

**For discussion
on 26 February 2019**

Legislative Council Panel on Development

PWP Item No. 4171CD – Revitalization of Tsui Ping River

PURPOSE

This paper briefs Members on the proposal to upgrade PWP Item No. **4171CD – Revitalization of Tsui Ping River** to Category A for taking forward the construction works for the revitalization of the existing King Yip Street Nullah into Tsui Ping River.

PROJECT SCOPE

2. The proposed scope of works under PWP Item No. **4171CD** includes –
- (a) revitalization of the existing King Yip Street Nullah, comprising resurfacing of the channel, installation of smart water gate, provision of water-friendly features, modification of underground stormwater storage tanks at the upstream near Anderson Road and On Sau Road, and in-stream plantation, etc.;
 - (b) dredging at the existing channel and strengthening of existing nullah walls;
 - (c) construction of riverside / cross-river walkways and landscaped decks;
 - (d) modification of the existing footbridge across Lei Yue Mun Road; and
 - (e) carrying out of ancillary works.

3. A plan and artist's impressions of the proposed works are at **Enclosures 1 and 2** respectively.

4. Subject to funding approval of the Finance Committee, we plan to commence works in the fourth quarter of 2019 for completion in phases from the fourth quarter of 2022 to the fourth quarter of 2023.

JUSTIFICATION

5. The existing King Yip Street Nullah in Kwun Tong was built over 50 years ago. With a length of approximately one kilometre, it runs along Tsui Ping Road and King Yip Street from Kai Lim Road to the harbour. It abuts the Kwun Tong Business Area and a residential area, having a prime geographical location. Given its riverine characteristics, the nullah possesses excellent conditions to become a precious riverside public space in the urban area.

6. To complement the Energizing Kowloon East Initiative in transforming Kowloon East into another Core Business District, we propose to revitalize the King Yip Street Nullah into a green and vibrant Tsui Ping River with environmental, ecological and landscaping upgrading, while enhancing the flood conveyance capability of the nullah at the same time.

7. We will revitalize the nullah through enriching its waterscape and ambience. To manifest the characteristics of Tsui Ping River as a water body, a smart water gate that will adjust itself with the tides will be installed at the downstream near Hung To Road to regulate the water level. This will create a waterfall effect when the river water plunges down from the water storage area. We will also provide along the riverside water-friendly features such as engineered wetland, landscaped decks and a floating pontoon.

8. We will dredge the existing channel, strengthen the existing nullah walls and relocate an existing footbridge ramp above the nullah to improve flood conveyance capability.

9. In line with the concept of "Walkable Kowloon East", riverside pedestrian walkways and cross-river walkways and landscaped decks

spanning across the river will be constructed to enhance connectivity between the river and the surrounding areas (including Tsui Ping River Garden). Tsui Ping River will become a green river corridor, connecting various leisure and recreational facilities in Kwun Tong. We adopt a design concept that integrates with adjacent leisure facilities, to create a public leisure space centred on the river, for instance, by providing seating and viewing platforms on cross-river walkways.

10. The project accords with the initiative of revitalising suitable existing nullahs promulgated in the 2017 Policy Agenda, aiming at enhancing their ecological value, providing a greener environment, promoting water friendliness, and improving the community environment for building a liveable city.

FINANCIAL IMPLICATIONS

11. We estimate the cost of the proposed works to be \$1,762.7 million in money-of-the-day (MOD) prices, broken down as follows:

	\$ million (in MOD prices)
(a) Revitalization of nullah	432.3
(b) Dredging of channel and strengthening of nullah walls	457.1
(c) Construction of riverside / cross-river walkways and landscaped decks	358.1
(d) Modification of footbridge	45.0
(e) Ancillary works ¹	109.7
(f) Environmental mitigation measures	17.3
(g) Consultant's fees ²	12.7
(h) Remuneration of resident site staff	170.3
(i) Contingencies	160.2
Total	1,762.7

¹ Comprising provision of public open spaces, streetscape enhancement works, landscaping works, energy conservation and green features and associated roadworks, etc.

² Comprising fees for contract administration and management of resident site staff.

PUBLIC CONSULTATION

12. We conducted two stages of public engagement from January to March 2017 and from May to July 2018 respectively. The public generally supported the proposed works.

13. We consulted the District Facilities Management Committee of the Kwun Tong District Council on the proposed works on 12 January 2017 and 17 May 2018. The Committee supported the proposed works.

14. We also briefed the Task Force on the Kai Tak Harbourfront Development of the Harbourfront Commission on the proposed works on 13 January 2017 and 23 May 2018. The Task Force supported the proposed works.

15. We gazetted the proposed works under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) on 9 November 2018 and received no objection. The authorization notice was gazetted on 15 February 2019.

ENVIRONMENTAL IMPLICATIONS

16. The project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). We completed a Preliminary Environmental Review for the proposed works, which concluded that the proposed works would not cause any long-term adverse environmental impacts. The Director of Environmental Protection agreed to the above conclusion. We have included in the project estimate of the proposed works the cost for implementation of suitable environmental mitigation measures to control the short-term environmental impacts of the proposed works.

17. During construction, we will minimize environmental nuisances to levels within established standards and guidelines through implementation of mitigation measures in the contract. These measures include the use of temporary noise barriers, silencers, mufflers and quiet plant to reduce noise, frequent cleaning and watering of the construction site, and provision of

wheel-washing facilities to reduce dust generation, and the use of temporary drains to collect site runoff for on-site treatment. We will also carry out regular site inspections to ensure that these mitigation measures and good site practices will be properly implemented on site.

18. At the planning and design stages, we have considered measures to reduce generation of construction waste where possible including using trenchless construction method to avoid excavation works as far as practicable. In addition, we will require the contractor to reuse inert construction waste (e.g. excavated materials) on site or in other suitable construction sites as far as possible, in order to minimize disposal of inert construction waste at public fill reception facilities (PFRF)³. We will encourage the contractor to maximize the use of recycled or recyclable inert construction waste, and the use of non-timber formwork to further reduce generation of construction waste.

19. At the construction stage, we will require the contractor to submit for approval a plan setting out the waste management measures, which will include appropriate mitigation measures to avoid and reduce generating inert construction waste, and to reuse and recycle the waste. We will ensure that the day-to-day operations on site comply with the approved plan. We will also require the contractor to separate the inert portion from non-inert construction waste on site for disposal at appropriate facilities. We will control the disposal of inert and non-inert construction waste at PFRF and landfills respectively through a trip-ticket system.

20. We estimate that the proposed works will generate in total about 95 500 tonnes of construction waste. Of these, we will reuse about 4 000 tonnes (4%) of inert construction waste on site and deliver about 90 000 tonnes (94%) of inert construction waste to PFRF for subsequent reuse. We will dispose of the remaining 1 500 tonnes (2%) of non-inert construction waste at landfills. The total cost for disposal of construction waste at PFRF and landfill sites is estimated to be \$6.7 million (based on a unit charge rate of \$71 per tonne for disposal at PFRF and \$200 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N).

³ PFRF are specified in Schedule 4 of Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N). Disposal of inert construction waste in PFRF requires a licence issued by the Director of Civil Engineering and Development.

HERITAGE IMPLICATIONS

21. The proposed works will not affect any heritage site, i.e. all declared monuments, proposed monuments, graded historic sites or buildings, sites of archaeological interest and government historic sites identified by the Antiquities and Monuments Office.

LAND ACQUISITION

22. The proposed works will only involve government land and do not require any land acquisition.

TRAFFIC IMPLICATIONS

23. We have conducted a traffic impact assessment (TIA) for the proposed works and the TIA indicates that the works will not cause significant traffic impact to the surrounding road network. Temporary traffic arrangement (TTA) will be implemented to maintain the traffic flow during construction and such TTA will be removed when there is no construction activity.

BACKGROUND

24. In September 2014, we upgraded PWP Item No. **4171CD** to Category B.

25. In July 2015, we engaged consultants to carry out site investigation, surveys, impact assessments and preliminary design for the project. The cost was about \$15.4 million in MOD prices. In December 2017, we engaged consultants to carry out detailed design and further site investigation for the project. The cost was about \$14.6 million in MOD prices. They were funded under block allocation **Subhead 4100DX** "Drainage works, studies and investigations for items in Category D of the Public Works Programme". We have substantially completed the detailed design of the proposed works.

26. Of the 329 trees within the boundary of the proposed works, there is no registered Old and Valuable Tree. In implementing the proposed works, 243 trees will be preserved and 86 trees will be removed, including 69 trees to be felled and 17 trees to be transplanted. No important trees⁴ will be affected. We will incorporate planting proposal as part of the proposed works, including planting of about 69 trees.

Overview of River Revitalization in Hong Kong

27. In the early years, drainage channels in Hong Kong were mainly concrete-lined primarily for effective conveyance and discharge of surface runoff to prevent flooding. However, concrete channels are not desirable from the aesthetic and ecological points of view. With the rising aspiration of the community for water-friendly activities, we have gradually introduced the concept of revitalization of water bodies in a number of completed drainage channel works including Yuen Long Bypass Floodway, Ho Chung River, Upper Lam Tsuen River and Kai Tak River in recent years. These projects not only beautified the environment, but also enhanced the diversity of river ecology successfully. In view of the benefits brought about by these projects, we have been actively planning a number of drainage improvement projects allowing water-friendly activities, including the Revitalization of Tsui Ping River project.

28. We have also introduced the concept of revitalization of water bodies in the planning of new development areas. For example, the first urban artificial flood attenuation lake, which will prevent flooding and also open for public enjoyment, will be provided in the Development of Anderson Road Quarry Site project. In addition, we propose to restore the channelized section of Tung Chung River to its natural appearance and integrate it as part of the planned river park in the Tung Chung New Town Extension project.

⁴ "Important trees" refers to trees in the Register of Old and Valuable Trees, or any other trees that meet one or more of the following criteria-

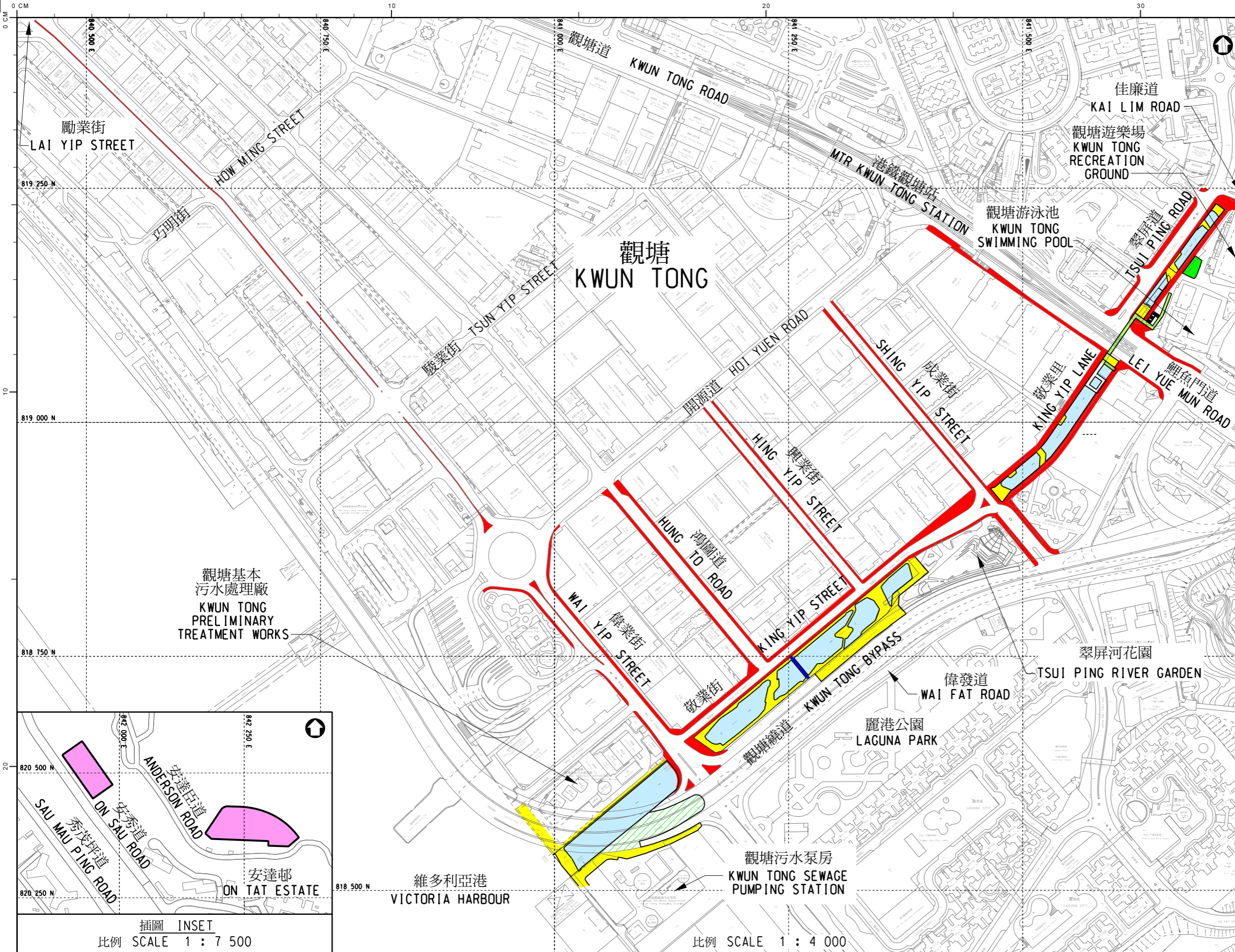
- (a) trees of 100 years old or above;
- (b) trees of cultural, historical or memorable significance e.g. Fung Shui trees, trees as landmark of monastery or heritage monument, and trees in memory of important persons or events;
- (c) trees of precious or rare species;
- (d) trees of outstanding form (taking account of overall tree sizes, shape and any special features) e.g. trees with curtain like aerial roots, trees growing in unusual habitat; or
- (e) trees with trunk diameter equal or exceeding 1.0 m (measured at 1.3 m above ground level), or with height or canopy spread equal or exceeding 25 m.

29. To further promote the revitalization of water bodies, we are comprehensively reviewing and evaluating the revitalization potential of major nullahs in Hong Kong with a view to identifying suitable nullahs for revitalization. In this regard, the Drainage Services Department is conducting a consultancy study on revitalization of water bodies and will propose various feasible schemes to enhance ecological and biodiversity values, greening and beautification of rivers. We strive to promote more water-friendly activities in order to allow the public to enjoy the drainage facilities, experience the multiple values of water bodies, treasure water bodies, and create a better living environment together.

WAY FORWARD

30. We plan to seek support from the Public Works Subcommittee for upgrading PWP Item No. **4171CD** in the second quarter of 2019 before seeking funding approval from the Finance Committee.

**Development Bureau
Drainage Services Department
February 2019**



- 圖例 :
LEGEND :**
- 擬議活化的現有明渠
EXISTING NULLAH PROPOSED TO BE REVITALIZED
 - 擬建智能水閘
PROPOSED SMART WATER GATE
 - 擬建河旁/跨河行人道、園境平台及人工浮島
PROPOSED RIVERSIDE / CROSS-RIVER WALKWAYS, LANDSCAPED DECKS AND FLOATING PONTOON
 - 擬議改建現有行人天橋
EXISTING FOOTBRIDGE PROPOSED TO BE MODIFIED
 - 擬建人工濕地
PROPOSED ENGINEERED WETLAND
 - 擬建休憩用地
PROPOSED OPEN SPACE
 - 擬議街景美化工程
PROPOSED STREETScape ENHANCEMENT WORKS
 - 擬議改建地下蓄洪池
UNDERGROUND STORMWATER STORAGE TANKS PROPOSED TO BE MODIFIED

觀塘基本
污水處理廠
KWUN TONG
PRELIMINARY
TREATMENT WORKS

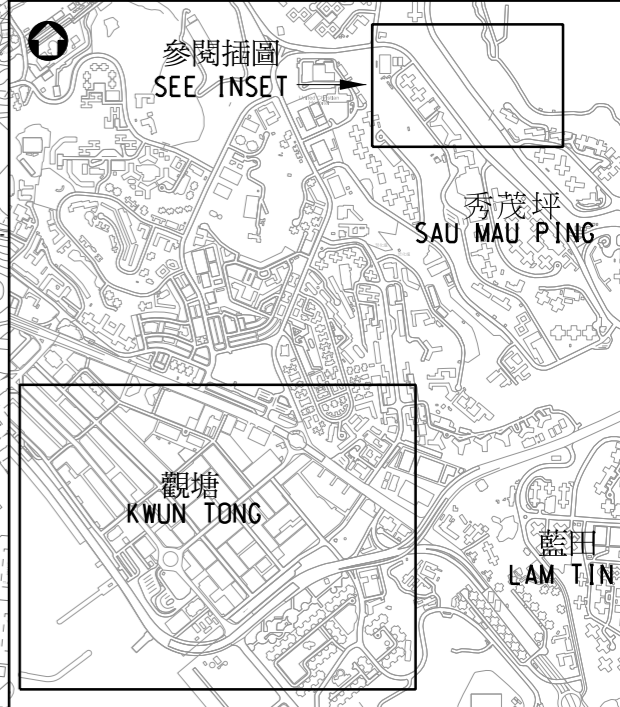
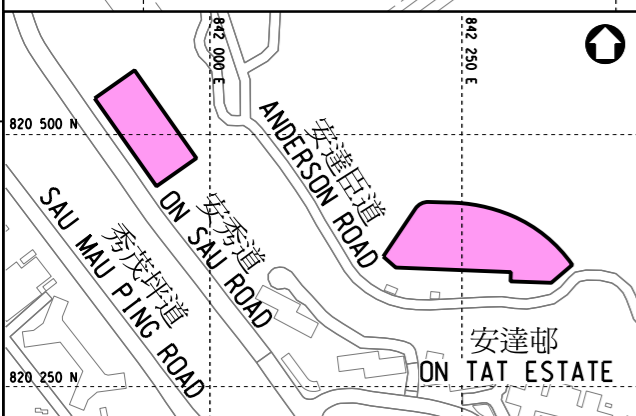


插圖 INSET
比例 SCALE 1 : 7 500

比例 SCALE 1 : 4 000

位置圖 LOCATION PLAN
比例 SCALE 1 : 25 000

圖則名稱 drawing title	工務計劃項目4171CD號 - 活化翠屏河平面圖 PWP ITEM NO. 4171CD - REVITALIZATION OF TSUI PING RIVER LAYOUT PLAN		
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繪畫 drawn	SIGNED W. L. LEUNG	日期 date	30 JAN 2019
核對 checked	SIGNED Ir H. M. CHAN	日期 date	30 JAN 2019
批核 approved	SIGNED Ir H. K. CHAN	日期 date	30 JAN 2019
部門 office	排水工程處 DRAINAGE PROJECTS DIVISION		

修改項目 description	簡簽 initial
圖則編號 drawing no.	比例 scale
DDP/171CD/0001	AS SHOWN
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圖則名稱 drawing title

工務計劃項目4171CD 號 - 活化翠屏河
從佳廉道望向翠屏河的構想圖

PWP ITEM NO. 4171CD - REVITALIZATION OF TSUI PING RIVER
ARTIST'S IMPRESSION OF TSUI PING RIVER VIEWING FROM KAI LIM ROAD

繪畫 drawn	SIGNED W. T. CHEUNG	日期 date	30 JAN 2019
核對 checked	SIGNED Ir H. M. CHAN	日期 date	30 JAN 2019
批核 approved	SIGNED Ir H. K. CHAN	日期 date	30 JAN 2019
部門 office	排水工程處 DRAINAGE PROJECTS DIVISION		

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圖則名稱 drawing title
 工務計劃項目4171CD 號 - 活化翠屏河
 從翠屏河下游望向擬建智能水閘的構想圖
 PWP ITEM NO. 4171CD - REVITALIZATION OF TSUI PING RIVER
 ARTIST'S IMPRESSION OF PROPOSED SMART WATER GATE VIEWING FROM TSUI PING RIVER DOWNSTREAM

繪畫 drawn	SIGNED W. T. CHEUNG	日期 date	30 JAN 2019
核對 checked	SIGNED Ir H. M. CHAN	日期 date	30 JAN 2019
批核 approved	SIGNED Ir H. K. CHAN	日期 date	30 JAN 2019
部門 office	排水工程處 DRAINAGE PROJECTS DIVISION		

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麗港城
LAGUNA CITY

觀塘污水泵房
KWUN TONG SEWAGE
PUMPING STATION

圖則名稱 drawing title
 工務計劃項目4171CD 號 - 活化翠屏河
 從維多利亞港望向翠屏河的構想圖
 PWP ITEM NO. 4171CD - REVITALIZATION OF TSUI PING RIVER
 ARTIST'S IMPRESSION OF TSUI PING RIVER VIEWING FROM VICTORIA HARBOUR

繪畫 drawn	SIGNED W. T. CHEUNG	日期 date	30 JAN 2019
核對 checked	SIGNED Ir H. M. CHAN	日期 date	30 JAN 2019
批核 approved	SIGNED Ir H. K. CHAN	日期 date	30 JAN 2019
部門 office	排水工程處 DRAINAGE PROJECTS DIVISION		

圖則編號 drawing no.	比例 scale
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