## **ENVIRONMENTAL OUTCOMES AND GAINS THROUGH**

## THE STATUTORY ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

## 法定環境影響評估程序的環境成果與增益

## **Hung Shui Kiu New Development Area**

洪水橋新發展區

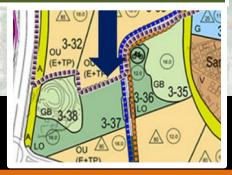
Huma Shui Kiu NDA

Transform the brownfield sites to alleviate existing industrial/residential interface issues

改造棕地作業的土地,以紓緩現有工 業與住宅為鄰的土地協調問題

San Sang San Tsuen Egretry will be retained in "Green Belt (GB)"; and adjacent "Local Open Space (LO)" is widened as a buffer and eco-corridor

保留新生新村鷺鳥林於「綠化地」 帶」,擴闊鄰近的「鄰舍休憩用地」 為緩衝地帶及生態走廊



Planning of road network holistically to reduce air and noise impacts from road traffic

整體規劃道路網絡,減少道路交通造成的空氣和噪音影響



West Rail Line 西鐵綫

Proposed Hung Shui Kiu Station 擬建洪水橋站



Existing West Rail Station 現有西鐵站

Green initiatives including Green Transit Corridor (GTC), reuse of treated effluent, green building design

綠色倡議包括環保運輸走廊、 經處理的污水再使用、綠色建 築設計



QUICK LINKS 快速連結

Project Description 工程項目詳情

Nature of the Designated Project 指定工程項目的性質

Key Environmental Issues 主要環境問題

Key Environmental Mitigation Measures 主要環境緩解措施 Environmental Outcomes and Gains 環境成果與增益 Reduce traffic noise through the extensive use of Low Noise Road Surfacing (LNRS) and Depressed Road 使用低噪音鋪路面物料及沉降道路減少道路交通噪音

## Hung Shui Kiu New Development Area (HSK NDA) 洪水橋新發展區

EIA Study Brief (No. ESB-291/2015) issued on 13 Jan 2016

EIA Report (No. AEIAR-203/2016) approved on 15 Dec 2016

環評研究概要 (編號: ESB-291/2015) 發出日期: 2016年1月13日

環境影響評估報告 (編號: AEIAR-203/2016) 批准日期: 2016 年 12 月 15 日

#### Project Description 工程項目詳情

The Project occupies an area of approximately 714 ha and is located in the northwestern part of the New Territories, midway between the Tuen Mun and Tin Shui Wai New Towns. The Project will provide a desirable place to live, work, learn and play for a total population of about 218,000. It will also offer development spaces for various commercial and special industrial uses and "Government, Institution and Community" ("G/IC") facilities.

工程項目面積約 714 公頃,位於新界西北部,屯門及天水圍新市鎮之間的位置。工程項目將成為一個能容納約 218,000 總人口的新市鎮,為香港提供一個適宜生活、工作、學習和遊樂的理想地方。工程項目亦會提供發展空間供各種商業、特殊工業和「政府、機構或社區」設施。

Nature of the Designated Project under EIA Ordinance "環境影響評估條例" 指定工程項目的性質
The Project includes the following Designated Projects (DPs) under the Environmental Impact Assessment
Ordinance (EIAO):

本工程項目包含以下《環境影響評估條例》(《環評條例》)的指定工程項目:

Schedule 3	Item 1 - Engineering feasibility study of urban development projects with a study area
附表 3	covering more than 20 ha or involving a total population of more than 100,000.
	項目1-研究範圍包括20公頃以上或涉及總人口超過100,000人的市區發展工程項
	目的工程技術可行性研究。

Schedule 2,	• Item A.1-	Primary distributor road and Distributor roads
Part I	項目 A.1-	主要幹路及地區幹路
附表 2 第 1 部	● Item A.2-	A railway and its associated stations
分	項目 A.2-	鐵路及其相聯車站
	• Item A.3-	A tramway and its associated stations
	項目 A.3-	電車軌道及其相聯車站
	● Item A.8-	A road or railway bridge more than 100 m in length between
		abutments
	項目 A.8-	橋台之間的長度超過 100 米的行車橋樑或鐵路橋樑
	● Item A.9-	A road fully enclosed by decking above and by structure on the sides
		for more than 100 m
	項目 A.9-	完全被其上的蓋層和兩邊的構築物所包圍,而被包圍的長度超過
		100米的道路
	● Item B.5-	A container back-up area, container storage, container handling or
		container packing area (including a container vehicle parking area)
		more than 5 ha in size and within 300 m of an existing or planned
		receiver
	項目 B.5-	貨櫃支援區、貨櫃貯存、貨櫃處理或貨櫃裝箱區(包括貨櫃車停泊
		處),而其面積超過5公頃且在一個現有的或計劃中的場所300米
		範圍內
	• Item F.1-	Sewage treatment works with an installed capacity of more than
		15,000 m³ per day
	項目 F.1-	裝置的污水處理能力超過每天 15,000 立方米的污水處理廠
	• Item F.3(b)-	A sewage pumping station – (b) with an installed capacity of more
		than 2,000 m <sup>3</sup> per day and a boundary of which is less than 150 m
		from an existing or planned sensitive receiver
	項目 F.3(b)-	污水泵水站,而其裝置的泵水能力超過每天 2,000 立方米,且其
		一條界線距離一個現有的或計劃中的敏感受體的最近界線少於

150 米

- Item F.4- An activity for the reuse of treated sewage effluent from a treatment plant
  - 項目 F.4- 對從處理廠流出並經處理的污水進行再使用的活動
- Item G.2- A refuse transfer station (RTS)
  - 項目 G.2- 垃圾轉運站
- All projects including new access roads, railways, sewers, sewage treatment facilities, earthworks, dredging works and other building works partly or wholly in an existing or gazetted proposed country park or special area, a conservation area, an existing or gazetted proposed marine park or marine reserve, a site of cultural heritage, and a site of special scientific interest
  - 項目 Q.1- 包括下述項目在內的全部工程項目:新通路、鐵路、下水道、污水處理設施、土木工事、挖泥工程及其他建築工程,而該等項目部分或全部位於現有的郊野公園或特別地區或經憲報刊登的建議中的郊野公園或特別地區、自然保育區、現有的海岸公園或海岸保護區或經憲報刊登的建議中的海岸公園或海岸保護區、文化遺產地點和具有特別科學價值的地點

## Key Environmental Issues 主要環境問題

Impacts 影響	Co	oncerns 關注
Ecological	-	0.1 ha of Conservation Area "CA" would be directly impacted. Two
生態		small areas of woodland located at Ngau Hom Shek (0.1 ha) and west of
		Fung Kong Tsuen (0.11 ha) would be lost
	-	Construction activities would came disturbance to the San Sang San
		Tsuen egretry
	-	Impacts on the two eastern ponds due to the proposed slip roads
		between Road P1 and Kong Sham Western Highway (KSWH), which
		could result in potential decreased use of these ponds by avifauna
		species
	-	0.1 公頃的「自然保育區」將會直接受到影響。位於鰲磡石(0.1 公
		頃)及鳳降村西面(0.11 公頃)這兩個小面積林地,將會因工程而
		失去
	-	施工活動將會對新生新村鷺鳥林產生滋擾
	-	擬建在 P1 路及港深西部公路之間的路將會干擾坐落於東面的兩個濕
		地池塘的旁邊,因此有機會減少鳥類使用這兩個池塘
Air Quality	-	Vehicular emissions from Kong Sham Western Highway, Castle Peak
空氣質素		Road and Yuen Long Highway, and industrial emissions within the
		assessment area of Tuen Mun Western Bypass
	-	Odour impact from existing chicken farm
	-	Odour impacts from upgraded San Wai STW, new HSK STW and planned
		RTS
	-	評估範圍内的道路 (包括港深西部公路、青山公路、元朗公路) 的車
		輛排放,及評估範圍內的工業排放
	-	現有養雞場的氣味影響
	-	新圍污水處理廠、新洪水橋污水處理厰和規劃的垃圾轉運站的氣味影
		響

Waste Management	-	Around 700 tonnes per day of municipal solid waste will be generated
廢物管理		during the operation phase of the Project
	-	工程項目營運期間每天將產生 700 噸都市固體廢物
Land Contamination	-	480 potentially contaminated sites were identified
土地污染	-	480 個潛在污染的場址
Noise	-	Road traffic noise from KSWH, Castle Peak Road, Yuen Long Highway and
噪音		Hung Tin Road
	-	Rail noise from Light Rail and West Rail
	-	港深西部公路、青山公路、元朗公路及洪天路的道路交通噪音
	-	輕鐵及西鐵的鐵路噪音
Water Quality	-	Sewage generated from the new developments
水質	-	Run-off or non-point source pollution from road surfaces and developed
		areas
	-	新發展項目產生的污水
	ı	徑流或路面及已發展地區的非點源污染
Landscape and Visual	-	Felling of approximately 13,721 trees
景觀及視覺	-	18 Landscape Resources (LRs) and six Landscape Character Areas (LCAs)
		are identified and some are inevitably affected
	-	約 13,721 棵樹木將被移除
	-	評估範圍內共錄得十八個景觀資源與六個景觀特色區,其中一些將不
		可避免地受到影響

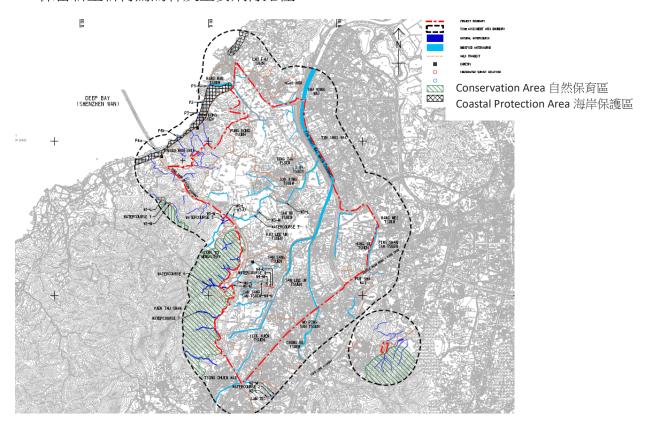
# Key Environmental Mitigation Measures 主要環境緩解措施

Impacts 影響	Measures 措施
Ecological	- San Sang San Tsuen Egretry to be retained in "Green Belt (GB)".
生態	The adjacent "Local Open Space (LO)" is widened as a buffer and
	eco-corridor
	- Additional buffer tree planting along the new Road P1 would
	provide screening for the two wetland ponds
	- No construction works should be carried out during the breeding
	season of ardeids
	- 保留新生新村鷺鳥林於「綠化地帶」,擴闊鄰近的「鄰舍休憩
	用地」為緩衝地帶及生態走廊
	- 沿著新路 P1 種植額外的樹木屏障,保護兩個濕地池塘
	- 建築工程將不會安排在鷺鳥繁殖季節期間
Air Quality	- Avoid locating any air sensitive uses or fresh air intakes near the
空氣質素	chicken farm
	- Provision of deodourising units for the 4 planned sewage pumping
	stations (SPS) and enclosing the wet wells and odourous facilities
	- 避免空氣敏感用途或新鮮空氣進氣口位處在養雞場附近
	- 為 4 個計劃的污水抽水站提供除臭設施及封閉濕井和惡臭設施
Waste Management	- Three new refuse collection points and a new Refuse Transfer
廢物管理	Station will be provided to handle the increased quantity of waste
	in the district
	- 將提供三個新建的垃圾收集站和一個新建的垃圾轉運站,以處
	理在區內增加的廢物

Land Contamination	- Conduct supplementary land contamination assessment and
土地污染	related decontamination works after the sites are handed over to
	the proponent
	- 場址交給項目倡議人後,進行補充污染評估及相關的淨化工作
Noise	- Planning of road network holistically to reduce air and noise
噪音	impacts from road traffic
	- Application of low noise road surfacing materials, noise barriers,
	building set-back and depressed road to reduce noise impacts
	- 整體規劃道路網絡,減少道路交通造成的空氣和噪音影響
	- 使用低噪音鋪路面物料,隔音屏障,後移住宅樓宇和地下道路
	以減少噪音影響
Water Quality	- All sewage generated from the new developments will be
水質	discharged to the proposed new Hung Shui Kiu Sewage Treatment
	Works (HSK STW)
	- Stormwater control measures including adequate stormwater
	drainage system with suitable pollutant removal devices
	- 所有由新發展項目產生的污水將會引到擬建的新洪水橋污水處
	理廠處理
	- 使用雨水控制措施,包括足夠的排洪能力及污染物去除裝置
Landscape and Visual	- Tree compensation will be provided at a 1:1 ratio to compensate
景觀及視覺	the felling of approximately 13,721 trees
	- 樹木補償數目達一比一的比例,以補償約 13,721 棵被移除的樹
	木

#### Environmental Outcomes and Gains 環境成果與增益

- 1. Preservation of Ecological Habitats 保存生態棲息地
- Retain "Coastal Protection Area", most of "Green Belt" (about 54 ha) and "Conservation Area"
- Retain San Sang San Tsuen egretry and flight lines
- 保留「海岸保護區」、大部分「綠化地帶」(約54公頃)及「自然保育區」
- 保留新生新村鷺鳥林及主要飛行路徑



# 2. Relocate Brownfield Operation and Avoid Industrial/Residential (I/R) Interface Problems 改造棕地作業,避免工業與住宅為鄰帶來的問題

- The development of the HSK NDA will minimize the I/R interface issues caused by the 200 ha existing brownfield operations
- Approximately 24 ha of land at the northern fringe of the Project area is reserved for accommodating the brownfield operations
- 洪水橋新發展區將減少現有 200 公頃棕地營運所造成的工業與住宅為鄰的問題
- 項目範圍北部約24公頃土地保留給棕地作業

- 3. Promote Green Mobility 推動綠色運輸
- Green Transit Corridor (GTC) for green transport to minimise vehicle emissions
- Comprehensive pedestrian walkway and cycle track
- Better planning of road network will minimize air pollutants generated from road traffic as well as reducing the existing road traffic noise
- 締造綠色運輸的環保運輸走廊以減低車輛排放
- 完善的行人道及單車徑網絡
- 規劃更好的道路網絡,將有助於減少道路交通產生的空氣污染物和減低現有的道路交通噪音





Conceptual diagram of GTC and environmentally-friendly modes of transport

環保運輸走廊概念圖和環保交通工具

- 4. Minimizing Water Quality Impact 減低對水質的影響
- New Sewerage Network and Sewage Treatment Works
- No net increase in pollution load to Deep Bay
- Reuse of treated effluent as reclaimed water to minimize water quality impact
- 新污水收集網絡及污水處理廠
- 不會增加對后海灣的污染物負荷
- 再用經處理的污水作為再造水,以減低對水質的影響

- 5. Preservation of Built Heritage 保存文物建築
- All the 2 declared monuments and 7 graded historic buildings retained
- Propose heritage trail to promote cultural heritage
- 保留 2 個法定古蹟和 7 個已評級的歷史建築
- 擬建文物徑以推廣文化遺產

Two Declared Monument within the Project Area 項目範圍內的兩個法定古蹟





Tang Ancestral Hall, Ha Tsuen Shi 鄧氏宗祠 厦村市

Yeung Hau Kung 楊侯宮

## Links and References 連結與參考

Executive Summary 行政摘要

Environmental Impact Assessment Report 環境影響評估報告

Advisory Council on the Environment - Environmental Impact Assessment Subcommittee 環境諮詢委員會-

環境影響評估小組會議文件 (ACE-EIA Paper 07/2016)

HSK NDA Planning and Engineering Study 洪水橋新發展區規劃及工程研究