



Date: 14 February 2024

Your ref:

Our ref: PL-202402017

Architectural Services Department 40/F, Queensway Government offices 66 Queensway, Hong Kong

Attn: Mr. Vincent Kwok

Dear Mr. Kwok.

Re: Contract No. SS K/509

Provision of Independent Environmental Checker Consultancy for Design and Construction of Kong Nga Po Police Training Facilities **Verification of Monthly EM&A Report (January 2024)**

Reference is made to the Monthly EM&A report (January 2024) provided by ET via email on 7 February 2024 and subsequent revision (Version 2) submitted on 14 February 2024.

Please be informed that we have no adverse comments on the revised Monthly EM&A report (January 2024) (Version 2). We hereby verify the submission is in accordance with Condition 3.4 of Environmental Permit No. FEP-01/510/2016.

Thank you for your attention.

Yours sincerely, For and on behalf of Acuity Sustainability Consulting Limited

Ir Y.H .LAW

Malan

Independent Environmental Checker

c.c. Ka Shing Management Consultancy Ltd.

Provision of Environmental Team consultancy for Design and Construction of Kong Nga Po Police Training Facilities (Programme No. 279LP)

Monthly Environmental Monitoring and Audit Report for January 2024 (Version 2)

REMARKS:

The information supplied and contained within this report is, to the best of our knowledge, correct at the time of printing.

Ka Shing accepts no responsibility for changes made to this report by third parties.

Ka Shing Management Consultancy Ltd. www.ka-shign.net Unit 2, 13/F Kai Yue Commercial Building, 2C Argyle St, Mong Kok, Kowloon Our ref: 14-2-2024

14-2-2024

By email: kwokhw@archsd.gov.hk

Architectural Services Department 40/F, High Block, Queensway Government Offices, 66 Queensway, Hong Kong (Attn: Mr. Vincent Kwok)

Dear Mr. Kwok,

Re: Quotation No. PMB202/8480/2022/A01/A

Provision of Environmental Team consultancy for Design and Construction of Kong Nga Po Police Training Facilities (Programme no. 279LP)

-Submission of the monthly EM&A report in January 2024

We refer to the Environmental Permit No. FEP-01/510/2016 for the captioned project.

Subject to the accuracy and authenticity of all the information provided to us, we hereby certify, in accordance with Conditions 3.4 of Environmental Permit No. FEP-01/510/2016, that the information is a representation of what it signifies.

Thank you very much for your attention and please feel free to contact Mr. Lee at 9382 4204 should you require further information.

Yours faithfully,

For and on behalf of Ka Shing Management Consultant Limited

Mr. W. H. Lee

Environmental Team Leader

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EXECUTIVE SUMMARY

Introduction

- 1. This is the 10th monthly Environmental Monitoring and Audit (EM&A) Report for the Project of Police Facilities in Kong Nga Po under Environmental Permit No. FEP-01/510/2016. This report was prepared by Ka Shing Management Consultancy Ltd. (Ka Shing) under "Service Contract Quotation No. PMB202/8480/2022/A01/A Provision of Environmental Team consultancy for Design and Construction of Kong Nga Po Police Training Facilities" (hereinafter called the "Service Contract"). This report documents the findings of Environmental Monitoring and Audit (EM&A) work conducted from 1st to 31st January 2024.
- 2. Part of the construction site was handed over to Architectural Services Department (ArchSD) on 23rd December 2022 whom taken over responsibility for the construction of building works and as maintenance agent for Hong Kong Police Force (HKPF) during operation phase.
- 3. During the reporting month, the following Works Contracts were undertaken for the Project of Police Facilities in Kong Nga Po under Environmental Permit No. FEP-01/510/2016: Contract No. SSK509 - Design and Construction of Kong Nga Po Police Training Facilities

Environmental Monitoring and Audit Progress

4. A summary of the EM&A activities in this reporting month is listed in **Table I** below:

Table I Summary Table for EM&A Activities in the Reporting Month

EM&A Activities	Date
Air Quality Monitoring	03, 09, 15, 19, 24, 30 January 2024
Noise Monitoring	03, 09, 15, 24, 30 January 2024
Ecological Monitoring	30, 31 January 2024
Environmental Site Inspection	02, 09, 16, 24, 30 January 2024
Landscape & Visual Inspection	02, 16, 30 January 2024

Breaches of Action and Limit Levels

5. Summary of the environmental exceedances of the reporting month is tabulated in Table II.

Air Quality

6. All construction air quality monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.

Construction Noise

7. All construction noise monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.

Table II Summary Table for Events Recorded in the Reporting Month

Environmental Monitoring	Parameter		on-Project cceedances	No. of Exceedance related to the Construction Works of the Contract		Action Taken
		Action Level	Limit Level	Action Level	Limit Level	
Air Quality	1-hr TSP	0	0	0	0	N/A
Noise	L _{eq(30min)}	0	0	0	0	N/A

Ecological Monitoring

8. All ecological monitoring was conducted as scheduled in the reporting month. The ecological monitoring result in the reporting month is shown in **Appendix H.**

Environmental Non-Compliance

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

Environmental Complaint

10. No environmental complaint was received in the reporting month. The Complaint Log is presented in **Appendix M**.

Notification of Summons and Successful Prosecutions

11. No notification of summons or successful prosecutions was received in the reporting month.

Reporting Changes

12. A portion of the construction site was transferred to the Architectural Services Department (ArchSD) on December 23rd 2022. ArchSD assumes responsibility for the construction of the building works. The site activities and implementation status of environmental mitigation measures related to ArchSD Contract are presented in this Monthly EM&A Report.

Future Key Issues

- 13. The major site activities for the coming three months include:
 - Open cut excavation
 - Removal of soil
 - Construction of footings
 - Construction of pile cap
 - Mock up construction
 - U.U. Lead in and Pipe Duct Connection
- 14. Potential environmental impacts arising from the above construction activities are mainly associated with construction dust, noise, water quality and waste management. For the details,

please refer to **Appendix A** regarding the anticipated major impacts from the construction works and corresponding recommended mitigation measures.

1 INTRODUCTION

- 1.1 Ka Shing Management Consultancy Ltd. (Ka Shing) was commissioned by the Architectural Services Department (ASD) as the Environmental Team to undertake the Environmental Monitoring and Audit (EM&A) works for the Project of Police Facilities in Kong Nga Po under Environmental Permit No. FEP-01/510/2016 to ensure that the environmental performance of the Works Contracts comply with the requirements specified in the Environmental Permits (EPs), Environmental Impact Assessment (EIA) Report and Environmental Monitoring & Audit (EM&A) Manual of the Police Facilities in Kong Nga Po Project and other relevant statutory requirements.
- 1.2 The major construction works for the Project commenced on 3rd July 2020 and the main site in Kong Nga Po was handed over to Architectural Services Department (ASD) on 23rd December 2022 whom taken over responsibility for the construction of building works and as maintenance agent for Hong Kong Police Force (HKPF) during operation phase.

Purpose of the report

1.3 This is the 10th EM&A Report which summarises the impact monitoring results and audit findings for the EM&A programme during the reporting period from 1st to 31st January 2024.

Structure of the report

- 1.4 The structure of the report is as follows:
 - Section 1: Introduction 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 Permits/Licences during the reporting month.
 - Section 3: Air Quality Monitoring summarises the monitoring parameters, monitoring programmes, monitoring methodologies, monitoring frequencies, monitoring locations, Action and Limit Levels, monitoring results and Event /Action Plans.
 - Section 4: Noise Monitoring summarises the monitoring parameters, monitoring programmes, monitoring methodologies, monitoring frequencies, monitoring locations, Action and Limit Levels, monitoring results and Event/Action Plans.
 - Section 5: Ecological Monitoring summarises the monitoring results of the monthly ecological monitoring undertaken within the reporting month.
 - Section 6: Landscape and Visual Monitoring summarises the audit results of the site inspection undertaken within the reporting month.
 - Section 7: Environmental Site Inspection summarises the audit findings of the weekly site inspections undertaken within the reporting month.
 - Section 8: Environmental Non-conformance summarises any monitoring exceedance, environmental complaints, environmental summons and successful prosecutions within the reporting month.

Section 9: Future Key Issues – summarises the impact forecast for the next three months and monitoring schedule in the next month.

Section 10: Conclusions and Recommendations

2 PROJECT INFORMATION

Background

- 2.1 The Project mainly includes construction and operation of various police facilities. The police facilities include:
 - (i) a helipad;
 - (ii) two firing ranges; and
 - (iii) other facilities, associated infrastructure & utilities, etc.
- 2.2 The Project is a Designated Project under the Environmental Impact Assessment Ordinance (EIAO). An Environmental Impact Assessment (EIA) Report (Report No.: AEIAR-201/2016) for the Project was approved under EIAO in October 2016 in accordance with the EIA Study Brief (No. ESB-276/2014) and the Technical Memorandum on Environmental Impact Assessment Process (EIAO-TM). The corresponding Environmental Permit was issued (EP no.: FEP-01/510/2016) by the Director of Environmental Protection (DEP).
- 2.3 According to an approved Environmental Monitoring and Audit (EM&A) Manual, an air quality and noise monitoring programme is recommended during the construction phases of the Project to monitor the expected dust and noise nuisances. Baseline air quality and noise monitoring were conducted by previous ET (Wellab Limited) from 14th March 2020 to 2nd April 2020 to establish the background conditions of the designated sensitive receivers prior to the commencement of the Project's construction works.
- 2.4 The site layout plan for the Project is shown in **Figure 1**.

Project Organization

2.5 Different parties with different levels of involvement in the Project organization under EP no.: FEP-01/510/2016 include:

Project Proponent – Architectural Services Department (ArchSD)

Contractor- China State JV

Environmental Team (ET) – Ka Shing Management Consultancy Ltd.

Independent Environmental Checker (IEC) - Acuity Sustainability Consulting Limited

2.6 The key personnel contact names and numbers under Quotation No. PMB202/8480/2022/A01/A and the other contact names and numbers under ArchSD Contract No. SSK509 are summarised in Table 2.1.

Table 2.1 Key Contacts of the Project

Party	Role	Contact Person	Phone No.	Fax No.
Architectural Services Department	Project Proponent	Mr. Vincent Kwok	2867 3939	3542 5223

	Site Agent	Mr. Kelvin Chan	6272 8828	
Contractor (China State JV)	Environmental	Ms. Marian Kong	6174 9735	2866 6325
	Officer Mr. LuLu Mar		5998 8852	
Ka Shing Management Consultancy Ltd.	ETL	Mr. W.H. Lee	2618 2166	2120 7752
Acuity Sustainability Consulting Limited	IEC	Ir. Y.H. Law	2698 6833	2698 9383

Summary of Construction Works Undertaken During Reporting Month

- 2.7 The major site activities undertaken in the reporting month included:
 - Open cut excavation
 - Removal of soil
 - Construction of footings
 - Mock-up construction
 - Plate load test

Construction Programme

- 2.8 A copy of the Contractors' construction programmes is provided in **Appendix A**. We have considered the major site activities for the upcoming three months as provided by the Contractor. The potential severity of the forthcoming environmental impacts and the use of machinery are recognized and detailed in **Appendix O**. This appendix also provides the Contractor with advice and considerations regarding possible alternative methods aimed at environmental improvement, awareness, and enhancement matters on site.
- 2.9 A summary of the relevant permits, licences, and/or notifications on environmental protection for this Project is presented in Table 2.2

Table 2.2 Status of Environmental Licences, Notifications and Permits

D	Valid	Period	C4 - 4			
Permit / Licence No.	From	To	Status			
Further Environmental Permit (FEP)						
FEP-01/510/2016	N/A	N/A	Valid			
Construction Noise Permit (CNP)						
GW-RN1337-23	20-12-2023	19-03-2024	Valid			
Notification pursuant to Air Po	ollution Contro	ol (Construction	Dust) Regulation			
EPD Ref no.: 487864	N/A	N/A	N/A			
Billing Account for Construction Waste Disposal						
Account No. 7046289 18-01-2023 N/A Valid						
Registration of Chemical Waste Producer						

WPN5213-641-C4770-01	18-01-2023	N/A	Valid		
Effluent Discharge Licence under Water Pollution Control Ordinance					
WT00043663-2023	21-04-2023	30-04-2028	Valid		

Summary of EM&A Requirement

- 2.10 The EM&A programme requires construction noise monitoring, air quality monitoring, ecological monitoring and environmental site audits. The EM&A requirements are described in the following sections, including:
 - All monitoring parameters;
 - Action and Limit levels for all environmental parameters;
 - Event / Action Plans;
 - Environmental mitigation measures, as recommended in the Project EIA study final report;
 and
 - Environmental requirements in contract documents.

Status of Compliance with Environmental Permits Conditions

2.11 The status of compliance with Environmental Permit (EP) No. FEP-01/510/2016 and required submission related to this Project under the EP is summarized in **Table 2.3**:

Table 2.3 Summary Table for Status of Compliance / Required Submission under FEP No. FEP-01/510/2016

EP Conditions	Submission	Submission Date	Approval Status
1.12	Commencement date of construction of the Project	30/3/2023	*
2.7	Proposal on the Reporting Mechanism and Curriculum Vitae of the IEC	20/3/2023	*
2.10	The date of setting up the Community Liaison Hotline and the contact details	27/2/2023	*
2.11	Management Organization of Main Construction Companies, at least an organization chart, names of responsible persons and their contact details	10/3/2023	*
2.12	Construction Works Schedule and Location Plans	10/3/2023	*
2.13	Layout plan for permeable pavings	29/3/2023	For approval
2.14	Landscape and visual mitigation plan	26/6/2023	For approval
2.16	Plan for perimeter walls/ boundary wall sat project site and sidewalls of firing range	1 month before fence wall works	For approval

Provision of Environmental Team consultancy for Design and Construction of Kong Nga Po Police Training Facilities (Programme no. 279LP) Monthly EM&A Report – January 2024

2.19	Submission of Helicopter Flight Plan	1 month before commencement of operation of Helipad	Notification
3.3	Baseline Air Quality and Noise Monitoring Report	30/3/2023	Deposit
4.2	Internet address of a dedicated web site	13/4/2023	*

Remarks: * Approval not required in FEP-01/510/2016

3 AIR QUALITY MONITORING

Monitoring Requirements

- 3.1 In accordance with the EM&A Manual, impact 1-hour TSP monitoring was conducted to monitor the air quality for the Works Contracts. **Appendix B** shows the established Action/Limit Levels for the air quality monitoring works.
- 3.2 Impact 1-hour TSP monitoring was conducted for at least three times every 6 day at one air quality monitoring station.

Monitoring Location

3.3 According to Section 2.2.5 of the EM&A Manual, impact air quality monitoring was conducted at the two designated monitoring stations for the Project as shown in Figure 2. Table 3.1 describes the location of the air quality monitoring stations.

Table 3.1 Location for Air Quality Monitoring Stations

Monitoring Station	Location of Measurement
AM1	Village House, Kong Nga Po
AM2	Village House, Kong Nga Po

Monitoring Equipment

- 3.4 As the setup of HVS for 1-hour TSP monitoring at the designated locations and request for secured supply of electricity for HVS were not allowed by the villager, direct reading dust meters was therefore used to carry out the 1-hour TSP monitoring. Dust meter has been commonly used for measuring 1-hour TSP levels in a number of designated projects of major infrastructure works. The proposed use of direct reading dust meter was submitted to IEC and agreed by the IEC. With the use of direct reading dust meter, it can allow prompt and direct results for the EM&A reporting and the implementation of the event and action plan. The 1-hour sampling was determined on bimonthly basis by the HVS to check the validity and accuracy of the results measured by direct reading method.
- 3.5 **Table 3.2** summarises the equipment used in the impact air quality monitoring programme. Copies of calibration certificates are attached in **Appendix C**.

Table 3.2 Air Quality Monitoring Equipment

Equipment	Model and Make	Quantity
Dust Monitor	SIBATA (LD-3B)	2

- 3.6 Meteorological information was extracted from "Hong Kong Observatory General Weather Conditions during the Monitoring Period (January 2024)" in **Appendix G** as the alternative method to obtain representative wind data.
- 3.7 The weather conditions (i.e. sunny, cloudy or rainy) were recorded by the field staff as well during the monitoring days.

Monitoring Parameters, Frequency and Duration

3.8 **Table 3.3** summarises the monitoring parameters and frequencies of impact dust monitoring during the Works Contracts activities. The air quality monitoring schedule for the reporting month is shown in **Appendix D**.

Table 3.3 Impact Dust Monitoring Parameters, Frequency and Duration

Parameters	Frequency
1-hr TSP	Three times/ 6 days

Monitoring Methodology and QA/QC Procedure

1-hour TSP Air Quality Monitoring

Instrumentation

- 3.9 Direct reading dust meter was deployed for the air quality monitoring as shown in **Table 3.2**.
- 3.10 The measuring procedures of the dust meter are in accordance with the Manufacturer's Instruction Manual as follows:
- When the Model LD-3B is turned on, the set time displayed at the bottom left of the liquid crystal display is [01 min].
- When the start/stop switch is pressed once at this time, a measurement of 1 minute is taken. The length of the measurement will depend on the time that is set and displayed.
- A down timer is displayed at the bottom right of the liquid crystal display

Maintenance/Calibration

- 3.11 The following maintenance/calibration was required for the direct dust meters:
 - Check and calibrate the dust meter by High Volume Sampler (HVS) to check the validity and accuracy of the results measured by direct reading method. Calibration of dust meter

- should be carried out on a bi-monthly basis throughout all stages of the air quality monitoring.
- The correlation of dust meter and HVS in TSP measurement was obtained by direct comparison of the weight of dust particle trapped in a filter paper using HVS with the reading of the dust meter. Calibration of the dust meter with HVS should be powered on and off at the same location and the same time.
- The correlation coefficient was checked to establish the correlation relationship between the dust meter and HVS. The correlation factor was determined by comparing the results of HVS and dust meter.
- Checking is made prior to dust monitoring commencing to ensure all equipment is in good working condition with necessary power supply. Zero count test were conducted before and after each monitoring event.

Results and Observations

3.12 The monitoring results for 1-hour TSP monitoring are summarised in **Table 3.4**. Detailed monitoring results and graphical presentations of 1-hour TSP monitoring results are shown in **Appendix E**.

Table 3.4 Summary Table of 1-hour TSP Monitoring Results during the Reporting Month

Monitoring Station	Concentration (μg/m³)		Action Level, μg/m³	Limit Level, μg/m³	
	Average	Range	mg/		
AM1	75	53 – 106	308	500	
AM2	88	64 – 104	311	500	

- 3.13 1-hour TSP monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedances were recorded.
- 3.14 According to our field observations, the major dust source identified at the designated air quality monitoring stations in the reporting month are shown in **Table 3.5**

Table 3.5 Observation at Dust Monitoring Stations

Monitoring Station	Major Dust Source	
AM1	Road traffic, exposed site area, site vehicle / equipment operation and movement	
AM2	Road traffic, exposed site area, site vehicle / equipment operation and movement, vehicle / equipment operation and movement at warehouse nearby	

Event and Action Plan

3.15 Should project-related non-compliance of the criteria occur, action in accordance with the Event Action Plan in **Appendix I** shall be carried out.

4 NOISE MONITORING

Monitoring Requirements

4.1 In accordance with EM&A Manual, construction noise monitoring was conducted in terms of the A-weighted equivalent continuous sound pressure level (Leq) to monitor the construction noise arising from the construction activities. The regular monitoring frequency for each monitoring station shall be on a weekly basis and one set of measurements between 0700 and 1900 hours on normal weekdays shall be conducted. **Appendix B** shows the established Action/Limit Levels for the environmental monitoring works.

Monitoring Location

4.2 According to Section 3.2.3 of the EM&A Manual, impact noise monitoring was conducted at fourteen designated noise monitoring stations. With reference to the principle of EIA report of the Project, noise monitoring station within 300 m from the boundary of this Project are considered. In such regard, six noise monitoring stations as shown in **Figure 3** as relevant monitoring locations. Table 4.1 describes the locations of the noise monitoring stations.

Table 4.1 Location of Noise Monitoring Stations

Monitoring Station	Location of Measurement	
NM9	Village House, Kong Nga Po	
NM10	Village House, Kong Nga Po	
NM11	Village House, Kong Nga Po	
NM12	Village House, Kong Nga Po	
NM13	Village House, Kong Nga Po	
NM14	Village House, near Man Kam To Road	

Monitoring Equipment

4.3 Integrating Sound Level Meters were used for impact noise monitoring. The meters were Type 1 sound level meter capable of giving a continuous readout of the noise level readings including equivalent continuous sound pressure level (Leq) and percentile sound pressure level (Lx) that also complied with International Electrotechnical Commission Publications 651:1979 (Type 1) and 804:1985 (Type 1) specifications. **Table 4.2** summarises the noise monitoring equipment being used. Copies of calibration certificates are attached in **Appendix C**.

Table 4.2 Noise Monitoring Equipment

Equipment	Model	Quantity
Sound Level Meter	RION NL-52	1
Sound Calibrator	Castle GA607	1

Monitoring Parameters, Frequency and Duration

4.4 **Table 4.3** summarises the monitoring parameters, frequency and total duration of monitoring. The noise monitoring schedule is shown in **Appendix D**.

Table 4.3 Noise Monitoring Parameters, Duration and Frequency

Monitoring Stations	Parameter	Duration	Frequency	Measurement
NM9	L10(30 min.)			Free field ^[1]
NM10	$dB(A)^{[2]}$			Free field ^[1]
NM11	L90(30 min.)			Façade
NM12	$dB(A)^{[2]}$	0700-1900 hrs on	Once per	Façade
NM13	Leq(30 min.)	normal weekdays	week	Free field ^[1]
NM14	dB(A) ^[2] (as six consecutive Leq, 5min readings)			Free field ^[1]

Remarks:

[1]: Correction of +3dB (A) for Free-field Measurement.

[2]: A-weighted equivalent continuous sound pressure level (Leq). It is the constant noise level which, under a given situation and time period, contains the same acoustic energy as the actual time-varying noise level.

L10 is the level exceeded for 10% of the time. For 10% of the time, the sound or noise has a sound pressure level above L10.

L90 is the level exceeded for 90% of the time. For 90% of the time, the noise level is above this level.

Monitoring Methodology and QA/QC Procedures

- 4.5 The monitoring procedures are as follows:
 - The sound level meter was set on a tripod at a point 1m from the exterior of the noise sensitive facade and at the position of 1.2m above the ground;
 - For free field measurement, the meter was positioned away from any nearby reflective surfaces. Free field noise levels were adjusted with a correction of +3 dB(A);
 - The battery condition was checked to ensure the correct functioning of the meter;
 - Parameters such as frequency weighting, the time weighting and the measurement time were set as follows:

frequency weighting : Atime weighting : Fast

- time measurement : Leq(30 min.) dB(A)

(as six consecutive Leq, 5min readings) during non-restricted hours (i.e. 0700-1900 hrs on normal weekdays)

Prior to and after each noise measurement, the meter was calibrated using a Calibrator for 94.0 dB at 1000 Hz. If the difference in the calibration level before and after measurement was more than 1.0 dB, the measurement would be considered invalid and repeat of noise measurement would be required after re- calibration or repair of the equipment;

- During the monitoring period, the Leq, L90 and L10 were recorded. In addition, site conditions and noise sources were recorded on a standard record sheet;
- Noise measurement was paused temporarily during periods of high intrusive noise (e.g. dog barking, helicopter noise) if possible and observation record during measurement period should be provided; and
- Noise monitoring was cancelled in the presence of fog, rain, and wind with a steady speed exceeding 5 m/s, or wind with gusts exceeding 10 m/s. The wind speed should be checked with a portable wind speed meter capable of measuring the wind speed in m/s.

Maintenance and Calibration

- 4.6 The microphone head of the sound level meter and calibrator were cleaned with a soft cloth at quarterly intervals.
- 4.7 The sound level meter and calibrator were checked and calibrated at yearly intervals.
- 4.8 Immediately prior to and following each noise measurement, the accuracy of the sound level meter should be checked using an acoustic calibrator generating a known sound pressure level at a known frequency. Measurements would be accepted as valid only if the calibration levels before and after the noise measurement agreed to within 1.0 dB.

Results and Observations

4.9 The noise monitoring results are summarised in Table 4.4. Detailed monitoring results and graphical presentations of noise monitoring are shown in **Appendix F**. The weather information for the reporting month is summarised in **Appendix G**.

Table 4.4 Summary Table of Noise Monitoring Results during the Reporting Month

Manitaning Station	Average	Range	Baseline Level	Limit Level
Monitoring Station	Leq (30 min) dB(A)	Leq (30 min) dB(A)	dB(A)	dB(A)
NM9 ^[1]	56.6	49.0 – 64.7	55.9	
NM10 ^[1]	52.7	45.4 – 57.2	52.8	
NM11	46.6	39.9 – 63.0	46.4	75
NM12	44.0	39.4 – 47.3	54.7	73
NM13 ^[1]	52.5	46.1 – 62.0	61.3	
NM14 ^[1]	44.1	40.1 – 51.4	59.6	

Remarks:

^{[1]:} Correction of +3dB (A) for Free-field Measurement.

- 4.10 Construction noise monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded. The summary of exceedance record in reporting month is shown in **Appendix J**.
- 4.11 According to our field observations, the major noise sources identified at the designated noise monitoring stations in the reporting month are as follows:

Table 4.5 Observation at Noise Monitoring Stations

Monitoring Station	Major Noise Source
NM9	Road traffic, excavation works, loading & unloading
NM10	Road traffic, excavation works, loading & unloading
NM11	Road traffic
NM12	Road traffic, loading & unloading
NM13	Road traffic, loading & unloading
NM14	Road traffic, dog barking

Event and Action Plan

4.12 Should any project related to non-compliance of the criteria occur, action in accordance with the Event Action Plan in Appendix I shall be carried out.

5 ECOLOGICAL MONITORING

Monitoring of Flora Species of Conservation Interest

- As required under Section 8.3.2 of EM&A Manual, during construction phase, temporary protective fence shall be erected enclosing the flora species of conservation interest identified under the detailed vegetation survey. The temporary protective fence shall be properly maintained and monitored for the effectiveness. Monthly monitoring of individual of flora species of conservation interest identified in the detailed vegetation survey shall be conducted during the construction phase to make sure that the flora species of conservation interest are not affected by the construction activities of the Project.
- 5.2 The purpose of the monitoring is to monitor the timely implementation of proper environmental management practices and mitigation measures for the retained and transplanted individuals of flora species of conservation interest. Proper erection and maintenance of the temporary protective fence enclosing the individuals was inspected for the effectiveness. The recommended protection measures in the implementation schedule as stated in approved transplantation proposal were monitored and the conditions of the individuals of flora species of conservation interest were recorded as shown in Table 5.1.
- 5.3 According to the approved detailed vegetation survey report and transplantation proposal, 71 individuals of *Brainea insignis*, 41 individuals of *Spiranthes sinensis* and 3 individuals of Aquilaria sinensis were identified to be transplanted to the receptor site. 51 individuals of *Keteleeria fortunei*, 26 undersized seedlings of *Keteleeria fortunei* and 7 undersized seedlings of Aquilaria sinensis were identified to be retained along Kong Nga Po Road near Police Dog Unit and Force Search Unit Training School.

Post-Transplantation Monitoring and Maintenance Programme

- 5.4 According to approved transplantation proposal, post-transplantation monitoring should be conducted by the Contractor once per week in the first three months and once per month afterwards during the 12-month establishment period and the post-establishment period until the end of construction phase of the Project. Regular monitoring allows early detection of the growth status of transplanted species, sign of construction activity within and nearby the receptor site, and any environmental change of the receptor site.
- 5.5 Maintenance works were recommended for the first year of establishment to allow healthy growth of the transplanted species. In view of the condition of transplanted individuals after the 12-month establishment period, maintenance works were recommended to extend during the Post-establishment Period until the end of Construction Phase. Watering was recommended in daily practice during the first three months after the transplantation and

during the dry season. Daily watering frequency is needed to keep the soil moist. Other maintenance works like the use of mulch and weeding shall be conducted if required.

Results and Observations

- Monthly monitoring of flora species of conservation interest was conducted by the Contractor on 31st January 2024 during the reporting month. The implementation status of protection measures as stated in the approved transplantation proposal and the maintenance of temporary protective fence were inspected. The implementation status of protection measures is shown in **Table 5.1** and photographic record and checklists for monthly monitoring are shown in **Appendix H**. The health conditions of the transplanted / retained species are generally in fair and poor condition. The Contractor was reminded to closely monitor the transplanted species and implement the protection measures according to the approved transplantation proposal to protect the transplanted / retained species. In addition, the Contractor was also advised of the following:
 - 1) To arrange the new tags for those *Brainea insignis* with missing tags;
 - 2) To replace the faded plant labels identified in the receptor site.
 - 3) To refer to the guidelines on soil improvement issued by the Greening, Landscape and Tree Management Section (GLTMS) of the development bureau (2022) to apply to monitoring and maintenance of transplanted flora species.
 - 4) To install shaded nets
 - 5) Daily watering frequency is needed to keep the soil moist.

Transplanted Brainea insignis and Spiranthes sinensis

5.7 71 individuals of Brainea insignis and 41 individuals of Spiranthes sinensis were transplanted to receptor site from 21st to 27th May 2020. Transplantation Report recording the process of transplantation has been submitted to ET(Wellab), IEC(Acuity) and the Supervisor (AECOM) for review and record. Post-transplantation monitoring was conducted once per week in the first three months (June to August 2020) and once per month during the 12-month establishment period and the post-establishment period until the end of construction phase of the Project. The health condition of the transplanted species was monitored by the Contractor. The Contractor provided maintenance works including watering, use of mulch and weeding in the first year of establishment to allow health growth of the transplanted species. Posttransplantation monitoring on transplanted Brainea insignis and Spiranthes sinensis was conducted on 25th November 2023 during the reporting month and the post-transplantation monitoring record is shown in **Appendix H**. The health condition of the transplanted *Brainea* insignis affected by bushfire on 2nd February 2021 was closely monitored and reported in the post-transplantation monitoring records. The health conditions of the retained species are generally in fair condition. The Contractor was reminded to closely monitor the retained species and implemented the protection measures to protect the retained species.

5.8 During monthly monitoring, no construction activity and equipment storage was observed within the receptor site. Temporary protective fence was properly erected and maintained for the transplanted species.

Table 5.1 Implementation Status of Protection Measures for Flora Species of Conservation Interest

Recommended Mitigation Measures	Implementation Status
Brainea insignis	
Identification of Plant Species of Conservation Importance to be Retained / Transplanted	۸
To mark trees/plants proposed to be retained and to be transplanted on the layout plan prior to commencement of site construction works.	
Protection of Plant Species of Conservation Importance prior to Site Clearance / Transplantation Works	
a) No site clearance shall be started at the locations of flora species of conservation interest until the transplantation works completed.	N/A
b) Set up buffer zone to enhance the protection of flora species of conservation importance to be preserved / transplanted including the proposed location for transplantation when the site clearance works shall commence before the transplantation works completed.	on N/A
Temporary Protective Fence for Flora Species of Conservation Interest / Retained Tree	d
a) To erect a temporary protective fence enclosing the flora species of conservation interest identified under the detailed vegetation survey.	۸
b) To set up a protection zone at least 1m from the plant / retained tree and erect robust, bright-coloured fencing of 1.5m in height.	۸
Maintenance of the Protection Zone for Flora Species of Conservation Interest / Retained Tree	
a) Monthly monitoring of flora species of conservation interest identified in the detailed vegetation survey should be conducted.	^
b) To inspect the temporary protective fence whether it is properly erected and maintained during construction.	۸
Post-transplantation Monitoring	
 Weekly post-transplantation monitoring of transplanted species in the first three months and monthly afterwards. 	^
Maintenance of Transplanted Species	
a) To keep the soil moist by watering the receptor sites properly and adequately.	^
b) To apply mulches on the soil surface over the plant root system, if required.	^
c) To remove unwanted weeds found in receptor sites.	^
Other Protection Measures for Flora Species of Conservation Interest / Retained Tree / Vegetated Areas	
a) All works should be confined within the site boundary.	^
b) Access of site staff should be controlled.	^
c) Care should be taken to prevent trees/plants being damaged by mechanical equipment or stockpile both during site clearance works and construction works.	۸
d) No fixings should be driven into trees/plants.	^

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e) No workshop, canteens, or similar should be installed beneath trees/plants, nor will equipment maintenance etc. be carried out under trees/plants.	۸
f) No excavation, including that for services or changes in ground level will take place within the spread of the crown of the trees / plants.	۸
g) No soil, debris or construction materials should be deposited around and against the trunk of a tree/plant as this causes bark damage and compaction of the soil.	۸
h) No fire should be lit below the branches and no petrol, oil or caustic substances stored near the trees/plants.	۸
i) No trees/plants should be used for anchoring or winching purposes or for the display of signs.	۸
j) Any damage or injury to the retained / transplanted plants should be reported as soon as possible for repair immediately.	۸
Spiranthes sinensis	
Identification of Plant Species of Conservation Importance to be Retained / Transplanted	
To mark trees/plants proposed to be retained and to be transplanted on the layout plan prior to commencement of site construction works.	۸
Protection of Plant Species of Conservation Importance prior to Site Clearance / Transplantation Works	
a) No site clearance shall be started at the locations of flora species of conservation interest until the transplantation works completed.	N/A
b) Set up buffer zone to enhance the protection of flora species of conservation importance to be preserved / transplanted including the proposed location for transplantation when the site clearance works shall commence before the transplantation works completed.	N/A
Temporary Protective Fence for Flora Species of Conservation Interest / Retained	
Tree	
a) To erect a temporary protective fence enclosing the flora species of conservation interest identified under the detailed vegetation survey.	۸
b) To set up a protection zone at least 1m from the plant / retained tree and erect robust, bright-coloured fencing of 1.5m in height.	۸
Maintenance of the Protection Zone for Flora Species of Conservation Interest / Retained Tree	
a) Monthly monitoring of flora species of conservation interest identified in the detailed vegetation survey should be conducted.	۸
b) To inspect the temporary protective fence whether it is properly erected and maintained during construction.	۸
Post-transplantation Monitoring	
a) Weekly post-transplantation monitoring of transplanted species in the first three months and monthly afterwards.	۸
Maintenance of Transplanted Species	
a) To keep the soil moist by watering the receptor sites properly and adequately.	^
b) To apply mulches on the soil surface over the plant root system, if required.	^
c) To remove unwanted weeds found in receptor sites.	۸
Other Protection Measures for Flora Species of Conservation Interest / Retained Tree / Vegetated Areas	
a) All works should be confined within the site boundary.	۸
b) Access of site staff should be controlled.	^
c) Care should be taken to prevent trees/plants being damaged by mechanical	
equipment or stockpile both during site clearance works and construction works.	۸

d) No fixings should be driven into trees/plants.	^
e) No workshop, canteens, or similar should be installed beneath trees/plants, nor will equipment maintenance etc. be carried out under trees/plants.	^
f) No excavation, including that for services or changes in ground level will take place within the spread of the crown of the trees / plants.	۸
g) No soil, debris or construction materials should be deposited around and against the trunk of a tree/plant as this causes bark damage and compaction of the soil.	۸
h) No fire should be lit below the branches and no petrol, oil or caustic substances stored near the trees/plants.	۸
i) No trees/plants should be used for anchoring or winching purposes or for the display of signs.	۸
j) Any damage or injury to the retained / transplanted plants should be reported as soon as possible for repair immediately.	۸

Implementation status:	^	Mitigation measure was fully implemented
	*	Observation/reminder was made during monitoring but improved/rectified by the contractor
	#	Observation/reminder was made during monitoring but not yet improved/rectified by the contractor
	X	Non-compliance of mitigation measure
	•	Non-compliance but rectified by the contractor
	N/A	Not Applicable at this stage as no such site activities were conducted in the reporting period

Precautionary Measure for Butterfly Species of Conservation Interest

- 5.9 According to FEP Condition 2.17, with consideration of minimizing impact on butterfly species of conservation interest, the re-establishment of the new grassland areas in the Project site shall be enhanced, through planting of appropriate plant species which are the larval food plants of butterfly species of conservation interest such as Small Three-Ring, in order to benefit these species.
- 5.10 The re-establishment of grassland areas in the Project shall be implemented before Commencement of Operation of the Project. Details of the plant species as larval food plants of butterflies including design and implementation arrangement will be further submitted under ArchSD's building works contract.

Precautionary Measures to Minimize Indirect Disturbance on Ecology

5.11 In accordance with Section 9.7.3 of EIA Report, mitigation measures for air, noise, water, waste and landscape aspects could act as precautionary measures to prevent and minimize any indirect disturbance impact or pollution arisen from the construction activities on the local ecology and offsite habitats. Site audits were carried out by ET on weekly basis to monitor the timely implementation of proper environmental management practices and mitigation measures on the Project site and the observations are summarised in Section 7.3.

6 LANDSCAPE AND VISUAL MONITORING

Monitoring Requirements

- 6.1 The EIA Report has recommended mitigation measures for landscape and visual resources to be undertaken during the construction and operation phases of the Project.
- 6.2 These measures include the consideration of a number of development options and the provision of mitigation measures to directly offset unavoidable impacts. The measures include strategies for reducing, offsetting and compensating impacts during construction and operation phases according to Section 10.13 in the EIA Report.
- 6.3 The implementation and maintenance of landscape compensatory planting measures is a key aspect of this and shall be checked to ensure that they are fully realised and that potential conflicts between the proposed landscape measures and any other Project works and operational requirements are resolved at the earliest possible date and without compromise to the intention of the mitigation measures. In addition, implementation of the mitigation measures recommended by the EIA shall be monitored throughout the construction phase site audit programme.
- 6.4 Bi-weekly inspection of the implementation of landscape and visual mitigation measures was conducted by ET during weekly site audit. The observation and recommendations made during the audit sessions are summarised in Table 7.1. The implementation status is given in **Appendix K.**

7 ENVIRONMENTAL SITE INSPECTION

Site Audits

- 7.1 Site audits were carried out by ET on weekly basis to monitor the timely implementation of proper environmental management practices and mitigation measures on the Contract site.
- 7.2 Site audits were conducted by ET with the representative of the Client's Representative and the Contractor on 02, 09, 16, 24, 30 January 2024 in the reporting month. Site audits with the representative of the Contractor and IEC were carried out on 24 January 2024.
- 7.3 During site inspections in the reporting month, no specific environmental issues were observed. These observations only reflect the conditions at those specific times. The observations and advice provided during the audit sessions are summarized in **Table 7.1**. No specific environmental issues are observed during the joint site inspection shall not relieve the Contractor duties and responsibilities in full compliance with the statutory requirements, Particular Specifications and EM&A Manual.

Table 7.1 Observations of Weekly site Inspection and advice

Parameters	Date	Observations	Advice
Air Quality		No specific environmental issues are observed	
Construction Noise Impact		No specific environmental issues are observed	
Water Quality		No specific environmental issues are observed	
Waste/ Chemical Management		No specific environmental issues are observed	
Landscape and Visual		No specific environmental issues are observed	
Ecology		No specific environmental issues are observed	
Permit /Licences		No specific environmental issues are observed	
Others		No specific environmental issues are observed.	

Implementation Status of Environmental Mitigation Measures

7.4 According to the EIA Report, Environmental Permit and the EM&A Manual of the Project, the mitigation measures detailed in the documents are recommended to be implemented during the construction phase. An updated summary of the Environmental Mitigation Implementation Schedule (EMIS) is provided in **Appendix K**.

Solid and Liquid Waste Management Status

- 7.5 In accordance with the EM&A Manual, waste management was audited during weekly site audit to determine if wastes are being managed in accordance with the Waste Management Plan (WMP) prepared for the Project and the relevant legislative and contractual requirements. Waste management practices including waste handling, storage, transportation, and disposal were audited.
- The Contractor has nominated on-site Environmental Officers to oversee the environmental management, pollution control measures, good site practices and training of site personnel in waste management. Proactive measures have been undertaken to make use of Construction and Demolition (C&D) materials to minimize the waste generated. On-site sorting and screening of excavated materials have been carried out to recover any recyclable portions. Inert C&D materials were used on-site for backfilling works and hard paving of haul road. In addition, inert C&D materials generated from excavation works were reused as fill materials in other local projects. The surplus inert C&D materials were disposed of at the Government's public fill reception facilities (PFRFs) for beneficial use by other projects. In order to monitor the disposal of inert and non-inert C&D materials and to control fly-tipping, every excavated material before leaving the site is weighted by a weight bridge and Trip Ticket System is strictly followed.
- 7.7 The Contractors are advised to minimize the wastes generated through the recycling or reusing. All mitigation measures stipulated in the EM&A Manual and waste management plans shall be fully implemented. The status of implementation of waste management and reduction measures is summarised in **Appendix K.**
- 7.8 Waste generated from this Project includes inert C&D materials and non-inert C&D materials.

 Non-inert C&D materials are made up of general refuse and waste that cannot be reused or recycled and has to be disposed of at the designated landfill sites. The amount of wastes generated by the construction works of the Project during the reporting month is shown in Appendix L.

8 ENVIRONMENTAL NON-CONFORMANCE

Summary of Exceedances

- 8.1 No exceedance of Action and Limit Levels of air quality was recorded in the reporting month.
- 8.2 No exceedance of Action and Limit Levels of construction noise was recorded in the reporting month.
- 8.3 Should the monitoring results of the environmental monitoring parameters at any designated monitoring stations indicate that the Action / Limit Levels are exceeded, the actions in accordance with the Event and Action Plans in **Appendix I** be carried out. The summary of exceedance record in reporting month is shown in **Appendix J**.

Summary of Environmental Non-Compliance

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

Summary of Environmental Complaint

8.5 No complaint was received in the reporting month. The Cumulative Complaint Log since the commencement of the Project is presented in **Appendix M**.

Summary of Environmental Summon and Successful Prosecution

8.6 There was no successful environmental prosecution or notification of summons received since the Project commencement. The Cumulative Log for environmental summon and successful prosecution since the commencement of the Project is presented in **Appendix N**.

9 FUTURE KEY ISSUES

Key Issues in the Coming Three Months

- 9.1 The tentative construction programmes for the Project are provided in **Appendix A**. The major construction activities undertaken in the coming three months will include:
 - Open cut excavation
 - Removal of soil
 - Construction of footings
 - Construction of pile cap
 - Mock up construction
 - U.U. Lead in and Pipe Duct Connection
- 9.2 With reference to the site layout plan including the indication of coming three months construction site activities in **Appendix A**, potential environmental impacts arising from the above construction activities are mainly associated with construction dust, noise, water quality, waste management, landscape and visual and ecology. The foreseeable environmental impacts were taken into consideration of the planned mitigation measures in the coming months.
- 9.3 The mitigation measures to be implemented for the coming three months were proposed by the Contractor, and reviewed by ET, IEC and the Client's Respective through Email during site audit and SSEMC meeting. The Proactive Environmental Protection Proforma summarizing the major site activities, potential environmental impacts and recommended mitigation measures was reviewed and verified by IEC and was shown in **Appendix A**.
- Dust can be generated during construction works and exposed site areas during dry weather. To prevent high dust concentrations during the dry weather, the Contractor should pay attention on the air quality mitigation measures as far as practicable to minimise the dust impact to the villages which are located adjacent to the Project works (refer to the layout plan in **Appendix A**). The Contractor was also reminded to follow the Project Implementation Schedule in approved EIA report / EM&A Manual to implement appropriate dust control measure to reduce dust emissions from heavy construction activities (including ground excavation, earth moving, etc.) at all active works area exposed site surfaces and unpaved roads, particularly during dry weather and covering 80% of stockpiling area by impervious sheets and spraying all dusty material with water immediately prior to any loading transfer operations to keep the dusty materials wet during material handling at the stockpile areas" as well as the relevant dust control practices as stipulated in the Air Pollution Control (Construction Dust) Regulation so that no adverse dust impact arising from the Project works site.

- 9.5 In addition, construction noise is also one of the key environmental issues during construction of the Project. Noise mitigation measures such as using quiet plants and noise barriers should be in place, where applicable. In addition, the Contractor was reminded to frequently check and maintain the acoustic materials wrapped on noisy part of PME and ensure no gaps between noise barriers; proactively identify any potential construction noise impact to NSRs and provide sufficient mitigation measures if necessary; and provide notification to nearby villagers in Kong Nga Po for potential noisy works at works area.
- 9.6 The Contractor is also recommended to maintain water quality mitigation measures during construction works. The dikes or embankments for flood protection should be implemented around the boundaries of earthwork areas. Temporary ditches should be provided to facilitate the runoff discharge into an appropriate watercourse, through a site/sediment trap. The sediment/silt traps should be incorporated in the permanent drainage channels to enhance deposition rates. Efficient silt removal facilities shall be deployed to ensure all treated effluent from wastewater treatment plant shall meet the requirements as stated in WPCO licences. The site drainage plan shall also be updated based on the site condition and construction programme.

Monitoring Schedule for the Next Month

9.7 The tentative environmental monitoring schedule for the next month is shown in **Appendix D**.

10 CONCLUSIONS AND RECOMMENDATIONS

Conclusions

- 10.1 This Monthly EM&A Report presents the EM&A work undertaken in January 2024 in accordance with EM&A Manual.
- 10.2 No Action/Limit Level exceedance was recorded for air quality monitoring in the reporting month.
- 10.3 No Action/Limit Level exceedance was recorded for construction noise monitoring in the reporting month.
- 10.4 Environmental site inspections were conducted on 02, 09, 16, 24, 30 January 2024 and landscape and visual monitoring was carried out on 02, 16, 30 January 2024, whereas ecological monitoring was carried out on 30 January 2024 by ETL in the reporting month, and additionally by the Contractor on 31 January 2024. No environmental non-compliance was recorded in the reporting month. No specific environmental issues are observed during the joint site inspection shall not relieve the Contractor duties and responsibilities in full compliance with the statutory requirements, Particular Specifications and EM&A Manual.
- 10.5 No complaint was received in the reporting month. No notification of summons or successful prosecutions was received in the reporting month.
- 10.6 The ET would keep track on the EM&A programme. The environmental requirements are complied with and all necessary mitigation measures are properly implemented.

Recommendations

10.7 According to the environmental audits performed in the reporting month, the following recommendations were made:

Air Quality Impact

- To enhance the dust suppression measures including watering for the dust generation works, exposed site area and haul road;
- To minimize the indirect impacts on air quality resulting from the operation of machineries on the construction site, one of the measures to be adopted is the use of biodiesel B100; and
- To regular check the valid NRMM labels are properly displayed on the regulated machines and non-road vehicles

Construction Noise

- To refer to the ISO 12001:1996 or other comprehensive practices and subsequently develop a thorough inspection and maintenance protocol for the plant and equipment, maintaining a focus on Noise Control; and
- To maintain temporary noise barriers for operations of noisy equipment near the noise sensitive receivers, if necessary.

Water Impact

- To maintain the cover for open stockpile of and exposed slope;
- To keep reviewing and updating temporary drainage system;
- To maintain the earth bunds or sand bag barriers on site to direct stormwater to silt removal facilities; and
- To divert the muddy water at the retention pond to the wetsep for treatment before discharging out.

Waste/Chemical Management

- To check for any accumulation of waste materials or rubbish on site; and
- To avoid improper handling, storage and dispose of oil drums or chemical containers on site.

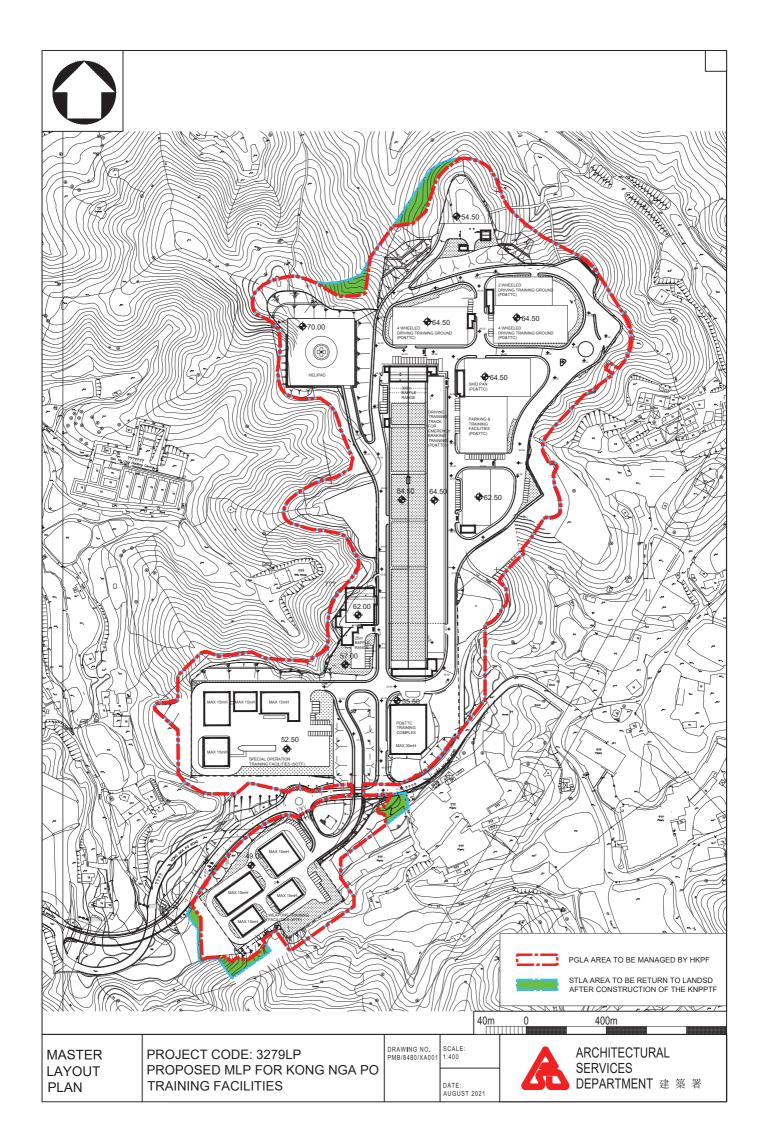
Ecology

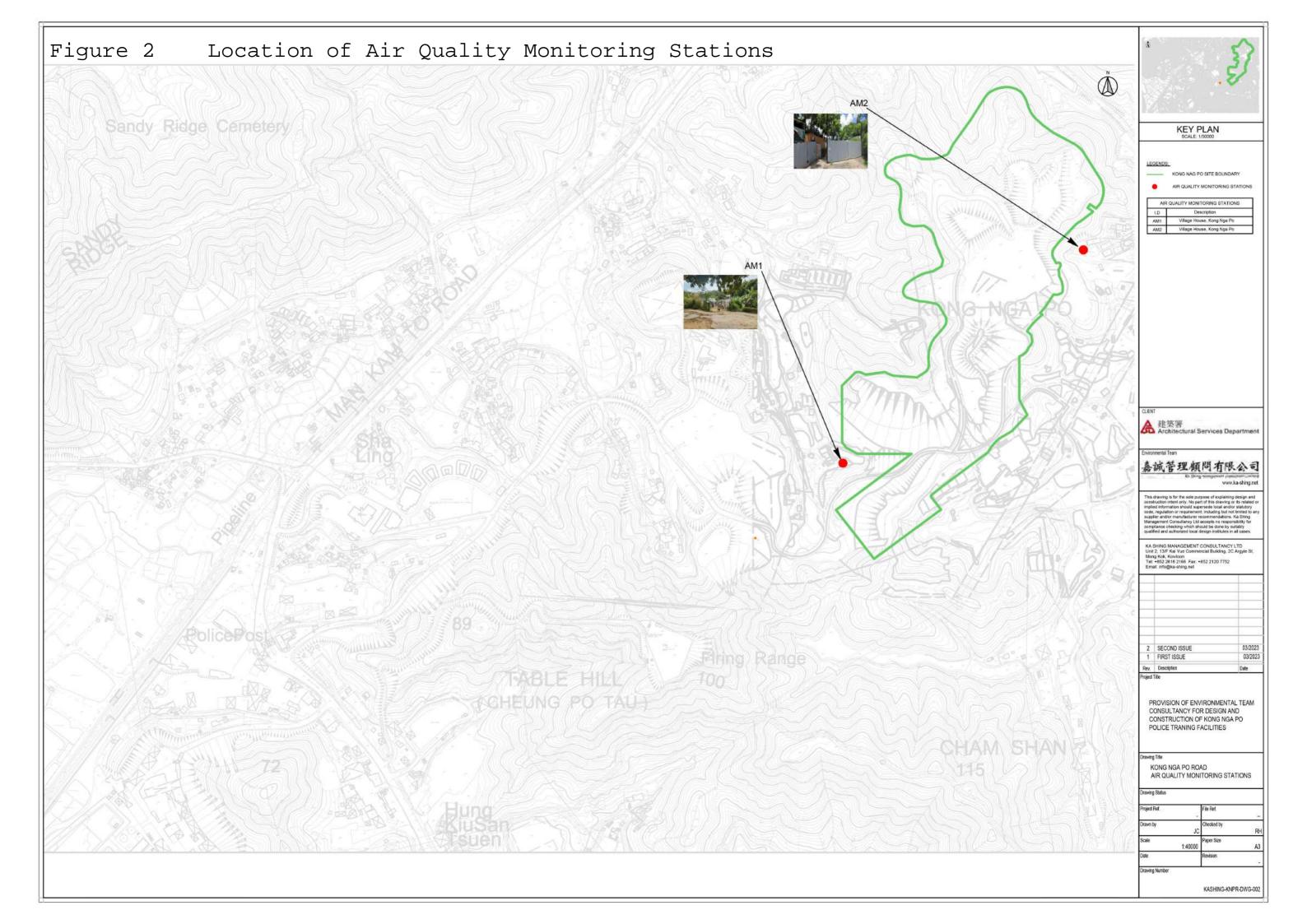
- To maintain soil moisture, daily watering is required;
- To install a shaded net;
- To consult the 155331 guidelines on soil improvement issued by the Greening, Landscape and Tree Management Section (GLTMS) of the 255863e Development Bureau (2022) for the effective monitoring and maintenance of transplanted flora species; and
- The wild plants that are growing in undesirable areas should be removed, as they compete with the cultivated flora species of conservation interest.

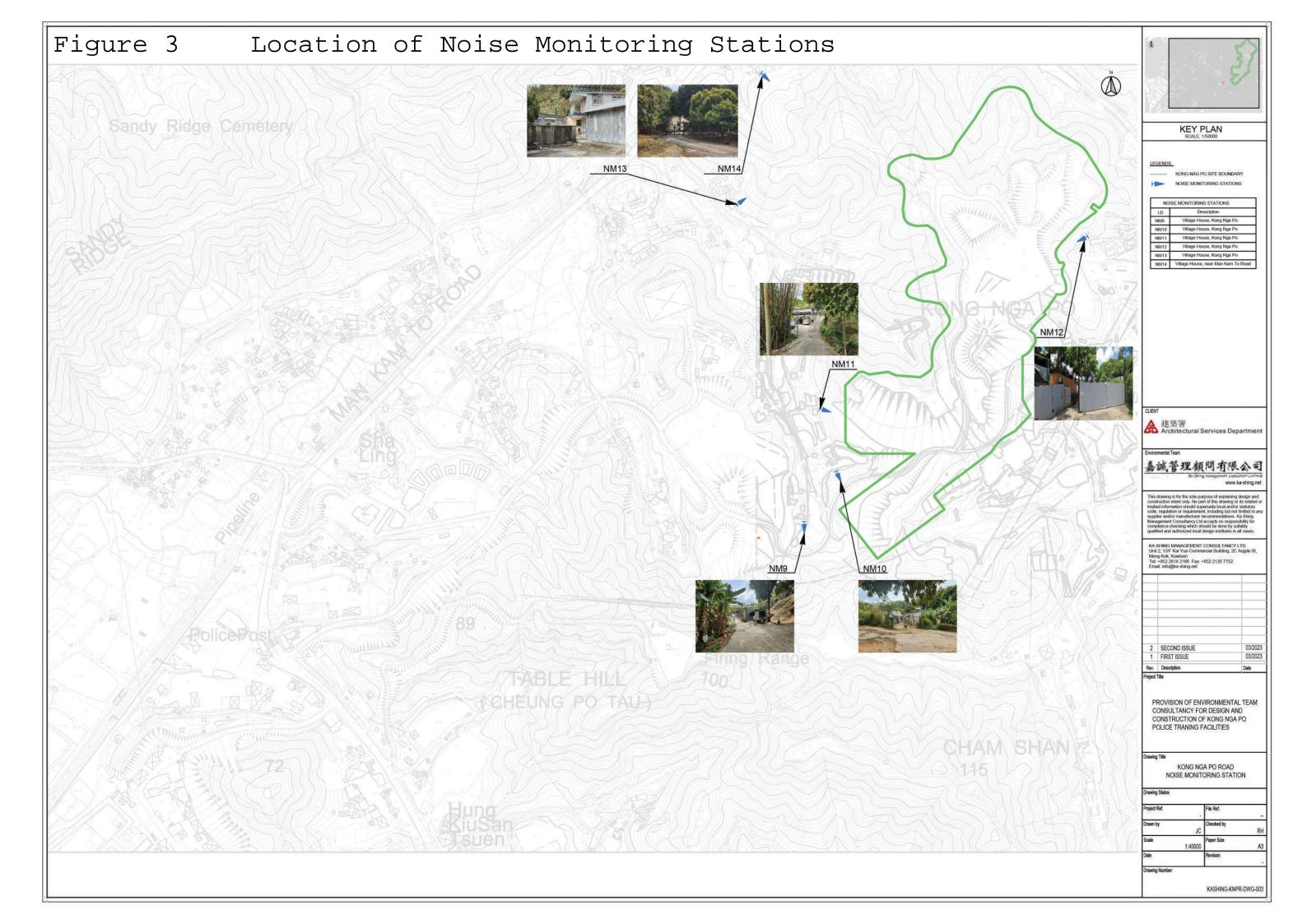
Landscape and Visual

- To remove the construction materials within the tree protection zone; and
- To keep the tree protection zone large enough to protect the tress.

FIGURE(S)

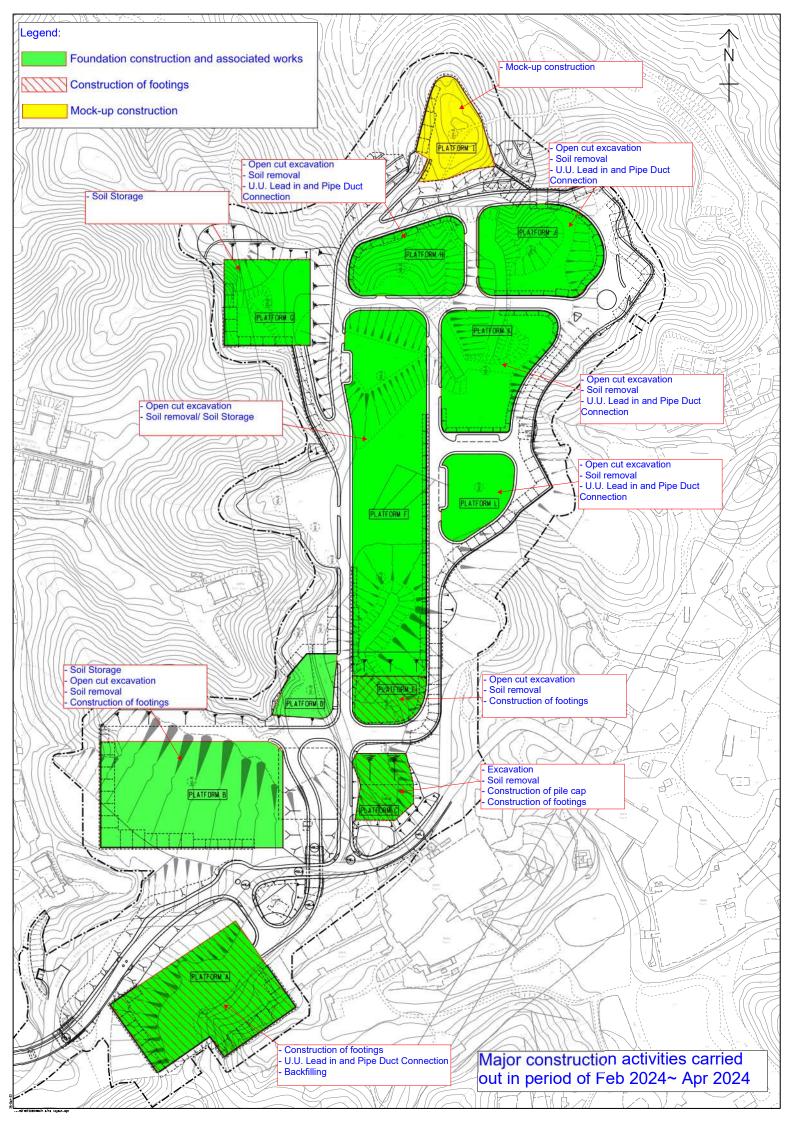




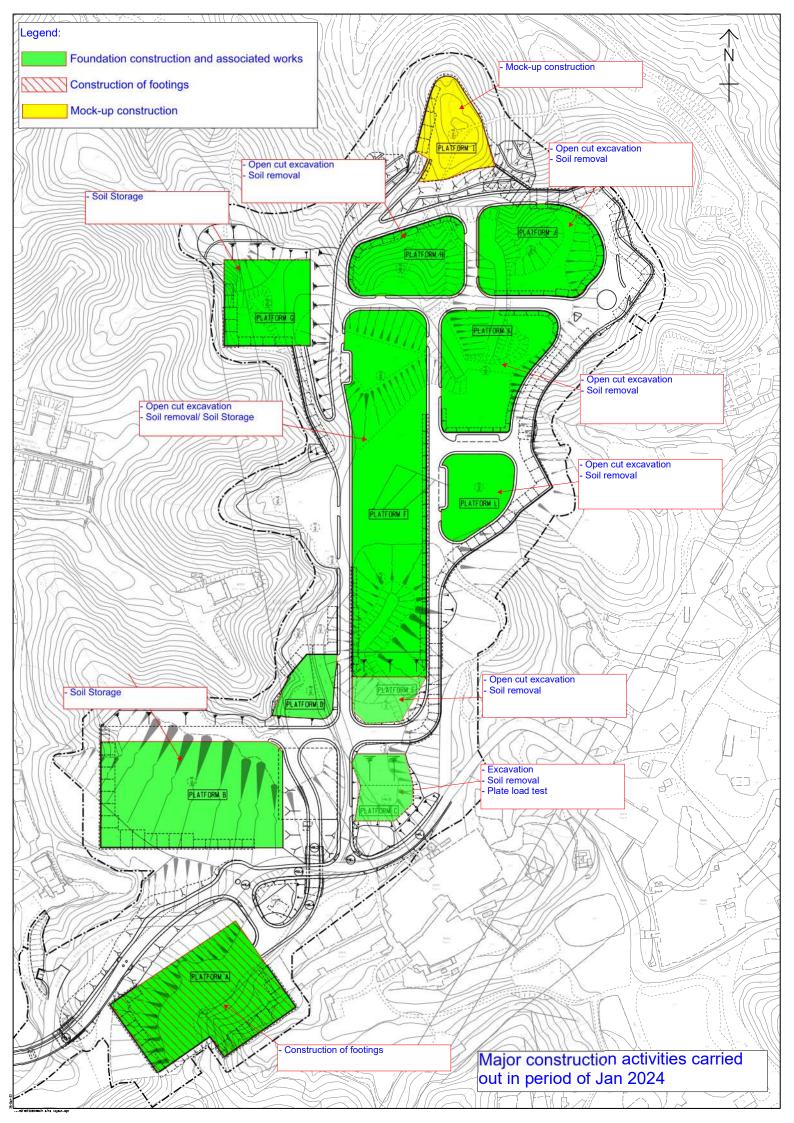


APPENDIX A CONSTRUCTION PROGRAMME AND PROACTIVE ENVIRONMENTAL PROTECTION PROFORMA

Construction Programme (Feb – Apr 2024)



Layout Plan with major construction activities



Proactive Environmental Protection Proforma

Design and Construction of Kong Nga Po Police Training Facilities <u>Proactive Environmental Protection Proforma</u>

Ref*	Proposed	Location/Working	Anticipated Major	Recommended Mitigation Measures
	Construction	Period	Impacts	
	Method			
EIA 3.9.1; EM&A Log 2.2	Open cut excavation	Kong Nga Po Site	Dust impact from excavation activities and earth moving	times per day) at all active works area exposed site surfaces
				 covered by mechanical cover before leaving the site Wheel washing facilities will be provided and cleaning the wheel of all vehicles before leaving the site
EIA 4.4.6;			Noise Control	Regular inspection and maintenance of plant & equipment in
EM&A Log 3.2				good condition

Working Period: Feb to Apr 2024

	Working in Restricted Hours	 Enclose the noisy part of machineries with noise enclosure Adopt of Quality Powered Mechanical Equipment (QPME) if possible Valid construction noise permit should be obtained and displayed on site In case of non-compliance with the construction noise criteria, more frequent monitoring and action should be carried out
EIA 5.6.1.2;	Water Pollution	Cover the stockpiles of construction materials to reduce the
EM&A Log 4.2	Control	potential for water pollution
		 Provide wastewater treatment facilities prior to discharge of wastewater Regular inspection and maintenance of wastewater treatment
		facilities
		Wastewater pumped out of the excavation areas will be treated to remove suspended solids prior to discharge
		Hard paving or well-compact of main haul road to minimize washout of soil
		Wheels of all vehicles and plants will be cleaned before
		leaving the work areas to remove sediment, soil and debris from the tracked. The wastewater will be treated and reused
		on site or discharged.
EIA 7.5.1.1 &	Waste Generation	Training of site personnel in proper waste management and

7.5.1.2;				chemical handling procedures
EM&A Log 6.2				 Proper storage and sorting of excavated inert materials to maximize on site reuse for backfilling Surplus inert C&D materials will be disposed of at designated Government's PFRF.
EIA 7.5.1.4; EM&A Log 6.2			Chemical Waste	 Chemical waste should be stored at chemical waste container and collected by a licensed collector to transport and dispose of at the approved Chemical Waste Treatment Centre Drip tray and chemical spillage kit will be provided on site
EIA 9.7.1 and EM&A Log 8.3			Ecology Concern	 Provide training to frontline workers for the conservative species Provision of protective fence for the conservative species Regular inspection for concerned vegetation and conservative species
EIA Table 10.11; EM&A Table 9.1			Landscape and Visual Impact	 Preservation of existing trees will be undertaken in accordance with DEVB TC(W) 7/2015 and Guidelines for Tree Risk Assessment and Management Arrangement Restrict construction area to minimize the impact on existing retained trees
EIA 3.9.1; EM&A Log 2.2	Soil Removal	Kong Nga Po Site	Dust impact from excavation activities and earth	times per day) at all active works area exposed site surfaces

EIA 4.4.6; EM&A Log 3.2	Noise Control	 Water spraying during loading and unloading of excavated materials Vehicles used for transporting dusty materials/spoils will be covered by mechanical cover before leaving the site Deploy water bowser for regular water spraying to enhance dust suppression Speed control of site transportation Stockpile of dusty materials will be covered by tarpaulin sheets to avoid wind-blown dust Wheel washing facilities will be provided and cleaning the wheel of all vehicles before leaving the site Regular inspection and maintenance of plant & equipment in good condition
		 Enclose the noisy part of machineries with noise enclosure Adopt of Quality Powered Mechanical Equipment (QPME) if
		Adopt of Quality Powered Mechanical Equipment (QPME) if possible
	Working in	Valid construction noise permit should be obtained and
	Restricted Hours	displayed on site
		In case of non-compliance with the construction noise criteria,
		more frequent monitoring and action should be carried out
EIA 5.6.1.2;	Water Pollution	Cover the stockpiles of excavated materials to reduce the
EM&A Log 4.2	Control	potential for water pollution

		 Provide wastewater treatment facilities prior to discharge of wastewater Regular inspection and maintenance of wastewater treatment facilities Wheels of all vehicles and plants will be cleaned before leaving the work areas to remove sediment, soil and debris from the tracked. The wastewater will be treated and reused on site or discharged.
EIA 7.5.1.1 & 7.5.1.2;	Waste Generation	 Training of site personnel in proper waste management and chemical handling procedures
·		- 1
EM&A Log 6.2		Proper storage and sorting of excavated inert materials to
		maximize on site reuse for backfilling
		Surplus inert C&D materials will be disposed of at designated
		Government's PFRF.
EIA 7.5.1.4;	Chemical Waste	Chemical waste should be stored at chemical waste container
EM&A Log 6.2		and collected by a licensed collector to transport and dispose
		of at the approved Chemical Waste Treatment Centre
		Drip tray and chemical spillage kit will be provided on site
EIA 9.7.1 and	Ecology Concern	Provide training to frontline workers for the conservative
EM&A Log 8.3		species
		Provision of protective fence for the conservative species
		Regular inspection for concerned vegetation and conservative

				species
EIA Table 10.11; EM&A Table 9.1			Landscape and Visual Impact	 Preservation of existing trees will be undertaken in accordance with DEVB TC(W) 7/2015 and Guidelines for Tree Risk Assessment and Management Arrangement Restrict construction area to minimize the impact on existing retained trees
EIA 3.9.1; EM&A Log 2.2	Construction of footings	Kong Nga Po Site	Air	 Regular inspection and maintenance of plant and equipment in good condition Regularly clean up stockpiles and debris to avoid accumulation of materials Dusty materials exceeding 20 bags shall be stored in area sheltered on top and the three sides or covered entirely by impervious sheeting.
EIA 4.4.6; EM&A Log 3.2			Noise Control	 Regular inspection and maintenance of plant & equipment in good condition Enclose the noisy part of machineries with noise enclosure Adopt of Quality Powered Mechanical Equipment (QPME) if possible
			Working in Restricted Hours	 Valid construction noise permit should be obtained and displayed on site In case of non-compliance with the construction noise criteria, more frequent monitoring and action should be carried out

EIA 5.6.1.2;			Water Pollution	Wheels of all vehicles and plants will be cleaned before
EM&A Log 4.2			Control	 leaving the work areas to remove sediment, soil and debris from the tracked. The wastewater will be treated and reused on site or discharged. Designated location for residual concrete washout Provide wastewater treatment facilities prior to discharge of wastewater
EIA 7.5.1.4; EM&A Log			Chemical Waste	Drip tray and chemical spillage kit shall be provided on site
EIA 9.7.1 and EM&A Log 8.3			Ecology Concern	 Provide training to frontline workers for the conservative species Provision of protective fence for the conservative species Regular inspection for concerned vegetation and conservative species
EIA Table 10.11; EM&A Table 9.1			Landscape and Visual Impact	 Preservation of existing trees will be undertaken in accordance with DEVB TC(W) 7/2015 and Guidelines for Tree Risk Assessment and Management Arrangement Implement temporary traffic arrangement which control construction area to minimize landscape and visual impacts
EIA 3.9.1; EM&A Log 2.2	Construction of pile cap	Kong Nga Po Site	Air	 Regular inspection and maintenance of plant and equipment in good condition Regularly clean up stockpiles and debris to avoid

EIA 4.4.6; EM&A Log 3.2	Noise Control	 Dusty materials exceeding 20 bags shall be stored in area sheltered on top and the three sides or covered entirely by impervious sheeting. Regular inspection and maintenance of plant & equipment in good condition Enclose the noisy part of machineries with noise enclosure
	Working in Restricted Hours	 Adopt of Quality Powered Mechanical Equipment (QPME) if possible Valid construction noise permit should be obtained and displayed on site In case of non-compliance with the construction noise criteria,
		more frequent monitoring and action should be carried out
EIA 5.6.1.2;	Water Pollution	Cover the stockpiles of construction materials to reduce the
EM&A Log 4.2	Control	potential for water pollution
		 Provide wastewater treatment facilities prior to discharge of wastewater
		Wastewater generated from piling or surface runoff shall be treated prior to discharge
EIA 7.5.1.1;	Waste	Cover stockpiles of C&D materials by impervious sheets to
EM&A Log 6.2	Management	avoid wind-blown dust.
		Spray water on all dusty materials including C&D materials

		immediately prior to any loading transfer operation
EIA 7.5.1.4;	Chemica	Drip tray and chemical spillage kit shall be provided on site
EM&A Log 6.2		
EIA 9.7.1 and	Ecology	Concern • Provide training to frontline workers for the conservative
EM&A Log 8.3		species
		 Provision of protective fence for the conservative species
		Regular inspection for concerned vegetation and conservative
		species
EIA Table 10.11;	Landscap	oe and • Preservation of existing trees will be undertaken in
EM&A Table 9.1	Visual Im	npact accordance with DEVB TC(W) 7/2015 and Guidelines for Tree
		Risk Assessment and Management Arrangement
		Implement temporary traffic arrangement which control
		construction area to minimize landscape and visual impacts

^{*}EIA Ref/EM&A Log/ Design Document Ref

^{**}Details of equipment, vehicles, plants, processes, technologies for the construction method

Design and Construction of Kong Nga Po Police Training Facilities <u>Proactive Environmental Protection Proforma</u>

Ref*	Proposed Construction Method	Location/Working Period	Anticipated Major Impacts	Recommended Mitigation Measures	Photo Records (Partial)
EIA 3.9.1 EM&A Log 2.2	-	Kong Nga Po Site	Dust impact	 Deploy water bowser for regular water spraying to enhance dust suppression Manual water spraying for dust suppression Regular inspection and maintenance of plant and equipment in good condition Cover stockpile with impervious sheets or grout Provide wheel washing facility at site entrance 	04.01.2024 By main contractor at KNP site

Working Period: Jan 2024

	By main contractor at KNP site
	By main contractor at KNP site

EIA 4.4.6; EM&A Log 3.2	Noise	 Regular inspection and maintenance of plant & equipment in good condition Deploy Quality Powered Mechanical Equipment (QPME) if possible Provide noise insulating mat for certain powered mechanical equipment. Valid construction noise permit should be displayed at site entrance.
EIA 9.7.1 and EM&A Log 8.3	Ecology Concern	 Provide training to workers about the conservative species Provision of protective fence for the conservative species Regular inspection for concerned vegetation

				and conservative species	By main contractor at KNP site 31.01.2024 By subcontractor at KNP site
EIA 3.9.1; EM&A Log 2.2	Soil Removal	Kong Nga Po Site	Air	 Cover dusty materials with impervious sheets Exposed slopes covered with waterproof layers such as tarpaulin sheets or grout to reduce the potential for sediment laden runoff entering the drainage system. 	By subcontractor at KNP site

		25.01.2024 By subcontractor at KNP site
		By main contractor at KNP site

			10.01.2024 By main contractor at KNP site
EIA 4.4.6; EM&A Log 3.2	Noise	 Regular inspection and maintenance of plant & equipment in good condition Deploy Quality Powered Mechanical Equipment (QPME) if possible Noise enclosure or acoustic shed should be used to cover stationary PME such as air 	By main contractor at KNP site

		compressor or generator.	20.01.20. By main contractor at KNP site
EIA 5.6.1.2 and EM&A Log 4.2	Water Quality	 Cover exposed slopes with impervious sheets or cement grout. Wastewater pumped out of the excavation areas shall be treated to remove suspended solid prior to discharge. Provide desilting/sedimentation devices for wastewater treatment prior to discharge 	By main contractor at KNP site

	By main contractor at KNP site
	By main contractor at KNP site

EIA 5.6.1.3 and EM&A Log 4.2	Water Quality	Provide drip tray to prevent spillage of fuels.	10.01.2024 By main contractor at KNP site
EIA Table 10.11; EM&A Table 9.1	Landscape and Visual Impact	 Preservation of existing trees will be undertaken in accordance with DEVB TC(W) 7/2015 and Guidelines for Tree Risk Assessment and Management Arrangement Implement temporary traffic arrangement which control construction area to 	By main contractor at KNP site

				minimize landscape and visual impacts	
EIA 3.9.1; EM&A Log 2.2	Construction of footings	Kong Nga Po Site	Air	 Cover dusty materials with impervious sheets Exposed slopes covered with waterproof layers such as tarpaulin sheets or grout to reduce the potential for sediment laden runoff entering the drainage system. 	By main contractor at KNP site
				 Provide wheel washing facility at site entrance 	
EIA 4.4.6; EM&A Log 3.2			Noise	Valid construction noise permit should be obtained and displayed on site	By main contractor at KNP site

EIA 5.6.1.3 and EM&A Log 4.2	Water Quality	Surface water from concrete batching areas and the rest of the site should be separated as far as possible.	By subcontractor at KNP site
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APPENDIX B ACTION AND LIMIT LEVELS

Appendix B - Action and Limit Levels

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

Monitoring station	Action Level (ug/m³)	Limit Level (ug/m³)	
AM1	308	500	
AM2	311	500	

Table B-2 Action and Limit Levels for Construction Noise

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

Noted:

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

APPENDIX C COPIES OF CALIBRATION CERTIFCATES



東業德勤測試顧問有限公司 ETS-TESTCONSULT LTD.

8/F Block B, Veristrong Industrial Centre, 34-36 Au Pui Wan Street, Fo Tan, Hong Kong

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Form Q/AS/C/02 Issue 1(1/4) [02/22]

Calibration Certificate

Certificate No.

: CSA33530

Page

Information Provided by Customer

Customer

: ETS - Testconsult Limited

Address

: 8/F., Block B, Veristrong Industrial Centre, 34 - 36 Au Pui Wan Street, Fotan, Shatin, Hong Kong

Information of Unit-under-test (UUT)

Description

Sound Level Calibrator

Manufacturer

Castle

Equipment I.D.

ET/EN/002/07

Туре

GA607

Serial No.

038641

Laboratory Information

Lab. Ref. No.

: Q/CAL/23/4006/I

Procedure

: CQS/002/A

Date of Calibration

: 19-May-2023

Date of Receipt

: 17-May-2023

Date of Issue

: 19-May-2023

Calibration Location

: Calibration Laboratory

Calibration Condition

Ambient Temperature : (20 ± 3) °C

Relative Humidity

: (50±20) %

Stabilizing Time

: 30 minutes

Sampling

: As received

Ambient Pressure

: (1000 ± 50) hPa

Reference equipment

- Multi-function sound calibrator, ET/2801/01
- Measuring Amplifier, ET/2702/01/01
- Signal generator, ET/2503/01
- Reference Oscilloscope, ET/2502/01

Calibration specification

To perform the calibration of sound level calibrator.

Calibration result

- The results are detailed on the subsequent pages.

Remarks

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

- The values given in this calibration certificate only to the values measureed at the time of test & any uncertibilities quoted will not include allowance for the equipment long term drift, varifications with environmental changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement

Calibrated By:

Tony MA (Technician) Approved By:

CHAN Chi Wai



東業德勤測試顧問有限公司 ETS-TESTCONSULT LTD.

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Calibration Certificate

Certificate No. : CSA33530

Page: 2 of 2

Calibration Result:

1. Measured Sound Pressure Level:

Nominal Frequency (Hz)	Nominal Output Sound Pressure (dB)	Measured Output (dB)	Expanded Uncertatiny (dB)	Coverage Factor
1000	94.0	94.1	0.13	2.0
1000	104.0	104.0	0.13	2.0

2. Actual Output Frequency:

Nominal Frequency (Hz)	Nominal Output Sound Pressure (dB)	Measured Output (Hz)	Expanded Uncertatiny (Hz)	Coverage Factor
1000	94.0	1000.020	0.057	2.0
1000	104.0	1000.017	0.057	2.0

Remark:

- The uncertainty quoted is based on 95 % confidence level.
- Measured output are mean of three measurements.

End of certificate



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Form Q/AS/C/01 Issue 1(1/7) [09/21]

Calibration Certificate

Certificate No.

: CSA34546

3

Information Provided by Customer

Customer

: ETS - Testconsult Limited

Address

8/F., Block B, Veristrong Industrial Centre, 34 - 36 Au Pui Wan Street, Fotan, Shatin, Hong Kong

Information of Unit-under-test (UUT)

	Sound Level Meter	Microphone	Pre-amplifier
Manufacturer	RION	RION	RION
Туре	NL-52	UC-59	NH-25
Equipment I.D. no.	ET/EN/003/17	2	
Serial No.	00264519	03558	64644
Adaptors used	□		
Resolution	0.1 dB	S S	

Laboratory Information

Lab. Ref. No.

Q/CAL/23/5141/I

Procedure

CQS/001/A

Date of Calibration

28-Jun-2023

Date of Receipt

21-Jun-2023

Date of Issue 28-Jun-2023 Calibration Location

Calibration Laboratory

Calibration Condition

Ambient Temperature : (20 ± 3) °C

Relative Humidity

(50 ± 20) %

Stabilizing Time

: 30 minutes

Sampling

As received

Ambient Pressure

: (1000 ± 50) hPa

Reference equipment

- Multi-function sound calibrator, ET/2801/01
- Signal generator, ET/2503/01

Calibration specification

To perform the calibration of linearity and frequency response by multi-function sound calibrator.

Calibration result

- The results are detailed on the subsequent pages.

Remarks

- The calibration results apply to the particular unit-under-test only.
- The values given in this calibration certificate only to the values measureed at the time of test & any uncertainties quoted will not include allowance for the equipment long term drift, varifications with environmental changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement

Calibrated By :

Tony MA (Technician) Approved By:

CHAN Chi Wai



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Calibration Certificate

Certificate No. : CSA34546

Page: 2 of 3

Calibration Result:

1 Reference Sound Pressure Level : (Unit in: dB)

Ra	nge / Mode		Reference Level	REF Frequency (kHz)	UUT Reading	Deviation	Expanded Uncertatiny	Coverage Factor
	Self-cal	Before	94.0		93.7	-0.3	0.13	2.0
A-Weighting	Range	30 to 130	104.0	1	103.7	-0.3	0.13	2.0
	Mode	Fast	114.0		113.7	-0.3	0.13	2.0
	Self-cal	After	94.0		94.0	0.0	0.13	2.0
	Range	30 to 130	104.0	1	104.1	0.1	0.13	2.0
	Mode	Fast	114.0		114.1	0.1	0.13	2.0
A-Weighting	Self-cal	After	94.0		94.0	0.0	0.13	2.0
	Range	30 to 130	104.0	1	104.1	0.1	0.13	2.0
	Mode	Slow	114.0		114.1	0.1	0.13	2.0
	Self-cal	10	94.0		94.0	0.0	0.13	2.0
	Range	30 to 130	104.0	1	104.1	0.1	0.13	2.0
0.141-1-1-1	Mode	Fast	114.0		114.0	0.0	0.13	2.0
C-Weighting	Self-cal	a a	94.0		94.0	0.0	0.13	2.0
	Range	30 to 130	104.0	1	104.1	0.1	0.13	2.0
	Mode	Slow	114.0		114.0	0.0	0.13	2.0
	Self-cal	2	94.0		94.0	0.0	0.13	2.0
	Range	30 to 130	104.0	1	104.1	0.1	0.13	2.0
7 14(-1-1-1)	Mode	Fast	114.0		114.1	0.1	0.13	2.0
Z-Weighting	Self-cal		94.0		94.0	0.0	0.13	2.0
	Range	30 to 130	104.0	1	104.1	0.1	0.13	2.0
	Mode	Slow	114.0		114.0	0.0	0.13	2.0

Remark:

- The uncertainty quoted is based on 95 % confidence level.
- UUT reading are mean of three measurements.
- Deviation = UUT Reading Reference Level
- Laboratory reference multi-function sound calibrator was used to adjust the "Self cal" reading of UUT.



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Form Q/AS/C/01 Issue 1(3/7) [09/21]

Calibration Certificate

Certificate No.

CSA34546

Page

3 of 3

Calibration Result:

Acoustic Sensitivity and Frequency Response:

2 Frequency Response A-Weighting (Unit in: dB)

Range	Mode	Applied Level	Frequency (Hz)	Reference Level	UUT Reading	Deviation	Expanded Uncertainty	Coverage Factor	
			31.5	54.6	40.5	-14.1	0.29	2.6	
		1	63	67.8	57.2	-10.6	0.22	2,3	
		8	125	77.9	72.2	-5.7	0.13	2.0	
		·	250	85.4	83,6	-1.8	0.12	2.0	
				500	90,8	90,9	0.1	0.12	2.0
30 to 130	Fast	94	1000 (Ref.)	94.0	94.0	0,0	0.13	2.0	
			2000	95.1	94.0	-1,1	0.13	2.0	
			4000	94,9	92,3	-2.6	0.13	2.0	
V			8000	92.9	85.4	-7.5	0.14	2.0	
V			12500	89.7	76.0	-13,7	0.14	2.0	
			16000	87.5	71,6	-15.9	0.16	2.0	

3 Frequency Response C-Weighting (Unit in: dB)

Range	Mode	Applied Level	Frequency (Hz)	Reference Level	UUT Reading	Deviation	Expanded Uncertainty	Coverage Factor											
			31.5	91.0	74.6	-16.4	0.22	2.3											
			63	93.2	82,4	-10.8	0.15	2.0											
			125	93.8	88.1	-5.7	0.15	2.0											
- 1			94	94	94	94	94	94						250	94.0	92.2	-1.8	0.14	2.0
		Fast 94							500	94.0	94.1	0.1	0.12	2.0					
30 to 130	Fast								94	94	94	94	1000 (Ref.)	94.0	94.0	0.0	0.13	2.0	
1 1											2000	93.7	92.6	-1.1	0,13	2.0			
				4000	93.1	90.5	-2,6	0.13	2.0										
			8000	91.0	83.5	-7.5	0.14	2.0											
				12500	87.8	74.1	-13.7	0.16	2.0										
			16000	85.6	69.8	-15.8	0.20	2.2											

4 Frequency Response Z-Weighting (Unit in: dB)

Range	Mode	Applied Level	Frequency (Hz)	Reference Level	UUT Reading	Deviation	Expanded Uncertainty	Coverage Factor
			31.5	94.0	77.6	-16.4	0.14	2.0
			63	94.0	83.2	-10.8	0.15	2.0
		i	125	94.0	88,3	-5.7	0.13	2.0
			250	94.0	92.2	-1.8	0.14	2.0
		2	500	94.0	94.0	0.0	0.12	2.0
30 to 130	Fast	94	1000 (Ref.)	94.0	94.0	0.0	0.13	2.0
			2000	94.0	92.8	-1.2	0.13	2.0
5			4000	94.0	91.3	-2.7	0.13	2.0
			8000	94.0	86,4	-7.6	0.14	2.0
			12500	94.0	80.7	-13.3	0.14	2.0
			16000	94.0	79.4	-14.6	0.14	2.0

Remark:

- Signal level at 1000 Hz is set as indication of reference sound pressure level.
- The uncertainty quoted is based on 95 % confidence level with coverage factor k=2,0.
- UUT reading are mean of three measurements.
- Deviation = UUT Reading Reference Level



RECALIBRATION DUE DATE:

January 17, 2024

Certificate of Calibration

Calibration Certification Information

Cal. Date: January 17, 2023

Rootsmeter S/N: 438320

Ta: 294
Pa: 741.4

°K

Operator: Jim Tisch

Calibration Model #: TE-5025A

Calibrator S/N: 4128

mm Hg

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	1.4370	3.2	2.00
2	3	4	1	1.0170	6.4	4.00
3	5	6	1	0.9140	8.0	5.00
4	7	8	1	0.8640	8.8	5.50
5	9	10	1	0.7170	12.8	8.00

		Data Tabula	tion		
Vstd	Qstd	$\sqrt{\Delta H \left(\frac{Pa}{Pstd}\right) \left(\frac{Tstd}{Ta}\right)}$		Qa	√∆H(Ta/Pa)
(m3)	(x-axis)	(y-axis)	Va	(x-axis)	(y-axis)
0.9846	0.6852	1.4063	0.9957	0.6929	0.8905
0.9803	0.9639	1.9888	0.9914	0.9748	1.2594
0.9782	1.0702	2.2235	0.9892	1.0823	1.4081
0.9771	1.1309	2.3321	0.9881	1.1437	1.4768
0.9718	1.3553	2.8126	0.9827	1.3706	1.7811
	m=	2.09676		m=	1.31296
QSTD	b=	-0.03027	QA	b=	-0.01917
٦٠	r=	0.99991		r=	0.99991

Calculation	ons	
Vstd= ΔVol((Pa-ΔP)/Pstd)(Tstd/Ta)	Va=	ΔVol((Pa-ΔP)/Pa)
Qstd= Vstd/ΔTime	Qa=	Va/ΔTime
For subsequent flow ra	ate calculatio	ns:
Qstd= $1/m \left(\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)} \right) - b$	Qa=	$1/m\left(\left(\sqrt{\Delta H\left(Ta/Pa\right)}\right)-b\right)$

	Standard Conditions
Tstd:	298.15 °K
Pstd:	760 mm Hg
	Key
ΔH: calibrator	manometer reading (in H2O)
ΔP: rootsmete	er manometer reading (mm Hg)
Ta: actual abs	olute temperature (°K)
Pa: actual bar	ometric pressure (mm Hg)
b: intercept	
m: slope	

RECALIBRATION

US EPA recommends annual recalibration per 1998 40 Code of Federal Regulations Part 50 to 51, Appendix B to Part 50, Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere, 9.2.17, page 30

Tisch Environmental, Inc. 145 South Miami Avenue Village of Cleves, OH 45002 www.tisch-env.com

TOLL FREE: (877)263-7610 FAX: (513)467-9009



RECALIBRATION DUE DATE:

January 15, 2025

Certificate of Calibration

Calibration Certification Information

Cal. Date:

January 15, 2024

Rootsmeter S/N: 438320

Calibrator S/N: 4228

Ta: 295
Pa: 756.4

°K

Operator:

Jim Tisch

mm Hg

Calibration Model #:

TE-5025A

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	1.4400	3.3	2.00
2	3	4	1	1.0250	6.4	4.00
3	5	6	1	0.9240	8.0	5.00
4	7	8	1	0.8780	8.9	5.50
5	9	10	1	0.7230	12.8	8.00

		Data Tabula	tion		
Vstd	Qstd	$\sqrt{\Delta H \left(\frac{Pa}{Pstd}\right) \left(\frac{Tstd}{Ta}\right)}$		Qa	√∆H(Ta/Pa)
(m3)	(x-axis)	(y-axis)	Va	(x-axis)	(y-axis)
1.0010	0.6951	1.4180	0.9956	0.6914	0.8832
0.9969	0.9726	2.0054	0.9915	0.9674	1.2490
0.9948	1.0766	2.2421	0.9894	1.0708	1.3964
0.9936	1.1316	2.3515	0.9882	1.1256	1.4646
0.9884	1.3671	2.8361	0.9831	1.3597	1.7664
	m=	2.11633		m=	1.32521
QSTD	b=	-0.04857	QA	b=	-0.03025
	r=	0.99987		r=	0.99987

	Calculation	ns	
Vstd=	ΔVol((Pa-ΔP)/Pstd)(Tstd/Ta)	Va=	ΔVol((Pa-ΔP)/Pa)
Qstd=	Vstd/ΔTime	Va/ΔTime	
	For subsequent flow ra	te calculatio	ns:
Qstd=	$1/m\left(\left(\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}\right)-b\right)$	Qa=	$1/m\left(\left(\sqrt{\Delta H(Ta/Pa)}\right)-b$

	Standard Conditions
Tstd:	298.15 °K
Pstd:	760 mm Hg
-	Key
ΔH: calibrato	manometer reading (in H2O)
ΔP: rootsmet	er manometer reading (mm Hg)
Ta: actual abs	olute temperature (°K)
Pa: actual bar	ometric pressure (mm Hg)
b: intercept	
m: slope	

RECALIBRATION

US EPA recommends annual recalibration per 1998 40 Code of Federal Regulations Part 50 to 51, Appendix B to Part 50, Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere, 9.2.17, page 30

Tisch Environmental, Inc. 145 South Miami Avenue Village of Cleves, OH 45002 www.tisch-env.com

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T: +852 2695 8318 F: +852 2695 3944 E: etl@ets-testconsult.com W: www.ets-testconsult.com

Calibration Report

High Volume Air Sampler

Manufacturer

Graseby GMW

Date of Calibration

20 December 2023

Serial No.

1180 (ET/EA/003/04)

Calibration Due Date

19 February 2024

Method

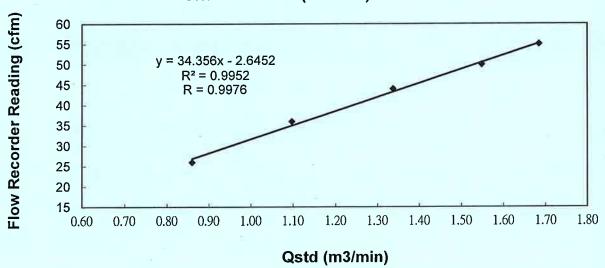
Based on Operations Manual for the 5-point calibration using standard calibration kit

manufactured by Tisch TE-5025 A

Results

Flow recorder rea	ading (cfm)		55	50	44	36	26
Qstd (Actual flow	rate, m³/min)		1.68	1.55	1.34	1.10	0.86
Pressure :	767.54	mm Hg		Temp.:	287	K	

Sampler 1180 Calibration Curve Site: Tuen Mun (TM-RA2)



Acceptance Criteria: Correlation coefficient (r) of the calibration curve greater than 0.990 after a 5-point calibration

The high volume sampler complies* / does not comply* with the specified requirements and is deemed acceptable* unacceptable * for use.

Calibrated by:

(Assistant Supervisor)

Checked by :

LAU, Chi Leung

(Environmental Team Leader)



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TEST REPORT

Internal Calibration Report

of **Dust Monitor**

Manufacturer: SIBATA (LD-3B)

Date of Calibration:

28 November 2023

Serial No.

155331 (ET/EA/001/09)

Calibration Due Date:

27 January 2024

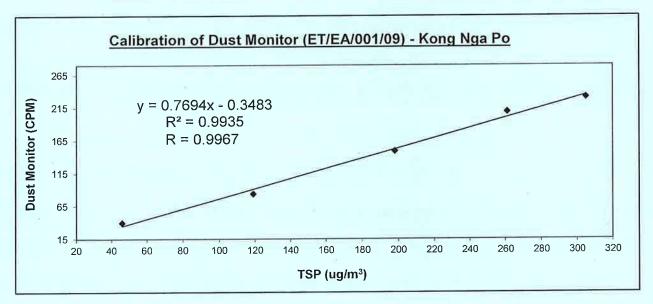
Method

Parallel measurement (Five-point calibration) by placing the Dust Monitor

and High Volume Air Samper together under the same environmental condition

Results

Dust Monitor (CPM)	40	84	149	209	231	
TSP (ug/m ³)	46	119	198	261	305	
High Volume Air Sampler, Serail No.: 1180	Calibration Due Date: 20 December 2023					



Acceptance Criteria:

Correlation coefficient (R) of the calibration curve greater than 0.990 after a five-point

calibration

The Dust Trak Monitor complies * / does not comply * with the internal calibration procedures and is deemed acceptable */ unacceptable * for use.

Calibrated by

CHENG, Hei Mal

(Technician)

Checked by

AU, Chi Leung

(Environmental Team Leader)



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TEST REPORT

Internal Calibration Report

of **Dust Monitor**

Manufacturer: SIBATA (LD-3B)

Date of Calibration:

26 January 2024

Serial No.

155331 (ET/EA/001/09)

Calibration Due Date:

25 April 2024

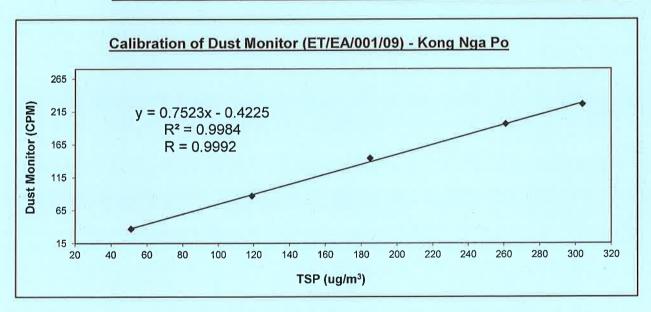
Method

: Parallel measurement (Five-point calibration) by placing the Dust Monitor

and High Volume Air Samper together under the same environmental condition

Results

Dust Monitor (CPM)	37	87	144	196	226		
TSP (ug/m ³)	51	119	185	261	304		
High Volume Air Sampler Serail No : 1180	Calibration Due Date: 19 February 2024						



Acceptance Criteria:

Correlation coefficient (R) of the calibration curve greater than 0.990 after a five-point

calibration

The Dust Trak Monitor complies * / does not comply * with the internal calibration procedures and is deemed acceptable */ unacceptable * for use.

Calibrated by :

CHENG, Hei Ma (Technician)

Checked by

LAU, Chi Leung

(Environmental Team Leader)



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TEST REPORT

Internal Calibration Report

of **Dust Monitor**

Manufacturer : SIBATA (LD-3B)

Date of Calibration:

28 November 2023

Serial No.

255863 (ET/EA/001/11)

Calibration Due Date :

27 January 2024

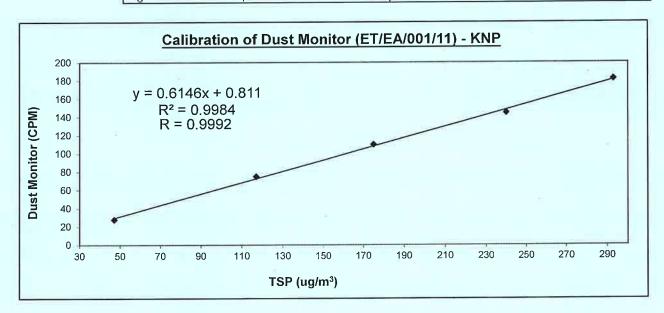
Method

Parallel measurement (Five-point calibration) by placing the Dust Monitor

and High Volume Air Samper together under the same environmental condition

Results

Dust Monitor (CPM)	28	75	110	145	182		
TSP (ug/m³)	47	117	175	240	293		
High Volume Air Sampler Serail No.:1180	Calibration Due Date: 20 December 2023						



Acceptance Criteria:

Correlation coefficient (R) of the calibration curve greater than 0.990 after a five-point

calibration

The Dust Trak Monitor complies * / does not comply * with the internal calibration procedures and is deemed acceptable */ unacceptable * for use.

Calibrated by:

CHENG, Hei Man

(Technician)

Checked by

LAU, Chi Leung

(Environmental Team Leader)



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TEST REPORT

Internal Calibration Report

of **Dust Monitor**

Manufacturer : SIBATA (LD-3B)

Date of Calibration :

26 January 2024

Serial No.

255863 (ET/EA/001/11)

Calibration Due Date:

25 April 2024

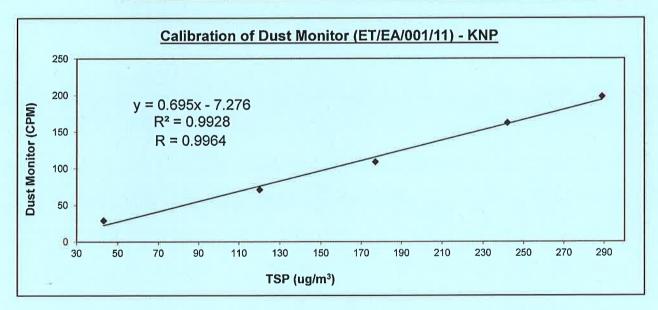
Method

Parallel measurement (Five-point calibration) by placing the Dust Monitor

and High Volume Air Samper together under the same environmental condition

Results

Dust Monitor (CPM)	29	71	109	162	198	
TSP (ug/m³)	43	120	177	242	289	
High Volume Air Sampler Serail No.:1180	Calibration Due Date: 19 February 2024					



Acceptance Criteria:

Correlation coefficient (R) of the calibration curve greater than 0.990 after a five-point calibration

The Dust Trak Monitor complies * / dees not comply * with the internal calibration procedures and is deemed acceptable */ unacceptable * for use.

Calibrated by:

CHENG, Hei Man (Technician)

Checked by :

LAU, Chi Leung

(Environmental Team Leader)

APPENDIX D ENVIRONMENTAL MONITORING SCHEDULES

Environmental Team for Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po Impact Air Quality and Noise Monitoring Schedule January-2024

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
31-Dec	1-Jan	2-Jan	3-Jan 1-hr TSP x3 (AM1, AM2) NM (NM9 to NM14)	4-Jan	5-Jan	6-Jan
7-Jan	8-Jan	9-Jan	10-Jan	11-Jan	12-Jan	13-Jan
		1-hr TSP x3 (AM1, AM2) NM (NM9 to NM14)				
14-Jan	15-Jan	16-Jan	17-Jan	18-Jan	19-Jan	20-Jan
	1-hr TSP x3 (AM1, AM2) NM (NM9 to NM14)				1-hr TSP x3 (AM1, AM2)	
21-Jan	22-Jan	23-Jan	24-Jan	25-Jan	26-Jan	27-Jan
			1-hr TSP x3 (AM1, AM2) NM (NM9 to NM14)			
28-Jan	29-Jan	30-Jan	31-Jan	1-Feb	2-Feb	3-Feb
		1-hr TSP x3 (AM1, AM2) NM (NM9 to NM14)				

Environmental Team for Site Formation and Infrastructure Works for Police Facilities in Kong Nga Po Impact Air Quality and Noise Monitoring Schedule February-2024

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
28-Jan	29-Jan	30-Jan	31-Jan	1-Feb	2-Feb	3-Feb
		1-hr TSP x3 (AM1, AM2) NM (NM9 to NM14)				
4-Feb	5-Feb	6-Feb	7-Feb	8-Feb	9-Feb	10-Feb
	1-hr TSP x3 (AM1, AM2) NM (NM9 to NM14)				1-hr TSP x3 (AM1, AM2)	
11-Feb	12-Feb	13-Feb	14-Feb	15-Feb	16-Feb	17-Feb
			1-hr TSP x3 (AM1, AM2) NM (NM9 to NM14)			
18-Feb	19-Feb	20-Feb	21-Feb	22-Feb	23-Feb	24-Feb
		1-hr TSP x3 (AM1, AM2) NM (NM9 to NM14)				
25-Feb	26-Feb	27-Feb	28-Feb	29-Feb	1-Mar	2-Mar
	1-hr TSP x3 (AM1, AM2) NM (NM9 to NM14)					

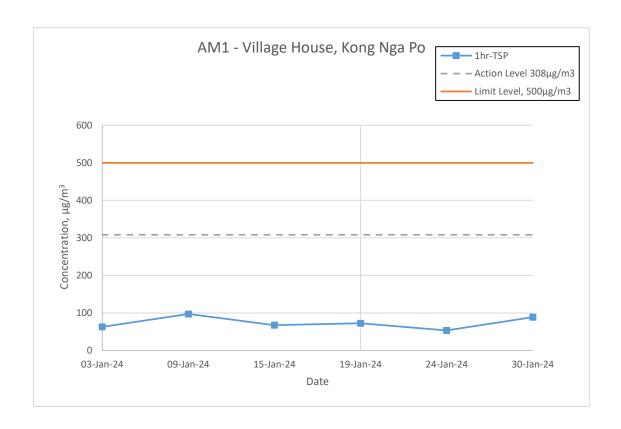
APPENDIX E AIR QUALITY MONITORING RESULTS AND GRAPHICAL PRESENTATION

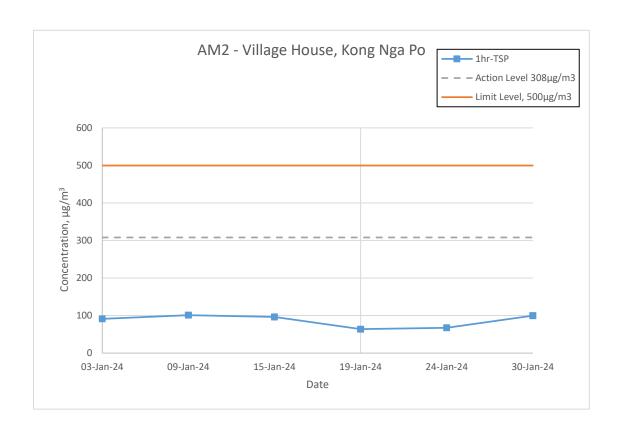
Appendix E - 1-hour TSP Monitoring Results

Location AM1 - Village House, Kong Nga Po								
Date	Time	Weather	Particulate Concentration (µg/m³)					
	8:40		63					
03-Jan-24	9:40	Cloudy	64					
	10:40		64					
	13:30		97					
09-Jan-24	14:30	Cloudy	100					
	15:30		106					
	10:30		67					
15-Jan-24	13:30	Fine	71					
	14:30		71					
	13:30		72					
19-Jan-24	14:30	Fine	66					
	15:30		71					
	9:00		53					
24-Jan-24	10:00	Cloudy	58					
	11:00		60					
	8:40		89					
30-Jan-24	9:40	Drizzle	90					
	10:40		92					
		Minimum	53					
		Maximum	106					
		Average	75					

Date	Time	Weather	Particulate Concentration (µg/m³)
	10:00	7,100,000	91
03-Jan-24	11:00	Cloudy	93
05 0411 21	13:30		93
	13:30		101
09-Jan-24	14:30	Cloudy	103
	15:30	1	103
	10:45		96
15-Jan-24	13:30	Fine	98
	14:30	1	100
	13:30		64
19-Jan-24	14:30	Fine	67
	15:30		67
	13:30		67
24-Jan-24	14:30	Cloudy	69
	15:30		69
	10:00		100
30-Jan-24	11:00	Drizzle	104
	12:00		103
		Minimum	64
		Maximum	104
		Average	88

1-hr TSP Concentration Levels





APPENDIX F NOISE MONITORING RESULTS AND GRAPHICAL PRESENTATION

Appendix F -Noise Monitoring Results

Location NM9 - Village House, Kong Nga Po									
Date	Weather	Wind Speed	Time	Unit	: dB(A) (5-	min)	Average	Limit Level	Baseline
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(m/s)		Leq	L ₁₀	L ₉₀	Leq	L_{eq}	Leq
				57.7	59.6	54.3			
				58.0	59.8	54.5			
03-Jan-24	Claudy	0.2	9:15	58.1	59.9	54.5	500	75.0	55.9
05-Jan-24	Cloudy	0.2	9:13	58.7	60.3	54.9	58.2	73.0	
				58.5	60.1	54.7			
			58.0	59.6	54.3				
				51.2	52.0	47.4			
			13:30	51.6	52.3	47.9			
09-Jan-24 Cloudy	Claudy	0.2		50.4	52.0	48.1	50.8	75.0	55.9
	Cloudy	0.2	13.30	50.7	52.8	47.1		75.0	33.3
				51.2	52.9	47.8			
				49.0	50.5	47.2			
				55.8	57.0	52.4			
		Fine 0.2	11:30	55.5	56.7	52.1	55.9		
15-Jan-24	Eino			56.2	57.3	52.7		75.0	55.9
13-Jan-24	FILE			56.4	57.6	53.1		75.0	
				56.0	57.1	52.5			
				55.2	56.4	52.3			
				56.2	56.9	53.1			
				59.5	62.9	55.1			
24-Jan-24	Cloudy	0.2	9:35	61.9	65.1	53.8	61.9	75.0	55.9
24-Jan-24	Cloudy	0.2	9:33	64.7	66.8	53.0	01.9	73.0	33.9
				63.1	66.0	51.6			
				61.5	65.9	51.1			
				60.4	63.3	55.5			
				59.4	61.9	54.2]		
20 Ion 24	Dwiggl-	0.2	0.15	57.0	59.7	51.8	57.9	75.0	55.9
30-Jan-24	Drizzle	zle 0.2	9:15	55.0	57.3	51.0			
				54.6	56.9	50.9			
				57.8	59.2	53.5			

Location NM	10 - Villa	ge House, Kong	Nga Po						
Date	Weather	Wind Speed	Time	Unit	: dB(A) (5-	min)	Average	Limit Level	Baseline
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(m/s)		Leq	L ₁₀	L ₉₀	Leq	L_{eq}	L _{eq}
				52.2	53.8	49.4		_	
				51.6	53.4	49.2			
03-Jan-24	Cloudy	0.2	8:40	51.5	53.2	48.9	51.6	75.0	52.8
03-Jan-24	Cloudy		0.40	51.1	52.7	48.6	31.0	75.0	
				51.4	52.9	48.8			
				52.0	53.6	49.1			
			54.1	58.0	46.8				
				47.7	50.8	44.8]		
09-Jan-24 Cloud	Cloudy	oudy 0.2	14:04	50.1	51.8	48.1	50.3	75.0	52.8
	Cloudy			51.6	52.7	49.7		73.0	52.0
				47.0	49.0	43.5			
				45.4	47.2	41.4			
		ine 0.2	10:30	50.5	51.8	47.3	50.8		
				51.0	52.4	47.7			
15-Jan-24	Fine			51.2	52.6	47.9		75.0	52.8
13-3411-24	Tille			51.5	52.9	48.1			
				50.2	51.6	47.1			
				50.1	51.4	47.2			
				55.7	57.5	48.3			
				56.3	58.0	48.8			
24-Jan-24	Cloudy	0.2	9:00	54.2	56.7	48.3	55.4	75.0	52.8
24-Jan-24	Cloudy	0.2	9.00	54.7	57.3	48.9] 55.4	75.0	32.0
				55.5	57.9	49.3			
				55.9	58.0	49.5			
				56.7	58.4	52.5			
				57.0	58.7	52.9	56.5		52.8
20 Ion 24	Deigala	rizzle 0.2	8:40	57.2	58.8	53.4		75.0	
30-Jan-24	Drizzie			55.9	57.6	52.2			
				56.0	57.5	52.4			
				56.3	57.7	52.6			

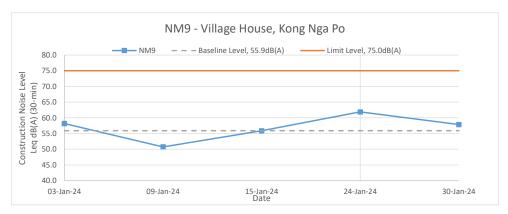
Location NM	[11 - Villa	ge House, Kong	Nga Po						
Date	Weather	Wind Speed	Time	Unit	: dB(A) (5-	min)	Average	Limit Level	Baseline
		(m/s)		L _{eq}	L ₁₀	L ₉₀	L_{eq}	L_{eq}	L _{eq}
				44.3	46.8	41.2			
				43.9	46.2	40.9			
03-Jan-24	Cloudy	0.2	11:00	43.7	45.4	40.4	44.7	75.0	46.4
03-Jan-24 Cloudy	Cloudy	0.2	11.00	45.2	47.1	42.8	44.7	75.0	40.4
				45.4	47.6	42.5			
			45.5	47.8	42.7				
09-Jan-24 Cloudy			59.3	65.2	40.1				
			63.0	69.0	47.0				
	Cloudy	0.2	14:41	46.7	48.4	44.1	57.0	75.0	46.4
	Cloudy	dy 0.2		45.8	47.5	42.6	57.0	75.0	40.4
				45.8	48.4	40.0			
				47.2	49.0	43.8			
			13:30	40.1	41.4	37.3			
		0.2		39.9	41.1	37.1	40.6		
15-Jan-24	Fine			40.5	41.8	37.9		75.0	46.4
13-Jan-24	FILE			40.7	42.0	38.1			
				40.9	42.2	38.4			
				41.2	42.6	38.8			
				51.4	49.0	46.7			
				48.1	48.8	44.0			
24-Jan-24	Cloudy	0.2	10:10	47.4	50.1	43.1	48.7	75.0	46.4
24-Jan-24	Cloudy	0.2	10.10	49.8	52.4	44.8	40.7	73.0	40.4
				48.7	51.6	44.3			
				42.9	50.9	43.2			
				47.4	49.0	44.2			
				47.7	49.4	44.6			
30-Jan-24	Drizzle	0.2	11:00	48.1	49.7	45.0	48.4	75.0	46.4
JU-Jan-24	DITZZIC	rizzle 0.2		48.5	50.2	45.7			46.4
				49.2	51.0	46.2			
				49.4	51.3	46.6			

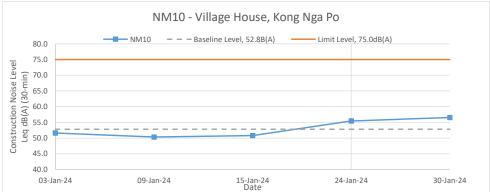
Location NM12 - Village House, Kong Nga Po									
Date	Weather	Wind Speed	Time	Unit	: dB(A) (5-1	min)	Average	Limit Level	Baseline
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(m/s)		L _{eq}	L ₁₀	L ₉₀	Leq	L_{eq}	Leq
				46.8	48.0	44.2			
				47.0	48.5	44.6			
03-Jan-24	Cloudy	0.2	10:00	47.2	48.8	45.1	46.8	75.0	54.7
03-Jan-24	Cloudy	0.2	10.00	47.3	48.9	45.3	40.0	75.0	34.7
				46.4	47.7	43.8]		
				45.9	47.2	43.1			
				44.6	46.5	41.3]		
				44.2	46.1	41.1]		54.7
09-Jan-24	Cloudy	0.2	13:30	43.7	45.8	40.8	44.1	75.0	
09-Jan-24	Cloudy	0.2	15.50	43.5	45.6	40.4	44.1		
				43.4	45.3	40.3			
				45.0	46.7	41.9			
				43.4	44.8	40.2]	75.0	54.7
				43.1	44.5	39.9]		
15-Jan-24	Fine	0.2	10:45	42.8	44.1	39.8	43.6		
13-3411-24	Tille	0.2	10.43	44.1	45.4	41.1	43.0		
				44.2	45.7	41.4			
				43.9	45.2	40.8			
				44.7	47.8	40.5			
				45.4	48.6	40.2			
24-Jan-24	Cloudy	0.2	13:30	44.9	49.6	41.8	46.0	75.0	54.7
21 3411 21	Cloudy	0.2	13.30	46.4	50.8	42.4	10.0	75.0	31.7
				46.9	51.0	43.2			
				47.0	51.4	43.8			
				40.0	41.8	37.5			
				39.4	40.7	37.2	39.9		
30-Jan-24	Drizzle	0.2	10:00	40.5	42.4	37.8		75.0	54.7
30-Jan-24	DITECTO	0.2	10.00	39.8	41.1	37.6		/5.0	J4./
				39.4	40.6	36.5			
				40.3	42.7	36.8			

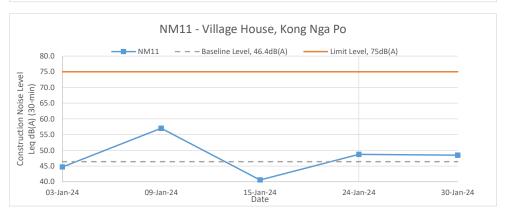
Location NM13 - Village House, Kong Nga Po											
Date	Weather	Wind Speed	Time	Unit	: dB(A) (5-	min)	Average	Limit Level	Baseline		
		(m/s)		Leq	L ₁₀	L ₉₀	Leq	Leq	Leq		
				53.4	55.5	50.1		-			
				53.8	55.9	50.6	52.9	520			
03-Jan-24	Cloudy	0.2	14:30	52.2	54.4	49.6			75.0	61.3	
03-Jan-24	Cloudy	0.2	14.50	52.4	54.7	49.9	32.9	75.0	01.5		
				52.7	54.9	50.1					
				52.9	55.1	50.3					
				47.4	49.0	44.9					
				47.2	48.6	44.6			61.3		
09-Jan-24	Cloudy	0.2	15:00	46.8	48.4	44.3	46.8	75.0			
09-Jan-24	Cloudy	0.2	15.00	46.5	48.0	43.9	40.6				
				46.1	47.6	43.5					
				46.6	48.1	44.3					
				51.2	52.8	49.0		75.0	61.3		
				51.4	52.9	49.2					
15-Jan-24	Fine	0.2	14:15	51.5	53.0	49.3	51.3				
13-3411-24	Time	0.2	14.13	51.7	53.3	49.6	31.3				
				50.9	52.4	48.4					
				50.8	52.3	48.2					
				60.7	62.8	57.8					
				61.4	62.9	58.6					
24-Jan-24	Cloudy	0.2	11:30	61.2	63.3	59.1	61.3	75.0	61.3		
24-Jan-24	Cloudy	0.2	11.50	61.1	62.6	59.2	01.5	75.0	01.5		
				62.0	63.1	60.2					
				61.5	62.9	59.3					
				48.9	50.2	47.4					
				48.1	49.9	46.2	50.9				
20 Ion 24	Duiggl-	0.2	14.20	52.0	53.7	47.8		75.0	612		
30-Jan-24	Drizzle	0.2	14:30	49.4	50.8	47.8		75.0	61.3		
				48.7	50.1	47.1]				
				54.3	55.7	48.9]				

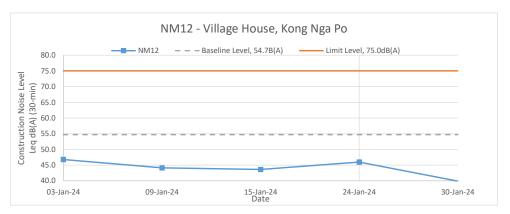
Location NM14 - Village House, near Man Kam To Road									
Date	Weather	Wind Speed	Time	Unit	:: dB(A) (5-1	min)	Average	Limit Level	Baseline
		(m/s)		L _{eq}	L ₁₀	L ₉₀	Leq	L_{eq}	L _{eq}
				43.4	44.7	40.2			
				42.8	44.3	39.6		75.0	
03-Jan-24	Cloudy	0.2	13:50	42.5	44.1	39.6	42.7		59.6
03-Jan-24	Cloudy	0.2	13.30	42.1	43.7	39.4	42.7	75.0	39.0
				42.4	43.9	39.7			
				42.8	44.2	39.9			
				40.4	41.8	37.6			
				40.5	41.9	37.7			59.6
09-Jan-24	Cloudy	0.2	14:20	40.2	41.5	37.3	40.7	75.0	
09-Jan-24	Cloudy	0.2	14.20	40.1	41.3	37.4	40.7		
				41.2	42.7	38.0			
				41.7	43.0	38.2			
				41.2	42.7	38.2		75.0	59.6
				41.1	42.5	38.1			
15-Jan-24	Fine	0.2	14:55	41.6	42.9	38.5	41.6		
13-Jan-24	Tille	0.2	14.55	41.9	43.3	38.8	41.0		
				41.5	43.0	38.6			
				42.0	43.7	39.1			
				51.3	54.9	41.3			
				49.7	53.6	40.2			
24-Jan-24	Cloudy	0.2	10:55	50.0	53.9	41.1	50.2	75.0	59.6
24-7411-24	Cloudy	0.2	10.55	49.1	52.2	40.0	30.2	13.0	39.0
				49.1	52.2	40.0			
				51.4	54.2	41.1			
				45.4	47.8	41.8			
				44.9	47.2	41.3	45.4		
30-Jan-24	Drizzle	0.2	13:50	45.0	47.3	41.3		75.0	59.6
J0-jan-24	DITECTE	0.2	15.50	44.3	46.8	41.1	1 43.4	13.0	39.0
				46.2	48.4	43.0]		
				46.4	48.7	43.4			

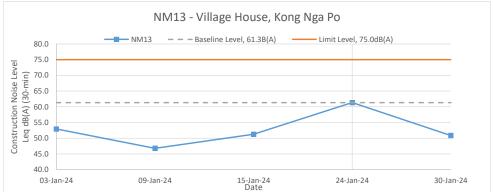
Noise Levels

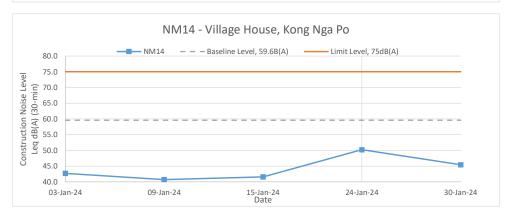












APPENDIX G WEATHER CONDITION

 $\label{eq:conditions} \begin{tabular}{ll} Appendix $G-$\\ General Weather Conditions during the Monitoring Period January 2024) \end{tabular}$

		Air Temperature			Mean	Mean	Mean	
Date	Mean Pressure				Dew Point	Relative	Amount	Total Rainfall
November	(hPa)	Maximum (deg. C)	Mean (deg. C)	Minimum (deg. C)	Temperature (deg. C)	Humidity (%)	of Cloud (%)	(mm)
1	1019.9	22	19.9	18.8	15.4	75	68	-
2	1019.1	20.5	18.7	17.8	14.3	76	59	-
3	1020	21.6	18.8	15.7	11.7	64	45	-
4	1020.9	19.6	17	15.4	10.8	67	29	-
5	1020.2	22	18.8	16.6	14.2	75	24	-
6	1020.1	23.8	20.2	17.8	15.6	76	34	-
7	1021	21.8	19.9	18.6	14.4	71	60	-
8	1019.6	20.6	19.1	17.7	14.1	73	70	Trace
9	1017.2	23.9	20.5	18.1	16.2	77	46	Trace
10	1018.6	23.2	20.3	17.9	13.7	67	33	-
11	1020	21.5	18.9	17.6	13	69	59	Trace
12	1019.1	21.8	18.9	17.1	14.2	75	53	-
13	1019.9	22	19.6	17.8	10.5	57	59	-
14	1021.1	23.8	20.7	18.5	11.2	56	48	-
15	1021.2	24.8	20.9	18.8	15.2	71	28	-
16	1022.1	20.5	18.7	17.5	14.1	75	74	-
17	1020.4	20.6	19.2	17.7	14	72	78	0.1
18	1017.7	24.2	21.2	19.1	16.3	74	47	-
19	1016.3	24.2	21.1	19.2	16.5	76	25	-
20	1016.3	24.6	21.4	19.5	16.8	75	50	-
21	1020.3	21.3	19.1	16.3	12.9	68	72	Trace
22	1023.3	18.5	15	9.8	10	72	88	0.5
23	1028.5	10.4	7.9	6.3	3.5	75	88	2.7
24	1029.2	12.5	9.2	6.5	1.6	59	87	-
25	1028.7	15.5	12.3	9.5	3.8	56	78	-
26	1027.3	17.8	15	13.1	7.6	61	84	-
27	1025.8	18.8	15.5	13.1	9.2	67	87	1
28	1026.4	15.7	13.7	11.7	11	83	87	2.4
29	1023.4	17.8	15.9	14.3	12.8	82	88	Trace
30	1020.7	20.2	18.3	16.8	16.2	88	88	Trace
31	1019.4	20.2	19.3	17.9	17.9	92	91	Trace
Mean/Total	1021.4	20.5	17.9	15.9	12.5	72	62	6.7
Normal*	1020.1	18.7	16.5	14.6	11.7	74	62	33.2

^{*} The above information was extracted from the daily weather summary by Hong Kong Observatory.

APPENDIX H ECOLOGICAL MONITORING RESULTS

Post-transplantation monitoring records for transplanted flora species (January 2024)

Contract No.: SS K509 Design and Construction of Kong Nga Po Police Training Facilities

Monitoring and Maintenance Works Report

INSPECTION DATE: 31 JANUARY 2024 REPORT DATE: 31 JANUARY 2024

> PREPARED BY: Lau Siu Yeung, Andy (UKAA PR5206)

> > Version: 00

Template of Post-transplantation Monitoring Checklist Design and Construction of Kong Nga Po Police Training Facilities

						Audit I	Ref. No	
Contra	act	SS K509						
Inspect	eed By	Lau Siu Yeung (Andy)	Inspection Date Time Period	_		/2024 to 13		<u></u>
Part A Condit Tempe Humid	ion rature	ather Sunny Fine Overcast Drizzle 18.3 °C High (RH>90%) Moderate (90%>RH>50%)	Rain	St	orm	Hazy		
Wind		Calm Light Breeze Strong	or not observed	Yes	No	Follow-up	N/C	Remarks
Part B			n not observed	103	110	ronow up	100	Temur no
1.	Cycadfer	n Brainea insignis		,				
1.1		lants' health conditions satisfactory?						
1.2		planted plants on site protected carefully?		\square			Ш	
1.3		emporary protective fence properly erected and maintained?						-
1.4	_	lant protection zone set 1m from the plants?						
1.5		assed and planted area kept free from weeds/unwanted plants?			\vdash		Н	
1.6	-	tion of the soil avoided for the plants?						_
1.7		oment or stockpile placed outside the protection zone?						
1.9	Are soil,	debris or construction materials deposited around and against the plant as this causes bark damage avoided?						
1.10		gs driven into plants avoided?						
1.11	Are the pl	lants used for anchoring or winching purposes or for the display of ided?		\triangle				
1.12		re lit below the branches and petrol, oil or caustic substances stored blants avoided?		\triangle				
1.13	Are all pla	ants kept free from pest, disease or fungal infection?		\triangle				
1.14	Are there	enough area for growth and development of plant roots?						
1.15a	Is exposu	re of plant roots avoided?						
1.15b	If not, we	re broken off or rotting of roots avoided?		\square				
			or not observed	Yes	No	Follow-up	N/C	Remarks
2. 2.1		resses Spiranthes sinensis lants' health conditions satisfactory?		\square				
2.2	•	planted plants on site protected carefully?						
2.3		emporary protective fence properly erected and maintained?		$\overline{\wedge}$				
2.4		lant protection zone set 1m from the plants?						
2.5		assed and planted area kept free from weeds/unwanted plants?						
2.6	-	ction of the soil avoided for the plants?						
2.7	Ara littar	/ unwanted material removed within the planting area?			$\overline{}$		$\overline{}$	

Template of Post-transplantation Monitoring Checklist Design and Construction of Kong Nga Po Police Training Facilities

		N/A or not observed	Yes	No	Follow-up	N/C	Remarks
2.8	Are equipment or stockpile placed outside the protection zone?		\square				
2.9	Are soil, debris or construction materials deposited around and against t trunk of a plant as this causes bark damage avoided?	he	\Box				
2.10	Are fixings driven into plants avoided?		\triangle				
2.11	Are the plants used for anchoring or winching purposes or for the displasigns avoided?	y of	\triangle				
2.12	Are the fire lit below the branches and petrol, oil or caustic substances s near the plants avoided?	tored	\triangle				
2.13	Are all plants kept free from pest, disease or fungal infection?		\triangle				
2.14	Are there enough area for growth and development of plant roots?						
2.15a	Is exposure of plant roots avoided?		\square				
2.15b	If not, were broken off or rotting of roots avoided?		\triangle				
<u></u>	Incense Trees Aquilaria sinesis	N/A or not observed	Yes	No	Follow-up	N/C	Remarks
3.1	Are the trees's health conditions satisfactory?						
3.2	Are transplanted trees on site protected carefully?						
3.3	Are the temporary protective fence properly erected and maintained?						
3.4	Are the tree protection zone set 1m from the trees?						
3.5	Are all grassed and planted area kept free from weeds/unwanted plants?						
3.6	Is compaction of the soil avoided for the trees						
3.7	Are litter/ unwanted material removed within the planting area?						
3.8	Are equipment or stockpile placed outside the protection zone?						
3.9	Are soil, debris or construction materials deposited around and against t trunk of a tree as this causes bark damage avoided?	he					
3.10	Are fixings driven into trees avoided?						
3.11	Are the trees used for anchoring or winching purposes or for the display signs avoided?	of					
3.12	Are the fire lit below the branches and petrol, oil or caustic substances s near the trees avoided?	tored					
3.13	Are all trees kept free from pest, disease or fungal infection?		A				
3.14	Are there enough area for growth and development of tree roots?			\Box			
3.15a	Is exposure of tree roots avoided?						
3.15b	If not, were broken off or rotting of roots avoided?						
3.16	Are wounds/mechanical injuries avoided on tree trunk?					A	
3.17	Are leaning of trees avoided?						
3.18	Are dead/detached branches avoided?						
3.19	Are decay/cavity avoided on tree trunks?						

Template of Post-transplantation Monitoring Checklist Design and Construction of Kong Nga Po Police Training Facilities

Part C	Follow-up for the Previo	ous Site Audit on Date:	(Ref. No.)		
	Tonon aproxime trem		N/A or not observed	Yes N	o Follow-up N/C	Remarks
1.	Is the situation in item	improved/rectified?				
2.	Is the situation in item	improved/rectified?				
3.	Is the situation in item	improved/rectified?				
4.	Is the situation in item	improved/rectified?				
5.	Is the situation in item	improved/rectified?				
6.	Is the situation in item	improved/rectified?				
7.	Is the situation in item	improved/rectified?				
8.	Is the situation in item	improved/rectified?				
9.	Is the situation in item	improved/rectified?				-
10.	Is the situation in item	improved/rectified?				-
Remarl	ks/Observations					
Cold	d weather condi	tion posted adver	rea affact to th	o foliado	of plants du	rina
2/1 t	o 25 January 20	1011 posted adver	Se effect to th	ic ioliage	or plants du	ilig
24 U	0 25 January 20	724.				
	Signatures:					
	Contractor's Representative		Ç,	pervisor's Rep.		
	A COMMENT OF THE PARTY OF THE P		31	регион в Кер.		
-	C pert		i de la companya de l			
	(Name: Lau Siu Yeung (Date: 31/01/2024	,		ame: ate:)	

Contract No.: SS K509

Design and Construction of Kong Nga Po Police Training Facilities Monitoring and Maintenance Works for Flora Species of Conservation Interest

Inspection Date:

31/01/20224

Tree/Plant/	Number of		Form	Health	
Colony No.	Individuals	Species Name	(Good/Fair/Poor)	(Good/Fair/Poor)	Remark
	01	Brainea insignis	F	F	Young leaves observed
	02	Brainea insignis	F	F	Young leaves observed
	03	Brainea insignis	F	F	Young leaves observed
~	04	Brainea insignis	F	F	Young leaves observed
C-0001	05	Brainea insignis	F	F	Young leaves observed
	06	Brainea insignis	F	F	Young leaves observed
	07	Brainea insignis	F	F	Young leaves observed
	08	Brainea insignis	F	F	Young leaves observed
	01	Brainea insignis	F	F	Young leaves observed
	02	Brainea insignis	F	F	Young leaves observed
	03	Brainea insignis	F	P	Young leaves observed
ŀ	04	Brainea insignis	F	P	Young leaves observed
C-0002	05		F	F	Young leaves observed
-	06	Brainea insignis	F	F	Young leaves observed
-	07	Brainea insignis	F	F	
-		Brainea insignis	_		Young leaves observed
G 0002	08	Brainea insignis	F	F	Young leaves observed
C-0003	01	Brainea insignis	F	F	Young leaves observed
					Young leaves at base; Dry out
	01	Brainea insignis	P	P	caused by bushfire initially
				_	outside site boundary and high
			_	_	temperature on 2 Feb 2021
	02	Brainea insignis	F	F	Young leaves observed
	03	Brainea insignis	F	F	Young leaves observed
	04	Brainea insignis	F	F	Young leaves observed
	05	Brainea insignis	F	F	Young leaves observed
	06	Brainea insignis	F	F	Young leaves observed
	07	Brainea insignis	F	F	Young leaves observed
	08	Brainea insignis	F	P	Young leaves at base
					Dry out caused by bushfire
	09	Brainea insignis	P	P	initially outside site boundary
	09	Drainea insignis	1	1	and high
					temperature on 2 Feb 2021
	10	Brainea insignis	F	P	Young leaves at base
	11	Brainea insignis	F	F	Young leaves observed
	12	Brainea insignis	F	P	Young leaves observed
C-0004					Stem not found
C-0004					Dry out caused by bushfire
	13	Brainea insignis	-	-	initially outside site boundary
					and high temperature on 2 Feb
					2021
	14	Brainea insignis	F	F	Young leaves observed
					Young leaves at base; Dry out
	1.5	D	P	D	caused by bushfire initially
	15	Brainea insignis	P	P	outside site boundary and high
					temperature on 2 Feb 2021
					Dry out caused by bushfire
		Brainea insignis	P	P	initially
	1.6		r	r	outside site boundary and high
	16	Drainea insignis			outside site obuildary and mgn
	16	Drainea insignis			temperature on 2 Feb 2021
	16	Brainea insignis	P	P	-
			P	P	temperature on 2 Feb 2021
			P -	Р -	temperature on 2 Feb 2021 Young leaves observed
	17	Brainea insignis	P -	P -	temperature on 2 Feb 2021 Young leaves observed Burned by bushfire initially
	17	Brainea insignis	P - F	P - P	Young leaves observed Burned by bushfire initially outside the site boundary on 2

Contract No.: SS K509

Design and Construction of Kong Nga Po Police Training Facilities Monitoring and Maintenance Works for Flora Species of Conservation Interest

Inspection Date:

31/01/20224

Tree/Plant/	Number of	Species Name	Form	Health	Remark
Colony No.	Individuals	-	(Good/Fair/Poor)	(Good/Fair/Poor)	
	01	Brainea insignis	F	F	Young leaves observed
	02	Brainea insignis	F	F	Young leaves observed
	03	Brainea insignis	F	F	Young leaves observed
C-0005	04	Brainea insignis	F	F	Young leaves observed
	05	Brainea insignis	F	P	Young leaves at base
	06	Brainea insignis	F	F	Young leaves observed
	07	Brainea insignis	F	F	Young leaves observed
C-0006	01	Brainea insignis	P	F	Young leaves observed
C-0007	01	Brainea insignis	F	F	Young leaves observed
C-0007	02	Brainea insignis	F	P	-
	01	Brainea insignis	F	F	Young leaves observed
	02	Brainea insignis	F	F	Young leaves observed
	03	Brainea insignis	P	P	Young leaves observed
C-0008	04	Brainea insignis	F	F	Young leaves observed
	05	Brainea insignis	F	F	Young leaves observed
	06	Brainea insignis	F	P	-
	07	Brainea insignis	F	P	Young leaves at base
C-0009	01	Brainea insignis	F	F	Young leaves observed
	01	Brainea insignis	F	F	Young leaves observed
C-0010	02	Brainea insignis	F	F	Young leaves observed
	03	Brainea insignis	F	F	Young leaves observed
	01	Brainea insignis	P	P	Dry out caused by bushfire initially outside site boundary and high temperature on 2 Feb 2021
	02	Brainea insignis	F	P	ı
	03	Brainea insignis	P	P	Young leaves at base
	04	Brainea insignis	F	F	-
G 0011	05	Brainea insignis	F	P	Young leaves at base
C-0011	06	Brainea insignis	F	F	Young leaves at base
	07	Brainea insignis	P	P	Young leaves at base
	08	Brainea insignis	F	F	Young leaves observed
	09	Brainea insignis	P	P	-
	10	Brainea insignis	F	F	Young leaves observed
	11	Brainea insignis	F	F	Young leaves observed
	12	Brainea insignis	P	P	-
	13	Brainea insignis	F	F	Young leaves observed







C-0001(Patch)_03









C-0001(Patch)_07





C-0002(Patch)_01





C-0002(Patch)_03





C-0002(Patch)_05





C-0002(Patch)_07





C-0003







C-0004(Patch)_03





C-0004(Patch)_05





C-0004(Patch)_07





C-0004(Patch)_09





C-0004(Patch)_11





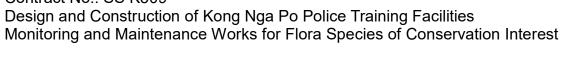
C-0004(Patch)_13





C-0004(Patch)_15







C-0004(Patch)_17





C-0004(Patch)_19









C-0005(Patch)_03





C-0005(Patch)_05





C-0005(Patch)_07



C-0006



C-0007(Patch)_01





C-0008(Patch)_01









C-0008(Patch)_05





C-0008(Patch)_07



C-0009



C-0010(Patch)_01





C-0010(Patch)_03



C-0011(Patch)_01





C-0011(Patch)_03





C-0011(Patch)_05





C-0011(Patch)_07





C-0011(Patch)_09





C-0011(Patch)_11





C-0011(Patch)_13

Design and Construction of Kong Nga Po Police Training Facilities

Monitoring and Maintenance Works for Flora Species of Conservation Interest

Inspection Date: 31/1/2024

Tree/Plant/ Colony No.	Species Name	Form (Good/Fair/Poor)	Health (Good/Fair/Poor)	Remark
L-0001	Spiranthes sinensis	-	-	Not observed
L-0002	Spiranthes sinensis	-	-	Leaf observed
L-0003	Spiranthes sinensis	P	P	Leaf observed
L-0004	Spiranthes sinensis	P	P	Leaf observed
L-0005	Spiranthes sinensis	-	-	Not observed
L-0006	Spiranthes sinensis	-	-	Not observed
L-0007	Spiranthes sinensis	-	-	Not observed
L-0008	Spiranthes sinensis	P	P	Leaf observed
L-0009	Spiranthes sinensis	-	-	Not observed
L-0010	Spiranthes sinensis	-	-	Not observed
L-0011	Spiranthes sinensis	-	-	Not observed
L-0012	Spiranthes sinensis	_	-	Not observed
L-0013	Spiranthes sinensis	-	-	Not observed
L-0014	Spiranthes sinensis	P	P	Leaf observed
L-0015	Spiranthes sinensis	P	P	Leaf observed
L-0016	Spiranthes sinensis	-	-	Not observed
L-0018	Spiranthes sinensis	F	F	Leaf observed
L-0019	Spiranthes sinensis	-	-	Not observed
L-0020	Spiranthes sinensis	-	-	Not observed
L-0021	Spiranthes sinensis	-	-	Not observed
L-0022	Spiranthes sinensis	F	F	Leaf observed
L-0023	Spiranthes sinensis	-	-	Not observed
L-0024	Spiranthes sinensis	P	Р	Leaf observed
L-0025	Spiranthes sinensis	-	-	Not observed
L-0026	Spiranthes sinensis	-	-	Not observed
L-0027	Spiranthes sinensis	-	-	Not observed
L-0028	Spiranthes sinensis	-	-	Not observed
L-0029	Spiranthes sinensis	-	-	Not observed
L-0030	Spiranthes sinensis	-	-	Not observed
L-0031	Spiranthes sinensis	F	F	Leaf observed
L-0032	Spiranthes sinensis	-	-	Not observed
L-0033	Spiranthes sinensis	-	-	Not observed
L-0034	Spiranthes sinensis	-	-	Not observed
L-0035	Spiranthes sinensis	-	-	Not observed
L-0036	Spiranthes sinensis	-	-	Not observed
L-0037	Spiranthes sinensis	F	F	Leaf observed
L-0038	Spiranthes sinensis	P	P	Leaf observed
L-0039	Spiranthes sinensis	-	-	Not observed
L-0040	Spiranthes sinensis	F	F	Leaf observed
L-0041	Spiranthes sinensis	-	-	Not observed
L-0042	Spiranthes sinensis	-	-	Not observed

Contract No.: SS K509 Design and Construction of Kong Nga Po Police Training Facilities
Monitoring and Maintenance Works for Flora Species of Conservation Interest







L-0002



L-0003



L-0004









L-0008







L-0010



L-0011



L-0012





L-0014







Contract No.: SS K509 Design and Construction of Kong Nga Po Police Training Facilities Monitoring and Maintenance Works for Flora Species of Conservation Interest







L-0019



L-0020



L-0021







L-0023



L-0024



L-0025







L-0027





L-0029

Contract No.: SS K509 Design and Construction of Kong Nga Po Police Training Facilities Monitoring and Maintenance Works for Flora Species of Conservation Interest







L-0031



L-0032



L-0033







L-0035



L-0036



L-0037

Contract No.: SS K509 Design and Construction of Kong Nga Po Police Training Facilities Monitoring and Maintenance Works for Flora Species of Conservation Interest







L-0039



L-0040



L-0041



L-0042

Contract No.: SS K509

Design and Construction of Kong Nga Po Police Training Facilities

Monitoring and Maintenance Works for Flora Species of Conservation Interest

Hong Da Landscaping Limited

Vegetation Maintenance Record Sheet (January 2024)

Description of West																Date															
Description of Work	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Watering		Y				Y		Y					Y			Y				Y			Y				Y		Y		Y
Weeding																															Y
Fertilization																															
Pest/Disease Control																													i		
Firming up of fence																													i		Y
Installation of shaded net																															
Mulching																															
Inspection																													i		Y
Checking of Protection Zone																													<u> </u>		Y
Remarks	МН	МН	МН	МН	МН	МН	МН	МН	МН	МН	МН	МН	МН	МН	МН	МН	МН	МН	МН	МН	МН	МН	МН	МН	МН	МН	МН	МН	МН	МН	МН
	Dubl	ia Ua	liday	1	Н-На	o.t	D-Dr	izzlo.		R-Ra	inv	1	X/ X/	indv		рш г	lioh F	Iumid	itx	MII	Medin	m Uu	midit	,	тцт	ow H	umidi	tsz			

Public Holiday H-Hot D-Drizzle R-Rainy W-Windy RH-High Humidity	MH-Medium Humidity LH-Low Humidity			
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watering (1)





weeding

Post-transplantation Monitoring Checklist Police Facilities in Kong Nga Po

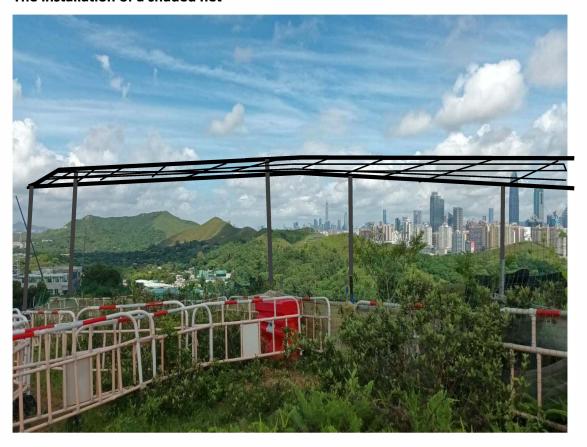
Contr	act	Provision of Environmental Team consultancy for Design and Construction					
		of Kong Nga Po Police Training Facilities (Programme no. 279LP)					
Inspec	ed By	ETL	Inspection Date	_	30-1	-2024	
Part A	We	ather					
Condit	ion	Sunny Fine Overcast Drizzle	Rain	St	orm	Hazy	
Humid Wind	ity	High (RH>90%) Moderate (90%>RH>50%) Calm Light Breeze Strong	Low (R	LH<50%)			
Part B		N/A (or not observed	Yes	No 1	Follow-up N/C	Remarks
1.	Cycadfer	n Brainea insignis					
1.1	Are the pl	lants' health conditions satisfactory?					
1.2	Are transp	planted plants on site protected carefully?					
1.3	Are the te	emporary protective fence properly erected and maintained?					
1.4	Are the pl	lant protection zone set 1m from the plants?					
1.5	Are all gr	assed and planted area kept free from weeds/unwanted plants?					-
1.6	Is compac	ction of the soil avoided for the plants?					
1.7	Are litter/	unwanted material removed within the planting area?					
1.8	Are equip	oment or stockpile placed outside the protection zone?					
1.9		debris or construction materials deposited around and against the plant as this causes bark damage avoided?					
1.10	Are fixing	gs driven into plants avoided?					
1.11	Are the pl	lants used for anchoring or winching purposes or for the display of ided?	\angle				
1.12		re lit below the branches and petrol, oil or caustic substances stored blants avoided?					
1.13	Are all pla	ants kept free from pest, disease or fungal infection?					
1.14	Are there	enough area for growth and development of plant roots?					
1.15a	Is exposu	re of plant roots avoided?					
1.15b	If not, we	ere broken off or rotting of roots avoided?	otag				
2.	Ladies T	resses Spiranthes sinensis					
2.1	Are the pl	lants' health conditions satisfactory?					-
2.2	Are transp	planted plants on site protected carefully?					
2.3	Are the te	emporary protective fence properly erected and maintained?					
2.4	Are the pl	lant protection zone set 1m from the plants?					
2.5	Are all gr	assed and planted area kept free from weeds/unwanted plants?					
2.6	Is compac	ction of the soil avoided for the plants?					
2.7	Are litter/	unwanted material removed within the planting area?					

Post-transplantation Monitoring Checklist Police Facilities in Kong Nga Po

		N/A or not obser	rved	Yes	No	Follow-up	N/C	Remarks
2.8	Are equipment or stockpile placed outside the protection zone?							
2.9	Are soil, debris or construction materials deposited around and against trunk of a plant as this causes bark damage avoided?	the						(0-
2.10	Are fixings driven into plants avoided?							
2.11	Are the plants used for anchoring or winching purposes or for the displasigns avoided?	ay of						2
2.12	Are the fire lit below the branches and petrol, oil or caustic substances an near the plants avoided?	stored						8
2.13	Are all plants kept free from pest, disease or fungal infection?							9
2.14	Are there enough area for growth and development of plant roots?							87
2.15a	Is exposure of plant roots avoided?							95
	If not, were broken off or rotting of roots avoided?							8
_∤ Ad	vice/observations							
1) Please refer to the guidelines on so andscape and Tree Management Section	•			-			-
	o apply to monitoring and maintenance	-	-				. Duit	(2022)
		,						
2) Daily watering frequency is needed	l to keep t	he so	oil mo	ist.			ë
3) Installation of a shaded net is provi	ded belov	v.					ž
re	The wild plants that are growing s they compete with the cultivated fleference or imitation, a photo illustration	ora speci	ies o	f con	serv	ation	inter	est. For
					22.5	303N #	1144章	.1331E 的道路 新界 1/2024

IEC	ETL	Contractor Representative
	Lee	
Name: Mr. Law	Name: Mr. Lee	Name: Marian Kong
Date:	Date: 30-1-2024	Date:

The installation of a shaded net





Remark: Non scale & Conceptual drawing

APPENDIX I EVENT ACTION PLANS

Appendix I:

Table I-1: Event / Action Plan for Air Quality

		ACTION	V	
EVENT	ET	IEC	PERMIT HOLDER	CONTRACTOR
ACTION LEVE	L			
1. Exceedance for one sample	1. Identify source, investigatethe causes of exceedance and propose remedial measures; 2. Inform IEC,ER and Contractor; 3. Repeat measurement to confirm finding; and 4. Increase monitoring frequency to daily.	Check monitoring data submitted by ET; Check Contractor's working method.	1. Notify Contractor.	1. Rectify any unacceptable practice: 2. Amend working methods if appropriate.
2. Exceedance for two or more consecutive samples	 Identify source; Inform IEC, ER andContractor; Advise the WKCDA on theeffectiveness of the proposed remedial measure; Repeat measurements to confirm findings; Increase monitoring frequency to daily; Discuss with IEC and Contractor on remedialactions required; If exceedance continues, arrange meeting with IECand ER; and 	 Check monitoring data submitted by ET; Check Contractor's working method; Discuss with ET and Contractor on possible remedial measures; Advise the ET on the effectiveness of the proposed remedial measures; and Monitor Implementation of remedial measures. 	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; and 3. Ensure remedial measures properly implemented.	 Submit proposals for remedial to ER within 3 working days of notification; Implement the agreed proposals; and Amend proposal if appropriate.

	ACTION									
EVENT	ET	IEC	PERMIT HOLDER	CONTRACTOR						
	8. If exceedance stops, cease additional monitoring.									
LIMIT LEVEL										
1.Exceedance for one sample	 Identify source, investigate the causes of exceedance and propose remedial measures; Inform ER, Contractor and EPD; Repeat measurement to confirm finding; Increase monitoring frequency to daily; and Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and the ER informed of the results. 	 Check monitoring data submitted byET; Check Contractor's working method; Discuss with ET and Contractor on possible remedial measures; Advise the ER on the effectiveness ofthe proposed remedial measures; and Monitor the implementation of remedial measures. 	1. Confirm receipt ofnotification of failure in writing; 2. Notify Contractor;and 3. Ensure remedial measures properly implemented.	1. Take immediate actionto avoid further exceedance; 2. Submit proposals for remedial actions to IECwithin 3 working days of notification; 3. Implement the agreedproposals; and 4. Amend proposal if appropriate.						
2.Exceedance for two or more consecutive samples	 Notify IEC, the ER, Contractor and EPD; Identify source; Repeat measurement to confirm findings; Increase monitoring frequency to daily; Carry out analysis of Contractor's working procedures to determine 	1. Check monitoring data submitted byET; 2. Check Contractor's working method; 3. Discuss amongst ER, ET, and Contractor on the potential remedial actions;	1. Confirm receipt ofnotification of failure in writing; 2. Notify Contractor; 3. In consultation with IEC, agree with the Contractor on theremedial measures to be implemented;	1. Take immediate actionto avoid further exceedance; 2. Submit proposals for remedial actions to IECwithin 3 working days of notification; 3. Implement the agreedproposals;						

EVENT	ACTION										
EVENI	ET	IEC	PERMIT HOLDER	CONTRACTOR							
	possible mitigation to	4. Review Contractor's	4. Ensure remedial	4. Resubmit proposals							
	be implemented;	remedial actions	measures	if problem still not							
	6. Arrange meeting with	whenever necessary to	properly	undercontrol; and							
	IEC, and ER to discuss	assuretheir	implemented;	5. Stop the relevant							
	the remedial actions to	effectiveness and	and	portion of works as							
	be taken;	advise the ER	5. If exceedance	determined by the							
	7. Assess effectiveness of	accordingly; and	continues,	ER until the							
	Contractor's remedial	5. Monitor	consider what	exceedance is							
	actions and keep IEC,	implementation of	portion of the	abated.							
	EPD and ER informed	remedial measures.	work is								
	of the results; and		responsible and								
	8. If exceedance stops,		instruct the								
	cease additional		Contractor to								
	monitoring.		stopthat portion								
			of work until								
			the exceedances is								
			abated.								

 $Abbreviations: ET-Environmental\ Team,\ IEC-Independent\ Environmental\ Checker$

Table I-2: Event / Action Plan for Construction Noise

EVENT		ACT	TION	
	ET	IEC	PERMIT HOLDER	CONTRACTOR
Action Level	 Notify ER, IEC and Contractor; Carry out investigation; Report the results of investigation to the IEC, ER and Contractor; Discuss with the IEC and Contractor on remedial measures required; and Increase monitoring frequency to check mitigation effectiveness. 	1. Review the monitoring data submitted by the ET; 2. Review the proposed remedial measures by the Contractor and advise ER; and 3. Advise the ER on the effectiveness of the proposed remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. In consolidation with the IEC, agree with the Contractor on the remedial measure to be implemented: and 4. Supervise the implementation of remedial measure.	1. Submit noise mitigation proposals to IEC and ER; and 2. Implement noise mitigation proposals.
Limit Level	 Inform IEC, ER and Contractor and EPD; Repeat measurements to confirm findings; Increase the monitoring frequency; Identify source and investigate the cause of exceedance; Carry out analysis of Contractor's working procedures; Discuss with the IEC, Contractor and ER on 	1. Discuss amongst the ER, ET, and Contractor on the potential remedial actions; and 2. Review Contractor's remedial actions 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. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; 4. Supervise the implementation of remedial measures; and 5. If exceedance continues, consider	1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to the IEC and ER within 3 working days of notification; 3. Implement the agreed proposals; 4. Submit further proposal if problem still not under control; and 5. Stop the relevant portion of works as

EVENT		ACT	TION	
	ET	IEC	PERMIT HOLDER	CONTRACTOR
	remedial measure		stopping the	determined by the ER
	required;		Contractor to	until the exceedance
	7. Assess effectiveness		continue working in	is abated.
	of Contractor's		that portion of work	
	remedial actions and		which causes the	
	keep IEC, EPD and		exceedance until	
	ER informed of the		the exceedance is	
	results; and		abated.	
	8. If exceedance stops,			
	cease additional			
	monitoring.			

 $Abbreviations: ET-Environmental\ Team,\ IEC-Independent\ Environmental\ Checker$

Table I-3: Event / Action Plan for Landscape and Visual Mitigation Measures

EVENT		ACT	TION	
	ET	IEC	PERMIT HOLDER	CONTRACTOR
Non-	Identify source. Inform	Check report.	Notify Contractor.	Amend working
conformity on	IEC and ER.	Check Contractor's	Ensure remedial	methods to prevent
one occasion	Discuss remedial actions	working method.	measures are properly	recurrence of
	with IEC, ER and	Discuss with ET and	implemented	nonconformity.
	Contractor.	Contractor on possible		Rectify damage and
	Monitor remedial	remedial measures.		undertake additional
	actions until rectification	Advise ER on		action necessary.
	has been completed.	effectiveness of		
		proposed remedial		
		measures.		
		Check implementation		
		of remedial measures.		
Repeated	Identify source.	Check monitoring	Notify Contractor.	Amend working
Nonconformity	Inform IEC and ER.	report. Check	Ensure remedial	methods to prevent
	Increase monitoring	Contractor's working	measures are properly	recurrence of
	frequency. Discuss	method.	implemented.	nonconformity.
	remedial actions with	Discuss with ET and		Rectify damage and
	IEC, ER and Contractor.	Contractor on possible		undertake additional
	Monitor remedial	remedial measures.		action necessary.
	actions until rectification	Advise ER on		
	has been completed.	effectiveness of		
	If non-conformity stops,	proposed remedial		
	cease additional	measures.		
	monitoring.	Supervise		
		implementation of		
		remedial measures.		

 $Abbreviations: ET-Environmental\ Team,\ IEC-Independent\ Environmental\ Checker$

APPENDIX J SUMMARY OF EXCEEDANCE

Appendix J: Exceedance Report

(A) Exceedance Report for Air Quality

Environmental Monitoring	Parameter	No. of non-proje Exceedance	ct related	No. of Exceeda the Construction this Contract	Exceedance	
		Action Level	Limit Level	Action Level		recorded
Air Quality	1-hr TSP	0	0	0	0	0

(B) Exceedance Report for Construction Noise

Environmental Monitoring	Parameter	No. of non-project related Exceedance		No. of Exceeda the Construction this Contract	Exceedance	
		Action Level	Limit Level	Action Level	Limit Level	recorded
Noise	Leq(30 min.) dB(A)	0	0	0	0	0

APPENDIX K ENVIRONMENTAL MITIGATION IMPLEMENTATION SCHEDULE (EMIS)

EIA	EM&A	Recommended Mitigation Measures	Objectives of the Recommended	Implementation	Location / Duration of the measure	Implementation Stages ¹			Relevant Legislation &
Ref.	Ref.		Measure & Main Concerns to address	Agent		Des	С	0	Guidelines
Air Qua	ality Impac	t - Construction Phase							
3.9.1	2.2	Dust Control Measures To achieve compliance with the FSP, RSP and TSP criteria during the construction phase, good practices for dust control should be implemented to reduce dust impacts. The dust control measures are detailed as follows: Use of regular water spraying (once every 1.25 hours or 8 times per day) to reduce dust emissions from heavy construction activities (including ground excavation, earth moving, etc.) at all active works area exposed site surfaces and unpaved roads, particularly during dry weather. Covering 80% of stockpiling area by impervious sheets and spraying all dusty material with water immediately prior to any loading transfer operations to keep the dusty materials wet during material handling at the stockpile areas Relevant dust control practices as stipulated in the Air Pollution Control (Construction Dust) Regulation should be adopted:	Construction Dust	Contractor	Project construction site / Duration of the construction phase / Prior to commencement of operation				EIA Recommendation and Air Pollution Control (Construction Dust) Regulation
		Good Site Management Good site management is important to help reduce potential air quality impact down to an acceptable level. As a general guide, the							

EIA	EM&A	Recommended Mitigation Measures	Objectives of the Recommended	Implementation	Location / Duration of		lementa Stages		Relevant Legislation &
Ref.	Ref.		Measure & Main Concerns to address	Agent	the measure	Des	С	0	Guidelines
		Contractor should maintain high standards of housekeeping to prevent emissions of fugitive dust. Loading, unloading, handling and storage of raw materials, wastes or byproducts should be carried out in a manner so as to minimise the release of visible dust emission. Any piles of materials accumulated on or around the work areas should be cleaned up regularly. Cleaning, repair and maintenance of all plant facilities within the work areas should be carried out in a manner minimising generation of fugitive dust emissions. The material should be handled properly to prevent fugitive dust emission before cleaning.							
		Disturbed Parts of the Roads Main temporary access points should be paved with concrete, bituminous hardcore materials or metal plates and be kept clear of dusty materials; or							
		 Unpaved parts of the road should be sprayed with water or a dust suppression chemical so as to keep the entire road surface wet. 							
		Exposed Earth Exposed earth should be properly treated by compaction, hydroseeding, vegetation planting or seating with latex, vinyl, bitumen within six months after the last construction activity on the site or part of the site where the exposed earth lies.							
		Loading, Unloading or Transfer of Dusty Materials All dusty materials should be sprayed with water immediately prior to any loading or transfer operation so as to keep the dusty material wet.							

Objectives of the Implementation Relevant EM&A Recommended Implementation Location / Duration of Stages¹ **Recommended Mitigation Measures** Legislation & Ref. Ref. Measure & Main Agent the measure Guidelines Des Concerns to address Debris Handling Any debris should be covered entirely by impervious sheeting or stored in a debris collection area sheltered on the top and the three sides. Before debris is dumped into a chute, water should be sprayed onto the debris so that it remains wet when it is dumped. Transport of Dusty Materials Vehicles used for transporting dusty materials/spoils should be covered with tarpaulin or similar material. The cover should extend over the edges of the sides and tailboards. Wheel washing Vehicle wheel washing facilities should be provided at each construction site exit. Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels. Use of vehicles The speed of the trucks within the site should be controlled to about 10 km/hour in order to reduce adverse dust impacts and secure the safe movement around the site. Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels. Where a vehicle leaving the construction site is carrying a load of dusty materials, the load should be covered entirely by clean impervious sheeting to ensure that the dusty materials do not leak from the vehicle.

EIA	EM&A	Recommended Mitigation Measures	Objectives of the Recommended	Implementation	Location / Duration of		lementa Stages		Relevant Legislation &
Ref.	Ref.		Measure & Main Concerns to address	Agent	the measure	Des	С	0	Guidelines
Air Qua	lity Impac	Site hoarding Where a site boundary adjoins a road, street, service lane or other area accessible to the public, hoarding of not less than 2.4m high from ground level should be provided along the entire length of that portion of the site boundary except for a site entrance or exit							
	iny impac	t – Operation Phase	=						
3.7.4	-	■ Bullet containment systems such as backstops of soft materials (e.g. timber baffles) and sand traps behind bullet targets are proposed to be installed to collect bullets from gunshots, which would reduce lead dust and dust in general. ■ Monitoring and adjusting of soil pH or runoff control measures may be required to ensure no lead migration occurs. Alternatively, the use of lead-free primers mixture for firearms or air pistols would eradicate lead dust emissions completely. ■ A solid fence wall (at least 2.4m to 3.5m high) with a backstop of soft material (of a density of at least 20kg/m²) will also be erected around the boundary of the firing ranges.	Proposed Firing Range	Hong Kong Police Force	Duration of the operation phase			V	N/A
Noise Ir	npact – Co	onstruction Phase							
4.4.6	3.2	Good Site Practice Good site practice and noise management can significantly reduce the impact of construction site activities on nearby NSRs. The following package of measures should be followed during each phase of construction: only well-maintained plant to be operated onsite and plant should be serviced regularly during the construction works; machines and plant that may be in intermittent use to be shut down between work periods or should be throttled down to a minimum;	Maintain good site practice to minimise / avoid construction noise impact	Contractor	Within the Project site / During construction phase / Prior to commencement of operation.		✓		EIAO and Noise Control Ordinance

EIA	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended	Implementation			lementa Stages		Relevant Legislation &
Ref.	IXGI.		Measure & Main Concerns to address	Agent	the measure	Des	С	0	Guidelines
		 plant known to emit noise strongly in one direction, should, where possible, be orientated to direct noise away from the NSRs; mobile plant should be sited as far away from NSRs as possible; and material stockpiles and other structures to be effectively utilised, where practicable, to screen noise from on-site construction activities. 							
4.4.6	3.2	Adoption of QPME QPME should be adopted as far as applicable.	Minimise / avoid construction noise impacts to the surrounding NSRs	Contractor	Within the Project site / During construction phase / Prior to commencement of operation.		√		EIAO and Noise Control Ordinance
4.4.6	3.2	Use of Movable Noise Barriers Movable noise barriers should be placed along the active works area and mobile plants to block the direct line of sight between PME and the NSRs.	Minimise / avoid construction noise impacts to the surrounding NSRs	Contractor	Within the Project site / During construction phase / Prior to commencement of operation.		√		EIAO and Noise Control Ordinance
4.4.6	3.2	Use of Noise Enclosure/ Acoustic Shed Noise enclosure or acoustic shed should be used to cover stationary PME such as air compressor and generator.	Minimise / avoid construction noise impacts to the surrounding NSRs	Contractor	Within the Project site / During construction phase / Prior to commencement of operation.		√		EIAO and Noise Control Ordinance
4.4.6	3.2	Use of Noise Insulating Fabric Noise insulating fabric can also be adopted for certain PME (e.g. pilling machine etc.).	Minimise / avoid construction noise impacts to the surrounding NSRs	Contractor	Within the Project site / During construction phase / Prior to commencement of operation.		√		EIAO and Noise Control Ordinance
Noise I	mpact – O	peration Phase							
4.6.6	3.3	Fixed Noise Source At least 2.5m height perimeter wall / boundary wall at the Project site and 5m height 4-side walls at Ma Tso Lung Firing Range will be installed.	Minimise / avoid fixed noise source impacts to the surrounding NSRs	Design Architect / Contractor	Within the Project site / During construction phase / Prior to commencement of operation.		✓		EIAO and Noise Control Ordinance
4.6.6	3.3	Fixed Noise Source Specification of the maximum allowable sound	Minimise / avoid fixed noise source impacts to	Design Architect / Contractor	Within the Project site / During operation phase			√	EIAO and Noise Control

EIA	EM&A	Recommended Mitigation Measures	Objectives of the Recommended	Implementation	Location / Duration of		lementa Stages		Relevant Legislation &
Ref.	Ref.		Measure & Main Concerns to address	Agent	the measure	Des	С	0	Guidelines
		power levels of the proposed fixed plants should be followed. The following noise reduction measures should be considered as far as practicable during operation: Install sand bullet trap, sound absorption materials and baffle system at the planned firing ranges; Choose quieter plant such as those which have been effectively silenced; Include noise levels specification when ordering new plant (including chillier and E/M equipment); Locate fixed plant/louvre away from any NSRs as far as practicable; Locate fixed plant in walled plant rooms or in specially designed enclosures; Locate noisy machines in a completely separate building; Install direct noise mitigation measures including silencers, acoustic louvres and acoustic enclosure where necessary; and Develop and implement a regularly scheduled plant maintenance programme so that equipment is properly operated and serviced in order to maintain a controlled level of noise.	the surrounding NSRs		/ Throughout operation phase				Ordinance
4.7.4	3.3	Helicopter Noise At least 2.5m height perimeter wall / boundary wall at the Project site will be installed.	Minimise / avoid helicopter noise impacts to the surrounding NSRs	Design Architect / Contractor	Within the Project site / During construction phase / Prior to commencement of operation.		✓		EIAO and Noise Control Ordinance
4.7.4	3.3	Helicopter Noise Only one helicopter will be allowed in hovering, approaching or taking-off while another helicopter should be idling on ground.	Minimise / avoid helicopter noise impacts to the surrounding NSRs	GFS	Helipad operation/ Operation Period			√	EIAO and Noise Control Ordinance
4.7.4	3.3	Helicopter Noise The helicopter will be in approaching or taking-off within the restricted ranges of approach/take-off flight paths and adopting steeper approach / departure (take-off) angles.	Minimise / avoid helicopter noise impacts to the surrounding NSRs	GFS	Helipad operation/ Operation Period			✓	EIAO and Noise Control Ordinance

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measure & Main	Implementation Agent	Location / Duration of the measure		ementa Stages		Relevant Legislation &
ixei.	IXGI.		Concerns to address	Agent	tile illeasule	Des	С	0	Guidelines
Water C	uality Imp	pact - Construction Phase							
5.6.1.1	4.2	The following measures should be implemented: Construction waste, debris and refuse generated on-site should be stored or contained appropriately to prevent them entering nearby watercourses or blocking stormwater drains. Regular off-site removal of these materials should be maintained to minimise the volume of waste present on the construction site at any one time. Stockpiles of construction materials such as cement and excavated material should be covered when not in use to reduce the	Maintain good site practices to avoid pollution of water courses	Contractor	Within the Project site / During construction phase		√		Water Pollution Control Ordinance (Cap. 358), ProPECC Note PN 1/94
5.6.1.2	4.2	Construction Site Runoff The site practices outlined in ProPECC Note PN 1/94 should be followed as far as practicable in order to minimise surface runoff and the chance of erosion. The following measures are recommended: Temporary site drainage facilities are to be designed and implemented by the Contractor prior to commencement of construction to convey surface runoff to storm drains applying adequately designed silt/ sand removal traps and sediment basins. Perimeter cut-off drains shall be installed in advance of any earthworks and site formation work to convey site runoff from the works areas to the silt removal facilities. Runoff into the excavation areas during rainstorm events shall be minimised as far as practicable. Any wastewater pumped out of the excavation areas shall be treated to remove suspended solids prior to discharge. Maintenance and inspection of the drainage system and sediment removal facilities should	Minimise / control construction site runoff to avoid pollution of water courses	Contractor	Within the Project site / During construction phase		√		Water Pollution Control Ordinance (Cap. 358), ProPECC Note PN 1/94

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measure & Main	Implementation Agent	Location / Duration of the measure	Implementation Stages ¹			Relevant Legislation &
Rei.	Rei.		Concerns to address	Ageiit	the measure	Des	С	0	Guidelines
		be carried out regularly to remove any sediment and blockages, especially when rainstorms are forecast. Final surface levels should be compacted and final surface protections installed to prevent erosion caused by rainstorms. Open stockpiles of material should be covered on site with waterproof layers such as tarpaulin to reduce the potential for sediment laden runoff entering the drainage system. The wheels of all vehicles and plant should be cleaned before leaving the works areas to remove sediment, soil and debris from the tracks. The washwater should be treated to remove any suspended sediment. Surface water from concrete batching areas and the rest of the site should be separated as far as possible. Wastewater from any concrete batching plant (if required) shall be treated to the required standards including pH adjustment and settlement of suspended sediments before discharging to stormwater drains. Manholes (including those constructed as part of the Project) should be adequately covered and temporarily sealed at all times to prevent silt, construction materials or debris from entering the drainage system, and to prevent storm runoff from entering foul sewers. The discharge of surface runoff into foul sewers should be prevented so as not to overload the sewerage system.							
		Discharges should be collected by the temporary drainage system installed by the Contractor and treated on-site to remove sediment prior to discharge to the off-site drainage areas. The Contractor is required to obtain a discharge licence from EPD under the WPCO for all discharges from site with all discharges meeting							

EIA	EM&A	Recommended Mitigation Measures	Objectives of the Recommended	Implementation	Location / Duration of		ementa Stages		Relevant Legislation &
Ref.	Ref.	, and the second se	Measure & Main Concerns to address	Agent	the measure	Des	С	0	Guidelines
		Memorandum on Standards for Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters (TM-DSS).							
5.6.1.3	4.2	Accidental Spillage of Chemicals In accordance with the Waste Disposal (Chemical Waste) (General) Regulation (Cap 354C), the following measures should be implemented: The labelling and storage of chemicals should be in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes and maintained at all times by the Contractor. Oils and fuels should only be stored in designated areas which have appropriate pollution prevention control facilities such as oil and grease traps. The maintenance of vehicles should only be undertaken in areas of the site served by appropriate pollution prevention control facilities. To prevent the spillage of fuels and solvents to nearby stormwater drains, all fuel tanks and storage areas should be locked and sited on sealed areas of the site, within bunded areas with a capacity equal to 110% of the storage capacity of the largest container. The bund should be kept free of surface water at all times and after each rainfall event.	Prevent accidental discharge of chemicals into the surrounding environment	Contractor	Within the Project site / During construction phase				Code of Practice on the Packaging Labelling and Storage of Chemical Wastes; Waste Disposal (Chemical Waste) (General) Regulation (Cap 354C)
5.6.1.4	4.2	Sewage from Construction Workforce Portable toilets should be available throughout the construction phase and regularly maintained, collected and disposed by a licensed waste collector to a public sewage treatment works for suitable treatment.	Prevent discharge of sewage into the surrounding environment	Contractor	Within the Project site / During construction phase		√		Water Pollution Control Ordinance (Cap. 358), ProPECC Note PN 1/94
5.6.1.5	4.2	Construction Works in Close Proximity to Inland Watercourses Mitigation measures such as such as temporary diversions of existing drainage culverts/ watercourses before construction commences and	Minimise/ control construction site discharges to avoid pollution of nearby watercourses	Contractor	Within the Project site / During construction phase		✓		Water Pollution Control Ordinance (Cap. 358), ProPECC Note PN 1/94,

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measure & Main		Location / Duration of the measure		lementa Stages		Relevant Legislation &
itei.	101.		Concerns to address	Agent		Des	С	0	Guidelines
		during construction should be implemented, in addition to those listed in ProPECC Note PN1/94 Construction Site Drainage and ETWB TC (Works) No. 5/2005 Protection of Natural Streams/rivers from Adverse Impacts Arising from Construction Works. Measures include the following: Stockpiling of construction materials and spoil, should be properly covered and located away from any natural stream/river. Construction works close to the inland waters should be carried out in dry season as far as practicable where the flow in the surface channel or stream is low. Removal of existing vegetation alongside the riverbanks should be avoided or minimised. When disturbance to vegetation is unavoidable, all disturbed areas should be hydroseeded or planted with suitable vegetation to blend in with the natural environment upon completion of works.							ETWB TC (Works) No. 5/2005
Water C	uality Imp	act – Operation Phase							
5.6.2.1	4.2	Stormwater Runoff In accordance with Drainage Services Department's Stormwater Drainage Manual, the following measures should be implemented: Silt removal facilities should be implemented to reduce the potential for suspended solids and heavy metal contaminants from vehicles. Petrol interceptors should be installed in areas with the potential to generate runoff contaminated with petrol and grease to capture pollutants from vehicles and their maintenance, especially in 'first flush' rainfall events. Regular maintenance of these facilities particularly at the onset of and after each major rainstorm event will ensure the impacts on downstream river water quality are	Prevent pollution of water courses due to stormwater runoff	Design Consultant/ Future site operator	During design and operation phase	√		√	Water Pollution Control Ordinance (Cap. 358), Stormwater Drainage Manual

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measure & Main	Implementation	Location / Duration of		lementa Stages		Relevant Legislation &
Rei.	Rei.		Concerns to address	Agent	the measure	Des	С	0	Guidelines
		minimised.							
5.6.2.2	4.2	Accidental Spillage of Chemicals, Oils and Fuels In accordance with the Waste Disposal (Chemical Waste) (General) Regulation (Cap 354C), the following measures should be implemented: The labelling and storage of chemicals should be in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes maintained at all times. Oils and fuels should only be stored in designated areas which have appropriate pollution prevention control facilities such as oil and grease traps. The maintenance of vehicles should only be undertaken in areas of the site served by appropriate pollution prevention control facilities. To prevent the spillage of fuels and solvents to nearby stormwater drains, all fuel tanks and storage areas should be locked and sited on sealed areas of the site, within bunded areas with a capacity equal to 110% of the storage capacity of the largest container. The bund should be kept free of surface water at all times and after each rainfall event. For refuelling activities, the following measures should be implemented: Refuelling activities at the PD&TTF shall be located in covered areas. No stormwater drainage systems shall be installed in the vicinity of helicopter or vehicle refuelling facilities unless petrol interceptors are implemented with an associated connection to the foul sewerage system. A fuel spill kit shall be located at easily accessible locations to enable any spillages to be cleaned up immediately.	Prevent accidental discharge of chemicals, oils and fuels into the surrounding environment	Design Consultant/ Future site operator	During design and operation phase				Code of Practice on the Packaging Labelling and Storage of Chemical Wastes; Waste Disposal (Chemical Waste) (General) Regulation (Cap 354C); Water Pollution Control Ordinance (Cap. 358); TM-DSS

EIA	EM&A	Recommended Mitigation Measures	Objectives of the Recommended	Implementation	Location / Duration of		lementa Stages	tion	Relevant Legislation &
Ref.	Ref.		Measure & Main Concerns to address	Agent	the measure	Des	С	0	Guidelines
5.6.2.3	4.2	Runoff generated by the PD&TTF Silt traps and petrol interceptors shall be installed in the drainage system where necessary to minimise the risk of suspended sediment, heavy metals and fuel oil entering downstream watercourses.	Prevent pollution of watercourses	Design Consultant/ Future site operator	During design and operation phase	√		✓	Water Pollution Control Ordinance (Cap. 358); TM-DSS; Stormwater Drainage Manual
Sewera	ge and Se	wage Treatment Implications - Construction Phas	е						
N/A									
Sewera	ge and Se	wage Treatment Implications – Design and Operat	ion Phase						
5.6.2.4 / 6.7	-	Liaison with interfacing projects including OWTF2, CE1/2015(DS) and SWHSTW Phase 1A to ensure the communal / public sewerage network and the SWHSTW has adequate capacity to handle the sewage flows generated by the Project.	Ensure adequate capacity of the existing / planned sewerage network	Design Consultant/ CEDD/ EPD/ DSD	During design and operation phase	√		✓	EIA Recommendation
5.6.2.5 / 6.7	-	To minimise the risk of overflows and emergency discharge of untreated effluents from the on-site SPS of the Project, the following mitigation measures will be implemented: The on-site SPS will be equipped with three pumps; 2 duty and 1 standby; and Retention tank with the capacity to store 2	To minimise the risk of overflows and emergency discharge of untreated effluents from the on-site SPS	Design Consultant/ CEDD	During design and operation phase	√		✓	EIA Recommendation
		hours of peak sewage flows.							
6.7	-	Design of twin rising mains connecting to the communal sewer to enable maintenance works to be carried out on one pipeline while the other remains in operation.	Improve the resilience and operability of the sewer pipeline / enable maintenance without disrupting operation	Design Consultant/ CEDD	During design and operation phase	√		✓	EIA Recommendation
Waste N	/lanageme	nt Implications – Construction Phase							
7.5.1.1	6.2	Good Site Practice Recommendations for good site practices during the construction activities include: Nomination of an approved person, such as a site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site	Implement good site practices to minimise waste generation	Contractor	Project construction site / Throughout construction stage / Until completion of all construction activities		√		Waste Disposal Ordinance (Cap 354); Waste Disposal (Chemical Wastes) (General) Regulation (Cap

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measure & Main	Implementation Agent	Location / Duration of the measure		lementa Stages		Relevant Legislation &
		Training of site personnel in proper waste	Concerns to address	5		Des	С	0	Guidelines 354C); and
		 Training of site personner in proper waste management and chemical handling procedures Provision of sufficient waste disposal points and regular collection of waste Appropriate measures to minimise windblown litter and dust/odour during transportation of waste by either covering trucks or by transporting wastes in enclosed containers Stockpiles of C&D materials should be kept covered by impervious sheets to avoid windblown dust. All dusty materials including C&D materials should be sprayed with water immediately prior to any loading transfer operation so as to keep the dusty material wet during material handling at the stockpile areas Provision of wheel washing facilities before the trucks leaving the works area so as to minimise dust introduction to public roads Well planned delivery programme for off-site disposal such that adverse environmental impact from transporting the inert or non-inert C&D materials is not anticipated 							ETWB Technical Circular (Works) No. 19/2005 Environmental Management on Construction Site
7.5.1.2	6.2	Waste Reduction Measures	Implement good	Contractor	Project construction		\checkmark		Waste Disposal
		Good management and control can prevent the generation of a significant amount of waste. Waste reduction is best achieved at the planning and design stage, as well as by ensuring the implementation of good site practices. Recommendations to achieve waste reduction include: Sort non-inert C&D materials to recover any recyclable portions Segregation and storage of different types of waste in different containers or skips or stockpiles to enhance reuse or recycling of materials and their proper disposal Encourage collection of recyclable waste such as waste paper and aluminium	management and control to minimise waste generation		site / Throughout construction stage / Until completion of all construction activities				Ordinance (Cap 354)

EIA	EM&A	Recommended Mitigation Measures	Objectives of the Recommended	Implementation	Location / Duration of		lementa Stages	ation	Relevant Legislation &
Ref.	Ref.		Measure & Main Concerns to address	Agent	the measure	Des	С	0	Guidelines
		cans by providing separate labelled bins to enable such waste to be segregated from other general refuse generated by the work force							
		 Proper site practices to minimise the potential for damage or contamination of inert C&D materials 							
		 Plan the use of construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste 							
7.5.1.3	6.2	Inert and Non-inert C&D Materials	Minimise impacts	Contractor	Project construction		\checkmark		Waste Disposal
		In order to minimise impacts resulting from collection and transportation of inert C&D materials for off-site disposal, the inert C&D materials should be reused on-site as fill material as far as practicable. In addition, inert C&D materials generated from excavation works could be reused as fill materials in local projects that require public fill for reclamation.	resulting from collection and transportation of inert C&D materials		site / Throughout construction stage / Until completion of all construction activities				Ordinance (Cap 354); DEVB Technical Circular (Works) No.6/2010 for Trip Ticket System for Disposal of Construction &
		The surplus inert C&D materials will be disposed of at the Government's PFRFs for beneficial use by other projects in Hong Kong.							Demolition Materials; and ETWB Technical Circular (Works)
		The C&D materials generated from general site clearance should be sorted on site to segregate any inert materials for reuse or disposal at PFRFs whereas the non-inert materials will be disposed of at the designated landfill site.							No. 19/2005 Environmental Management on Construction Site
		In order to monitor the disposal of inert and non-inert C&D materials at respectively PFRFs and the designated landfill site, and to control fly-tipping, it is recommended that the Contractor should follow the DEVB Technical Circular (Works) No. 6/2010 for Trip Ticket System for Disposal of Construction & Demolition Materials issued by Development Bureau. In addition, it is also recommended that the Contractor should prepare and implement a Waste Management Plan detailing their various waste arising and waste management practices in							

EIA	EM&A	Recommended Mitigation Measures	Objectives of the Recommended	Implementation		lmp	lement Stages		Relevant Legislation &
Ref.	Ref.		Measure & Main Concerns to address	Agent	the measure	Des	С	0	Guidelines
		accordance with the relevant requirements of the ETWB Technical Circular (Works) No. 19/2005 Environmental Management on Construction Site							
7.5.1.4	6.2	Chemical Waste If chemical wastes are produced at the construction site, the Contractor will be required to register with the EPD as a chemical waste producer and to follow the guidelines stated in the "Code of Practice on the Packaging Labelling and Storage of Chemical Wastes". Good quality containers compatible with the chemical wastes should be used, and incompatible chemicals should be stored separately. Appropriate labels should be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the chemical waste, such as explosive, flammable, oxidising, irritant, toxic, harmful, corrosive, etc. The Contractor should use a licensed collector to transport and dispose of the chemical wastes at the approved Chemical Waste Treatment Centre or other licensed recycling facilities, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation. Potential environmental impacts arising from the handling activities (including storage, collection, transportation and disposal of chemical waste) are expected to be minimal with the implementation of appropriate mitigation measures as recommended	Implement good practices to avoid chemical waste impact.	Contractor	Project construction site / Throughout construction stage / Until completion of all construction activities		√		Code of Practice on the Packaging Labelling and Storage of Chemical Wastes; Waste Disposal (Chemical Waste) (General) Regulation (Cap 354C)
7.5.1.5	6.2	General Refuse	Implement good	Contractor	Project construction		√		Waste Disposal
		General refuse should be stored in enclosed bins or compaction units separated from inert C&D materials. A reputable waste collector should be employed by the Contractor to remove general refuse from the site, separately from inert C&D materials. Preferably an enclosed and covered area should be provided to reduce the occurrence of 'wind blown' light material.	practices to avoid odour nuisance or pest/vermin problem and waste impact.		site / Throughout construction stage / Until completion of all construction activities				Ordinance (Cap 354); Public Health and Municipal Services Ordinance (Cap 132) - Public Cleansing and Prevention of Nuisances

EIA	EM&A	Recommended Mitigation Measures	Objectives of the Recommended	Implementation	Location / Duration of		lement Stages		Relevant Legislation &
Ref.	Ref.		Measure & Main Concerns to address	Agent	the measure	Des	С	0	Guidelines
									Regulation
Waste I	Manageme	ent Implications - Operation Phase					ı		
7.5.2.1	6.3	General Reuse General refuse should be collected on a daily basis and delivered to the refuse collection point accordingly. A reputable waste collector should be employed to remove general refuse regularly to avoid odour nuisance or pest/vermin problem. Sufficient recycling containers are recommended to be provided at suitable locations of the Project to encourage recycling of waste such as aluminium cans, plastics and waste paper.	Implement good practices to avoid odour nuisance or pest/vermin problem and waste impact.	Future user	Project area / On a regular basis / Throughout operation stage			√	Waste Disposal Ordinance (Cap 354)
7.5.2.2	6.3	If chemical Wastes are expected to be produced during the operation phase, the Project Proponent should register with the EPD as a chemical waste producer and follow the guidelines stated in the "Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes". Good quality containers compatible with the chemical wastes should be used, and incompatible chemicals should be stored separately. Appropriate labels should be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the chemical waste, such as explosive, flammable, oxidising, irritant, toxic, harmful, corrosive, etc. Licensed collector should be deployed to transport and dispose of the chemical wastes at the approved Chemical Waste Treatment Centre or other licensed recycling facilities, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation (Cap 354C).	Implement good practices to avoid chemical waste impact.	Future user	Project area / On a regular basis / Throughout operation stage				Code of Practice on the Packaging Labelling and Storage of Chemical Wastes; Waste Disposal (Chemical Waste) (General) Regulation (Cap 354C)
7.5.2.3	6.3	Cartridge Casings All cartridge casings and bullet heads should be collected from the firing range daily and kept in the storeroom for disposal. A designated waste contractor should be employed to remove	Minimise impacts resulting from collection and transportation of cartridge casings and bullet heads	Future user	Project area / On a regular basis / Throughout operation stage			✓	Waste Disposal Ordinance (Cap 354)

EIA	EM&A	Recommended Mitigation Measures	Objectives of the Recommended	Implementation	Location / Duration of		lementa Stages		Relevant Legislation &
Ref.	Ref.		Measure & Main Concerns to address	Agent	the measure	Des	С	0	Guidelines
		cartridge casings and bullet heads regularly.							
Land C	ontaminat	ion – Construction Phase							
8.6.1	7.2	In any case where contaminated soil is identified after the commencement of works, a Contamination Assessment Plan (CAP) is required to be prepared for EPD's endorsement prior to the site investigation. The Contamination Assessment Report (CAR) and/ or Remediation Action Plan (RAP) should be prepared for EPD's approval after the site investigation. If land contamination is confirmed, remediation works should be carried out according to the approved RAP. A Remediation Report (RR) should also be prepared for EPD's endorsement to demonstrate that the clean-up of the contaminated land is completed. No construction work or development of the site should be carried out before the approval of the RR.	Assessment is required for EPD approval in any case where contaminated soil is identified	Contractor	Project construction site / Before construction stage	√			Guidance Note for Contaminated Land Assessment and Remediation; Guidance Manual for Use of Risk-based Remediation Goals for Contaminated Land Management; Practice Guide for Investigation and Remediation of Contaminated Land
8.6.1	7.2	The following mitigation measures are proposed for contaminated material excavation and transportation of contaminated materials (if any), in order minimise the potentially adverse effects in the health and safety of construction workers and impacts arising from the disposal of potentially contaminated materials: To minimise the chance for construction workers to come into contact with any contaminated materials, bulk earth-moving excavation equipment should be employed; Contact with contaminated materials can be minimised by wearing appropriate clothing and personal protective equipment such as gloves and masks (especially when working directly with contaminated material), provision of washing facilities and prohibition of smoking and eating on site; Stockpiling of contaminated excavated	Minimise impacts resulting from excavation and transportation of contaminated materials	Contractor	Project construction site / Throughout construction stage / Until completion of all construction activities		√		Waste Disposal Ordinance (Cap 354) Waste Disposal (Chemical Waste) (General) Regulation (Cap 354C)

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measure & Main Concerns to address	Implementation Agent	Location / Duration of the measure		lementa Stages C		Relevant Legislation & Guidelines
		materials on site should be avoided as far as possible; The use of any contaminated soil for landscaping purpose should be avoided unless pre-treatment was carried out; Vehicles containing any excavated materials should be suitably covered to reduce dust emissions and / or release of contaminated wastewater; Truck bodies and tailgates should be sealed to stop any discharge; Only licensed waste haulers should be used to collect and transport contaminated material to treatment/disposal site and should be equipped with tracking system to avoid fly tipping; Speed control for trucks carrying contaminated materials should be exercised; Observe all relevant regulations in relation to waste handling, such as Waste Disposal Ordinance (Cap 354), Waste Disposal (Chemical Waste) (General) Regulation (Cap 354C) and obtain all necessary permits where required; and Maintain records of waste generation,							
		disposal quantities and disposal arrangements.							
	T	ion – Operation Phase				l l			
8.6.2	7.3	The implementation of appropriate mitigation measures for the underground storage tank and pipework, and refuelling activities is required to ensure that risk of land contamination as a result of fuel oil spills or leaks is kept to a practical minimum. Such measures should include the following: Adherence to relevant design standards for storage tank and pipework;	Minimise the risk of land contamination from the operation of underground storage tank and pipework, and refuelling activities	Future user	Project area / On a regular basis / Throughout operation stage			√	Waste Disposal Ordinance (Cap 354); Waste Disposal (Chemical Waste) (General) Regulation (Cap 354C)

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measure & Main	Implementation Agent	Location / Duration of the measure		lementa Stages		Relevant Legislation &
			Concerns to address			Des	С	0	Guidelines
		 Regular inspections and maintenance; Underground fuel storage tank should be placed within a concrete pit; Refuelling service area should be concrete-paved; 							
		 Provision of spill control materials and equipment on site (e.g. absorbent materials, googles, protective masks, nitrile gloves, disposal bags etc.); 							
		 If the fuel leakage or spillage occur during refuelling activities, the activities should be immediately stopped; and 							
		 Fuel leakage or spillage should be contained and cleaned up immediately. Waste fuel oil should be collected and stored for recycling or disposal in accordance with the Waste Disposal Ordinance (Cap 354). 							
Ecologi	ical Impac	t							
9.7.1	8.3	Detailed Vegetation Survey	To ensure no flora	Qualified	Project construction	✓			EIAO-TM; Hong
		A detailed vegetation survey should be conduct to update the exact locations, number and condition of individuals of Cycad-fern <i>Brainea insignis</i> , Fortune's Keteleeria <i>Keteleeria fortunei</i> and Ladies Tresses <i>Spiranthes sinensis</i> and any other flora species of conservation interest within the proposed works area prior to the commencement of site clearance.	species of conservation interest will be affected.	botanist/ecologist of the ET	site / For once / Before site clearance				Kong Ordinance Cap. 96
9.7.1	8.3	Temporary Protective Fence for Flora Species of Conservation Interest	To avoid potential impact on flora species	Contractor	Project construction site / Throughout		✓		EIAO-TM
		During construction phase, erection and maintenance of a temporary protective fence enclosing the flora species of conservation interest identified under the detailed vegetation survey is	of conservation interest from construction activities such as materials storage;		construction stage / Until completion of all construction activities				
		recommended. Monthly monitoring of any other flora species of conservation interest identified in the detailed vegetation survey should be conducted during the	To make sure that the flora species of conservation interest are not affected by the construction activities of						

EIA	EM&A	Recommended Mitigation Measures	Objectives of the Recommended	Implementation	Location / Duration of		lement Stages		Relevant Legislation &
Ref.	Ref.		Measure & Main Concerns to address	Agent	the measure	Des	С	0	Guidelines
		construction phase.	the Project						
9.7.2	8.2	Precautionary Measures for Butterfly Species of Conservation Interest It is recommended to consider inclusion of the common grass species <i>Ischaemum barbatum</i> and <i>Zanthoxylum nitidum</i> in the proposed vegetation planting or the Landscape Master Plan for the Project Site.	To benefit butterfly species of conservation interest Small Three-ring and Swallowtail by providing their larval food plants	Design Architect / Contractor	Project area / During design stage / Throughout operation phase	√		✓	EIAO-TM
Landsc	ape and V	isual Impacts – Construction Phase							
Table 10.11	Table 9.1	CM01: Trees / woodland within the Project Site which are unaffected by the works shall be protected and preserved during the detailed design stage and construction phase. The tree preservation proposals shall be coordinated with the layout and design of the engineering and architectural works at detailed design stage for further retention of individual trees. The preservation of existing tree shall provide instant greening and screening effect for proposed works. Tree protection works will be undertaken in accordance with DEVB TC(W) 7/2015 on "Tree Preservation" and tree risk assessment in accordance with "Guidelines for Tree Risk Assessment and Management Arrangement" by DEVB.	Preserve and protect existing trees	Contractor	Project area / During design stage / construction phase / Establishment Period		✓		EIAO-TM; Protection of Endangered Species of Animals and Plants Ordinance (Cap 586); DEVB TC(W) No. 6/2015 — Maintenance of Vegetation and Hard Landscape Features; ETWB TCW No. 29/2004 — Registration of Old and Valuable Trees, and Guidelines for their Preservation; DEVB TC(W) No. 07/2015 -Tree Preservation; ETWB (2/2007) - General Guidelines on Tree Pruning; GLTMS (12/2013

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measure & Main	Implementation	Location / Duration of	lmp	lementa Stages ¹	tion	Relevant Legislation &
Rei.	Rei.		Concerns to address	Agent	the measure	Des	С	0	Guidelines
									- Guidelines for Tree Risk Assessment and Management Arrangement on an Area Basis and on a Tree Basis
Table 10.11	Table 9.1	CM02: If removal of trees unavoidable due to construction impacts, trees will be transplanted where technically feasible in accordance with "Guidelines on Tree Transplanting" by DEVB and HQ/GN/13 and HQ/GN/13 – Interim Guidelines for Tree Transplanting Works under Highways Department's Vegetation Maintenance Ambit where applicable.	Preserve and protect existing trees	Contractor	Project area / During design stage / construction phase / Establishment Period	√	✓		As above
Table 10.11	Table 9.1	CM03: Construction area control, where possible, to ensure that the landscape and visual impacts arising from the construction activities are minimised. This includes the reduction of the extent and location of working areas to avoid sensitive LRs, siting of offices or temporary structures so that they are not visually prominent, and consideration of detailed schedules to shorten the construction period. Temporary landscape treatments are considered to be adopted such as applying hydro-seeding on temporary stockpiles and areas of earthworks to alleviate the potential impacts and minimise soil erosion.	Minimise landscape and visual impacts.	Contractor	Project area / During design stage / construction phase.		✓		EIAO-TM
Table 10.11	Table 9.1	CM04: Replanting of existing / disturbed vegetation shall be undertaken as soon as technically feasible during the construction phase. The priority shall be areas at the periphery of the site to ensure that proposed planting fulfils its role in mitigating the predicted impacts including screening views of the proposals as early as possible during the operation phase.	Maximise the mitigation effect of the planting to minimise landscape and visual impacts.	Contractor	Project area / During design stage / construction phase / Establishment Period		✓		EIAO-TM
Table 10.11	Table 9.1	CM05: Decorative screen hoarding will be erected along areas of the construction works site	Minimise landscape and visual impacts.	Contractor	Project area – areas adjacent to sensitive		✓		EIAO-TM

EIA	EM&A	Recommended Mitigation Measures	Objectives of the Recommended	Implementation	Location / Duration of		lementa Stages		Relevant Legislation &
Ref.	Ref.		Measure & Main Concerns to address	Agent	the measure	Des	С	0	Guidelines
		boundary where the works site borders publically accessible routes and/or is close to visually sensitive receivers (VSRs) to screen undesirable views of the works site. It is proposed that the screening be compatible with the surrounding environment and where possible, non-reflective, recessive colours be used.			receivers / During construction phase.				
Landsc	ape and V	isual Impacts – Operation Phase							
Table 10.12	Table 9.2	OM01: Detailed design of development components should reduce landscape footprint and visibility of structures. The area allowed for any development components should be reduced to a practical minimum.	Minimise landscape and visual impacts.	Detailed Designer / Consultants	Project area / During design phase	✓			EIAO-TM; PNAP 152 – Sustainable Building Design Guidelines;
									Hong Kong Planning Standards and Guidelines;
									Urban Design Guidelines
Table 10.12	Table 9.2	OM02: The form, textures, finishes and colours of the proposed development components should be compatible with the existing surroundings. Light earthy tone colours such as shades of green, grey, brown and off- white may be utilised where technically feasible to reduce the visibility of the development components, including all roadwork, buildings and noise barriers etc. To further improve visual amenity, natural building materials such as stone and timber, should be preferably adopted for architectural features, where technically feasible.	Minimise landscape and visual impacts.	Detailed Designer / Consultants	Project area / During design phase	✓			EIAO-TM; PNAP 152 – Sustainable Building Design Guidelines; Hong Kong Planning Standards and Guidelines; Urban Design Guidelines
		The proposed use of a responsive design for the disposition of the main elements of the proposed scheme including the locations of buildings and utility structures. Grouping of utilities and infrastructure components into proposed buildings as far as technically feasible to reduce the mass of development. The disposition and height profile of the developments and above							

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measure & Main	Implementation Agent	Location / Duration of the measure		lementa Stages		Relevant Legislation &
		ground utilities structures to respond to the existing context particularly the existing landform and preserved trees. Proposals designed to minimise the 'wall effects' and create a subtle transition at the edges of the site where it meets the rural landscape. Measures may include the creation of setbacks, articulating the development frontage and maintenance of view corridors to enhance the sense of visual integration with the existing context, avoid abrupt transitions between the existing and proposed built environment and reduce the apparent visual mass of the proposed developments.	Concerns to address			Des	С	0	Guidelines
Table 10.12	Table 9.2	OM03: The design of the proposed Engineering Structures such as the proposed road layout and any ancillary structures including the sewage pumping station and the Ma Tso Lung Firing Range should pay particular attention to the appearance and construction methods. The detailed design landscape consultants shall work in unison with the engineers on the aesthetic aspects of the structures and their relationship with the landscape. The design of engineering structures shall avoid any unnecessary visual clutter achieved through the co-ordination of the various engineering disciplines involved to arrive at integrated design solutions.	Minimise landscape and visual impacts.	Detailed Designer / Consultants	Project area / During design phase	1			EIAO-TM
Table 10.12	Table 9.2	OM04: The proposed treatment of Retaining Wall and Slopes will be undertaken in accordance with GEO Publication No. 1/2011 "Technical Guidelines on Landscape Treatment and Bioengineering for Man-made Slopes and Retaining Walls". These engineering structures will be aesthetically enhanced through the use of soft landscape works including tree and shrub planting to give man-made slopes a more natural appearance blending into the local rural landscape.	Minimise landscape and visual impacts.	Detailed Designer / Consultants	Project area / During design phase	✓			EIAO-TM; GEO Publication No. 1/2011 Technical Guideline on Landscape Treatment for Slopes; DEVB TC(W) No. 6/2015 — Maintenance of Vegetation and Hard Landscape

EIA EM&, Ref. Ref.		Recommended Mitigation Measures	Objectives of the Recommended Measure & Main	Implementation Agent	Location / Duration of the measure		lementa Stages C	Relevant Legislation & Guidelines
			Concerns to address			Des		Features
Table 10.12	Table 9.2	OM05: All compensatory planting of trees is to be carried out in accordance with DEVB TCW No. 7/2015. A total woodland compensation area of 5.54 ha is proposed. The planting proposals will utilise largely native species in accordance with GLTM/DEVB's - Guiding Principles on Use of Native Plant Species in Public Works Projects. Some compensatory shrub and ground cover planting will also be provided within the woodland area to create a more structurally diverse woodland. 5,869 nos. new trees will be planted as compensation including some 4,317 nos. will be planted within the Project site, 1,400 nos. alongside KNP Road, and 152 nos. to compensate for the existing dead trees to be removed. Woodland areas will utilise a combination of large sized tree stock (including heavy standard sized trees) and whip sized trees to create a more naturalistic effect and screen views of the new structures and buildings. Whip sized tree planting is preferred on the face of soil cut slopes and for general woodland areas where screening is not a priority. The smaller, younger plant stock will adapt to their new growing conditions more quickly than larger sized stock and establish a naturalistic effect more rapidly. Roadside and amenity planting will utilise largely heavy standard sized trees.	Minimise landscape and visual impacts.	Contractors	Project area / During design phase			EIAO-TM; DEVB TC(W) No. 7/2015 – Tree Preservation; DEVB TC(W) No. 2/2012 - Allocation of Space for Quality Greening on Roads; DEVB TC (W) No. 3/2012 - Site Coverage of Greenery for Government Building Projects; DEVB TC (W) No. 2/2013 - Greening on Footbridges and Flyovers; ETWB TCW No. 6/2015 – Maintenance of Vegetation and Hard Landscape Features; LTM/DEVB's - Guiding Principles on Use of Native Plant Species in
Table 10.12	Table 9.2	OM06: Tree planting using larger sized tree stock shall be provided to screen the proposed structures and associated facilities. Wherever possible the planting will utilise native species. This measure will form part of the compensatory	Minimise landscape and visual impacts.	Contractors	Project area / During design phase	√	✓	Public Works Projects. As above

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the Recommended	Implementation	Location / Duration of		lement Stages		Relevant Legislation &
кет.	Ref.		Measure & Main Concerns to address	Agent	the measure	Des	С	0	Guidelines
		planting and will improve compatibility with the surrounding environment and create a pleasant pedestrian environment.							
Table 10.12	Table 9.2	OM07: Roadside amenity planting using predominantly native species shall be provided, to enhance the landscape and visual quality of the existing and proposed transport routes and car parks.	Minimise landscape and visual impacts.	Contractors	Project area / During design phase	√	✓		As above
Table 10.12	Table 9.2	OM08: Creation of new grassland areas approximately 1.02 ha in size. Inclusion of common grass species <i>Ischaemum barbatum</i> and <i>Zanthoxylum nitidum</i> (the larval food plants for butterfly species).	Minimise landscape and visual impacts.	Contractors	Project area / During design phase	√	√		As above
Table 10.12	Table 9.2	OM09: Green roofs predominantly using native species shall be introduced where technically feasible on proposed buildings to reduce exposure of untreated concrete surfaces; enhance the sustainability of the design and mitigate visual impact to VSRs at high levels. Location and extent of green roof subject to detailed design.	Minimise landscape and visual impacts.	Contractors	Project area / During design phase	✓	√	✓	EIAO-TM; PNAP 152 – Sustainable Building Design Guidelines; Hong Kong Planning Standards and Guidelines; Urban Design Guidelines; DEVB TC (W) No.3/2012 - Site Coverage of Greenery for Government Building Projects
Table 10.12	Table 9.2	OM10: Vertical planting shall be introduced using predominantly native species to soften the hard, vertical surfaces of the proposed development components including the walls of the proposed buildings and retaining walls. Planting to utilise climbing and trailing plants. Location and extent of vertical greening subject to detailed design.	Minimise landscape and visual impacts.	Contractors	Project area / During design phase	✓	√		EIAO-TM; PNAP 152 – Sustainable Building Design Guidelines; Hong Kong Planning Standards and

EIA EM&A Recommo		Recommended Mitigation Measures	Objectives of the Recommended Measure & Main	Implementation Agent	Location / Duration of the measure		lementa Stages		Relevant Legislation &
IXGI.	IXCI.		Concerns to address	Ageill	tile illeasure	Des	С	0	Guidelines
									Guidelines;
									Urban Design Guidelines;
									DEVB TC (W) No.3/2012 - Site Coverage of Greenery for Government Building Projects
Table 10.12	Table 9.2	OM11: Where technically feasible utilise a green paving approach such as grass-crete or grass-grid	Minimise landscape and visual impacts.	Contractors	Project area / During design phase	✓	✓		EIAO-TM;
10.12	9.2	to maximise the area of planting and reduce the area of hard paving. Location and extent of green paving subject to detailed design. This includes the use of permeable paving where grass-crete /	visuai iiripacis.		uesigii piiase				PNAP 152 – Sustainable Building Design Guidelines;
		grass grid is not practicable.							DEVB TC (W) No.3/2012 - Site Coverage of Greenery for Government Building Projects
Table 10.12	Table 9.2	OM12: Street and night time lighting glare will be controlled to minimize glare impact to adjacent VSRs during the operation stage.	Minimise landscape and visual impacts.	Contractors	Project area / During design phase	✓		√	EIAO-TM
Impact	of Hazard	to Life – Construction Phase					•		
N/A									
Impact of	of Hazard	to Life - Operation Phase							
11.7.7	10.1	A list of recommendations / good practices are proposed:	Minimize hazards in the proposed police facility	Project Manager / Project Engineer / Operating staff	Project Area / During design and operation phase	✓		✓	EIAO-TM
		All DG store should be constructed according to the standards and recommendations by Fire Services Department, having adequate fire-fighting facilities, proper ventilation and fire-proofing requirement.							
		All DGs such as paints and solvents should be stored in their respective DG rooms.							

EIA	EM&A	Recommended Mitigation Measures	Objectives of the Recommended	Implementation	Location / Duration of		lementa Stages ¹		Relevant Legislation &
Ref. Ref.			Measure & Main Agent Concerns to address		the measure	Des	С	0	Guidelines
		 Adequate fire-fighting equipment, such as fire extinguishers, fire sand etc. should be present during kerosene refuelling operation on the helipad. Proper earthing equipment and procedures should be in place to prevent accumulation of static electricity during kerosene refuelling operation. 							
		 GFS kerosene road tanker and the helicopter pilot should follow the established protocol for arriving at the helipad to prevent helicopter crashing on the road tanker. 							
		6. Refuelling will only be performed in daytime							
		Underground storage tanks will be used for petrol/diesel storage							
		Kerosene pump will be equipped with pressure switch to prevent overfilling							

Note 1: Des = Design; C = Construction; O = Operation

APPENDIX L WASTE GENERATION IN THE REPORTING MONTH

Name of Department: ArchSD

Monthly Summary Waste Flow Table for 2024 (year)

Project: Design and Construction of Kong Nga Po Police Training Facilities Contract No.: SS K509

Troject.	Design and C	onstruction of	Trong rigar o	1 Office Trummi	ig i deliities						Contract 140 BE	11307
		Actual Q	uantities of Inc	ert C&D Mate	rials Generate	d Monthly	Monthly Actual Quantities of C&D Wastes Generated				es Generated N	Monthly
Month	Total Quantity Generated	Hard Rock and Large Broken Concrete	Bituminous Material	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 3)	Chemical Waste	Others, e.g. general refuse
	(in '000m ³)	$(in '000m^3)$	(in '000m ³)	$(in '000m^3)$	$(in '000m^3)$	(in '000m ³)	(in '000m ³)	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	$(in '000 m^3)$
Cumulative in 2023	16.796	0.000	0.000	0.000	0.000	16.796	0.000	0.000	0.041	0.054	0.000	0.657
Jan	0.000	0.000	0.000	0.000	0.000	3.263	0.000	0.000	0.000	0.000	0.000	0.117
Feb												
Mar												
Apr												
May												
Jun												
Sub-total	0.000	0.000	0.000	0.000	0.000	3.263	0.000	0.000	0.000	0.000	0.000	0.117
Jul												
Aug												
Sep												
Oct												
Nov												
Dec	46 = 26			0.000	0.000	• • • • •	0.000	0.000	2 2 4 4	2.2.1		/
Total	16.796	0.000	0.000	0.000	0.000	20.059	0.000	0.000	0.041	0.054	0.000	0.774

Notes:

- (1) The performance targets are given in the Particular Specification on Environmental Management Plan.
- (2) The waste flow table shall also include construction waste that are specified in the Contract to be imported for use at the site.
- (3) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material.
- (4) Broken concrete for recycling into aggregates.
- (5) If necessary, use the conversion factor: 1 full load of dumping truck being equivalent to 6.5 m3 by volume.

APPENDIX M COMPLAINT LOG

Appendix M - Complaint Log

Reporting month: January 2024

Complaint Log Ref.	EPD Log Ref.	Location	Received Date	Details of Complaint	Investigation/ Mitigation Action Status	Status
C001	N07/RN/00020836- 23	Kong Nga Po Road (Lamp post GD0470)	29-Aug-23	The complainant alleged that the general construction noise except renovation (within Restricted Hours) from at Kong Nga Po Road (Lamp post GD0470), and commented that "晚上八九點地盤有噪音有人工作". The work sites under complaint are adjacent to the captioned Designated Project area.	Record of Site Investigation Refer to the public complaint which was no mention the certain time, based on daily record provided, CSJV was confirmed that the working period on 26, 27 & 28 Aug 2023 and the working hours were within the approved restricted hour. The equipment applied on the mentioned periods were listed in the Group D of the CNP No. GW- RN0882-23 (Effective date from 24/08/2023 to 23/11/2023) According to the written reply, the Contractor has implemented both the notification of the neighborhood on the schedule of night works and erect noise barriers to screen noisy works for neighborhood. Please be advised that the Contractor is strictly adhering to the conditions of the construction noise permit.	Closed
C002	N07/RN/00029993- 23	The river(s) near the San Uk Ling Holding Centre	14-Dec-23	The complainant alleged that the river(s) near the San Uk Ling Holding Centre has recently had a large amount of soil/muddy water. (新屋嶺扣留中心附近的河流,近日有大量黃泥水)	Record of Site Investigation In reference to the public complaint, it has been noted that the complainant did not provide a precise description of the river(s) location adjacent to the San Uk Ling Holding Centre, where there has been a recent influx of soil-laden water. EPD officers carried out site inspection on 15/12/2023 at 11:20 –12:00. EPD officers checked the U-channels, catchpits and wastewater treatment facility at WTF. No water including muddy water was discharged from Construction sites to the drainage. The Contractor has checked the drainage and wastewater treatment facilities at WTF and SOTF, which is near the complaint area. No water was discharged from the above locations. Advice: For the Contractor: 1) The Contractor strictly complies with the	Classed

	requirements of relevant environmental ordinances and EM&A Manual. 2)The promotional flyer contains a Community Liaison Hotline: 9790 2879 that can be placed in residents' mailboxes, so they can directly contact you to resolve environmental issues.
	For EPD officer: 1)Please consider that the Community Liaison Hotline: 9790 2879 will be provided for the complainant to directly contact the Contractor to resolve environmental issues. 2) Please consider encouraging the complainant to provide more accurate and detailed information to facilitate our follow-up efforts.

Cumulative Complaint Log

Complaint Log Reporting Period	Total no. of Complaint Received
This reporting month	0
From 1st April 2023 to end of the reporting month	2

APPENDIX N SUMMARY OF SUCCESSFUL PROSECUTION

Appendix N - Summary of Successful Prosecution

Date of Successful Prosecution	Details of the Successful Prosecution	Status	Follow Up	Total no. Received in this Reporting Month	Total no. Received since Project Commencement

APPENDIX O

The potential seriousness of the forthcoming environmental impacts and the use of machineries

A list of potential environmental impacts	The advice includes, but is not limited to, the following	Consideration of possible alternative methods
Visual Impact: The presence of machinery, equipment, and temporary structures associated with ground investigation and plate load testing may have visual impacts on the surrounding landscape, altering the aesthetic qualities of the area. Noise and Vibration: The operation of heavy machinery can contribute to noise and vibration pollution, which can disturb local wildlife or sensitive wildlife habitats.	Screening and Camouflage: Use screening techniques, such as temporary fencing, barriers, or landscaping, to visually conceal the machinery, equipment, and temporary structures from view. This can help minimize the visual impact on the surrounding landscape. Use of Low Noise and Vibration Equipment: Whenever possible, equipment produces lower levels of noise and vibration should be used. The use of noise barriers around the site can also help to mitigate the impact on local communities and wildlife.	Use of Electric-Powered Equipment: Electric- powered equipment is generally quieter than diesel powered equipment to help reduce noise pollution.
Disturbance of Local Ecosystems: The drilling operations, particularly those involving excavation, can potentially disturb the local ecosystems and impacting biodiversity. Air Pollution: Machinery used in construction sites can emit pollutants into the air. These pollutants may include Particulate Matter (PM), Nitrogen Oxides (NOx), Sulfur Oxides (SOx), and Volatile Organic Compounds (VOCs), contributing to air pollution and potentially impacting air quality in the surrounding area.	Training and Awareness: trainings are provided for site personal about the importance of minimizing disturbance to local ecosystems, such as minimized noise and light pollution, how to handle waste properly, and what to do if they encounter local wildlife. Dust Control Measures: Implement dust control measures such as water sprays, dust screens, or using dust suppression chemicals to reduce particulate matter emissions, and training for all staff on the importance of air quality and measures to reduce air pollution.	 Employing construction methods of a low-impact nature, such as the utilization of machinery that is lightweight and drilling techniques which are minimally invasive 1. Improved Fuel Efficiency and Maintenance: Promoting fuel-efficient practices and regular maintenance of machinery can help reduce emissions. 2. Properly maintained equipment operates more efficiently, resulting in lower fuel consumption and reduced emissions. Implementing fuel-saving measures, such as reducing idling time and optimizing equipment usage, can further
Water Pollution: Drilling operations have the	Proper containment and lining of mud pools is crucial to	minimize air pollution during construction. 1. Horizontal Directional Drilling (HDD): HDD is a

potential to contaminate local water sources, particularly if improper waste management practices are used. **Soil Disturbance:** The use of heavy machinery can cause soil compaction and disturbance, particularly during drilling operations or movement of equipment. This soil disturbance can disrupt the natural structure and composition of the soil, affecting its

prevent contamination. Mud pools should have an impermeable liner, such as HDPE or bentonite clay, to prevent seepage into the ground. Berms can be constructed around the perimeter to contain any overflow. Regular inspection and maintenance of the liner integrity is important.

- trenchless method that causes less disturbance to the surrounding environment and mitigates the risk of water contamination. It could be a viable alternative depending on the geology of the site and the purpose of the drilling operation.
- 2. Dry Drilling Techniques: Depending on the geology of the site, dry drilling techniques could be considered. These methods do not use drilling fluids and therefore reduce the risk of water contamination from these sources.

ability to support vegetation growth and nutrient cycling.

- 1. Proper Planning and Design: Incorporate soil protection measures into the initial planning and design phase of construction projects. This includes identifying sensitive areas and implementing appropriate construction techniques to minimize soil disturbance.
- 2. Ground Improvement Techniques: Techniques like soil stabilization, grouting, and compaction can help improve the soil's strength and stability, reducing the likelihood of soil disturbance during construction.

A helical pile is a type of deep foundation system used in construction. It consists of a steel shaft with helical plates or blades that are twisted into the ground to provide support for structures. Helical piles are commonly used in situations where traditional foundation methods are impractical or costly, such as in areas with poor soil conditions or limited access for heavy machinery.

Energy Consumption: The operation of machinery requires energy, typically derived from fossil fuels. The extraction, processing, and combustion of these fuels contribute to greenhouse gas emissions and contribute to climate change.

- 1. Training: workers are trained in the importance of energy conservation and efficiency. This could involve instruction on when to turn off equipment, how to use machinery efficiently, and the benefits of energy conservation.
- 2. Efficient Equipment and Machinery: Use energy-efficient machinery and equipment that consume less energy during operation. Regular maintenance and proper calibration of machinery can also improve energy efficiency and reduce energy waste.
- 1. Prefabrication and Modular Construction: Prefabrication and modular construction methods involve manufacturing building components off-site and assembling them onsite. This approach reduces energy consumption by streamlining the construction process, minimizing material waste, and optimizing energy usage during manufacturing.
- 2. Lean Construction: This methodology helps energy optimization in construction processes.

Waste Generation: Ground investigation and plate load testing may generate various types of waste, including drilling cuttings, excess soil, and construction debris. Improper disposal or management of these wastes can result in soil and water contamination or contribute to landfill usage.

Education and Training: education and training are provided to construction workers and staff on proper waste management practices. Raise awareness about the importance of waste reduction, recycling, and responsible disposal methods. Encourage worker participation and engagement in waste management initiatives.

Cone Penetration Testing (CPT): CPT is a method of ground investigation that produces minimal waste compared to traditional drilling methods. It involves pushing a cone-shaped probe into the ground and measuring the resistance, which can provide valuable information about the soil conditions with less soil disturbance.

APPENDIX P A LIST OF MACHINERIES USED IN CONSTRUCTIN SITE

|SSK509 Design and Construction of Kong Nga Po Police Training Facilities NRMM & QPME List

	Туре	<u>Brand</u>	Model	S/N No.	Engine Make	Engine Model	NRMM No.	Approval, Exemption or Modification	QPME no.	<u>QPME</u> Expiry Date	Sound Power Level
1	Generator	Airman	SDG100S-3B1	1533B10240	ISUZU	BI-4HK1XYGD-02	EPD-A-003542-2017	Approval	EPD-06206R	Dec-29	92
2	Forklift	Mitsubishi	fd25nt	CF18C-81179	Mitsubishi	S4S	EPD-A-007117-2016	Approval			
3	Loader	Bobcat	S450	B1ED14478	Kubota	V2403	EPD-A-000347-2022	Approval			
4	Generator	Airman	SDG60S-3B1	14A3B10240	ISUZU	BJ-4JJ1XYGD-04	EPD-A-003657-2017	Approval	EPD-06274R	Dec-29	90
5	Generator	Denyo	DCA-220ESEI	3936288	ISUZU	6UZ1	EPD-A-001848-2019	Approval	EPD-08614	Aug-25	96
6	Forklift	Doosan	D30NXP	FDA41-1670-02844	YANMAR	4TNE98-BQDF1CC	EPD-A-000153-2023	Approval			
7	Generator	Airman	SDG45S-3B1	13A3B10348	Kubota	V3800-T	EPD-A-003460-2017	Approval	EPD-06203R	Dec-29	87
8	Generator	Airman	SDG60S-3B1	14A3B10369	ISUZU	BJ-4JJ1XYGD-04	EPD-A-001314-2020	Approval	EPD-09851	Aug-26	90
9	Generator	Airman	SDG220L-5B1	P8BB1-0270	ISUZU	BH-6UZ1XYGD-04	EPD-A-001771-2021	Approval	EPD-11160	Aug-27	94
10	Generator	Airman	SDG45S-3B1	1333B10473	Kubota	V3800-T	EPD-A-000268-2018	Approval	EPD-06538	Feb-24	87
11	Generator	Nippon Sharyo	NES150TI	DG041900	ISUZU	BH-6HK1X	EPD-A-001707-2018	Approval	EPD-07118	Jul-24	92
12	Forklift	Mitsubishi	FD30NT	CF14E-16891	Mitsubishi	S4S	EPD-A-000779-2017	Approval			
13	Generator	Nippon Sharyo	NES220EM	FJ083800	Guangxi Yuchai	YC6A275-D30	EPD-M-002058-2020	Approval	EPD-01840R	Jul-25	95
14	Generator	Airman	SDG300L-5B1	P9BB1-0057	KOMATSU	SAA6D125E-5-BV	EPD-A-001535-2017	Approval	EPD-05174R	Apr-29	98
15	Excavator	Komatsu	PC138US-8NM	29202	KOMATSU	SAA4D95LE-5	EPD-A-000710-2021	Approval			
16	Excavator	Hitachi	ZX200-5A	HCMDCX90E00300835	ISUZU	4HK1-XDHAG-02-C3	EPD-A-001008-2019	Approval	EPD-08152	Apr-25	103
17	Excavator	Hitachi	ZX75US-3	HCM1P300A00062042	ISUZU	AU-4LE2X	EPD-A-003158-2019	Approval			
18	Generator	Airman	SDG220L-5B1	P8BB1-0339	ISUZU	BH-6UZ1XYGD-04	EPD-A-001469-2022	Approval	EPD-12431	Jun-28	94
19	Generator	Nissha	NES150TI	DG028600	Isuzu	BH-6HK1X	EPD-A-004698-2016	Approval	EPD-03628R	Apr-28	92
20	Generator	Airman	SDG45S-3B1	13A3B10349	Kubota	V3800-T	EPD-A-003461-2017	Approval	EPD-06204R	Dec-29	87
21	Excavator	Komatsu	PC228US-3E0	KMTPC161P02042049	KOMATSU	SAA6D107E-1	EPD-A-005462-2016	Approval			
22	Excavator	Kobelco	SK350D-10	LC14-18002	Hino	J08E-VV	EPD-A-003264-2022	Approval			
23	Generator	Airman	SDG45S-3B1	1333B10475	Kubota	V3800-T	EPD-A-000053-2018	Approval	EPD-06536	Feb-24	87
24	Generator	Airman	SDG220L-5B1	P8BB1-0383	ISUZU	BH-6UZ1XYGD-04	EPD-A-000565-2023	Approval	EPD-13321	Mar-29	94
25	D 111	China Geo-equipment Chongqing Exploration)0/ 2B	2 4010		F 41 01 0511 1 2	500 A 0000 AC 0000				
25	Drilling rig	Machinery Co. Ltd.	XY-2B	3-4818	Beinei	F4L912E11-3	EPD-A-002846-2020	Approval			
26	Excavator	Komatsu	SK350LC-8	YC11-06650	Hino	JOSE-TM	EPD-A-002154-2018	Approval	EDD 07363	A 24	00
27	Generator	Nippon Sharyo	NES150TI	DG042300	ISUZU	BH-6HK1X	EPD-A-002077-2018	Approval	EPD-07262	Aug-24	92
28	Excavator	Yanmar	ViO40-5	51036B	Yanmar	4TNV88-PBV	EPD-A-000128-2019	Approval			
29	Excavator	Hitachi	ZX350K-3	HCM1V900T00056936	ISUZU	6HK1-XDHAA-01-C2	EPD-A-000772-2020	Approval			
30	Excavator	Kobelco	SK135SR-2	YY06-15612	Mitsubishi	D04FR	EPD-A-000581-2022	Approval		 	
31	Excavator	Liugong	CLG922E	CLG922EZHPE718565	Cummins	QSB7	EPD-A-003163-2023	Approval	FDD 045005	D 20	
32	Generator	Nippon Sharyo	NES60TK2	KS013300	Kubota	V3800-DI-TI-K3A	EPD-A-007338-2016	Approval	EPD-04522R	Dec-28	90