

## ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

### HEAD 705 – CIVIL ENGINEERING

#### Civil Engineering – Multi-purpose

#### 43CG – Greening master plans for the New Territories

### HEAD 707 – NEW TOWNS AND URBAN AREA DEVELOPMENT

#### Recreation, Culture and Amenities – Sport facilities

#### 265RS – Cycle tracks connecting North West New Territories with North East New Territories – Sam Mun Tsai extension

Members are invited to recommend to Finance Committee –

- (a) the upgrading of part of **43CG**, entitled “Greening master plans for the Southwest and Northeast New Territories – priority greening works”, to Category A at an estimated cost of \$367.6 million in money-of-the-day prices;
- (b) the upgrading of **265RS** to Category A at an estimated cost of \$66.9 million in money-of-the-day prices; and
- (c) the retention of the remainder of **43CG** in Category B.

### PROBLEM

We need to carry out the following works –

- (a) **43CG** for implementation of priority greening works recommended in the Greening Master Plans for Southwest and Northeast New Territories to improve the living environment; and

(b).....

- (b) **265RS** for construction of a section of cycle track alongside Sam Mun Tsai Road in Tai Po for public enjoyment.

**PROPOSAL**

2. The Director of Civil Engineering and Development proposes to upgrade the following projects to Category A–

- (a) part of **43CG** at an estimated cost of \$367.6 million in money-of-the-day (MOD) prices for the implementation of priority greening works recommended in the Greening Master Plans for Southwest and Northeast New Territories; and
- (b) **265RS** at an estimated cost of \$66.9 million in MOD prices for the construction of a section of cycle track alongside Sam Mun Tsai Road.

The Secretary for Development supports the above proposals.

**PROJECT SCOPE AND NATURE**

— 3. Details of the above two projects are provided at Enclosures 1 and 2 respectively.

-----

Development Bureau  
June 2020

**43CG – Greening master plans for the New Territories**

**PROJECT SCOPE AND NATURE**

We propose to upgrade part of **43CG** to Category A and the scope of works comprises –

- (a) planting and establishment of about 1 850 trees and about 830 000 shrubs including –
  - (i) about 500 trees and about 250 000 shrubs in Kwai Tsing;
  - (ii) about 400 trees and about 200 000 shrubs in Tsuen Wan;
  - (iii) about 250 trees and about 100 000 shrubs in Islands District;
  - (iv) about 300 trees and about 80 000 shrubs in North District; and
  - (v) about 400 trees and about 200 000 shrubs in Tai Po;
- (b) ground preparation, soil improvement and installation of tree support systems;
- (c) construction of associated planters and other landscape works; and
- (d) ancillary works including irrigation facilities.

2. A plan of the proposed works extent and major planting locations is at Annex 1 to Enclosure 1.

3. Subject to funding approval of the Finance Committee, we plan to commence the implementation of priority greening works in the third quarter of 2020 for completion in the third quarter of 2023, followed by a one-year establishment period.

4. We will retain the remainder of **43CG** in Category B, which covers the implementation of the remaining greening works in the Greening Master Plans (GMPs) for the New Territories. Funding for these works will be sought later when they are ready for upgrading to Category A.

### JUSTIFICATION

5. The Government has been actively promoting greening to improve our living environment, in particular in urbanised areas. There is a close relationship between greening and improvement in air quality. Green plants can act as a sponge by sequestering carbon dioxide in the atmosphere while releasing oxygen. They can improve air quality by intercepting particulate matters and absorbing gaseous contaminants such as sulphur dioxide and nitrogen oxides in the atmosphere as well as help lower urban temperature. Therefore, we have developed and implemented district-based GMPs since 2004 to complement existing vegetation in local areas, thereby improving the overall quality of our environment.

6. GMP seeks to define the overall greening framework of a district, and serves as a guide for all parties involved in planning, design and implementation of greening works. In addition to identifying planting locations, GMP establishes the greening themes and proposes suitable planting species. We have developed and completed the GMPs for all urban areas by 2011. The public has been supportive of the GMP projects and there is a strong demand to extend GMPs to the New Territories progressively.

7. We have completed the development of the GMPs for Southeast and Northwest New Territories in January 2014 and have subsequently completed the priority greening works under the GMPs in October 2017 for the enjoyment of the public.

8. With the development of the GMPs for Southwest and Northeast New Territories completed, we propose to implement the priority greening works in Southwest New Territories, covering Kwai Tsing, Tsuen Wan and Islands District, and Northeast New Territories, covering North District and Tai Po, as a continuation of the GMP projects.

**/FINANCIAL .....**



**FINANCIAL IMPLICATIONS**

9. We estimate the capital cost of the proposed works to be \$367.6 million in MOD prices, broken down as follows –

	<b>\$ million (in MOD prices)</b>
(a) Greening works	275.9
(i) planting and establishment of trees and shrubs	154.3
(ii) ground preparation, soil improvement and installation of tree support systems	47.9
(iii) construction of associated planters and other landscape works	55.0
(iv) ancillary works	18.7
(b) Consultants' fees for	17.0
(i) contract administration	14.7
(ii) management of resident site staff (RSS)	2.3
(c) Remuneration of RSS	41.3
(d) Contingencies	33.4
Total	367.6

Due to insufficient in-house resources, we propose to engage consultants to undertake the contract administration and site supervision of the proposed works. A detailed breakdown of the estimates for the consultants' fees and RSS costs by man-months is at Annex 2 to Enclosure 1.

10. Subject to funding approval, we plan to phase the expenditure of the proposed works as follows –

Year	\$ million (in MOD prices)
2020 – 2021	11.0
2021 – 2022	143.8
2022 – 2023	99.5
2023 – 2024	56.9
2024 – 2025	26.6
2025 – 2026	19.0
2026 – 2027	10.8
	<hr style="width: 100%; border: 0.5px solid black;"/> 367.6 <hr style="width: 100%; border: 0.5px solid black;"/>

11. We have derived the MOD estimates on the basis of the Government's latest forecast of the trend rate of change in the prices of public sector building and construction output for the period 2020 to 2027. We will tender the proposed greening works through standard re-measurement contracts because the quantities of works may vary depending on actual site constraints. The contracts will provide for price adjustments.

12. We estimate the annual recurrent expenditure arising from the proposed works to be about \$13.3 million.

## **PUBLIC CONSULTATION**

13. In developing the GMPs for Southwest and Northeast New Territories, we followed the Enhanced Partnering Approach whereby the District Councils (DCs), Rural Committees (RCs) and the local communities were actively involved. In general, relevant representatives of DCs and RCs formed a District Participation Group (DPG) to partner with the Civil Engineering and Development Department (CEDD) from inception to finalisation of the GMPs. In addition, community forums were organised jointly by DPGs and CEDD to collect views from the public and major stakeholders such as the Hong Kong Housing Society, the Link Management Limited and professional bodies.

/14. ....

14. In consultation with the DPGs and the relevant DCs in 2013 and 2019, the following greening themes have been adopted –

- (a) Kwai Tsing – Blue Breeze and Green Vista (嵐海菁喬);
- (b) Tsuen Wan – Green Vibrance (翠錦悅灣);
- (c) Islands District – Tranquil Seascape, Flourishing Isles (躍蓉恬翠);
- (d) North District – A Landscape Born of River and Mountain (錦繡山河); and
- (e) Tai Po – History and Harmony in the Urban Landscape (綠意盎然).

———— The details of the proposed greening themes are at Annex 3 to Enclosure 1.

15. We consulted the Legislative Council Panel on Development on 25 June 2019 on the proposed works. Members in general supported the submission of this proposal to the Public Works Subcommittee for its consideration.

## **ENVIRONMENTAL IMPLICATIONS**

16. The proposed works are not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). It will not cause any long-term adverse environmental impact. We have included in the project estimate the cost to implement suitable mitigation measures to control short-term environmental impacts.

17. During construction, we will control noise and dust to meet the requirement of established standards and guidelines through the implementation of mitigation measures in works contracts. These include the use of silencers, mufflers, acoustic lining or shields for noisy construction activities, frequent cleaning and watering of the site to prevent dust nuisance.

/18. ....

18. At the planning and design stages, we have considered minimisation of the volume of soil excavation to reduce generation of construction waste where possible. In addition, we will require the contractor to reuse inert construction waste (e.g. excavated soil) on site or in other suitable construction sites as far as possible, in order to minimise the disposal of inert construction waste at public fill reception facilities<sup>1</sup>. We will encourage the contractor to maximise the use of recycled or recyclable inert construction waste, and the use of non-timber formwork to further minimise 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 means to avoid, reduce, reuse and recycle inert construction waste. We will ensure that the day-to-day operations on site comply with the approved plan. We will 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 construction waste and non-inert construction waste at public fill reception facilities and landfills respectively through a trip-ticket system.

20. We estimate that the proposed works will generate an approximate total of 82 700 tonnes construction waste. Of these, we will reuse about 6 100 tonnes (7%) of inert construction waste on site and deliver about 75 000 tonnes (91%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the approximate remaining 1 600 tonnes (2%) of non-inert construction waste at landfills. The total cost for disposal of construction waste at public fill reception facilities and landfill sites is estimated to be about \$5.6 million for this project (calculated based on a unit charge rate of \$71 per tonne for disposal at public fill reception facilities and \$200 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N)).

## HERITAGE IMPLICATIONS

21. The proposed works will not affect any heritage sites, 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 .....

---

<sup>1</sup> Public fill reception facilities are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N). Disposal of inert construction waste in public fill reception facilities requires a licence issued by the Director of Civil Engineering and Development.

**LAND ACQUISITION**

22. The proposed works do not require any land acquisition.

**BACKGROUND INFORMATION**

23. We upgraded **43CG** to Category B in January 2008.

24. In view of the large area of the New Territories, we engaged consultants in May 2011 for development of GMPs for Southwest New Territories and Northeast New Territories and for carrying out site investigation works. The total costs for the above consultancy services and works for Southwest New Territories and Northeast New Territories are about \$16.8 million and \$11.6 million respectively. We have charged the amounts to block allocation **Subhead 5101CX** “Civil engineering works, studies and investigations for items in Category D of the Public Works Programme”. The development of GMPs and the site investigation works were completed in 2015. We have further reviewed and updated the detailed design and carried out additional site investigation works in 2019 to cater for the latest site conditions. The tender documents are being finalised.

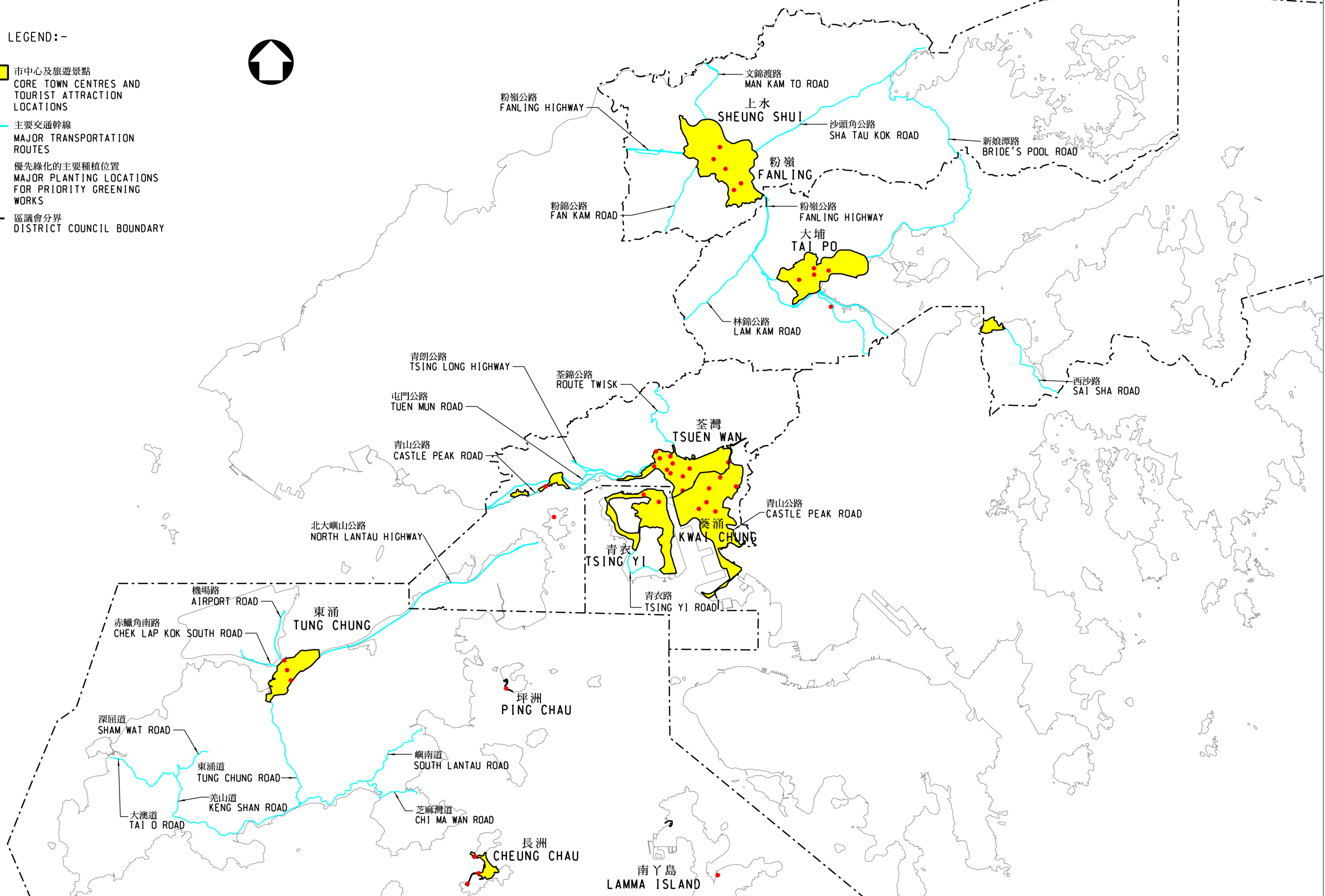
25. No old and valuable tree has been identified on site. The proposed works will not involve any tree removal.

26. We estimate that the proposed works will create about 160 jobs (125 for labourers and another 35 for professional or technical staff), providing a total employment of 6 650 man-months.

-----

圖例 LEGEND:-

- 市中心及旅遊景點  
CORE TOWN CENTRES AND TOURIST ATTRACTION LOCATIONS
- 主要交通幹線  
MAJOR TRANSPORTATION ROUTES
- 優先綠化的主要種植位置  
MAJOR PLANTING LOCATIONS FOR PRIORITY GREENING WORKS
- 區議會分界  
DISTRICT COUNCIL BOUNDARY



新界西南及東北綠化總綱圖 - 優先綠化工程  
GREENING MASTER PLANS FOR SOUTHWEST AND NORTHEAST NEW TERRITORIES - PRIORITY GREENING WORKS

**43CG (Part) – Greening mater plans for the Southwest and  
Northeast New Territories – priority greening works**

**Breakdown of the estimates for consultants’ fees and resident site staff costs  
(in September 2019 prices)**

		Estimate man- months	Average MPS* salary point	Multiplier (Note 1)	Estimated fee (\$ million)
(a) Consultants fees for contract administration (Note 2)	Professional	-	-	-	9.7
	Technical	-	-	-	3.0
				Sub-total	<u>12.7#</u>
(b) Resident site staff costs (Note 3)	Professional	118	38	1.6	16.2
	Technical	444	14	1.6	21.5
				Sub-total	<u>37.7</u>
Comprising –					
(i) Consultants’ fees for management of resident site staff					2.0#
(ii) Remuneration of resident site staff					35.7#
				<b>Total</b>	<b><u>50.4</u></b>

\* MPS = Master Pay Scale

**Notes**

1. A multiplier of 1.6 is applied to the average MPS salary point to estimate the cost of resident site staff supplied by the consultants (as at now, MPS salary point 38 = \$85,870 per month and MPS salary point 14 = \$30,235 per month).
2. The consultants’ staff costs for contract administration are calculated in accordance with the existing consultancy agreements. The construction phase of the assignments will only be executed subject to Finance Committee’s approval to upgrade part of **43CG** to Category A.
3. The actual man-months and actual costs will only be known after completion of the greening works.

**Remarks**

The cost figures in this Annex are shown in constant prices to correlate with the MPS salary point of the same year. The figure marked with # are shown in money-of-the-day prices in paragraph 9 of Enclosure 1.



青衣，一個動感的綠色島嶼；葵涌，一個熱情的多元社區。“嵐海菁喬”這主題將葵青區恬靜的山林景色，遼闊的海峽風情以及充滿朝氣的社區氣氛透過大葉杜英、大花紫薇和宮粉羊蹄甲等主題品種烘托出來，營造一個大氣而多姿多彩的綠色居住環境。

Tsing Yi is a green island full of dynamism, while Kwai Tsing is a diversified welcoming community. With the adoption of such theme plant species as *Elaeocarpus balansae* (大葉杜英), *Lagerstroemia speciosa* (大花紫薇) and *Bauhinia variegata* (宮粉羊蹄甲), the greening theme of Kwai Tsing District “Blue Breeze and Green Vista” (嵐海菁喬) highlights the tranquil hillside landscape, an open and magnificent view of Ramber Channel and the lively community ambience, thereby creating a green and cosy living environment with the splendours of the area.

嵐  
海  
菁  
喬  
Blue Breeze and Green Vista

葵  
青  
Kwai Tsing



## 喬木 Trees

(N) : Native Species 本地品種  
(E) : Exotic Species 外來品種

*Elaeocarpus balansae*  
大葉杜英 (E)



*Bauhinia variegata*  
宮粉羊蹄甲 (E)



*Lagerstroemia speciosa*  
大花紫薇 (E)





荃灣 Tsuen Wan

翠  
錦  
悅  
灣  
Green Vibrance

充滿生機的翠綠山景、繁華多姿的都市生活、繽紛愉悅的璀璨海灣 - “翠錦悅灣”描述的就是荃灣多元化的精彩景緻。主題品種以大葉杜英、宮粉羊蹄甲及狐尾椰子構成荃灣繽紛活力的畫面。

The Greening Theme for Tsuen Wan District is “Green Vibrance” (翠錦悅灣) reflecting the bustling street life of the cosmopolitan, colourful urban area and the diversified setting and scenery in Tsuen Wan. Recommended theme tree species are *Elaeocarpus balansae* (大葉杜英), *Bauhinia variegata* (宮粉羊蹄甲) and *Wodyetia bifurcata* (狐尾椰子).



## 喬木 Trees

(N) : Native Species 本地品種  
(E) : Exotic Species 外來品種

*Wodyetia bifurcata*  
狐尾椰子 (E)



*Elaeocarpus balansae*  
大葉杜英 (E)



*Bauhinia variegata*  
宮粉羊蹄甲 (E)





綠化主題“躍蓉恬翠”以搖曳的花兒和恬靜的山嵐，強調離島區動與靜結合的魅力，讓幽靜山嵐、自然美態延續的同時突顯熱鬧動感的風情閃耀光芒。建議主題品種包括有陰香、大葉欖仁及秋楓。

The Greening Theme for Islands District is “Tranquil Seascape, Flourishing Isles” (躍蓉恬翠), reflecting the tranquil mountains and predominantly rural but dynamic character of the outlying islands. Recommended theme tree species include the canopy trees *Cinnamomum burmanii* (陰香), *Bischofia javanica* (秋楓) and the distinctive seaside canopy tree *Terminalia catappa* (大葉欖仁).

躍  
蓉  
恬  
翠  
Tranquil Seascape, Flourishing Isles

離島區 Islands District



## 喬木 Trees

(N) : Native Species 本地品種  
(E) : Exotic Species 外來品種

*Bischofia javanica*  
秋楓 (N)



*Cinnamomum burmanii*  
陰香 (N)



*Terminalia catappa*  
大葉欖仁 (E)





# 錦繡山河

A Landscape Born of River and Mountain

北區活躍的火山活動及河流侵蝕塑造現時香港特有的地貌。“錦繡山河”所描述的是北區的崇山峻嶺(紅花嶺、八仙嶺)及秀麗河溪(流水響、梧桐河)帶來豐富的天然綠地和醉人美景。綠化總綱圖的設計概念抽取當中的山丘和河溪元素，利用色彩鮮艷奪目的植物品種營造歡迎的感覺，襯托出種植主題。建議主題品種包括:大花紫薇、洋紫荊、楝及黃花風鈴木。

Both the active volcanic activities and the river erosion in the North District have shaped today's unique landforms in Hong Kong. The greening theme of North District “A Landscape Born of Rivers and Mountains” (錦繡山河) is manifesting the rich green land and the enjoyable views brought about by the magnificent high mountains (Robin's Nest and Pak Sin Leng) and the beautiful rivers (Lau Shui Heung and Ng Tung River) in the North District. The conceptual ideas of the Greening Master Plan originated from the relevant elements of mountains and rivers, fostering a sense of welcome with the use of colourful eye-catching plant species and highlighting the plant theme. The proposed theme species include *Lagerstroemia speciosa* (大花紫薇), *Bauhinia x blakeana* (洋紫荊), *Melia azedarach* (楝) and *Tabebuia chrysantha* (黃花風鈴木).

北區 North District



## 喬木 Trees

(N) : Native Species 本地品種  
(E) : Exotic Species 外來品種

*Lagerstroemia speciosa*  
大花紫薇 (E)



*Bauhinia x blakeana*  
洋紫荊 (N)



*Melia azedarach*  
楝 (E)



*Tabebuia chrysantha*  
黃花風鈴木 (E)





# 綠意盎然

History and Harmony in the Urban Landscape

自宋朝起，華南地區的居民南遷，移居大埔，隨著人口增加，商貿日益頻繁，早期居民依靠土產蚌珠為生，其後更將之發展成一重要經濟事業。“綠意盎然”所描述的是大埔三面環山，位處八仙嶺、九龍坑山、大帽山和草山之間，各個山脈互為裙帶，形成山谷及盆地，山巒起伏。另外林村河由大帽山及觀音山，流經林村谷，貫穿大埔市中心，匯合大埔河流入吐露港。大埔綠化總綱圖以“綠意盎然”為主題，利用色彩鮮艷的植物品種，把綠色郊野帶進市區，加強市中心的繁華與郊區山巒起伏的自然地理環境的和諧關係。建議主題品種包括：紅花風鈴木、槭葉蘋婆、棟及陰香。

Tai Po began to shine as a market town during the Song Dynasty establishing its presence through the hard work of the indigenous people who developed a lucrative business through clamming and pearl making; working in harmony with the natural resources at hand. The greening theme for Tai Po District is “History and Harmony in the Urban Landscape” (綠意盎然) reflecting the town’s historic origins and its outstanding natural setting. Recommended theme tree species include *Tabebuia pentaphylla* (紅花風鈴木), *Brachychiton acerifolius* (槭葉蘋婆), *Melia azedarach* (棟) and *Cinnamomum burmannii* (陰香).



## 喬木 Trees

(N) : Native Species 本地品種  
(E) : Exotic Species 外來品種

*Brachychiton acerifolius*  
槭葉蘋婆 (E)



*Tabebuia pentaphylla*  
紅花風鈴木 (E)



*Melia azedarach*  
楝 (E)



*Cinnamomum burmannii*  
陰香 (N)



**265RS – Cycle tracks connecting North West New Territories with North East New Territories – Sam Mun Tsai extension**

**PROJECT SCOPE AND NATURE**

We propose to upgrade **265RS** to Category A and the scope of works comprises –

- (a) a section of new cycle track of about 900 metres (m) in length alongside Sam Mun Tsai Road together with about 600 m-long retaining wall;
- (b) a resting station with supporting facilities, including a toilet, water dispensers, bicycle parking spaces and seating benches; and
- (c) associated junction modification, landscaping and ancillary works.

\_\_\_\_\_ 2. The layout plans and sections of the proposed works are at Annex 1 to Enclosure 2.

3. Subject to funding approval by the Finance Committee (FC), we plan to commence the proposed works in mid 2020 for completion in mid 2022. We plan to invite tenders of the proposed works in parallel to enable early commencement of the works. The contract will only be awarded after obtaining FC's funding approval.

**/JUSTIFICATION .....**

**JUSTIFICATION**

4. We have been making efforts in implementing the cycle track network in the New Territories (alignment at Annex 2 to Ensloure 2) for improving the quality of living. The proposed cycle track to be built alongside Sam Mun Tsai Road is a branching off section of the cycle track network connecting North West New Territories with North East New Territories. The proposed works will construct a section of 900 m-long cycle track along the seaside of Sam Mun Tsai Road with associated supporting facilities for leisure and recreation purpose. The public will delight in cycling as they can enjoy the appealing scenery of fishing village along the waterfront of Sam Mun Tsai. Both the Tai Po Rural Council (TPRC) and Tai Po District Council (TPDC) have repeatedly requested proceeding with the proposed works.

**FINANCIAL IMPLICATIONS**

5. We estimate the capital cost of the proposed works to be about \$66.9 million in MOD prices, broken down as follows –

	<b>\$ million (in MOD prices)</b>
(a) Cycle track	40.8
(b) Resting station with supporting facilities, and junction modification, landscaping and ancillary works	10.4
(c) Environmental mitigation measures	0.9
(d) Consultants' fees for	0.9
(i) contract administration	0.5
(ii) management of resident site staff (RSS)	0.4
(e) Remuneration of RSS	7.8
(f) Contingencies	6.1
Total	66.9

/6. ....



6. A breakdown of the estimates for the consultants’ fees and RSS costs by man-months is at Annex 3 to Enclosure 2.

7. Subject to funding approval, we plan to phase the expenditure as follows –

Year	\$ million (in MOD prices)
2020 – 2021	3.7
2021 – 2022	31.9
2022 – 2023	24.2
2023 – 2024	5.3
2024 – 2025	1.8
	66.9

8. We have derived the MOD estimates on the basis of the Government’s latest forecast of the trend rate of change in the prices of public sector building and construction output from 2020 to 2025. We will deliver the proposed works using New Engineering Contract<sup>1</sup> form with provision for price adjustment.

9. We estimate the annual recurrent expenditure arising from the proposed works to be about \$1.2 million.

**/PUBLIC .....**

---

<sup>1</sup> New Engineering Contract is a suite of contracts developed by the Institution of Civil Engineers, United Kingdom. It is a contract form that emphasises cooperation, mutual trust and collaborative risk management between contracting parties.

## **PUBLIC CONSULTATION**

10. We consulted TPRC and the Traffic and Transport Committee (TTC) of TPDC on 8 and 10 July 2015 respectively and obtained their support to gazette the proposed road works. We then gazetted the proposed road works under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) on 8 and 15 July 2016. During the statutory objection period, no objection was received. The notice of authorisation was gazetted on 4 and 11 November 2016.

11. We reported the detailed design and updated implementation progress of the proposed works to TPRC and the TTC of TPDC on 7 and 10 May 2019 respectively. Both the committees supported the implementation of the proposed works.

12. We consulted the Legislative Council Panel on Development on 19 November 2019. Members generally supported the submission of this funding proposal to the Public Works Subcommittee for consideration.

## **ENVIRONMENTAL IMPLICATIONS**

13. The proposed works are not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499) and an environmental permit is not required for the construction and operation of the proposed works.

14. We have completed a Preliminary Environmental Review (PER) for the proposed works and updated the PER according to the latest environmental standards and site conditions, which was agreed by the Director of Environmental Protection in June 2019. The PER concluded that the proposed works would not cause any long-term adverse environmental impacts. We will incorporate mitigation measures recommended in the PER in the relevant contract to control short-term environmental impacts during construction to within established standards and guidelines. These measures include the frequent cleaning and watering of the sites, and provision of wheel-washing facilities to minimise dust generation; the use of movable noise barriers or enclosures and silenced plant to reduce noise generation; and the use of temporary drains and sedimentation tanks to collect and treat site runoff before discharge.

15. At the planning and design stages, we have considered the alignments, levels, layouts and construction sequence of the proposed works in order to reduce generation of construction waste where possible. In addition, we will require the contractor to reuse inert construction waste (e.g. excavated soil) on site or in other suitable construction sites as far as possible, in order to minimise disposal of inert construction waste at public fill reception facilities<sup>2</sup>. We will encourage the contractor to maximise the use of recycled and recyclable inert construction waste, and the use of non-timber formwork to further reduce the generation of construction waste.

16. 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 means to avoid, reduce, reuse and recycle inert construction waste. We will ensure that day-to-day operations on site comply with the approved plan, and will 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 public fill reception facilities and landfills respectively through a trip-ticket system.

17. We estimate that the proposed works will generate in total about 25 000 tonnes of construction waste. Of these, we will reuse about 16 000 tonnes (64%) of inert construction waste on site and deliver 6 000 tonnes (24%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 3 000 tonnes (12%) of non-inert construction waste at landfills. The total cost for disposal of construction waste at public fill reception facilities and landfill sites is estimated to be about \$1 million (calculated based on a unit charge rate of \$71 per tonne for disposal at public fill reception facilities and \$200 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N)).

**/HERITAGE .....**

---

<sup>2</sup> Public fill reception facilities are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N). Disposal of inert construction waste in public fill reception facilities requires a licence issued by the Director of Civil Engineering and Development.

## HERITAGE IMPLICATIONS

18. 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.

## TRAFFIC IMPLICATIONS

19. The proposed works will not cause any significant traffic impact during the construction and operation stages. Temporary traffic arrangement will be implemented to facilitate the construction works which will require temporary partial road closures at Sam Mun Tsai Road and its adjacent roads in Tai Po. We will display publicity boards on site giving details of the temporary traffic arrangements, and the anticipated completion date of individual section of works. In addition, we will set up a telephone hotline to respond to public enquiries or complaints.

## LAND ACQUISITION

20. The proposed works do not require any land acquisition.

## BACKGROUND

21. We upgraded **265RS** to Category B in February 2007.

22. In August 2008, we engaged consultants to carry out investigation and design for the construction of cycle track alongside Sam Mun Tsai Road. We have charged the cost of about \$0.8 million to **Subhead 7100CX** “New towns and urban area works, studies and investigations for items in Category D of the Public Works Programme”. We have completed the detailed design of the proposed works.



23. Of the 635 trees within the site boundary of the proposed works, 350 trees will be preserved, 272 trees will have to be felled and 13 trees will be transplanted within the site boundary. All trees to be felled or transplanted are not important trees<sup>3</sup>. We will incorporate planting proposals as part of the proposed works, including estimated quantities of 257 trees and 160 whips.

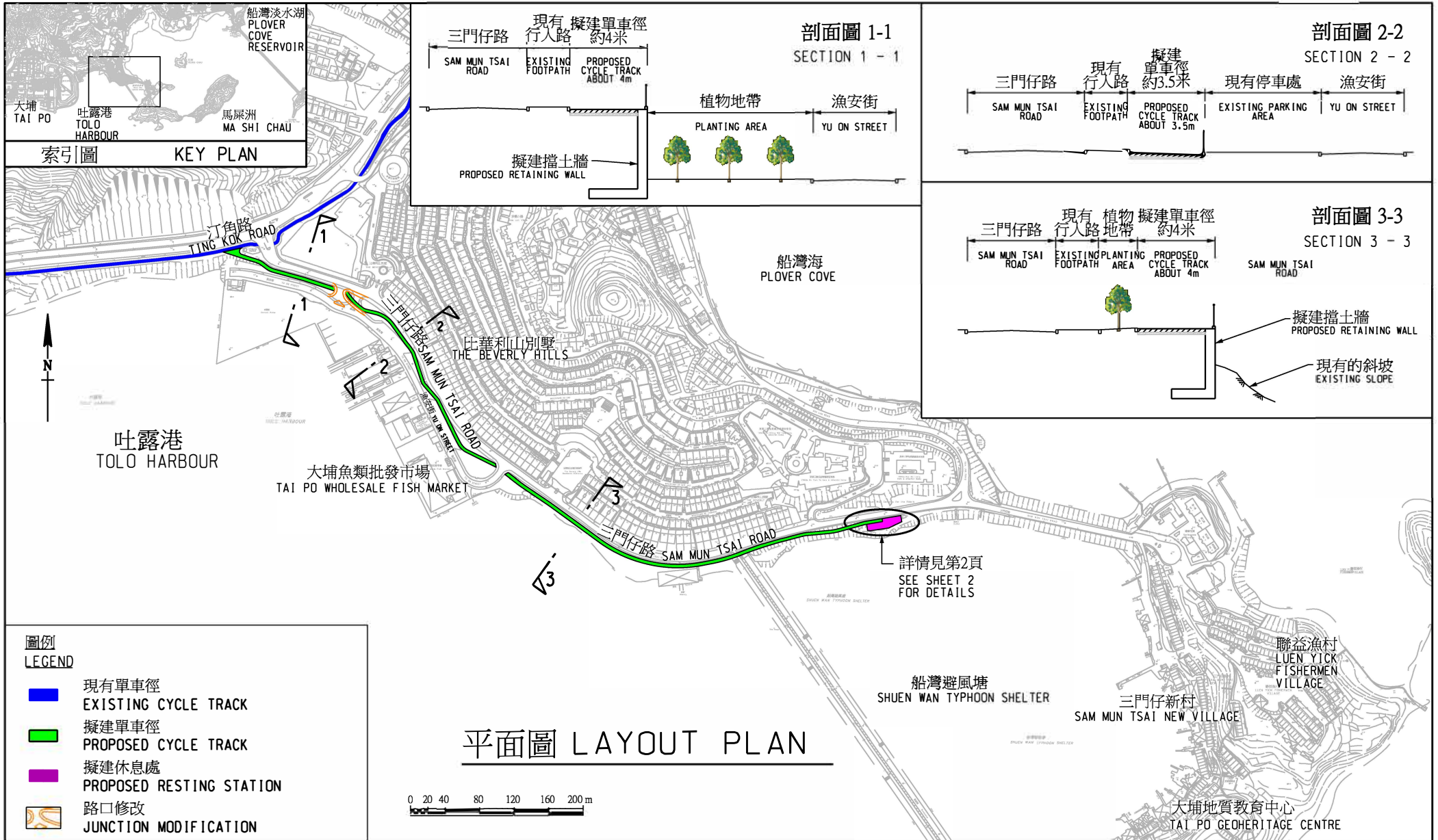
24. We estimate that the proposed works will create about 35 jobs (28 for labourers and another 7 for professional or technical staff), providing a total employment of 720 man-months.

-----

---

<sup>3</sup> “Important trees” refer 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 an important person or event;
- (c) trees of precious or rare species;
- (d) trees of outstanding form (taking account of the 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 a trunk diameter equal to or exceeding 1.0 m (measured at 1.3 m above ground level), or with a height/canopy spread equal to or exceeding 25 m.

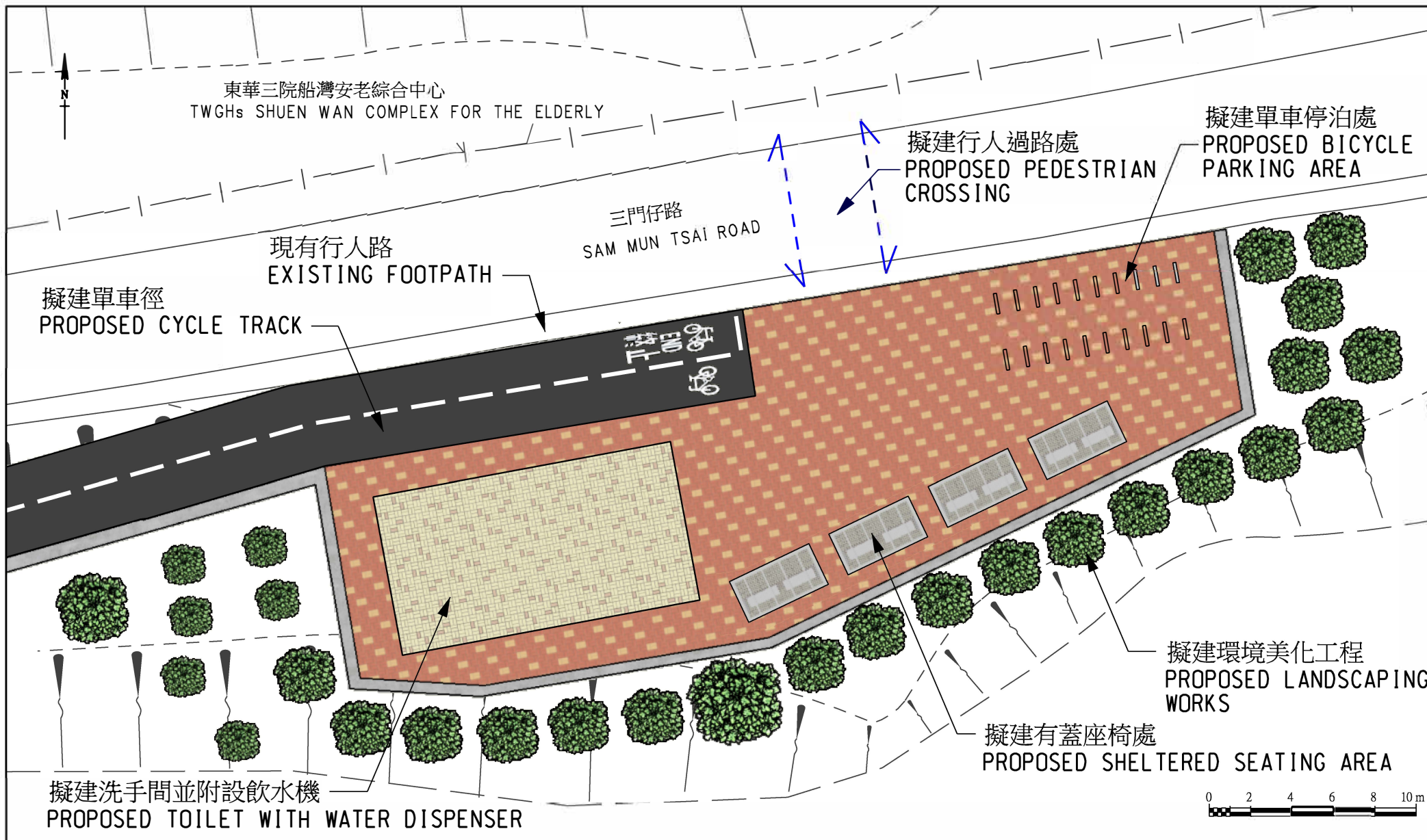


工程名稱 PROJECT TITLE

工務工程計劃項目 265RS - 連接新界西北及新界東北之單車徑 - 三門仔伸延部分  
PWP ITEM No. 265RS - CYCLE TRACKS CONNECTING NORTH WEST NEW TERRITORIES WITH NORTH EAST NEW TERRITORIES - SAM MUN TSAI EXTENSION

圖則名稱 DRAWING TITLE

平面圖及剖面圖  
LAYOUT PLAN AND SECTIONS



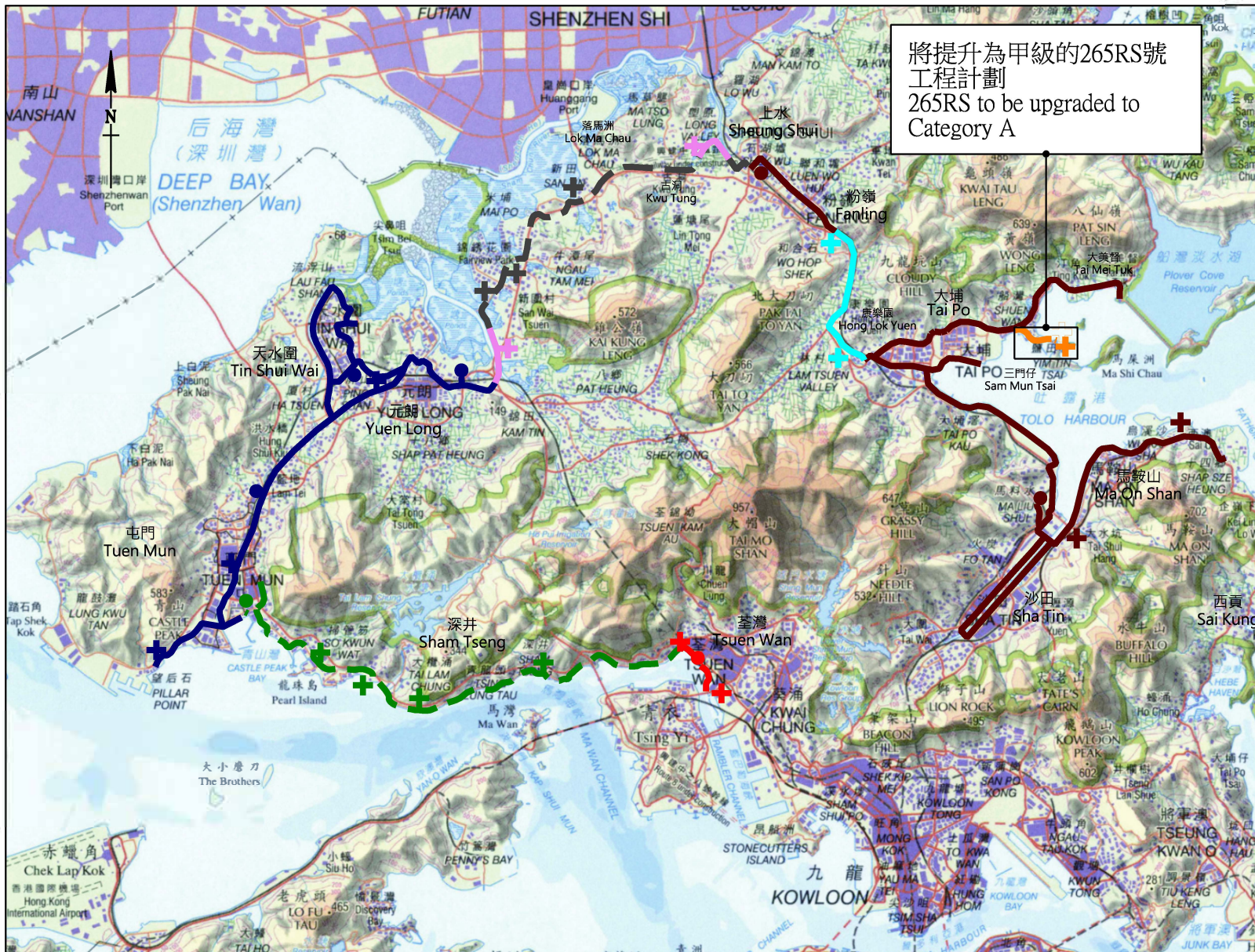
工程名稱  
PROJECT TITLE

工務工程計劃項目 265RS - 連接新界西北及新界東北之單車徑 - 三門仔伸延部分  
PWP ITEM No. 265RS - CYCLE TRACKS CONNECTING NORTH WEST NEW TERRITORIES WITH NORTH EAST NEW TERRITORIES - SAM MUN TSAI EXTENSION

圖則名稱  
DRAWING TITLE

擬建休息處 平面圖  
LAYOUT PLAN : PROPOSED RESTING STATION





將提升為甲級的265RS號工程計劃  
265RS to be upgraded to Category A

**圖例 Legend**

**主幹線 Backbone Section**

(a) 上水至馬鞍山段(271RS號工程計劃)  
Sheung Shui to Ma On Shan Section (under 271RS)

- 已完成的現有單車徑  
Improvement to existing cycle tracks completed
- 已開放新單車徑  
New cycle tracks already opened

(b) 屯門至上水段 - 第一階段 (279RS號工程計劃)  
Tuen Mun to Sheung Shui Section - Stage 1 (under 279RS)

- 已完成的現有單車徑  
Improvement to existing cycle tracks completed
- 已開放新單車徑  
New cycle tracks already opened

(c) 屯門至上水段 - 餘下工程 (259RS號工程計劃)  
Tuen Mun to Sheung Shui Section - Remaining (under 259RS)

- 興建中的單車徑(預計於2020年年中完成)  
Cycle tracks under construction (Target to complete in mid 2020)

(d) 荃灣至屯門段  
Tsuen Wan to Tuen Mun Section

- 興建中的單車徑(前期工程)(293RS號工程計劃)(預計於2020年年底完成)  
Cycle tracks under construction (Advance Works) (under 293RS) (Target to complete in end 2020)
- 擬建的單車徑(第一階段工程, 第二甲階段工程及第二乙階段工程)(268RS號工程計劃)  
Proposed cycle tracks (Stage 1, Stage 2A and Stage 2B) (under 268RS)

**分支路段 (265RS號工程計劃)  
Branching Off Section (under 265RS)**

(e) 擬建的單車徑  
Proposed cycle track

- 於各單車徑路段的匯合中心  
Entry / Exit Hub along various cycle track sections
- 於各單車徑路段的休息處  
Resting Station along various cycle track sections

工程名稱  
PROJECT TITLE

工務工程計劃項目 265RS - 連接新界西北及新界東北之單車徑 - 三門仔伸延部分  
PWP ITEM No. 265RS - CYCLE TRACKS CONNECTING NORTH WEST NEW TERRITORIES WITH NORTH EAST NEW TERRITORIES - SAM MUN TSAI EXTENSION

圖則名稱  
DRAWING TITLE

新界單車徑網路  
CYCLE TRACK NETWORK IN THE NEW TERRITORIES

## Annex 3 to Enclosure 2

### 265RS – Cycle tracks connecting North West New Territories with North East New Territories – Sam Mun Tsai extension

#### Breakdown of the estimates for consultants' fees and resident site staff costs (in September 2019 prices)

		Estimated man- months	Average MPS*	Multiplier (note 1)	Estimated fee (\$ million)
(a)	Consultants' fees for contract administration (note 2)	Professional	-	-	0.3
		Technical	-	-	0.1
				Sub-total	0.4#
(b)	Resident site staff (RSS) costs (note 3)	Professional	24	38	3.3
		Technical	80	14	3.9
				Sub-total	7.2
Comprising –					
(i)	Consultants' fees for management of RSS				0.3#
(ii)	Remuneration of RSS				6.9#
				<b>Total</b>	<b>7.6</b>

\* MPS = Master Pay Scale

#### Notes

1. A multiplier of 1.6 is applied to the average MPS salary point to estimate the cost of RSS supplied by the consultants (as at now, MPS point 14 = \$30,235 per month and MPS point 38 = \$85,870 per month).
2. The consultants' staff cost for the contract administration is calculated in accordance with the existing consultancy agreement for the design and construction of **265RS**. The construction phase of the assignment will only be executed subject to Finance Committee's approval to upgrade **265RS** to Category A.
3. The actual man-months and actual costs will only be known after completion of the construction works.

#### Remarks

The cost figures in this Annex are shown in constant prices to correlate with the MPS salary point of the same year. The figures marked with # are shown in money-of-the-day prices in paragraph 5 of Enclosure 2.