



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

Monthly Audit Report No. 5 for September 2022

October 2022



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Contents

Executive Summary	3
1 Introduction	4
1.1 Background	4
1.2 Project Organisation	5
1.3 Construction Activities	5
2 Environmental Site Inspection and Audit	6
2.1 Site Inspection	6
2.2 Advice on Waste Management Status	6
2.3 Status of Environmental Licences and Permits	6
2.4 Implementation Status of Mitigation Measures	6
3 Report on Complaints, Notifications of Summons and Successful Prosecutions	7
3.1 Record of Environmental Complaints Received	7
3.2 Record of Notifications of Summons and Successful Prosecutions	7
3.3 Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions	7
4 Future Key Issues	8
4.1 Construction Works for the Next Reporting Month	8
5 Conclusions	9
5.1 Conclusions	9
 Appendices	
A. Organisation Chart of the Project	
B. Construction Programme	
C. Summary of Mitigation Measures during Construction Phase	

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Environmental Checker (IEC) under the Environmental Permit (EP) (No. EP-603/2022 or as subsequently varied or superseded) to audit the implementation of all mitigation measures and Environmental Monitoring and Audit (EM&A) programme recommended in the EP and Project Profile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 5th IEC Monthly Audit Report prepared and submitted under Condition 2.1 of the EP, for the period from 1 September 2022 to 30 September 2022 ("the reporting month").

Implementation of Mitigation Measures

One site inspection was carried out by IEC on 23 September 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. During the reporting month, the EMP for pylons “P7” to “P14” submitted to DEP was verified by IEC on 22 September 2022, while the EMP for pylons “P15” to “P19” was received from HEC, subsequently reviewed and verified by the IEC on 30 August 2022, and duly submitted to DEP.

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 September 2022 to 30 September 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. (HEC)	Head of Mechanical Engineering, Projects Division	L.M. Chan	3143 3819	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:

- Extracting of earthing wire on P2 to P6 circuit
- Extracting of overhead line on P2 to P6, P20 to P24 circuit
- Overhead line on pulley on P21, P22, P23
- Releasing tension on P18 to P19, P20 and P24
- Removing of Pulley on P2 to P6
- Tensioner setup in P24
- The Mesh Sock Joints Replacement at P10

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

- The Contractor is reminded to provide suitable mitigation measures to protect the *Gnetum luofuense* at P22.

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, no 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 (October 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

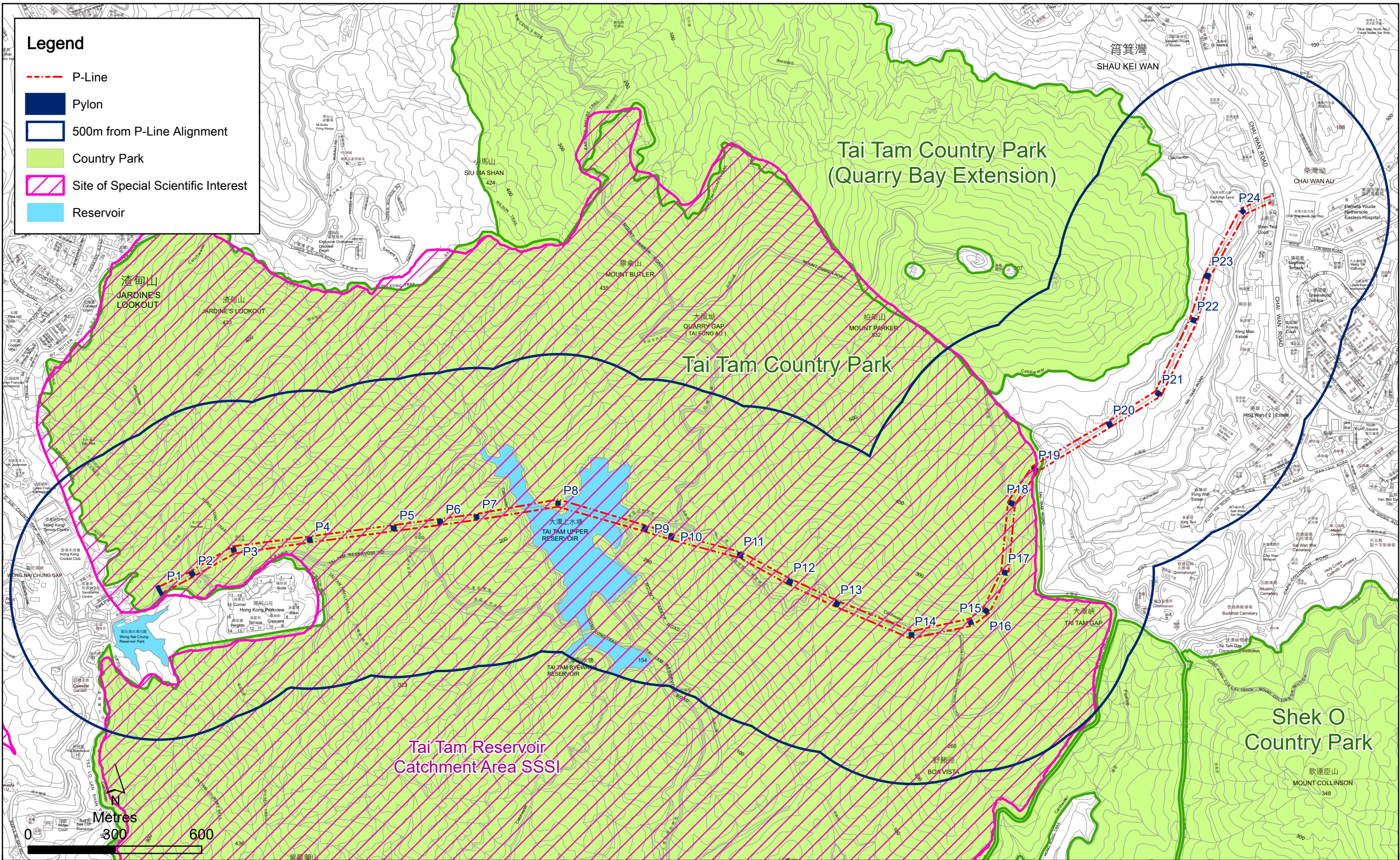


Figure 1.1 Site Location

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

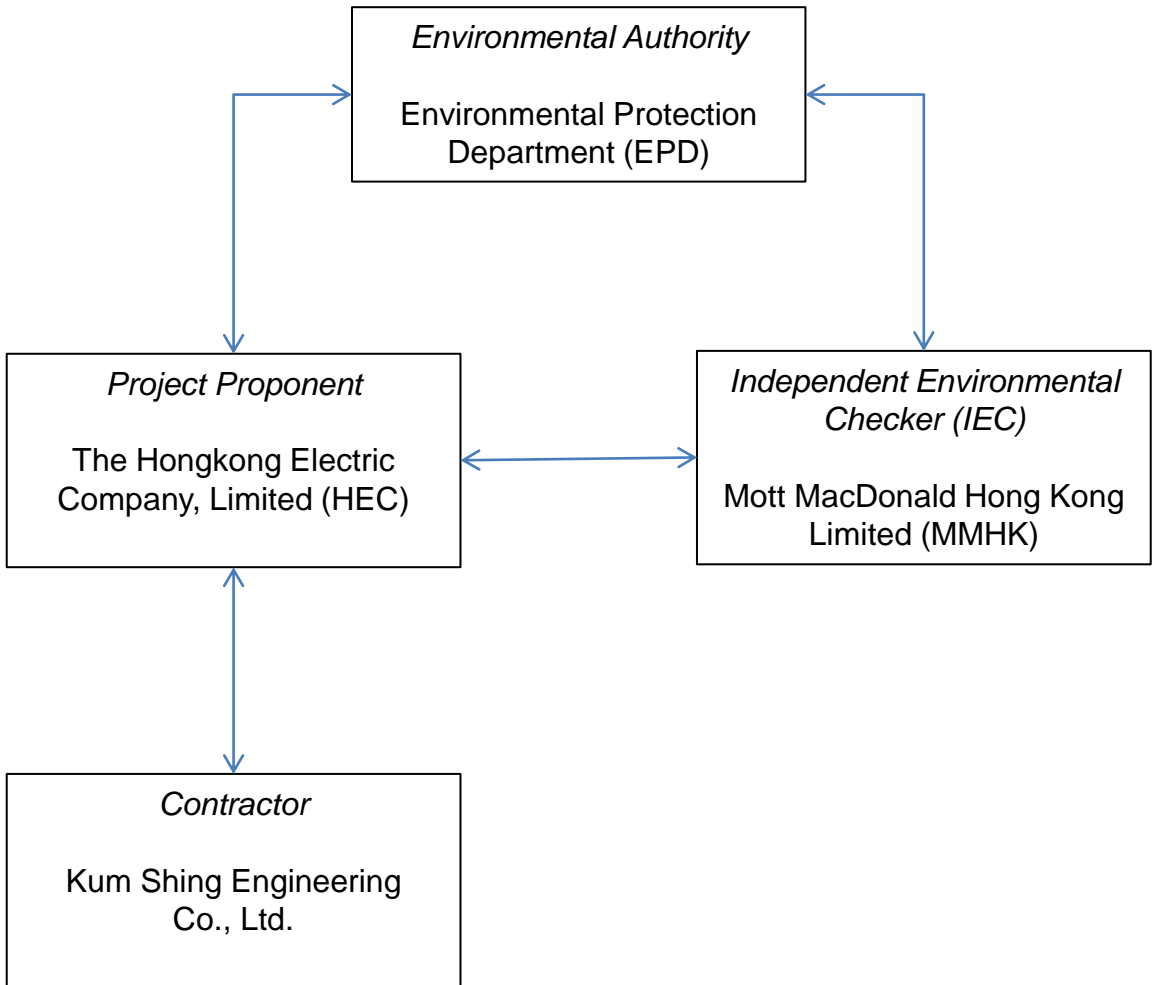
(extracted from Project Profile (Register No. PP-636/2021) prepared by ERM-Hong Kong, Limited, November 2021)

Appendices

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

A. Organisation Chart of the Project

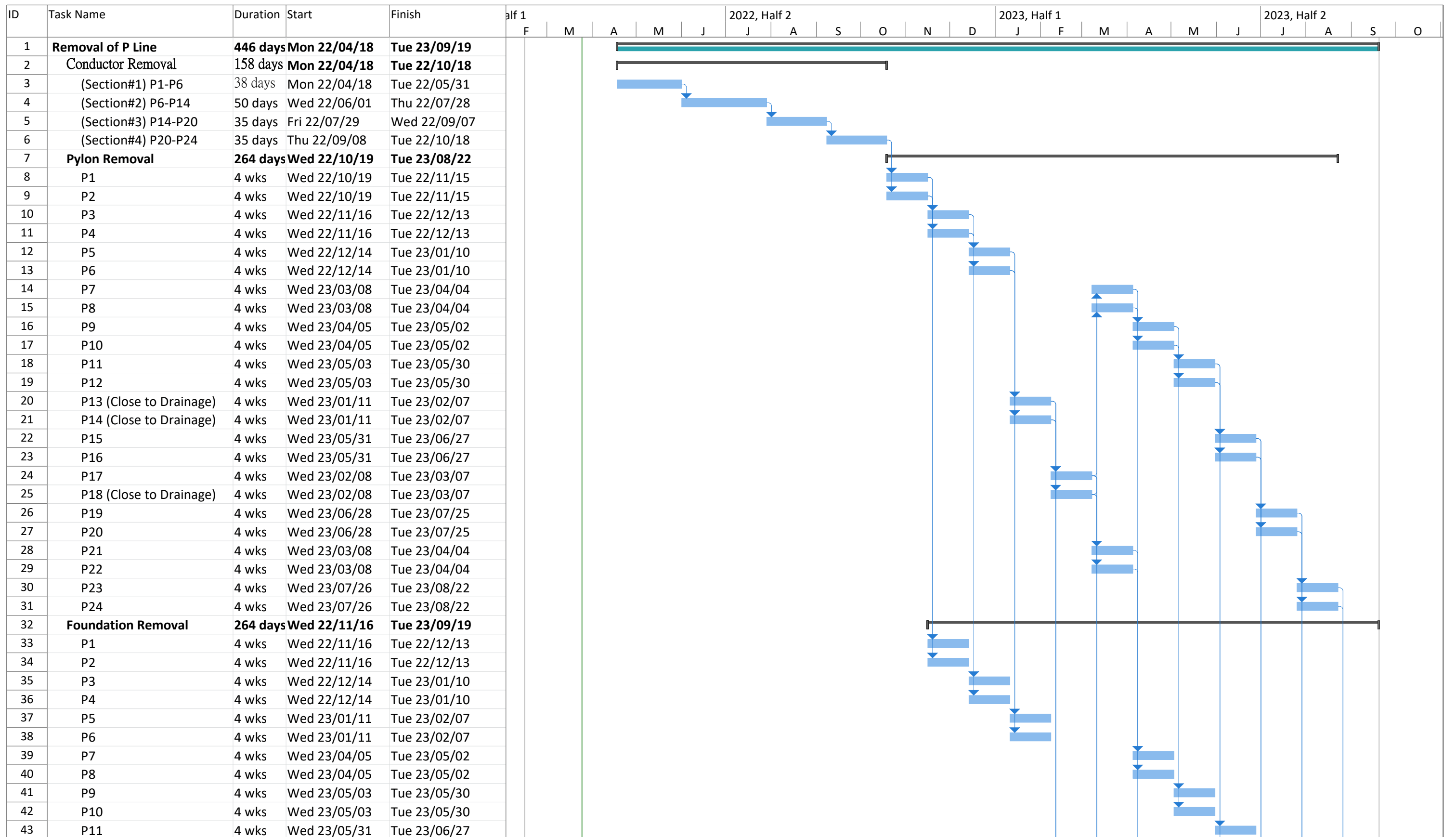
Organisation Chart of the Project



↔ Line of Communication

B. Construction Programme

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



Project: HEC18/9202 132kV Pylon Date: Fri 22/03/25	Task		External Tasks		Manual Task		Finish-only		Progress
	Split		External Milestone		Duration-only		Deadline		Manual Progress
	Milestone		Inactive Task		Manual Summary Rollup		Baseline		
	Summary		Inactive Milestone		Manual Summary		Baseline Milestone		
	Project Summary		Inactive Summary		Start-only		Baseline Summary		

ID	Task Name	Duration	Start	Finish	2022, Half 1					2022, Half 2					2023, Half 1					2023, Half 2				
					F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
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																				

Project: HEC18/9202 132kV Pylon Date: Fri 22/03/25	Task		External Tasks		Manual Task		Finish-only		Progress	
	Split		External Milestone		Duration-only		Deadline		Manual Progress	
	Milestone		Inactive Task		Manual Summary Rollup		Baseline			
	Summary		Inactive Milestone		Manual Summary		Baseline Milestone			
	Project Summary		Inactive Summary		Start-only		Baseline Summary			

C. Summary of Mitigation Measures during Construction Phase

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

Table 4.2 Implementation 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
Ecological Mitigation Measures						
EP condition 2.9	<p><u>Avoidance and minimisation on potential environmental impacts</u></p> <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 2.9
S5.1.5 of PP	<p><u>Avoidance encroachment onto natural habitats within the country parks and SSSI</u></p> <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	N/A
EP condition 2.8 & S5.1.5 of PP	<p><u>Avoidance of use of mechanical equipment</u></p> <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 2.8
EP condition 2.6 & S5.1.5 of PP	<p><u>To conduct pre-construction site visits/surveys</u></p> <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. 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. 	<p>Minimise direct impacts on the woodland habitat (i.e. with minimum level of vegetation clearance), tree pruning and tree felling</p> <p>Minimise direct impacts on amphibian species of conservation importance</p>	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
Ecological Mitigation Measures						
S4 of the EMP	<p><u>Site Inspection</u></p> <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. 	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	<p><u>Protection on flora species of conservation importance</u></p> <ul style="list-style-type: none"> For <i>Gnetum luofuense</i> 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 <i>Artocarpus hypargyreus</i> 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 <i>Artocarpus hypargyreus</i> during dismantling works. For the <i>Gnetum luofuense</i> at P3 and P6, a soft protective net with warning sign in sharp colour and fencing will be built around the identified plant with the aim to avoid damage during 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	<p><u>Protection on nearby habitats and flora of conservation importance</u></p> <ul style="list-style-type: none"> 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
Ecological Mitigation Measures						
	<p>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.</p> <ul style="list-style-type: none"> • 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. 					

