



Removal of 132kV Overhead Line and Pylons for P-Line

Monthly Audit Report No. 2 for June 2022 July 2022

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Monthly Audit Report No. 2 for June 2022 July 2022





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Environmental Verification Sheet

Environmental Permit No. EP-603/2022

Reference Document /Plan

Document/Plan to be Certified/ Verified:	Monthly Audit Report No. 2 for June 2022
Date of Report:	14 July 2022
Date prepared by IEC:	14 July 2022

Reference EP Condition

Environmental Permit Condition:

Condition 2.1 of EP-603/2022:

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 mitigation measures recommended in the Project Profile (Register No.: PP-636/2021) and required under this Permit, and to confirm full compliance of the mitigation 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-603/2022.

Ms Liz Lo, Independent Environmental Checker (IEC):

Date: 14 July 2022

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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Environmental Checker (IEC) under the Environmental Permit (EP) (No. EP-603/2022 or as subsequently varied or superseded) to audit the implementation of all mitigation measures and Environmental Monitoring and Audit (EM&A) programme recommended in the EP and Project Profile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-636/2021), and to confirm full compliance of the mitigation measures through a monthly audit report.

Construction of the project was scheduled to commence on 22 April 2022 while the actual commencement date of construction was 24 May 2022 after approval of Ecological Management Plan (EMP) for pylons "P1" to "P6" by EPD.

This is the 2nd IEC Monthly Audit Report prepared and submitted under Condition 2.1 of the EP, for the period from 1 June 2022 to 30 June 2022 ("the reporting month").

Implementation of Mitigation Measures

One site inspection was carried out by IEC on 29 June 2022 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 "P-Line" or "Parker Line" refers to a network of overhead lines, pylons and gantry towers totalling 4.7 km in length from Deep Water Bay Road to Tai Tam Road, a large portion of which is within Tai Tam Country Park, Tai Tam Country Park (Quarry Bay Extension) and Tai Tam Reservoir Catchment Area Site of Special Scientific Interest (SSSI). The P-Line was in service for more than 40 years and has aged at various extent depending on the locations of the pylons and localised climatic conditions. It is no longer in use.

The "Removal of 132kV Overhead Line and Pylons for P-Line" (the Project) involves the following works:

- Removal of overhead line (OHL) earth wire and conductor; and
- Dismantling of pylons (24 pylons in total, numbered from "P1" to "P24"), including removal of supporting plinths of pylons and the associated gantry towers, steel compounds and fencing at "P1" and "P24".

These removal works are tentatively scheduled to last for about 18 months.

1.1.2 Project Status under EIAO

Due to the P-Line's location 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-603/2022 (EP) for the Project works was issued to the Project Proponent, The Hongkong Electric Co., Ltd. (HEC), on 14 January 2022.

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-636/2021), 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 2.6 and 2.7 of the EP, as described in the following paragraphs.

Under Condition 2.6 of the EP, before commencement of the removal work within Tai Tam 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 Tai Tam Country Park and, subject to the findings of the site visits/surveys, an Ecological Management Plan (EMP) 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 with the country park.

Under Condition 2.7 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 EMP for pylons "P1" to "P6" was approved by DEP on 23 May 2022, while the EMP for pylons "P7" to "P14" was verified by the IEC on 13 June 2022 and duly submitted to DEP. The EMP for the remaining sections of the "P-Line" alignment will be prepared by HEC and verified by IEC at a later date.

1.1.3 Objectives of this Report

This is the 2nd IEC Monthly Audit Report summarising the findings of the implementation status of the mitigation measures and EM&A programme under the Project from 1 June 2022 to 30 June 2022 ("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.	Head of Mechanical Engineering, Projects Division	L.M. Chan	3143 3819	2810 0506
(HEC)	Head of Sustainability	Steven H.Y. Ho	3143 3897	2810 0506
Independent Environmental Checker (IEC)	IEC	Liz Lo	2828 5751	2827 1823
Mott MacDonald Hong Kong Limited (MMHK)				
Contractor Kum Shing Engineering Co., Ltd.	Project Manager	Lau Kin Ming	2127 6898	2330 1692

1.3 Construction Activities

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

- Overhead cable sealing ends removal at "P1".
- Releasing tension on overhead cables for "P1" to "P2".
- Overhead line on pulley at "P3", "P5" and "P7".
- Overhead line de-tension at "P8".
- Dismantling of cable sealing ends and accessories in "P1".
- Dismantling of insulators on "P1" Gantry.
- Transportation of scrap metal and materials at "P3", "P5" and "P8".
- No demolition of structures at ground level was conducted.

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 28 June 2022 in the reporting month. The finding(s) of the site inspection are described below:

- No major observation from the Contractor's works was noted during site inspection. The following reminders were made.
 - The Contractor is reminded that all construction materials awaiting removal from the worksites shall not adversely impact nearby sensitive receivers such as U-channels and nearby 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 Table 4.2 implementation schedule of the EMP for "P1" to "P6" were implemented in the reporting month.

Cultural heritage mitigation measures set out in Section 5.1.7 and Appendix E of the Project Profile were not applicable in the reporting month, since no active site works at "P2" and "P3" were in progress.

Furthermore, weekly site audit of active works areas was conducted by HEC as set out in the Table 4.2 implementation schedule of the EMP for "P1" to "P6".

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, 4.8 tonnes of C&D waste were disposed as public fill and no general refuse were disposed of from the Project sites during the reporting month.

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-603/2022	14 Jan 2022	-	Valid
Billing account under Waste Disposal Ordinance (WDO)	7032720	19 Dec 2018	-	Valid

According to the Contractor, notification to EPD under Air Pollution Control Ordinance of "notifiable works" is tentatively scheduled for early 2023 based on the current scheduling of construction works for this 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 (July 2022) include:

- Overhead cable releasing of tension, dismantling and removal of accessories.
- Overhead line on pulley and de-tension.
- Off-site removal of materials.
- General ground level site clearance works at active work sites.
- No demolition of structures at ground level.

The Contractor is reminded, prior to commencement of any "notifiable work" under Air Pollution Control Ordinance, to notify EPD of such works using the prescribed Form NA.

5 Conclusions

5.1 Conclusions

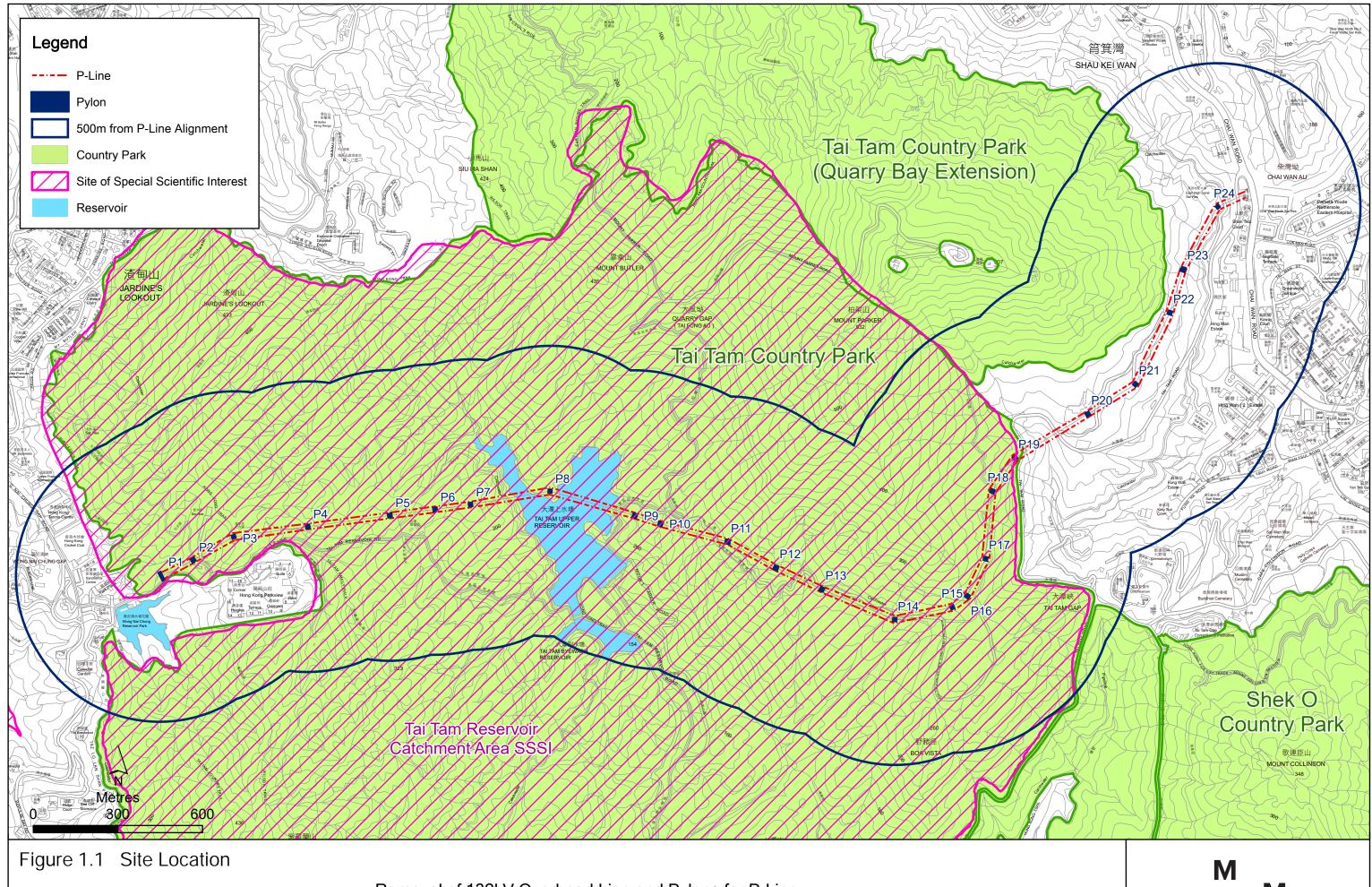
The EM&A programme recommended in the Project Profile (PP) was commenced on 22 April 2022 and was continued during the reporting month.

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



Removal of 132kV Overhead Line and Pylons for P-Line

(extracted from Project Profile (Register No. PP-636/2021) prepared by ERM-Hong Kong, Limited, November 2021)

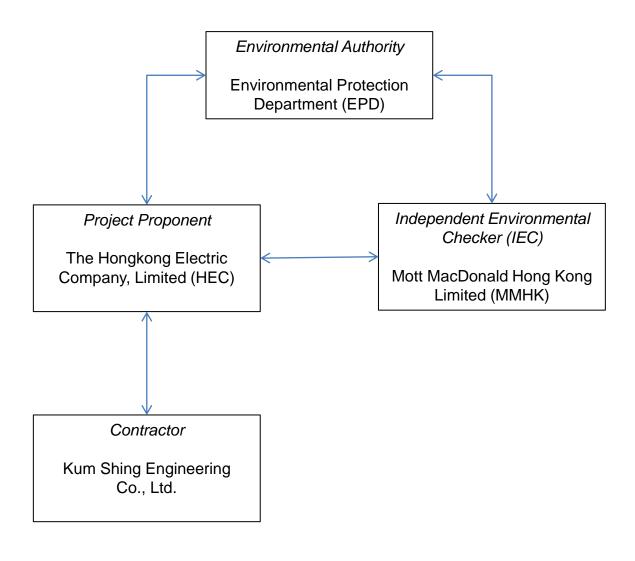


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A. Organisation Chart of the Project

Organisation Chart of the Project

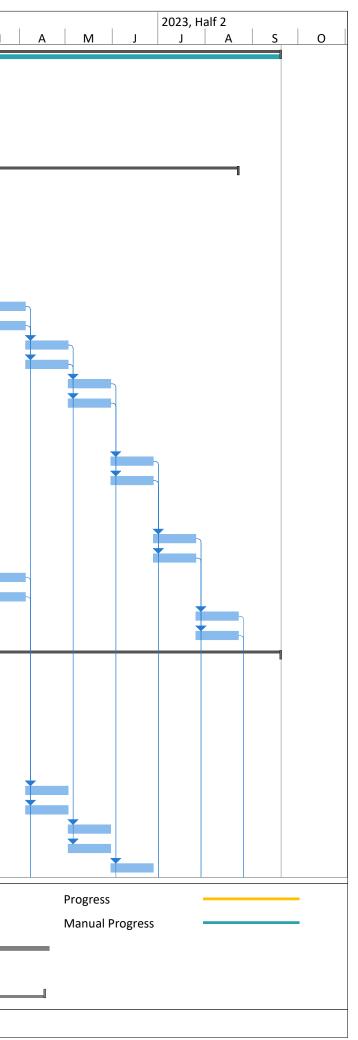


Line of Communication

B. Construction Programme

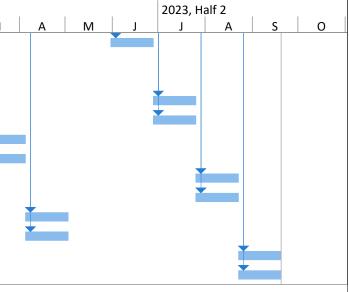
(Note: Dates presented are in "Year/Month/Day" format)

ID	Task Name	Duration Start	Finish	alf 1 F	MA	M J	2022, Half 2 J A	S O	2023, Ha N D J	alf 1 F M
1	Removal of P Line	446 days Mon 22/04	/18 Tue 23/09/19			J				. 101
2	Conductor Removal	158 days Mon 22/04						1		
3	(Section#1) P1-P6	38 days Mon 22/04								
4	(Section#2) P6-P14	50 days Wed 22/06								
5	(Section#3) P14-P20	35 days Fri 22/07/2								
6	(Section#4) P20-P24	35 days Thu 22/09/						*		
7	Pylon Removal	264 days Wed 22/10						r		
8	P1	4 wks Wed 22/10								
9	P2	4 wks Wed 22/10								
10	P3	4 wks Wed 22/11								
11	P4	4 wks Wed 22/11								
12	P5	4 wks Wed 22/12								
13	P6	4 wks Wed 22/12								
14	P7	4 wks Wed 23/03								
15	P8	4 wks Wed 23/03								
16	P9	4 wks Wed 23/04								1
17	P10	4 wks Wed 23/04								
18	P11	4 wks Wed 23/04								
19	P12	4 wks Wed 23/05								
20	P13 (Close to Drainage								• • • • • • • • • • • • • • • • • • •	
20	P14 (Close to Drainage									
22	P15	4 wks Wed 23/05								
23	P16	4 wks Wed 23/05								
23	P10	4 wks Wed 23/03								
24	P17 P18 (Close to Drainage									•
26	P18 (Close to Drainage	4 wks Wed 23/02 4 wks Wed 23/06								
20	P19 P20									
27		4 wks Wed 23/06								↓
28	P21	4 wks Wed 23/03								-
30	P22	4 wks Wed 23/03								
	P23	4 wks Wed 23/07								
31	P24	4 wks Wed 23/07								
32 33	Foundation Removal	264 days Wed 22/11								
	P1	4 wks Wed 22/11								
34	P2	4 wks Wed 22/11								
35	P3	4 wks Wed 22/12							-	
36	P4	4 wks Wed 22/12							•	
37	P5	4 wks Wed 23/01							-	
38	P6	4 wks Wed 23/01								
39	P7	4 wks Wed 23/04								
40	P8	4 wks Wed 23/04								
41	P9	4 wks Wed 23/05								
42	P10	4 wks Wed 23/05								
43	P11	4 wks Wed 23/05	/31 Tue 23/06/27							
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		Split	Externa	al Milestone	\diamond	Dura	ation-only		Deadline	$\hat{\nabla}$
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Date:	111 22/03/23	Vilestone	Inactive				nual Summary Rollu	P	Baseline	
		Summary		e Milestone	\diamond		nual Summary		Baseline Milestone	\diamond
	F	Project Summary	Inactive	e Summary		Star	t-only	C	Baseline Summary	
						I	Page 1			



ID	Task Name	Duration	Start	Finish	alf 1		I	I			I		2022, I	Half 2			I	1		I		2023 <i>,</i> H	alf 1	I
					F	F	M		A	Μ		J	J		A	S		0	Ν		2	J	F	M
44	P12	4 wks	Wed 23/05/31	Tue 23/06/27																				
45	P13 (Close to Drainage)	4 wks	Wed 23/02/08	Tue 23/03/07																				
46	P14 (Close to Drainage)	4 wks	Wed 23/02/08	Tue 23/03/07																				
47	P15	4 wks	Wed 23/06/28	Tue 23/07/25																				
48	P16	4 wks	Wed 23/06/28	Tue 23/07/25																				
49	P17	4 wks	Wed 23/03/08	Tue 23/04/04																				
50	P18 (Close to Drainage)	4 wks	Wed 23/03/08	Tue 23/04/04																				
51	P19	4 wks	Wed 23/07/26	Tue 23/08/22																				
52	P20	4 wks	Wed 23/07/26	Tue 23/08/22																				
53	P21	4 wks	Wed 23/04/05	Tue 23/05/02																				
54	P22	4 wks	Wed 23/04/05	Tue 23/05/02																				
55	P23	4 wks	Wed 23/08/23	Tue 23/09/19																				
56	P24	4 wks	Wed 23/08/23	Tue 23/09/19																				

	Task		External Tasks		Manual Task		Finish-only	Э
	Split		External Milestone	\diamond	Duration-only		Deadline	仑
Project: HEC18/9202 132kV Pylon Date: Fri 22/03/25	Milestone	•	Inactive Task		Manual Summary Rollup		Baseline	
	Summary	II	Inactive Milestone		Manual Summary	II	Baseline Milestone	\diamond
	Project Summary	1	Inactive Summary	0	Start-only	E	Baseline Summary	[
					Page 2			



Progress Manual Progress

C. Summary of Mitigation Measures during Construction Phase

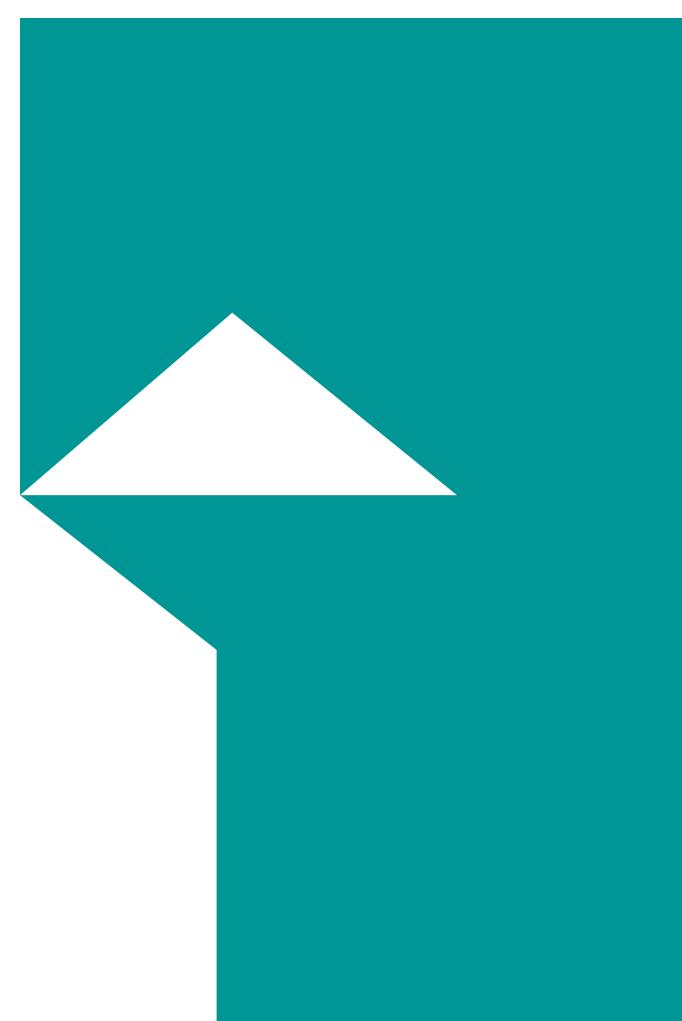
(as extracted from the "Ecological Management Plan (P1 to P6)")

Table 4.2Implementation Schedule of Recommended Mitigation Measures during Removal of Overhead Line and
Pylons (P1 to P6)

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
Ecologica	I Mitigation Measures	1	1	1		1
EP condition 2.9	 <u>Avoidance and minimisation on potential environmental impacts</u> 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 2.9
S5.1.5 of PP	 <u>Avoidance encroachment onto natural habitats within the country parks and SSSI</u> 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	N/A
EP condition 2.8 & S5.1.5 of PP	 <u>Avoidance of use of mechanical equipment</u> 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 2.8
EP condition 2.6 & S5.1.5 of PP	 To conduct pre-construction site visits/surveys 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. Additional ecological survey with focus to amphibian species of conservation importance will be conducted at pre-construction phase by qualified ecologist. To prepare detailed translocation proposal for capture and translocation works if any amphibian species of conservation importance be found within the works area. 	Minimise direct impacts on the woodland habitat (i.e. with minimum level of vegetation clearance), tree pruning and tree felling Minimise direct impacts on amphibian species of conservation importance	Contractor	Proposed works areas	Pre-construction phase (Pre-construction site visits/surveys for P1-6 completed on 18 th February 2022, protective measure for newly identified flora of conservation importance and translocation proposal are not required based on the survey findings.)	N/A

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
Ecologica	I Mitigation Measures					
S4 of the EMP	 <u>Site Inspection</u> 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. 	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	N/A
S5.1.5 of PP and Table 4.1 of this EMP	 Protection on flora species of conservation importance For Gnetum luofuense at P1, it will be gently disentangled out of the fence before dismantling. The disentangled part will be put on adjacent unaffected vegetated area outside the works area which will not be affected by the dismantling work. For Artocarpus hypargyreus at P2, 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 steep slope. The Contractor will ensure that the top parts of pylon segments will not have direct contact with the Artocarpus hypargyreus during dismantling works. For the Gnetum luofuense at P3 and P6, a soft protective net with warning sign in sharp colour and fencing will be built around the dismantling works. 	Minimise direct impacts on floral of conservation importance	Contractor	Relevant proposed works areas	Pre-construction phase / Construction phase	N/A
EP condition 2.5, S5.1.5 of PP and Table 4.1 of this EMP	 Protection on nearby habitats and flora of conservation importance 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; Safety briefing to workers will be provided to alert their awareness on species of conservation importance along the access road to pylons and pay extra attention when using the accesses. Temporary fencing with soft PVC tape/net will be erected along the footpath to P5 in order to limit the activities by the workers and alert workers' awareness to protect the natural 	Protect habitats and flora of conservation importance nearby the works area	Contractor	Proposed works areas	Construction phase	N/A

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
Ecologi	cal Mitigation Measures					
	 stream. The Contractor will ensure the temporary fencing will not entangle any animal. A gap of at least 50cm at the bottom of the fencing will be arranged and allowed for the animals freely move across the fenced footpath. Temporary fencing will be setup and removed on each working day, and it will not be left on-site overnight and during non-working hours. Briefing to workers will be provided to avoid pollution to the natural stream adjacent to footpath. 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); 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 Upon completion of the pylon footing removal works, the resulting pits will then be backfilled with soil up to formation level. The works areas will then be reinstated with native plant species. 					



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