

Form_No. S16-I 表格第 S16-I 號

For Official Use Only	Application No. 申請編號	A/4L-NSW/307
請勿填寫此欄	Date Received 收到日期	18 JAN ()[3

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 The completed form and supporting documents (if any) should be sent to the Secretary, Town Planning Board (the Board), 15/F, North Point Government Offices, 333 Java Road, North Point, Hong Kong.
 申請人須把填妥的申請表格及其他支持申請的文件(倘有),送交香港北角渣華道 333 號北角政府合署 15 樓城市 規劃委員會(下稱「委員會」)秘書收。

- 3. This form can be downloaded from the Board's website, and obtained from the Secretariat of the Board and the Planning Enquiry Counters of the Planning Department. The form should be typed or completed in block letters. The processing of the application may be refused if the required information or the required copies are incomplete. 此表格可從委員會的網頁下載,亦可向委員會秘書處及規劃署的規劃資料查詢處索取。申請人須以打印方式或以正楷填寫表格。如果申請人所提交的資料或文件副本不齊全,委員會可拒絕處理有關申請。

1. Name of Applicant 申請人姓名/名稱

(□Mr. 先生 /□Mrs. 夫人 /□Miss 小姐 /□Ms. 女士 1 Company 公司 /□Organisation 機構)

CLP Power Hong Kong Limited

2. Name of Authorised Agent (if applicable) 獲授權代理人姓名/名稱(如適用)

(□Mr. 先生 / □ Mrs. 夫人 / □ Miss 小姐 / □ Ms. 女士 / ☑ Company 公司 / □ Organisation 機構)

Pacific Extend Ltd.

3.	Application Site 申請地點	
(a)	Full address / location / demarcation district and lot number (if applicable) 詳細地址/地點/丈量約份及 地段號碼(如適用)	Government land in DD123 Nam Sang Wai , YL
(b)	Site area and/or gross floor area involved 涉及的地盤面積及/或總樓面面 積	☑Site area 地盤面積 27.6 sq.m 平方米☑About 約 □Gross floor area 總樓面面積 sq.m 平方米□About 約
(c)	Area of Government land included (if any) 所包括的政府土地面積(倘有)	92m x 0.3m = 27.6m2 sq.m 平方米 🗹 About 約

Parts 1, 2 and 3 第1、第2及第3部分

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(d)	Name and number of the related statutory plan(s) 有關法定圖則的名稱及編號	S/YL-ŅSW/8		
(e)	Land use zone(s) involved Conservation Area 涉及的土地用途地帶			
(f)	Current use(s) 現時用途	Local Track		
		(If there are any Government, institution or community facilities, please illustrate on plan and specify the use and gross floor area) (如有任何政府、機構或社區設施,讀在圖則上顯示,並註明用涂及總懲而面積)		
4.	"Current Land Owner" of A	pplication Site 申請地點的「現行土」	—————————————————————————————————————	
The	applicant 申請人 -			
	is the sole "current land owner" ^{#&} (ple 是唯一的「現行土地擁有人」 ^{#&} (講	ease proceed to Part 6 and attach documentary proof 繼續填寫第 6 部分,並夾附業權證明文件)。	f of ownership).	
	is one of the "current land owners" ^{* &} (please attach documentary proof of ownership). 是其中一名「現行土地擁有人」 ^{*&} (請夾附業權證明文件)。			
	is not a "current land owner"#. 並不是「現行土地擁有人」#。			
	The application site is entirely on Government land (please proceed to Part 6). 申請地點完全位於政府土地上(請繼續填寫第 6 部分)。			
5.	5. Statement on Owner's Consent/Notification 就土地擁有人的同意/通知土地擁有人的陳述			
(a)				
	涉 名「現行土地	擁有人」 [*] 。	山印記錄,這不中時六年	
(b)	The applicant 申請人 —			
	L has obtained consent(s) of名日			
		· · · · · · · · · · · · · · · · · · ·		
		nd owner(s)" [#] obtained 取得「現行土地擁有人		
	「 現行 + 协 擁 有 Registry whe	ddress of premises as shown in the record of the Land re consent(s) has/have been obtained 冊處記錄已獲得同意的地段號碼/處所地址	Date of consent obtained (DD/MM/YYYY) 取得同意的日期 (日/月/年)	
	· ·			
	(Please use separate sheets if the space	e of any box above is insufficient. 如上列任何方格的空	間不足,請另頁說明)	

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	ſ	Details of the "cu	rrent land owner(s)" [#] notified 已獲通知「現行土地擁有人」	"的詳細資料
	-	No. of 'Current Land Owner(s)' 「現行土地擁 有人」數目	Lot number/address of premises as shown in the record of th Land Registry where notification(s) has/have been given 根據土地註冊處記錄已發出通知的地段號碼/處所地址	Date of notification
	-	· · · · · · · · · · · · · · · · · · ·		
	[- (Please use separate s	heets if the space of any box above is insufficient. 如上列任何方格的	
			le steps to obtain consent of or give notification to owner(s): L取得土地擁有人的同意或向該人發給通知。詳情如下:	
	ļ	Reasonable Steps to	o Obtain Consent of Owner(s) 取得土地擁有人的同意所採用	<u>取的合理步骤</u>
	[sent request fo於	or consent to the "current land owner(s)" on (日/月/年)向每一名「現行土地擁有人」 [#] 郵遞要求	(DD/MM/YYYY) ^{#&} <同意書 ^{&}
	Ē	Reasonable Steps to	o Give Notification to Owner(s) 向土地擁有人發出通知所招	和的合理步驟
	[ices in local newspapers on (DD/MM/Y (日/月/年)在指定報章就申請刊登一次通知 ^{&}	(YYY) ^{&}
	[in a prominent position on or near application site/premises on (DD/MM/YYYY) ^{&}	
		於	(日/月/年)在申請地點/申請處所或附近的顯明位	置貼出關於該申請的通知《
	[office(s) or ru 於	relevant owners' corporation(s)/owners' committee(s)/mutual a ral committee on (DD/MM/YYYY) ^{&} (日/月/年)把通知寄往相關的業主立案法團/業主 例鄉事委員會 ^{&}	
	<u>(</u>	<u>Dthers 其他</u>		
	[」 others (please 其他(請指明		
				· · · · · · · · · · · · · · · · · · ·
Note:	May i	nsert more than one	$: \ulcorner \boldsymbol{\nu}_{ J}$. ovided on the basis of each and every lot (if applicable) and pres	·

Part 5 (Cont'd) 第5部分(續)

۰ſ	-			<u> </u>	<u>.</u>				
	6.	Type(s)	of Applicatio	n 申請	類別				
		Type (i) 第(i)類	Change of use 更改現有建築	within exis 物或其部分	ting building or pa 內的用途	art thereof			
	\checkmark	Type (ii)	(ii) Diversion of stream / excavation of land / filling of land / filling of pond as required under Notes of Statu Plan(s)			under Notes of Statutory			
		第(ii)類		《註釋》内	n所要求的 河道改	递 /挖土/填土/導	塘王程		
	\checkmark	Type (iii) 第(iii)類	Public utility in 公用事業設施	nstallation / 裝置/私人會	Utility installation 發展計劃的公用記	n for private project 投施裝置			
		Type (iv) 第(iv)類			atutory Plan(s)				
		Type (v) 第(v)類	Use / developn 上述的(i)至(iii	nent other th)項以外的/	nan (i) to (iii) abov 用途/發展	ле			
	Note	1: May insert	more than one	/ C / DD			•		
1	Note	2: For Develop	一個方格內加上 ment involving colu 支援灰安置所用支	mbarium use,	please complete the tai 、附件的表格。	ble in the Appendix.			
	Ô.	EoistPyp	e:(i):applicat	on 供第	<u>())類申請</u> 一一				
	(a)] :.	Cotal floc nvolved	r area						
		步及的總樓通	面積				sq.m	平方为	К
					<u> </u>			·	
	(b) Proposed use(s)/development 擬議用途/發展								
			(If there are any Government, institution or community facilities, please illustrate on plan and specify						
			the use and	gross floor area)	nstitution or community 設施,請在圖則上顯表				
(lumber of sto 步及層數	oreys involved			Number of units inv 涉及單位數目	/olved		
╞	<u> </u>	<u></u> .							
				Domestic	part 住用部分	·····	sq.m 平	方米	□About 約
(roposed floor 議樓面面積		Non-dome	estic part 非住用音	彩分	sq.m 平	方米	口About 約
				Total 總計	· · · · · · · · · · · · · · · · · · ·		sq.m 平	方米	□About 約
(e) Proposed uses of different		Floor(s) 樓層	Current us	e(s) 現時用途	Pr	oposed	use(s) 擬議用途	
		oors (if appli 。同樓層的擬	cable) 議用途(如適						
	用 (P		ate sheets if the	·			<u> ·</u>		
	ŝp	ace provided is i				· · · ·			· .
	明					,			
		_			.				

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<u>Part 6 第6部分</u>

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(ii) For Type (ii) applic	ation.供第(ii)類申請。
	Diversion of stream 河道改道
	 □ Filling of pond 填塘 Area of filling 填塘面積sq.m 平方米 □About 約 Depth of filling 填塘深度m 米 □About 約
(a) Operation involved 涉及工程	 ☑ Filling of land 填土 Area of filling 填土面積
	 ☑ Excavation of land 挖土 Area of excavation 挖土面積
	(frease militate of she plan the boundary of concerned rand/point(s), and particulars of sheah arceston, the extern of filling of land/pond(s) and/or excavation of land) (請用圖則顯示有關土地/池塘界線,以及河道改道、填塘、填土及/或挖土的細節及/或範圍))
(b) Intended use/development 有意進行的用途/發展	 Public utility installation (LV cable laying) Filling and Excavation of land
' (138)). <u>Far Twor (1910) app</u> like	cutition (####100));TUEDAL
	☑ Public utility installation 公用事業設施裝置
	□ Utility installation for private project 私人發展計劃的公用設施裝置
	Please specify the type and number of utility to be provided as well as the dimensions of each building/structure, where appropriate 請註明有關裝置的性質及數量,包括每座建築物/構築物(倘有)的長度、高度和闊度
	Name/type of installation 裝置名稱/種類Number of provisionDimension /building/structure (m) (LxWxH) 每個裝置/建築物/構築物的尺寸
	裝置名稱/種類
(a) Nature and scale 性質及規模	
	数重 (米)(長 x 闊 x 高) Excavation and LV 1 LV underground Cable 92m (L) x
	数重 (米)(長 x 闊 x 高) Excavation and LV 1 LV underground Cable 92m (L) x

(iv) <u>I</u>	or Type (iv) application.	<u>性第(iv)類申請</u>		
(a)	Please specify the propos	sed minor relaxation of st	ated development restriction(s) and	l <u>also fill in the</u>
I	proposed use/development a	nd development particu	lars in part (v) below –	
Ē	间21991厥战哈局队見的驳民	限制 <u>业現安於弟(v)部分</u>	的擬議用途/發展及發展細節 -	
	Plot ratio restriction 地積比率限制	From 由	to 至	
	Gross floor area restriction 總樓面面積限制	From 由sq. m	平方米 to 至sq. m 平方	·米
	Site coverage restriction 上蓋面積限制	From 由	.% to 至%	· •
	Building height restriction 建築物高度限制	From 由	m 米 to 至 m 米	
		From 由	.mPD 米 (主水平基準上) to 至	
		•••••••••••••••••••••••••••••••••••••••	mPD 米 (主水平基準上)	
		From 由	. storeys 層 to 至 store	eys 層
	Non-building area restriction 非建築用地限制	From 由	.m to 至m	
	Others (please specify) 其他(請註明)			
*(Y) <u>E</u> C	rType(x):application (#	<u>第0)類用請</u>		
-)/development 用途/發展	Instrate the datails of the prope	sal on a layout plan 請用平面圖說明建議	±₩.6#\\
(b) Deve	lopment Schedule 發展細節表			叶(月)
i .	osed gross floor area (GFA) 擬語	的旗而西部		
	osed plot ratio 擬議地積比率	找你的安山山山们具	sq.m 平方米	□About 約 □About 約
	osed site coverage 擬議上蓋面積		%	□About 約
	osed no. of blocks 擬議座數			
Propo	osed no. of storeys of each block	每座建築物的擬議層數	storeys 層	
			口 include 包括storeys of basem	
			□ exclude 不包括storeys of bas	ements 層地庫
Propo	sed building height of each bloc	k 每座建築物的擬議高度	mPD 米(主水平基準上	.)□About 約
	ı		m 米	□About 約

*

Domestic par				•
-	樓面面積			方米 🛛 About 約
	of Units. 單位數目			
	unit size 單位平均面	前積	sq. m 平;	方米 □About 約
-	d number of resident		••••••	
			,	
🗌 Non-domesti	c part 非住用部分		<u>GFA </u> 約	<u> 廖樓面面積</u>
📋 eating p	lace 食肆	· ·	sq. m 平	方米 □About 約
I hotel 酒	店		sq. m 平	方米 □About 約
			(please specify the number of	of rooms
•			請註明房間數目)	·····
□ office 勃	裕公室		sq. m 平	方米 □About 約
Shop and	d services 商店及服務	務行業	sq. m 平	方米 □About約
	nent, institution or co 幾構或社區設施	ommunity facilities	(please specify the use(s) area(s)/GFA(s) 請註明用途, 樓面面積)	
~				
			••••••	
			· · · · · · · · · · · · · · · · · · ·	· • • • • • • • • • • • • • • • • • • •
other(s)	其他	· ·	(please specify the use(s) area(s)/GFA(s) 請註明用途, 樓面面積)	
,		• •	••••••	
		·.		
			(please specify land area(s)	達打印称空空海)
Open space 1		m 22		
· •	open space 私人休憩		sq. m 平方米	
	pen space 公眾休憩		sq. m 平方米	山 Not less than 个少形
(c) Use(s) of differ	ent floors (if applicat	ole) 各樓層的用途 (如適	用)	·
[Block number]	[Floor(s)]	4 · ·	[Proposed use(s)]	
[座數]	[層數]		[擬議用途]	
••••••	•••••			
••••••			•••••••••••••••••	
•••••	•••••		••••••	
•••••	•••••	· · · · · · · · · · · · · · · · · · ·	•••••	
•••••	•••••	•••••	·····	
(d) Proposed use(s)) of uncovered area (i	if any) 露天地方(倘有)	的擬議用途	
••••••		• • • • • • • • • • • • • • • • • • • •		•••••

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7. Anticipated Completion Time of the Development Proposal 擬議發展計劃的預計完成時間				
Anticipated completion time (in month and year) of the development proposal (by phase (if any)) (e.g. June 2023) 擬議發展計劃預期完成的年份及月份 (分期 (倘有))(例: 2023 年 6 月) (Separate anticipated completion times (in month and year) should be provided for the proposed public open space and Government, institution or community facilities (if any)) (申請人須就擬議的公眾休憩用地及政府、機構或社區設施 (倘有) 提供個別擬議完成的年份及月份)				
Target Complete Date : Before Apr 2023	(About 3 we	eks)		
•••••	••••••			
	• • • • • • • • • • • • • •			
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······································				
8. Vehicular Access Arr 擬議發展計劃的行		t of the Development Proposal 安排		
Any vehicular access to the	Yes 是	 There is an existing access. (please indicate the street name, where appropriate) 有一條現有車路。(請註明車路名稱(如適用)) 		
site/subject building?		Nam Sang Wai Road		
是否有車路通往地 <u>盤</u> /有關 建築物?		 There is a proposed access. (please illustrate on plan and specify the width) 有一條擬議車路。(請在圖則顯示,並註明車路的闊度) 		
	No 否			
	Yes 是	 (Please specify type(s) and number(s) and illustrate on plan) 請註明種類及數目並於圖則上顯示) 		
		Private Car Parking Spaces 私家車車位		
		Motorcycle Parking Spaces 電單車車位 Light Goods Vehicle Parking Spaces 輕型貨車泊車位		
Any provision of parking space for the proposed use(s)?		Medium Goods Vehicle Parking Spaces 中型貨車泊車位		
是否有為擬議用途提供停車		Heavy Goods Vehicle Parking Spaces 重型貨車泊車位		
位?		Others (Please Specify) 其他 (請列明)		
-				
	No 否			
	Yes 是	 (Please specify type(s) and number(s) and illustrate on plan) 請註明種類及數目並於圖則上顯示) 		
		Taxi Spaces 的土車位		
Any provision of		Coach Spaces 旅遊巴車位 Light Goods Vehicle Spaces 輕型貨車車位		
loading/unloading space for the		Medium Goods Vehicle Spaces 中型貨車位		
proposed use(s)?		Heavy Goods Vehicle Spaces 重型貨車車位		
是否有為擬議用途提供上落客 貨車位?		Others (Please Specify) 其他 (請列明)		
	No 否			

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9. Impacts of De	9. Impacts of Development Proposal 擬議發展計劃的影響				
justifications/reasons for	If necessary, please use separate sheets to indicate the proposed measures to minimise possible adverse impacts or give justifications/reasons for not providing such measures. 如需要的話,請另頁表示可盡量减少可能出現不良影響的措施,否則請提供理據/理由。				
Does the development	Yes 是	Please provide details 請提供詳情			
proposal involve					
alteration of existing					
building?					
擬議發展計劃是否 包括現有建築物的		·····			
改動?					
·	No 否				
* *	Yes 是	(Please indicate on site plan the boundary of concerned land/pond(s), and particulars of stream diversion,			
		the extent of filling of land/pond(s) and/or excavation of land)			
Does the development		(請用地盤平面圖顯示有關土地/池塘界線,以及河道改道、填塘、填土及/或挖土的細節及/或範			
proposal involve the operation on the					
right?		□ Diversion of stream 河道改道			
擬議發展是否涉及		□ Filling of pond 填塘			
右列的工程? (Note: where Type (ii)		Area of filling 填塘面積 sq.m 平方米 □About 約			
application is the		Depth of filling 填塘深度 m 米 □About 約·			
subject of application,	,	□ Filling of land 填土			
please skip this		Area of filling 填土面積 sq.m 平方米 口About 約			
section. 註:如申請涉及第		Depth of filling 填土厚度 m 米 □About 約			
(ii)類申請,請跳至下		□ Excavation of land 挖土			
ー條問題。)		Area of excavation 挖土面積 sq.m 平方米 口About 約			
		Depth of excavation 挖土深度m 米 口About 約			
	No 否				
	On envir	onment 對環境 Yes 會 No 不會 🗉			
		c 對交通 Yes 會 No 不會 III No 不會 III			
		r supply 對供水 Yes 會 🗌 No 不會 🗩 age 對排水 Yes 會 🗌 No 不會 🗩			
		age 到孙尔 Yes 會 □ No 不會 ■			
		by slopes 受斜坡影響 Yes 會□ No 不會 ■			
		pe Impact 構成景觀影響 Yes 會□ No 不會 ■ ling 砍伐樹木 Yes 會□ No 不會 ■			
		ling 砍伐樹木 Yes 會 □ No 不會 ■ npact 構成視覺影響 Yes 會 □ No 不會 ■			
		Please Specify) 其他 (請列明) Yes 會 🗌 No 不會 🖻			
Would the					
development proposal cause any					
adverse impacts?	Please s	tate measure(s) to minimise the impact(s). For tree felling, please state the number,			
擬議發展計劃會否 造成不良影響?	diameter 請註明a	at breast height and species of the affected trees (if possible) 基量減少影響的措施。如涉及砍伐樹木,請說明受影響樹木的數目、及胸高度的樹幹 品種(倘可)			
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<u>Part 9 第9部分</u>

10. Justifications 理由

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The applicant is invited to provide justifications in support of the application.	Use separate sheets if necessary.
現請申請人提供申請理由及支持其申請的資料。如有需要,請另頁說明	a

CLP received a new application for electricity supply. The applicant seeks planning permission to use the application site for propsed public utility installation LV cable laying and associated filling and excavation of land (about 0.55m in depth). 1 Lv underground cable with length
of 92m and width of 0.3m is proposed to be install within the application
site. The Lv electricity supply for St. John First Aid Post at Nam Shang Wai Area.
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Form No. S16-I 表格第 S16-I 號

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11. Declaration 聲明			
I hereby declare that the particulars given in this application are correct and true to the best of my knowledge and belief. 本人謹此聲明,本人就這宗申請提交的資料,據本人所知及所信,均屬真實無誤。			
I hereby grant a permission to the Board to copy all the materials submitted in this application and/or to upload such materials to the Board's website for browsing and downloading by the public free-of-charge at the Board's discretion.本人現准許委員會酌情將本人就此申請所提交的所有資料複製及/或上載至委員會網站,供公眾免費瀏覽或下載。			
Signature C Applicant 申請人 / C Authorised Agent 獲授權代理人 簽署			
Lewy Wai Kit Project Engineer			
Name in Block LettersPosition (if applicable)姓名(請以正楷填寫)職位 (如適用)			
Professional Qualification(s) □ Member 會員 / □ Fellow of 資深會員 專業資格 □ HKIP 香港規劃師學會 / □ HKIA 香港建築師學會 / □ HKIS 香港測量師學會 / □ HKIE 香港工程師學會 / □ HKILA 香港園境師學會 / □ HKIUD 香港城市設計學會 □ RPP 註冊專業規劃師 Others 其他			
on behalf of Pacific Extend Limited 蓝角角股石可。 代表 Company 公司/□ Organisation Name and Chop (if applicable) 機構名稱 (如適用)			
Date 日期 3. Jan 2023 (DD/MM/YYYY 日/月/年)			
<u>Remark 備註</u>			
The materials submitted in this application and the Board's decision on the application would be disclosed to the public. Such materials would also be uploaded to the Board's website for browsing and free downloading by the public where the Board environmentation approximate the second se			
considers appropriate. 委員會會向公眾披露申請人所遞交的申請資料和委員會對申請所作的決定。在委員會認為合適的情況下,有關申請 資料亦會上載至委員會網頁供公眾免費瀏覽及下載。			
Warning 警告			
Any person who knowingly or wilfully makes any statement or furnish any information in connection with this application, which is false in any material particular, shall be liable to an offence under the Crimes Ordinance. 任何人在明知或故意的情況下,就這宗申請提出在任何要項上是虛假的陳述或資料,即屬違反《刑事罪行條例》。			
Statement on Personal Data 個人資料的聲明			
 The personal data submitted to the Board in this application will be used by the Secretary of the Board and Government departments for the following purposes: 			
委員會就這宗申請所收到的個人資料會交給委員會秘書及政府部門,以根據《城市規劃條例》及相關的城市規制委員會規劃指引的規定作以下用途:			
 (a) the processing of this application which includes making available the name of the applicant for public inspection when making available this application for public inspection; and 處理這宗申請,包括公布這宗申請供公眾查閱,同時公布申請人的姓名供公眾查閱;以及 (b) facilitating communication between the applicant and the Secretary of the Board/Government departments. 方便申請人與委員會秘書及政府部門之間進行聯絡。 			
 The personal data provided by the applicant in this application may also be disclosed to other persons for the purposes mentioned in paragraph 1 above. 申請人就這宗申請提供的個人資料,或亦會向其他人士披露,以作上述第1段提及的用途。 			
3. An applicant has a right of access and correction with respect to his/her personal data as provided under the Personal Data (Privacy) Ordinance (Cap. 486). Request for personal data access and correction should be addressed to the Secretary of the Board at 15/F, North Point Government Offices, 333 Java Road, North Point, Hong Kong. 根據《個人資料(私隱)條例》(第 486 章)的規定,申請人有權查閱及更正其個人資料。如欲查閱及更正個人資料, 應向委員會秘書提出有關要求,其地址為香港北角渣華道 333 號北角政府合署 15 樓。			

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For Developments involving Columbarium Use, please also complete the 如發展涉及靈灰安置所用途,請另外填妥以下資料:	following:
Ash interment capacity 骨灰安放容量 [@]	
Maximum number of sets of ashes that may be interred in the niches 在龕位內最多可安放骨灰的數量 Maximum number of sets of ashes that may be interred other than in niches 在非龕位的範圍內最多可安放骨灰的數量	
Total number of niches 龕位總數	
Total number of single niches 單人龕位總數	
Number of single niches (sold and occupied) 單人龕位數目 (已售並佔用) Number of single niches (sold but unoccupied) 單人龕位數目 (已售但未佔用) Number of single niches (residual for sale) 單人龕位數目 (待售)	
Total number of double niches 雙人龕位總數	
Number of double niches (sold and fully occupied) 雙人龕位數目 (已售並全部佔用) Number of double niches (sold and partially occupied) 雙人龕位數目 (已售並部分佔用) Number of double niches (sold but unoccupied) 雙人龕位數目 (已售但未佔用) Number of double niches (residual for sale) 雙人龕位數目 (待售)	
Total no. of niches other than single or double niches (please specify type) 除單人及雙人龕位外的其他龕位總數 (請列明類別)	
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Proposed operating hours 擬議營運時間	
 @ Ash interment capacity in relation to a columbarium means – 就籃灰安置所而言,骨灰安放容量指: the maximum number of containers of ashes that may be interred in each niche in the columbarium; 每個龕位內可安放的骨灰容器的最高數目; the maximum number of sets of ashes that may be interred other than in niches in any area in the colum 在該氫灰安置所並非龕位的範圍內,總共最多可安放多少份骨灰;以及 the total number of sets of ashes that may be interred in the columbarium. 在該骨灰安置所內,總共最多可安放多少份骨灰。 	nbarium; and

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,	(includ	es Government land	of包括政府土	地 27.6	sq.m 平方米 ☑About 約)
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Applied use/ development 申請用途/發展		olic utility install ing and Excavati	on of land	le laying)	
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	•	Non-domestic 非住用			
		Composite 綜合用途	· ·		

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		-	mPD 米(主水平基準上) □ (Not more than 不多於)
			Storeys(s) 層 □ (Not more than 不多於)
		(□Include 包括/□ Exclude 不包括 □ Carport 停車間 □ Basement 地庫 □ Refuge Floor 防火層 □ Podium 平台)	
		Non-domestic 非住用	m 米 □ (Not more than 不多於)
			mPD 米(主水平基準上) □ (Not more than 不多於)
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(iv)	Site coverage 上蓋面積		%□ About 約
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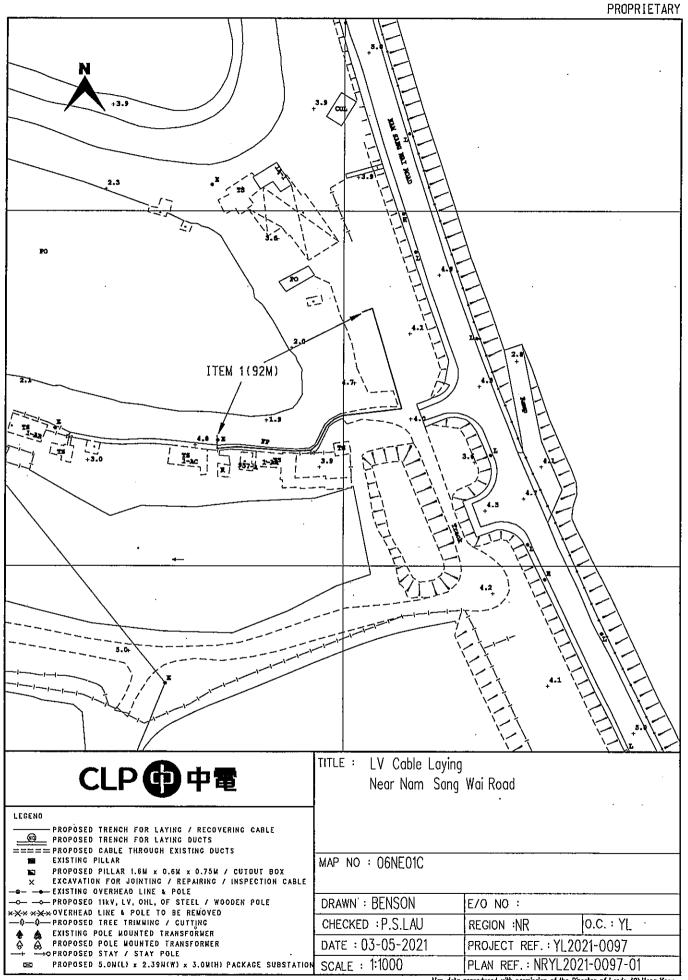
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Submitted Plans, Drawings and Documents 提交的圖則、繪圖及文件	•	
	<u>Chinese</u>	<u>English</u>
	中文	英文
Plans and Drawings 圖則及繪圖		
Master layout plan(s)/Layout plan(s) 總綱發展藍圖/布局設計圖		
Block plan(s) 樓宇位置圖	\Box .	
Floor plan(s) 樓宇平面圖		
Sectional plan(s) 截視圖		
Elevation(s) 立視圖		
Photomontage(s) showing the proposed development 顯示擬議發展的合成照片		
Master landscape plan(s)/Landscape plan(s) 園境設計總圖/園境設計圖		
Others (please specify) 其他(請註明)		
Location Plan, Cable Trench Drawing, Authorization letter, Location Map		
Reports 報告書		
Planning Statement/Justifications 規劃綱領/理據		· 🔲
Environmental assessment (noise, air and/or water pollutions)		
環境評估(噪音、空氣及/或水的污染)		
Traffic impact assessment (on vehicles) 就車輛的交通影響評估		
Traffic impact assessment (on pedestrians) 就行人的交通影響評估		
Visual impact assessment 視覺影響評估		
Landscape impact assessment 景觀影響評估		
Tree Survey 樹木調查		
Geotechnical impact assessment 土力影響評估		
Drainage impact assessment 排水影響評估		
Sewerage impact assessment 排污影響評估		Ц
Risk Assessment 風險評估		
Others (please specify) 其他(請註明)		

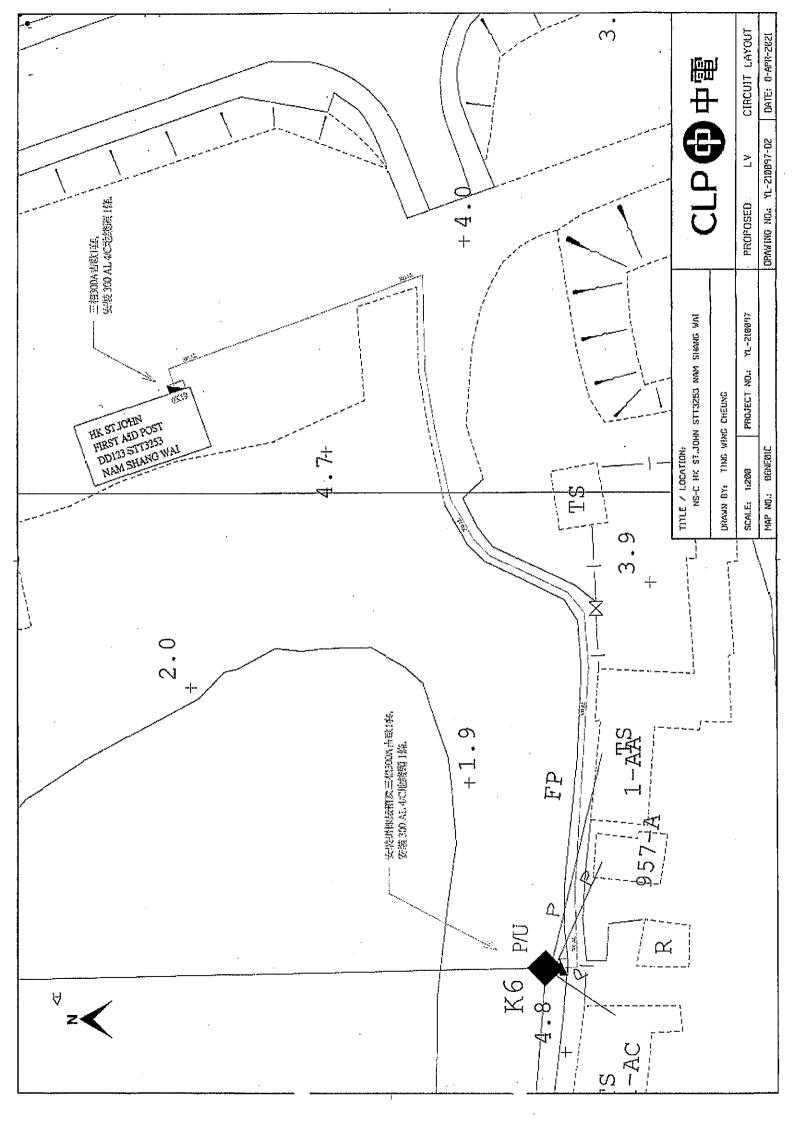
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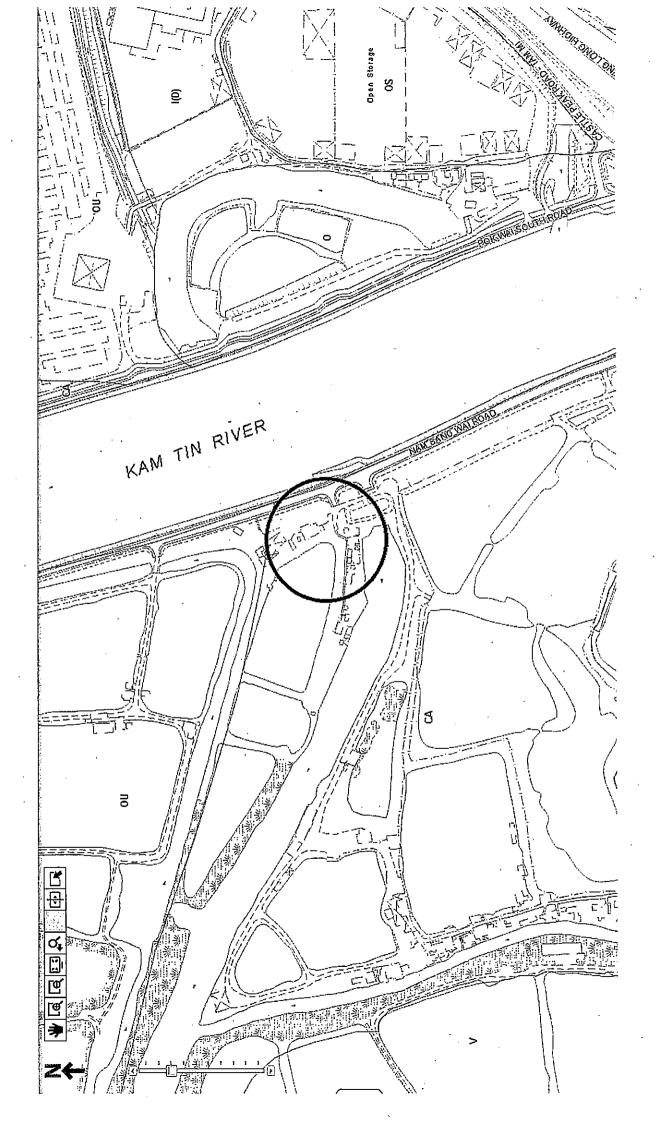
- Note: The information in the Gist of Application above is provided by the applicant for easy reference of the general public. Under no circumstances will the Town Planning Board accept any liabilities for the use of the information nor any inaccuracies or discrepancies of the information provided. In case of doubt, reference should always be made to the submission of the applicant. 註: 上述申請摘要的資料是由申請人提供以方便市民大眾參考。對於所載資料在使用上的問題及文義上的歧異,城市規劃委員 會概不負責。若有任何疑問,應查閱申請人提交的文件。

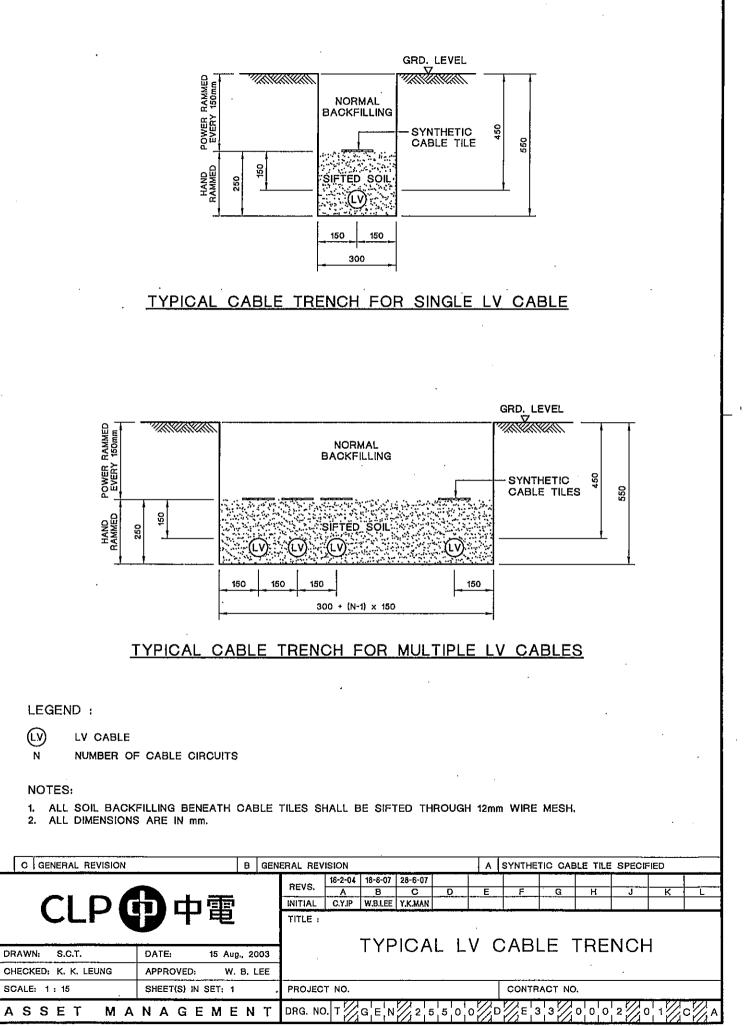
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Appendix Ia of RNTPC Paper No. A/YL-NSW/307B

CLP 🗗 中電

Proposed Public Utility Installation and Associated Excavation and Filling of Land in "Conservation Area" Zone, Government Land in D.D. 123, Nam Sang Wai, Yuen Long

Ecological Assessment

15 December 2022 Project No.: 0669885

Document details	
Document title	Proposed Public Utility Installation and Associated Excavation and Filling of Land in "Conservation Area" Zone, Government Land in D.D. 123, Nam Sang Wai, Yuen Long
Document subtitle	Ecological Assessment
Project No.	0669885
Date	15 December 2022
Version	0.0
Author	Various
Client Name	CLP Power

Document history						
				ERM approv	al to issue	
Version	Revision	Author	Reviewed by	Name	Date	Comments
	0.0	Yuihong Chiu	Arthur Lo	Terence Fong	15.12.2022	-

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Annex 6 Presence of Butterfly Species Recorded Within the Study Area

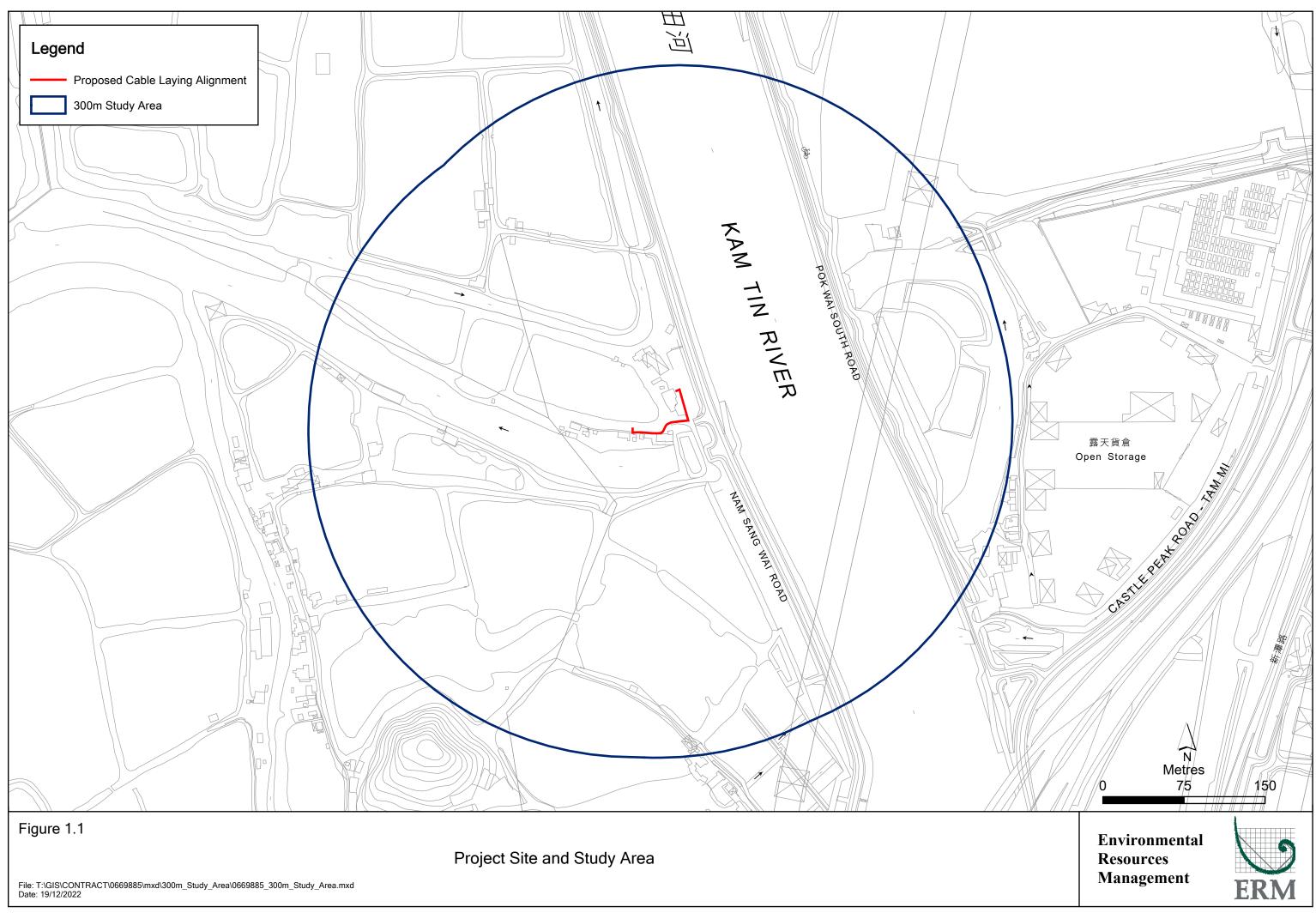
Annex 7 Presence of Odonate Species Recorded Within the Study Area

Annex 8 Presence of Aquatic Fauna Species Recorded Within the Study Area

1. INTRODUCTION

CLP Power Hong Kong Limited has commissioned ERM-Hong Kong, Limited (ERM) to undertake ecological survey and ecological assessment for the "Proposed Public Utility Installation and Associated Excavation and Filling of Land in "Conservation Area" Zone, Government Land in D.D. 123, Nam Sang Wai, Yuen Long" ("the Project"). The objective of the Project is to improve the electricity supply reliability at Nam Sang Wai, CLP is proposing LV cable laying near Nam Sang Wai Road. The overall construction period will be around 1 month between April 2023 and May 2023.

This Ecological Assessment (EcoA) provides detailed information regarding the ecology of the Study Area, which is defined as a 300m radius from the Project Site, i.e. proposed cable route (see *Figure 1.1*). The ecological assessment is based on literature review as well as the recent verification ecological baseline survey, with particular attention paid to the habitat adjacent to the proposed cable route.



PROPOSED PUBLIC UTILITY INSTALLATION AND ASSOCIATED EXCAVATION AND FILLING OF LAND IN "CONSERVATION AREA" ZONE, GOVERNMENT LAND IN D.D. 123, NAM SANG WAI, YUEN LONG ECOLOGICAL ASSESSMENT

2. ENVIRONMENTAL LEGISLATION AND GUIDELINES

Reference has been made to the *Technical Memorandum on Environmental Impact Assessment Process* (EIAO-TM) issued under the *Environmental Impact Assessment Ordinance* (EIAO) in the evaluation of potential ecological impacts, particularly *Annex 8 Criteria for Evaluating Ecological Impact* and *Annex 16 Guidelines for Ecological Assessment*. The following Guidance Notes have also been taken to account:

- GN 6/2010 Some Observations on Ecological Assessment from the Environmental Impact Assessment Ordinance Perspective;
- GN 7/2010 Ecological Baseline Survey for Ecological Assessment; and
- GN 10/2010 Methodologies for Terrestrial and Freshwater Ecological Baseline Surveys.

In addition, the following legislation and guidelines provide the framework for conducting ecological surveys and the protection of species and habitats of ecological importance for ecological assessment in Hong Kong:

- Country Parks Ordinance (Cap. 208)
- Forests and Countryside Ordinance (Cap. 96);
- Town Planning Ordinance (Cap. 131);
- Wild Animals Protection Ordinance (Cap. 170);
- Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586);
- Hong Kong Planning Standards and Guidelines Chapter 10 (HKPSG);
- Technical Circular (Works) No. 4/2020 Tree Preservation.

3. LITERATURE REVIEW

Upon commencement of the ecological assessment, a desktop review was conducted to search for relevant scientific papers, reports and previous Environmental Impact Assessment reports etc. to identify any available ecological information, including habitats and species of conservation concern in the area. Based on recent aerial photos and relevant previous studies, habitats and species of conservation importance recorded previously were identified. General studies (if any), which may not necessarily focus on the Study Area and Project Site, was also reviewed and relevant information was extracted from the report(s).

3.1 Site of Conservation Importance

The Study Area (SA) falls within the below-mentioned sites of conservation importance in the vicinity of Nam Sang Wai Road, including Wetland Conservation Area (WCA), Wetland Buffer Area (WBA), Conservation Area (CA). The Project Site is located within WCA and CA (*Figure 3.1*).

3.1.1 Wetland Conservation Area (WCA)

Fishponds continuous and adjoining to the Deep Bay Area are designated under TPB PG-No. 12C as the WCA, with the aim of protecting the integrity of the Deep Bay wetland ecosystem. Any development in the WCA should normally comply with the "No-Net-Loss in Wetland" principle. Other than permitted essential conservation or infrastructural works, no developments involving pond filling or other works detrimental to the ecological function of the wetland are allowed within the WCA.

The WCA covers part of the Study Area, including a few fishponds along Nam Sang Wai Road and Pok Wai South Road as well as part of Kam Tin River (*Figure 3.1*). The proposed cable route falls within this zone.

3.1.2 Wetland Buffer Area (WBA)

The WBA is also designated under TPB PG-No. 12C to include a buffer of about 500m on the landward side of the WCA. The planning intention is to protect the ecological integrity of wetlands within the WCA and prevent any development that would have a negative off-site disturbance impact on the WCA. Developments within the WBA are required to demonstrate that ecological impacts on the WCA will be minimized and any negative ecological impacts will be fully mitigated through positive measures.

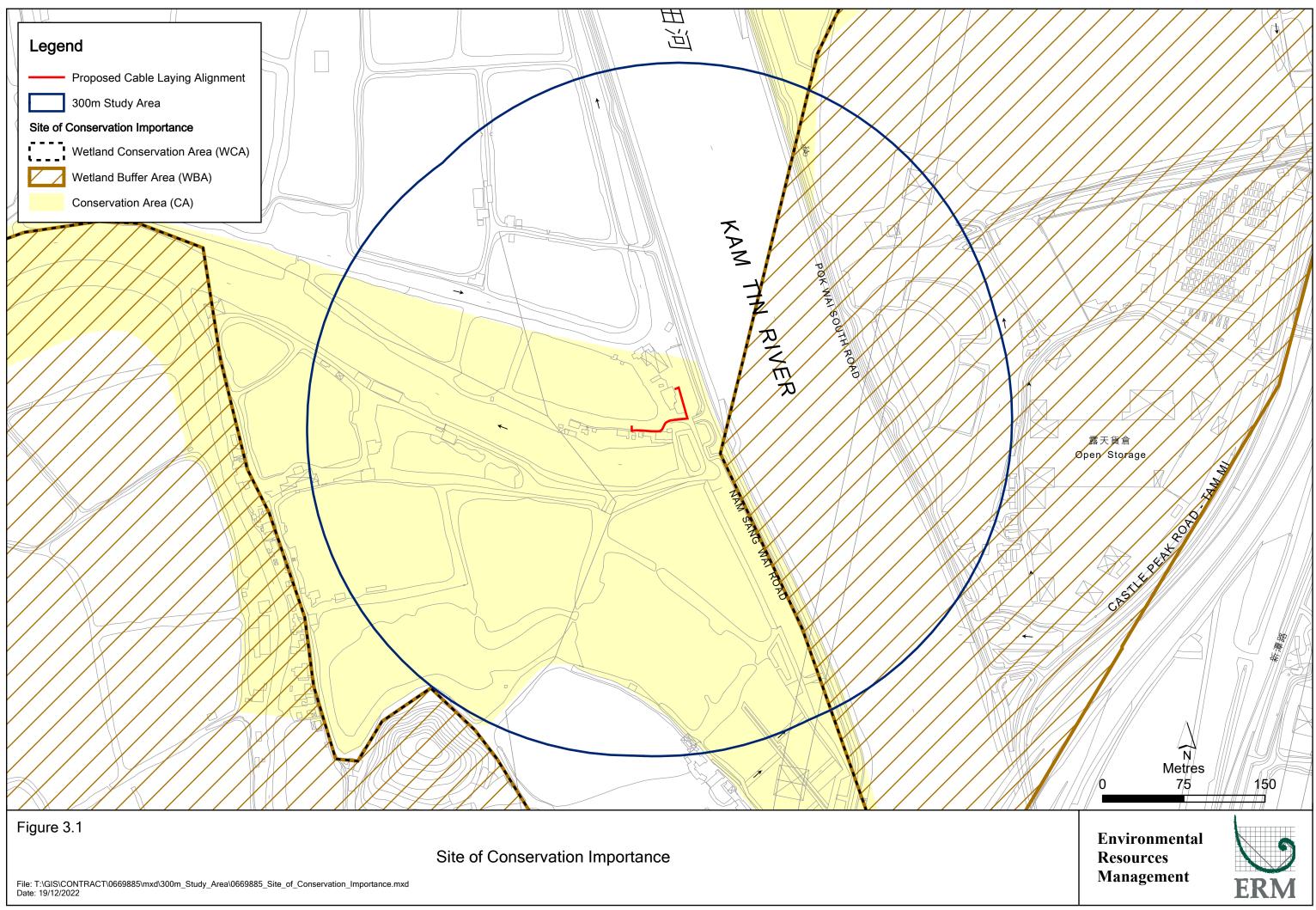
The WBA covers part of the Study Area, including a few fishponds along Nam Sang Wai Road and Pok Wai South Road as well as part of Kam Tin River (*Figure 3.1*).

3.1.3 Conservation Area (CA)

The large areas of continuous fishponds (both active and abandoned) within the SA are zoned as CA under the Approved Nam Sang Wai OZP NO. S/YL-NSW/8 (*Figure 3.1*). The proposed cable route falls within this zone.

The planning intention of this zone is to conserve the ecological value of wetland and fish ponds which form an integral part of the wetland ecosystem in the Deep Bay Area. The "no-net-loss in wetland" principle is adopted for any change in use within this zone. The primary intention is to discourage new development unless it is required to support the conservation of the ecological integrity of the wetland ecosystem or the development is an essential infrastructure project with overriding public interest.

There is a general presumption against development in this zone. In general, only developments that are needed to support the conservation of the existing natural landscape or scenic quality of the area or are essential infrastructure projects with overriding public interest may be permitted.



Previously Recorded Species of Conservation Importance 3.2

A literature review has been conducted to characterise the existing ecological conditions of the Project Site and Study Area and to identify habitats and species of conservation concern in the area. A number of relevant studies including but not limited to the follows were reviewed.

- EIA 074/2002 Yuen Long and Kam Tin Sewerage and Sewage Disposal Stage 1 Packages 1A-1T and 1B-1T - Kam Tin Trunk Sewerage Phase I and II (DSD, 2002)⁽¹⁾
- EIA 159/2008 Construction of Cycle Tracks and the associated Supporting Facilities from Sha Po Tsuen to Shek Sheung River (CEDD, 2008)⁽²⁾
- EIA 269/2021 Yuen Long Barrage Scheme (DSD, 2021) (3)
- Approved Nam Sang Wai Outline Zoning Plan S/YL-NSW/8
- Protection of Wetlands in Hong Kong, AFCD (AFCD, 2000)⁽⁴⁾
- Hong Kong Biodiversity Information Hub maintained by AFCD⁽⁵⁾
- Hong Kong Bird Report 2017 (HKBWS, 2022) (6)
- The Avifauna of Hong Kong

The ecological survey periods and surveyed flora/ fauna groups that are presented in the above studies are tabulated in Table 3.1; a map showing their study areas, whenever defined, is provided in Figure 3.2.

Special attention was paid to ecologically sensitive areas, and species of conservation importance (i.e. species protected by local legislation, endemic to Hong Kong or South China, listed in international conventions for conservation of habitat/wildlife, listed in IUCN Red Data Book or those of the South China region and considered as rare in the territory or having special conservation importance by scientific studies etc.). The information gathered from the literature review was evaluated and the information gaps concerning assessment of the potential ecological impacts arising from the Project on the terrestrial environment were identified. The species of conservation importance with known locations are shown on Figure 3.3.

Table 3.1: Previous	s Studies	Relevant to	the Study Area
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Study	Survey Period	Flora and Fauna Groups Surveyed
DSD, 2002	Apr 2000 – Mar 2001	Habitat & Vegetation, Mammals, Avifauna, Herpetofauna,
		Butterfly, Odonates, Aquatic fauna
CEDD, 2008	Nov 2006 – Apr 2007	Habitat & Vegetation, Avifauna
DSD, 2021	Jul 2019 – Apr 2020	Habitat & Vegetation, Mammals, Avifauna, Herpetofauna,
		Butterfly, Odonates, Aquatic fauna

⁽¹⁾ Drainage Services Department (2002). Yuen Long and Kam Tin Sewerage and Sewage Disposal Stage 1 Packages 1A-1T and 1B-1T - Kam Tin Trunk Sewerage Phase I and II.

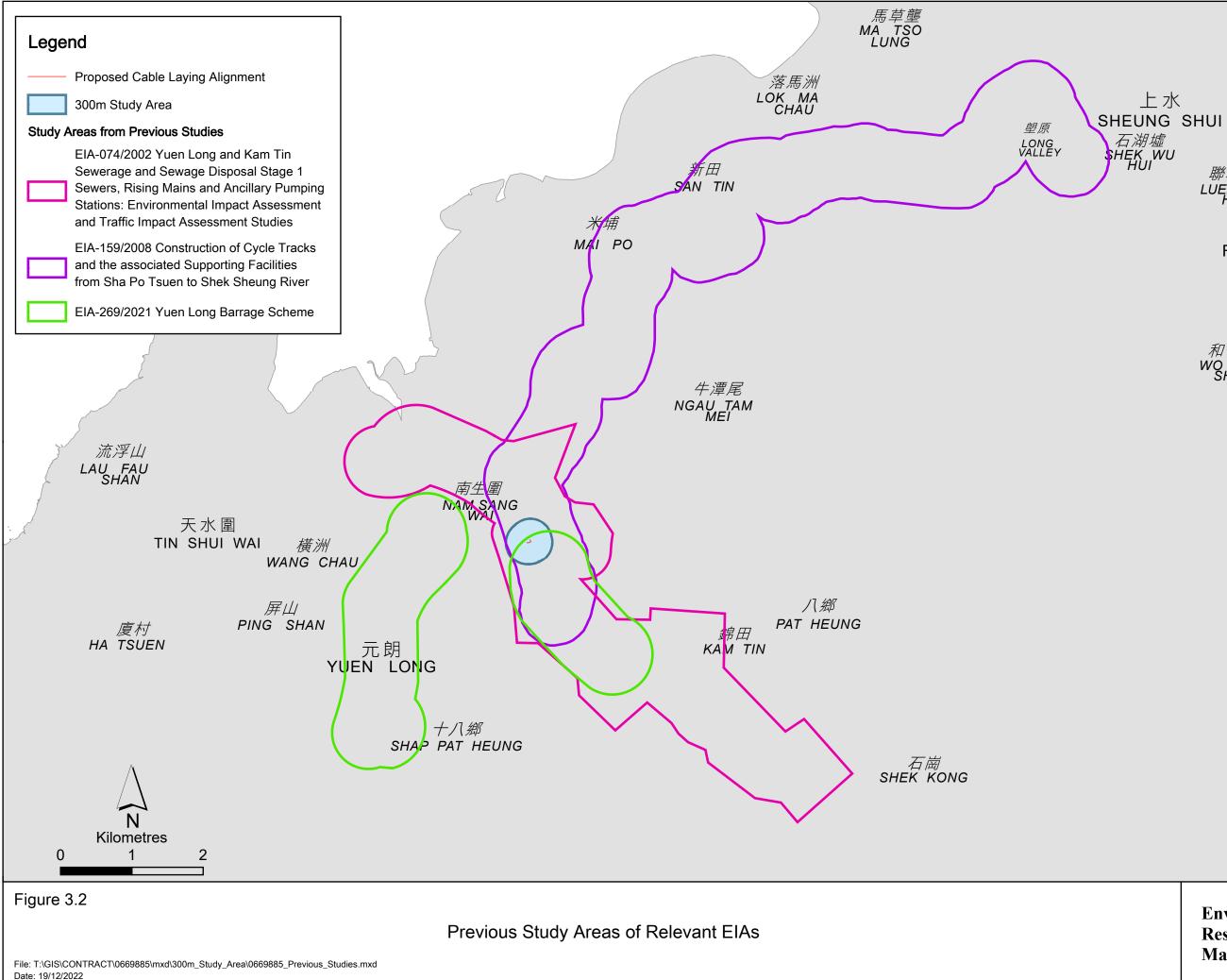
⁽²⁾ Civil Engineering and Development Department (2008). Construction of Cycle Tracks and the associated Supporting Facilities from Sha Po Tsuen to Shek Sheung River.

⁽³⁾ Drainage Services Department (2021). Yuen Long Barrage Scheme.

AFCD (2000). Legislative Council Paper NO. CB(2) 397/00-01 (03) - Protection of Wetlands in Hong Kong. Information (4) reviewed.

Information reviewed from AFCD, Available at https://bih.gov.hk/en/home/index.html (5)

⁽⁶⁾ HKBWS (2022). Hong Kong Bird Report 2000-2017.



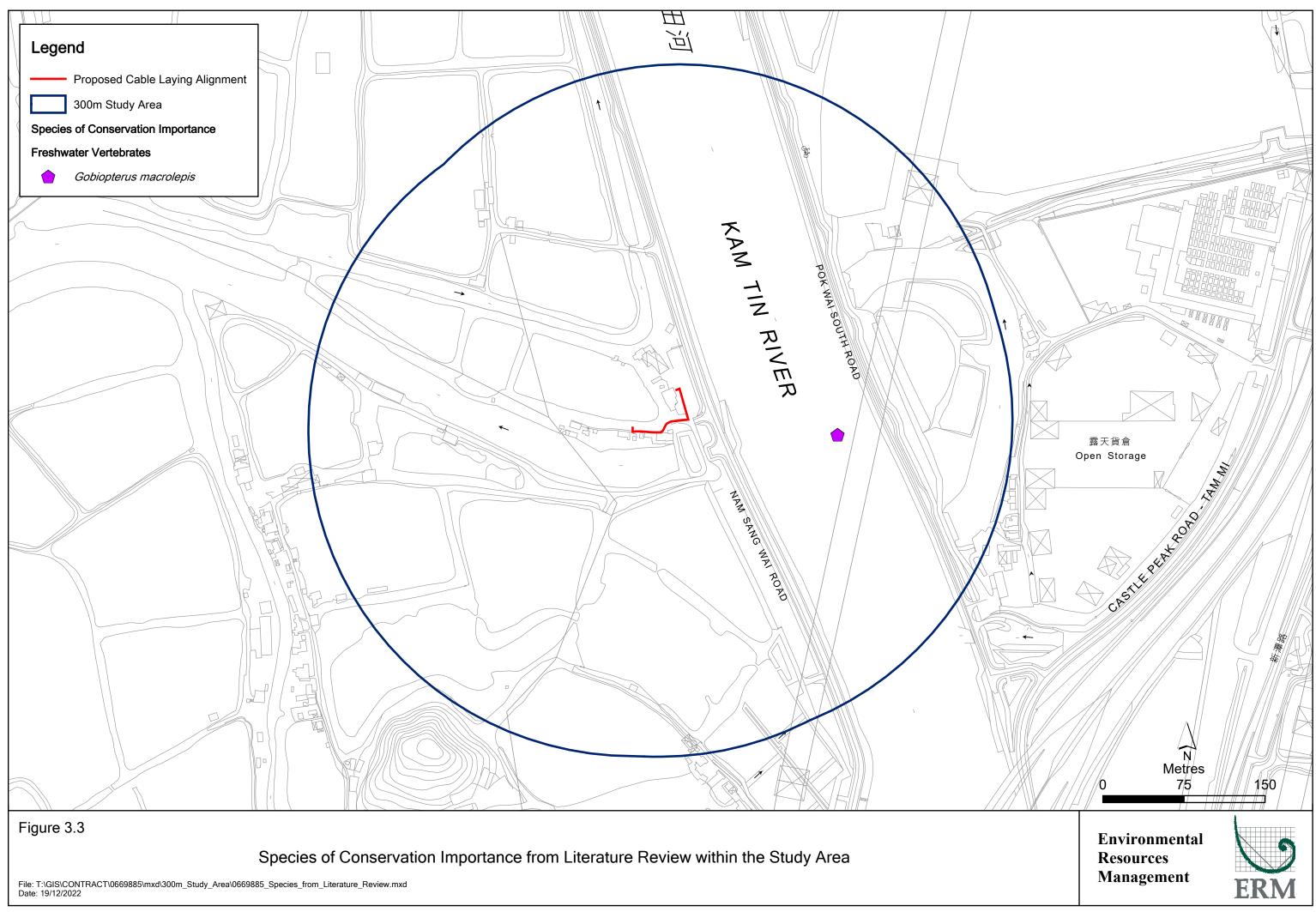
聯和墟 LUEN WO HUI

粉嶺 FANLING

和合石 WO HOP SHEK

Environmental Resources Management





3.2.1 Flora Species of Conservation Importance Recorded in Previous Studies

Based on the reviewed literatures, no flora species of conservation importance was reported within the Study Area.

3.2.2 Fauna Species of Conservation Importance Recorded in Previous Studies

Mammals

Based on the reviewed literature, one mammal species of conservation importance was recorded in the Study Area from previous surveys/ approved EIA studies. A concern of this study is whether Eurasian Otters are present within the Study Area. However, it is unlikely that it will occur within the **300m** Study Area as the nearest record was at the junction between Kam Tin River and Shan Pui River (DSD 2021)⁽⁷⁾. Details of the mammal species of conservation importance is shown in **Table 3.2**.

Table 3.2: Mammal of Conservation Importance Recorded from PreviousStudies

Common Name	Scientific Name	Chinese Name	Conservation Status
Mammal			
Japanese Pipistrelle	Pipistrellus abramus	東亞家蝠	Cap.170

Note:

Conservation Status:

a. Cap. 170: Protected under Wild Animals Protection Ordinance

Avifauna

A significant diversity of waterbirds, both resident and migratory were recorded in wetland habitats within the Study Area, including fishponds, watercourse etc. Many of the recorded species are known to forage and roost in wetlands, with ardeid and duck species being the dominant species group within the Study Area. A total of 53 avifauna species of conservation importance were recorded in the Study Area and its vicinity from previous surveys/ approved EIA studies (i.e. including Kam Tin River (KTR) and Nam Sang Wai (NSW)). All bird species are protected under the Wild Animals Protection Ordinance (Cap. 170). Details of the avifauna species of conservation importance are shown in *Table 3.3*.

Table 3.3: Avifauna of Conservation Importance Recorded from PreviousStudies

Common Name	Scientific Name	Chinese Name	Conservation Status	Location	
				KTR	NSW
Avifauna					
Northern Shoveler	Spatula clypeata	琵嘴鴨	Fellowes: RC	✓	~
Eurasian Wigeon	Mareca penelope	赤頸鴨	Fellowes: RC	~	~

⁽⁷⁾ Drainage Services Department (2021). Yuen Long Barrage Scheme.

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Common Name	Scientific Name	Chinese Name	Conservation Status	Location	
				KTR	NSW
Northern Pintail	Anas acuta	針尾鴨	Fellowes: RC	~	~
Eurasian Teal	Anas crecca	綠翅鴨	Fellowes: RC	~	~
Common Pochard	Aythya ferina	紅頭潛鴨	IUCN(VU)	~	✓
Tufted Duck	Aythya fuligula	鳳頭潛鴨	Fellowes: LC	~	~
Little Grebe	Tachybaptus ruficollis	小鸊鷉	Fellowes: LC	~	~
Eurasian Spoonbill	Platalea leucorodia	白琵鷺	Fellowes: LC, RLCV(NT), CITES(II), CSMPS(II), Cap.586	~	
Black-faced Spoonbill	Platalea minor	黑臉琵鷺	Fellowes: PGC, RLCV(EN), IUCN(EN), CSMPS(II)	~	~
Von Schrenck's Bittern	lxobrychus eurhythmus	紫背葦鳽	Fellowes: RC		~
Black-crowned Night Heron	Nycticorax nycticorax	夜鷖	Fellowes: (LC)	~	~
Chinese Pond Heron	Ardeola bacchus	池鷺	Fellowes: PRC (RC)	~	~
Eastern Cattle Egret	Bubulcus coromandus	牛背鷺	Fellowes: (LC)	~	
Grey Heron	Ardea cinerea	蒼鷺	Fellowes: PRC	~	~
Great Egret	Ardea alba	大白鷺	Fellowes: PRC (RC)	~	✓
Intermediate Egret	Ardea intermedia	中白鷺	Fellowes: RC		✓
Little Egret	Egretta garzetta	小白鷺	Fellowes: PRC (RC)	~	~
Great Cormorant	Phalacrocorax carbo	普通鸕鷀	Fellowes: PRC	~	~
Western Osprey	Pandion haliaetus	豊	Fellowes: RC, RLCV(NT), CITES(II), CSMPS(II), Cap.586	~	~
Crested Serpent Eagle	Spilornis cheela	蛇鵰	Fellowes: (LC), RLCV(NT), CITES(II), CSMPS(II), Cap.586		~
Greater Spotted Eagle	Clanga clanga	烏鵰	Fellowes: GC, RLCV(EN), IUCN(VU), CITES(II), CSMPS(II), Cap.586	~	
Bonelli's Eagle	Aquila fasciata	白腹隼鵰	Fellowes: (RC), RLCV(VU), CITES(II), CSMPS(II), Cap.586	~	
Eastern Marsh Harrier	Circus spilonotus	白腹鷂	Fellowes: LC, RLCV(NT), CITES(II), CSMPS(II), Cap.586		~
Black Kite	Milvus migrans	黑鳶	Fellowes: (RC), CSMPS (II), CITES (II), Cap. 586	~	~

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Common Name	Scientific Name	Chinese Name	Conservation Status	Location	
				KTR	NSW
Eastern Buzzard	Buteo japonicus	普通鵟	CSMPS(II), CITES(II), Cap.586	✓	~
Slaty-breasted Rail	Gallirallus striatus	灰胸秧雞	Fellowes: RC	✓	
Black-winged Stilt	Himantopus himantopus	黑翅長腳鷸	Fellowes: RC	~	~
Pied Avocet	Recurvirostra avosetta	反嘴鷸	Fellowes: RC	~	~
Grey-headed Lapwing	Vanellus cinereus	灰頭麥雞	Fellowes: LC	~	
Little Ringed Plover	Charadrius dubius	金眶鴴	Fellowes: (LC)	~	~
Eurasian Curlew	Numenius arquata	白腰杓鷸	Fellowes: RC, RLCV(NT), IUCN(NT)	~	
Marsh Sandpiper	Tringa stagnatilis	澤鷸	Fellowes: RC	✓	~
Wood Sandpiper	Tringa glareola	林鷸	Fellowes: LC	✓	✓
Spotted Redshank	Tringa erythropus	鶴鷸			~
Common Greenshank	Tringa nebularia	青腳鷸	Fellowes: RC	~	
Oriental Pratincole	Glareola maldivarum	普通燕鴴	Fellowes: LC		~
Black-headed Gull	Chroicocephalus ridibundus	紅嘴鷗	Fellowes: PRC	~	
Lesser Black- backed Gull	Larus fuscus	烏灰銀鷗	Fellowes: LC	~	
Greater Coucal	Centropus sinensis	褐翅鴉鵑	CSMPS(II)		~
Lesser Coucal	Centropus bengalensis	小鴉鵑	CSMPS(II)		~
Asian Barred Owlet	Glaucidium cuculoides	斑頭鵂鹠	CITES(II), CSMPS(II), Cap.586		~
White-throated Kingfisher	Halcyon smyrnensis	白胸翡翠	Fellowes: (LC)	~	~
Black-capped Kingfisher	Halcyon pileata	藍翡翠	Fellowes: (LC)	~	
Pied Kingfisher	Ceryle rudis	斑魚狗	Fellowes: (LC)	✓	✓
Common Kestrel	Falco tinnunculus	紅隼	CITES(II), CSMPS(II), Cap.586	~	
Peregrine Falcon	Falco peregrinus	遊隼	Fellowes: (LC), RLCV(NT), CITES(I), CSMPS(II), Cap.586	~	

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Common Name	Scientific Name	Chinese Name	Conservation Status	Location	
				KTR	NSW
Collared Crow	Corvus torquatus	白頸鴉	Fellowes: LC, RLCV(NT), IUCN(VU)	~	~
Zitting Cisticola	Cisticola juncidis	棕扇尾鶯	Fellowes: LC	✓	
Red-billed Starling	Spodiopsar sericeus	絲光椋鳥	Fellowes: GC	~	~
White-cheeked Starling	Spodiopsar cineraceus	灰椋鳥	Fellowes: PRC	✓	
Daurian Starling	Agropsar sturninus	北椋鳥	Fellowes: LC		~
White-shouldered Starling	Sturnia sinensis	灰背椋鳥	Fellowes: (LC)		~
Yellow-breasted Bunting	Emberiza aureola	黄胸鵐	Fellowes: RC, RLCV(EN), IUCN(CR)		~

Note:

Conservation Status:

- a. Fellowes Fellowes et al. (2002): PGC = Potential Global Concern, PRC = Potential Regional Concern, GC = Global Concern, RC = Regional Concern, LC = Local 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.
- b. RLCV Red List of China's Vertebrate (2016): NT = Near Threatened, VU = Vulnerable, EN: Endangered
- c. IUCN International Union for Conservation of Nature Red List of Threatened Species (2022).VU = Vulnerable, EN = Endangered, CR = Critically Endangered
- d. CSMPS China State Major Protection Status: Appendix (I) or Appendix (II)
- e. CITES Under Appendix (I) or Appendix (II) of Convention on International Trade in Endangered Species of Wild Fauna
- f. Cap. 586: Protection of Endangered Species of Animals and Plants Ordinance
- g. All birds in Hong Kong are protected under Cap. 170 Protected under Wild Animals Protection Ordinance

Herpetofauna

A total of two herpetofauna species of conservation importance were recorded in the Project Site and its vicinity from previous surveys/ approved EIA studies. Details of the herpetofauna species of conservation importance are shown in *Table 3.4*.

Table 3.4: Herpetofauna of Conservation Importance Recorded from Previous Studies

Common Name	Scientific Name	Chinese Name	Conservation Status
Amphibian			
Spotted Narrow- mouthed Frog	Kalophrynus interlineatus	花細狹口蛙	RLCV(NT)
Chinese Bullfrog	Hoplobatrachus rugulosus	虎紋蛙	Fellowes: PRC; RLCV(EN), CSMPS(II)

Conservation Status:

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Common Name	Scientific Name	Chinese Name	Conservation Status
	· · · ·	0	ers in parentheses indicate that the tes rather than in general occurrence.

- b. RLCV Red List of China's Vertebrate (2016): NT = Near Threatened, EN = Endangered
- c. CSMPS China State Major Protection Status: Appendix (I) or Appendix (II)

Butterfly and Odonate

No butterfly or odonate species of conservation importance were recorded in the Study Area from previous surveys/ approved EIA studies.

Aquatic Fauna

Only one aquatic fauna species of conservation importance was recorded within the Study Area in Kam Tin River from previous surveys/ approved EIA studies. Details of the species of conservation importance is shown in *Table 3.5*.

Table 3.5: Butterfly and Odonate of Conservation Importance Recorded from Previous Studies

Common Name	Scientific Name	Chinese Name	Conservation Status
Freshwater Fish			
-	Gobiopterus macrolepis	大鱗鰭鰕虎魚	RLCV(VU)

Note:

Conservation Status:

a. RLCV – Red List of China's Vertebrate (2016): VU = Vulnerable

Fireflies

Bent-winged Firefly *Pteroptyx maipo*, an endemic firefly was first recorded in mangrove habitat in Hong Kong Wetland Park in 2003 ⁽⁸⁾. According to AFCD ⁽⁹⁾, *Pteroptyx maipo* is the only species that depends on mangrove ecosystem. While the larvae feed on snails found on the tidal mudflats, the adults inhabit short vegetation in the vicinity. Although mangrove/ mangrove associates are distributed in many coastal areas of Hong Kong, this species is restricted to the landward fringe of the mangrove ecosystem along the shoreline of Deep Bay including Mai Po, Hong Kong Wetland Park and Sheung Pak Nai. The adult flight period of the Bent-winged Firefly is between April and September while their peak breeding season is May, August and September. A concern of this study is whether Bent-winged Firefly *Pteroptyx maipo* are present within the Study Area. However, it is unlikely that it will occur within the <u>300m</u> Study Area as the nearest records was at the junction between Kam Tin River and Shan Pui River (Yiu Vor, 2011) ⁽¹⁰⁾ and mangroves adjacent to Nam Sang Wai Ferry Pier (DSD 2021) ⁽¹¹⁾

Law, K.M. 2010. "Unique Worldwide: New Species of Firefly Found in Wetland", Hong Kong News, Wen Wei Po, Hong Kong. Accessed at http://pdf.wenweipo.com/2010/09/23/a14-0923

⁽⁹⁾ Cheng et al. 2020. Habitat Characteristics of Fireflies in Hong Kong. AFCD Newsletter Issue No. 26.

⁽¹⁰⁾ Yiu, V. 2011. A new species of firefly from Hong Kong - Pteroptyx maipo Ballantyne, 2011. Insect

News (Hong Kong Entomological Society Newsletter), 3, 2-7.

⁽¹¹⁾ Drainage Services Department (2021). Yuen Long Barrage Scheme.

4. VERIFICATION ECOLOGICAL BASELINE SURVEY

The Study Area comprises an area within 300m from the cable route. With reference to the reviewed data in **Section 3**, it is considered that the Project Site and its vicinity have been well covered and studies comprehensively by a number of EIA studies, planning application and research.

The previous studies and research have demonstrated a relatively high and constant use of the areas surrounding the proposed cable route by birds, esp. by waterbirds at the fishponds and Kam Tin River. Appropriate measures to avoid and minimise the potential ecological impacts caused by the Project on birds are discussed in **Section 7**.

In order to supplement and establish a set of project specific baseline data, a verification survey, including day and night surveys, was carried out in November 2022 with particular focus on habitat and wildlife along and adjacent to the proposed cable route. A summary of the ecological baseline survey methodologies is provided in *Table 4.1* and the ecological baseline survey schedule is provided in *Table 4.2*. Survey transects follow mainly the existing roads (*Figure 4.1* refers), aiming to cover all types of habitats within the Study Area. Details of the methodologies are provided in *Sections 4.1* and *4.2*.

Survey Type	Methodology
Habitat and Vegetation	Habitat mapping and vegetation identification through ground truthing in major habitats.
Avifauna	Quantitative (active searching along the survey transect) and Qualitative (recorded within Study Area); including day and night surveys
Mammal	Quantitative (active searching along the survey transect) and qualitative (recorded within Study Area); including day and night surveys
Herpetofauna	Quantitative (active searching along the survey transect) and qualitative (recorded within Study Area); including day and night surveys
Butterfly	Qualitative (recorded within Study Area) survey; including only day surveys
Odonates	Qualitative (recorded within Study Area) survey; including only day surveys
Aquatic fauna	Active searching at sizable streams and notable water bodies; including day and night surveys

Table 4.1: Summary of the Ecological Baseline Survey Methodologies

Table 4.2: Ecological Baseline Survey Schedule

Survey Type	30 November 2022
Habitat and Vegetation	\checkmark
Avifauna (day and night)	\checkmark
Mammal (day and night)	\checkmark
Herpetofauna (day and night)	\checkmark
Butterfly	\checkmark
Odonates	\checkmark
Aquatic fauna (day and night)	\checkmark

4.1 Habitat and Vegetation Surveys

An initial map of habitats within the Study Area was prepared from aerial photos and previous approved EIA studies. Representative areas of each habitat type were then ground-truthed on foot, in order to ensure they reflected current conditions and to distinguish between habitats which could not always be reliably distinguished from aerial photos. Representative colour photos were taken for each habitat type (*Annex 1*) and any important ecological features identified.

In parallel with the habitat mapping, the vegetation specialist recorded the flora species encountered in each habitat. Special attention was also paid to species that are rare, protected and/or of ecological importance.

4.2 Wildlife Surveys

4.2.1 Avifauna

The bird communities of the identified habitats within the Study Area were surveyed using transects count method subject to the site conditions. Any signs of breeding (e.g. nests, recently fledged juveniles) within the Study Area were also recorded. Observations were made using 8× binoculars and photographic records taken, where possible. Day-time and night-time survey were conducted once for avifauna within the Study Area.

4.2.2 Mammals

Mammal surveys were conducted with transect count during daytime and nighttime. As mammals usually occur at low densities, in addition to direct observation, any observation of signs of mammal activity, such as tracks, scats or burrows were actively sought. Day-time and night-time survey were conducted once for mammal within the Study Area.

4.2.3 Herpetofauna

Herpetofauna surveys were conducted through direct observation and active searching in all major representative habitat types along survey transects and in potential hiding places such as among leaf litter, inside holes and under stones and logs within the Study Area. Auditory detection of species specific calls was also used to survey frogs and toads. During the surveys, all reptiles and amphibians sighted and heard were recorded. Day-time and night-time survey were conducted once for herpetofauna within the Study Area.

4.2.4 Butterflies and Odonates

Butterflies and odonates of various habitats within the Study Area were surveyed once using transect/ point count method during day-time. Any butterflies and odonates encountered outside the transects/ counting points were also identified and counted in order to produce a complete species list.

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Particular attention was given to food/ host plants for butterfly larvae and favoured habitats for both groups, such as shrubland for butterflies and streams for odonates (both adults and larvae).

4.2.5 Aquatic Fauna

Aquatic survey was conducted once during day-time at nearby sizable watercourses within the Study Area in order to collect more comprehensive information of the wildlife usage in the area. The watercourses were surveyed by direct observation and active searching for aquatic fauna, including but not limited to fish, invertebrates and macroinvertebrates.

5. EXISTING ECOLOGICAL BASELINE

A very large proportion of the Study Area is located within Wetland Conservation Area, Wetland Buffer Area and Conservation Area. The Project site is located within Wetland Conservation Area and Conservation Area. Most built-up areas are concentrated on the eastern end of the Study Area. Seven major habitat types have been identified in the Study Area, namely plantation, shrubland/grassland, watercourse, fishpond, managed wetland, developed area and village area. Habitats present within the Study Area are shown *Figure 5.1*.

5.1 Habitat and Vegetation

Table 5.1 summarises the area of each habitat recorded in the Study Area. The representative habitat photos are in *Annex 1*. The full plant list for the Study Area is provided in *Annex 2*. The following text elaborates the ecological conditions, flora and fauna recorded at each habitat during the ecological baseline survey.

Habitat	Area within Study Area (ha)	% of Study Area
Plantation	1.06	3.25%
Shrubland/Grassland	1.51	4.61%
Watercourse	10.07	30.83%
Pond	7.60	23.25%
Developed Area	2.21	6.76%
Village Area	5.59	17.10%
Managed Wetland	4.64	14.20%
TOTAL	32.68	100.00%

Table 5.1: Area of Each Habitat Identified in the Study Area

5.1.1 Habitats within the Study Area

Plantation

Plantations are mainly found along Nam Sang Wai Raod, Pok Wai South Road and Castle Peak Road as well as a patch that is located at the south west end of the Study Area (*Figure 5.1*). Plant species present are mainly tree and shrub species for landscaping purposes or ruderal species that colonised the area, due to close vicinity to village houses and main roads, these patches of plantation receive a relatively high level of disturbance, esp. on their fringes.

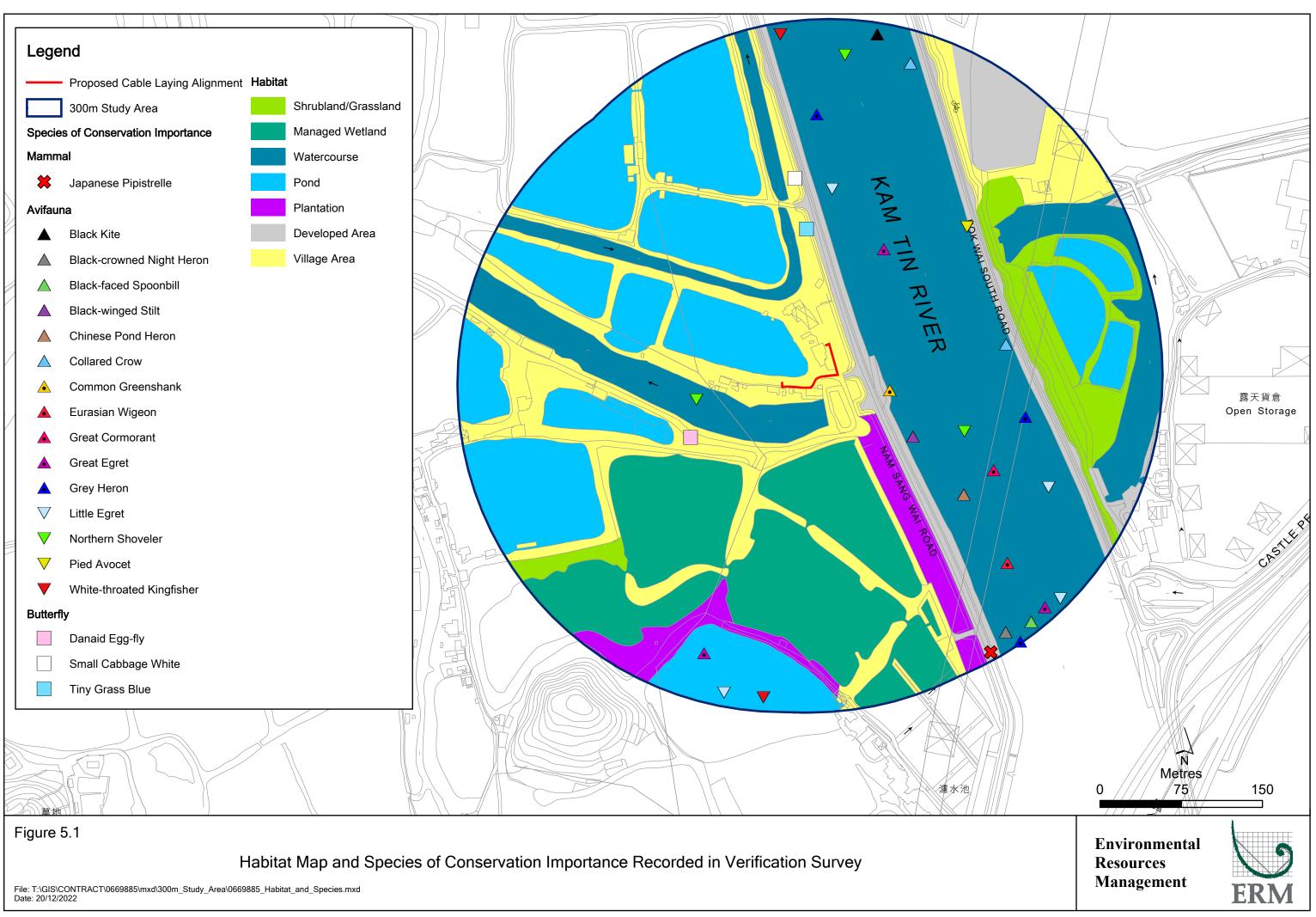
A total of 20 plant species were recorded in plantation habitat. Most of the plant species recorded from this habitat are common in Hong Kong. Plants dominated by exotic landscaping or ruderal species such as *Acacia auriculiformis, Acacia magnium, Eucalyptus citriodora, Lagerstroemia speciosa, Lantana camara* and *Melaleuca cajuputi* subsp. *Cumingiana* were frequently found in this habitat. No flora species of conservation importance was recorded.

Shrubland/Grassland

There are two main patches of shrubland/grassland within the Study Area one that is located adjacent to Pok Wai South Road and nearby fishponds and one at the south west end of the Study Area adjacent to a village and fishpond. A total of 51 plant species were recorded in plantation habitat. Plant species present are mainly common shrub and herb species such as *Bridelia tomentosa*, Cynodon dactylon, *Desmodium heterocarpon*, *Desmos chinensis*, *Panicum maximum* and *Scoparia dulcis*. No flora species of conservation importance was recorded.

Watercourse

Watercourse is the largest habitat within the Study Area (approx. 10.07 ha; 30.83% of the total area), after fishpond habitat. The watercourses in the Study Area include the main channelised watercourse



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of the Kam Tin River between Nam Sang Wai Road and Po Wai South Road. It is approximately 100m in width and has a riverbed that mainly consists of muddy substrate. When the tide ebbs wide expanses of mud is exposed on both sides of the channel, it provides foraging grounds that attracts a high diversity of water birds. A total of 20 plant species were recorded in or along watercourse. Common herb species such as *Cynodon dactylon, Ischaemum aristatum, Panicum maximum, Phragmites australis* and isolated patches of mangrove species, namely, *Kandelia obovata* and *Sonneratia* sp. can be found along the river bank, which allows for perching and act as a refuge for birds. Other watercourses present include semi-natural tributaries and meanders of the main Kam Tin River channel which are located beside Nam Sang Wai Road and Pok Wai South Road. They provide connectivity to different types of wetland habitats (esp. fishponds) and provide drainage to the area. The vegetation composition of the riparian zone is similar to the main channel. Common and weedy species such as *Cynodon dactylon* and *Panicum maximum* as well as wetland herbs including *Phragmites australis* predominate the banks and stream beds of these watercourses, patches of *Eichhornia crassipes* were also recorded.

No flora species of conservation importance was recorded in this habitat.

Pond

This habitat is the second largest habitat in the Study Area, occupying most of the total area (approx. 7.60 ha; 23.25% of the total area). Most of the fishponds within the Study Area including one adjacent to the proposed cable alignment were observed to be active (*Figure 5.1*). Active fishponds are maintained with mostly open water and little emergent vegetation. They were occasionally drained to permit harvesting of fish or maintenance of ponds. The composition and structure of vegetation is typical of fishponds in the Deep Bay, with simple vegetation structure and low vegetative diversity dominated by grassy vegetation. A total of 20 plant species were recorded in or along fishponds. Plants frequently recorded on the pond bunds are grassy and herbaceous species such as *Cynodon dactylon, Hedyotis corymbosa, Ischaemum aristatum, Lemna minor* and *Panicum maximum*, and sometimes fruit trees such as *Lucuma nervosa*. As most of these fishponds are active, the level of human disturbance to this habitat as a result of fishpond management is at least low to moderate. No flora species of conservation importance was recorded.

Developed Area

Developed area within the Study Area included main roads (e.g. Nam Sang Wai Road, Pok Wai South Road and Castle Peak Road – Tam Mei), as well as public facilities (e.g. Yuen Long Tam Mei Community Isolation Facility) and storage facilities, mainly located in eastern part of the Study Area (*Figure 5.1*). This habitat has been through human modifications of various levels and receives constant disturbances resulted from traffic and other anthropogenic activities.

A total of 41 plant species were recorded in Most of the plant species recorded from this habitat are common in Hong Kong. Plants dominated by exotic landscaping or ruderal species such as *Bombax ceiba*, *Bridelia tomentosa*, *Leucaena leucocephala* and *Wedelia trilobata* were frequently found in this habitat. No flora species of conservation importance was recorded in this habitat.

Village Area

Village Area refers to areas occupied by village houses, and the associated access paths to fishponds and main roads close to the villages (*Figure 5.1*).

There are 45 plant species recorded in this habitat (*Annex 2*). Most of the plant species recorded are commonly grown for ornamental purpose or as orchards such as *Allamanda schottii, Averrhoa carambola, Dimocarpus longan, Litchi chinensis* and *Lucuma nervosa*. No flora species of conservation importance was recorded in this habitat.

Managed Wetland

Managed Wetland refers to the mitigation wetland to the west of Kam Tin River for the Yuen Long Bypass Floodway which is planted with wetland plants and woody vegetation for attracting wildlife. A total of 25 plant species were recorded in the managed wetland. Plants frequently recorded are grassy and herbaceous species such as *Cynodon dactylon*, *Euphorbia hirta*, *Mimosa pudica* and *Phragmites australis*.

5.1.2 Habitats within the Project Site

Works associated with the Project include the installation of LV cable near Nam Sang Wai Road. The alignment will be along the existing pavement/ road surface as far as possible. The Project Site, including works area, therefore is located within village area only, which is currently subject to a relatively high level of disturbance due to its being used as the only pedestrian access between Nam Sang Wai Road and the village area. Photographic records of the Project Site are as presented in *Annex 1*.

During the ecological baseline survey, no flora species of conservation importance were recorded within the Project Site.

5.2 Terrestrial Wildlife

Wildlife recorded during the ecological surveys described in **Section 4.2** are presented below. The photo of the recorded species of conservation importance are in **Annex 3**. A full list of fauna species recorded during the ecology surveys for the Project is found in **Annexes 4 – 8**. The locations of species of conservation importance in the Study Area are shown in **Figure 5.1**.

5.2.1 Mammals

The survey identified one mammal species within the Study Area. The recorded mammal species is of conservation importance, namely, Japanese Pipistrelle *Pipistrellus abramus*. Their conservation and protection status in Hong Kong are presented in *Table 5.2* below.

Table 5.2: Mammal Species of Conservation Importance Recorded within theStudy Area

Common Name	Scientific Name	Chinese Name	Conservation Status	Recorded Habitat
Mammal				
Japanese Pipistrelle	Pipistrellus abramus	東亞家蝠	Cap.170	Developed Area

Note:

Conservation Status:

a. Cap. 170: Protected under Wild Animals Protection Ordinance

5.2.2 Avifauna

The survey identified 34 bird species. Most of the bird species recorded are common and widespread in Hong Kong. A total of 15 bird species of conservation importance, namely Northern Shoveler *Spatula clypeata*, Eurasian Wigeon *Mareca penelope*, Black-faced Spoonbill *Platalea minor*, Blackcrowned Night Heron *Nycticorax nycticorax*, Chinese Pond Heron *Ardeola bacchus*, Grey Heron *Ardea cinerea*, Great Egret *Ardea alba*, Little Egret *Egretta garzetta*, Great Cormorant *Phalacrocorax carbo*, Black Kite *Milvus migrans*, Black-winged Stilt *Himantopus himantopus*, Pied Avocet *Recurvirostra avosetta*, Common Greenshank *Tringa nebularia*, White-throated Kingfisher *Halcyon smyrnensis* and Collared Crow *Corvus torquatus* were recorded within the Study Area. Their protection and/or conservation status are presented in *Table 5.3.* The photo of the recorded species of conservation importance are in *Annex 3*.

Common Name	Scientific Name	Chinese Name	Conservation Status	Recorded Habitat
Avifauna				
Northern Shoveler	Spatula clypeata	琵嘴鴨	Fellowes: RC	Watercourse
Eurasian Wigeon	Mareca penelope	赤頸鴨	Fellowes: RC	Watercourse
Black-faced Spoonbill	Platalea minor	黑臉琵鷺	Fellowes: PGC, RLCV(EN), IUCN(EN), CSMPS(II)	Watercourse
Black-crowned Night Heron	Nycticorax nycticorax	夜鷺	Fellowes: (LC)	Watercourse
Chinese Pond Heron	Ardeola bacchus	池鷺	Fellowes: PRC (RC)	Watercourse
Grey Heron	Ardea cinerea	蒼鷺	Fellowes: PRC	Watercourse
Great Egret	Ardea alba	大白鷺	Fellowes: PRC (RC)	Watercourse, Pond
Little Egret	Egretta garzetta	小白鷺	Fellowes: PRC (RC)	Watercourse, Pond
Great Cormorant	Phalacrocorax carbo	普通鸕鷀	Fellowes: PRC	Watercourse
Black Kite	Milvus migrans	黑鳶	Fellowes: (RC), CSMPS (II), CITES (II), Cap. 586	Watercourse
Black-winged Stilt	Himantopus himantopus	黑翅長腳鷸	Fellowes: RC	Watercourse
Pied Avocet	Recurvirostra avosetta	反嘴鷸	Fellowes: RC	Watercourse
Common Greenshank	Tringa nebularia	青腳鷸	Fellowes: RC	Watercourse
White-throated Kingfisher	Halcyon smyrnensis	白胸翡翠	Fellowes: (LC)	Watercourse
Collared Crow	Corvus torquatus	白頸鴉	Fellowes: LC, RLCV(NT), IUCN(VU)	Watercourse

Table 5.3: Avifauna of Conservation Importance recorded within the Study Area

Note:

Conservation Status:

- Fellowes Fellowes et al. (2002): PGC = Potential Global Concern, PRC = Potential Regional Concern, RC = Regional Concern, LC = Local 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.
- b. RLCV Red List of China's Vertebrate (2016): NT = Near Threatened, EN: Endangered
- c. CSMPS China State Major Protection Status: Appendix (I) or Appendix (II)
- d. CITES Under Appendix (I) or Appendix (II) of Convention on International Trade in Endangered Species of Wild Fauna
- e. Cap. 586: Protection of Endangered Species of Animals and Plants Ordinance
- f. All birds in Hong Kong are protected under Cap. 170 Protected under Wild Animals Protection Ordinance

5.2.3 Herpetofauna

No herpetofauna species was recorded during the day and night survey within the Study Area.

5.2.4 Butterflies and Odonates

A total of 11 butterfly species and one odonate species were recorded within the Study Area. Most of the recorded butterfly and odonates species are considered to be common and widespread in Hong Kong. Three butterfly species of conservation importance, namely Tiny Grass Blue *Zizula hylax*, Danaid Egg-fly *Hypolimnas misippus*, and Small Cabbage White *Pieris rapae*, were recorded within the Study Area. Their protection and/or conservation status are presented in *Table 5.6*. The photo of the recorded species of conservation importance are in *Annex 3*.

Table 5.6 Butterfly Species of Conservation Importance Recorded within the Study Area

Common Name	Scientific Name	Chinese Name	Conservation/ Protection Status	Distribution in Hong Kong ⁽¹⁾	Recorded Habitat
Tiny Grass Blue	Zizula hylax	長腹灰蝶	-	Very Rare, Species of Conservation Concern	Village Area
Danaid Egg-fly	Hypolimnas misippus	金斑蛺蝶	Fellowes: LC	Uncommon	Village Area
Small Cabbage White	Pieris rapae	菜粉蝶	-	Rare	Village Area

Notes:

1. Distribution in Hong Kong refers to AFCD database: Available at

Chan, A., Cheung, J., Sze, P., Wong, A., Wong, E. and Yau, E. 2011. A Review of the Local Restrictedness of Hong Kong Butterflies. Hong Kong Biodiversity 21: 1-12

2. Conservation Status: Fellowes – Fellowes et al. (2002): LC = Local 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.

5.2.5 Aquatic Fauna

Four fish species and no aquatic invertebrate species were recorded in the watercourse habitat. No aquatic fauna species of conservation importance was recorded within the Study Area.

6. ECOLOGICAL EVALUATION

In this section the ecological importance of the habitats identified within the Study Area are evaluated in accordance with the *EIAO TM Annex 8* criteria. The evaluation is based upon the information of literature review and verification ecological baseline survey presented in the **Sections 3 – 5**.

6.1 Study Area

A total of seven major terrestrial habitats have been identified within the Study Area, including plantation, shrubland/grassland, watercourse, fishpond, developed area, village area and managed wetland. The ecological importance evaluation of each habitat type within the Study Area is presented in *Table 6.1* to *Table 6.5*.

Criteria	Plantation
Naturalness	Man-made habitat with planted species for landscaping purpose
Size	Approx. 1.06ha within the Study Area
Diversity	Low in diversity of plant species and structural complexity. Low diversity of fauna species.
Rarity	No flora and fauna species of conservation importance recorded during the surveys.
Re-creatability	Recreatable
Fragmentation	Fragmented by developed areas. Three patches are found within the Study Area
Ecological Linkage	Limited linkage to adjacent habitat
Potential Value	Low
Nursery/ Breeding Ground	No significant nursery or breeding ground recorded.
Age	Unknown
Abundance/ Richness of Wildlife	Low abundance and richness for fauna species
Overall Ecological	Low
Importance	

Table 6.1: Ecological Evaluation of Plantation

Table 6.2: Ecological Evaluation of Shrubland/Grassland

Criteria	Shrubland/Grassland
Naturalness	Semi-natural habitat at early-stage of natural succession.
Size	Approx. 1.51ha within the Study Area
Diversity	Low to moderate diversity of plant species, structural complexity, and low diversity of fauna species.
Rarity	No flora and fauna species of conservation importance recorded during the surveys.
Re-creatability	Readily re-creatable.
Fragmentation	Fragmented into a few patches
Ecological Linkage	Weak ecological linkage with adjacent habitats
Potential Value	Low
Nursery/ Breeding Ground	No significant nursery or breeding ground recorded.
Age	Various.
Abundance/ Richness of Wildlife	Very low abundance and richness for fauna species.
Overall Ecological Importance	Low

Table 6.3: Ecological Evaluation of Watercourse

PROPOSED PUBLIC UTILITY INSTALLATION AND ASSOCIATED EXCAVATION AND FILLING OF LAND IN "CONSERVATION AREA" ZONE, GOVERNMENT LAND IN D.D. 123, NAM SANG WAI, YUEN LONG ECOLOGICAL ASSESSMENT

Criteria	Watercourse						
Naturalness	Semi-natural watercourse and channelised watercourse are present in the Study						
	Area. Anthropogenic influences were observed.						
Size	Approx. 10.07ha within the Study Area						
Diversity	Low in diversity of plant species and structural complexity.						
	Low to moderate diversity of fauna species.						
Rarity	No flora species of conservation importance recorded during the surveys.						
	Fauna species of conservation importance recorded during the surveys include: Avifauna – Northern Shoveler, Eurasian Wigeon, Black-faced Spoonbill, Black- crowned Night Heron, Chinese Pond Heron, Grey Heron, Great Egret, Little Egret, Great Cormorant, Black Kite, Black-winged Stilt, Pied Avocet, Common Greenshank, White-throated Kingfisher and Collared Crow						
Re-creatability	Re-creatable under suitable hydrological conditions for main channelised channel; difficult to be re-created for semi-natural meanders and tributaries						
Fragmentation	Not fragmented.						
Ecological Linkage	Ecologically linked to adjacent fishpond habitats.						
Potential Value	Act as foraging grounds for a multitude of water bird species. Could be enhanced						
	by reducing pollution to watercourse.						
Nursery/ Breeding Ground	No significant nursery or breeding ground recorded.						
Age	River works completed in 2000s						
Abundance/ Richness of Wildlife	Low to moderate abundance and richness for fauna species.						
Overall Ecological Importance	Moderate for both semi-natural sections and channelised channel.						

Table 6.4: Ecological Evaluation of Pond

Criteria	Pond						
Naturalness	Anthropogenic habitat with high level of human disturbance						
Size	Approx. 7.60ha within the Study Area						
Diversity	Low diversity of plant species and moderate structural complexity in the riparian zones.						
	Low to moderate diversity of terrestrial fauna species, especially birds.						
Rarity	No flora species of conservation importance recorded during the surveys.						
	Fauna Species of conservation importance recorded during the surveys include: Avifauna –Great Egret, Little Egret and White-throated Kingfisher						
Re-creatability	Re-creatable						
Fragmentation	Majority not fragmented, some isolated						
Ecological Linkage	Ecologically linked to adjacent ponds.						
Potential Value	Ecological value could be enhanced by more ecologically friendly management methods.						
Nursery/ Breeding Ground	No significant nursery or breeding ground recorded. Potential breeding ground for water bird species.						
Age	Unknown						
Abundance/ Richness of Wildlife	Low to moderate abundance and richness for terrestrial fauna species.						
Overall Ecological Importance	Low to Moderate						

Criteria	Developed Area						
Naturalness	Anthropogenic habitat with high level of human disturbance.						
Size	Approx. 2.21ha within the Study Area						
Diversity	Low in diversity of plant species, structural complexity, and low diversity of fauna species.						
Rarity	No flora species of conservation importance recorded during the surveys. Fauna Species of conservation importance recorded during the surveys include Mammal – Japanese Pipistrelle						
Re-creatability	Readily re-creatable.						
Fragmentation	N/A						
Ecological Linkage	Weak ecological linkage with adjacent habitats						
Potential Value	Low						
Nursery/ Breeding Ground	No significant nursery or breeding ground recorded.						
Age	Various.						
Abundance/ Richness of Wildlife	Very low abundance and richness for fauna species.						
Overall Ecological Importance	Low						

Table 6.2: Ecological Evaluation of Developed Area

Table 6.6: Ecological Evaluation of Village Area

Criteria	Village Area						
Naturalness	Anthropogenic habitat with high level of human disturbance.						
Size	Approx. 5.59ha within the Study Area						
Diversity	Low in diversity of plant species, structural complexity, and low diversity of faur species.						
Rarity	No flora species of conservation importance recorded during the surveys.						
	Fauna Species of conservation importance recorded during the surveys include Butterfly – Danaid Egg-fly, Small Cabbage White and Tiny Grass Blue						
Re-creatability	Readily re-creatable.						
Fragmentation	N/A						
Ecological Linkage	Weak ecological linkage with adjacent habitats						
Potential Value	Low						
Nursery/ Breeding Ground	No significant nursery or breeding ground recorded.						
Age	Various.						
Abundance/ Richness of Wildlife	Very low abundance and richness for fauna species.						
Overall Ecological	Low						
Importance							

Table 6.7: Ecological Evaluation of Managed Wetland

Criteria	Managed Wetland
Naturalness	Semi-natural habitat with active human management for conservation purposes.
Size	Approx. 4.64ha within the Study Area
Diversity	Low in diversity of plant species, structural complexity, and low diversity of fauna species.

PROPOSED PUBLIC UTILITY INSTALLATION AND ASSOCIATED EXCAVATION AND FILLING OF LAND IN "CONSERVATION AREA" ZONE, GOVERNMENT LAND IN D.D. 123, NAM SANG WAI, YUEN LONG ECOLOGICAL ASSESSMENT

Criteria	Managed Wetland					
Rarity	No flora and fauna species of conservation importance recorded during the surveys.					
Re-creatability	Re-creatable under suitable hydrological conditions					
Fragmentation	N/A					
Ecological Linkage	Ecologically linked to adjacent ponds and watercourse.					
Potential Value	Could be better enhanced with improved management practices					
Nursery/ Breeding Ground	No significant nursery or breeding ground recorded. Potential breeding ground for water bird species					
Age	Less than 20 years.					
Abundance/ Richness of Wildlife	Low abundance and richness for fauna species.					
Overall Ecological Importance	Low to Moderate					

6.2 **Project Site**

The Project Site, including works area, comprise of approximately 0.05ha of village area. The abundance and richness of wildlife are very low due to the small size of the Project Site and its adjacency to an existing, regularly used vehicular/ pedestrian access. No flora or fauna species was recorded within the Project Site during ecological baseline survey. No tree felling/ pruning will be required. The evaluation of village area within the Project Site is presented in *Table 6.3*.

Criteria	Village Area within Project Site						
Naturalness	Anthropogenic habitat with high level of human disturbance.						
Size	Approx. 0.05ha						
Diversity	Low in diversity of plant species, structural complexity, and low diversity of fauna species.						
Rarity	No flora and fauna species of conservation importance recorded during the surveys.						
Re-creatability	Readily re-creatable.						
Fragmentation	N/A						
Ecological Linkage	Weak ecological linkage with adjacent habitats						
Potential Value	Low						
Nursery/ Breeding Ground	No significant nursery or breeding ground recorded.						
Age	Various.						
Abundance/ Richness of	Very low abundance and richness for fauna species.						
Wildlife							
Overall Ecological	Low						
Importance							

Table 6.3: Ecological Evaluation of Project Site

7. ECOLOGICAL ASSESSMENT

7.1 Identification of Potential Ecological Impacts

In view of the current habitat conditions of the Project Site and its vicinity and their ecological values, the potential ecological impacts associated with the LV cable laying near Nam Sang Wai Road is predicted as follows. The potential impacts would cease immediately upon completion of the installation works, where there will be no operational impacts.

- Temporary habitat loss and habitat disturbance within the Project Site due to excavation of cable trenches;
- Indirect disturbances to the surrounding habitats and associated wildlife due to the construction works (e.g. increased human activities, generation of dust, waste and noise and inappropriate disposal of construction materials); and
- Indirect impacts (pollution) on watercourses due to construction run-off.

7.2 Assessment of Ecological Impacts in the Absence of Mitigation Measures

In the absence of mitigation measures, the identified ecological impacts due to installation of the proposed cable along Tam Kon Chau Road are evaluated in the following sections.

7.2.1 Temporary Habitat Loss

Direct habitat loss arising from the Project limits to the cable trenches near Nam Sang Wai Road within village area. The construction works include excavation by QPME (Quality Powered Mechanical Equipment) excavators and the hand tools, cable laying and reinstatement. The dimension of the cable trenches, which will be reinstated upon completion of construction, is approximately 3m in width and 5.5m in depth. The Project's works area will be restricted to 1m on either of the proposed cable route, which will involve minimal vegetation clearance. Only transitional vegetated areas (with grass only) between the existing road/ paved surface and adjacent habitat. No tree felling or pruning will be involved.

In the absence of mitigation measures, the direct habitat loss caused by the Project is considered to be of **Very Low** to village area. The assessment of potential direct impact on habitats within the Project Site in the absence of mitigation measures is detailed in *Table 7.1*.

Criteria	Village Area			
Habitat Quality	Low			
Species	No flora and fauna species of conservation importance recorded during the surveys.			
Size/Abundance	Small with a total area of 0.05ha (including works area). No tree removal and pruning will be involved.			
Duration	Temporary, the works will be completed (including reinstatement) around 4 weeks			
Reversibility	The trenches will be reinstated upon completion of construction			
Magnitude	Very small			
Overall Impact Severity	Very Low			

Table 7.1: Temporary	y Loss of Existing Habitats within t	he Project Site
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7.2.2 Indirect Disturbances to Surrounding Habitats and Associated Wildlife

The surrounding habitats including fish ponds and watercourses adjacent to the Project Site could be indirectly impacted by the Project, due to construction-induced disturbances arising from the Project. Increased human activities (esp. during the construction phase) and construction activities would be the main source of disturbance accrued from the proposed works. Noise, dust, waste generation, and visual disturbance, which may arise from the construction activities, are predicted to occur during construction. As the cable alignment will be located along the existing pavement/ road surface as far as possible, the excavation is not expected to cause direct disturbance or the physical damages to the surrounding habitats.

Different terrestrial ecological resources, including avifauna and butterfly species of conservation importance, have been identified to be located in the vicinity of the proposed cable route. These species could be indirectly impacted by the proposed construction works.

According to the baseline ecological survey and literature review, fauna inhabiting the nearby area are highly mobile and able to move to the other similar habitats, which are large in area and with higher habitat quality. Furthermore, the fauna recorded in the Study Area were less susceptible to the anthropogenic disturbances. Therefore, nuisances induced by the small-scale construction work along the Project Site would not have significant impact to surrounding wildlife. As observed during the baseline survey, waterbirds in the Study Area are generally not disturbed by frequent human activity, traffic and activity from construction. However, the excavation could pose risk to smaller fauna species such as small mammals and amphibian, where they could be trapped in open trenches.

In the absence of mitigation measures, the above-mentioned disturbance impact on surrounding habitats and associated wildlife due to noise, dust, waste generation and visual disturbance etc. caused by increased human activities is considered to be **Low**.

7.2.3 Indirect Impact (Pollution) on Watercourses

Site runoff from the works area may contain suspended solids and contaminants if uncontrolled. Potential sources of water pollution from uncontrolled site runoff may include runoff and erosion of exposed bare soil, earth and stockpiles, fuel, oil, and lubricant from maintenance of construction mechanical equipment. Water pollution could be substantial if construction runoff is allowed to discharge without mitigation, resulting in adverse impacts through physical and biological disruption of the area's ecosystem. Taking into account the small scale of the construction works, in the absence of mitigation measures, the impact of potential water pollution caused by the Project is considered to be of **Low to Moderate** significance.

7.3 Cumulative Impact

No concurrent project, of which the construction programme would have overlapped with this Project, is identified within the Study Area. And hence, cumulative impact is not anticipated for this Project.

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8. MITIGATION AND PRECAUTIONARY MEASURES

Based on the ecological impacts predicted in **Section 7**, mitigation measures to avoid, minimise or compensate (if necessary) for the potential significant impacts are detailed below. In line with the EIAO-TM, ways to avoid impacts were identified and followed wherever possible during the planning and design stage. If, despite taking all appropriate design measures of avoidance and minimisation, potential ecological impacts of greater than "Low" significance are still anticipated, further mitigation measures are considered necessary to reduce these impacts to an acceptable level. Moreover, to achieve a better ecological performance, precautionary measures are proposed under this project for certain potential ecological impacts that are not considered to be significant.

In order to minimise the potential disturbances arising the project, good site/ construction practice and housekeeping measures will be adopted. Mitigation measures and good construction practices are recommended below.

8.1 Avoidance and Minimisation

- During the planning stage, the Project Proponent has conducted site visits with contractors to minimise footprint/ impact on vegetation, tree and habitat loss at any stage of the Project. No tree felling or pruning will be caused by the Project.
- The cable laying work will be constructed section by section. The trench will be backfilled with soil stocking before moving to next section.
- The construction period will be between April and May 2023 for about four weeks, which will avoid the wintering season of migratory birds.
- The relevant statutory requirements for the construction activities will be complied with.

8.2 Mitigation for Indirect Disturbances to Surrounding Habitats and Associated Wildlife

- All construction activities will be carried out in daytime hours (i.e. 8:00 am to 5:00 pm) only, which is at least one hour after sunrise and over one hour before sunset;
- The construction works would be carried out using QPME excavators and hand tools to minimise the potential impacts;
- The boundary of the works area will be clearly marked by temporary fence. The works area boundaries will be regularly checked to ensure that they are not breached and that no adverse impacts occur to surrounding habitat and associated wildlife;
- Contractors will check the excavation trench each day, prior to commencing work, to ensure that no mammals, reptiles or amphibians are trapped in the trench;
- Adopt appropriate measures including controlled wastewater discharge to the nearby water bodies, in accordance with the guidelines stipulated in Environmental Protection Department (EPD)'s *Practice Note for Professional Persons on Construction Site Drainage (ProPECC PN1/94)* during the construction works to properly control site run-off and drainage and to minimise potential water quality impacts;
- In the event of rain or at any time when rainstorms are likely to happen, exposed surfaces within the works area should be covered by tarpaulin or by other means;
- Avoid any damage and disturbance, particularly those caused by filling and illegal dumping to the surrounding natural habitats;
- Prohibit and prevent open fires within the works area boundary during construction and provide temporary firefighting equipment in the work areas;

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- Good site practice will be enforced and effective mitigation measures are required. Works site will be kept tidy at all times. Regular watering to minimise dust emissions from exposed site surfaces and construction activities would be provided. The dusty materials and the open stockpiles shall be avoided or covered fully by the tarpaulin. Accumulation of construction waste and general refuse will not be allowed; and
- Upon completion of the construction works at each section, the works areas will be reinstated.

8.3 Residual Ecological Impacts after Implementation of Proposed Mitigation Measure

Table 8.1 summarises the potential ecological impacts of the project, the impacts that require mitigation, the mitigation measures to be carried out and the residual impacts after mitigation. It can be seen that with the implementation of proposed mitigation measures described above, residual impacts of the Project could be reduced to **Low/ Negligible**.

Table 8.1: Summary of Potential Ecological Impacts, Required Mitigation Measures and Post-mitigation Acceptability of
the Project

Potential Impact	Predicted Significance of Impact in Absence of Mitigation Measures	Proposed Mitigation/ Precautionary Measures		
Direct Habitat Loss (Developed Area)	Very Low	Not required	Very Low	
Indirect Disturbances to Surrounding Habitats and Associated Wildlife	Low	 The construction period will be between April and May 2023 for four weeks, which will avoid the wintering season of migratory birds. All construction activities will be carried out in daytime hours (i.e. 8:00 am to 5:00 pm) only, which is at least one hour after sunrise and over one hour before sunset; The construction works would be carried out using QPME excavators and hand tools; The boundary of the works area will be clearly marked by temporary fence. The works area boundaries will be regularly checked to ensure that they are not breached and that no adverse impacts occur to surrounding habitat and associated wildlife; and Contractors will check the excavation trench each day, prior to commencing work, to ensure that no mammals, reptiles or amphibians are trapped in the trench. 	Low/ Negligible	
Indirect Impact (Pollution) on Watercourses		 Adopt appropriate measures including controlled wastewater discharge to the nearby water bodies, in accordance with the guidelines stipulated in Environmental Protection Department (EPD)'s <i>Practice Note for Professional Persons on Construction Site Drainage (ProPECC PN1/94)</i> during the construction works to properly control site run-off and drainage and to minimise potential water quality impacts; In the event of rain or at any time when rainstorms are likely to happen, exposed surfaces within the works area should be covered by tarpaulin or by other means; Avoid any damage and disturbance, particularly those caused by filling and illegal dumping to the surrounding natural habitats; and Good site practice will be enforced and effective mitigation measures are required. Works site will be kept tidy at all times. Regular watering to minimise dust emissions from exposed site surfaces and construction activities would be provided. The dusty materials and the open stockpiles shall be avoided or covered fully by the tarpaulin. Accumulation of construction waste and general refuse will not be allowed. 		
Cumulative Impact	Not anticipated	Not required	Not anticipated	

9. SUMMARY OF ECOLOGICAL ASSESSMENT

The main terrestrial ecological resources recorded within the proposed construction works section of the Study Area comprise of plantation, shrubland/grassland, watercourse, pond, developed area, village area, managed wetland, and their associated wildlife, where the Project Sites will be restricted to village area on Nam Sang Wai Road. Majority of the habitat within the Study Area is considered to be anthropogenic with frequent disturbance from traffic on Nam Sang Wai Road and commercial fishpond operation. The ecological value of the habitats is considered to be moderate for watercourse; low to moderate for pond and managed wetland, low for plantation, shrubland/grassland, developed area and village area.

The village area within the Project Site is considered to have a low level of ecological value, given that the habitat nature is anthropogenic with high level of human disturbance. The Project Site support a very low diversity of flora and fauna species, where the proposed cable route has also been designed to avoid any tree felling and tree pruning. In the absence of mitigation measures, the temporary habitat loss within Project Site is considered to be of Very Low significance. The potential indirect disturbances to surrounding habitat and associated wildlife is considered to be of Low significance, and indirect impact (pollution) on watercourses is considered to be Low to Moderate.

In order to mitigate for the potential ecological impacts, the proposed works will be conducted in daytime hours only and contractors will be checking the presence of wildlife in open trenches to minimise potential impact on wildlife. Good site practices and the measures in accordance with the Practice Notes for Professional Persons on "*Construction Site Drainage*" (ProPECC PN 1/94) will be applied to control surface runoff and the potential pollution to watercourse.

With the implementation of the proposed mitigation measures, residual ecological impacts of the Project would be of low/negligible significance and acceptable.

Annex 1

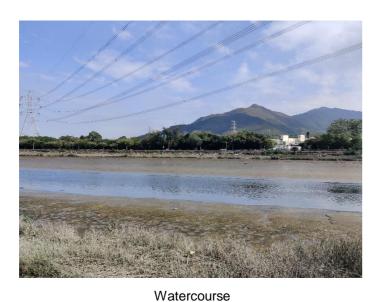
Habitat Photos



Plantation



Shrubland/Grassland



Fishpond

Annex 1

Habitat Photos

Environmental Resources Management



DATE: 12/12/2022



Developed Area



Village Area



Managed Wetland

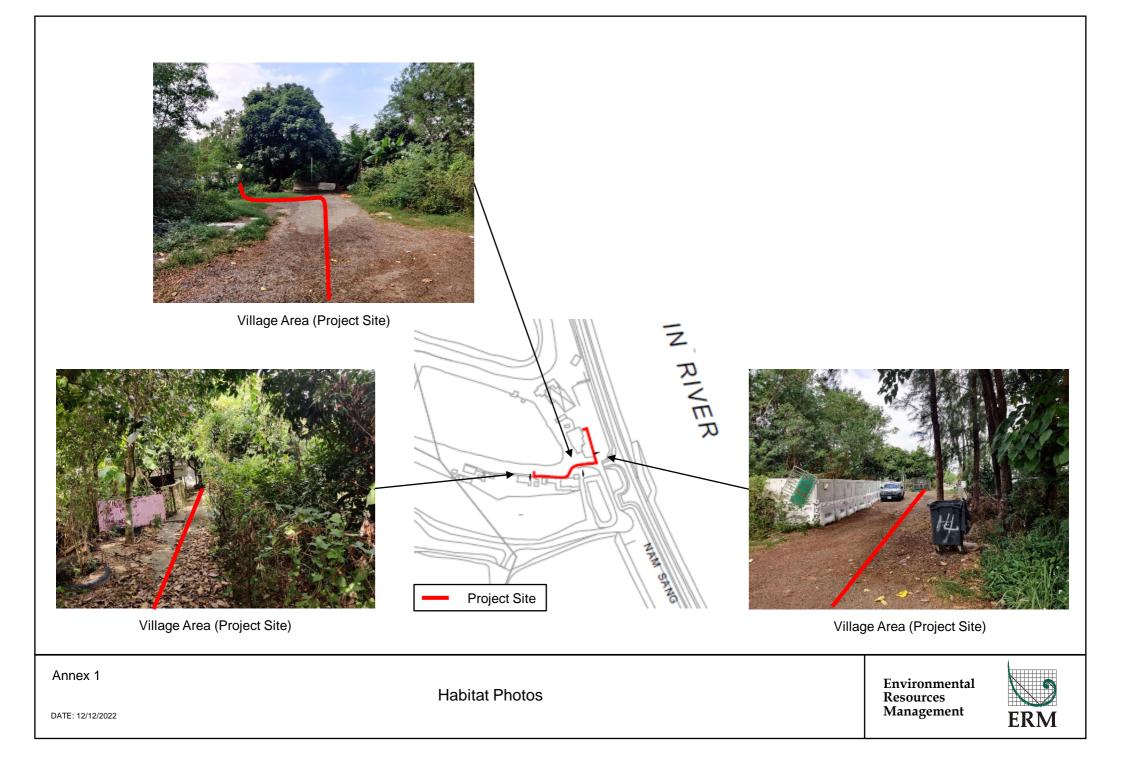
Annex 1

Habitat Photos

Environmental Resources Management



DATE: 12/12/2022



Annex 2

Presence of Plant Species Recorded Within the Study Area

Annex 2 Presence of Plant Species Recorded Within the Study Area

Annex 2 Presence of Plant Species Re													
Species Name	Chinese Name	Origin ¹	Growth Form	Status in Hong Kong ²	Status in Hong Kong ²	Conservation Status³			Stu	ady Area			Project Site
							WC	PO	VA D	DA S/G	PL	MW	VA
Acacia auriculiformis	耳果相思	Е	Tree	Widely cultivated				1			√	\checkmark	(
Acacia mangium	大葉相思,馬占相思	E	Tree	Widely cultivated				4 			\checkmark	4	
Acanthus ilicifolius	老鼠簕	E	Shrub	Common			\checkmark				1		(İ
Acrostichum aureum	國蕨	N	Herb	Restricted			\checkmark	$\overline{\checkmark}$			*	1	
Agave americana	龍舌蘭	N	Herb	Common				 		····	*	4	✓
Allamanda schottii	硬枝黃蟬		Shrub	Cultivated					 	 	+	4/	<u> </u>
Alocasia macrorrhizos	海芊	N	Herb	Common						·····			· · · · · · · · · · · · · · · · · · ·
Alysicarpus vaginalis	· · · · · · · · · · · · · · · · · · ·	N	Herb	Very common				<u></u>		<u></u>	+	+	/
Averrhoa carambola	楊桃		Tree	Common				<u> </u>	\checkmark		· 	+ <i>+</i>	
Avicennia marina	白骨壤		Shrub	Common				<u> </u>	` †		+	ł/	/t
Bambusa multiplex			Bamboo	Common			`			·····	+	+	/
Bidens alba	白花鬼針草	E	Herb	Very common			./	./	<u>ب</u>	<u> </u>	<u>+</u>	+	
Bischofia javanica		<u>N</u>	Tree	Common			<u>v</u>	<u> </u>	<u>`</u>	<u>××</u>		·	/·
Bombax ceiba	木棉		Tree	Cultivated				<u> </u>		<u></u>	<u>+</u>	<u>×</u>	/
Bougainvillea spectabilis			Climber/Shrub	Cultivated				↓	`	<u>×</u> +×		<u>`</u>	
Bougumonieu speciuonis Brachiaria subquadripara			Herb	Cultivated						<u></u>	+	!	·
				-				<u> </u>		<u> </u>	+		<u> </u>
Bridelia tomentosa Broucecuetia nomerifora	土蜜樹	IN N	Shrub/Tree	Very common							÷	·'	·
Broussonetia papyrifera	構樹 生相tt yrytt		Tree	Very common				İ	<u>√ ,</u>	<u> </u>	+	. <u></u> /	<u> </u>
Calliandra haematocephala	朱纓花,紅絨球		Shrub	Cultivated				<u> </u>		····	<u>↓</u>	. /	<u> </u>
Callistemon viminalis	<u>串錢柳</u>		Tree	Cultivated			,			,,,	↓	· + [/]	ii
Celosia argentea Chloris barbata	青葙	N	Herb	Very common			∕			<u> </u>		. [/]	<u> </u>
Chloris barbata	孟仁草	N	Herb	Very common					<u></u>	<u> </u>			<u>↓</u> ↓
Cleome rutidosperma	皺子白花菜	E	Herb	Restricted				 		<u> </u>	.		·
Coccinia grandis	紅瓜	<u>N</u>	Climber	Common				<u>↓</u>		<u> </u>			il
Cuscuta chinensis	菟絲子	N	Herb	Common						<u> </u>		<u> </u>	<u> </u>
Cyclosorus interruptus	間斷毛蕨,毛蕨	N	Shrub	Common				<u>√</u>			i +	<u> </u>	<u>.</u>
Cynodon dactylon	狗牙根	Ν	Herb	Very common			✓	✓	√ ·	<u> </u>	_	✓	✓
Desmodium heterocarpon	假地豆	Ν	Shrub	Very common						\checkmark			<u>i</u> I
Desmos chinensis	假鷹爪	Ν	Climber/Shrub	Common						√		! !	
Dimocarpus longan	龍眼, 桂圓	Е	Tree	Restricted				1	\checkmark	\checkmark	1	1	√
Dypsis lutescens	散尾葵	Е	Shrub	Common					\checkmark			1	\checkmark
Eichhornia crassipes	鳳眼藍,大水萍	Е	Herb	Common			\checkmark	\checkmark			•	1	
Eucalyptus citriodora	檸檬桉	Е	Tree	Cultivated							\checkmark	\checkmark	1
Eucalyptus urophylla		E	Tree	Cultivated				╉╾╼╼╼╼╼╼╼ ╏		\checkmark	+	44	
Eunhorhia hirta	大飛揚草	Е	Herb	Very common				†	\checkmark ,	✓	†	1	
Euphorbia thymifolia	千根草,小飛揚	N	Herb	Very Common				+		· · · · ·	+	† <i>†</i>	$\overline{\checkmark}$
Excorcaria agallocha		N	Tree	Common							·	<i>i</i>	·
Excoecaria agallocha Fagraea ceilanica	灰莉	4 ^F	Shrub	-				<u> </u>	<u>/</u>		+	+	·
Ficus hispida	對葉榕		Shrub/Tree	Very common				<u> </u>		·····	+	+	·
Ficus microcarpa		N	Tree	Common				<u> </u>		<u></u>		·	·····
		N	Climber	Very common				<u> </u>		<u>v</u>	+	<u> </u>	·
Ficus pumila								<u> </u>			+		┟
Ficus virens			Tree	Common						<u> </u>			
Flueggea virosa	白飯樹		Shrub	Common			 	+	<u>`</u> `	<u>/</u>	i 	<u> </u>	/
Hedyotis corymbosa	<u> 傘房花耳草</u>		Herb	Very common				<u>↓∕</u>	 `	<u> </u>		. <u> </u> /	<u> </u>
Hibiscus tiliaceus	黄槿		Tree	Very common			~	<u>↓</u>		····· · · · · · · · · · · · · · · · ·		<u> </u>	·
Hylocereus undatus Hyophorbe lagenicaulis	量天尺,霸王花,火龍果		Herb	Common				+	/ /		÷	·+/	<u> </u>
nyopnorve lagenicaulis	酒瓶椰子	E	Tree	-					<u>√</u>	· ···		. .	<u> </u>
Hypserpa nitida	夜花藤		Climber	Very common						<u> </u>	i +	. <u> </u> /	<u></u>
Indigofera suffruticosa	野青樹	^N	Small Tree	Restricted					`	<u> </u>		. [/]	<u> </u>
Ipomoea nil	牽牛	E	Herb	Common					<u> </u>	<u>v </u>		. /	ļ
Ipomoea obscura	小心葉薯,紫心牽牛	N	Herb	Common					<u>`</u>	✓ ↓ _ ✓	_	. !	↓
Ischaemum aristatum		<u>N</u>	Herb	-			<u>∕</u>	<u> </u>				. /	
Kandelia obovata	水筆仔	<u>N</u>	Tree	Very common			∕	İ				<u> </u>	<u> </u>
Koelreuteria bipinnata	複羽葉欒樹	E	Tree	Cultivated				_			<u>√</u>	, /	į
Lagerstroemia speciosa	大花紫薇	E	Tree	Cultivated				 				. .	{
Lantana camara	馬纓丹,如意草	Е	Shrub	Common				<u> </u>	、	<u> </u>	<u>↓ √</u>	. <u> </u> /	<u>i</u> l
Lemna minor	浮萍	Ν	Herb	-			 	 ✓ 					
Leucaena leucocephala	銀合歡	Е	Shrub/Tree	Common			\checkmark	\checkmark	√ ·	\checkmark		\checkmark	√ 1
Lemna minor Leucaena leucocephala Lindernia crustacea	母草	Ν	Herb	Common						\checkmark		/	
Liriope spicata	山麥冬,麥門冬	N	Herb	Very common				\checkmark			<u></u>		
Litchi chinensis	荔枝	Е	Tree	Restricted				*	\checkmark	√	_		\checkmark
Litsea glutinosa	潺槁樹	Ν	Tree	Very common				 			\checkmark		<u> </u>
	蛋黄果	Е	Tree	Common				\checkmark	\checkmark		T	1	√
Lucuma nervosa Ludwigia hyssopifolia		N	Herb	Common				$\overline{\checkmark}$			†	1	
Luawigia nyssopijota Macaranga tanarius var. tomentosa Mangifera indica Melaleuca cajuputi subsp. Cumingiana Melia azedarach	血桐	N	Tree	Common				<u> </u>	\checkmark	····	+	† <i>i</i>	·
Manoifera indica			Tree	Cultivated				<u> </u>		····	†	· +/	<u>[</u>
Melaleuca cajunuti subsn Cumingiang			Tree	Cultivated				†			<u>†</u>	† <i>'</i>	<u> </u>
Melia azedarach	<u>旦丁噌</u> 苦棟	E	Tree	Common				<u>†</u>		<u></u>	<u>†`</u>	· ./	/ł
Molinis ronons	<u>古咪</u>		Herb	Very common				<u> </u>		<u> </u>	<u>+</u>	<u>↓</u> /	·
Melinis repens Microcos nervosa	<u> </u>							 	·····	<u>.</u>	+	· +/	/ł
<u>Microcos nervosa</u> Mikania micrantha		IN T	Shrub/Tree	Common				├	·····	<u>×</u> +×	+	·	/ł
	薇甘菊		Climber/Herb	Common				├ [_]	·	<u>×</u>		<u> </u>	·
Mimosa pudica	含羞草		Herb	Very common					<u>√</u> ,	<u>×</u>	}	<u> /</u>	·
Morus alba	楽	IN	Shrub/Tree	Common				!	l`	<u> </u>	L	.1/	ll

Annex 2	Presence o	f Plant S _l	pecies Recorded	Within the Study Area
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Species Name	Chinese Name	Origin ¹ Growth Form	Status in Hong Kong ²	Status in Hong Kong ²	Conservation Status	3		Study Area					Project Site		
							WC	PO	VA	DA	S/G	PL	MW	VA	
Paederia scandens	雞矢藤	N Herb	Very common					\checkmark	\checkmark	\checkmark	\checkmark			√	
Panicum maximum	大黍	E Herb	Very common				\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	1		√	
Passiflora foetida	龍珠果	E Climber	Very common					*	\checkmark	\checkmark	\checkmark	1	-	√	
Passiflora suberosa	南美西番蓮	E Climber	Common					\checkmark	\checkmark	\checkmark	\checkmark			\checkmark	
Peltophorum pterocarpum	盾柱木	E Tree	Cultivated									\checkmark			
Pennisetum purpureum	象草	E Herb	Very common					\checkmark							
Pennisetum purpureum Phragmites australis	蘆葦	N Herb	Common				\checkmark	\checkmark				†	\checkmark		
Phyllanthus emblica Phyllanthus myrtifolius	餘甘子,油甘子	N Shrub/Tree	Common							\checkmark		✓			
Phyllanthus myrtifolius	瘤腺葉下珠	E Shrub	-									\checkmark			
Portulaca oleracea	馬齒莧	N Herb	Common								\checkmark				
Rhaphiolepis indica	車輪梅	N Shrub/Tree	Very common								\checkmark	T	\checkmark		
bageretia thea Bansevieria trifasciata	雀梅藤	N Climber/Shrub	Very common								\checkmark	\checkmark			
Sansevieria trifasciata	虎尾蘭	E Herb	Cultivated					•	\checkmark					√	
apium discolor	山烏桕	N Tree	Very common					 			√				
apium discolor chefflera arboricola	鵝掌藤	E Climber/Shrub	Common					†	\checkmark			\checkmark	\checkmark	\checkmark	
coparia dulcis	野甘草,冰塘草	E Herb/Shrub	Common					\checkmark	\checkmark	\checkmark	\checkmark	T		√	
enna siamea	鐵刀木, 暹羅槐	E Tree	Common					•				\checkmark			
esbania cannabina	田菁	E Herb	Common					\checkmark		\checkmark	\checkmark				
olanum torvum	水茄	E Shrub	Common					\checkmark	\checkmark	\checkmark	\checkmark	T		✓	
conneratia sp.	海桑屬	E Tree	Introduced				\checkmark	\checkmark				T	\checkmark		
Sonneratia sp. Sterculia lanceolata	假蘋婆	N Tree	Very common						\checkmark		\checkmark	T 		√	
Suaeda australis	南方鹼蓬	N Herb/Shrub	Common				\checkmark								
yzygium cumini	海南蒲桃	E Tree	Common									\checkmark			
yzygium jambos	蒲桃	E Tree	Common						\checkmark			[\checkmark	
rachelospermum jasminoides	絡石	N Climber	-									\checkmark			
Fridax procumbens	羽芒菊	E Herb	Very common					 	\checkmark	\checkmark				√	
Typha angustifolia	水燭	E Herb	Rare					\checkmark				T	\checkmark		
Irena lobata	肖梵天花,地桃花	N Shrub	Common								\checkmark				
⁷ ernonia amygdalina	南非葉	E Shrub	-						\checkmark						
Vedelia trilobata	三裂葉蟛蜞菊	E Herb	Common						\checkmark	\checkmark	\checkmark		\checkmark	√	
Visteria sinensis	紫藤	E Climber	Cultivated					T	\checkmark			Ţ	 -	\checkmark	
			104		TOTAL	TOTAL	17	27	45	41	51	20	25	45	

Notes:

1. Origin of plant species refers to AFCD (2012). Check List of Hong Kong Plants 2012. Agriculture, Fisheries and Conservation Department, HKSAR, Hong Kong. 2. Commonness follows:

- Xing, F.W., Ng, S.C., Chau, L.K.C. 2000. Gymnosperms and angiosperms of Hong Kong. Memoirs of the Hong Kong Natural History Society 23: 21-136.

- KFBG (2003) Flora of Hong Kong - Pteridophyta. Kadoorie Farm and Botanic Garden, Hong Kong

- AFCD (2003) Rare and Precious Plants of Hong Kong. Agriculture, Fisheries and Conservation Department, HKSAR, Hong Kong.

- AFCD (2007) Flora of Hong Kong Vol. 1. Edited by Hong Kong Herbarium, Agriculture, Fisheries and Conservation Department & South China Botanical Garden, Chinese Academy of Sciences

- AFCD (2008) Flora of Hong Kong Vol. 2. Edited by Hong Kong Herbarium, Agriculture, Fisheries and Conservation Department & South China Botanical Garden Chinese Academy of Sciences

- AFCD (2009) Flora of Hong Kong Vol. 3. Edited by Hong Kong Herbarium, Agriculture, Fisheries and Conservation Department & South China Botanical Garden Chinese Academy of Sciences

- AFCD (2011) Flora of Hong Kong Vol. 3. Edited by Hong Kong Herbarium, Agriculture, Fisheries and Conservation Department & South China Botanical Garden Chinese Academy of Sciences

Conservation status follows:

- AFCD (2003) Rare and Precious Plants of Hong Kong. Agriculture, Fisheries and Conservation Department, HKSAR, Hong Kong.

- Cap. 96A: Forestry Regulations, the subsidiary legislation of Forests and Countryside Ordinance (Cap. 96).

- Cap. 586: Protection of Endangered Species of Animals and Plants Ordinance

- CPRDB: Fu and Jin (1992) China Plant Red Data Book

- IUCN: International Union for Conservation of Nature Red List of Threatened Species (2017). NT = Near threatened, VU = Vulnerable.

3. Habitats: PL = Plantation, S/G = Shrubland/Grassland, WC = Watercourse, FP = Fishpond, DA = Developed Area, VA = Village Area, MW = Managed Wetland

Annex 3

Photographic Records of Species of Conservation Importance



Northern Shoveler



Eurasian Wigeon



Black-faced Spoonbill



Black-crowned Night Heron





Annex 3

Photographic Records of Species of Conservation Importance



Chinese Pond Heron



Grey Heron







Little Egret

Environmental Resources Management ERM

Annex 3



Great Cormorant



Black-winged Stilt





Common Greenshank

Environmental Resources Management

ERM

Pied Avocet

Annex 3

Photographic Records of Species of Conservation Importance



White-throated Kingfisher



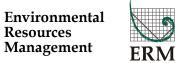
Collared Crow



Pied Kingfisher



Danaid Egg-fly



Annex 3

Photographic Records of Species of Conservation Importance

DATE: 12/12/2022

Annex 4

Presence of Mammal Species Recorded Within the Study Area

Common Name	Scientific Name	Chinese Name	Conservation Status ¹	¹ Commonness ²	Habitat ³ Study Area P								
					PL	S/G	WC	PO	DA	VA	MW	VA	
Japanese Pipistrelle	Pipistrellus abramus	東亞家蝠	Cap.170	Widely distributed throughout Hong Kong.					1				
				TOTAL	0	0	0	0	1	0	0	0	

Notes:

1. Conservation and Protection Status:

a. Cap. 170 - Protected under Wild Animals Protection Ordinance

2. Commonness as per AFCD database: Available at https://bih.gov.hk/en/home/index.html

3. Habitats: PL = Plantation, S/G = Shrubland/Grassland, WC = Watercourse, PO = Pond, DA = Developed Area, VA = Village Area, MW = Managed Wetland

Annex 5

Presence of Avifauna Species Recorded Within the Study Area

								Ha	bitat ³			
Common Name	Scientific Name	Chinese Name	e Conservation Status	₁ Distribution in Hong Kong ²				Study Area	a			Project Site
				Kong	PL	SH	WC	РО	DA	VA	MW	VA
Northern Shoveler	Spatula clypeata	琵嘴鴨	Fellowes: RC	Abundant winter visitor. Found in Deep Bay area.			14					
Eurasian Wigeon	Mareca penelope	赤頸鴨	Fellowes: RC	Winter visitor. Found in Deep Bay area, Tai Lam			3					
Black-faced Spoonbill	Platalea minor	黑臉琵鷺	Fellowes: PGC; RLCV(EN); IUCN(EN); CSMPS(II)	Chung. Common winter visitor. Found in Deep Bay area.			2					
Black-crowned Night Heron	Nycticorax nycticorax	夜鷺	Fellowes: (LC)	Common resident and migrant. Widely distributed in Hong Kong.			1					
Chinese Pond Heron	Ardeola bacchus	池鷺	Fellowes: PRC (RC)	Common resident. Widely distributed in Hong Kong.			6					
Grey Heron	Ardea cinerea	蒼鷺	Fellowes: PRC	Common winter visitor. Found in Deep Bay area, Starling Inlet, Kowloon Park, Cape D'Aguilar.			4					
Great Egret	Ardea alba	大白鷺	Fellowes: PRC (RC)	Common resident, migrant and winter visitor. Widely distributed in Hong Kong.			15	2				
Little Egret	Egretta garzetta	小白鷺	Fellowes: PRC (RC)	Common resident, migrant and winter visitor. Widely distributed in coastal area throughout Hong Kong.			20	1				
Great Cormorant	Phalacrocorax carbo	普通鸕鷀	Fellowes: PRC	Common winter visitor. Widely distributed in coastal areas throughout			3					
Black Kite	Milvus migrans	黑鳶	Fellowes: (RC); CITES(II); CSMPS(II); Cap.586	Hong Kong. Common resident and winter visitor, widely distributed in Hong Kong			2					

				1 Distribution in Hong				Hab	itat ³			
Common Name	Scientific Name	Chinese Name	Conservation Status	Kong ²				Study Area				Project Site
					PL	SH	WC	РО	DA	VA	MW	VA
Black-winged Stilt	Himantopus himantopus	黑翅長腳鷸	Fellowes: RC	Common migrant and wintor visitor. Found in Deep Bay area, Long Valley, Kam Tin. Abundant winter visitor.			5					
Pied Avocet	Recurvirostra avosetta	反嘴鷸	Fellowes: RC	Found in Deep Bay area.			3					
Common Sandpiper	Actitis hypoleucos	磯鷸	-	Common passage migrant and winter visitor. Widely distributed in wetland area throughout Hong Kong.			1					
Common Greenshank	Tringa nebularia	青腳鷸	Fellowes: RC	Abundant winter visitor and migrant. Found in Deep Bay area. Locally common resident.			1					
Rock Dove	Columba livia	原鴿	-	Widely distributed in urban area throughout Hong Kong. Abundant resident.					7			
Spotted Dove	Spilopelia chinensis	珠頸斑鳩	-	Widely distributed in Hong Kong.	1	2	2		2			
White-throated Kingfisher	Halcyon smyrnensis	白胸翡翠	Fellowes: (LC)	Common resident. Widely distributed in coastal areas throughout Hong Kong.			1					
Pied Kingfisher	Ceryle rudis	斑魚狗	Fellowes: (LC)	Common resident. Widely distributed in lakes and ponds throughout Hong Kong.				1				
Collared Crow	Corvus torquatus	白頸鴉	Fellowes: LC; RLCV(NT); IUCN(VU)	Locally common resident. Found in Inner Deep Bay area, Nam Chung, Kei Ling Ha, Tai Mei Tuk, Pok Fu Lam, Chek lap Kok, Shuen Wan, Lam Tsuen.			2					

								Ha	bitat ³			
Common Name	Scientific Name	Chinese Nam	e Conservation Status	¹ Distribution in Hong				Study Are	a			Project Site
				Kong ²	PL	SH	WC	РО	DA	VA	MW	VA
Large-billed Crow	Corvus macrorhynchos	大嘴烏鴉	-	Common resident. Widely distributed in Hong Kong.		1						
Red-whiskered Bulbul	Pycnonotus jocosus	紅耳鵯	-	Abundant resident. Widely distributed in Hong Kong.		2			1			
Chinese Bulbul	Pycnonotus sinensis	白頭鵯	-	Abundant resident. Widely distributed in Hong Kong.	3	1						
Barn Swallow	Hirundo rustica	家燕	-	Abundant passage migrant and uncommon winter visitor. Widely distributed in Hong Kong.			1					
		褐柳鶯	-	Abundant winter visitor and migrant. Widely distributed in shrubland and waterside vegetation throughout Hong Kong.	1				1			
Dusky Warbler Plain Prinia	Phylloscopus fuscatus Prinia inornata	純色鷦鶯	-	Locally common resident. Widely distributed in grassland throughout Hong Kong			1					
Masked Laughingthrush	Pterorhinus perspicillatus	黑臉噪鶥	-	Abundant resident. Widely distributed in shrubland throughout Hong Kong. Abundant resident.		2				4		4
Crested Myna	Acridotheres cristatellus	八哥		Widely distributed in Hong Kong.			14		3	3		
Black-collared Starling	Gracupica nigricollis	黑領椋鳥	-	Common resident. Widely distributed in Hong Kong.			1		1	3		
Daurian Redstart	Phoenicurus auroreus	北紅尾鴝	-	Common winter visitor. Widely distributed in Hong Kong.	1		1					

							H	abitat ³			
Common Name	Scientific Name	Chinese Name Conservation Status	Distribution in Hong V_{4}				Study Are	ea			Project Site
			² Kong ²	PL	SH	WC	РО	DA	VA	MW	VA
Stejneger's Stonechat	Saxicola stejnegeri	黑喉石䳭 -	Common passage migrant and winter visitor. Widely distributed in open fields throughout Hong Kong.			2				1	
Fork-tailed Sunbird	Aethopyga christinae	叉尾太陽鳥 -	Common resident and winter visitor. Widely distributed in Hong Kong.					1			
Eurasian Tree Sparrow	Passer montanus	樹麻雀 -	Abundant resident. Widely distributed in Hong Kong. Abundant resident.					2	3		
Scaly-breasted Munia	Lonchura punctulata	斑文鳥 -	Widely distributed in Hong Kong.				40				
White Wagtail	Motacilla alba	白鶺鴒 -	Resident, common passage migrant and winter visitor. Widely distributed in Hong Kong.			1			2	1	
		ΤΟΤΑ	L	4	5	24	4	8	5	2	1

1. Conservation and Protection Status:

a. Fellowes - Fellowes et al. (2002): LC = Local Concern, 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.

b. CITES (II) - Under Appendix II of Convention on International Trade in Endangered Species of Wild Fauna and Flora

c. CSMPS – China State Major Protection Status: Appendix I/II

d. RLCV – Red List of China's Vertebrate (2016): NT = Near Threatened

e. Cap. 586 - Protected under Protection of Endangered Species of Animals and Plants Ordinance

f. IUCN – IUCN (2022): VU = Vulnerable

g. All birds in Hong Kong are protected under Cap. 170 - Protected under Wild Animals Protection Ordinance

2. Distribution as per AFCD database. Available at https://bih.gov.hk/en/home/index.html

3. Habitats: PL = Plantation, S/G = Shrubland/Grassland, WC = Watercourse, PO = Pond, DA = Developed Area, VA = Village Area, MW = Managed Wetland

Annex 6

Presence of Butterfly Species Recorded Within the Study Area

Annex 6 Presence of Butterfly Species Recorded Within the Study Area

									abitat ²			
Common Name	Scientific Name	Chinese Name	Consevation/	Distribution in			Stu	dy Area				Project Site
Common Hume	Scientific Funce	Chinese Maine	Protection Status	Hong Kong ¹	PL	SH	WC	PO	DA	VA	MW	VA
Long-tailed Blue	Lampides boeticus	亮灰蝶	-	Common Very Rare;						1		
Tiny Grass Blue	Zizula hylax	長腹灰蝶		Species of Conservation						1		
			-	Concern								
Common Indian Crow	Euploea core	幻紫斑蝶		Common			1					
Danaid Egg-fly	Hypolimnas misippus	金斑蛺蝶	Fellowes: LC	Uncommon						1		1
Common Sailer	Neptis hylas	中環蛺蝶	-	Very Common					1			
Dark-brand Bush Brown	Mycalesis mineus	小眉眼蝶	-	Very Common					1			
Tailed Jay	Graphium agamemnon	統帥青鳳蝶	-	Common								
Common Mormon	Papilio polytes	玉帶鳳蝶	-	Very Common					1			1
Common Grass Yellow	Eurema hecabe	寬邊黃粉蝶	-	Very Common						1		
Red-base Jezebel	Delias pasithoe	報喜斑粉蝶	-	Very Common					1			
Small Cabbage White	Pieris rapae	菜粉蝶	-	Rare						1		
				TOTAL	0	0	1	0	4	5	0	0

Notes:

1. Distribution in Hong Kong refers to AFCD database: Chan et al. 2011. A Review of the Local Restrictedness of Hong Kong Butterflies. Hong Kong Biodiversity 21: 1-12

2. Habitats: PL = Plantation, S/G = Shrubland/Grassland, WC = Watercourse, PO = Pond, DA = Developed Area, VA = Village Area, MW = Managed Wetland

Annex 7

Presence of Odonate Species Recorded Within the Study Area

								Ha	bitat ³			"
Common Name	Scientific Name	Chinese Nan	Rarity in Hong	Distribution in Hong Kong ²				Study Are	a			Project Site
			Kong ¹	0 0	PL	SH	WC	РО	DA	VA	MW	VA
Wandering Glider	Pantala flavescens	黄蜻	Abundant	Widely distributed all over Hong Kong.				10	1			
			TOTA	L	0	0	0	1	1	0	0	0

Notes:

1. Rarity in Hong Kong refers to AFCD database: Available at http://www.afcd.gov.hk/english/conservation/hkbiodiversity/database/search.asp?lang=en.

Distribution as per AFCD database. Available at https://bih.gov.hk/en/home/index.html
 Habitats: PL = Plantation, S/G = Shrubland/Grassland, WC = Watercourse, PO = Pond, DA = Developed Area, VA = Village Area, MW = Managed Wetland

Annex 8

Presence of Aquatic Fauna Species Recorded Within the Study Area

			Conservation Status ¹				H	abitat ²			
Scientific Name	Common Name	Chinese Name					Study Are	ea			Project Site
				PL	SH	WC	PO	DA	VA	MW	VA
Freshwater Fish											
Clarias gariepinus	North African Catfish	尖齒鬍鯰	-				+				
Oreochromis niloticus	Nile Tilapia	尼羅口孵非鯽	-				+++				
Boleophthalmus pectiniros	stris Bluespotted Mudskipper	大彈塗魚	-				++++				
Channa maculata	Spotted Snakehead	斑鱧	-				+				
			TOTAL	0	0	0	4	0	0	0	0

Notes: 1. Conservation and Protection Status:

a. Fellowes – Fellowes *et al.* (2002): PGC = Potential Global Concern.
2. Habitats: PL = Plantation, S/G = Shrubland/Grassland, WC = Watercourse, PO = Pond, DA = Developed Area, VA = Village Area, MW = Managed Wetland



回覆: Application No. A/YL-NSW/307 Departmental Comment (AFCD and EPD) 17/05/2023 15:38 From: "Leung, Issac Wai Kit" <issac.leung@pel-teams.com.hk> To: "tpbpd@pland.gov.hk" <tpbpd@pland.gov.hk>

History: This message has been forwarded.

1 Attachment



AYL-NSW307 TTA.pdf

Dear Sir/madam,

For the relevant application number: A/YL-NSW/307, we would like reply the departmental comment for TD.

Best Regards, Issac Leung TEL: Pacific Extend Limited

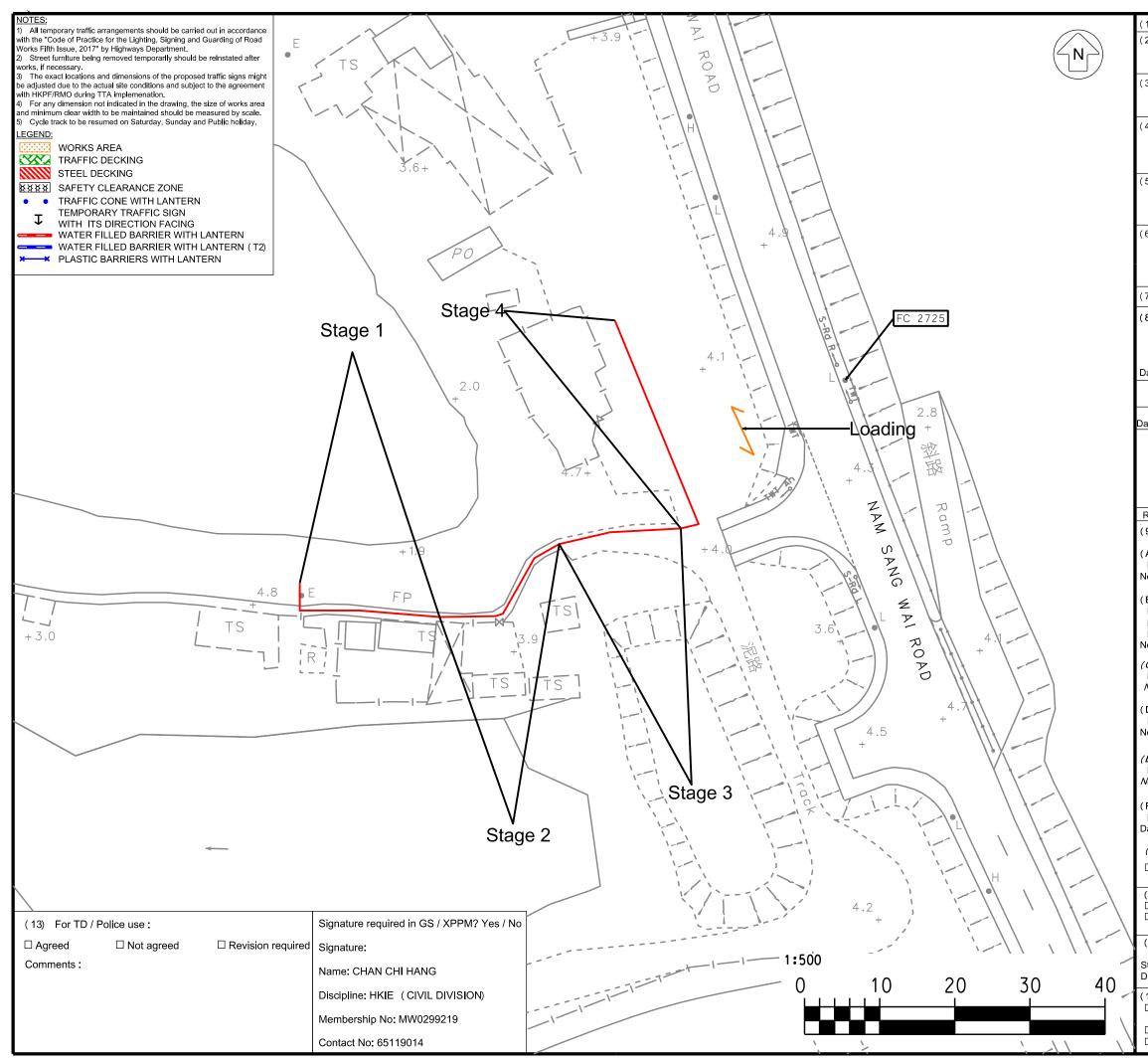
寄件者: Leung, Issac Wai Kit 寄件日期: 2023年5月17日 10:48 收件者: tpbpd@pland.gov.hk <tpbpd@pland.gov.hk>

主旨: Application No. A/YL-NSW/307 Departmental Comment (AFCD and EPD)

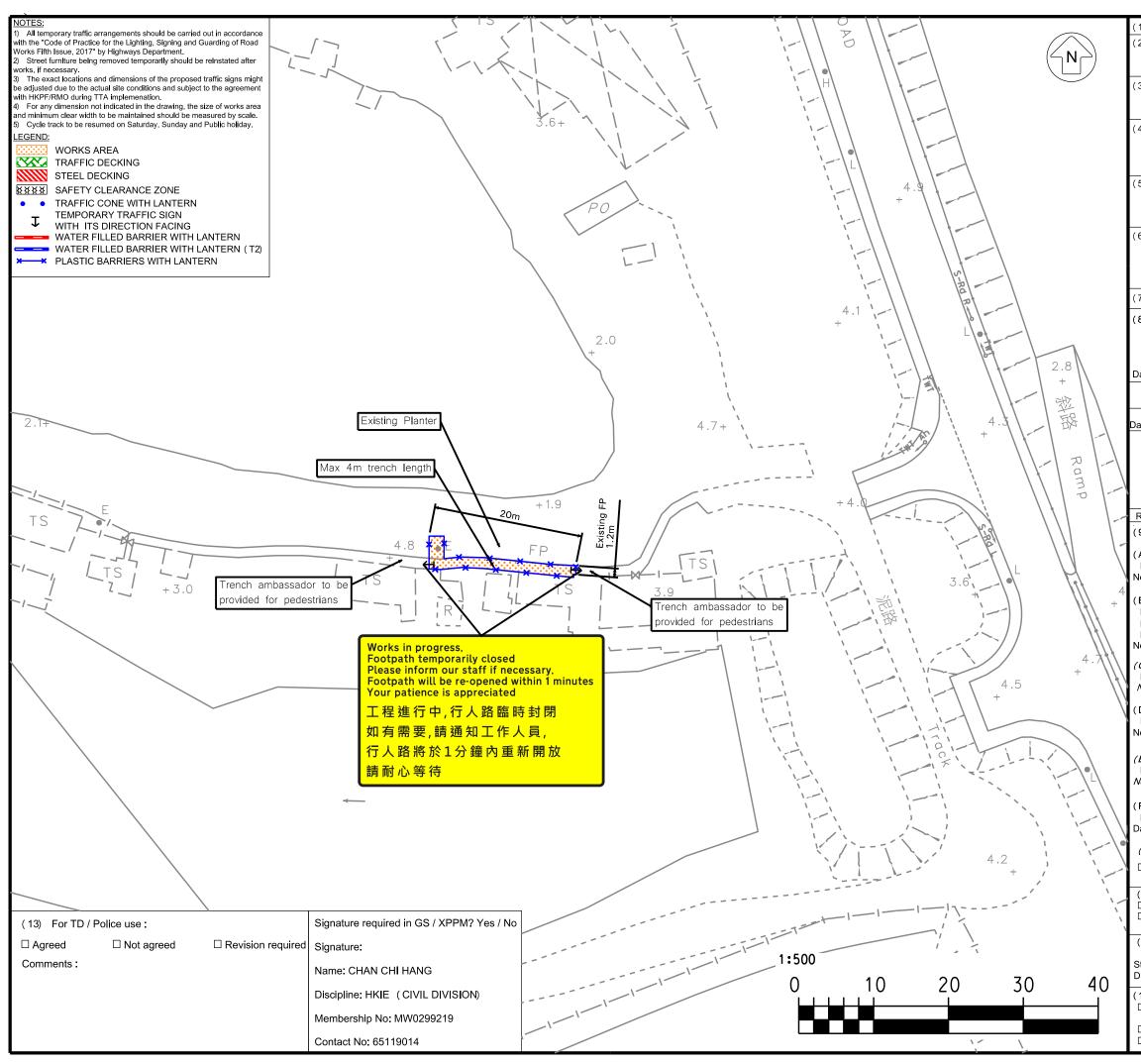
Dear Sir/madam,

For the relevant application number: A/YL-NSW/307, we would like reply the departmental comment for AFCD and EPD.

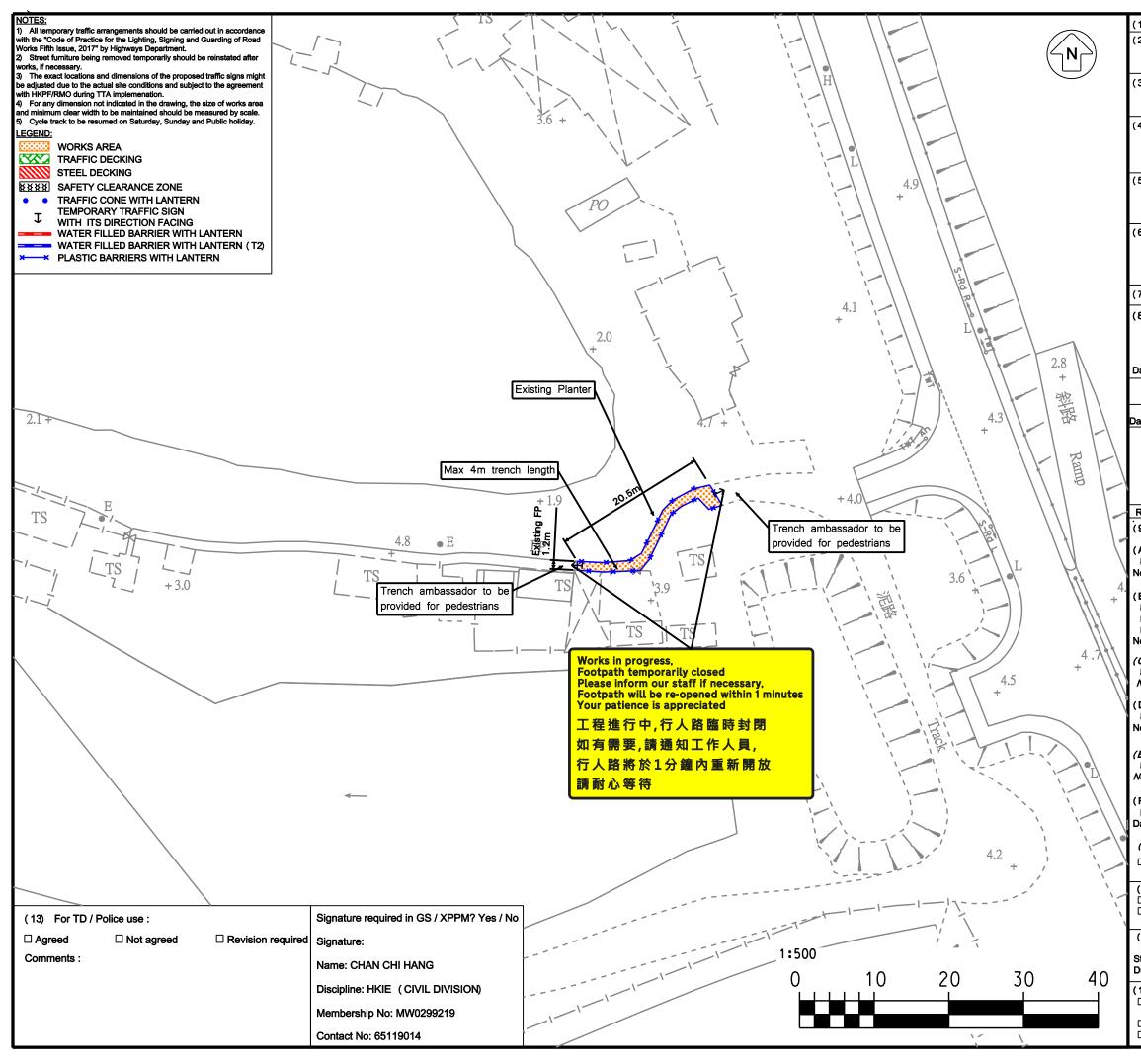
Best Regards, Issac Leung TEL 7 Pacific Extend Limited



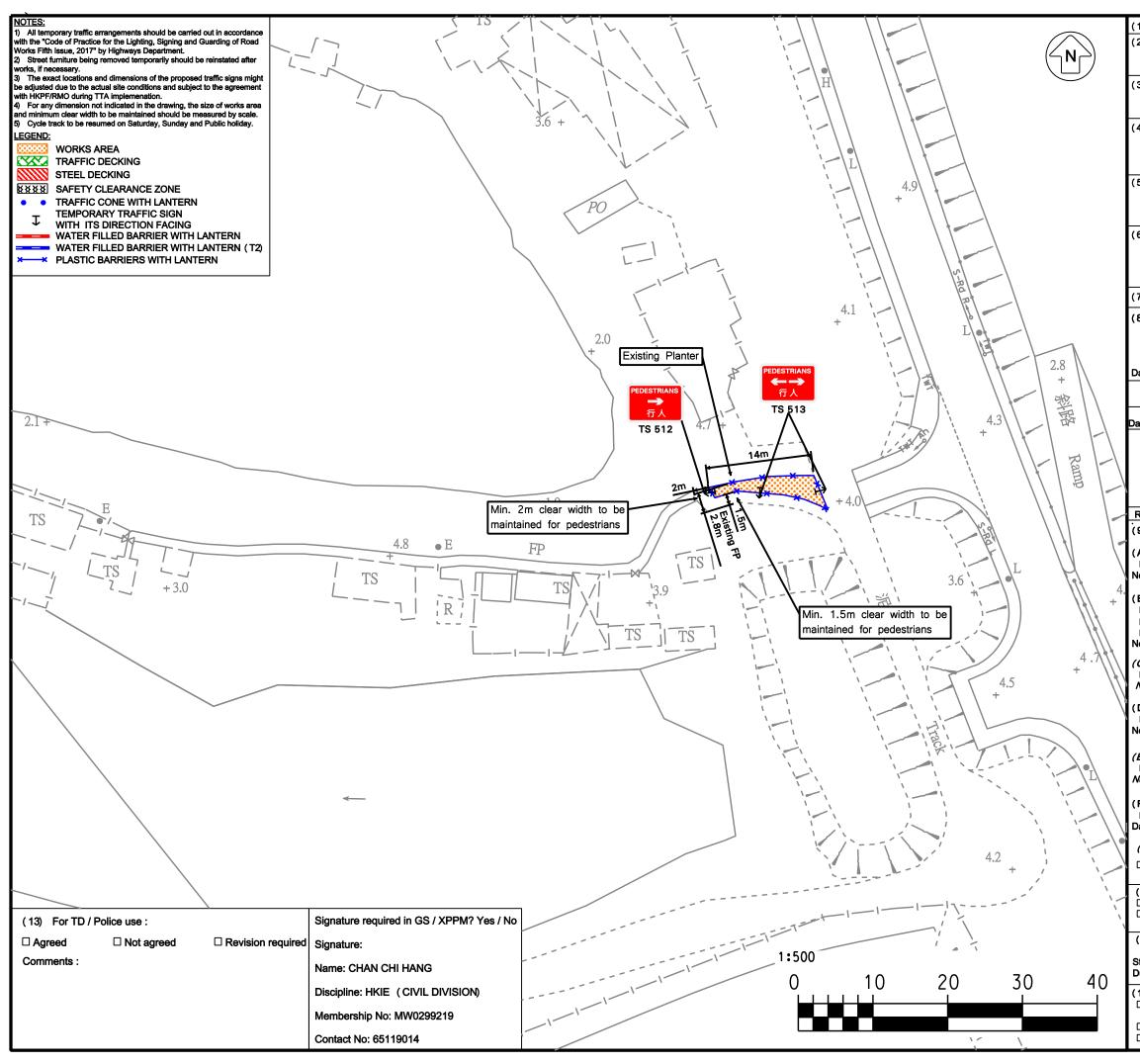
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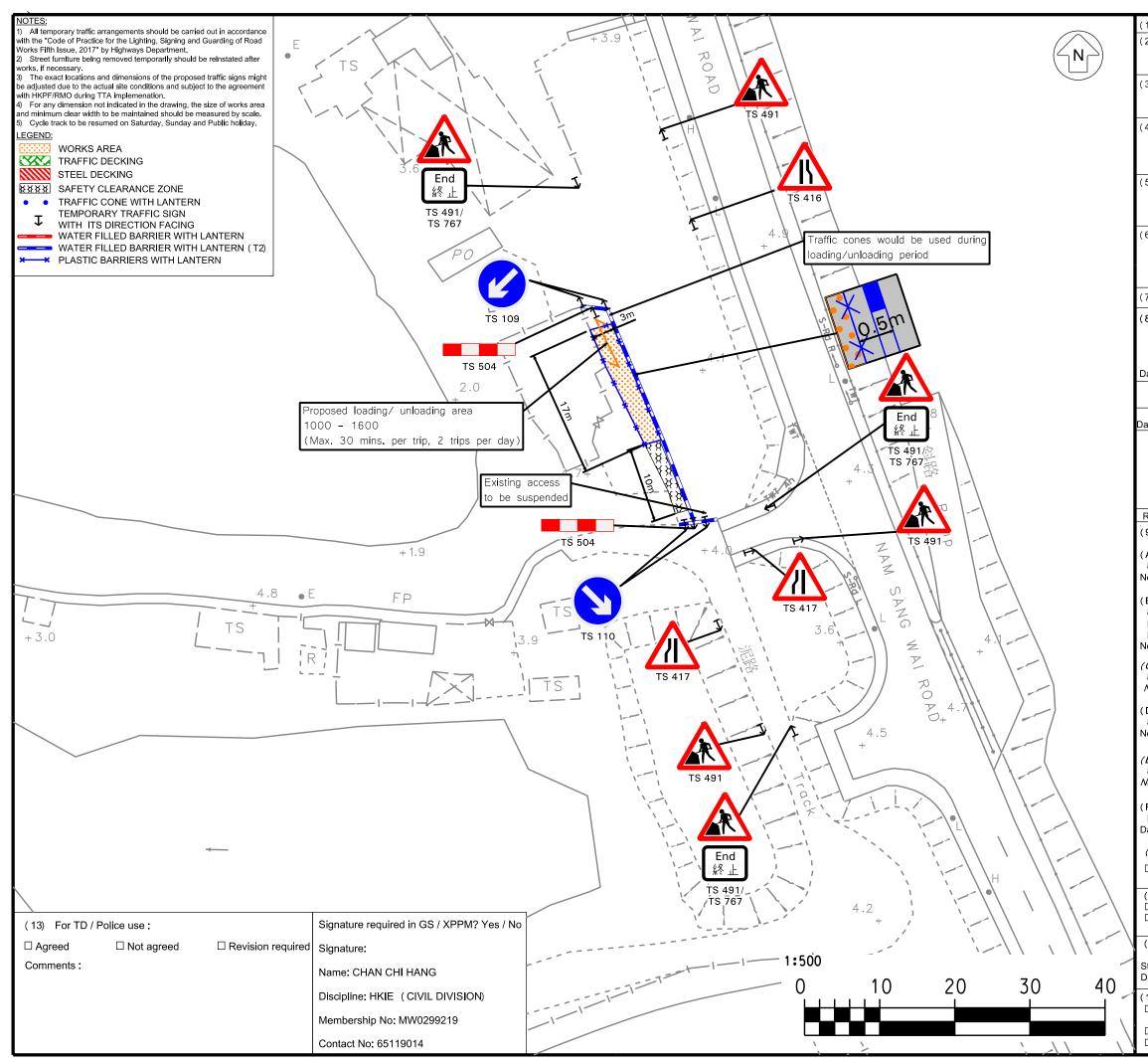
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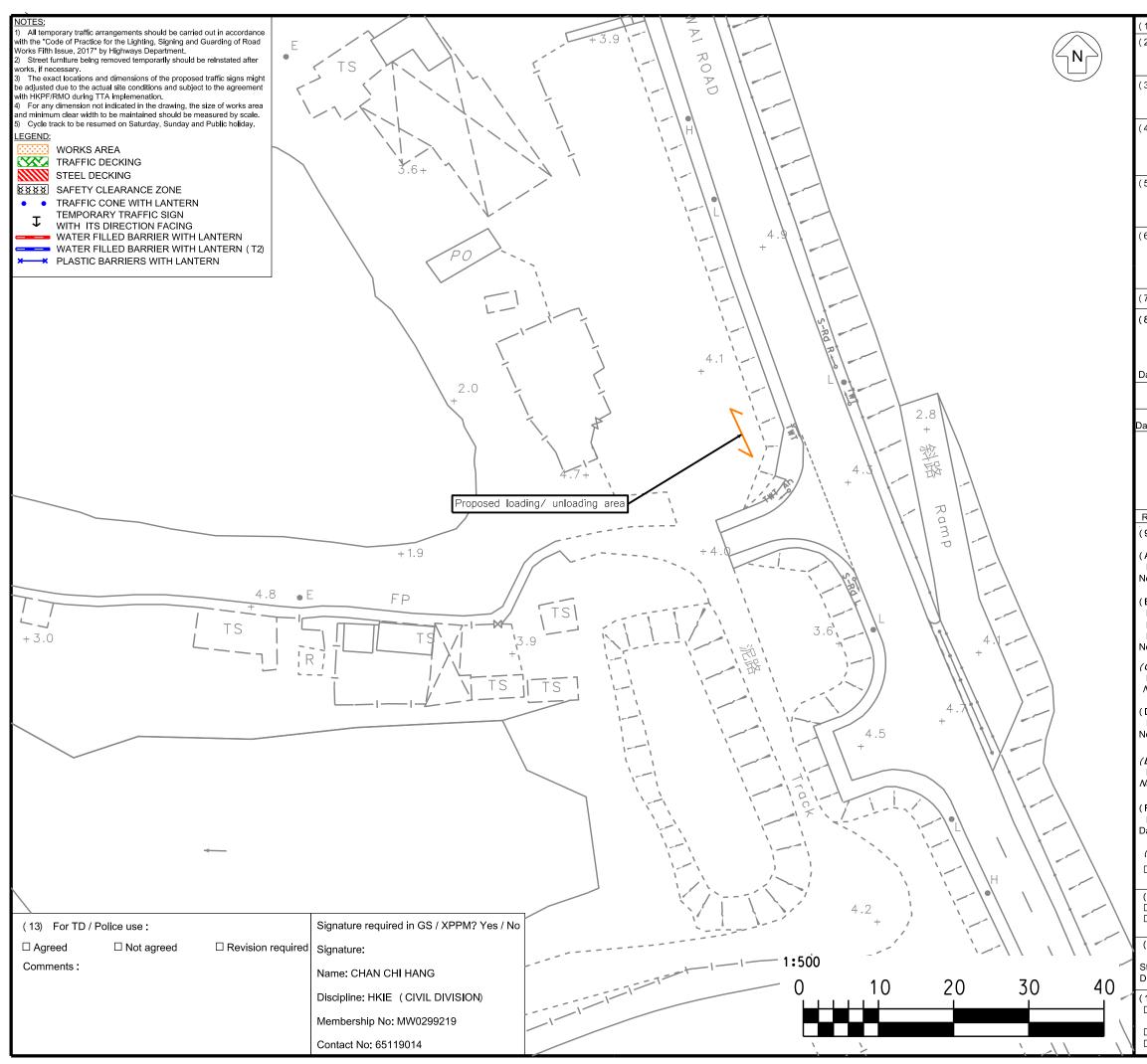
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) Contractor Pacific Extend
) Traffic Consultant :
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) TMLG meeting date :
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) Contract No : Outline Agreement No: 4600008486 Distribution Cable Trenching and Laying Works in North Region (Yuen Long/Tuen Mun)
) Engineer :
CLP 中電
)Contractor Pacific Extend
i) Traffic Consultant :
Wolan Consultants Ltd. 路蘭顧問有限公司
) TMLG meeting date :
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) Contractor	
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Application No. A/YL-NSW/307 Departmental Comment (AFCD and EPD)17/05/2023 10:48

From: "Leung, Issac Wai Kit" <issac.leung@pel-teams.com.hk> To: "tpbpd@pland.gov.hk" <tpbpd@pland.gov.hk>

4 Attachments

یگر ₽DF

0669885_EcoA_v1_Combined.pdf 0669885_EcoA_v1_TC.pdf

Application no. AYL-NSW307 comment to EPD _ updated.pdf RtC_NSW EcoA_v0.pdf

یک ₽DF

Dear Sir/madam,

For the relevant application number: A/YL-NSW/307, we would like reply the departmental comment for AFCD and EPD.

Best Regards, Issac Leung TEL Pacific Extend Limited

Reply comment of EPD

i. <u>Voltage Level of the proposed power cable.</u>

1. LV(380V)

ii. <u>The mitigation measures to be implemented during construction phase to</u> <u>handle non-point source and point source pollution, such as runoff and</u> <u>sewage from construction site workers, etc.</u>

2.1 Debris and rubbish generated on-site will be collected, handled and disposed of properly to avoid entering the nearby stormwater drains and open drainage channels. The refuse collection point will be properly constructed with covers and will be bunded and drained to the CLP sewerage system.

- 2.2 Open storm water drains and culverts near the works area will be covered to block the entrance of large debris and refuse.
- 2.3 Oil leakage or spillage will be contained and cleaned up immediately. Waste oil should be collected and stored for recycling or disposal, in accordance with the Waste Disposal Ordinance. The Contractors will prepare guidelines and procedures for immediate clean-up actions following any spillages of oil, fuel or chemicals.

iii. <u>Please state the compliance with relevant regulations, best practices and</u> guidelines, such as WPCO, ProPECC PN 1/94 "Construction Site Drainage", <u>etc.;</u>

 In order to minimize the impacts of wastewater/ runoff generated on site to the nearby WSRs, mitigation measures and good site practices will be adopted during the construction site and operation phases of the Project based on the ProPECC PN 1/94 and WPCO.

iv. <u>Please confirm if the works area would be reinstated and there would not be</u> <u>any discharge during operation phase</u>.

4. We are ensure the works area would be reinstated and there would bot be any discharge during operation phase.

Response to Comments Proposed Public Utility Installation and Associated Excavation and Filling of Land in "Conservation Area" Zone, Government Land in D.D. 123, Nam Sang Wai, Yuen Long Ecological Assessment

P:\Projects\0669885 CLP Power Hong Kong Limited CLP Cable at Nam Sang Wai.MT\03 Deliverables\01 EcoA\v1\RtC_NSW EcoA_v0.0.doc

No.	Department	Reference	Comments	Consultants' Response
1.	AFCD	E-mail Correspondences dated 30 March 2023	Figure 3.3: It is noted that only the freshwater fish species of conservation importance is shown in the figure while species of conservation importance of other fauna groups as mentioned in S.3.2.2 are missing. Please revise.	Not all studies provided exact locations of where the species (e.g. mammals, avifauna, herpetofauna) were recorded in figures. As such these species are absent from Figure 3.3
2.			Figure 4.1: The figure for survey transects is missing. Please supplement.	Supplemented as requested.
3.			Figure 5.1 habitat map: The bunds within the ponds, watercourse as well as managed wetland should be indicated as an integral part of the corresponding habitat type, rather than "village area". Records of fauna species on Table 5.6 should be amended accordingly if needed	Habitats are adjusted for ponds, watercourse, and managed wetland to expand and cover areas with riparian vegetation that are integral to the corresponding habitat type. Bunds that provide clear access to residential village houses are kept as village area.
				Table 5.6 is updated accordingly.
4.			Table 6.3 and 6.4: Given a high diversity of avifauna including species of conservation concern were recorded in the watercourse and pond, the evaluation of its biodiversity and ecological	The evaluation of watercourse has been adjusted in view of the abundance and diversity of avifauna species recorded in the verification survey and past records from literature review.
			importance should be reviewed	The evaluation of pond has been adjusted in view of the abundance and diversity of avifauna species recorded in past records from literature review.
5.			Table 6.7: Please elaborate the fauna records in the managed wetland which is targeted to attract wildlife. Noting that the evaluation is based upon the information of literature review and verification survey, the evaluation of the diversity, richness, and overall importance of the managed wetland etc. should be reviewed.	The evaluation of managed wetland has been adjusted in view of the abundance and diversity of avifauna and herpetofauna species recorded in past literature.

CLP 中電

Proposed Public Utility Installation and Associated Excavation and Filling of Land in "Conservation Area" Zone, Government Land in D.D. 123, Nam Sang Wai, Yuen Long

Ecological Assessment

18 April 2023 Project No.: 0669885

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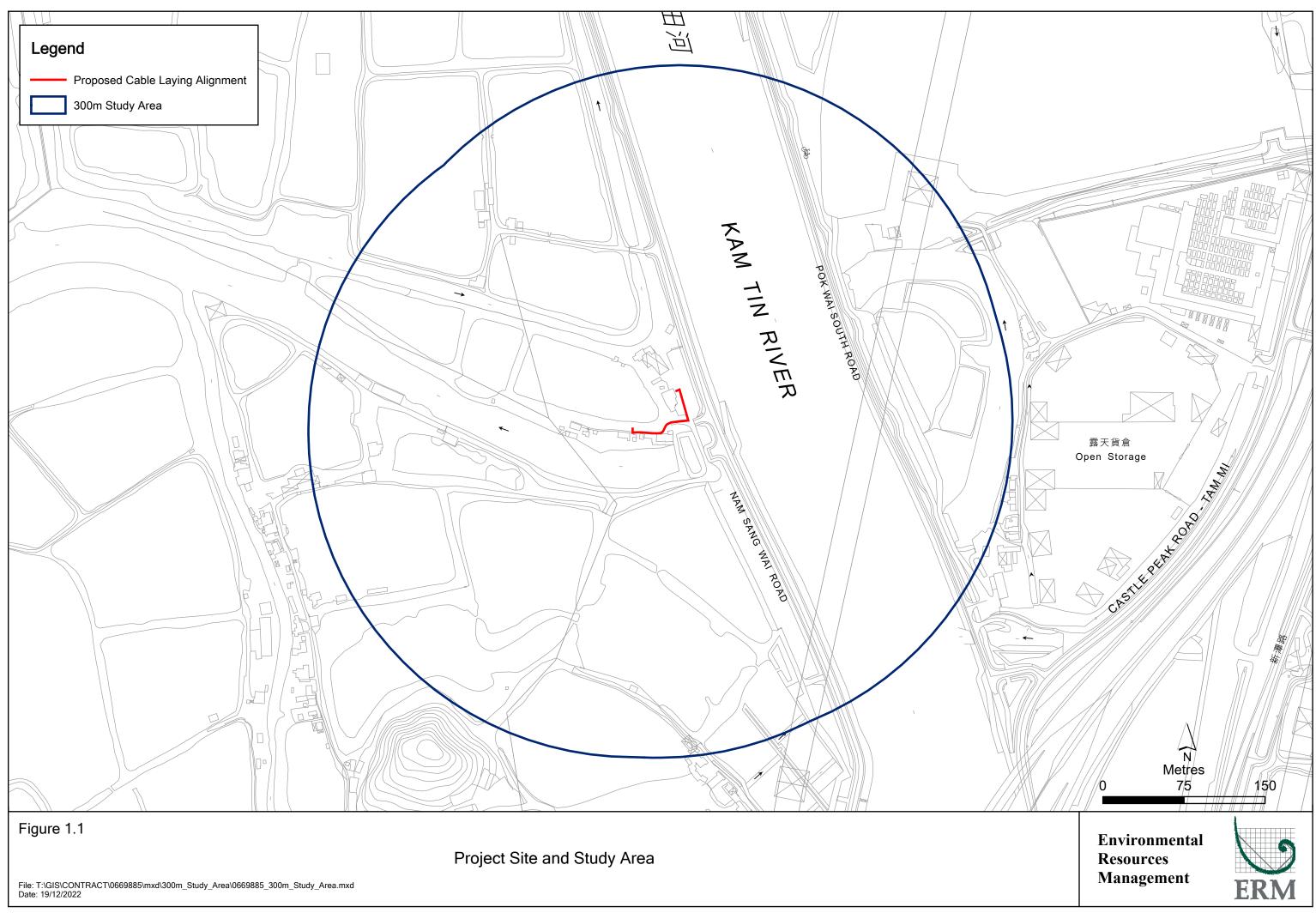
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1. INTRODUCTION

CLP Power Hong Kong Limited has commissioned ERM-Hong Kong, Limited (ERM) to undertake ecological survey and ecological assessment for the "Proposed Public Utility Installation and Associated Excavation and Filling of Land in "Conservation Area" Zone, Government Land in D.D. 123, Nam Sang Wai, Yuen Long" ("the Project"). The objective of the Project is to improve the electricity supply reliability at Nam Sang Wai, CLP is proposing LV cable laying near Nam Sang Wai Road. The overall construction period will be around 1 month between April 2023 and May 2023.

This Ecological Assessment (EcoA) provides detailed information regarding the ecology of the Study Area, which is defined as a 300m radius from the Project Site, i.e. proposed cable route (see *Figure 1.1*). The ecological assessment is based on literature review as well as the recent verification ecological baseline survey, with particular attention paid to the habitat adjacent to the proposed cable route.



PROPOSED PUBLIC UTILITY INSTALLATION AND ASSOCIATED EXCAVATION AND FILLING OF LAND IN "CONSERVATION AREA" ZONE, GOVERNMENT LAND IN D.D. 123, NAM SANG WAI, YUEN LONG ECOLOGICAL ASSESSMENT

2. ENVIRONMENTAL LEGISLATION AND GUIDELINES

Reference has been made to the *Technical Memorandum on Environmental Impact Assessment Process* (EIAO-TM) issued under the *Environmental Impact Assessment Ordinance* (EIAO) in the evaluation of potential ecological impacts, particularly *Annex 8 Criteria for Evaluating Ecological Impact* and *Annex 16 Guidelines for Ecological Assessment*. The following Guidance Notes have also been taken to account:

- GN 6/2010 Some Observations on Ecological Assessment from the Environmental Impact Assessment Ordinance Perspective;
- GN 7/2010 Ecological Baseline Survey for Ecological Assessment; and
- GN 10/2010 Methodologies for Terrestrial and Freshwater Ecological Baseline Surveys.

In addition, the following legislation and guidelines provide the framework for conducting ecological surveys and the protection of species and habitats of ecological importance for ecological assessment in Hong Kong:

- Country Parks Ordinance (Cap. 208)
- Forests and Countryside Ordinance (Cap. 96);
- Town Planning Ordinance (Cap. 131);
- Wild Animals Protection Ordinance (Cap. 170);
- Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586);
- Hong Kong Planning Standards and Guidelines Chapter 10 (HKPSG);
- Technical Circular (Works) No. 4/2020 Tree Preservation.

3. LITERATURE REVIEW

Upon commencement of the ecological assessment, a desktop review was conducted to search for relevant scientific papers, reports and previous Environmental Impact Assessment reports etc. to identify any available ecological information, including habitats and species of conservation concern in the area. Based on recent aerial photos and relevant previous studies, habitats and species of conservation importance recorded previously were identified. General studies (if any), which may not necessarily focus on the Study Area and Project Site, was also reviewed and relevant information was extracted from the report(s).

3.1 Site of Conservation Importance

The Study Area (SA) falls within the below-mentioned sites of conservation importance in the vicinity of Nam Sang Wai Road, including Wetland Conservation Area (WCA), Wetland Buffer Area (WBA), Conservation Area (CA). The Project Site is located within WCA and CA (*Figure 3.1*).

3.1.1 Wetland Conservation Area (WCA)

Fishponds continuous and adjoining to the Deep Bay Area are designated under TPB PG-No. 12C as the WCA, with the aim of protecting the integrity of the Deep Bay wetland ecosystem. Any development in the WCA should normally comply with the "No-Net-Loss in Wetland" principle. Other than permitted essential conservation or infrastructural works, no developments involving pond filling or other works detrimental to the ecological function of the wetland are allowed within the WCA.

The WCA covers part of the Study Area, including a few fishponds along Nam Sang Wai Road and Pok Wai South Road as well as part of Kam Tin River (*Figure 3.1*). The proposed cable route falls within this zone.

3.1.2 Wetland Buffer Area (WBA)

The WBA is also designated under TPB PG-No. 12C to include a buffer of about 500m on the landward side of the WCA. The planning intention is to protect the ecological integrity of wetlands within the WCA and prevent any development that would have a negative off-site disturbance impact on the WCA. Developments within the WBA are required to demonstrate that ecological impacts on the WCA will be minimized and any negative ecological impacts will be fully mitigated through positive measures.

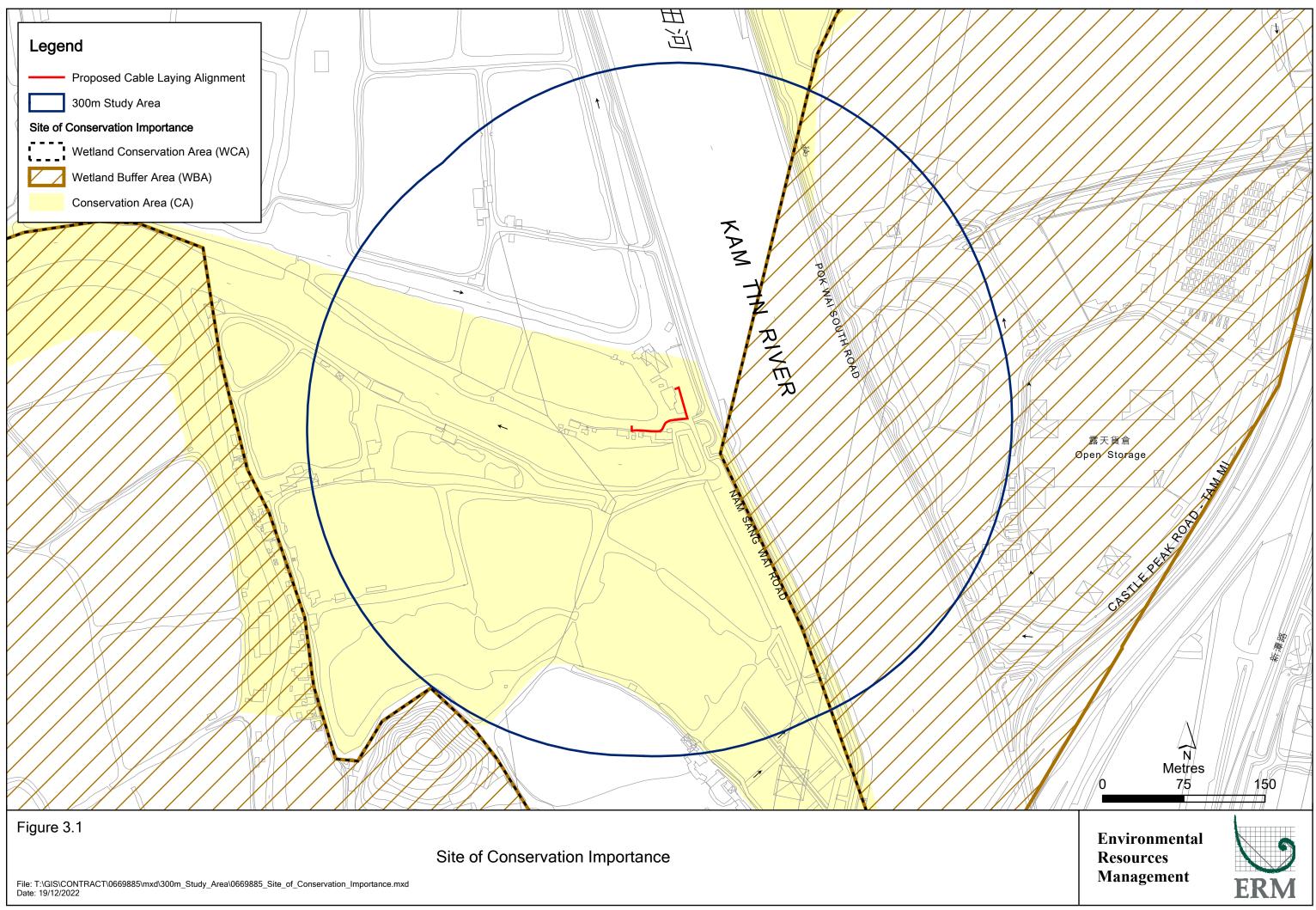
The WBA covers part of the Study Area, including a few fishponds along Nam Sang Wai Road and Pok Wai South Road as well as part of Kam Tin River (*Figure 3.1*).

3.1.3 Conservation Area (CA)

The large areas of continuous fishponds (both active and abandoned) within the SA are zoned as CA under the Approved Nam Sang Wai OZP NO. S/YL-NSW/8 (*Figure 3.1*). The proposed cable route falls within this zone.

The planning intention of this zone is to conserve the ecological value of wetland and fish ponds which form an integral part of the wetland ecosystem in the Deep Bay Area. The "no-net-loss in wetland" principle is adopted for any change in use within this zone. The primary intention is to discourage new development unless it is required to support the conservation of the ecological integrity of the wetland ecosystem or the development is an essential infrastructure project with overriding public interest.

There is a general presumption against development in this zone. In general, only developments that are needed to support the conservation of the existing natural landscape or scenic quality of the area or are essential infrastructure projects with overriding public interest may be permitted.



3.2 Previously Recorded Species of Conservation Importance

A literature review has been conducted to characterise the existing ecological conditions of the Project Site and Study Area and to identify habitats and species of conservation concern in the area. A number of relevant studies including but not limited to the follows were reviewed.

- EIA 074/2002 Yuen Long and Kam Tin Sewerage and Sewage Disposal Stage 1 Packages 1A-1T and 1B-1T - Kam Tin Trunk Sewerage Phase I and II (DSD, 2002) ⁽¹⁾
- EIA 159/2008 Construction of Cycle Tracks and the associated Supporting Facilities from Sha Po Tsuen to Shek Sheung River (CEDD, 2008) ⁽²⁾
- EIA 269/2021 Yuen Long Barrage Scheme (DSD, 2021) ⁽³⁾
- Approved Nam Sang Wai Outline Zoning Plan S/YL-NSW/8
- Protection of Wetlands in Hong Kong, AFCD (AFCD, 2000)⁽⁴⁾
- Hong Kong Biodiversity Information Hub maintained by AFCD⁽⁵⁾
- Hong Kong Bird Report 2017 (HKBWS, 2022) ⁽⁶⁾
- The Avifauna of Hong Kong

The ecological survey periods and surveyed flora/ fauna groups that are presented in the above studies are tabulated in *Table 3.1*; a map showing their study areas, whenever defined, is provided in *Figure 3.2*.

Special attention was paid to ecologically sensitive areas, and species of conservation importance (i.e. species protected by local legislation, endemic to Hong Kong or South China, listed in international conventions for conservation of habitat/wildlife, listed in IUCN Red Data Book or those of the South China region and considered as rare in the territory or having special conservation importance by scientific studies etc.). The information gathered from the literature review was evaluated and the information gaps concerning assessment of the potential ecological impacts arising from the Project on the terrestrial environment were identified. The species of conservation importance with known locations provided in relevant studies are shown on *Figure 3.3*.

Table 3.1: Previous Studies Relevant to the Study Area

Study	Survey Period	Flora and Fauna Groups Surveyed
DSD, 2002	Apr 2000 – Mar 2001	Habitat & Vegetation, Mammals, Avifauna, Herpetofauna,
		Butterfly, Odonates, Aquatic fauna
CEDD, 2008	Nov 2006 – Apr 2007	Habitat & Vegetation, Avifauna
DSD, 2021	Jul 2019 – Apr 2020	Habitat & Vegetation, Mammals, Avifauna, Herpetofauna,
		Butterfly, Odonates, Aquatic fauna

⁽¹⁾ Drainage Services Department (2002). Yuen Long and Kam Tin Sewerage and Sewage Disposal Stage 1 Packages 1A-1T and 1B-1T - Kam Tin Trunk Sewerage Phase I and II.

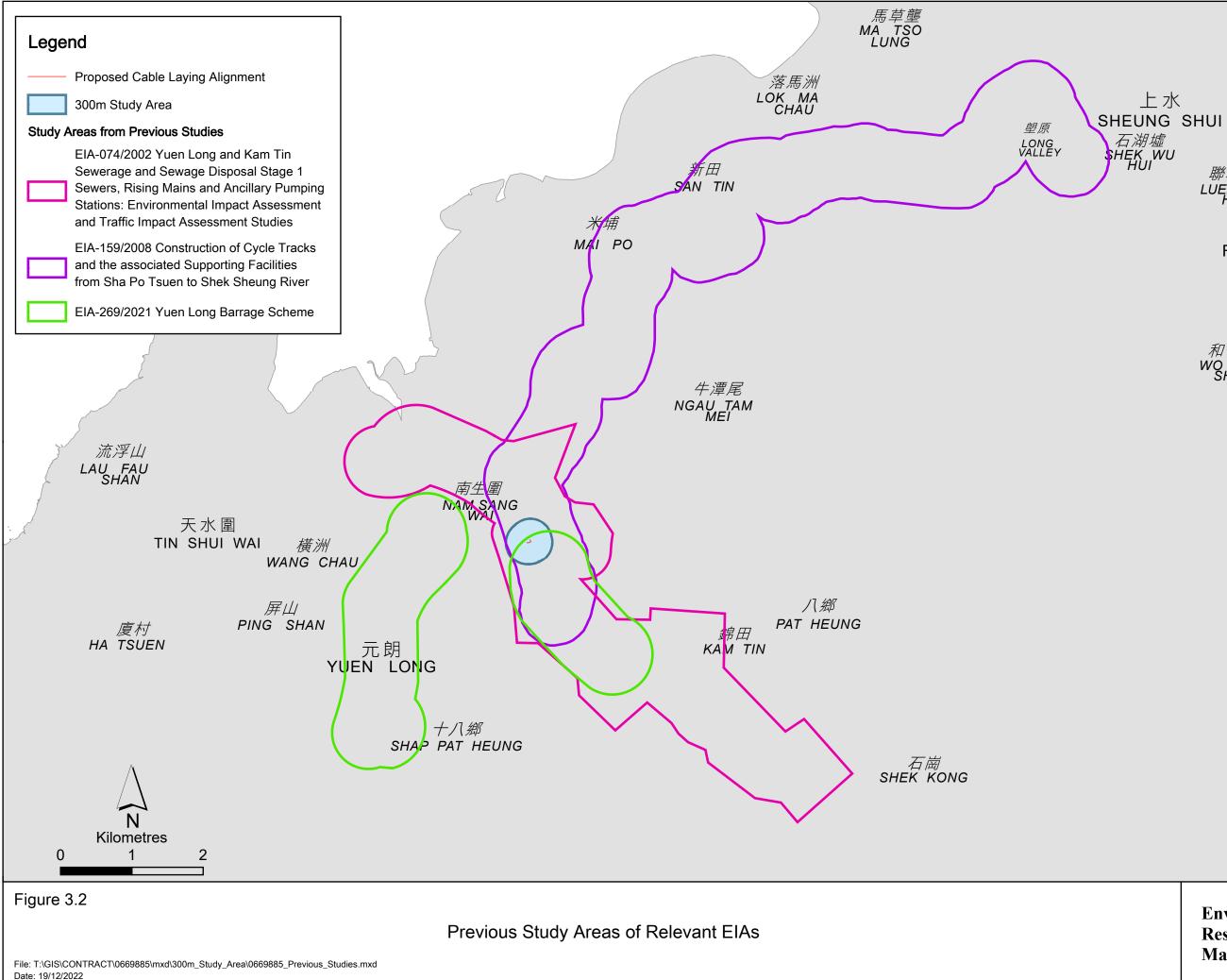
⁽²⁾ Civil Engineering and Development Department (2008). Construction of Cycle Tracks and the associated Supporting Facilities from Sha Po Tsuen to Shek Sheung River.

⁽³⁾ Drainage Services Department (2021). Yuen Long Barrage Scheme.

⁽⁴⁾ AFCD (2000). Legislative Council Paper NO. CB(2) 397/00-01 (03) – Protection of Wetlands in Hong Kong. Information reviewed.

⁽⁵⁾ Information reviewed from AFCD, Available at https://bih.gov.hk/en/home/index.html

⁽⁶⁾ HKBWS (2022). Hong Kong Bird Report 2000-2017.



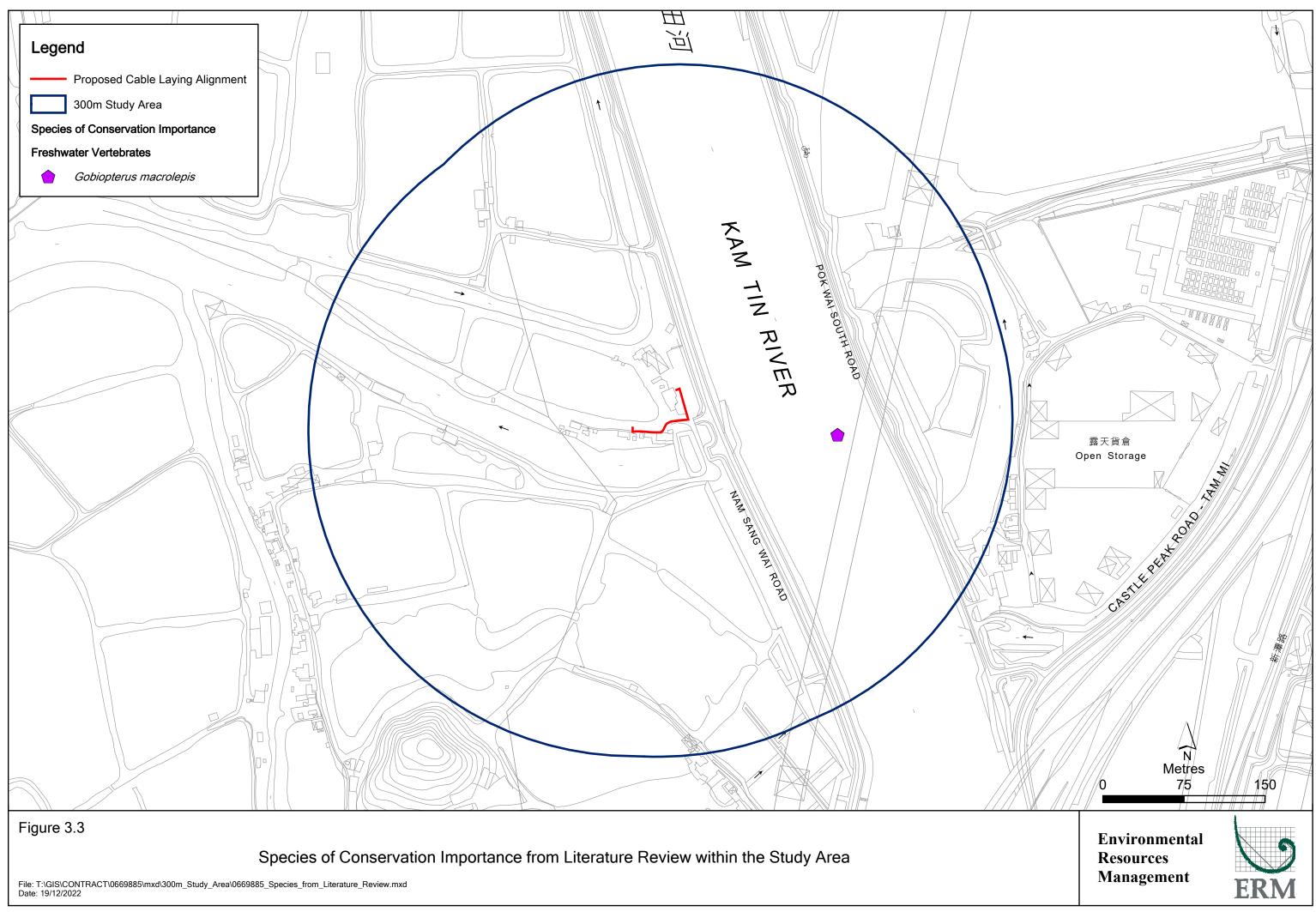
聯和墟 LUEN WO HUI

粉嶺 FANLING

和合石 WO HOP SHEK

Environmental Resources Management





3.2.1 Flora Species of Conservation Importance Recorded in Previous Studies

Based on the reviewed literatures, no flora species of conservation importance was reported within the Study Area.

3.2.2 Fauna Species of Conservation Importance Recorded in Previous Studies

Mammals

Based on the reviewed literature, one mammal species of conservation importance was recorded in the Study Area from previous surveys/ approved EIA studies. A concern of this study is whether Eurasian Otters are present within the Study Area. However, it is unlikely that it will occur within the 300m Study Area as the nearest record was at the junction between Kam Tin River and Shan Pui River (DSD 2021)⁽⁷⁾. Details of the mammal species of conservation importance is shown in *Table 3.2*.

Table 3.2: Mammal of Conservation Importance Recorded from PreviousStudies

Common Name	Scientific Name	Chinese Name	Conservation Status
Mammal			
Japanese Pipistrelle	Pipistrellus abramus	東亞家蝠	Cap.170

Note:

Conservation Status:

a. Cap. 170: Protected under Wild Animals Protection Ordinance

Avifauna

A significant diversity of waterbirds, both resident and migratory were recorded in wetland habitats within the Study Area, including fishponds, watercourse etc. Many of the recorded species are known to forage and roost in wetlands, with ardeid and duck species being the dominant species group within the Study Area. A total of 53 avifauna species of conservation importance were recorded in the Study Area and its vicinity from previous surveys/ approved EIA studies (i.e. including Kam Tin River (KTR) and Nam Sang Wai (NSW)). All bird species are protected under the Wild Animals Protection Ordinance (Cap. 170). Details of the avifauna species of conservation importance are shown in *Table 3.3*.

Table 3.3: Avifauna of Conservation Importance Recorded from PreviousStudies

Common Name	Scientific Name	Chinese Name	Conservation Status	Location	
				KTR	NSW
Avifauna					
Northern Shoveler	Spatula clypeata	琵嘴鴨	Fellowes: RC	✓	~
Eurasian Wigeon	Mareca penelope	赤頸鴨	Fellowes: RC	~	~

⁽⁷⁾ Drainage Services Department (2021). Yuen Long Barrage Scheme.

PROPOSED PUBLIC UTILITY INSTALLATION AND ASSOCIATED EXCAVATION AND FILLING OF LAND IN "CONSERVATION AREA" ZONE, GOVERNMENT LAND IN D.D. 123, NAM SANG WAI, YUEN LONG ECOLOGICAL ASSESSMENT

Common Name	Scientific Name	Chinese Name	Conservation Status	Locati	on
				KTR	NSW
Northern Pintail	Anas acuta	針尾鴨	Fellowes: RC	~	~
Eurasian Teal	Anas crecca	綠翅鴨	Fellowes: RC	~	~
Common Pochard	Aythya ferina	紅頭潛鴨	IUCN(VU)	~	~
Tufted Duck	Aythya fuligula	鳳頭潛鴨	Fellowes: LC	~	~
Little Grebe	Tachybaptus ruficollis	小鸊鷉	Fellowes: LC	~	~
Eurasian Spoonbill	Platalea leucorodia	白琵鷺	Fellowes: LC, RLCV(NT), CITES(II), CSMPS(II), Cap.586	~	
Black-faced Spoonbill	Platalea minor	黑臉琵鷺	Fellowes: PGC, RLCV(EN), IUCN(EN), CSMPS(II)	~	~
Von Schrenck's Bittern	Ixobrychus eurhythmus	紫背葦鳽	Fellowes: RC		~
Black-crowned Night Heron	Nycticorax nycticorax	夜鷺	Fellowes: (LC)	~	~
Chinese Pond Heron	Ardeola bacchus	池鷺	Fellowes: PRC (RC)	~	~
Eastern Cattle Egret	Bubulcus coromandus	牛背鷺	Fellowes: (LC)	~	
Grey Heron	Ardea cinerea	蒼鷺	Fellowes: PRC	~	~
Great Egret	Ardea alba	大白鷺	Fellowes: PRC (RC)	~	~
Intermediate Egret	Ardea intermedia	中白鷺	Fellowes: RC		~
Little Egret	Egretta garzetta	小白鷺	Fellowes: PRC (RC)	~	~
Great Cormorant	Phalacrocorax carbo	普通鸕鷀	Fellowes: PRC	~	~
Western Osprey	Pandion haliaetus	聘	Fellowes: RC, RLCV(NT), CITES(II), CSMPS(II), Cap.586	~	~
Crested Serpent Eagle	Spilornis cheela	蛇鵰	Fellowes: (LC), RLCV(NT), CITES(II), CSMPS(II), Cap.586		~
Greater Spotted Eagle	Clanga clanga	烏鵰	Fellowes: GC, RLCV(EN), IUCN(VU), CITES(II), CSMPS(II), Cap.586	~	
Bonelli's Eagle	Aquila fasciata	白腹隼鵰	Fellowes: (RC), RLCV(VU), CITES(II), CSMPS(II), Cap.586	~	
Eastern Marsh Harrier	Circus spilonotus	白腹鷂	Fellowes: LC, RLCV(NT), CITES(II), CSMPS(II), Cap.586		✓
Black Kite	Milvus migrans	黑鳶	Fellowes: (RC), CSMPS (II), CITES (II), Cap. 586	~	~

PROPOSED PUBLIC UTILITY INSTALLATION AND ASSOCIATED EXCAVATION AND FILLING OF LAND IN "CONSERVATION AREA" ZONE, GOVERNMENT LAND IN D.D. 123, NAM SANG WAI, YUEN LONG ECOLOGICAL ASSESSMENT

Common Name	Scientific Name	Chinese Name	Conservation Status	Locati	on
				KTR	NSW
Eastern Buzzard	Buteo japonicus	普通鵟	CSMPS(II), CITES(II), Cap.586	✓	~
Slaty-breasted Rail	Gallirallus striatus	灰胸秧雞	Fellowes: RC	✓	
Black-winged Stilt	Himantopus himantopus	黑翅長腳鷸	Fellowes: RC	~	~
Pied Avocet	Recurvirostra avosetta	反嘴鷸	Fellowes: RC	~	~
Grey-headed Lapwing	Vanellus cinereus	灰頭麥雞	Fellowes: LC	~	
Little Ringed Plover	Charadrius dubius	金眶鴴	Fellowes: (LC)	~	~
Eurasian Curlew	Numenius arquata	白腰杓鷸	Fellowes: RC, RLCV(NT), IUCN(NT)	~	
Marsh Sandpiper	Tringa stagnatilis	澤鷸	Fellowes: RC	✓	~
Wood Sandpiper	Tringa glareola	林鷸	Fellowes: LC	✓	~
Spotted Redshank	Tringa erythropus	鶴鷸			~
Common Greenshank	Tringa nebularia	青腳鷸	Fellowes: RC	~	
Oriental Pratincole	Glareola maldivarum	普通燕鴴	Fellowes: LC		~
Black-headed Gull	Chroicocephalus ridibundus	紅嘴鷗	Fellowes: PRC	~	
Lesser Black- backed Gull	Larus fuscus	烏灰銀鷗	Fellowes: LC	~	
Greater Coucal	Centropus sinensis	褐翅鴉鵑	CSMPS(II)		~
Lesser Coucal	Centropus bengalensis	小鴉鵑	CSMPS(II)		~
Asian Barred Owlet	Glaucidium cuculoides	斑頭鵂鹠	CITES(II), CSMPS(II), Cap.586		~
White-throated Kingfisher	Halcyon smyrnensis	白胸翡翠	Fellowes: (LC)	~	~
Black-capped Kingfisher	Halcyon pileata	藍翡翠	Fellowes: (LC)	~	
Pied Kingfisher	Ceryle rudis	斑魚狗	Fellowes: (LC)	✓	✓
Common Kestrel	Falco tinnunculus	紅隼	CITES(II), CSMPS(II), Cap.586	~	
Peregrine Falcon	Falco peregrinus	遊隼	Fellowes: (LC), RLCV(NT), CITES(I), CSMPS(II), Cap.586	~	

PROPOSED PUBLIC UTILITY INSTALLATION AND ASSOCIATED EXCAVATION AND FILLING OF LAND IN "CONSERVATION AREA" ZONE, GOVERNMENT LAND IN D.D. 123, NAM SANG WAI, YUEN LONG ECOLOGICAL ASSESSMENT

Common Name	Scientific Name	Chinese Name	Conservation Status	Location	
				KTR	NSW
Collared Crow	Corvus torquatus	白頸鴉	Fellowes: LC, RLCV(NT), IUCN(VU)	~	~
Zitting Cisticola	Cisticola juncidis	棕扇尾鶯	Fellowes: LC	✓	
Red-billed Starling	Spodiopsar sericeus	絲光椋鳥	Fellowes: GC	~	~
White-cheeked Starling	Spodiopsar cineraceus	灰椋鳥	Fellowes: PRC	~	
Daurian Starling	Agropsar sturninus	北椋鳥	Fellowes: LC		~
White-shouldered Starling	Sturnia sinensis	灰背椋鳥	Fellowes: (LC)		~
Yellow-breasted Bunting	Emberiza aureola	黄胸鵐	Fellowes: RC, RLCV(EN), IUCN(CR)		~

Note:

Conservation Status:

- a. Fellowes Fellowes et al. (2002): PGC = Potential Global Concern, PRC = Potential Regional Concern, GC = Global Concern, RC = Regional Concern, LC = Local 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.
- b. RLCV Red List of China's Vertebrate (2016): NT = Near Threatened, VU = Vulnerable, EN: Endangered
- c. IUCN International Union for Conservation of Nature Red List of Threatened Species (2022).VU = Vulnerable, EN = Endangered, CR = Critically Endangered
- d. CSMPS China State Major Protection Status: Appendix (I) or Appendix (II)
- e. CITES Under Appendix (I) or Appendix (II) of Convention on International Trade in Endangered Species of Wild Fauna
- f. Cap. 586: Protection of Endangered Species of Animals and Plants Ordinance
- g. All birds in Hong Kong are protected under Cap. 170 Protected under Wild Animals Protection Ordinance

Herpetofauna

A total of two herpetofauna species of conservation importance were recorded in the Project Site and its vicinity from previous surveys/ approved EIA studies. Details of the herpetofauna species of conservation importance are shown in *Table 3.4*.

Table 3.4: Herpetofauna of Conservation Importance Recorded from Previous Studies

Common Name	Scientific Name	Chinese Name	Conservation Status
Amphibian			
Spotted Narrow- mouthed Frog	Kalophrynus interlineatus	花細狹口蛙	RLCV(NT)
Chinese Bullfrog	Hoplobatrachus rugulosus	虎紋蛙	Fellowes: PRC; RLCV(EN), CSMPS(II)

Conservation Status:

PROPOSED PUBLIC UTILITY IN EXCAVATION AND FILLING OF ZONE, GOVERNMENT LAND IN LONG ECOLOGICAL ASSESSMENT	LAND IN "CONSERVATION ARE	A"	LITERATURE REVIEW
Common Name	Scientific Name	Chinese Name	Conservation Status
	()	0	s in parentheses indicate that the state of

- b. RLCV Red List of China's Vertebrate (2016): NT = Near Threatened, EN = Endangered
- c. CSMPS China State Major Protection Status: Appendix (I) or Appendix (II)

Butterfly and Odonate

No butterfly or odonate species of conservation importance were recorded in the Study Area from previous surveys/ approved EIA studies.

Aquatic Fauna

Only one aquatic fauna species of conservation importance was recorded within the Study Area in Kam Tin River from previous surveys/ approved EIA studies. Details of the species of conservation importance is shown in *Table 3.5*.

Table 3.5: Butterfly and Odonate of Conservation Importance Recorded from Previous Studies

Common Name	Scientific Name	Chinese Name	Conservation Status
Freshwater Fish			
-	Gobiopterus macrolepis	大鱗鰭鰕虎魚	RLCV(VU)

Note:

Conservation Status:

a. RLCV – Red List of China's Vertebrate (2016): VU = Vulnerable

Fireflies

Bent-winged Firefly *Pteroptyx maipo*, an endemic firefly was first recorded in mangrove habitat in Hong Kong Wetland Park in 2003 ⁽⁸⁾. According to AFCD ⁽⁹⁾, *Pteroptyx maipo* is the only species that depends on mangrove ecosystem. While the larvae feed on snails found on the tidal mudflats, the adults inhabit short vegetation in the vicinity. Although mangrove/ mangrove associates are distributed in many coastal areas of Hong Kong, this species is restricted to the landward fringe of the mangrove ecosystem along the shoreline of Deep Bay including Mai Po, Hong Kong Wetland Park and Sheung Pak Nai. The adult flight period of the Bent-winged Firefly is between April and September while their peak breeding season is May, August and September. A concern of this study is whether Bent-winged Firefly *Pteroptyx maipo* are present within the Study Area. However, it is unlikely that it will occur within the 300m Study Area as the nearest records was at the junction between Kam Tin River and Shan Pui River (Yiu Vor, 2011) ⁽¹⁰⁾ and mangroves adjacent to Nam Sang Wai Ferry Pier (DSD 2021) ⁽¹¹⁾

Law, K.M. 2010. "Unique Worldwide: New Species of Firefly Found in Wetland", Hong Kong News, Wen Wei Po, Hong Kong. Accessed at http://pdf.wenweipo.com/2010/09/23/a14-0923

⁽⁹⁾ Cheng et al. 2020. Habitat Characteristics of Fireflies in Hong Kong. AFCD Newsletter Issue No. 26.

⁽¹⁰⁾ Yiu, V. 2011. A new species of firefly from Hong Kong - Pteroptyx maipo Ballantyne, 2011. Insect

News (Hong Kong Entomological Society Newsletter), 3, 2-7.

⁽¹¹⁾ Drainage Services Department (2021). Yuen Long Barrage Scheme.

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4. VERIFICATION ECOLOGICAL BASELINE SURVEY

The Study Area comprises an area within 300m from the cable route. With reference to the reviewed data in **Section 3**, it is considered that the Project Site and its vicinity have been well covered and studies comprehensively by a number of EIA studies, planning application and research.

The previous studies and research have demonstrated a relatively high and constant use of the areas surrounding the proposed cable route by birds, esp. by waterbirds at the fishponds and Kam Tin River. Appropriate measures to avoid and minimise the potential ecological impacts caused by the Project on birds are discussed in **Section 7**.

In order to supplement and establish a set of project specific baseline data, a verification survey, including day and night surveys, was carried out in November 2022 with particular focus on habitat and wildlife along and adjacent to the proposed cable route. A summary of the ecological baseline survey methodologies is provided in *Table 4.1* and the ecological baseline survey schedule is provided in *Table 4.2*. Survey transects follow mainly the existing roads (*Figure 4.1* refers), aiming to cover all types of habitats within the Study Area. Details of the methodologies are provided in *Sections 4.1* and *4.2*.

Survey Type	Methodology
Habitat and Vegetation	Habitat mapping and vegetation identification through ground truthing in major habitats.
Avifauna	Quantitative (active searching along the survey transect) and Qualitative (recorded within Study Area); including day and night surveys
Mammal	Quantitative (active searching along the survey transect) and qualitative (recorded within Study Area); including day and night surveys
Herpetofauna	Quantitative (active searching along the survey transect) and qualitative (recorded within Study Area); including day and night surveys
Butterfly	Qualitative (recorded within Study Area) survey; including only day surveys
Odonates	Qualitative (recorded within Study Area) survey; including only day surveys
Aquatic fauna	Active searching at sizable streams and notable water bodies; including day and night surveys

Table 4.1: Summary of the Ecological Baseline Survey Methodologies

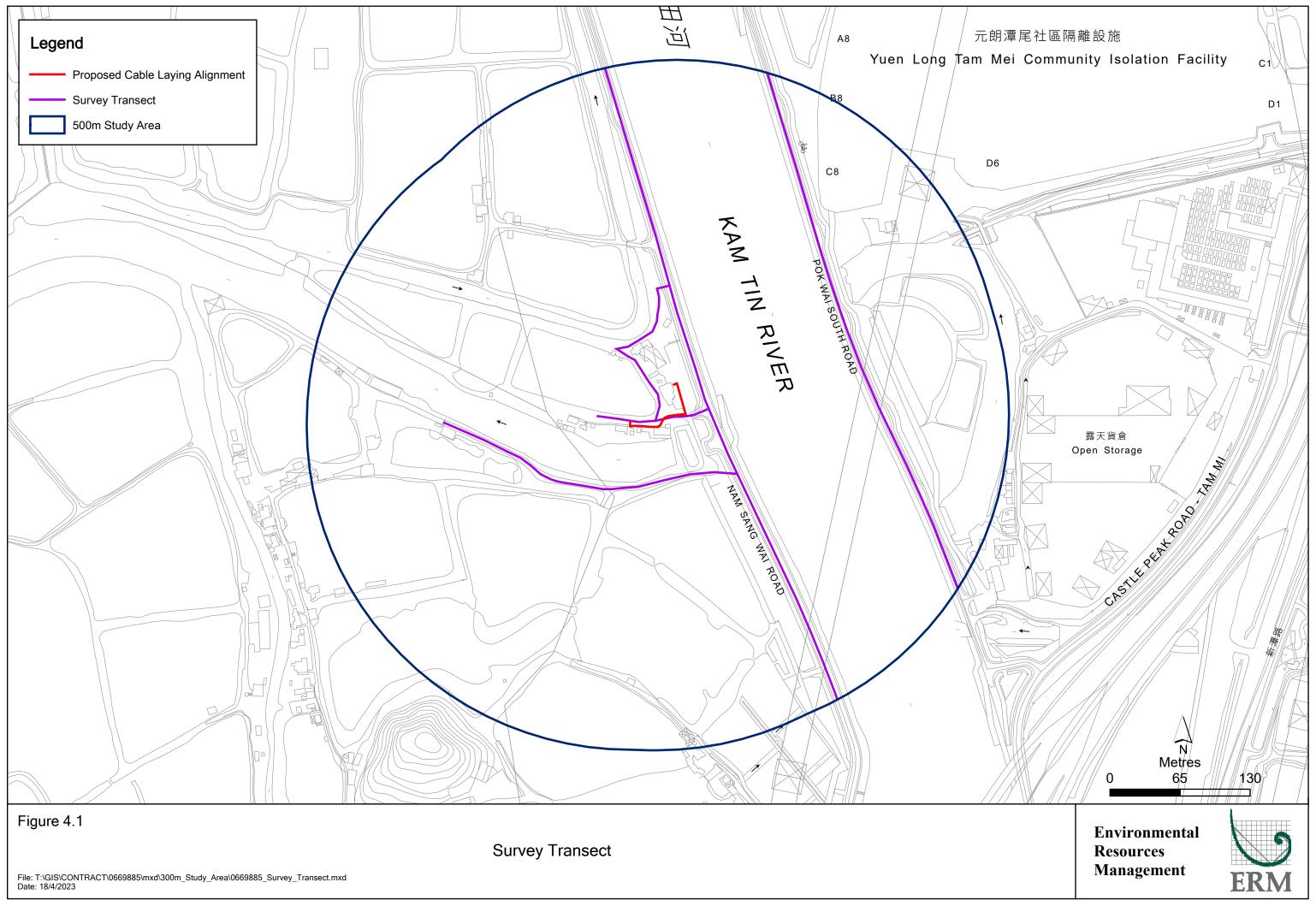


Table 4.2: Ecological Baseline Survey Schedule

Survey Type	30 November 2022
Habitat and Vegetation	√
Avifauna (day and night)	\checkmark
Mammal (day and night)	\checkmark
Herpetofauna (day and night)	\checkmark
Butterfly	\checkmark
Odonates	\checkmark
Aquatic fauna (day and night)	\checkmark

4.1 Habitat and Vegetation Surveys

An initial map of habitats within the Study Area was prepared from aerial photos and previous approved EIA studies. Representative areas of each habitat type were then ground-truthed on foot, in order to ensure they reflected current conditions and to distinguish between habitats which could not always be reliably distinguished from aerial photos. Representative colour photos were taken for each habitat type (*Annex 1*) and any important ecological features identified.

In parallel with the habitat mapping, the vegetation specialist recorded the flora species encountered in each habitat. Special attention was also paid to species that are rare, protected and/or of ecological importance.

4.2 Wildlife Surveys

4.2.1 Avifauna

The bird communities of the identified habitats within the Study Area were surveyed using transects count method subject to the site conditions. Any signs of breeding (e.g. nests, recently fledged juveniles) within the Study Area were also recorded. Observations were made using 8× binoculars and photographic records taken, where possible. Day-time and night-time survey were conducted once for avifauna within the Study Area.

4.2.2 Mammals

Mammal surveys were conducted with transect count during daytime and nighttime. As mammals usually occur at low densities, in addition to direct observation, any observation of signs of mammal activity, such as tracks, scats or burrows were actively sought. Day-time and night-time survey were conducted once for mammal within the Study Area.

4.2.3 Herpetofauna

Herpetofauna surveys were conducted through direct observation and active searching in all major representative habitat types along survey transects and in potential hiding places such as among leaf litter, inside holes and under stones and logs within the Study Area. Auditory detection of species specific calls was also used to survey frogs and toads. During the surveys, all reptiles and amphibians sighted and heard were recorded. Day-time and night-time survey were conducted once for herpetofauna within the Study Area.

4.2.4 Butterflies and Odonates

Butterflies and odonates of various habitats within the Study Area were surveyed once using transect/ point count method during day-time. Any butterflies and odonates encountered outside the transects/ counting points were also identified and counted in order to produce a complete species list.

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Particular attention was given to food/ host plants for butterfly larvae and favoured habitats for both groups, such as shrubland for butterflies and streams for odonates (both adults and larvae).

4.2.5 Aquatic Fauna

Aquatic survey was conducted once during day-time at nearby sizable watercourses within the Study Area in order to collect more comprehensive information of the wildlife usage in the area. The watercourses were surveyed by direct observation and active searching for aquatic fauna, including but not limited to fish, invertebrates and macroinvertebrates.

5. EXISTING ECOLOGICAL BASELINE

A very large proportion of the Study Area is located within Wetland Conservation Area, Wetland Buffer Area and Conservation Area. The Project site is located within Wetland Conservation Area and Conservation Area. Most built-up areas are concentrated on the eastern end of the Study Area. Seven major habitat types have been identified in the Study Area, namely plantation, shrubland/grassland, watercourse, fishpond, managed wetland, developed area and village area. Habitats present within the Study Area are shown *Figure 5.1*.

5.1 Habitat and Vegetation

Table 5.1 summarises the area of each habitat recorded in the Study Area. The representative habitat photos are in *Annex 1*. The full plant list for the Study Area is provided in *Annex 2*. The following text elaborates the ecological conditions, flora and fauna recorded at each habitat during the ecological baseline survey.

Habitat	Area within Study Area (ha)	% of Study Area
Plantation	1.32	4.04%
Shrubland/Grassland	1.43	4.36%
Watercourse	10.07	30.83%
Pond	8.49	25.97%
Developed Area	2.94	9.00%
Village Area	2.80	8.56%
Managed Wetland	5.63	17.24%
TOTAL	32.68	100.00%

Table 5.1: Area of Each Habitat Identified in the Study Area

5.1.1 Habitats within the Study Area

Plantation

Plantations are mainly found along Nam Sang Wai Raod, Pok Wai South Road and Castle Peak Road as well as a patch that is located at the south west end of the Study Area (*Figure 5.1*). Plant species present are mainly tree and shrub species for landscaping purposes or ruderal species that colonised the area, due to close vicinity to village houses and main roads, these patches of plantation receive a relatively high level of disturbance, esp. on their fringes.

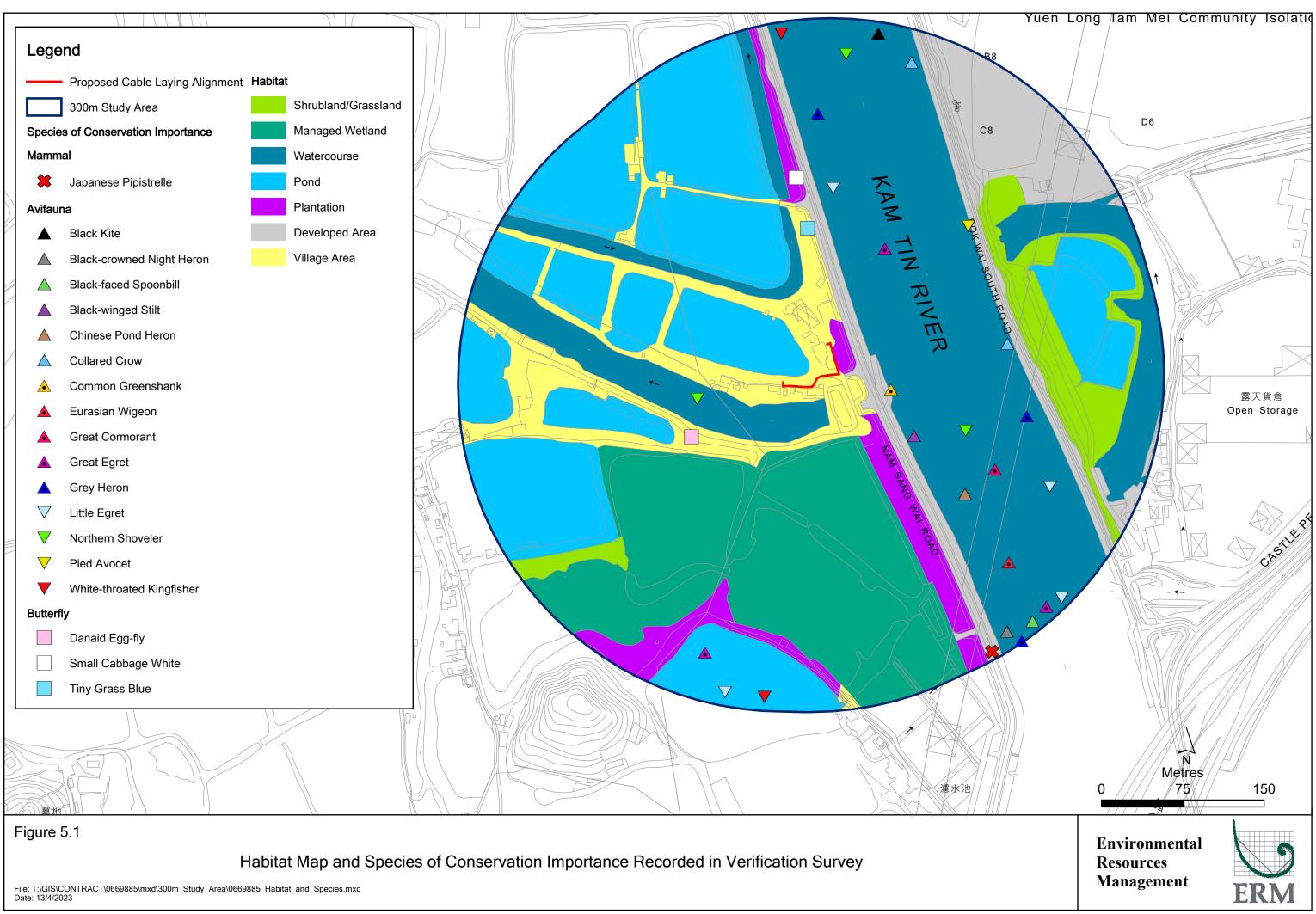
A total of 20 plant species were recorded in plantation habitat. Most of the plant species recorded from this habitat are common in Hong Kong. Plants dominated by exotic landscaping or ruderal species such as *Acacia auriculiformis, Acacia magnium, Eucalyptus citriodora, Lagerstroemia speciosa, Lantana camara* and *Melaleuca cajuputi* subsp. *Cumingiana* were frequently found in this habitat. No flora species of conservation importance was recorded.

Shrubland/Grassland

There are two main patches of shrubland/grassland within the Study Area one that is located adjacent to Pok Wai South Road and nearby fishponds and one at the south west end of the Study Area adjacent to a village and fishpond. A total of 51 plant species were recorded in plantation habitat. Plant species present are mainly common shrub and herb species such as *Bridelia tomentosa*, Cynodon dactylon, *Desmodium heterocarpon*, *Desmos chinensis*, *Panicum maximum* and *Scoparia dulcis*. No flora species of conservation importance was recorded.

Watercourse

Watercourse is the largest habitat within the Study Area (approx. 10.07 ha; 30.83% of the total area), after fishpond habitat. The watercourses in the Study Area include the main channelised watercourse



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of the Kam Tin River between Nam Sang Wai Road and Po Wai South Road. It is approximately 100m in width and has a riverbed that mainly consists of muddy substrate. When the tide ebbs wide expanses of mud is exposed on both sides of the channel, it provides foraging grounds that attracts a high diversity of water birds. A total of 20 plant species were recorded in or along watercourse. Common herb species such as *Cynodon dactylon, Ischaemum aristatum, Panicum maximum, Phragmites australis* and isolated patches of mangrove species, namely, *Kandelia obovata* and *Sonneratia* sp. can be found along the river bank, which allows for perching and act as a refuge for birds. Other watercourses present include semi-natural tributaries and meanders of the main Kam Tin River channel which are located beside Nam Sang Wai Road and Pok Wai South Road. They provide connectivity to different types of wetland habitats (esp. fishponds) and provide drainage to the area. The vegetation composition of the riparian zone is similar to the main channel. Common and weedy species such as *Cynodon dactylon* and *Panicum maximum* as well as wetland herbs including *Phragmites australis* predominate the banks and stream beds of these watercourses, patches of *Eichhornia crassipes* were also recorded.

No flora species of conservation importance was recorded in this habitat.

Pond

This habitat is the second largest habitat in the Study Area, occupying most of the total area (approx. 8.49 ha; 25.97% of the total area). Most of the fishponds within the Study Area including one adjacent to the proposed cable alignment were observed to be active (*Figure 5.1*). Active fishponds are maintained with mostly open water and little emergent vegetation. They were occasionally drained to permit harvesting of fish or maintenance of ponds. The composition and structure of vegetation is typical of fishponds in the Deep Bay, with simple vegetation structure and low vegetative diversity dominated by grassy vegetation. A total of 20 plant species were recorded in or along fishponds. Plants frequently recorded on the pond bunds are grassy and herbaceous species such as *Cynodon dactylon, Hedyotis corymbosa, Ischaemum aristatum, Lemna minor* and *Panicum maximum*, and sometimes fruit trees such as *Lucuma nervosa*. As most of these fishponds are active, the level of human disturbance to this habitat as a result of fishpond management is at least low to moderate. No flora species of conservation importance was recorded.

Developed Area

Developed area within the Study Area included main roads (e.g. Nam Sang Wai Road, Pok Wai South Road and Castle Peak Road – Tam Mei), as well as public facilities (e.g. Yuen Long Tam Mei Community Isolation Facility) and storage facilities, mainly located in eastern part of the Study Area (*Figure 5.1*). This habitat has been through human modifications of various levels and receives constant disturbances resulted from traffic and other anthropogenic activities.

A total of 41 plant species were recorded in Most of the plant species recorded from this habitat are common in Hong Kong. Plants dominated by exotic landscaping or ruderal species such as *Bombax ceiba*, *Bridelia tomentosa*, *Leucaena leucocephala* and *Wedelia trilobata* were frequently found in this habitat. No flora species of conservation importance was recorded in this habitat.

Village Area

Village Area refers to areas occupied by village houses, and the associated access paths to fishponds and main roads close to the villages (*Figure 5.1*).

There are 45 plant species recorded in this habitat (*Annex 2*). Most of the plant species recorded are commonly grown for ornamental purpose or as orchards such as *Allamanda schottii, Averrhoa carambola, Dimocarpus longan, Litchi chinensis* and *Lucuma nervosa*. No flora species of conservation importance was recorded in this habitat.

Managed Wetland

Managed Wetland refers to the mitigation wetland to the west of Kam Tin River for the Yuen Long Bypass Floodway which is planted with wetland plants and woody vegetation for attracting wildlife. A total of 25 plant species were recorded in the managed wetland. Plants frequently recorded are grassy and herbaceous species such as *Cynodon dactylon*, *Euphorbia hirta*, *Mimosa pudica* and *Phragmites australis*.

5.1.2 Habitats within the Project Site

Works associated with the Project include the installation of LV cable near Nam Sang Wai Road. The alignment will be along the existing pavement/ road surface as far as possible. The Project Site, including works area, therefore is located within village area only, which is currently subject to a relatively high level of disturbance due to its being used as the only pedestrian access between Nam Sang Wai Road and the village area. Photographic records of the Project Site are as presented in *Annex 1*.

During the ecological baseline survey, no flora species of conservation importance were recorded within the Project Site.

5.2 Terrestrial Wildlife

Wildlife recorded during the ecological surveys described in **Section 4.2** are presented below. The photo of the recorded species of conservation importance are in **Annex 3**. A full list of fauna species recorded during the ecology surveys for the Project is found in **Annexes 4 – 8**. The locations of species of conservation importance in the Study Area are shown in **Figure 5.1**.

5.2.1 Mammals

The survey identified one mammal species within the Study Area. The recorded mammal species is of conservation importance, namely, Japanese Pipistrelle *Pipistrellus abramus*. Their conservation and protection status in Hong Kong are presented in *Table 5.2* below.

Table 5.2: Mammal Species of Conservation Importance Recorded within theStudy Area

Common Name	Scientific Name	Chinese Name	Conservation Status	Recorded Habitat
Mammal				
Japanese Pipistrelle	Pipistrellus abramus	東亞家蝠	Cap.170	Developed Area

Note:

Conservation Status:

a. Cap. 170: Protected under Wild Animals Protection Ordinance

5.2.2 Avifauna

The survey identified 34 bird species. Most of the bird species recorded are common and widespread in Hong Kong. A total of 15 bird species of conservation importance, namely Northern Shoveler *Spatula clypeata*, Eurasian Wigeon *Mareca penelope*, Black-faced Spoonbill *Platalea minor*, Blackcrowned Night Heron *Nycticorax nycticorax*, Chinese Pond Heron *Ardeola bacchus*, Grey Heron *Ardea cinerea*, Great Egret *Ardea alba*, Little Egret *Egretta garzetta*, Great Cormorant *Phalacrocorax carbo*, Black Kite *Milvus migrans*, Black-winged Stilt *Himantopus himantopus*, Pied Avocet *Recurvirostra avosetta*, Common Greenshank *Tringa nebularia*, White-throated Kingfisher *Halcyon smyrnensis* and Collared Crow *Corvus torquatus* were recorded within the Study Area. Their protection and/or conservation status are presented in *Table 5.3.* The photo of the recorded species of conservation importance are in *Annex 3*.

Common Name	Scientific Name	Chinese Name	Conservation Status	Recorded Habitat
Avifauna				
Northern Shoveler	Spatula clypeata	琵嘴鴨	Fellowes: RC	Watercourse
Eurasian Wigeon	Mareca penelope	赤頸鴨	Fellowes: RC	Watercourse
Black-faced Spoonbill	Platalea minor	黑臉琵鷺	Fellowes: PGC, RLCV(EN), IUCN(EN), CSMPS(II)	Watercourse
Black-crowned Night Heron	Nycticorax nycticorax	夜鷺	Fellowes: (LC)	Watercourse
Chinese Pond Heron	Ardeola bacchus	池鷺	Fellowes: PRC (RC)	Watercourse
Grey Heron	Ardea cinerea	蒼鷺	Fellowes: PRC	Watercourse
Great Egret	Ardea alba	大白鷺	Fellowes: PRC (RC)	Watercourse, Pond
Little Egret	Egretta garzetta	小白鷺	Fellowes: PRC (RC)	Watercourse, Pond
Great Cormorant	Phalacrocorax carbo	普通鸕鷀	Fellowes: PRC	Watercourse
Black Kite	Milvus migrans	黑鳶	Fellowes: (RC), CSMPS (II), CITES (II), Cap. 586	Watercourse
Black-winged Stilt	Himantopus himantopus	黑翅長腳鷸	Fellowes: RC	Watercourse
Pied Avocet	Recurvirostra avosetta	反嘴鷸	Fellowes: RC	Watercourse
Common Greenshank	Tringa nebularia	青腳鷸	Fellowes: RC	Watercourse
White-throated Kingfisher	Halcyon smyrnensis	白胸翡翠	Fellowes: (LC)	Watercourse
Collared Crow	Corvus torquatus	白頸鴉	Fellowes: LC, RLCV(NT), IUCN(VU)	Watercourse

Table 5.3: Avifauna of Conservation Importance recorded within the Study Area

Note:

Conservation Status:

- Fellowes Fellowes et al. (2002): PGC = Potential Global Concern, PRC = Potential Regional Concern, RC = Regional Concern, LC = Local 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.
- b. RLCV Red List of China's Vertebrate (2016): NT = Near Threatened, EN: Endangered
- c. CSMPS China State Major Protection Status: Appendix (I) or Appendix (II)
- d. CITES Under Appendix (I) or Appendix (II) of Convention on International Trade in Endangered Species of Wild Fauna
- e. Cap. 586: Protection of Endangered Species of Animals and Plants Ordinance
- f. All birds in Hong Kong are protected under Cap. 170 Protected under Wild Animals Protection Ordinance

5.2.3 Herpetofauna

No herpetofauna species was recorded during the day and night survey within the Study Area.

5.2.4 Butterflies and Odonates

A total of 11 butterfly species and one odonate species were recorded within the Study Area. Most of the recorded butterfly and odonates species are considered to be common and widespread in Hong Kong. Three butterfly species of conservation importance, namely Tiny Grass Blue *Zizula hylax*, Danaid Egg-fly *Hypolimnas misippus*, and Small Cabbage White *Pieris rapae*, were recorded within the Study Area. Their protection and/or conservation status are presented in *Table 5.6*. The photo of the recorded species of conservation importance are in *Annex 3*.

Table 5.6	Butterfly Species of Conservation Importance Recorded within the
	Study Area

Common Name	Scientific Name	Chinese Name	Conservation/ Protection Status	Distribution in Hong Kong ⁽¹⁾	Recorded Habitat
Tiny Grass Blue	Zizula hylax	長腹灰蝶	-	Very Rare, Species of Conservation Concern	Village Area
Danaid Egg-fly	Hypolimnas misippus	金斑蛺蝶	Fellowes: LC	Uncommon	Village Area
Small Cabbage White	Pieris rapae	菜粉蝶	-	Rare	Plantation

Notes:

1. Distribution in Hong Kong refers to AFCD database: Available at

Chan, A., Cheung, J., Sze, P., Wong, A., Wong, E. and Yau, E. 2011. A Review of the Local Restrictedness of Hong Kong Butterflies. Hong Kong Biodiversity 21: 1-12

2. Conservation Status: Fellowes – Fellowes et al. (2002): LC = Local 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.

5.2.5 Aquatic Fauna

Four fish species and no aquatic invertebrate species were recorded in the watercourse habitat. No aquatic fauna species of conservation importance was recorded within the Study Area.

6. ECOLOGICAL EVALUATION

In this section the ecological importance of the habitats identified within the Study Area are evaluated in accordance with the *EIAO TM Annex 8* criteria. The evaluation is based upon the information of literature review and verification ecological baseline survey presented in the **Sections 3 – 5**.

6.1 Study Area

A total of seven major terrestrial habitats have been identified within the Study Area, including plantation, shrubland/grassland, watercourse, fishpond, developed area, village area and managed wetland. The ecological importance evaluation of each habitat type within the Study Area is presented in *Table 6.1* to *Table 6.5*.

Criteria	Plantation		
Naturalness	Man-made habitat with planted species for landscaping purpose		
Size	Approx. 1.32ha within the Study Area		
Diversity	Low in diversity of plant species and structural complexity. Low diversity of fauna species.		
Rarity	No flora and fauna species of conservation importance recorded during the surveys.		
Re-creatability	Recreatable		
Fragmentation	Fragmented by developed areas. Three patches are found within the Study Area		
Ecological Linkage	Limited linkage to adjacent habitat		
Potential Value	Low		
Nursery/ Breeding Ground	No significant nursery or breeding ground recorded.		
Age	Unknown		
Abundance/ Richness of Wildlife	Low abundance and richness for fauna species		
Overall Ecological	Low		
Importance			

Table 6.1: Ecological Evaluation of Plantation

Table 6.2: Ecological Evaluation of Shrubland/Grassland

Criteria	Shrubland/Grassland					
Naturalness	Semi-natural habitat at early-stage of natural succession.					
Size	Approx. 1.43ha within the Study Area					
Diversity	Low to moderate diversity of plant species, structural complexity, and low diversity of fauna species.					
Rarity	No flora and fauna species of conservation importance recorded during the surveys.					
Re-creatability	Readily re-creatable.					
Fragmentation	Fragmented into a few patches					
Ecological Linkage	Weak ecological linkage with adjacent habitats					
Potential Value	Low					
Nursery/ Breeding Ground	No significant nursery or breeding ground recorded.					
Age	Various.					
Abundance/ Richness of Wildlife	Very low abundance and richness for fauna species.					
Overall Ecological Importance	Low					

Table 6.3: Ecological Evaluation of Watercourse

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Criteria	Watercourse							
Naturalness	Semi-natural watercourse and channelised watercourse are present in the Study							
	Area. Anthropogenic influences were observed.							
Size	Approx. 10.07ha within the Study Area							
Diversity	Low in diversity of plant species and structural complexity.							
	Moderate to high diversity of avifauna species, low diversity of other fauna species.							
Rarity	No flora species of conservation importance recorded during the surveys.							
	Fauna species of conservation importance recorded during the surveys include: Avifauna – Northern Shoveler, Eurasian Wigeon, Black-faced Spoonbill, Black- crowned Night Heron, Chinese Pond Heron, Grey Heron, Great Egret, Little Egret, Great Cormorant, Black Kite, Black-winged Stilt, Pied Avocet, Common Greenshank, White-throated Kingfisher and Collared Crow							
Re-creatability	Re-creatable under suitable hydrological conditions for main channelised channel; difficult to be re-created for semi-natural meanders and tributaries							
Fragmentation	Not fragmented.							
Ecological Linkage	Ecologically linked to adjacent fishpond habitats.							
Potential Value	Act as foraging grounds for a multitude of water bird species. Could be enhanced by reducing pollution to watercourse.							
Nursery/ Breeding Ground	No significant nursery or breeding ground recorded.							
Age	River works completed in 2000s							
Abundance/ Richness of Wildlife	Moderate to high abundance and richness for avifauna species, Low abundance and richness for other fauna species.							
Overall Ecological Importance	Moderate to High for both semi-natural sections and channelised channel.							

Table 6.4: Ecological Evaluation of Pond

Criteria	Pond
Naturalness	Anthropogenic habitat with high level of human disturbance
Size	Approx. 8.49ha within the Study Area
Diversity	Low diversity of plant species and moderate structural complexity in the riparian zones.
	Moderate diversity of avifauna species, low diversity of other fauna species.
Rarity	No flora species of conservation importance recorded during the surveys.
	Fauna Species of conservation importance recorded during the surveys include: Avifauna –Great Egret, Little Egret and White-throated Kingfisher
Re-creatability	Re-creatable
Fragmentation	Majority not fragmented, some isolated
Ecological Linkage	Ecologically linked to adjacent ponds.
Potential Value	Ecological value could be enhanced by more ecologically friendly management methods.
Nursery/ Breeding Ground	No significant nursery or breeding ground recorded. Potential breeding ground for water bird species.
Age	Unknown
Abundance/ Richness of	Moderate abundance and richness for avifauna species, Low abundance and
Wildlife	richness for other fauna species.
Overall Ecological	Moderate
Importance	

Criteria	Developed Area						
Naturalness	Anthropogenic habitat with high level of human disturbance.						
Size	pprox. 2.94ha within the Study Area						
Diversity	Low in diversity of plant species, structural complexity, and low diversity of fauna species.						
Rarity	No flora species of conservation importance recorded during the surveys. Fauna Species of conservation importance recorded during the surveys include						
	Mammal – Japanese Pipistrelle						
Re-creatability	Readily re-creatable.						
Fragmentation	N/A						
Ecological Linkage	Weak ecological linkage with adjacent habitats						
Potential Value	Low						
Nursery/ Breeding Ground	No significant nursery or breeding ground recorded.						
Age	Various.						
Abundance/ Richness of Wildlife	Very low abundance and richness for fauna species.						
Overall Ecological Importance	Low						

Table 6.2: Ecological Evaluation of Developed Area

Table 6.6: Ecological Evaluation of Village Area

Criteria	Village Area					
Naturalness	Anthropogenic habitat with high level of human disturbance.					
Size	Approx. 2.80ha within the Study Area					
Diversity	Low in diversity of plant species, structural complexity, and low diversity of fauna species.					
Rarity	No flora species of conservation importance recorded during the surveys. Fauna Species of conservation importance recorded during the surveys include Butterfly – Danaid Egg-fly, Small Cabbage White and Tiny Grass Blue					
Re-creatability	Readily re-creatable.					
Fragmentation	N/A					
Ecological Linkage	Weak ecological linkage with adjacent habitats					
Potential Value	Low					
Nursery/ Breeding Ground	No significant nursery or breeding ground recorded.					
Age	Various.					
Abundance/ Richness of Wildlife	Very low abundance and richness for fauna species.					
Overall Ecological	Low					
Importance						

Table 6.7: Ecological Evaluation of Managed Wetland

Criteria	Managed Wetland
Naturalness	Semi-natural habitat with active human management for conservation purposes.
Size	Approx. 5.63ha within the Study Area
Diversity	Low in diversity of plant species, structural complexity, and moderate diversity of
	avifauna and herpetofauna species, low diversity of other fauna species

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Criteria	Managed Wetland					
Rarity	No flora and fauna species of conservation importance recorded during the surveys.					
Re-creatability	Re-creatable under suitable hydrological conditions					
Fragmentation	N/A					
Ecological Linkage	Ecologically linked to adjacent ponds and watercourse.					
Potential Value	Could be better enhanced with improved management practices					
Nursery/ Breeding Ground	No significant nursery or breeding ground recorded. Potential breeding ground for water bird species					
Age	Less than 20 years.					
Abundance/ Richness of	Moderate abundance and richness for avifauna and herpetofauna species, Low					
Wildlife	abundance and richness for other fauna species.					
Overall Ecological	Moderate					
Importance						

6.2 Project Site

The Project Site, including works area, comprise of approximately 0.05ha of village area. The abundance and richness of wildlife are very low due to the small size of the Project Site and its adjacency to an existing, regularly used vehicular/ pedestrian access. No flora or fauna species was recorded within the Project Site during ecological baseline survey. No tree felling/ pruning will be required. The evaluation of village area within the Project Site is presented in *Table 6.3*.

Criteria	Village Area within Project Site					
Naturalness	Anthropogenic habitat with high level of human disturbance.					
Size	Approx. 0.05ha					
Diversity	Low in diversity of plant species, structural complexity, and low diversity of fauna species.					
Rarity	No flora and fauna species of conservation importance recorded during the surveys.					
Re-creatability	Readily re-creatable.					
Fragmentation	N/A					
Ecological Linkage	Weak ecological linkage with adjacent habitats					
Potential Value	Low					
Nursery/ Breeding Ground	No significant nursery or breeding ground recorded.					
Age	Various.					
Abundance/ Richness of Wildlife	Very low abundance and richness for fauna species.					
Overall Ecological	Low					
Importance						

Table 6.3: Ecological Evaluation of Project Site

7. ECOLOGICAL ASSESSMENT

7.1 Identification of Potential Ecological Impacts

In view of the current habitat conditions of the Project Site and its vicinity and their ecological values, the potential ecological impacts associated with the LV cable laying near Nam Sang Wai Road is predicted as follows. The potential impacts would cease immediately upon completion of the installation works, where there will be no operational impacts.

- Temporary habitat loss and habitat disturbance within the Project Site due to excavation of cable trenches;
- Indirect disturbances to the surrounding habitats and associated wildlife due to the construction works (e.g. increased human activities, generation of dust, waste and noise and inappropriate disposal of construction materials); and
- Indirect impacts (pollution) on watercourses due to construction run-off.

7.2 Assessment of Ecological Impacts in the Absence of Mitigation Measures

In the absence of mitigation measures, the identified ecological impacts due to installation of the proposed cable along Tam Kon Chau Road are evaluated in the following sections.

7.2.1 Temporary Habitat Loss

Direct habitat loss arising from the Project limits to the cable trenches near Nam Sang Wai Road within village area. The construction works include excavation by QPME (Quality Powered Mechanical Equipment) excavators and the hand tools, cable laying and reinstatement. The dimension of the cable trenches, which will be reinstated upon completion of construction, is approximately 3m in width and 5.5m in depth. The Project's works area will be restricted to 1m on either of the proposed cable route, which will involve minimal vegetation clearance. Only transitional vegetated areas (with grass only) between the existing road/ paved surface and adjacent habitat. No tree felling or pruning will be involved.

In the absence of mitigation measures, the direct habitat loss caused by the Project is considered to be of **Very Low** to village area. The assessment of potential direct impact on habitats within the Project Site in the absence of mitigation measures is detailed in *Table 7.1*.

Criteria	Village Area
Habitat Quality	Low
Species	No flora and fauna species of conservation importance recorded during the surveys.
Size/Abundance	Small with a total area of 0.05ha (including works area). No tree removal and pruning will be involved.
Duration	Temporary, the works will be completed (including reinstatement) around 4 weeks
Reversibility	The trenches will be reinstated upon completion of construction
Magnitude	Very small
Overall Impact Severity	Very Low

Table 7.1: Temporary	Loss of Existing Habitats	s within the Project Site
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7.2.2 Indirect Disturbances to Surrounding Habitats and Associated Wildlife

The surrounding habitats including fish ponds and watercourses adjacent to the Project Site could be indirectly impacted by the Project, due to construction-induced disturbances arising from the Project. Increased human activities (esp. during the construction phase) and construction activities would be the main source of disturbance accrued from the proposed works. Noise, dust, waste generation, and visual disturbance, which may arise from the construction activities, are predicted to occur during construction. As the cable alignment will be located along the existing pavement/ road surface as far as possible, the excavation is not expected to cause direct disturbance or the physical damages to the surrounding habitats.

Different terrestrial ecological resources, including avifauna and butterfly species of conservation importance, have been identified to be located in the vicinity of the proposed cable route. These species could be indirectly impacted by the proposed construction works.

According to the baseline ecological survey and literature review, fauna inhabiting the nearby area are highly mobile and able to move to the other similar habitats, which are large in area and with higher habitat quality. Furthermore, the fauna recorded in the Study Area were less susceptible to the anthropogenic disturbances. Therefore, nuisances induced by the small-scale construction work along the Project Site would not have significant impact to surrounding wildlife. As observed during the baseline survey, waterbirds in the Study Area are generally not disturbed by frequent human activity, traffic and activity from construction. However, the excavation could pose risk to smaller fauna species such as small mammals and amphibian, where they could be trapped in open trenches.

In the absence of mitigation measures, the above-mentioned disturbance impact on surrounding habitats and associated wildlife due to noise, dust, waste generation and visual disturbance etc. caused by increased human activities is considered to be **Low**.

7.2.3 Indirect Impact (Pollution) on Watercourses

Site runoff from the works area may contain suspended solids and contaminants if uncontrolled. Potential sources of water pollution from uncontrolled site runoff may include runoff and erosion of exposed bare soil, earth and stockpiles, fuel, oil, and lubricant from maintenance of construction mechanical equipment. Water pollution could be substantial if construction runoff is allowed to discharge without mitigation, resulting in adverse impacts through physical and biological disruption of the area's ecosystem. Taking into account the small scale of the construction works, in the absence of mitigation measures, the impact of potential water pollution caused by the Project is considered to be of **Low to Moderate** significance.

7.3 Cumulative Impact

No concurrent project, of which the construction programme would have overlapped with this Project, is identified within the Study Area. And hence, cumulative impact is not anticipated for this Project.

PROPOSED PUBLIC UTILITY INSTALLATION AND ASSOCIATED EXCAVATION AND FILLING OF LAND IN "CONSERVATION AREA" ZONE, GOVERNMENT LAND IN D.D. 123, NAM SANG WAI, YUEN LONG ECOLOGICAL ASSESSMENT

8. MITIGATION AND PRECAUTIONARY MEASURES

Based on the ecological impacts predicted in **Section 7**, mitigation measures to avoid, minimise or compensate (if necessary) for the potential significant impacts are detailed below. In line with the EIAO-TM, ways to avoid impacts were identified and followed wherever possible during the planning and design stage. If, despite taking all appropriate design measures of avoidance and minimisation, potential ecological impacts of greater than "Low" significance are still anticipated, further mitigation measures are considered necessary to reduce these impacts to an acceptable level. Moreover, to achieve a better ecological performance, precautionary measures are proposed under this project for certain potential ecological impacts that are not considered to be significant.

In order to minimise the potential disturbances arising the project, good site/ construction practice and housekeeping measures will be adopted. Mitigation measures and good construction practices are recommended below.

8.1 Avoidance and Minimisation

- During the planning stage, the Project Proponent has conducted site visits with contractors to minimise footprint/ impact on vegetation, tree and habitat loss at any stage of the Project. No tree felling or pruning will be caused by the Project.
- The cable laying work will be constructed section by section. The trench will be backfilled with soil stocking before moving to next section.
- The construction period will be between April and May 2023 for about four weeks, which will avoid the wintering season of migratory birds.
- The relevant statutory requirements for the construction activities will be complied with.

8.2 Mitigation for Indirect Disturbances to Surrounding Habitats and Associated Wildlife

- All construction activities will be carried out in daytime hours (i.e. 8:00 am to 5:00 pm) only, which is at least one hour after sunrise and over one hour before sunset;
- The construction works would be carried out using QPME excavators and hand tools to minimise the potential impacts;
- The boundary of the works area will be clearly marked by temporary fence. The works area boundaries will be regularly checked to ensure that they are not breached and that no adverse impacts occur to surrounding habitat and associated wildlife;
- Contractors will check the excavation trench each day, prior to commencing work, to ensure that no mammals, reptiles or amphibians are trapped in the trench;
- Adopt appropriate measures including controlled wastewater discharge to the nearby water bodies, in accordance with the guidelines stipulated in Environmental Protection Department (EPD)'s *Practice Note for Professional Persons on Construction Site Drainage (ProPECC PN1/94)* during the construction works to properly control site run-off and drainage and to minimise potential water quality impacts;
- In the event of rain or at any time when rainstorms are likely to happen, exposed surfaces within the works area should be covered by tarpaulin or by other means;
- Avoid any damage and disturbance, particularly those caused by filling and illegal dumping to the surrounding natural habitats;
- Prohibit and prevent open fires within the works area boundary during construction and provide temporary firefighting equipment in the work areas;

PROPOSED PUBLIC UTILITY INSTALLATION AND ASSOCIATED EXCAVATION AND FILLING OF LAND IN "CONSERVATION AREA" ZONE, GOVERNMENT LAND IN D.D. 123, NAM SANG WAI, YUEN LONG ECOLOGICAL ASSESSMENT

- Good site practice will be enforced and effective mitigation measures are required. Works site will be kept tidy at all times. Regular watering to minimise dust emissions from exposed site surfaces and construction activities would be provided. The dusty materials and the open stockpiles shall be avoided or covered fully by the tarpaulin. Accumulation of construction waste and general refuse will not be allowed; and
- Upon completion of the construction works at each section, the works areas will be reinstated.

8.3 Residual Ecological Impacts after Implementation of Proposed Mitigation Measure

Table 8.1 summarises the potential ecological impacts of the project, the impacts that require mitigation, the mitigation measures to be carried out and the residual impacts after mitigation. It can be seen that with the implementation of proposed mitigation measures described above, residual impacts of the Project could be reduced to **Low/ Negligible**.

Table 8.1: Summary of Potential Ecological Impacts, Required Mitigation Measures and Post-mitigation Acceptability of
the Project

Potential Impact	Predicted Significance of Impact in Absence of Mitigation Measures	Proposed Mitigation/ Precautionary Measures			
Direct Habitat Loss (Developed Area)	Very Low	Not required	Very Low		
Indirect Disturbances to Surrounding Habitats and Associated Wildlife	Low	 The construction period will be between April and May 2023 for four weeks, which will avoid the wintering season of migratory birds. All construction activities will be carried out in daytime hours (i.e. 8:00 am to 5:00 pm) only, which is at least one hour after sunrise and over one hour before sunset; The construction works would be carried out using QPME excavators and hand tools; The boundary of the works area will be clearly marked by temporary fence. The works area boundaries will be regularly checked to ensure that they are not breached and that no adverse impacts occur to surrounding habitat and associated wildlife; and Contractors will check the excavation trench each day, prior to commencing work, to ensure that no mammals, reptiles or amphibians are trapped in the trench. 	Low/ Negligible		
Indirect Impact (Pollution) on Watercourses		 Adopt appropriate measures including controlled wastewater discharge to the nearby water bodies, in accordance with the guidelines stipulated in Environmental Protection Department (EPD)'s <i>Practice Note for Professional Persons on Construction Site Drainage (ProPECC PN1/94)</i> during the construction works to properly control site run-off and drainage and to minimise potential water quality impacts; In the event of rain or at any time when rainstorms are likely to happen, exposed surfaces within the works area should be covered by tarpaulin or by other means; Avoid any damage and disturbance, particularly those caused by filling and illegal dumping to the surrounding natural habitats; and Good site practice will be enforced and effective mitigation measures are required. Works site will be kept tidy at all times. Regular watering to minimise dust emissions from exposed site surfaces and construction activities would be provided. The dusty materials and the open stockpiles shall be avoided or covered fully by the tarpaulin. Accumulation of construction waste and general refuse will not be allowed. 	Low/ Negligible		
Cumulative Impact	Not anticipated	Not required			

9. SUMMARY OF ECOLOGICAL ASSESSMENT

The main terrestrial ecological resources recorded within the proposed construction works section of the Study Area comprise of plantation, shrubland/grassland, watercourse, pond, developed area, village area, managed wetland, and their associated wildlife, where the Project Sites will be restricted to village area on Nam Sang Wai Road. Majority of the habitat within the Study Area is considered to be anthropogenic with frequent disturbance from traffic on Nam Sang Wai Road and commercial fishpond operation. The ecological value of the habitats is considered to be moderate for watercourse; low to moderate for pond and managed wetland, low for plantation, shrubland/grassland, developed area and village area.

The village area within the Project Site is considered to have a low level of ecological value, given that the habitat nature is anthropogenic with high level of human disturbance. The Project Site support a very low diversity of flora and fauna species, where the proposed cable route has also been designed to avoid any tree felling and tree pruning. In the absence of mitigation measures, the temporary habitat loss within Project Site is considered to be of Very Low significance. The potential indirect disturbances to surrounding habitat and associated wildlife is considered to be of Low significance, and indirect impact (pollution) on watercourses is considered to be Low to Moderate.

In order to mitigate for the potential ecological impacts, the proposed works will be conducted in daytime hours only and contractors will be checking the presence of wildlife in open trenches to minimise potential impact on wildlife. Good site practices and the measures in accordance with the Practice Notes for Professional Persons on "*Construction Site Drainage*" (ProPECC PN 1/94) will be applied to control surface runoff and the potential pollution to watercourse.

With the implementation of the proposed mitigation measures, residual ecological impacts of the Project would be of low/negligible significance and acceptable.

Annex 1

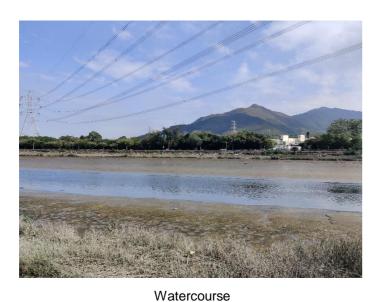
Habitat Photos



Plantation



Shrubland/Grassland



Fishpond

Annex 1

Habitat Photos

Environmental Resources Management



DATE: 12/12/2022



Developed Area



Village Area



Managed Wetland

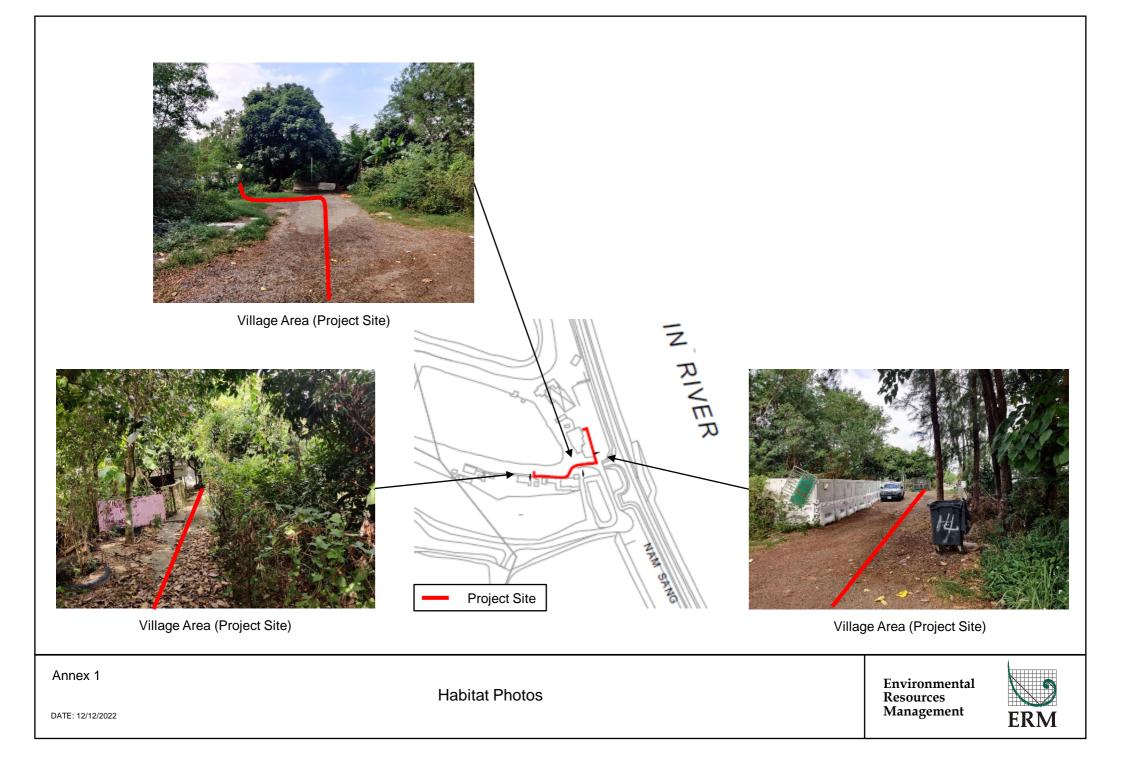
Annex 1

Habitat Photos

Environmental Resources Management



DATE: 12/12/2022



Annex 2

Presence of Plant Species Recorded Within the Study Area

Annex 2 Presence of Plant Species Recorded Within the Study Area

Annex 2 Presence of Plant Species Re													
Species Name	Chinese Name	Origin ¹	Growth Form	Status in Hong Kong ²	Status in Hong Kong ²	Conservation Status³			Stu	ady Area			Project Site
							WC	PO	VA D	DA S/G	PL	MW	VA
Acacia auriculiformis	耳果相思	Е	Tree	Widely cultivated				1			√	\checkmark	(
Acacia mangium	大葉相思,馬占相思	E	Tree	Widely cultivated				4 			\checkmark	4	
Acanthus ilicifolius	老鼠簕	E	Shrub	Common			\checkmark				1		(İ
Acrostichum aureum	國蕨	N	Herb	Restricted			\checkmark	$\overline{\checkmark}$			*	1	
Agave americana	龍舌蘭	N	Herb	Common				 		····	*	4	✓
Allamanda schottii	硬枝黃蟬		Shrub	Cultivated					 	 	+	4/	<u> </u>
Alocasia macrorrhizos	海芊	N	Herb	Common						·····		1	· · · · · · · · · · · · · · · · · · ·
Alysicarpus vaginalis	· · · · · · · · · · · · · · · · · · ·	N	Herb	Very common				<u></u>		<u></u>	+	+	/
Averrhoa carambola	楊桃		Tree	Common				<u> </u>	\checkmark		· 	+ <i>+</i>	
Avicennia marina	白骨壤		Shrub	Common				<u> </u>	` †		+	/	/t
Bambusa multiplex			Bamboo	Common			`			·····	+	+	/
Bidens alba	白花鬼針草	E	Herb	Very common			./	./	<u>ب</u>	<u> </u>	<u>+</u>	+	
Bischofia javanica	<u>口16_迤到早</u> 秋楓	<u>N</u>	Tree	Common			<u>v</u>	<u> </u>	<u>`</u>	<u>××</u>		·	/·
Bombax ceiba	木棉		Tree	Cultivated				<u> </u>		<u></u>	<u>+</u>	<u>×</u>	/
Bougainvillea spectabilis			Climber/Shrub	Cultivated				↓	`	<u>×</u> +×		<u>`</u>	
Bougumonieu speciuonis Brachiaria subquadripara			Herb	Cultivated						<u></u>	+	!	·
				-				<u> </u>		<u> </u>	+		<u> </u>
Bridelia tomentosa Broucecuetia nomerifora	土蜜樹	IN N	Shrub/Tree	Very common							÷	·'	·
Broussonetia papyrifera	構樹 生相tt yrytt		Tree	Very common				İ	<u>`</u>	<u> </u>	+	. <u></u> /	<u> </u>
Calliandra haematocephala	朱纓花,紅絨球		Shrub	Cultivated				<u> </u>		····	<u>↓</u>	. /	<u> </u>
Callistemon viminalis	<u>串錢柳</u>		Tree	Cultivated			,			,,, +,	↓	· + [/]	ii
Celosia argentea Chloris barbata	青葙	N	Herb	Very common			∕			<u> </u>		. [/]	<u>↓↓</u>
Chloris barbata	孟仁草	N	Herb	Very common					<u></u>	<u> </u>			<u>↓</u> ↓
Cleome rutidosperma	皺子白花菜	E	Herb	Restricted				 		<u> </u>	.		·
Coccinia grandis	紅瓜	<u>N</u>	Climber	Common				<u>↓</u>		<u> </u>			il
Cuscuta chinensis	菟絲子	N	Herb	Common						<u> </u>		<u> </u>	<u> </u>
Cyclosorus interruptus	間斷毛蕨,毛蕨	N	Shrub	Common				<u>√</u>			i +	<u> </u>	<u>.</u>
Cynodon dactylon	狗牙根	Ν	Herb	Very common			✓	✓	√ ·	<u> </u>	_	✓	✓
Desmodium heterocarpon	假地豆	Ν	Shrub	Very common						\checkmark			<u>i</u> I
Desmos chinensis		Ν	Climber/Shrub	Common						√		! !	
Dimocarpus longan	龍眼, 桂圓	Е	Tree	Restricted				1	\checkmark	√	1	1	√
Dypsis lutescens	散尾葵	Е	Shrub	Common					\checkmark			1	\checkmark
Eichhornia crassipes	鳳眼藍,大水萍	Е	Herb	Common			\checkmark	\checkmark			•	1	
Eucalyptus citriodora	檸檬桉	Е	Tree	Cultivated							\checkmark	\checkmark	1
Eucalyptus urophylla		E	Tree	Cultivated				╉╾╼╼╼╼╼╼╼ ╏		\checkmark	+	44	
Eunhorhia hirta	大飛揚草	Е	Herb	Very common				†	\checkmark ,	✓	†	1	\checkmark
Euphorbia thymifolia	千根草,小飛揚	N	Herb	Very Common				+		· · · · ·	+	† <i>†</i>	$\overline{\checkmark}$
Excorcaria agallocha	<u> </u>	N	Tree	Common								<i>i</i>	·
Excoecaria agallocha Fagraea ceilanica	灰莉	4 ^F	Shrub	-				<u> </u>	<u>/</u>		+	+	·
Ficus hispida	對葉榕		Shrub/Tree	Very common				<u> </u>		·····	+	+	·
Ficus microcarpa		N	Tree	Common				<u> </u>		<u></u>		·	·····
		N	Climber	Very common				<u> </u>		<u>v</u>	+	<u> </u>	·
Ficus pumila								<u> </u>			+		┟
Ficus virens			Tree	Common						<u> </u>			
Flueggea virosa	白飯樹		Shrub	Common			 	+	<u>`</u> `	<u>/</u>		<u> </u>	/
Hedyotis corymbosa	<u> 傘房花耳草</u>		Herb	Very common				<u>↓∕</u>	 `	<u> </u>		. <u> </u> /	<u> </u>
Hibiscus tiliaceus	黄槿		Tree	Very common			~	<u>↓</u>		····· · · · · · · · · · · · · · · · ·		<u> </u>	·
Hylocereus undatus Hyophorbe lagenicaulis	量天尺,霸王花,火龍果		Herb	Common				+	/ /		+	·+/	<u> </u>
nyopnorve lagenicaulis		E	Tree	-					<u>√</u>	· ····		. .	<u> </u>
Hypserpa nitida	夜花藤		Climber	Very common						<u> </u>	i +	. <u> </u> /	<u></u>
Indigofera suffruticosa	野青樹	^N	Small Tree	Restricted					`	<u> </u>		. [/]	<u> </u>
Ipomoea nil	牽牛	E	Herb	Common					<u> </u>	<u>v </u>		. /	ļ
Ipomoea obscura	小心葉薯,紫心牽牛	N	Herb	Common					<u>`</u>	✓ ↓ _ ✓	_	. !	↓
Ischaemum aristatum		<u>N</u>	Herb	-			<u>∕</u>	<u> </u>				. /	
Kandelia obovata	水筆仔	<u>N</u>	Tree	Very common			∕	İ				<u> </u>	<u> </u>
Koelreuteria bipinnata	複羽葉欒樹	E	Tree	Cultivated				_			<u>√</u>	, /	į
Lagerstroemia speciosa	大花紫薇	E	Tree	Cultivated				 				. .	{
Lantana camara	馬纓丹,如意草	Е	Shrub	Common				<u> </u>	、	<u> </u>	<u>↓ √</u>	. <u> </u> /	<u>i</u> l
Lemna minor	浮萍	Ν	Herb	-			 	 ✓ 					
Leucaena leucocephala	銀合歡	Е	Shrub/Tree	Common			\checkmark	\checkmark	√ ·	\checkmark		\checkmark	√ 1
Lemna minor Leucaena leucocephala Lindernia crustacea	母草	Ν	Herb	Common						\checkmark		/	
Liriope spicata	山麥冬,麥門冬	N	Herb	Very common				\checkmark			<u></u>		
Litchi chinensis	荔枝	Е	Tree	Restricted				*	\checkmark	√	_		\checkmark
Litsea glutinosa	潺槁樹	Ν	Tree	Very common				 			\checkmark		<u> </u>
	蛋黄果	Е	Tree	Common				\checkmark	\checkmark		T	1	√
Lucuma nervosa Ludwigia hyssopifolia		N	Herb	Common				$\overline{\checkmark}$			†	1	
Luawigia nyssopijota Macaranga tanarius var. tomentosa Mangifera indica Melaleuca cajuputi subsp. Cumingiana Melia azedarach	血桐	N	Tree	Common				<u> </u>	\checkmark	····	+	† <i>i</i>	·
Manoifera indica			Tree	Cultivated				<u> </u>		····	†	· +/	<u>[</u>
Melaleuca cajunuti subsn Cumingiang			Tree	Cultivated				†			<u>† √</u>	† <i>'</i>	<u> </u>
Melia azedarach	<u>旦丁噌</u> 苦棟	E	Tree	Common				<u>†</u>		<u></u>	<u>†`</u>	· ./	/ł
Molinis ronons	<u>古咪</u>		Herb	Very common				+		<u> </u>	<u>+</u>	<u>↓</u> /	·
Melinis repens Microcos nervosa	<u> </u>							 	·····	<u>.</u>	+	· +/	/ł
<u>Microcos nervosa</u> Mikania micrantha		IN T	Shrub/Tree	Common				├	·····	<u>×</u> +×	+	·	/ł
	薇甘菊		Climber/Herb	Common				├ [_]	·	<u>×</u>		<u> </u>	·
Mimosa pudica	含羞草		Herb	Very common					<u>√</u> ,	<u>×</u>	}	<u> /</u>	·
Morus alba	楽	IN	Shrub/Tree	Common				!	l`	<u> </u>	L	.1/	ll

Annex 2	Presence o	f Plant Sp	pecies Recorded	Within the Study Area
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Species Name	Chinese Name	Origin ¹ Growth Form	Status in Hong Kong ²	Status in Hong Kong ²	Conservation Status	3		Study Area					Project Site		
							WC	PO	VA	DA	S/G	PL	MW	VA	
Paederia scandens	雞矢藤	N Herb	Very common					\checkmark	\checkmark	\checkmark	\checkmark			√	
Panicum maximum	大黍	E Herb	Very common				\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	1		√	
Passiflora foetida	龍珠果	E Climber	Very common					*	\checkmark	\checkmark	\checkmark	1	-	√	
Passiflora suberosa	南美西番蓮	E Climber	Common					\checkmark	\checkmark	\checkmark	\checkmark			\checkmark	
Peltophorum pterocarpum	盾柱木	E Tree	Cultivated									\checkmark			
Pennisetum purpureum	象草	E Herb	Very common					\checkmark							
Pennisetum purpureum Phragmites australis	蘆葦	N Herb	Common				\checkmark	\checkmark				1	\checkmark		
Phyllanthus emblica Phyllanthus myrtifolius	餘甘子,油甘子	N Shrub/Tree	Common							\checkmark		 ✓ 			
Phyllanthus myrtifolius	瘤腺葉下珠	E Shrub	-									\checkmark			
Portulaca oleracea	馬齒莧	N Herb	Common								\checkmark				
Rhaphiolepis indica	車輪梅	N Shrub/Tree	Very common								\checkmark	T	\checkmark		
bageretia thea Bansevieria trifasciata	雀梅藤	N Climber/Shrub	Very common								\checkmark	\checkmark			
Sansevieria trifasciata	虎尾蘭	E Herb	Cultivated					•	\checkmark					√	
apium discolor	山烏桕	N Tree	Very common					 			√				
apium discolor chefflera arboricola	鵝掌藤	E Climber/Shrub	Common					†	\checkmark			\checkmark	\checkmark	\checkmark	
coparia dulcis	野甘草,冰塘草	E Herb/Shrub	Common					\checkmark	\checkmark	\checkmark	\checkmark	T		√	
enna siamea	鐵刀木, 暹羅槐	E Tree	Common					•				\checkmark			
esbania cannabina	田菁	E Herb	Common					\checkmark		\checkmark	\checkmark				
olanum torvum	水茄	E Shrub	Common					\checkmark	\checkmark	\checkmark	\checkmark	T		✓	
conneratia sp.	海桑屬	E Tree	Introduced				\checkmark	\checkmark				T	\checkmark		
Sonneratia sp. Sterculia lanceolata	假蘋婆	N Tree	Very common						\checkmark		\checkmark	T 		√	
Suaeda australis	南方鹼蓬	N Herb/Shrub	Common				\checkmark								
yzygium cumini	海南蒲桃	E Tree	Common									\checkmark			
yzygium jambos	蒲桃	E Tree	Common						\checkmark			[\checkmark	
rachelospermum jasminoides	絡石	N Climber	-									\checkmark			
Fridax procumbens	羽芒菊	E Herb	Very common					 	\checkmark	\checkmark				√	
Typha angustifolia	水燭	E Herb	Rare					\checkmark				T	\checkmark		
Irena lobata	肖梵天花,地桃花	N Shrub	Common								\checkmark				
⁷ ernonia amygdalina	南非葉	E Shrub	-						\checkmark					√	
Vedelia trilobata	三裂葉蟛蜞菊	E Herb	Common						\checkmark	\checkmark	\checkmark		\checkmark	√	
Visteria sinensis	紫藤	E Climber	Cultivated					T	\checkmark			Ţ	 -	\checkmark	
			104		TOTAL	TOTAL	17	27	45	41	51	20	25	45	

Notes:

1. Origin of plant species refers to AFCD (2012). Check List of Hong Kong Plants 2012. Agriculture, Fisheries and Conservation Department, HKSAR, Hong Kong. 2. Commonness follows:

- Xing, F.W., Ng, S.C., Chau, L.K.C. 2000. Gymnosperms and angiosperms of Hong Kong. Memoirs of the Hong Kong Natural History Society 23: 21-136.

- KFBG (2003) Flora of Hong Kong - Pteridophyta. Kadoorie Farm and Botanic Garden, Hong Kong

- AFCD (2003) Rare and Precious Plants of Hong Kong. Agriculture, Fisheries and Conservation Department, HKSAR, Hong Kong.

- AFCD (2007) Flora of Hong Kong Vol. 1. Edited by Hong Kong Herbarium, Agriculture, Fisheries and Conservation Department & South China Botanical Garden, Chinese Academy of Sciences

- AFCD (2008) Flora of Hong Kong Vol. 2. Edited by Hong Kong Herbarium, Agriculture, Fisheries and Conservation Department & South China Botanical Garden Chinese Academy of Sciences

- AFCD (2009) Flora of Hong Kong Vol. 3. Edited by Hong Kong Herbarium, Agriculture, Fisheries and Conservation Department & South China Botanical Garden Chinese Academy of Sciences

- AFCD (2011) Flora of Hong Kong Vol. 3. Edited by Hong Kong Herbarium, Agriculture, Fisheries and Conservation Department & South China Botanical Garden Chinese Academy of Sciences

Conservation status follows:

- AFCD (2003) Rare and Precious Plants of Hong Kong. Agriculture, Fisheries and Conservation Department, HKSAR, Hong Kong.

- Cap. 96A: Forestry Regulations, the subsidiary legislation of Forests and Countryside Ordinance (Cap. 96).

- Cap. 586: Protection of Endangered Species of Animals and Plants Ordinance

- CPRDB: Fu and Jin (1992) China Plant Red Data Book

- IUCN: International Union for Conservation of Nature Red List of Threatened Species (2017). NT = Near threatened, VU = Vulnerable.

3. Habitats: PL = Plantation, S/G = Shrubland/Grassland, WC = Watercourse, FP = Fishpond, DA = Developed Area, VA = Village Area, MW = Managed Wetland

Annex 3

Photographic Records of Species of Conservation Importance



Northern Shoveler



Eurasian Wigeon



Black-faced Spoonbill



Black-crowned Night Heron





Annex 3

Photographic Records of Species of Conservation Importance



Chinese Pond Heron



Grey Heron







Little Egret

Environmental Management ERM

Resources

Annex 3

Photographic Records of Species of Conservation Importance

DATE: 12/12/2022



Great Cormorant



Black-winged Stilt





Common Greenshank

Environmental Resources Management

ERM

Pied Avocet

Annex 3

Photographic Records of Species of Conservation Importance



White-throated Kingfisher



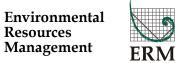
Collared Crow



Pied Kingfisher



Danaid Egg-fly



Annex 3

Photographic Records of Species of Conservation Importance

DATE: 12/12/2022

Annex 4

Presence of Mammal Species Recorded Within the Study Area

Common Name	Scientific Name	Chinese Name	Conservation Status ¹	Commonness ²				Ha Study Are	ıbitat ³ a			Project
					PL	S/G	WC	PO	DA	VA	MW	VA
Japanese Pipistrelle	Pipistrellus abramus	東亞家蝠	Cap.170	Widely distributed throughout Hong Kong.					1			
				TOTAL	0	0	0	0	1	0	0	0

Notes:

1. Conservation and Protection Status:

a. Cap. 170 - Protected under Wild Animals Protection Ordinance

2. Commonness as per AFCD database: Available at https://bih.gov.hk/en/home/index.html

3. Habitats: PL = Plantation, S/G = Shrubland/Grassland, WC = Watercourse, PO = Pond, DA = Developed Area, VA = Village Area, MW = Managed Wetland

Annex 5

Presence of Avifauna Species Recorded Within the Study Area

								Ha	bitat ³			
Common Name	Scientific Name	Chinese Name	e Conservation Status	₁ Distribution in Hong Kong ²				Study Area	a			Project Site
				Kong	PL	SH	WC	РО	DA	VA	MW	VA
Northern Shoveler	Spatula clypeata	琵嘴鴨	Fellowes: RC	Abundant winter visitor. Found in Deep Bay area.			14					
Eurasian Wigeon	Mareca penelope	赤頸鴨	Fellowes: RC	Winter visitor. Found in Deep Bay area, Tai Lam			3					
Black-faced Spoonbill	Platalea minor	黑臉琵鷺	Fellowes: PGC; RLCV(EN); IUCN(EN); CSMPS(II)	Chung. Common winter visitor. Found in Deep Bay area.			2					
Black-crowned Night Heron	Nycticorax nycticorax	夜鷺	Fellowes: (LC)	Common resident and migrant. Widely distributed in Hong Kong.			1					
Chinese Pond Heron	Ardeola bacchus	池鷺	Fellowes: PRC (RC)	Common resident. Widely distributed in Hong Kong.			6					
Grey Heron	Ardea cinerea	蒼鷺	Fellowes: PRC	Common winter visitor. Found in Deep Bay area, Starling Inlet, Kowloon Park, Cape D'Aguilar.			4					
Great Egret	Ardea alba	大白鷺	Fellowes: PRC (RC)	Common resident, migrant and winter visitor. Widely distributed in Hong Kong.			15	2				
Little Egret	Egretta garzetta	小白鷺	Fellowes: PRC (RC)	Common resident, migrant and winter visitor. Widely distributed in coastal area throughout Hong Kong.			20	1				
Great Cormorant	Phalacrocorax carbo	普通鸕鷀	Fellowes: PRC	Common winter visitor. Widely distributed in coastal areas throughout			3					
Black Kite	Milvus migrans	黑鳶	Fellowes: (RC); CITES(II); CSMPS(II); Cap.586	Hong Kong. Common resident and winter visitor, widely distributed in Hong Kong			2					

				1 Distribution in Hong				Hab	itat ³			
Common Name	Scientific Name	Chinese Name	Conservation Status	Kong ²				Study Area				Project Site
					PL	SH	WC	РО	DA	VA	MW	VA
Black-winged Stilt	Himantopus himantopus	黑翅長腳鷸	Fellowes: RC	Common migrant and wintor visitor. Found in Deep Bay area, Long Valley, Kam Tin. Abundant winter visitor.			5					
Pied Avocet	Recurvirostra avosetta	反嘴鷸	Fellowes: RC	Found in Deep Bay area.			3					
Common Sandpiper	Actitis hypoleucos	磯鷸	-	Common passage migrant and winter visitor. Widely distributed in wetland area throughout Hong Kong.			1					
Common Greenshank	Tringa nebularia	青腳鷸	Fellowes: RC	Abundant winter visitor and migrant. Found in Deep Bay area. Locally common resident.			1					
Rock Dove	Columba livia	原鴿	-	Widely distributed in urban area throughout Hong Kong. Abundant resident.					7			
Spotted Dove	Spilopelia chinensis	珠頸斑鳩	-	Widely distributed in Hong Kong.	1	2	2		2			
White-throated Kingfisher	Halcyon smyrnensis	白胸翡翠	Fellowes: (LC)	Common resident. Widely distributed in coastal areas throughout Hong Kong.			1					
Pied Kingfisher	Ceryle rudis	斑魚狗	Fellowes: (LC)	Common resident. Widely distributed in lakes and ponds throughout Hong Kong.				1				
Collared Crow	Corvus torquatus	白頸鴉	Fellowes: LC; RLCV(NT); IUCN(VU)	Locally common resident. Found in Inner Deep Bay area, Nam Chung, Kei Ling Ha, Tai Mei Tuk, Pok Fu Lam, Chek lap Kok, Shuen Wan, Lam Tsuen.			2					

								Ha	bitat ³			
Common Name	Scientific Name	Chinese Nam	e Conservation Status	¹ Distribution in Hong				Study Are	a			Project Site
				Kong ²	PL	SH	WC	РО	DA	VA	MW	VA
Large-billed Crow	Corvus macrorhynchos	大嘴烏鴉	-	Common resident. Widely distributed in Hong Kong.		1						
Red-whiskered Bulbul	Pycnonotus jocosus	紅耳鵯	-	Abundant resident. Widely distributed in Hong Kong.		2			1			
Chinese Bulbul	Pycnonotus sinensis	白頭鵯	-	Abundant resident. Widely distributed in Hong Kong.	3	1						
Barn Swallow	Hirundo rustica	家燕	-	Abundant passage migrant and uncommon winter visitor. Widely distributed in Hong Kong.			1					
		褐柳鶯	-	Abundant winter visitor and migrant. Widely distributed in shrubland and waterside vegetation throughout Hong Kong.	1				1			
Dusky Warbler Plain Prinia	Phylloscopus fuscatus Prinia inornata	純色鷦鶯	-	Locally common resident. Widely distributed in grassland throughout Hong Kong			1					
Masked Laughingthrush	Pterorhinus perspicillatus	黑臉噪鶥	-	Abundant resident. Widely distributed in shrubland throughout Hong Kong. Abundant resident.		2				4		4
Crested Myna	Acridotheres cristatellus	八哥		Widely distributed in Hong Kong.			14		3	3		
Black-collared Starling	Gracupica nigricollis	黑領椋鳥	-	Common resident. Widely distributed in Hong Kong.			1		1	3		
Daurian Redstart	Phoenicurus auroreus	北紅尾鴝	-	Common winter visitor. Widely distributed in Hong Kong.	1		1					

							H	abitat ³			
Common Name	Scientific Name	Chinese Name Conservation Status	₁ Distribution in Hong Kong ²				Study Are	ea			Project Site
			Nong	PL	SH	WC	РО	DA	VA	MW	VA
Stejneger's Stonechat	Saxicola stejnegeri	黑喉石䳭 -	Common passage migrant and winter visitor. Widely distributed in open fields throughout Hong Kong.			2				1	
Fork-tailed Sunbird	Aethopyga christinae	叉尾太陽鳥 -	Common resident and winter visitor. Widely distributed in Hong Kong.					1			
Eurasian Tree Sparrow	Passer montanus	樹麻雀 -	Abundant resident. Widely distributed in Hong Kong. Abundant resident.					2	3		
Scaly-breasted Munia	Lonchura punctulata	斑文鳥 -	Widely distributed in Hong Kong.				40				
White Wagtail	Motacilla alba	白鶺鴒 -	Resident, common passage migrant and winter visitor. Widely distributed in Hong Kong.			1			2	1	
		ΤΟΤΑ	L	4	5	24	4	8	5	2	1

1. Conservation and Protection Status:

a. Fellowes - Fellowes et al. (2002): LC = Local Concern, 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.

b. CITES (II) - Under Appendix II of Convention on International Trade in Endangered Species of Wild Fauna and Flora

c. CSMPS – China State Major Protection Status: Appendix I/II

d. RLCV – Red List of China's Vertebrate (2016): NT = Near Threatened

e. Cap. 586 - Protected under Protection of Endangered Species of Animals and Plants Ordinance

f. IUCN – IUCN (2022): VU = Vulnerable

g. All birds in Hong Kong are protected under Cap. 170 - Protected under Wild Animals Protection Ordinance

2. Distribution as per AFCD database. Available at https://bih.gov.hk/en/home/index.html

3. Habitats: PL = Plantation, S/G = Shrubland/Grassland, WC = Watercourse, PO = Pond, DA = Developed Area, VA = Village Area, MW = Managed Wetland

Annex 6

Presence of Butterfly Species Recorded Within the Study Area

Annex 6 Presence of Butterfly Species Recorded Within the Study Area

									abitat ²			
Common Name	Scientific Name	Chinese Name	Consevation/	Distribution in			Stu	dy Area				Project Site
Common Hume	Scientific Funce	Chinese Maine	Protection Status	Hong Kong ¹	PL	SH	WC	PO	DA	VA	MW	VA
Long-tailed Blue	Lampides boeticus	亮灰蝶	-	Common Very Rare;						1		
Tiny Grass Blue	Zizula hylax	長腹灰蝶		Species of Conservation						1		
			-	Concern								
Common Indian Crow	Euploea core	幻紫斑蝶		Common			1					
Danaid Egg-fly	Hypolimnas misippus	金斑蛺蝶	Fellowes: LC	Uncommon						1		1
Common Sailer	Neptis hylas	中環蛺蝶	-	Very Common					1			
Dark-brand Bush Brown	Mycalesis mineus	小眉眼蝶	-	Very Common					1			
Tailed Jay	Graphium agamemnon	統帥青鳳蝶	-	Common								
Common Mormon	Papilio polytes	玉帶鳳蝶	-	Very Common					1			1
Common Grass Yellow	Eurema hecabe	寬邊黃粉蝶	-	Very Common						1		
Red-base Jezebel	Delias pasithoe	報喜斑粉蝶	-	Very Common					1			
Small Cabbage White	Pieris rapae	菜粉蝶	-	Rare						1		
				TOTAL	0	0	1	0	4	5	0	0

Notes:

1. Distribution in Hong Kong refers to AFCD database: Chan et al. 2011. A Review of the Local Restrictedness of Hong Kong Butterflies. Hong Kong Biodiversity 21: 1-12

2. Habitats: PL = Plantation, S/G = Shrubland/Grassland, WC = Watercourse, PO = Pond, DA = Developed Area, VA = Village Area, MW = Managed Wetland

Annex 7

Presence of Odonate Species Recorded Within the Study Area

								Ha	bitat ³			"
Common Name	Scientific Name	Chinese Nan	Rarity in Hong	Distribution in Hong Kong ²				Study Are	a			Project Site
			Kong ¹	0 0	PL	SH	WC	РО	DA	VA	MW	VA
Wandering Glider	Pantala flavescens	黄蜻	Abundant	Widely distributed all over Hong Kong.				10	1			
			TOTA	L	0	0	0	1	1	0	0	0

Notes:

1. Rarity in Hong Kong refers to AFCD database: Available at http://www.afcd.gov.hk/english/conservation/hkbiodiversity/database/search.asp?lang=en.

Distribution as per AFCD database. Available at https://bih.gov.hk/en/home/index.html
 Habitats: PL = Plantation, S/G = Shrubland/Grassland, WC = Watercourse, PO = Pond, DA = Developed Area, VA = Village Area, MW = Managed Wetland

Annex 8

Presence of Aquatic Fauna Species Recorded Within the Study Area

			Conservation Status ¹	Habitat ²								
Scientific Name	Common Name	Chinese Name					Study Are	ea			Project Site	
				PL	SH	WC	PO	DA	VA	MW	VA	
Freshwater Fish												
Clarias gariepinus	North African Catfish	尖齒鬍鯰	-				+					
Oreochromis niloticus	Nile Tilapia	尼羅口孵非鯽	-				+++					
Boleophthalmus pectiniros	stris Bluespotted Mudskipper	大彈塗魚	-				++++					
Channa maculata	Spotted Snakehead	斑鱧	-				+					
			TOTAL	0	0	0	4	0	0	0	0	

Notes: 1. Conservation and Protection Status:

a. Fellowes – Fellowes *et al.* (2002): PGC = Potential Global Concern.
2. Habitats: PL = Plantation, S/G = Shrubland/Grassland, WC = Watercourse, PO = Pond, DA = Developed Area, VA = Village Area, MW = Managed Wetland



Application No. A/YL-NSW/30718/08/2023 16:34 From: "Leung, Issac Wai Kit" <issac.leung@pel-teams.com.hk> To: "tpbpd@pland.gov.hk" <tpbpd@pland.gov.hk>

1 Attachment

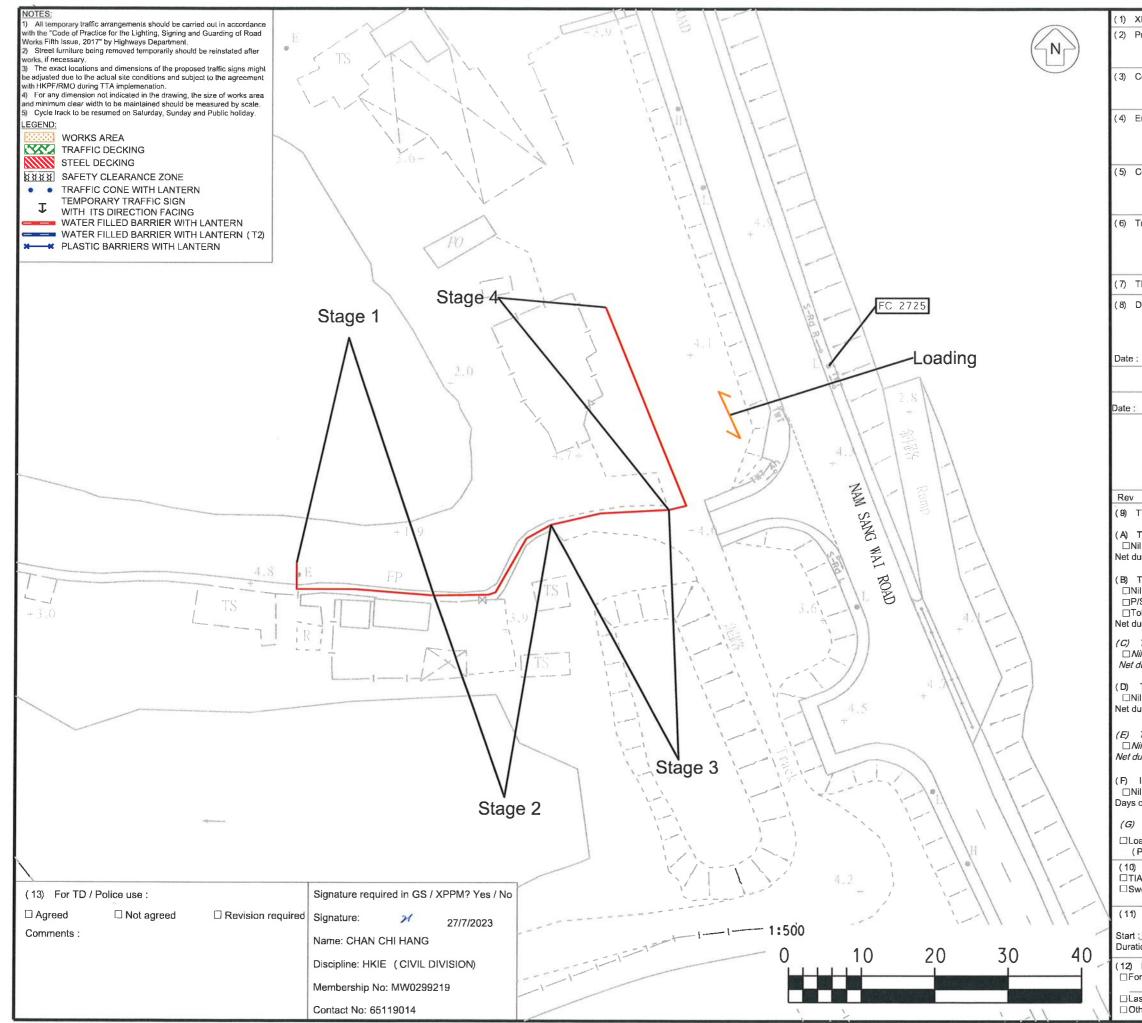


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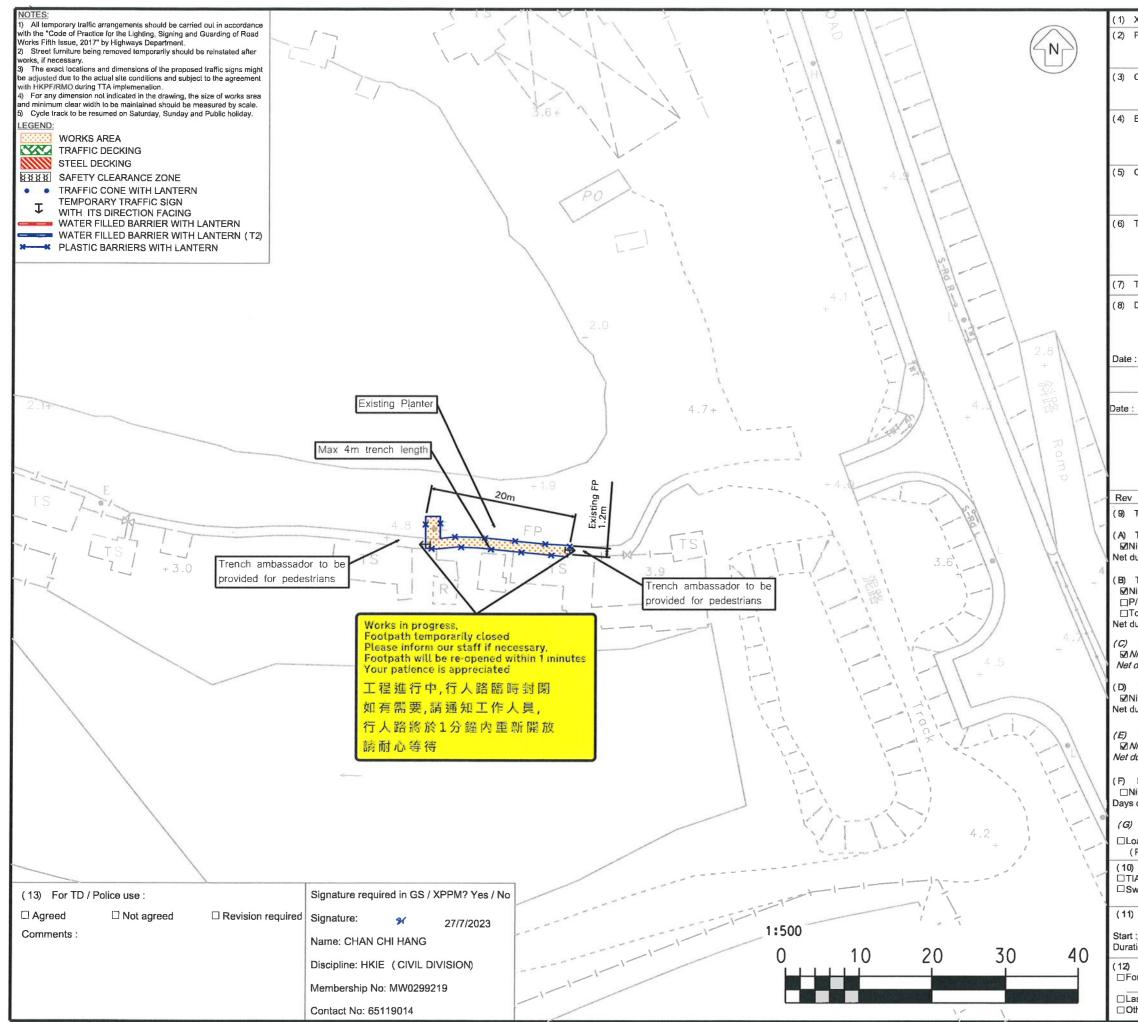
Dear TPB,

Please find the attachment for the submit to TD. Thanks.

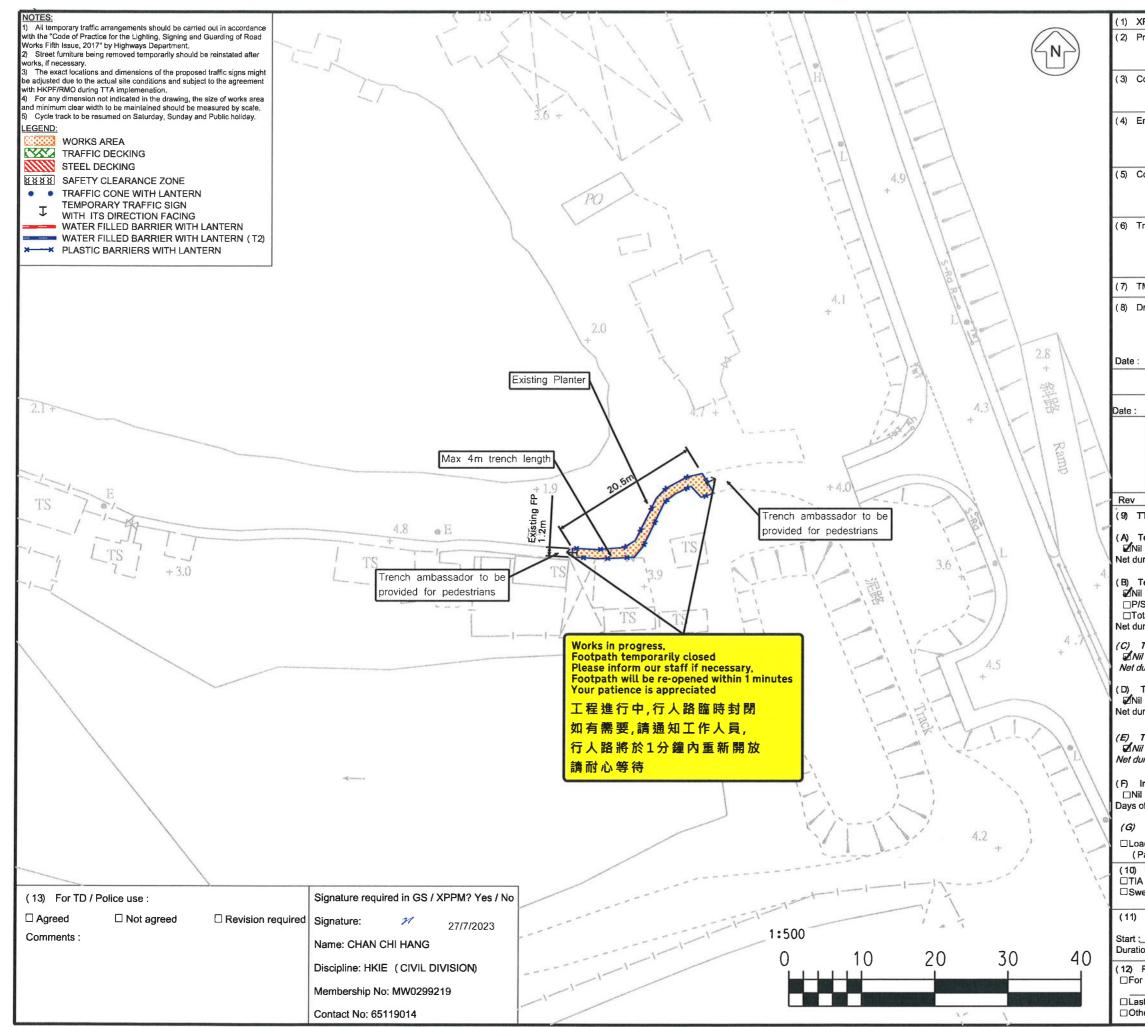
Best Regards, Issac Leung TEL: Pacific Extend Limited



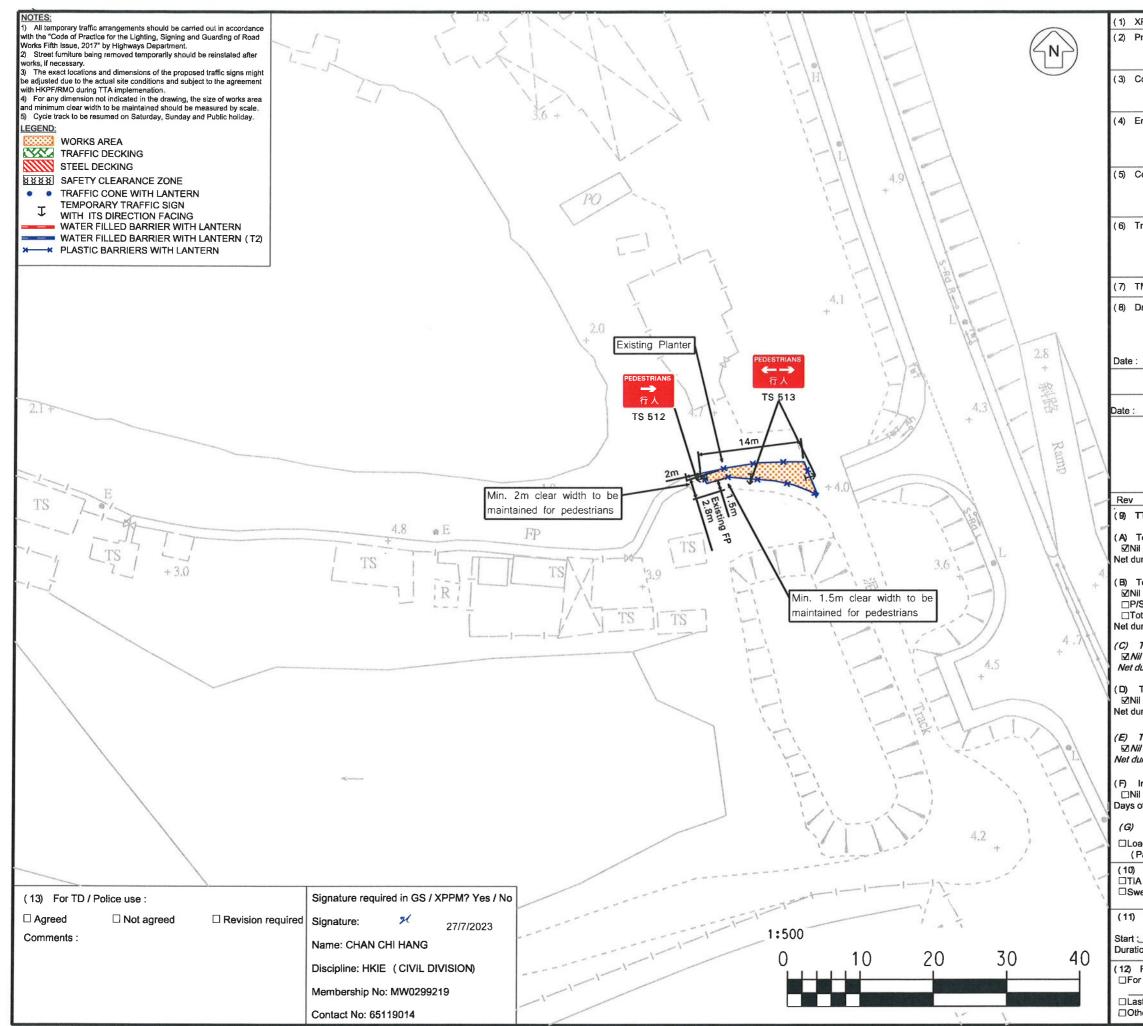
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Project Office : CLP
Contract No : Outline Agreement No: 4600008486 Distribution Cable Trenching and Laying Works in North Region (Yuen Long/Tuen Mun)
Engineer :
CLP
Contractor Pacific Extend
Traffic Consultant :
Wolan Consultants Ltd. 路蘭顧問有限公司
TMLG meeting date :
Drawing No : NRYL2021-0097-01-Keyplan
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near Nam Sang Wai Road : 27/7/2023 Scale : 1:500 (A3) Case : Items :
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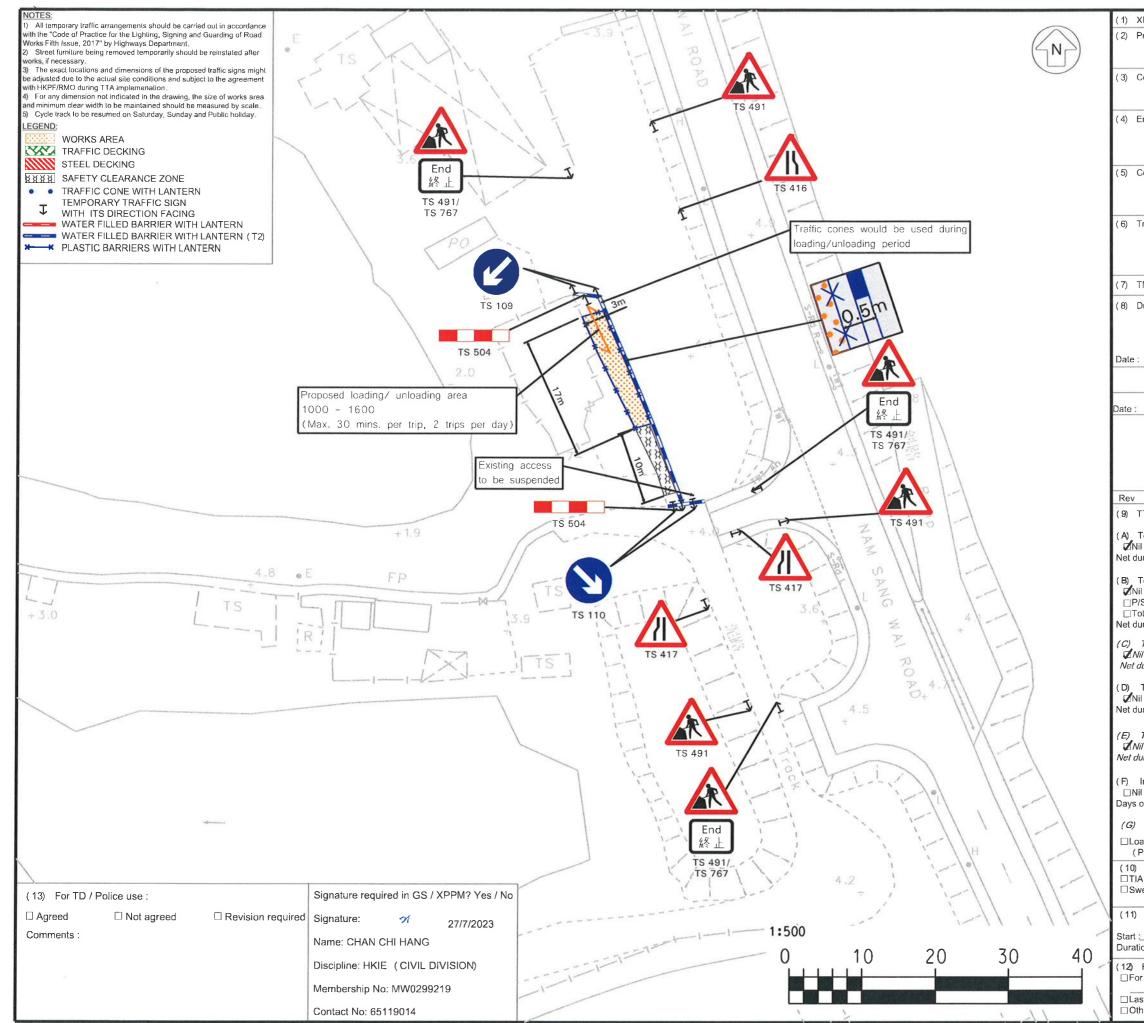
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Engineer : CLP 中電	
Contractor	
Pacific Extend	
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Nolan Consultants Ltd. 路 蘭 顧 問 有 限 公 司	
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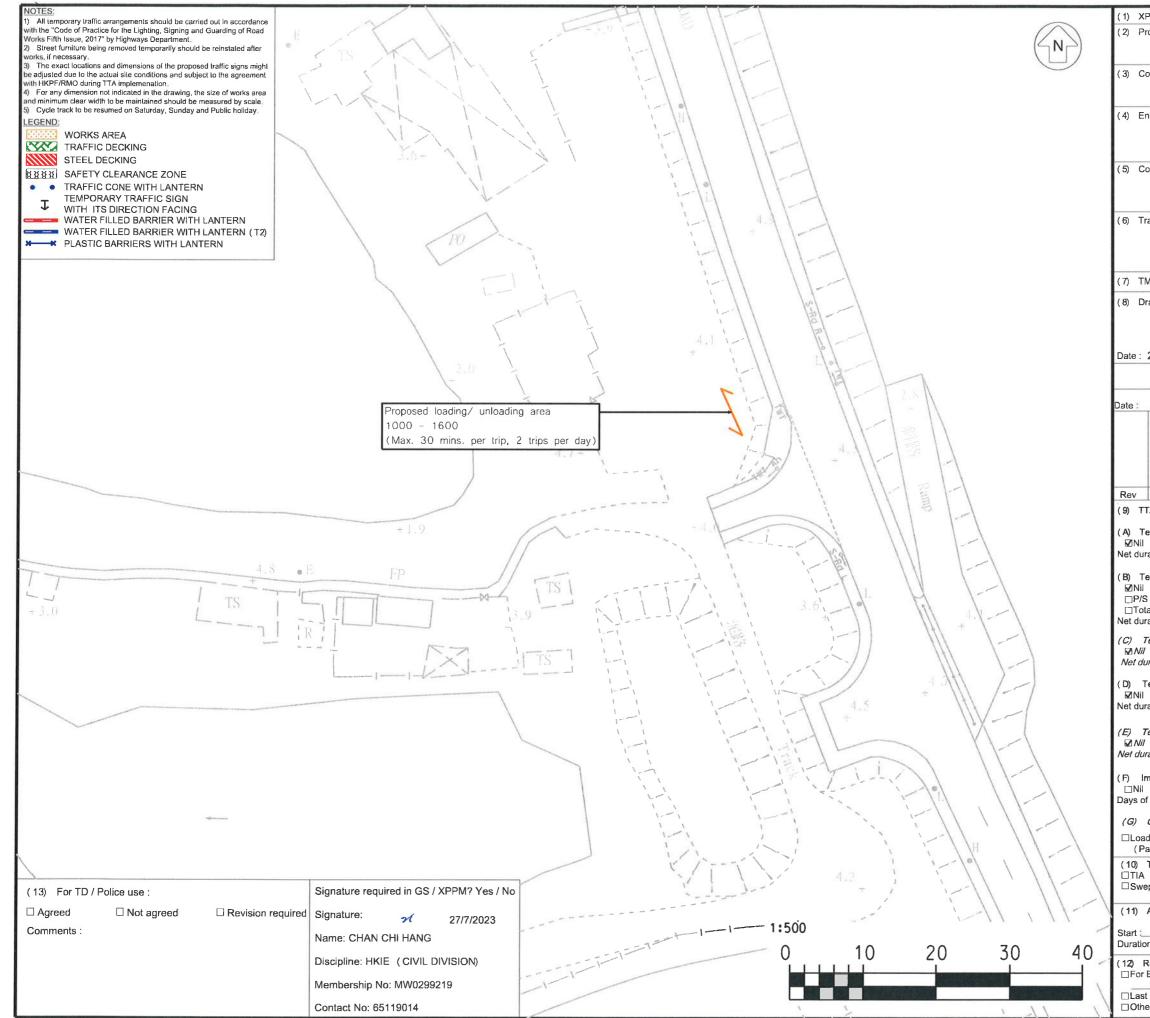
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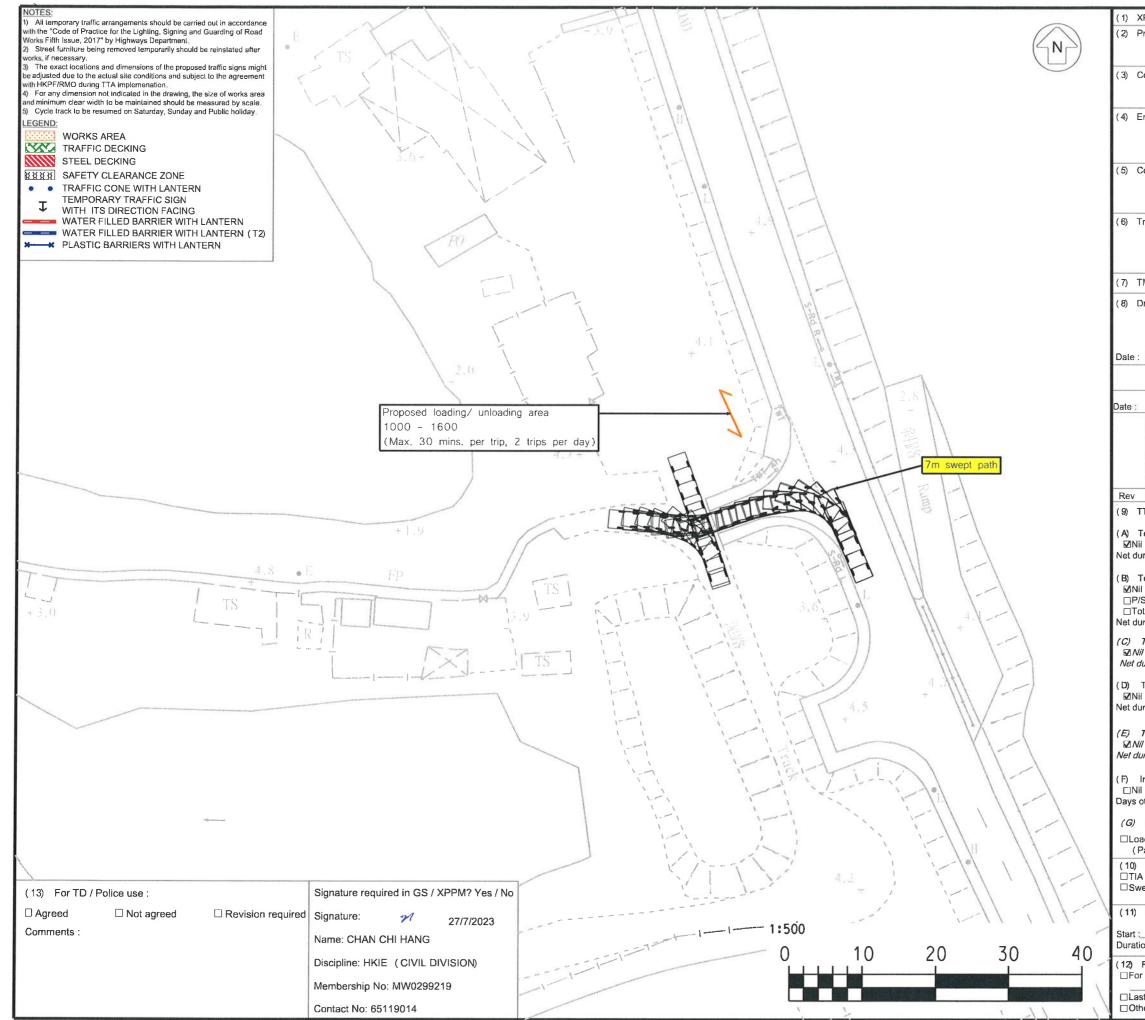
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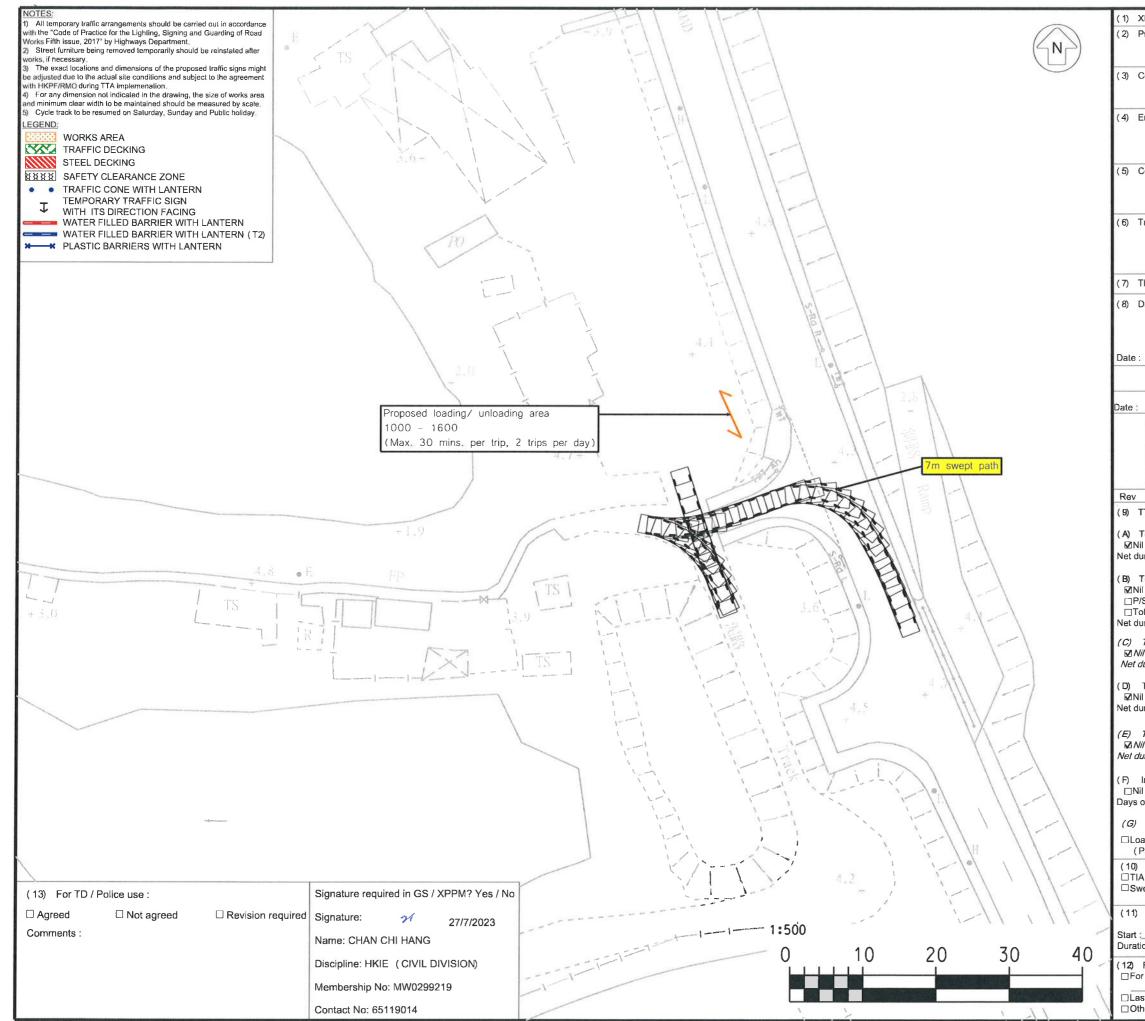
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Planning Application Number A/YL-NSW/30704/10/2023 10:55 From: "Leung, Issac Wai Kit" <issac.leung@pel-teams.com.hk> To: "tpbpd@pland.gov.hk" <tpbpd@pland.gov.hk>

2 Attachments



Reply comment of TD.pdf Reply comment of FSYLE DPO.pdf

Dear Sir/madam,

<mark>ک</mark> PDF

For the relevant application number: A/YL-NSW/307, in response to the comments about TD & FSYLE DPO. Please see the attachment.

Best Regards, Issac Leung TEL: Pacific Extend Limited

Reply comment of TD

 a) My previous comment regarding a section of local access road which is not managed by Transport Department remains valid. Please clarify with relevant lands and maintenance authorities accordingly;

A) Noted and comment from relevant lands and maintenance authorities will be sought.

b) Comment from DSD should be sought prior to commencement of the works as Nam Sang Wai Road is their maintenance access of Kam Tin River;

B) Noted and comment from DSD will be sought.

c) RtC i. It is noted that construction vehicle< 9 tons will be deployed. Please supplement the dimension / specification of construction vehicle and demonstrate the manoeuverability;

C) Noted. Only 2.2m x 7m vehicles will be deployed for the captioned works. A swept path adopting 2.2m x 7m vehicle has been included in the FI

d) RtC ii. Details of trip generation and the induced traffic impact is not shown in the TTA, please supplement. Please confirm if there is any temporary road closure required;

D) Noted. Only 2 trips per day will be generated for loading and unloading during the non-peak hours, i.e. 1000-1600. The induced traffic impact will be negligible.

e) RtC iii. The proposed loading and unloading is located on land where is out of TD's purview. Comments should be sought from the maintenance authorities/ land owners;

E) Noted. The loading/unloading bay is relocated as shown in the FI and consent from relevant lands and maintenance authorities will be sought.

f) RtC iv: Swept path of construction vehicle should be provided in addition to the TTA;

F) Noted and swept path is included in the FI.

g) The excavation is proposed on land where is out of TD&HyD's purview. Comments on the TTA should be sought from the maintenance authorities/ land owners, locals and stakeholders; and

G) Noted and comments on the TTA will be sought from all stakeholders.

 h) Sufficient manoeuvring spaces shall be provided within the subject site. No vehicle is allowed to queue back to or reverse onto/from the subject site at any time during the planning approval period.

H) Noted and as revealed by the swept path, sufficient manoeuvring spaces is allowed within the subject site. We confirmed that no vehicle will be allowed to queue back to or reverse onto/from the subject site at any time during the planning approval period.

Comments from FSYLE DPO, PlanD:

Q) Please confirm whether construction work will be completed in October 2023.

A) We confirmed the construction work will be completed in October 2023.

Relevant Extract of Town Planning Board Guidelines for Application for Development within Deep Bay Area <u>under Section 16 of the Town Planning Ordinance (TPB PG-No.12C)</u>

According to TPB PG-No. 12C, the Site falls within the Wetland Conservation Area (WCA). Extracts of land use concept and development guidelines are summarised as follows:

- (a) the planning intention of the WCA is to conserve the ecological value of the fish ponds which form an integral part of the wetland ecosystem in the Deep Bay Area. It comprises the existing and contiguous, active or abandoned fishponds in the Deep Bay Area, which should all be conserved;
- (b) new development within the WCA would not be allowed unless it is required to support the conservation of the ecological value of the area or the development is an essential infrastructural project with overriding public interest;
- (c) any development within WCA which requires planning permission from the Board should be supported by an ecological impact assessment (EcoIA) to demonstrate that the development would not result in a net loss in wetland function and negative disturbance impact. Moreover, wetland compensation is required for development involving pond filling and mitigation measures against disturbance would be necessary;
- (d) subject to submission of EcoIA, the type of activities which may be considered within the WCA must be related to conservation, environmental education or essential infrastructure projects needed for public purposes; and
- (e) essential infrastructure projects needed for public purpose, such as rail, emergency vehicular access and footpath, road, drainage and flood protection project and public utility project, for which no suitable alternative locations outside the WCA could be identified, would also be considered by the Board. However, any such proposed project should include a practical wetland compensation scheme for the consideration of the Board. It should not add to the pollution loading of the Deep Bay Area.

Similar s.16 Application within the same "CA" Zone on the Approved Nam Sang Wai Outline Zoning Plan No. S/YL-NSW/8 in the Past Five Years

Approved Application

No.	Application No.	Use(s)/Development(s)	Date of Consideration (RNTPC/TPB)	Approval Condition
1.	A/YL-NSW/297	Public Utility Installation (LV Cable Laying) and Filling and Excavation of Land	10.6.2022 Approved by RNTPC	1

Approval Condition

1. no construction work (including excavation and filling of land and laying of underground cables at the Site is allowed during (i) 5:00 p.m. to 9:00 a.m. from Monday to Saturday; and (ii) Sunday and public holidays

Government Departments' General Comments

1. Land Administration

Comments of the District Lands Officer/Yuen Long, Lands Department (DLO/YL, LandsD):

- (a) He has no adverse comment on the application.
- (b) The proposed works will affect the unleased and unallocated Government land in D.D. 123. Excavation permit in respect of the proposed works has been issued to CLP Power Hong Kong Limited.

2. <u>Traffic</u>

Comments of the Commissioner for Transport (C for T):

- (a) She has no adverse comment from traffic engineering point of view.
- (b) Advisory comments as detailed in Appendix V.

3. <u>Environment</u>

Comments of the Director of Environmental Protection (DEP):

- (a) He has no objection to the application from environmental planning perspective.
- (b) He notes that (i) the application seeks permission for the proposed public utility installation and associated excavation and filling of land on the application site (the Site) (about 27.6 m²) where is located within an area zoned "Conservation Area" on the approved Nam Sang Wai OZP No. S/YL-NSW/8 and currently used as local track; (ii) the voltage level of the proposed electricity cable is only 380V; and the applicant has committed to carry out suitable pollution control measures to minimize the potential environmental impacts of the proposed construction works, and the works area will be reinstated after the works and there will not be any discharge during the operation phase.
- (c) There was no substantiated environmental complaint concerning the Site received by the Environmental Protection Department in the past three years.
- (d) Advisory comments as detailed in Appendix V.

4. Landscape

Comments of the Chief Town Planner/Urban Design and Landscape, Planning Department (CTP/UD&L, PlanD):

- (a) She has no objection to the application from landscape planning perspective.
- (b) Based on aerial photo of 2022, the Site is situated in an area of rural coastal plains landscape character comprising rivers, ponds, vacant land, temporary structures and scattered tree groups. According to the site photos taken in February 2023, the Site is hard-paved footpath with no existing tree within the site boundary. Based on the application form, the applicant stated that no tree felling is involved. Given the nature and scale of the works, significant adverse impact on landscape character and resources arising from the proposed works is not anticipated.

5. <u>Others</u>

The following government departments have no comment/ no objection to the application:

- Chief Building Surveyor/New Territories West, Buildings Department (CBS/NTW, BD);
- Chief Highway Engineer/New Territories West, Highways Department (CHE/NTW, HyD);
- Chief Engineer/Railway Development 2-2, Railway Development Office, HyD (CE/RD 2-2, RDO, HyD);
- Chief Engineer/Mainland North, Drainage Services Department (CE/MN, DSD);
- Chief Engineer/Construction, Water Supplies Department (CE/C, WSD);
- Director of Fire Services (D of FS);
- Director of Electrical and Mechanical Services (DEMS);
- Project Manager (West), Civil Engineering and Development Department (PM(W), CEDD);
- Commissioner of Police (C of P); and
- District Officer (Yuen Long), Home Affairs Department (DO(YL), HAD).

Recommended Advisory Clauses

- (a) to note the comments of the Commissioner for Transport (C for T), Transport Department that:
 - the application site is connected to Nam Sang Wai Road via a section of a local access road which is not managed by Transport Department. The land status of the local access road should be clarified with the Lands Department by the applicant. Moreover, the management and maintenance responsibilities of the local access road should be clarified with the relevant lands and maintenance authorities accordingly;
 - the applicant should seek the relevant land owner(s) on the right of using the vehicular access; and
 - no vehicle is allowed to queue back to or reverse onto/from the application site at any time during the planning approval period.
- (b) to note the comments of the Chief Highway Engineer/New Territories West, Highways Department (CHE/NTW, HyD) that:
 - the proposed access arrangement of the application site should be commented by Transport Department;
 - the access road connecting the application site with Nam Sang Wai Road is not and will not be maintained by HyD. HyD should not be responsible for maintaining any access connecting the application site with Nam Sang Wai Road; and
 - adequate drainage measures should be provided to prevent surface water running from the application site to nearby public roads and drains.
- (c) to note the comments of Director of Environmental Protection (DEP) that the applicant should observe and implement the relevant mitigation measures in the Recommended Pollution Control Clauses for Construction Contracts as promulgated by this Department to minimise the potential environmental nuisance arising from the proposed works.

Appendix VI of RNTPC Paper N





A/YL-NSW/307 DD 123 Nam San Wai CLP Conservation 28/03/2023 02:37

From: To: File Ref:

tpbpd <tpbpd@pland.gov.hk>

Dear TPB Members,

301 withdrawn. Objections relevant and upheld.

Mary Mulvihill

From: To: tpbpd <tpbpd@pland.gov.hk> Date: Sunday, 24 July 2022 3:48 AM CST Subject: A/YL-NSW/301 DD 123 Nam San Wai CLP Conservation

A/YL-NSW/301 CLP

Government Land in D.D. 123, Nam Sang Wai

Site area : About 27.6sq.m

Zoning : "Conservation Area"

Applied development : Public Utility Installation and Associated Excavation and Filling of Land

Dear TPB Members,

CLP applications, particularly when they involve the excavation of government land, should declare what is the end use of the installation.

Strong objections in this instance as it is an area of wetlands where the ponds have been excavated indicating that the end use will be detrimental to the preservation of the wetlands and the planning intention of the conservation area.

This week we are experiencing record high temperatures, further erosion of coastal defenses and important ecological habitat cannot be tolerated.

Mary Mulvihill