



Removal of 132kV Overhead Line and Pylons for B-Line and W-Line

Monthly Audit Report No. 5 for October 2024

November 2024



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Environmental Verification Sheet

Environmental Permit No. EP-642/2024

Reference Document /Plan

Document/ Plan to be Certified/ Verified:	Monthly Audit Report No. 5 for October 2024
Date of Report:	12 November 2024
Date prepared by IEC:	12 November 2024

Reference EP Condition

Environmental Permit Condition:

Condition 2.1 of EP-642/2024:

An Independent Environmental Checker (IEC) shall be employed by the Permit Holder before commencement of construction of the Project. The IEC shall not be in any way an associated body of the Contractor for the Project. The IEC shall be a person who has at least 7 years of experience in Environmental Monitoring and Audit or environmental management. The IEC shall audit the implementation of all measures recommended in the Project Profile (Register No.: PP-660/2023) and required under this Permit, and to confirm full compliance of the measures through a monthly audit report. The Permit Holder shall, no later than 10 working days after the end of each reporting month, deposit with the Director 2 hardcopies and 1 electronic copy of the monthly audit report prepared by the IEC.

IEC Verification

I hereby verify that the above referenced document/~~plan~~ complies with the above referenced condition of EP-642/2024.

Ms Liz Lo,
Independent Environmental Checker (IEC):



Date: 12 November 2024

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Executive Summary

Mott MacDonald Hong Kong Limited (MMHK) was commissioned by The Hongkong Electric Co., Ltd. (HEC) as the Independent Environmental Checker (IEC) under the Environmental Permit (EP) (No. EP-642/2024 or as subsequently varied or superseded) to audit the implementation of all mitigation measures and Environmental Monitoring and Audit (EM&A) programme recommended in the EP and Project Profile (Register No. PP-660/2023), and to confirm full compliance of the mitigation measures through a monthly audit report.

The commencement date of construction for W-Line was 5 June 2024 and the tentative commencement date of construction for B-Line is November 2024.

This is the 5th IEC Monthly Audit Report prepared and submitted under Condition 2.1 of the EP, for the period from 1 October 2024 to 31 October 2024 (“the reporting month”).

Implementation of Mitigation Measures

One site inspection was carried out by IEC on 30 October 2024 during the reporting month. The inspection findings are summarised in **Section 2**.

Record of Environmental Complaint, Notification of Summons and Successful Prosecution

No environmental complaint was received in the reporting month.

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

1 Introduction

1.1 Background

1.1.1 Project Description

The Project “Removal of 132kV Overhead Line and Pylons for B-Line and W-Line” is situated along the B-Line and the W-Line, refers to networks of disused overhead lines (OHL) earth wire, pylons and gantry towers. The B-Line has total length approximately 5.3 km from Tin Wan Praya Road to Bowen Road. And the W-Line has total length approximately 5 km from Tin Wan Praya Road to Deep Water Bay Road. A large portion of the OHL and Pylons are within Pok Fu Lam Country Park, Aberdeen Country Park and Site of Special Scientific Interest (SSSI) of Pok Fu Lam Reservoir Catchment Area and Nam Fung Road Woodland. The B-Line and W-Line were in service for more than 40 years and has aged at various extent depending on the locations of the pylons and localised climatic conditions. They are no longer in use.

The “Removal of 132kV Overhead Line and Pylons for B-Line and W-Line” (the Project) involves the following works:

- Removal of overhead line (OHL) earth wire and conductor; and
- Dismantling of pylons at
 - B-Line: 26 pylons in total, numbered from “B2” to “B27”; and
 - W-Line: 25 pylons in total, numbered from “W2” to “W26”.

1.1.2 Project Status under EIAO

Due to the B-Line and W-Line’s locations as described above, the Project is classified as a Designated Project (DP) by virtue of Item Q.1, Part I, Schedule 2 of the Environmental Impact Assessment Ordinance (EIAO) (Cap. 499) and does not fall into any exception works under Item Q.1.

An Environmental Permit no. EP-642/2024 (EP) for the Project works was issued to the Project Proponent, The Hongkong Electric Co., Ltd. (HEC), on 29 January 2024.

Mott MacDonald Hong Kong Limited (MMHK) was commissioned by The Hongkong Electric Co., Ltd. (HEC) as the Independent Environmental Checker (IEC) under the EP to audit the implementation of all mitigation measures and Environmental Monitoring and Audit (EM&A) programme recommended in the EP and Project Profile (Register No. PP-660/2023), and to confirm full compliance of the mitigation measures through a Monthly Audit Report under Condition 2.1 of the EP.

Mitigation measures relating to ecology to be implemented are further regulated under Conditions 2.7 and 2.8 of the EP, as described in the following paragraphs.

Under Condition 2.7 of the EP, before commencement of the removal work within Pok Fu Lam Country Park and Aberdeen Country Park, pre-construction site visits/surveys shall be conducted to review the extent of works and verify the ecological baseline information collected within the Pok Fu Lam Country Park and Aberdeen Country Park, and subject to the findings of the site visits/surveys, Ecological Management Plan(s) (EMP(s)) shall be certified by qualified ecologist, verified by the IEC and submitted to the Director for Environmental Protection (DEP) no later than one month before commencement of the respective removal work within the country park.

Under Condition 2.8 of the EP, the EMP shall include an implementation schedule in table form clearly listing out the ecological mitigation measures to be implemented, and by whom, when, where and what requirement. The mitigation measures recommended in the EMP, including the implementation schedule, will prevail over the corresponding measures in the Project Profile where applicable.

The EMPs for pylons “W9”, “W12”, “W18” and “W24” were approved by DEP on 14 August 2024.

1.1.3 Objectives of this Report

This is the 5th IEC Monthly Audit Report summarising the findings of the implementation status of the mitigation measures and EM&A programme under the Project from 1 October 2024 to 31 October 2024 (“the reporting month”).

The site location of the Project is presented in **Figure 1.1**.

1.2 Project Organisation

The contact information of key Project personnel is summarised in **Table 1.1**. An organisation chart is presented in **Appendix A**.

Table 1.1: Key Project Personnel

Party	Position	Contact Person	Telephone	Fax
Project Proponent The Hongkong Electric Co., Ltd. (HEC)	Head of Mechanical Engineering	David S.N. Li	3143 3814	2810 0506
	Head of Sustainability	Steven H.Y. Ho	3143 3897	2810 0506
Independent Environmental Checker (IEC) Mott MacDonald Hong Kong Limited (MMHK)	IEC	Liz Lo	2828 5751	2827 1823
Contractor Kum Shing Engineering Co., Ltd.	Senior Project Engineer	Chan Yi Chun	2127 3121	8169 6333

1.3 Construction Activities

The construction activities undertaken in this reporting month are presented below:

- Overhead line on-pulley work at “W12”, “W13”, “W14”, “W15”, “W16”, “W17”, “W18”, “W19”, “W21”, “W23” and “W24”;
- Extracting of overhead line on “W18” to “W24” Circuit #1 (L2 and L3) and Circuit #2 (L2 and L3);
- Extracting of earthing wire on “W18” to “W24” Circuit #1 and Circuit #2;
- Transportation of scrap off-site at “W19”, “W21”, “W22” and “W23”; and
- Transportation of materials at “W13”, “W16” and “W17”.

The Construction Programme of the Project is provided in **Appendix B**.

2 Environmental Site Inspection and Audit

2.1 Site Inspection

Site inspections are required to be conducted by IEC on a monthly basis to monitor the implementation of proper environmental pollution control and mitigation measures recommended in the PP of the Project, as required under the EP.

One site inspection was carried out on 30 October 2024 in the reporting month. The finding(s) of the site inspection is described below:

- No major environmental observations were found during inspection.

The Contractor is reminded that construction materials awaiting removal from the worksites shall not adversely impact nearby sensitive receivers such as U-Channels and trees.

Only hand-held power tools and hand-held manual tools were used for carrying out the site works of the Project.

Ecological mitigation measures set out in the Section 5.1.5 of the PP were implemented in the reporting month. Furthermore, weekly site audit of active works areas was conducted by HEC as set out in the Section 5.1.5 of the PP.

2.2 Advice on Waste Management Status

A billing account for disposal of construction waste was created for the Project on 19 December 2018.

According to information provided by the Contractor, the amount of waste produced by the Project sites during the reporting month is provided in **Appendix D**.

2.3 Status of Environmental Licences and Permits

The environmental licences and permits for the Project that were valid during the reporting month are summarized in **Table 2.1**.

Table 2.1: Summary of Environmental Licences and Permits

Licence/Permit	Reference No.	Date of Issue	Expiry Date (if any)	Status
Environmental Permit	EP-642/2024	29 Jan 2024	-	Valid
Billing account under Waste Disposal Ordinance (WDO)	7032720	19 Dec 2018	-	Valid

According to the Contractor, the progress of application of Notification of Work Commencement for Notifiable Works under Air Pollution Control (Construction Dust) Regulation will be confirmed upon the issue of tentative programme for dismantling works for the Project.

2.4 Implementation Status of Mitigation Measures

The implementation status of mitigation measures recommended in the Project Profile (PP) is summarised in **Appendix C**.

3 Report on Complaints, Notifications of Summons and Successful Prosecutions

3.1 Record of Environmental Complaints Received

No environmental complaint was received in the reporting month.

3.2 Record of Notifications of Summons and Successful Prosecutions

No notification of summons or successful prosecution was received during the reporting month.

3.3 Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions

Cumulative statistics of complaints, notifications of summons and successful prosecutions for the period from the date of commencement of construction to end of the reporting month are summarized in **Table 3.1**.

Table 3.1: Statistics for Complaints, Notifications of Summons and Successful Prosecutions

Period	Complaints	Notifications of Summons	Successful Prosecutions
Within this reporting month	0	0	0
From the date of commencement of construction to the end of the reporting month	0	0	0

4 Future Key Issues

4.1 Construction Works for the Next Reporting Month

The construction works that are scheduled to be conducted in the coming reporting month (November 2024) include:

- Pylon dismantling work;
- Conductor removal work; and
- Material transportation from site.

The Construction Programme of the Project is provided in **Appendix B**.

5 Conclusions

5.1 Conclusions

The EM&A programme recommended in the Project Profile (PP) was commenced on 5 June 2024 and has been continued during the reporting month.

No environmental complaint was received in the reporting month.

One site inspection was conducted in the reporting month by IEC, and the implementation of mitigation measures by the Contractor as recommended in the PP were audited. Weekly site audit of active works areas was also conducted by HEC.

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

Figures

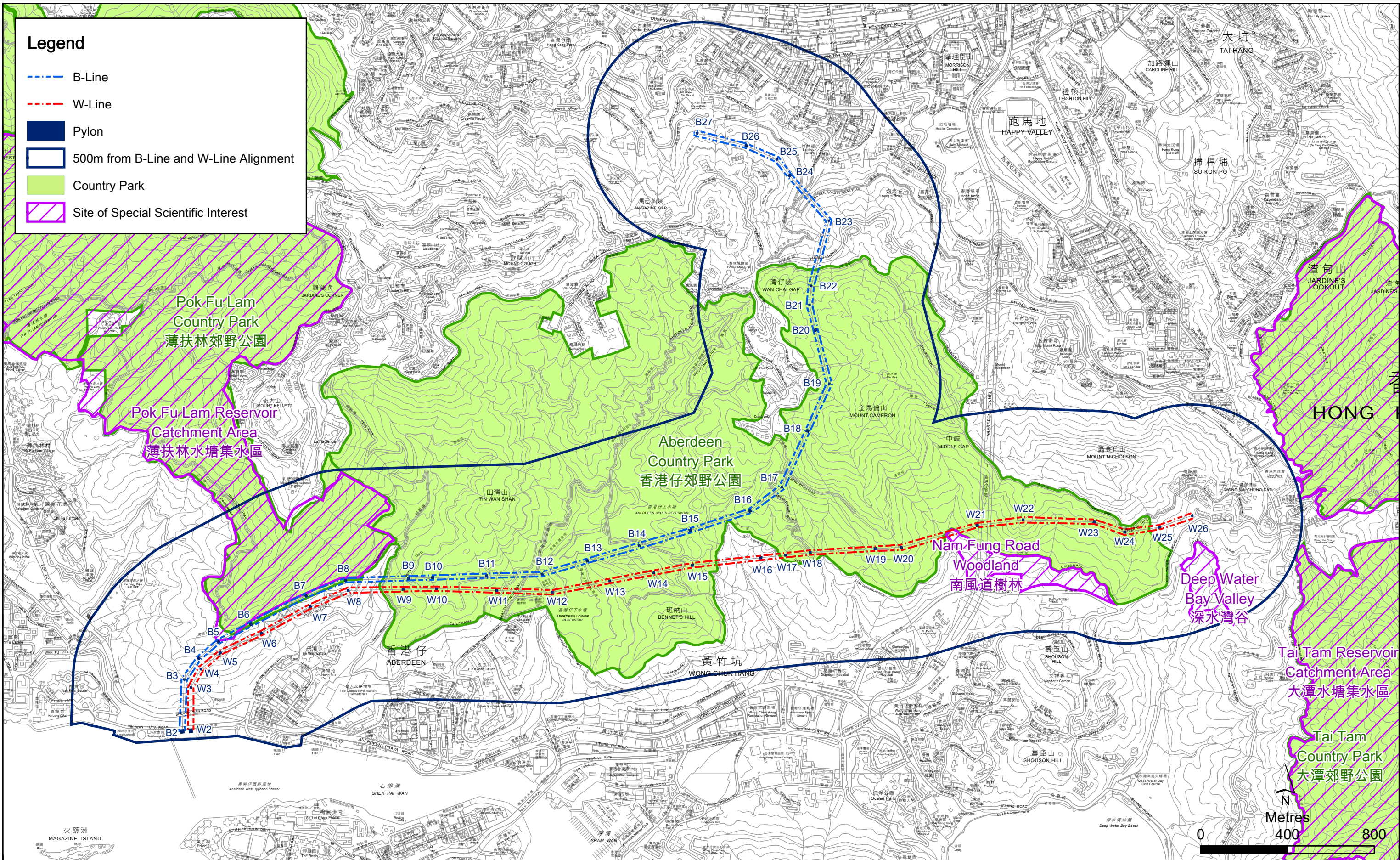


Figure 1.1 Site Location

Removal of 132kV Overhead Line and Pylons for B-Line and W-Line

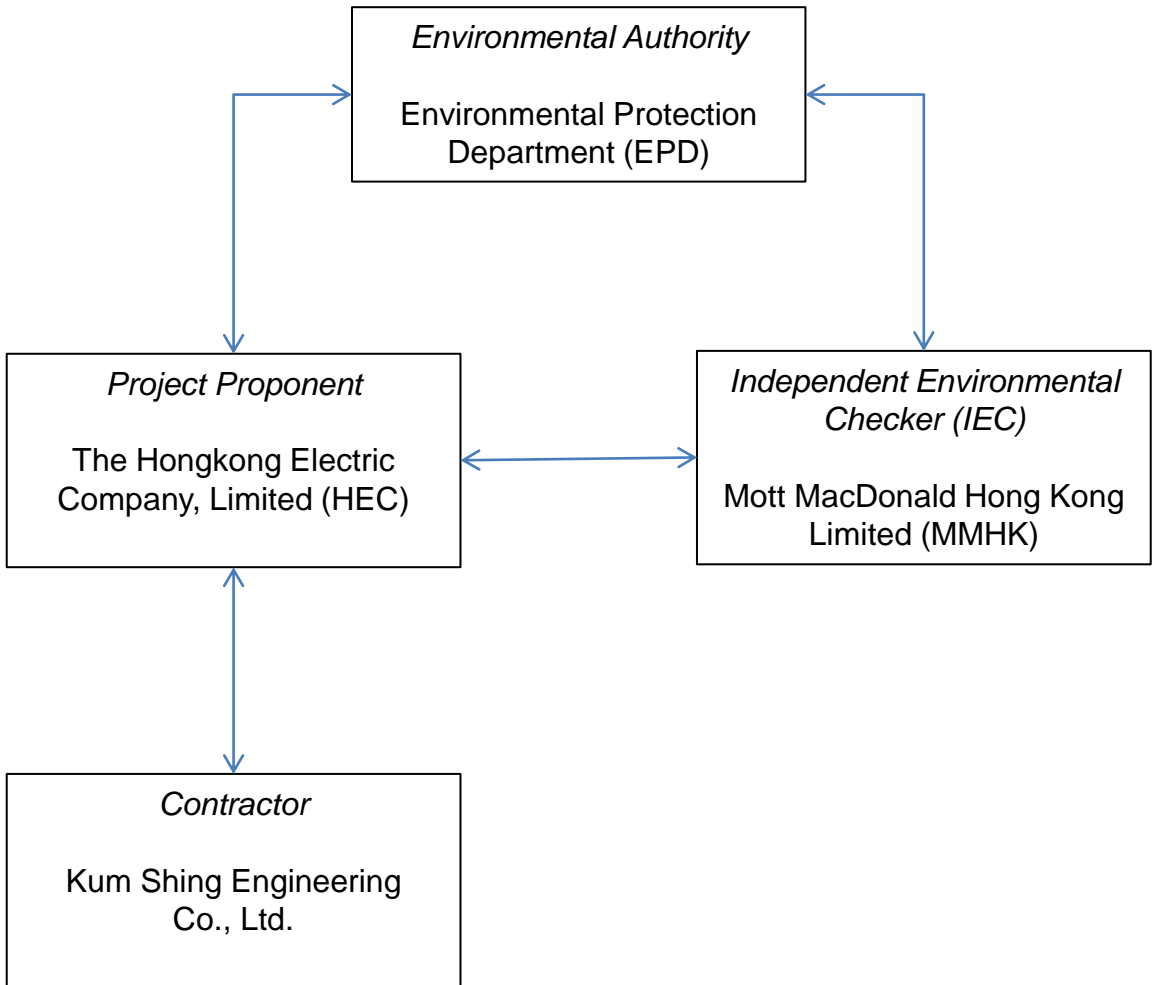
(extracted from Project Profile (Register No. PP-660/2023) prepared by ERM-Hong Kong, Limited, November 2023)

Appendices

- A. Organisation Chart of the Project
- B. Construction Programme
- C. Summary of Mitigation Measures during Construction Phase
- D. Waste Flow Table

A. Organisation Chart of the Project

Organisation Chart of the Project



↔ Line of Communication

B. Construction Programme

(Note: Dates presented are in “Year/Month/Day” format)

ID	Task Name	Duration	% Complete	Start	Finish	Timeline											
						May	Jun	2024 Qtr 3			2024 Qtr 4			2025 Qtr 1			
								Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	
1	Removal of W Line	478 days	24%	2024/06/04	2025/12/12												
2	Conductor Removal	252 days	30%	2024/06/12	2025/04/01												
3	(Section#5) W25-W26	11 days	100%	2024/06/20	2024/07/02												
4	(Section#4) W24-W25	18 days	100%	2024/08/30	2024/09/19												
5	(Section#3) W18-W24	34 days	100%	2024/09/15	2024/10/23												
6	(Section#2) W12-W18	41 days	34%	2024/10/18	2024/12/04												
7	(Section#1) W3-W12	144 days	0%	2024/12/08	2025/05/23												
8	(Section#6) W2-W3	6 days	0%	2025/05/25	2025/05/30												
9	Pylon Removal	478 days	18%	2024/06/04	2025/12/12												
10	Cable seiling end removal work (W26, P1)	15 days	95%	2024/06/04	2024/07/03												
11	W26	32 days	100%	2024/07/08	2024/08/23												
12	W25	9 days	0%	2025/06/08	2025/06/17												
13	W24	11 days	0%	2025/06/18	2025/06/30												
14	W23	10 days	0%	2025/07/01	2025/07/11												
15	W22	9 days	0%	2025/07/12	2025/07/22												
16	W21	9 days	0%	2025/07/23	2025/08/01												
17	W20	9 days	0%	2025/08/02	2025/08/12												
18	W19	9 days	0%	2025/08/13	2025/08/22												
19	W18	10 days	0%	2025/08/23	2025/09/03												
20	W17	9 days	0%	2025/09/04	2025/09/13												
21	W16	9 days	0%	2025/09/15	2025/09/24												
22	W15	9 days	0%	2025/09/25	2025/10/04												
23	W14	9 days	0%	2025/10/06	2025/10/15												
24	W13	9 days	0%	2025/10/16	2025/10/25												
25	W12	9 days	0%	2025/10/27	2025/11/05												
26	W11	10 days	0%	2025/11/06	2025/11/17												
27	W10	11 days	0%	2025/11/18	2025/11/29												
28	W9	9 days	0%	2025/12/01	2025/12/10												
29	W8	9 days	0%	2025/12/11	2025/12/20												
30	W7	9 days	0%	2025/12/22	2025/12/31												
31	W6	9 days	0%	2026/01/01	2026/01/10												
32	W5	8 days	0%	2026/01/12	2026/01/20												
33	W4	8 days	0%	2026/01/21	2026/01/29												
34	W3	8 days	0%	2026/01/30	2026/02/07												

Project: HEC18/9202 132kV Pylon
Date: 2024/11/04

Task		External Tasks		Manual Task		Finish-only	
Split		External Milestone		Duration-only		Deadline	
Milestone		Inactive Task		Manual Summary Rollup		Last Programme of Monthly Report	
Summary		Inactive Milestone		Manual Summary		Progress	
Project Summary		Inactive Summary		Start-only		Manual Progress	

ID	Task Name	Duration	% Complete	Start	2025 Qtr 2			2025 Qtr 3			2025 Qtr 4			2026 Qtr 1			2026 Q	
					Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	
1	Removal of W Line	478 days	24%	2024/06/04														
2	Conductor Removal	252 days	30%	2024/06/12														
3	(Section#5) W25-W26	11 days	100%	2024/06/20														
4	(Section#4) W24-W25	18 days	100%	2024/08/30														
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10	Cable seiling end removal work (W26, P1)	15 days	95%	2024/06/04														
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14	W23	10 days	0%	2025/07/01														
15	W22	9 days	0%	2025/07/12														
16	W21	9 days	0%	2025/07/23														
17	W20	9 days	0%	2025/08/02														
18	W19	9 days	0%	2025/08/13														
19	W18	10 days	0%	2025/08/23														
20	W17	9 days	0%	2025/09/04														
21	W16	9 days	0%	2025/09/15														
22	W15	9 days	0%	2025/09/25														
23	W14	9 days	0%	2025/10/06														
24	W13	9 days	0%	2025/10/16														
25	W12	9 days	0%	2025/10/27														
26	W11	10 days	0%	2025/11/06														
27	W10	11 days	0%	2025/11/18														
28	W9	9 days	0%	2025/12/01														
29	W8	9 days	0%	2025/12/11														
30	W7	9 days	0%	2025/12/22														
31	W6	9 days	0%	2026/01/01														
32	W5	8 days	0%	2026/01/12														
33	W4	8 days	0%	2026/01/21														
34	W3	8 days	0%	2026/01/30														

Project: HEC18/9202 132kV Pylon Date: 2024/11/04	Task		External Tasks		Manual Task		Finish-only	
	Split		External Milestone		Duration-only		Deadline	
	Milestone		Inactive Task		Manual Summary Rollup		Last Programme of Monthly Report	
	Summary		Inactive Milestone		Manual Summary		Progress	
	Project Summary		Inactive Summary		Start-only		Manual Progress	

C. Summary of Mitigation Measures during Construction Phase

Implementation Schedule of Recommended Mitigation Measures during Removal of Overhead Line and Pylons for B-Line and W-Line

Recommended Mitigation Measures for Air Quality Impact

PP Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^
S5.1.1	<p>Good site management practices for dust control detailed in the Air Pollution Control (Construction Dust) Regulation are referred to (as appropriate) during removal and dismantling works. These include:</p> <ul style="list-style-type: none"> Exposed soil surfaces and temporary stockpiles of dusty materials (such as removed concrete during dismantling of concrete supporting plinths) are covered with impervious sheeting when not in use. Materials transported by truck are not loaded to a level higher than the side and tail boards, and are dampened or covered before transport. Powered Mechanical Equipment (PME) during idling are switched off. Regular maintenance of PMEs deployed on-site is conducted to prevent black smoke emission. 	Yes
	<ul style="list-style-type: none"> All broken concrete and steel structures from removal and dismantling works are contained in sandbags and removed from site on a daily basis to avoid fugitive dust emission by wind erosion. Temporary hoarding is erected at the worksites as long as appropriate when carrying out the minor excavation and backfilling works. <p><i>Note: Watering for dust suppression is not feasible for this Project and thus is not implemented as it is impracticable to control potential surface runoff generated as a result.</i></p>	Yes
	<ul style="list-style-type: none"> Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation requirements are followed to regulate emissions from non-road mobile machinery (NRMM) during the removal and dismantling works. 	Yes

Recommended Mitigation Measures for Noise Impact

PP Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^
S5.1.2	<ul style="list-style-type: none"> The removal and dismantling works are carried out during non-restricted working hours only, i.e. 0700-1900hr from Monday to Saturday (except public holidays). 	Yes
	<ul style="list-style-type: none"> Idling Powered Mechanical Equipment (PME) is switched off. 	Yes
	<ul style="list-style-type: none"> Noisy PME is sited as far away from the Noise Sensitive Receivers (NSRs) as practicable. 	Yes
	<ul style="list-style-type: none"> Quiet PME is used as far as practicable. 	Yes
	<ul style="list-style-type: none"> Work sequences to avoid the simultaneous use of noisy PME in close proximity to NSRs are planned ahead of the commencement of works. 	Yes

PP Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^
	<ul style="list-style-type: none"> Due to accessibility of the Project Site, helicopter is considered for material transportation for pylons B3–B11, B13, B15–B16, B18–B27 and W3–W26. Helicopter is only operated during non-restricted working hours between 0700 and 1900 hours, and for pylons located near residential NSRs (i.e. B3–B11, B18–B27, W3–W12, W25 and W26), helicopter is only used between 1000 and 1600 hrs during weekdays. 	N/A
	<ul style="list-style-type: none"> Helicopters are operated over the 152m (i.e. 500 ft) threshold above NSRs according to the requirements of the Civil Aviation Department. Minimum buffer distances between helicopter and NSRs are implemented during different operation modes: <ul style="list-style-type: none"> Approaching: 152m Hovering: 180m Flyover: 152m 	N/A

Recommended Mitigation Measures for Water Quality Impact

PP Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^
	<p>Standard measures stipulated in EPD's "Professional Persons Environmental Consultative Committee Practice Note 1/94 on Construction Site Drainage" (ProPECC PN1/94) are implemented during the removal and dismantle works to properly control site run-off and drainage and to minimise potential water quality impacts.</p> <p>Specifically, applicable measures include:</p> <ul style="list-style-type: none"> Sand bag barriers (or equivalent) to stop storm water from getting into works. 	N/A
S5.1.3	<ul style="list-style-type: none"> Minimize stockpile on-site (by planning the backfilling material delivery and backfilling, as well as timely removal of dismantled material) and provide cover / protection with secured tarpaulin or similar fabric. 	Yes
	<ul style="list-style-type: none"> Public toilets are used. 	Yes
	<ul style="list-style-type: none"> All exposed surfaces and stockpiled materials not in use are covered by tarpaulin or similar fabric as well as sand bag barriers. Additional layer of tarpaulin is used to cover the tools. In case of rainstorm or during non-work hours, machineries and handheld tools used are covered with tarpaulin or otherwise sheltered from rain. 	Yes
S5.1.3	<ul style="list-style-type: none"> Wastewater discharge licence (where appropriate) is applied for. Conditions/requirements under Water Pollution Control Ordinance (WPCO) (Chapter 358) and the Technical Memorandum on "Standards for Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters" (Chapter 358AK) respectively are complied with. 	N/A
S5.1.3	<ul style="list-style-type: none"> Proposed works at B21 and B22 located in the close vicinity to watercourses are scheduled outside of wet season to further reduce risk of water quality impact on natural watercourse and associated wildlife. 	N/A
S5.1.3	<ul style="list-style-type: none"> Construction and demolition waste generated is removed on a daily basis as far as practicable. 	Yes
S5.1.3	<ul style="list-style-type: none"> PMEs used on-site are not refuelled or repaired at the works areas, thus there is no storage of chemicals, lube or fuel on-site. 	Yes

PP Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^
	For removal and dismantling works in close vicinity to watercourses and reservoirs, the good site practices outlined in ProPECC PN 1/94, as well as the control and design measures stipulated in ETWB TC (Works) No. 5/2005 "Protection of Natural Streams/Rivers from Adverse Impacts arising from Construction Works" are followed where practicable. The following specific measures are included:	
S5.1.3	<ul style="list-style-type: none"> Construction works close to the inland waters are carried out in dry season as far as practicable where the flow in the surface channel or stream is low. 	Yes
	<ul style="list-style-type: none"> Work site is temporarily isolated using sandbags in the proximity of watercourses and reservoirs. 	N/A
	<ul style="list-style-type: none"> Disturbance to existing vegetation alongside the stream banks is minimised. 	N/A
	<ul style="list-style-type: none"> Less or smaller construction plants may be specified in areas close to the watercourses and reservoirs to reduce the disturbance to the surface water. 	N/A
	<ul style="list-style-type: none"> Stockpiles of removal and dismantle material are covered and kept away from watercourses and reservoirs; and 	Yes
	<ul style="list-style-type: none"> Debris and spoil are covered and disposed of as soon as possible. 	Yes
S5.1.3	<ul style="list-style-type: none"> The "Conditions of Working within Water Gathering Ground" issued by WSD (see Project Profile Appendix F) are strictly followed for all works within Water Gathering Ground (WGG). 	N/A

Recommended Mitigation Measures for Waste Management

PP Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^
S5.1.4	<ul style="list-style-type: none"> Good site management practice is adopted by the contractor. Waste on-site is properly segregated to increase the potential for reuse and recycling. 	Yes
S5.1.4	<ul style="list-style-type: none"> The removed concrete generated during the pylon dismantlement is disposed of at an appropriate waste reception facility (WENT or SENT Landfill). The dismantled materials including wire, conductor and steel are recycled. The dismantled parts and materials are first transported by manual handling, Electric Vehicle (EV) trolley (see Project Profile Appendix A3-11 and B2), crane lorry or helicopter to a nearby vehicular access, and subsequently transported off-site by lorry. 	Yes
S5.1.4	<ul style="list-style-type: none"> General refuse generated on-site is taken away from the site by the workers for proper disposal on a daily basis (at WENT or NENT Landfill). 	Yes
S5.1.4	<ul style="list-style-type: none"> Different types of waste are disposed of in accordance with Waste Disposal Ordinance (WDO) (Chapter 354) and its subsidiary regulations. 	Yes

Recommended Mitigation Measures for Terrestrial Ecology

PP Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^
Avoidance and Minimisation		
S5.1.5	<ul style="list-style-type: none"> The contractor is avoiding any unnecessary encroachment of the Project onto natural habitats within the Country Parks and Site of Special Scientific Interest (SSSI), and uses minimal space as the works areas. 	Yes
S5.1.5	<ul style="list-style-type: none"> The details of reinstatement requirement, including reinstatement arrangement, associated reporting, monitoring, maintenance and management requirement are further discussed and agreed with AFCD before the reinstatement commences. 	N/A
S5.1.5	<ul style="list-style-type: none"> The equipment and materials are transported to the Project Site by crane lorry, or by helicopter for those areas which are not accessible via existing vehicular roads and/or footpaths (i.e. helicopter will be tentatively used for B3 – B11, B13, B15 – B16, B18 – B27, and W3 – W26 and subjected to the finalised engineering design), such that construction of new access route and associated vegetation clearance are not required. For transportation along the access road to B14, light goods vehicles of no more than 3 tonnes will be used instead of crane lorry. 	Yes
S5.1.5	<ul style="list-style-type: none"> Proposed works at B21 and B22 located in the close vicinity to watercourses are scheduled outside wet season (April – October), to minimise the potential impacts to amphibians and freshwater fish. 	N/A
S5.1.5	<ul style="list-style-type: none"> Electrical hand-held breaker and other hand tools are used for the dismantling works instead of the mechanical equipment such as excavators to further minimise the potential disturbance to the surrounding natural habitats and associated wildlife (esp. fauna species of conservation importance). 	Yes
S5.1.5	<ul style="list-style-type: none"> The findings of the additional site visit(s) at the pre-construction phase and the final extent for works area have been submitted to AFCD for review and agreement prior to the commencement of dismantling works. 	Yes (for W9, W12, W18 and W24)
Preventive Measures – General		
S5.1.5	<ul style="list-style-type: none"> The boundary of the works area is clearly marked by temporary fence where possible and soft PVC tape at area where space is limited. The works area boundaries are regularly checked to ensure that they are not breached and that no damage occurs to surrounding areas / Country Parks, particularly to any identified flora of conservation importance nearby. 	Yes
S5.1.5	<ul style="list-style-type: none"> Disturbance to adjacent watercourse/ water body and the riparian woodland or shrubland/ grassland habitats is avoided and the construction activities are strictly restricted within the works area boundaries. 	Yes
S5.1.5	<ul style="list-style-type: none"> For the works area with watercourse / water body nearby, temporary drainage system with sand traps and oil and grease removal facilities, in accordance with the Practice Notes for Professional Persons on "Construction Site Drainage" (ProPECC PN 1/94) are provided to control surface runoff and the potential pollution to the adjacent streams. 	N/A
S5.1.5	<ul style="list-style-type: none"> Pollutants, if any, are pre-treated and settled before discharge at discharge points. 	N/A

PP Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^
S5.1.5	<ul style="list-style-type: none"> Runoff from the construction works is prevented. In the event of rain or at any time when rainstorms are likely to happen, exposed surfaces are covered by tarpaulin or by other means. 	N/A
S5.1.5	<ul style="list-style-type: none"> Any damage and disturbance, particularly those caused by filling and illegal dumping to the surrounding natural habitats and especially those within the Country Park, is avoided. The contractor is providing proof of dismantled materials dumping (i.e. waste disposal ticket issued by landfill office and recycling receipt). The total weight of dumped materials is reviewed and endorsed. 	Yes
S5.1.5	<ul style="list-style-type: none"> Open fires within the works area boundary during construction are prohibited and prevented. Temporary firefighting equipment is provided in the works areas. 	Yes
S5.1.5	<ul style="list-style-type: none"> Good site practice is enforced with effective preventive measures. Works site is kept tidy at all times. Accumulation of construction waste and general refuse is not allowed. 	Yes
Flora Species of Conservation Importance		
S5.1.5	<ul style="list-style-type: none"> A number of plant species of conservation importance are present in the close vicinity of the proposed works area and along the accessing path connecting to pylons, including but not limited to <i>Aquilaria sinensis</i>, <i>Artocarpus hypargyreus</i>, <i>Canthium dicoccum</i>, <i>Diospyros vaccinioides</i>, <i>Endospermum chinense</i>, <i>Enkianthus quinqueflorus</i>, <i>Eulophia graminea</i>, <i>Geodorum densiflorum</i>, <i>Pavetta hongkongensis</i> and <i>Rhododendron simsii</i>. The identified flora species of conservation importance are retained in situ. Flora species of conservation importance identified within the works area, i.e. <i>Eulophia graminea</i> and <i>Geodorum densiflorum</i> at W7, <i>Diospyros vaccinioides</i> and <i>Endospermum chinense</i> at B8, B15 and W21, <i>Pavetta hongkongensis</i> at B6, are preserved in situ as far as technically feasible and area available. 	Yes (at active sites)
S5.1.5	<ul style="list-style-type: none"> A protection zone for the species is established wherever practicable, and the workers are briefed to be aware and avoid trampling or any damaging the species. (See Project Profile Figures C2.1 to C2.18.) For <i>Eulophia graminea</i>, <i>Endospermum chinense</i>, <i>Diospyros vaccinioides</i>, <i>Geodorum densiflorum</i> and <i>Pavetta hongkongensis</i> found at B6, B8, W7, B15 and W21, a metal cage will be built to avoid trampling/ damage/ disturbance by works. 	N/A
S5.1.5	<ul style="list-style-type: none"> The identified individual plant is marked by warning sign during decommission work to ensure contractor is aware of the concerned plant. 	N/A
S5.1.5	<ul style="list-style-type: none"> Before the commencement of construction works, additional site visit(s) and vegetation survey are conducted at pre-construction phase to verify the practicality of the proposed works areas. For any new flora species of conservation importance which are identified during the pre-construction vegetation survey, similar means of protective measures should be applied to minimise potential damage on the plant(s). The results of the pre-construction vegetation survey and associated protective measures have been submitted to AFCD for review before commencement of works. 	Yes (for W9, W12, W18 and W24)

PP Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^
S5.1.5	<ul style="list-style-type: none"> Upon completion of the dismantling activities, the affected habitats including woodland, shrubland/grassland and developed area/disturbed area are reinstated by planting native trees and vegetation. Some developed area/disturbed areas which used to be the concrete ground under the pylon, may also be converted to vegetated habitat through plantation and integrate with adjacent natural habitats. The details of reinstatement requirement, including reinstatement arrangement, associated reporting, monitoring, maintenance and management requirement are further discussed and agreed with AFCD separately before the reinstatement commences. 	N/A
<i>Fauna Species of Conservation Importance</i>		
S5.1.5	<ul style="list-style-type: none"> Before the commencement of dismantling works, additional ecological survey is conducted with focus on the presence of any active bird nests on the pylons. In case any active bird nest is recorded on the pylon during the pre-construction phase, the dismantling works are temporarily suspended considering that bird nests or egg are protected under the Wild Animals Protection Ordinance (Chapter 170). The records of active bird nest during the pre-construction phase are reported to AFCD and the procedures of the pylon dismantle works are further discussed and agreed with AFCD. 	Yes (for W9, W12, W18 and W24)
<i>Ecological Site Audit</i>		
S5.1.5	<ul style="list-style-type: none"> During the dismantling works, Hongkong Electric (HEC) prepares a site audit checklist and conduct weekly site audit at the active works areas to ensure that proposed good site practices / protective measures are in place and effective. 	Yes
	<ul style="list-style-type: none"> During the dismantling works, monthly site visit by HEC's representative is conducted at the active works areas to ensure the appropriate and successful implementation of the measures mentioned above. 	Yes

Recommended Mitigation Measures for Landscape and Visual Impact

PP Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^
S5.1.6	<ul style="list-style-type: none"> Construction waste is managed appropriately. 	Yes
S5.1.6	<ul style="list-style-type: none"> Upon completion of the removal works, natural reinstatement is carried out in the works area. 	N/A
S5.1.6	<ul style="list-style-type: none"> For tree compensation (if tree felling is unavoidable), a minimum ratio of 1:1 tree compensation with native species is applied. 	N/A
S5.1.6	<ul style="list-style-type: none"> Work site boundaries are regularly checked to ensure that they are not breached and that no damage occurs to surrounding vegetation/tree. 	Yes

Recommended Mitigation Measures for Cultural Heritage

PP Ref.	Recommended Mitigation Measures	Mitigation Measures Implemented? ^
S5.1.7	<ul style="list-style-type: none"> As a precautionary measure, the project proponent and his/her contractor are required to inform Antiquities and Monuments Office (AMO) immediately when any antiquities or supposed antiquities under the Antiquities and Monuments Ordinance (Chapter 53) are discovered during the course of works, so that appropriate mitigation measures, if needed, can be timely formulated and implemented in agreement with AMO. 	N/A

Notes:

Yes = Implemented where applicable

Obs/Rem = Observations or reminders were issued, and items were rectified

N/A = Not applicable to the construction works implemented during the reporting period

^ = Checked by HEC and IEC through site inspection and record provided by the Contractor

TABLE 5.1 IMPLEMENTATION SCHEDULE OF RECOMMENDED MITIGATION MEASURES DURING REMOVAL OF OVERHEAD LINE AND PYLONS (W9 AND W12)

Ref.	Recommended Mitigation Measures	Objectives of the recommended measures	Implementation Parties	Location of the measure	When to implement the measure	Relevant requirements or standards for the measure to achieve
Ecological Mitigation Measures						
EP condition 2.10(b)	<u>Avoidance and minimisation on potential environmental impacts</u> <ul style="list-style-type: none"> The flora species of conservation importance identified in close vicinity of the works areas will be retained in situ and protected during the works. 	Avoid or minimize potential environmental impacts during the construction stage of the Project	Contractor	Relevant proposed works areas	Construction phase	EP condition 2.10(b)
S5.1.5 of PP	<u>Avoidance encroachment onto natural habitats within the country parks and SSSI</u> <ul style="list-style-type: none"> To avoid any unnecessary encroachment of the Project onto natural habitats within the country parks and SSSI and use minimal space as the works areas. 	Avoid direct impact to natural habitats within the country parks and SSSI	Contractor	Natural habitats within the country parks and SSSI	Pre-construction phase	EP condition 2.7(b)
EP condition 2.9 & S5.1.5 of PP	<u>Avoidance of use of mechanical equipment</u> <ul style="list-style-type: none"> To use of electrical hand-held breaker and other hand tools will be used for the pylon foundation removal instead of the mechanical equipment such as excavators. 	Further minimise the potential disturbance to the surrounding natural habitats and associated wildlife (esp. fauna species of conservation importance).	Contractor	Proposed works areas	Construction phase	EP condition 2.9
EP condition 2.7 & S5.1.5 of PP	<u>To conduct pre-construction site visits/surveys</u> <ul style="list-style-type: none"> Additional site visit(s) will be conducted at the pre-construction phase to review the validity and practicality of the proposed works areas. Propose protective measure for the flora of conservation importance newly identified from pre-construction survey. 	Minimise direct impacts on the woodland habitat (i.e. with minimum level of vegetation clearance), tree pruning and tree felling.	Contractor	Proposed works areas	Pre-construction phase	EP condition 2.7
S5.1.5 of PP and S4 of the EMP	<u>Site Inspection</u> <ul style="list-style-type: none"> During the dismantle works, HK Electric will prepare a site audit checklist and conduct weekly site audit at the active works areas to ensure the proposed good site practices / protective measures are in place and effective. During the dismantle works, monthly site visit by a HK Electric's representative will be conducted at the active works areas to ensure the appropriate and successful implementation of the measures. 	Minimise the potential disturbance to the surrounding natural habitats and associated wildlife (esp. fauna species of conservation importance).	Contractor	Relevant proposed works areas	Construction phase	EP condition 2.7
EP condition 2.7 and 2.10(b), S5.1.5 of PP and S4 of this EMP	<u>Protection on nearby habitats, active bird nest and flora species of conservation importance</u> <ul style="list-style-type: none"> All the flora species of conservation importance including <i>Artocarpus hypargyreus</i>, <i>Camellia crapnelliana</i>, <i>Camellia granthamiana</i>, <i>Canthium dicoccum</i>, <i>Diospyros vaccinioides</i> and <i>Pavetta hongkongensis</i> recorded outside the proposed works area at W9 and W12 will be retained. <i>Artocarpus hypargyreus</i> recorded immediately adjacent to the proposed work area at W12 will be preserved in-situ, a protective fencing with 1.5m-2m will be erected around the dripline of the tree to avoid potential impact under the Project subject to site condition (Appendix A1). The protective fencing will be removed upon completion of works. Safety and environmental awareness briefing to workers will be provided to alert their awareness on species of conservation importance along the access road to W9 and W12 and pay extra attention when using the access to avoid any damage and disturbance, particularly those caused by filling and illegal dumping to the surrounding natural habitats and especially those within the Country Park. The contractors will be required to provide proofs of 	Minimise direct impacts on habitats, active bird nest and flora species of conservation importance	Contractor	Relevant proposed works areas	Pre-construction phase / Construction phase	EP conditions 2.7 & 2.10(b)

Ref.	Recommended Mitigation Measures	Objectives of the recommended measures	Implementation Parties	Location of the measure	When to implement the measure	Relevant requirements or standards for the measure to achieve
Ecological Mitigation Measures						
	<p>dismantled materials dumping (i.e. waste disposal ticket issued by landfill office and recycling receipt).</p> <ul style="list-style-type: none"> Measures will be provided to deal with any active bird nest found on the pylon (if any). Upon completion of the dismantling activities, the affected habitats including woodland, shrubland/ grassland and developed area/disturbed area will be reinstated by planting native trees and vegetation. The boundary of the works area will be clearly marked by temporary fence where possible and soft PVC tape at area where space is limited. The works area boundaries will be regularly checked to ensure that they are not breached and that no damage occurs to surrounding areas/ country parks, particularly to any identified flora of conservation importance nearby. Prohibit and prevent open fires within the works area boundary during construction and provide temporary firefighting equipment in the work areas. Good site practice should be enforced. Works site should be kept tidy at all times. Accumulation of construction waste and general refuse should not be allowed. 					

TABLE 5.1 IMPLEMENTATION SCHEDULE OF RECOMMENDED MITIGATION MEASURES DURING REMOVAL OF OVERHEAD LINE AND PYLONS (W18 AND W24)

Ref.	Recommended Mitigation Measures	Objectives of the recommended measures	Implementation Parties	Location of the measure	When to implement the measure	Relevant requirements or standards for the measure to achieve
Ecological Mitigation Measures						
EP condition 2.10(b)	<u>Avoidance and minimisation on potential environmental impacts</u> <ul style="list-style-type: none"> The flora species of conservation importance identified in close vicinity of the works areas will be retained in situ and protected during the works. 	Avoid or minimize potential environmental impacts during the construction stage of the Project	Contractor	Relevant proposed works areas	Construction phase	EP condition 2.10(b)
S5.1.5 of PP	<u>Avoidance encroachment onto natural habitats within the country parks and SSSI</u> <ul style="list-style-type: none"> To avoid any unnecessary encroachment of the Project onto natural habitats within the country parks and SSSI and use minimal space as the works areas. 	Avoid direct impact to natural habitats within the country parks and SSSI	Contractor	Natural habitats within the country parks and SSSI	Pre-construction phase	EP condition 2.7(b)
EP condition 2.9 & S5.1.5 of PP	<u>Avoidance of use of mechanical equipment</u> <ul style="list-style-type: none"> To use of electrical hand-held breaker and other hand tools will be used for the pylon foundation removal instead of the mechanical equipment such as excavators. 	Further minimise the potential disturbance to the surrounding natural habitats and associated wildlife (esp. fauna species of conservation importance).	Contractor	Proposed works areas	Construction phase	EP condition 2.9
EP condition 2.7 & S5.1.5 of PP	<u>To conduct pre-construction site visits/surveys</u> <ul style="list-style-type: none"> Additional site visit(s) will be conducted at the pre-construction phase to review the validity and practicality of the proposed works areas. Propose protective measure for the flora of conservation importance newly identified from pre-construction survey. 	Minimise direct impacts on the woodland habitat (i.e. with minimum level of vegetation clearance), tree pruning and tree felling.	Contractor	Proposed works areas	Pre-construction phase	EP condition 2.7
S5.1.5 of PP and S4 of the EMP	<u>Site Inspection</u> <ul style="list-style-type: none"> During the dismantle works, HK Electric will prepare a site audit checklist and conduct weekly site audit at the active works areas to ensure the proposed good site practices / protective measures are in place and effective. During the dismantle works, monthly site visit by a HK Electric's representative will be conducted at the active works areas to ensure the appropriate and successful implementation of the measures. 	Minimise the potential disturbance to the surrounding natural habitats and associated wildlife (esp. fauna species of conservation importance).	Contractor	Relevant proposed works areas	Construction phase	EP condition 2.7
EP condition 2.7 and 2.10(b), S5.1.5 of PP and S4 of this EMP	<u>Protection on nearby habitats, active bird nest and flora species of conservation importance</u> <ul style="list-style-type: none"> All the flora species of conservation importance including <i>Canthium dicoccum</i>, <i>Pavetta hongkongensis</i> and <i>Rhododendron simsii</i> recorded outside the proposed works area at W18 and W24 will be retained. Safety and environmental awareness briefing to workers will be provided to alert their awareness on species of conservation importance along the access road to W24 and pay extra attention when using the access to avoid any damage and disturbance, particularly those caused by filling and illegal dumping to the surrounding natural habitats and especially those within the Country Park. The contractors will be required to provide proofs of dismantled materials dumping (i.e. waste disposal ticket issued by landfill office and recycling receipt). Measures will be provided to deal with any active bird nest found on the pylon (if any). 	Minimise direct impacts on habitats, active bird nest and flora species of conservation importance	Contractor	Relevant proposed works areas	Pre-construction phase / Construction phase	EP conditions 2.7 & 2.10(b)

Ref.	Recommended Mitigation Measures	Objectives of the recommended measures	Implementation Parties	Location of the measure	When to implement the measure	Relevant requirements or standards for the measure to achieve
Ecological Mitigation Measures						
	<ul style="list-style-type: none"> Upon completion of the dismantling activities, the affected habitats including woodland, shrubland/ grassland and developed area/disturbed area will be reinstated by planting native trees and vegetation. The boundary of the works area will be clearly marked by temporary fence where possible and soft PVC tape at area where space is limited. The works area boundaries will be regularly checked to ensure that they are not breached and that no damage occurs to surrounding areas/ country parks, particularly to any identified flora of conservation importance nearby. Prohibit and prevent open fires within the works area boundary during construction and provide temporary firefighting equipment in the work areas. Good site practice should be enforced. Works site should be kept tidy at all times. Accumulation of construction waste and general refuse should not be allowed. 					

D. Waste Flow Table

Table D-1: Monthly Waste Flow Table for Removal of 132kV Overhead Line and Pylons for B-Line and W-Line

Month	Actual Quantities of Inert C&D Materials Generated Monthly							Actual Quantities of C&D Wastes Generated Monthly					
	Total Quantity Generated	Hard Rocks and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Disposed to Sorting Facility	Imported Fill	Metals	Paper/ Cardboard Packaging	Plastics	Wood/ Timber	Chemical Waste	Others, e.g. General Refuse
	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)
2024													
Jan	0.0												
Feb	0.0												
Mar	0.0												
Apr	0.0												
May	0.0												
Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Jul	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oct	5.0	0.0	0.0	0.0	5.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0
Nov	0.0												
Dec	0.0												
Sub-total (2024)	5.0	0.0	0.0	0.0	5.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0
Total	5.0	0.0	0.0	0.0	5.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0

Notes:

- 1 - The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
- 2 - Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material.
- 3 - Broken concrete for recycling into aggregates.