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Contract No. CM 04/2024 – Outlying Islands Sewerage Stage 2 – South Lantau Sewerage Works – Environmental Team Services (2025 - 2027)

Monthly Environmental Monitoring and Audit Report for:
July 2026
Revision 1

Certified By:

Lau Hoi Wai, Josephine
Environmental Team Leader
Report Date: 11 August 2026

Drainage Services Department
The Government of the Hong Kong Special Administrative Region

Real impact, made together.

Our Ref: 7076811/L33656/AC/KL/TK/KCL/jm

12 August 2026

Drainage Services Department
Sewage Services Branch
Consultants Management Division Group 4
18/F, Drainage Services Tower
8 Ying Wa Street
Cheung Sha Wan, Kowloon

By Email and Post
(kkchan06@dsd.gov.hk)

Attn: Mr. CHAN Ka Keung

Dear Sir

Contract No. SD 7/2020
Independent Environmental Checker ("IEC") for Environmental Monitoring Work for South Lantau Sewerage Works
Verification of Monthly EM&A Report (July 2026)

With reference to the Monthly EM&A Report (July 2026) Revision 1 dated and certified by the ET Leader on 11 August 2026, please note that we have no adverse comments on the captioned and we hereby verify the captioned in accordance with Condition 3.4 of the Environmental Permit No. EP-538/2017.

Should you have questions please do not hesitate to contact the undersigned at tel. 3995-8140 or by email to kitty.lee@smec.com; or our Mr Tommy KONG on tel. 3995-8123 or by email to tommy.kong@smec.com.

Yours faithfully

Kitty LEE
Independent Environmental Checker

cc

Binnies	- Mr. Kelvin Tso	by email
Umwelt	- Ms. Josephine Lau / Mr. Ivan TING	by email
KLCW-JV	- Mr. Daniel Chu	by email

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Executive Summary

This Monthly Environmental Monitoring and Audit ("EM&A") Report summarise project monitoring and auditing data, with full interpretation illustrating the acceptability or otherwise of any environmental impacts and identification or assessment of the implementation status of agreed mitigation measures, including monitoring results and findings of the EM&A Programme, along with findings recorded during the site Inspections and audits, reports of Complaints, Notifications of Summons and Successful Prosecutions, and other necessary observations obtained within this reporting month of July 2026.

In the reporting month, the principal work activities conducted are as follow:

- Excavation, sewer laying, construction of manhole at Pui O Lo Uk Tsuen, South Lantau Road, Chi Ma Wan Road;
- Trenchless drilling works (Chi Ma Wan Road);
- Excavation and Excavation and Lateral Support ("ELS") work at Pui O Sewage Pumping Station ("POSPS');
- Superstructure Reinforced Concrete ("RC") works at San Shek Wan Sewerage Treatment Works ("SSWSTW");
- Waterproofing work at SSWSTW;
- Excavation and site formation at SSWSTW;
- Retaining wall construction at SSWSTW;
- Electrical and Mechanical ("E&M") Installation at POSPS;
- E&M Installation at SSWSTW;
- Architectural Builders Works and Finishes Work ("ABWF") work at POSPS; and
- ABWF work at SSWSTW

Noise Monitoring

Noise Monitoring has been conducted at 8 of the designated monitoring locations (N12a, N12b, N13, N14, N15b, N16a, N16b, and N17) where construction works has been conducted nearby during the reporting month.

No action or limit level exceedance was recorded in construction noise level in this reporting period.

Water Quality Monitoring

Subsequent to the completion of marine work on 24 May 2025, water quality monitoring was considered completed by 30 May 2025. No water quality monitoring is conducted in this reporting month.

Should marine works resume, water quality monitoring will be conducted in accordance with the requirement stipulated in the EM&A Manual accordingly.

Ecological Impact Monitoring

Transplanting of the trees of *Aquilaris sinensis* was completed on 26 April 2022. Maintenance works for trees in holding nursery have commenced.

As per latest version of PTP, 4 tree found (1 no. of *Aquilaria sinensis* and 3 nos. of *Gmelina chinensis*) within the site of SSWSTW which are considered to be the plant species with conservative importance for temporarily transplanted to the nursery at Kam Tin and eventually be transplanted to Pui O Pumping Station.

The weekly site audit was carried out by ET include checking whether good site practices are being properly implemented by the Contractor.

The extent of the work site boundaries was checked by the ET during the weekly site audit.

Complaints, Notification of Summons and Prosecution

No environmental complaint was recorded in the reporting month.

No notification of summons and successful prosecution regarding construction works were recorded in the reporting month.

Reporting Changes

The Engineer's Representative, holding the post of Resident Engineer for Binnies Hong Kong Limited, has been changed from Kevin Chan to Kelvin Tso.

Future Key Issues

The construction works scheduled to be conducted in the coming 3 reporting months are listed as follows:

- Excavation, sewer laying, construction of manhole at Pui O Lo Uk Tsuen, South Lantau Road, Chi Ma Wan Road;
- Excavation and site formation at SSWSTW;
- Trenchless drilling works (Chi Ma Wan Road);
- Excavation and ELS work at POSPS;
- Superstructure RC works at SSWSTW;
- Waterproofing Work at SSWSTW;
- Excavation and site formation at SSWSTW;
- Retaining wall construction at SSWSTW;
- E&M Installation at POSPS;
- E&M Installation at SSWSTW;
- ABWF Work at POSPS;
- ABWF Work at SSWSTW; and
- Slope Work near SSWSTW

Key construction activities for the next three months with the recommended mitigation measures to be implemented are presented as follows:

Key Construction Works	Recommended Mitigation Measures
• Excavation, sewer laying, construction of manhole at Pui O Lo Uk Tsuen, South Lantau Road, Chi Ma Wan Road; • Excavation and site formation at SSWSTW; • Trenchless drilling works (Chi Ma Wan Road); • Excavation and ELS work at POSPS; • Superstructure RC works at SSWSTW; • Waterproofing Work at SSWSTW; • Excavation and site formation at SSWSTW; • Retaining wall construction at SSWSTW; • E&M Installation at POSPS; • E&M Installation at SSWSTW; • ABWF Work at POSPS; • ABWF Work at SSWSTW; and • Slope Work near SSWSTW	• Prevention of site runoff during heavy rainstorms. • Implementation of noise pollution control in accordance with Construction Noise Mitigation Plan; • Dust control during dust generating works; • Adopt surface drainage and sediment control facilities for sewage installation in village and public roads; • Adopt temporary drainage and sediment control facilities on Site; • Regular water spraying on excavation works for dust control; and • Proper waste handling, recycling and storage.

1. Introduction

1.1 Project Background

1.1.1 The Environmental Protection Department ("EPD") completed the Outlying Islands Sewerage Master Plan ("SMP") Study in 1994 and drew up a SMP for Lantau Island and other outlying islands. The proposed sewerage works of the SMP were divided into 2 stages. The Stage 2 Works of the SMP were subsequently reviewed by EPD under the Outlying Islands Sewerage Master Plan Stage 2 Review (SMP Review Study) in 2001.

1.1.2 The proposed sewerage works for South Lantau were further reviewed in 2008 under the Review of Sewerage Scheme for South Lantau (Review Study). According to the Review Study, the proposed sewerage works for South Lantau would serve the unsewered areas of Shui Hau, Tong Fuk, Cheung Sha, San Shek Wan, Pui O and Ham Tin.

1.1.3 The Outlying Islands Sewerage Stage 2 – South Lantau Sewerage Works, herein referred to as "the Project", referred to the sewerage works for South Lantau that would serve the unsewered areas of Shui Hau, Tong Fuk, Cheung Sha, San Shek Wan, Pui O and Ham Tin.

1.1.4 The Project mainly comprises of the following items:

a) Construction of a secondary sewage treatment works ("STW") at San Shek Wan in South Lantau;
b) Construction of sewage pumping station ("SPS") at Pui O, San Shek Wan, Cheung Sha, Cheung Fu Street, Shui Hau and Tong Fuk;
c) Construction of about 1.4km of twin submarine outfalls with a diameter of 350mm for the disposal of treated effluent from the STW at San Shek Wan;
d) Construction of about 10.1km of gravity sewers with diameters ranging from 150mm to 375mm along South Lantau Road and Chi Ma Wan Road and at Pui O; and
e) Construction of about 3.1km of twin rising mains with a diameter of 200mm to 250mm along South Lantau Road and Chi Ma Wan Road.

1.2 Environmental Monitoring & Audit Programme

1.2.1 An Environmental Impact Assessment ("EIA") was subsequently prepared to review the potential environmental impact that would be due to the Project during its construction works and operational works. The EIA Report was submitted and approved on 24 April 2017, and Environmental Permit ("EP") No. EP-538/2017 was subsequently granted on 13 July 2017.

1.2.2 Environmental Monitoring & Audit ("EM&A") Programme is therefore implemented in accordance with the EM&A Manual under the EIA Report.

1.2.3 Umwelt Consulting Limited ("UCL") has been appointed to work as the Environmental Team ("ET") under EP No. EP-538/2017 to implement the Environmental Monitoring and Audit ("EM&A") programme as stipulated in the EM&A Manual of the approved EIA Report for the Outlying Islands Sewerage Stage 2 – South Lantau Sewerage Works (Register No.: AEIAR-210/2017).

1.3 Monthly Environmental Monitoring & Audit Report

1.3.1 This Monthly EM&A Report summarise project monitoring and auditing data, with full interpretation illustrating the acceptability or otherwise of any environmental impacts and identification or assessment of the implementation status of agreed mitigation measures, including monitoring results and findings of the EM&A Programme, along with findings recorded during the site Inspections and audits, reports of Complaints, Notifications of Summons and Successful Prosecutions, and other necessary observations obtained within this reporting month of July 2026.

1.3.2 The structure of this Report is detailed as follows:

a) ***Section 1 Introduction –***
Details the scope and structure of the report.

b) ***Section 2 Basic project Information and Environmental Status –***
Summarizes project organization and key personnel contact, construction programme and works undertaken for the month. Construction programme, works undertaken during the month with illustrations, drawing showing the project area, environmental sensitive receivers and monitoring locations.

c) ***Section 3 Implementation Status –***
Advice on the implementation status of environmental protection and pollution control/mitigation measures, as recommended in the EIA Report and summarised in the updated implementation schedule.

d) ***Section 4 Noise Monitoring –***
Summarizes the monitoring results obtained in the reporting period, including monitoring methodology, name of laboratory and equipment used and calibration details, parameters monitored, monitoring locations (and depth), monitoring date, frequency, and duration, for impact noise monitoring.

e) ***Section 5 Water Quality Monitoring –***
Summarizes the monitoring results obtained in the reporting period, including monitoring methodology, name of laboratory and equipment used and calibration details, parameters monitored, monitoring locations (and depth), monitoring date, frequency, and duration, for impact water quality monitoring.

f) ***Section 6 Ecology –***
Summarizes the audit findings during the reporting month on ecological aspects.

g) ***Section 7 Waste Management –***
Summarizes the status of waste management, including the amount and types of waste generated, and respective treatment approach.

h) ***Section 8 Report on Complaints, Notification of Summons and Successful Prosecutions –***
Summarizes:

- Record of all complaints received (written or verbal) for each media, including locations and nature of complaints investigation, liaison and consultation undertaken, actions and follow-up procedures taken, results and summary.
- Record of notifications of summons and successful prosecutions for breaches of the current environmental protection/pollution control legislations, including locations and nature of the breaches, investigation, follow-up actions taken, results and summary.

- Review of the reasons for and the implications of non-compliance, complaints, summons and prosecutions including review of pollution sources and working procedures; and
- Description of the actions taken in the event of non-compliance and deficiency reporting and any follow-up procedures related to non-compliance.

i) ***Section 9 Future Key Issues –***
An account of the future key issues as reviewed from the works programme and work method statements.

j) ***Section 10 Conclusion –***
Summarises the findings conclusion drawn from the environmental monitoring and audit programme in this reporting month.

2. Basic project Information and Environmental Status

2.1 Basic Project Information

2.1.1 Drainage Services Department ("DSD") is the project proponent and the permit holder of the Project. For the construction phase of the Project, Contractor(s), ET and Independent Environmental Checker ("IEC") are appointed to manage and control environmental issues. Key personnel and contact particulars are summarized in **Table 2.1**.

2.1.2 Upon conclusion of Contract No: SD 15/2022 Outlying Island Sewerage Stage 2 – South Lantau Sewage Works – Environmental Team Services (2023 – 2024), the subsequent contract, Contract No. CM 04/2024 Outlying Islands Sewerage Stage 2 – South Lantau Sewerage Works – Environmental Team Services (2025–2027), was awarded to Umwelt Consulting Limited ("UCL").Mr. Ting Po Chung, Ivan was appointed as the environmental team leader ("ETL") for the Project with effect from 1 February 2025. With effect from 1 March 2026, Mr. Ting Po Chung, Ivan ceased to be the ETL and was replaced by Ms Lau Hoi Wai, Josephine as the Environmental Team Leader ("ETL") of the subject project. Her contact details have been updated in **Table 2.1**.

2.1.3 The Engineer's Representative, holding the post of Resident Engineer for Binnies Hong Kong Limited, has been changed from Kevin Chan to Kelvin Tso.

Table 2.1: Contact Details of Key Personnel

Party	Role	Post	Name	Contact No.	Contact Fax
Drainage Services Department	The Engineer for the Contract	Engineer	Mr. KK Chan	3965 8202	3104 6426
Binnies Hong Kong Limited	Engineer's Representative	Resident Engineer	Mr. Kelvin Tso	3529 3003	-
Kwan Lee – Chun Wo Joint Venture	Contractor	Sub Agent	Mr. Daniel Chu	6737 6701	2744 6937
		Environmental Supervisor	Ms. Joey Pang	6978 2876	
		Environmental Supervisor	Mr. Philip Wong	6908 8920	
SJ Consultants Hong Kong Limited	IEC	IEC	Ms. Kitty Lee	3995 8140	3422 3631
Umwelt Consulting Limited	ET	ET Leader	Ms. Josephine Lau	3756 9590	3582 3310

2.2 Construction Programme

2.2.1 The proposed sewerage works will collect the sewage generated from the unsewered areas of Shui Hau, Tong Fuk, Cheung Sha, San Shek Wan, Pui O and Ham Tin in South Lantau (i.e. within the Project Catchment Area) and convey it to a proposed sewage treatment works at San Shek Wan for treatment and disposal into outer bay of Pui O / Chi Ma Wan via a submarine outfall.

2.2.2 The Project was divided into 3 contracts. The current contract, Contract No. DC/2020/02 - Construction of San Shek Wan Sewage Treatment Works, Associated Submarine

Outfall and Pui O Sewerage Works ("the Contract") would have the following implementations. The works site of the Contract is also given in **Figure 2.1**.

2.2.3 The major components of the Contract under Environmental Permit ("EP") (EP No. EP-538/2017) comprises:

a) Construction of a secondary sewage treatment works ("STW") at San Shek Wan in South Lantau;
b) Construction of a sewage pumping station ("SPS") at Pui O, San Shek Wan, Cheung Sha and Cheung Fu Street;
c) Construction of about 1.4km of submarine outfall with a diameter of 350mm for the disposal of treated effluent from the STW at San Shek Wan;
d) Construction of about 10.1km of gravity sewers with diameters ranging from 150mm to 375mm along South Lantau Road and Chi Ma Wan road and at Pui O; and
e) Construction of about 3.1km twin rising mains with a diameter of 200mm to 250mm along South Lantau Road and Chi Ma Wan Road.

2.3 Works undertaken during the Reporting Month

2.3.1 In the reporting month, the principal work activities conducted are as follow:

a) Excavation, sewer laying, construction of manhole at Pui O Lo Uk Tsuen, South Lantau Road, Chi Ma Wan Road
b) Trenchless drilling works (Chi Ma Wan Road)
c) Excavation and ELS work at POSPS
d) Superstructure RC works at SSWSTW
e) Waterproofing Work at SSWSTW
f) Excavation and Site formation at SSWSTW
g) Retaining wall construction at SSWSTW
h) E&M Installation at POSPS
i) E&M Installation at SSWSTW
j) ABWF work at POSPS
k) ABWF work at SSWSTW

2.3.2 The locations of the works are shown in **Figure 2.2**.

2.4 Drawing Showing the Project Area, Environmental Sensitive Receivers and Monitoring Locations

2.4.1 Noise monitoring location plans with sensitive receivers are shown in **Figure 2.3**.

3. Implementation Status

3.1 Advice on the Implementation Status of Environmental Protection and Pollution Control/Mitigation Measures

3.1.1 Mitigation measures according to the environmental mitigation implementation schedule in Annex A of EM&A Manual were generally implemented by the Contractor. Hence, the EM&A programme was considered effective and shall be maintained.

3.2 Environmental Mitigation Measures

3.2.1 Environmental mitigation measures mentioned the EIA Report were weekly reviewed and recorded in Weekly Environmental Site Audit Checklist. Also, a summary of the current status on submissions and measures mentioned in the EP No. EP-538/2017 are shown in **Table 3.1**.

Table 3.1: Summary of Submission Status under EP-538/2017

EP Condition	Submission and Revision No.	Date of Latest Submission
2.10	Waste Management Plan (Rev. 5) (electronic copy)	4 April 2022#
2.11	Preservation and/or Transplantation Plan for Plant Species of Conservation Importance (Rev. 23)	9 September 2022#
2.12	Compensatory Woodland Planting Plan (Rev. 23)	15 May 2023^
2.13	Silt Curtain Deployment Plan (Rev. 11)	1 June 2022#
2.14	Landscape Mitigation Plan	To be confirmed
2.15	Construction Noise Mitigation Plan (Rev. 20)	4 August 2022#

Note:
^ Submission was made to EPD
Approval from EPD was received

3.3 Environmental Monitoring Requirements and Contractual Requirements

3.3.1 A summary of the current status on licences and/or permits on environmental protection pertinent to the Project is shown in **Table 3.2**.

Table 3.2: Summary of the Current Status on Licences and/or Permits on Environmental Protection Pertinent to The Project

Permits and/or Licences	Permit. No. / Account No.	Issued Date	Valid Period & Expiry Date	Status
Notification of Works Under APCO	466408	14 Apr 2021	N/A	Valid
Wastewater Discharge Licence under Water Pollution Control Ordinance	SSWSTW: WT00039636-2021	30 Dec 2021	30 Dec 2021 to 31 Dec 2026	Valid
	POPS: WT00039820-2021	31 Dec 2021	31 Dec 2021 to 31 Dec 2026	Valid
	SSWSTW: Gravity Sewer & Raising Main: WT00042613-2022	09 Jan 2023	09 Jan 2023 to 31 Jan 2028	Valid

Permits and/or Licences	Permit. No. / Account No.	Issued Date	Valid Period & Expiry Date	Status
Billing account under Waste Disposal Ordinance	Account No.: 7040411	05 May 2021	N/A	Valid
Registration as a Chemical Waste Producer	WPN 0000-931-K3428-01	13 May 2021	N/A	Valid
Construction Noise Permit under Noise Control Ordinance for SSWSTW	GW-RS0087-26	30 Jan 2026	13 Feb 2026 to 12 Aug 2026	Valid
Construction Noise Permit under Noise Control Ordinance for POSPS	GW-RS0740-26	22 Jun 2026	27 Jun 2026 to 26 Dec 2026	Valid

Note: Only valid permits or permits under applications within the reporting month are included.

3.4 Site Inspection and Audit Reports

3.4.1 Within this reporting month, weekly environmental site inspections were conducted on 3, 6, 13, 20 and 31. IEC attended the SSEMC meeting held on 20 July 2026. The ET and contractor participated in the holding nursery visit for transplanted trees on 31 July 2026.

3.4.2 No non-compliance was found during the site inspections while reminders on environmental measures were recommended. Reminders and/or Observations recorded during site inspections in this reporting month are listed in **Table 3.3**.

Table 3.3: Summary of Environmental Inspections

Inspection Date	Reminder and Recommendations	Close-out Date / Status
3 July 2026	**Pui O Sewage Pumping Station** No Reminder and/or Observation **San Shek Wan Sewage Treatment Works** Reminder 1: The contractor is reminded to clean construction debris	Contractor has rectified on 6 July 2026
6 July 2026	**Pui O Sewage Pumping Station** No Reminder and/or Observation **San Shek Wan Sewage Treatment Works** Reminder 1: The contractor is reminded to clean construction debris	Contractor has rectified on 13 July 2026
13 July 2026	**Pui O Sewage Pumping Station** No Reminder and/or Observation **San Shek Wan Sewage Treatment Works** Reminder 1: The contractor is reminded to maintain the housekeeping	Contractor has rectified the reminders on 20 July 2026

Inspection Date	Reminder and Recommendations	Close-out Date / Status
20 July 2026	**Pui O Sewage Pumping Station** No Reminder and/or Observation **San Shek Wan Sewage Treatment Works** Reminder 1: The contractor is reminded to properly store chemical on site **Roadside Works Site (South Lantau Road)** Reminder 1: The contractor is reminded to properly store chemical on site	Contractor has rectified the reminder on 27 July 2026
31 July 2026	**Pui O Sewage Pumping Station** No Reminder and/or Observation **San Shek Wan Sewage Treatment Works** The contractor is reminded to maintain the housekeeping **Kam Tin Nursery** No Reminder and/or Observation	To be verified in next inspection.

4. Noise Monitoring

4.1 Monitoring Methodology

Monitoring Procedure

4.1.1 The impact noise monitoring should be carried out at all the designated monitoring stations when there are project-related construction activities undertaken within a radius of 300m from the monitoring stations.

4.1.2 The monitoring station shall normally be at a point 1m from the exterior of the sensitive receiver's building façade and be at a position 1.2m above the ground.

4.1.3 Façade measurements were made at the monitoring locations. For free-field measurement, a correction factor of +3dB(A) will be applied.

4.1.4 The battery condition was checked to ensure the correct functioning of the meter.

4.1.5 Parameters such as frequency weighting, the time weighting and the measurement time were set as follows:

a) Frequency weighting: A,
b) Time weighting: Fast,
c) Measurement time set: continuous 5 mins

4.1.6 Prior and after to the noise measurement, the meter was checked using the acoustic calibrator for 94dB (A) at 1000 Hz. If the difference in the calibration level before and after measurement was more than ±1.0 dB (A), the measurement would be considered invalid and repeat of noise measurement would be required after recalibration or repair of the equipment.

4.1.7 Noise measurements will be made in accordance with standard acoustical principles and shall not be made in fog, rain, wind with a steady speed exceeding 5m/s or wind with gusts exceeding 10m/s. The wind speed shall be checked with a portable wind speed meter capable of measuring the wind speed in m/s.

Equipment Used for Noise Monitoring

4.1.8 Noise monitoring was performed using sound level meter at the designated monitoring locations. The sound level meters shall comply with the International Electrotechnical Commission Publications 651:1979 (Type 1) and 804:1985 (Type 1) specifications. Acoustic calibrator shall be deployed to check the sound level meters at a known sound pressure level. Brand and model of the equipment is given in **Table 4.1**.

Table 4.1: Noise Monitoring Equipment

Equipment	Brand and Model	Serial Number	Valid Until
Integrated Sound Level Meter	Rion – NL-52	1198668	19 Jan 2027
Acoustic Calibrator	Rion – NC-75	34202223	19 Jan 2027
	Rion – NC-75	34256525	23 Mar 2027

4.1.9 The calibration certificates of the noise monitoring equipment are attached in **Appendix 4.1**.

Calibration Details

4.1.10 The microphone head of the sound level meter was cleaned with soft cloth at regular intervals.

4.1.11 The sound level meter and calibrator were calibrated at yearly intervals.

Parameters Monitored

4.1.12 The construction noise level shall be measured in terms of the A-weighted equivalent continuous sound pressure level ("L_{eq}"). $L_{eq(30min)}$ should be used as the monitoring parameter. Supplementary information for data auditing, statistical results such as L_{10} and L_{90} shall also be obtained for reference.

4.1.13 For impact monitoring for construction of village sewers / rising main, noise monitoring should be undertaken on weekly basis. 1 set of $L_{eq(30min)}$ noise level as 6 consecutive $L_{eq(5min)}$ between 07:00-19:00 hours on normal weekdays has been taken.

4.2 Monitoring Stations

4.2.1 The noise monitoring stations for the Project are listed and shown in **Table 4.2**. Impact noise monitoring was conducted once per week at the noise monitoring stations with construction works being conducted nearby. Noise monitoring has been conducted at 8 noise monitoring stations N12a, N12b, N13, N14, N15b, N16a, N16b and N17 in the reporting month.

4.2.2 Monitoring station N17 Bui O Public School is an institutional sensitive receiver. During the reporting month, no examination was conducted, as such the construction noise criteria is 70db(A).

4.2.3 ***Table 4.2: Noise Monitoring Station***

Monitoring Station ID +	Monitoring Location	Measurement Type	Level (in terms of no. of floor)
N01a	Shui Hau Village	Free-Field	G/F
N01c	Shui Hau Village	Free-Field	G/F
N03a	Tong Fuk Village	Free-Field	G/F
N05a	Residences at Cheung Fu Street	Free-Field	G/F
N07	Government Holiday Bungalows	Free-Field	G/F
N08	Cheung Sha Ha Tsuen	Free-Field	G/F
N10	Cheung Sha Sheung Tsuen	Façade	G/F
N11b	San Shek Wan – Ming Garden	Free-Field	G/F
N12a *	Lo Uk Tsuen	Free-Field	G/F
N12b *	Lo Uk Tsuen	Free-Field	G/F
N13 *	Pui O San Wai Tsuen	Free-Field	G/F
N14 *	South Lantau Community Centre	Free-Field	G/F
N15b *	Pui O Lo Wai Tsuen	Façade	G/F
N16a *	Residences at Ham Tin	Façade	G/F
N16b *	Residences at Ham Tin	Free-Field	G/F

Monitoring Station ID +	Monitoring Location	Measurement Type	Level (in terms of no. of floor)
N17 *	Bui O Public School	Façade	R/F

NOTE:
+ Fine adjustment of noise monitoring stations at all locations was proposed as per EP Condition 3.1.
* Measurement was conducted at the station in the reporting month.

4.3 Monitoring Date, Time, Frequency and Duration

4.3.1 For daytime construction work on normal weekdays, monitoring of $L_{eq(30min)}$ should be carried out at each station at 0700-1900 hours on normal weekdays at a frequency of once a week. Impact monitoring schedule can be referred to **Appendix 4.2**.

4.4 Noise Monitoring Results

4.4.1 Noise monitoring results measured in this reporting period are reviewed and summarized. Details of noise monitoring results and graphical presentation can be referred in **Appendix 4.3**.

4.4.2 No action or limit level exceedance was recorded in construction noise level in this reporting period.

5. Water Quality Monitoring

5.1 Completion of Water Quality Monitoring

5.1.1 Subsequent to the completion of marine work on 24 May 2025, water quality monitoring was considered completed by 30 May 2025. No water quality monitoring is conducted in this reporting month.

5.1.2 Should marine works resume, water quality monitoring will be conducted in accordance with the requirement stipulated in the EM&A Manual accordingly.

6. Ecology

6.1 Monitoring Methodology

6.1.1 The weekly site audit to be carried out by the ET should include checking whether good site practices are being properly implemented by the Contractor

6.1.2 Impact monitoring of the transplanted *Aquilaris sinensis* at holding nursery and 1 retain tree of *Aquilaris sinensis* in SSWSTW Project Site, establishment and after-establishment caring measures of the compensatory mixed woodland to ensure the affected tree would not be affected by any unacceptable construction works. The trees would be treated with establishment works immediately after transplanting.

6.1.3 Site inspection at the nursery was conducted on 31 July 2026. No reminder was recorded.

6.2 Parameters Monitored

6.2.1 The extent of the work site boundaries should be checked by the ET during the weekly site audit. Any disturbance by the Contractor outside the works area especially any damage to the vegetation and surrounding habitats outside the Project area shall be reported to ER and IEC.

6.2.2 To identify any unacceptable construction works for the trees of *Aquilaris sinensis* during transplanting, establishment and after-establishment caring measures of the compensatory mixed woodland.

6.3 Monitoring Location

6.3.1 As per latest version of PTP, 4 trees found (1 no. of *Aquilaria sinensis* and 3 nos. of *Gmelina chinensis*) within the site of SSWSTW (**Figure 6.1**) which are considered to be the plant species with conservative importance for temporarily transplanted to the nursery (**Figure 6.2**) at Kam Tin and eventually be transplanted to Pui O Pumping Station.

6.4 Monitoring Date, Time, Frequency and Duration

6.4.1 The recommended good site practices to be audited once every week as part of the site audit programme. The weekly site audit to be carried out by the ET includes checking whether good site practices are being properly implemented by the Contractor. Results are recorded in Weekly Environmental Site Audit Checklist.

6.4.2 Monitoring programme for post-transplantation was conducted on 31 July 2026.

6.5 Monitoring Results

6.5.1 The weekly site audit was carried out by ET include checking whether good site practices are being properly implemented by the Contractor.

6.5.2 The extent of the work site boundaries was checked by the ET during the weekly site audit.

6.5.3 Results and findings of site audit in this reporting month are listed in **Table 3.3**.

7. Waste Management

7.1.1 The quantities of waste for disposal in the Reporting Period are summarized in **Table 7.1**. The Monthly Summary Waste Flow Table is shown in **Appendix 7.1**.

Table 7.1: Summary of Quantities of Waste Material

Waste Type	Quantity this month	Quantity (the end of last month)	Cumulative Quantity-to-Date
Hard Rock and Large Broken Concrete (Inert), in '000m^3	0	0	0
Reused in this Contract (Inert), in '000m^3	0	0	0
Reused in other Projects (Inert), in '000m^3	0	0	0
Disposal as Public Fill (Inert), in '000m^3	0.15	0.2	31.998
Metals, in '000kg	0.004	0	142.266
Paper / Cardboard Packing, in '000kg	0.049	0	1.838
Plastics, in '000kg	0.004	0	0.134
Chemical Wastes, in '000kg	0	0	0.36
General Refuses, in '000kg	65.53	34.47	1683.25
Marine Sediment (Type 1 – Open Sea Disposal), m^3	0	0	1360.2

8. Complaints, Notification of Summons and Prosecution

8.1.1 No environmental complaint was recorded in the reporting month.

8.1.2 No notification of summons and successful prosecution regarding construction works were recorded in the reporting month.

8.1.3 Cumulative statistic on complaints, summary of complaints and successful prosecutions are summarized in **Table** 8.1, **Table 8.2** and **Table 8.3** respectively.

Table 8.1: Cumulative Statistics on Complaints

Reporting Period	No. of Complaints
Project commencement to the end of last reporting month	4
This Reporting Month (July 2026)	0
Total:	4

Table 8.2: Summary of Complaints

Date of Notification from EPD	Date of Complaint	Description of Complaint	Validity of Complaint	Close-Out Date / Status
26 May 2022	22 May 2022	A complaint is regarding to noise nuisance from marine site of San Shek Wan, Lantau Island.	Based on the investigation, the works activities of marine works did not result in any noise nuisance to Noise Sensitive Receivers (NSRs), noise nuisance from the Project is unlikely to be valid.	The interim report was submitted to EPD in June 2022. EPD replied no further comments on the final investigation report on 13 July 2022.
23 Dec 2022	21 Dec 2022	A complaint is regarding to the water quality for Pui O Beach, Lantau Island.	Based on the investigation, the works activities at POPS did not result in any water quality impacts to the Pui O Beach.	The interim report was submitted to EPD on 4 Jan 2023.
16 Aug 2024	15 Aug 2024	A complaint is regarding to the damaged silt curtain and potential water quality impact.	Based on the investigation, no marine works since Dec 2023 till present, the land-based works activities at POPS did not result in any water quality impacts to the Pui O Wan	The interim report was submitted to EPD on 31 Aug 2024.

Date of Notification from EPD	Date of Complaint	Description of Complaint	Validity of Complaint	Close-Out Date / Status
16 Sep 2025	16 Sep 2025	A complaint is regarding to oil sheen observed at Pui O Wetland, Lantau Island.	Based on the investigation, no evidence of oil leakage within our project site, it is considered that the oil pollution would not due to our site operation. As such the case is considered closed.	The Final Investigation Report was submitted to EPD by 17 Oct 2025.

Table 8.3: Cumulative Statistics on Successful Prosecutions

Environmental Parameters	Cumulative No. Brought Forward	No. of Successful Prosecutions this month (Offence Date)	Cumulative No. Project-to-Date
Air	-	0	0
Noise	-	0	0
Water	-	0	0
Waste	-	0	0
Other	-	0	0
Total	**-**	**0**	**0**

9. Future Key Issues

9.1.1 In coming reporting 3 months, the scheduled construction activities are listed as follows:

- Excavation, sewer laying, construction of manhole at Pui O Lo Uk Tsuen, South Lantau Road, Chi Ma Wan Road
- Excavation and site formation at SSWSTW
- Trenchless drilling works (Chi Ma Wan Road)
- Excavation and ELS work at POSPS
- Superstructure RC works at SSWSTW
- Waterproofing Work at SSWSTW
- Excavation wall construction at SSWSTW
- Retaining wall construction at SSWSTW
- E&M Installation at POSPS
- E&M Installation at SSWSTW
- ABWF work at POSPS
- ABWF work at SSWSTW
- Slope Work near SSWSTW

9.1.2 The scheduled construction activities and the recommended mitigation measures for the coming 3 months are listed in **Table 9.1**. The major construction activities for the next 3 months are summarized in 3 Months Rolling Programme – August to October 2026 in **Appendix 9.1**

Table 9.1: Construction Activities and Recommended Mitigation Measures in Coming Reporting 3 Months

Key Construction Works	Recommended Mitigation Measures
• Excavation, sewer laying, construction of manhole at Pui O Lo Uk Tsuen, South Lantau Road, Chi Ma Wan Road • Excavation and site formation at SSWSTW • Trenchless drilling works (Chi Ma Wan Road) • Excavation and ELS work at POSPS • Superstructure RC works at SSWSTW • Waterproofing Work at SSWSTW • Excavation and site formation at SSWSTW • Retaining wall construction at SSWSTW • E&M Installation at POSPS • E&M Installation at SSWSTW • ABWF work at POSPS • ABWF work at SSWSTW • Slope Work near SSWSTW	• Prevention of site runoff during heavy rainstorms. • Implementation of noise pollution control in accordance with Construction Noise Mitigation Plan; • Dust control during dust generating works; • Adopt surface drainage and sediment control facilities for sewage installation in village and public roads; • Adopt temporary drainage and sediment control facilities on Site; • Regular water spraying on excavation works for dust control; and • Proper waste handling, recycling and storage.

10. Conclusion

10.1 Noise Monitoring

10.1.1 Noise Monitoring has been conducted at 8 of the designated monitoring locations where construction works has been conducted nearby during the reporting month.

10.1.2 No action or limit level exceedance was recorded in construction noise level in this reporting period.

10.2 Water Quality Monitoring

10.2.1 Subsequent to the completion of marine work on 24 May 2025, water quality monitoring was considered completed by 30 May 2025. No water quality monitoring is conducted in this reporting month.

10.3 Ecological Impact Monitoring

10.3.1 Transplanting of the trees of *Aquilaris sinensis* was completed on 26 April 2022. Maintenance works for trees in holding nursery have commenced.

10.3.2 As per latest version of PTP, 4 trees found (1 no. of *Aquilaria sinensis* and 3 nos. of *Gmelina chinensis*) within the site of SSWSTW which are considered to be the plant species with conservative importance for temporarily transplanted to the nursery at Kam Tin and eventually be transplanted to Pui O Pumping Station.

10.3.3 The weekly site audit was carried out by ET include checking whether good site practices are being properly implemented by the Contractor.

10.3.4 The extent of the work site boundaries was checked by the ET during the weekly site audit.

10.3.5 Within this reporting period, holding nursery visit for transplanted trees on 31 July 2026.

10.3.6 No non-compliance was found during the site inspection while reminders on environmental measures were recommended. Results and findings of these inspections in this reporting period are listed below in **Table 10.1**

Table 10.1: Summary of Ecological Impact Monitoring

Inspection Date	Reminder and Recommendations	Close-out Date / Status
31 July 2026	No Reminder and/or Observation	N/A.

10.4 Review of the Reasons for and the Implications of Non-compliance

10.4.1 No environmental non-compliance was recorded in the reporting month.

10.5 Summary of Action Taken in the Event of and Follow-Up on Non-Compliance

10.5.1 There was no particular action taken since no non-compliance was recorded in the reporting month.

10.5.2 The performance of the environmental management system of the reporting period was generally satisfied. Mitigation measures according to the environmental mitigation implementation schedule and the EIA were generally implemented by the Contractor. Hence, the EM&A programme was considered effective and shall be maintained.

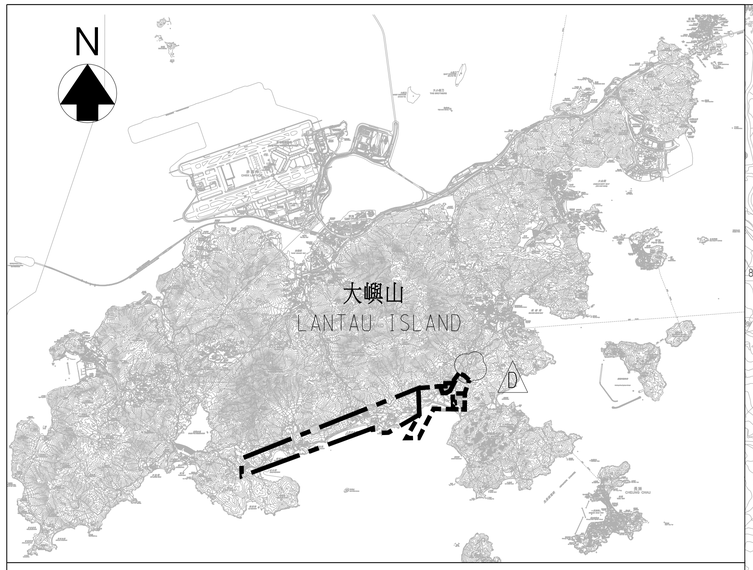
10.6 Complaints, Notification of Summons and Prosecution

10.6.1 No complaints were recorded in the reporting month.

10.6.2 No notification of summons and successful prosecution regarding construction works were recorded in the reporting month.

Figures

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SITE PLAN
1:100000

Figure 2.1 - Master Layout Plan

Revision	Date	Description	Initial
D	11/20	TENDER ADDENDUM NO.6	BL
C	11/20	TENDER ADDENDUM NO.5	BL
B	11/20	TENDER ADDENDUM NO.4	BL
A	09/20	TENDER ADDENDUM NO.2	TFL

	Designed	Checked	Drawn	Checked
Initial	TFL	BL	SZ	CSC
Date	04/20	04/20	04/20	04/20

Approved

Contract no.
DC/2020/02

Contract title
CONSTRUCTION OF SAN SHEK WAN SEWAGE TREATMENT WORKS, ASSOCIATED SUBMARINE OUTFALL AND PUI O SEWERAGE WORKS

Drawing title
SOUTH LANTAU SEWERAGE WORKS - MASTER LAYOUT PLAN

Drawing no.
178711/B&V/GN/001

Revision
D

Scale
1 : 15000

香港特別行政區政府渠務署
THE GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION
DRAINAGE SERVICES DEPARTMENT

BLACK & VEATCH HONG KONG LIMITED
博威工程顧問有限公司

Plot Date = 11/25/2020

CAD Filename = Y:\Daily Work\00 From SZ Design Team\178711 - South Lantau Sewerage Works\Tender Drawing\Dgn\178711-B&V-GN-001.dgn

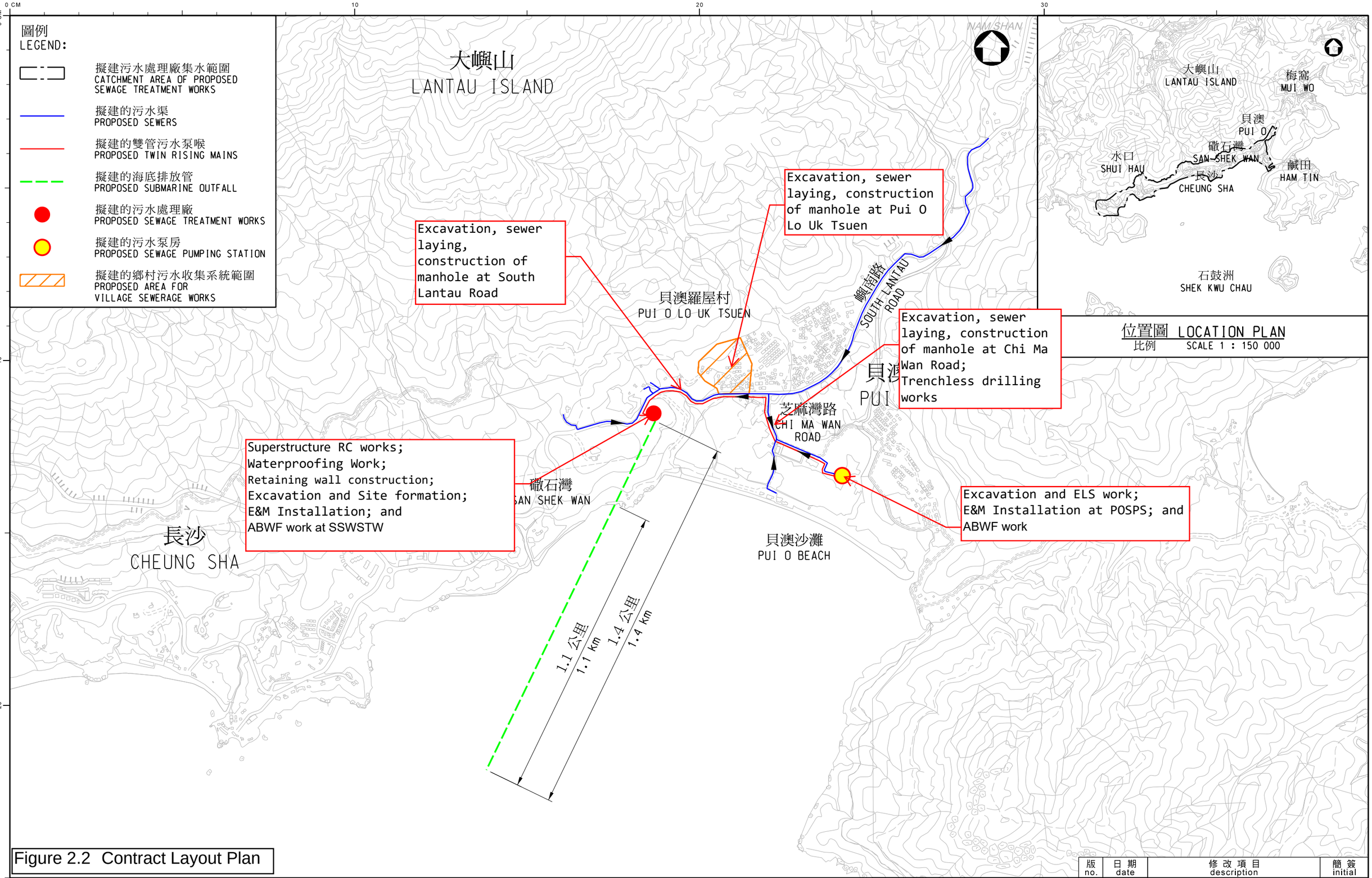


Figure 2.2 Contract Layout Plan

圖則名稱 drawing title			版 no.	日期 date	修改項目 description / 簡簽 initial
工務工程計劃編號331DS - 離島污水收集系統第2階段 - 南大嶼山污水收集系統工程 PWP ITEM NO.331DS - OUTLYING ISLANDS SEWERAGE, STAGE 2 - SOUTH LANTAU SEWERAGE WORKS	繪畫 drawn	SIGNED W. H. CHAN		日期 date 27 APR 2020	圖則編號 drawing no. DVD/2020/001
	核對 checked	SIGNED Ir K. S. CHAN		日期 date 27 APR 2020	比例 scale 1:12 500
	批核 approved	SIGNED Ir L. CHEN		日期 date 27 APR 2020	保留版權 COPYRIGHT RESERVED
	部門 office	特別職務部 SPECIAL DUTY DIVISION			香港特別行政區政府渠務署 DRAINAGE SERVICES DEPARTMENT GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION

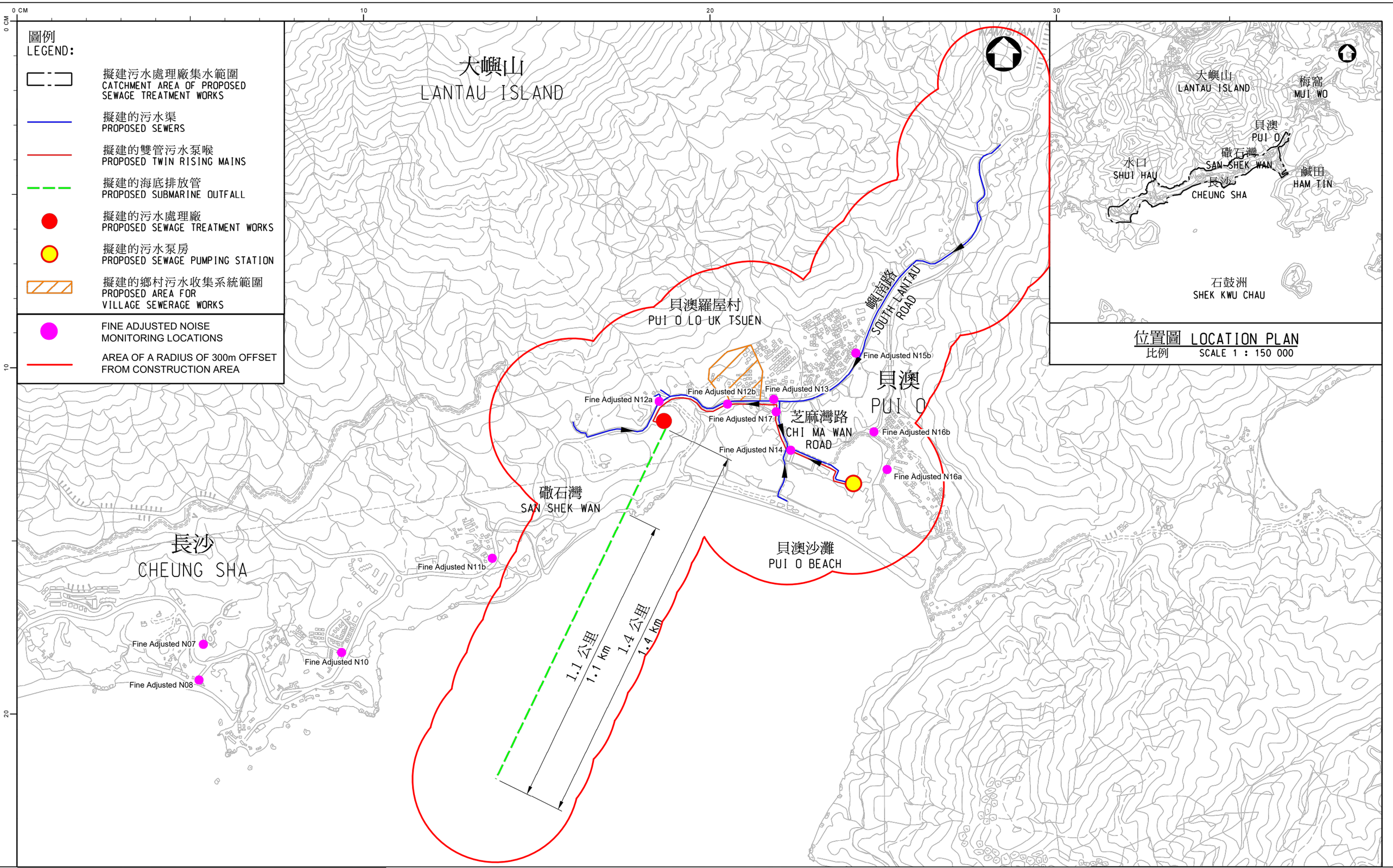


Figure 2.3 - Locations of Noise Monitoring Station

Figure 6.1 Mark up Figure 5.4i extracted from approved EIA Report (AEIAR-210/2017)

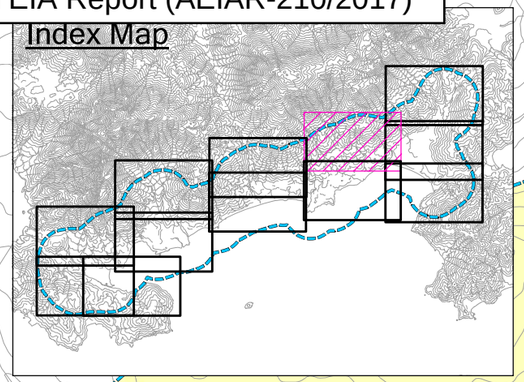
Key

Project Boundary
- Project Boundary
- 500m Study Area
- Proposed Site of Pumping Station
- Alternative Site of Pumping Station
- Proposed Site of Sewage Treatment Works
- Access Road
- Proposed Sewer
- Proposed Rising Main
- Proposed Submarine Outfall

Habitat
- Fung Shui Woodland
- Mixed Woodland
- Plantation
- Shrubland-Grassland
- Cultivated Land
- Marsh
- Stream
- Mangrove
- Sandflat
- Rocky Shore
- Sandy Shore
- Urbanised/Disturbed Area
- Subtidal Hard Bottom Habitat
- Subtidal Soft Bottom Habitat

Species of Conservation Interest
- *Aquilaria sinensis*
- *Artocarpus hypargyreus*
- *Pavetta hongkongensis*
- Black Kite
- Collared Scops Owl
- Greater Coucal
- Hwamei
- Reef Egret
- Copperhead Racer
- Chinese Bullfrog
- Japanese pipistrelle
- Horseshoe Crab
- Hard Coral

Index Map



Aquilaria sinensis

Catchwater

Road

LANTAU TRAIL

Weir

Ruin

San Shek Wan

羅屋村
Lo Uk Tsuen

N
Meters
0 100 200 400

Title: Habitat Map and Species of Conservation Interest (Sheet 8 of 12)	Outlying Islands Sewerage Stage 2 – South Lantau Sewerage Works	Figure no. Figure 5.4i
	香港特別行政區政府渠務署 THE GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION DRAINAGE SERVICES DEPARTMENT	Prepared / Checked
	BLACK & VEATCH HONG KONG LIMITED	Date / Scale

File: T:\GIS\CONTRACT\0227541\Mxd\Ecology\0227541_Habitat_8.mxd
Date: 16/8/2016

Date : 2020-10-15
Prepared by Daniel Ho

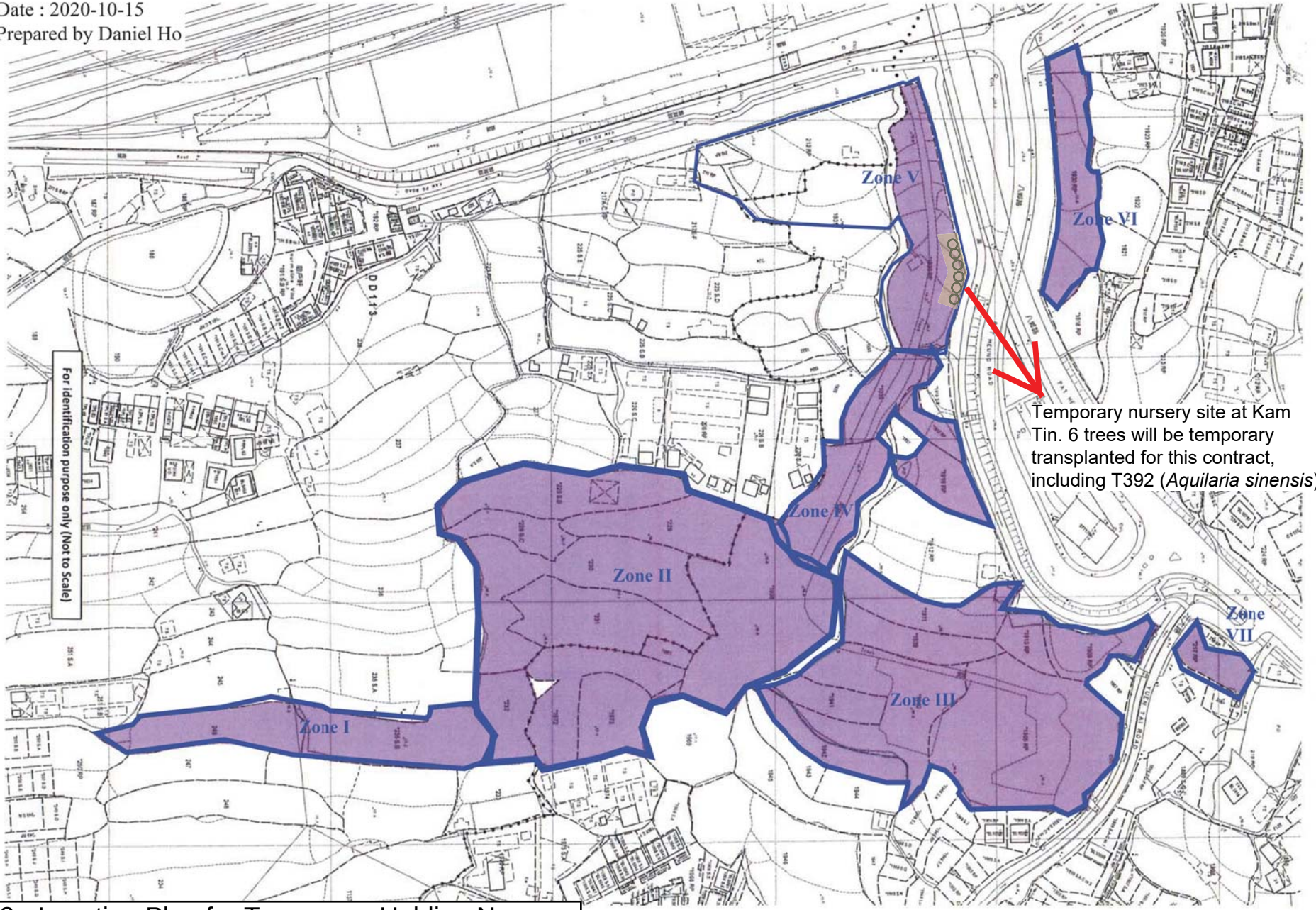


Figure 6.2 - Location Plan for Temporary Holding Nursery

COPY RIGHT®

Project : Contract No.: DC/2020/02
Construction of San Shek Wan Sewage Treatment Works, Associated Submarine Outfall and Pui O Sewerage Works

Toyo Greenland Co., Ltd.

Drawing Title : Location Plan for 6 nos. Trees on Kam Tin Nursery

Check : Ho Tat Pui, Daniel	Scale : N.T.S.	Rev.
Ref: C3109/22/TGD0164	Date : 10 January 2022	00

UMWELT CONSULTING LIMITED
23/F, On Hong Commercial Building, 145 Hennessy Road, Wan Chai, Hong Kong

Appendix 4.1

Calibration Certificates for Noise Meter and Acoustic Calibrator

綜合試驗有限公司
SOILS & MATERIALS ENGINEERING CO., LTD.
香港新界葵涌永基路22-24號好爸爸創科大廈
Good Ba Ba Hitech Building, Nos. 22-24 Wing Kei Road, Kwai Chung, New Territories, Hong Kong
Tel: (852) 2873 6860 Fax: (852) 2555 7533 E-mail: smec@cigismec.com Website: www.cigismec.com

HOKLAS 028 CAL

CERTIFICATE OF CALIBRATION

Certificate No.: 26CA0115 01-01 **Page** 1 **of** 2

Item tested

Description:	Sound Level Meter (Class 1)	,	Microphone	Preamp
Manufacturer:	Rion Co., Ltd.	,	Rion Co., Ltd.	Rion Co., Ltd.
Type/Model No.:	NL-52	,	UC-59	NH-25
Serial/Equipment No.:	01198668	,	16390	98882
Adaptors used:	-	,	-	-

Item submitted by

Customer Name:	Umwelt Consulting Limited.
Address of Customer:	-
Request No.:	-
Date of receipt:	15-Jan-2026

Date of test: 19-Jan-2026

Reference equipment used in the calibration

Description:	Model:	Serial No.	Expiry Date:	Traceable to:
Multi function sound calibrator	B&K 4226	2288444	28-Aug-2026	CIGISMEC
Signal generator	DS 360	61227	24-Feb-2026	CEPREI

Ambient conditions

Temperature:	20.0~20.4 °C
Relative humidity:	62.2~62.7 %
Air pressure:	1005 ± 5 hPa

Test specifications

1, The Sound Level Meter has been calibrated in accordance with the requirements as specified in BS 7580: Part 1: 1997 and the lab calibration procedure SMTP004-CA-152.

2, The electrical tests were performed using an electrical signal substituted for the microphone which was removed and replaced by an equivalent capacitance within a tolerance of ±20%.

3, The acoustic calibration was performed using an B&K 4226 sound calibrator and corrections was applied for the difference between the free-field and pressure responsess of the Sound Level Meter.

Test results

This is to certify that the Sound Level Meter conforms to BS 7580: Part 1: 1997 for the conditions under which the test was performed.

Details of the performed measurements are presented on page 2 of this certificate.

Actual Measurement data are documented on worksheets.

Approved Signatory: Feng Junqi **Date:** 20-Jan-2026 **Company Chop:** SOILS AND MATERIALS ENGINEERING COMPANY LTD. 綜合試驗有限公司

Comments: The results reported in this certificate refer to the condition of the instrument on the date of calibration and carry no implication regarding the long-term stability of the instrument. The results apply to the item as received.

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HKAS has accredited this laboratory (Reg. No. HOKLAS 028) under HOKLAS for specific calibration activities as listed in the HOKLAS directory of accredited laboratories. The results shown in this certificate are traceable to the International System of Units (SI) or recognised measurement standards. The results relate only to the item(s) calibrated. This certificate shall not be reproduced except in full without approval of the laboratory.

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Good Ba Ba Hitech Building, Nos. 22-24 Wing Kei Road, Kwai Chung, New Territories, Hong Kong
Tel: (852) 2873 6860 Fax: (852) 2555 7533 E-mail: smec@cigismec.com Website: www.cigismec.com

HOKLAS 028 CAL

CERTIFICATE OF CALIBRATION

(Continuation Page)

Certificate No.: 26CA0115 01-01 **Page** 2 **of** 2

1, Electrical Tests

The electrical tests were perfomed using an equivalent capacitance substituted for the microphone. The results are given in below with test status and the estimated uncertainties. The "Pass" means the result of the test is inside the tolerances stated in the test specifications. The "-" means the result of test is outside these tolerances.

Test:	Subtest:	Status:	Expanded Uncertainty (dB)	Coverage Factor
Self-generated noise	A	Pass	0.3	
	C	Pass	0.8	
	Lin (Z)	Pass	1.6	
Linearity range for Leq	At reference range , Step 5 dB at 4 kHz	Pass	0.3	
	Reference SPL on all other ranges	Pass	0.3	
	2 dB below upper limit of each range	Pass	0.3	
	2 dB above lower limit of each range	Pass	0.3	
Linearity range for SPL	At reference range , Step 5 dB at 4 kHz	Pass	0.3	
Frequency weightings	A	Pass	0.3	
	C	Pass	0.3	
	Lin (Z)	Pass	0.3	
Time weightings	Single Burst Fast	Pass	0.3	
	Single Burst Slow	Pass	0.3	
Peak response	Single 100μs rectangular pulse	Pass	0.3	
R.M.S. accuracy	Crest factor of 3	Pass	0.3	
Time weighting I	Single burst 5 ms at 2000 Hz	N/A	N/A	
	Repeated at frequency of 100 Hz	N/A	N/A	
Time averaging	1 ms burst duty factor $1/10^3$ at 4kHz	Pass	0.3	
	1 ms burst duty factor $1/10^4$ at 4kHz	Pass	0.3	
Pulse range	Single burst 10 ms at 4 kHz	Pass	0.4	
Sound exposure level	Single burst 10 ms at 4 kHz	Pass	0.4	
Overload indication	SPL	Pass	0.3	
	Leq	Pass	0.4	

2, Acoustic tests

The complete sound level meter was calibrated on the reference range using a B&K 4226 acoustic calibrator with 1000Hz and SPL 94 dB. The sensitivity of the sound level meter was adjusted. The test results at 125 Hz and 8000 Hz are given in below with test status and the estimated uncertainties.

Test:	Subtest	Status	Expanded Uncertainty (dB)	Coverage Factor
Acoustic response	Weighting A at 125 Hz	Pass	0.3	
	Weighting A at 8000 Hz	Pass	0.5	

The expanded uncertainties have been calculated in accordance with the ISO Publication "Guide to the expression of uncertainty in measurement", and gives an interval estimated to have a level of confidence of 95%. A coverage factor of 2 is assumed unless explicitly stated.

- End -

Calibrated by: Fung Chi Yip **Date:** 19-Jan-2026

Checked by: Chan Yuk Yiu **Date:** 20-Jan-2026

The standard(s) and equipment used in the calibration are traceable to national or international recognised standards and are calibrated on a schedule to maintain the required accuracy level.

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Good Ba Ba Hitech Building, Nos. 22-24 Wing Kei Road, Kwai Chung, New Territories, Hong Kong
Tel: (852) 2873 6860 Fax: (852) 2555 7533 E-mail: smec@cigismec.com Website: www.cigismec.com

SMECLab

Sound level meter	type:	NL-52	Serial No.	01198668	Date 19-Jan-2026
Microphone	type:	UC-59	Serial No.	16390	
Preamp	type:	NH-25	Serial No.	98882	Report: 26CA0115 01-01

SELF GENERATED NOISE TEST

The noise test is performed in the most sensitive range of the SLM with the microphone replaced by an equivalent impedance.

Noise level in A weighting	10.4	dB
Noise level in C weighting	14.2	dB
Noise level in Lin (Z)	19.6	dB

LINEARITY TEST

The linearity is tested relative to the reference sound pressure level using a continuous sinusoidal signal of frequency 4 kHz. The measurement is made on the reference range for indications at 5 dB intervals starting from the 94 dB reference sound pressure level. And until within 5 dB of the upper and lower limits of the reference range, the measurements shall be made at 1 dB intervals.(SLM set to LEQ/SPL)

Reference/Expected level	Actual level		Tolerance	Deviation	
	non-integrated	integrated		non-integrated	integrated
dB	dB	dB	+/- dB	dB	dB
94.0	94.0	94.0	0.7	0.0	0.0
99.0	99.0	99.0	0.7	0.0	0.0
104.0	104.0	104.0	0.7	0.0	0.0
109.0	109.0	109.0	0.7	0.0	0.0
114.0	114.0	114.0	0.7	0.0	0.0
119.0	119.0	119.0	0.7	0.0	0.0
124.0	124.0	124.0	0.7	0.0	0.0
125.0	125.0	125.0	0.7	0.0	0.0
126.0	126.0	126.0	0.7	0.0	0.0
127.0	127.0	127.0	0.7	0.0	0.0
128.0	128.0	128.0	0.7	0.0	0.0
129.0	129.0	129.0	0.7	0.0	0.0
130.0	130.0	130.0	0.7	0.0	0.0
89.0	89.0	89.0	0.7	0.0	0.0
84.0	84.0	84.0	0.7	0.0	0.0
79.0	79.0	79.0	0.7	0.0	0.0
74.0	74.0	74.0	0.7	0.0	0.0
69.0	69.0	69.0	0.7	0.0	0.0
64.0	64.0	64.0	0.7	0.0	0.0
59.0	59.0	59.0	0.7	0.0	0.0
54.0	54.0	54.0	0.7	0.0	0.0
49.0	49.0	49.0	0.7	0.0	0.0
44.0	44.0	44.0	0.7	0.0	0.0
39.0	38.9	38.9	0.7	-0.1	-0.1

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Good Ba Ba Hitech Building, Nos. 22-24 Wing Kei Road, Kwai Chung, New Territories, Hong Kong
Tel: (852) 2873 6860 Fax: (852) 2555 7533 E-mail: smec@cigismec.com Website: www.cigismec.com

SMECLab

Sound level meter type:	NL-52	Serial No.	01198668	Date	19-Jan-2026
Microphone type:	UC-59	Serial No.	16390		
Preamp type:	NH-25	Serial No.	98882	Report:	26CA0115 01-01

34.0	33.9	33.9	0.7	-0.1	-0.1
33.0	32.9	32.9	0.7	-0.1	-0.1
32.0	31.9	31.9	0.7	-0.1	-0.1
31.0	30.9	30.9	0.7	-0.1	-0.1
30.0	29.8	29.8	0.7	-0.2	-0.2

Measurements for an indication of the reference SPL on all other ranges which include it

Other ranges	Expected level	Actual level	Tolerance	Deviation
dB	dB	dB	+/- dB	dB
30-130	94.0	94.0	0.7	0.0

Measurements on all level ranges for indications 2 dB below the upper limit and 2 dB above the lower limit

Ranges	Reference/Expected level	Actual level	Tolerance	Deviation
dB	dB	dB	+/- dB	dB
30-130	32.0	31.9	0.7	-0.1
	128.0	128.0	0.7	0.0

FREQUENCY WEIGHTING TEST

The frequency response of the weighting netwoks are tested at octave intervals over the frequency ranges 31.5 Hz to 12500 Hz. The signal level at 1000 Hz is set to give an indication of the reference SPL.

Frequency weighting A:

Frequency	Ref. level	Expected level	Actual level	Tolerance(dB)		Deviation
Hz	dB	dB	dB	+	-	dB
1000.0	94.0	94.0	94.0	0.0	0.0	0.0
31.6	94.0	54.6	54.5	1.5	1.5	-0.1
63.1	94.0	67.8	67.8	1.5	1.5	0.0
125.9	94.0	77.9	78.0	1.0	1.0	0.1
251.2	94.0	85.4	85.4	1.0	1.0	0.0
501.2	94.0	90.8	90.8	1.0	1.0	0.0
1995.0	94.0	95.2	95.1	1.0	1.0	-0.1
3981.0	94.0	95.0	94.7	1.0	1.0	-0.3
7943.0	94.0	92.9	92.8	1.5	3.0	-0.1
12590.0	94.0	89.7	89.6	3.0	6.0	-0.1

Frequency weighting C:

Frequency	Ref. level	Expected level	Actual level	Tolerance(dB)		Deviation
Hz	dB	dB	dB	+	-	dB
1000.0	94.0	94.0	94.0	0.0	0.0	0.0
31.6	94.0	91.0	91.0	1.5	1.5	0.0
63.1	94.0	93.2	93.2	1.5	1.5	0.0
125.9	94.0	93.8	93.8	1.0	1.0	0.0

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Tel: (852) 2873 6860 Fax: (852) 2555 7533 E-mail: smec@cigismec.com Website: www.cigismec.com

SMECLab

Sound level meter type:	NL-52	Serial No.	01198668	Date	19-Jan-2026
Microphone type:	UC-59	Serial No.	16390		
Preamp type:	NH-25	Serial No.	98882	Report:	26CA0115 01-01

251.2	94.0	94.0	94.1	1.0	1.0	0.1
501.2	94.0	94.0	94.1	1.0	1.0	0.1
1995.0	94.0	93.8	93.7	1.0	1.0	-0.1
3981.0	94.0	93.2	92.9	1.0	1.0	-0.3
7943.0	94.0	91.0	91.0	1.5	3.0	0.0
12590.0	94.0	87.8	87.7	3.0	6.0	-0.1

Frequency weighting Lin:

Frequency	Ref. level	Expected level	Actual level	Tolerance(dB)		Deviation
Hz	dB	dB	dB	+	-	dB
1000.0	94.0	94.0	94.0	0.0	0.0	0.0
31.6	94.0	94.0	94.0	1.5	1.5	0.0
63.1	94.0	94.0	94.0	1.5	1.5	0.0
125.9	94.0	94.0	94.0	1.0	1.0	0.0
251.2	94.0	94.0	94.0	1.0	1.0	0.0
501.2	94.0	94.0	94.1	1.0	1.0	0.1
1995.0	94.0	94.0	93.8	1.0	1.0	-0.2
3981.0	94.0	94.0	93.7	1.0	1.0	-0.3
7943.0	94.0	94.0	94.0	1.5	3.0	0.0
12590.0	94.0	94.0	94.1	3.0	6.0	0.1

TIME WEIGHTING FAST TEST

Time weighting F is tested on the reference range with a single sinusoidal burst of duration 200 ms at a frequency 2000 Hz and an amplitude which produces an indication 4 dB below the upper limit of the primary indicator range when the signal is continuous. (Weight A, Maximum hold)

Ref. level	Expected level	Actual level	Tolerance(dB)		Deviation
dB	dB	dB	+	-	dB
126.0	125.0	125.0	1.0	1.0	0.0

TIME WEIGHTING SLOW TEST

Time weighting S is tested on the reference range with a single sinusoidal burst of duration 500 ms at a frequency 2000 Hz and an amplitude which produces an indication 4 dB below the upper limit of the primary indicator range when the signal is continuous. (Weight A, Maximum hold)

Ref. level	Expected level	Actual level	Tolerance(dB)		Deviation
dB	dB	dB	+	-	dB
126.0	121.9	121.9	1.0	1.0	0.0

PEAK RESPONSE TEST

The onset time of the peak detector is tested on the reference range by comparing the response to a 100 us rectangular test pulse with the response to a 10 ms reference pulse of the same amplitude. The amplitude of the 10 ms reference pulse is such as to produce an indication 1 dB below the upper limit of the primary indicator range.

Positive polarities: (Weighting Z, set the generator signal to single, Lzpeak)

Ref. level	Response to 10 ms	Response to 100 us	Tolerance	Deviation

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SMECLab

Sound level meter type:	NL-52	Serial No.	01198668	Date	19-Jan-2026
Microphone type:	UC-59	Serial No.	16390		
Preamp type:	NH-25	Serial No.	98882	Report:	26CA0115 01-01

dB	dB	dB	+/- dB	dB
129.0	129.0	129.6	2.0	0.6

Negative polarities:

Ref. level	Response to 10 ms	Response to 100 us	Tolerance	Deviation
dB	dB	dB	+/- dB	dB
129.0	129.0	129.6	2.0	0.6

RMS ACCURACY TEST

The RMS detector accuracy is tested on the reference range for a crest factor of 3.

Test frequency: 2000 Hz
Amplitude: 2 dB below the upper limit of the primary indicator range.
Burst repetition frequency: 40 Hz
Tone burst signal: 11 cycles of a sine wave of frequency 2000 Hz. (Set to INT)

	Ref. Level	Expected level	Tone burst signal	Tolerance	Deviation
Time wighting	dB	dB	indication(dB)	+/- dB	dB
Slow	128.0+6.6	128.0	127.9	0.5	-0.1

TIME AVERAGING TEST

This test compares the SLM reading for continuous sine signals with readings obtained from a sine tone burst sequence having the same RMS level. The test level is 30 dB below the upper limit of the linearity range and repeated for Type 1 SLM with 40 dB below the upper limit of the linearity.

Frequency of tone burst: 4000 Hz

Duration of tone burst: 1 ms

Repetition Time	Level of tone burst	Expected Leq	Actual Leq	Tolerance	Deviation	Remarks
msec	dB	dB	dB	+/- dB	dB	
1000	100.0	100.0	99.9	1.0	-0.1	60s integ.
10000	90.0	90.0	89.9	1.0	-0.1	6min. integ.

PULSE RANGE AND SOUND EXPOSURE LEVEL TEST

The test tone burst signal is superimposed on a baseline signal corresponding to the lower limit of reference range

Test frequency: 4000 Hz

Integration time: 10 sec

The integrating sound level meter set to Leq:

Duration	Rms level of	Expected	Actual	Tolerance	Deviation
msec	tone burst (dB)	dB	dB	+/- dB	dB
10	100.0	70.0	70.0	1.7	0.0

The integrating sound level meter set to SEL:

Duration	Rms level of	Expected	Actual	Tolerance	Deviation
msec	tone burst (dB)	dB	dB	+/- dB	dB
10.0	100.0	80.0	80.0	1.7	0.0

OVERLOAD INDICATION TEST

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SMECLab

Sound level meter type:	NL-52	Serial No.	01198668	Date	19-Jan-2026
Microphone type:	UC-59	Serial No.	16390		
Preamp type:	NH-25	Serial No.	98882	Report:	26CA0115 01-01

For SLM capable of operating in a non-integrating mode.

Test frequency: 2000 Hz
Amplitude: 2 dB below the upper limit of the primary indicator range.
Burst repetition frequency: 40 Hz
Tone burst signal: 11 cycles of a sine wave of frequency 2000 Hz.

Level	Level reduced by	Further reduced	Difference	Tolerance	Deviation
at overload (dB)	1 dB	3 dB	dB	dB	dB
131.1	130.1	127.1	3.0	1.0	0.0

For integrating SLM, with the instrument indicating Leq.

For integrating SLM, with the instrument indicating Leq and set to the reference range. The test signal as following:
The test tone burst signal is superimposed on a baseline signal corresponding to the lower limit of reference range

Test frequency: 4000 Hz
Integration time: 10 sec
Single burst duration: 1 msec

Rms level	Level reduced by	Expected level	Actual level	Tolerance	Deviation
at overload (dB)	1 dB	dB	dB	dB	dB
138.3	137.3	97.3	97.3	2.2	0.0

ACOUSTIC TEST

The acoustic test of the complete SLM is tested at the frequency 125 Hz and 8000 Hz using a B&K type 4226 Multifunction Acoustic Calibrator. The test is performed in A weighting.

Frequency	Expected level	Actual level	Tolerance (dB)		Deviation
Hz	dB	Measured (dB)	+	-	dB
1000	94.0	94.0	0.0	0.0	0.0
125	77.9	78.1	1.0	1.0	0.2
8000	92.9	93.5	1.5	3.0	0.6

---------END---------

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HOKLAS 028 CAL

CERTIFICATE OF CALIBRATION

Certificate No.: 26CA0115 01-02 **Page:** 1 **of** 2

Item tested

Description:	Acoustical Calibrator (Class 1)
Manufacturer:	Rion
Type/Model No.:	NC-75
Serial/Equipment No.:	34202223
Adaptors used:	-

Item submitted by

Curstomer:	Umwelt Consulting Limited.
Address of Customer:	-
Request No.:	-
Date of receipt:	15-Jan-2026

Date of test: 19-Jan-2026

Reference equipment used in the calibration

Description:	Model:	Serial No.	Expiry Date:	Traceable to:
Lab standard microphone	B&K 4180	3257856	17-Jul-2026	SCL
Preamplifier	B&K 2673	3353200	02-Jul-2026	CEPREI
Measuring amplifier	B&K 2610	2346941	04-Jul-2026	CEPREI
Signal generator	DS 360	61227	24-Feb-2026	CEPREI
Digital multi-meter	34401A	US36087050	22-Apr-2026	CEPREI
Audio analyzer	8903B	GB41300350	10-Jul-2026	CEPREI
Universal counter	53132A	MY40003662	07-Jul-2026	CEPREI

Ambient conditions

Temperature:	20.0~20.4 °C
Relative humidity:	62.2~62.7 %
Air pressure:	1005 ± 5 hPa

Test specifications

1, The Sound Calibrator has been calibrated in accordance with the requirements as specified in IEC 60942 1997 Annex B and the lab calibration procedure SMTP004-CA-156.

2, The calibrator was tested with its axis vertical facing downwards at the specific frequency using insert voltage technique.

3, The results are rounded to the nearest 0.01 dB and 0.1 Hz and have not been corrected for variations from a reference pressure of 1013.25 hectoPascals as the maker's information indicates that the instrument is insensitive to pressure changes.

Test results

This is to certify that the sound calibrator conforms to the requirements of annex B of IEC 60942: 1997 for the conditions under which the test was performed. This does not imply that the sound calibrator meets IEC 60942 under any other conditions.

Details of the performed measurements are presented on **page 2** of this certificate.

Approved Signatory: Feng Junqi **Date:** 20-Jan-2026 **Company Chop:** SOILS AND MATERIALS ENGINEERING COMPANY LTD. 綜合試驗有限公司

Comments: The results reported in this certificate refer to the conditon of the instrument on the date of calibration and carry no implication regarding the long-term stability of the instrument. The results apply to the item as received.

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HKAS has accredited this laboratory (Reg. No. HOKLAS 028) under HOKLAS for specific calibration activities as listed in the HOKLAS directory of accredited laboratories. The results shown in this certificate are traceable to the International System of Units (SI) or recognised measurement standards. The results relate only to the item(s) calibrated. This certificate shall not be reproduced except in full without approval of the laboratory.

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HOKLAS 028 CAL

CERTIFICATE OF CALIBRATION

(Continuation Page)

Certificate No.: 26CA0115 01-02 **Page:** 2 **of** 2

1, Measured Sound Pressure Level

The output Sound Pressure Level in the calibrator head was measured at the setting and frequency shown using a calibrated laboratory standard microphone and insert voltage technique. The results are given in below with the estimated uncertainties.

(Output level in dB re 20 μPa)

Frequency Shown Hz	Output Sound Pressure Level Setting dB	Measured Output Sound Pressure Level dB	Estimated Expanded Uncertainty dB
1000	94.00	94.14	0.10

2, Sound Pressure Level Stability - Short Term Fluctuations

The Short Term Fluctuations was determined by measuring the maximum and minimum of the fast weighted DC output of the B&K 2610 measuring amplifier over a 20 second time interval as required in the standard. The Short Term Fluctuation was found to be:

At 1000 Hz **STF = 0.007 dB**

Estimated expanded uncertainty 0.005 dB

3, Actual Output Frequency

The determination of actual output frequency was made using a B&K 4180 microphone together with a B&K 2673 preamplifier connected to a B&K 2610 measuring amplifier. The AC output of the B&K 2610 was taken to an universal counter which was used to determine the frequency averaged over 20 second of operation as required by the standard. The actual output frequency at 1 KHz was:

At 1000 Hz **Actual Frequency = 1000.0 Hz**

Estimated expanded uncertainty 0.1 Hz Coverage factor k = 2.2

4, Total Noise and Distortion

For the Total Noise and Distortion measurement, the unfiltered AC output of the B&K 2610 measuring amplifier was connected to an Agilent Type 8903 B distortion analyser. The TND result at 1 KHz was:

At 1000 Hz **TND = 1.0 %**

Estimated expanded uncertainty 0.7 %

The expanded uncertainties have been calculated in accordance with the ISO Publication "Guide to the expression of uncertainty in measurement", and gives an interval estimated to have a level of confidence of 95%. A coverage factor of 2 is assumed unless explicitly stated.

- End -

Calibrated by: Fung Chi Yip **Date:** 19-Jan-2026

Checked by: Chan Yuk Yiu **Date:** 20-Jan-2026

The standard(s) and equipment used in the calibration are traceable to national or international recognised standards and are calibrated on a schedule to maintain the required accuracy level.

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HOKLAS 028
CAL

CERTIFICATE OF CALIBRATION

Certificate No.: 26CA0320 05-02 **Page:** 1 **of** 2

Item tested

Description:	Acoustical Calibrator (Class 1)
Manufacturer:	Rion Co., Ltd.
Type/Model No.:	NC-75
Serial/Equipment No.:	34256525
Adaptors used:	-

Item submitted by

Curstomer:	Umwelt Consulting Limited.
Address of Customer:	-
Request No.:	-
Date of receipt:	20-Mar-2026

Date of test: 23-Mar-2026

Reference equipment used in the calibration

Description:	Model:	Serial No.	Expiry Date:	Traceable to:
Lab standard microphone	B&K 4180	3257856	17-Jul-2026	SCL
Preamplifier	B&K 2673	3353200	02-Jul-2026	CEPREI
Measuring amplifier	B&K 2610	2346941	04-Jul-2026	CEPREI
Signal generator	DS 360	33873	11-Mar-2027	CEPREI
Digital multi-meter	34401A	US36087050	22-Apr-2026	CEPREI
Audio analyzer	8903B	GB41300350	10-Jul-2026	CEPREI
Universal counter	53132A	MY40003662	07-Jul-2026	CEPREI

Ambient conditions

Temperature:	20.1~20.4 °C
Relative humidity:	64.2~64.7%
Air pressure:	1005 ± 5 hPa

Test specifications

1, The Sound Calibrator has been calibrated in accordance with the requirements as specified in IEC 60942 1997 Annex B and the lab calibration procedure SMTP004-CA-156.

2, The calibrator was tested with its axis vertical facing downwards at the specific frequency using insert voltage technique.

3, The results are rounded to the nearest 0.01 dB and 0.1 Hz and have not been corrected for variations from a reference pressure of 1013.25 hectoPascals as the maker's information indicates that the instrument is insensitive to pressure changes.

Test results

This is to certify that the sound calibrator conforms to the requirements of annex B of IEC 60942: 1997 for the conditions under which the test was performed. This does not imply that the sound calibrator meets IEC 60942 under any other conditions.

Details of the performed measurements are presented on **page 2** of this certificate.

Approved Signatory: Feng Junqi **Date:** 24-Mar-2026 **Company Chop:** SOILS AND MATERIALS ENGINEERING COMPANY LTD. 綜合試驗有限公司

Comments: The results reported in this certificate refer to the conditon of the instrument on the date of calibration and carry no implication regarding the long-term stability of the instrument. The results apply to the item as received.

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HOKLAS 028 CAL

CERTIFICATE OF CALIBRATION

(Continuation Page)

Certificate No.: 26CA0320 05-02 **Page:** 2 **of** 2

1, Measured Sound Pressure Level

The output Sound Pressure Level in the calibrator head was measured at the setting and frequency shown using a calibrated laboratory standard microphone and insert voltage technique. The results are given in below with the estimated uncertainties.

(Output level in dB re 20 μPa)

Frequency Shown Hz	Output Sound Pressure Level Setting dB	Measured Output Sound Pressure Level dB	Estimated Expanded Uncertainty dB
1000	94.00	93.97	0.10

2, Sound Pressure Level Stability - Short Term Fluctuations

The Short Term Fluctuations was determined by measuring the maximum and minimum of the fast weighted DC output of the B&K 2610 measuring amplifier over a 20 second time interval as required in the standard. The Short Term Fluctuation was found to be:

At 1000 Hz **STF = 0.016 dB**

Estimated expanded uncertainty 0.005 dB

3, Actual Output Frequency

The determination of actual output frequency was made using a B&K 4180 microphone together with a B&K 2673 preamplifier connected to a B&K 2610 measuring amplifier. The AC output of the B&K 2610 was taken to an universal counter which was used to determine the frequency averaged over 20 second of operation as required by the standard. The actual output frequency at 1 KHz was:

At 1000 Hz **Actual Frequency = 1000.0 Hz**

Estimated expanded uncertainty 0.1 Hz Coverage factor k = 2.2

4, Total Noise and Distortion

For the Total Noise and Distortion measurement, the unfiltered AC output of the B&K 2610 measuring amplifier was connected to an Agilent Type 8903 B distortion analyser. The TND result at 1 KHz was:

At 1000 Hz **TND = 0.4 %**

Estimated expanded uncertainty 0.7 %

The expanded uncertainties have been calculated in accordance with the ISO Publication "Guide to the expression of uncertainty in measurement", and gives an interval estimated to have a level of confidence of 95%. A coverage factor of 2 is assumed unless explicitly stated.

- End -

Calibrated by: Fung Chi Yip **Checked by:** Chan Yuk Yiu

Date: 23-Mar-2026 **Date:** 24-Mar-2026

The standard(s) and equipment used in the calibration are traceable to national or international recognised standards and are calibrated on a schedule to maintain the required accuracy level.

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Appendix 4.2

Impact Monitoring Schedule for Construction Phase Noise Monitoring for the Reporting Month and Next Mont

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Contract No. CM 04/2024
Outlying Islands Sewerage Stage 2 – South Lantau Sewerage Works – Environmental Team Services (2025 - 2027)
Environmental Monitoring Schedule
Month: July-2026

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			Hong Kong Special Administrative Region Establishment Day 1-Jul	2-Jul	3-Jul	4-Jul
5-Jul	6-Jul	7-Jul	8-Jul	9-Jul	Noise Monitoring 10-Jul	11-Jul
12-Jul	13-Jul	14-Jul	15-Jul	16-Jul	Noise Monitoring 17-Jul	Noise Monitoring 18-Jul
19-Jul	Noise Monitoring 20-Jul	21-Jul	Noise Monitoring 22-Jul	23-Jul	24-Jul	25-Jul
26-Jul	Noise Monitoring 27-Jul	28-Jul	29-Jul	30-Jul	31-Jul	

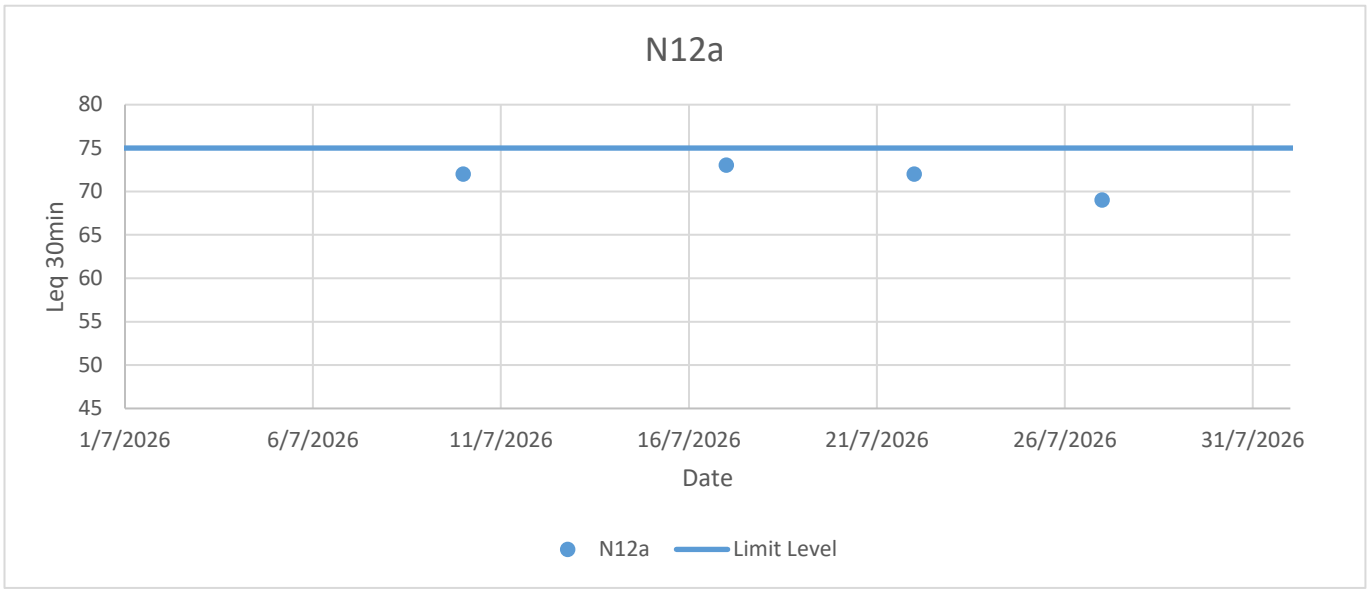
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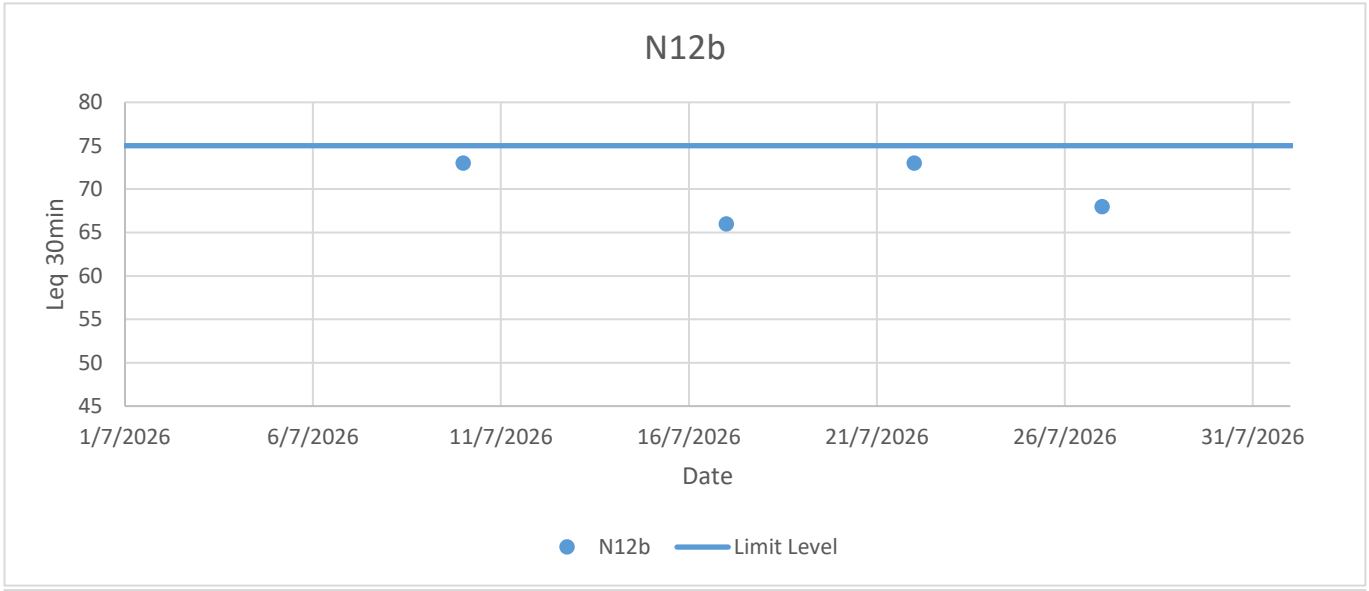
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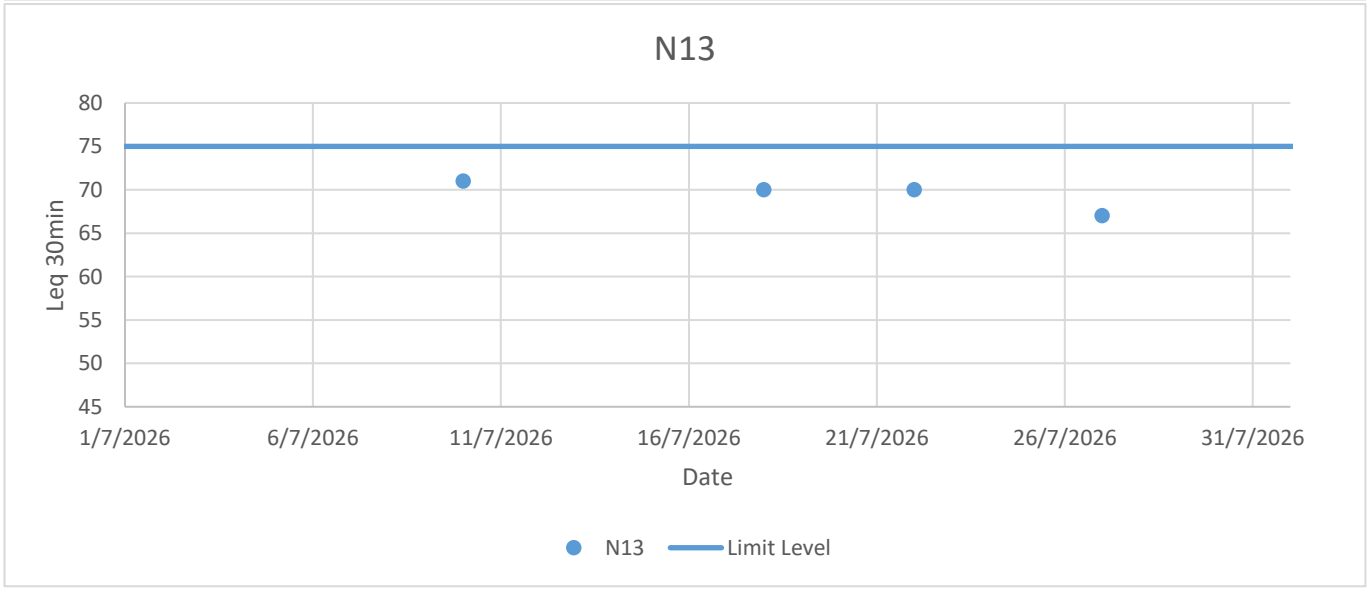
Contract No. CM 04/2024
Outlying Islands Sewerage Stage 2 – South Lantau Sewerage Works – Environmental Team Services (2025 - 2027)
Environmental Monitoring Schedule
Month: **August-2026**

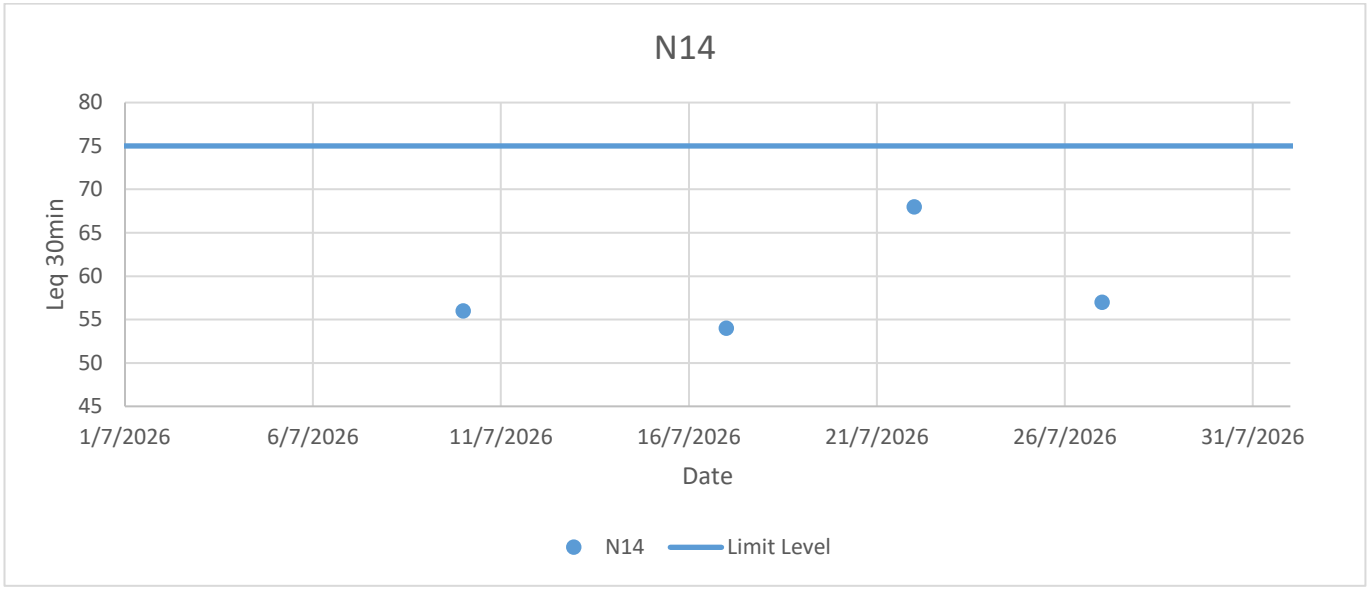
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1-Aug
2-Aug	3-Aug	4-Aug	5-Aug	6-Aug	Noise Monitoring 7-Aug	8-Aug
9-Aug	10-Aug	11-Aug	12-Aug	Noise Monitoring 13-Aug	14-Aug	15-Aug
16-Aug	17-Aug	18-Aug	Noise Monitoring 19-Aug	20-Aug	21-Aug	22-Aug
23-Aug	24-Aug	Noise Monitoring 25-Aug	26-Aug	27-Aug	28-Aug	29-Aug
30-Aug	Noise Monitoring 31-Aug					

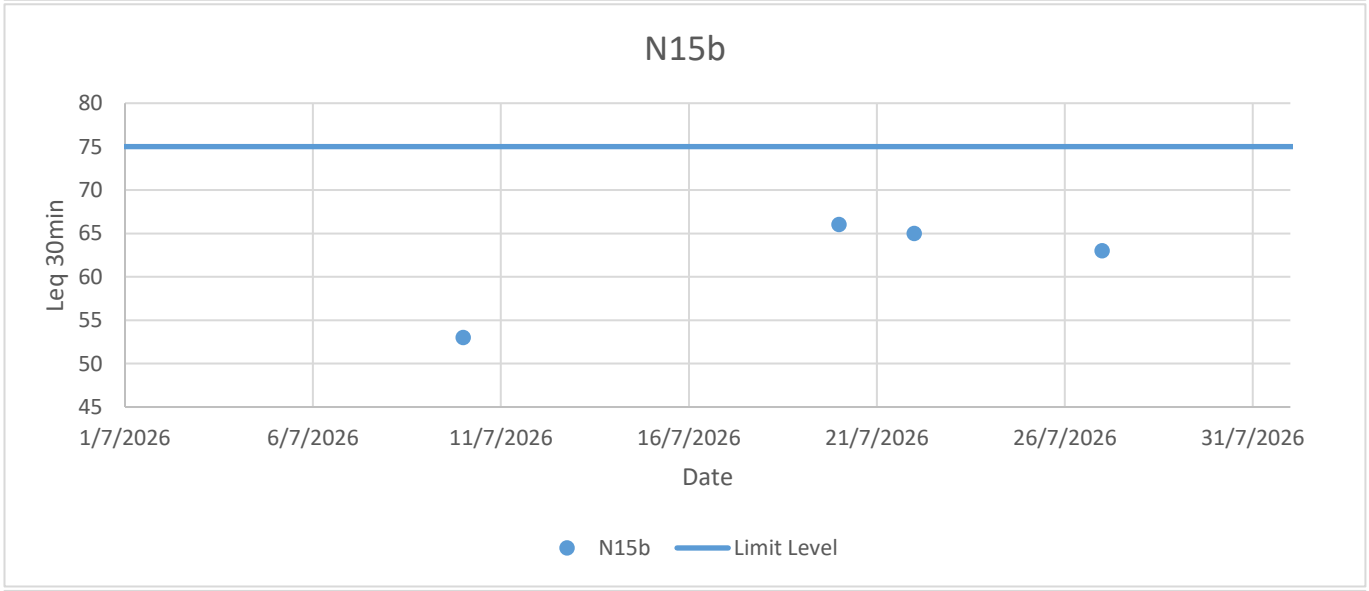
Appendix 4.3
Noise Monitoring Results and Graphical Representations

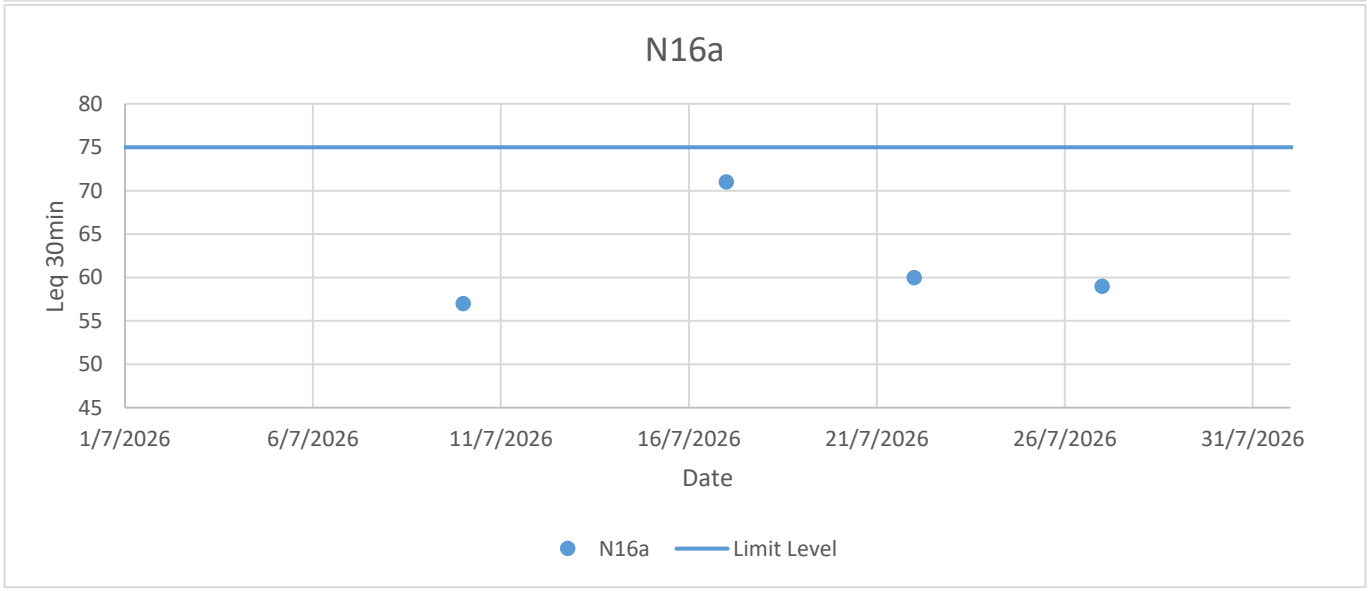

N12a
80
75
70
65
60
55
50
45
Leq 30min
1/7/2026
6/7/2026
11/7/2026
16/7/2026
21/7/2026
26/7/2026
31/7/2026
Date
N12a
Limit Level

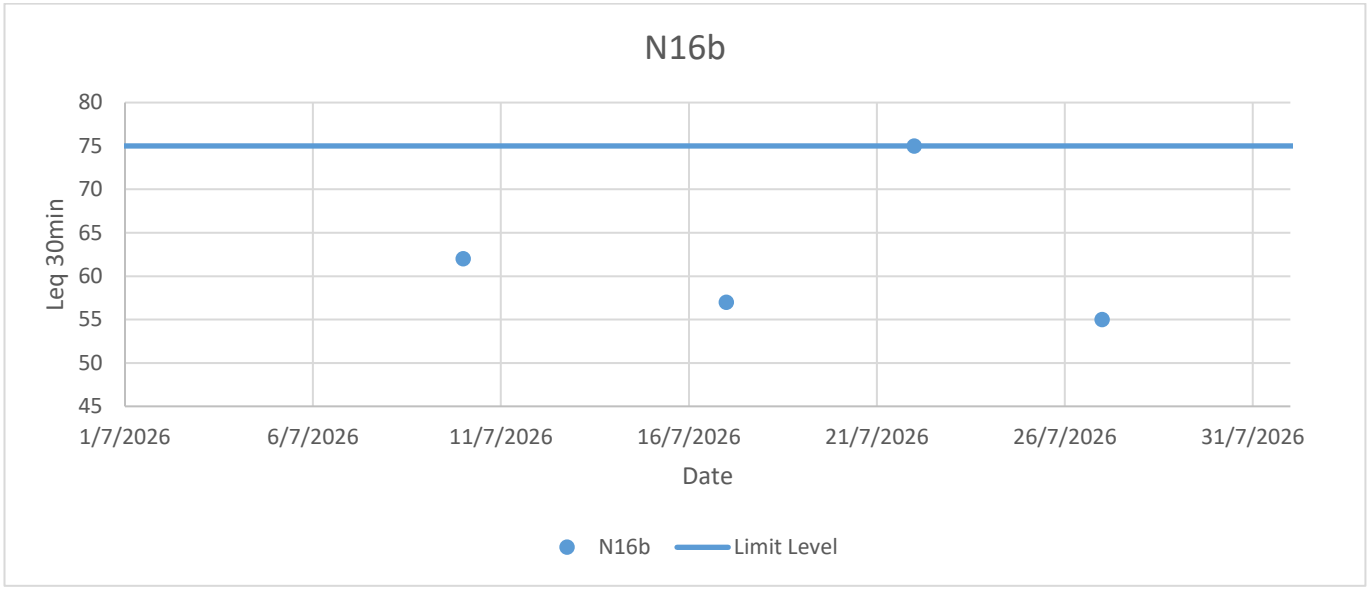

N12b
80
75
70
65
60
55
50
45
Leq 30min
1/7/2026
6/7/2026
11/7/2026
16/7/2026
21/7/2026
26/7/2026
31/7/2026
Date
N12b
Limit Level

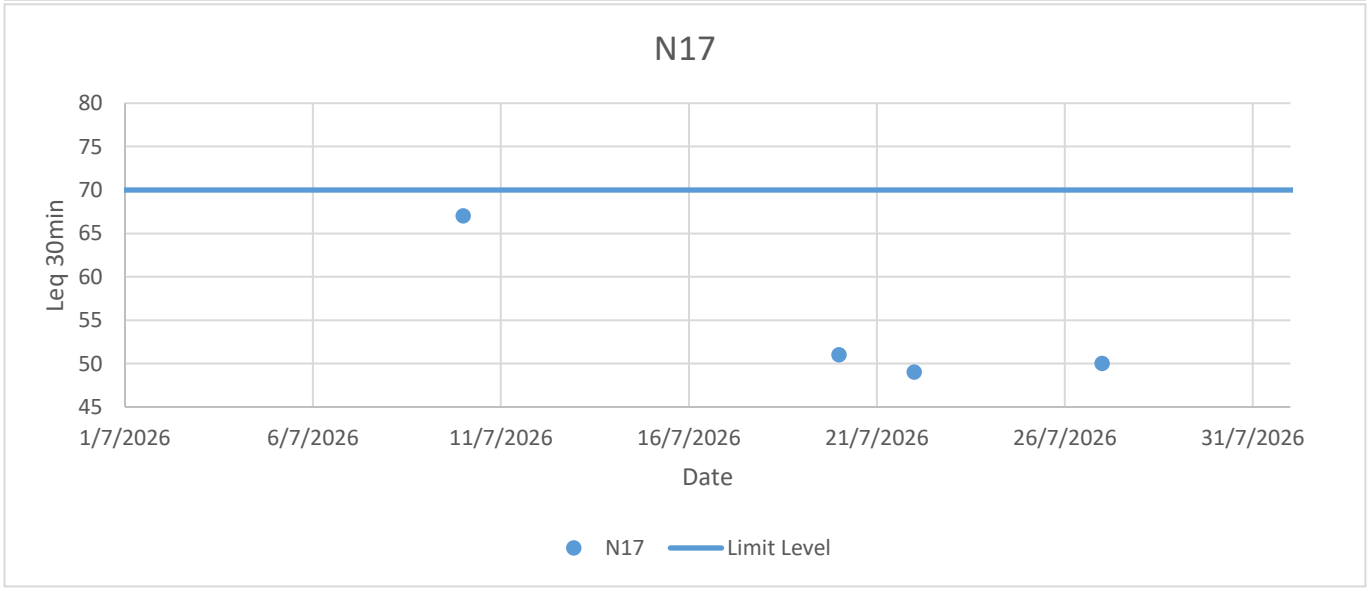

N13
80
75
70
65
60
55
50
45
Leq 30min
1/7/2026
6/7/2026
11/7/2026
16/7/2026
21/7/2026
26/7/2026
31/7/2026
Date
N13
Limit Level


N14
80
75
70
65
60
55
50
45
Leq 30min
1/7/2026
6/7/2026
11/7/2026
16/7/2026
21/7/2026
26/7/2026
31/7/2026
Date
N14
Limit Level


N15b
80
75
70
65
60
55
50
45
Leq 30min
1/7/2026
6/7/2026
11/7/2026
16/7/2026
21/7/2026
26/7/2026
31/7/2026
Date
N15b
Limit Level


N16a
80
75
70
65
60
55
50
45
Leq 30min
1/7/2026
6/7/2026
11/7/2026
16/7/2026
21/7/2026
26/7/2026
31/7/2026
Date
N16a
Limit Level


N16b
80
75
70
65
60
55
50
45
Leq 30min
1/7/2026
6/7/2026
11/7/2026
16/7/2026
21/7/2026
26/7/2026
31/7/2026
Date
N16b
Limit Level


N17
80
75
70
65
60
55
50
45
Leq 30min
1/7/2026
6/7/2026
11/7/2026
16/7/2026
21/7/2026
26/7/2026
31/7/2026
Date
N17
Limit Level

	Ref	Location Name	Level	Type of Measurement
Location	N12a	Lo Uk Tsuen	G/F	Free-Field

Date	Weather	Wind Condition	Start Time	End Time	Measured Noise Level			Leq30mins	Façade Correction	Corrected Leq30mins	Limit Level	Other Noise Sources	Construction Noise	Remake
					Leq	L10	L90							
10/7/2026	Sunny	Calm	10:08	10:38	71.2	70.1	56.3	69	3	72	75	Traffic	Not observed	--
					67.1	68.5	55.7							
					70.2	73.5	55.8							
					63.8	67.3	55.8							
					70.0	74.1	56.1							
					70.5	75.9	56.2							
17/7/2026	Cloudy	Calm	08:39	09:09	68.5	71.5	51.6	70	3	73	75	Traffic, dog, human activity	Not observed	--
					68.3	72.5	55.7							
					68.5	69.7	55.9							
					70.9	73.9	58.2							
					71.9	71.2	57.6							
					69.1	72.9	52.9							
22/7/2026	Sunny	Calm	10:09	10:39	69.8	72.2	56.9	69	3	72	75	Traffic, human activities	Not Observed	--
					68.7	73.0	57.3							
					68.6	72.4	57.4							
					68.3	72.7	56.9							
					69.1	71.8	56.8							
					70.3	73.4	61.8							
27/7/2026	Cloudy	Calm	16:30	17:00	67.1	69.1	58.5	66	3	69	75	Traffic, dog, human activity	Not Observed	--
					67.0	69.8	55.6							
					67.1	69.0	55.5							
					65.2	69.0	58.1							
					66.2	69.1	56.8							
					64.5	66.9	56.5							

	Ref	Location Name	Level	Type of Measurement
Location	N12b	Lo Uk Tsuen	G/F	Free-Field

Date	Weather	Wind Condition	Start Time	End Time	Measured Noise Level			Leq30mins	Façade Correction	Corrected Leq30mins	Limit Level	Other Noise Sources	Construction Noise	Remake
					Leq	L10	L90							
10/7/2026	Sunny	calm	10:42	11:12	72.4	76.2	55.9	70	3	73	75	Traffic, birds	not observed	--
					67.3	70.8	54.4							
					70.4	75.3	54.6							
					67.8	72.1	54.5							
					68.8	72.4	54.7							
					70.2	73.7	55.2							
17/7/2026	Cloudy	Calm	09:11	09:41	67.0	67.2	48.8	63	3	66	75	Traffic, human activity	Not observed	--
					58.8	60.6	53.4							
					64.0	65.3	52.4							
					62.3	62.8	49.4							
					61.4	63.8	56.1							
					58.8	61.6	54.3							
22/7/2026	Sunny	Calm	10:44	11:14	68.6	72.5	57.0	70	3	73	75	Traffic, human activities, truck activities	Not Observed	--
					69.6	73.4	55.4							
					67.9	73.3	55.6							
					67.9	71.4	55.2							
					70.2	72.0	56.5							
					72.0	74.9	55.2							
27/7/2026	Cloudy	Calm	15:54	16:24	61.4	65.3	53.9	65	3	68	75	Traffic, human activity, helicopter	Not observed	--
					65.9	70.1	55.6							
					68.7	71.5	55.0							
					62.9	68.1	53.5							
					61.1	64.3	53.4							
					64.3	68.6	53.5							

	Ref	Location Name	Level	Type of Measurement
Location	N13	Pui O San Wai Tsuen	G/F	Free-Field

Date	Weather	Wind Condition	Start Time	End Time	Measured Noise Level			Leq30mins	Façade Correction	Corrected Leq30mins	Limit Level	Other Noise Sources	Construction Noise	Remake
					Leq	L10	L90							
10/7/2026	sunny	calm	11:19	11:49	67.8	72.3	59.1	68	3	71	75	Traffic, human activities	Not observed	--
					64.3	67.9	55.6							
					65.1	69.5	54.7							
					71.7	71.7	54.8							
					68.0	71.5	56.9							
					67.3	71.0	58.8							
18/7/2026	Cloudy	Calm	14:12	14:42	66.8	71.3	54.3	67	3	70	75	Traffic, loading works from 18/wsd/18 human activities	Not Observed	--
					69.3	73.4	54.5							
					68.5	74.5	54.5							
					65.4	68.8	51.8							
					63.7	66.5	52.1							
					67.8	71.8	53.4							
22/7/2026	Sunny	Calm	11:17	11:47	67.6	71.4	55.6	67	3	70	75	Traffic, human activities	Not Observed	--
					68.4	71.7	54.0							
					66.5	71.1	52.5							
					67.5	70.9	52.0							
					63.5	67.5	52.1							
					67.1	71.9	54.0							
27/7/2026	Cloudy	Calm	15:22	15:52	60.7	63.2	53.7	64	3	67	75	Traffic, human activities	Not Observed	--
					63.4	67.8	52.9							
					64.6	67.6	52.5							
					64.7	69.1	53.4							
					65.1	68.6	54.9							
					64.7	66.9	53.0							

	Ref	Location Name	Level	Type of Measurement
Location	N14	Pui O San Wai Tsuen	G/F	Free-Field

Date	Weather	Wind Condition	Start Time	End Time	Measured Noise Level			Leq30mins	Façade Correction	Corrected Leq30mins	Limit Level	Other Noise Sources	Construction Noise	Remake
					Leq	L10	L90							
10/7/2026	sunny	calm	11:54	12:24	53.3	57.3	43.9	56	--	56	75	Birds, human activities	Not observed	--
					56.9	60.3	43.1							
					52.5	56.0	43.8							
					54.9	57.5	45.2							
					54.2	57.1	44.9							
					60.3	63.2	44.6							
17/7/2026	Cloudy	Calm	10:50	11:20	56.8	60.2	49.6	54	--	54	75	Traffic, human activity	Not observed	--
					53.7	51.7	49.6							
					51.6	50.8	48.1							
					51.4	49.9	48.6							
					53.9	59.3	47.3							
					54.0	58.8	47.1							
22/7/2026	sunny	calm	12:26	12:56	69.0	68.8	67.6	68	--	68	75	Traffic, human activities	Roadside works, noise source coming from the generator	--
					68.2	68.8	67.7							
					68.2	68.8	67.7							
					68.0	68.6	67.6							
					68.1	68.6	67.6							
					68.3	68.9	67.8							
27/7/2026	Cloudy	Calm	14:04	14:34	55.4	54.4	42.4	57	--	57	75	Traffic, human activity	Not observed	--
					58.1	59.2	51.6							
					59.9	62.2	53.4							
					56.5	56.2	53.3							
					53.3	54.6	46.9							
					58.2	59.8	46.1							

	Ref	Location Name	Level	Type of Measurement
Location	N15b	Pui O San Wai Tsuen	G/F	Free-Field

Date	Weather	Wind Condition	Start Time	End Time	Measured Noise Level			Leq30mins	Façade Correction	Corrected Leq30mins	Limit Level	Other Noise Sources	Construction Noise	Remake
					Leq	L10	L90							
10/7/2026	Sunny	Calm	12:34	13:04	50.2	52.1	47.4	53	--	53	75	Traffic, human activities	Not observed	--
					50.7	53.0	47.3							
					51.3	53.5	48.7							
					56.3	54.2	48.1							
					52.4	53.3	48.5							
					51.5	54.2	48.2							
20/7/2026	Cloudy	Calm	15:57	16:27	63.8	66.6	60.6	66	--	66	75	Traffic	Not Observed	--
					66.1	68.8	60.4							
					63.0	66.9	55.7							
					63.4	66.2	55.8							
					70.3	70.5	63.2							
					64.0	67.4	54.9							
22/7/2026	Cloudy	Calm	14:17	14:47	67.9	68.8	61.2	65	--	65	75	Traffic, human activities	Not Observed	--
					64.2	66.7	61.5							
					65.0	67.2	61.0							
					63.7	65.8	61.1							
					64.4	67.1	61.5							
					63.2	64.9	61.0							
27/7/2026	Cloudy	Calm	12:15	12:45	63.2	64.9	60.4	63	--	63	75	Traffic	Not Observed	--
					63.0	65.5	60.7							
					63.7	68.0	55.2							
					62.7	64.4	55.1							
					60.2	62.8	56.0							
					65.5	69.3	51.8							

	Ref	Location Name	Level	Type of Measurement
Location	N16a	Residences at Ham Tin	G/F	Free-Field

Date	Weather	Wind Condition	Start Time	End Time	Measured Noise Level			Leq30mins	Façade Correction	Corrected Leq30mins	Limit Level	Other Noise Sources	Construction Noise	Remake
					Leq	L10	L90							
10/7/2026	Sunny	Calm	14:28	14:58	53.6	55.3	50.8	54	3	57	75	Traffic, human activities	Not observed	--
					54.9	57.7	51.6							
					53.4	55.1	51.7							
					54.0	55.0	52.5							
					54.2	55.1	53.1							
					54.6	55.8	53.5							
17/7/2026	Cloudy	Calm	12:16	12:46	67.4	72.9	50.0	68	3	71	75	Traffic, human activity	Not observed	--
					69.9	72.1	66.7							
					69.6	72.1	66.3							
					68.7	70.9	65.5							
					64.3	69.0	54.5							
					59.4	63.3	45.6							
22/7/2026	Sunny	Calm	13:07	13:37	51.7	51.6	41.1	57	3	60	75	Traffic, human activities	Not Observed	--
					58.4	54.6	41.2							
					56.8	50.5	43.8							
					60.3	58.2	44.6							
					53.6	48.5	41.5							
					58.3	52.2	42.7							
27/7/2026	Cloudy	Calm	13:27	13:57	54.5	56.3	53.3	56	3	59	75	Traffic, human activity	Not observed	--
					57.6	58.7	52.2							
					55.4	52.4	50.9							
					54.9	56.3	50.7							
					51.3	51.8	50.9							
					57.6	60.9	50.8							

	Ref	Location Name	Level	Type of Measurement
Location	N16b	Residences at Ham Tin	G/F	Free-Field

Date	Weather	Wind Condition	Start Time	End Time	Measured Noise Level			Leq30mins	Façade Correction	Corrected Leq30mins	Limit Level	Other Noise Sources	Construction Noise	Remake
					Leq	L10	L90							
10/7/2026	Sunny	Calm	15:14	15:44	57.8	58.4	43.8	59	3	62	75	Human activities, birds	Not observed	--
					55.6	51.3	42.9							
					60.8	61.2	43.3							
					57.7	53.7	44.9							
					61.1	61.2	44.7							
					56.0	57.4	44.0							
17/7/2026	Cloudy	Calm	16:52	17:22	50.9	49.8	48.0	54	3	57	75	Traffic, human activity	Not observed	--
					51.4	54.2	47.9							
					54.2	57.6	48.2							
					55.4	58.5	48.4							
					54.4	56.8	48.1							
					54.8	58.1	48.0							
22/7/2026	Sunny	Calm	13:41	14:11	71.9	72.3	71.0	72	3	75	75	Traffic, human activities, construction works from WSD	Not Observed	--
					72.7	73.1	71.4							
					71.4	71.8	70.5							
					71.3	71.7	70.7							
					71.3	71.8	70.7							
					71.5	72.7	70.4							
27/7/2026	Cloudy	Calm	12:52	13:22	52.4	54.7	48.3	52	3	55	75	Traffic, human activity	Not observed	--
					52.7	54.9	48.3							
					50.1	53.3	47.4							
					50.9	54.0	48.3							
					51.3	53.0	48.3							
					52.6	55.1	48.4							

	Ref	Location Name	Level	Type of Measurement
Location	N17	Bui O Public School	R/F	Façade

Date	Weather	Wind Condition	Start Time	End Time	Measured Noise Level			Leq30mins	Façade Correction	Corrected Leq30mins	Limit Level	Other Noise Sources	Construction Noise	Remake
					Leq	L10	L90							
10/7/2026	Sunny	Calm	15:52	16:22	67.5	71.4	60.8	67	--	67	70	Human activities	Not observed	--
					67.1	71.6	59.8							
					66.0	68.2	63.4							
					66.9	68.3	63.7							
					66.8	70.0	63.0							
					67.4	70.5	63.2							
20/7/2026	Cloudy	Calm	15:16	15:46	50.2	53.1	47.2	51	--	51	70	Traffic	Not Observed	--
					50.6	51.3	47.0							
					49.1	50.5	47.0							
					50.3	52.9	47.1							
					50.7	53.4	47.8							
					52.1	53.0	48.6							
22/7/2026	Sunny	Calm	11:51	12:21	49.1	50.6	47.3	49	--	49	70	Traffic, human activities	Not Observed	--
					49.4	51.2	47.8							
					49.2	50.9	47.5							
					49.2	51.0	47.2							
					48.2	49.0	46.5							
					49.5	51.4	46.9							
27/7/2026	Cloudy	Calm	14:40	15:10	49.8	52.2	45.9	50	--	50	70	Traffic	Not Observed	--
					47.9	49.2	45.3							
					48.4	50.8	45.2							
					51.8	55.3	46.4							
					52.7	56.0	45.2							
					49.6	52.2	43.8							

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23/F, On Hong Commercial Building, 145
Hennessy Road, Wan Chai, Hong Kong

Appendix 7.1
Monthly Summary Waste Flow Table

Drainage Services Department
Contract No. DC/2020/02
Construction of San Shek Wan Sewage Treatment Works,
Associated Submarine Outfall and Pui O Sewerage Works

Summary Waste Flow Table for June 2026

Month	Actual Quantities of Inert C&D Material Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly				
	Total Quantity Generated (a) (in '000m3)	Hard Rocks and Large Broken Concrete (b) (in '000m3)	Reused in the Contract (c) (in '000m3)	Reused in other Projects (d) (in '000m3)	Disposed as Public Fill (a-b-c-d) (in '000m3)	Imported Fill (in '000m3)	Metals (in '000kg)	Paper/cardboard packaging (in '000kg)	Plastics [see Note 3] (in '000kg)	Chemical waste (in '000kg)	Others. e.g. general refuse (in '000kg)
Jan	0.600	0.000	0.000	0.000	0.570	0.030	9.383	0.060	0.003	0.000	114.330
Feb	0.060	0.000	0.000	0.000	0.060	0.003	0.000	0.000	0.000	0.000	51.560
Mar	0.120	0.000	0.000	0.000	0.120	0.000	8.302	0.087	0.003	0.360	73.450
Apr	0.030	0.000	0.000	0.000	0.030	0.000	0.002	0.086	0.004	0.000	50.210
May	0.040	0.000	0.000	0.000	0.040	0.000	0.003	0.097	0.002	0.000	54.040
Jun	0.200	0.000	0.000	0.000	0.200	0.000	0.000	0.000	0.000	0.000	34.470
Sub-total	1.050	0.000	0.000	0.000	1.020	0.033	17.690	0.330	0.011	0.360	378.060
Jul	0.150	0.000	0.000	0.000	0.150	0.000	0.004	0.049	0.004	0.000	65.530
Aug											
Sept											
Oct											
Nov											
Dec											
Total	1.200	0.000	0.000	0.000	1.170	0.033	17.694	0.379	0.015	0.360	443.590

Notes:
(1) The inert C&D material except slurry and bentonite are disposed at Mui Wo Temporary Public Fill Bank (MW-PFRF) or Tuen Mun Area 38 Fill Bank (TM38-FB)
(2) The slurry and bentonite are disposed at Tseung Kwan O Area 137 Fill Bank (TKO137FB)
(3) The non-inert waste is disposed at NENT or Outlying Islands Transfer Facilities
(4) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
(5) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material
(6) Assume the density of fill material is 2 tonne/m3.
(7) For the chemical waste: 400L of non-halogenated solvent was disposed of this month. Assume the desity of the non-halogenated solvent is 0.9kg/L.

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Appendix 9.1
3 Months Rolling Programme

KL-CW JV

Tentative Three Months Construction Rolling Program **Contract No.: DC/2020/02** **Construction of San Shek Wan Sewage Treatment Works, Associated Submarine Outfall and Pui O Sewerage Works**	**Reference No. : DC/2020/02** **Revision No. : -**

Construction Activities for the reporting period

Item	Construction Activities
1	Excavation, sewer laying, construction of manhole at Pui O Lo Uk Tsuen, South Lantau Road, Chi Ma Wan Road
2	Trenchless drilling works (Chi Ma Wan Road)
3	Excavation and ELS work at POSPS
4	Superstructure RC works at SSWSTW
5	Waterproofing work at SSWSTW
6	Excavation and site formation at SSWSTW
7	Retaining wall construction at SSWSTW
8	E&M installation at POSPS
9	E&M installation at SSWSTW
10	ABWF work at POSPS
11	ABWF work at SSWSTW

KL-CW JV

Tentative Three Months Construction Rolling Program **Contract No.: DC/2020/02** **Construction of San Shek Wan Sewage Treatment Works, Associated Submarine Outfall and Pui O Sewerage Works**	**Reference No. : DC/2020/02** **Revision No. : -**

Tentative Three Months (August, September and October 2026) Construction Rolling Program

Item	Construction Activities
1	Excavation, sewer laying, construction of manhole at Pui O Lo Uk Tsuen, South Lantau Road, Chi Ma Wan Road
2	Trenchless drilling works (Chi Ma Wan Road)
3	Excavation and ELS work at POSPS
4	Superstructure RC works at SSWSTW
5	Waterproofing Work at SSWSTW
6	Excavation and site formation at SSWSTW
7	Retaining wall construction at SSWSTW
8	E&M installation at POSPS
9	E&M installation at SSWSTW
10	ABWF work at POSPS
11	ABWF work at SSWSTW
12	Slope Work near SSWSTW