

For Information

Legislative Council Panel on Transport

94TB – Sha Tin New Town, stage 2 – pedestrian and cycle subways at Lion Bridge

PURPOSE

This paper informs Members of our proposal to upgrade **94TB**, Sha Tin New Town, stage 2 – pedestrian and cycle subways at Lion Bridge, to Category A in order to carry out the proposed construction works.

PROJECT SCOPE

2. The scope of **94TB** comprises –
 - (a) construction of two pedestrian and cycle subways, each of approximately 40 metres (m) in length at Lion Bridge, Sha Tin: one on the northern side of Shing Mun River (the River) adjacent to the Hong Kong Heritage Museum (the Northern Subway), and one on the southern side of the River adjacent to the Che Kung Temple Station (the Southern Subway);
 - (b) reconstruction of an existing footway of approximately 650 m in length along the River between Hong Kong Heritage Museum (the Museum) and Man Lai Court into a footpath and cycle track; and
 - (c) drainage, slope and landscaping works associated with the works mentioned in items (a) and (b) above.

— A site plan showing the proposed works is at **Enclosure 1**.

3. We plan to start the construction works in October 2005 for completion in January 2008.

JUSTIFICATIONS

4. The promenade and cycle track system along both sides of the River are very popular with both local residents and visitors. However, the existing Lion Rock Tunnel Road, which cuts across the River, breaks the system on both sides of the River. Pedestrians and cyclists wishing to continue their trips along the river bank have to take a detour along Lion Rock Tunnel Road, and cross the road by using the existing pedestrian subways at Sha Tin Centre Street or Che Kung Miu Road. Many users resort to crossing the road direct by jaywalking. On the other hand, since the existing subways in Sha Tin Centre Street and Che Kung Miu Road are designed for pedestrians only, pedestrian/cyclist conflicts are frequent. The planned housing developments in Tai Wai, when completed, will bring about an additional 50 000 population. Usage of the river bank promenade and cycle track is expected to grow significantly. Jaywalking and pedestrian/cyclist conflicts at Lion Rock Tunnel Road will aggravate if the current situation remains.

5. The Museum is a popular tourist spot. The existing 3.5 m wide pedestrian and cycle subway at the junction of Lion Rock Tunnel Road and Sha Tin Centre Street is inadequate to cater for the pedestrian and cyclist flow, especially during Sundays and public holidays. The proposed Northern Subway, which will link the Museum and the Sha Tin Central Park, will help relieve the pedestrian and cyclist flow in the existing subway.

6. With the commissioning of Ma On Shan Rail and the opening of the Che Kung Temple Station (the Station), the existing pedestrian subway of 3.5m wide at Che Kung Miu Road is inadequate to meet the increasing pedestrian and cyclist flow. The proposed Southern Subway will facilitate access to the Station.

7. To further enhance the footpath and cycle track network in Sha Tin, we will upgrade the existing 650m footway between the proposed Northern Subway and Man Lai Court to a separate footpath and cycle track.

FINANCIAL IMPLICATIONS

8. We estimate the capital cost of the project to be \$48.4 million in MOD prices, made up as follows –

		\$ million	
(a)	Construction of two pedestrian and cycle subways	19.4	
	(i) Northern Subway	12.0	
	(ii) Southern Subway	7.4	
(b)	Reconstruction of an existing footway	3.0	
(c)	Associated drainage works, slope works, retaining walls and landscaping works	16.1	
(d)	Environmental mitigation measures	0.4	
(e)	Consultants' fees	5.1	
	(i) construction stage	0.6	
	(ii) resident site staff costs	4.5	
(f)	Contingencies	4.2	
	Sub-total	48.2	(in September 2004 prices)
(g)	Provision for price adjustment	0.2	
	Total	48.4	(in MOD prices)

— A breakdown by man-months of the estimate for item (e) is at **Enclosure 2**.

9. We estimate the annual recurrent expenditure arising from this project to be about \$400 000.

PUBLIC CONSULTATION

10. We consulted the Traffic and Transport Committee (the Committee) of the Sha Tin District Council on the proposed works on 5 March 2002. The

Committee had no objection to the proposed works. We consulted the Committee again on 6 January 2005 on the updated programme for the proposed works. Members of the Committee supported the project and suggested that we reconsider the routing of the ramp leading to the Northern Subway. We have taken on board the Committee's advice. In response to the Committee's other concern about the cleanliness of the proposed subway, we have also undertaken to use an appropriate type of floor tiles to facilitate easy cleansing.

11. We gazetted the proposed road works under the Roads (Works, Use and Compensation) Ordinance (the Ordinance) on 28 June 2002 and received no objection. The then Permanent Secretary for the Environment, Transport and Works authorized the proposed road works under delegated authority of the Ordinance on 27 September 2002 and the notice of authorization was gazetted on 4 October 2002.

ENVIRONMENTAL IMPLICATIONS

12. The project is not a designated project under the Environmental Impact Assessment Ordinance and will not cause long-term environmental impact. We will implement suitable mitigation measures to control short-term environmental impacts during the construction stage. These measures will include watering of the site, provision of wheel-washing facilities, covering of materials on trucks, use of silenced construction plant, and the provision of mobile noise barriers. We estimate the cost of implementing the mitigation measures to be \$400 000. We have included this cost in the project estimate.

13. The proposed works will involve removal of 109 trees including 41 trees to be felled and 68 trees to be transplanted elsewhere. All the trees to be removed are not important trees¹. We will incorporate planting proposals into the project, including an estimated quantity of 326 trees, 16,049 shrubs and 2,640 square metres of grassed area.

¹ Important trees include trees on the Register of Old and Valuable Trees, and any other trees which meet one or more of the following criteria –

- (a) trees over 100 years old;
- (b) trees of cultural, historical or memorable significance;
- (c) trees of precious or rare species;
- (d) trees of outstanding form; or
- (e) trees with trunk diameter exceeding one metre (measured at one metre above ground level).

14. At the planning and design stages of this project, we have given due consideration to minimising construction and demolition (C&D) materials. We estimate that the project will generate about 34 900 cubic metres (m³) of C&D materials. Of these, we will reuse about 12 400 m³ (36%) on site, 20 000 m³ (57%) as fill in public filling areas² and dispose of about 2 500 m³ (7%) at landfills. The notional cost of accommodating C&D waste at landfill sites is estimated to be \$312 500 for this project (based on a notional unit cost³ of \$125/m³).

15. We will require the contractor to submit a waste management plan (WMP) for approval. The WMP will include appropriate mitigation measures to avoid, reduce, reuse and recycle C&D materials. We will ensure that the day-to-day operations on site will comply with the approved WMP. To further minimise generation of C&D materials, we will encourage the contractor to use non-timber formwork and recyclable materials for temporary works. We will control the disposal of public fill and C&D waste at designated public filling facilities and landfills respectively through a trip-ticket system. We will require the contractor to separate public fill from C&D waste for disposal at appropriate facilities. We will record the disposal, reuse and recycling of C&D materials for monitoring purposes.

LAND ACQUISITION

16. The proposed works do not require any land acquisition and clearance.

THE WAY FORWARD

17. We intend to submit the project to the Public Works Sub-Committee and Finance Committee of the Legislative Council on 11 May

² A public filling area is a designated part of a development project that accepts public fill for reclamation purposes. Disposal of public fill in a public filling area requires a licence issued by the Director of Civil Engineering and Development.

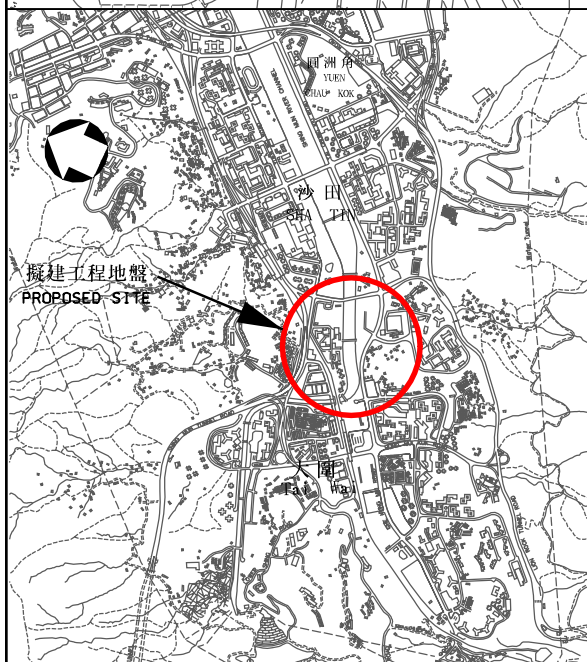
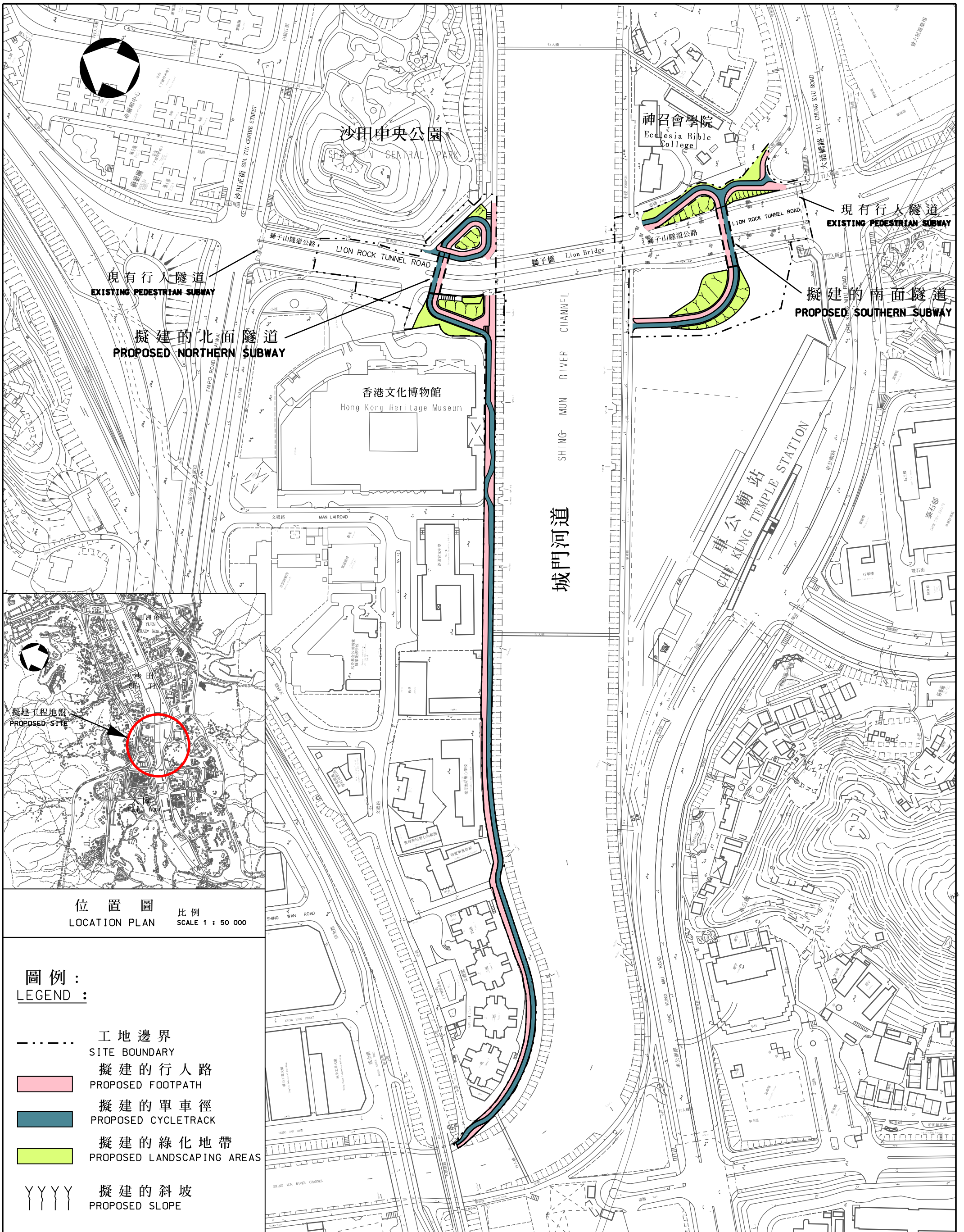
³ This estimate has taken into account the cost for developing, operating and restoring the landfills after they are filled and the aftercare required. It does not include the land opportunity cost for existing landfill sites (which is estimated at \$90/m³), nor the cost to provide new landfills (which are likely to be more expensive) when the existing ones are filled. The notional cost estimate is for reference only and does not form part of this project estimate.

2005 and 10 June 2005 respectively for upgrading the project to Category A. Subject to funding approval, we plan to start construction works in October 2005 for completion in January 2008.

ADVICE SOUGHT

18. Members are invited to note the contents of this paper.

Environment, Transport and Works Bureau
April 2005



位置圖
LOCATION PLAN
比例
SCALE 1 : 50 000

圖例：
LEGEND :

- 工地邊界
SITE BOUNDARY
- █ 擬建的行人路
PROPOSED FOOTPATH
- █ 擬建的單車徑
PROPOSED CYCLETRACK
- █ 擬建的綠化地帶
PROPOSED LANDSCAPING AREAS
- YYY 擬建的斜坡
PROPOSED SLOPE

工務計劃編號 PWP ITEM No. 094TB

圖則名稱 drawing title
工務計劃第94TB號 - 沙田新市鎮第2階段工程
沙田獅子橋行人及單車隧道 - 工地平面圖
PWP ITEM No. 94TB - SHA TIN NEW TOWN, STAGE 2
PEDESTRIAN AND CYCLE SUBWAYS AT LION BRIDGE, SHA TIN
- SITE PLAN

繪圖 drawn
W K CHUI
核對 checked
S C CHAN
核准 approved
W T YEUNG

簽署 initial
日期 date
04.04.2005
簽署 initial
日期 date
04.04.2005
簽署 initial
日期 date
04.04.2005

比例 scale
1 : 2500
圖則編號 drawing no.
ST2039

辦事處 office
新界東拓展處
NEW TERRITORIES EAST
DEVELOPMENT OFFICE
土木工程拓展署
CIVIL ENGINEERING
AND DEVELOPMENT
DEPARTMENT



Enclosure 2

94TB – Sha Tin New Town, stage 2 - pedestrian and cycle subways at Lion Bridge

Breakdown of the estimate for consultants' fees (in September 2004 prices)

Consultants' staff costs			Estimated Man- months	Average MPS* salary point	(Note 1) Multiplier	Estimated fees (\$ million)
(a) Consultants' fees for construction stage ^(Note 2)						
(i) contract administration			--	--	--	0.3
						0.1
(ii) preparation of as-built drawings			--	--	--	0.1
						0.1
(b) Resident site staff costs ^(Note 3)						
			24	38	1.6	2.1
			83	14	1.6	2.4
Total						5.1

* MPS = Master Pay Scale

Notes

1. A multiplier of 1.6 is applied to the average MPS point to estimate the cost of resident site staff supplied by the consultants. (As at 1 January 2005, MPS pt. 38 = \$54,255 per month and MPS pt. 14 = \$18,010 per month.)
2. The consultants' staff cost for construction stage (including contract administration and preparation of as-built drawings) is calculated in accordance with the existing consultancy agreement for the Sha Tin New Town Development Stage 2. The construction phase of the assignment will only be executed subject to Finance Committee's approval to upgrade **94TB** to Category A.
3. We will only know the actual man-months and actual costs after completion of the construction works.