15

Remarks:

1. The equipment being used in this calibration is traceable to recognized National Standards.
2. The interpolation equation : Concentration (mg/m³) = K x UUT reading (CPM) where K = 0.002620
3. Correlation coefficient (r) : 0.9988

Checked by : 
CA-R-297 (22/07/2009)

Date : 12-8-2014

Certified by : 

Date : 15-8-2014

Leung Kwok Tai (Assistant Manager)

**** End of Report ****

Report no.: 212769CA240263

Page 1 of 1

CALIBRATION CERTIFICATE OF SOUND LEVEL METER

Client Supplied Information

Client : Materialab Consultants Ltd.

Project : Calibration Services

Details of Unit Under Test, UUT -

Description : Sound Level Meter

Manufacturer : Casella

	Meter	Microphone	Preamplifier
Model No.	CEL-633A	CE-251	CEL-495
Serial No.	1488302	0772	004020

Equipment ID : N/A

Next Calibration Date : 31-Jan-2025

Specification Limit : EN 61672-1: 2003 Class 1

Laboratory Information

Details of Reference Equipment -

Description : B & K Acoustic Multifunction Calibrator 4226 (Traditional free field setting)

Equipment ID. : R-108-1

Date of Receipt : 24-Jan-2024

Date of Calibration : 01-Feb-2024

Calibration Location : Calibration Laboratory of FTS

Ambient Temperature : 20±2 °C

Method Used : By direct comparison

Relative Humidity : <80% R.H.

Calibration Results :

Parameters		Mean Value (dB)	Specification Limit(dB)
A-weighting frequency response	4000Hz	1.2	2.6 to -0.6
	2000Hz	1.2	2.8 to -0.4
	1000Hz	-0.1	1.1 to -1.1
	500Hz	-3.5	-1.8 to -4.6
	250Hz	-8.9	-7.2 to -10.0
	125Hz	-16.4	-14.6 to -17.6
	63Hz	-26.5	-24.7 to -27.7
Differential level linearity	94dB-104dB	0.0	± 0.6
	104dB-114dB	0.0	± 0.6

Remarks :

1. The equipment used in this calibration is traceable to recognized National Standards.
2. The mean value is the average of four measurements.
3. For calibration: Reference SPL are 94, 104 & 114dB, range setting is 20-140dB & time weighting is fast
4. The UUT does comply with EN 61672-1: 2003 Class 1 sound level meter for the above measurement.
5. The values given in this Calibration Certificate only relate to unit under test and the values measured at the time of the test. Any uncertainties will not include allowance for the equipment long term drift, variations with environment changes, vibration and shock during transportation, overloading, mis-handling or the capability of any other laboratory to repeat the measurement.

Checked by :  Date : 5-2-2024
CA-R-297 (22/07/2009)

Certified by :  Date : 8-2-2024
Leung Kwok Tai (Assistant Manager)

** End of Report **

Report no.: 212769CA240263(2)

Page 1 of 1

CALIBRATION CERTIFICATE OF SOUND CALIBRATOR

Client Supplied Information

Client : Materialab Consultants Ltd.

Project : Calibration Services

Details of Unit Under Test, UUT -

Description : Sound Calibrator
Manufacturer : Casella (Model CEL-120/1)
Serial No. : 2525895
Equipment ID : N/A

Next Calibration Date : 31-Jan-2025

Specification Limit : EN 60942: 2003 Class 1

Laboratory Information

Details of Calibration Equipment -

Description : Reference Sound level meter
Equipment ID. : R-119-2

Date of Receipt : 24-Jan-2024

Date of Calibration : 01-Feb-2024

Calibration Location : Calibration Laboratory of FTS Ambient Temperature : 20±2 °C

Method Used : By direct comparison Relative Humidity : <80% R.H.

Calibration Results :

Parameters (Setting of UUT)	Mean Value (error of measurement)	Specification Limit(dB)
94dB	-0.3 dB	±0.4dB
114dB	-0.2 dB	

Remarks :

1. The equipment used in this calibration is traceable to recognized National Standards.
2. The mean value is the average of four measurements.
3. The equipment under test does comply with the specification limit.
4. The values given in this Calibration Certificate only relate to the unit-under-test and the values measured at the time of the test. Any uncertainties quoted will not include allowances for the environmental changes, variation and shock during transportation, or the capability of any other laboratory to repeat the measurement.

Checked by :  Date : 1-2-2024 Certified by :  Date : 1-2-2024
CA-R-297 (22/07/2009) Leung Kwok Tai (Assistant Manager)

** End of Report **

Report No. : 142626WA248063(1)



Page 1 of 3

Report on Calibration of YSI EXO-1 Multi-parameter Water Quality Meter**Information Supplied by Client**

Client : Fugro Technical Services Limited (MCL)

Client's address : 13/F, Fugro House – KCC2, No. 1 Kwai On Road, Kwai Chung, N.T., H.K.

Sample description : One YSI EXO-1 Multi-parameter Water Quality Meter

Client sample ID : Serial No. 21D101383

Test required : Calibration of the YSI EXO-1 Multi-parameter Water Quality Meter

Laboratory Information

Lab. sample ID : WA248063/2

Date sample received : 04/10/2024

Date of calibration : 19/10/2024

Next calibration date : 18/01/2025

Test method used : In-house comparison method

Note : This report refers only to the sample(s) tested and the result(s) applied to the sample(s) as received.

Report No. : 142626WA248063(1)

Page 2 of 3

Results :
A. pH calibration

pH reading at 25°C for Q.C. solution(6.86) and at 25°C for Q.C. solution(9.18)		
Theoretical	Measured	Deviation
9.18	9.13	-0.05
6.86	6.84	-0.02

B. Salinity calibration

Salinity, ppt			
Theoretical	Measured	Deviation	Maximum acceptable Deviation
1	1.01	+0.01	± 0.1
10	9.92	-0.08	± 0.5
20	20.02	+0.02	± 1.0
30	29.99	-0.01	± 1.5
40	40.48	+0.48	± 2.0

C. Dissolved Oxygen calibration

Trial No.	Dissolved oxygen content, mg/L	
	By Titration	By D.O. meter
1	8.24	8.25
2	7.68	7.70
3	7.68	7.61
Average	7.87	7.85

Differences of D.O. Content between Wrinkler Titration and D.O. meter should be less than 0.2 mg/L

Certified by :

Approved Signatory : HO Kin Man, John
Director

Date :

31/10/2014

Note : This report refers only to the sample(s) tested and the result(s) applied to the sample(s) as received.

Report No. : 142626WA248063(1)

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Results :
D. Temperature calibration

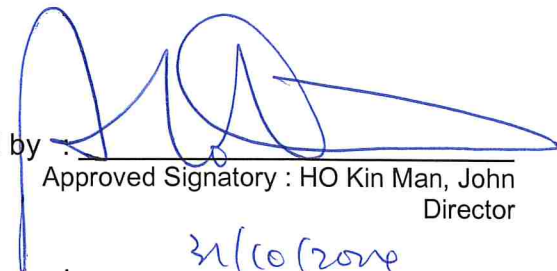
Thermometer reading, °C	Meter reading, °C
25.6	25.69

E. Turbidity calibration

Turbidity, N.T.U.			
Theoretical	Measured	Deviation	Maximum acceptable Deviation
4	4.53	+0.53	± 0.6
8	8.25	+0.25	± 0.8
40	40.02	+0.02	± 3.0
80	79.14	-0.86	± 4.0

F. Conductivity calibration

Conductivity, µS/cm			
Theoretical	Measured	Deviation (%)	Maximum acceptable Deviation (%)
1408	1505	+6.88	±10.0
6668	6425	-3.64	
12860	12633	-1.76	
24820	23794	-4.13	

Certified by : 
Approved Signatory : HO Kin Man, John
Director

Date : 31/10/2019

** End of Report **

Note : This report refers only to the sample(s) tested and the result(s) applied to the sample(s) as received.

Calibration Certificate

for the instrument

OPTIMA 7 Biogas

for the serial number

331555

The instrument meets the requirements according to TÜV EN 50379-2.

The adjustment and calibration of the flue gas analyser is due to a measurement with certified test gases. Other measuring procedures correspond with the technical regulations and norms valid at the time of the measurement. All equipment used is being checked periodically.
Traceability is guaranteed by national normative!

Measuring installations:

Measurement with certified test gases

Measuring results:

Gases	Nominal value	Limits + / -	Actual value	Test gas vendor	Bottle number
CO in ppm	499,9	+ / - 25	----	Air Liquide	94315
O2 in Vol. %	2,01	+ / - 0,3	2,03	Air Liquide	94315
NO in ppm	82,1	+ / - 4	----	Air Liquide	D11LLGH
Special gases					
H2S in ppm	99,2	+/- 25	99,5	Air Liquide	94274
CO2 in %	40,00	+/- 1,5	39,97	Air Liquide	94274
CH4 in %	59,99	+/- 2,5	60,03	Air Liquide	94274
NO2 in ppm	50,0	+/- 3	----	Air Liquide	D6DH5DF
in ppm		+/-		Air Liquide	
Temperature	250 °C	+/- 2 °C	250,0 °C	Test equipment: MRU Temperaturetester T042	
draft in hPa	0,25 hPa	+/- 0,03 hPa	0,25 hPa	Test equipment: MRU DK 1500 007-D007	

special remarks:

Calibration date: 31.01.24

processed by:

Appendix 4.1

Implementation Status of Environmental Mitigation Measures

Implementation Status of Environmental Mitigation Measures (Construction Phase)

EM&A Log Ref	Recommended Mitigation Measures	Status
<u>Air Quality</u>		
D1	Water spraying every hour on exposed worksites and haul road	Implemented
D2	The contractor shall follow the procedures and requirements given in the Air Pollution Control (Construction Dust) Regulation	Implemented
	The following dust suppression measures should be incorporated to control the dust nuisance throughout the construction phase:	
	• Water spraying on any dusty materials before loading and unloading, stockpile of dusty materials, area where demolition works is carried out, area where excavation or earth moving activities are carried out, and any unpaved main haul road	Implemented
	• Adoption of side enclosure and covering of any aggregate or dusty material storage piles to reduce emissions. Where this is not practicable owing to frequent usage, watering shall be used to aggregate fines	Implemented
	• Use of regular watering to reduce dust emissions from exposed site surfaces, unpaved roads, dusty construction areas	Implemented
	• Provide effective dust screens, sheeting, or netting to enclose any scaffolding built around the perimeter of a building	Implemented
	• Prevent placing dusty material storage piles near ASRs	Implemented
D3	• Cover or shelter any stockpile of dusty materials	ET had reminded the contractor on 29 th October 2024 weekly site inspection and is awaiting an update.
	• Provide vehicle washing facilities at all site exits to wash away any dusty materials from vehicle body and wheels before they leave the site	Implemented
	• Cover any dusty load on vehicles before they leave the site	Implemented
	• Loading, unloading, transfer, handling, or storage of bulk cement or dry pulverized fuel ash shall be carried out in a totally enclosed system or facility, and any vent or exhaust shall be fitted with an effective fabric filter or equivalent air pollution control system	Implemented
	• Properly treat exposed earth, such as by compacting or hydroseeding, within 6 months after the last construction activity	Implemented
	• When there are open excavation and reinstatement works, hoarding of not less than 2.4m high should be provided as far as practicable along the Project Site boundary with provision for public crossing	Implemented
D4	Implement regular dust monitoring under EM&A programme during the construction stage.	Implemented
D5	A 3m high hoarding at the northern boundary of the Project Site during construction stage.	Hoarding will be erected by the contractor.
D6	When there are open excavation and reinstatement works, hoarding of not less than 2.4m high should be provided as far as practicable along the Project Site boundary with provision for public crossing. Good site practice shall also be adopted by the Contractor to ensure the conditions of the hoardings are properly maintained throughout the construction period	No open excavation and reinstatement works at present.
<u>Noise</u>		
	Implement the following good site management practices:	
N1	• only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction programme	Implemented
	• machines and plant (such as trucks, breakers) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum	Implemented

EM&A Log Ref	Recommended Mitigation Measures	Status
	plant known to emit noise strongly in one direction, where possible, be orientated so that the noise is directed away from nearby Noise Sensitive Receivers (NSRs)	Implemented
	silencers or mufflers on construction equipment should be properly fitted and maintained during the construction works	Implemented
	mobile plant should be sited as far away from NSRs as possible and practicable	Implemented
	material stockpiles, site office and other structures should be effectively utilised, where practicable, to screen noise from on-site construction activities	Implemented
N2	Use of quiet plant which should be made reference to the Powered Mechanical Equipment (PME) listed in the Quality Powered Mechanical Equipment (QPME) / other commonly used PME listed in Environmental Protection Department (EPD) web pages as far as possible which includes the Sound Power Level (SWLs) for specific quiet PME. Require the Contractor to independently verifies the noise level of the plant proposed to be used and demonstrate that the plant proposed to be used on the Project Site meets the requirements.	Implemented
N3	Install movable temporary noise barriers (typical design is wooden framed barrier with a small-cantilevered upper portion of superficial density no less than 7kg/m ² on a skid footing with 25mm thick internal sound absorptive lining) in order to achieve a minimum 5 dB(A) reduction for movable plant.	Implemented
N4	Coordinate with contractors of other concurrent projects such as "Upgrading of Sewage Pumping Station and Sewerage along Ting Kok Road" to schedule and avoid overlapping of major noisy construction activities.	"Upgrading of Sewage Pumping Station and Sewerage along Ting Kok Road" is completed.
N5	Carry out construction noise monitoring in accordance with the EM&A Manual.	Implemented
Water Quality		
	General Site Operation To reduce the potential water quality impact due to construction site runoff, the following good site practices in accordance to Practice Note for Professional Persons on Construction Site Drainage, Environmental Protection Department, 1994 (ProPECC PN 1/94) should be implemented to avoid potential adverse water quality impacts:	
	Installation of temporary storage tanks to treat construction surface runoff. Once one of the water storage tanks are completed, use the water storage tank for sedimentation.	Implemented
	Construct perimeter cut-off drains to direct off-site water around the site and provide channels (both temporary and permanent drainage pipes and culverts), earth bunds or sand bag barriers on site to direct stormwater to silt removal facilities.	Implemented
W1	Implementation of dikes or embankments for flood protection and provide temporary ditches to facilitate the runoff discharge into an appropriate watercourse, through a silt/sediment trap.	Implemented
	Design efficient silt removal facilities based on the guidelines in Appendix A1 of ProPECC PN 1/94.	Implemented
	Schedule construction works to minimize surface excavation works during the rainy seasons (April to September). Complete and vegetate all exposed earth areas as soon as possible after earthworks have been completed.	Implemented
	Inspect and maintain all drainage facilities and erosion and sediment control structures regularly to ensure proper and efficient operation at all times and particularly following rainstorms.	Implemented
	Implementation of measures to minimize the ingress of site drainage into excavations. If the excavation of trenches in wet periods is necessary, it should be dug and backfilled in short sections wherever practicable.	Implemented

EM&A Log Ref	Recommended Mitigation Measures	Status
	Cover all construction materials at temporary storage area with tarpaulin or similar fabric during rainstorms and implementation of measures to prevent the washing away of construction materials, soil, silt or debris into any drainage system.	ET had reminded the contractor on 29 th October 2024 weekly site inspection and is awaiting an update.
	Cover manholes (including newly constructed ones) adequately and seal temporarily to prevent silt, construction materials or debris being washed into the drainage system and storm runoff being directed into foul sewers.	Implemented
	Take precautions at any time of year when rainstorms are likely. The actions to be taken based on the guidelines in Appendix A2 of ProPECC PN 1/94.	Implemented
	Clean all vehicles and plant before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads and provide adequately designed and sited wheel washing facilities at every construction site exit where practicable.	Implemented
	Provide oil interceptors in the drainage system downstream of any oil/fuel pollution sources. Empty and clean the oil interceptors regularly to prevent the release of oil and grease into the storm water drainage system after accidental spillage."	No oil/fuel pollution sources observed at present, so no oil interceptors provided.
	Collect, handle and dispose construction solid waste, debris and rubbish on site to avoid water quality impacts.	Implemented
	Provide locks for all fuel tanks and storage areas and locate on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank to prevent spilled fuel oils from reaching water sensitive receivers nearby.	Implemented
	A 300mm bund wall is also recommended along the seawall.	Implemented
Accidental Spillage of Chemicals To reduce the potential water quality impact due to accidental spillage of chemicals, the following mitigation measures should be implemented to avoid potential adverse water quality impacts:		
W2	Properly sort and contain the chemicals used during construction, such as fuel, oil, solvents and lubricants in a designated area with secondary containment to prevent spillage and contamination of the nearby water environment.	ET had reminded the contractor on 29 th October 2024 weekly site inspection for placing drip trays under chemical containers and is awaiting an update.
	Locate any maintenance activities and workshops with chemicals use away from watercourses on hard standings within a bunded area and provide sumps and oil interceptors as appropriate.	Implemented
	The Contractor shall register as a chemical waste producer and employ licensed collector for collection of chemical waste from the construction site. Any chemical waste generated shall be managed in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.	The contractor had applied chemical waste producer registration on 3 rd September 2024 and is waiting for EPD approval. No chemical waste produced at present.
W3	Sewage from workforce To mitigate the water quality impacts of sewage arising from the on-site construction workers, the following measures should be implemented:	
	Provide temporary sanitary facilities, e.g. portable chemical toilets to collect the sewage. Regular collection by licensed collectors should be arranged.	Implemented

EM&A Log Ref	Recommended Mitigation Measures	Status
	Post notices at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the surrounding environment during the construction phase of the Project.	Implemented
	<u>Waste Management</u>	
	Good Site Practices The following good site practices are recommended throughout the construction activities:	
	nomination of an approved personnel, such as a site manager, to be responsible for the implementation of good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site	Implemented
	training of site personnel in site cleanliness, appropriate waste management procedures and concepts of waste reduction, reuse and recycling	Implemented
	provision of sufficient waste disposal points and regular collection for disposal	Implemented
WM1	appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers	Implemented
	regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors	Implemented
	prepare a Waste Management Plan (WMP) in accordance with the ADV-19 Practice Note for Authorized Persons and Registered Structural Engineers on Construction and Demolition Waste, which include the mitigation measures proposed in the EIA and EM&A Manual, and submit to the Engineer for approval	Implemented
	Waste Reduction Measures Waste reduction is best achieved at the planning and design phase, as well as by ensuring the implementation of good site practices. The following recommendations are proposed to achieve reduction:	
	segregate and store different types of waste in different containers, skip or stockpiles to enhance reuse or recycling of materials and their proper disposal	Implemented
WM2	proper storage and site practices to minimize the potential for damage and contamination of construction materials	Implemented
	plan and stock construction materials carefully to minimize amount of waste generated and avoid unnecessary generation of waste	Implemented
	sort out demolition debris and excavated materials from demolition works to recover reusable/recyclable portions (i.e. soil, broken concrete, metal etc.)	Implemented
	provide training to workers on the importance of appropriate waste management procedures, including waste reduction, reuse and recycling	Implemented
	Storage, Collection and Transportation of Waste The following recommendation should be implemented to minimize the impacts:	
	non-inert C&D materials such as top soil should be handled and stored well to ensure secure containment of the materials	Implemented
WM3	stockpiling area should be provided with covers and water spraying system to prevent materials from wind-blown or being washed away	ET had reminded the contractor on 29 th October 2024 weekly site inspection and is awaiting an update.
	different locations should be designated to stockpile each material to enhance reuse	Implemented
	remove waste in timely manner	Implemented
	employ the trucks with cover or enclosed containers for waste transportation	Implemented
	obtain relevant waste disposal permits from the appropriate authorities	Implemented

EM&A Log Ref	Recommended Mitigation Measures	Status
	disposal of waste should be done at licensed waste disposal facilities	Implemented
	all dumping trucks engaged on site be equipped with GPS or equivalent system for tracking and monitoring of their travel routings and parking locations by Environmental Team (ET) and Independent Environmental Checker (IEC) to prohibit illegal dumping and landfilling of materials	Implemented
	keep record and analysis of data collected by GPS or equivalent system relating to travel routings and parking locations of dump trucks engaged on site	Implemented
WM4	C&D Materials Wherever practicable, C&D materials should be segregated from other wastes to avoid contamination and ensure acceptability at public fill reception facilities areas or reclamation sites. The following mitigation measures should be implemented in handling the C&D materials:	
	maintain temporary storage locations and reuse excavated fill material for backfilling	Implemented
	carry out on-site sorting	Implemented
	make provisions in the Contract documents to allow and promote the use of recycled aggregates where appropriate	Implemented
	implement a trip-ticket system for each works contract to ensure that the disposal of C&D materials are properly documented and verified The recommended C&D materials handling should include:	Implemented
	on-site sorting of C&D materials	Implemented
	reuse of C&D materials	Implemented
	The acceptance criteria of inert C&D materials to public fill reception facilities are subject to the fill management authority of CEDD.	
WM5	Use of Standard Formwork and Planning of Construction Materials purchasing	
	Standard formwork should also be used as far as practicable to minimise the arising of non-inert C&D materials	Implemented
	Use of more durable formwork (e.g. metal hoarding) or plastic facing should be encouraged in order to enhance the possibility of recycling	Implemented
	Purchasing of construction materials should be carefully planned in order to avoid over ordering and wastage	Implemented
WM6	General Refuse	
	General refuse should be stored in enclosed bins separately from construction and chemical wastes.	Implemented
	Recycling bins should also be placed to encourage recycling	ET had reminded the contractor on 25 th October 2024 weekly site inspection and is awaiting an update.
	Preferably enclosed and covered areas should be provided for general refuse collection and routine cleaning for these areas should also be implemented to keep areas clean	Implemented
	A reputable waste collector should be employed to remove general refuse on a daily basis	Implemented
WM7	Chemical Waste	
	Reduce the generation quantities or select a chemical type of less impact on environment, health and safety as far as possible If chemical wastes are produced at the construction site, the Contractors should register with EPD as chemical waste producer. Chemical wastes should be stored in appropriate containers and collected by a licensed chemical waste collector. Chemical wastes (e.g. spent lubricant oil) should be recycled at an appropriate facility as far as possible, while the chemical waste that cannot be recycled should be disposed of at either the Chemical Waste Treatment Centre, or another licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation	Implemented

EM&A Log Ref	Recommended Mitigation Measures	Status
WM8	Felled Trees, Twigs and Branches	
	Felled trees, twigs and branches can be shredded into smaller particles of appropriate size which can be used as mulch. Mulch is applied to the soil surface modifying the soil environment and enhancing plant growth.	
Landfill Gas Hazards		
General Site Safety		
LFG1	Appointment of Safety Officer, who has been trained in use of gas detection equipment and LFG related hazards, should be present on site throughout the ground works phase. The Safety Officer should be provided with an intrinsically safe portable instrument appropriately calibrated and capable of measuring the following gases: • CH4: 0-100% LEL and 0-100% v/v; • CO2: 0-100% v/v; and • O2: 0-100% v/v.	Implemented
	Those staff who work in, or have responsibility for "at risk" areas, including all excavation workers, supervisors and engineers working within the Consultation Zone, should receive appropriate training on working in areas susceptible to LFG, fire and explosion hazards.	Implemented
	An excavation procedure or code of practice to minimise LFG related risk should be devised and carried out by the Safety Officer.	Implemented
	No worker should be allowed to work alone at any time in or near to any excavation. At least one other worker should be available to assist with a rescue if needed.	Implemented
	Smoking, naked flames and other source of ignition should be prohibited within 15m of any excavation or ground-level confined space. "No Smoking", "No Naked Flame" and "Potential Hazard of Landfill Gas" notices in Chinese and English should be posted prominently around the Project Site.	Implemented
	Welding, flame-cutting or other hot works may only be carried out in trenches or confined spaces when controlled by a "permit to work" procedure, properly authorised by Safety Officer.	Implemented
	Ground level construction plant should be fitted with vertical exhausts at least 0.6m above ground level and with spark arrestors.	Implemented
	Any electrical equipment, such as motors and extension cords, should be intrinsically safe.	Implemented
LFG2	During piping assembly or conduiting construction, all valves/seals should be closed immediately after installation. As construction progresses, all valves/seals should be closed as installed to prevent the migration of gases through the pipeline/conduit. All piping/conduiting should be capped at the end of each working day.	Implemented
	Frequency and location of LFG monitoring within excavation area should be determined prior to commencement of works. LFG monitoring in excavations should be conducted at no more than 10mm from exposed ground surface.	Implemented
	Temporary facilities such as mobile site offices, equipment stores, mess rooms etc. should be raised clear of the ground. If buildings are raised clear of the ground, a minimum, clear separation distance (as measured from the highest point on the ground surface to the underside of the lowest floor joist) should be 500mm."	Implemented
	Adequate fire extinguishers and breathing apparatus sets should be made available on site and appropriate training given in their use.	Implemented
	Fire drills should be organised at not less than six months intervals.	Implemented
Site Safety for Drilling		
LFG2	Specialist Contractor should provide proper personal protective equipment (PPE) to the construction workers.	Implemented
	The following safety equipment shall also be provided by Specialist Contractor at all times during the drilling:	
	no smoking signs, to be placed prominently adjacent to the drilling area;	Implemented
portable fire extinguisher;		Implemented

EM&A Log Ref	Recommended Mitigation Measures	Status
	• high visibility clothing to be worn by all drilling operatives; and	Implemented
	• additional protective clothing should include stout industrial boots (with steel toe cap and insole), plastic hard hats, heavy duty waterproof industrial grooves.	Implemented
	• When drilling on landfill sites, all spoil obtained from the borehole should be stockpiled alongside the borehole and disposed of (to an appropriately licensed disposal site) at the end of the working day. At the end of the working day all vehicles, the drilling rig and any hand tools should be hosed-down with clean water to remove deposits of excavated spoil. Suitable guards or barriers should be placed around the excavation or borehole to prevent access by unauthorised persons.	Implemented
	• One person should be present at all times during drilling operations, with the sole responsibility of assuring the observance of all safety procedures. This person should be trained in the use of all recommended safety equipment.	Implemented
	• Smoking should be prohibited anywhere on a landfill site and within 15 metres of a boring or excavation at any locations within the Consultation Zone.	Implemented
	• For large diameter boreholes, a working platform should be placed over the hole which will prevent accidental entry into the hole by operatives.	Implemented
	• No worker should be allowed to work alone at any time near the edge of the well under construction. Another worker should always be present, beyond the area considered to be subject to the possible effects of landfill gas or cave-in.	Implemented
	• Periodically during the well construction, the work areas should be monitored for levels of methane.	Implemented
	• If the well construction is not completed by the end of the working day, the hole should be covered with a plate of sufficient overlap to prevent access to the hole and sufficient structural strength to support expected loads. The plate should be weighted down to discourage removal and, on landfill sites, the edges of the plate should be covered with sufficient depth of wet soil to prevent escape of gas.	Implemented
	• All pipes or casings should be capped at the end of each working day.	Implemented
	• Engine-driven rigs should have vertical exhaust stacks discharging not less than 1.5m above ground level and should have speed limits to prevent engine run away on ingested gas.	Implemented
	• Diesel engine air-intakes should also be located not less than 1.5m above ground level.	Implemented
	• Any electrical equipment should be intrinsically safe.	Implemented
	Site Safety for Well Installation	
	• To prevent uncontrolled gas release and to protect personnel from the risk of falling into the borehole, the open borehole should be covered with a sheet or plate strong enough to support personnel and having an overlap all round the borehole.	Implemented
LFG3	• The drilling rig, boring machine or excavator should remain in place over the borehole and could be used as a support to assist placement of the casing.	Implemented
	• The upper end of the well casing should be sealed, preferably with a fused or screwed end cap or alternatively with an inflatable bag type flow stopper, until the permanent headworks/monitoring tap is fitted. Landfill gas must not be allowed to vent freely at the site surface.	Implemented
	Ecology	
EC1	Preservation of existing tree groups at various locations within the Project Site, covering some of the tree groups used by Collared Crow and Black Kite as roosting sites. These included a major tree group at the southern end of the Project Site which was more frequently used by Collared Crows.	Implemented
EC2	Erection of protective fencing without foundations for the major preserved tree groups	Implemented

EM&A Log Ref	Recommended Mitigation Measures	Status
EC3	Phasing of construction works and works areas	Implemented
EC4	The use of powered mechanical equipment will be stopped at one hour before sunset at Area 3, eastern part of area 2 and the Ancillary Facilities	Implemented
EC5	In situ preservation of the two individuals of Incense Tree <i>Aquilaria sinensis</i> recorded within the Project Site Should further individuals of Incense Trees be found and having direct conflict with the golf course layout, preparation of transplantation plan prior to site formation;	Implemented
EC6	Planting of new trees: Upon completion of site formation at each phase, landscape planting will be implemented immediately before the beginning of next phase such that new tree groups aiming for roosting site provision will be planted before site clearance in the next phase.	Implemented
EC7	There will be no marine works and marine traffic arising from the Project to avoid potential impact on the marine habitats of conservation importance (e.g. Ting Kok SSSI).	Implemented
EC8	Implementation of good site practices as described in Practice Note for Professional Persons on Construction Site Drainage, EPD, 1994 (ProPECC PN 1/94).	Implemented
EC9	A temporary drainage system should be installed to intercept all construction runoff and divert it to water storage tanks.	Implemented
EC10	Schedule construction works to minimise surface excavation works during the rainy seasons (April to September). Complete and vegetate all exposed earth areas as soon as possible after earthworks have been completed.	Not in rainy seasons at present.
EC11	During construction phase, roost surveys should be conducted on the Project Site to monitor utilisation of the preserved tree groups by Collared Crow and Black Kite.	Implemented
EC12	The mitigation mentioned in water quality impact assessment should be implemented to avoid/ minimize impact to marine ecology due to deterioration of water quality.	Implemented
EC13	Site inspections and water quality monitoring during construction phase shall be carried out to monitor any malpractice leading to deterioration of water quality of the surrounding which may in turn affect marine ecology.	Implemented
Fisheries		
F1	The mitigation mentioned in water quality impact assessment should be implemented to avoid/ minimize impact to fisheries resources due to deterioration of water quality.	Implemented
F2	Site inspections during construction phase shall be carried out at least once per week to monitor any malpractice leading to deterioration of water quality of the surrounding which may in turn affect the fisheries resources. The proposed construction phase water quality monitoring programme stated in Section 6 should cover the closest FCZ (i.e. Yim Tin Tsai FCZ)	Implemented
Landscape		
CP1 Preservation of Existing Vegetation		
CP1.1	Avoid disturbance to the existing trees and vegetation as far as practicable within the Project Site.	Implemented
CP1.2	Creation of "Tree Protection Zone" around trees/tree groups to be retained and to be fenced off from construction works.	Implemented
CP1.3	Prohibition of the runoff from construction activities, the storage of materials including fuel, the movement of construction vehicles, and the refuelling and washing of equipment including concrete mixers within the Tree Protection Zone.	Implemented
CP1.4	All works affecting the trees identified for retention and transplantation will be carefully monitored. This includes the key stages in the preparation of the tree transplanting, the implementation of protection measures and health monitoring throughout the construction period.	Implemented
CP1.5	Detailed landscape and tree preservation proposals will be submitted to the relevant government departments for approval.	Implemented
CP1.6	The tree preservation works should be implemented by qualified softworks contractor. Works will be inspected by a competent person of the ET. A tree protection specification would be included within the contract documents.	Implemented
CP2 Implementation of Mitigation Planting and Planting Species Selection		

EM&A Log Ref	Recommended Mitigation Measures	Status
CP2.1	Replanting of existing/ disturbed vegetation will be undertaken at the earliest possible stage of the construction phase of the Project.	Implemented
CP2.2	Predominantly use of native or locally adopted tree species supplement with ornamental species and broadleaf plant species in the planting design.	Implemented
CP2.3	Proposed mitigation planting will not only be limited to conventional amenity planting, but also consider alternative greening measures such as vertical greening for screening and softening of the built structures and green roof on built structures for enhancing the visual amenity. Small shrub, climbing plants, turf and groundcover shall be used in specific locations where technically feasible.	Implemented
CP2.4	The tree planting works should be implemented by qualified softworks contractor and inspected by the ET/competent person with horticultural works experiences. A tree planting specification would be included within the contract documents.	Implemented
CP3 Transplantation of Existing Trees		
CP3.1	The tree transplanting works should be implemented by qualified softworks contractors and inspected by the ET/competent person with horticultural works experiences. A tree protection / transplanting specification would be included within the contract documents.	Implemented
CP3.2	Approximately 326 nos. existing trees to be transplanted, majority of them shall be relocated to future planting areas within the Project Site near the preserved trees.	Implemented
CP3.3	Trees will be directly transplanted to the final recipient site. Advance tree transplanting works before construction or at early stage of construction phase.	Implemented
CP3.4	Phased segmental root pruning for preparation of tree transplanting over a suitable period (determined by species and size).	Implemented
CP3.5	Pruning of the branches of transplanted trees to be based on the principle of crown thinning that would maintain their original tree form and amenity value.	Implemented
CP3.6	The implementation programme for the Project will reserve enough time for the advance tree transplanting preparation works.	Implemented
CP3.7	Detailed tree transplanting proposals will be submitted to the relevant government departments for approval.	Implemented
CP4 Minimisation of Topographical Changes		
CP4.1	Potential impact on slope profile of the Project Site will be minimised as far as possible through import of soil mix for necessary site levelling of golf playing area and association of planting works and to minimise adding extensive loading and affect the protective layer of land fill underneath.	Implemented
CP5 Protection of Coastline		
CP5.1	The existing coastline will be maintained without any alteration. Responsive access road alignment of using the existing maintenance track at seashore to minimise disturbance of vegetation and the coastline.	Implemented
Visual		
CPV1 Preservation of Existing Vegetation		
CPV1.1	The tree preservation proposals will coordinate with the layout and design of the engineering and architectural layout at detailed design stage.	Implemented
CPV2 Works Area and Temporary Works Areas		
CPV2.1	The landscape of the works areas will be restored to their original condition or enhanced through the introduction of new amenity planting areas following the completion of the construction phase or in phase when the planting areas are ready	Implemented
CPV2.2	Optimise the construction sequence and construction programme.	Implemented
CPV2.3	Construction site controls will be enforced including the storage of materials, the location and appearance of site accommodation and site storage; and the careful design of site lighting.	Implemented
CPV2.4	Hoarding designed with recessive colour shall be set up around the construction site providing screening effect for the construction works.	Hoarding will be erected by the contractor.
CPV2.5	The site office or temporary above-ground structures shall be sited at less visual prominent locations.	Implemented

EM&A Log Ref	Recommended Mitigation Measures	Status
	CPV3 Coordination with Concurrent Projects	
CPV3.1	Coordinated implementation programme with concurrent projects.	Implemented
EM&A Project		
EM1	An Independent Environmental Checker needs to be employed as per the EM&A Manual	Implemented
EM2	1) An Environmental Team needs to be employed as per the EM&A Manual 2) An environmental impact monitoring needs to be implementing by the Environmental Team to ensure all the requirements given in the EM&A Manual are fully complied with	Implemented

Appendix 5.1

Monitoring Data

DM-1

Date	Weather Condition	Time	Hour	Mass Concentration ($\mu\text{g}/\text{m}^3$)
18/10/2024	Fine	14:22	1st	37
18/10/2024	Fine	15:22	2nd	31
18/10/2024	Fine	16:22	3rd	34
24/10/2024	Fine	14:15	1st	34
24/10/2024	Fine	15:15	2nd	29
24/10/2024	Fine	16:15	3rd	37
30/10/2024	Fine	13:51	1st	49
30/10/2024	Fine	14:51	2nd	49
30/10/2024	Fine	15:51	3rd	74

DM-2a

Date	Weather Condition	Time	Hour	Mass Concentration ($\mu\text{g}/\text{m}^3$)
18/10/2024	Fine	13:44	1st	46
18/10/2024	Fine	14:44	2nd	46
18/10/2024	Fine	15:44	3rd	52
24/10/2024	Fine	13:47	1st	49
24/10/2024	Fine	14:47	2nd	43
24/10/2024	Fine	15:47	3rd	46
30/10/2024	Fine	9:33	1st	63
30/10/2024	Fine	10:33	2nd	60
30/10/2024	Fine	11:33	3rd	60

DM-3a

Date	Weather Condition	Time	Hour	Mass Concentration ($\mu\text{g}/\text{m}^3$)
18/10/2024	Fine	8:45	1st	40
18/10/2024	Fine	9:45	2nd	43
18/10/2024	Fine	10:45	3rd	43
24/10/2024	Fine	8:42	1st	37
24/10/2024	Fine	9:42	2nd	43
24/10/2024	Fine	10:42	3rd	40
30/10/2024	Fine	8:42	1st	52
30/10/2024	Fine	9:42	2nd	46
30/10/2024	Fine	10:42	3rd	54

Summary of Construction Phase 1-hour TSP Monitoring Results

Monitoring Stations	TSP Concentration, $\mu\text{g}/\text{m}^3$	
	Average	Range
DM-1	42	29 - 74
DM-2a	52	43 - 63
DM-3a	44	37 - 54

NM-1a (30 minutes between 0700 and 1900)

Start Date	Time	LAeq(dB(A))	LA90(dB(A))	LA10(dB(A))	Remark(s)
18/10/2024	13:07	66.4	64.5	68.0	
24/10/2024	13:11	67.2	65.0	69.0	
30/10/2024	13:14	67.4	65.0	79.5	

NM-2 (30 minutes between 0700 and 1900)

Start Date	Time	LAeq(dB(A))	LA90(dB(A))	LA10(dB(A))	Remark(s)
18/10/2024	9:22	65.7	63.5	67.0	
24/10/2024	9:29	68.3	66.5	70.0	
30/10/2024	9:28	66.1	64.0	68.0	

Summary of Construction Phase Noise Monitoring Results**LAeq (30 mins) between 0700 and 1900**

Monitoring Station ID	Location	Min in dB(A)	Max in dB(A)	Average in dB(A)
NM-1a	Fortune Garden	66.4	67.4	67.0
NM-2	Village House at 53 Ting Kok Road	65.7	68.3	66.9



Provision of Environmental Team Services for the Proposed Golf Course Development at Tai Po Lot No.246 Shuen Wan

								Water Temperature			DO Saturation			DO			Salinity			pH			Turbidity			Suspended Solids			
								°C			%			mg/L			ppt			-			NTU			mg/L			
Date	Time	Weather Condition	Sea Condition	Tide	Location	Sampling Depth	(m)	Water Temp. R1	Water Temp. R2	Water Temp. Average	DO Sat. R1	DO Sat. R2	DO Sat. Average	DO R1	DO R2	DO Depth Average	Salinity R1	Salinity R2	Salinity Average	pH R1	pH R2	pH Average	Tur. R1	Tur. R2	Tur. Average	SS R1	SS R2	SS Average	
14/10/2024	10:00	Fine	Calm	Mid Ebb	WM-1	Surface	1.0	29.24	29.24	29.24	103.7	103.9	103.8	6.68	6.70	6.69	30.63	30.63	30.63	8.37	8.37	8.37	0.34	0.36	0.51	3	3	8	
14/10/2024				Mid Ebb	WM-1	Middle																							
14/10/2024				Mid Ebb	WM-1	Bottom	4.9	28.88	28.88	28.88	96.0	96.2	96.1	6.24	6.26	6.25	31.04	31.04	31.04	8.32	8.32	8.32	0.66	0.68			13		14
14/10/2024	10:20	Fine	Calm	Mid Ebb	WM-2	Surface	1.0	28.98	28.98	28.98	104.0	104.2	104.1	6.76	6.78		30.61	30.61	30.61	8.37	8.37	8.37	0.56	0.58	0.74	11	9	7	
14/10/2024				Mid Ebb	WM-2	Middle	3.3	28.94	28.94	28.94	94.0	94.2	94.1	6.10	6.12	6.44	31.25	31.25	31.25	8.31	8.31	8.31	0.75	0.78			6		7
14/10/2024				Mid Ebb	WM-2	Bottom	5.5	28.72	28.72	28.72	50.1	50.3	50.2	3.32	3.34	3.33	32.58	32.58	32.58	8.13	8.13	8.13	0.88	0.90			2		5
14/10/2024	16:40	Fine	Calm	Mid Flood	WM-1	Surface	1.0	29.16	29.16	29.16	101.6	101.4	101.5	6.59	6.57	6.58	30.56	30.56	30.56	8.35	8.35	8.35	0.41	0.44	0.58	11	12	10	
14/10/2024				Mid Flood	WM-1	Middle																							
14/10/2024				Mid Flood	WM-1	Bottom	4.7	28.94	28.94	28.94	49.1	49.3	49.2	3.14	3.16	3.15	32.10	32.10	32.10	8.12	8.12	8.12	0.71	0.75			8		8
14/10/2024	17:00	Fine	Calm	Mid Flood	WM-2	Surface	1.0	29.01	29.01	29.01	104.5	104.8	104.7	6.78	6.81		30.65	30.65	30.65	8.36	8.36	8.36	0.60	0.62	0.77	6	6	6	
14/10/2024				Mid Flood	WM-2	Middle	3.1	28.97	28.97	28.97	89.2	89.4	89.3	5.76	5.78	6.28	31.42	31.42	31.42	8.29	8.29	8.29	0.77	0.75			6		6
14/10/2024				Mid Flood	WM-2	Bottom	5.2	28.79	28.79	28.79	71.0	71.2	71.1	4.60	4.62	4.61	32.00	32.00	32.00	8.22	8.22	8.22	0.92	0.95			6		6
16/10/2024	11:00	Fine	Moderate	Mid Ebb	WM-1	Surface	1.0	29.15	29.15	29.15	108.1	108.3	108.2	7.00	7.02	7.01	29.78	29.78	29.78	8.38	8.38	8.38	0.40	0.42	0.43	16	16	15	
16/10/2024				Mid Ebb	WM-1	Middle																							
16/10/2024				Mid Ebb	WM-1	Bottom	4.9	29.23	29.23	29.23	96.0	96.2	96.1	6.15	6.17	6.16	30.74	30.74	30.74	8.33	8.33	8.33	0.44	0.46			16		13
16/10/2024	11:20	Fine	Smooth	Mid Ebb	WM-2	Surface	1.0	29.13	29.13	29.13	103.2	103.0	103.1	6.68	6.66		30.71	30.71	30.71	8.39	8.39	8.39	0.51	0.52	0.64	14	14	10	
16/10/2024				Mid Ebb	WM-2	Middle	3.6	29.15	29.15	29.15	102.9	102.7	102.8	6.68	6.66	6.67	30.78	30.78	30.78	8.38	8.38	8.38	0.68	0.70			7		8
16/10/2024				Mid Ebb	WM-2	Bottom	6.1	28.85	28.85	28.85	45.7	45.5	45.6	2.94	2.92	2.93	32.58	32.58	32.58	8.10	8.10	8.10	0.71	0.73			8		8
16/10/2024	16:50	Fine	Moderate	Mid Flood	WM-1	Surface	1.0	29.30	29.30	29.30	100.6	100.8	100.7	6.52	6.54	6.53	29.54	29.54	29.54	8.35	8.35	8.35	0.36	0.38	0.46	10	10	10	
16/10/2024				Mid Flood	WM-1	Middle																							
16/10/2024				Mid Flood	WM-1	Bottom	4.8	29.19	29.19	29.19	103.5	103.2	103.4	6.54	6.51	6.53	30.33	30.33	30.33	8.37	8.37	8.37	0.54	0.56			9		9
16/10/2024	17:10	Fine	Smooth	Mid Flood	WM-2	Surface	1.0	29.10	29.10	29.10	103.3	103.4	103.4	6.69	6.70		30.69	30.69	30.69	8.38	8.38	8.38	0.49	0.52	0.59	6	7	7	
16/10/2024				Mid Flood	WM-2	Middle	3.5	29.18	29.18	29.18	104.3	104.6	104.5	6.75	6.78	6.73	31.01	31.01	31.01	8.37	8.37	8.37	0.58	0.61			7		7
16/10/2024				Mid Flood	WM-2	Bottom	5.9	28.91	28.91	28.91	44.3	44.5	44.4	2.80	2.88	2.84	32.27	32.27	32.27	8.11	8.11	8.11	0.66	0.68			7		8
18/10/2024	13:00	Fine	Moderate	Mid Ebb	WM-1	Surface	1.0	28.91	28.91	28.91	103.4	103.2	103.3	6.74	6.72	6.73	29.69	29.69	29.69	8.42	8.42	8.42	0.51	0.53	0.59	7	8	7	
18/10/2024				Mid Ebb	WM-1	Middle																							
18/10/2024				Mid Ebb	WM-1	Bottom	4.7	29.05	29.05	29.05	92.3	92.1	92.2	6.05	6.03	6.04	30.42	30.42	30.42	8.39	8.39	8.39	0.64	0.66			6		7
18/10/2024	13:22	Fine	Smooth	Mid Ebb	WM-2	Surface	1.0	28.79	28.99	28.89	102.9	102.7	102.8	6.72	6.70		30.39	30.39	30.39	8.46	8.46	8.46	0.41	0.43	0.65	12	7	8	
18/10/2024				Mid Ebb	WM-2	Middle	3.5	28.57	28.57	28.57	99.3	99.5	99.4	6.45	6.48		31.03	31.03	31.03	8.38	8.38	8.38	0.64	0.62			8		7
18/10/2024				Mid Ebb	WM-2	Bottom	6.0	28.72	28.72	28.72	68.6	68.8	68.7	4.53	4.54	4.54	31.95	31.95	31.95	8.26	8.26	8.26	0.88	0.90			7		6
18/10/2024	16:39	Fine	Moderate	Mid Flood	WM-1	Surface	1.0	28.91	28.91	28.91	97.6	97.8	97.7	6.37	6.39	6.38	29.91	29.91	29.91	8.41	8.41	8.41	0.45	0.48	0.57	6	6	7	
18/10/2024				Mid Flood	WM-1	Middle																							
18/10/2024				Mid Flood	WM-1	Bottom	4.8	28.79	28.79	28.79	99.1	99.3	99.2	6.49	6.51	6.50	30.35	30.35	30.35	8.41	8.41	8.41	0.67	0.69			8		7
18/10/2024	17:00	Fine	Smooth	Mid Flood	WM-2	Surface	1.0	28.79	28.79	28.79	102.3	102.1	102.2	6.67	6.65	6.41	30.40	30.40	30.40	8.44	8.44	8.44	0.39	0.42	0.69	6	6	6	
18/10/2024				Mid Flood	WM-2	Middle	3.6	28.63	28.63	28.63	94.5	94.7	94.6	6.15	6.17		31.06	31.06	31.06	8.37	8.37	8.37	0.66	0.69			5		6
18/10/2024				Mid Flood	WM-2	Bottom	6.1	28.67	28.67	28.67	63.4	63.5	63.5	4.09	4.09	4.09	32.25	32.25	32.25	8.21	8.21	8.21	0.96	0.99			6		6



Provision of Environmental Team Services for the Proposed Golf Course Development at Tai Po Lot No.246 Shuen Wan

Date	Time	Weather Condition	Sea Condition	Tide	Location	Sampling Depth	(m)	Water Temperature			DO Saturation			DO			Salinity			pH			Turbidity			Suspended Solids		
								°C			%			mg/L			ppt			-			NTU			mg/L		
								Water Temp. R1	Water Temp. R2	Water Temp. Average	DO Sat. R1	DO Sat. R2	DO Sat. Average	DO R1	DO R2	DO Depth Average	Salinity R1	Salinity R2	Salinity Average	pH R1	pH R2	pH Average	Tur. R1	Tur. R2	Tur. Average	SS R1	SS R2	SS Average
21/10/2024	13:37	Fine	Smooth	Mid Ebb	WM-1	Surface	1.0	28.73	28.73	28.73	99.2	99.4	99.3	6.48	6.50	6.49	30.78	30.78	30.78	8.32	8.32	8.32	0.66	0.68	0.87	6	7	7
21/10/2024				Mid Ebb	WM-1	Middle																						
21/10/2024				Mid Ebb	WM-1	Bottom	4.7	28.00	28.00	28.00	73.8	73.6	73.7	4.79	4.77	4.78	31.79	31.79	31.79	8.24	8.24	8.24	1.06	1.06	0.81	6	7	5
21/10/2024	14:00	Fine	Smooth	Mid Ebb	WM-2	Surface	1.0	28.71	28.71	28.71	86.7	86.8	86.8	5.65	5.66	5.55	31.08	31.08	31.08	8.29	8.29	8.29	0.52	0.55		5	5	
21/10/2024				Mid Ebb	WM-2	Middle	3.4	28.85	28.85	28.85	83.9	83.7	83.8	5.46	5.44		31.54	31.54	31.54	8.27	8.27	8.27	0.76	0.79		5	5	
21/10/2024				Mid Ebb	WM-2	Bottom	5.7	28.80	28.80	28.80	77.2	77.5	77.4	5.00	5.03	5.02	31.96	31.96	31.96	8.25	8.25	8.25	1.11	1.13		4	4	
21/10/2024	10:00	Fine	Smooth	Mid Flood	WM-1	Surface	1.0	28.76	28.76	28.76	98.8	98.6	98.7	6.48	6.46	6.47	30.05	30.05	30.05	8.33	8.33	8.33	0.71	0.73	0.93	7	7	7
21/10/2024				Mid Flood	WM-1	Middle																						
21/10/2024				Mid Flood	WM-1	Bottom	4.8	28.80	28.80	28.80	77.3	77.5	77.4	4.99	5.01	5.00	31.82	31.82	31.82	8.22	8.22	8.22	1.12	1.14	0.71	7	7	6
21/10/2024	10:20	Fine	Smooth	Mid Flood	WM-2	Surface	1.0	28.58	28.58	28.58	85.2	85.2	85.2	5.55	5.57	5.46	31.21	31.21	31.21	8.29	8.29	8.29	0.44	0.46		4	5	
21/10/2024				Mid Flood	WM-2	Middle	3.5	28.76	28.76	28.76	82.2	82.4	82.3	5.35	5.35		31.28	31.28	31.28	8.28	8.28	8.28	0.69	0.71		7	8	
21/10/2024				Mid Flood	WM-2	Bottom	5.9	28.77	28.77	28.77	79.3	79.5	79.4	5.11	5.13	5.12	31.83	31.83	31.83	8.25	8.25	8.25	0.98	1.00		6	5	
23/10/2024	5:00	Fine	Smooth	Mid Ebb	WM-1	Surface	1.0	28.90	28.90	28.90	108.3	108.0	108.2	7.01	7.00	7.01	30.87	30.87	30.87	8.17	8.17	8.17	0.51	0.54	0.69	7	7	8
23/10/2024				Mid Ebb	WM-1	Middle																						
23/10/2024				Mid Ebb	WM-1	Bottom	4.7	28.96	28.96	28.96	98.5	98.7	98.6	6.36	6.38	6.37	31.08	31.08	31.08	8.13	8.13	8.13	0.84	0.86	0.86	9	8	7
23/10/2024	5:24	Fine	Smooth	Mid Ebb	WM-2	Surface	1.0	28.86	28.86	28.86	104.7	104.9	104.8	6.83	6.85	6.35	30.25	30.25	30.25	8.16	8.16	8.16	0.66	0.68		7	5	
23/10/2024				Mid Ebb	WM-2	Middle	3.5	29.03	29.03	29.03	90.9	91.1	91.0	5.85	5.87		31.12	31.12	31.12	8.09	8.09	8.09	0.84	0.86		6	7	
23/10/2024				Mid Ebb	WM-2	Bottom	5.9	28.96	28.96	28.96	85.0	85.2	85.1	5.50	5.52	5.51	31.38	31.38	31.38	8.06	8.06	8.06	1.05	1.07		9	7	
23/10/2024	13:37	Fine	Smooth	Mid Flood	WM-1	Surface	1.0	29.00	29.00	29.00	107.6	107.8	107.7	6.93	6.95	6.94	30.49	30.49	30.49	8.16	8.16	8.16	0.56	0.58	0.75	6	6	6
23/10/2024				Mid Flood	WM-1	Middle																						
23/10/2024				Mid Flood	WM-1	Bottom	4.8	28.96	28.96	28.96	97.3	97.5	97.40	6.29	6.31	6.30	31.10	31.10	31.10	8.12	8.12	8.12	0.91	0.94	0.89	6	7	7
23/10/2024	14:00	Fine	Smooth	Mid Flood	WM-2	Surface	1.0	28.90	28.90	28.90	108.1	108.3	108.20	7.06	7.08	6.25	30.21	30.21	30.21	8.17	8.17	8.17	0.69	0.71		7	7	
23/10/2024				Mid Flood	WM-2	Middle	3.6	29.03	29.03	29.03	88.6	88.4	88.5	5.17	5.69		31.16	31.16	31.16	8.09	8.09	8.09	0.86	0.88		7	5	
23/10/2024				Mid Flood	WM-2	Bottom	6.2	28.96	28.96	28.96	82.2	82.0	82.10	5.31	5.29	5.30	31.39	31.39	31.39	8.06	8.06	8.06	1.12	1.10		6	8	
25/10/2024	7:00	Fine	Smooth	Mid Ebb	WM-1	Surface	1.0	28.06	28.06	28.06	86.4	86.6	86.5	5.67	5.69	5.68	31.52	31.52	31.52	8.01	8.01	8.01	0.59	0.61	0.68	9	8	9
25/10/2024				Mid Ebb	WM-1	Middle																						
25/10/2024				Mid Ebb	WM-1	Bottom	4.7	28.07	28.07	28.07	85.5	83.3	84.4	5.47	5.45	5.46	31.64	31.64	31.64	8.00	8.00	8.00	0.74	0.76	0.76	10	9	7
25/10/2024	7:22	Fine	Smooth	Mid Ebb	WM-2	Surface	1.0	27.85	27.85	27.85	93.1	93.4	93.3	6.21	6.24	6.06	31.44	31.44	31.44	8.05	8.05	8.05	0.65	0.68		8	6	
25/10/2024				Mid Ebb	WM-2	Middle	3.4	27.86	27.86	27.86	89.3	89.5	89.4	5.87	5.91		31.45	31.45	31.45	8.04	8.04	8.04	0.55	0.57		6	6	
25/10/2024				Mid Ebb	WM-2	Bottom	5.8	28.19	28.19	28.19	56.1	56.4	56.3	3.64	3.67	3.66	31.72	31.72	31.72	7.87	7.87	7.87	1.07	1.06		8	8	
25/10/2024	15:38	Fine	Smooth	Mid Flood	WM-1	Surface	1.0	28.10	28.10	28.10	84.2	84.0	84.1	5.52	5.50	5.51	31.47	31.47	31.47	8.01	8.01	8.01	0.62	0.65	0.75	6	6	7
25/10/2024				Mid Flood	WM-1	Middle																						
25/10/2024				Mid Flood	WM-1	Bottom	4.8	28.07	28.07	28.07	80.7	80.5	80.6	5.28	5.26	5.27	31.65	31.65	31.65	8.00	8.00	8.00	0.84	0.88	0.83	8	7	7
25/10/2024	16:00	Fine	Smooth	Mid Flood	WM-2	Surface	1.0	27.88	27.88	27.88	91.8	91.5	91.7	6.04	6.01	5.92	31.45	31.45	31.45	8.05	8.05	8.05	0.71	0.73		5	6	
25/10/2024				Mid Flood	WM-2	Middle	3.5	27.85	27.85	27.85	88.3	88.5	88.4	5.81	5.83		31.45	31.45	31.45	8.03	8.03	8.03	0.62	0.64		8	7	
25/10/2024				Mid Flood	WM-2	Bottom	6.0	28.16	28.16	28.16	52.8	52.6	52.7	3.41	3.39	3.40	31.70	31.70	31.70	7.88	7.88	7.88	1.12	1.14		7	6	



Provision of Environmental Team Services for the Proposed Golf Course Development at Tai Po Lot No.246 Shuen Wan

Date	Time	Weather Condition	Sea Condition	Tide	Location	Sampling Depth	(m)	Water Temperature			DO Saturation			DO			Salinity			pH			Turbidity			Suspended Solids		
								°C			%			mg/L			ppt			-			NTU			mg/L		
								Water Temp. R1	Water Temp. R2	Water Temp. Average	DO Sat. R1	DO Sat. R2	DO Sat. Average	DO R1	DO R2	DO Depth Average	Salinity R1	Salinity R2	Salinity Average	pH R1	pH R2	pH Average	Tur. R1	Tur. R2	Tur. Average	SS R1	SS R2	SS Average
28/10/2024	11:37	Overcast	Smooth	Mid Ebb	WM-1	Surface	1.0	27.37	27.37	27.37	90.2	90.4	90.3	6.00	6.02	6.01	31.24	31.24	31.24	8.01	8.01	8.01	0.62	0.63	0.76	8	8	8
28/10/2024				Mid Ebb	WM-1	Middle																						
28/10/2024				Mid Ebb	WM-1	Bottom	4.7	27.06	27.06	27.06	85.2	85.4	85.3	5.69	5.71	5.70	31.24	31.24	31.24	8.03	8.03	8.03	0.87	0.90	1.00	7	7	7
28/10/2024	12:00	Overcast	Smooth	Mid Ebb	WM-2	Surface	1.0	27.19	27.19	27.19	98.0	98.2	98.1	6.54	6.56	6.20	31.17	31.17	31.17	8.08	8.08	8.08	0.71	0.73		7	7	
28/10/2024				Mid Ebb	WM-2	Middle	3.5	27.22	27.22	27.22	87.6	87.8	87.7	5.84	5.86		31.28	31.28	31.28	8.04	8.04	8.04	0.89	0.91		8	6	
28/10/2024				Mid Ebb	WM-2	Bottom	7.0	27.10	27.10	27.10	71.9	72.1	72.0	4.79	4.81	4.80	31.72	31.72	31.72	7.96	7.96	7.96	1.36	1.38		6	7	
28/10/2024	7:00	Overcast	Smooth	Mid Flood	WM-1	Surface	1.0	27.37	27.37	27.37	90.8	90.6	90.7	6.03	6.01	6.02	31.24	31.24	31.24	7.99	7.99	7.99	0.56	0.58	0.67	8	8	8
28/10/2024				Mid Flood	WM-1	Middle																						
28/10/2024				Mid Flood	WM-1	Bottom	4.9	27.10	27.11	27.11	87.3	87.5	87.4	5.83	5.85	5.84	31.24	31.24	31.24	8.03	8.03	8.03	0.79	0.76	0.98	7	8	7
28/10/2024	7:25	Overcast	Smooth	Mid Flood	WM-2	Surface	1.0	27.19	27.19	27.19	97.4	97.6	97.5	6.48	6.50	6.34	31.15	31.15	31.15	8.09	8.09	8.09	0.65	0.67		7	6	
28/10/2024				Mid Flood	WM-2	Middle	3.6	27.23	27.23	27.23	92.8	93.0	92.9	6.18	6.20		31.23	31.23	31.23	8.06	8.06	8.06	0.84	0.82		6	7	
28/10/2024				Mid Flood	WM-2	Bottom	6.2	27.16	27.16	27.16	75.4	75.6	75.5	5.02	5.04	5.03	31.71	31.71	31.71	7.96	7.96	7.96	1.43	1.45		7	7	
30/10/2024	11:00	Fine	Smooth	Mid Ebb	WM-1	Surface	1.0	26.83	26.83	26.83	118.3	118.5	118.4	7.94	7.96	7.95	31.04	31.04	31.04	8.17	8.17	8.17	0.47	0.50	0.60	7	7	7
30/10/2024				Mid Ebb	WM-1	Middle																						
30/10/2024				Mid Ebb	WM-1	Bottom	4.8	27.19	27.19	27.19	74.2	74.4	74.3	4.94	4.96	4.95	31.38	31.38	31.38	7.96	7.96	7.96	0.71	0.73	0.87	7	7	7
30/10/2024	11:24	Fine	Smooth	Mid Ebb	WM-2	Surface	1.0	26.70	26.70	26.70	108.0	108.2	108.1	7.29	7.31	6.88	30.70	30.70	30.70	8.14	8.14	8.14	0.52	0.54		7	7	
30/10/2024				Mid Ebb	WM-2	Middle	3.4	26.86	26.86	26.86	96.1	96.4	96.3	6.44	6.47		31.16	31.16	31.16	8.09	8.09	8.09	0.84	0.86		7	7	
30/10/2024				Mid Ebb	WM-2	Bottom	5.8	27.03	27.03	27.03	70.0	70.2	70.1	4.70	4.72	4.71	31.71	31.71	31.71	7.92	7.92	7.92	1.22	1.22		7	6	
30/10/2024	15:36	Fine	Smooth	Mid Flood	WM-1	Surface	1.0	26.89	26.89	26.89	115.9	115.8	115.9	7.77	7.76	7.77	31.07	31.07	31.07	8.17	8.17	8.17	0.55	0.58	0.63	7	7	7
30/10/2024				Mid Flood	WM-1	Middle																						
30/10/2024				Mid Flood	WM-1	Bottom	5.9	27.20	27.20	27.20	76.0	76.2	76.1	5.06	5.08	5.07	31.34	31.34	31.34	7.98	7.98	7.98	0.68	0.70	0.84	7	7	7
30/10/2024	16:00	Fine	Smooth	Mid Flood	WM-2	Surface	1.0	26.87	26.87	26.87	110.5	110.5	110.5	7.43	7.43	7.07	30.93	30.93	30.93	8.15	8.15	8.15	0.59	0.60		6	6	
30/10/2024				Mid Flood	WM-2	Middle	3.5	26.83	26.83	26.83	100.0	100.0	100.0	6.71	6.71		31.11	31.11	31.11	8.12	8.12	8.12	0.79	0.81		7	7	
30/10/2024				Mid Flood	WM-2	Bottom	6.0	27.02	27.02	27.02	67.7	67.5	67.6	4.51	4.49	4.50	31.69	31.69	31.69	7.93	7.93	7.93	1.12	1.15		7	7	

Summary of Water Quality Construction Phase Monitoring Results

Date	Tide	Location	DO (S&M)	DO (B)	TUR	SS
14/10/2024	Mid Ebb	WM-1	6.69	6.25	0.51	8
16/10/2024	Mid Ebb	WM-1	7.01	6.16	0.43	15
18/10/2024	Mid Ebb	WM-1	6.73	6.04	0.59	7
21/10/2024	Mid Ebb	WM-1	6.49	4.78	0.87	7
23/10/2024	Mid Ebb	WM-1	7.01	6.37	0.69	8
25/10/2024	Mid Ebb	WM-1	5.68	5.46	0.68	9
28/10/2024	Mid Ebb	WM-1	6.01	5.70	0.76	8
30/10/2024	Mid Ebb	WM-1	7.95	4.95	0.60	7
		AL	6.23	5.06	1.00	3
		LL	4.00	2.00	1.21	4
		Min	5.68	4.78	0.43	7
		Max	7.95	6.37	0.87	15
		Mean	6.70	5.71	0.64	9

Date	Tide	Location	DO (S&M)	DO (B)	TUR	SS
14/10/2024	Mid Flood	WM-1	6.58	3.15	0.58	10
16/10/2024	Mid Flood	WM-1	6.53	6.53	0.46	10
18/10/2024	Mid Flood	WM-1	6.38	6.50	0.57	7
21/10/2024	Mid Flood	WM-1	6.47	5.00	0.93	7
23/10/2024	Mid Flood	WM-1	6.94	6.30	0.75	6
25/10/2024	Mid Flood	WM-1	5.51	5.27	0.75	7
28/10/2024	Mid Flood	WM-1	6.02	5.84	0.67	8
30/10/2024	Mid Flood	WM-1	7.77	5.07	0.63	7
		AL	6.36	5.46	0.96	2
		LL	4.00	2.00	1.12	3
		Min	5.51	3.15	0.46	6
		Max	7.77	6.53	0.93	10
		Mean	6.52	5.46	0.67	8

Date	Tide	Location	DO (S&M)	DO (B)	TUR	SS
14/10/2024	Mid Ebb	WM-2	6.44	3.33	0.74	7
16/10/2024	Mid Ebb	WM-2	6.67	2.93	0.64	10
18/10/2024	Mid Ebb	WM-2	6.59	4.54	0.65	8
21/10/2024	Mid Ebb	WM-2	5.55	5.02	0.81	5
23/10/2024	Mid Ebb	WM-2	6.35	5.51	0.86	7
25/10/2024	Mid Ebb	WM-2	6.06	3.66	0.76	7
28/10/2024	Mid Ebb	WM-2	6.20	4.80	1.00	7
30/10/2024	Mid Ebb	WM-2	6.88	4.71	0.87	7
		AL	6.10	4.92	1.31	3
		LL	5.00	2.00	1.54	3
		Min	5.55	2.93	0.64	5
		Max	6.88	5.51	1.00	10
		Mean	6.34	4.31	0.79	7

Date	Tide	Location	DO (S&M)	DO (B)	TUR	SS
14/10/2024	Mid Flood	WM-2	6.28	4.61	0.77	6
16/10/2024	Mid Flood	WM-2	6.73	2.84	0.59	7
18/10/2024	Mid Flood	WM-2	6.41	4.09	0.69	6
21/10/2024	Mid Flood	WM-2	5.46	5.12	0.71	6
23/10/2024	Mid Flood	WM-2	6.25	5.30	0.89	7
25/10/2024	Mid Flood	WM-2	5.92	3.40	0.83	7
28/10/2024	Mid Flood	WM-2	6.34	5.03	0.98	7
30/10/2024	Mid Flood	WM-2	7.07	4.50	0.84	7
		AL	6.23	5.15	1.40	3
		LL	5.00	2.00	1.47	3
		Min	5.46	2.84	0.59	6
		Max	7.07	5.30	0.98	7
		Mean	6.31	4.36	0.79	6

Report No. : 230546WA242718



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Test Report on Analysis of Water

Information Supplied by Client

Client : TAI PO CLUB LIMITED

Client's address : Room 802, 8th Floor, Far East Consortium Building, 121 Des Voeux Road, Central, Hong Kong

Project : Proposed Golf Course Development at Tai Po Town Lot No. 246 Shuen Wan, Ting Kok, Tai Po

Sample description : Twenty nos. of water sample

Sampling location : See table below

Test required : Total suspended solids dried at 103°C – 105°C

Laboratory Information

Lab sample I.D. : WA242718/1-20

Date of receipt of sample : 14/10/2024

Date test completed : 17/10/2024

Test method used : APHA 23rd ed, 2540D

Lab Sample ID	Sampling Location	Sampling Date	Lab Sample ID	Sampling Location	Sampling Date
WA242718/1	WM-1 /S /E	14/10/2024	WA242718/11	WM-1 /S /F	14/10/2024
WA242718/2	WM-1 /S /E Dup	14/10/2024	WA242718/12	WM-1 /S /F Dup	14/10/2024
WA242718/3	WM-1 /B /E	14/10/2024	WA242718/13	WM-1 /B /F	14/10/2024
WA242718/4	WM-1 /B /E Dup	14/10/2024	WA242718/14	WM-1 /B /F Dup	14/10/2024
WA242718/5	WM-2 /S /E	14/10/2024	WA242718/15	WM-2 /S /F	14/10/2024
WA242718/6	WM-2 /S /E Dup	14/10/2024	WA242718/16	WM-2 /S /F Dup	14/10/2024
WA242718/7	WM-2 /M /E	14/10/2024	WA242718/17	WM-2 /M /F	14/10/2024
WA242718/8	WM-2 /M /E Dup	14/10/2024	WA242718/18	WM-2 /M /F Dup	14/10/2024
WA242718/9	WM-2 /B /E	14/10/2024	WA242718/19	WM-2 /B /F	14/10/2024
WA242718/10	WM-2 /B /E Dup	14/10/2024	WA242718/20	WM-2 /B /F Dup	14/10/2024

Note : This report refers only to the sample(s) tested and the result(s) applied to the sample(s) as received.

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Report No. : 230546WA242718

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Results:

Sampling location	Testing items
	TSS, mg/L
WM-1 /S /E	3
WM-1 /S /E Dup	3
WM-1 /B /E	13
WM-1 /B /E Dup	14
WM-2 /S /E	11
WM-2 /S /E Dup	9
WM-2 /M /E	6
WM-2 /M /E Dup	7
WM-2 /B /E	2
WM-2 /B /E Dup	5
WM-1 /S /F	11
WM-1 /S /F Dup	12
WM-1 /B /F	8
WM-1 /B /F Dup	8
WM-2 /S /F	6
WM-2 /S /F Dup	6
WM-2 /M /F	6
WM-2 /M /F Dup	6
WM-2 /B /F	6
WM-2 /B /F Dup	6

Note : This report refers only to the sample(s) tested and the result(s) applied to the sample(s) as received.

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Report No. : 230546WA242718

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QC data:

Sample ID		WA242718/20					
Testing item	Blank, mg/L	Original conc., mg/L	Duplicate result, mg/L	Repeatability range normalized	Acceptable range, %	Matrix spike, %	Acceptable range, %
TSS	<0.5	3.53	3.62	0.025	0 – 0.24	100	85 ~ 115

Supervised by : M.L.YUNG

Certified by : 
Approved Signatory: HO Kin Man, John
Director

Date : 28/10/2019
**** End of Report ****

Note : This report refers only to the sample(s) tested and the result(s) applied to the sample(s) as received.

The Hong Kong Accreditation Service (HKAS) has accredited Fugro Technical Services Limited (Reg. No. HOKLAS 015) under the Hong Kong Laboratory Accreditation Scheme (HOKLAS) for specific laboratory activities as listed in the HOKLAS Directory of Accredited Laboratories. The copyright of this report is owned by Fugro Technical Services Limited. This report shall not be reproduced except in full.

Report No. : 230546WA242718(1)



Page 1 of 3

Test Report on Analysis of Water

Information Supplied by Client

Client : TAI PO GOLF CLUB LIMITED

Client's address : Room 802, 8th Floor, Far East Consortium Building, 121 Des Voeux Road, Central, Hong Kong

Project : Proposed Golf Course Development at Tai Po Town Lot No. 246 Shuen Wan, Ting Kok, Tai Po

Sample description : Twenty nos. of water sample

Sampling location : See table below

Test required : Total suspended solids dried at 103°C – 105°C

Laboratory Information

Lab sample I.D. : WA242718(1)/1-20

Date of receipt of sample : 16/10/2024

Date test completed : 17/10/2024

Test method used : APHA 23rd ed, 2540D

Lab Sample ID	Sampling Location	Sampling Date	Lab Sample ID	Sampling Location	Sampling Date
WA242718(1)/1	WM-1 /S /E	16/10/2024	WA242718(1)/11	WM-1 /S /F	16/10/2024
WA242718(1)/2	WM-1 /S /E Dup	16/10/2024	WA242718(1)/12	WM-1 /S /F Dup	16/10/2024
WA242718(1)/3	WM-1 /B /E	16/10/2024	WA242718(1)/13	WM-1 /B /F	16/10/2024
WA242718(1)/4	WM-1 /B /E Dup	16/10/2024	WA242718(1)/14	WM-1 /B /F Dup	16/10/2024
WA242718(1)/5	WM-2 /S /E	16/10/2024	WA242718(1)/15	WM-2 /S /F	16/10/2024
WA242718(1)/6	WM-2 /S /E Dup	16/10/2024	WA242718(1)/16	WM-2 /S /F Dup	16/10/2024
WA242718(1)/7	WM-2 /M /E	16/10/2024	WA242718(1)/17	WM-2 /M /F	16/10/2024
WA242718(1)/8	WM-2 /M /E Dup	16/10/2024	WA242718(1)/18	WM-2 /M /F Dup	16/10/2024
WA242718(1)/9	WM-2 /B /E	16/10/2024	WA242718(1)/19	WM-2 /B /F	16/10/2024
WA242718(1)/10	WM-2 /B /E Dup	16/10/2024	WA242718(1)/20	WM-2 /B /F Dup	16/10/2024

Note : This report refers only to the sample(s) tested and the result(s) applied to the sample(s) as received.

The Hong Kong Accreditation Service (HKAS) has accredited Fugro Technical Services Limited (Reg. No. HOKLAS 015) under the Hong Kong Laboratory Accreditation Scheme (HOKLAS) for specific laboratory activities as listed in the HOKLAS Directory of Accredited Laboratories. The copyright of this report is owned by Fugro Technical Services Limited. This report shall not be reproduced except in full.

Report No. : 230546WA242718(1)

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Results:

Sampling location	Testing items
	TSS, mg/L
WM-1 /S /E	16
WM-1 /S /E Dup	16
WM-1 /B /E	16
WM-1 /B /E Dup	13
WM-2 /S /E	14
WM-2 /S /E Dup	14
WM-2 /M /E	7
WM-2 /M /E Dup	8
WM-2 /B /E	8
WM-2 /B /E Dup	8
WM-1 /S /F	10
WM-1 /S /F Dup	10
WM-1 /B /F	9
WM-1 /B /F Dup	9
WM-2 /S /F	6
WM-2 /S /F Dup	7
WM-2 /M /F	7
WM-2 /M /F Dup	7
WM-2 /B /F	7
WM-2 /B /F Dup	8

Note : This report refers only to the sample(s) tested and the result(s) applied to the sample(s) as received.

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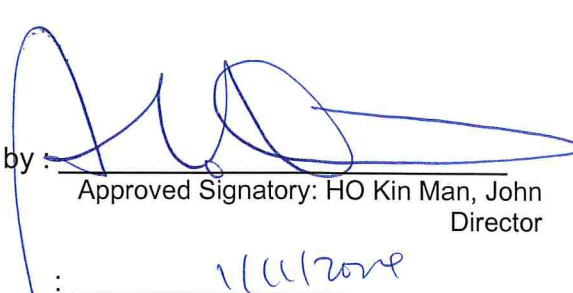
Report No. : 230546WA242718(1)

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QC data:

Sample ID		WA242718(1)/20					
Testing item	Blank, mg/L	Original conc., mg/L	Duplicate result, mg/L	Repeatability range normalized	Acceptable range, %	Matrix spike, %	Acceptable range, %
TSS	0.10	16.69	15.38	0.0817	0 – 0.24	95.2	85 ~ 115

Supervised by : M.L.YUNG

Certified by : 

Approved Signatory: HO Kin Man, John
Director

Date : 1/11/2019
**** End of Report ****

Note : This report refers only to the sample(s) tested and the result(s) applied to the sample(s) as received.

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Report No. : 230546WA242718(2)



Page 1 of 3

Test Report on Analysis of Water

Information Supplied by Client

Client : TAI PO CLUB LIMITED

Client's address : Room 802, 8th Floor, Far East Consortium Building, 121 Des Voeux Road, Central, Hong Kong

Project : Proposed Golf Course Development at Tai Po Town Lot No. 246 Shuen Wan, Ting Kok, Tai Po

Sample description : Twenty nos. of water sample

Sampling location : See table below

Test required : Total suspended solids dried at 103°C – 105°C

Laboratory Information

Lab sample I.D. : WA242718(2)/1-20

Date of receipt of sample : 18/10/2024

Date test completed : 22/10/2024

Test method used : APHA 23rd ed, 2540D

Lab Sample ID	Sampling Location	Sampling Date	Lab Sample ID	Sampling Location	Sampling Date
WA242718(2)/1	WM-1 /S /E	18/10/2024	WA242718(2)/11	WM-1 /S /F	18/10/2024
WA242718(2)/2	WM-1 /S /E Dup	18/10/2024	WA242718(2)/12	WM-1 /S /F Dup	18/10/2024
WA242718(2)/3	WM-1 /B /E	18/10/2024	WA242718(2)/13	WM-1 /B /F	18/10/2024
WA242718(2)/4	WM-1 /B /E Dup	18/10/2024	WA242718(2)/14	WM-1 /B /F Dup	18/10/2024
WA242718(2)/5	WM-2 /S /E	18/10/2024	WA242718(2)/15	WM-2 /S /F	18/10/2024
WA242718(2)/6	WM-2 /S /E Dup	18/10/2024	WA242718(2)/16	WM-2 /S /F Dup	18/10/2024
WA242718(2)/7	WM-2 /M /E	18/10/2024	WA242718(2)/17	WM-2 /M /F	18/10/2024
WA242718(2)/8	WM-2 /M /E Dup	18/10/2024	WA242718(2)/18	WM-2 /M /F Dup	18/10/2024
WA242718(2)/9	WM-2 /B /E	18/10/2024	WA242718(2)/19	WM-2 /B /F	18/10/2024
WA242718(2)/10	WM-2 /B /E Dup	18/10/2024	WA242718(2)/20	WM-2 /B /F Dup	18/10/2024

Note : This report refers only to the sample(s) tested and the result(s) applied to the sample(s) as received.

The Hong Kong Accreditation Service (HKAS) has accredited Fugro Technical Services Limited (Reg. No. HOKLAS 015) under the Hong Kong Laboratory Accreditation Scheme (HOKLAS) for specific laboratory activities as listed in the HOKLAS Directory of Accredited Laboratories. The copyright of this report is owned by Fugro Technical Services Limited. This report shall not be reproduced except in full.

Report No. : 230546WA242718(2)

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Results:

Sampling location	Testing items
	TSS, mg/L
WM-1 /S /E	7
WM-1 /S /E Dup	8
WM-1 /B /E	6
WM-1 /B /E Dup	7
WM-2 /S /E	12
WM-2 /S /E Dup	7
WM-2 /M /E	8
WM-2 /M /E Dup	7
WM-2 /B /E	7
WM-2 /B /E Dup	6
WM-1 /S /F	6
WM-1 /S /F Dup	6
WM-1 /B /F	8
WM-1 /B /F Dup	7
WM-2 /S /F	6
WM-2 /S /F Dup	6
WM-2 /M /F	5
WM-2 /M /F Dup	6
WM-2 /B /F	6
WM-2 /B /F Dup	6

Note : This report refers only to the sample(s) tested and the result(s) applied to the sample(s) as received.

The Hong Kong Accreditation Service (HKAS) has accredited Fugro Technical Services Limited (Reg. No. HOKLAS 015) under the Hong Kong Laboratory Accreditation Scheme (HOKLAS) for specific laboratory activities as listed in the HOKLAS Directory of Accredited Laboratories. The copyright of this report is owned by Fugro Technical Services Limited. This report shall not be reproduced except in full.

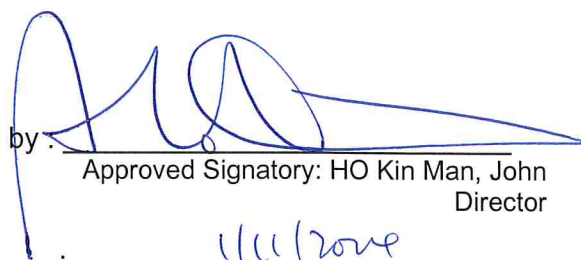
Report No. : 230546WA242718(2)

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QC data:

Sample ID		WA242718(2)/5					
Testing item	Blank, mg/L	Original conc., mg/L	Duplicate result, mg/L	Repeatability range normalized	Acceptable range, %	Matrix spike, %	Acceptable range, %
TSS	<0.5	11.13	12.10	0.0835	0 – 0.24	101	85 ~ 115

Supervised by : M.L.YUNG

Certified by : 

Approved Signatory: HO Kin Man, John
Director

Date : 11/11/2014
**** End of Report ****

Note : This report refers only to the sample(s) tested and the result(s) applied to the sample(s) as received.

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Report No. : 230546WA242718(3)



Page 1 of 3

Test Report on Analysis of Water

Information Supplied by Client

Client : TAI PO GOLF CLUB LIMITED

Client's address : Room 802, 8th Floor, Far East Consortium Building, 121 Des Voeux Road, Central, Hong Kong

Project : Proposed Golf Course Development at Tai Po Town Lot No. 246 Shuen Wan, Ting Kok, Tai Po

Sample description : Twenty nos. of water sample

Sampling location : See table below

Test required : Total suspended solids dried at 103°C – 105°C

Laboratory Information

Lab sample I.D. : WA242718(3)/1-20

Date of receipt of sample : 21/10/2024

Date test completed : 25/10/2024

Test method used : APHA 23rd ed, 2540D

Lab Sample ID	Sampling Location	Sampling Date	Lab Sample ID	Sampling Location	Sampling Date
WA242718(3)/1	WM-1 /S /E	21/10/2024	WA242718(3)/11	WM-1 /S /F	21/10/2024
WA242718(3)/2	WM-1 /S /E Dup	21/10/2024	WA242718(3)/12	WM-1 /S /F Dup	21/10/2024
WA242718(3)/3	WM-1 /B /E	21/10/2024	WA242718(3)/13	WM-1 /B /F	21/10/2024
WA242718(3)/4	WM-1 /B /E Dup	21/10/2024	WA242718(3)/14	WM-1 /B /F Dup	21/10/2024
WA242718(3)/5	WM-2 /S /E	21/10/2024	WA242718(3)/15	WM-2 /S /F	21/10/2024
WA242718(3)/6	WM-2 /S /E Dup	21/10/2024	WA242718(3)/16	WM-2 /S /F Dup	21/10/2024
WA242718(3)/7	WM-2 /M /E	21/10/2024	WA242718(3)/17	WM-2 /M /F	21/10/2024
WA242718(3)/8	WM-2 /M /E Dup	21/10/2024	WA242718(3)/18	WM-2 /M /F Dup	21/10/2024
WA242718(3)/9	WM-2 /B /E	21/10/2024	WA242718(3)/19	WM-2 /B /F	21/10/2024
WA242718(3)/10	WM-2 /B /E Dup	21/10/2024	WA242718(3)/20	WM-2 /B /F Dup	21/10/2024

Note : This report refers only to the sample(s) tested and the result(s) applied to the sample(s) as received.

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Report No. : 230546WA242718(3)

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Results:

Sampling location	Testing items
	TSS, mg/L
WM-1 /S /E	6
WM-1 /S /E Dup	7
WM-1 /B /E	6
WM-1 /B /E Dup	7
WM-2 /S /E	5
WM-2 /S /E Dup	5
WM-2 /M /E	5
WM-2 /M /E Dup	5
WM-2 /B /E	4
WM-2 /B /E Dup	4
WM-1 /S /F	7
WM-1 /S /F Dup	7
WM-1 /B /F	7
WM-1 /B /F Dup	7
WM-2 /S /F	4
WM-2 /S /F Dup	5
WM-2 /M /F	7
WM-2 /M /F Dup	8
WM-2 /B /F	6
WM-2 /B /F Dup	5

Note : This report refers only to the sample(s) tested and the result(s) applied to the sample(s) as received.

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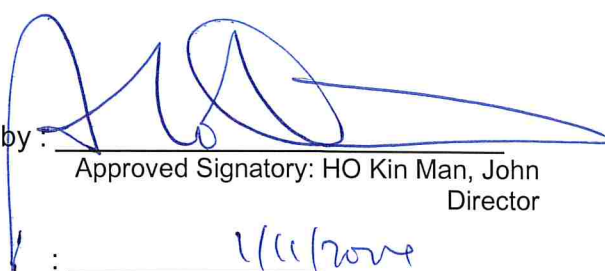
Report No. : 230546WA242718(3)

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QC data:

Sample ID		WA242718(3)/5					
Testing item	Blank, mg/L	Original conc., mg/L	Duplicate result, mg/L	Repeatability range normalized	Acceptable range, %	Matrix spike, %	Acceptable range, %
TSS	<0.5	6.82	7.11	0.0416	0 – 0.24	99	85 ~ 115

Supervised by : M.L.YUNG

Certified by : 

Approved Signatory: HO Kin Man, John
Director

Date : 1/11/2014
**** End of Report ****

Note : This report refers only to the sample(s) tested and the result(s) applied to the sample(s) as received.

The Hong Kong Accreditation Service (HKAS) has accredited Fugro Technical Services Limited (Reg. No. HOKLAS 015) under the Hong Kong Laboratory Accreditation Scheme (HOKLAS) for specific laboratory activities as listed in the HOKLAS Directory of Accredited Laboratories. The copyright of this report is owned by Fugro Technical Services Limited. This report shall not be reproduced except in full.

Report No. : 230546WA242718(4)



Page 1 of 3

Test Report on Analysis of Water

Information Supplied by Client

Client : TAI PO CLUB LIMITED

Client's address : Room 802, 8th Floor, Far East Consortium Building, 121 Des Voeux Road, Central, Hong Kong

Project : Proposed Golf Course Development at Tai Po Town Lot No. 246 Shuen Wan, Ting Kok, Tai Po

Sample description : Twenty nos. of water sample

Sampling location : See table below

Test required : Total suspended solids dried at 103°C – 105°C

Laboratory Information

Lab sample I.D. : WA242718(4)/1-20

Date of receipt of sample : 23/10/2024

Date test completed : 26/10/2024

Test method used : APHA 23rd ed, 2540D

Lab Sample ID	Sampling Location	Sampling Date	Lab Sample ID	Sampling Location	Sampling Date
WA242718(4)/1	WM-1 /S /E	23/10/2024	WA242718(4)/11	WM-1 /S /F	23/10/2024
WA242718(4)/2	WM-1 /S /E Dup	23/10/2024	WA242718(4)/12	WM-1 /S /F Dup	23/10/2024
WA242718(4)/3	WM-1 /B /E	23/10/2024	WA242718(4)/13	WM-1 /B /F	23/10/2024
WA242718(4)/4	WM-1 /B /E Dup	23/10/2024	WA242718(4)/14	WM-1 /B /F Dup	23/10/2024
WA242718(4)/5	WM-2 /S /E	23/10/2024	WA242718(4)/15	WM-2 /S /F	23/10/2024
WA242718(4)/6	WM-2 /S /E Dup	23/10/2024	WA242718(4)/16	WM-2 /S /F Dup	23/10/2024
WA242718(4)/7	WM-2 /M /E	23/10/2024	WA242718(4)/17	WM-2 /M /F	23/10/2024
WA242718(4)/8	WM-2 /M /E Dup	23/10/2024	WA242718(4)/18	WM-2 /M /F Dup	23/10/2024
WA242718(4)/9	WM-2 /B /E	23/10/2024	WA242718(4)/19	WM-2 /B /F	23/10/2024
WA242718(4)/10	WM-2 /B /E Dup	23/10/2024	WA242718(4)/20	WM-2 /B /F Dup	23/10/2024

Note : This report refers only to the sample(s) tested and the result(s) applied to the sample(s) as received.

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Report No. : 230546WA242718(4)

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Results:

Sampling location	Testing items
	TSS, mg/L
WM-1 /S /E	7
WM-1 /S /E Dup	7
WM-1 /B /E	9
WM-1 /B /E Dup	8
WM-2 /S /E	7
WM-2 /S /E Dup	5
WM-2 /M /E	6
WM-2 /M /E Dup	7
WM-2 /B /E	9
WM-2 /B /E Dup	7
WM-1 /S /F	6
WM-1 /S /F Dup	6
WM-1 /B /F	6
WM-1 /B /F Dup	7
WM-2 /S /F	7
WM-2 /S /F Dup	7
WM-2 /M /F	7
WM-2 /M /F Dup	5
WM-2 /B /F	6
WM-2 /B /F Dup	8

Note : This report refers only to the sample(s) tested and the result(s) applied to the sample(s) as received.

The Hong Kong Accreditation Service (HKAS) has accredited Fugro Technical Services Limited (Reg. No. HOKLAS 015) under the Hong Kong Laboratory Accreditation Scheme (HOKLAS) for specific laboratory activities as listed in the HOKLAS Directory of Accredited Laboratories. The copyright of this report is owned by Fugro Technical Services Limited. This report shall not be reproduced except in full.

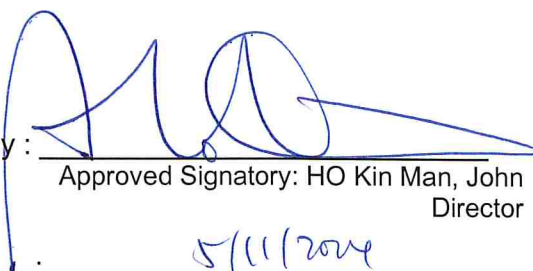
Report No. : 230546WA242718(4)

Page 3 of 3


QC data:

Sample ID		WA242718(4)/4					
Testing item	Blank, mg/L	Original conc., mg/L	Duplicate result, mg/L	Repeatability range normalized	Acceptable range, %	Matrix spike, %	Acceptable range, %
TSS	<0.5	8.37	7.65	0.0899	0 – 0.24	95.80	85 ~ 115

Supervised by : M.L.YUNG

Certified by : 
Approved Signatory: HO Kin Man, John
Director

Date : 5/11/2014
**** End of Report ****

Note : This report refers only to the sample(s) tested and the result(s) applied to the sample(s) as received.

The Hong Kong Accreditation Service (HKAS) has accredited Fugro Technical Services Limited (Reg. No. HOKLAS 015) under the Hong Kong Laboratory Accreditation Scheme (HOKLAS) for specific laboratory activities as listed in the HOKLAS Directory of Accredited Laboratories. The copyright of this report is owned by Fugro Technical Services Limited. This report shall not be reproduced except in full.

Report No. : 230546WA242718(5)



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Test Report on Analysis of Water

Information Supplied by Client

Client : TAI PO CLUB LIMITED

Client's address : Room 802, 8th Floor, Far East Consortium Building, 121 Des Voeux Road, Central, Hong Kong

Project : Proposed Golf Course Development at Tai Po Town Lot No. 246 Shuen Wan, Ting Kok, Tai Po

Sample description : Twenty nos. of water sample

Sampling location : See table below

Test required : Total suspended solids dried at 103°C – 105°C

Laboratory Information

Lab sample I.D. : WA242718(5)/1-20

Date of receipt of sample : 25/10/2024

Date test completed : 31/10/2024

Test method used : APHA 23rd ed, 2540D

Lab Sample ID	Sampling Location	Sampling Date	Lab Sample ID	Sampling Location	Sampling Date
WA242718(5)/1	WM-1 /S /E	25/10/2024	WA242718(5)/11	WM-1 /S /F	25/10/2024
WA242718(5)/2	WM-1 /S /E Dup	25/10/2024	WA242718(5)/12	WM-1 /S /F Dup	25/10/2024
WA242718(5)/3	WM-1 /B /E	25/10/2024	WA242718(5)/13	WM-1 /B /F	25/10/2024
WA242718(5)/4	WM-1 /B /E Dup	25/10/2024	WA242718(5)/14	WM-1 /B /F Dup	25/10/2024
WA242718(5)/5	WM-2 /S /E	25/10/2024	WA242718(5)/15	WM-2 /S /F	25/10/2024
WA242718(5)/6	WM-2 /S /E Dup	25/10/2024	WA242718(5)/16	WM-2 /S /F Dup	25/10/2024
WA242718(5)/7	WM-2 /M /E	25/10/2024	WA242718(5)/17	WM-2 /M /F	25/10/2024
WA242718(5)/8	WM-2 /M /E Dup	25/10/2024	WA242718(5)/18	WM-2 /M /F Dup	25/10/2024
WA242718(5)/9	WM-2 /B /E	25/10/2024	WA242718(5)/19	WM-2 /B /F	25/10/2024
WA242718(5)/10	WM-2 /B /E Dup	25/10/2024	WA242718(5)/20	WM-2 /B /F Dup	25/10/2024

Note : This report refers only to the sample(s) tested and the result(s) applied to the sample(s) as received.

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Report No. : 230546WA242718(5)

Page 2 of 3


Results:

Sampling location	Testing items
	TSS, mg/L
WM-1 /S /E	9
WM-1 /S /E Dup	8
WM-1 /B /E	10
WM-1 /B /E Dup	9
WM-2 /S /E	8
WM-2 /S /E Dup	6
WM-2 /M /E	6
WM-2 /M /E Dup	6
WM-2 /B /E	8
WM-2 /B /E Dup	8
WM-1 /S /F	6
WM-1 /S /F Dup	6
WM-1 /B /F	8
WM-1 /B /F Dup	7
WM-2 /S /F	5
WM-2 /S /F Dup	6
WM-2 /M /F	8
WM-2 /M /F Dup	7
WM-2 /B /F	7
WM-2 /B /F Dup	6

Note : This report refers only to the sample(s) tested and the result(s) applied to the sample(s) as received.

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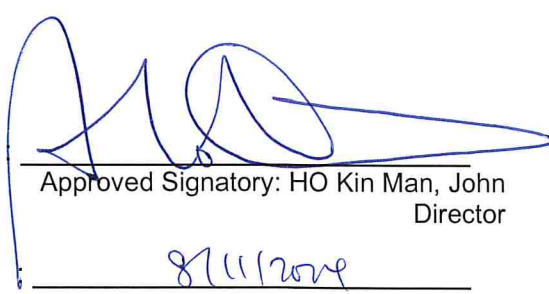
Report No. : 230546WA242718(5)

Page 3 of 3


QC data:

Sample ID		WA242718(5)/4					
Testing item	Blank, mg/L	Original conc., mg/L	Duplicate result, mg/L	Repeatability range normalized	Acceptable range, %	Matrix spike, %	Acceptable range, %
TSS	<0.5	9.48	8.93	0.0671	0 – 0.24	98.0	85 ~ 115

Supervised by : M.L.YUNG

Certified by : 
Approved Signatory: HO Kin Man, John
Director

Date : 8/11/2019
** End of Report **

Note : This report refers only to the sample(s) tested and the result(s) applied to the sample(s) as received.

The Hong Kong Accreditation Service (HKAS) has accredited Fugro Technical Services Limited (Reg. No. HOKLAS 015) under the Hong Kong Laboratory Accreditation Scheme (HOKLAS) for specific laboratory activities as listed in the HOKLAS Directory of Accredited Laboratories. The copyright of this report is owned by Fugro Technical Services Limited. This report shall not be reproduced except in full.

Report No. : 230546WA242718(6)



Page 1 of 3

Test Report on Analysis of Water

Information Supplied by Client

Client : TAI PO GOLF CLUB LIMITED

Client's address : Room 802, 8th Floor, Far East Consortium Building, 121 Des Voeux Road, Central, Hong Kong

Project : Proposed Golf Course Development at Tai Po Town Lot No. 246 Shuen Wan, Ting Kok, Tai Po

Sample description : Twenty nos. of water sample

Sampling location : See table below

Test required : Total suspended solids dried at 103°C – 105°C

Laboratory Information

Lab sample I.D. : WA242718(6)/1-20

Date of receipt of sample : 28/10/2024

Date test completed : 03/11/2024

Test method used : APHA 23rd ed, 2540D

Lab Sample ID	Sampling Location	Sampling Date	Lab Sample ID	Sampling Location	Sampling Date
WA242718(6)/1	WM-1 /S /E	28/10/2024	WA242718(6)/11	WM-1 /S /F	28/10/2024
WA242718(6)/2	WM-1 /S /E Dup	28/10/2024	WA242718(6)/12	WM-1 /S /F Dup	28/10/2024
WA242718(6)/3	WM-1 /B /E	28/10/2024	WA242718(6)/13	WM-1 /B /F	28/10/2024
WA242718(6)/4	WM-1 /B /E Dup	28/10/2024	WA242718(6)/14	WM-1 /B /F Dup	28/10/2024
WA242718(6)/5	WM-2 /S /E	28/10/2024	WA242718(6)/15	WM-2 /S /F	28/10/2024
WA242718(6)/6	WM-2 /S /E Dup	28/10/2024	WA242718(6)/16	WM-2 /S /F Dup	28/10/2024
WA242718(6)/7	WM-2 /M /E	28/10/2024	WA242718(6)/17	WM-2 /M /F	28/10/2024
WA242718(6)/8	WM-2 /M /E Dup	28/10/2024	WA242718(6)/18	WM-2 /M /F Dup	28/10/2024
WA242718(6)/9	WM-2 /B /E	28/10/2024	WA242718(6)/19	WM-2 /B /F	28/10/2024
WA242718(6)/10	WM-2 /B /E Dup	28/10/2024	WA242718(6)/20	WM-2 /B /F Dup	28/10/2024

Note : This report refers only to the sample(s) tested and the result(s) applied to the sample(s) as received.

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Report No. : 230546WA242718(6)

Page 2 of 3


Results:

Sampling location	Testing items
	TSS, mg/L
WM-1 /S /E	8
WM-1 /S /E Dup	8
WM-1 /B /E	7
WM-1 /B /E Dup	7
WM-2 /S /E	7
WM-2 /S /E Dup	7
WM-2 /M /E	8
WM-2 /M /E Dup	6
WM-2 /B /E	6
WM-2 /B /E Dup	7
WM-1 /S /F	8
WM-1 /S /F Dup	8
WM-1 /B /F	7
WM-1 /B /F Dup	8
WM-2 /S /F	7
WM-2 /S /F Dup	6
WM-2 /M /F	6
WM-2 /M /F Dup	7
WM-2 /B /F	7
WM-2 /B /F Dup	7

Note : This report refers only to the sample(s) tested and the result(s) applied to the sample(s) as received.

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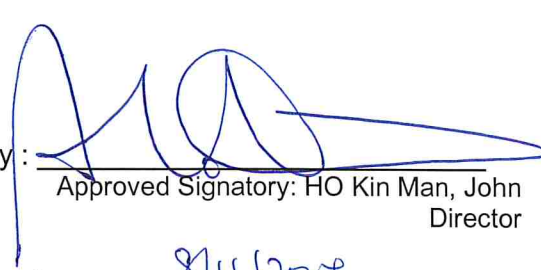
Report No. : 230546WA242718(6)

Page 3 of 3


QC data:

Sample ID		WA242718(6)/4					
Testing item	Blank, mg/L	Original conc., mg/L	Duplicate result, mg/L	Repeatability range normalized	Acceptable range, %	Matrix spike, %	Acceptable range, %
TSS	<0.5	7.64	7.28	0.0483	0 – 0.24	87.0	85 ~ 115

Supervised by : M.L.YUNG

Certified by : 
Approved Signatory: HO Kin Man, John
Director

Date : 8/11/2018
**** End of Report ****

Note : This report refers only to the sample(s) tested and the result(s) applied to the sample(s) as received.

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Report No. : 230546WA242718(7)



Page 1 of 3



Test Report on Analysis of Water

Information Supplied by Client

Client : TAI PO GOLF CLUB LIMITED

Client's address : Room 802, 8th Floor, Far East Consortium Building, 121 Des Voeux Road, Central, Hong Kong

Project : Proposed Golf Course Development at Tai Po Town Lot No. 246 Shuen Wan, Ting Kok, Tai Po

Sample description : Twenty nos. of water sample

Sampling location : See table below

Test required : Total suspended solids dried at 103°C – 105°C

Laboratory Information

Lab sample I.D. : WA242718(7)/1-20

Date of receipt of sample : 30/10/2024

Date test completed : 06/11/2024

Test method used : APHA 23rd ed, 2540D

Lab Sample ID	Sampling Location	Sampling Date	Lab Sample ID	Sampling Location	Sampling Date
WA242718(7)/1	WM-1 /S /E	30/10/2024	WA242718(7)/11	WM-1 /S /F	30/10/2024
WA242718(7)/2	WM-1 /S /E Dup	30/10/2024	WA242718(7)/12	WM-1 /S /F Dup	30/10/2024
WA242718(7)/3	WM-1 /B /E	30/10/2024	WA242718(7)/13	WM-1 /B /F	30/10/2024
WA242718(7)/4	WM-1 /B /E Dup	30/10/2024	WA242718(7)/14	WM-1 /B /F Dup	30/10/2024
WA242718(7)/5	WM-2 /S /E	30/10/2024	WA242718(7)/15	WM-2 /S /F	30/10/2024
WA242718(7)/6	WM-2 /S /E Dup	30/10/2024	WA242718(7)/16	WM-2 /S /F Dup	30/10/2024
WA242718(7)/7	WM-2 /M /E	30/10/2024	WA242718(7)/17	WM-2 /M /F	30/10/2024
WA242718(7)/8	WM-2 /M /E Dup	30/10/2024	WA242718(7)/18	WM-2 /M /F Dup	30/10/2024
WA242718(7)/9	WM-2 /B /E	30/10/2024	WA242718(7)/19	WM-2 /B /F	30/10/2024
WA242718(7)/10	WM-2 /B /E Dup	30/10/2024	WA242718(7)/20	WM-2 /B /F Dup	30/10/2024

Note : This report refers only to the sample(s) tested and the result(s) applied to the sample(s) as received.

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Report No. : 230546WA242718(7)

Page 2 of 3


Results:

Sampling location	Testing items
	TSS, mg/L
WM-1 /S /E	7
WM-1 /S /E Dup	7
WM-1 /B /E	7
WM-1 /B /E Dup	7
WM-2 /S /E	7
WM-2 /S /E Dup	7
WM-2 /M /E	7
WM-2 /M /E Dup	7
WM-2 /B /E	7
WM-2 /B /E Dup	6
WM-1 /S /F	7
WM-1 /S /F Dup	7
WM-1 /B /F	7
WM-1 /B /F Dup	7
WM-2 /S /F	6
WM-2 /S /F Dup	6
WM-2 /M /F	7
WM-2 /M /F Dup	7
WM-2 /B /F	7
WM-2 /B /F Dup	7

Note : This report refers only to the sample(s) tested and the result(s) applied to the sample(s) as received.

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Report No. : 230546WA242718(7)

Page 3 of 3


QC data:

Sample ID		WA242718(7)/4					
Testing item	Blank, mg/L	Original conc., mg/L	Duplicate result, mg/L	Repeatability range normalized	Acceptable range, %	Matrix spike, %	Acceptable range, %
TSS	<0.5	6.82	6.41	0.0620	0 – 0.24	86.5	85 ~ 115

Supervised by : M.L.YUNG

Certified by : 
Approved Signatory: HO Kin Man, John
Director

Date
** End of Report **

Note : This report refers only to the sample(s) tested and the result(s) applied to the sample(s) as received.

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Appendix 5.2

HOKLAS Accreditation Certificate



Hong Kong Accreditation Service
香港認可處

Certificate of Accreditation
認可證書

This is to certify that
特此證明

FUGRO TECHNICAL SERVICES LIMITED
輝固技術服務有限公司

Fugro Development Centre, 5 Lok Yi Street, Tai Lam, Tuen Mun, New Territories, Hong Kong
香港新界屯門大欖樂怡街五號輝固發展中心

is accredited by the Hong Kong Accreditation Service (HKAS) to ISO/IEC 17025:2017
for performing specific laboratory activities as listed in the scope of accreditation within the test category of
獲香港認可處根據ISO/IEC 17025:2017認可
進行載於認可範圍內下述測試類別中的指定實驗所活動

Environmental Testing
環境測試

This accreditation to ISO/IEC 17025:2017 demonstrates technical competence for a defined scope and
the implementation of a management system relevant to laboratory operation
(see joint IAF-ILAC-ISO Communiqué).
此項 ISO/IEC 17025:2017 的認可資格證明此實驗所具備指定範疇內所須的技術能力並
實施一套與實驗所運作相關的管理體系
(見國際認可論壇、國際實驗所認可合作組織及國際標準化組織的聯合公報)。

The common seal of HKAS is affixed hereto by the authority of the HKAS Executive
現經香港認可處執行機關授權在此蓋上香港認可處的印章

SHUM Wai-leung, Executive Administrator
執行幹事 沈偉良
Issue Date : 25 May 2021
簽發日期：二零二一年五月二十五日

Registration Number : **HOKLAS 015**
註冊號碼：

Date of First Registration : 23 March 1989
首次註冊日期：一九八九年三月二十三日



Appendix 5.3

Photo Records of Water Sampling Days

Photos taken by the Environmental Team on 14/10/2024



Photos taken by the Environmental Team on 16/10/2024



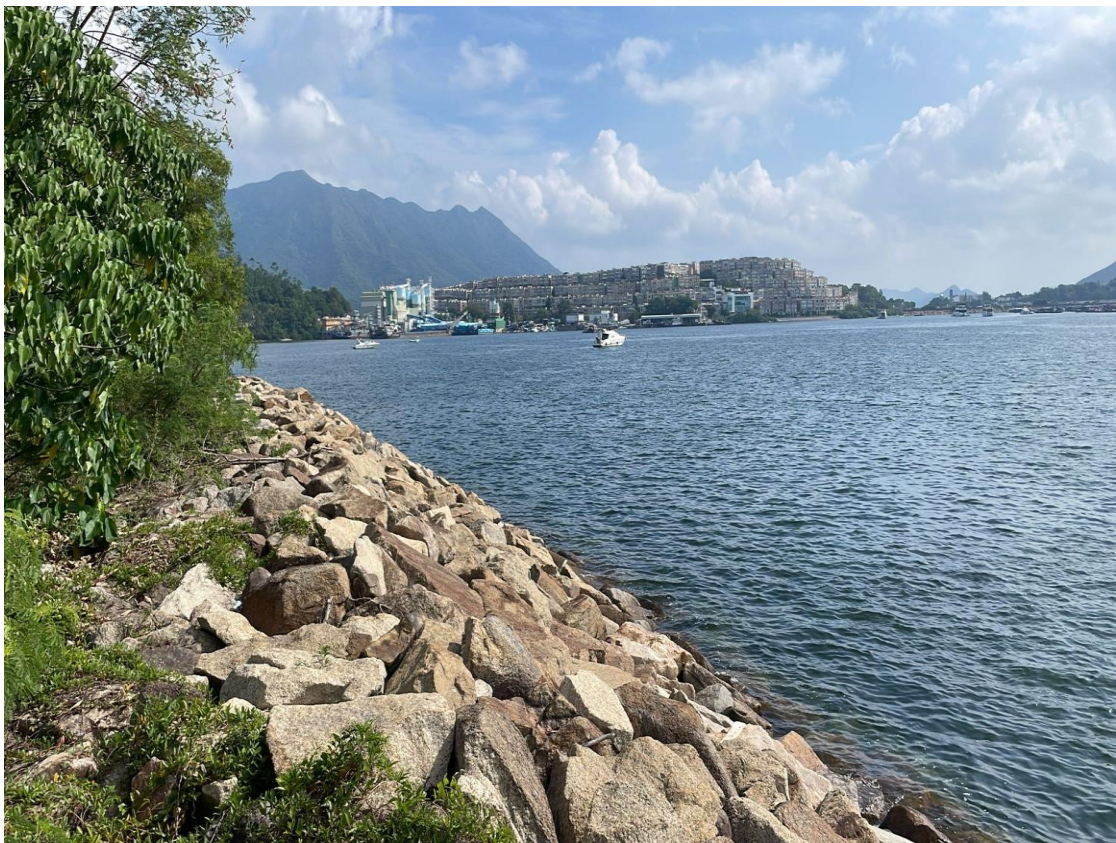
Photos taken by the Contractor on 16/10/2024



Photos taken by the Environmental Team on 18/10/2024



Photos taken by the Contractor on 18/10/2024



Photos taken by the Environmental Team on 21/10/2024



Photos taken by the Contractor on 21/10/2024



Photos taken by the Environmental Team on 23/10/2024



Photos taken by the Contractor on 23/10/2024



Photos taken by the Environmental Team on 25/10/2024



Photos taken by the Environmental Team on 28/10/2024



Photos taken by the Contractor on 28/10/2024



Photos taken by the Environmental Team on 30/10/2024



Photos taken by the Contractor on 30/10/2024



Appendix 5.4

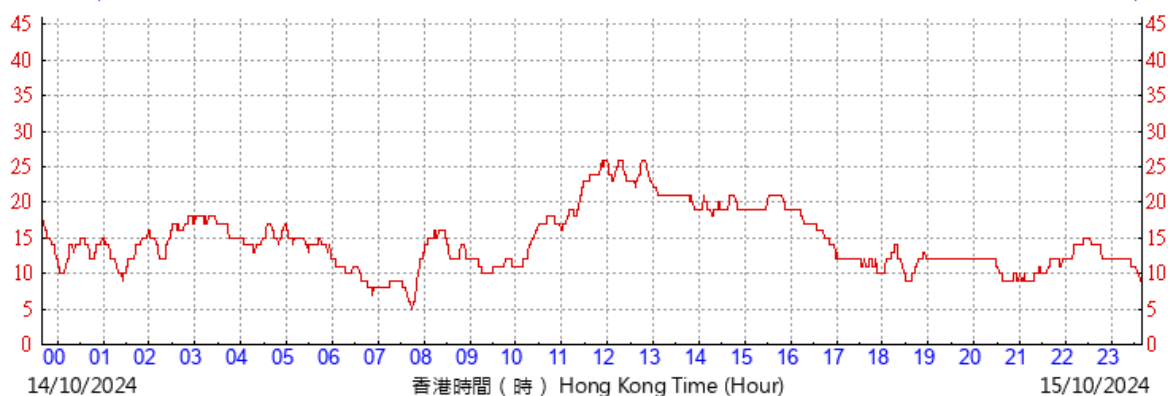
Weather Condition

Month	Day	Mean Pressure (hPa)	Air Temperature			Mean Dew Pont (deg. C)	Mean Relative Humidity (%)	Mean Amount of Cloud (%)	Total Rainfall (mm)
			Absolute Daily Max (deg. C)	Mean (deg. C)	Absolute Daily Min (deg. C)				
10	14	1013.5	31.0	28.0	26.3	23.0	75	34	0.0
10	15	1013.6	30.9	28.1	26.6	23.3	75	77	0.0
10	16	1014.5	31.1	28.2	27.4	23.0	74	88	Trace
10	17	1013.9	29.7	27.8	27.1	23.3	77	85	Trace
10	18	1013.2	30.7	28.3	27.1	24.0	78	85	Trace
10	19	1014.1	33.7	29.2	26.4	23.9	74	43	0.0
10	20	1016.5	29.7	27.9	26.9	23.1	75	82	1.9
10	21	1015.0	31.5	27.8	26.4	22.9	75	69	Trace
10	22	1013.7	32.3	28.3	26.0	20.5	64	52	0.0
10	23	1012.4	28.4	25.7	23.4	16.4	57	81	0.0
10	24	1009.2	28.5	24.8	22.0	10.6	42	84	0.0
10	25	1006.7	29.4	26.0	22.9	13.2	45	78	0.0
10	26	1006.6	28.5	26.6	25.3	19.8	67	88	0.7
10	27	1009.3	29.2	27.3	25.9	22.0	73	77	Trace
10	28	1010.1	27.2	25.8	24.6	19.2	67	83	Trace
10	29	1011.1	26.7	25.3	23.7	19.1	69	86	Trace
10	30	1010.3	29.3	26.2	24.3	18.7	64	70	0.0
10	31	1006.0	30.6	27.1	24.1	16.4	52	41	0.0

Trace means rainfall less than 0.05 mm.

Data Source: Hong Kong Observatory

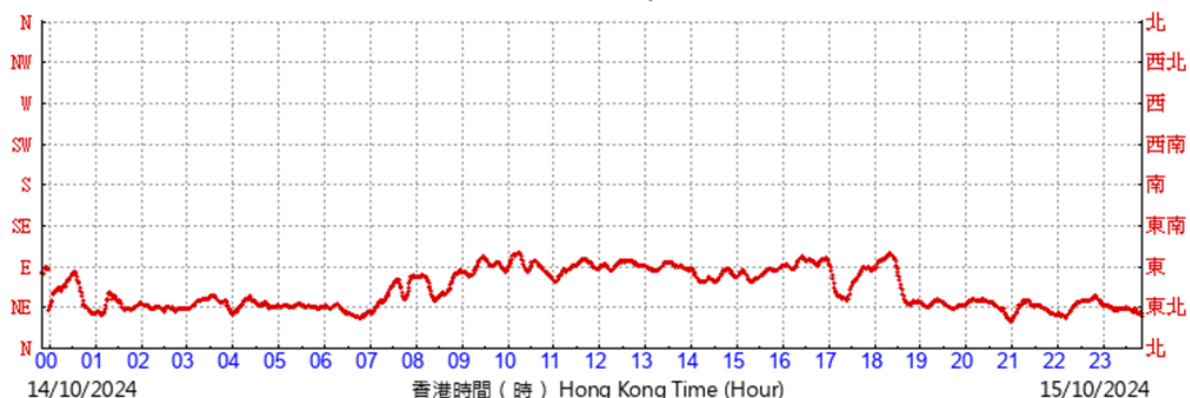
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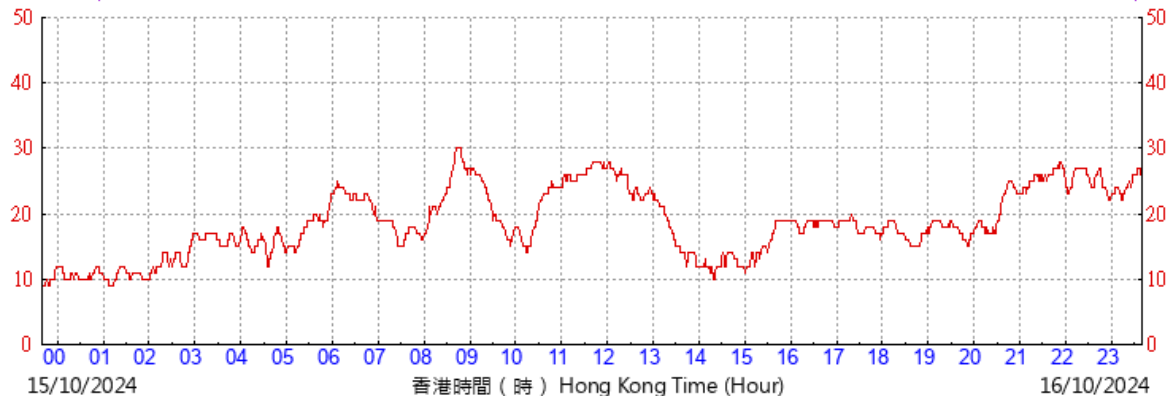
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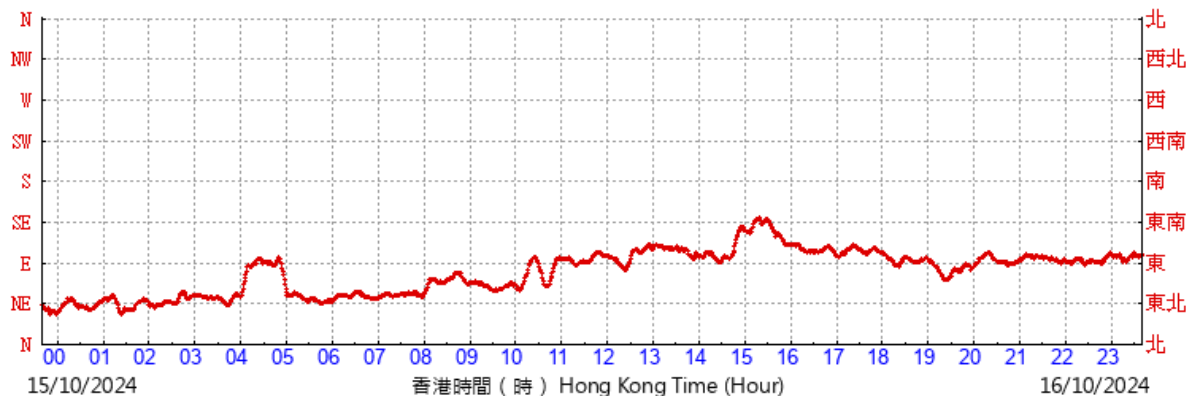
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(於香港時間16/10/2024 23 時 40 分更新) (Updated at 23:40H on 16/10/2024)

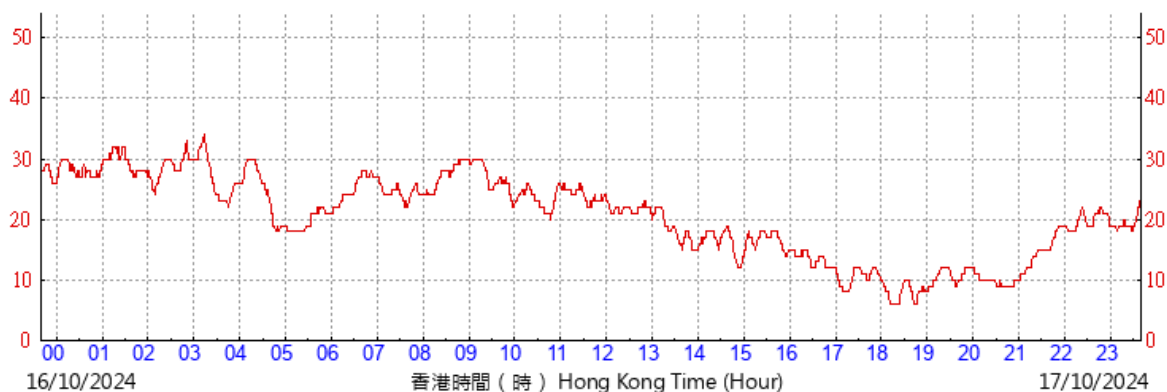


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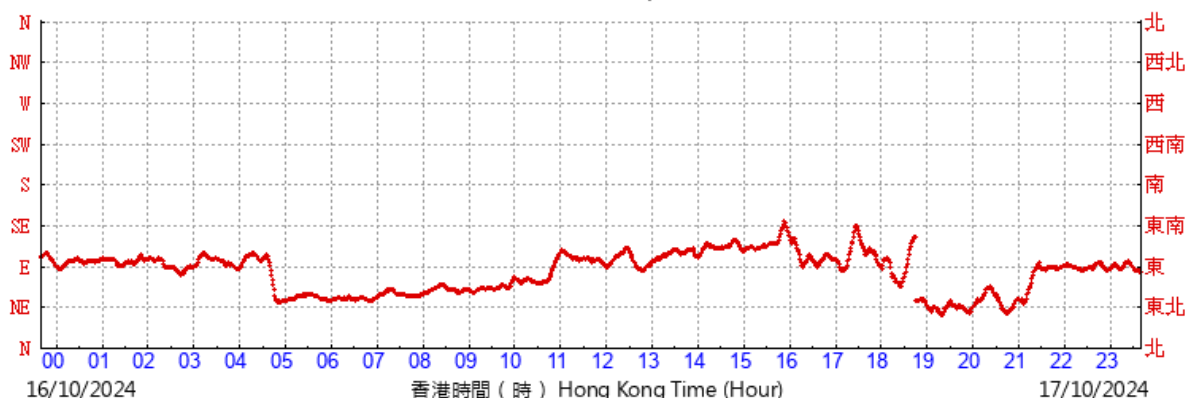
(km/h)



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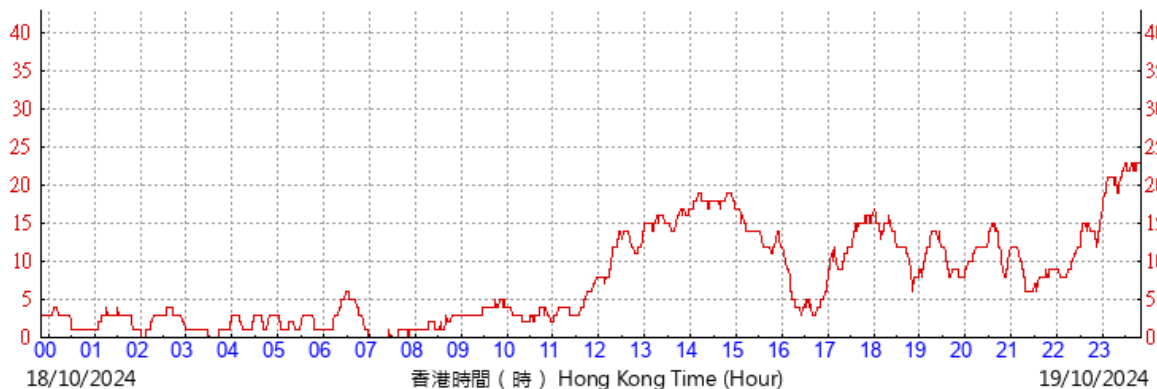


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(公里/小時) (於香港時間19/10/2024 23 時 50 分更新) (Updated at 23:50H on 19/10/2024)

(km/h)



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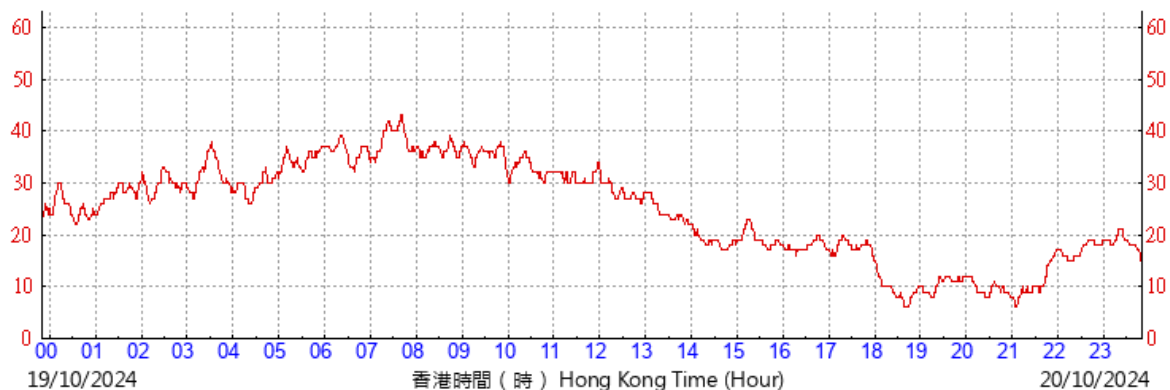


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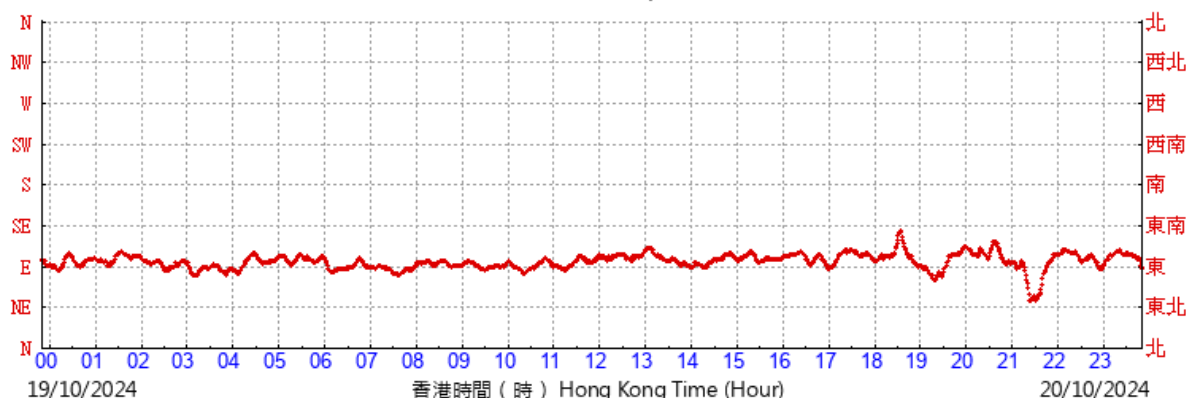
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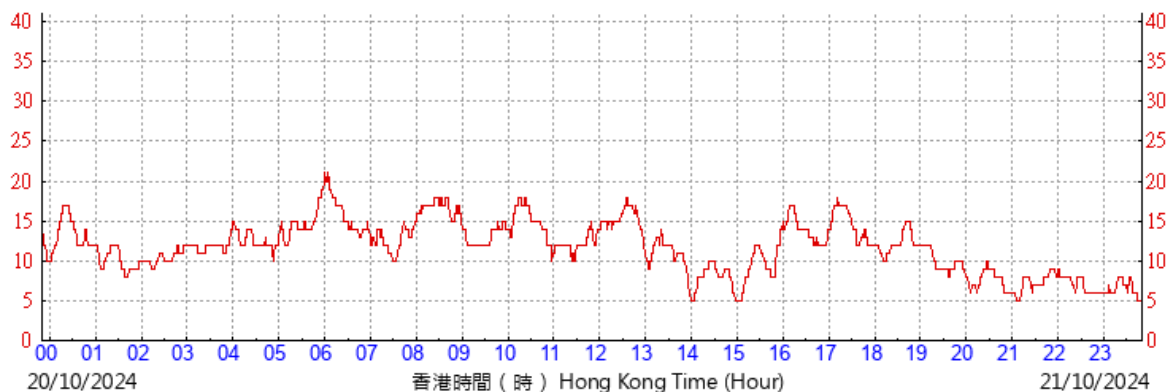


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(km/h)



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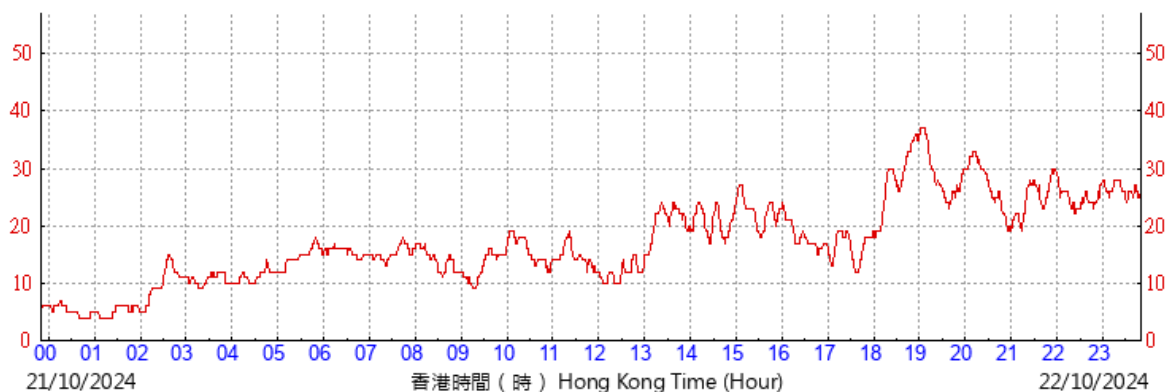


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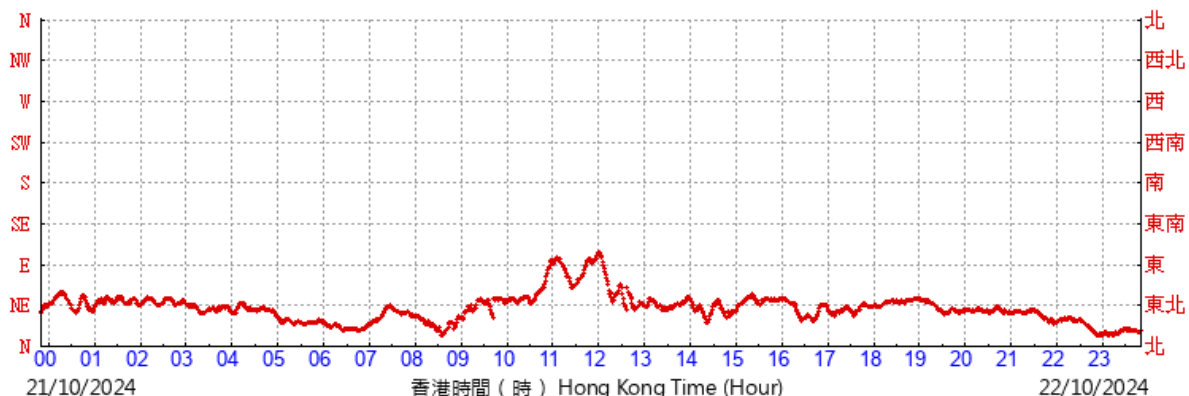
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(km/h)



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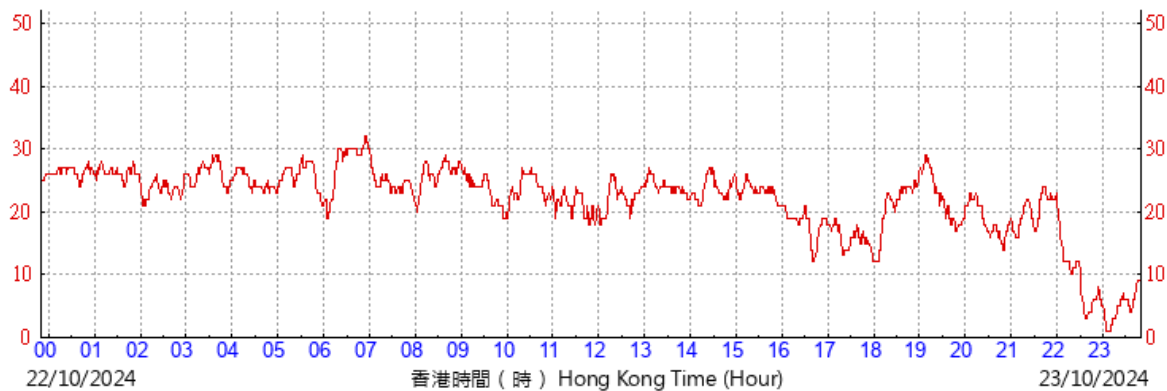
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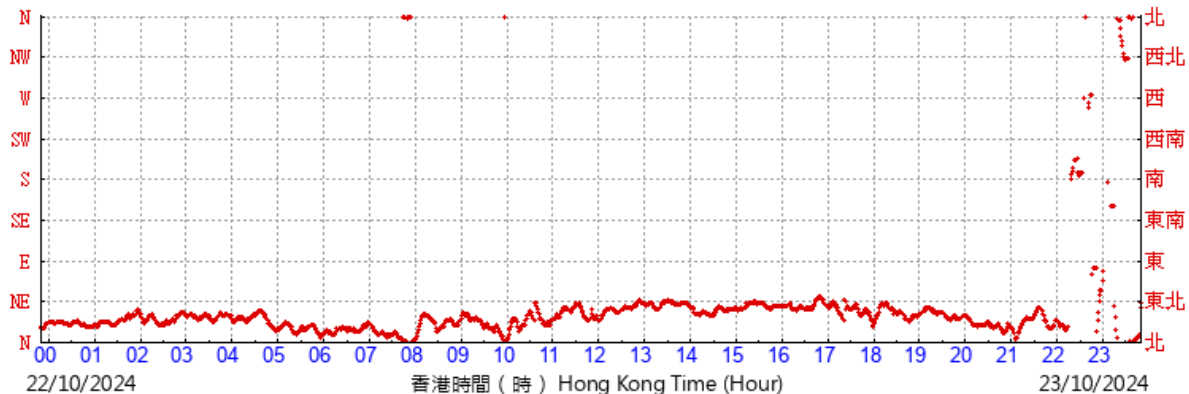
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(km/h)



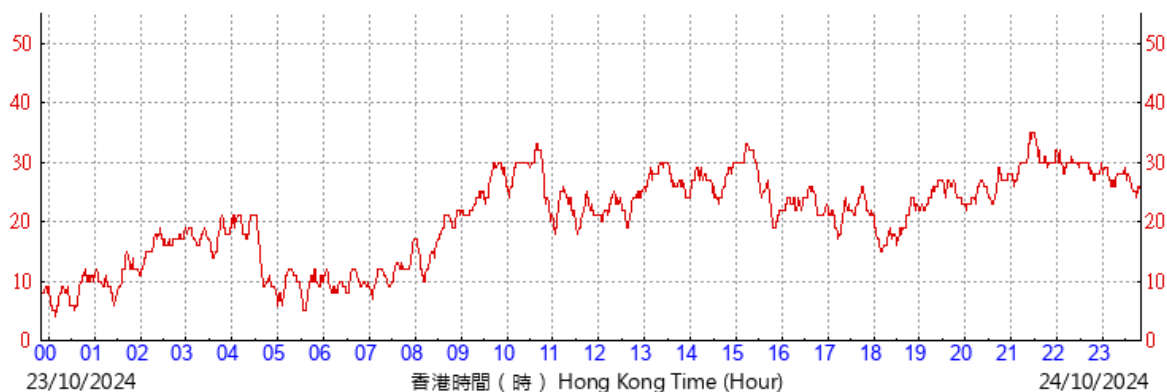
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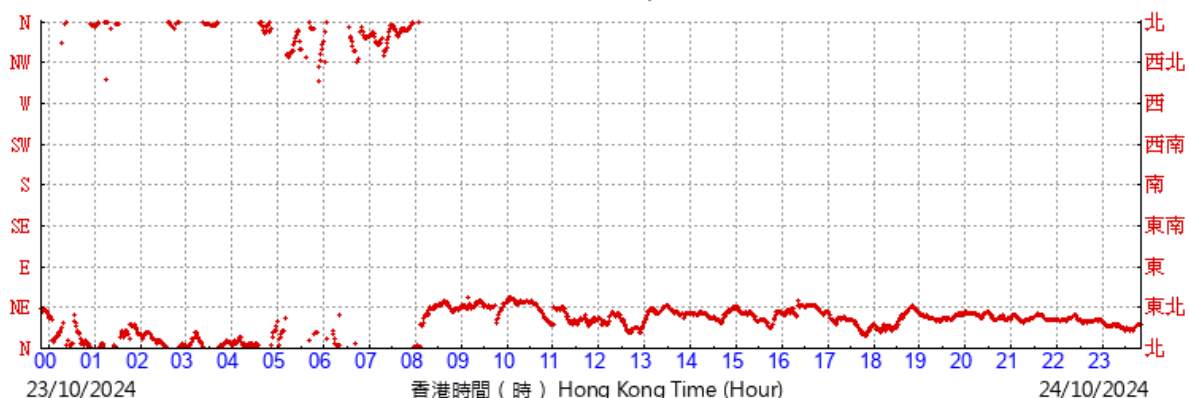
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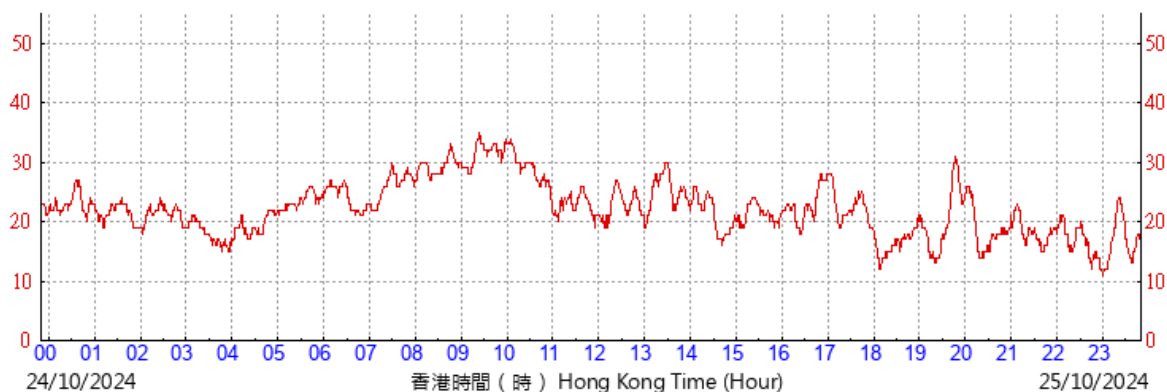
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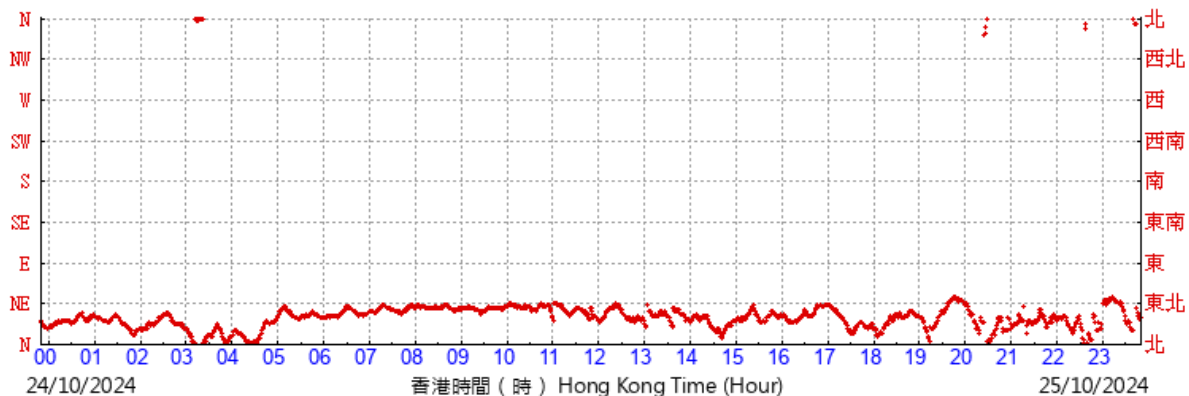
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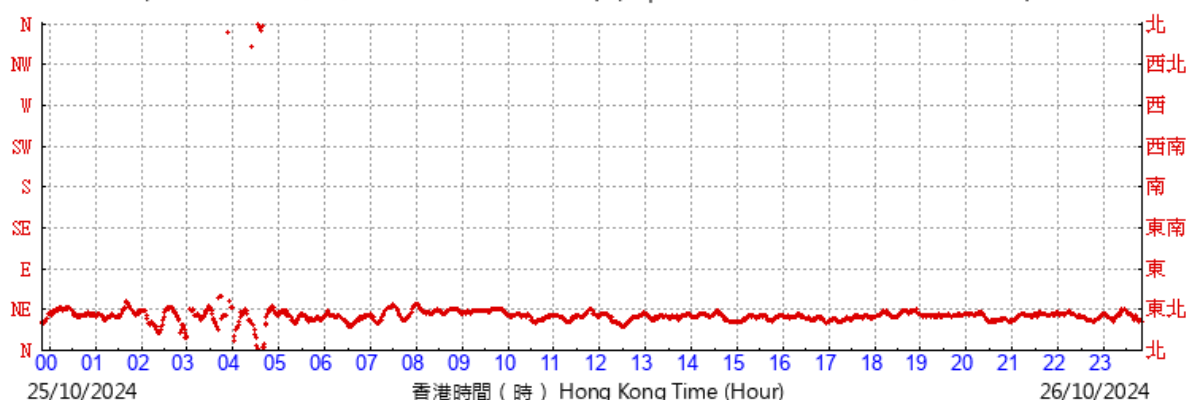
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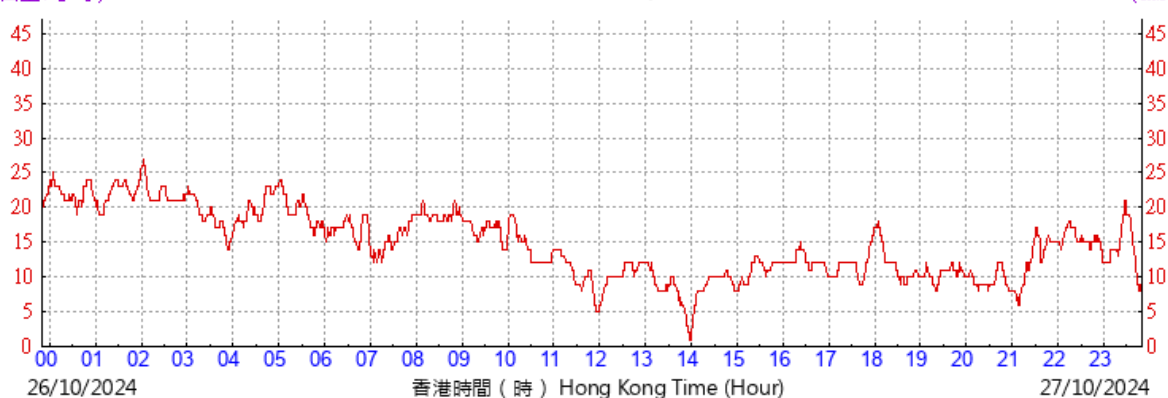
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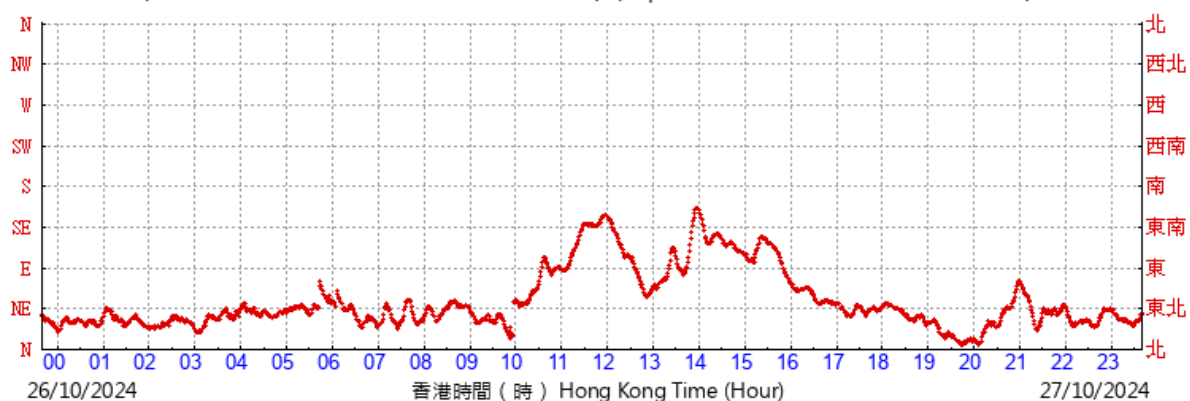
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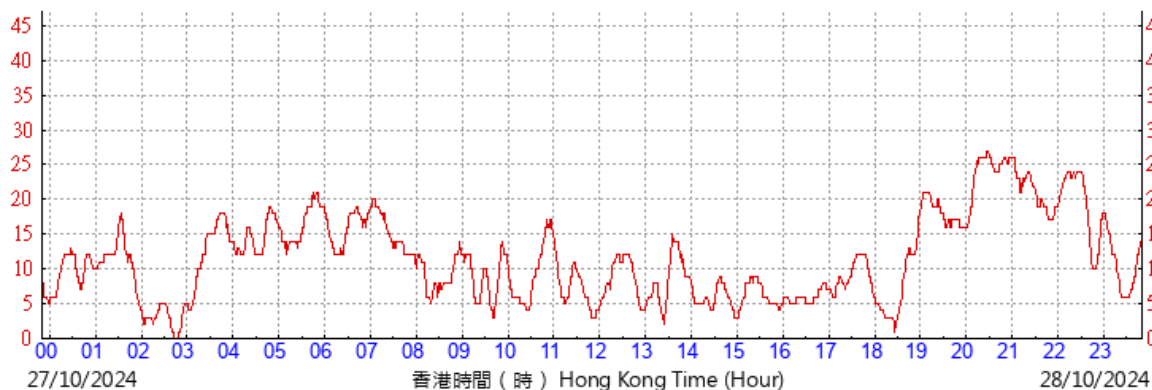


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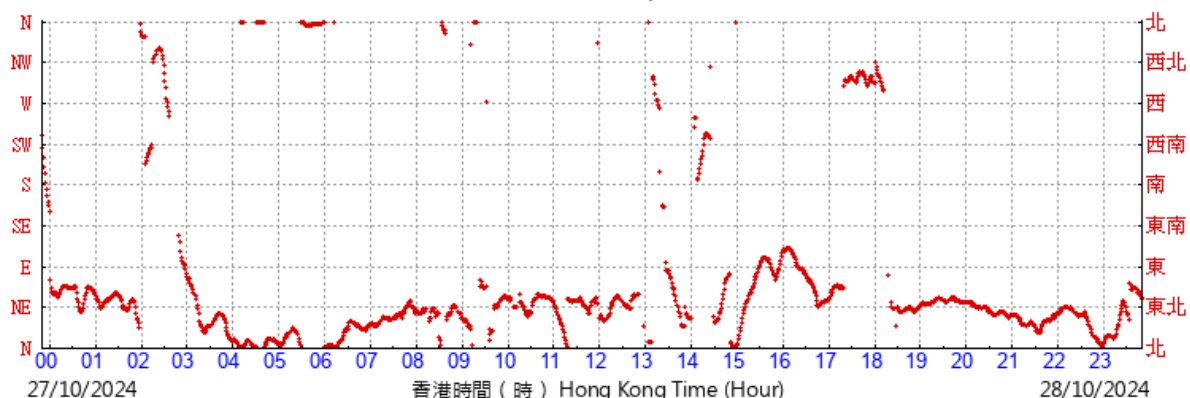
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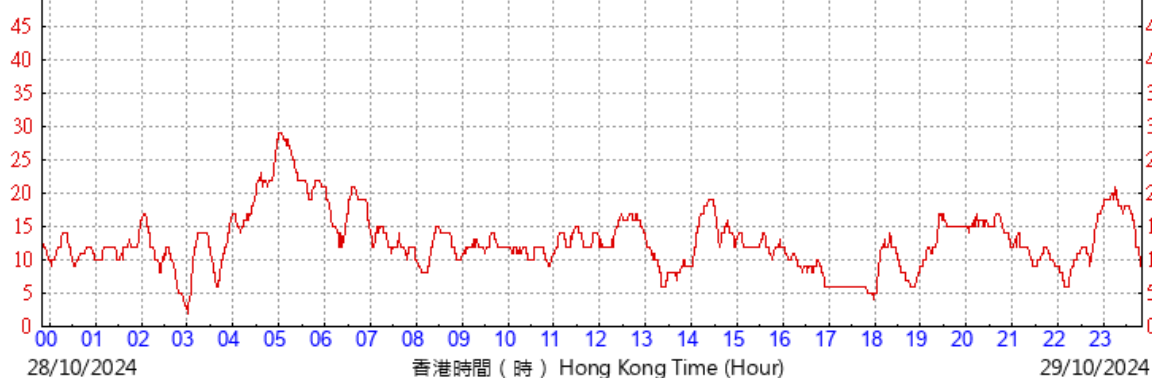


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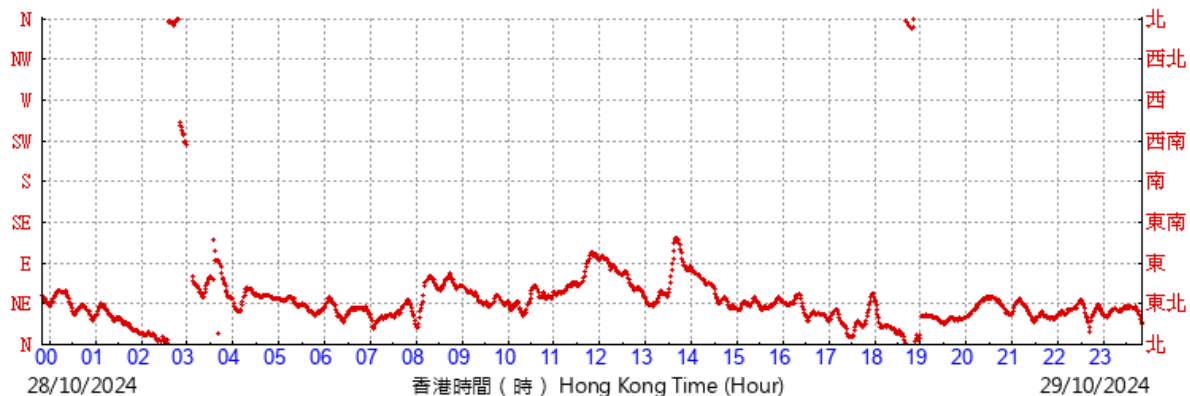
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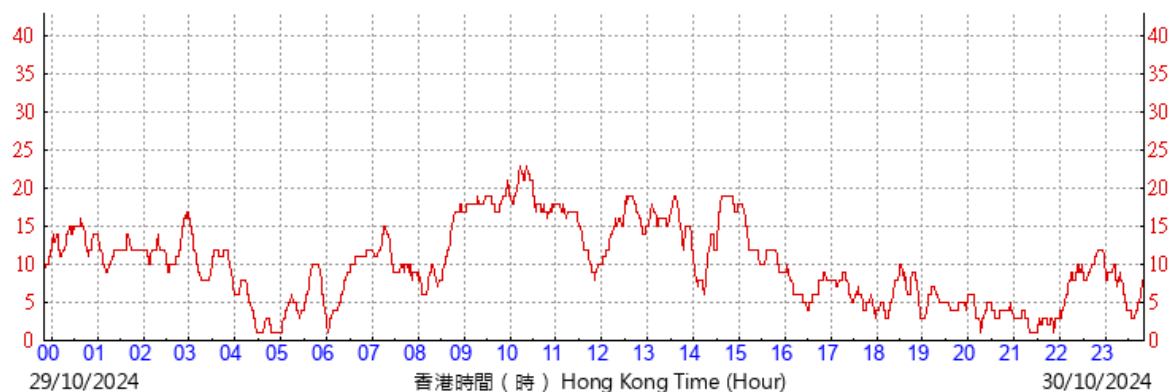


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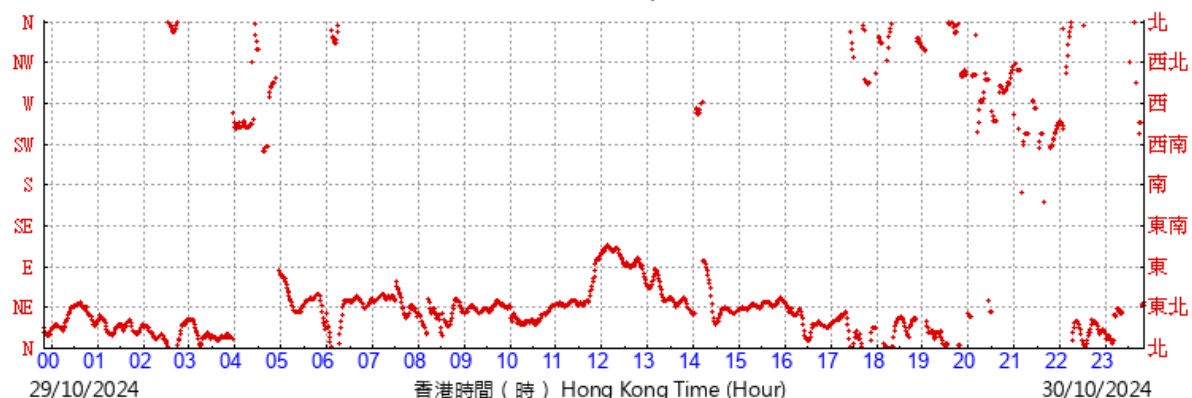
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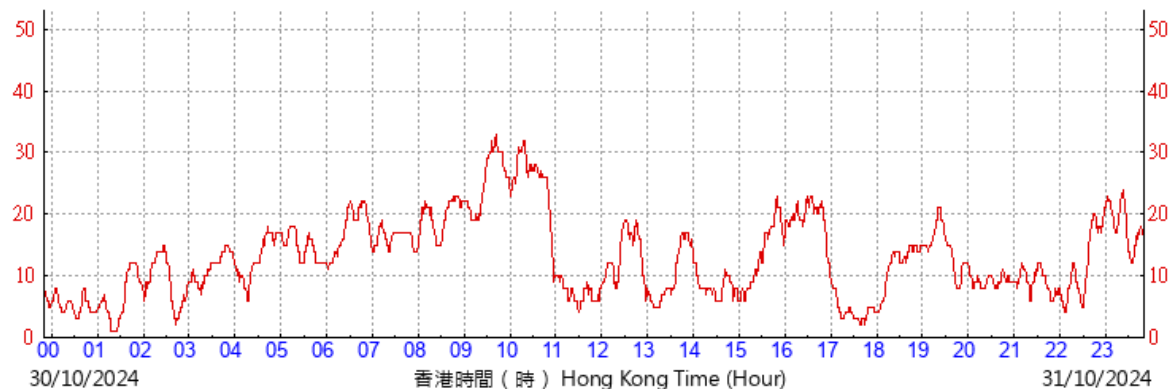


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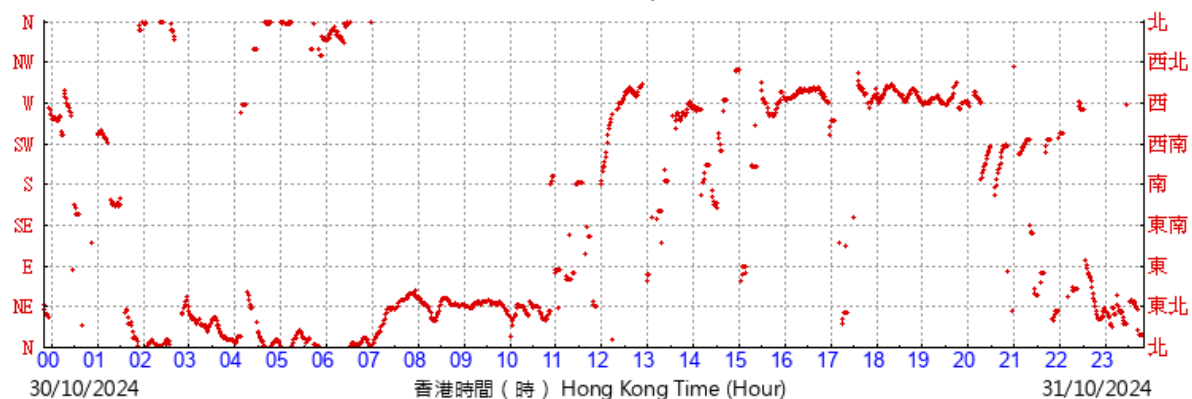
(km/h)



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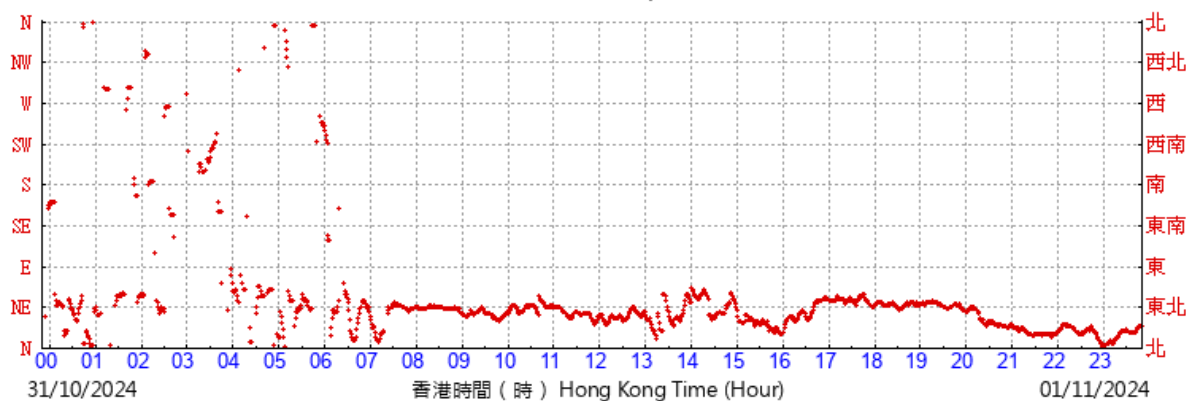
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(於香港時間01/11/2024 23 時 50 分更新) (Updated at 23:50H on 01/11/2024)



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Data from 17/10/2024 00:00 – 18/10/2024 00:00 is not available.

Appendix 5.5

Figures of Collared Crow and Black Kite Monitoring

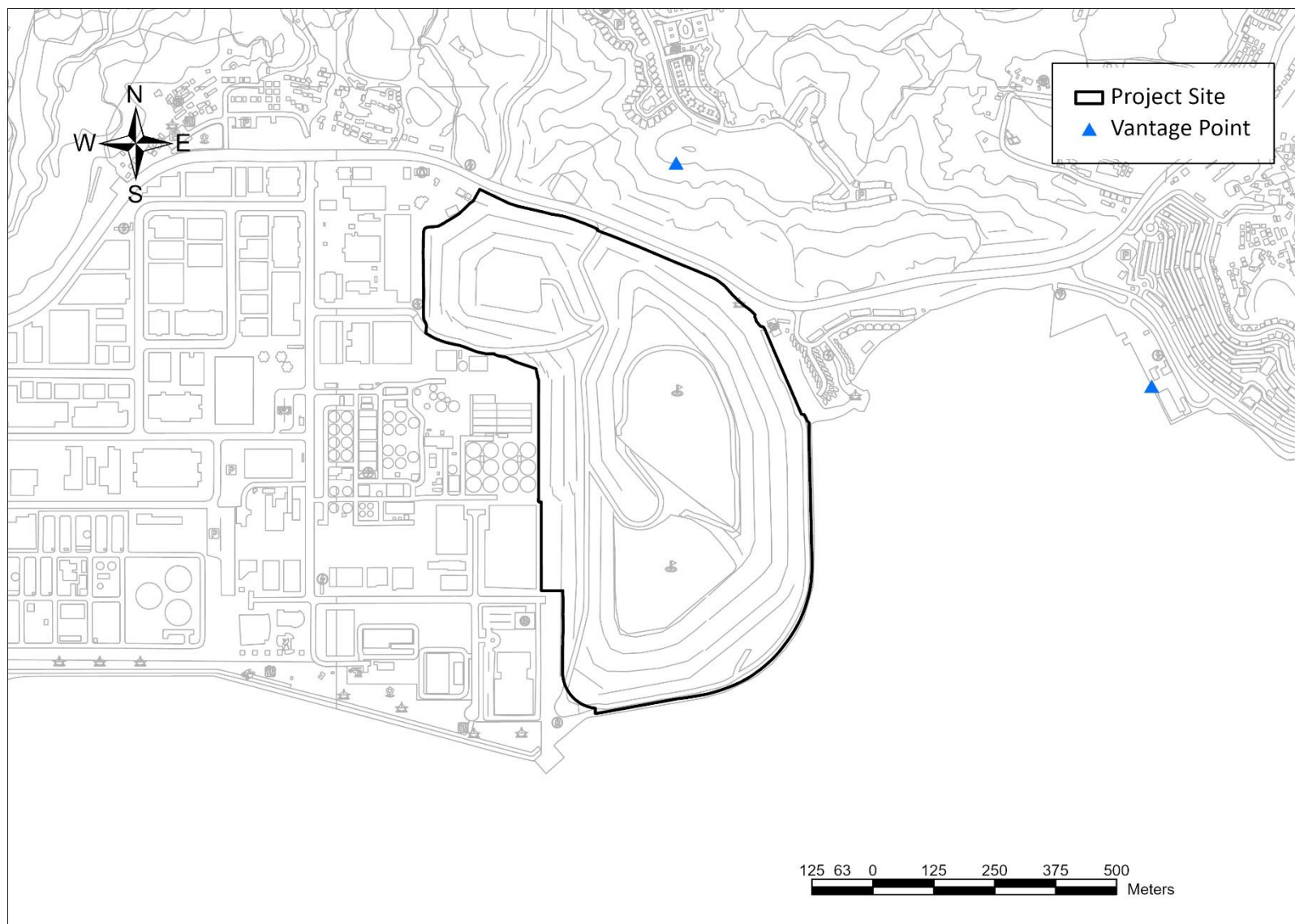


Figure 1 Vantage Points for Collared Crow and Black Kite Monitoring



Figure 2 **Locations of Collared Crow and Black Kite Recorded During the Monitoring**

Appendix 8.1

Monitoring Schedule (November 2024)



Proposed Golf Course Development at Tai Po Lot No. 246 Shuen Wan
CONSTRUCTION PHASE ENVIRONMENTAL MONITORING SCHEDULE

November

2024

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
27	28 Water Quality Monitoring	29	30 Air Quality Monitoring Noise Monitoring Water Quality Monitoring	31	01 Water Quality Monitoring	02
03	04 Water Quality Monitoring	05 Air Quality Monitoring Noise Monitoring	06 Water Quality Monitoring	07	08 Water Quality Monitoring	09
10	11 Air Quality Monitoring Noise Monitoring	12	13 Water Quality Monitoring	14	15 Water Quality Monitoring	16 Air Quality Monitoring
17	18 Water Quality Monitoring	19	20 Water Quality Monitoring	21	22 Air Quality Monitoring Noise Monitoring Water Quality Monitoring	23
24	25 Water Quality Monitoring	26	27 Water Quality Monitoring	28 Air Quality Monitoring Noise Monitoring	29 Water Quality Monitoring	30
01	02	Notes: Air Quality Monitoring Station: DM-1: EPD Site Office DM-2a: Near Fortune Garden Entrance DM-3a: Outside Hung Hing Printing Centre Noise Monitoring Station: NM-1a: Near Fortune Garden Entrance NM-2: Village House at 53 Ting Kok Road Water Quality Monitoring: WM-1: South of Project Site near Coral Sites WM-2: West of Yim Tin Tsai Fish Culture Zone Schedule may change due to unforeseen circumstances (adverse weather, etc)				