

PART C PROPOSED VARIATIONS TO THE CONDITIONS IN CURRENT ENVIRONMENTAL PERMIT

D1. Condition(s) in the Current Environmental Permit :	D2. Proposed Variation(s) :	D3. Reason for Variation(s) :	D4. Describe the environmental changes arising from the proposed variation(s) :	D5. Describe how the environment and the community might be affected by the proposed variation(s) :	D6. Describe how and to what extent the environmental performance requirements set out in the EIA report previously approved or project profile previously submitted for this project may be affected :	D7. Describe any additional measures proposed to eliminate, reduce or control any adverse environmental impact arising from the proposed variation(s) and to meet the requirements in the Technical Memorandum on Environmental Impact Assessment Process :
<p><u>Condition 3.2</u></p> <p>Measures to Mitigate Ecological Impacts</p> <p>To minimize disturbance to freshwater habitats within the Cheung Po Ecologically Important Stream, the construction works at Tai Wo shall only be carried out in the dry season (October to March), and sand bags and/or other appropriate measures shall be placed to prevent any accidental discharge of untreated effluent into the aforementioned areas under adverse weather conditions.</p>	<p><u>Condition 3.2</u></p> <p>Measures to Mitigate Ecological Impacts</p> <p>To minimize disturbance to freshwater habitats within the Cheung Po Ecologically Important Stream, the construction works at Tai Wo shall only be carried out in the dry season (October to March), and sand bags and/or other appropriate measures shall be placed at the construction works area at Tai Wo to prevent any accidental discharge of untreated effluent into the aforementioned areas under adverse weather conditions.</p> <p><u>Part B</u></p> <p>Drainage channel or river training and diversion works which discharges or discharge into an area which is located less than 300m from the nearest boundary of conservation area.</p>	<p>Please refer to Section 2.2 to 2.3 in Environmental Review Report for the Variation to Environmental Permit (No. EP-596/2021)</p>	<p>An Environmental Review Report (ERR) for the Variation to Environmental Permit (No. EP-596/2021) (VEP) has been conducted for the proposed variation on major environmental issues including ecology and water quality. No environmental changes are expected to arise from the proposed variation. Please refer to Section 3 to Section5 of the Environmental Review Report for the VEP.</p>	<p>An Environmental Review Report (ERR) for the Variation to Environmental Permit (No. EP-596/2021) (VEP) has been conducted for the proposed variation on major environmental issues including ecology and water quality. The proposed variation would not adversely affect the environment and the community. Please refer to Section 3 to Section5 of the Environmental Review Report for the VEP.</p>	<p>The environmental performance set out in the previously approved EIA report would not be affected by the proposed variations. Please refer to ERR for details.</p>	<p>No additional measures are required for the proposed variation.</p>

PART E DECLARATION BY APPLICANT

E1. I hereby certify that the particulars given above are correct and true to the best of my knowledge and belief. I understand the environmental permit may be suspended, varied or cancelled if any information given above is false, misleading, wrong or incomplete.



Signature of Applicant

Full Name in Block Letters

Position



on behalf of

Drainage Services Department
Company Name and Chop (as appropriate)

10 April 2026

Date

NOTES :

1. A person who constructs or operates a designated project in Part I of Schedule 2 of the Ordinance or decommissions a designated project listed in Part II of Schedule 2 of the Ordinance without an environmental permit or contrary to the permit conditions commits an offence under the Ordinance and is liable to a maximum fine of \$5,000,000 and to a maximum imprisonment for 2 years.
2. A person for whom a designated project is constructed, operated or decommissioned and who permits the carrying out of the designated project in contravention of the Ordinance commits an offence and is liable to a maximum fine of \$5,000,000 and to a maximum imprisonment for 2 years.

Wing Tat Civil Engineering Co. Limited



**asia
infrastructure
solutions**

**Contract No. DC/2022/02
Drainage Improvement Works at Yuen Long – Stage 2
Subcontract No. DC/2022/02/SC/043**

**Environmental Permit No. EP-596/2021
Application for Variation of Environmental Permit**

Environmental Review Report

April 2026

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1. INTRODUCTION

1.1 Project Background

- 1.1.1 The Drainage Services Department (DSD) awarded Contract No. DC/2022/02 “Drainage Improvement Works at Yuen Long – Stage 2” to Wing Tat Civil Engineering Co. Limited (hereafter as “the Contractor”) in May 2023 to construct the drainage improvement works near four villages in Yuen Long, namely Sung Shan New Village, Tai Wo, Lin Fa Tei, and Ha Che (hereafter as “the Project”).
- 1.1.2 The Project aims to enhance the drainage capacity of the existing drainage systems to lower the flood risks.
- 1.1.3 The Project is a designated project under the Environmental Impact Assessment Ordinance (EIAO) (Cap. 499). An Environmental Impact Assessment (EIA) Report for the Project was prepared and approved on 3 June 2021 (EIAO Register No.: AEIAR-229/2021) and an Environmental Permit (No. EP-596/2021) (hereafter as “the EP”) was issued on 28 September 2021.
- 1.1.4 The Project scope at Tai Wo as described in the EP includes construction of a 290m (approx.) long rectangular channel. Measures to mitigate ecological impacts during the construction works at Tai Wo are provided in the EP Condition 3.2, which states:
- To minimize disturbance to freshwater habitats within the Cheung Po Ecologically Important Stream, the construction works at Tai Wo shall only be carried out in the dry season (October to March), and sand bags and/or other appropriate measures shall be placed to prevent any accidental discharge of untreated effluent into the aforementioned areas under adverse weather conditions.*
- 1.1.5 Works at Tai Wo commenced in December 2024 and stopped at the end of March 2025 in accordance with EP Condition 3.2. Environmental Monitoring and Audit (EM&A) programme has been implemented for the Project.

1.2 Purpose of this Environmental Review

- 1.2.1 This Environmental Review Report (ERR) provides information on the evaluation of the potential impacts on the environment due to construction works at Tai Wo in the wet season (from April to September) taking into account the current condition of the surrounding environment. The purpose of this ERR is to demonstrate that there is no material change to the environmental impact with mitigation measures in place resulted from the proposed variation, and the Project complies with the requirements in the Technical Memorandum on Environmental Impact Assessment Process (EIAO-TM). This ERR forms part of the submission for an Application for Variation of an Environmental Permit (VEP) to Condition 3.2 of the EP under Section 13(5) of the EIAO.

2. PROPOSED VARIATIONS TO THE EP

2.1 Drainage Improvement Works at Tai Wo

- 2.1.1 The proposed drainage improvement works at Tai Wo include construction of an open rectangular channel along the sloping ground at the southwest corner of Tai Wo connecting to the existing engineered channel to the west. Construction activities at Tai Wo commenced in December 2024 and were suspended at the end of March 2025 in compliance with EP Condition 3.2.
- 2.1.2 The Cheung Po Ecologically Important Stream (EIS) runs approximately 50m south of, and mostly parallel to the proposed channel. Further downstream beyond the designated boundary of Cheung Po EIS, the watercourse joins the existing channel to the west which is where the proposed channel will be connected to.
- 2.1.3 The locations of the drainage works in Tai Wo and Cheung Po EIS are shown in **Figure A**.
- 2.1.4 Cheung Po EIS has been identified as a recognized site of conservation importance in the approved EIA. The approved EIA has assessed the potential environmental impact to Cheung Po EIS. Based on the approved EIA, Cheung Po EIS is unlikely to be directly affected by the works hydrologically. A grassland is located in between the proposed channel and Cheung Po EIS. Any direct and indirect disturbance caused by the construction activities such as active or passive effluents discharge into the EIS through the grassland or direct discharge into the EIS may cause potential impact. To this end, measures have been recommended in the approved EIA Report to avoid/ minimize any potential disturbance to Cheung Po EIS and the grassland. One of the recommendations refers to scheduling the construction works in the dry season. Subsequently the EP has stipulated in EP Condition 3.2 that construction works at Tai Wo shall only be carried out in the dry season (October to March).

2.2 Reason for the Variation

- 2.2.1 Since the EIA approval, there have been several extreme rainstorm events causing flooding incidents. The exacerbating flood risk marks an imminent need to expedite the completion of the drainage improvement works in order to protect the public safety. To this end, there is a need for a continuous works schedule with an aim to shortening the construction period and enabling timely completion of the drainage improvement works to alleviate the flood risk. A shorter construction duration will be beneficial to both the environment and the stakeholders.
- 2.2.2 As stated in Section 2.1.1, construction activities at Tai Wo were suspended at the end of March 2025 in compliance with EP Condition 3.2. Works were resumed in the dry season in November 2025 and have proceeded continuously. To update, the major construction works of the drainage channel have been completed. Minor finishing activities are ongoing such that the entire Tai Wo drainage improvement works will be completed within the second quarter of 2026. This would achieve the

essential objective of providing flood protection to the community at the earliest practicable date.

- 2.2.3 Although the construction of drainage channel has been completed, some of the remaining finishing activities may be carried out at the completed drainage channel, e.g. modification of the drainage pipe bend connections and finishing details of the drainage facilities to suit the existing conditions. Such remaining finishing activities are minor in nature and are confined to the existing works boundary of the drainage channel. No large-scale earth works would be carried out and hence, no further direct habitat loss will be anticipated. Additional impact to the surrounding area will not be expected.
- 2.2.4 On the above basis, no environmental impact is expected from the carrying out of these minor finishing activities in the second quarter of 2026, i.e. the wet season. During the carrying out of these minor finishing activities, EM&A programme as detailed in the EM&A Manual of the approved EM&A Report will continue to be implemented. Mitigation measures, including provision of sand bags and other control measures as detailed in Section 3.4.5 of the ERR which are proven and effective methods for containing site runoff and preventing accidental effluent discharge will be implemented. Based on the ongoing EM&A programme and the associated monitoring records of the Project, no project-related water quality exceedances have been recorded to date, demonstrating the effectiveness of the above mitigation measures.

2.3 Detail of the Proposed Variation

- 2.3.1 Based on Section 2.2 above, to ensure the completion of the entire Tai Wo drainage improvement works within the second quarter of 2026, it is proposed to vary the EP Condition 3.2 of Environmental Permit No. EP-596/2021: *To minimize disturbance to freshwater habitats within the Cheung Po Ecologically Important Stream, the construction works at Tai Wo shall only be carried out in the dry season (October to March), and sand bags and/or other appropriate measures shall be placed at the construction works area at Tai Wo to prevent any accidental discharge of untreated effluent into the aforementioned areas under adverse weather conditions.*
- 2.3.2 In addition, amendments to the EIAO (Cap. 499) have taken effect since 30 June 2023 after the issuance of the EP. The description of the designated project as in the EP is therefore to be updated according to the amended Schedule 2 to the EIAO.

2.3.3 Update to Part B of Environmental Permit No. EP-596/2021:

Nature of Designated Project	Drainage channel or river training and diversion works which discharges or discharge into an area which is <i>located</i> less than 300m from the nearest boundary of conservation area.
指定工程項目的性質	排水道或河流治理與導流工程，而該工程排水入一個地區，該地區 <i>其位置</i> 距離自然保育區的最近界線少於300米。

3. REVIEW ON ECOLOGICAL IMPACT

3.1 Ecological Concern

- 3.1.1 The potential direct and indirect ecological impact of the drainage works at Tai Wo has been assessed in the approved EIA Report and the potential construction impact to Cheung Po Ecologically Important Stream (EIS) has been identified as the key ecological concern of the Project.
- 3.1.2 Given the ecological sensitivity of this natural stream, the approved EIA Report has concluded that any direct/indirect physical or hydrological disturbance/disruption of the riverine habitat of the Cheung Po EIS (including the riparian zone of the watercourse and the grassland in between the work boundary and the watercourse), or indirect deterioration of water quality from construction activities, would result in a moderate to severe ecological impact.
- 3.1.3 Corresponding mitigation measures, i.e., schedule the work in dry season only and implement specific measures to prevent site runoff from entering the EIS and its buffer area, have been recommended in the EIA report, which were subsequently included in Condition 3.2 of the Project's Environmental Permit.

3.2 Ecological Significance of the Cheung Po EIS

- 3.2.1 EIS are natural streams and rivers with important ecological functions such as providing habitats for diverse or rare animal or plant communities. According to Chan (2001), the Cheung Po EIS is a relatively unpolluted lowland stream inhabited with a diverse fish fauna including several locally rare freshwater fish species (such as Rose Bitterling and Chinese Rasbora), and it is the most ecologically important stream in the Northwest New Territories.
- 3.2.2 The Cheung Po EIS is mostly paralleled to and approximately 50m apart from the proposed drainage works at Tai Wo. It has no direct linkage to the works site and will not be directly affected by the Project hydrologically.
- 3.2.3 The EIS is buffered from the works site by an open grassland that is prone to any direct and indirect physical disturbance related to the construction activities; and it was considered in the approved EIA Report that any disturbance of this buffer would also threaten the habitat quality of the EIS.

3.3 Review of the Ecological Baseline

Approved EIA Report

- 3.3.1 According to the ecological and verification surveys undertaken for the approved EIA in 2015 and 2019, a total of 13 habitat types were delineated within the Study Area of the Tai Wo site, which covered 500m from the project boundary. Nonetheless, only 0.1 ha grassland, 0.1 ha waste ground and 0.01 ha or 35m long semi-natural watercourse were located within the works boundary and to be directly affected by the Project. Besides, habitats located in the vicinity of the works site

and potentially affected by the works, either directly and indirectly, consist of the above three habitats as well as natural watercourse (including the Cheung Po EIS), channelised watercourse and urban/residential area.

- 3.3.2 Except the Cheung Po EIS and the semi-natural watercourse within the works boundary and its downstream section that were assigned with a moderate ecological value, all of the other habitat types only have a low ecological value.
- 3.3.3 On species level, a total of 343 plant, 5 mammal, 37 bird, 10 amphibian, 5 reptile, 28 odonate, 13 freshwater fishes and 23 freshwater invertebrate species were recorded within the Study Area in 2015, among which 25 of them are considered as species of conservation concern in the approved EIA Report.
- 3.3.4 The distribution of habitats and species of conservation concern recorded within and in the vicinity of the works boundary at Tai Wo during the EIA study is illustrated in **Figure B**. It shows that a total of 3 species of conservation importance were recorded within the works boundary, i.e., the frog Brown Wood Frog, the butterfly Glassy Bluebottle, and larva of the odonate Dog-legged Clubtail. Besides, 6 nos. of species of conservation importance were recorded in the Cheung Po EIS during the EIA study, including the freshwater fish Chinese Rasbora and Small Snakehead, and the odonates Scarlet Basker and larva of Dog-legged Clubtail, Club-tailed Cruiser, Marauder Clubtail.

Updated Ecological Survey

- 3.3.5 The Contractor has commissioned Aurecon Hong Kong Limited (Aurecon) to conduct an updated ecological baseline survey since August 2025 to collect relevant data in supporting this VEP application. The survey schedule is presented in **Table 3.1**. The survey includes the new requirements of the EIAO-TM, which now includes survey of fireflies - a taxon listed in Appendix B of Annex 16. The survey was conducted after consultation with Agriculture, Fisheries and Conservation Department (AFCD) and covers a 500m area from the Project boundary. The survey methodology and transect/survey locations are provided in **Appendix A**. The survey findings in between August 2025 and January 2026, which covered 3 wet season months (August, September and October) and 3 dry season months (November, December and January) form the basis for this review. For firefly, additional survey has been conducted in April 2026 to supplement wet season findings.

Table 3.1 Ecological Survey Programme

Tasks	Wet Season			Dry Season		
	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25	Jan-26
Habitat and Vegetation Survey		✓				
Terrestrial Mammal Survey	✓#	✓#	✓#	✓#	✓#	✓#
Avifauna Survey	✓#	✓#	✓#	✓#	✓#	✓#
Butterfly and Odonate Survey	✓	✓	✓	✓	✓	✓
Herpetofauna Survey	✓#	✓#	✓#	✓#	✓#	✓#
Freshwater Fish and Invertebrate Survey	✓#	✓#	✓#	✓#	✓#	✓#
Firefly Survey @	✓#	✓#	✓#	✓#	✓#	✓#

Note:

#: Both daytime and night-time survey

@: Additional survey in April 2026 to supplement wet season findings

- 3.3.6 The habitat map showing the latest distribution of habitat and species of conservation importance recorded within the 500m Study Area is shown in **Appendix B**. The photographic records and detailed findings of the ecological survey are provided in **Appendix C** and **Appendix D** respectively.
- 3.3.7 According to the latest ecological survey findings, there was a substantial change in the habitats within and in the vicinity of the works boundary at Tai Wo as well as the Cheung Po EIS. As illustrated in **Figure C** which compares an extract of the latest habitat map and the habitat map prepared during the EIA study, the grassland within and in the vicinity of the works boundary has been re-categorised as waste ground, agricultural land or developed area, and a small area near the western end of the works boundary is now covered by plantation habitat. Besides, instead of solely bordered with grassland, the south of the eastern part and north of the western part of the Cheung Po EIS are now covered by waste ground, including the buffer between the works boundary and the EIS. Furthermore, the orchard south of the watercourse downstream of the EIS and marsh east of the work boundary has also re-categorised as grassland and seasonally wet grassland due to the change in habitat characteristics, i.e., the “orchard” were found abandoned and overgrown with grasses with limited fruit trees within, and waterlogging has not been observed in the “marsh” during the dry season and the vegetation community found to be resembled to those recorded in seasonal wet grassland.
- 3.3.8 As shown in the latest habitat map (**Appendix B**), a number of species of conservation importance has been recorded during the latest ecological survey, in which only 3 of them were recorded within the works boundary of the Project, i.e., the frog Brown Wood Frog, and the butterflies Tiny Grass Blue and Small Cabbage White; and 4 of them were recorded within the Cheung Po EIS, including the bird Little Egret, the frog Brown Wood Frog, freshwater crab *Somanniathelphusa zanklon* and larvae of the Club-tailed Cruiser. Besides, the Brown Wood Frog as well as another 2 species of conservation importance (Red Muntjac and Tiny Grass Blue) were recorded in the waste ground in between the works boundary and the

EIS. However, the native fish species *Rasbora steineri*, which has a restricted distribution in Hong Kong and was previously recorded in the EIA study (DSD 2021), has not been recorded.

- 3.3.9 On the other hand, the ecological survey undertaken for this VEP application also recorded 3 widespread firefly species within the 500m Study Area in three of the survey months, including 1 no. of Stream flicker *Pygoluciola qingyu* recorded in a watercourse ~490m south of the Project Area, 4 nos. of Rimmed Window firefly *Pygoluciola analis* recorded in agricultural land, seasonally wet grassland and developed area ~80m to 200m north of the Project Area, and 200 nos. of Black-tipped Flash-train *Abscondita terminalis* recorded in the seasonally wet grassland ~80m north of the Project Area. All of these locations have no direct line of sight to the Project Area. **Figure D** shows the firefly recorded locations.
- 3.3.10 The latest ecological value of the habitats delineated within the 500m Study Area has been evaluated against the criteria listed in the Annex 8 of the EIAO-TM by the ecological surveyor and included in **Appendix E**. **Table 3.2** provides a summary of the comparison of ecological value evaluated for different habitats in the Approved EIA Report.

Table 3.2 Comparison of Ecological Value of Habitats Evaluated in the Approved EIA Report and the Latest Ecological Survey

Habitat*	Ecological Value		
	Approved EIA Report	Ecological Survey (2025-2026)	
		Project Area	Study Area
Secondary Woodland (Woodland)	Low to Moderate	-	Moderate
Plantation	Low	-	Low
Grassland/Shrubland (Shrubland)	Low	-	Moderate
Grassland	Low	-	Low to Moderate
Marsh	Moderate	-	-
Seasonally Wet Grassland	Low	-	Low
Mitigation Wetland	Low to Moderate	-	Moderate
Agricultural Land	Low	-	Low to Moderate
Orchard	Low	-	-
Waste Ground	Low	Low	Low
Urban/Residential Area (Developed Area)	Low	-	Low
Pond	Low	-	Low
Watercourse: Cheung Po EIS	Moderate	-	Moderate
Project Area	Moderate	Low to Moderate	-
Others	Low to Low to Moderate	-	Moderate

* habitat in brackets () denotes the habitat category used in the latest ecological survey

3.4 Review of Ecological Impact

- 3.4.1 Based on the latest construction programme and progress of the drainage improvement works provided by the Contractor, all of the major civil and drainage works at Tai Wo have been completed by March 2026, and the outstanding works planned for the wet season 2026 are anticipated to be small in scale, e.g. modification of the drainage pipe bend connections and finishing details of the drainage facilities to suit the existing conditions. Direct habitat loss would not be anticipated.
- 3.4.2 Nonetheless, the potential ecological impact to the Cheung Po EIS as identified in the S.5.8.19 of the Approved EIA Report, i.e., the potential direct/indirect physical or hydrological disturbance/disruption of the riverine habitats of the EIS (including the area in between the EIS and the works site and indirect deterioration of water quality from construction activities, would remain valid and applicable in this review, but would expect to be in a lesser extent due to the nature, type and much smaller scale of construction activities planned for the wet season 2026.
- 3.4.3 Besides, the significance of the ecological impact from potential construction disturbance to the surrounding habitat and species, including potential interruption of wildlife movement, would also be lessened due to the nature and reduced scale of construction activities planned for the wet season 2026, especially night work that may prevent the use of the nearby habitats by those nocturnal wildlife of conservation importance (e.g., the Red Muntjac or bats) recorded in the vicinity of the Project Area would not be anticipated; and the three common firefly species recorded recently were identified at locations with a significant distance separation and with no direct line of sight to the Project Area.
- 3.4.4 The evaluation of the significance of the potential ecological impact identified for the construction activities planned for the wet season 2026 described above is presented in **Appendix F** and summarized in **Table 3.3**.

Table 3.3 Significance of Potential Ecological Impact

Habitat*	Ecological Value*	Impact Significance	
		Potential Impact to Habitats from Construction Disturbance within Project Site	Potential Impact to Surrounding Habitat/Species from Construction Disturbance
Woodland	Moderate	-	Negligible [^]
Plantation	Low	-	Minor
Shrubland	Moderate	-	Minor
Grassland	Low to Moderate	-	Minor
Seasonally Wet Grassland	Low	-	Negligible [^]
Mitigation Wetland	Moderate	-	Negligible [^]
Agricultural Land	Low to Moderate	-	Minor
Waste Ground	Low	Low	Minor
Developed Area	Low	-	Minor
Pond	Low	-	Negligible [^]
Watercourse: Cheung Po EIS Project Area Others	Moderate to High Low to Moderate Moderate	- Low -	Minor - Minor

* Habitat category and rating adopted from the latest Ecological Survey

[^] the habitat is either distance from the Project Area or buffered/shielded from construction disturbance by other habitats and would not be affected whatsoever by the nature and scale of construction activities planned for wet season 2026

3.4.5 Furthermore, other avoidance/minimization measures to manage the occurrence of the above impact, including implementing good site practice to control the sources of potential water quality impact, placement of 900mm tall water-filler barriers and sand bags along the southern boundary of the works site, as well as collect, treat and discharge all surface runoff from the works area via the site drainage system and direct the discharge point of site effluent away from the EIS and the grassland/waste ground buffer, have been implemented in the Project and found to be effective with no non-compliance or exceedance reported under the EM&A program.

3.4.6 Therefore, with respect to the nature and type of construction activities planned for the wet season 2026, particularly the reduced scale of works (e.g. modification of the drainage pipe bend connections and finishing details of the drainage facilities to suit the existing conditions), as well as the approach and demonstrated effectiveness of the existing site management measures in managing/controlling the site runoff, the occurrence of the predicted construction disturbance impact, either the potential deteriorating of water quality and habitat quality, or hydrological disruption of the Cheung Po EIS during the wet season, should be properly managed and avoided, and in the unlikely event of spillage of surface runoff it would only be in a limited scale with no significance impact to the EIS due to the presence of the buffer area.

- 3.4.7 To ensure continuous effectiveness of the measures, it is recommended that the integrity and condition of the sand bags and water-filled barrier should be regularly checked. The Site Supervisor or the Environmental Officer shall continue to conduct regular inspection and audit at least once a week to ensure their function properly. Furthermore, the Contractor should maintain vigilant monitoring of the weather conditions particularly during the wet season. This includes tracking local rainfall forecasts and rainstorm warning signal issued by the Hong Kong Observatory. Proactive and ad hoc checking must be carried out prior any foreseeable or predicted rainstorm event, and rectify any identified flaws immediately.
- 3.4.8 With the implementation of the existing and planned site management measures, as well as the avoidance/minimization measures and audit recommended above, the potential ecological impact to the Cheung Po EIS from the proposed construction activities in wet season should be properly managed and prevented; and any potential spillage of surface runoff from the works site to the buffer area if occurred should only in a limited scale with no impact to the EIS or ecological condition of the surrounding environment; and as such adverse ecological impact to the Cheung Po EIS and its buffer zone would not be anticipated.

4. REVIEW ON WATER QUALITY IMPACT

4.1 Source of Impact

- 4.1.1 The primary sources of water quality impact arising from the construction activities include construction site runoff, sewage from workforce and accidental spillage of chemicals.
- 4.1.2 For the purpose of this ERR for the VEP, Cheung Po EIS and its downstream are the primary water sensitive receivers (WSR) of concern. Cheung Po EIS is located to the south and about 50m away from the proposed drainage works alignment. As the proposed works are confined within the existing works boundary of the Tai Wo drainage channel, no direct impact at the Cheung Po EIS is expected to occur.
- 4.1.3 The WSRs identified in the approved EIA Report remain unchanged. No additional WSRs have been identified.
- 4.1.4 As stated in S.2.2.3, minor finishing activities such as modification of the drainage pipe bend connections and finishing details of the drainage facilities to suit the existing conditions would be carried out within the existing works boundary. Potential source of impact will be surface runoff that may carry sediment, which may eventually be carried to waterbodies near the works. The approved EIA Report indicated that with proper implementation of good site mitigation measures to control site runoff from the working areas, and with practices outlined in ProPECC PN 2/24 “Construction Site Drainage” (Practice Note that supersedes all previous versions, PN 1/94 and PN 2/23), and provision of sediment removal facilities, no adverse water quality impacts from site runoff are anticipated to occur in the adjacent waterbodies or drainage systems.
- 4.1.5 According to the approved EIA Report, sewage from workforce on site will be handled in accordance with the Environment, Transport and Works Bureau (ETWB) Technical Circular (Works) No. 5/2005 “Protection of Natural Streams/Rivers from Adverse Impacts Arising from Construction Works”. Chemical wastes will be handled in compliance with the Waste Disposal Ordinance and following the “Code of Practice on Packaging, Labelling and Storage of Chemical Wastes”. No adverse water quality impact is anticipated.
- 4.1.6 It is considered that with the proposed variation, the potential water quality impacts are acceptable and the assessment results presented in the approved EIA Report are still valid. Adverse water quality impacts due to the construction and operation of the Project are not anticipated.

5. REVIEW OF OTHER ENVIRONMENTAL IMPACTS

5.1 Nature of the Impacts

- 5.1.1 As stated in S.2.2.3, the remaining finishing activities are minor in nature and are confined to the existing works boundary. Also, no large-scale earth works would be carried out and hence, no further direct habitat loss will be anticipated. On the above basis, the environmental impacts associated with noise, air quality, waste management, landscape and visual, cultural heritage, land contamination assessed in the approved EIA and the corresponding mitigation measures remains applicable in view of the proposed variation to the EP. As such, it is considered that there is no material change to the environmental impacts and such environmental impacts are not further reviewed in this report.

6. REVIEW OF MITIGATION MEASURES

6.1 Summary of Mitigation Measures

- 6.1.1 The works are primarily land-based. With reference to the approved EIA Report, proper implementation of mitigation measures for water quality impact will control construction site runoff and hence prevent any impacts to the Cheung Po EIS. These mitigation measures have been in place since the works commencement. With reference to the Project's Environmental Monitoring and Audit (EM&A) Reports, mitigation measures have been properly implemented and considered effective.
- 6.1.2 As stated in S.2.2.3, the proposed variation of the EP Condition 3.2 is for the carrying out of minor finishing activities within the existing works boundary to ensure timely completion of the drainage improvement works in Tai Wo for providing flood protection to the community.
- 6.1.3 To ensure continuous effectiveness of the surface runoff control, the integrity and condition of the sand bags and water-filled barrier should be regularly checked and audited. The Contractor should maintain vigilant monitoring of the weather conditions and to take proactive actions prior any foreseeable or predicted rainstorm event, and rectify any identified flaws immediately.

7. REVIEW OF ENVIRONMENTAL MONITORING AND AUDIT REQUIREMENTS

7.1 Environmental Monitoring and Audit Requirements

- 7.1.1 This ERR finds the environmental impacts associated with the proposed variation are comparable with the approved EIA Report findings. The Project's Environmental Monitoring and Audit (EM&A) programme shall be implemented in accordance with the EM&A requirements from the approved EIA Report and the Updated Environmental Monitoring Audit (EM&A) Manual as appropriate. The monitoring requirements as stipulated therein are considered applicable and sufficient.

8. REVIEW OF POTENTIAL MATERIAL CHANGE

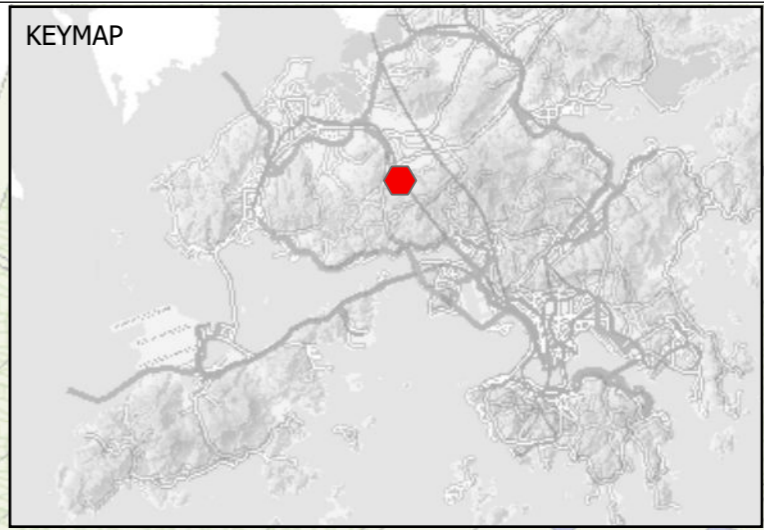
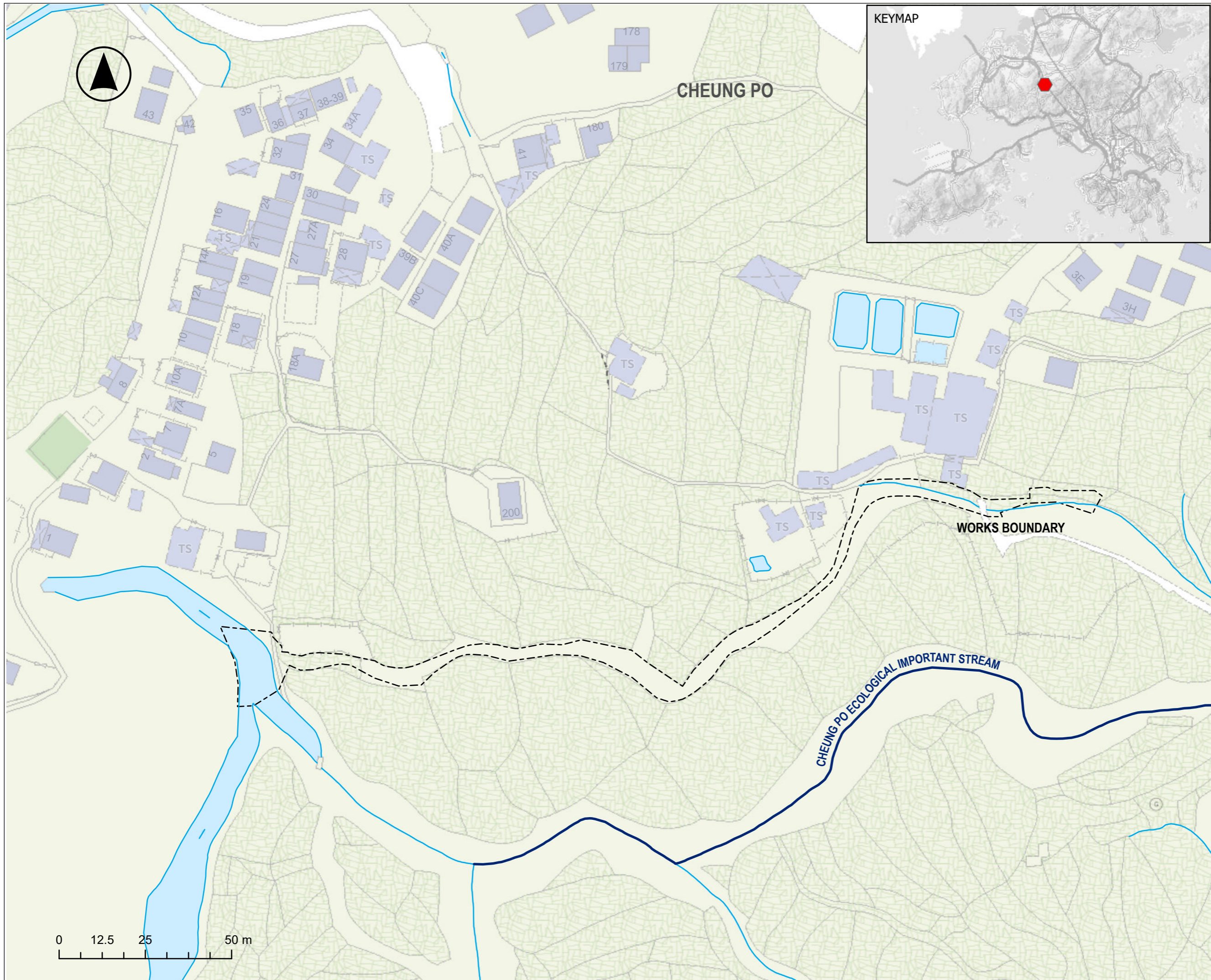
8.1 EIAO Schedule 1 and EIAO-TM Section 6

- 8.1.1 The EIAO-TM Section 6.2 reads *“The environmental impact of a designated project, for which an environmental permit has been issued, is considered to be materially changed if the environmental requirements set out in the EIA report for this project (including relevant documents submitted under the Ordinance for that EIA report) may be exceeded or violated, even with the mitigation measures in place.”*.
- 8.1.2 The EP for the Project (No. EP-596/2021) was issued on 28 September 2021. Review of the potential environmental impacts due to the proposed variation of EP condition for working in the wet season months (April to September) has been conducted and detailed in Section 3 to Section 5. In summary, the proposed variation does not involve any physical change to the Project. No impacts beyond those already predicted in the approved EIA Report are expected to occur due to the proposed variation of EP condition. No additional mitigation measures are required.
- 8.1.3 The potential environmental impacts associated with the proposed variation of EP condition for working in the wet season months have been evaluated. The results demonstrates that the environmental impacts are not considered “materially changed”. The environmental requirements set out in the approved EIA Report are not exceeded or violated with the implementation of the mitigation measures proposed in the approved EIA Report. The potential environmental impacts comply with the requirements and criteria stipulated in the EIAO-TM.

9. CONCLUSION

- 9.1.1 The proposed variation of EP condition of working in the wet season months have been reviewed against the approved EIA Report. The review findings show that the proposed variation will not cause material change to the environmental impacts of the Project.
- 9.1.2 The proposed variation of EP condition enables a continuous construction schedule, which in turn shortens the overall construction duration. This timely drainage works completion will directly contribute to the early achievement of the Government's objective of alleviating the flood risk for the community in the project area thereby enhancing public safety.

Figures



- LEGEND:**
- WORKS BOUNDARY
 - ECOLOGICALLY IMPORTANT STREAM

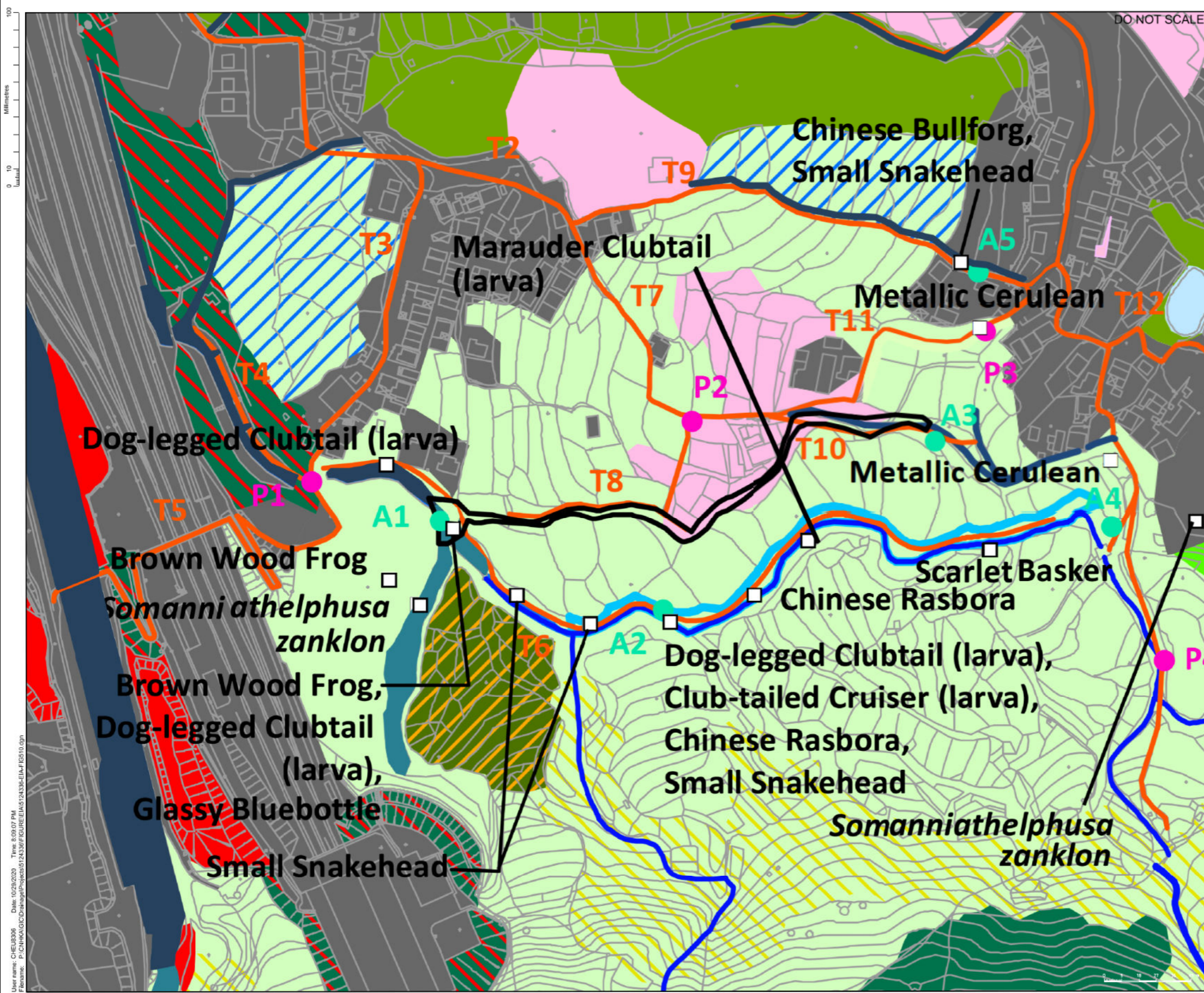
Project
CONTRACT NO. DC/2022/02
DRAINAGE IMPROVEMENT
WORKS AT YUEN LONG –
STAGE 2

Title
DRAINAGE WORKS IN TAI WO



Designed	-	Checked	AC
Drawn	VL	Approved	WW
Scale	A3	Status	Rev
1:1,000			0

Drawing No. **FIGURE A**



- Site Boundary
- 500m Study Area
- Survey Transect
- Point Count Location
- Sampling Point for Aquatic Fauna
- Cheung Po Ecologically Important Stream
- Agricultural Land
- Pond
- Marsh
- Mitigation Wetland
- Natural Watercourse
- Semi-Natural Watercourse
- Channelised Watercourse
- Seasonally Wet Grassland
- Grassland
- Grassland/Shrubland
- Secondary Woodland
- Orchard
- Plantation
- Waste Ground
- Urban/Residential Area
- Species of Conservation Concern
- Tai Lam Country Park Boundary

Rev.	Date	Description	By	Chk'd	App'd
C	10/21	FOURTH ISSUE		WSL	WCTT MWKL
B	09/21	THIRD ISSUE		WSL	WCTT MWKL
A	08/21	SECOND ISSUE		WSL	WCTT MWKL
-	02/21	FIRST ISSUE		WSL	WCTT MWKL

DETAILED DESIGN

ATKINS

渠務署
Drainage Services Department

工程管理部
Project Management Division

Project Title
DRAINAGE IMPROVEMENT WORKS IN YUEN LONG STAGE 1 - INVESTIGATION, DESIGN AND CONSTRUCTION CE 22/2013 (DS)

Drawing Title
UPDATED HABITAT MAP AND LOCATIONS OF FLORA AND NON-BIRD FAUNA SPECIES OF CONSERVATION INTEREST RECORDED WITHIN THE STUDY AREA AND IDENTIFIED SITE BOUNDARY (UPDATED TO 2019) AT TAI WO

Scale	AS SHOWN	Designed	WSL	Drawn	AC	Checked	WCTT	Authorised	MWKL
Original Scale	A1	Date	FEB 2020	Date	FEB 2020	Date	FEB 2020	Date	FEB 2020

Drawing Number: **FIGURE 5.10** Revision: **C**

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Project
CONTRACT NO. DC/2022/02
DRAINAGE IMPROVEMENT WORKS AT YUEN LONG – STAGE 2

Title
HABITAT MAP AT TAI WO EXTRACTED FROM THE APPROVED EIA REPORT

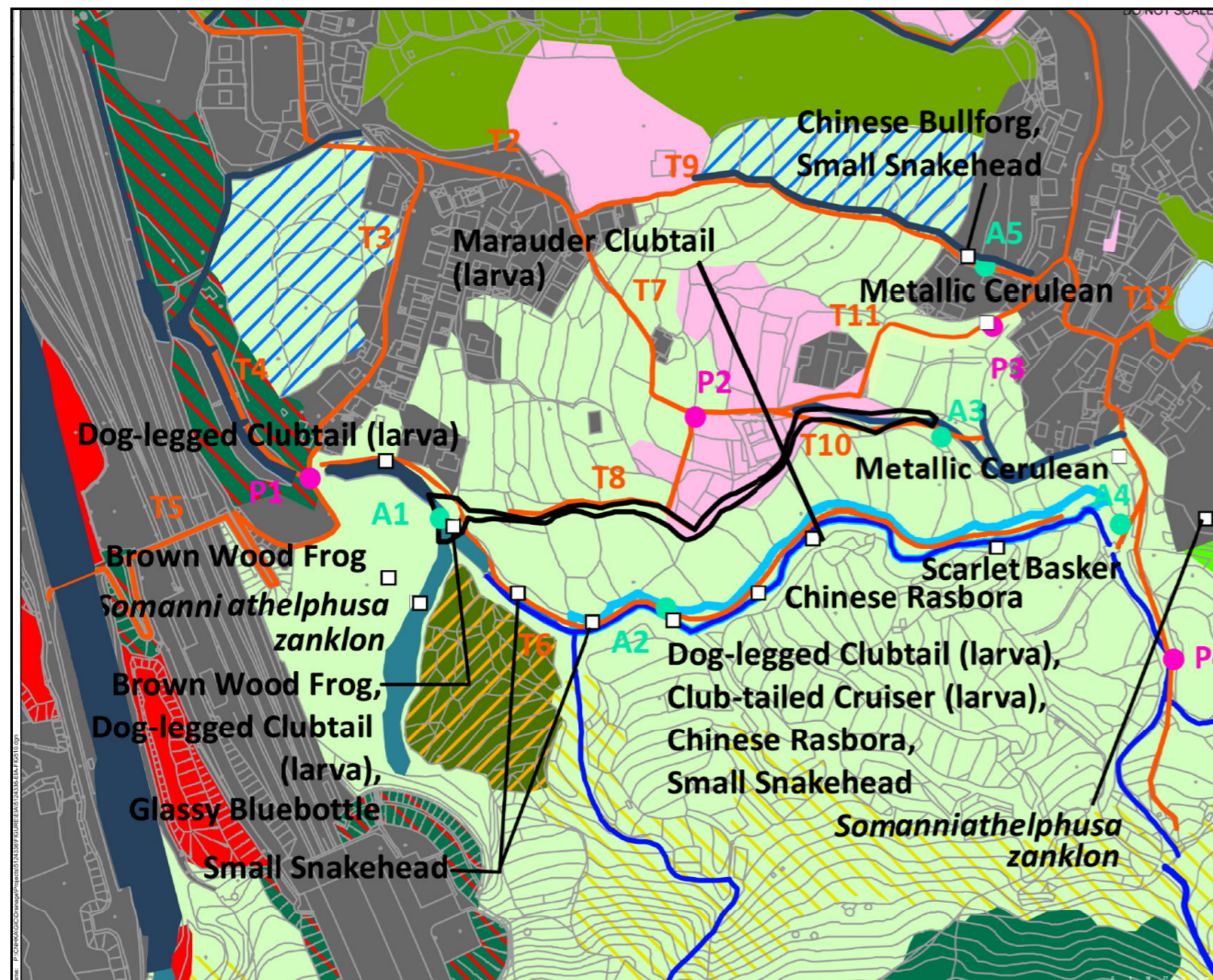


Designed	-	Checked	AC
Drawn	VL	Approved	WW
Scale	A3	Status	Rev 0

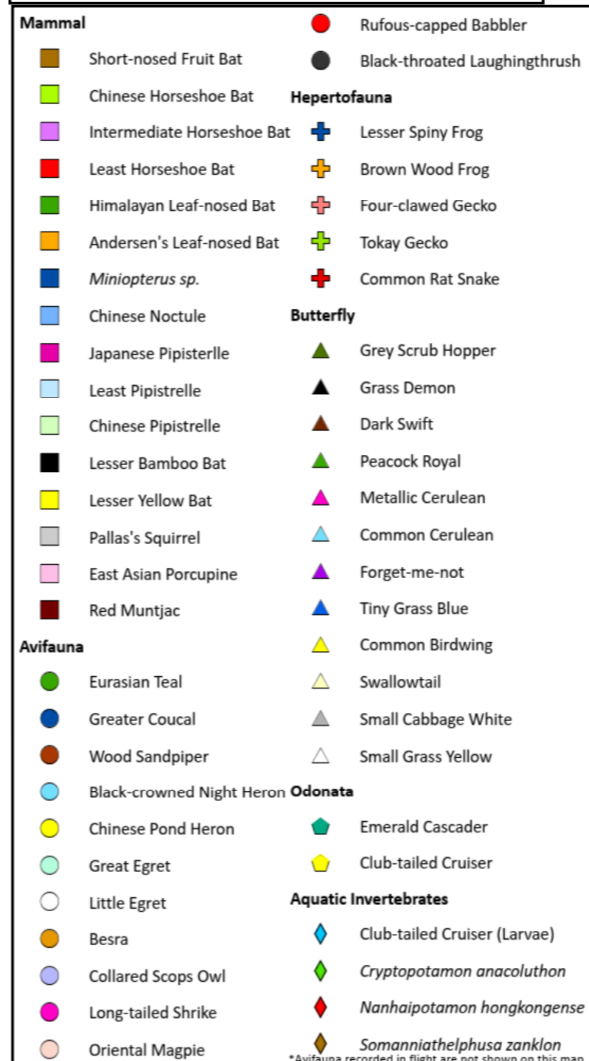
Drawing No. **FIGURE B**

© Copyright reserved

User name: CHEU306 Date: 10/29/2020 Time: 5:09:07 PM
Filename: P:\CHK\A\GD\Drawings\Projects\124336\Figure\A1-Figure5.10.dgn



Upper: Extract from Figure 5.10 of AEIAR-229/2021



Lower: Extract from Latest Habitat Map

Project
 CONTRACT NO. DC/2022/02
 DRAINAGE IMPROVEMENT
 WORKS AT YUEN LONG –
 STAGE 2

Title
 HABITAT MAP AT TAI WO
 EXTRACTED FROM THE
 LATEST ECOLOGICAL SURVEY
 COMPARED WITH HABITAT
 MAP FROM THE APPROVED
 EIA REPORT

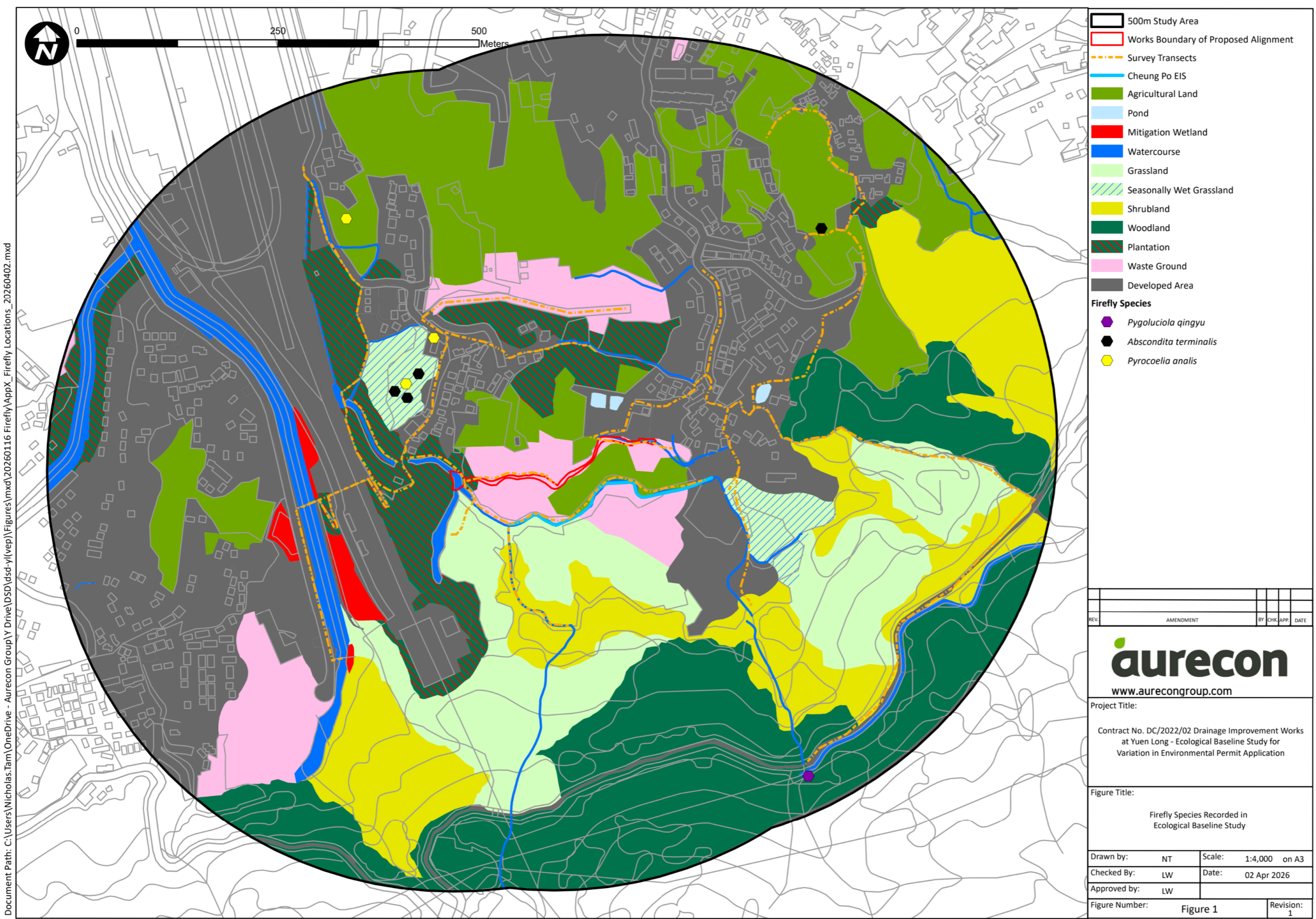


Designed	-	Checked	AC
Drawn	VL	Approved	WW
Scale	A3	Status	Rev 0

Drawing No.
 FIGURE C

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Notes: Based on survey results of Sep-25, Oct-25 and Apr-26 by Aurecon



Project
**CONTRACT NO. DC/2022/02
DRAINAGE IMPROVEMENT
WORKS AT YUEN LONG –
STAGE 2**

Title
**LOCATIONS OF FIREFLY
RECORDED**



Designed	-	Checked	AC
Drawn	VL	Approved	WW
Scale	A3	Status	Rev 0

Drawing No.
FIGURE D

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Appendix A

Ecological Baseline Survey Methodology (provided by Aurecon Hong Kong Limited)

Ecological Surveys

Habitat and Vegetation Survey

Habitat and vegetation surveys will be conducted once in the dry season and once in the wet season. Habitat maps will be prepared to reflect current site conditions of the Study Area. The habitat map is first prepared by desktop review of recent aerial photographs and the government base map (**Figure 1**), which will be followed by on-site verification during ground-truthing surveys. Habitat value will be assessed based on the condition, vegetation type and faunal use, particularly species of conservation concern.

Vegetation surveys will be conducted in parallel with habitat surveys. Transects are set across representative patches of each habitat type present in the Study Area (as indicated in **Figure 1**). All plant species encountered during the surveys and their relative abundance in each habitat will be recorded. Locations of floral species of conservation importance will be marked onto the habitat maps.

Mammal Survey

Daytime and night-time surveys for terrestrial mammals covered both dry and wet seasons, conducted monthly in areas which might potentially be utilised by terrestrial mammals. The surveys focused on searching for field signs such as droppings, footprints, diggings or burrows left by larger mammals. Mammal identification will be made as accurate as possible from the field signs encountered. In addition, mammals directly observed will also be identified and recorded, while survey for nocturnal mammal species will also be undertaken at night-time by active searching with spotlight.

Bat surveys will be undertaken by surveyor(s) equipped with ultrasonic bat detector(s) at potential roosting, commuting, foraging and drinking sites at dusk and during night-time when bats are most active.

All recordings collected during the transect surveys were subsequently analysed by using the Kaleidoscope Analysis Software to permit, as far as possible, identification of bat species from call structures. Given the limited reference sources available regarding the known call structures and peak frequencies of local bat species except for Horseshoe Bats (*Rhinolophus* spp.) and Leaf-nosed Bats (*Hipposideros* spp.) (Shek & Lau 2006); there is not yet a reference for the call structure of other Hong Kong bats so identification is based on literature from elsewhere in the region, e.g. Tong (2016). For non-vocalising bats (e.g. Short-nosed Fruit Bat) not detectable by calls, observations will be included through visual confirmations. Any notable bat behaviours will be recorded, where possible, to have a better understanding on bat use of the Assessment Area.

Nomenclature of bat species will follow AFCD's Hong Kong Biodiversity Information Hub (AFCD 2024). The commonness and conservation status (including status from Red List of China's Vertebrates, the latest IUCN Red List and other scientific research study e.g. Fellowes *et al.* 2002) for each species will be presented.

Avifauna Survey

The presence and abundance of avifauna species in various habitats shall be recorded visually and aurally. Both daytime and night-time surveys will be conducted monthly during both dry and wet seasons. Avifauna shall be surveyed quantitatively using the transect count method along the transects during early morning, dusk and night times. The location of any avifauna species of conservation importance encountered shall be recorded, along with notable behaviours (e.g. breeding behaviour such as nesting and the presence of recently fledged juveniles, roosting, and feeding activities). Nomenclature of species follows Carey *et al.* (2001), HKBWS (2022).

Butterfly and Odonate Survey

Butterflies and odonates (dragonflies and damselflies) will be surveyed and counted along the walk-transects. Daytime surveys will be conducted monthly during both dry and wet seasons. Attention will be given to their potential habitats. Surveys will be conducted in suitable weather condition to avoid overcast weather when the butterflies and odonates are less active. Relative abundance of butterfly, dragonfly and damselfly will be recorded, while larvae and pupae encountered will also be recorded.

Nomenclature of butterfly and odonate species will follow AFCD's Hong Kong Biodiversity Information Hub (AFCD 2024). The commonness and conservation status (including status from China Red Data Book, the

latest IUCN Red List and other scientific research study e.g. Fellowes *et al.* (2002) and Pun (2024)) for each species will be provided.

Herpetofauna Survey

Herpetofauna will be surveyed and counted along survey transects by active searching. Both daytime and night-time surveys will be conducted monthly during both dry and wet seasons. Potential microhabitats (e.g. leaf litter, underneath of rotten logs) will be searched. All reptiles and amphibians sighted will be identified and recorded.

Amphibian survey will be conducted in the evening and at night, focusing on areas suitable for amphibians (including forests, shrublands, grasslands, streams, catchwaters, fishponds and marshes). Acoustic records of amphibians will likely constitute the majority of data collected, supplemented by visual observation of eggs, tadpoles and adults.

During reptile surveys conducted in the daytime and at night, careful searches will be undertaken at the microhabitats and refugia of reptiles (including stones, pond bunds, crevices, leaf litter/debris, rotten log). All reptiles encountered will be identified and recorded. In addition to active searching, observation of exposed, basking and foraging reptiles will also be made.

Nomenclature of species will follow AFCD's Hong Kong Biodiversity Information Hub (AFCD 2024). The commonness and conservation status (including status from Red List of China's Vertebrates, the latest IUCN Red List and other scientific research study e.g. Fellowes *et al.* (2002)) for each species will be presented.

Freshwater Fishes and Invertebrates Survey

Freshwater invertebrates and fish survey will be conducted monthly in both wet and dry seasons through active searching and/or direct observation at watercourses and freshwater habitats within the Study Area.

Special attention will be paid to the Cheung Po EIS located roughly 50m from the Tai Wo site given the high number of species of conservation importance recorded at the stream.

Freshwater invertebrates survey will be conducted during daytime; whereas freshwater fish survey will be conducted during daytime for diurnal species, and night-time for nocturnal species.

To avoid driving organisms away and disturbing the bottom substrate, direct observation from a suitable distance will be conducted before active searching and kick sampling. Boulders within the watercourses will be turned over to locate any aquatic animals beneath. Hand nets will be used to collect organisms along the watercourses.

Baited funnel traps will be considered for sections of the stream that are too deep to turbid to perform active search. Once traps are set, they will be fixed and left in place for **no more than twenty-four hours** to allow the watercourse adequate recovery time from disturbance. All traps would be properly labelled to demonstrate that it is being utilised for authorized surveys. When traps are retrieved, all trapped aquatic fauna will be recorded, notes taken of any key features, identified to the lowest possible taxonomic level, photographed when necessary, and then **released**. All trapping will be conducted in a humane manner and without jeopardizing the health of the fish as well as other freshwater organisms.

Surveys will be avoided within three days of heavy rain or when stream is in spate

Nomenclature of species will follow AFCD's Hong Kong Biodiversity Information Hub (AFCD 2024). The commonness and conservation status (including status from Red List of China's Vertebrates, the latest IUCN Red List and other scientific research study e.g. Fellowes *et al.* (2002)) for each species will be presented.

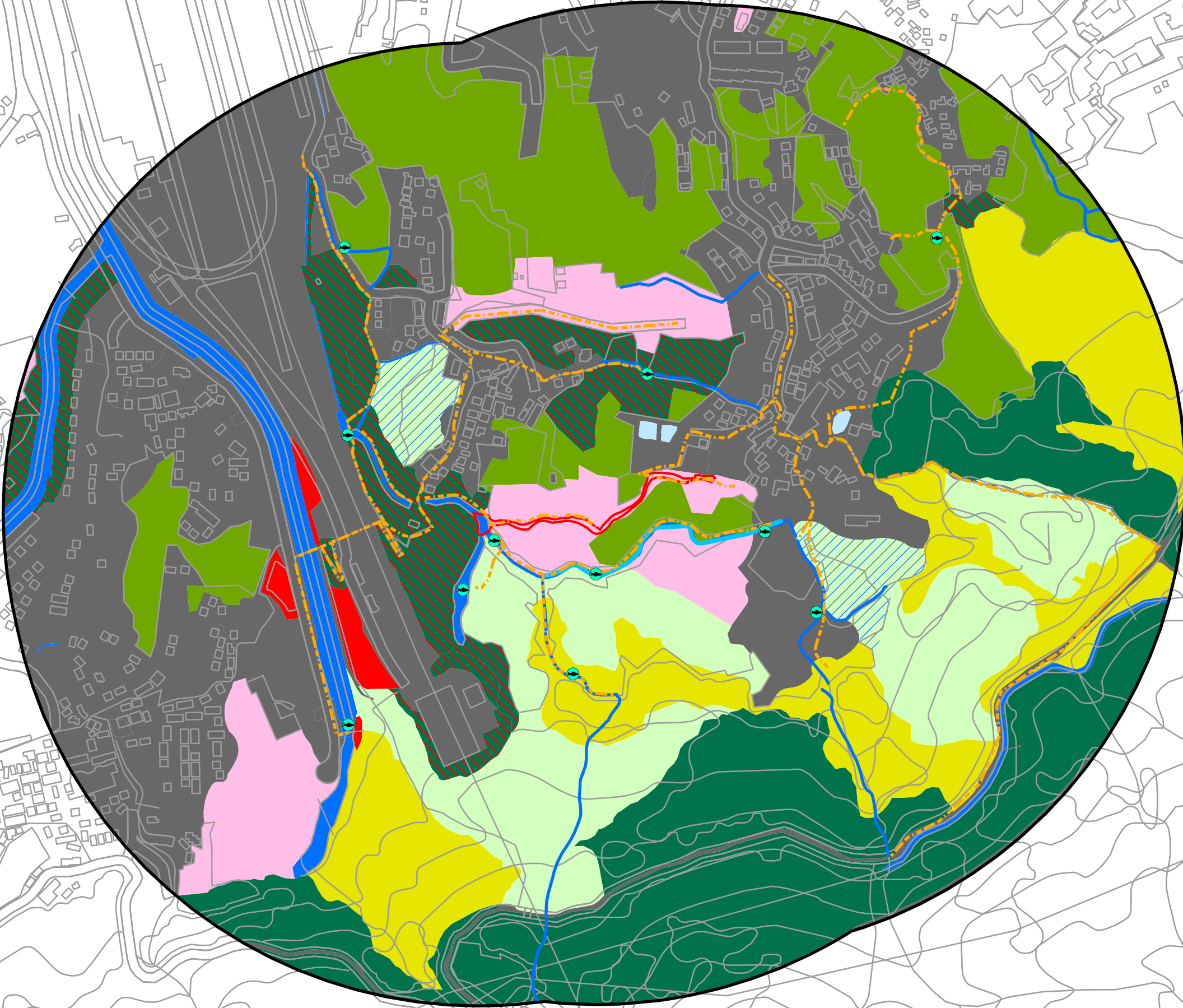
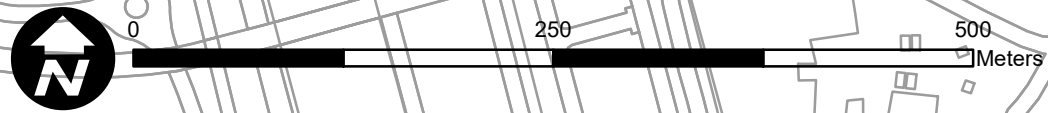
Firefly Survey

Firefly surveys will be conducted along survey transects. Daytime and nighttime surveys will be conducted monthly. Nighttime surveys will start at dusk immediately after sunset for at least 2-3 hours, which covered the active hours of most species found in Hong Kong (Yiu 2017). Where site situation permits (e.g. under safe conditions), lighting devices will be switched off most of the time and/or at sufficient intervals during night-time surveys to enhance the detection of fireflies.

Special attention will be given to potential habitats for fireflies, with priority given to transects within these habitats during night-time surveys. Starting location of night-time surveys will be changed each month, targeting different firefly habitats, such that all habitats within the Study Area could be covered in the first 90 minutes of the night-time survey (where most fireflies species are the most active). Starting locations of night-time surveys will be considered based on the seasonality and preferred habitats of firefly species that are suspected to be distributed within the Study Area.

Diurnal fireflies encountered during other daytime surveys, if any, will also be recorded. Any adult and larva firefly observed will be identified to the species level, where possible. The abundance and distribution of fireflies will be documented, and any notable behaviours such as mass occurrences or breeding activities will be recorded, along with their corresponding locations and habitats. Nomenclature of fireflies followed Yiu (2024).

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- 500m Study Area
- Works Boundary of Proposed Alignment
- Survey Transects
- Cheung Po EIS
- Freshwater Sampling Point
- Agricultural Land
- Pond
- Mitigation Wetland
- Watercourse
- Grassland
- Seasonally Wet Grassland
- Shrubland
- Woodland
- Plantation
- Waste Ground
- Developed Area

*Habitats have been updated according to the revisions after the first issue of the approved Methodology Paper in October 2025

REV.	AMENDMENT	BY	CHK.	APP.	DATE



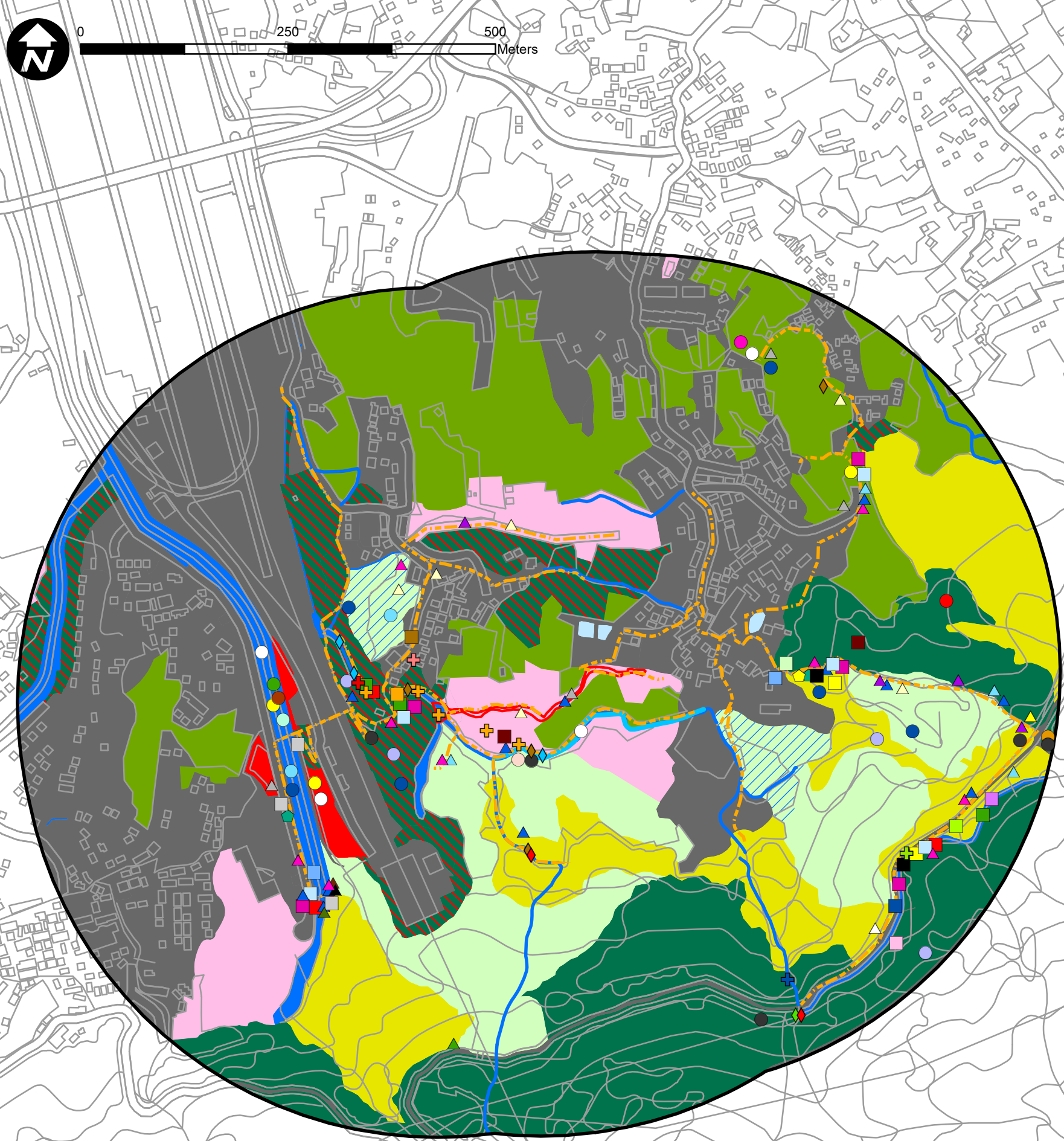
Project Title:
 Contract No. DC/2022/02 Drainage Improvement Works at Yuen Long - Ecological Baseline Study for Variation in Environmental Permit Application

Figure Title:
 500m Study Area and Proposed Survey Transects

Drawn by:	NT	Scale:	1:4,500 on A3
Checked By:	LW	Date:	02 Apr 2026
Approved by:	LW		
Figure Number:	Figure 1	Revision:	0

Appendix B

Habitat Map prepared by Aurecon Hong Kong Limited



- Mammal**
- Short-nosed Fruit Bat
 - Chinese Horseshoe Bat
 - Intermediate Horseshoe Bat
 - Least Horseshoe Bat
 - Himalayan Leaf-nosed Bat
 - Andersen's Leaf-nosed Bat
 - Miniopterus sp.*
 - Chinese Noctule
 - Japanese Pipistrelle
 - Least Pipistrelle
 - Chinese Pipistrelle
 - Lesser Bamboo Bat
 - Lesser Yellow Bat
 - Pallas's Squirrel
 - East Asian Porcupine
 - Red Muntjac
- Avifauna**
- Eurasian Teal
 - Greater Coucal
 - Wood Sandpiper
 - Black-crowned Night Heron
 - Chinese Pond Heron
 - Great Egret
 - Little Egret
 - Besra
 - Collared Scops Owl
 - Long-tailed Shrike
 - Oriental Magpie
- Hepertofauna**
- Lesser Spiny Frog
 - Brown Wood Frog
 - Four-clawed Gecko
 - Tokay Gecko
 - Common Rat Snake
- Butterfly**
- Grey Scrub Hopper
 - Grass Demon
 - Dark Swift
 - Peacock Royal
 - Metallic Cerulean
 - Common Cerulean
 - Forget-me-not
 - Tiny Grass Blue
 - Common Birdwing
 - Swallowtail
 - Small Cabbage White
 - Small Grass Yellow
- Odonata**
- Emerald Cascader
 - Club-tailed Cruiser
- Aquatic Invertebrates**
- Club-tailed Cruiser (Larvae)
 - Cryptopotamon anacoluthon*
 - Nanhaipotamon hongkongense*
 - Somaniathelphusa zanklon*
- *Avifauna recorded in flight are not shown on this map.

- 500m Study Area
- Works Boundary of Proposed Alignment
- Survey Transects
- Cheung Po EIS
- Agricultural Land
- Pond
- Mitigation Wetland
- Watercourse
- Grassland
- Seasonally Wet Grassland
- Shrubland
- Woodland
- Plantation
- Waste Ground
- Developed Area

REV.	AMENDMENT	BY	CHK.	APP.	DATE



Project Title:
 Contract No. DC/2022/02 Drainage Improvement Works at Yuen Long - Ecological Baseline Study for Variation in Environmental Permit Application

Figure Title:
 Habitat Map and Species of Conservation Importance (Cumulative)

Drawn by:	NT	Scale:	1:5,500 on A3
Checked By:	LW	Date:	5 Feb 2025
Approved by:	LW		
Figure Number:	Figure 1	Revision:	0

Appendix C

Representative Photographs of Ecological Habitats and Recorded Species of Conservation Importance (provided by Aurecon Hong Kong Limited)

Representative Photographs of Habitats & Species of Conservation Importance Recorded

Proposed Alignment (Watercourse)	Proposed Alignment (Waste Ground)	EIS (Watercourse)
 <p>A photograph showing a narrow watercourse with brownish water. The banks are covered in green vegetation. A white plastic sheet is visible on the left bank. A date stamp '05/12/2025' is present in the bottom right corner.</p>	 <p>A photograph of a waste ground area. A concrete wall runs across the middle ground, with red and white safety barriers in the foreground. The background shows green hills and a blue sky with clouds.</p>	 <p>A photograph of a watercourse flowing through a dense, lush green forest. The water is clear and reflects the surrounding vegetation.</p>
Study Area (Agricultural Land)	Study Area (Pond)	Study Area (Mitigation Wetland)
 <p>A photograph of agricultural land. A field of crops is visible in the foreground, with a fence and a road in the middle ground. The background shows green hills and a clear sky.</p>	 <p>A photograph of a pond area. A large white building is visible in the background, with a fence and a road in the middle ground. The foreground is filled with green vegetation.</p>	 <p>A photograph of a mitigation wetland area. A stream flows through the area, with a fence and a road in the background. The foreground is filled with green vegetation and rocks.</p>

Study Area (Watercourse)



Study Area (Grassland)



Study Area (Seasonally Wet Grassland)



Study Area (Shrubland)



Study Area (Woodland)



Study Area (Plantation)



Study Area (Wasteground)



Study Area (Developed Area)



Andersen's Leaf-nosed Bat



Metallic Cerulean



Common Cerulean



Club-tailed Cruiser (Larvae)



Somanniathelphusa zanklon



Appendix D

Detailed Findings of the Ecological Survey (provided by Aurecon Hong Kong Limited)

Appendix 1

List of Flora Species Recorded

Scientific Name	Chinese Name	Origin ²	Growth Form ¹	Conservation and Protection Status ²	Rarity ²	Habitat ³													
						PA		SA											
						WC	WG	AG	PO	MW	EIS WC	NON -EIS WC	GL	SWG	SL	WL	PL	WG	DA
<i>Abelmoschus moschatus</i>	黃葵	Exotic	Herb	-	Cultivated/ Naturalised		**	*				*	*	**	*	*		**	**
<i>Acacia concinna</i>	藤金合歡	Native	Climber	-	Restricted			*						**					
<i>Acacia confusa</i>	台灣相思	Exotic	Tree	-	Cultivated/ Naturalised					*	*				*	*	*		
<i>Acorus gramineus</i>	石菖蒲	Native	Herb	-	Common														
<i>Acronychia pedunculata</i>	山油柑	Native	Tree	-	Common											*			
<i>Adiantum caudatum</i>	鞭葉鐵線蕨	Native	Herb	-	Restricted											*			
<i>Adiantum flabellulatum</i>	扇葉鐵線蕨	Native	Herb	-	Common											*			
<i>Aeschynomene americana</i>	美洲合萌	Exotic	Shrub	-	Cultivated/ Naturalised						*							**	
<i>Ageratum conyzoides</i>	藿香薊	Exotic	Herb	-	Cultivated/ Naturalised	*		*		*				*	*				
<i>Ageratum houstonianum</i>	熊耳草	Exotic	Herb	-	Cultivated/ Naturalised		*			*				*				*	
<i>Alangium chinense</i>	八角楓	Native	Shrub/Tree	-	Common					*					**	*			
<i>Albizia lebbek</i>	大葉合歡	Exotic	Tree	-	Cultivated/ Naturalised											*			
<i>Aleurites moluccana</i>	石栗	Exotic	Tree	-	Cultivated/ Naturalised						*								*
<i>Alocasia macrorrhizos</i>	海芋	Native	Herb	-	Common	**		**	*	*		*	*	**		*	*		*
<i>Aloe vera</i>	蘆薈	Exotic	Herb	-	Cultivated/ Naturalised			*											
<i>Alternanthera philoxeroides</i>	空心莧	Exotic	Herb	-	Cultivated/ Naturalised			**		**	*	**							*
<i>Alternanthera sessilis</i>	蝦蟇菜	Native	Herb	-	Common								**	**	*	*			*
<i>Alysicarpus vaginalis</i>	鏈莢豆	Native	Herb	-	Common			*						*	*	*		**	
<i>Amaranthus viridis</i>	野莧	Native	Herb	-	Common		*	*						**			*	**	*
<i>Ampelopsis cantoniensis</i>	廣東蛇葡萄	Native	Vine	-	Common										*				
<i>Anisomeles indica</i>	廣防風	Native	Herb	-	Common					*								*	
<i>Annona squamosa</i>	番荔枝	Exotic	Tree	-	Cultivated/ Naturalised			*										*	
<i>Antidesma bunius</i>	五月茶	Native	Tree	-	Common											**			
<i>Antidesma ghaesembilla</i>	方葉五月茶	Native	Tree	-	Common										*	*	*		
<i>Apluda mutica</i>	水蔗草	Native	Herb	-	Common			**			*	**		***	*				
<i>Aporosa dioica</i>	銀柴	Native	Tree	-	Common								**		**	***			
<i>Araucaria cunninghamii</i>	南洋杉	Exotic	Tree	-	Cultivated/ Naturalised														*
<i>Archidendron lucidum</i>	亮葉猴耳環	Native	Tree	-	Common										*				

Scientific Name	Chinese Name	Origin ²	Growth Form ¹	Conservation and Protection Status ²	Rarity ²	Habitat ³														
						PA			SA											
						WC	WG	AG	PO	MW	EIS WC	NON -EIS WC	GL	SWG	SL	WL	PL	WG	DA	
<i>Ardisia crenata</i>	朱砂根	Native	Shrub	-	Common								*							
<i>Artemisia indica</i>	五月艾	Native	Herb/Shrub	-	Restricted			*		*										
<i>Artocarpus heterophyllus</i>	菠蘿蜜	Exotic	Tree	-	Cultivated/ Naturalised			*												*
<i>Asparagus cochinchinensis</i>	天門冬	Exotic	Herb	-	Cultivated/ Naturalised			*							*					
<i>Aster subulatus</i>	鑽形紫菀	Exotic	Herb	-	Cultivated/ Naturalised					*	*								**	
<i>Asystasia micrantha</i>	小花十萬錯	Exotic	Herb	-	Cultivated/ Naturalised					*		**	**					**		**
<i>Axonopus compressus</i>	地毯草	Exotic	Herb	-	Cultivated/ Naturalised			*											*	
<i>Bambusa sp.</i>	竹屬	-	Bamboo	-	-											*	**			*
<i>Basella alba</i>	潺菜	Exotic	Vine	-	Cultivated/ Naturalised			**												
<i>Bauhinia championii</i>	缺葉藤	Native	Vine	-	Common											*				
<i>Bauhinia glauca</i>	羊蹄甲藤	Native	Vine	-	Common										**					
<i>Bauhinia sp.</i>	羊蹄甲屬	-	Tree	-	-										*					
<i>Bauhinia variegata</i>	宮粉羊蹄甲	Exotic	Tree	-	Cultivated/ Naturalised					***		*				*				**
<i>Berchemia floribunda</i>	勾兒茶	Native	Climber	-	Common					*	*				*	*				
<i>Bidens alba</i>	白花鬼針草	Exotic	Herb	-	Cultivated/ Naturalised	*	*	*	***	**	*	***	**	*		*	*	*	*	*
<i>Bischofia javanica</i>	秋楓	Native	Tree	-	Common		*	*			**		*							*
<i>Blechnum orientale</i>	烏毛蕨	Native	Herb	-	Common	*					*				*	*				
<i>Boehmeria nivea</i>	芋麻	Exotic	Shrub	-	Cultivated/ Naturalised							*			*					*
<i>Boehmeria nivea var. tenacissima</i>	青葉芋麻	Native	Herb	-	Restricted									*						
<i>Bombax ceiba</i>	木棉	Exotic	Tree	-	Cultivated/ Naturalised									*	*	*	*	*	*	*
<i>Bothriochloa bladhii</i>	臭根子草	Native	Herb	-	Common										*	*				
<i>Bothriospermum zeylanicum</i>	柔弱斑種草	Native	Herb	-	Restricted					**										
<i>Bougainvillea spectabilis</i>	籐杜鵑	Exotic	Shrub	-	Cultivated/ Naturalised													*		*
<i>Brachiaria mutica</i>	巴拉草	Exotic	Herb	-	Cultivated/ Naturalised			*		***		**	**	**						**
<i>Breynia fruticosa</i>	黑面神	Native	Shrub	-	Common											*				
<i>Bridelia tomentosa</i>	土蜜樹	Native	Shrub/Tree	-	Common			*		**		*	*		**	**	*			*
<i>Broussonetia papyrifera</i>	構樹	Native	Tree	-	Common										*	*				*
<i>Brucea javanica</i>	鴉膽子	Native	Shrub/Tree	-	Common									*	*					
<i>Byttneria grandifolia</i>	刺果藤	Native	Climber	-	Common					*					**		*			
<i>Caesalpinia crista</i>	假老虎筋	Native	Vine	-	Common						***		*							

Scientific Name	Chinese Name	Origin ²	Growth Form ¹	Conservation and Protection Status ²	Rarity ²	Habitat ³														
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<i>Callipteris esculenta</i>	菜蕨	Native	Herb	-	Common			*		*		**		**						
<i>Cardamine flexuosa</i>	碎米薺	Native	Herb	-	Common					**										
<i>Cardamine flexuosa</i>	彎曲碎米薺	Native	Herb	-	-							*							*	
<i>Cardiospermum halicacabum</i>	倒地鈴	Native	Climber	-	Restricted														*	
<i>Carica papaya</i>	番木瓜	Exotic	Tree	-	Cultivated/ Naturalised			*	*			*						*	**	
<i>Caryota maxima</i>	魚尾葵	Exotic	Tree	-	Cultivated/ Naturalised														*	
<i>Caryota mitis</i>	短穗魚尾葵	Exotic	Shrub	-	Cultivated/ Naturalised					*								*		
<i>Cassia fistula</i>	豬腸豆	Exotic	Tree	-	Cultivated/ Naturalised														**	
<i>Catharanthus roseus</i>	長春花	Exotic	Shrub	-	Cultivated/ Naturalised			*											*	
<i>Cayratia corniculata</i>	角花烏薺莓	Native	Vine	-	Common					*		*						**	**	
<i>Cayratia japonica</i>	烏薺莓	Native	Vine	-	Restricted					*										
<i>Celosia argentea</i>	青葙	Native	Herb	-	Common			**	**	**	*			**				*	***	*
<i>Celtis sinensis</i>	朴	Native	Tree	-	Common			*		*			*		*	**	*		**	
<i>Cenchrus echinatus</i>	蒺藜草	Exotic	Herb	-	Cultivated/ Naturalised									**				*	**	
<i>Centella asiatica</i>	崩大碗	Native	Herb	-	Common	*				*									*	
<i>Chamaecrista mimosoides</i>	含羞草決明	Native	Herb	-	Common									*						
<i>Chloris barbata</i>	孟仁草	Native	Herb	-	Common			*										*	*	
<i>Cinnamomum camphora</i>	樟	Native	Tree	-	Common										*	**				
<i>Citrus limonia</i>	黎檬	Exotic	Tree	-	Cultivated/ Naturalised			*												
<i>Citrus reticulata</i>	桔	Exotic	Tree	-	Cultivated/ Naturalised			*		*				*				*		
<i>Clausena lansium</i>	黃皮	Exotic	Tree	-	Cultivated/ Naturalised						*							*		
<i>Cleistocalyx nervosum</i>	水翁	Native	Tree	-	Common							*			*					
<i>Cleome ruidosperma</i>	皺子白花菜	Exotic	Herb	-	Cultivated/ Naturalised			*		*		*							**	
<i>Clerodendrum cyrtophyllum</i>	大青	Native	Shrub/Tree	-	Common								*			*				
<i>Clerodendrum fortunatum</i>	鬼燈籠	Native	Shrub	-	Common									**	*					
<i>Clitoria ternatea</i>	蝶豆	Exotic	Herb	-	Cultivated/ Naturalised			*												
<i>Coccinia grandis</i>	紅瓜	Native	Vine	-	Very Rare (Corlett et al. 2000)					*										
<i>Cocculus orbiculatus</i>	木防己	Native	Vine	-	Common			*		***									*	
<i>Codiaeum variegatum</i>	變葉木	Exotic	Shrub	-	Cultivated/ Naturalised														*	
<i>Coix lacryma-jobi</i>	薏苡	Native	Herb	-	Common			*												

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<i>Coleus amboinicus</i>	到手香	-	-	-	-						*								*
<i>Colocasia esculenta</i>	芋	Exotic	Herb	-	Cultivated/ Naturalised			**	**		**	*		**					
<i>Commelina diffusa</i>	節節草	Native	Herb	-	Common	*			**	***	*	*	***					*	**
<i>Conyza sumatrensis</i>	蘇門白酒草	Exotic	Herb	-	Cultivated/ Naturalised			*	*		*							**	*
<i>Corchorus aestuans</i>	假黃麻	Native	Herb	-	Common		*	*										*	*
<i>Cordyline fruticosa</i>	朱蕉	Exotic	Shrub	-	Cultivated/ Naturalised														*
<i>Cratogeomys cochinchinense</i>	黃牛木	Native	Shrub/Tree	-	Common												**		
<i>Crotalaria pallida var. obovata</i>	豬屎豆	Exotic	Herb	-	Cultivated/ Naturalised										*				
<i>Cucurbita moschata</i>	南瓜	Exotic	Herb	-	Cultivated/ Naturalised			*											
<i>Cunninghamia lanceolata</i>	杉木	Exotic	Tree	-	Cultivated/ Naturalised											**			
<i>Cuscuta australis</i>	南方菟絲子	Native	Herb	-	Common			*	***					*					
<i>Cyclosorus interruptus</i>	間斷毛蕨	Native	Herb	-	Common	**		*		**	**			***					
<i>Cyclosorus parasiticus</i>	華南毛蕨	Native	Herb	-	Common	**		*		*	**		**			*	*		*
<i>Cynodon dactylon</i>	狗牙根	Native	Herb	-	Common		**	**		**		**		***		**	**	**	**
<i>Cyperus compressus</i>	扁穗莎草	Native	Herb	-	Common			*										*	*
<i>Cyperus diffusus</i>	多脈莎草	Native	Herb	-	Restricted							*							
<i>Cyperus involucratus</i>	風車草	Native	Herb	-	Restricted							**							
<i>Cyperus iria</i>	碎米莎草	Native	Herb	-	Common		***	**										*	
<i>Cyperus malaccensis var. brevifolius</i>	短葉茛苳	Native	Herb	-	Common					**									
<i>Cyperus pilosus</i>	毛軸莎草	Native	Herb	-	Common		***											*	
<i>Cyperus rotundus</i>	香附子	Native	Herb	-	Common			*										*	**
<i>Cyperus surinamensis</i>	蘇里南莎草	Exotic	Herb	-	-			*		*		*						**	*
<i>Cyrtococcum patens</i>	弓果黍	Native	Herb	-	Common			*		**						***	***		*
<i>Dactyloctenium aegyptium</i>	龍爪茅	Native	Herb	-	Common													*	*
<i>Dalbergia benthamii</i>	兩廣黃檀	Native	Climber	Cap.586	Common										**	*			
<i>Dalbergia hancei</i>	藤黃檀	Native	Climber	Cap.586	Common										**	***			
<i>Daphniphyllum calycinum</i>	牛耳楓	Native	Shrub/Tree	-	Common											*			
<i>Delonix regia</i>	鳳凰木	Exotic	Tree	-	Cultivated/ Naturalised											*			*
<i>Desmodium gangeticum</i>	大葉山螞蝗	Native	Shrub	-	Common			*		*				*	*	*			*
<i>Desmodium heterocarpon</i>	假地豆	Native	Shrub	-	Common									*					
<i>Desmodium reticulatum</i>	顯脈山綠豆	Native	Shrub	-	Restricted								**						

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<i>Desmodium tortuosum</i>	南美山蚂蝗	Exotic	Shrub	-	Cultivated/ Naturalised			*									*	**	
<i>Desmodium triflorum</i>	三點金	Native	Herb	-	Common						*				*	*			
<i>Desmos chinensis</i>	假鷹爪	Native	Shrub	-	Common					**			*		*	**	*		*
<i>Dichanthium annulatum</i>	雙花草	Native	Herb	-	Restricted					**		**		**		*		*	**
<i>Dicliptera chinensis</i>	狗肝菜	Native	Herb	-	Restricted								*						
<i>Dicranopteris pedata</i>	芒萁	Native	Herb	-	Common						*				***	**			
<i>Dimocarpus longan</i>	龍眼	Exotic	Tree	VU (TSLCHP)	Cultivated/ Naturalised			*		*			*			**	**	*	*
<i>Dioscorea alata</i>	大薯	Exotic	Vine	-	Cultivated/ Naturalised			*											*
<i>Dioscorea bulbifera</i>	黃獨	Native	Vine	-	Common									*	*				
<i>Dioscorea oppositifolia</i>	薯蕷	-	-	-	-								*						
<i>Dracaena fragrans</i>	巴西鐵樹	Exotic	Shrub	-	Cultivated/ Naturalised														*
<i>Dracaena sanderiana</i>	富貴竹	Exotic	Shrub	-	Cultivated/ Naturalised			*											
<i>Dracontomelon duperreanum</i>	人面子	Exotic	Tree	-	Cultivated/ Naturalised													*	
<i>Drymaria cordata</i>	荷蓮豆	Native	Herb	-	Common			**		*									
<i>Duhaldea cappa</i>	羊耳菊	Native	Herb	-	Common									**	*				
<i>Duranta erecta 'variegata'</i>	花葉假連翹	Exotic	Shrub	-	Cultivated/ Naturalised														*
<i>Dyopsis lutescens</i>	散尾葵	Exotic	Shrub	-	Cultivated/ Naturalised												*		*
<i>Echinochloa colona</i>	光頭稗	Native	Herb	-	Common			*										**	
<i>Eclipta prostrata</i>	鱧腸	Native	Herb	-	Common														*
<i>Elephantopus scaber</i>	地膽草	Native	Herb	-	Common									*					*
<i>Eleusine indica</i>	牛筋草	Native	Herb	-	Common		**	**		*			**				**	**	*
<i>Eleutherococcus trifoliatus</i>	白筋	Native	Shrub/Climber	-	Common									*					
<i>Embelia laeta</i>	酸藤子	Native	Climber	-	Common									*					
<i>Emilia sonchifolia</i>	一點紅	Native	Herb	-	Common								*					*	
<i>Epipremnum aureum</i>	綠蘿	Exotic	Herb	-	Cultivated/ Naturalised												*		
<i>Eragrostis atrovirens</i>	鼠婦草	Native	Herb	-	Common									*	*				
<i>Eragrostis sp.</i>	畫眉草屬	-	-	-	-									*	*				
<i>Eragrostis tenella</i>	鯽魚草	Native	Herb	-	Common			*									*	*	**
<i>Eriobotrya japonica</i>	枇杷	Exotic	Tree	-	Cultivated/ Naturalised														*
<i>Eriosema chinense</i>	雞頭薯	Native	Herb	-	Common									*			**		
<i>Eucalyptus robusta</i>	大葉桉	Exotic	Tree	-	Cultivated/ Naturalised												*		*

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<i>Eucalyptus torelliana</i>	毛葉桉	Exotic	Tree	-	Cultivated/ Naturalised								*							
<i>Euphorbia bifida</i>	細齒大戟	Native	Herb	-	Common			*										*		
<i>Euphorbia hirta</i>	大飛揚草	Exotic	Herb	-	Cultivated/ Naturalised		*	*						*				*	*	**
<i>Euphorbia hypericifolia</i>	通奶草	Native	Herb	-	Common									*						
<i>Euphorbia prostrata</i>	匍匐大戟	Exotic	Herb	-	Cultivated/ Naturalised													*	**	
<i>Euphorbia thymifolia</i>	小飛揚	Native	Herb	-	Common			*										*	**	
<i>Euphorbia tirucalli</i>	綠玉樹	Exotic	Shrub/Tree	-	Cultivated/ Naturalised														*	
<i>Eurya nitida</i>	細齒葉柃	Native	Shrub/Tree	-	Common													*		
<i>Ficus benjamina</i>	垂葉榕	Exotic	Tree	-	Cultivated/ Naturalised													**		
<i>Ficus elastica</i>	印度榕	Exotic	Tree	-	Cultivated/ Naturalised															*
<i>Ficus fistulosa</i>	水同木	Native	Tree	-	Common													*		
<i>Ficus hirta</i>	粗葉榕	Native	Shrub/Tree	-	Common						**							**		
<i>Ficus hispida</i>	對葉榕	Native	Shrub/Tree	-	Common			*		*	*	**	*	*	*	*	*	**		*
<i>Ficus microcarpa</i>	細葉榕	Native	Tree	-	Common					*				*				**		**
<i>Ficus pumila</i>	薜荔	Native	Shrub	-	Common					*										
<i>Ficus subpisocarpa</i>	筆管榕	Native	Tree	-	Common	*				*		*						*		
<i>Ficus tinctoria subsp. gibbosa</i>	斜葉榕	Native	Tree	-	Restricted		*				*	*						*	*	
<i>Ficus variegata</i>	青果榕	Native	Tree	-	Common													*		*
<i>Ficus virens</i>	大葉榕	Native	Tree	-	Common															*
<i>Fimbristylis aestivalis</i>	夏飄拂草	Native	Herb	-	Restricted					**									*	
<i>Fimbristylis dichotoma</i>	兩歧飄拂草	Native	Herb	-	Common			*											*	
<i>Flueggea virosa</i>	白飯樹	Native	Shrub	-	Common					*		*		**				*		*
<i>Gahnia tristis</i>	黑莎草	Native	Herb	-	Common								*							
<i>Gardenia jasminoides var. fortuneana</i>	白蟻	Exotic	Shrub	-	Cultivated/ Naturalised					**										
<i>Glebionis coronaria</i>	茼蒿	-	-	-	-			*												
<i>Glochidion eriocarpum</i>	毛果算盤子	Native	Shrub/Tree	-	Common													*		
<i>Glochidion zeylanicum</i>	香港算盤子	Native	Shrub/Tree	-	Common								*							*
<i>Gnaphalium affine</i>	鼠麴草	Native	Herb	-	Common					**										
<i>Gnetum luofuense</i>	羅浮買麻藤	Native	Tree	-	Common													*		
<i>Gomphrena celosioides</i>	銀花萹	Exotic	Herb	-	Cultivated/ Naturalised									*					*	
<i>Grangea maderaspatana</i>	田基黃	Native	Herb	-	Common					**										

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<i>Grona heterocarpos subsp. angustifolia</i>	顯脈山綠豆	-	-	-	-										*				
<i>Gymnanthemum amygdalinum</i>	南非葉	-	-	-	-					*									
<i>Hedychium coronarium</i>	薑花	Exotic	Herb	-	Cultivated/ Naturalised			**					*	***					
<i>Hedyotis corymbosa</i>	傘房花耳草	Native	Herb	-	Common			*					**						*
<i>Helicteres angustifolia</i>	山芝麻	Native	Shrub	-	Common										*	**			
<i>Heteropanax fragrans</i>	幌傘楓	Exotic	Tree	-	Cultivated/ Naturalised														*
<i>Hibiscus rosa-sinensis</i>	大紅花	Exotic	Shrub	-	Cultivated/ Naturalised														*
<i>Hylocereus undatus</i>	量天尺	Exotic	Herb	-	Cultivated/ Naturalised			*											*
<i>Ilex asprella</i>	梅葉冬青	Native	Shrub	-	Common								*		*	**			
<i>Ilex rotunda</i>	鐵冬青	Exotic	Tree	-	Cultivated/ Naturalised					**									*
<i>Imperata cylindrica var. major</i>	絲茅	Native	Herb	-	Common			*		**					*	*			
<i>Indigofera hendecaphylla</i>	穗序木藍	-	-	-	-						*			*					
<i>Indocalamus sp.</i>	箬竹屬	-	-	-	-								**						
<i>Ipomoea aquatica</i>	通菜	Exotic	Herb	-	Cultivated/ Naturalised			***	***	**									*
<i>Ipomoea batatas</i>	番薯	Exotic	Herb	-	Cultivated/ Naturalised			*			**								*
<i>Ipomoea cairica</i>	五爪金龍	Exotic	Herb	-	Cultivated/ Naturalised		**	**		**		***	**	**		*	*	**	**
<i>Ipomoea obscura</i>	小心葉薯	Native	Herb	-	Common					*	*								
<i>Ipomoea triloba</i>	三裂葉薯	Exotic	Herb	-	Cultivated/ Naturalised			*		**		***		**		*		*	*
<i>Ischaemum barbatum</i>	粗毛鴨嘴草	Native	Herb	-	Common										*	*			
<i>Itea chinensis</i>	鼠刺	Native	Shrub/Tree	-	Common											*			
<i>Ixora chinensis</i>	龍船花	Native	Shrub	-	Restricted					*									
<i>Jatropha integerrima</i>	全緣葉麻瘋	Exotic	Shrub	-	Cultivated/ Naturalised														*
<i>Juncus effusus</i>	燈心草	Native	Herb	-	Restricted					*		*							
<i>Kyllinga brevifolia</i>	短葉水蜈蚣	Native	Herb	-	Common			*					*	*					*
<i>Kyllinga nemoralis</i>	單穗水蜈蚣	Native	Herb	-	Common							*	*				**		*
<i>Kyllinga polyphylla</i>	香根水蜈蚣	Exotic	Herb	-	Cultivated/ Naturalised	*		*		**		**	*					**	
<i>Lagerstroemia speciosa</i>	大花紫薇	Exotic	Tree	Cap.96	Cultivated/ Naturalised					*	*				*				
<i>Lantana camara</i>	馬纓丹	Exotic	Shrub	-	Cultivated/ Naturalised			*	*	*		**	*		*	*	**	*	**
<i>Leersia hexandra</i>	李氏禾	Native	Herb	-	Common					**		**							

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<i>Leucaena leucocephala</i>	銀合歡	Exotic	Shrub/Tree	-	Cultivated/ Naturalised		*	*		*		**		*	*		*		*
<i>Ligustrum sinense</i>	山指甲	Exotic	Shrub/Tree	-	Cultivated/ Naturalised					*							*		*
<i>Lindernia antipoda</i>	泥花草	Native	Herb	-	Common								**						
<i>Lindernia crustacea</i>	母草	Native	Herb	-	Restricted			*											
<i>Lindernia oblonga</i>	稜萼母草	Native	Herb	-	Restricted							*	**						
<i>Lindsaea orbiculata</i>	圓葉鱗始蕨	Native	Herb	-	Common								*						
<i>Liquidambar formosana</i>	楓香	Native	Tree	-	Common										*	*			
<i>Liriope spicata</i>	山麥冬	Native	Herb	-	Common					*					*	**			
<i>Litchi chinensis</i>	荔枝	Exotic	Tree	EN (TSLCHP)	Cultivated/ Naturalised			**					*	*	*				*
<i>Litsea cubeba</i>	木薑子	Native	Shrub/Tree	-	Common										*	**			
<i>Litsea glutinosa</i>	潺槁	Native	Tree	-	Common						*						**		
<i>Litsea monopetala</i>	假柿木薑子	Native	Tree	-	Restricted					*			*				**		*
<i>Litsea rotundifolia</i> var. <i>oblongifolia</i>	豺皮樟	Native	Tree	-	Common								*		**	**			
<i>Livistona chinensis</i>	蒲葵	Exotic	Tree	-	Cultivated/ Naturalised														*
<i>Lonicera japonica</i>	忍冬	Native	Climber	-	Restricted														*
<i>Lophatherum gracile</i>	淡竹葉	Native	Herb	-	Common											**			
<i>Lophostemon confertus</i>	紅膠木	Exotic	Tree	-	Cultivated/ Naturalised												*		
<i>Ludwigia erecta</i>	美洲水丁香	Exotic	Herb	-	-		***	**	**	*								**	*
<i>Ludwigia hyssopifolia</i>	草龍	Native	Herb	-	Restricted			*	**	**	*	**	*	*					
<i>Ludwigia octovalvis</i>	毛草龍	Native	Herb	-	Common		**			*			*					*	
<i>Lygodium flexuosum</i>	曲軸海金沙	Native	Herb	-	Common										*				
<i>Lygodium japonicum</i>	海金沙	Native	Herb	-	Common					**		*			*	**			**
<i>Lygodium scandens</i>	小葉海金沙	Native	Herb	-	Common						*		*						
<i>Macaranga tanarius</i> var. <i>tomentosa</i>	血桐	Native	Tree	-	Common			*		*		*	*	*	*	**	**		*
<i>Machilus chekiangensis</i>	浙江潤楠	Native	Tree	-	Common						*		*						
<i>Machilus pauhoi</i>	刨花潤楠	Native	Tree	-	Restricted								*		**				*
<i>Macroptilium atropurpureum</i>	紫花大翼豆	Exotic	Herb/Vine	-	Cultivated/ Naturalised			*		*								***	
<i>Maesa perularius</i>	鯽魚膽	Native	Shrub	-	Common								**						
<i>Mallotus paniculatus</i>	白楸	Native	Shrub/Tree	-	Common					*		*	*		*	**	*		
<i>Malvastrum coromandelianum</i>	賽葵	Exotic	Herb	-	Cultivated/ Naturalised													*	*
<i>Mangifera indica</i>	芒果	Exotic	Tree	-	Cultivated/ Naturalised			*					*	*					*

Scientific Name	Chinese Name	Origin ²	Growth Form ¹	Conservation and Protection Status ²	Rarity ²	Habitat ³													
						PA		SA											
						WC	WG	AG	PO	MW	EIS WC	NON -EIS WC	GL	SWG	SL	WL	PL	WG	DA
<i>Manihot esculenta</i>	木薯	Exotic	Shrub	-	Cultivated/ Naturalised			*						*					*
<i>Mazus pumilus</i>	通泉草	Native	Herb	-	Restricted					*	**								
<i>Melastoma malabathricum</i>	野牡丹	Native	Shrub	-	Common											*			
<i>Melastoma sanguineum</i>	毛茛	Native	Shrub	-	Common									*	**				
<i>Melia azedarach</i>	苦楝	Exotic	Tree	-	Cultivated/ Naturalised			*		*		*	*	*	*	*			*
<i>Melicope pteleifolia</i>	三椏苦	Native	Shrub/Tree	-	Common									*	*				
<i>Melinis repens</i>	紅毛草	Exotic	Herb	-	Cultivated/ Naturalised							*					*		**
<i>Merremia hederacea</i>	魚黃草	Native	Herb	-	Restricted		**	**						**				**	
<i>Merremia umbellata</i>	山豬菜	-	-	-	-										*				
<i>Michelia x alba</i>	白蘭	Exotic	Tree	Cap.96	Cultivated/ Naturalised														*
<i>Microcos nervosa</i>	布渣葉	Native	Shrub/Tree	-	Common					*	**			*	**				*
<i>Microstegium ciliatum</i>	剛莠竹	Native	Herb	-	Common			**		****	**		****	***	**	***	***		
<i>Mikania micrantha</i>	薇甘菊	Exotic	Herb	-	Cultivated/ Naturalised			*	*	**		**	**	**			*		***
<i>Millettia nitida</i>	亮葉雞血藤	Native	Climber	-	Common									*	*				
<i>Mimosa diplotricha</i>	巴西含羞草	Exotic	Herb	-	Cultivated/ Naturalised		***				*			*				*	
<i>Mimosa pudica</i>	含羞草	Exotic	Herb	-	Cultivated/ Naturalised			*		*		*		*	*		*	*	*
<i>Miscanthus floridulus</i>	五節芒	Native	Herb	-	Common									***					
<i>Miscanthus sinensis</i>	芒	Native	Herb	-	Common									*	**	**			
<i>Morus alba</i>	桑	Native	Shrub/Tree	-	Common			*				*		*					*
<i>Murraya paniculata</i>	九里香	Exotic	Tree	-	Cultivated/ Naturalised			*		*									*
<i>Musa x paradisiaca</i>	大蕉	Exotic	Herb	-	Cultivated/ Naturalised			**		*		*					*		**
<i>Mussaenda pubescens</i>	玉葉金花	Native	Shrub	-	Common											*			
<i>Nephrolepis auriculata</i>	腎蕨	Native	Herb	-	Common										*				
<i>Neyraudia reynaudiana</i>	類蘆	Native	Herb	-	Common							**	**	***	**	*	*		*
<i>Ocimum basilicum</i>	羅勒	Exotic	Herb	-	Cultivated/ Naturalised					*									
<i>Opismenus compositus</i>	竹葉草	Native	Herb	-	Common					**			**	*	***				
<i>Opuntia stricta var. dillenii</i>	仙人掌	Exotic	Herb	-	Cultivated/ Naturalised														*
<i>Oroxylum indicum</i>	木蝴蝶	Native	Tree	-	Restricted									*	*				
<i>Oxalis corniculata</i>	酢醬草	Native	Herb	-	Common					*		*							*
<i>Oxalis debilis subsp. corymbosa</i>	紅花酢醬草	Exotic	Herb	-	Cultivated/ Naturalised			*		*				*	*				*

Scientific Name	Chinese Name	Origin ²	Growth Form ¹	Conservation and Protection Status ²	Rarity ²	Habitat ³													
						PA		SA											
						WC	WG	AG	PO	MW	EIS WC	NON -EIS WC	GL	SWG	SL	WL	PL	WG	DA
<i>Pachira aquatica</i>	瓜栗	Exotic	Tree	-	Cultivated/ Naturalised														*
<i>Paederia scandens</i>	雞矢藤	Native	Herb	-	Common			**		*		**				**	*		*
<i>Pandanus austrosinensis</i>	露兜草	Native	Herb	-	Restricted											*			
<i>Panicum brevifolium</i>	短葉黍	Native	Herb	-	Common						*				*		**		**
<i>Panicum maximum</i>	大黍	Exotic	Herb	-	Cultivated/ Naturalised		****	***	*	****		***	**	*	*	*	*	*	**
<i>Panicum repens</i>	鋪地黍	Native	Herb	-	Common					**									
<i>Parthenocissus dalzielii</i>	爬牆虎	Exotic	Vine	-	Cultivated/ Naturalised														*
<i>Paspalum conjugatum</i>	兩耳草	Native	Herb	-	Common		*	*										**	*
<i>Paspalum scrobiculatum var. orbiculare</i>	圓果雀稗	Native	Herb	-	Common					*		*			*			*	
<i>Passiflora edulis</i>	雞蛋果	Exotic	Vine	-	Cultivated/ Naturalised			*						*					*
<i>Passiflora foetida</i>	龍珠果	Exotic	Vine	-	Cultivated/ Naturalised		*	*				*			*	*	*		**
<i>Passiflora suberosa</i>	南美西番蓮	Exotic	Vine	-	Cultivated/ Naturalised					*	*							*	
<i>Persicaria barbata</i>	毛蓼	Native	Herb	-	Common			*		**		**							
<i>Persicaria chinensis</i>	火炭母	Native	Herb	-	Common			*		*							**		*
<i>Persicaria glabra</i>	光蓼	Native	Herb	-	Restricted					**									
<i>Persicaria perfoliata</i>	杠板歸	Native	Herb	-	Common		**	**											
<i>Phoenix loureiroi</i>	刺葵	Native	Tree	-	Common													*	
<i>Phragmites australis</i>	蘆葦	Native	Herb	-	Common					**									
<i>Phragmites vallatorius</i>	卡開蘆	Native	Herb	-	Common					*									
<i>Phyllanthus cochinchinensis</i>	越南葉下珠	Native	Shrub	-	Common										*	*			
<i>Phyllanthus niruri</i>	珠子草	Native	Herb	-	Common			*											*
<i>Phyllanthus reticulatus</i>	小果葉下珠	Native	Shrub	-	Common							*			*				*
<i>Phyllanthus tenellus</i>	纖梗葉下珠	-	Herb	-	-			*		*		*					*		*
<i>Phyllanthus urinaria</i>	葉下珠	Native	Herb	-	Common			*					*					*	*
<i>Phyllodium elegans</i>	毛排錢草	Native	Shrub	-	Common									*					
<i>Pilea microphylla</i>	小葉冷水花	Exotic	Herb	-	Cultivated/ Naturalised										*				**
<i>Pinus massoniana</i>	馬尾松	Native	Tree	-	Common										*				
<i>Piper hancei</i>	山蒟	Native	Climber	-	Common										*				
<i>Plantago major</i>	車前草	Native	Herb	-	Common							**							
<i>Platyclusus orientalis</i>	側柏	Exotic	Tree	-	Cultivated/ Naturalised														*
<i>Plumeria rubra</i>	雞蛋花	Exotic	Tree	-	Cultivated/ Naturalised														*

Scientific Name	Chinese Name	Origin ²	Growth Form ¹	Conservation and Protection Status ²	Rarity ²	Habitat ³													
						PA			SA										
						WC	WG	AG	PO	MW	EIS WC	NON -EIS WC	GL	SWG	SL	WL	PL	WG	DA
<i>Podocarpus macrophyllus</i>	羅漢松	Native	Tree	VU (TSLCHP)	Restricted														*
<i>Pogonatherum crinitum</i>	金絲草	Native	Herb	-	Common					*		*						*	
<i>Polygonum plebeium</i>	腋花蓼	Native	Herb	-	Restricted					**									
<i>Portulaca oleracea</i>	馬齒莧	Native	Herb	-	Common													*	
<i>Pouzolzia zeylanica</i>	霧水葛	Native	Herb	-	Common					*			*					*	
<i>Praxelis clematidea</i>	假臭草	Exotic	Herb	-	Cultivated/ Naturalised													*	
<i>Psidium guajava</i>	番石榴	Exotic	Tree	-	Cultivated/ Naturalised			*											*
<i>Psychotria asiatica</i>	山大刀	Native	Shrub/Tree	-	Common								*					**	
<i>Psychotria serpens</i>	蔓九節	Native	Shrub	-	Common					*	*								
<i>Pteris ensiformis</i>	劍葉鳳尾蕨	Native	Herb	-	Common	*				*		*	*						
<i>Pteris vittata</i>	蜈蚣草	Native	Herb	-	Common						*	*							
<i>Pueraria lobata</i>	葛	Native	Vine	-	Common		*	**		**		**	****	*	*	**	**	*	*
<i>Pueraria lobata var. montana</i>	葛麻姆	Native	Climber	-	Common														*
<i>Pueraria lobata var. thomsonii</i>	粉葛	Exotic	Climber	-	Cultivated/ Naturalised					**									*
<i>Pueraria phaseoloides</i>	野葛	Native	Herb	-	Common													*	
<i>Rhaphiolepis indica</i>	車輪梅	Native	Shrub/Tree	-	Common					*		*					*	*	*
<i>Rhododendron pulchrum</i>	錦繡杜鵑	Exotic	Shrub	Cap.96	Cultivated/ Naturalised													*	*
<i>Rhodomyrtus tomentosa</i>	桃金娘	Native	Shrub	-	Common													**	
<i>Rhus chinensis</i>	鹽膚木	Native	Shrub/Tree	-	Common												**	*	
<i>Rhus hypoleuca</i>	白背鹽膚木	Native	Tree	-	Common													*	
<i>Rhus succedanea</i>	野漆樹	Native	Shrub/Tree	-	Common												*	***	
<i>Ricinus communis</i>	蓖麻	Exotic	Shrub	-	Cultivated/ Naturalised			*											
<i>Roystonea regia</i>	王棕	Exotic	Tree	-	Cultivated/ Naturalised														*
<i>Rubus parvifolius</i>	茅莓	Native	Shrub	-	Common			*		*		*					*	*	
<i>Rubus reflexus</i>	蛇泡筋	Native	Shrub	-	Common												*	*	
<i>Saccharum arundinaceum</i>	斑茅	Native	Herb	-	Common					*									
<i>Saccharum officinarum</i>	甘蔗	Exotic	Herb	-	Cultivated/ Naturalised			*											
<i>Sacciolepis indica</i>	囊穎草	Native	Herb	-	Common					*									
<i>Sageretia thea</i>	雀梅藤	Native	Shrub	-	Common					*									*
<i>Sansevieria trifasciata</i>	虎尾蘭	Exotic	Herb	-	Cultivated/ Naturalised														*
<i>Sapium discolor</i>	山烏柏	Native	Tree	-	Common												**		

Scientific Name	Chinese Name	Origin ²	Growth Form ¹	Conservation and Protection Status ²	Rarity ²	Habitat ³													
						PA		SA											
						WC	WG	AG	PO	MW	EIS WC	NON -EIS WC	GL	SWG	SL	WL	PL	WG	DA
<i>Sapium sebiferum</i>	烏柏	Native	Tree	-	Common			*								*			
<i>Saururus chinensis</i>	三白草	Native	Herb	-	Restricted			*											
<i>Schefflera arboricola</i>	鵝掌藤	Exotic	Shrub/Tree	-	Cultivated/ Naturalised						*								**
<i>Schefflera heptaphylla</i>	鴨腳木	Native	Shrub/Tree	-	Common					*			*		*	**			
<i>Schima superba</i>	木荷	Native	Shrub/Tree	-	Common											*			
<i>Scoparia dulcis</i>	野甘草	Exotic	Herb/Shrub	-	Cultivated/ Naturalised													**	
<i>Senna occidentalis</i>	望江南	Exotic	Shrub	-	Cultivated/ Naturalised		**											***	
<i>Sesbania cannabina</i>	田菁	Exotic	Herb	-	Cultivated/ Naturalised			*				*		**				**	
<i>Setaria pumila</i>	金色狗尾草	Native	Herb	-	Very common			*											
<i>Setaria verticillata</i>	倒刺狗尾草	Native	Herb	-	Restricted										*				
<i>Smilax china</i>	金剛藤	Native	Climbing vine	-	Common					*									
<i>Smilax glabra</i>	土茯苓	Native	Climbing vine	-	Common										**	*			
<i>Solanum americanum</i>	少花龍葵	Exotic	Herb	-	Cultivated/ Naturalised			*											
<i>Solanum melongena</i>	矮瓜	Exotic	Herb/Shrub	-	Cultivated/ Naturalised			*			*								
<i>Solanum torvum</i>	水茄	Exotic	Shrub	-	Cultivated/ Naturalised		*	*		*		*	*			*		*	
<i>Solena amplexicaulis</i>	茅瓜	Native	Vine	-	Common		**				*	*					*		*
<i>Spermacoce remota</i>	光葉豐花草	Exotic	Herb	-	-			*		*			**		*	*	*	*	*
<i>Spilanthes paniculata</i>	金鈕扣	Native	Herb	-	Common					*									
<i>Sporobolus fertilis</i>	鼠尾粟	Native	Herb	-	Common											*			**
<i>Stephania longa</i>	糞箕簕	Native	Vine	-	Common						*		*			**	*		*
<i>Sterculia lanceolata</i>	假蘋婆	Native	Tree	-	Common					*			*			**	*		
<i>Strophanthus divaricatus</i>	羊角拗	Native	Liana/Shrub	-	Common											*			
<i>Synedrella nodiflora</i>	金腰箭	Exotic	Herb	-	Cultivated/ Naturalised														*
<i>Syzygium cumini</i>	海南蒲桃	Exotic	Tree	-	Cultivated/ Naturalised														*
<i>Syzygium hancei</i>	韓氏蒲桃	Native	Shrub/Tree	-	Common											*			
<i>Syzygium jambos</i>	蒲桃	Exotic	Tree	-	Cultivated/ Naturalised			*		*			*						
<i>Tadehagi triquetrum</i>	葫蘆茶	Native	Shrub	-	Common										*	*			
<i>Taxodium distichum var. imbricatum</i>	池杉	Exotic	Tree	-	-					*									
<i>Tetracera asiatica</i>	錫葉藤	Native	Vine	-	Common					*					*	**			
<i>Themeda triandra</i>	黃芎草	-	-	-	-										*				
<i>Thevetia peruviana</i>	黃花夾竹桃	Exotic	Tree	-	Cultivated/ Naturalised														*

Scientific Name	Chinese Name	Origin ²	Growth Form ¹	Conservation and Protection Status ²	Rarity ²	Habitat ³													
						PA		SA											
						WC	WG	AG	PO	MW	EIS WC	NON -EIS WC	GL	SWG	SL	WL	PL	WG	DA
<i>Thysanolaena latifolia</i>	粽葉蘆	Native	Herb	-	Common						*	**				**			
<i>Tinospora sinensis</i>	中華青牛膽	Native	Vine	-	Common								*		*	**			*
<i>Trema tomentosa</i>	山黃麻	Native	Shrub/Tree	-	Common							*	*		**	**			*
<i>Tridax procumbens</i>	羽芒菊	Exotic	Herb	-	Cultivated/ Naturalised					**			*					*	**
<i>Typha angustifolia</i>	水燭	Exotic	Herb	-	Cultivated/ Naturalised								*						
<i>Uvaria macrophylla</i>	紫玉盤	Native	Shrub	-	Common					*						*			
<i>Vernonia cinerea</i>	夜香牛	Native	Herb	-	Common					**	*		*		*	*			
<i>Vitis balanseana</i>	小果葡萄	Native	Vine	-	Common			*					**			**			*
<i>Wedelia trilobata</i>	三裂葉蟛蜞菊	Exotic	Herb	-	Cultivated/ Naturalised			**		**			*	*	*	**	*	*	***
<i>Wikstroemia indica</i>	了哥王	Native	Shrub	-	Common											*			
<i>Youngia japonica</i>	黃鶉菜	Native	Herb	-	Common			*		*		*					*		*
<i>Zanthoxylum avicennae</i>	筍櫨	Native	Tree	-	Common					*						**			
<i>Zanthoxylum nitidum</i>	兩面針	Native	Shrub	-	Common					*			*		**	**			*
<i>Ziziphus mauritiana</i>	滇刺棗	Exotic	Tree	-	Cultivated/ Naturalised													*	
Total number of species					379	11	26	116	14	124	48	116	124	48	92	140	63	67	151

Notes:

- Grow form and origin follows AFCD (2012).
 - Conservation and protection status refers to AFCD (2007, 2008, 2009, 2011), Corlett *et al.* (2000), IUCN (2026), Threatened Species List of China's Higher Plants (TSLCHP) (Qin *et al.*, 2007), List of Rare and Precious Plants of Hong Kong (AFCD, 2023), China Red Data Book (AFCD, 2003), Xing *et al.* (2000), Cap. 96, Cap. 96A and Cap. 586.
 - Conservation status by TSLCHP (Qin *et al.*, 2007): VU = Vulnerable; EN = Endangered.
 - Cap. 96 = Forests and Countryside Ordinance.
 - Cap. 586 = Protection of Endangered Species of Animals and Plants Ordinance.

In this study, plant species is regarded as plant species of conservation importance if it is protected under Cap. 96A, Cap. 586, documented as rare/protected species in AFCD (2003), or its wild population (i.e. not cultivated/exotic specimens) has conservation status of Vulnerable or higher under international or regional conservation inventory (e.g. IUCN Red List of Threatened Species, China Red Data Book, Threatened Species of China's Higher Plants).
 - Location and Habitat: PA = Proposed Alignment, EIS = Ecologically Important Stream, SA = Study Area, AG = Agricultural Land, PO = Pond, MW = Mitigation Wetland, WC = Watercourse, GL = Grassland, SWG = Seasonally Wet Grassland, SL = Shrubland, WL = Woodland, PL = Plantation, WG = Waste Ground, DA = Developed Area.
- Code for Relative Abundance: ****= Abundant, *** = Frequent, ** = Occasional, * = Scarce

Appendix 2

Max Count of Mammals Recorded

Species	Conservation and Protection Status ¹	Distribution in Hong Kong ²	Status in Hong Kong ²	Habitat ³														
				PA				SA										
				WC	WG	AG	PO	MW	EISWC	NON-EISWC	GL	SWG	SL	WL	PL	WG	DA	IF
Short-nosed Fruit Bat <i>Cynopterus sphinx</i>	Cap.170	Widespread	Very Common														3	3
Chinese Horseshoe Bat <i>Rhinolophus sinicus</i>	Cap.170	Widespread	Very Common															*
Intermediate Horseshoe Bat <i>Rhinolophus affinis</i>	Cap.170	Widespread	Uncommon															*
Least Horseshoe Bat <i>Rhinolophus pusillus</i>	PRC (RC); Cap.170	Widespread	Uncommon							1								*
Himalayan Leaf-nosed Bat <i>Hipposideros armiger</i>	(LC); Cap.170	Widespread	Very Common							3								*
Andersen's Leaf-nosed Bat <i>Hipposideros gentilis</i>	(LC); Cap.170	Widespread	Very Common							1								
Miniopterus sp. -	-	-	-															*
Chinese Noctule <i>Nyctalus plancyi</i>	PRC (RC); Cap.170	Widespread	Common															*
Japanese Pipistrelle <i>Pipistrellus abramus</i>	Cap.170	Widespread	Very Common															*
Least Pipistrelle <i>Pipistrellus tenuis</i>	Cap.170	Localised	Uncommon															*
Chinese Pipistrelle <i>Hypsugo pulveratus</i>	(LC); Cap.170	Localised	Rare															*
Lesser Bamboo Bat <i>Tylonycteris fulvida</i>	(LC); Cap.170	Widespread	Very Common															*
Lesser Yellow Bat <i>Scotophilus kuhlii</i>	(LC); Cap.170	Widespread	Uncommon															*
Pallas's Squirrel <i>Callosciurus erythraeus</i>	Cap.170	Widespread	Common					1									1	
Indochinese Forest Rat <i>Rattus andamanensis</i>	-	Widespread	Very Common														1	
East Asian Porcupine <i>Hystrix brachyura</i>	PGC; Cap.170	Widespread	Very Common												1			
Red Muntjac <i>Muntiacus vaginalis</i>	PRC	Widespread	Very Common												1		1	
Total no. of species recorded			17	0	0	0	0	1	0	3	0	0	0	2	0	1	3	12

Notes:

- Conservation and protection status refers to The State of Hong Kong Biodiversity 2025 (Or and Chan, 2025), Fellowes *et al.* (2002), China's Red List of Biodiversity – Vertebrates (2020) (RLCV) (MEEPRC and CAS, 2023), List of Wild Animals with China State Major Protection Status (2021) (CSMPS), IUCN (2026), CITES (2026), Cap. 170 and Cap. 586.
 - Conservation status by Fellowes *et al.* (2002): LC = Local Concern; PRC = Potential Regional Concern; RC = Regional Concern; PGC = Potential Global Concern. Letters in parentheses indicate that the assessment is on the basis of restrictedness in breeding and/or roosting sites rather than in general occurrence.
 - Protection status by CITES (2026): III = listed in CITES Appendix III.
 - Cap. 170 = Wild Animals Protection Ordinance.
 - Cap. 586 = Protection of Endangered Species of Animals and Plants Ordinance.
- Distribution and rarity are inferred based on the information available on HKBIH website (AFCD, 2024) and Shek (2006).
- Location and Habitat: PA = Proposed Alignment, EIS = Ecologically Important Stream, SA = Study Area, AG = Agricultural Land, PO = Pond, MW = Mitigation Wetland, WC = Watercourse, GL = Grassland, SWG = Seasonally Wet Grassland, SL = Shrubland, WL = Woodland, PL = Plantation, WG = Waste Ground, DA = Developed Area, IF = In Flight.
- Species considered as of conservation importance in this study are indicated in bold type.
- * Indicates species recorded but abundance not certain.

Appendix 3

Max Count of Avifauna Recorded

Species	Conservation and Protection Status ¹	Distribution in Hong Kong ²	Status in Hong Kong ²	Habitat ³														
				PA		SA												
				WC	WG	AG	PO	MW	EISWC	NON-EISWC	GL	SWG	SL	WL	PL	WG	DA	IF
Eurasian Teal <i>Anas crecca</i>	RC; HR	Localised	Abundant								1							
House Swift* <i>Apus nipalensis</i>	HR(B)	Widespread	Abundant														8	30
Greater Coucal <i>Centropus sinensis</i>	CSMPS(II)	Widespread	Common			1					1	2	1	1		1		
Asian Koel <i>Eudynamis scolopaceus</i>	-	Widespread	Abundant											1	1			
Rock Dove <i>Columba livia</i>	-	Widespread	Common			2												
Spotted Dove <i>Spilopelia chinensis</i>	-	Widespread	Abundant			32		2					4	2	1	1	5	
White-breasted Waterhen <i>Amauromis phoenicurus</i>	-	Widespread	Common			3		2		2		1					1	
Green Sandpiper <i>Tringa ochropus</i>	-	Localised	Uncommon							1								
Wood Sandpiper <i>Tringa glareola</i>	LC; HR	Localised	Common							1								
Black-crowned Night Heron <i>Nycticorax nycticorax</i>	(LC)	Widespread	Abundant							2		1						
Chinese Pond Heron <i>Ardeola bacchus</i>	PRC (RC)	Widespread	Common			1		3		1								
Grey Heron <i>Ardea cinerea</i>	PRC; MR	Widespread	Abundant															1
Great Egret <i>Ardea alba</i>	PRC (RC)	Widespread	Abundant							1								
Little Egret <i>Egretta garzetta</i>	PRC (RC)	Widespread	Abundant			1		2	1	2				1				
Crested Serpent Eagle <i>Spilornis cheela</i>	(LC); CSMPS(II); CITES(II); Cap.586	Widespread	Common															1
Crested Goshawk <i>Lophospiza trivirgata</i>	CITES(II); CSMPS(II); Cap.586	Widespread	Common															1
Besra <i>Tachyspiza virgata</i>	CSMPS(II); CITES(II); Cap.586	Widespread	Common											1				
Eastern Buzzard <i>Buteo japonicus</i>	CSMPS(II); CITES(II); Cap.586	Widespread	Common															1
Collared Scops Owl <i>Otus lettia</i>	CSMPS(II); CITES(II); Cap.586	Widespread	Common										1	3	1			
Hair-crested Drongo <i>Dicrurus hottentottus</i>	-	Widespread	Common								1		1			1	1	
Black Drongo* <i>Dicrurus macrocerus</i>	HR(B)	Widespread	Common										2					
Long-tailed Shrike <i>Lanius schach</i>	MR	Localised	Common			1												
Red-billed Blue Magpie <i>Urocissa erythroryncha</i>	-	Widespread	Common					1							1		1	
Oriental Magpie <i>Pica serica</i>	HR	Widespread	Common								1							
Collared Crow <i>Corvus torquatus</i>	LC; MR; IUCN(VU)	Localised	Common															2
Large-billed Crow <i>Corvus macrorhynchos</i>	-	Widespread	Common											1				2

Species	Conservation and Protection Status ¹	Distribution in Hong Kong ²	Status in Hong Kong ²	Habitat ³															
				PA		SA													
				WC	WG	AG	PO	MW	EISWC	NON-EISWC	GL	SWG	SL	WL	PL	WG	DA	IF	
Japanese Tit <i>Parus minor</i>	-	Widespread	Abundant									8		1	13	2		3	
Chestnut Bulbul <i>Hemixos castanonotus</i>	-	Localised	Common											9					
Chinese Bulbul <i>Pycnonotus sinensis</i>	-	Widespread	Abundant			2							1		1				
Red-whiskered Bulbul <i>Pycnonotus jocosus</i>	-	Widespread	Abundant		3	64		4			3	10	3	30	70	2		19	
Barn Swallow <i>Hirundo rustica</i>	-	Widespread	Common																2
Mountain Tailorbird <i>Phyllergates cucullatus</i>	-	Widespread	Common												3				
Yellow-browed Warbler <i>Phylloscopus inornatus</i>	-	Widespread	Common					2				2		3	5	4	1	4	
Pallas's Leaf Warbler <i>Phylloscopus proregulus</i>	-	Widespread	Common									2			2			2	
Dusky Warbler <i>Phylloscopus fuscatus</i>	-	Widespread	Common			3		2		1				1	2	1	1	2	
Pale-legged Leaf Warbler <i>Phylloscopus tenellipes</i>	-	Widespread	Common											1	1				
Yellow-bellied Prinia <i>Prinia flaviventris</i>	-	Widespread	Common			1		1		1	3			2	1		2	1	
Plain Prinia <i>Prinia inornata</i>	-	Localised	Common					1					1				1		
Common Tailorbird <i>Orthotomus sutorius</i>	-	Widespread	Common			5		4			3			10	12	4		3	
Swinhoe's White-eye <i>Zosterops simplex</i>	-	Widespread	Abundant			12		4			10			30	25	12		12	
Rufous-capped Babbler <i>Cyanoderma ruficeps</i>	LC	Localised	Common												3				
Black-throated Laughingthrush <i>Pterorhinus chinensis</i>	CSMPS(II)	Widespread	Common								1			5	3	7			
Masked Laughingthrush <i>Pterorhinus perspicillatus</i>	-	Localised	Common			4		3		2	5			3	6	3		3	
Crested Myna <i>Acridotheres cristatellus</i>	-	Widespread	Abundant			69												5	
Common Myna <i>Acridotheres tristis</i>	-	Localised	Common			2											2	5	
Black-collared Starling <i>Gracupica nigricollis</i>	-	Widespread	Common			30					2						2	3	
Eyebrowed Thrush <i>Turdus obscurus</i>	-	Widespread	Uncommon												1				
Oriental Magpie Robin <i>Copsychus saularis</i>	-	Widespread	Abundant			3		1			1			3	2	2		5	
Blue whistling Thrush <i>Myophonus caeruleus</i>	-	Widespread	Common													1			
Red-throated Flycatcher <i>Ficedula albicilla</i>	-	Localised	Common					1								1		1	
Daurian Redstart <i>Phoenicurus auroreus</i>	-	Localised	Common			2		1		1							1		
Amur Stonechat <i>Saxicola stejnegeri</i>	-	Widespread	Common			2											2		
Scarlet-backed Flowerpecker <i>Dicaeum cruentatum</i>	-	Widespread	Common			1								4	3	1			
Fork-tailed Sunbird <i>Aethopyga christinae</i>	-	Widespread	Abundant					1							1				

Species	Conservation and Protection Status ¹	Distribution in Hong Kong ²	Status in Hong Kong ²	Habitat ³															
				PA		SA													
				WC	WG	AG	PO	MW	EISWC	NON-EISWC	GL	SWG	SL	WL	PL	WG	DA	IF	
Eurasian Tree Sparrow <i>Passer montanus</i>	-	Widespread	Abundant		2	30											6	12	
Scaly-breasted Munia <i>Lonchura punctulata</i>	-	Localised	Common			8								7			40		
White-rumped Munia <i>Lonchura striata</i>	-	Localised	Common											2					
Eastern Yellow Wagtail <i>Motacilla tschutschensis</i>	-	Widespread	Common														2		
Grey Wagtail <i>Motacilla cinerea</i>	-	Widespread	Common								1			1	1			2	
White Wagtail <i>Motacilla alba</i>	-	Widespread	Common			2		1		4							1	1	
Olive-backed Pipit <i>Anthus hodgsoni</i>	-	Widespread	Common			1					2								
Total no. of species recorded			61	0	2	25	0	18	1	17	14	6	21	25	17	14	22	8	

Notes:

- All wild birds are Protected under Wild Animals Protection Ordinance (Cap. 170).
- Conservation and protection status refers to The State of Hong Kong Biodiversity 2025 (Or and Chan, 2025), Fellowes *et al.* (2002), China's Red List of Biodiversity – Vertebrates (2020) (RLCV) (MEEPRC and CAS, 2023), List of Wild Animals with China State Major Protection Status (2021) (CSMPS), IUCN (2026), CITES (2026), Cap. 170 and Cap. 586.
 - Conservation status by The State of Hong Kong Biodiversity 2025 (Or and Chan, 2025): HR = High Risk of Extinction in Hong Kong species status assessment; MR = Moderate Risk of Extinction in Hong Kong species status assessment. Letters in parentheses specify the population of migratory birds: B = Breeding population.
 - Conservation status by Fellowes *et al.* (2002): LC = Local Concern; PRC = Potential Regional Concern; RC = Regional Concern. Letters in parentheses indicate that the assessment is on the basis of restrictedness in breeding and/or roosting sites rather than in general occurrence.
 - Protection status by CSMPS: II = Class II Protected Species in China.
 - Conservation status by IUCN (2026): VU = Vulnerable.
 - Protection status by CITES (2026): II = Listed in Appendix II of CITES.
 - Cap. 586 = Protection of Endangered Species of Animals and Plants Ordinance.
- Distribution and rarity are inferred based on the information in the latest Hong Kong Bird Report published by HKBWS.
- Location and Habitat: PA = Proposed Alignment, EIS = Ecologically Important Stream, SA = Study Area, AG = Agricultural Land, PO = Pond, MW = Mitigation Wetland, WC = Watercourse, GL = Grassland, SWG = Seasonally Wet Grassland, SL = Shrubland, WL = Woodland, PL = Plantation, WG = Waste Ground, DA = Developed Area, IF = In Flight.
- Species considered as of conservation importance in this study are indicated in bold type.
- * Indicates the species is not regarded as of conservation importance, since its conservation status is based on the breeding population only, and there is no indication that the observed individuals are breeding.

Appendix 4

Max Count of Amphibians Recorded

Species	Conservation and Protection Status	Distribution in Hong Kong ¹	Status in Hong Kong ¹	Habitat ³													
				PA		Study Area											
				WC	WG	AG	MW	PO	EISWC	NON-EIS WC	GL	SWG	SL	WL	PL	WG	DA
Asian Common Toad <i>Duttaphrynus melanostictus</i>	-	Very Common	Widespread			1							1				5
Spotted Narrow-mouthed Frog <i>Kalophrynus interlineatus</i>	-	Common	Isolated			1											
Asiatic Painted Frog <i>Kaloula pulchra</i>	-	Very Common	Widespread			2											1
Butler's Pigmy Frog <i>Microhyla butleri</i>	-	Common	Widespread				50										
Ornate Pigmy Frog <i>Microhyla fissipes</i>	-	Common	Widespread			3	35			3		5			30	1	
Paddy Frog <i>Fejervarya multistriata</i>	-	Very Common	Widespread		4	6	5			50			1				
Lesser Spiny Frog <i>Quasipaa exilispinosa</i>	PGC; RLCV(VU)	Common	Widespread							1							
Günther's Frog <i>Sylvirana guentheri</i>	-	Very Common	Widespread				1										
Brown Wood Frog <i>Hylarana latouchii</i>	LC	Common	Localised	1						15	3					1	
Brown Tree Frog <i>Polypedates megacephalus</i>	-	Very Common	Widespread			2	2			2			1				2
Greenhouse Frog <i>Eleutherodactylus planirostris</i>	-	Not Evaluated	Widespread			2					1		1	5	5	1	7
Total no. of species recorded			11	1	1	7	5	0	1	6	0	1	4	1	2	3	4

Notes:

- Conservation and protection status refers to The State of Hong Kong Biodiversity 2025 (Or and Chan, 2025), Fellowes *et al.* (2002), China's Red List of Biodiversity – Vertebrates (2020) (RLCV) (MEEPRC and CAS, 2023), List of Wild Animals with China State Major Protection Status (2021) (CSMPs), IUCN (2026), CITES (2026), Cap. 170 and Cap. 586.
 - Conservation status by Fellowes *et al.* (2002): LC = Local Concern; PGC = Potential Global Concern. Letters in parentheses indicate that the assessment is on the basis of restrictedness in breeding and/or roosting sites rather than in general occurrence.
 - Conservation status by RLCV: VU = Vulnerable.
- Distribution and rarity are inferred based on the information available on HKBIH website (AFCD, 2024) and Chan *et al.* (2005).
- Location and Habitat: PA = Proposed Alignment, EIS = Ecologically Important Stream, SA = Study Area, AG = Agricultural Land, PO = Pond, MW = Mitigation Wetland, WC = Watercourse, GL = Grassland, SWG = Seasonally Wet Grassland, SL = Shrubland, WL = Woodland, PL = Plantation, WG = Waste Ground, DA = Developed Area.

Appendix 5

Max Count of Reptiles Recorded

Species	Conservation and Protection Status ¹	Distribution in Hong Kong ²	Status in Hong Kong ²	Habitat ³														
				PA		Study Area												
				WC	WG	AG	PO	MW	EIS WC	NON-EIS WC	GL	SWG	SL	WL	PL	WG	DA	
Changeable Lizard <i>Calotes wangii</i>	-	Common	Widespread										1	1				
Long-tailed Skink <i>Eutropis longicaudata</i>	-	Common	Widespread										1				1	
Brown Forest Skink <i>Sphenomorphus ingognitus</i>	-	-	Localised							1								
Four-clawed Gecko <i>Gehyra mutilata</i>	RLCV(VU)	Uncommon	Widespread														6	
Chinese Gecko <i>Gekko chinensis</i>	-	Common	Widespread										2	2				
Tokay Gecko <i>Gekko gecko</i>	RC; RLCV(CR); CITES(II); CSMPS(II); Cap.586	-	Isolated														1	
Bowring's Gecko <i>Hemidactylus bowringii</i>	-	Very Common	Widespread										2	1			2	
Garnot's Gecko <i>Hemidactylus garnotii</i>	-	-	Widespread														4	
Common Rat Snake <i>Ptyas mucosa</i>	PRC; RLCV(EN); CITES(II); Cap.586	-	Widespread								1							
Checkered Keelback <i>Fowlea flavipunctata</i>	-	-	Localised								1							
Bamboo Snake <i>Trimeresurus albolabris</i>	-	Very Common	Widespread										1					
Total no. of species recorded			11	0	0	0	0	0	0	1	2	0	0	5	3	0	0	5

Notes:

- Conservation and protection status refers to The State of Hong Kong Biodiversity 2025 (Or and Chan, 2025), Fellowes *et al.* (2002), China's Red List of Biodiversity – Vertebrates (2020) (RLCV) (MEEPRC and CAS, 2023), List of Wild Animals with China State Major Protection Status (2021) (CSMPS), IUCN (2026), CITES (2026), Cap. 170 and Cap. 586.
 - Conservation status by Fellowes *et al.* (2002): RC = Regional Concern; PRC = Potential Regional Concern. Letters in parentheses indicate that the assessment is on the basis of restrictedness in breeding and/or roosting sites rather than in general occurrence.
 - Conservation status by RLCV: CR = Critically Endangered; EN = Endangered; VU = Vulnerable.
 - Protection status by CSMPS: II = Class II Protected Species in China.
 - Protection status by CITES (2026): II = Listed in CITES Appendix II.
 - Cap. 586 = Protection of Endangered Species of Animals and Plants Ordinance.
- Distribution and rarity are inferred based on the information available on HKBIH website (AFCD, 2024) and Karsen *et al.* (1998).
- Location and Habitat: PA = Proposed Alignment, EIS = Ecologically Important Stream, SA = Study Area, AG = Agricultural Land, PO = Pond, MW = Mitigation Wetland, WC = Watercourse, GL = Grassland, SWG = Seasonally Wet Grassland, SL = Shrubland, WL = Woodland, PL = Plantation, WG = Waste Ground, DA = Developed Area.
- Species considered as of conservation importance in this study are indicated in bold type.
- * Indicates the species is not regarded as of conservation importance as it is considered a released individual, not naturally occurring.

Appendix 6

Max Count of Butterflies Recorded

Species	Conservation and Protection Status ¹	Distribution in Hong Kong ²	#Status in Hong Kong ²	Habitat ³														
				PA		SA												
				WC	WG	AG	PO	MW	EIS WC	NON-EIS WC	GL	SWG	SL	WL	PL	WG	DA	
Grey Scrub Hopper <i>Aeromachus jhora</i>	-	Widespread	Rare								1							
Bush Hopper <i>Ampittia dioscorides</i>	-	Widespread	Uncommon		1	1		5		1	1		1					
Forest Hopper <i>Astictopterus jama</i>	-	Widespread	Common										1					
Grass Demon <i>Udaspes folus</i>	-	Widespread	Rare					1										
Tree Flitter <i>Hyarotis adrastus</i>	-	Widespread	Uncommon											2				
Chinese Dart <i>Potanthus confucius</i>	-	Widespread	Uncommon		1										1			
Formosan Swift <i>Borbo cinnara</i>	-	Widespread	Common			1					1		1	1		2	1	
Contiguous Swift <i>Polytremis lubricans</i>	-	Widespread	Common												2			
Dark Swift <i>Caltoris cahira</i>	-	Widespread	Rare					2										
Toothed Sunbeam <i>Curetis acuta</i>	-	Widespread	Uncommon										1					
Silver Streak Blue <i>Iraota timoleon</i>	-	Widespread	Uncommon											1				
Peacock Royal <i>Tajuria cippus</i>	LC	Widespread	Rare										1					
Fluffy Tit <i>Zeltus amasa</i>	-	Widespread	-									1		1	6		1	
Slate Flash <i>Rapala manea</i>	-	Widespread	Common											1				
Purple Sapphire <i>Heliophorus epicles</i>	-	Widespread	Common			2		1				4	1			1	2	1
Transparent 6-line Blue <i>Nacaduba kurava</i>	-	Widespread	Common											1	12			
Tailless Line Blue <i>Prosotas dubiosa</i>	-	Widespread	Vagrant			2		2										
Dark Cerulean <i>Jamides bochus</i>	-	Widespread	Common		3			1	1	2			3	12	2		4	
Metallic Cerulean <i>Jamides alecto</i>	-	Widespread	Very Rare			5		1				4	1	7	9	11		4
Common Cerulean <i>Jamides celeno</i>	-	Widespread	Rare			1						2		2	6			
Forget-me-not <i>Catochrysops strabo</i>	-	Widespread	Very Rare											2	1		1	
Long-tailed Blue <i>Lampides boeticus</i>	-	Widespread	Common														1	
Pale Grass Blue <i>Zizeeria maha</i>	-	Widespread	Very Common		2	2		6		2			1	5	1	2	3	3
Lesser Grass Blue <i>Zizina otis</i>	-	Widespread	Common			1									1			1
Tiny Grass Blue <i>Zizula hylax</i>	-	Widespread	Very Rare		1	1		5		1	1			4	1	5	1	1
Tailed Cupid <i>Everes lacturnus</i>	-	Widespread	Common					1						2				

Species	Conservation and Protection Status ¹	Distribution in Hong Kong ²	#Status in Hong Kong ²	Habitat ³													
				PA		SA											
				WC	WG	AG	PO	MW	EIS WC	NON-EIS WC	GL	SWG	SL	WL	PL	WG	DA
Common Hedge Blue <i>Acyrtodes puspa</i>	-	Widespread	Common											1	1		
Plum Judy <i>Abisara echerius</i>	-	Widespread	Very Common			1		1				1		1	1		1
Punchinello <i>Zemeros flegyas</i>	-	Widespread	Common			1									1		
Common Evening Brown <i>Melanitis leda</i>	-	Widespread	Common					1				1					
Dark Evening Brown <i>Melanitis phedima</i>	-	Widespread	Uncommon			1		1				2		1	1		
Banded Tree Brown <i>Lethe confusa</i>	-	Widespread	Common											2	1		
Dark-brand Bush Brown <i>Mycalesis mineus</i>	-	Widespread	Very Common			1		2				6	1	6	10	4	3
South China Bush Brown <i>Mycalesis mucianus</i>	-	Widespread	Common			1						2			2		
Common Palmfly <i>Elymnias hypermnestra</i>	-	Widespread	Common			2					1	1	1				1
Common Five-ring <i>Ypthima baldus</i>	-	Widespread	Very Common			1		1			1			5	3	2	
Straight Five-ring <i>Ypthima lisandra</i>	-	Widespread	Common												1		
Common Tiger <i>Danaus genutia</i>	-	Widespread	Common											1	2	2	
Plain Tiger <i>Danaus chrysippus</i>	-	Widespread	Uncommon		1			1				1		3		2	2
Blue Tiger <i>Tirumala limniace</i>	-	Widespread	Common												2		1
Glassy Tiger <i>Parantica aglea</i>	-	Widespread	Common											1	1		
Ceylon Blue Glassy Tiger <i>Ideopsis similis</i>	-	Widespread	Very Common												1		
Blue-spotted Crow <i>Euploea midamus</i>	-	Widespread	Very Common			3		2				1	1	3	1	3	
Common Indian Crow <i>Euploea core</i>	-	Widespread	Common												1		
Striped Blue Crow <i>Euploea mulciber</i>	-	Widespread	Uncommon												1		
Common Duffer <i>Discophora sondaica</i>	-	Widespread	Uncommon									1				1	1
Rustic <i>Cupha erymanthis</i>	-	Widespread	Very Common											1	4		1
Great Egg-fly <i>Hypolimnas bolina</i>	-	Widespread	Common			3		3			1	2		3	2	5	2
Blue Admiral <i>Kaniska canace</i>	-	Widespread	Common														1
Lemon Pansy <i>Junonia lemonias</i>	-	Widespread	Common					1						5	5		
Chocolate Pansy <i>Junonia iphita</i>	-	Widespread	Common													1	
Common Jester <i>Symbrenthia lilaea</i>	-	Widespread	Common											1	2		
Tawny Rajah <i>Charaxes bernardus</i>	-	Widespread	Common					1									
Red-ring Skirt <i>Hestina assimilis</i>	-	Widespread	Common					1									1

Species	Conservation and Protection Status ¹	Distribution in Hong Kong ²	#Status in Hong Kong ²	Habitat ³													
				PA		SA											
				WC	WG	AG	PO	MW	EIS WC	NON-EIS WC	GL	SWG	SL	WL	PL	WG	DA
Common Mapwing <i>Cyrestis thyodamas</i>	-	Widespread	Common												1		
Angled Castor <i>Ariadne ariadne</i>	-	Widespread	Common			4		1				1	1		1		3
White-edged Blue Baron <i>Euthalia phemius</i>	-	Widespread	Common										1	2			
Common Archduke <i>Lexias pardalis</i>	-	Widespread	Suspected Species												1		
Five-dot Sergeant <i>Limenitis sulphita</i>	-	Widespread	Common					1					1	1			
Staff Sergeant <i>Athyma selenophora</i>	-	Widespread	Common											2			
Colour Sergeant <i>Athyma nefte</i>	-	Widespread	Common										1	1			
Common Sailer <i>Neptis hylas</i>	-	Widespread	Very Common		1	1		2			2	1	4	5	1	3	2
Southern Sullied Sailer <i>Neptis clinia</i>	-	Widespread	Common										2	3			
Short-banded Sailer <i>Phaedyma columella</i>	-	Widespread	Common			1					1		1	1	1	1	
Common Birdwing <i>Troides helena</i>	CITES(II); CSMPS(II); Cap. 170; Cap.586	Widespread	Uncommon												1		
Common Mime <i>Papilio clytia</i>	-	Widespread	Common			1										1	
Common Mormon <i>Papilio polytes</i>	-	Widespread	Very Common		1	4		6		2	3	1	13	8	1	1	6
Red Helen <i>Papilio helenus</i>	-	Widespread	Very Common			1		3					1	2	1		1
Spangle <i>Papilio protenor</i>	-	Widespread	Very Common			1		1		1			2	2			1
Great Mormon <i>Papilio memnon</i>	-	Widespread	Very Common			1		2		1	1	1	1	5	2	1	
Chinese Peacock <i>Papilio bianor</i>	-	Widespread	Common			1		1						1			
Paris Peacock <i>Papilio paris</i>	-	Widespread	Very Common					1		1				2			
Lime Butterfly <i>Papilio demoleus</i>	-	Widespread	Common			1							1			1	
Swallowtail <i>Papilio xuthus</i>	-	Widespread	Rare			3					1	1				1	1
Common Bluebottle <i>Graphium sarpedon</i>	-	Widespread	Very Common			1				6				2			1
Common Jay <i>Graphium doson</i>	-	Widespread	Common			1				1			1	1	1		
Tailed Jay <i>Graphium agamemnon</i>	-	Widespread	Common										1	1			1
Five-bar Swordtail <i>Graphium antiphates</i>	-	Widespread	Common										1			1	
Lemon Emigrant <i>Catopsilia pomona</i>	-	Widespread	Common		3	6		2				1	1	4	1	13	3
Small Grass Yellow <i>Eurema brigitta</i>	LC	Isolated	Rare										1				
Common Grass Yellow <i>Eurema hecabe</i>	-	Widespread	Very Common		4	3		3		1	3	2	15	10		7	3
Three-spot Grass Yellow <i>Eurema blanda</i>	-	Widespread	Common		1												

Species	Conservation and Protection Status ¹	Distribution in Hong Kong ²	#Status in Hong Kong ²	Habitat ³													
				PA		SA											
				WC	WG	AG	PO	MW	EIS WC	NON-EIS WC	GL	SWG	SL	WL	PL	WG	DA
Yellow Orange Tip <i>Ixias pyrene</i>	-	Widespread	Uncommon												1		
Red-base Jezebel <i>Delias pasithoe</i>	-	Widespread	Very Common			2		4				3	3	2	1	1	4
Painted Jezebel <i>Delias hyparete</i>	-	Widespread	Uncommon										2				1
Common Gull <i>Cepora nerissa</i>	-	Widespread	Common					1									
Small Cabbage White <i>Pieris rapae</i>	-	Widespread	Rare		1	12		1									
Indian Cabbage White <i>Pieris canidia</i>	-	Widespread	Very Common		6	15		4			1	2	1	1		12	3
Great Orange Tip <i>Hebomoia glaucippe</i>	-	Widespread	Common									1	2	6			
Total no. of species recorded			89	0	13	13	0	13	1	15	1	16	50	57	24	23	29

Notes:

- Conservation and protection status refers to The State of Hong Kong Biodiversity 2025 (Or and Chan, 2025), Fellowes *et al.* (2002), China's Red List of Biodiversity – Vertebrates (2020) (RLCV) (MEEPRC and CAS, 2023), List of Wild Animals with China State Major Protection Status (2021) (CSMPS), IUCN (2026), CITES (2026), Cap. 170 and Cap. 586.
 - Conservation status by Fellowes *et al.* (2002): LC = Local Concern.
 - Protection status by CSMPS: II = Class II Protected Species in China.
 - Protection status by CITES (2026): II = Listed in CITES Appendix II.
 - Cap. 170 = Wild Animals Protection Ordinance.
 - Cap. 586 = Protection of Endangered Species of Animals and Plants Ordinance.
- Distribution is inferred based on the information available on HKBIH website (AFCD, 2024), rarity follows Chan *et al.* (2011) and Chan *et al.* (2018).
- Location and Habitat: PA = Proposed Alignment, EIS = Ecologically Important Stream, SA = Study Area, AG = Agricultural Land, PO = Pond, MW = Mitigation Wetland, WC = Watercourse, GL = Grassland, SWG = Seasonally Wet Grassland, SL = Shrubland, WL = Woodland, PL = Plantation, WG = Waste Ground, DA = Developed Area.
- Species considered as of conservation importance in this study are indicated in bold type.

Appendix 7

Max Count of Odonates Recorded

Species	Conservation and Protection Status ¹	Distribution in Hong Kong ²	#Status in Hong Kong ²	Habitat ³															
				PA				SA											
				WC	WG	AG	PO	MW	EISWC	NON-EIS WC	GL	swg	SL	WL	PL	WG	DA	IF	
Common Blue Jewel <i>Helioocypha perforata</i>	-	Widespread	Abundant							3	2								
Orange-tailed Midget <i>Agriocnemis femina</i>	-	Isolated	Abundant			1		1											
Wandering Midget <i>Agriocnemis pygmaea</i>	-	Localised	Common												1				
Orange-tailed Sprite <i>Ceriagrion auranticum</i>	-	Widespread	Abundant								2								
Common Bluetail <i>Ischnura senegalensis</i>	-	Widespread	Abundant					10											
Orange-faced Sprite <i>Pseudagrion rubriceps</i>	-	Localised	Common						2										
Black-banded Gossamerwing <i>Euphaea decorata</i>	-	Widespread	Abundant							3									
Yellow Featherlegs <i>Copera marginipes</i>	-	Widespread	Abundant			2				60	30								
Black Threadtail <i>Prodasineura autumnalis</i>	-	Widespread	Abundant							6	2								
Black-kneed Featherlegs <i>Pseudocopera ciliata</i>	-	Widespread	Common								1								
Pale-spotted Emperor <i>Anax guttatus</i>	-	Widespread	Common					1											
Common Flangetail <i>Ictinogomphus pertinax</i>	-	Widespread	Common			1		1	2	1									
Blue dasher <i>Brachydiplax chalybea</i>	-	Widespread	Common					2											
Crimson Darter <i>Crocothemis servilia</i>	-	Localised	Abundant			1													
Amber-winged Glider <i>Hydrobasileus croceus</i>	-	Localised	Common						1				1						
Black Marsh Skimmer <i>Indothemis carnatica</i>	-	Vagrant	Vagrant					1											
Forest Chaser <i>Lyriothemis elegantissima</i>	-	Widespread	Common													1			
Russet Percher <i>Neurothemis fulvia</i>	-	Widespread	Common			1		5		1			1		1	2			
Pied Percher <i>Neurothemis tullia</i>	-	Localised	Abundant					2											
Red-faced Skimmer <i>Orthetrum chrysis</i>	-	Widespread	Abundant			1		1	2					1					
Common Blue Skimmer <i>Orthetrum glaucum</i>	-	Widespread	Abundant		1	3		2	3	2			3	4					
Common Red Skimmer <i>Orthetrum pruinosum neglectum</i>	-	Widespread	Abundant		3	4		1	10	3		1	1		1	1			
Green Skimmer <i>Orthetrum sabina</i>	-	Widespread	Abundant		1	3		2	1						1	1			
Wandering Glider <i>Pantala flavescens</i>	-	Widespread	Abundant		2	3		10				20	50	36	5	2	10	13	30
Pied Skimmer <i>Pseudothemis zonata</i>	-	Widespread	Common										1						
Variegated Flutterer <i>Rhyothemis variegata arria</i>	-	Localised	Common					3				1							

Species	Conservation and Protection Status ¹	Distribution in Hong Kong ²	#Status in Hong Kong ²	Habitat ³														
				PA		SA												
				WC	WG	AG	PO	MW	EISWC	NON-EIS WC	GL	SWG	SL	WL	PL	WG	DA	IF
Crimson Dropwing <i>Trithemis aurora</i>	-	Widespread	Abundant			1		2	3	2						1		
Indigo Dropwing <i>Trithemis festiva</i>	-	Widespread	Abundant			1		1	4	7			1	1				
Emerald Cascader <i>Zygonyx iris</i>	PGC	Widespread	Abundant										3			1		
Regal Pond Cruiser <i>Epophthalmia elegans</i>	-	Localised	Common							1								
Club-tailed Cruiser <i>Macromia urania</i>	GC	Localised	Common										1					
Total no. of species recorded			30	0	4	12	0	16	13	12	1	3	9	4	3	3	7	1

Notes:

- Conservation status refers to The State of Hong Kong Biodiversity 2025 (Or and Chan, 2025), Fellowes *et al.* (2002), China's Red List of Biodiversity – Vertebrates (2020) (RLCV) (MEEPRC and CAS, 2023), List of Wild Animals with China State Major Protection Status (2021) (CSMPS), IUCN (2026), CITES (2026), Cap. 170 and Cap. 586.
 - Conservation status by Fellowes *et al.* (2002): GC = Global Concern; PGC = Potential Global Concern.
- Distribution is inferred based on the information available on HKBIH website (AFCD, 2024), rarity follows Tam *et al.* (2011).
- Location and Habitat: PA = Proposed Alignment, EIS = Ecologically Important Stream, SA = Study Area, AG = Agricultural Land, PO = Pond, MW = Mitigation Wetland, WC = Watercourse, GL = Grassland, SWG = Seasonally Wet Grassland, SL = Shrubland, WL = Woodland, PL = Plantation, WG = Waste Ground, DA = Developed Area, IF = In Flight.
- Species considered as of conservation importance in this study are indicated in bold type.

Appendix 8

Max Count of Freshwater Fishes Recorded

Species	Conservation and Protection Status ¹	Distribution in Hong Kong ²	Habitat ³														
			PA		SA												
			WC	WG	AG	PO	MW	EIS WC	NON-EIS WC	GL	SWG	SL	WL	PL	WG	DA	
Chinese Barb <i>Barbodes semifasciolatus</i>	-	Widely distributed in most of local freshwater streams, rivers and reservoirs.	+		++				++++	++							
Longfin Banded Hill Trout <i>Opsariichthys cf. evolans</i>	-	Found in streams with good water quality in North District, Tai Mo Shan, Tai Po, Sai Kung, and catchment of some reservoirs								+							
Predaceous Chub <i>Parazacco spilurus</i>	-	A widespread species occurring in most unpolluted hill streams in both upper and lower courses.	+						++	+							
Oriental Weatherfish <i>Misgurnus anguillicaudatus</i>	-	Records from streams and marshes throughout Hong Kong.	+						6	2							
Nim <i>Pterocryptis anomala</i>	-	North District, Tai Po, Tsuen Wan, Sai Kung, and on Lantau Island								1							
White-cheeked Goby <i>Rhinogobius duosplius</i>	-	Probably the commonest goby in Hong Kong and is widely distributed in upper and middle course of streams, sometimes occurs in lowland streams.	+						1	1							
Redbelly Tilapia <i>Coptodon zillii</i>	-	Records from streams, rivers and estuaries throughout Hong Kong.								1							
- <i>Oreochromis sp.</i>	-	-	++		1				+++	++							
Mosquito Fish <i>Gambusia affinis</i>	-	Introduced as a mosquito-control agent, widespread in local freshwater bodies.			+++++	+++			++++	++++							
Guppy <i>Poecilia reticulata</i>	-	Occurs in large number in many local streams and ponds.								+++							
Swordtail <i>Xiphophorus hellerii</i>	-	Occurs in large numbers in many local freshwater streams, rivers and ponds.								++							
Variable Platyfish <i>Xiphophorus variatus</i>	-	Found in large numbers in many local freshwater streams, rivers and ponds.	++		++					++							
Dwarf Snakehead <i>Channa limbata</i>	-	-	+		11				2	7							
Snakehead Murrel <i>Channa striata</i>	-	Uncommon in the wild and is an introduced species. Records from a few streams in North District and on Lantau Island.	+		5				3	3							
Total no. of species recorded		14	8	0	6	1	0	8	14	0	0	0	0	0	0	0	0

Notes:

1. Conservation and protection status refers to The State of Hong Kong Biodiversity 2025 (Or and Chan, 2025), Fellowes *et al.* (2002), China's Red List of Biodiversity – Vertebrates (2020) (RLCV) (MEEPRC and CAS, 2023), List of Wild Animals with China State Major Protection Status (2021) (CSMPS), IUCN (2026), CITES (2026), KFBG (2019), Cap. 170 and Cap. 586.
2. Distribution in Hong Kong follows information available on HKBIH website (AFCD, 2024).
3. Location and Habitat: PA = Proposed Alignment, EIS = Ecologically Important Stream, SA = Study Area, AG = Agricultural Land, PO = Pond, MW = Mitigation Wetland, WC = Watercourse, GL = Grassland, SWG = Seasonally Wet Grassland, SL = Shrubland, WL = Woodland, PL = Plantation, WG = Waste Ground, DA = Developed Area.
4. Species considered as of conservation importance in this study are indicated in bold type.
5. Key for relative abundance: + = 1-10; ++ = 11-50; +++ = 51-100; ++++ = 101 – 500; +++++ = 500+

Appendix 9

Max Count of Aquatic Invertebrates Recorded

Species	Conservation and Protection Status ¹	Distribution in Hong Kong ²	Habitat ³														
			PA		SA												
			WC	WG	AG	PO	MW	EIS WC	NON-EIS WC	GL	SWG	SL	WL	PL	WG	DA	
Common Bluetail (Larvae) <i>Ischnura senegalensis</i>	-	Widely distributed in all wetland habitats except fast flowing rivers throughout Hong Kong.							1								
Yellow Featherlegs (Larvae) <i>Copera marginipes</i>	-	Widely distributed in lowland streams, ditches, and weedy margins of pond throughout Hong Kong.							1								
Giant River Hawker (Larvae) <i>Tetracanthagyna waterhousei</i>	-	Widely distributed in forested areas throughout the New Territories							1								
Skimmer (Larvae) <i>Orthetrum sp.</i>	-	-			++				1	1							
Wandering Glider (Larvae) <i>Pantala flavescens</i>	-	Widely distributed all over Hong Kong.			2												
Indigo Dropwing (Larvae) <i>Trithemis festiva</i>	-	Favours sluggish sections of streams with a strong current or the small rock pools in of mountain streams. Widespread in Hong Kong.							1								
Dropwing (Larvae) <i>Trithemis sp.</i>	-	-							1								
Club-tailed Cruiser (Larvae) <i>Macromia urania</i>	GC	Found soaring in sheltered spots adjacent to woodlands. Recorded in Lion Rock Country Park, Pat Sin Leng, Sha Lo Tung, Tai Lam Country Park and Wu Kau Tang.							3	3							
Mayfly (Ephemeroptera) Larva <i>Baetidae sp.</i>	-	-							5								
Backswimmer <i>Enithares sp.</i>	-	-							++	2							
Freshwater Shrimp <i>Caridina cantonensis</i>	-	The species is known from Guangdong and Guangxi Provinces (China) and probably northern Vietnam.	++						++++	++++							
Freshwater Prawn <i>Macrobrachium formosense</i>	-	-	+						2	10							
Freshwater Prawn <i>Macrobrachium nipponense</i>	-	-								10							
Freshwater Crab <i>Cryptopotamon anacoluthon</i>	PGC; IUCN(VU)	-								3							
Freshwater Crab <i>Nanhaipotamon hongkongense</i>	PGC	-								1							
Freshwater Crab <i>Somaniathelphusa zanklon</i>	GC; IUCN(EN)	-			2				1	2							
Freshwater Snail <i>Bakytetaia polyzonata</i>	-	-	++						++	+++							
Apple Snail <i>Pomacea canaliculata</i>	-	-			++	+			+++	+++							
Freshwater Snail <i>Sulcospira hainanensis</i>	-	This species was described from Hainan Island and is known from Guangdong Province and Hong Kong, southern China. Records from northern Vietnam require confirmation.	+++						+++	++							
Freshwater Snail <i>Melanooides tuberculata</i>	-	-							++	+							
Freshwater Snail <i>Stenomelania costellaris</i>	-	-								+							
Leech <i>Hirudinea sp. 1</i>	-	-								1							
Annelid Polychaeta	-	-							1								
Total no. of species recorded		24	4	0	4	1	0	18	15	0	0	0	0	0	0	0	0

Notes:

1. Conservation and protection status refers to The State of Hong Kong Biodiversity 2025 (Or and Chan, 2025), Fellowes et al. (2002), China's Red List of Biodiversity – Vertebrates (2020) (RLCV) (MEEPRC and CAS, 2023), List of Wild Animals with China State Major Protection Status (2021) (CSMPS), IUCN (2026), CITES (2026), Cap. 170 and Cap. 586.
 - a. Conservation status by Fellowes *et al.* (2002): GC = Global Concern, PGC = Potential Global Concern.
 - b. Conservation status by IUCN (2026): VU = Vulnerable, EN = Endangered.
2. Distribution and rarity are inferred based on the information available on HKBIH website (AFCD, 2024).
3. Location and Habitat: PA = Proposed Alignment, EIS = Ecologically Important Stream, SA = Study Area, AG = Agricultural Land, PO = Pond, MW = Mitigation Wetland, WC = Watercourse, GL = Grassland, SWG = Seasonally Wet Grassland, SL = Shrubland, WL = Woodland, PL = Plantation, WG = Waste Ground, DA = Developed Area.
4. Species considered as of conservation importance in this study are indicated in bold type.
5. Key for relative abundance: + = 1-10; ++ = 11-50; +++ = 51-100; ++++ = 101 – 500; +++++ = 500+

Appendix 10

Max Count of Fireflies Recorded

Species	Conservation and Protection Status ¹	Distribution in Hong Kong ²	Habitat ³														
			PA		SA												
			WC	WG	AG	PO	MW	EIS WC	NON-EIS WC	GL	SWG	SL	WL	PL	WG	DA	
Rimmed Window Firefly <i>Pyrocoelia analis</i>	-	Commonly seen in countryside, farmlands, abandoned farmlands, fish ponds, wetlands, occasionally even in the city, but less commonly seen in woodland areas.			1							1					1
Black-tipped Flash-train <i>Absocondita terminalis</i>	-	Kam Tin, Shui Tsan Tin, Tai Po Kau, Bride's Pool, Wu Kau Tang, Sha Lo Tung.			20							200					
Stream Flicker <i>Pygoluciola qingyu</i>	-	Widely distributed along natural streams at all elevations.								1							
Total no. of species recorded		3	0	0	2	0	0	0	0	1	0	2	0	0	0	0	1

Notes:

1. Conservation and protection status refers to The State of Hong Kong Biodiversity 2025 (Or and Chan, 2025), Fellowes et al. (2002), China's Red List of Biodiversity – Vertebrates (2020) (RLCV) (MEEPRC and CAS, 2023), List of Wild Animals with China State Major Protection Status (2021) (CSMPS), IUCN (2026), CITES (2026), Cap. 170 and Cap. 586.
2. Distribution in Hong Kong refers to Yiu 2023.
3. Location and Habitat: PA = Proposed Alignment, EIS = Ecologically Important Stream, SA = Study Area, AG = Agricultural Land, PO = Pond, MW = Mitigation Wetland, WC = Watercourse, GL = Grassland, SWG = Seasonally Wet Grassland, SL = Shrubland, WL = Woodland, PL = Plantation, WG = Waste Ground, DA = Developed Area.

Appendix E

Ecological Evaluation of Habitats (updated by Aurecon Hong Kong Limited)

Table 1 Habitat Evaluation for Agricultural Land

Criteria	Agricultural Land
	Study Area (outside the Proposed Alignment and Ecologically Important Stream)
Naturalness	Man-made habitat, actively managed
Size (ha)	15.30
Diversity	Moderate for flora; moderate for fauna. 4 bird, 5 butterfly and 1 freshwater invertebrate species of conservation importance
Rarity	Commonly found in village areas of Hong Kong. Species of conservation importance recorded: Greater Coucal, Chinese Pond Heron, Little Egret, Long-tailed Shrike, Metallic Cerulean, Common Cerulean, Tiny Grass Blue, Swallowtail, Small Cabbage White and <i>Sommaniathephusa zanklon</i> .
Re-creatability	Readily re-creatable
Fragmentation	Fragmented
Ecological Linkage	Some linkages to adjacent habitats
Potential Value	Limited
Nursery/Breeding Ground	No significant nursery or breeding ground
Age	Not known
Abundance/ Richness of Wildlife	Moderate
Ecological Value	LOW TO MODERATE

Table 2 Habitat Evaluation for Pond

Criteria	Pond
	Study Area (outside the Proposed Alignment and Ecologically Important Stream)
Naturalness	Man-made
Size (ha)	0.09
Diversity	Low for flora; low for fauna. No species of conservation importance recorded
Rarity	Common in the northwestern New Territories. No species of conservation importance recorded
Re-creatability	Readily re-creatable
Fragmentation	Not fragmented
Ecological Linkage	Assumed linkages to adjacent watercourses via underground water
Potential Value	Limited potential value
Nursery/Breeding Ground	Potential breeding ground for invasive fish species
Age	Not known
Abundance/ Richness of Wildlife	Low
Ecological Value	LOW

Table 3 Habitat Evaluation for Mitigation Wetland

Criteria	Mitigation Wetland
	Study Area (outside the Proposed Alignment and Ecologically Important Stream)
Naturalness	Semi-natural habitat with limited human disturbance
Size (ha)	0.62
Diversity	Moderate for flora; Moderate for fauna. 1 mammal, 2 bird and 5 butterfly species of conservation importance
Rarity	Uncommon habitat in Hong Kong. Species of conservation importance recorded: Pallas's Squirrel, Chinese Pond Heron, Little Egret, Grass Demon, Dark Swift, Metallic Cerulean, Tiny Grass Blue and Small Cabbage White
Re-creatability	Can be re-created but specific hydrological requirement needed
Fragmentation	Fragmented
Ecological Linkage	Linkages to adjacent watercourses
Potential Value	Potential to increase via continued wetland enhancement measures
Nursery/Breeding Ground	Potential breeding ground for wetland-dependent species
Age	Under 30 years
Abundance/ Richness of Wildlife	Moderate
Ecological Value	MODERATE

Table 4 Habitat Evaluation for Watercourse

Criteria	Watercourse		
	Proposed Alignment	Ecologically Important Stream	Study Area (outside the Proposed Alignment and Ecologically Important Stream)
Naturalness	Semi-natural with human disturbance	Natural habitat with human disturbance	Semi-natural with human disturbance
Size (ha)	0.02	0 (300.77 m)	2.84 (1794.23 m)
Diversity	Low for flora and fauna. 1 amphibian of conservation importance	Low for flora; Moderate for fauna. 1 bird, 1 amphibian and 2 aquatic invertebrate species of conservation importance	Low for flora; moderate for fauna. 3 mammal, 7 bird, 2 amphibian, 1 reptile, 2 butterfly and 4 aquatic invertebrate species of conservation importance
Rarity	Common in Hong Kong. Species of conservation importance recorded: Brown Wood Frog	One of 33 ecologically important streams in Hong Kong. Species of conservation importance recorded: Little Egret, Brown Wood Frog, Club-tailed Cruiser (Larvae) and <i>Somaniathelphusa zanklon</i> . The restricted fish Chinese Rasbora was recorded in previous studies, but was not found in the current study	Common in Hong Kong. Species of conservation importance recorded: Least Horseshoe Bat, Himalayan Leaf-nosed Bat, Andersen's Leaf-nosed Bat, Eurasian Teal, Greater Coucal, Wood Sandpiper, Black-crowned Night Heron, Chinese Pond Heron, Great Egret, Little Egret, Lesser Spiny Frog, Brown Wood Frog, Common Rat Snake, Grey Scrub Hopper, Tiny Grass Blue, Club-tailed Cruiser (Larvae), <i>Cryptopotamon anacoluthon</i> , <i>Nanhaipotamon hongkongense</i> and <i>Somaniathelphusa zanklon</i>
Re-creatability	Difficult to re-create	Difficult to re-create	Difficult to re-create
Fragmentation	Not fragmented	Not fragmented	Not fragmented
Ecological Linkage	Hydrologically linked to other watercourses	Linkages to adjacent watercourses	Hydrologically linked to other watercourses
Potential Value	Value could potentially be increased by reduction in disturbance	Value could potentially be increased by reduction in disturbance	Value could potentially be increased by reduction in disturbance
Nursery/Breeding Ground	Utilised as both a nursery and breeding ground for freshwater fauna	Utilised as both a nursery and breeding ground for freshwater fauna, including species of conservation importance such as Club-tailed Cruiser and <i>Sommaniathelphusa zanklon</i>	Utilised as both a nursery and breeding ground for freshwater fauna
Age	Moderate	Old	Old
Abundance/Richness of Wildlife	Low	Moderate	Moderate
Ecological Value	LOW TO MODERATE	MODERATE	MODERATE

Table 5 Habitat Evaluation for Grassland

Criteria	Grassland
	Study Area (outside the Proposed Alignment and Ecologically Important Stream)
Naturalness	Semi-natural
Size (ha)	9.68
Diversity	Low for flora and fauna. 3 bird and 4 butterfly species of conservation importance
Rarity	A common habitat in Hong Kong. Species of conservation importance recorded: Greater Coucal, Oriental Magpie, Black-throated Laughingthrush, Metallic Cerulean, Common Cerulean, Tiny Grass Blue and Swallowtail
Re-creatability	Could be re-created
Fragmentation	Slightly fragmented
Ecological Linkage	Linkages to adjacent shrublands and woodlands
Potential Value	Could increase in value with natural succession
Nursery/Breeding Ground	No significant nursery or breeding ground
Age	Moderate
Abundance/ Richness of Wildlife	Low
Ecological Value	LOW TO MODERATE

Table 6 Habitat Evaluation for Seasonally Wet Grassland

Criteria	Seasonally Wet Grassland
	Study Area (outside the Proposed Alignment and Ecologically Important Stream)
Naturalness	Man-made habitat that originated from abandoned agricultural lands, but is currently colonised by wetland vegetation.
Size (ha)	1.74
Diversity	Low for flora and fauna. 2 bird and 2 butterfly species of conservation importance
Rarity	Uncommon habitat in Hong Kong. Species of conservation importance recorded: Greater Coucal, Black-crowned Night Heron, Metallic Cerulean and Swallowtail
Re-creatability	Can be re-created
Fragmentation	Not fragmented
Ecological Linkage	Linkages to adjacent developed area and agricultural lands
Potential Value	Limited potential to increase value
Nursery/Breeding Ground	No significant nursery or breeding ground
Age	Young
Abundance/ Richness of Wildlife	Low
Ecological Value	LOW

Table 7 Habitat Evaluation for Shrubland

Criteria	Shrubland
	Study Area (outside the Proposed Alignment and Ecologically Important Stream)
Naturalness	Semi-natural with human disturbance
Size (ha)	11.82
Diversity	Moderate for flora and fauna. 3 bird, 6 butterfly and 2 odonate species of conservation importance
Rarity	A common habitat in Hong Kong. Species of conservation importance recorded: Greater Coucal, Collared Scops Owl, Black-throated Laughingthrush, Peacock Royal, Metallic Cerulean, Common Cerulean, Forget-me-not, Tiny Grass Blue, Small Grass Yellow, Emerald Cascader and Club-tailed Cruiser
Re-creatability	Can be-recreated
Fragmentation	Not fragmented
Ecological Linkage	Linkages to adjacent grassland and woodland
Potential Value	Could increase in value with natural succession
Nursery/Breeding Ground	No significant nursery or breeding ground
Age	Moderate
Abundance/ Richness of Wildlife	Moderate
Ecological Value	MODERATE

Table 8 Habitat Evaluation for Woodland

Criteria	Woodland
	Study Area (outside the Proposed Alignment and Ecologically Important Stream)
Naturalness	Semi-natural secondary forest with some human disturbances
Size (ha)	16.01
Diversity	Moderate for flora and fauna. 2 mammal, 5 bird and 5 butterfly species of conservation importance
Rarity	Disturbed and fragmented secondary woodland is common in Hong Kong, while woodland of large size and high maturity is rare; species of conservation importance recorded: East Asian Porcupine, Red Muntjac, Little Egret, Besra, Collared Scops Owl, Rufous-capped Babbler, Black-throated Laughingthrush, Metallic Cerulean, Common Cerulean, Forget-me-not, Tiny Grass Blue and Common Birdwing
Re-creatability	Take time to a mature woodland with difficulty to maintain naturalness due to invasion of exotic plants
Fragmentation	Not fragmented
Ecological Linkage	Linkages to adjacent shrubland and grassland
Potential Value	Value could increase naturally over time under natural succession
Nursery/Breeding Ground	Potential nursery and breeding ground for various resident/breeding species
Age	Moderate
Abundance/ Richness of Wildlife	Moderate
Ecological Value	MODERATE

Table 9 Habitat Evaluation for Plantation

Criteria	Plantation
	Study Area (outside the Proposed Alignment and Ecologically Important Stream)
Naturalness	Man-made with natural self-seeded flora species
Size (ha)	5.94
Diversity	Low for flora and fauna. 3 bird and 2 butterfly species
Rarity	A common habitat in Hong Kong. Species of conservation importance recorded: Greater Coucal, Collared Scops Owl, Black-throated Laughingthrush, Metallic Cerulean and Tiny Grass Blue
Re-creatability	Readily re-creatable, but takes time
Fragmentation	Fragmented
Ecological Linkage	Limited ecological linkage with adjacent habitats
Potential Value	Value could increase with increase in diversity of native species
Nursery/Breeding Ground	No significant nursery or breeding ground
Age	Young
Abundance/ Richness of Wildlife	Low
Ecological Value	LOW

Table 10 Habitat Evaluation for Waste Ground

Criteria	Waste Ground	
	Proposed Alignment	Study Area (outside the Proposed Alignment and Ecologically Important Stream)
Naturalness	Man-made construction site	Abandoned developed areas invaded by herb species
Size (ha)	0.12	5.83
Diversity	Low for flora and fauna. 2 butterfly species of conservation importance	Low for flora and fauna. 1 mammal, 1 amphibian and 3 butterfly species
Rarity	Uncommon habitat in Hong Kong. Species of conservation importance recorded: Tiny Grass Blue and Small Cabbage White	Uncommon habitat in Hong Kong. Species of conservation importance recorded: Red Muntjac, Brown Wood Frog, Forget-me-not, Tiny Grass Blue and Swallowtail.
Re-creatability	Readily re-creatable	Readily re-creatable
Fragmentation	Not fragmented	Not fragmented
Ecological Linkage	Limited ecological linkage with adjacent habitats	Limited ecological linkage with adjacent habitats
Potential Value	Limited potential to increase value	Limited potential to increase value
Nursery/Breeding Ground	No known nurse/ breeding ground	No known nurse/ breeding ground
Age	Young	Young
Abundance/ Richness of Wildlife	Low	Low
Ecological Value	LOW	LOW

Table 11 Habitat Evaluation for Developed Area

Criteria	Developed Area
	Study Area (outside the Proposed Alignment and Ecologically Important Stream)
Naturalness	Man-made
Size (ha)	36.88
Diversity	Moderate for flora; low for fauna. 2 mammal, 2 reptile, 3 butterfly and 1 odonate species
Rarity	A common habitat in Hong Kong. Species of conservation importance recorded: Short-nosed Fruit Bat, Pallas's Squirrel, Four-clawed Gecko, Tokay Gecko, Metallic Cerulean, Tiny Grass Blue, Swallowtail and Emerald Cascader.
Re-creatability	Readily re-creatable
Fragmentation	Fragmented
Ecological Linkage	No functional ecological linkages with other adjacent habitats
Potential Value	Limited potential to increase value
Nursery/Breeding Ground	Potential breeding ground for Four-clawed Gecko and Tokay Gecko
Age	Moderate
Abundance/ Richness of Wildlife	Low
Ecological Value	LOW

Appendix F

Evaluation of Identified Ecological Impact

Appendix F Evaluation of Identified Ecological Impact

Table 1 Evaluation of the Impact Severity to Ecological Habitat

Project Area	Habitat quality	Species	Size/ abundance	Criteria			Regional Significance	Impact Severity
				Duration	Reversibility	Magnitude		
Project Area	Watercourse	Low to Moderate	Recorded with 1 Species of conservation Importance (SoCI), the Brown Wood Frog	Direct Habitat Loss*: 0.02 ha, low abundance of SoCI was recorded	Temporary and to be re-instated	Reversible	Low for the limited and temporary nature of the work anticipated in this affected habitat	Habitat Loss*: Minor
	Waste Ground	low	Recorded with 2, i.e., Tiny Grass Blue and Small Cabbage White	Direct Habitat Loss*: 0.12 ha, low abundance of SoCI was recorded	Permanent Habitat loss	Irreversible	Low for the small area affected	Habitat Loss*: Minor
Assessment Area	Plantation	Low	Recorded with 5 SoCI: Greater Coucal, Collared Scops Owl, Black-throated Laughingthrush, Metallic Cerulean and Tiny Grass Blue, all in the vicinity of the PA	No Direct Habitat Loss, and area potentially affected by construction disturbance limit to the edge area of the patch west of the PA, which is mostly separated with the PA by a watercourse; and only low abundances of the SoCI were recorded	The construction disturbance will be temporary only and ceased when construction work ended	Potential ecological impact from construction disturbance would be reversible with or without remedial action	Very low due to the nature and limited scales of construction activities planned for the wet season 2026, and no night work has been planned that potentially affect the movement or activities of the nocturnal animals	Minor from Construction disturbance
	Shrubland	Moderate	Recorded with 11 SoCI: Greater Coucal, Collared Scops Owl, Black-throated Laughingthrush, Peacock Royal, Metallic Cerulean, Common Cerulean, Forget-me-not, Tiny Grass Blue, Small Grass Yellow, Emerald Cascader and Club-tailed Cruiser, but only the the Tiny Grass Blue was recorded in the vicinity of the PA	No Direct Habitat Loss, and construction disturbance will only affect the fringe area of this habitat located in the south of the EIS; where only low abundances of the SoCI were recorded				Minor from Construction disturbance
	Grassland	Low to Moderate	Recorded with 7 SoCI: Greater Coucal, Oriental Magpie, Black-throated Laughingthrush, Tiny Grass Blue, Swallowtail Metallic Cerulean and Common Cerulean; but only the latter two were recorded in the vicinity of the PA	No Direct Habitat Loss, and construction disturbance will only affect the fringe area of this habitat located in the south of the EIS; where only low abundances of the SoCI were recorded				Minor from Construction disturbance
	Agricultural Land	Low to Moderate	Recorded with 10 SoCI: Greater Coucal, Chinese Pond Heron, Little Egret, Long-tailed Shrike, Metallic Cerulean, Common Cerulean, Tiny Grass Blue, Swallowtail, Small Cabbage White and <i>Sommaniathelphusa zanklon</i> , but none of them was recorded in the vicinity of the PA	No Direct Habitat Loss, and ~ 1 ha of this habitat located in the vicinity of the PA would be potentially affected by the construction disturbance				Minor from Construction disturbance
	Developed Area	Low	Recorded with 8 SoCI, i.e. Short-nosed Fruit Bat, Pallas's Squirrel, Four-clawed Gecko, Tokay Gecko, Metallic Cerulean, Tiny Grass Blue, Swallowtail and Emerald Cascader; and only the Four-clawed Gecko was recorded in the vicinity of the PA	No Direct Habitat Loss, and construction disturbance will only affect the fringe area of this habitat located in the vicinity of the PA, where a low abundance of the SoCI was recorded				Minor from Construction disturbance
	Waste ground	Low	Recorded with 5 SoCI, i.e. Red Muntjac, Brown Wood Frog, Tiny Grass Blue, Swallowtail, and Forget-me-not, and only the former 4 were recorded in the vicinity of the PA	No Direct Habitat Loss and ~ 0.6 ha of this habitat located in the vicinity of the PA will be potentially affected by the construction disturbance, where low abundances of the SoCI were recorded				Minor from Construction disturbance
	Watercourse (non-EIS)	Moderate	Recorded with 19 SoCI: Least Horseshoe Bat, Himalayan Leaf-nosed Bat, Andersen's Leaf-nosed Bat, Eurasian Teal, Greater Coucal, Wood Sandpiper, Black-crowned Night Heron, Chinese Pond Heron, Great Egret, Little Egret, Lesser Spiny Frog, Brown Wood Frog, Common Rat Snake, Grey Scrub Hopper, Tiny Grass Blue, Club-tailed Cruiser (Larvae), <i>Cryptopotamon anacoluthon</i> , <i>Nanhaipotamon hongkongense</i> and <i>Somanniathelphusa zanklon</i> , and only 7 of them (including Himalayan Leaf-nosed Bat, Andersen's Leaf-nosed Bat, Little Egret, Brown Wood Frog, Common Rat Snake, Club-tailed Cruiser (Larvae), and <i>Somanniathelphusa zanklon</i>) were recorded in the watercourse in the vicinity of the PA	No Direct Habitat Loss; and ~220 m non-EIS watercourse is located in the vicinity of the PA and potentially affected by the construction disturbance, where low abundances of the SoCI were recorded				Minor from Construction disturbance
	Watercourse - EIS	Moderate	Recorded with 1 bird, 1 amphibian and 2 aquatic invertebrate species of conservation importance, i.e., Little Egret, Brown Wood Frog, Club-tailed Cruiser (Larvae) and <i>Somanniathelphusa zanklon</i>	No Direct Habitat Loss, but the whole length of the EIS ~ 300m long is potentially affected by the construction disturbance, where low abundances of the SoCI were recorded				Minor from Construction disturbance

Appendix F Evaluation of Identified Ecological Impact

		Criteria							
		Habitat quality	Species	Size/ abundance	Duration	Reversibility	Magnitude	Regional Significance	Impact Severity
Assessment Area	Woodland	Moderate	None of the 12 SoCI recorded will be affected as the nearest distance of this habitat from the PA is >200m away, i.e., the: East Asian Porcupine, Red Muntjac, Little Egret, Besra, Collared Scops Owl, Rufous-capped Babbler, Black-throated Laughingthrush, Metallic Cerulean, Common Cerulean, Forget-me-not, Tiny Grass Blue	No Direct Habitat Loss, and this habitat will not affect by the construction disturbance as the nearest patch of this habitat type is >200 m from the PA and will be shielded from the disturbance by other habitats in between	N/A: Ecological impact has not been anticipated	N/A: Ecological impact has not been anticipated	N/A: Ecological impact has not been anticipated	N/A: Ecological impact has not been anticipated	N/A: Ecological impact has not been anticipated
	Seasonally Wet Grassland	Low	None of the 4 SoCI recorded will be affected as the nearest distance of this habitat from the PA is >160 m away, i.e., the Greater Coucal, Black-crowned Night Heron, Metallic Cerulean and Swallowtail,	No Direct Habitat Loss, and this habitat will not affect by the construction disturbance as the two patches of this habitat type are ~160m from the PA and will be shielded from the disturbance by other habitats in between					
	Mitigation Wetland	Moderate	None of the 8 SoCI recorded will be affected as this habitat is located >200m away from the PA, i.e., the Pallas’s Squirrel, Chinese Pond Heron, Little Egret, Grass Demon, Dark Swift, Metallic Cerulean, Tiny Grass Blue and Small Cabbage White	No Direct Habitat Loss and will not affect by the construction disturbance as it is located ~200m away from the PA and shielded from the disturbance by other habitats in between					
	Pond	Low	No SoCI was recorded	No Direct Habitat Loss, and will not affect by the construction disturbance as the 3 patches of this habitat would be shielded from the disturbance by the “Developed Area” habitat					

* Direct Habitat Loss is resulted from the permanent/temporary works of the Project. The remaining works of the Project to be carried out after March 2026 will not cause any further habitat loss.

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