

Environmental Team Services for Contract No. SS H504 Design and Construction of Chai Wan Government Complex and Vehicle Depot

29th Monthly EM&A Report (March 2024)

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15 April 2024

**Contract No. SS H504
Design and
Construction of Chai
Wan Government
Complex and Vehicle
Depot**

29th Monthly EM&A Report

Yau Lee Construction Co, Ltd

2024-04-15

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Document control record

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Executive Summary

Aurecon Hong Kong Limited (Aurecon) was commissioned by the Yau Lee Construction Co, Ltd (Yau Lee) to undertake the role of Environmental Team (ET) for carrying out the environmental monitoring and audit (EM&A) works for the “Contract No. SS H504 Design and Construction of Chai Wan Government Complex and Vehicle Depot (The Project).

An Environmental Permit (EP) No. EP-505/2015 was issued by the Environmental Protection Department (EPD) on 17 December 2015 for the construction of this project based on the Environmental Impact Assessment (EIA) Report (Register No: AEIAR-191/2015) approved by the EPD. The latest EP No. EP-505/2015/A was subsequently issued by the EPD on 8 November 2019 based on the documents (including an Environmental Review Report (ERR)) for the application of Variation of Environmental Permit.

The construction phase and EM&A programme of the Project commenced on 25 November 2021.

This 29th Monthly EM&A Report presents the EM&A works conducted from 1 March 2024 to 31 March 2024 in accordance with the EM&A Manual.

Summary of Construction Works undertaken during Report Period

The major construction works undertaken during the reporting period include:

- Superstructure construction
- Rebar fixing
- Formwork erection
- Concreting works
- Installation of MiC and precast elements
- Backfilling

Environmental Monitoring and Audit Progress

A summary of the monitoring activities in this reporting period is listed below:

- | | |
|---|---------|
| - Construction Noise Monitoring during normal weekdays at each monitoring station | 4 times |
| - Joint Environmental Site Inspection | 4 times |

Noise

4 sets of 30-minute construction noise measurement were carried out at each monitoring stations during normal weekdays of the reporting period. No exceedance of Action and Limit Levels of construction noise was recorded during the reporting period.

Environmental Site Inspection

Joint environmental site inspections were carried out on 07, 14, 21 and 28 March 2024. The joint environmental site inspection was carried out by the representatives of the

Engineer's Representative (ER), the Contractor, IEC and the ET on 07 March 2024. The Contractor has generally implemented the mitigation measures as recommended.

Environmental Exceedance/Non-conformance/Compliant/Summons and Prosecution

No exceedance of the Action and Limit Levels of construction noise was recorded at designated monitoring stations during the reporting period.

No non-compliance event was recorded during the reporting period.

No environmental complaint and summons/prosecutions was received in this reporting period.

EPD conducted general site inspection on 20 March 2024. No special findings were identified during the inspection.

Future Key Issues

Works to be undertaken in the next month include:

-
- Superstructure construction
 - Rebar fixing
 - Formwork erection
 - Concreting works
 - Installation of Mic and precast elements
-

Potential environmental impacts arising from the above construction activities are mainly associated with dust, construction noise, site runoff and waste management.

1 Introduction

- 1.1.1 Aurecon Hong Kong Limited (Aurecon) was commissioned by the Yau Lee Construction Co, Ltd (Yau Lee) to undertake the role of Environmental Team (ET) for carrying out the environmental monitoring and audit (EM&A) works for the “Contract No. SS H504 Design and Construction of Chai Wan Government Complex and Vehicle Depot (The Project).

1.2 Purpose of this Report

- 1.2.1 This is the twenty-ninth EM&A report which summarises the impact monitoring results and audit findings for the EM&A programme during the reporting period from 01 March 2024 to 31 March 2024.

1.3 Structure of the Report

- 1.3.1 The structure of the report is as follows:

Section 1 - Introduction

- details the background, purpose and structure of the report.

Section 2 - Project Information

- summarises background and scope of the Project, site description, project organization and contact details, construction programme, the construction works undertaken and the status of Environmental Permit(s)/License(s) during the reporting period.

Section 3 - Environmental Monitoring Requirement

- summarises the monitoring parameters, monitoring programmes, monitoring methodologies, monitoring frequency, monitoring locations, Action and Limit Levels, Event/Action Plans.

Section 4 - Implementation Status on Environmental Mitigation Measures

- summarises the implementation of environmental protection measures during the reporting period.

Section 5 - Monitoring Results

- summarises the monitoring results obtained in the reporting period.

Section 6 - Environmental Site Auditing

- summarises the audit findings of the weekly site inspections undertaken within the reporting period.

Section 7 - Environmental Non-conformance

- summarises any monitoring exceedance, environmental complaints and environmental summons within the reporting period.

Section 8 - Future Key Issues

- summarises the impact forecast and monitoring schedule for the next reporting month.

Section 9 - Review of EM&A Data and EIA Predictions

- compares and contrasts the EM&A data in the month with the EIA predictions and annotates with explanation for any discrepancies.

Section 10 - Conclusions

2 Project Information

2.1 Background

2.1.1 On 5 October 2015, the Environment Impact Assessment (EIA) for the proposed “Chai Wan Government Complex and Vehicle Depot” (AEIAR-191/2015, hereafter referred to as “the Project”) was approved and an Environmental Permit (EP) (EP-505/2015) for the construction of the Project was issued. The latest EP No. EP-505/2015/A was subsequently issued by the EPD on 8 November 2019 based on the documents (including an Environmental Review Report (ERR)) for the application of Variation of Environmental Permit.

2.1.2 The construction phase and EM&A programme of the Project commenced on 25 November 2021.

2.2 Site Description

2.2.1 The scope of works of the Project, which is a Designated Project under the EIA Ordinance (EIAO), will construct joint user building comprising the government office, store, laboratory, transport pool and vehicle depot facilities in Chai Wan District. The Site is bounded by NWFB Depot to the north, Sheung On Street to the east, Sheung Mau Street to the south and Sheung Tat Street to the west. A layout plan of the Project is provided in **Figure 1-1**.

Figure 1-1 A layout plan of the Project



2.3 Construction Activities

2.3.1 A summary of the major construction activities undertaken in this reporting period is shown in **Table 2.1** and the construction programme is illustrated in **Appendix 1**.

Table 2-1 Major Construction Activities Undertaken in the Reporting Period

Construction Activities Undertaken
- Superstructure construction
- Rebar fixing
- Formwork erection
- Concreting works
- Installation of MiC and precast elements
- Backfilling

2.4 Project Organisation

2.4.1 The Project organization chart and contact details are shown in **Appendix 2**.

2.5 Status of Environmental Approval Document

2.5.1 A summary of the relevant valid permits, licences, and/or notifications on environmental protection for this Project since the granting of the EP is presented in **Table 2.2**.

Table 2-2 Summary of the relevant valid permits, license, and/or notification on environmental protection

Permit / Licenses / Notification	Reference	Validity Period	Remark
Environmental Permit (EP)	EP-505/2015/A	Throughout the Contract	Permit granted on 8 November 2019
Notification of Construction Works as required under Air Pollution Control (Construction Dust) Regulation	469716	Throughout the Contract	Approved on 21 July 2021
Registration of Waste Producer under Waste Disposal Ordinance	7041313	Throughout the Contract	Approved on 13 August 2021
Registration as Chemical Waste Producer	5213-163-Y2782-01	Throughout the Contract	Approved on 24 August 2021
Construction Noise Permit	GW-RS0090-24	15 August 2024	Approved on 16 February 2024
Effluent Discharge License under Water Pollution Control Ordinance	WT00038924-2021	30 September 2026	Approved on 9 December 2021

3 Environmental Monitoring Requirements

3.1 Noise Monitoring Locations

3.1.1 The noise monitoring locations in approved EM&A Manual are summarised in **Table 3-1** and shown in **Figure 3-1**.

Table 3-1 Noise Monitoring Station in Approved EM&A Manual

Noise Monitoring ID	Proposed Noise Monitoring Location	Remark
NM1	Ground Floor at Heng Fa Chuen Block 50	-
NM2b	Pedestrian road at Shing Tai Road	*
NM3	Rooftop of THEi Campus	-
Remark: * -	Hong Kong Institute of Vocational Education (Chai Wan) - Academic Block (NM2) is the noise monitoring stations for the construction phase EM&A programme as identified in the approved EM&A Manual for the Project. The access to NM2 and Knight Court (as a VTC Senior Quarters and NSR3 in approved EIA) were denied. A search for alternative noise monitoring locations along Shing Tai Road and Sheung Mau Street was carried out during the site visit on 4 October 2021. Lamp Post no. 47447 at Sheung Mau Street (NM2a), which is located between project site and original noise monitoring location, Hong Kong Institute of Vocational Education (Chai Wan) - Academic Block (NM2), is found suitable and available to be an alternative noise monitoring location for NM2. Also, NM2a, which has a direct line of sight towards project site (where construction works will be carried out and likely to have noise impacts), is located closer to project site than NM2 and thus considered as a representative noise monitoring location. Monitoring position at NM2a is proposed at 2m above ground due to security concerns and minimize the road traffic noise contribution. Noise measurement at NM2a will be considered as free-field and a correction of +3dB(A) would be made to the noise monitoring results. The alternative location of NM2a, were therefore proposed and agreed by the Independent Environmental Checker (IEC). Due to the adjustment of the location of NM2 to NM2a, the measured noise levels at NM2a would represent the noise levels at NM2. To respond to the comment raised by EPD on monitoring location of NM2a by email dated 23 May 2022 and site meeting on 6 June 2022, the monitoring location of NM2a was adjusted to the pedestrian road at Shing Tai Road (NM2b) which is located between project site and original noise monitoring location, Hong Kong Institute of Vocational Education (Chai Wan) - Academic Block (NM2). Compared with NM2a, NM2b is far away from the traffic light and therefore should be able to minimise the traffic noise issue. This arrangement was started from 28 June 2022 and has been agreed by the Independent Environmental Checker (IEC). Noise measurement at NM2b will be considered as free-field and a correction of +3dB(A) would be made to the noise monitoring results. Due to the adjustment of the location of NM2a to NM2b, the measured noise level at NM2b would represent the noise levels at NM2.	

Figure 3-1 Location of Noise Monitoring Stations (NM1, NM2b and NM3)



3.2 Monitoring Parameters, Frequency and Duration

3.2.1 Weekly construction noise monitoring was conducted in accordance with the requirements stipulated in the EM&A Manual. The monitoring programme for this reporting period is shown in **Appendix 3**.

3.2.2 **Table 3-2** summarizes the monitoring parameters, frequency and duration of the impact noise monitoring.

Table 3-2 Noise Monitoring Parameters, Period and Frequency

Time Period	Parameters
Daytime on normal weekdays (0700-1900 hrs)	$L_{eq}(30 \text{ mins})$, $L_{10}(5 \text{ mins})$ and $L_{90}(5 \text{ mins})$
Evening time on all days (1900-2300 hrs) and Holidays (including Sundays) during daytime and evening (0700-2300 hrs)	$L_{eq}(5 \text{ mins})$, $L_{10}(5 \text{ mins})$ and $L_{90}(5 \text{ mins})$
All days during the night-time (2300-0700 hrs of the next day)	$L_{eq}(5 \text{ mins})$, $L_{10}(5 \text{ mins})$ and $L_{90}(5 \text{ mins})$

3.3 Monitoring Equipment

3.3.1 Noise measurements were conducted in accordance with the calibration and measurement procedures as stated in Annex – General Calibration and Measurement Procedures of Technical Memorandum on Noise from Construction Work other than Percussive Piling (GW-TM) issued under the Noise Control Ordinance (NCO) (Cap.400).

3.3.2 The sound level meter and calibrator used for the noise measurement, as listed in **Table 3-3**, complies with IEC 651: 1979 and 804:1985 (Type 1) specification. The calibration certificates of the sound level meter and calibrator are given in **Appendix 4**.

Table 3-3 Noise Monitoring Equipment

Monitoring Station	Monitoring Equipment (Sound Level Meter and Calibrator)
NM1	Sound Level Meter: Rion NL 52(s/n:01010406)
NM2b	Calibrator: Larson Davis Cal 200(s/n: 11334)
NM3	

3.3.3 Immediately prior to and following the noise measurements, the accuracy of the measurement equipment was checked using an acoustic calibrator generating a known sound pressure level at a known frequency. Measurements were accepted as the calibration level from before and after the noise measurement agree to within 1.0 d(B).

3.3.4 A portable wind speed meter shall be used for measuring wind speeds in m/s.

3.4 Event / Action Plan

Table 3-4 Action and Limit Levels for Construction Noise Monitoring

Monitoring Station	Action Level	Limit Level	Remark
NM1		Noise Criteria, $Leq_{(30mins)}$, dB(A) 75	
NM2b	When one documented complaint is received	70 65 (during examination)	Applicable during 0700 – 1900 hours, Monday to Saturday
NM3		70 65 (during examination)	

- 3.4.1 Should non-compliance of the noise criteria occur, the Event and Action Plan as presented in **Appendix 5** should be followed.

3.5 Mitigation Measures

- 3.5.1 The mitigation measures in accordance with the EP, EIA and EM&A Manual and their implementation status are presented in **Appendix 6**.

4 Implementation Status on Environmental Mitigation Measures

4.1.1 The Contractor has generally implemented environmental mitigation measures and requirements as stated in the EIA Report, the EP and EM&A Manual and the contract documents. The implementation status during the reporting period is summarized in **Appendix 6**.

4.1.2 The implemented environmental mitigation measures are listed as follow:

- I. The timing and sequence of construction activities were carefully arranged.
- II. QPME were used to reduce the excessive noise impact.
- III. Good site practices were implemented to reduce noise impact of the site activities. The practices are listed as below:
 - Use only well-maintained and regularly-serviced plant during the works;
 - Turn off or throttle down the plant in intermittent use to a minimum;
 - Orient the plant known to emit noise strongly in one direction to face away from the NSRs;
 - Use silencers, mufflers and enclosures for plant where possible and maintain properly throughout the works;
 - Site fixed plant as far away from NSRs as possible; and
 - Use stockpiles of excavated materials and other structures such as site buildings effectively to screen noise from the works.
- IV. Movable noise barrier/acoustic sheet barriers as noise shield were adopted as far as practicable following the Construction Noise Management Plan (CNMP).

5 Monitoring Results

5.1 Noise

5.1.1 A total of 4 sets of 30-minute construction noise measurements were carried out at the monitoring stations (NM1, NM2b and NM3) during normal weekdays of the reporting period. The monitoring results together with graphical presentations are presented in **Appendix 7**. The local impacts observed near the monitoring stations were summarized below:

- NM1: Railway noise, traffic noise and Yau Lee Site.
- NM2b: Road traffic noise and Yau Lee Site.
- NM3: Cargo Handling Area and Yau Lee Site.

5.1.2 No exceedance of Action and Limit Levels of construction noise was recorded during the reporting period. Therefore, there was no record of Notification of Environmental Quality Limits Exceedance in the **Appendix 11**.

5.1.3 Baseline corrections were made when the measured noise level is higher than both the noise limit level and the baseline level, and it is made by deducting the measured noise levels with their corresponding baseline noise level. The corrected noise level (ie. Construction Noise Level) would solely represent the noise levels of Construction works.

5.1.4 The methodology is shown as below:

- When Measured noise level (Leq 30mins) > Baseline noise level (Leq30), Construction noise level is calculated
- Construction noise level = Measured noise level (Leq 30 mins) – Baseline noise level
- If Measured noise level (Leq 30mins) < Baseline noise level, Corrected noise level = Measured noise level

5.2 Waste Management

- 5.2.1 Wastes generated from this Project include inert construction and demolition (C&D) materials and non-inert C&D materials. Non-inert C&D materials were made up of general refuse, steels and paper/cardboard packaging materials. Steel materials generated from the Project were also grouped into non-inert C&D materials as the materials were not disposed of with other inert C&D materials. With reference to relevant handling records and trip tickets of this Project, the quantities of different types of waste generated in the reporting period are summarised in **Appendix 8**. The non-inert C&D materials and general refuse generated from the Project were disposed of at the NENT Landfill. A total of 84.15 tonnes of general refuse was generated during the reporting period. The inert C&D materials generated from the Project were disposed of at the Chai Wan Public Fill Barging Point (CW-PFBP) or Fill Bank at Tseung Kwan O Area 137(TKO137FB). A total of 29.22 inert waste was generated during the reporting period.

6 Environmental Site Inspection

6.1.1 Joint environmental site inspection was conducted in the reporting period on 07, 14, 21 and 28 March 2024. The joint environmental site inspection was carried out by the representatives of the Engineer's Representative (ER), the Contractor, IEC and the ET on 07 March 2024. The joint environmental site inspection record is shown in **Appendix 9**. There was no noncompliance recorded during the site inspections.

6.1.2 Major findings and recommendations are summarized as follows:

07 March 2024

- Ineffective dust sheets, sheeting or netting of scaffolding was observed. The contractor has been advised that the effective dust screens, sheeting, or netting should be provided to enclose the scaffolding.
- The general waste shall be collected in the enclosed bins properly. The contractor has been reminded that the sufficient enclosed bins should be provided to collect the general waste properly.

14 March 2024

- The accumulation of C&D waste was observed. The contractor has been advised to provide sufficient waste skip for waste storage and increase the frequency of waste disposal if necessary to avoid waste accumulation.
- The oils stains were found in the work area. The contractor has been reminded that the oil stains should be cleansed immediately, and disposal of it as chemical wastes.

21 March 2024

- NRMM label shall be provided and fixed on the forklift. The contractor has been reminded to display the NRMM label on the forklift.
- The general waste and C&D waste shall be collected and stored properly. The contractor has been advised to provide sufficient enclosed bins and waste skips for the proper collection and storage of general waste and C&D waste.
- The accumulation of C&D waste shall be disposed regularly. The contractor has been recommended to increase the waste disposal frequently if necessary to avoid waste accumulation.

28 March 2024

- C&D waste stored on the floor without waste skip. The contractor has been recommended to provide the containers or skip to store C&D waste to enhance reuse or recycling of materials and their proper disposal.

7 Environmental Non-conformance

7.1 Summary of Monitoring Exceedance

7.1 No exceedance of the Action and Limit Levels of construction noise was recorded at monitoring station during the reporting period.

7.2 Summary of Environmental Non-compliance

7.2.1 No non-compliance event was recorded during the reporting period.

7.3 Summary of Environmental Complaint

7.3.1 No complaint was received during the reporting period.

7.4 Summary of Environmental Summons and Successful Prosecution

7.4.1 No summons and successful prosecution were received during the reporting period.

8 Future Key Issues

8.1 Key Issues for the Coming Month

8.1.1 Works to be undertaken for the coming monitoring periods are summarized below:

- Superstructure construction
- Rebar fixing
- Formwork erection
- Concreting works
- Installation of MiC and Precast Elements

8.1.2 Potential environmental impacts arising from the above construction activities are mainly associated with dust, construction noise, site runoff and waste management.

8.2 Monitoring Schedule for the Next Month

8.2.1 The tentative schedule of noise monitoring for the next reporting period is presented in **Appendix 10**.

8.3 Construction Programme for the Next Month

8.3.1 The most updated construction programme for the Project is presented in **Appendix 1**.

9 Review of EM&A Data and EIA Predictions

9.1 Noise

- 9.1.1 The EIA predicted the construction noise levels during the day-time period. In this reporting period, ELS works, Pile Cap & Tie Beam Construction, Lift Pit Construction, Column Construction, Tower Crane Erection were conducted. Hence, a comparison between the measured noise results in this reporting month and predicted EIA noise levels was made. (Table 9-1).

Table 9-1 Comparison between the measured noise results and EIA predictions

Monitoring Station	EIA Predicted Construction Noise Levels, dB(A)	Baseline Noise Levels, dB(A)	Noise Monitoring Results, dB(A)	
			Leq _(30mins) , Average	Range
NM1	62	65.1	64.6	64-66
NM2b	69	73.4	72*	72*
NM3	66	69.8	69(67.4 [#])	66-72(66-68 [#])

Note: * The measured noise level exceeded the limit noise level of 70 dB for NM2b, but they were lower than the baseline level for NM2b. Therefore, they were not considered as an exceedance of limit level. As such the EAP was not triggered.

[#]Baseline corrections were carried out as the measured noise levels exceeded the limit noise levels and they were higher than the baseline levels for NM3. The corrected noise levels which solely represent the noise levels of Construction works are lower than the noise criteria. As such the EAP was not triggered. Details are mentioned in section 5.1.3 and summarised in Appendix 7.

- 9.1.2 The comparison shows that the average of 30-minute construction noise levels recorded at all monitoring stations during the reporting period were higher than the EIA predicted construction noise levels but lower than the baseline noise levels. Recommended mitigation measures in **Section 5.8** of EIA will be implemented throughout the construction period.

9.2 Waste Management

- 9.2.1 The estimated amount of waste generated in this Project and the accumulated quantities of waste generated up to this reporting month are presented in **Appendix 8**. The amount of construction waste generated are minimal. Recommended mitigation measures in **Section 8.5** of the EIA will be implemented during the construction stage.

9.3 Conclusion of Review

- 9.3.1 The EIA predictions against the monitoring results since the commencement of construction works have been reviewed. The EIA concluded that the Project would not cause adverse impacts to the environment, and the monitoring results have also indicated the same so far. Mitigation measures recommended in the EP, EIA, EM&A Manual and the contract documents will continue to be implemented throughout the construction phase of the Project.

10 Conclusion

- 10.1.1 For construction noise, no Action and Limit Level exceedance was recorded at the monitoring stations during the reporting period.
- 10.1.2 Environmental site inspection was carried out on 07, 14, 21 and 28 March 2024. Recommendations on remedial actions were given to the Contractors for the deficiencies identified during the site inspections.
- 10.1.3 EPD conducted general site inspection on 20 March 2024. No special findings were identified during the inspection.
- 10.1.4 No notification of summons and prosecution was received during the reporting period.
- 10.1.5 The ET will keep track on the EM&A programme to ensure compliance of environmental requirements and the proper implementation of all necessary mitigation measures.

Appendix 1

Design and Construction of Chai Wan Government Complex and Vehicle Depot

Contract No. SS H504 (Programme No. 184GK)

Update on: 02 April 2024

ID	Task Name	Duration	Start	Finish	Predecessors	Successors	Task Calendar	% Complete	Mar M34	Apr M35	May M36	Jun M37
1	Contract Date	0 days	Thu 24/6/21	Thu 24/6/21			Calendar day	100%				
2	Contract Period	389.5 days	Mon 19/7/21	Thu 8/5/25			Calendar day	0%				
3	Starting Date	0 days	Mon 19/7/21	Mon 19/7/21		4SS,5SS+946 day	Calendar day	100%				
4	Access Date	0 days	Mon 19/7/21	Mon 19/7/21	3SS		Calendar day	100%				
5	Original Contract Period (945 days after starting date)	0 days	Mon 19/2/24	Mon 19/2/24	3SS+946 days		Calendar day	0%				
6	Revised Contract Period (1023.5 days after starting date)	0 days	Wed 8/5/24	Wed 8/5/24	3SS+1024.5 day	7SS+365 days	Calendar day	0%				
7	Defects Date	0 days	Thu 8/5/25	Thu 8/5/25	6SS+365 days		Calendar day	0%				
8	Major Submission Other than AIP/DDA	416 days	Tue 5/10/21	Thu 24/11/22			Calendar day	100%				
9	Submission for Environmental Permit to EPD	77 days	Wed 27/10/21	Tue 11/1/22			Calendar day	100%				
16	Traffic Impact Assessment (TIA)	90 days	Tue 5/10/21	Sun 2/1/22			Calendar day	100%				
20	Construction Traffic Impact Assessment (CTIA)	90 days	Tue 5/10/21	Sun 2/1/22			Calendar day	100%				
24	Submission to HKE for Transformer Room Layout	129 days	Wed 20/10/21	Fri 25/2/22			Calendar day	100%				
29	Submission of GBP to Government Departments	142 days	Tue 16/11/21	Wed 6/4/22			Calendar day	100%				
34	BEAM Plus Project Assessment Process	340 days	Mon 20/12/21	Thu 24/11/22			Calendar day	100%				
43	Construction	1135 days	Mon 23/8/21	Mon 30/9/24			Calendar day	90%				
44	Site Mobilization and Preparation	828 days	Wed 15/9/21	Thu 21/12/23			Calendar day	100%				
45	Set up monitoring checkpoints (done on 29/10/21)	45 days	Wed 15/9/21	Fri 29/10/21			Calendar day	100%				
46	Ground Investigation Works (done on 23/10/21)	30 days	Wed 15/9/21	Thu 14/10/21			Calendar day	100%				
47	Set up revised hoarding	536 days	Mon 4/7/22	Thu 21/12/23			Calendar day	100%				
51	Erection of Tower Crane	76 days	Fri 4/8/23	Wed 18/10/23			Calendar day	100%				
54	Tree Removal and Preservation	296 days	Mon 23/8/21	Wed 15/6/22			Calendar day	100%				
61	Structural Works	1064 days	Tue 2/11/21	Mon 30/9/24			Calendar day	89%				
62	Piling Works	569 days	Tue 2/11/21	Wed 24/5/23			Calendar day	100%				
68	Substructure Works	675 days	Sat 26/11/22	Mon 30/9/24			Calendar day	91%				
69	Zone A (near Sheung On Street)	378 days	Wed 4/1/23	Tue 16/1/24			Calendar day	100%				
70	Sheet pile installation (started on 4/1/2023, done on 18/3/20	74 days	Wed 4/1/23	Sat 18/3/23			Calendar day	100%				
71	Pile cap construction (pre-requisite for ELSW) (Started on 8/3/2023)	219 days	Wed 8/3/23	Thu 12/10/23			Calendar day	100%				
72	PC5F, PC5G, PC6F, PC6G (done on 5/7/2023)	120 days	Wed 8/3/23	Wed 5/7/23	66FS+49 days	75SS+14 days	Calendar day	100%				
73	PC5D, PC5E, PC6D, PC6E, PC7D, PC7E (started on 7/8/2023, done on 12/10/2023)	67 days	Mon 7/8/23	Thu 12/10/23	52SS+3 days	76FF+13 days,53FS+3	Calendar day	100%				
74	Installation of waling and strut (ELSW)	219 days	Wed 22/3/23	Thu 26/10/23			Calendar day	100%				
75	G.L. F-G (started on 22/3/2023, done on 17/7/2023)	118 days	Wed 22/3/23	Mon 17/7/23	72SS+14 days	77FS+6 days	Calendar day	100%				
76	G.L. C-F (started on 24/7/2023, done on 26/10/2023)	95 days	Mon 24/7/23	Thu 26/10/23	73FF+13 days		Calendar day	100%				
77	Pile cap construction (afte ELSW) (started on 24/7/2023, 28/12/2023)	158 days	Mon 24/7/23	Thu 28/12/23	75FS+6 days	78FS-37 days,80SS+80	Calendar day	100%				
78	Lift pit construction (started on 22/11/2023, done on 22/12/2	31 days	Wed 22/11/23	Fri 22/12/23	77FS-37 days	79FS+10 days	Calendar day	100%				
79	External tanking to lift pit and testing (started on 2/1/2024, done on 10/1/2024)	9 days	Tue 2/1/24	Wed 10/1/24	78FS+10 days		Calendar day	100%				
80	Tie beam construction and dismantle ELS strut (done on 16/1/2024)	97 days	Thu 12/10/23	Tue 16/1/24	77SS+80 days		Calendar day	100%				
81	Zone B (near Sheung Tat Street)	337 days	Tue 14/2/23	Tue 16/1/24			Calendar day	100%				
82	Sheet pile installation (started on 14/2/2023, done on 18/3/2	33 days	Tue 14/2/23	Sat 18/3/23	66FS+27 days	83FS+2 days	Calendar day	100%				
83	Pumping test (Started on 21/3/2023)	12 days	Tue 21/3/23	Sat 1/4/23	82FS+2 days	84FS+13 days	Calendar day	100%				
84	Pile cap construction (pre-requisite for ELSW) (started on 15/4/2023)	61 days	Sat 15/4/23	Wed 14/6/23	83FS+13 days	85SS+7 days	Calendar day	100%				
85	Installation of waling and strut (ELSW) (started on 11/4/2023, done on 29/6/2023)	69 days	Sat 22/4/23	Thu 29/6/23	84SS+7 days	86	Calendar day	100%				
86	Pile cap construction (afte ELSW) (started on15/7/2023, done on 22/9/2023)	85 days	Fri 30/6/23	Fri 22/9/23	85	87FS+2 days,89FS+2	Calendar day	100%				
87	Lift pit construction (started on 25/9/2023, done on 2/11/20	40 days	Mon 25/9/23	Fri 3/11/23	86FS+2 days	88FS+9 days	Calendar day	100%				
88	External tanking to lift pit and testing (started on 13/11/2023	10 days	Mon 13/11/23	Wed 22/11/23	87FS+9 days		Calendar day	100%				
89	Tie beam construction and dismantle ELS strut (done on 16/1/2024)	114 days	Mon 25/9/23	Tue 16/1/24	86FS+2 days		Calendar day	100%				
90	Zone C (near NWBF)	432 days	Sat 26/11/22	Wed 31/1/24			Calendar day	100%				
91	Sheet pile installation (Start on 26/11/2022, Done on 18/03/2	113 days	Sat 26/11/22	Sat 18/3/23		93FS+2 days	Calendar day	100%				
92	Excavation	301 days	Tue 21/3/23	Mon 15/1/24			Calendar day	100%				
93	G.L. 1-4 (started on 21/3/2023)	75 days	Tue 21/3/23	Sat 3/6/23	91FS+2 days	97SS+7 days	Calendar day	100%				
94	G.L. 4-8 (exclude PC6A & PC7A) (started on 24/10/2023)	84 days	Tue 24/10/23	Mon 15/1/24	53FS+5 days	98SS,95FF	Calendar day	100%				
95	PC6A & PC7A (started on 28/12/2023)	14 days	Tue 2/1/24	Mon 15/1/24	94FF		Calendar day	100%				
96	Pile cap construction (Started on 21/3/2023)	310 days	Tue 28/3/23	Wed 31/1/24			Calendar day	100%				
97	G.L. 1-4 (started 21/3/2023, done on 27/7/2023)	122 days	Tue 28/3/23	Thu 27/7/23	93SS+7 days	52FS+7 days,106	Calendar day	100%				
98	G.L. 4-8 (exclude PC6A, PC6B, PC7A, PC7B & PC8B) (started on 24/10/2023, done on 4/1/2024)	73 days	Tue 24/10/23	Thu 4/1/24	94SS	99FS-8 days	Calendar day	100%				
99	PC6A, PC6B, PC7A, PC7B & PC8B (started on 28/12/2023, done on 31/1/2024)	35 days	Thu 28/12/23	Wed 31/1/24	98FS-8 days		Calendar day	100%				
100	Tie beam construction (done on 31/1/2024)	203 days	Thu 13/7/23	Wed 31/1/24	97FS-15 days		Calendar day	100%				
101	U/G drainage connection and builder's work (started on 15/5/2	90 days	Wed 29/5/24	Mon 26/8/24		103SS+35 days	Calendar day	46%				
102	Backfilling (include all zones)	400 days	Fri 4/8/23	Fri 6/9/24			Calendar day	70%				
103	L1 slab construction (include all zones)	90 days	Wed 3/7/24	Mon 30/9/24	101SS+35 days		Calendar day	40%				
104	Superstructure Works	326 days	Mon 21/8/23	Thu 11/7/24			Calendar day	50%				
105	Left Zone (G.L.1-5/A-G)	326 days	Mon 21/8/23	Thu 11/7/24			Calendar day	50%				
106	L1-L2 (started on 21/8/2023)	237 days	Mon 21/8/23	Sat 13/4/24	97FS+24 days	107FS-30 days	Calendar day	75%				
107	L2-L3 (include L2M) (started on 15/3/2024)	53 days	Fri 15/3/24	Mon 6/5/24	106FS-30 days	108FS-4 days	Calendar day	5%				
108	L3-L3M	37 days	Fri 3/5/24	Sat 8/6/24	107FS-4 days	109FS-4 days	Calendar day	0%				
109	L3M-L4	37 days	Wed 5/6/24	Thu 11/7/24	108FS-4 days		Calendar day	0%				
110	Off-Site Mock Up	223 days	Wed 6/4/22	Mon 14/11/22			Calendar day	100%				
118	MiC Mock Up	57 days	Mon 10/10/22	Mon 5/12/22			Calendar day	100%				

有利建築有限公司

Yau Lee Construction Co., Ltd.

Task

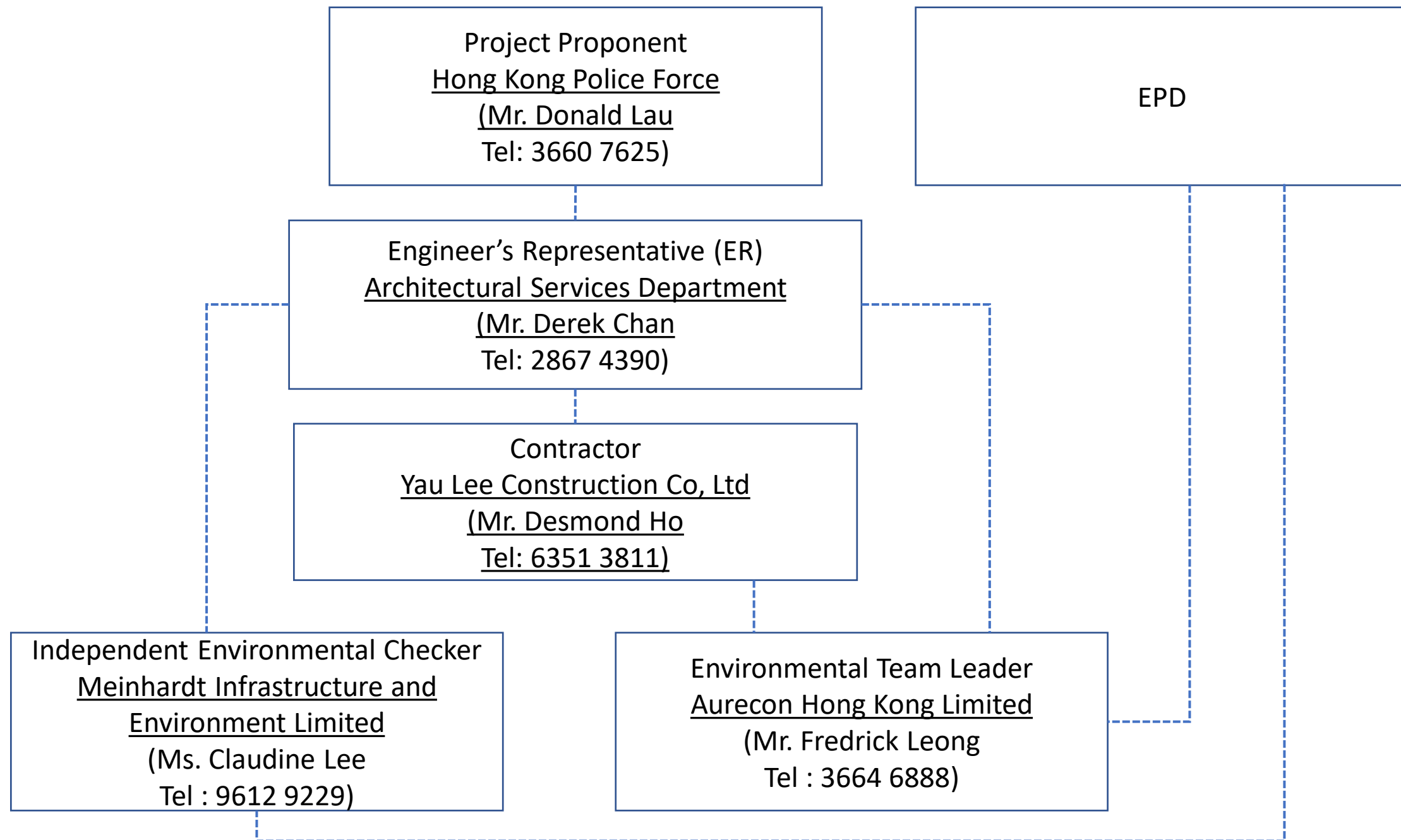
Critical TaskMilestone

Summary

ProgressManual Progress

Page

Appendix 2



Key: ----- Line of Communication

Appendix 3

2024		March				
MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
26	27	28	29	01	02	03
04	05	06 Noise Monitoring (NM1, NM2b and NM3)	07	08	09	10
11	12 Noise Monitoring (NM1, NM2b and NM3)	13	14	15	16	17
18	19 Noise Monitoring (NM1, NM2b and NM3)	20	21	22	23	24
25	26 Noise Monitoring (NM1, NM2b and NM3)	27	28	29	30	31
01	02	Notes:				

Appendix 4

Certificate of Calibration

校正證書

Certificate No. : C237486

證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC23-2475)

Date of Receipt / 收件日期 : 8 December 2023

Description / 儀器名稱 : Sound Level Meter

Manufacturer / 製造商 : Rion

Model No. / 型號 : NL-52

Serial No. / 編號 : 01010406

Supplied By / 委託者 : Envirotech Services Co.

Room 712, 7/F, My Loft, 9 Hoi Wing Road, Tuen Mun,
New Territories, Hong Kong

TEST CONDITIONS / 測試條件

Temperature / 溫度 : $(23 \pm 2)^{\circ}\text{C}$

Relative Humidity / 相對濕度 : $(50 \pm 25)\%$

Line Voltage / 電壓 : ---

TEST SPECIFICATIONS / 測試規範

Calibration check

DATE OF TEST / 測試日期 : 31 December 2023

TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.

The results do not exceed specified limits.

These limits refer to manufacturer's published tolerances as requested by the customer.

The results are detailed in the subsequent page(s).

The test equipment used for calibration are traceable to National Standards via :

- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory
- Hottinger Brüel & Kjær Calibration Laboratory, Denmark
- Agilent Technologies / Keysight Technologies
- Fluke Everett Service Center, USA

Tested By

測試

:


H T Wong
Assistant Engineer

Certified By

核證

:


K C Lee
Engineer

Date of Issue

簽發日期

:

3 January 2024

The test equipment used for calibration is traceable to the National Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.

本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗室書面批准。

Certificate of Calibration

校正證書

Certificate No. : C237486
證書編號

- The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours, and switched on to warm up for over 10 minutes before the commencement of the test.
- Self-calibration was performed before the test.
- The results presented are the mean of 3 measurements at each calibration point.
- Test equipment :

Equipment ID	Description	Certificate No.
CL280	40 MHz Arbitrary Waveform Generator	C230306
CL281	Multifunction Acoustic Calibrator	CDK2302738

- Test procedure : MA101N.

- Results :

6.1 Sound Pressure Level

6.1.1 Reference Sound Pressure Level

UUT Setting				Applied Value		UUT Reading	IEC 61672 Class 1 Limit
Range (dB)	Function	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)	(dB)	(dB)
30 - 130	L _A	A	Fast	94.00	1	94.0	± 1.1

6.1.2 Linearity

UUT Setting				Applied Value		UUT Reading
Range (dB)	Function	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)	(dB)
30 - 130	L _A	A	Fast	94.00	1	94.0 (Ref.)
				104.00		104.1
				114.00		114.0

IEC 61672 Class 1 Limit : ± 0.6 dB per 10 dB step and ± 1.1 dB for overall different.

6.2 Time Weighting

UUT Setting				Applied Value		UUT Reading	IEC 61672 Class 1 Limit
Range (dB)	Function	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)	(dB)	(dB)
30 - 130	L _A	A	Fast	94.00	1	94.0	Ref.
			Slow			94.0	± 0.3

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證書編號

6.3 Frequency Weighting

6.3.1 A-Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Limit (dB)
Range (dB)	Function	Frequency Weighting	Time Weighting	Level (dB)	Freq.		
30 - 130	L _A	A	Fast	94.00	63 Hz	67.7	-26.2 ± 1.5
					125 Hz	77.8	-16.1 ± 1.5
					250 Hz	85.3	-8.6 ± 1.4
					500 Hz	90.7	-3.2 ± 1.4
					1 kHz	94.0	Ref.
					2 kHz	95.2	+1.2 ± 1.6
					4 kHz	95.0	+1.0 ± 1.6
					8 kHz	93.0	-1.1 (+2.1 ; -3.1)
					16 kHz	86.0	-6.6 (+3.5 ; -17.0)

6.3.2 C-Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Limit (dB)
Range (dB)	Function	Frequency Weighting	Time Weighting	Level (dB)	Freq.		
30 - 130	L _C	C	Fast	94.00	63 Hz	93.1	-0.8 ± 1.5
					125 Hz	93.8	-0.2 ± 1.5
					250 Hz	94.0	0.0 ± 1.4
					500 Hz	94.0	0.0 ± 1.4
					1 kHz	94.0	Ref.
					2 kHz	93.8	-0.2 ± 1.6
					4 kHz	93.2	-0.8 ± 1.6
					8 kHz	91.1	-3.0 (+2.1 ; -3.1)
					16 kHz	84.1	-8.5 (+3.5 ; -17.0)

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Certificate of Calibration

校正證書

Certificate No. : C237486
證書編號

Remarks : - UUT Microphone Model No. : UC-59 & S/N : 13748

- Mfr's Limit : IEC 61672 Class 1

- Uncertainties of Applied Value :	94 dB	: 63 Hz - 125 Hz	: ± 0.35 dB
		250 Hz - 500 Hz	: ± 0.30 dB
		1 kHz	: ± 0.20 dB
		2 kHz - 4 kHz	: ± 0.35 dB
		8 kHz	: ± 0.45 dB
		16 kHz	: ± 0.70 dB
	104 dB	: 1 kHz	: ± 0.10 dB (Ref. 94 dB)
	114 dB	: 1 kHz	: ± 0.10 dB (Ref. 94 dB)

- The uncertainties are for a confidence probability of not less than 95 %.

Note :

Only the original copy or the laboratory's certified true copy is valid.

The values given in this Certificate only relate to the values measured at the time of the test and any uncertainties quoted 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. Sun Creation Engineering Limited shall not be liable for any loss or damage resulting from the use of the equipment.

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Sun Creation Engineering Limited - Calibration & Testing Laboratory

c/o 4/F, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong

輝創工程有限公司 - 校正及檢測實驗室

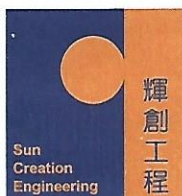
c/o 香港新界屯門興安里一號四樓

Tel/電話: (852) 2927 2606

Fax/傳真: (852) 2744 8986

E-mail/電郵: callab@suncreation.com

Website/網址: www.suncreation.com



輝創工程有限公司

Sun Creation Engineering Limited

Calibration & Testing Laboratory

Certificate of Calibration

校正證書

Certificate No. : C232461

證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC23-0674)

Date of Receipt / 收件日期 : 31 March 2023

Description / 儀器名稱 : Precision Acoustic Calibrator

Manufacturer / 製造商 : LARSON DAVIS

Model No. / 型號 : CAL200

Serial No. / 編號 : 11334

Supplied By / 委託者 : Envirotech Services Co.

Room 712, 7/F, My Loft, 9 Hoi Wing Road, Tuen Mun,
New Territories, Hong Kong

TEST CONDITIONS / 測試條件

Temperature / 溫度 : $(23 \pm 2)^{\circ}\text{C}$

Relative Humidity / 相對濕度 : $(50 \pm 25)\%$

Line Voltage / 電壓 : ---

TEST SPECIFICATIONS / 測試規範

Calibration check

DATE OF TEST / 測試日期 : 1 May 2023

TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.

The results do not exceed specified limits.

These limits refer to manufacturer's published or user's specified tolerances as requested by the customer.

The results are detailed in the subsequent page(s).

The test equipment used for calibration are traceable to National Standards via :

- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory
- The Bruel & Kjaer Calibration Laboratory, Denmark
- Agilent Technologies / Keysight Technologies
- Fluke Everett Service Center, USA

Tested By
測試

K C Lee
Engineer

Certified By
核證

H C Chan
Engineer

Date of Issue
簽發日期

2 May 2023

The test equipment used for calibration is traceable to the National Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.

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輝創工程有限公司 - 校正及檢測實驗室

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E-mail/電郵: callab@suncreation.com

Website/網址: www.suncreation.com

Certificate of Calibration

校正證書

Certificate No. : C232461
證書編號

- The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours before the commencement of the test.
- The results presented are the mean of 3 measurements at each calibration point.
- Test equipment :

Equipment ID	Description	Certificate No.
CL130	Universal Counter	C223647
CL281	Multifunction Acoustic Calibrator	CDK2302738
TST150A	Measuring Amplifier	C221750

- Test procedure : MA100N.

- Results :

5.1 Sound Level Accuracy

UUT Nominal Value	Measured Value (dB)	User's Limit (dB)	Uncertainty of Measured Value (dB)
94 dB, 1 kHz	93.65	± 0.5	± 0.20
114 dB, 1 kHz	113.60		

5.2 Frequency Accuracy

UUT Nominal Value (kHz)	Measured Value (kHz)	Mfr's Limit	Uncertainty of Measured Value (Hz)
1	1.000	1 kHz ± 1 %	± 1

Remarks : - The user's limit is a customer pre-defined operating tolerance of the UUT, suitable for one's own intended use.

- The uncertainties are for a confidence probability of not less than 95 %.

Note :

Only the original copy or the laboratory's certified true copy is valid.

The values given in this Certificate only relate to the values measured at the time of the test and any uncertainties quoted 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. Sun Creation Engineering Limited shall not be liable for any loss or damage resulting from the use of the equipment.

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Appendix 5

Event and Action Plan for Construction Noise Monitoring

	Action			
	ET	IEC	ER	Contractor
Action Level	1. Notify the ER, IEC and Contractor. 2. Carry out investigation. 3. Report the results of investigation to the ER, IEC and Contractor. 4. Discuss with the IEC and Contractor and formulate remedial measures. 5. Increase monitoring frequency to check mitigation effectiveness.	1. Review the investigation results submitted by the ET. 2. Review the proposed remedial measures by the Contractor and advise the ER accordingly. 3. Advise the ER on the effectiveness of the proposed remedial measures.	1. Confirm receipt of notification of failure in writing. 2. Notify the Contractor. 3. Require the Contractor to propose remedial measures. 4. Ensure remedial measures are properly implemented.	1. Submit noise mitigation proposals to the IEC and ER. 2. Implement noise mitigation proposals.
Limit Level	1. Notify the ER, IEC, Contractor and EPD. 2. Identify sources. 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 the IEC, ER and Contractor the causes and action taken for the exceedances. 7. Assess the effectiveness of the Contractor's remedial action and keep the IEC, EPD and ER informed of the results. 8. If exceedance stops, cease additional monitoring.	1. Discuss amongst the ER, ET and Contractor on the potential remedial action. 2. Review the Contractor's remedial action whenever necessary to assure their effectiveness and advise the ER accordingly.	1. Confirm receipt of notification of failure in writing. 2. Notify the Contractor. 3. Require the Contractor to propose remedial measures. 4. Ensure remedial measures are properly implemented. 5. If exceedance continues, consider what portion of work is responsible and instruct the Contractor to stop that portion of works until the exceedance is abated.	1. Take immediate action to avoid further exceedance. 2. Submit proposals for remedial action to the IEC and ER within 3 working days of notification. 3. Implement the agreed proposals. 4. Submit further proposals if problems still not under control. 5. Stop the relevant portion of works as determined by the ER until the exceedance is abated.

Notes

(1) ET – Environmental Team, IEC – Independent Environmental Checker;

(2) Each step of action should be undertaken within 1 working day unless otherwise specified

Appendix 6

Implementation Schedule for Environmental Mitigation Measures (EMIS)

EIA Ref.	EM&A Manual Ref.	Environmental Protection Measures	Location/ Duration of Measures/ Timing of Completion of Measures	Implementation Agent	Status
Air Quality					
4.8.2	2.3.1	Dust suppression measures stipulated in the Air Pollution Control (Construction Dust) Regulation and good site practices: • Use of regular watering, to reduce dust emissions from exposed site surfaces and unpaved roads, particularly during dry weather; • Use of frequent watering for particularly dusty construction areas close to ASRs; • 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 should be applied to aggregate fines; • Open temporary stockpiles should be avoided or covered. Prevent placing dusty material storage plies near ASRs; • Tarpaulin covering of all dusty vehicle loads transported to, from and between site locations; • Establishment and use of vehicle wheel and body washing facilities at the exit points of the site; • Imposition of speed controls for vehicles on unpaved site roads. 8 km/hr is the recommended limit; • Routing of vehicles and positioning of construction plant should be at the maximum possible distance from ASRs; • Every stock of more than 20 bags of cement or dry pulverised fuel ash (PFA) , if applicable, should be covered entirely by impervious sheeting or placed in an area sheltered on the top and the 3-sides; and • Loading, unloading, transfer, handling or storage of large amount of cement or dry PFA should be carried out in a totally enclosed system or facility, and nay vent or exhaust should be fitted with the an effective fabric filter or	All work sites	Contractor and sub-contractor(s)	√

EIA Ref.	EM&A Manual Ref.	Environmental Protection Measures	Location/ Duration of Measures/ Timing of Completion of Measures	Implementation Agent	Status
		equivalent air pollution control system.			
Noise					
5.8.3	3.4.1 – 3.4.2	Selection and Optimisation of Construction Processes - Carefully arrange the timing and sequencing of the various construction activities according to the actual site work situation; - Limit the quantity of PME to be operated concurrently; - In the case during school examination, more stringent construction noise criteria should be imposed, the potentially most disruptive construction activities should be avoided, and arranged to be conducted during school holidays as far as practicable; and - Preparation of the Construction Noise Management Plan.	All work sites	Contractor and sub-contractor(s)	√
5.8.4 – 5.8.6	3.4.1 – 3.4.2	Use of QPME and Quiet Working Methods In order to reduce the excessive noise impacts at the NSRs, quieter PME are recommended. Whilst quieter PME are listed, the Contractor may be able to obtain particular models of plant that are quieter than the PMEs given in GW-TM. The associated mitigation measures to the particular PME should be reviewed by the Contractor. The use of plants with SWLs less than those in the GW-TM are summarized in Table 5.14 of the EIA report and the proposed mitigated plant inventory for the	All work sites	Contractor and sub-contractor(s)	√

EIA Ref.	EM&A Manual Ref.	Environmental Protection Measures	Location/ Duration of Measures/ Timing of Completion of Measures	Implementation Agent	Status
		construction works of the proposed Project is detailed in Appendix 5.8 .			
5.8.7 – 5.8.8	3.4.1 – 3.4.2	Use of movable noise barriers The use of movable noise barrier for certain PME could further minimize the construction noise impact. In general 5dB(A) reduction for mobile PME and 10dB(A) for stationary PME can be achieved provided that the direct line-of site of the PME is blocked. The Contractor shall be responsible for the design of the movable noise barrier with due consideration given to the size of the PME and the requirement of intercepting the line of sight between the NSRs and the PME, as well as ensuring that the barriers should have no openings and gaps.	All work sites	Contractor and sub-contractor(s)	√
5.8.9	3.4.1 – 3.4.2	Good site practices • Use of well-maintained and regularly-serviced plant during the works; • Plant operating on intermittent basis should be turned off or throttled down to a minimum; • Plant known to emit noise strongly in one direction should be orientated to face away from the NSRs; • Silencers, mufflers and enclosures for plant should be used where possible and properly maintained throughout the works; • Where possible fixed plants should be sited away from NSRs; and • Stockpiles of excavated materials and other structures such as site buildings should be used effectively to screen noise from the works.	All work sites	Contractor and sub-contractor(s)	√

EIA Ref.	EM&A Manual Ref.	Environmental Protection Measures	Location/ Duration of Measures/ Timing of Completion of Measures	Implementation Agent	Status
Water Quality & Sewerage					
6.9.1	4.4.2	In accordance with Professional Persons Environmental Consultative Committee Practice Notes (ProPECC PN) 1/94, potential water quality impact shall be minimised by the implementation of construction phase mitigation measures and general good site practice including the following: - At the establishment of works site, perimeter cut-off drains to direct off-site water around the Site should be constructed with internal drainage works and erosion and sedimentation control facilities implemented. Channels (both temporary and permanent drainage pipes and culverts), earth bunds or sand bag barriers should be provided to divert the stormwater to silt removal facilities. - Dikes or embankments for flood protection should be implemented around the boundaries of earthwork areas. Temporary ditches should be provided to facilitate the run-off discharge into an appropriate watercourse, through a silt/sediment trap. Silt/sediment traps should also be incorporated in the permanent drainage channels to enhance deposition rates; - The design of efficient silt removal facilities should be based on the guidelines in Appendix A1 of ProPECC PN 1/94, which states that the retention time for silt/sand traps should be 5 minutes under maximum flow conditions. The sizes may vary depending upon the flow rate, but for a flow rate of 0.1m³/s, a sedimentation basin of 30m³ would be required and for a	All work sites	Contractor and sub-contractor(s)	√

EIA Ref.	EM&A Manual Ref.	Environmental Protection Measures	Location/ Duration of Measures/ Timing of Completion of Measures	Implementation Agent	Status
		flow rate of 0.5m³/s the basin would be 150m³. The detailed design of the sand/silt raps should be undertaken by the Contractor prior to the commencement of construction. - The construction works should be programmed to minimise surface excavation works during rainy seasons (April to September), as possible. All exposed earth areas should be completed and vegetated as soon as possible after completion of the earthwork, or alternatively, within 14 days of the cessation of earthworks where practicable. If excavation of soil cannot be avoided during the rainy season, or at any time of year when rainstorms are likely, exposed slope surfaces should be covered by tarpaulin or other means; - The overall slope of works sites should be kept to a minimum to reduce the erosive potential of surface water flows, and all trafficked areas and access roads should be protected by coarse stone ballast. An additional advantage accruing from the use of crushed stone is the positive traction gained during the prolonged periods of inclement weather and the reduction of surface sheet flows; - All drainage facilities and erosion and sediment control structures should be regularly inspected and maintained to ensure their proper and efficient operation at all times particularly following rainstorms. Deposited silts and grits should be removed regularly and disposed of by spreading evenly over stable, vegetated areas; - Measures should be taken to minimise the ingress of site drainage into excavations. If the excavation of trenches in wet season is inevitable, they should be dug and backfilled in short sections wherever practicable. The water pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal facilities; - All open stockpiles of construction materials (for example, aggregates, sand and fill materials) should be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to prevent the washing away of construction materials, soil, silt or debris into any drainage system; - Manholes (including newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction materials			√

EIA Ref.	EM&A Manual Ref.	Environmental Protection Measures	Location/ Duration of Measures/ Timing of Completion of Measures	Implementation Agent	Status
		or debris being washed into the drainage system and storm run-off being directed into foul sewers; • Precautions to be taken at any time of the year when rainstorms are likely, actions to be taken when a rainstorm is imminent or forecasted and during or after rainstorms, are summarised in Appendix A2 of ProPECC PN 1/94. Particular attention should be paid to the control of silty surface run-off during storm events; • All vehicles and plants should be cleaned before leaving the Project site to ensure no earth, mud, debris and the like is deposited by them on roads. An adequately designed and sited wheel washing bay should be provided at the exit of Project site where practicable. Wash-water should have sand and silt settled out and removed at least on a weekly basis to ensure the continued efficiency of the process. The section of access road leading to, and exiting from, the wheel-washing bay to public roads should be paved with sufficient backfall toward the wheel-washing bay to prevent vehicle tracking of soil and silty water to public roads and drains; • Oil interceptors should be provided in the drainage system downstream of any oil/fuel pollution sources. Oil interceptors should be emptied and cleaned regularly to prevent the release of oil and grease into the storm water drainage system after accidental spillage. A bypass should be provided for oil interceptors to prevent flushing during heavy rain. Any drainage channels connecting storm drains via designed sand/silt removal facilities should be disconnected/removed after completion of construction stage to prevent any direct discharge to the stormwater system; • The construction solid waste, debris and rubbish on-site should be collected, handled and disposed of properly to avoid causing any water quality impacts. The requirements for solid waste management are detailed in Section 8 of EIA report; and • All fuel tanks and storage areas should be provided with locks and sited 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 the nearby WSRs.			√

EIA Ref.	EM&A Manual Ref.	Environmental Protection Measures	Location/ Duration of Measures/ Timing of Completion of Measures	Implementation Agent	Status
6.9.3	4.4.3	There is a need to apply to the EPD for a discharge licence for discharge of effluent from the construction site under the WPCO. The discharge quality must meet the requirements as specified in the discharge licence. All the run-off and wastewater generated from the works areas should be treated so that it satisfies all the standards listed in the Technical Memorandum. Minimum distances of 100 m should be maintained between the discharge points of construction site effluent and the existing seawater intakes. In addition, no new effluent discharges in nearby typhoon shelters should be allowed. The beneficial uses of the treated effluent for other on-site activities such as dust suppression, wheel washing and general cleaning etc., would minimise water consumption and reduce the effluent discharge volume.	All work sites	Contractor and sub-contractor(s)	√
6.9.4	4.4.4	Portable chemical toilets and sewage holding tanks are recommended for the handling of the construction sewage generated by the workforce. A licenced contractor should be employed to provide appropriate and adequate portable toilets and be responsible for appropriate disposal and maintenance.	All work sites	Contractor and sub-contractor(s)	√
6.9.6	4.4.5	Any maintenance facilities should be located on hard standings within a bunded area, and sumps and oil interceptors should be provided. Maintenance of vehicles and equipment involving activities with potential for leakage and spillage should be undertaken within the areas appropriately equipped to control these discharges.	All work sites	Contractor and sub-contractor(s)	√
6.9.7	4.4.6	All sewage arising from the proposed Project should be collected and diverted to the public foul water drainage system via proper connections to minimise water quality impact from the operation of the Project and ensure compliance with Technical Memorandum on Standards for Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters under the Water Pollution Control Ordinance (WPCO-TM).	The Government Complex and Vehicle Depot	Contractor and sub-contractor(s), HKPF, FEHD, EMSD and GL	√
6.9.8	4.4.7	Run-offs from the covered areas including vehicle washing bays and vehicle examination / maintenance / repair / testing area would be properly treated prior to discharge into the foul water drainage system. The wastewater treatment	The Government Complex and Vehicle Depot	Contractor and sub-contractor(s)	√

EIA Ref.	EM&A Manual Ref.	Environmental Protection Measures	Location/ Duration of Measures/ Timing of Completion of Measures	Implementation Agent	Status
		facilities for the proposed Project, which comprised of petrol interceptor and sedimentation tank, would be designed using sedimentation process with adequate treatment capacity. Oily waste collected by petrol interceptors is considered and disposed of as chemical waste. The wastewater treatment facilities for the proposed Project will be designed during the detailed design stage and the treated effluent for discharging into the public foul water drainage system should comply with the effluent standards as stated in the WPCO-TM.			
Landscape and Visual					
7.8.2	5.2.1	Hoardings should be provided with aesthetic treatment and designed to be subtle and camouflaged. It should be compatible with the surrounding landscape and visually “impermeable” to block the view of construction activities from VSRs.	All work sites	Contractor and sub-contractor(s)	√
7.8.3	5.2.1	Temporary landscape treatment, such as the provision of temporary landscape planting around the Site office in ornamental pots and application of green roof for Site office, should be considered during construction phase. Landscape planting in movable planters should also be considered as a temporary greening measure for the Project area (i.e. along Site hoarding). Design of the green roof and the type of species to be used shall be reviewed and confirmed during detailed design stage.	All work sites	Contractor and sub-contractor(s)	N/A

EIA Ref.	EM&A Manual Ref.	Environmental Protection Measures	Location/ Duration of Measures/ Timing of Completion of Measures	Implementation Agent	Status
7.8.4	5.2.1	Disturbance to existing vegetation should be avoided as far as practicable. Where possible, the construction programme should retain all trees in situ that are not in direct conflict with the development proposals. Subject to the detailed design of the proposed Project, a review shall be carried out before commencement of construction phase to assess the potential conflict of the construction activities with existing roadside trees and the need of corresponding measures. Proper protective fencing should be provided by the Contractor to protect the preserved trees before commencement of any works within the Project site. The protective fencing should be erected along or beyond the perimeter of the tree protection zone of each individual tree.	All work sites	Contractor and sub-contractor(s)	√

EIA Ref.	EM&A Manual Ref.	Environmental Protection Measures	Location/ Duration of Measures/ Timing of Completion of Measures	Implementation Agent	Status
7.8.7	5.2.1	A multi-patch of landscape area should be provided on the roof of the proposed building to soften the impact of the built structure. An area of approximately 2600m ² of shrub, which comprises of a mix of native and ornamental species, is proposed to be provided to enhance the aesthetics of views for those viewing the roof. The type of shrub species will be confirmed during detailed design stage. The planting should be commenced during construction stage and be completed before the completion of construction stage to ensure the measure will be implemented on Day 1 of operation stage. Vegetation maintenance should be provided by the Operator.	The Government Complex and Vehicle Depot	Contractor and sub-contractor(s), Operator	N/A
7.8.8 7.8.9	5.2.1	The exterior of the permanent structure of the proposed Project should use non-reflective external finishes in light colour that is visually unobtrusive with surrounding context. Non-reflective paving materials should be considered to reduce potential glare from surface reflectance. The finishing material and colour will be reviewed and confirmed during detailed design stage. Lighting should be efficiently designed so that minimum amount of lighting is required for safety and security. The design may make reference to the Guidelines on Industry Best Practices for External Lighting Installations by Environmental Bureau, EPD and EMSD. The mounting height and direction of exterior lighting fixtures shall be designed and arranged to point away from sensitive receivers where possible. Specification of lighting operation schedule shall be formed by the operator to impose restriction on lighting operation after business hours, such as limiting the operation of lighting except for security lighting only, and in areas with necessary night-time operation where applicable.	The Government Complex and Vehicle Depot	Contractor and sub-contractor(s), Operator	N/A

EIA Ref.	EM&A Manual Ref.	Environmental Protection Measures	Location/ Duration of Measures/ Timing of Completion of Measures	Implementation Agent	Status
Waste Management					
8.5.1	6.2.1	Recommendations for good site practices: - The Contractor shall prepare a Waste Management Plan (WMP) in accordance with the requirements set out in the ETWB TCW No. 19/2005, Waste Management on Construction Site, for the Engineer's Representative approval. The WMP shall include monthly and yearly Waste Flow Tables that indicate the amounts of waste generated, recycled and disposed of (including final disposal site); - The Contractor's waste management practices and effectiveness shall be audited by the Engineer's Representative on regular basis; - The Contractor shall provide training for site staff for the concept of site cleanliness and appropriate waste management procedures, including waste reduction, reuse and recycling; - The Contractor shall ensure sufficient waste disposal points and regular collection of waste; - The Contractor shall use trucks with covering for the open-box bed and enclosed container shall be used to minimise windblown litter and dust during transportation of waste; - The Contractor shall implement regular cleaning and maintenance programme for drainage systems, pumps and oil interceptors; - Separation of chemical wastes for special handling and appropriate treatment at a Chemical Waste Treatment Facility (CWTF); - Encourage collection of aluminium cans, paper and plastic bottles by providing separate labelled bins to enable these wastes to be segregated from other general refuse generated by the workforce; - Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal; - Wheel washing facilities shall be used by all trucks leaving the site to prevent transfer of mud onto public roads;	All works sites	Contractor and Sub-contractors	√

EIA Ref.	EM&A Manual Ref.	Environmental Protection Measures	Location/ Duration of Measures/ Timing of Completion of Measures	Implementation Agent	Status
		- Make provisions in contract documents to allow and promote the use of recycled aggregates where appropriate; - No waste shall be burnt on-site; - A recording system for the amount of wastes generated, recycled and disposed (including disposal sites) should be proposed; - Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste; and - Adequate numbers of portable toilets should be provided for on-site workers. Portable toilets should be maintained in reasonable states, which will not deter the workers from utilizing them. Night soil should be regularly collected by licensed collectors.			√
8.5.1	6.2.1	<u>C&D Materials / Waste:</u> - Use standard formwork or pre-fabrication as far as practicable so as to minimise the C&D Materials arising; - Consider the use of more durable formwork or plastic facing for construction works; - Avoid the use of wooden hoardings and substitute with metal hoarding to facilitate recycling; - Purchase of construction materials should be carefully planned in order to avoid over-ordering and wastage; - Establish a trip-ticket system in accordance with DevB TC(W) No. 6/2010 and Waste Disposal (Charges for Disposal of Construction Waste) Regulation in order to monitor the disposal of inert C&D Materials at public fill and the remaining C&D Waste to landfills, and control fly-tipping; - Design foundation works to minimise the amount of excavated material to be generated; - Sort construction debris and excavated materials on-site to recover	All work sites	Contractor and Sub-contractors	√

EIA Ref.	EM&A Manual Ref.	Environmental Protection Measures	Location/ Duration of Measures/ Timing of Completion of Measures	Implementation Agent	Status
		reusable/recyclable portions (i.e. soil, broken concrete, metal, etc.) for backfilling and reinstatement; - Segregate and store different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal; - Specify in design & build contract the use of recycled aggregates where appropriate; - Plan and stock construction materials carefully to minimise the amount of waste to be generated and to avoid unnecessary generation of waste; and - Recommend the use of metal fencing or building panels, which are more durable than wooden panels, for the erection of construction site hoarding.			√
8.5.1	6.2.1	<u>Chemical waste:</u> - Chemical waste producers should be registered with the EPD; - Chemical waste should be handled in accordance with the “Code of Practice on the Packaging, Handling and Storage of Chemical Wastes” including but not limited to the followings: - Good quality containers compatible with the chemical wastes should be used and maintained in good conditions and securely closed, with incompatible chemicals be stored separately. - Appropriate labels should be securely attached on each chemical waste container in English and Chinese according to the instructions prescribed in Schedule 2 of the Regulations. - A licensed collector to transport and dispose of the chemical wastes should be employed by the Contractor, to either the Chemical Waste Treatment Centre at Tsing Yi, or any other licensed facilities. - Waste oils, chemicals or solvents should not be discharged to drain; and - Routine cleaning and maintenance programme for drainage systems, sumps	The Government Complex and Vehicle Depot	Contractor and Sub-contractor; HKPF, FEHD, EMSD and GL	√

EIA Ref.	EM&A Manual Ref.	Environmental Protection Measures	Location/ Duration of Measures/ Timing of Completion of Measures	Implementation Agent	Status
		and oil interceptors during operation.			
8.5.1	6.2.1	<u>General refuse:</u> - Sufficient dustbins should be provided for storage of waste as required under the Public Cleansing and Prevention of Nuisances By-laws; - Sufficient enclosed bins should be provided for general refuse, food and beverage waste to reduce odour, pest and litter impacts; - General refuse arising on-site should be stored in enclosed bins or compaction units separately from C&D and chemical wastes; - A reliable waste collector should be employed to clear general refuse from the construction site on a daily basis and disposed of to the licensed landfill or refuse transfer station; - Office wastes can be reduced by recycling of paper if such volume is sufficiently large to warrant collection. Participation in a local collection scheme by the Contractor should be advocated; and - Waste separation facilities for paper, aluminium cans, plastic bottles, etc. should be provided on-site and collected by individual collectors should be encouraged.	The Government Complex and Vehicle Depot	Contractor and Sub-contractor; HKPF, FEHD, EMSD and GL	√
Hazard to Life					
10.11.1	8.2.1	Recommendations for good site practices in construction phase: - ignition of fire on site should be controlled throughout the construction programme; - any temporary storage of fuel and flammable chemical should be minimised to reduce chance of causing explosion or escalation of fire in the case of emergency event at nearby potentially hazardous sources;	All works area	Contractor and sub-contractors	√

EIA Ref.	EM&A Manual Ref.	Environmental Protection Measures	Location/ Duration of Measures/ Timing of Completion of Measures	Implementation Agent	Status
		- fire extinguisher or other firefighting equipment should be made easily accessible to on-site workers; and - establish communication channel and evacuation plan in the case of emergency event at nearby potentially hazardous sources.			

Remark:

√ Compliance of Mitigation Measures

<> Compliance of Mitigation but need improvement

x Non-compliance of Mitigation Measures

▲ Non-compliance of Mitigation Measures but rectified by Yau Lee Construction, Co, Ltd

Δ Deficiency of Mitigation Measures but rectified by Yau Lee Construction, Co, Ltd

N/A Not Applicable in Reporting Period

Appendix 7

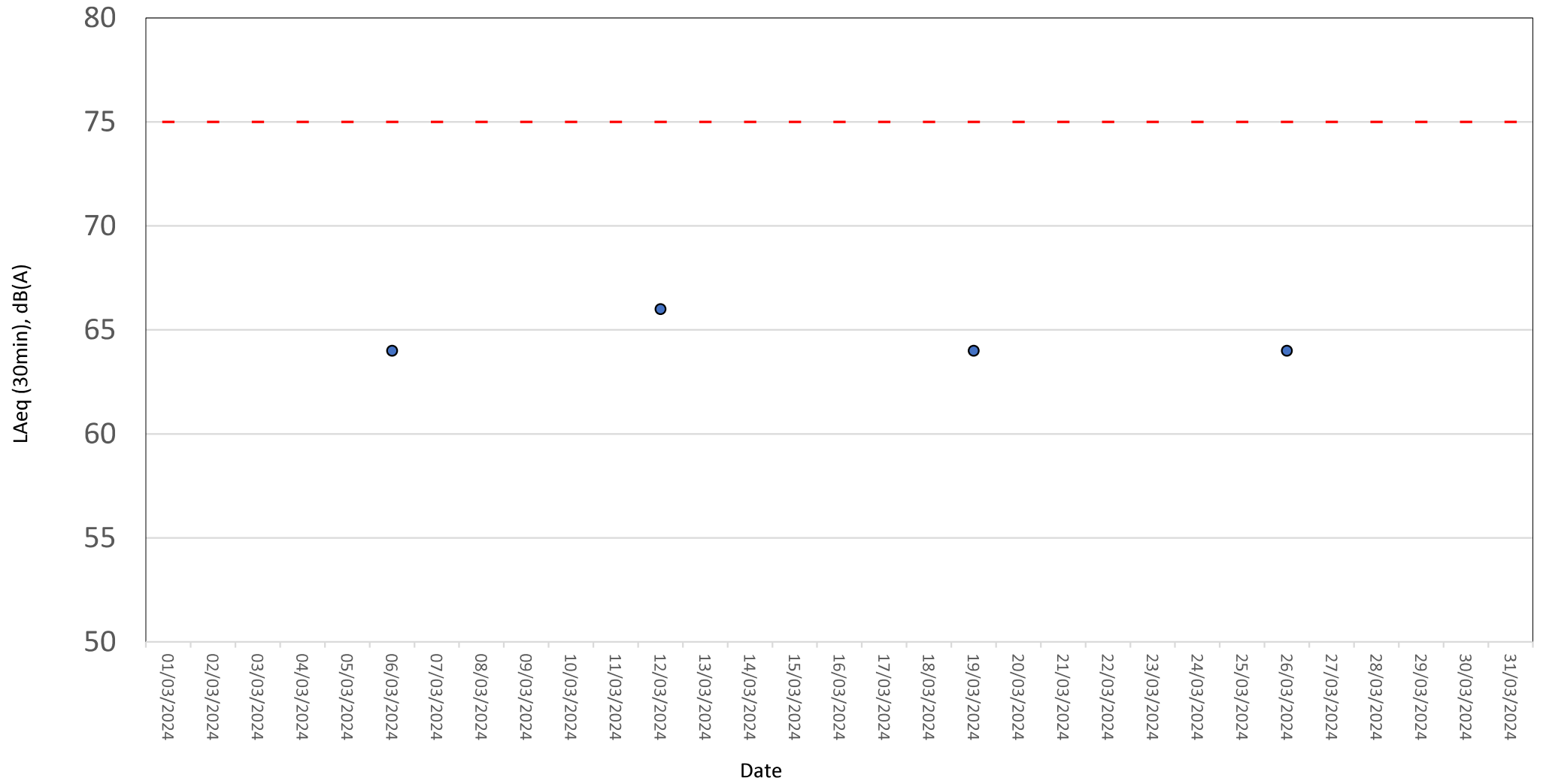
Contract No. SS H504 Design and Construction of Chai Wan Government Complex and Vehicle Depot
Noise Monitoring Data

Date(yyyy-mm-dd)	Station	Start Time	Wind Speed, m/s	1st set 5mins, dB(A)		2nd set 5mins, dB(A)		3rd set 5mins, dB(A)		4th set 5mins, dB(A)		5th set 5mins, dB(A)		6th set 5mins, dB(A)		Measured Noise Level [Construction Noise Level], Leq 30mins,		Unit	Site Observation	Measured Noise Level [Construction Noise Level], dB(A)		Unit	Construction Noise Level #	Unit
2024-03-06	NM1*	14:16	0.5	Leq:	61.8	Leq:	63.3	Leq:	67	Leq:	62.3	Leq:	63.5	Leq:	62.3	Leq:	64	dB(A)	Major: Noise from Yau Lee Site Other: Railway Noise and Traffic Noise.	Leq:	63.77	dB(A)	N.A.	dB(A)
				L10:	65.3	L10:	66.9	L10:	69.4	L10:	65.7	L10:	66.9	L10:	65.7									
				L90:	55.3	L90:	56	L90:	56.6	L90:	55.6	L90:	56.4	L90:	55.1									
2024-03-06	NM2b *	14:11	0.3	Leq:	73.1	Leq:	71.3	Leq:	72.1	Leq:	71.7	Leq:	70.3	Leq:	71.1	Leq:	72^	dB(A)	Major: Noise from Yau Lee Site Other: Traffic Noise.	Leq:	71.69	dB(A)	N.A.	dB(A)
				L10:	76.2	L10:	75.3	L10:	75.5	L10:	75.1	L10:	74.5	L10:	74.6									
				L90:	65.8	L90:	65.3	L90:	64.8	L90:	62.1	L90:	61.3	L90:	62									
2024-03-06	NM3	14:48	0.5	Leq:	68.9	Leq:	68.7	Leq:	70.1	Leq:	70.2	Leq:	69.2	Leq:	69.6	Leq:	69	dB(A)	Major: Noise from Yau Lee Site Other: Noise from Cargo Handling Area.	Leq:	69.49	dB(A)	N.A.	dB(A)
				L10:	70.8	L10:	70.3	L10:	72	L10:	72.1	L10:	70.6	L10:	71.3									
				L90:	66.7	L90:	66.9	L90:	67.7	L90:	67.5	L90:	66.7	L90:	66.6									
2024-03-12	NM1*	14:34	1.1	Leq:	65.8	Leq:	65.8	Leq:	65.7	Leq:	67.9	Leq:	66.1	Leq:	65.6	Leq:	66	dB(A)	Major: Noise from Yau Lee Site Other: Railway Noise and Traffic Noise.	Leq:	66.23	dB(A)	59.83	dB(A)
				L10:	68.2	L10:	68.1	L10:	67.7	L10:	69.8	L10:	67.4	L10:	67.6									
				L90:	62.4	L90:	62.4	L90:	62.4	L90:	63.8	L90:	61.9	L90:	62.8									
2024-03-12	NM2b *	13:59	0.5	Leq:	73.1	Leq:	70.8	Leq:	72.1	Leq:	72.6	Leq:	71.6	Leq:	71.8	Leq:	72^	dB(A)	Major: Noise from Yau Lee Site Other: Traffic Noise.	Leq:	72.06	dB(A)	N.A.	dB(A)
				L10:	76.2	L10:	74	L10:	75.7	L10:	75.1	L10:	73.5	L10:	75.3									
				L90:	66.8	L90:	64.7	L90:	64.9	L90:	65.3	L90:	65.4	L90:	65.8									
2024-03-12	NM3	13:18	0.5	Leq:	65.2	Leq:	64.7	Leq:	65.7	Leq:	65.8	Leq:	66.6	Leq:	66.7	Leq:	66	dB(A)	Major: Noise from Yau Lee Site Other: Noise from Cargo Handling Area.	Leq:	65.84	dB(A)	N.A.	dB(A)
				L10:	66.4	L10:	66.2	L10:	67.4	L10:	67.2	L10:	68.1	L10:	68.1									
				L90:	63.2	L90:	62.7	L90:	63.7	L90:	63.9	L90:	64.6	L90:	65.1									
2024-03-19	NM1*	14:35	0.5	Leq:	64.2	Leq:	63	Leq:	63.6	Leq:	63	Leq:	62.4	Leq:	67.1	Leq:	64	dB(A)	Major: Noise from Yau Lee Site Other: Railway Noise and Traffic Noise.	Leq:	64.20	dB(A)	N.A.	dB(A)
				L10:	67.2	L10:	66.5	L10:	66.9	L10:	66.1	L10:	65.7	L10:	69.2									
				L90:	58.3	L90:	57.9	L90:	56.9	L90:	57.7	L90:	56.5	L90:	58.2									
2024-03-19	NM2b *	14:00	0.3	Leq:	70.9	Leq:	70.8	Leq:	71	Leq:	71.4	Leq:	73.6	Leq:	71.3	Leq:	72^	dB(A)	Major: Noise from Yau Lee Site Other: Traffic Noise.	Leq:	71.62	dB(A)	N.A.	dB(A)
				L10:	74.2	L10:	74.7	L10:	74.7	L10:	74.5	L10:	76.2	L10:	74.9									
				L90:	65.3	L90:	63.2	L90:	63.7	L90:	64.6	L90:	67.3	L90:	64									
2024-03-19	NM3	13:10	0.3	Leq:	65.9	Leq:	64.9	Leq:	65.9	Leq:	67	Leq:	65.7	Leq:	65.6	Leq:	66	dB(A)	Major: Noise from Yau Lee Site Other: Noise from Cargo Handling Area.	Leq:	65.88	dB(A)	N.A.	dB(A)
				L10:	68	L10:	66.7	L10:	67.5	L10:	69.3	L10:	66.8	L10:	66.6									
				L90:	63.2	L90:	63	L90:	63.3	L90:	64	L90:	63.1	L90:	62.4									
2024-03-26	NM1*	14:33	0.3	Leq:	63.7	Leq:	63.5	Leq:	63.5	Leq:	64	Leq:	64.2	Leq:	64.1	Leq:	64	dB(A)	Major: Noise from Yau Lee Site Other: Railway Noise and Traffic Noise.	Leq:	63.84	dB(A)	N.A.	dB(A)
				L10:	66.7	L10:	66.5	L10:	66.4	L10:	68.6	L10:	66.5	L10:	67									
				L90:	58.6	L90:	59.2	L90:	58.3	L90:	59.5	L90:	60.5	L90:	59.6									
2024-03-26	NM2b *	13:57	0.3	Leq:	71.5	Leq:	71.6	Leq:	72.5	Leq:	72.4	Leq:	72.8	Leq:	73.5	Leq:	72^	dB(A)	Major: Noise from Yau Lee Site Other: Traffic Noise.	Leq:	72.44	dB(A)	N.A.	dB(A)
				L10:	74.3	L10:	74.5	L10:	75.3	L10:	75.5	L10:	75.7	L10:	76									
				L90:	67.1	L90:	67.4	L90:	67.4	L90:	66.6	L90:	68.4	L90:	69.6									
2024-03-26	NM3	13:14	0.3	Leq:	67.7	Leq:	73.7	Leq:	72.2	Leq:	73.3	Leq:	69.1	Leq:	72.4	Leq:	72 [68 #]	dB(A)	Major: Noise from Yau Lee Site Other: Noise from Cargo Handling Area.	Leq:	71.89	dB(A)	67.72	dB(A)
				L10:	69.2	L10:	78.2	L10:	78.3	L10:	77.7	L10:	70.5	L10:	77.2									
				L90:	65	L90:	66.5	L90:	67.1	L90:	66.2	L90:	65.8	L90:	65.7									

Remark: * A facade correction of +3 dB(A) was applied to the measured noise level.
On 26 March 2024, the measured noise levels exceeded the noise level of 70dB(A) and they were higher than the baseline level of 69.8 dB(A) for NM3.
Therefore, baseline corrections were carried out and the corrected noise level which solely represent the noise level of Construction works are lower than the noise criteria. As such the EAP was not triggered.
^On 06, 12, 19 and 26 March 2024, the measured noise levels of NM2b exceeded the limit level of 70dB(A). However, they were lower than the baseline level of 73.4 dB(A). Therefore, they are not considered as an limit level exceedance.

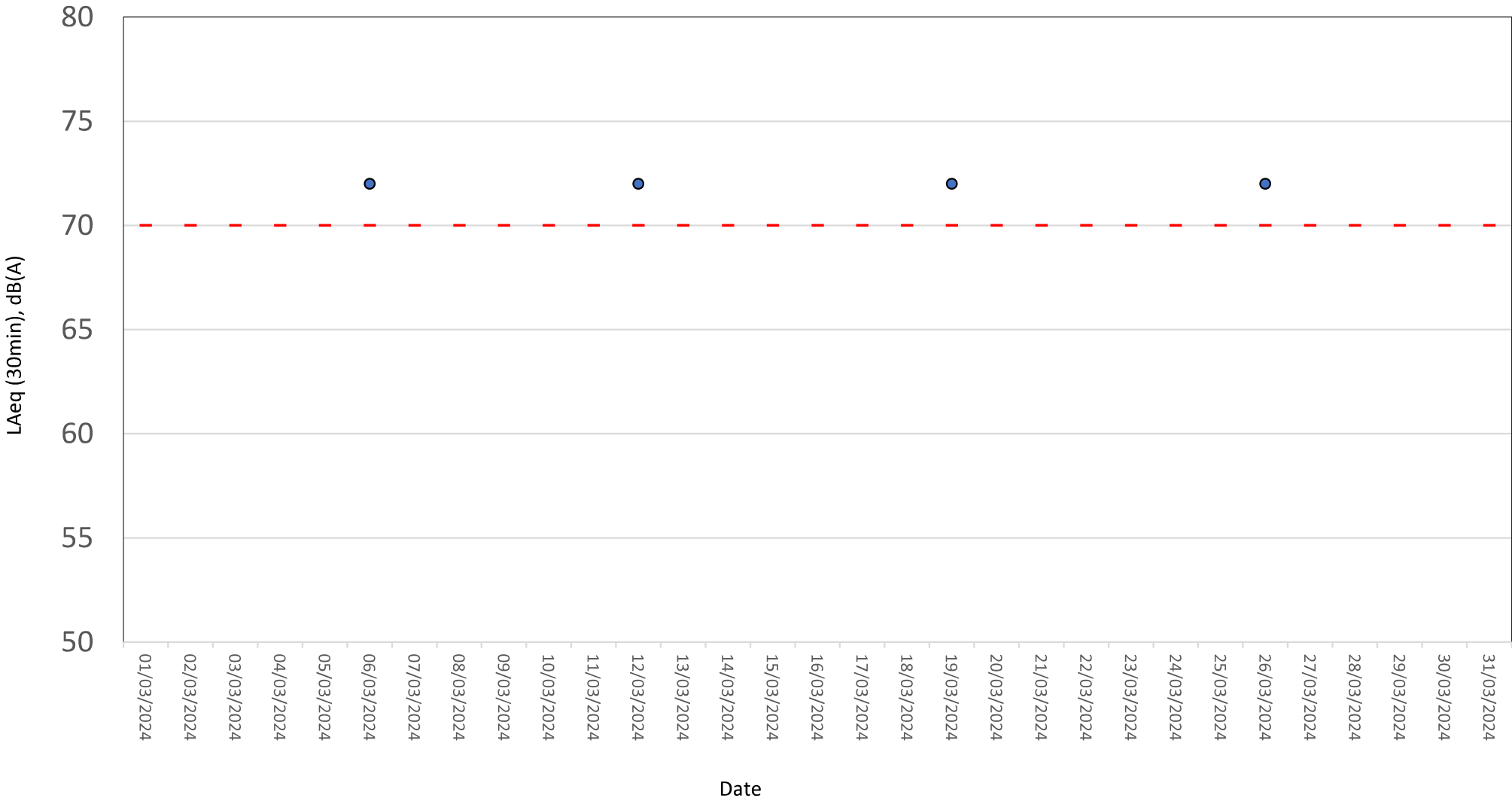
Normal Weekdays Noise Monitoring Results at NM1(Leq, 30min)

● NM1 - Measured Noise Level - Limit Level



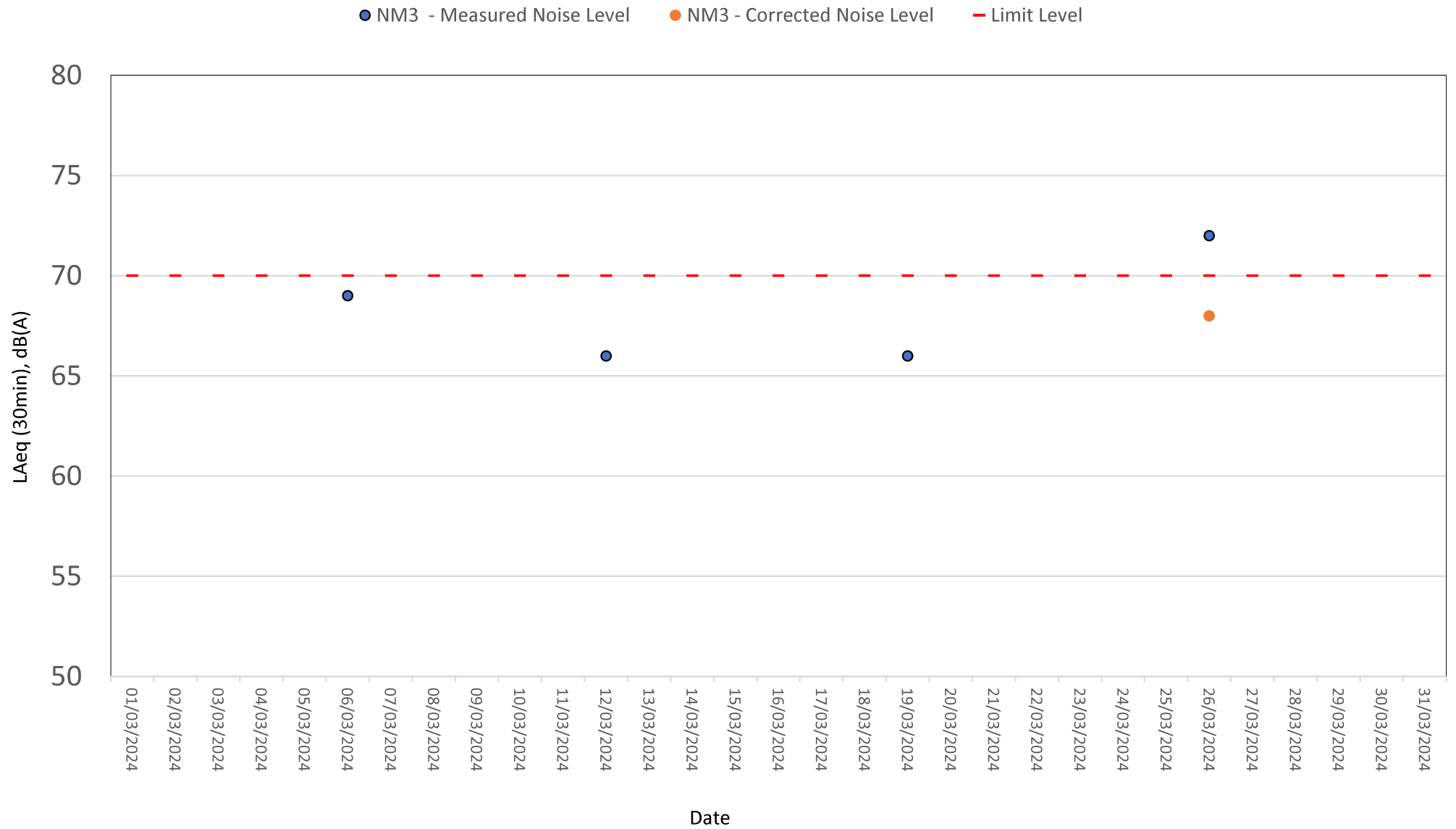
Normal Weekdays Noise Monitoring Results at NM2b(Leq, 30min)

NM2b - Measured Noise Level Limit Level



Remark:
On 06, 12, 19 and 26 March 2024 the measured noise level of NM2b exceeded the limit level of 70dB(A). However, they were lower than the baseline level of 73.4dB(A). Therefore, they are not considered as an limit level exceedance.

Normal Weekdays Noise Monitoring Results at NM3(Leq, 30min)



Remark:

The measured noise level exceeded the noise level of 70dB(A) and it was higher than the baseline level of 69.8dB(A) for NM3, Therefore, baseline correction was corrected noise level which solely represent the noise level of Construction works are lower than the noise criteria. As such the EAP was not triggered.

Appendix 8

Waste Flow Table

Total Quantities of C&D Materials to be Generated from the Contract											
Month	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in Other Projects	Disposed as Public Fill (Inert waste) ¹	Imported Fill	Metals	Timber	Paper / Cardboard Packaging	Plastics	Chemical Waste	Others, e.g. general refuse (Non-inert waste) ²
	(in tonne)	(in tonne)	(in tonne)	(in tonne)	(in tonne)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000L)	(in tonne)
Jul-21	0	0	0	0	0	0	0	0	0	0	0
Aug-21	0	0	0	0	0	0	0	0	0	0	0
Sep-21	0	0	0	0	0	0	0	0	0	0	1.28
Oct-21	0	0	0	0	0	0	0	0	0	0	7.67
Nov-21	0	0	0	0	0	0	6.77	0.055	0	0	1.23
Dec-21	0	0	0	811.54	0	0	0	0	0	0	7.84
Jan-22	0	0	0	3270.8	0	0	0	0	0	0	2.5
Feb-22	0	0	0	2886.66	0	0	0	0	0	0	1.31
Mar-22	0	0	0	3793	0	0	0	0	0	0	3.43
Apr-22	0	0	0	3126.84	0	7.420	0	0	0	0	3.58
May-22	0	0	0	2414.91	0	0	0	0	0	0	3.64
Jun-22	0	0	0	4427.27	0	0	0	0	0	0	2.36
Jul-22	0	0	0	6759.07	0	0	0	0	0	1	4.28

Month	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in Other Projects	Disposed as Public Fill (Inert waste) ¹	Imported Fill	Metals	Timber	Paper / Cardboard Packaging	Plastics	Chemical Waste	Others, e.g. general refuse (Non-inert waste) ²
	(in tonne)	(in tonne)	(in tonne)	(in tonne)	(in tonne)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000L)	(in tonne)
Aug-22	0	0	0	5152.13	0	0	0	0	0	0	1.89
Sep-22	0	0	0	5305.27	0	0	0	0	0	0	8.32
Oct-22	0	0	0	5,120.34	0	0	0	0	0	0	12.84
Nov-22	0	0	0	5733.35	0	0	0	0	0	0	1.75
Dec-22	0	0	0	2063.77	0	0	0	0	0	0	3.02
Jan-23	0	0	0	577.99	0	0	0	0	0	0	17.84
Feb-23	0	0	0	1493.86	0	0	0	0	0	0	45.42
Mar-23	0	0	0	3537.78	0	0	0	0	0	0	9.53
Apr-23	0	0	0	7255.41	0	0	0	0	0	0	7.86
May-23	0	0	0	1788.17	0	0	0	0	0	0	8.7
Jun-23	0	0	0	2005.44	0	0	0	0	0	0	27.29
Jul-23	0	0	0	2950.43	0	0	0	0	0	0.2	19.94
Aug-23	0	0	0	5610.19	0	0	0	0	0	0	26.12
Sep-23	0	0	0	1014.45	0	0	0	0	0	0	26.6
Oct-23	0	0	0	2479.82	0	0	0	0	0	0	31.78

Nov-23	0	0	0	2974.54	0	0	0	0	0	0	135.19
Dec-23	0	0	0	3126.35	0	0	0	0	0	0	59.96
Jan-24	0	0	0	1496.21	0	0	0	0	0	0	54.34
Feb-24	0	0	0	0	0	0	0	0	0	0	37.92
Mar-24	0	0	0	29.22	0	0	0	0	0	0	84.15
Total	0	0	0	89,733.88	0	7.420	6.77	0.055	0	1.2	679.3

Note: 1. Inert waste will be disposed to Chai Wan Public Fill Barging Point (CW-PFBP) or Fill Bank at Tseung Kwan O Area 137(TKO137FB).

2. Non-inert waste (General refuse) will be disposed to North East New Territories Landfill (NENT).

Appendix 9

Inspection Date:	7 March 2024	Inspected By:	Joan Lo
Time:	14:15 – 15:15	Weather Condition:	Cloudy
Participants:	Mr. K.Y Yip (Engineer's Representative); Desmond Ho (Contractor); Echo Hung (IEC); Yohana David Jr. Gbadago (IEC); Joan Lo (ET)		

A	Permits/Licenses	N/A or Not Observed	Yes	No	Remarks / Photo
A1	Are Environmental Permit, license/ other permit displayed at major site exit and vehicle access?	☐	☒	☐	EP No.: EP-505/2015/A
A2	Are Construction Noise Permits available for inspection/posted at site entrance.	☐	☒	☐	CNP No: GW-RS0090-24
A3	Is wastewater discharge licence available for inspection?	☐	☒	☐	
A4	Are trip tickets for chemical waste and construction waste disposal available for inspection?	☐	☒	☐	
A5	Are relevant licence/permit for disposal of construction waste or excavated materials available for inspection?	☐	☒	☐	

B	Air Quality	N/A or Not Observed	Yes	No	Remarks / Photo
B1	Is open burning avoided?	☐	☒	☐	
B2	Are completed earthworks sealed as soon as practicable?	☐	☒	☐	
B3	Are plant and equipment well maintained (i. e. without black smoke from powered plant)?	☐	☒	☐	
B4	Are NRMM labels properly affixed on the PMEs?	☐	☒	☐	
B5	Any remedial action undertaken?	☒	☐	☐	N.A.
B6	Observed dust source(s)				
		☒ Wind erosion			
		☒ Vehicle/ Equipment Movements			
		☐ Loading/ unloading of materials			
		☐ Others: _____			
B7	Are unpaved areas/ designated roads watered regularly to avoid dust generation?	☐	☒	☐	
B8	Are dusty materials covered entirely by impervious sheeting or sprayed with water to maintain the entire surface wet and then removed or backfilled or reinstated where practicable within 24 hours of the excavation or unloading?	☐	☒	☐	
B9	After removal of stockpile, are the remained dusty materials wetted with water and cleared from surface of roads?	☐	☒	☐	
B10	Is the stockpile of dusty materials avoid to be extend beyond the pedestrian barriers, fencing or traffic cones?	☐	☒	☐	

B11	Are loaded dump trucks covered by impervious sheeting appropriately before leaving the site?	☒	☐	☐	N.A.
B12	Are wheel washing facilities with high pressure water jet provided at all site exits if practicable?	☐	☒	☐	
B13	Are all vehicles and plant cleaned before they leave the construction site?	☐	☒	☐	
B14	Are hoarding $\geq 2.4\text{m}$ tall provided beside roads or area with public access?	☐	☒	☐	
B15	Is the portion of any road leading only to construction site (within 30m of a vehicle entrance or exit) kept clear of dusty materials?	☐	☒	☐	
B16	Are surfaces where any pneumatic or power-driven drilling, cutting, polishing or other mechanical breaking operations takes place sprayed with water or a dust suppression chemical continuously?	☐	☒	☐	
B17	Is the area involved demolition activities sprayed with water or a dust suppression chemical immediately prior to, during and immediately after the activities so as to maintain the entire surface wet?	☒	☐	☐	N.A.
B18	Is scaffolding erected around the perimeter of a building under construction?	☐	☒	☐	
B19	Are effective dust screens, sheeting or netting provided to enclose the scaffolding from the ground floor level of the building, or a canopy provided from the first floor level up to the highest level of the scaffolding?	☐	☐	☒	Refer to Observation 1
B20	Is the skip hoist for materials transport enclosed by impervious sheeting?	☒	☐	☐	N.A.
B21	Is every stock of more than 20 bags of cement or dry pulverized fuel ash (PFA) covered entirely by impervious sheeting or placed in an area sheltered on the top and 3 sides?	☒	☐	☐	N.A.
B22	Are the areas of washing facilities and the road section between the washing facilities and the exit point paved with concrete, bituminous materials or hardcores?	☐	☒	☐	
B23	Are cement or dry PFA delivered in bulk stored in a closed silo fitted with an audible high-level alarm which is interlocked with the material filling line and no overfilling is allowed?	☐	☒	☐	
B24	Are the activities of loading, unloading, transfer, handing or storage of bulk cement or dry PFA carried out in a totally enclosed system or facility?	☐	☒	☐	
B25	Is any vent or exhaust fitted with an effective fabric filter or equipment air pollution control system?	☒	☐	☐	N.A.
B26	Is the exposed earth properly treated by compaction, turfing, hydroseeding, vegetation planting or sealing with latex, vinyl, bitumen, shotcrete or other suitable surface stabiliser within six months after last construction activity on the construction site or part of the construction site where the exposed earth lies?	☐	☒	☐	
B27	Are the worksites wetted with water regularly?	☐	☒	☐	
B28	Is generation of dust avoided during loading or unloading?	☐	☒	☐	

B29	Are all trucks loaded to a level within the side and tail boards?	☐	☒	☐	
B30	Are appropriate speed limit sign displayed?	☐	☒	☐	
B31	Are designated roads paved?	☐	☒	☐	
B32	Are site vehicle movements confined to designated roads?	☐	☒	☐	

C	Noise	N/A or Not Observed	Yes	No	Remarks / Photo
C1	Is well-maintained plant operated on-site and plant served regularly?	☐	☒	☐	
C2	Are vehicles and equipment switched off or throttled down while not in use?	☐	☒	☐	
C3	Is the noise directed away from nearby NSRs?	☐	☒	☐	
C4	Are the silencers or mufflers properly fitted on construction equipment and maintained regularly?	☐	☒	☐	
C5	Are mobile and/or noisy plant sited as far away from NSRs as possible and practicable and orientated so that the noise is directed away from nearby NSRs?	☐	☒	☐	
C6	Are material stockpiles, mobile container office and other structures utilised to screen noisy activities?	☒	☐	☐	N.A.
C7	Is temporary hoarding installed located on the site boundaries between noisy construction activities and NSRs?	☐	☒	☐	
C8	Are noise barriers (typically density @14kg/m ²) acoustic mat or full enclosure close to noise plants including air compressor, generators and saw etc. provided to protect NSRs?	☐	☒	☐	
C9	Is the sequencing operation of construction plants where practicable?	☐	☒	☐	
C10	Is the hoarding maintained properly?	☐	☒	☐	
C11	Do air compressors have valid noise labels?	☐	☒	☐	
C12	Are compressor operated with doors closed?	☐	☒	☐	
C13	QPME used with valid noise labels?	☐	☒	☐	
C14	Major noise source(s)				
		☐ Traffic			
		☒ Construction activities inside of site			
		☐ Construction activities outside of site			
		☐ Others: _____			

D	Water Quality	N/A or Not Observed	Yes	No	Remarks / Photo
Construction Activities					
D1	Are catchpits and perimeter channels constructed in advance of site formation works and earthworks?	☐	☒	☐	
D2	Is wastewater from temporary site facilities controlled to prevent direct discharge to surface or marine water?	☐	☒	☐	
D3	Is minimise surface excavation works during rainy seasons (April to September), as possible?	☐	☒	☐	
D4	Is the storm drainage directed to storm drains via adequately designed sand/ silt removal facilities e.g. sand traps, silt?	☐	☒	☐	
D5	Are channels, earth bunds or sandbag barriers provided on site to properly direct stormwater to such silt removal facilities?	☐	☒	☐	
D6	Are the silt removal facilities, channels and manholes maintained regularly?	☐	☒	☐	
D7	Are the temporary access roads surfaced with crushed stone or gravel?	☐	☒	☐	
D8	Is the deposited silt and grit removed regularly?	☐	☒	☐	
D9	Is rainwater pumped out from trenches discharged into storm drains via silt system?	☐	☒	☐	
D10	Are measures taken to prevent the washout of construction materials, soil, silt or debris into any drainage system?	☐	☒	☐	
D11	Are open stockpiles of construction materials e.g. aggregates and sand on site covered with tarpaulin or similar fabric during rainstorms?	☐	☒	☐	
D12	Are manholes adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage?	☐	☒	☐	
D13	Are the discharges of surface run-off into foul sewer always prevented?	☐	☒	☐	
D14	Is a wheel washing bay provided at every site exit?	☐	☒	☐	
D15	Is the wheel wash overflow directed to silt removal facilities before being discharged to the storm drain?	☐	☒	☐	
D16	Is the section of construction road between the wheel washing bay and the public road surfaced with crushed stone or coarse gravel?	☐	☒	☐	
D17	Is wastewater generated from concreting, plastering, internal decoration, cleaning work and other similar activities screened to remove large objects?	☒	☐	☐	N.A.
D18	Are the vehicle and plant serving areas, vehicle wash bays and lubrication facilities located under roofed areas?	☐	☒	☐	
D19	Is leakage or spillages contained and cleaned up immediately?	☐	☒	☐	
D20	Does the surface runoff from bunded areas pass through oil/grease traps prior to discharge to the storm water system?	☒	☐	☐	N.A.

D21	Are site drainage systems provided over the entire project site with sediment control facilities?	☐	☒	☐	
D22	Are sedimentation tanks or package treatment systems provided to treat the large amount of sediment-laden wastewater generated from wheel washing, site runoff and construction works?	☐	☒	☐	
D23	Is the generated wastewater with high concentrations of SS collected to the sedimentation tanks or package treatment systems for proper treatment prior to disposal?	☐	☒	☐	
D24	Is the treated wastewater reused for vehicle washing, dust suppression and general cleaning?	☐	☒	☐	
D25	Is the sewage generated from toilets collected using a temporary storage system?	☐	☒	☐	
D26	Is there any sediment plume observed in nearby watercourses?	☐	☐	☒	
D27	Are slit-grease traps deployed to prevent a direct input of road surface runoff to the marine waters?	☒	☐	☐	N.A.

E	Waste / Chemical Management	N/A or Not Observed	Yes	No	Remarks / Photo
General Waste					
E1	Is the general waste generated on-site stored in enclosed bins or compaction units separately from the construction and chemical wastes?	☐	☐	☒	Refer to Observation 2
E2	Is the general waste collected properly by using the waste separation facilities for paper, aluminium cans, plastic bottles etc.?	☐	☒	☐	
E3	Does accumulation of waste avoid?	☐	☒	☐	
E4	Is waste disposed regularly?	☐	☒	☐	
Construction Waste					
E5	Are the temporary stockpiles maintained regularly?	☐	☒	☐	
E6	Is the excavated fill material reused for backfilling and reinstatement?	☐	☒	☐	
E7	Are the C&D materials sorted and recycled on-site?	☐	☒	☐	
E8	Is there any contract documents provided to allow and promote the use of recycled aggregates where appropriate?	☒	☐	☐	Not Observed.
E9	Is the disposal of C&D materials avoided onto any sensitive locations e.g. agricultural lands etc.?	☒	☐	☐	N.A.
E10	Are the public fill and C&D waste segregated and stored in different containers or skips to enhance reuse or recycling of materials and their proper disposal?	☐	☒	☐	
E11	Is the durable formwork or plastic facing for construction works used?	☒	☐	☐	N.A.
E12	Do the wooden hoardings avoid to be used?	☐	☒	☐	
E13	Is metal hoarding used to enhance the possibility of recycling?	☐	☒	☐	
E14	Is the segregation and storage of C&D wastes undertaken in designated are?	☐	☒	☐	

E15	Are waste storage area properly cleaned and do not cause windblown litter and dust nuisance?	☐	☒	☐	
E16	Do the excavated materials appear contaminated?	☐	☐	☒	
E17	If suspected contaminated, appropriate procedures followed?	☒	☐	☐	N.A.

Chemical / Fuel Storage Area

E18	Are the fuel tanks and chemical storage areas provided with locks and sited on sealed areas?	☐	☒	☐	
E19	Are the storage area enclosed 3 sides by walls/ fence of ≥2m tall and bounded with adequate bund capacity (>110% of largest container) or do the storage area allow storage of 20% of total volume of waste?	☐	☒	☐	
E20	Are the storage areas labelled and separated (if needed)?	☐	☒	☐	
E21	Do the storage areas have adequate ventilation and be covered to prevent rainfall entering?	☐	☒	☐	
E22	Are the containers used for the storage of chemical wastes suitable for the substance that are holding, resist to corrosion, maintained in a good condition, and securely closed?	☐	☒	☐	
E23	If no specification has been approved by EPD, are container with <450L capacity provided for storage of chemicals waste?	☐	☒	☐	

Chemical Waste / Waste Oil

E24	Is chemical waste or waste oil stored and labelled in English and Chinese properly in designated area?	☐	☒	☐	
E25	Are chemicals and waste oil recycled or disposed properly?	☐	☒	☐	
E26	Is waste oil collected and stored for recycling or disposal?	☐	☒	☐	

Records

E27	Is a licensed waste haulier used for waste collection?	☐	☒	☐	
E28	Are the records of quantities of wastes generated, recycled, and disposed properly kept?	☐	☒	☐	
E29	For the demolition material/ waste, is the number of loads for each day recorded as appropriate?	☒	☐	☐	N.A.

F	Landscape and Visual Impacts	N/A or Not Observed	Yes	No	Remarks / Photo
F1	Is the work site confined within site boundaries?	☐	☒	☐	
F2	Is damage to surrounding areas avoided?	☐	☒	☐	
F3	Is the hoardings with aesthetic treatment provided and designed to be subtle and camouflaged?	☐	☒	☐	
F4	Is the temporary landscape treatment provided (such as the provision of temporary landscape planting around the Site office in ornamental pots and application of green roof for Site office)?	☐	☒	☐	
F5	Are the protective fencing erected along or beyond the perimeter of the tree protection zone of each individual tree?	☒	☐	☐	To be implemented before demolition of hoarding

G	Environmental Complaint	N/A or Not Observed	Yes	No	Remarks / Photo
G1	Number of Environmental Complaint received from 11/11/2021 to 07/03/2024	☐	☐	☒	

H	General Housekeeping	N/A or Not Observed	Yes	No	Remarks / Photo
H1	Are potential stagnant pools cleared and mosquito breeding prevented?	☐	☒	☐	
H2	Are the defined boundaries of working areas identified to prevent loss of vegetation	☐	☒	☐	

I	Others	N/A or Not Observed	Yes	No	Remarks / Photo
I1	Are the portable toilets maintained in a state, which will not deter the workers from utilizing these portable toilets?	☐	☒	☐	

Follow up action for previous Site Inspection:

22 February 2024 Observation

1. The general waste was disposed. (Photo F1)
2. The chemical containers were removed and stored in the chemical cabinet. (Photo F2-3)

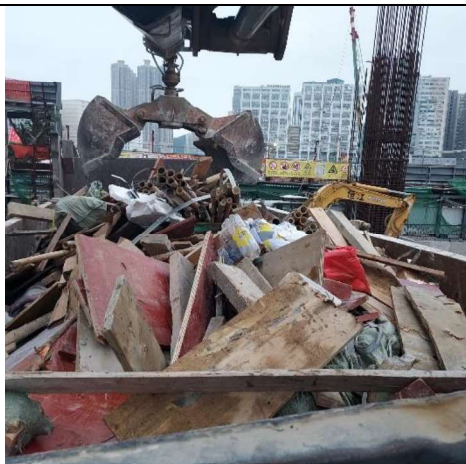


Photo F1



Photo F2



Photo F3

Observation(s):

1. Ineffective dust sheets, sheeting or netting of scaffolding is observed. (Photo 1-2)
2. The general waste shall be collected in the enclosed bins properly. (Photo 2-3)



Photo 1

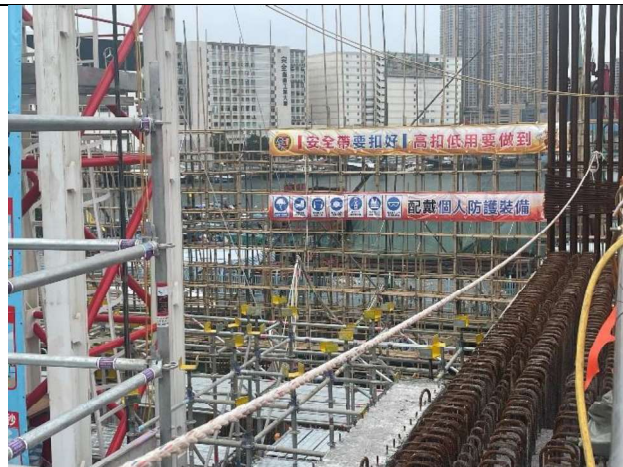


Photo 2



Photo 3

Corrective Actions – Mitigation Measures Implemented or Proposed (if any):

1. The contractor has been advised that the effective dust screens, sheeting or netting should be provided to enclose the scaffolding.
2. The contractor has been reminded that the sufficient enclosed bins should be provided to collect the general waste properly.

	Environmental Team Representative:	IEC's Representative:	Contractor's Representative:	Engineer's Representative
Signature:				
Name:	Joan Lo	Echo Hung	Desmond Ho	K.Y. YIP (SUPD/ACW) for SUPD/COW
Date:	7 March 2024	7 March 2024	7 March 2024	7 March 2024

Inspection Date:	14 March 2024	Inspected By:	Joan Lo
Time:	15:00 – 16:00	Weather Condition:	Cloudy
Participants:	Mr. K.Y Yip (Engineer's Representative); Desmond Ho (Contractor); Joan Lo (ET)		

A	Permits/Licenses	N/A or Not Observed	Yes	No	Remarks / Photo
A1	Are Environmental Permit, license/ other permit displayed at major site exit and vehicle access?	☐	☒	☐	EP No.: EP-505/2015/A
A2	Are Construction Noise Permits available for inspection/posted at site entrance.	☐	☒	☐	CNP No: GW-RS0090-24
A3	Is wastewater discharge licence available for inspection?	☐	☒	☐	
A4	Are trip tickets for chemical waste and construction waste disposal available for inspection?	☐	☒	☐	
A5	Are relevant licence/permit for disposal of construction waste or excavated materials available for inspection?	☐	☒	☐	

B	Air Quality	N/A or Not Observed	Yes	No	Remarks / Photo
B1	Is open burning avoided?	☐	☒	☐	
B2	Are completed earthworks sealed as soon as practicable?	☐	☒	☐	
B3	Are plant and equipment well maintained (i. e. without black smoke from powered plant)?	☐	☒	☐	
B4	Are NRMM labels properly affixed on the PMEs?	☐	☒	☐	
B5	Any remedial action undertaken?	☒	☐	☐	N.A.
B6	Observed dust source(s)				
		☒ Wind erosion			
		☒ Vehicle/ Equipment Movements			
		☐ Loading/ unloading of materials			
		☐ Others: _____			
B7	Are unpaved areas/ designated roads watered regularly to avoid dust generation?	☐	☒	☐	
B8	Are dusty materials covered entirely by impervious sheeting or sprayed with water to maintain the entire surface wet and then removed or backfilled or reinstated where practicable within 24 hours of the excavation or unloading?	☐	☒	☐	
B9	After removal of stockpile, are the remained dusty materials wetted with water and cleared from surface of roads?	☐	☒	☐	
B10	Is the stockpile of dusty materials avoid to be extend beyond the pedestrian barriers, fencing or traffic cones?	☐	☒	☐	
B11	Are loaded dump trucks covered by impervious	☒	☐	☐	N.A.

	sheeting appropriately before leaving the site?				
B12	Are wheel washing facilities with high pressure water jet provided at all site exits if practicable?	☐	☒	☐	
B13	Are all vehicles and plant cleaned before they leave the construction site?	☐	☒	☐	
B14	Are hoarding $\geq 2.4\text{m}$ tall provided beside roads or area with public access?	☐	☒	☐	
B15	Is the portion of any road leading only to construction site (within 30m of a vehicle entrance or exit) kept clear of dusty materials?	☐	☒	☐	
B16	Are surfaces where any pneumatic or power-driven drilling, cutting, polishing or other mechanical breaking operations takes place sprayed with water or a dust suppression chemical continuously?	☐	☒	☐	
B17	Is the area involved demolition activities sprayed with water or a dust suppression chemical immediately prior to, during and immediately after the activities so as to maintain the entire surface wet?	☒	☐	☐	N.A.
B18	Is scaffolding erected around the perimeter of a building under construction?	☐	☒	☐	
B19	Are effective dust screens, sheeting or netting provided to enclose the scaffolding from the ground floor level of the building, or a canopy provided from the first floor level up to the highest level of the scaffolding?	☐	☒	☐	
B20	Is the skip hoist for materials transport enclosed by impervious sheeting?	☒	☐	☐	N.A.
B21	Is every stock of more than 20 bags of cement or dry pulverized fuel ash (PFA) covered entirely by impervious sheeting or placed in an area sheltered on the top and 3 sides?	☒	☐	☐	N.A.
B22	Are the areas of washing facilities and the road section between the washing facilities and the exit point paved with concrete, bituminous materials or hardcores?	☐	☒	☐	
B23	Are cement or dry PFA delivered in bulk stored in a closed silo fitted with an audible high-level alarm which is interlocked with the material filling line and no overfilling is allowed?	☐	☒	☐	
B24	Are the activities of loading, unloading, transfer, handing or storage of bulk cement or dry PFA carried out in a totally enclosed system or facility?	☐	☒	☐	
B25	Is any vent or exhaust fitted with an effective fabric filter or equipment air pollution control system?	☒	☐	☐	N.A.
B26	Is the exposed earth properly treated by compaction, turfing, hydroseeding, vegetation planting or sealing with latex, vinyl, bitumen, shotcrete or other suitable surface stabiliser within six months after last construction activity on the construction site or part of the construction site where the exposed earth lies?	☐	☒	☐	
B27	Are the worksites wetted with water regularly?	☐	☒	☐	
B28	Is generation of dust avoided during loading or unloading?	☐	☒	☐	

B29	Are all trucks loaded to a level within the side and tail boards?	☐	☒	☐	
B30	Are appropriate speed limit sign displayed?	☐	☒	☐	
B31	Are designated roads paved?	☐	☒	☐	
B32	Are site vehicle movements confined to designated roads?	☐	☒	☐	

C	Noise	N/A or Not Observed	Yes	No	Remarks / Photo
C1	Is well-maintained plant operated on-site and plant served regularly?	☐	☒	☐	
C2	Are vehicles and equipment switched off or throttled down while not in use?	☐	☒	☐	
C3	Is the noise directed away from nearby NSRs?	☐	☒	☐	
C4	Are the silencers or mufflers properly fitted on construction equipment and maintained regularly?	☐	☒	☐	
C5	Are mobile and/or noisy plant sited as far away from NSRs as possible and practicable and orientated so that the noise is directed away from nearby NSRs?	☐	☒	☐	
C6	Are material stockpiles, mobile container office and other structures utilised to screen noisy activities?	☒	☐	☐	N.A.
C7	Is temporary hoarding installed located on the site boundaries between noisy construction activities and NSRs?	☐	☒	☐	
C8	Are noise barriers (typically density @14kg/m ²) acoustic mat or full enclosure close to noise plants including air compressor, generators and saw etc. provided to protect NSRs?	☐	☒	☐	
C9	Is the sequencing operation of construction plants where practicable?	☐	☒	☐	
C10	Is the hoarding maintained properly?	☐	☒	☐	
C11	Do air compressors have valid noise labels?	☐	☒	☐	
C12	Are compressor operated with doors closed?	☐	☒	☐	
C13	QPME used with valid noise labels?	☐	☒	☐	
C14	Major noise source(s)	☐ Traffic ☒ Construction activities inside of site ☐ Construction activities outside of site ☐ Others: _____			

D	Water Quality	N/A or Not Observed	Yes	No	Remarks / Photo
Construction Activities					
D1	Are catchpits and perimeter channels constructed in advance of site formation works and earthworks?	☐	☒	☐	
D2	Is wastewater from temporary site facilities controlled to prevent direct discharge to surface or marine water?	☐	☒	☐	
D3	Is minimise surface excavation works during rainy seasons (April to September), as possible?	☐	☒	☐	
D4	Is the storm drainage directed to storm drains via adequately designed sand/ silt removal facilities e.g. sand traps, silt?	☐	☒	☐	
D5	Are channels, earth bunds or sandbag barriers provided on site to properly direct stormwater to such silt removal facilities?	☐	☒	☐	
D6	Are the silt removal facilities, channels and manholes maintained regularly?	☐	☒	☐	
D7	Are the temporary access roads surfaced with crushed stone or gravel?	☐	☒	☐	
D8	Is the deposited silt and grit removed regularly?	☐	☒	☐	
D9	Is rainwater pumped out from trenches discharged into storm drains via silt system?	☐	☒	☐	
D10	Are measures taken to prevent the washout of construction materials, soil, silt or debris into any drainage system?	☐	☒	☐	
D11	Are open stockpiles of construction materials e.g. aggregates and sand on site covered with tarpaulin or similar fabric during rainstorms?	☐	☒	☐	
D12	Are manholes adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage?	☐	☒	☐	
D13	Are the discharges of surface run-off into foul sewer always prevented?	☐	☒	☐	
D14	Is a wheel washing bay provided at every site exit?	☐	☒	☐	
D15	Is the wheel wash overflow directed to silt removal facilities before being discharged to the storm drain?	☐	☒	☐	
D16	Is the section of construction road between the wheel washing bay and the public road surfaced with crushed stone or coarse gravel?	☐	☒	☐	
D17	Is wastewater generated from concreting, plastering, internal decoration, cleaning work and other similar activities screened to remove large objects?	☒	☐	☐	N.A.
D18	Are the vehicle and plant serving areas, vehicle wash bays and lubrication facilities located under roofed areas?	☐	☒	☐	
D19	Is leakage or spillages contained and cleaned up immediately?	☐	☒	☐	
D20	Does the surface runoff from bunded areas pass through oil/grease traps prior to discharge to the storm water system?	☒	☐	☐	N.A.

D21	Are site drainage systems provided over the entire project site with sediment control facilities?	☐	☒	☐	
D22	Are sedimentation tanks or package treatment systems provided to treat the large amount of sediment-laden wastewater generated from wheel washing, site runoff and construction works?	☐	☒	☐	
D23	Is the generated wastewater with high concentrations of SS collected to the sedimentation tanks or package treatment systems for proper treatment prior to disposal?	☐	☒	☐	
D24	Is the treated wastewater reused for vehicle washing, dust suppression and general cleaning?	☐	☒	☐	
D25	Is the sewage generated from toilets collected using a temporary storage system?	☐	☒	☐	
D26	Is there any sediment plume observed in nearby watercourses?	☐	☐	☒	
D27	Are slit-grease traps deployed to prevent a direct input of road surface runoff to the marine waters?	☒	☐	☐	N.A.

E	Waste / Chemical Management	N/A or Not Observed	Yes	No	Remarks / Photo
General Waste					
E1	Is the general waste generated on-site stored in enclosed bins or compaction units separately from the construction and chemical wastes?	☐	☒	☐	
E2	Is the general waste collected properly by using the waste separation facilities for paper, aluminium cans, plastic bottles etc.?	☐	☒	☐	
E3	Does accumulation of waste avoid?	☐	☐	☒	Refer to Observation 1
E4	Is waste disposed regularly?	☐	☒	☐	
Construction Waste					
E5	Are the temporary stockpiles maintained regularly?	☐	☒	☐	
E6	Is the excavated fill material reused for backfilling and reinstatement?	☐	☒	☐	
E7	Are the C&D materials sorted and recycled on-site?	☐	☒	☐	
E8	Is there any contract documents provided to allow and promote the use of recycled aggregates where appropriate?	☒	☐	☐	Not Observed.
E9	Is the disposal of C&D materials avoided onto any sensitive locations e.g. agricultural lands etc.?	☒	☐	☐	N.A.
E10	Are the public fill and C&D waste segregated and stored in different containers or skips to enhance reuse or recycling of materials and their proper disposal?	☐	☒	☐	
E11	Is the durable formwork or plastic facing for construction works used?	☒	☐	☐	N.A.
E12	Do the wooden hoardings avoid to be used?	☐	☒	☐	
E13	Is metal hoarding used to enhance the possibility of recycling?	☐	☒	☐	
E14	Is the segregation and storage of C&D wastes undertaken in designated are?	☐	☒	☐	

E15	Are waste storage area properly cleaned and do not cause windblown litter and dust nuisance?	☐	☒	☐	
E16	Do the excavated materials appear contaminated?	☐	☐	☒	
E17	If suspected contaminated, appropriate procedures followed?	☒	☐	☐	N.A.

Chemical / Fuel Storage Area

E18	Are the fuel tanks and chemical storage areas provided with locks and sited on sealed areas?	☐	☒	☐	
E19	Are the storage area enclosed 3 sides by walls/ fence of $\geq 2\text{m}$ tall and bounded with adequate bund capacity ($>110\%$ of largest container) or do the storage area allow storage of 20% of total volume of waste?	☐	☒	☐	
E20	Are the storage areas labelled and separated (if needed)?	☐	☒	☐	
E21	Do the storage areas have adequate ventilation and be covered to prevent rainfall entering?	☐	☒	☐	
E22	Are the containers used for the storage of chemical wastes suitable for the substance that are holding, resist to corrosion, maintained in a good condition, and securely closed?	☐	☒	☐	
E23	If no specification has been approved by EPD, are container with $<450\text{L}$ capacity provided for storage of chemicals waste?	☐	☒	☐	

Chemical Waste / Waste Oil

E24	Is chemical waste or waste oil stored and labelled in English and Chinese properly in designated area?	☐	☒	☐	
E25	Are chemicals and waste oil recycled or disposed properly?	☐	☐	☒	Refer to Observation 2
E26	Is waste oil collected and stored for recycling or disposal?	☐	☒	☐	

Records

E27	Is a licensed waste haulier used for waste collection?	☐	☒	☐	
E28	Are the records of quantities of wastes generated, recycled, and disposed properly kept?	☐	☒	☐	
E29	For the demolition material/ waste, is the number of loads for each day recorded as appropriate?	☒	☐	☐	N.A.

F	Landscape and Visual Impacts	N/A or Not Observed	Yes	No	Remarks / Photo
F1	Is the work site confined within site boundaries?	☐	☒	☐	
F2	Is damage to surrounding areas avoided?	☐	☒	☐	
F3	Is the hoardings with aesthetic treatment provided and designed to be subtle and camouflaged?	☐	☒	☐	
F4	Is the temporary landscape treatment provided (such as the provision of temporary landscape planting around the Site office in ornamental pots and application of green roof for Site office)?	☐	☒	☐	
F5	Are the protective fencing erected along or beyond the perimeter of the tree protection zone of each individual tree?	☒	☐	☐	To be implemented before demolition of hoarding

G	Environmental Complaint	N/A or Not Observed	Yes	No	Remarks / Photo
G1	Number of Environmental Complaint received from 11/11/2021 to 14/03/2024	☐	☐	☒	

H	General Housekeeping	N/A or Not Observed	Yes	No	Remarks / Photo
H1	Are potential stagnant pools cleared and mosquito breeding prevented?	☐	☒	☐	
H2	Are the defined boundaries of working areas identified to prevent loss of vegetation	☐	☒	☐	

I	Others	N/A or Not Observed	Yes	No	Remarks / Photo
I1	Are the portable toilets maintained in a state, which will not deter the workers from utilizing these portable toilets?	☐	☒	☐	

Follow up action for previous Site Inspection:

29 February 2024 Observation

- 1. The general waste was disposed and the site area was cleaned regularly. (Photo F1)
- 2. The chemical containers were removed. (Photo F2-3)

07 March 2024 Observation

- 1. The effective dust sheet of scaffolding was provided. (Photo F4)
- 2. The general waste was disposed in the enclosed bins. (Photo F5)



Photo F1

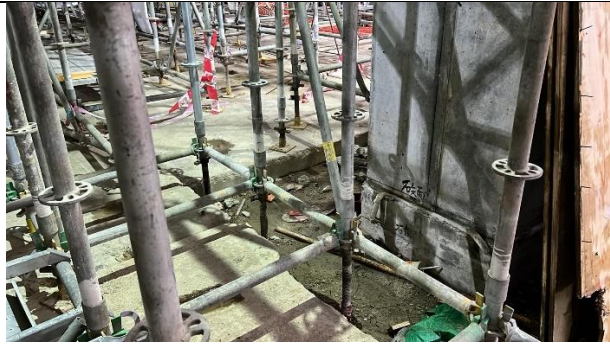


Photo F2



Photo F3



Photo F4



Photo F5

Observation(s):

1. The accumulation of C&D waste is observed. (Photo 1-2)
2. The oil stains are found in the work area. (Photo 2-3)

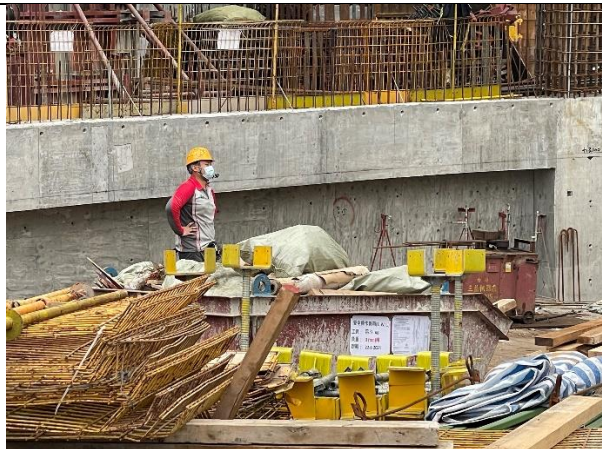


Photo 1



Photo 2

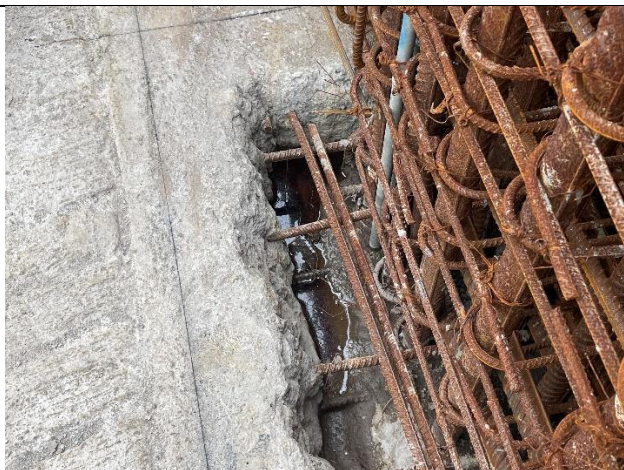


Photo 3

Corrective Actions – Mitigation Measures Implemented or Proposed (if any):

1. The contractor has been advised to provide sufficient waste skip for waste storage and increase the frequency of waste disposal if necessary to avoid waste accumulation.
2. The contractor has been reminded that the oil stains should be cleaned immediately, and disposal of it as chemical wastes.

	Environmental Team Representative:	IEC's Representative:	Contractor's Representative:	Engineer's Representative
Signature:		/		
Name:	Joan Lo	/	Desmond Ho	K.Y. YIP (SUPD/ACW) for SUPD/COW
Date:	14 March 2024	/	14 March 2024	14 March 2024

Inspection Date:	21 March 2024	Inspected By:	Joan Lo
Time:	15:00 – 16:00	Weather Condition:	Sunny
Participants:	Mr. K.Y Yip (Engineer's Representative); Desmond Ho (Contractor); Joan Lo (ET)		

A	Permits/Licenses	N/A or Not Observed	Yes	No	Remarks / Photo
A1	Are Environmental Permit, license/ other permit displayed at major site exit and vehicle access?	☐	☒	☐	EP No.: EP-505/2015/A
A2	Are Construction Noise Permits available for inspection/posted at site entrance.	☐	☒	☐	CNP No: GW-RS0090-24
A3	Is wastewater discharge licence available for inspection?	☐	☒	☐	
A4	Are trip tickets for chemical waste and construction waste disposal available for inspection?	☐	☒	☐	
A5	Are relevant licence/permit for disposal of construction waste or excavated materials available for inspection?	☐	☒	☐	

B	Air Quality	N/A or Not Observed	Yes	No	Remarks / Photo
B1	Is open burning avoided?	☐	☒	☐	
B2	Are completed earthworks sealed as soon as practicable?	☐	☒	☐	
B3	Are plant and equipment well maintained (i. e. without black smoke from powered plant)?	☐	☒	☐	
B4	Are NRMM labels properly affixed on the PMEs?	☐	☐	☒	Refer to Observation 1
B5	Any remedial action undertaken?	☒	☐	☐	N.A.
B6	Observed dust source(s)				
		☒ Wind erosion			
		☒ Vehicle/ Equipment Movements			
		☐ Loading/ unloading of materials			
		☐ Others: _____			
B7	Are unpaved areas/ designated roads watered regularly to avoid dust generation?	☐	☒	☐	
B8	Are dusty materials covered entirely by impervious sheeting or sprayed with water to maintain the entire surface wet and then removed or backfilled or reinstated where practicable within 24 hours of the excavation or unloading?	☐	☒	☐	
B9	After removal of stockpile, are the remained dusty materials wetted with water and cleared from surface of roads?	☐	☒	☐	
B10	Is the stockpile of dusty materials avoid to be extend beyond the pedestrian barriers, fencing or traffic cones?	☐	☒	☐	
B11	Are loaded dump trucks covered by impervious	☒	☐	☐	N.A.

	sheeting appropriately before leaving the site?				
B12	Are wheel washing facilities with high pressure water jet provided at all site exits if practicable?	☐	☒	☐	
B13	Are all vehicles and plant cleaned before they leave the construction site?	☐	☒	☐	
B14	Are hoarding $\geq 2.4\text{m}$ tall provided beside roads or area with public access?	☐	☒	☐	
B15	Is the portion of any road leading only to construction site (within 30m of a vehicle entrance or exit) kept clear of dusty materials?	☐	☒	☐	
B16	Are surfaces where any pneumatic or power-driven drilling, cutting, polishing or other mechanical breaking operations takes place sprayed with water or a dust suppression chemical continuously?	☐	☒	☐	
B17	Is the area involved demolition activities sprayed with water or a dust suppression chemical immediately prior to, during and immediately after the activities so as to maintain the entire surface wet?	☒	☐	☐	N.A.
B18	Is scaffolding erected around the perimeter of a building under construction?	☐	☒	☐	
B19	Are effective dust screens, sheeting or netting provided to enclose the scaffolding from the ground floor level of the building, or a canopy provided from the first floor level up to the highest level of the scaffolding?	☐	☒	☐	
B20	Is the skip hoist for materials transport enclosed by impervious sheeting?	☒	☐	☐	N.A.
B21	Is every stock of more than 20 bags of cement or dry pulverized fuel ash (PFA) covered entirely by impervious sheeting or placed in an area sheltered on the top and 3 sides?	☒	☐	☐	N.A.
B22	Are the areas of washing facilities and the road section between the washing facilities and the exit point paved with concrete, bituminous materials or hardcores?	☐	☒	☐	
B23	Are cement or dry PFA delivered in bulk stored in a closed silo fitted with an audible high-level alarm which is interlocked with the material filling line and no overfilling is allowed?	☐	☒	☐	
B24	Are the activities of loading, unloading, transfer, handing or storage of bulk cement or dry PFA carried out in a totally enclosed system or facility?	☐	☒	☐	
B25	Is any vent or exhaust fitted with an effective fabric filter or equipment air pollution control system?	☒	☐	☐	N.A.
B26	Is the exposed earth properly treated by compaction, turfing, hydroseeding, vegetation planting or sealing with latex, vinyl, bitumen, shotcrete or other suitable surface stabiliser within six months after last construction activity on the construction site or part of the construction site where the exposed earth lies?	☐	☒	☐	
B27	Are the worksites wetted with water regularly?	☐	☒	☐	
B28	Is generation of dust avoided during loading or unloading?	☐	☒	☐	

B29	Are all trucks loaded to a level within the side and tail boards?	☐	☒	☐	
B30	Are appropriate speed limit sign displayed?	☐	☒	☐	
B31	Are designated roads paved?	☐	☒	☐	
B32	Are site vehicle movements confined to designated roads?	☐	☒	☐	

C	Noise	N/A or Not Observed	Yes	No	Remarks / Photo
C1	Is well-maintained plant operated on-site and plant served regularly?	☐	☒	☐	
C2	Are vehicles and equipment switched off or throttled down while not in use?	☐	☒	☐	
C3	Is the noise directed away from nearby NSRs?	☐	☒	☐	
C4	Are the silencers or mufflers properly fitted on construction equipment and maintained regularly?	☐	☒	☐	
C5	Are mobile and/or noisy plant sited as far away from NSRs as possible and practicable and orientated so that the noise is directed away from nearby NSRs?	☐	☒	☐	
C6	Are material stockpiles, mobile container office and other structures utilised to screen noisy activities?	☒	☐	☐	N.A.
C7	Is temporary hoarding installed located on the site boundaries between noisy construction activities and NSRs?	☐	☒	☐	
C8	Are noise barriers (typically density @14kg/m ²) acoustic mat or full enclosure close to noise plants including air compressor, generators and saw etc. provided to protect NSRs?	☐	☒	☐	
C9	Is the sequencing operation of construction plants where practicable?	☐	☒	☐	
C10	Is the hoarding maintained properly?	☐	☒	☐	
C11	Do air compressors have valid noise labels?	☐	☒	☐	
C12	Are compressor operated with doors closed?	☐	☒	☐	
C13	QPME used with valid noise labels?	☐	☒	☐	
C14	Major noise source(s)	☐ Traffic ☒ Construction activities inside of site ☐ Construction activities outside of site ☐ Others: _____			

D	Water Quality	N/A or Not Observed	Yes	No	Remarks / Photo
Construction Activities					
D1	Are catchpits and perimeter channels constructed in advance of site formation works and earthworks?	☐	☒	☐	
D2	Is wastewater from temporary site facilities controlled to prevent direct discharge to surface or marine water?	☐	☒	☐	
D3	Is minimise surface excavation works during rainy seasons (April to September), as possible?	☐	☒	☐	
D4	Is the storm drainage directed to storm drains via adequately designed sand/ silt removal facilities e.g. sand traps, silt?	☐	☒	☐	
D5	Are channels, earth bunds or sandbag barriers provided on site to properly direct stormwater to such silt removal facilities?	☐	☒	☐	
D6	Are the silt removal facilities, channels and manholes maintained regularly?	☐	☒	☐	
D7	Are the temporary access roads surfaced with crushed stone or gravel?	☐	☒	☐	
D8	Is the deposited silt and grit removed regularly?	☐	☒	☐	
D9	Is rainwater pumped out from trenches discharged into storm drains via silt system?	☐	☒	☐	
D10	Are measures taken to prevent the washout of construction materials, soil, silt or debris into any drainage system?	☐	☒	☐	
D11	Are open stockpiles of construction materials e.g. aggregates and sand on site covered with tarpaulin or similar fabric during rainstorms?	☐	☒	☐	
D12	Are manholes adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage?	☐	☒	☐	
D13	Are the discharges of surface run-off into foul sewer always prevented?	☐	☒	☐	
D14	Is a wheel washing bay provided at every site exit?	☐	☒	☐	
D15	Is the wheel wash overflow directed to silt removal facilities before being discharged to the storm drain?	☐	☒	☐	
D16	Is the section of construction road between the wheel washing bay and the public road surfaced with crushed stone or coarse gravel?	☐	☒	☐	
D17	Is wastewater generated from concreting, plastering, internal decoration, cleaning work and other similar activities screened to remove large objects?	☒	☐	☐	N.A.
D18	Are the vehicle and plant serving areas, vehicle wash bays and lubrication facilities located under roofed areas?	☐	☒	☐	
D19	Is leakage or spillages contained and cleaned up immediately?	☐	☒	☐	
D20	Does the surface runoff from bunded areas pass through oil/grease traps prior to discharge to the storm water system?	☒	☐	☐	N.A.

D21	Are site drainage systems provided over the entire project site with sediment control facilities?	☐	☒	☐	
D22	Are sedimentation tanks or package treatment systems provided to treat the large amount of sediment-laden wastewater generated from wheel washing, site runoff and construction works?	☐	☒	☐	
D23	Is the generated wastewater with high concentrations of SS collected to the sedimentation tanks or package treatment systems for proper treatment prior to disposal?	☐	☒	☐	
D24	Is the treated wastewater reused for vehicle washing, dust suppression and general cleaning?	☐	☒	☐	
D25	Is the sewage generated from toilets collected using a temporary storage system?	☐	☒	☐	
D26	Is there any sediment plume observed in nearby watercourses?	☐	☐	☒	
D27	Are slit-grease traps deployed to prevent a direct input of road surface runoff to the marine waters?	☒	☐	☐	N.A.

E	Waste / Chemical Management	N/A or Not Observed	Yes	No	Remarks / Photo
General Waste					
E1	Is the general waste generated on-site stored in enclosed bins or compaction units separately from the construction and chemical wastes?	☐	☐	☒	Refer to Observation 2
E2	Is the general waste collected properly by using the waste separation facilities for paper, aluminium cans, plastic bottles etc.?	☐	☒	☐	
E3	Does accumulation of waste avoid?	☐	☐	☒	Refer to Observation 3
E4	Is waste disposed regularly?	☐	☒	☐	
Construction Waste					
E5	Are the temporary stockpiles maintained regularly?	☐	☒	☐	
E6	Is the excavated fill material reused for backfilling and reinstatement?	☐	☒	☐	
E7	Are the C&D materials sorted and recycled on-site?	☐	☐	☒	Refer to Observation 2
E8	Is there any contract documents provided to allow and promote the use of recycled aggregates where appropriate?	☒	☐	☐	Not Observed.
E9	Is the disposal of C&D materials avoided onto any sensitive locations e.g. agricultural lands etc.?	☒	☐	☐	N.A.
E10	Are the public fill and C&D waste segregated and stored in different containers or skips to enhance reuse or recycling of materials and their proper disposal?	☐	☒	☐	
E11	Is the durable formwork or plastic facing for construction works used?	☒	☐	☐	N.A.
E12	Do the wooden hoardings avoid to be used?	☐	☒	☐	
E13	Is metal hoarding used to enhance the possibility of recycling?	☐	☒	☐	
E14	Is the segregation and storage of C&D wastes undertaken in designated are?	☐	☐	☒	Refer to Observation 2

E15	Are waste storage area properly cleaned and do not cause windblown litter and dust nuisance?	☐	☒	☐	
E16	Do the excavated materials appear contaminated?	☐	☐	☒	
E17	If suspected contaminated, appropriate procedures followed?	☒	☐	☐	N.A.

Chemical / Fuel Storage Area

E18	Are the fuel tanks and chemical storage areas provided with locks and sited on sealed areas?	☐	☒	☐	
E19	Are the storage area enclosed 3 sides by walls/ fence of ≥2m tall and bounded with adequate bund capacity (>110% of largest container) or do the storage area allow storage of 20% of total volume of waste?	☐	☒	☐	
E20	Are the storage areas labelled and separated (if needed)?	☐	☒	☐	
E21	Do the storage areas have adequate ventilation and be covered to prevent rainfall entering?	☐	☒	☐	
E22	Are the containers used for the storage of chemical wastes suitable for the substance that are holding, resist to corrosion, maintained in a good condition, and securely closed?	☐	☒	☐	
E23	If no specification has been approved by EPD, are container with <450L capacity provided for storage of chemicals waste?	☐	☒	☐	

Chemical Waste / Waste Oil

E24	Is chemical waste or waste oil stored and labelled in English and Chinese properly in designated area?	☐	☒	☐	
E25	Are chemicals and waste oil recycled or disposed properly?	☐	☒	☐	
E26	Is waste oil collected and stored for recycling or disposal?	☐	☒	☐	

Records

E27	Is a licensed waste haulier used for waste collection?	☐	☒	☐	
E28	Are the records of quantities of wastes generated, recycled, and disposed properly kept?	☐	☒	☐	
E29	For the demolition material/ waste, is the number of loads for each day recorded as appropriate?	☒	☐	☐	N.A.

F	Landscape and Visual Impacts	N/A or Not Observed	Yes	No	Remarks / Photo
F1	Is the work site confined within site boundaries?	☐	☒	☐	
F2	Is damage to surrounding areas avoided?	☐	☒	☐	
F3	Is the hoardings with aesthetic treatment provided and designed to be subtle and camouflaged?	☐	☒	☐	
F4	Is the temporary landscape treatment provided (such as the provision of temporary landscape planting around the Site office in ornamental pots and application of green roof for Site office)?	☐	☒	☐	
F5	Are the protective fencing erected along or beyond the perimeter of the tree protection zone of each individual tree?	☒	☐	☐	To be implemented before demolition of hoarding

G	Environmental Complaint	N/A or Not Observed	Yes	No	Remarks / Photo
G1	Number of Environmental Complaint received from 11/11/2021 to 21/03/2024	☐	☐	☒	

H	General Housekeeping	N/A or Not Observed	Yes	No	Remarks / Photo
H1	Are potential stagnant pools cleared and mosquito breeding prevented?	☐	☒	☐	
H2	Are the defined boundaries of working areas identified to prevent loss of vegetation	☐	☒	☐	

I	Others	N/A or Not Observed	Yes	No	Remarks / Photo
I1	Are the portable toilets maintained in a state, which will not deter the workers from utilizing these portable toilets?	☐	☒	☐	

Follow up action for previous Site Inspection:

14 March 2024 Observation

1. The accumulation of C&D waste was disposed. (Photo F1)
2. The oil stains were cleaned and disposed of as chemical waste. (Photo F2-3)



Photo F1



Photo F2



Photo F3

Observation(s):

1. NRMM label shall be provide and fix on the forklift. (Photo 1)
2. The general waste and C&D waste shall be collected and stored properly. (Photo 2-3)
3. The accumulation of C&D waste shall be disposed regularly. (Photo 4-6)



Photo 1



Photo 2

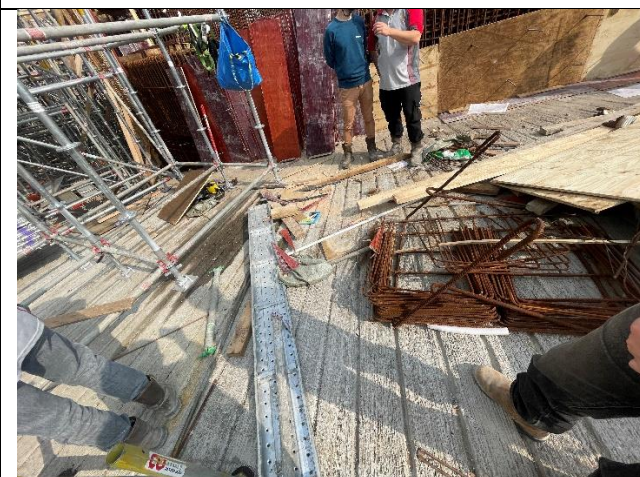


Photo 3



Photo 4



Photo 5



Photo 6

Corrective Actions – Mitigation Measures Implemented or Proposed (if any):

1. The contractor has been reminded to display the NRMM label on the forklift.
2. The contractor has been advised to provide sufficient enclosed bins and waste skips for the proper collection and storage of general waste and C&D waste.
3. The contractor has been recommended to increase the waste disposal frequently if necessary to avoid waste accumulation.

	Environmental Team Representative:	IEC's Representative:	Contractor's Representative:	Engineer's Representative
Signature:		/		
Name:	Joan Lo	/	Desmond Ho	K.Y. YIP (SUPD/ACW) for SUPD/COW
Date:	21 March 2024	/	21 March 2024	21 March 2024

Inspection Date:	28 March 2024	Inspected By:	Joan Lo
Time:	15:00 – 16:00	Weather Condition:	Sunny
Participants:	Mr. K.Y Yip (Engineer's Representative); Desmond Ho (Contractor); Joan Lo (ET)		

A	Permits/Licenses	N/A or Not Observed	Yes	No	Remarks / Photo
A1	Are Environmental Permit, license/ other permit displayed at major site exit and vehicle access?	☐	☒	☐	EP No.: EP-505/2015/A
A2	Are Construction Noise Permits available for inspection/posted at site entrance.	☐	☒	☐	CNP No: GW-RS0090-24
A3	Is wastewater discharge licence available for inspection?	☐	☒	☐	
A4	Are trip tickets for chemical waste and construction waste disposal available for inspection?	☐	☒	☐	
A5	Are relevant licence/permit for disposal of construction waste or excavated materials available for inspection?	☐	☒	☐	

B	Air Quality	N/A or Not Observed	Yes	No	Remarks / Photo
B1	Is open burning avoided?	☐	☒	☐	
B2	Are completed earthworks sealed as soon as practicable?	☐	☒	☐	
B3	Are plant and equipment well maintained (i. e. without black smoke from powered plant)?	☐	☒	☐	
B4	Are NRMM labels properly affixed on the PMEs?	☐	☒	☐	
B5	Any remedial action undertaken?	☒	☐	☐	N.A.
B6	Observed dust source(s)				
		☒ Wind erosion			
		☒ Vehicle/ Equipment Movements			
		☐ Loading/ unloading of materials			
		☐ Others: _____			
B7	Are unpaved areas/ designated roads watered regularly to avoid dust generation?	☐	☒	☐	
B8	Are dusty materials covered entirely by impervious sheeting or sprayed with water to maintain the entire surface wet and then removed or backfilled or reinstated where practicable within 24 hours of the excavation or unloading?	☐	☒	☐	
B9	After removal of stockpile, are the remained dusty materials wetted with water and cleared from surface of roads?	☐	☒	☐	
B10	Is the stockpile of dusty materials avoid to be extend beyond the pedestrian barriers, fencing or traffic cones?	☐	☒	☐	
B11	Are loaded dump trucks covered by impervious	☒	☐	☐	N.A.

	sheeting appropriately before leaving the site?				
B12	Are wheel washing facilities with high pressure water jet provided at all site exits if practicable?	☐	☒	☐	
B13	Are all vehicles and plant cleaned before they leave the construction site?	☐	☒	☐	
B14	Are hoarding $\geq 2.4\text{m}$ tall provided beside roads or area with public access?	☐	☒	☐	
B15	Is the portion of any road leading only to construction site (within 30m of a vehicle entrance or exit) kept clear of dusty materials?	☐	☒	☐	
B16	Are surfaces where any pneumatic or power-driven drilling, cutting, polishing or other mechanical breaking operations takes place sprayed with water or a dust suppression chemical continuously?	☐	☒	☐	
B17	Is the area involved demolition activities sprayed with water or a dust suppression chemical immediately prior to, during and immediately after the activities so as to maintain the entire surface wet?	☒	☐	☐	N.A.
B18	Is scaffolding erected around the perimeter of a building under construction?	☐	☒	☐	
B19	Are effective dust screens, sheeting or netting provided to enclose the scaffolding from the ground floor level of the building, or a canopy provided from the first floor level up to the highest level of the scaffolding?	☐	☒	☐	
B20	Is the skip hoist for materials transport enclosed by impervious sheeting?	☒	☐	☐	N.A.
B21	Is every stock of more than 20 bags of cement or dry pulverized fuel ash (PFA) covered entirely by impervious sheeting or placed in an area sheltered on the top and 3 sides?	☒	☐	☐	N.A.
B22	Are the areas of washing facilities and the road section between the washing facilities and the exit point paved with concrete, bituminous materials or hardcores?	☐	☒	☐	
B23	Are cement or dry PFA delivered in bulk stored in a closed silo fitted with an audible high-level alarm which is interlocked with the material filling line and no overfilling is allowed?	☐	☒	☐	
B24	Are the activities of loading, unloading, transfer, handing or storage of bulk cement or dry PFA carried out in a totally enclosed system or facility?	☐	☒	☐	
B25	Is any vent or exhaust fitted with an effective fabric filter or equipment air pollution control system?	☒	☐	☐	N.A.
B26	Is the exposed earth properly treated by compaction, turfing, hydroseeding, vegetation planting or sealing with latex, vinyl, bitumen, shotcrete or other suitable surface stabiliser within six months after last construction activity on the construction site or part of the construction site where the exposed earth lies?	☐	☒	☐	
B27	Are the worksites wetted with water regularly?	☐	☒	☐	
B28	Is generation of dust avoided during loading or unloading?	☐	☒	☐	

B29	Are all trucks loaded to a level within the side and tail boards?	☐	☒	☐	
B30	Are appropriate speed limit sign displayed?	☐	☒	☐	
B31	Are designated roads paved?	☐	☒	☐	
B32	Are site vehicle movements confined to designated roads?	☐	☒	☐	

C	Noise	N/A or Not Observed	Yes	No	Remarks / Photo
C1	Is well-maintained plant operated on-site and plant served regularly?	☐	☒	☐	
C2	Are vehicles and equipment switched off or throttled down while not in use?	☐	☒	☐	
C3	Is the noise directed away from nearby NSRs?	☐	☒	☐	
C4	Are the silencers or mufflers properly fitted on construction equipment and maintained regularly?	☐	☒	☐	
C5	Are mobile and/or noisy plant sited as far away from NSRs as possible and practicable and orientated so that the noise is directed away from nearby NSRs?	☐	☒	☐	
C6	Are material stockpiles, mobile container office and other structures utilised to screen noisy activities?	☒	☐	☐	N.A.
C7	Is temporary hoarding installed located on the site boundaries between noisy construction activities and NSRs?	☐	☒	☐	
C8	Are noise barriers (typically density @14kg/m ²) acoustic mat or full enclosure close to noise plants including air compressor, generators and saw etc. provided to protect NSRs?	☐	☒	☐	
C9	Is the sequencing operation of construction plants where practicable?	☐	☒	☐	
C10	Is the hoarding maintained properly?	☐	☒	☐	
C11	Do air compressors have valid noise labels?	☐	☒	☐	
C12	Are compressor operated with doors closed?	☐	☒	☐	
C13	QPME used with valid noise labels?	☐	☒	☐	
C14	Major noise source(s)	☐ Traffic ☒ Construction activities inside of site ☐ Construction activities outside of site ☐ Others: _____			

D	Water Quality	N/A or Not Observed	Yes	No	Remarks / Photo
Construction Activities					
D1	Are catchpits and perimeter channels constructed in advance of site formation works and earthworks?	☐	☒	☐	
D2	Is wastewater from temporary site facilities controlled to prevent direct discharge to surface or marine water?	☐	☒	☐	
D3	Is minimise surface excavation works during rainy seasons (April to September), as possible?	☐	☒	☐	
D4	Is the storm drainage directed to storm drains via adequately designed sand/ silt removal facilities e.g. sand traps, silt?	☐	☒	☐	
D5	Are channels, earth bunds or sandbag barriers provided on site to properly direct stormwater to such silt removal facilities?	☐	☒	☐	
D6	Are the silt removal facilities, channels and manholes maintained regularly?	☐	☒	☐	
D7	Are the temporary access roads surfaced with crushed stone or gravel?	☐	☒	☐	
D8	Is the deposited silt and grit removed regularly?	☐	☒	☐	
D9	Is rainwater pumped out from trenches discharged into storm drains via silt system?	☐	☒	☐	
D10	Are measures taken to prevent the washout of construction materials, soil, silt or debris into any drainage system?	☐	☒	☐	
D11	Are open stockpiles of construction materials e.g. aggregates and sand on site covered with tarpaulin or similar fabric during rainstorms?	☐	☒	☐	
D12	Are manholes adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage?	☐	☒	☐	
D13	Are the discharges of surface run-off into foul sewer always prevented?	☐	☒	☐	
D14	Is a wheel washing bay provided at every site exit?	☐	☒	☐	
D15	Is the wheel wash overflow directed to silt removal facilities before being discharged to the storm drain?	☐	☒	☐	
D16	Is the section of construction road between the wheel washing bay and the public road surfaced with crushed stone or coarse gravel?	☐	☒	☐	
D17	Is wastewater generated from concreting, plastering, internal decoration, cleaning work and other similar activities screened to remove large objects?	☒	☐	☐	N.A.
D18	Are the vehicle and plant serving areas, vehicle wash bays and lubrication facilities located under roofed areas?	☐	☒	☐	
D19	Is leakage or spillages contained and cleaned up immediately?	☐	☒	☐	
D20	Does the surface runoff from bunded areas pass through oil/grease traps prior to discharge to the storm water system?	☒	☐	☐	N.A.

D21	Are site drainage systems provided over the entire project site with sediment control facilities?	☐	☒	☐	
D22	Are sedimentation tanks or package treatment systems provided to treat the large amount of sediment-laden wastewater generated from wheel washing, site runoff and construction works?	☐	☒	☐	
D23	Is the generated wastewater with high concentrations of SS collected to the sedimentation tanks or package treatment systems for proper treatment prior to disposal?	☐	☒	☐	
D24	Is the treated wastewater reused for vehicle washing, dust suppression and general cleaning?	☐	☒	☐	
D25	Is the sewage generated from toilets collected using a temporary storage system?	☐	☒	☐	
D26	Is there any sediment plume observed in nearby watercourses?	☐	☐	☒	
D27	Are slit-grease traps deployed to prevent a direct input of road surface runoff to the marine waters?	☒	☐	☐	N.A.

E	Waste / Chemical Management	N/A or Not Observed	Yes	No	Remarks / Photo
General Waste					
E1	Is the general waste generated on-site stored in enclosed bins or compaction units separately from the construction and chemical wastes?	☐	☒	☐	
E2	Is the general waste collected properly by using the waste separation facilities for paper, aluminium cans, plastic bottles etc.?	☐	☒	☐	
E3	Does accumulation of waste avoid?	☐	☒	☐	
E4	Is waste disposed regularly?	☐	☒	☐	
Construction Waste					
E5	Are the temporary stockpiles maintained regularly?	☐	☒	☐	
E6	Is the excavated fill material reused for backfilling and reinstatement?	☐	☒	☐	
E7	Are the C&D materials sorted and recycled on-site?	☐	☒	☐	
E8	Is there any contract documents provided to allow and promote the use of recycled aggregates where appropriate?	☒	☐	☐	Not Observed.
E9	Is the disposal of C&D materials avoided onto any sensitive locations e.g. agricultural lands etc.?	☒	☐	☐	N.A.
E10	Are the public fill and C&D waste segregated and stored in different containers or skips to enhance reuse or recycling of materials and their proper disposal?	☐	☐	☒	Refer to Observation 1
E11	Is the durable formwork or plastic facing for construction works used?	☒	☐	☐	N.A.
E12	Do the wooden hoardings avoid to be used?	☐	☒	☐	
E13	Is metal hoarding used to enhance the possibility of recycling?	☐	☒	☐	
E14	Is the segregation and storage of C&D wastes undertaken in designated area?	☐	☒	☐	

E15	Are waste storage area properly cleaned and do not cause windblown litter and dust nuisance?	☐	☒	☐	
E16	Do the excavated materials appear contaminated?	☐	☐	☒	
E17	If suspected contaminated, appropriate procedures followed?	☒	☐	☐	N.A.

Chemical / Fuel Storage Area

E18	Are the fuel tanks and chemical storage areas provided with locks and sited on sealed areas?	☐	☒	☐	
E19	Are the storage area enclosed 3 sides by walls/ fence of ≥2m tall and bounded with adequate bund capacity (>110% of largest container) or do the storage area allow storage of 20% of total volume of waste?	☐	☒	☐	
E20	Are the storage areas labelled and separated (if needed)?	☐	☒	☐	
E21	Do the storage areas have adequate ventilation and be covered to prevent rainfall entering?	☐	☒	☐	
E22	Are the containers used for the storage of chemical wastes suitable for the substance that are holding, resist to corrosion, maintained in a good condition, and securely closed?	☐	☒	☐	
E23	If no specification has been approved by EPD, are container with <450L capacity provided for storage of chemicals waste?	☐	☒	☐	

Chemical Waste / Waste Oil

E24	Is chemical waste or waste oil stored and labelled in English and Chinese properly in designated area?	☐	☒	☐	
E25	Are chemicals and waste oil recycled or disposed properly?	☐	☒	☐	
E26	Is waste oil collected and stored for recycling or disposal?	☐	☒	☐	

Records

E27	Is a licensed waste haulier used for waste collection?	☐	☒	☐	
E28	Are the records of quantities of wastes generated, recycled, and disposed properly kept?	☐	☒	☐	
E29	For the demolition material/ waste, is the number of loads for each day recorded as appropriate?	☒	☐	☐	N.A.

F	Landscape and Visual Impacts	N/A or Not Observed	Yes	No	Remarks / Photo
F1	Is the work site confined within site boundaries?	☐	☒	☐	
F2	Is damage to surrounding areas avoided?	☐	☒	☐	
F3	Is the hoardings with aesthetic treatment provided and designed to be subtle and camouflaged?	☐	☒	☐	
F4	Is the temporary landscape treatment provided (such as the provision of temporary landscape planting around the Site office in ornamental pots and application of green roof for Site office)?	☐	☒	☐	
F5	Are the protective fencing erected along or beyond the perimeter of the tree protection zone of each individual tree?	☒	☐	☐	To be implemented before demolition of hoarding

G	Environmental Complaint	N/A or Not Observed	Yes	No	Remarks / Photo
G1	Number of Environmental Complaint received from 11/11/2021 to 28/03/2024	☐	☐	☒	

H	General Housekeeping	N/A or Not Observed	Yes	No	Remarks / Photo
H1	Are potential stagnant pools cleared and mosquito breeding prevented?	☐	☒	☐	
H2	Are the defined boundaries of working areas identified to prevent loss of vegetation	☐	☒	☐	

I	Others	N/A or Not Observed	Yes	No	Remarks / Photo
I1	Are the portable toilets maintained in a state, which will not deter the workers from utilizing these portable toilets?	☐	☒	☐	

Follow up action for previous Site Inspection:

Nil

Observation(s):

1. C&D Waste stored on the floor without waste skip. (Photo 1)

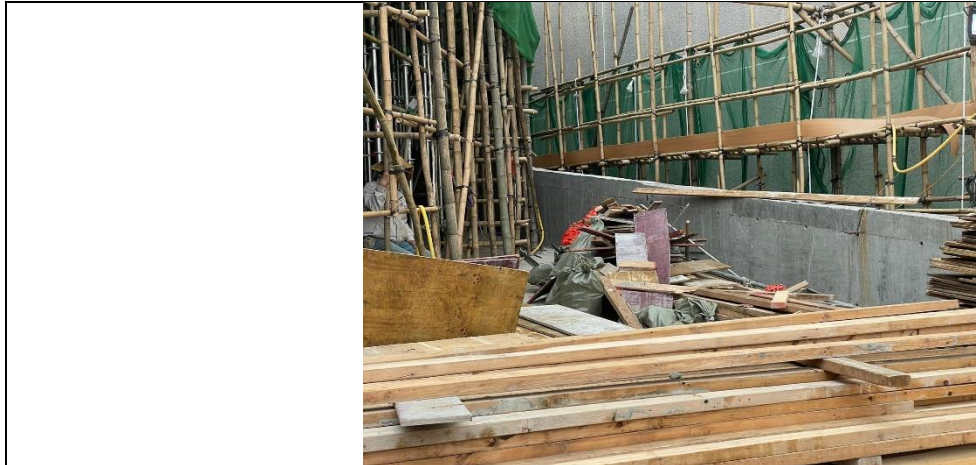


Photo 1

Corrective Actions – Mitigation Measures Implemented or Proposed (if any):

1. The contractor has been recommended to provide the containers or skips to store C&D waste to enhance reuse or recycling of materials and their proper disposal.

	Environmental Team Representative:	IEC's Representative:	Contractor's Representative:	Engineer's Representative
Signature:		/		
Name:	Joan Lo	/	Desmond Ho	K.Y. YIP (SUPD/ACW) for SUPD/COW
Date:	28 March 2024	/	28 March 2024	28 March 2024

Appendix 10

2024		April				
MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
01	02 Noise Monitoring (NM1, NM2b and NM3)	03	04	05	06	07
08	09 Noise Monitoring (NM1, NM2b and NM3)	10	11	12	13	14
15	16 Noise Monitoring (NM1, NM2b and NM3)	17	18	19	20	21
22	23 Noise Monitoring (NM1, NM2b and NM3)	24	25	26	27	28
29	30 Noise Monitoring (NM1, NM2b and NM3)	01	02	03	04	05
06	07	Notes:				

Appendix 11

There was no Notification of Environmental Quality Limits Exceedance in the reporting month.

Prepared by:

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