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

Housing Sites in Yuen Long South 元朗南房屋用地



Nature of the Designated Project 指定工程項目的

Key Environmental Mitigation Measures 主要環境緩解措施 Environmental Outcomes and Gains 環境成果與增益

Key Environmental Issues 主要環境問題

Housing Sites in Yuen Long South 元朗南房屋用地

Environmental Impact Assessment Study Brief (No. ESB-246/2012) issued on 18 June 2012

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Project Description 工程項目詳情

The Yuen Long South (YLS) Potential Development Area (PDA) is located to the south of Yuen Long New Town, and in the proximity of Tin Shui Wai New Town and the planned Hung Shui Kiu New Development Area. The YLS PDA has an area of 223.5 hectares (ha), and would provide about 28,500 new flats through development, accommodating a total population of about 88,000. The project also aims to improve the living environment of YLS and adjacent areas, providing opportunities to enhance existing drainage facilities, new facilities for promotion of blue-green infrastructure, and to review and preserve existing natural and landscape features. The scope of the project includes new slip roads connecting the PDA to Pok Oi Interchange and a new public transport interchange next to Yoho Midtown, a new Tong Yan San Tsuen (TYST) Reclaimed Water Service Reservoir and its associated works, partial decking of Yuen Long Nullah along Kung Um Road and Kiu Hing Road, modification works on the trunk roads connecting Tin Shui Wai West Interchange and on the primary distributor roads connecting TYST Interchange, other new local roads connecting the PDA, rising main and a new sewer from YLS Sewage Treatment Work to the existing inlet chamber of the Northwest New Territories effluent tunnel at San Wai.

元朗南具發展潛力區位於元朗新市鎮南面,毗鄰天水圍新市鎮,以及已規劃的洪水橋新發展區。元朗南具發展潛力區佔地約223.5公頃,預期發展後可提供約28,500個住宅單位及容納約88,000名人口。項目目標為可改善現時元朗南及鄰近地區的居住環境,同時亦提供了改善現有排水配套設施的機遇,如活化明渠、提供促進藍綠建設的新設

施、檢討和保育現有的大自然及景觀特色。項目範圍包括連接具發展潛力區和博愛交匯處及新時代中城旁的新建公共運輸交匯處的新建支路; 新時代中城附近新建公共運輸交匯處;新建的唐人新村再造水配水庫及其配套工程;沿公庵路及僑興路的元朗明渠部分加建局部明渠上蓋; 連接天水圍西交匯處改善工程及連接唐人新村交匯處的幹道和主要幹道改善工程;其他連接具發展潛力區的區內道路;新建的供水及排污上行水管;以及由擬建的元朗南污水處理廠接駁新污水管至位於新圍的新界西北污水輸送管道的現有進水間。

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 EIA 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:	
附表 3	Engineering feasibility study of urban development projects with a study area 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 公民程項目的工程技術可	頁以上或涉及總人口超過 100 000 人的市區發展工 行性研究。
Schedule 2,	Item A.1	Trunk roads, new primary distributor roads and
Part I		new distributor roads
附表 2	項目 A.1	幹道、主要幹路、和新地區幹路
第Ⅰ部分		

	Item A.3	A tramway and its associated stations
	項目 A.3	鐵路及其相聯車站
	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 F.2	Sewage treatment works with an installed
		capacity of more than 5 000 m ³ per day and a
		boundary of which is less than 200 m from the
		nearest boundary of an existing or planned
		receivers
	項目 F.2	污水處理廠,而其裝置的污水處理能力超過每天
		5000立方米;及其一條界線距離一個現有的或計
		劃中的受體的最近界線少於 200 米
	Item F.3(b)	A sewage pumping station with an installed
		capacity of more than 2 000 m ³ per day and a
		boundary of which is less than 150 m from an
		existing or planned receivers
	項目 F.3(b)	污水泵水站,而其裝置的泵水能力超過每天2000
		立方米,且其一條界線距離一個現有的或計劃中
		的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 I.1 (b) (vii)	A drainage channel or river training and
	diversion works which discharges or discharge
	into an area which is less than 300 m from the
	nearest boundary of an existing conservation
	area
項目 I.1 (b) (vii)	排水道或河流治理與導流工程,而該工程排水入
	一個地區,該地區距離一個現有的或計劃中的自
	然保育區的最近界線少於300米

Key Environmental Issues 主要環境問題

Impacts 影響	Concerns 關注
Air Quality 空氣質素	 Odour impacts from the YLS Sewage Treatment Works (STW) and existing livestock farms 擬建元朗南污水處理廠及現有禽畜養殖場會帶來氣味影響
Noise 噪音	 Road traffic noise arising from Yuen Long Highway (YLH), Long Tin Road, Kung Um Road, Tong Yan San Tsuen Interchange, Tin Shui Wai West Interchange, slip road connecting to Shap Pat Heung Road, Kung Um Road and TYST Road 現有的元朗公路、朗天路、公庵路、唐人新村交匯處及天水圍西交匯處,和連接十八鄉路的連接支路會造成道路交通噪音
Ecology 生態	 Fragmentation of agricultural land near Shan Ha Tsuen Loss of hillside secondary woodland (~2.42 ha in total) Cumulative loss of watercourses (~465 m in total) 山下村農地被分裂 山坡次生林地損失(約2.42公頃) 損失河道(總長約465米)
Landscape and Visual	34 numbers of Important Trees are in direct conflict with the project development

景觀及視覺	- Landscape Character Areas (LCAs) in YLS area will be
	changed by the Project
	- 約34棵重要樹木(包括被定為潛在可註冊為古樹名木的樹木,和
	稀有或受保護的樹木)將會受到本項目的直接影響
	- 項目會改變現有的景觀特色區
Land	- 697 potentially contaminated sites were identified
Contamination	- 評估共錄得 697 個具潛在土地污染的場址
土地污染	

Key Environmental Mitigation Measures 主要環境緩解措施

Impacts 影響	Measures 措施
Air Quality 空氣質素	 5 existing livestock farms within the Project site will be removed, reducing the total odour emissions in the area and improving the odour conditions in future STW would be implemented with odour removal facilities 位於項目範圍內的 5 個現有禽畜飼養場將會被撤走,減少該區域的總氣味排放,從而改善現時的氣味狀況 擬建的污水處理廠將會配有除氣味設施
Noise 噪音	 The following will be implemented to reduce traffic noise impacts: Absorptive vertical barriers and cantilevered noise barriers along some sections of Project roads and Kung Um Road Low noise road surfacing on some road sections Semi-enclosures/ full enclosures at primary distributor roads at TYST Interchange and Kung Um Road Nullah features / barriers along some sections of Yuen Long Nullah (Kiu Hing Road) Provision of acoustic windows for some planned public and

private housing Alternative building orientation for some planned schools are proposed to alleviate adverse traffic noise impact on the affected noise sensitive receivers Multi-storey buildings would serve as a physical barrier to further reduce industrial noise and road traffic noise 為減少交通噪音影響,將採取以下措施: 於部分項目道路及公庫路興建吸音垂直屏障及懸臂式隔音屏障 於部分道路採用低噪音路面 在唐人新村交匯處及公庵路的主要幹路上興建半密封式或全密封 式隔音罩 沿著元朗明渠(僑興路)旁興建屏障或其他隔音措施 為規劃的部分公私營住宅樓宇提供減音窗 為規劃的部分學校建議可供替代的平面設計,以緩解道路交通噪 音對受影響的敏感受體的影響 多層樓宇可發揮屏障作用,阻隔工業噪音及交通噪音 Water Quality Most of the treated sewage effluent (TSE) generated by the & Sewage Project would be reused as reclaimed water for non-potable Treatment water supply A reedbed will be provided to further polish the TSE before it 水質及污水處 discharges to Yuen Long Nullah and Deep Bay 理 大部分項目產生經處理污水將作為再生水用於非飲用水供應 蘆葦床亦可將經處理的污水於排放至元朗明渠及后海灣前作進一 步淨化 **Ecology** A compensatory woodland planting site (~12 ha) has been proposed to provide a compensation area with ratio of at least 生態 1:1 to adequately mitigate the impacts from woodland loss To mitigate for the cumulative loss of watercourses, it is

	proposed that a new watercourse be created along the hillside of the western boundary of PDA, i.e. the Hillside River Corridor - 補價植林面積約 12 公頃,可提供至少 1:1 的補價種植面積比率,以足夠地緩解失去林地的影響 - 一條全新的河道將建設於具發展潛力區西邊界的山坡旁(建議發展大綱圖內的山邊河道),以緩解累積損失的河道
Landscape and	- Compensatory measures are applied, in combination with
Visual	landscape enhancement proposed in the Recommended
景觀及視覺	Outline Development Plan such as open space and green
京飯以汽見	network, revitalisation of nullahs and provision of reedbed/
	retention pond
	- 透過制定建議發展大綱圖及實施補償措施,例如建立休憩用地、
	綠色網絡、活化明渠及提供蘆葦床/蓄洪池提升景觀質素
Land	- Implementing the recommended remediation works for
Contamination	identified contaminated site(s) within the PDA minimising the
土地污染	health risk to the future occupants, also providing the
	opportunity to reuse the contaminated materials into useful
	materials for backfilling
	- 建議的整治工程不僅能減低未來居民因暴露於受污染的土壤和/
	或地下水而引起的健康風險,也有機會將受污染的物料循環再造
	成有用的回填物料

Environmental Outcomes and Gains 環境成果與增益

- Relocation of Brownfield Operation and Minimization of Industrial/Residential (I/R)
 Interface Problems 重新安置棕地運營和減少工業/住宅為鄰的問題
- Approximately 100 ha of originally agricultural land within the PDA had been disturbed by brownfield operations
- Brownfield operations would be converted to open space, residential, government, institution or community facilities, etc.
- Proposed multi-storey buildings in the Employment Belt near YLH would accommodate the brownfield operations
- Alleviate existing I/R interface problems associated with the existing brownfield operations
- 現時具發展潛力區內約有 100 公頃區內原有的農地被用作露天貯物場及鄉村式工場的棕地
- 棕地會被改變為休憩用地、住宅及政府、機構或社區等其他用途
- 建造多層樓字於近元朗公路的就業帶內,以容納棕地作業
- 改善現有棕地作業帶來的工業/住宅為鄰的問題







Overview of Existing Open Storage Yards, Warehouses,
Workshops and Industrial Uses

現有露天貯物場、倉庫、車間和工業用途

2. Revitalization of Yuen Long Nullah

- Rehabilitation works without decking are proposed for about 0.7km of the Yuen Long Nullah at its southern section which would be a place for leisure for both existing and future residents
- 元朗明渠南段約 0.7 公里,擬進行無蓋板修復工程,為未來元朗南居民及現時村民 提供消閒和休憩用地



Existing Yuen Long Nullah 現有元朗明渠



<u>Conceptual Diagram of the Revitalised Yuen Long Nullah (Southern Section) 經修復的元朗明渠(南段)</u>

3. Enhancement of Landscape and Visual Impacts

- Developments at YLS would integrate with its surroundings by disposing high density developments in the north and transitioning to medium and low density developments to the south
- Comprehensive open space and green network is planned
- 一元朗南的發展會與周邊環境融合,由北面的高密度市區環境和諧地轉接至南面的中 低密度發展
- 計劃創造完善的休憩用地及綠色網絡



Provide Open space and Amenity Areas

4. Removal of Existing Odour Sources

- Only one chicken farm is retained at the southern fringe in the YLS development
- Areas in the vicinity are proposed to be rezoned as "Government" for government depots, serving as part of a buffer between the retained chicken farm and sensitive land uses
- 項目將只保留一個南面邊陲的禽畜飼養場
- 附近地段將會重新劃定為「政府」用地,作政府維修中心及作為敏感土地用途與禽畜飼養場之間的緩衝區

Existing Livestock Farms in the PDA

5. Adoption of Green Initiatives

- Green mobility through comprehensive and convenient cycle track and pedestrian walkway networks
- Promotion of using environmental-friendly vehicles
- Reuse of treated sewage effluent as reclaimed water for toilet flushing
- Collection of rainwater for non-potable purposes for buildings
- 為了推廣綠色運輸,具發展潛力區提供了完善的行人徑及單車徑網絡
- 推廣使用環保車輛

- 重用經處理污水作再造水作沖廁用途
- 收集雨水供大廈作非飲用用途



Environmentally-friendly Modes of Transport



Photomontage of the Hillside River Corridor and the Retention Lake to Store Peak

Runoff

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-EIA Paper 6/2017 環境諮詢委員會文件 6/2017
- Planning and Engineering Study for Housing Sites in Yuen Long South Investigation
 元朗南房屋用地規劃及工程研究 勘查研究