

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 711 – HOUSING

Transport –Footbridges and pedestrian tunnels

177TB – Footbridge link at Sau Ming Road, Kwun Tong

Members are invited to recommend to the Finance Committee the upgrading of **177TB** to Category A at an estimated cost of \$130.1 million in money-of-the-day prices.

PROBLEM

We need to construct a footbridge link at Sau Ming Road, Kwun Tong to cater for the anticipated increase in the pedestrian flow.

PROPOSAL

2. The Director of Highways, with the support of the Secretary for Transport and Housing, proposes to upgrade **177TB** to Category (Cat) A at an estimated cost of \$130.1 million in money-of-the-day (MOD) prices for the construction of the footbridge link at Sau Ming Road, Kwun Tong.

/ **PROJECT**

PROJECT SCOPE AND NATURE

3. The proposed scope of works under the project includes –
- (a) construction of a covered footbridge of approximately 30 metres (m) long connecting Sau Ming Road and Hiu Kwong Street;
 - (b) construction of a lift tower with three passenger lifts; and
 - (c) ancillary works including drainage, planter irrigation pipeworks connection, landscaping, and electrical and mechanical (E&M) works.

———— A site plan and artist's impression drawings of the proposed footbridge are at Enclosures 1 to 3 respectively.

4. Subject to the funding approval of the Finance Committee, we plan to commence the construction works in mid-2016 for completion in mid-2018.

JUSTIFICATION

5. The Hong Kong Housing Authority (HA) is constructing a public housing development at Sau Ming Road. The development will provide about 320 flats for a population of around 670. A new community hall will also be constructed within the site boundary of the new housing development as a composite development¹. In addition, there are a number of residential developments, including Sau Mau Ping Estate, Sau Mau Ping South Estate, Po Tat Estate and Hiu Lai Court located in the vicinity. The population in the area is about 86 000.

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¹ In February 2014, FC approved the construction of a new community hall at an estimated cost of \$134.9 million in MOD prices to address the local demand for upgrading the community hall in Sau Ming Road, Kwun Tong. The construction works have commenced in 2014 for completion in September 2018.

6. There is currently no grade-separated pedestrian linkage between the existing and planned developments at Sau Ming Road and the Kwun Tong Town Centre. We propose constructing a footbridge with a lift tower linking Sau Ming Road to Hiu Kwong Street, which are separated with a level difference of about 34 m. The proposed works will provide barrier-free access for the users of the new community hall and residents of the adjoining public housing development. It will cater for the anticipated increase in the pedestrian flow² in the vicinity and enhance local pedestrian connectivity by forming a convenient pedestrian passageway to the Kwun Tong Town Centre at the south and the Anderson Road developments at the north.

7. Due to the limited works area, the construction works of the proposed footbridge will be implemented in conjunction with the public housing development at Sau Ming Road. To ensure better coordination between the footbridge project and the public housing development for timely completion for public use, we propose entrusting the design and construction of the project to HA. Upon completion of the construction works, the footbridge will be handed over to relevant government departments for management and maintenance.

FINANCIAL IMPLICATIONS

8. We estimate the capital cost of the project to be \$130.1 million in MOD prices (please see paragraph 9 below), broken down as follows –

		\$ million
(a)	Construction of footbridge	91.0
	(i) foundation	32.9
	(ii) bridge deck	17.3
	(iii) lift tower	32.4
	(iv) lighting and E&M systems	8.4
(b)	Landscaping works	1.2
(c)	Associated slope and civil works	1.6

/ (d)

² The estimated total peak pedestrian flow of the proposed footbridge is about 1 760 persons per hour.

		\$ million	
(d)	On-cost payable to HA ³	11.7	
(e)	Contingencies	10.6	
	Sub-total	116.1	(in September 2015 prices)
(f)	Provision for price adjustment	14.0	
	Total	130.1	(in MOD prices)

9. Subject to funding approval, we will phase the expenditure as follows –

Year	\$ million (Sept 2015)	Price adjustment factor	\$ million (MOD)
2016 – 2017	33.8	1.05875	35.8
2017 – 2018	56.9	1.12228	63.9
2018 – 2019	22.8	1.18961	27.1
2019 – 2020	2.1	1.26099	2.6
2020 – 2021	0.5	1.32719	0.7
	116.1		130.1

10. 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 2016 to 2021. Subject to funding approval, HA will deliver the proposed works under a lump sum contract. The contract will provide for price adjustments.

11. We estimate the annual recurrent expenditure arising from this project to be about \$2.3 million.

/ **PUBLIC**

³ This is the estimated cost (an assumed rate of 12.5% of the estimated construction cost) to be charged by HA for the design and construction of the project.

PUBLIC CONSULTATION

12. We consulted the Traffic and Transport Committee of Kwun Tong District Council on the proposed footbridge in November 2012. Members supported the proposal.

13. We consulted the Advisory Committee on the Appearance of Bridges and Associated Structures (ACABAS)⁴ on 19 November 2013. ACABAS considered the proposed design of the footbridge acceptable.

14. We gazetted the proposed works under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) on 19 December 2014 and received no objection. The notice of authorisation was subsequently gazetted on 10 April 2015.

15. We consulted the Legislative Council Panel on Housing on the proposed works on 1 June 2015. Members generally supported the proposed works.

ENVIRONMENTAL IMPLICATIONS

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

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⁴ The ACABAS comprises representatives of the Hong Kong Institute of Architects, the Hong Kong Institution of Engineers, the Hong Kong Institute of Planners, an academic institution, the Architectural Services Department, the Highways Department, the Housing Department and the Civil Engineering and Development Department. It is responsible for vetting the design of bridges and other structures associated with the public highway system, from the aesthetic and visual impact points of view.

17. During construction, HA will control noise, dust, and site run-off nuisances to within established standards and guidelines through the implementation of mitigation measures in the relevant contract. These include the use of silencers, mufflers, acoustic lining or shields for noisy construction activities, frequent cleaning and watering of the site, and the provision of wheel-washing facilities.

18. At the planning and design stages, we have considered measures to reduce the generation of construction waste where possible. In addition, HA 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, to minimise the disposal of inert construction waste to public fill reception facilities⁵. HA will encourage the contractor to maximise the use of recycled or recyclable inert construction waste, and the use of non-timber formwork to further reduce the generation of construction waste.

19. At the construction stage, HA 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. HA will ensure that the day-to-day operations on site comply with the approved plan. HA will require the contractor to separate the inert portion from non-inert construction waste on site for disposal at appropriate facilities. HA will control the disposal of inert construction waste and non-inert construction waste to public fill reception facilities and landfills respectively through a trip-ticket system.

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⁵ Public fill reception facilities are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation. Disposal of inert construction waste in public fill reception facilities requires a licence issued by the Director of Civil Engineering and Development.

20. We have estimated that the project will generate in total 1 850 tonnes of construction waste. Of these, HA will deliver 1 700 tonnes (92%) of inert construction waste to public fill reception facilities for subsequent reuse. In addition, HA will dispose 150 tonnes (8%) of non-inert construction waste at landfills. The total cost for accommodating construction waste at public fill reception facilities and landfill sites is estimated to be \$64,650 for this project (based on a unit charge rate of \$27 per tonne for disposal at public fill reception facilities and \$125 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation).

HERITAGE IMPLICATIONS

21. The project 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 project requires resumption of about 73.8 square metres (m²) of private land. The creation of rights of temporary occupation of about 801.1 m² and easements and other permanent rights of about 42.2 m² of private land respectively will also be required for the project. The land resumption costs, estimated at \$12,000, will be charged to **Head 701 – Land Acquisition**. A breakdown of land resumption costs is at Enclosure 4. No land clearance will be required.

BACKGROUND INFORMATION

23. We upgraded **177TB** to Cat B in September 2012. The detailed design for the proposed works was completed in November 2015. We have invited a tender for the project in December 2015 in view of the latest construction progress of the housing development.

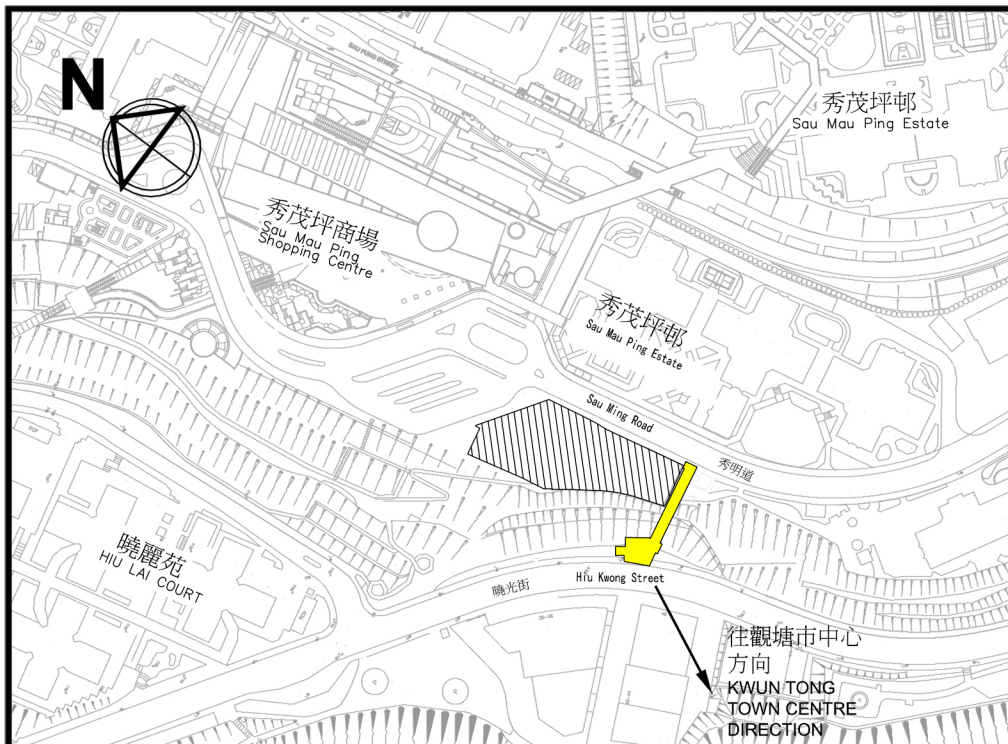
24. There are 14 trees within the site boundary. HA will preserve 12 trees and remove two trees at the slope. All trees to be removed are not important trees⁶. HA will incorporate a planting proposal as part of the proposed works, including planting of eight trees and provision of 49 planter pots.

25. We estimate that the proposed works will create about 70 jobs (60 for labourers and another 10 for professional/technical staff) providing a total employment of 1 620 man-months.

Transport and Housing Bureau
January 2016

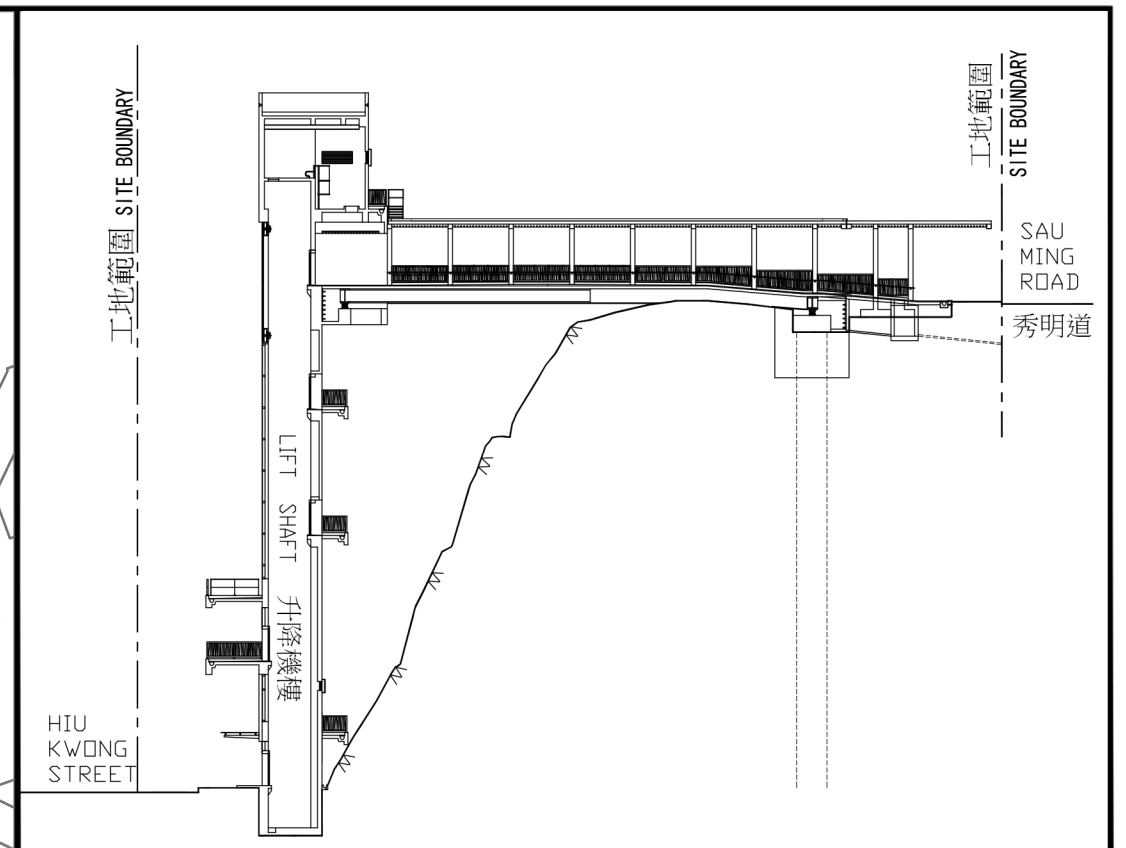
⁶ “Important trees” refer to trees on the Register of Old and Valuable Trees, or any other trees that meet one or more of the following criteria –

- (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 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/canopy spread equal or exceeding 25 m.



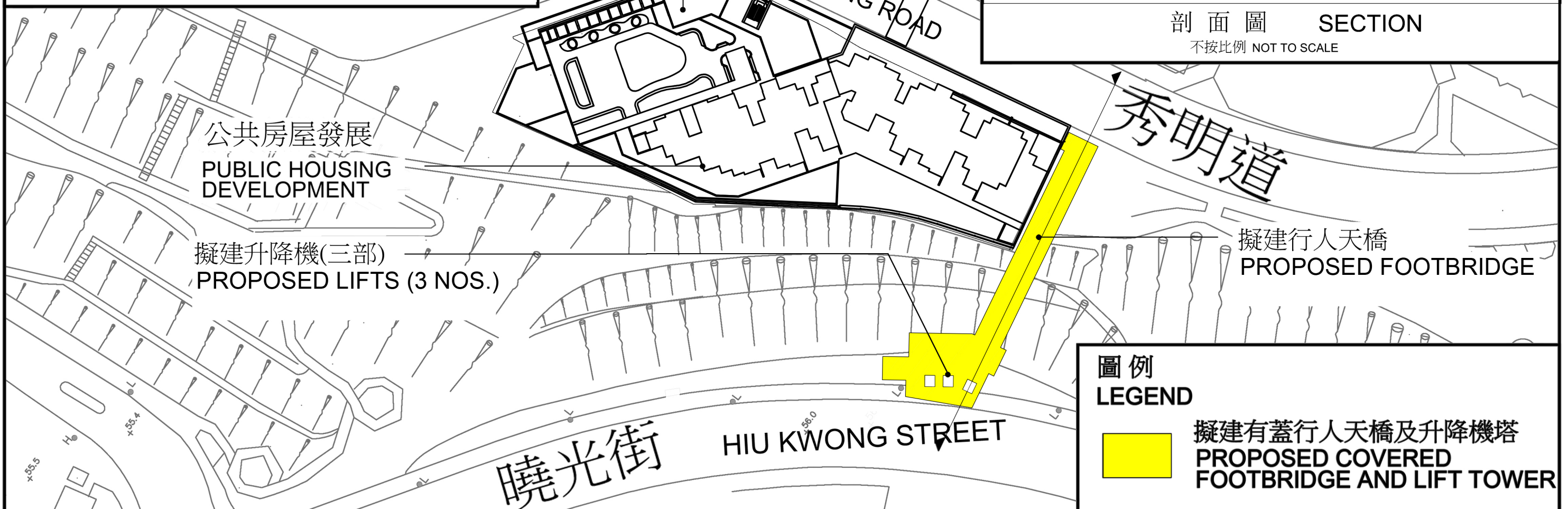
索引圖 KEY PLAN

比例 SCALE 1 : 5000

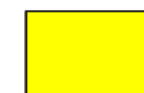


剖面圖 SECTION

不按比例 NOT TO SCALE



圖例
LEGEND



擬建有蓋行人天橋及升降機塔
PROPOSED COVERED
FOOTBRIDGE AND LIFT TOWER

工務計劃項目編號 177TB 號 -
觀塘秀明道的接駁行人天橋
PUBLIC WORKS PROGRAMME ITEM No. 177TB -
FOOTBRIDGE LINK AT SAU MING ROAD, KWUN TONG

工地平面圖
SITE PLAN

比例 SCALE 1 : 1000



工務計劃項目編號 177TB 號 -
觀塘秀明道的接駁行人天橋
PUBLIC WORKS PROGRAMME ITEM No. 177TB -
FOOTBRIDGE LINK AT SAU MING ROAD, KWUN TONG

構思圖
Artist's Impression Drawing



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構思圖
 Artist's Impression Drawing

177TB – Footbridge Link at Sau Ming Road, Kwun Tong

Breakdown of land resumption cost

(I) Estimated land resumption costs	\$10,000
<ul style="list-style-type: none">• compensation for resumption of private land of a total area of 73.8 square metres (m²)• compensation for creation of easements and other permanent rights in, under or over private land of a total area of 42.2 m²• compensation for creation of rights of temporary occupation of private land of a total area of 801.1 m²	
(II) Contingency payment	\$ 2,000
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	\$12,000
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