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Faunal /floral group under study	Key surveyor				
	Full Name	Brief description of relevant experience	No. of years of relevant experience	Signature	Date
Vegetation and Terrestrial Fauna (avifauna, mammal, herpetofauna odonate and butterfly)	Choi Wing Ki	Conducted and managed terrestrial ecological studies for both public and private development projects, which involve habitat identification, vegetation and fauna surveys, impact assessment and recommendation on mitigation measures	13		8 Sep 2023
Freshwater Communities	So Ying Kin	Obtained Ph.D with research focus on freshwater marshlands, community ecology and conservation. Published publications on topics including freshwater marsh. Provided professional services for environmental consultancy firms, green groups. Provided lectures for universities and environmental education organisations.	9		8 Sep 2023

## 1. INTRODUCTION

- 1.1.1 This Report presents the methodologies and results of terrestrial ecological survey carried out under the EIA for Development of Integrated Waste Management Facilities Phase 2 (I-PARK2).

## 2. LEGISLATIONS, STANDARDS AND GUIDELINES

- 2.1.1 With reference to the Technical Memorandum on Environmental Impact Assessment Process of the Environmental Impact Assessment Ordinance (Cap.499) (EIAO TM), criteria for evaluating ecological impacts includes:

- Annex 8 lists the criteria for evaluating ecological impacts
- Annex 16 sets out the general approach and methodology for the assessment of ecological impacts arising from a project. Recognized Sites of Conservation Importance and Species of Conservation Importance are also defined.

- 2.1.2 EIAO Guidance Notes details temporal considerations in arranging surveys, survey methodology at different habitats, data collection and requirements of ecological impact assessment:

- EIAO Guidance Note “Some Observations on Ecological Assessment from the Environmental Impact Assessment Ordinance Perspective”
- EIAO Guidance Note “Ecological Baseline Survey for Ecological Impact Assessment”
- EIAO Guidance Note “Methodologies for Terrestrial and Freshwater Ecological Baseline Surveys”

- 2.1.3 Hong Kong ordinances and guidelines for reference include:

- Forests and Countryside Ordinance (Cap. 96) and its subsidiary legislation in the Forestry Regulations, which prohibit destructive activities in the forest and trading or keeping of rare plants
- Town Planning Ordinance (Cap. 131), in which land uses such as coastal protection areas, sites of special scientific interest and other specified uses promote environmental conservation or protection
- Wild Animals Protection Ordinance (Cap. 170), which protects wild mammals, avifauna, reptiles, amphibians and insects under column 2 from hunting, possession, trading and disturbance
- Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586), which regulates trading and possession of endangered species in response to Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES)
- Hong Kong Planning Standard and Guidelines (Chapter 10), which gives principles of conservation, identifies policies and conserves natural landscapes and habitats through legislation, administrative controls and planning
- Rare and Precious Plants of Hong Kong by Agriculture, Fisheries and Conservation Department which includes 100 rare and precious plant species in Hong Kong to raise

awareness and provide insight for conservation.

2.1.4 Other international conventions are referenced where appropriate:

- Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES)
- IUCN Red List
- United Nations Conventions on Biological Diversity (1992).
- Wild Animal Protection Law of the PRC

### 3. SURVEY METHODOLOGY

3.1.1 A terrestrial ecological survey programme was carried out in February/March and May 2023 to update and verify the findings obtained in the survey conducted under the Decommissioning of Remaining Portion of Middle Ash Lagoon in Tsang Tsui (the Decommissioning Project) (EPD 2022a and EPD 2022b). All survey methodologies for ecological surveys were designed with reference to the *Environmental Impact Assessment Ordinance (Cap.499)*, and Methodologies for Terrestrial and Freshwater Ecological Baseline Surveys. Survey transect and sampling points are shown in **Figure 1**.

**Table 3-1 Schedule of Ecological Survey**

Survey	Dry Season	Wet Season
	Feb/Mar 2023	May 2023
Habitat and Vegetation Survey	✓	✓
Mammal Survey (Day)	✓	✓
Mammal Survey (Night)	✓	✓
Bird Survey (Day)	✓	✓
Bird Survey (Night)	✓	✓
Herpetofauna Survey (Day)	✓	✓
Herpetofauna Survey (Night)	✓	✓
Butterfly Survey (Day)	✓	✓
Odonate Survey (Day)	✓	✓
Freshwater Survey (Day)	✓	✓

#### Habitat Survey

3.1.2 Aerial photos of the surroundings of the site were interpreted to identify the types of habitats found within the study area. This was updated by ground truthing.

#### Vegetation Survey

Key vegetation communities and dominant species within the site area were noted for vegetation survey. Any rare, protected and threatened plant species and other species of conservation concern were identified with their location marked. Identification of flora species and status in Hong Kong was made with reference to Xing *et al.* (2000), Hu *et al.* (2003), Lai *et al.* (2008), Hong Kong Herbarium (2012), and Hong Kong Herbarium and South China Botanical Gardens (2007; 2008; 2009; 2011).

### Avifauna Survey

- 3.1.3 Birds were observed and identified with naked eyes and aided with a pair of binoculars during daytime and nocturnal surveys. Identification was also made from bird calls. Any feeding, nesting and breeding behaviours were noted. Ornithological nomenclature in this report follows the most recently updated list from the Hong Kong Bird Watching Society.

### Terrestrial Mammal Survey

- 3.1.4 Mammal was actively searched within the site area in parallel with avifauna survey and identified by direct observation. Any traits observed, such as dung, feeding signs, footprints, burrows and dens were recorded and the mammal that left the tracks was identified as far as possible. Flying mammals were detected with the use of a bat detector, which aimed to identify the bat species utilizing the site for commuting and foraging. All bat calls recorded during surveys were analysed by using Kaleidoscop computer software. Nomenclature of mammal follows Shek (2006).

### Herpetofauna Survey

- 3.1.5 Active searching was carried out to look for amphibians and reptiles in daytime and nocturnal surveys within the study area. This can identify both diurnal and nocturnal species. Potential breeding ground and microhabitats were searched, such as pools, water channels, crevices and fallen leaves. Any eggs and tadpoles found were also noted. Mating calls of frogs and toads could assist in identification as well. Nomenclature of amphibian and reptile follows Chan *et al.* (2005) and Chan *et al.* (2006), respectively.

### Butterflies and Odonates Survey

- 3.1.6 Butterflies and Odonates Survey were conducted during daytime and under fine weather when these insects were active. Butterflies and odonates were observed with naked eyes or with the help of a pair of binoculars. They were recorded and identified. Nomenclature of butterfly follows Chan *et al.* (2011) and odonate on Tam *et al.* (2008) and Reels (2019).

### Freshwater Community Survey

- 3.1.7 Freshwater survey was carried out in the watercourses previously surveyed in the studies by EPD (2022a; 2022b). Observation was made with naked eyes and binoculars from stream banks. D-framed hand nets with about 3mm mesh size were used to capture fish for identification where necessary. Rocks were turned over to search for organisms hiding in crevices. Nomenclature of fresh water fish and invertebrate communities follows Lee *et al.* (2004) and Dudgeon (2003), respectively.

## **4. SURVEY RESULTS**

### **4.1 Habitat Descriptions**

- 4.1.1 The Project Site (Middle Ash Lagoon) consisted of three habitats – wasteland, grassland and developed area. While wasteland (overgrown with vegetation such as the exotic *Leucaena leucocephala*) was the dominant habitat, grassland was located along the northeast corner and

extended southwards. Developed area within Project Site were mainly engineered slopes and sea walls which only observed at the edge of Project Site. No plant species of conservation interest was observed within Project Site during survey. The wasteland within the Project site was observed to be dry during the survey of this EIA.

4.1.2 The habitats found within 500m Study Area identified from the survey is presented in **Figure 2**. Representative photographs of the habitat are given in **Appendix A**. A list of plant species recorded in different habitats recorded in the survey is provided in **Appendix B1**. Locations of flora species of conservation importance recorded in the survey are shown in **Figures 3**.

## 4.2 Fauna Survey Results

4.2.1 Fauna species and freshwater fauna species recorded during survey are detailed in **Appendix B2** and **Appendix B3**. Locations of species of conservation importance recorded from the current study are illustrated in **Figure 3**. Photographic records are provided in **Appendix C**. As shown in **Figure 3**, two nests of *Tachybaptus ruficollis* (Little Grebe) being built were found in West Ash Lagoon. No juveniles or eggs were found during surveys.

## 5. REFERENCES

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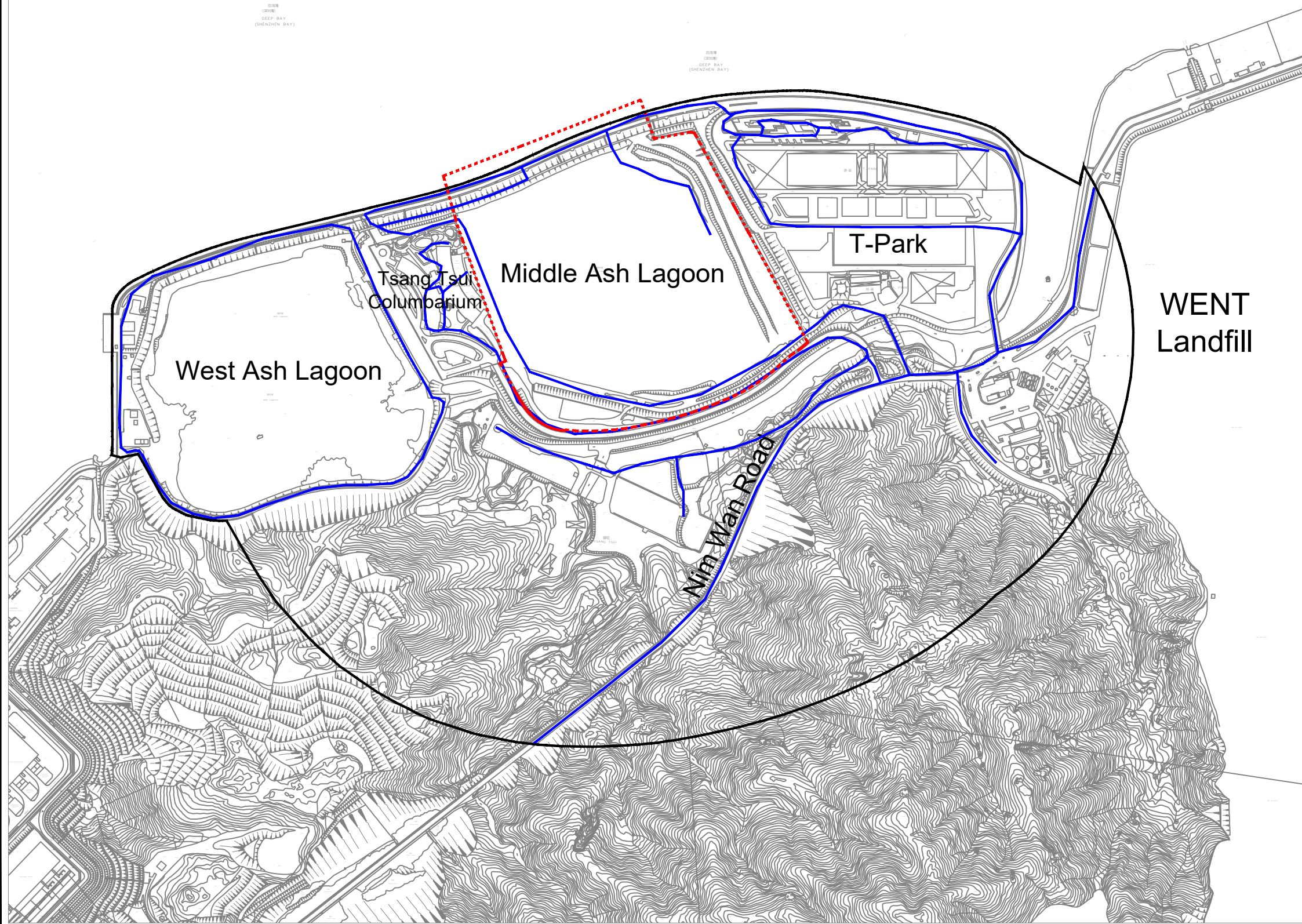
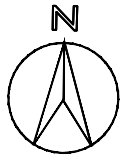
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## FIGURES




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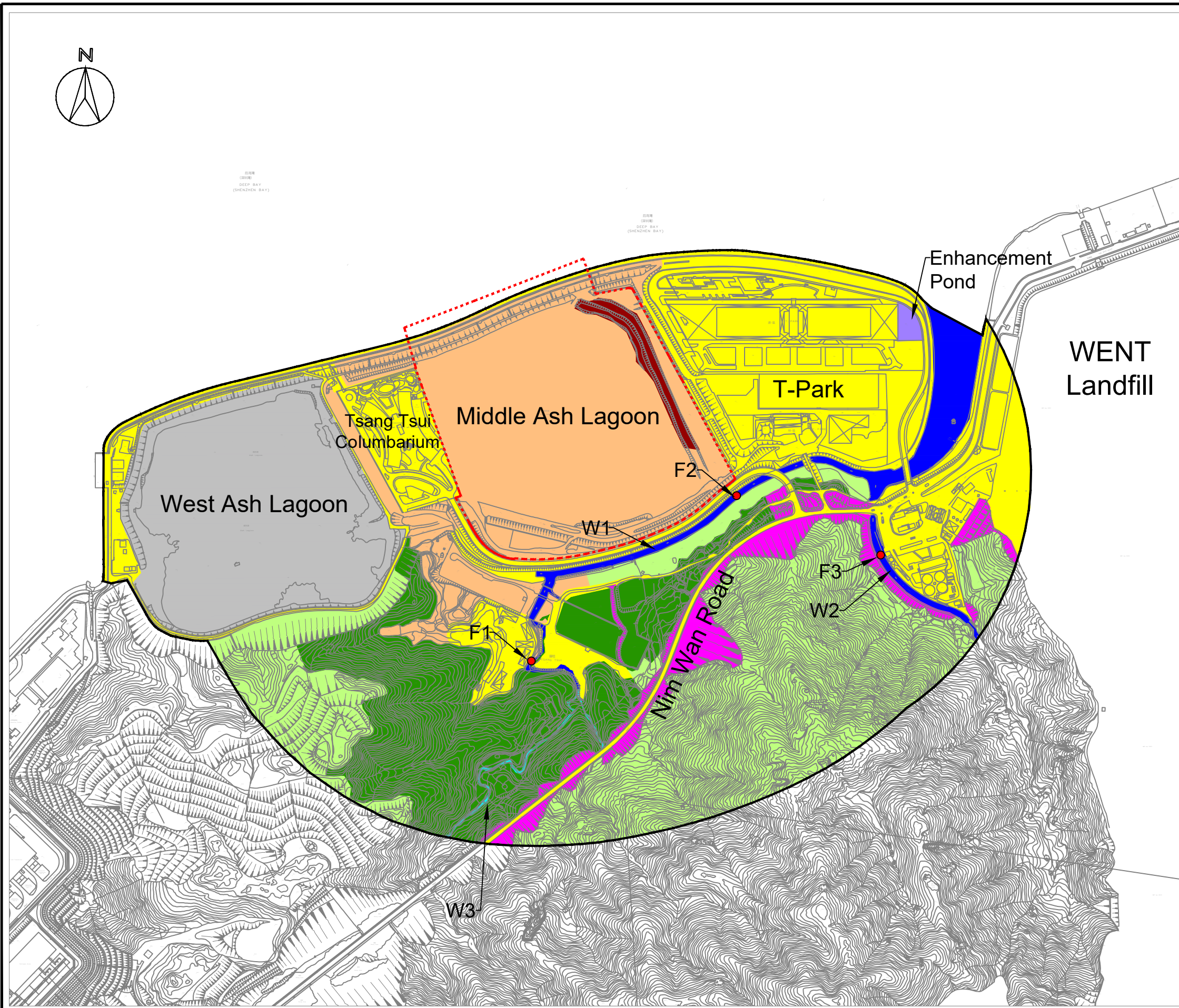




**Legend**

-  500m Study Area
-  Project Site
-  Survey Transect

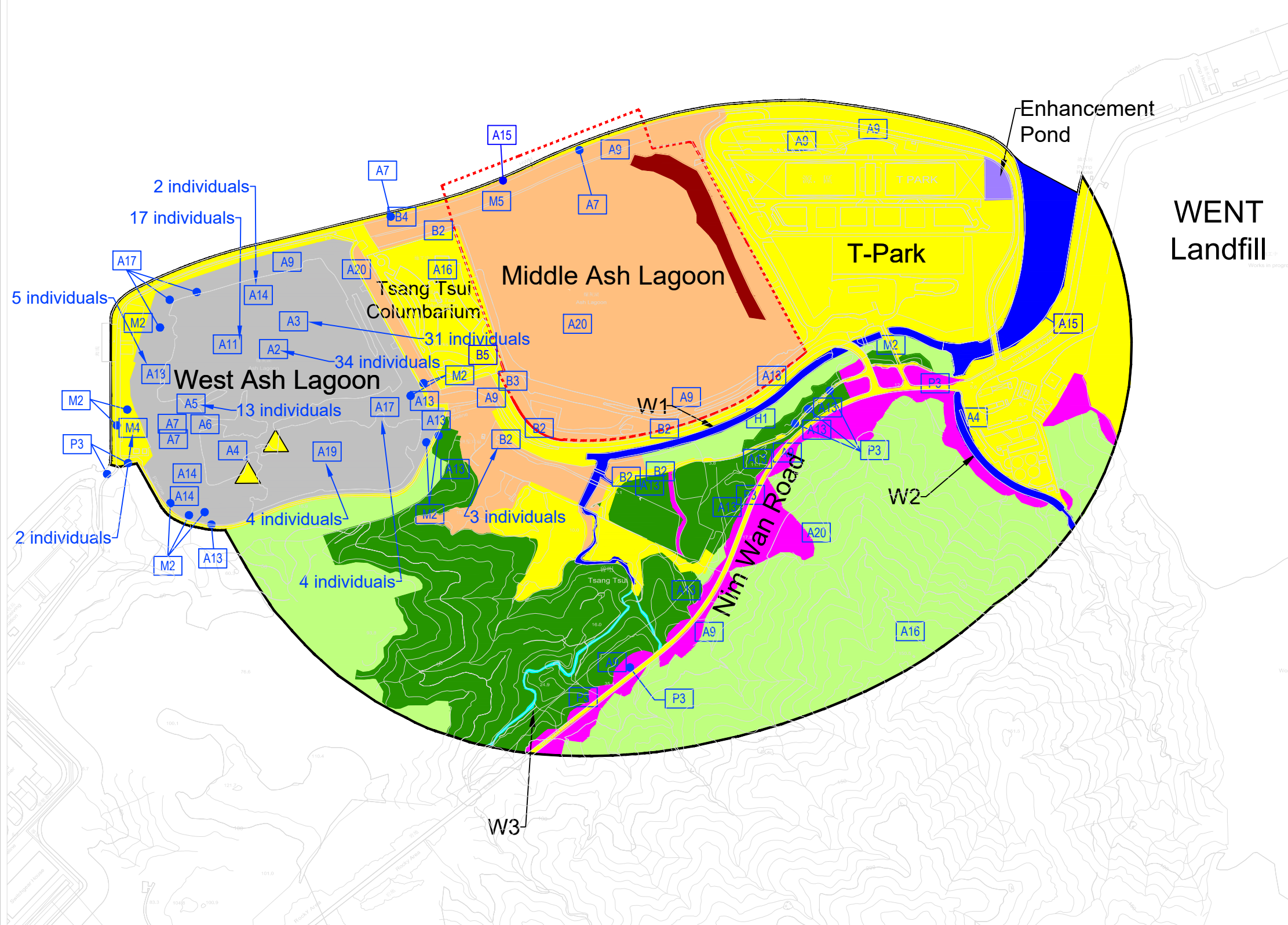
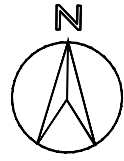
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CHECK	BC	DRAWN	IF		
JOB No.	EC23007	FIGURE No.	1	REV	-



**Legend**

- 500m Study Area
- Project Site
- Woodland
- Plantation
- Shrubland
- Grassland
- Wasteland
- Artificial Pond
- Develop Area
- Ash Lagoon
- Modified Watercourse
- Natural Watercourse
- Freshwater Sampling Point

SCALE	1:70000@A3	DATE	OCT 2023
CHECK	BC	DRAWN	RL
JOB No.	EC23007	FIGURE No.	2
		REV	-



**Legend**

- 500m Study Area
- Project Site
- Current Study

Avifauna

- A2 *Aythya fuligula*
- A3 *Tachybaptus ruficollis*
- A4 *Ardeola bacchus*
- A5 *Ardea cinerea*
- A6 *Ardea alba*
- A7 *Egretta garzetta*
- A9 *Milvus migrans*
- A11 *Fulica atra*
- A13 *Centropus sinensis*
- A14 *Corvus torquatus*
- A15 *Halcyon smyrnensis*
- A16 *Spilornis cheela*
- A17 *Ceryle rudis*
- A18 *Nycticorax nycticorax*
- A19 *Charadrius dubius*
- A20 *Otus lettia*
- ▲ *Tachybaptus ruficollis* nests

Butterfly

- B2 *Pieris rapae*
- B3 *Zizula hylax*
- B4 *Celastrina lavendularis*
- B5 *Catochrysops strabo*

Herpetofauna

- H1 *Ptyas korros*

Mammals

- M2 *Pipistrellus abramus*
- M4 *Hipposideros armiger*
- M5 *Callosciurus erythraeus*

Flora

- P3 *Gnetum luofuense*



Agreement no. CE 26/2022 (EP) Development of Integrated Waste Management Facilities Phase 2 – Investigation, Design and Construction  
 Location of Species of Conservation Interest of Current Study

SCALE	1:70000@A3	DATE	AUG 2023
CHECK	BC	DRAWN	RL
JOB No.	EC23007	FIGURE No.	3
		REV	-

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**APPENDIX A  
HABITAT PHOTOS**

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**Appendix A – Representative Photo of Habitats**



Plate 1 – Woodland

Appendix A – Representative Photo of Habitats

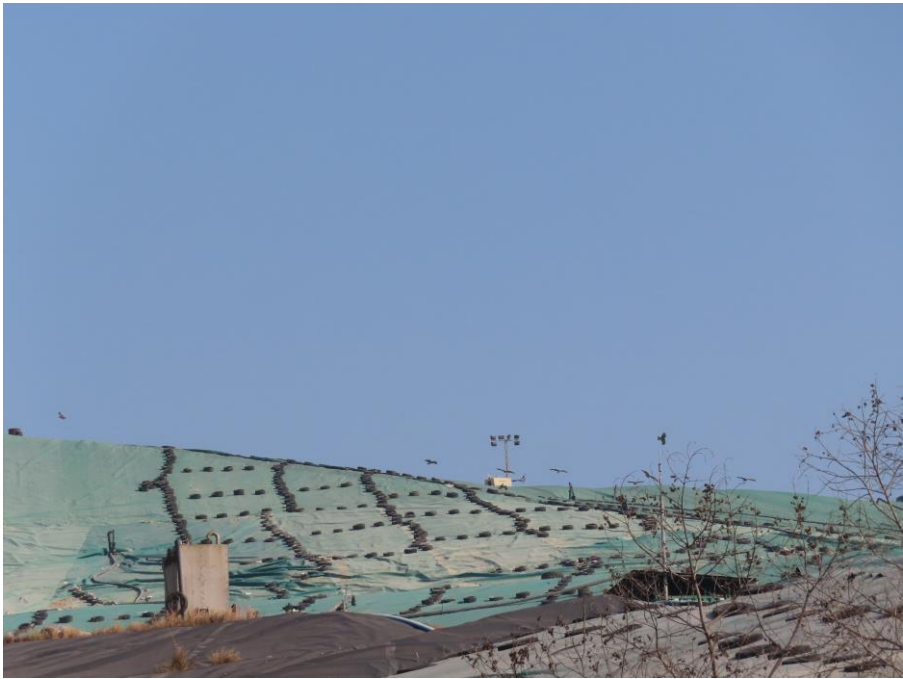


Plate 2 – Developed Area

Appendix A – Representative Photo of Habitats



Modified Watercourse (Upper: **W1**, Lower: **W2**)



Natural Watercourse (**W3**)

Plate 3 – Watercourse

Appendix A – Representative Photo of Habitats



Plate 4 – Ash Lagoon



**Appendix A – Representative Photo of Habitats**



**Plate 5 – Artificial Pond (Enhancement Pond)**

Appendix A – Representative Photo of Habitats



Plate 6 – Plantation

Appendix A – Representative Photo of Habitats



Plate 7 – Grassland

Appendix A – Representative Photo of Habitats



Plate 8 – Shrubland

Appendix A – Representative Photo of Habitats



Plate 9 – Wasteland

**Appendix A – Representative Photo of Habitats**



**Plate 10 – Wasteland (Overview of Project Site)**

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**APPENDIX B1  
FLORAL SURVEY RESULT**

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Appendix B1 - Floral Survey Result

Chinese Name	Species Name	Abundance											Growth Form	Origin	Rarity	Conservation Status	Remarks	
		Project Site (PS)			Developed Area	Woodland	Plantation	Shrubland	Wasteland (outside PS)	Modified Watercourse	Artificial Pond (Enhancement Pond)	Ash Lagoon						Natural Watercourse
		Wasteland	Grassland	Developed Area														
大葉相思	<i>Acacia mangium</i>							+						Tree	Exotic	Cultivated	-	-
老鼠筋	<i>Acanthus ilicifolius</i>								++					Shrub	Native	Common	-	-
羅香薷	<i>Ageratum conyzoides</i>			+++										Herb	Exotic	Common	-	-
銀柴	<i>Aporosa dioica</i>				++									Tree	Native	Very common	-	-
天門冬	<i>Asparagus cochinchinensis</i>			+										Scandent subshrub	Native	Common	-	-
地錢草	<i>Axonopus compressus</i>			+++										Herb	Exotic	Common	-	-
宮粉羊蹄甲	<i>Bauhinia variegata</i>			+++										Tree	Exotic	Common	-	-
白花羊蹄甲	<i>Bauhinia variegata var. candida</i>			++										Tree	Exotic	Common	-	-
洋紫荊	<i>Bauhinia x blakeana</i>			+										Tree	Native	-	-	-
白花鬼針草	<i>Bidens alba</i>	++++		++	++++	+++	++++	++++					++	Herb	Exotic	Very common	-	-
秋楓	<i>Bischofia javanica</i>			++										Tree	Native	Common	-	-
烏毛蕨	<i>Blechnum orientale</i>				++	++	++	++					++	Herb	Native	Common	-	-
木棉	<i>Bombax ceiba</i>	+		+					+					Deciduous tree	Exotic	-	-	-
黑面神	<i>Brevnia fruticosa</i>			+					+					Shrub	Native	Very common	-	-
通迫仔	<i>Bridelia tomentosa</i>	++		++	++	++				+		++		Shrub or small tree	Native	Very common	-	-
鴉膽子	<i>Brucea javanica</i>			+										Shrub/Small tree	Native	Common	-	-
刺果蘇木	<i>Caesalpinia bonduc</i>					+								Vine	Native	Restricted	-	-
無根藤	<i>Cassytha filiformis</i>	+++				+								Parasitic twining herb	Native	Very common	-	-
木麻黃	<i>Casuarina equisetifolia</i>			+			+++							Tree	Exotic	-	-	-
青江藤	<i>Celastrus hindsii</i>					+								Vine	Native	Common	-	-
朴樹	<i>Celtis sinensis</i>	++		+++	+++	+++	+			++				Deciduous tree	Native	Common	-	-
陰香	<i>Cinnamomum burmannii</i>			+										Tree or large shrub	Native	-	-	-
樟	<i>Cinnamomum camphora</i>			+++					+					Large tree	Native	Common	-	-
白酒草	<i>Conyza japonica</i>	+++												Herb	Native	-	-	-
黃牛木	<i>Cratogeomys cochinchinense</i>				+++	+								Deciduous shrub or tree	Native	Very common	-	-
間斷毛蕨	<i>Cyclosorus interruptus</i>									+				Herb	Native	Common	-	-
華南毛蕨	<i>Cyclosorus parasiticus</i>			+++	+++		+++							Herb	Native	Very common	-	-
兩廣黃檀	<i>Dalbergia benthamii</i>	++			++	+	+							Vine	Native	Common	-	-
假鷹爪	<i>Desmos chinensis</i>			++++	+									Shrub	Native	Common	-	-
芒萁	<i>Dicranopteris pedata</i>					++	++++							Herb	Native	Very common	-	-
龍眼	<i>Dimocarpus longan</i>				+++	++								Tree	Exotic	Cultivated	-	-
一點紅	<i>Emilia sonchifolia</i>			+++	++									Herb	Native	Very common	-	-
飛揚草	<i>Euphorbia hirta</i>			++										Herb	Exotic	-	-	-
通奶草	<i>Euphorbia hypericifolia</i>			++										Herb	Native	-	-	-
香港算盤子	<i>Glochidion zexlanicum</i>							++						Shrub or treelet	Native	Common	-	-
玉葉金花	<i>Mussaenda pubescens</i>					+								Shrub	Native	-	-	-
五指毛桃	<i>Ficus hirta</i>					++								Shrub or small tree	Native	Common	-	-
對葉榕	<i>Ficus hispida</i>					+++								Shrub or small tree	Native	Common	-	-
細葉榕	<i>Ficus microcarpa</i>		+	+	+++	++	+	+			++			Tree	Native	Common	-	-
梔子	<i>Gardenia jasminoides</i>			+										Shrub	Native	Common	-	-
羅浮買麻藤	<i>Gnetum luofuense</i>					++++	+++							Woody vine	Native	Common	Near Threatened <sup>(2)</sup>	-
黃槿	<i>Hibiscus tiliaceus</i>		+		+	++			+			++		Shrub or tree	Native	Very common	-	-
銅錢草	<i>Hydrocotyle verticillata</i>			+					+					-	Exotic	-	-	-
梅葉冬青	<i>Ilex asprella</i>					++	+							Shrub	Native	Very common	-	-
鐵冬青	<i>Ilex rotunda</i>			+										Tree	Exotic	Cultivated	-	-
白茅	<i>Imperata cylindrica</i>			+++										Herb	Native	Very common	-	-
五爪金龍	<i>Ipomoea cairica</i>					+							++	Twining herb	Exotic	Very common	-	-
海邊牽牛	<i>Ipomoea pes-caprae</i>			+										Herb	Native	Common	-	-
水筆仔	<i>Kandelia obovata</i>									++				Small tree	Native	Common	-	-
短葉水蜈蚣	<i>Kyllinga brevifolia</i>			+++										Herb	Native	Common	-	-
馬纓丹	<i>Lantana camara</i>	++++					+++							Shrub	Exotic	Very common	-	-
蒲葦	<i>Lepironia articulata</i>					++								Herb	Exotic	Cultivated in gardens	-	-
銀合歡	<i>Leucaena leucocephala</i>	++++		+++	++++	+++	++++							Shrub or small tree	Exotic	Cultivated and naturalized	-	-
山指甲	<i>Ligustrum sinense</i>		+		+++	+++	++	++		+				Deciduous shrub or tree	Exotic	Common	-	-
潺槁	<i>Litsea glutinosa</i>							++						Tree	Native	Very common	-	-
豺皮樟	<i>Litsea rotundifolia var. oblongifolia</i>					+++	+++	+						Shrub	Native	Common	-	-
金銀花	<i>Lonicera japonica</i>			+										Herb	Native	Restricted	-	-
紅花檳木	<i>Loropetalum chinense f. rubrum</i>			++										Shrub	Exotic	-	-	-
海金沙	<i>Lygodium japonicum</i>				+++	+++						+++		Climbing herb	Native	Common	-	-
血桐	<i>Macaranga tanarius var. tomentosa</i>	++++			++++	+++	++	+++						Tree	Native	Common	-	-
白楸	<i>Mallotus paniculatus</i>	+				++								Tree or shrub	Native	Very common	-	-
杧果	<i>Mangifera indica</i>						+		+					Tree	Exotic	Cultivated	Data Deficient <sup>(2)</sup>	-



Appendix B1 - Floral Survey Result

Chinese Name	Species Name	Abundance											Growth Form	Origin	Rarity	Conservation Status	Remarks	
		Project Site (PS)			Developed Area	Woodland	Plantation	Shrubland	Wasteland (outside PS)	Modified Watercourse	Artificial Pond (Enhancement Pond)	Ash Lagoon						Natural Watercourse
		Wasteland	Grassland	Developed Area														
通泉草	<i>Mazus pumilus</i>			+									Herb	Native	-	-	-	
野牡丹	<i>Melastoma malabathricum</i>		++	+++						+			Shrub	Native	Common	-	-	
毛稔	<i>Melastoma sanguineum</i>							+	+++				Shrub	Native	Common	-	-	
苦楝	<i>Melia azedarach</i>								+				Deciduous tree	Exotic	Common	-	-	
紅毛草	<i>Melinis repens</i>	+		+++							++		Herb	Exotic	Very common	-	-	
含笑	<i>Michelia figo</i>			++									Shrub	Exotic	Cultivated in gardens	-	-	
布渣葉	<i>Micras nervosa</i>	+++			++++	+++							Shrub or small tree	Native	Common	-	-	
薺甘菊	<i>Mikania micrantha</i>	++++			++								Herb	Exotic	Very common	-	-	
含羞草	<i>Minosa pudica</i>	+		++					+				Shrub	Exotic	Very common	-	-	
五節芒	<i>Miscanthus floridulus</i>	++		+		+	+++					++	Herb	Native	Common	-	-	
九里香	<i>Murraya paniculata</i>			++	+								Small tree	Exotic	Common	-	-	
紅毛丹	<i>Nephelium lappaceum</i>			+									Tree	Exotic	Cultivated	-	-	
毛葉腎蕨	<i>Nephrolepis hirsutula</i>			+									Herb	Native	-	-	-	
水蓮	<i>Nymphoides hydrophylla</i>			+									Aquatic plant	Exotic	-	-	-	
麥冬	<i>Ophiopogon japonicus</i>			+			+						Herb	Native	-	-	-	
酢漿草	<i>Oxalis corniculata</i>			+++		++++							Herb	Native	Very common	-	-	
紅花酢漿草	<i>Oxalis debilis subsp. corymbosa</i>			+									Herb	Exotic	Common	-	-	
露兜草	<i>Pandanus australiensis</i>	+											Herb	Native	-	-	-	
龍珠果	<i>Passiflora foetida</i>	++							++			++	Herbaceous vine	Exotic	Very common	-	-	
光萼	<i>Persicaria glabra</i>		+++				+++						Herb	Native	-	-	-	
刺葵	<i>Phoenix loureiroi</i>				+	+		+					Tree palm	Native	Common	-	-	
日本葵	<i>Phoenix roebelenii</i>			+									Small tree palm	Exotic	Cultivated	-	-	
越南葉下珠	<i>Phyllanthus cochinchinensis</i>					+++							Shrub	Native	Very common	-	-	
油桐子	<i>Phyllanthus emblica</i>			+++									Tree or shrub	Native	Very common	-	-	
小葉冷水花	<i>Pilea microphylla</i>			+++									Herb	Exotic	Common	-	-	
馬尾松	<i>Pinus massoniana</i>			+++									Tree	Native	Common	-	-	
羅漢松	<i>Podocarpus macrophyllus</i>			+									Tree	Native	Very rare	Restricted <sup>(1)</sup>	Cultivated in garden	
水黃皮	<i>Pongamia pinnata</i>									+			Tree	Native	Common	-	-	
馬齒莧	<i>Portulaca oleracea</i>	++		+	+++		++						Herb	Native	Common	-	-	
九節	<i>Psychotria asiatica</i>				+++	++							Shrub or tree	Native	Very common	-	-	
半邊旗	<i>Pteris semipinnata</i>				++								Herb	Native	Very common	-	-	
車輪梅	<i>Rhaphiolepis indica</i>	+++		+++	+++	++		+++					Shrub or small tree	Native	Very common	-	-	
紅杜鵑	<i>Rhododendron simsii</i>			+									Shrub	Native	-	Cap. 96 <sup>(1)</sup>	Cultivated in garden	
白杜鵑	<i>Rhododendron mucronatum</i>			+									Shrub	Exotic	Cultivated in gardens	-	-	
白背漆	<i>Rhus hypoleuca</i>					+							Shrub or small tree	Native	Common	-	-	
野漆	<i>Rhus succedanea</i>					++	+++	+++					Shrub or small tree	Native	Common	-	-	
雀梅藤	<i>Sageretia thea</i>	+						+					Shrub	Native	Very common	-	-	
鵝掌藤	<i>Schefflera arboricola</i>			+++									Scandent shrub	Exotic	-	-	-	
鴨腳木	<i>Schefflera heptaphylla</i>	++			++++	+++	+						Tree	Native	Very common	-	-	
廣東刺楸	<i>Scolopia saeva</i>	++											Small tree or large shrub	Native	Common	-	-	
紫茉莉	<i>Mirabilis jalapa</i>			+									Shrub	Exotic	-	-	-	
田菁	<i>Sesbania cannabina</i>	++						+	++				Herb	Exotic	Common	-	-	
披殼	<i>Smilax china</i>	+											Climbing shrub	Native	Very common	-	-	
少花龍葵	<i>Solanum americanum</i>	+++			+++								Herb	Exotic	Very common	-	-	
海欖	<i>Sonneratia caseolaris</i>								+++				Small tree	Exotic	-	-	-	
豐花草	<i>Spermacoce stricta</i>			++									Herb	Native	-	-	-	
假馬鞭	<i>Stachytarpheta jamaicensis</i>								+++				Subshrub or perennial herb	Exotic	Common	-	-	
假蒺藜	<i>Sterculia lanceolata</i>			+++	++++	++	+						Semi-deciduous tree	Native	Very common	-	-	
蒲桃	<i>Syzygium jambos</i>			+++									Tree	Exotic	Common	-	-	
海南蒲桃	<i>Syzygium cumini</i>			+									Tree	Exotic	Cultivated	-	-	
狗牙花	<i>Tabebuia rosea</i>			+									Shrub	Exotic	Commonly cultivated	-	-	
小葉欖仁	<i>Terminalia mantaly</i>			++									-	Exotic	Cultivated in gardens	-	-	
欖仁樹	<i>Terminalia catappa</i>			++									Tree	Exotic	Cultivated	-	-	
羽芒菊	<i>Trixis procumbens</i>			+++									Herb	Exotic	Common	-	-	
紫玉盤	<i>Uvaria macrophylla</i>				++++								Vine	Native	Common	-	-	
單葉蔓荊	<i>Vitex rotundifolia</i>			++									Shrub	Native	Common	-	-	
三裂葉鵝掌柴	<i>Wedelia trilobata</i>			+++		+++							Herb	Exotic	Common; also widely cultivated	-	-	
黃鶴菜	<i>Youngia japonica</i>		++	+++									Herb	Native	Very common	-	-	
新楓花楸	<i>Zanthoxylum avicennae</i>				++++	++							Tree	Native	Common	-	-	
兩面針	<i>Zanthoxylum nitidum</i>	+++			++++	+++							Woody vine	Native	Very common	-	-	
人字草	<i>Zornia gibbosa</i>			++									Herb	Native	-	-	-	
小果葉下珠	<i>Phyllanthus reticulatus</i>	+											Shrub	Native	-	-	-	
台灣相思	<i>Acacia confusa</i>						+++						Tree	Exotic	Cultivated	-	-	
檸檬桉	<i>Corombia citriodora</i>				++	+++	+++						Tree	Exotic	Cultivated	-	-	
垂花懸鈴花	<i>Malva viscosa penduliflora</i>				+	++							Shrub	Exotic	Commonly cultivated	-	-	

Appendix B1 - Floral Survey Result

Chinese Name	Species Name	Abundance											Growth Form	Origin	Rarity	Conservation Status	Remarks	
		Project Site (PS)			Developed Area	Woodland	Plantation	Shrubland	Wasteland (outside PS)	Modified Watercourse	Artificial Pond (Enhancement Pond)	Ash Lagoon						Natural Watercourse
		Wasteland	Grassland	Developed Area														
葉下珠	<i>Phyllanthus urinaria</i>						+++						Annual herb	Native	-	-	-	
熊耳草	<i>Ageratum houstonianum</i>					+++							Erect annual herbs	Exotic	Naturalized and widely distributed	-	-	
小葉紅葉藤	<i>Rourea microphylla</i>						++						Climbing shrub	Native	Common	-	-	
崗松	<i>Baeckea frutescens</i>						+	+++					Shrub or sometimes small tree	Native	Common	-	-	
海馬齒	<i>Sesuvium portulacastrum</i>	+											Perennial succulent herb	Native	Common	-	-	
相思子	<i>Abrus precatorius</i>	+											Climbing shrub	Native	Common	-	-	
檉柳	<i>Tamarix chinensis</i>	+											Small tree or shrub	Exotic	-	-	-	
藜	<i>Chenopodium album</i>	+											Annual herb	Native	-	-	-	
荔枝菊	<i>Grangea maderaspatana</i>	+											Annual herbs	Native	-	-	-	
蘆葦	<i>Phragmites australis</i>	++++										++	Perennial reed	Native	-	-	-	
大馬蓼	<i>Persicaria lapathifolia</i>	++	++++										Annual herb	Native	-	-	-	
蘇門白酒草	<i>Conyza sumatrensis</i>	++											Annual or biennial herbs	Exotic	-	-	-	
紅龍莖	<i>Alternanthera dentata</i>				+								Short-lived perennial herb	Exotic	-	-	-	
三裂葉牽牛	<i>Ipomoea triloba</i>	+											Annual twining or creeping herb	Exotic	-	-	-	
山茶	<i>Camellia japonica</i>				+								Shrub or small tree	Exotic	-	Cap. 96 [1]	Cultivated in garden	
水石榕	<i>Elaeocarpus hainanensis</i>				+								Small tree	Exotic	-	-	-	
草海桐	<i>Scaevola taccada</i>				+								Shrubs or small trees	Native	Common	-	-	
大翼豆	<i>Macrophilum lathyroides</i>								+				Herb	Exotic	-	-	-	
狗尾草屬	<i>Setaria</i> sp.				++++								Annual or perennial herbs	-	-	-	-	
花葉躑躅山薑	<i>Alpinia zerumbet</i>				+								Herb	Exotic	-	-	-	
海桐	<i>Pinosporum tobira</i>				+								Shrub or small tree	Exotic	-	-	-	
蘭花草	<i>Ruellia coerulea</i>				+								Erect perennial herbs	Exotic	-	-	-	
紅花玉芙蓉	<i>Leucophyllum frutescens</i>				+								Shrub	Exotic	-	-	-	
吊蘭	<i>Chlorophytum comosum</i>				+								Herb	Exotic	-	-	-	
裂葉喜樹蕉	<i>Philodendron bipinnatifidum</i>				+								Herb	Exotic	-	-	-	
美人蕉	<i>Canna indica</i>				+								Herb	Exotic	-	-	-	
垂花水竹芋	<i>Thalia geniculata</i>				+								Aquatic plant	Exotic	-	-	-	
小葉米仔蘭	<i>Aglaiia odorata</i>									++			Shrub	Exotic	-	-	-	
土荆芥	<i>Dysphania ambrosioides</i>	+											Annual or perennial herb	Exotic	-	-	-	
黃花夾竹桃	<i>Thevetia peruviana</i>					+							Tree	Exotic	-	-	-	
假淡竹葉	<i>Centotheca lappacea</i>					++++							Perennial herb	Native	Common	-	-	
大黍	<i>Panicum maximum</i>	++++				++++							Perennial herb	Exotic	-	-	-	
海芋	<i>Alocasia macrorrhizos</i>					++++							Large evergreen perennial herb	Native	Common	-	-	
鹽膚木	<i>Rhus chinensis</i>	+											Shrub or tree	Native	Common	-	-	
蜈蚣草	<i>Pteris vittata</i>	++++											Herb	Native	-	-	-	
狼尾草	<i>Pennisetum alopecuroides</i>									++++			Perennial herb	Native	Common	-	-	
紅瓜	<i>Coccinia grandis</i>				+								Herbaceous vine	Native	-	-	-	
筆管榕	<i>Ficus subpisocarpa</i>				++								Deciduous tree	Native	Common	-	-	
長刺酸模	<i>Rumex crispifolius</i>		++									++	Perennial herb	Native	-	-	-	

Note:  
 [1] Protected under the Forests and Countryside Ordinance (Cap. 96)  
 [2] IUCN. (2023). IUCN Red List of Threatened Species Version 2022-2. [online] <https://www.iucnredlist.org/>. Last Accessed: 6 June 2023.  
 [3] Corlett et al. (2000). Hong Kong Vascular Plants: Distribution and Status  
 Species listed as "Least Concern" in IUCN Red List was not shown in the Conservation Status column  
 Code of Abundance: +=Rare; ++=Occasional; +++=Common; ++++=Abundant

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**APPENDIX B2**  
**FAUNAL SURVEY RESULT**

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Appendix B2 - Faunal Survey Result

Chinese Name	English Name	Species Name	Abundance											Conservation status	Distribution	Rarity				
			Project Site (PS)			Developed Area	Ash Lagoon	Woodland	Plantation	Shrubland	Wasteland (outside PS)	Natural Watercourse	Modified Watercourse				Artificial Pond (Enhancement Pond)			
			Wasteland	Grassland	Developed Area															
<b>Avifauna</b>																				
蛇鷲	Crested Serpent Eagle	<i>Spilornis cheela</i>				1				1							Cap. 586 <sup>(1)</sup> ; Near Threatened <sup>(2)</sup> ; Local Concern <sup>(3)</sup>	Widely distributed in shrublands on hill-sides throughout Hong Kong	Common resident	
麻雀	Eurasian Tree Sparrow	<i>Passer montanus</i>				20											-	Widely distributed in Hong Kong	Abundant resident	
紅耳鸛	Red Bulbul	<i>Pycnonotus jocosus</i>	2			17		10	17	5	5	8					-	Widely distributed in Hong Kong	Abundant resident	
黑頸椋鳥	Black-collared Starling	<i>Gracupica nigricollis</i>	1			4		1	3		3						-	Widely distributed in Hong Kong	Common resident	
白胸鸛	White Wagtail	<i>Motacilla alba</i>			1	1			7		1			3			-	Widely distributed in Hong Kong	Resident	
灰胸鸛	Grey Wagtail	<i>Motacilla cinerea</i>							7								-	Widely distributed in hill streams throughout Hong Kong	Common passage migrant and winter visitor	
家燕	Barn Swallow	<i>Hirundo rustica</i>				16								10			-	Widely distributed in Hong Kong.	Abundant passage migrant and uncommon winter visitor	
黑鳶	Black Kite	<i>Milvus migrans</i>	1			2		2	1	3		1					Cap. 586 <sup>(1)</sup> ; Regional Concern <sup>(2)</sup>	Widely distributed in Hong Kong.	Common resident and winter visitor	
八哥	Crested Myna	<i>Acridotheres cristatellus</i>				22		10						5			4	-	Widely distributed in Hong Kong.	Abundant resident
斑文鳥	Scaly-breasted Munia	<i>Lonchura punctulata</i>				5			12			15						-	Widely distributed in Hong Kong.	Common resident
白胸翡翠	White-throated Kingfisher	<i>Halcyon smyrnensis</i>	1													1		Local Concern <sup>(3)</sup>	Widely distributed in coastal areas throughout Hong Kong	Common resident
小白腰雨燕	House Swift	<i>Apus nipalensis</i>							15					4				-	Widely distributed in Hong Kong.	Abundant spring migrant and common resident
白浮頂	Common Coot	<i>Fulica atra</i>							17									Regional Concern <sup>(4)</sup>	Found in Deep Bay area, Plover Cove Reservoir, Shaou Wan.	Uncommon winter visitor
棕背伯勞	Long-tailed Shrike	<i>Lanius schach</i>							2					1				-	Widely distributed in open areas throughout Hong Kong	Common resident
小鵝鶯	Little Grebe	<i>Tachybaptus ruficollis</i>							31									Local Concern <sup>(3)</sup>	Found in Deep Bay area.	Common resident
林夜鷹	Savanna Nightjar	<i>Caprimulgus affinis</i>	2							2		1						-	Widely distributed in Hong Kong.	Uncommon resident and passage migrant
褐翅鸚鵡	Greater Coucal	<i>Centropus sinensis</i>	1						3	6	1							Vulnerable <sup>(1)</sup>	Widely distributed in lakes and ponds throughout Hong Kong	Common resident
斑魚狗	Pied Kingfisher	<i>Ceryle rudis</i>							7									Local Concern <sup>(3)</sup>	Widely distributed in inland areas throughout Hong Kong	Uncommon resident
珠頸斑鳩	Spotted Dove	<i>Spilopelia chinensis</i>	1			8		6	6	2			4			2		-	Widely distributed in Hong Kong.	Abundant resident
山斑鳩	Oriental Turtle Dove	<i>Streptopelia orientalis</i>															1	-	Widely distributed in Hong Kong	Common resident
蒼鷺	Grey Heron	<i>Ardea cinerea</i>							13									Potential Regional Concern <sup>(4)</sup>	Found in Deep Bay area, Starling Inlet, Kowloon Park, Cape D'Aguilar	Common winter visitor
白頸鴉	Collared Crow	<i>Corvus torquatus</i>							4									Local Concern <sup>(3)</sup> ; Near Threatened <sup>(2)</sup>	Found in Inner Deep Bay area, Nam Chung, Kei Lung Ha, Tai Mei Tuk, Pok Fu Lam, Chek Lap Kok, Shaou Wan, Lam Tsuen	Uncommon resident
原鴿	Domestic Pigeon	<i>Columba livia</i>				2			1									-	Widely distributed in urban area throughout Hong Kong	Locally common resident
鳳頭潛鴨	Tufted Duck	<i>Aythya fuligula</i>							34									Local Concern <sup>(3)</sup>	Found in Deep Bay area, Nam Chung, Starling Inlet	Uncommon winter visitor
白胸苦惡鳥	White-breasted Waterhen	<i>Amaurornis phoenicurus</i>							3									-	Widely distributed in wetland throughout Hong Kong	Common resident
扇尾鶯科	Plain Prinia	<i>Prinia inornata</i>							4					5				-	Widely distributed in grassland throughout Hong Kong	Locally common resident
大白鷺	Great Egret	<i>Ardea alba</i>				1			1									Regional Concern <sup>(4)</sup>	Widely distributed in Hong Kong	Common resident and winter visitor
小白鷺	Little Egret	<i>Egretta garzetta</i>	4						2					1				Regional Concern <sup>(4)</sup>	Widely distributed in coastal areas throughout Hong Kong	Common resident
白頭鸛	Chinese Bulbul	<i>Pycnonotus sinensis</i>	3			14		1	4	2			2					-	Widely distributed in Hong Kong	Abundant resident
純色鷓鴣	Plain Prinia	<i>Prinia inornata</i>	1			1			4					7				-	Widely distributed in grassland throughout Hong Kong	Common resident
黃腹鷓鴣	Yellow-bellied Prinia	<i>Prinia flaviventris</i>	8						2	1				4				-	Widely distributed in Hong Kong.	Common resident
栗背短腳鸛	Chestnut Bulbul	<i>Hemixos castanonotus</i>							1									-	Widely distributed in woodland throughout Hong Kong	Common resident and winter visitor
噪鶇	Asian Koel	<i>Eudynamis scolopacea</i>												2				-	Widely distributed in Hong Kong.	Common resident
鸚鵡	Oriental Magpie-Robin	<i>Copsychus saularis</i>				4					1			3			1	-	Widely distributed in Hong Kong.	Abundant resident
大嘴烏鶇	Large-billed Crow	<i>Corvus macrorhynchos</i>									3	1		4				-	Widely distributed in Hong Kong.	Common resident
紅嘴藍鸛	Red-billed Blue Magpie	<i>Urocissa erythrorhynchos</i>									1			2				-	Widely distributed in woodland edges throughout Hong Kong	Common resident
暗綠繡眼鳥	Swinhoe's White-eye	<i>Zosterops simplex</i>	1			22			22		8			5				-	Widely distributed in Hong Kong	Abundant resident
黑喉噪鶇	Black-throated Laughingthrush	<i>Pterorhinus chinensis</i>								2								-	Widely distributed in woodland and shrubland throughout Hong Kong	Common resident
北紅尾鶇	Daurian Redstart	<i>Phoenicurus auroreus</i>	7			1								1				-	Widely distributed in Hong Kong	Common winter visitor
樹鶇	Olive-backed Pipit	<i>Anthus hodgsoni</i>								3								-	Widely distributed in Hong Kong	Common passage migrant and winter visitor
遠東山雀	Japanese Tit	<i>Parus minor</i>								6	4			1				-	Widely distributed in Hong Kong.	Common resident
長尾絨鶯	Common Tailorbird	<i>Oriothorus sutorius</i>	2	2						2								-	Widely distributed in Hong Kong.	Common resident
叉尾太陽鳥	Fork-tailed Sunbird	<i>Aethopyga christinae</i>				1				2				1				-	Widely distributed in Hong Kong.	Common resident and winter visitor
夜鷺	Black-crowned Night Heron	<i>Nycticorax nycticorax</i>							6									Local Concern <sup>(3)</sup>	Widely distributed in Hong Kong	Common resident and winter visitor
磯鶇	Common Sandpiper	<i>Actitis hypoleucos</i>							3							2		-	Widely distributed in wetland area throughout Hong Kong	Common passage migrant and winter visitor
黑卷尾	Black Drongo	<i>Dicrurus macrocercus</i>								3				3				-	Widely distributed in open area throughout Hong Kong	Common summer visitor
池鷺	Chinese Pond Heron	<i>Ardeola bacchus</i>							1							1		Regional Concern <sup>(4)</sup>	Widely distributed in Hong Kong	Common resident
白喉紅臀鸛	Sooty-headed Bulbul	<i>Pycnonotus aurigaster</i>							2									-	Widely distributed in open areas throughout Hong Kong	Uncommon resident
八聲杜鵑	Plaintive Cuckoo	<i>Cacomantis merulinus</i>												1				-	Widely distributed in open area throughout Hong Kong	Uncommon summer visitor
黃眉柳鶇	Yellow-browed Warbler	<i>Phylloscopus inornatus</i>	24						1									-	Widely distributed in woodland throughout Hong Kong	Common winter visitor and spring migrant
黃胸鸛	Eastern Yellow Wagtail	<i>Motacilla tschutschensis</i>								3								-	Widely distributed in agricultural fields and marsh edges throughout Hong Kong	Common passage migrant and winter visitor
金眶鸛	Little Ringed Plover	<i>Charadrius dubius</i>								3								Local Concern <sup>(3)</sup>	Widely distributed in freshwater areas throughout Hong Kong	Common winter visitor and passage migrant
黑臉噪鶇	Masked Laughingthrush	<i>Garrulax perspicillatus</i>	1											1				-	Widely distributed in shrubland throughout Hong Kong	Abundant resident
領角鸛	Collared Scops Owl	<i>Otus letia</i>	1											1				Cap. 586 <sup>(1)</sup>	Widely distributed in shrubland throughout Hong Kong	Common resident

Appendix B2 - Faunal Survey Result

Chinese Name	English Name	Species Name	Abundance											Conservation status	Distribution	Rarity	
			Project Site (PS)			Developed Area	Ash Lagoon	Woodland	Plantation	Shrubland	Wasteland (outside PS)	Natural Watercourse	Modified Watercourse				Artificial Pond (Enhancement Pond)
			Wasteland	Grassland	Developed Area												
<b>Butterfly</b>																	
黃粉蝶屬	-	<i>Eurema sp.</i>	1			1		7				5					-
寬邊黃粉蝶	Common Grass Yellow	<i>Eurema hecabe</i>	2								4						-
報喜斑粉蝶	<i>Delias pasithoe</i>	<i>Red-base Jezebel</i>				1		1				1			1		-
酢漿灰蝶	Pale Grass Blue	<i>Zizeeria maha</i>	20			18		4				30					-
吉灰蝶	Dark Grass Blue	<i>Zizeeria karsandra</i>				4					1						-
玉環鳳蝶	Red Helen	<i>Papilio helenus helenus</i>						3		1					6		-
亮灰蝶	Long-tailed Blue	<i>Lampides boeticus</i>									1						-
吻灰蝶	Forget-me-not	<i>Catochrysops strabo</i>				1											-
袖弄蝶	Formosan Swift	<i>Borbo cinnara</i>													2		-
美鳳蝶	Great Mormon	<i>Papilio memnon</i>				1									2		-
小眉眼蝶	Dark-brand Bush Brown	<i>Myccalesis mineus</i>						2		1					3		-
幻紫斑蛺蝶	Great Egg-fly	<i>Hypolimnas bolina</i>	5														-
斜斑彩灰蝶	Purple Sapphire	<i>Heliophorus epicles</i>						1							2		-
紅脈蛺蝶	Red Lacewing	<i>Cethosia biblis</i>	19		7			2							2		-
長腹灰蝶	Tiny Grass Blue	<i>Zizula hylax</i>	4														-
疑波灰蝶	Tailless Line Blue	<i>Prosotas dubiosa</i>				1											-
蛇眼蝶	Lemon Pansy	<i>Junonia lemonias</i>	3					3							12		-
蛇目褐眼蝶	Plum Judy	<i>Abisara echerius</i>													1		-
古樓蝶	Transparent 6-line Blue	<i>Nacadaba kurava</i>													1		-
波紋蝶	Angled Castor	<i>Ariadne ariadne</i>													1		-
殘鈎蛺蝶	Five-dot Sergeant	<i>Parathyma sulphita</i>													1		-
燕衣琉璃灰蝶	Plain Hedge Blue	<i>Celastrina levaldularis</i>													1		-
鈕灰蝶	Common Hedge Blue	<i>Acrotopis puspa</i>						2									-
碧鳳蝶	Chinese Peacock	<i>Papilio bianor</i>	6			1									1		-
玉環鳳蝶	Red Helen	<i>Papilio helenus helenus</i>	1			2		4		3					1		-
東方菜粉蝶	Indian Cabbage White	<i>Pieris candida</i>	2		1	1		5							6		-
黃襟蛺蝶	Rustic	<i>Cupha erymanthis</i>													3		-
菜粉蝶	Small Cabbage White	<i>Pieris rapae</i>	3												6		-
巴黎翠鳳蝶	Paris Peacock	<i>Papilio paris</i>	1					4							2		-
統帥青鳳蝶	Tailed Jay	<i>Graphium agamemnon</i>													1		-
藍鳳蝶	Spangle	<i>Papilio protenor</i>			1	2		2							2		-
角翅弄蝶	Chestnut Angle	<i>Odontoptilum angulatum angulatum</i>						1									-
燕灰蝶	Slate Flash	<i>Rapala manea</i>						9							2		-
黑脈蛺蝶	Red Ring Skirt	<i>Hestina assimilis</i>	4					1		3		1					-
黑脈圓粉蝶	Common Gull	<i>Cepora nerissa</i>						1									-
青鳳蝶	Common Bluebottle	<i>Graphium sarpedon</i>	2			1		1							1		-
玉帶鳳蝶	Common Mormon	<i>Papilio polytes</i>	1					3							1		-
中環蛺蝶	Common Sailer	<i>Neptis hylax</i>				3									1		-
翠袖眼蝶	Common Palmfly	<i>Elymnias hypermnestra</i>													3		-
金斑蝶	Plain Tiger	<i>Danaus chrysippus</i>						2									-
<b>Odonata</b>																	
褐斑異痣蝶	Common Bluetail	<i>Ischnura senegalensis</i>					29	100+							4		-
烏齒原蝶	Black Threadtail	<i>Prodasineura autumnalis</i>	1														-
狹腹灰蜻	Green Skimmer	<i>Orthetrum sabina sabina</i>													3		-
華麗寬腹蜻	Forest Chaser	<i>Lyriothemis elegantissima</i>													1		-
黃狹尾蝶	Yellow Featherlegs	<i>Coperia marginipes</i>													10		-
黃蜻	Wandering Glider	<i>Pantala flavescens</i>	6			3											-
華麗灰蜻	Red-faced Skimmer	<i>Orthetrum chrysis</i>													1		-
曉靑蜻	Crimson Dropwing	<i>Tritheimis aurora</i>													2		-
<b>Herpetofauna</b>																	
變色樹蜥	Changeable Lizard	<i>Calotes versicolor</i>													5		-
長尾南蜥	Long-tailed Skink	<i>Eutropis longicaudata</i>													2		-
沼蛙	Gunther's Frog	<i>Hylarana guntheri</i>					8	25							1		2
原尾蜥虎	Bowring's gecko	<i>Hemidactylus bowringii</i>					8		1						1		2
灰鼠蛇	Indo-Chinese Rat Snake	<i>Pyas korros</i>															1
中國壁虎	Chinese Gecko	<i>Gekko chinensis</i>					1		1						1		2
溫室蟾	Greenhouse Frog	<i>Eleutherodactylus planirostris</i>					2										
斑腿泛樹蛙	Brown Tree Frog	<i>Polydactylus megacephalus</i>	8				28			3							7
箭紋姬蛙	Ornate Pigmy Frog	<i>Microhyla fissipes</i>					5										
澤蛙	Paddy Frog	<i>Fejervarya limnocharis</i>	1														

Appendix B2 - Faunal Survey Result

Chinese Name	English Name	Species Name	Abundance											Conservation status	Distribution	Rarity			
			Project Site (PS)			Developed Area	Ash Lagoon	Woodland	Plantation	Shrubland	Wasteland (outside PS)	Natural Watercourse	Modified Watercourse				Artificial Pond (Enhancement Pond)		
			Wasteland	Grassland	Developed Area														
<b>Mammals</b>																			
大蹄蝠	Himalayan Leaf-nosed Bat	<i>Hipposideros armiger</i>				2											Cap. 170 <sup>[1]</sup> ; Local Concern <sup>[4]</sup>	Widely distributed in countryside areas throughout Hong Kong	Very Common
東亞家蝠	Japanese house bat	<i>Pipistrellus abramus</i>				1	1										Cap. 170 <sup>[1]</sup> ; Local Concern <sup>[4]</sup>	Widely distributed throughout Hong Kong	Very Common
赤腹松鼠	Pallas's Squirrel	<i>Callosciurus erythraeus</i>	1														Cap. 170 <sup>[2]</sup>	Fairly widely distributed, with the stanni subspecies found in the New Territories (e.g. Tai Lam, Shing Mun and Tai Po Koi), and the thsi subspecies found on the Hong Kong Island (e.g. Tai Tam and Pok Fu Lam).	Common

Note:

[1] Protected under the Protection of Endangered Species of Animal and Plants Ordinance (Cap. 586)

[2] Protected under the Wild Animals Protection Ordinance (Cap. 170)

[3] IUCN. (2023). IUCN Red List of Threatened Species Version 2023.2. [online] <https://www.iucnredlist.org/>. Last Accessed: 6 June 2023.

[4] Fellowes, J.R., Lau, M.W.N., Dudgeon, D., Rees, G.T., Ades, G.W.J., Casey, G.J., Chan, B.P.L., Kendrick, R.C., Lee, K.S., Leven, M.R., Wilson, K.D.P., and Yu, Y.T. (2002). Wild animals to watch: Terrestrial and freshwater fauna of conservation importance in Hong Kong. *Memoirs of the Hong Kong Natural History Society*, 25: 123-159.

[5] China Red Data Book of Endangered Animals

[6] Agriculture, Fisheries and Conservation Department (AFCD). (2011). Newsletter Issue No. 21: A Review of the Local Restrictedness of Hong Kong Butterflies

All birds are Listed in Wild Animals Protection Ordinance (Cap. 170)

Species listed as "Least Concern" in IUCN Red List was not shown in the Conservation Status column

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**APPENDIX B3  
FRESHWATER FAUNA SURVEY  
RESULT**

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Appendix B3 - Freshwater Fauna Survey Result

Chinese Name	English Name	Species Name	Project Site Wasteland	Abundance					Conservation status	Distribution	Rarity
				F1	F2	F3	Developed Area	Casual Findings at F2			
<b>Amphibian</b>											
黑眶蟾蜍蝌蚪	Asian Common Toad	<i>Duttaphrynus melanostictus</i>				+++++			-	Widely distributed in Hong Kong	-
澤蛙蝌蚪	Paddy Frog	<i>Fejervarya limnocharis</i>				++++			-	Widely distributed in Hong Kong	-
斑腿泛樹蛙蝌蚪	Brown Tree Frog	<i>Polypedates megacephalus</i>	+				+++++		-	Widely distributed throughout Hong Kong	-
<b>Fish</b>											
-	-	<i>Ambassis</i> sp.			++				-	-	-
彈塗魚	Common Mudskipper	<i>Periophthalmus modestus</i>			+				-	Brackish water	Common
大彈塗魚	Great Blue Spotted Mudskipper	<i>Boleophthalmus pectinirostris</i>						+	-	Brackish water	Common
-	-	<i>Channa</i> sp.		++++					-	-	-
尼羅口孵非鯽	Nile Tilapia	<i>Oreochromis niloticus</i>		+	+				-	-	-
-	-	<i>Mugilidae</i> sp.		+	+++++	++			-	-	-
-	-	<i>Zenarchopterus</i> sp.						+++	-	-	-
<b>Decapoda</b>											
-	-	<i>Penaedidae</i> sp.			+++				-	-	-
-	Short Nose Algae Shrimp	<i>Caridina longirostris</i>		+					-	-	-
-	-	<i>Macrobrachium</i> sp.		+					-	-	-
字紋弓蟹	River Swimming Crab	<i>Varuna litterata</i>		+					-	-	-
-	-	<i>Eriocheir</i> sp.				+			-	-	-
雙齒擬相手蟹	Red-clawed Crab	<i>Perisesarma bidens</i>						+++	-	Brackish water	-
弧邊招潮蟹	Fiddler Crab	<i>Uca arcuata</i>						+++	-	Brackish water	-
擬盾氏管招潮蟹	-	<i>Tubuca paradussumieri</i>						+	-	Brackish water	-
大眼蟹屬	-	<i>Macrophthalmus</i> sp.						+	-	Brackish water	-
北方凹指招潮蟹	Northern Calling Fiddler Crab	<i>Gelasimus borealis</i>						+	-	Brackish water	-
<b>Gastropoda</b>											
-	-	<i>Biomphalaria</i> sp.		+++++		+++			-	-	-
尖膀胱螺	European physa	<i>Physella acuta</i>				+++++			-	-	-
-	-	<i>Radix</i> sp.				++++			-	-	-



Appendix B3 - Freshwater Fauna Survey Result

Chinese Name	English Name	Species Name	Project Site Wasteland	Abundance					Conservation status	Distribution	Rarity
				F1	F2	F3	Developed Area	Casual Findings at F2			
福壽螺	Golden Apple Snail	<i>Pomacea canaliculata</i>					+++++	++	-	-	-
<b>Insect</b>											
-	-	<i>Gerridae</i> sp.		+++	++++	++			-	-	-
-	-	<i>Baetidae</i> sp.		+++++					-	-	-
-	-	<i>Caenidae</i> sp.		+					-	-	-
-	-	<i>Chironomidae</i> sp.		++		+++++			-	-	-
黃狹扇蟴(幼蟲)	Yellow Featherlegs(Larve)	<i>Copera marginipes</i>		+++					-	Widespread in streams throughout Hong Kong	Abundant
-	-	<i>Leptophlebiidae</i> sp.		+					-	-	-
-	-	<i>Micronecta</i> sp.		+					-	-	-
-	-	<i>Simuliidae</i> sp.		+++++					-	-	-
-	-	<i>Trithemis</i> sp.		++		+			-	-	-
-	-	<i>Veliidae</i> sp.		++		++			-	-	-
褐斑異痣蟴(幼蟲)	Common Bluetail(Larve)	<i>Ischnura senegalensis</i>		+		+++			-	Widely distribute in all wetland habitats except fast flowing rivers throughout Hong Kong	Abundant
黃蜻(幼蟲)	Wandering Glider(Larve)	<i>Pantala flavescens</i>				+			-	Widely distribute in all wetland habitats throughout Hong Kong	Abundant
-	-	<i>Ephyridae</i> sp.				+			-	-	-
翠胸黃蟴(幼蟲)	Orange-tailed Sprite(Larve)	<i>Ceriatrion auranticum ryukyuanum</i>		+					-	Widely spread in ponds and marshes throughout Hong Kong	Abundant
-	-	<i>Hydropsychidae</i> sp.		+					-	-	-
-	-	<i>Orthetrum</i> sp.		+					-	-	-
<b>Annelidae</b>											
-	-	<i>Erpobdellidae</i> sp.				+			-	-	-

Note:

\*\* Species listed as "Least Concern" in IUCN Red List was not shown in the Conservation Status column

	From	To
+	0	10
++	11	20
+++	21	50
++++	51	100
+++++	101	101+

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**APPENDIX C  
PHOTOGRAPHIC RECORD OF SPECIES  
OF CONSERVATION IMPORTANCE**

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## Appendix C - Photographic Record of Species of Conservation Importance

 A Black Kite ( <i>Milvus migrans</i> ) is captured in flight, showing its dark brown wings and tail against a blurred background of water and structures.	 A Common Coot ( <i>Fulica atra</i> ) is swimming in greenish water, displaying its dark body and characteristic white bill.
<p>黑鳶 Black Kite <i>Milvus migrans</i></p>	<p>白骨頂 Common Coot <i>Fulica atra</i></p>
 A Little Grebe ( <i>Tachybaptus ruficollis</i> ) is swimming in a body of water, with its small, dark body and reddish-brown head visible.	 A Greater Coucal ( <i>Centropus sinensis</i> ) is partially hidden among tall, green reeds, showing its dark body and reddish-brown head.
<p>小鸕鶿 Little Grebe <i>Tachybaptus ruficollis</i></p>	<p>褐翅鴉鶿 Greater Coucal <i>Centropus sinensis</i></p>
 A Pied Kingfisher ( <i>Ceryle rudis</i> ) is perched on a large, light-colored rock in the foreground, with a dark body of water in the background.	 A Grey Heron ( <i>Ardea cinerea</i> ) is standing in shallow water near a dense thicket of reeds, showing its long neck and white body.
<p>斑魚狗 Pied Kingfisher <i>Ceryle rudis</i></p>	<p>蒼鷺 Grey Heron <i>Ardea cinerea</i></p>

**Appendix C - Photographic Record of Species of Conservation Importance**

	
<p>白頸鴉 Collared Crow <i>Corvus torquatus</i></p>	<p>鳳頭潛鴨 Tufted Duck <i>Aythya fuligula</i></p>
	
<p>小白鷺 Little Egret <i>Egretta garzetta</i></p>	<p>白胸翡翠 White-throated Kingfisher <i>Halcyon smyrnensis</i></p>
	
<p>金眶鸻 Little Ringed Plover <i>Charadrius dubius</i></p>	<p>領角鴞 Collared Scops Owl <i>Otus lettia</i></p>

Appendix C - Photographic Record of Species of Conservation Importance



Nests of 小鸕鷀 Little Grebe *Tachybaptus ruficollis*



薰衣琉璃灰蝶 Plain Hedge Blue  
*Celastrina lavendularis*



羅浮買麻藤 Luofushan Joint-fir  
*Gnetum luofuense*



菜粉蝶 Small Cabbage White Spoonbill  
*Pieris rapae*



咖灰蝶 Forget-me-not *Catochrysops strabo*