

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 706 – HIGHWAYS

Transport – Footbridges and pedestrian tunnels

153TB – Enhancement of footbridges in Tsim Sha Tsui East

Members are invited to recommend to Finance Committee the upgrading of **153TB** to Category A at an estimated cost of \$59.6 million in money-of-the-day prices for the enhancement of two footbridges in Tsim Sha Tsui East.

PROBLEM

Constructed over 20 years ago, the two existing footbridges at Tsim Sha Tsui East (TSTE), spanning across Mody Road and Salisbury Road do not blend in with the enhanced Tsim Sha Tsui (TST) area.

PROPOSAL

2. The Director of Highways, with the support of the Secretary for Commerce and Economic Development, proposes to upgrade **153TB** to Category A at an estimated cost of \$59.6 million in money-of-the-day (MOD) prices for the enhancement of the two footbridges in TSTE.

/PROJECT

PROJECT SCOPE AND NATURE

3. The scope of **153TB** comprises –
- (a) enhancement of the two existing footbridges (FB1 and FB2) and the staircases by -
 - (i) replacing the existing steel roofing, fluorescent light, metal parapet and flooring with skylight roof, recessed downlights, combined metal and glass parapets and artificial granite floor tiles respectively;
 - (ii) installing architectural cladding;
 - (iii) repainting the footbridges;
 - (b) demolition of the two existing footbridge ramps (Ramp A and B) and one staircase alongside Mody Road, and provision of twin lifts at each of the original ramp locations;
 - (c) demolition of the existing footbridge ramp (Ramp C) and the connecting staircase alongside Salisbury Road, and provision of a staircase and twin lifts thereat; and
 - (d) associated works including footpath paving works, landscaping, drainage, electrical and mechanical (E&M) works.

_____ A layout plan and photomontages showing the proposed enhancement works are at Enclosures 1 to 4.

4. We plan to commence the construction works in October 2008 for completion in October 2010.

/JUSTIFICATION

JUSTIFICATION

5. Tourism is a main pillar of Hong Kong's economy. We are committed to enhancing existing tourism facilities to sustain Hong Kong's appeal as an attractive tourist destination. TST is an important tourist, leisure and entertainment district in Hong Kong. Various tourism projects and improvement works have been carried out to further enhance TST's attractiveness to tourists and improve the connectivity between TSTE and other parts of TST¹ with a view to boosting tourism activities in the area. These projects and improvement works include the "Avenue of Stars"², the "Tsim Sha Tsui Promenade Beautification Project", the "Transport Link in Tsim Sha Tsui East", and "Improvement Works to the Urban Council Centenary Garden and Mody Road Garden". We are also seeking public views on our proposal to develop the existing Public Transport Interchange site adjacent to the Tsim Sha Tsui Star Ferry Pier into a new open space with enriched features, subject to smooth relocation of the bus routes and implementation of effective traffic management arrangements.

6. The two existing footbridges in TSTE covered in this project were built in the early 1980s. The original design of the footbridges, with their steel roofing, conventional metal parapets, flooring and typical fluorescent lighting system, does not blend in harmoniously with the enhanced TST area. The ramp structures fitted to the footbridges also occupy much space which if replaced by lifts can facilitate pedestrian flow and allow more space for greening and public enjoyment, thereby improving the environment in the area. Two footbridge ramps on the TSTE promenade opposite to Shangri-la Hotel and Empire Centre have been replaced with lifts, and this improvement measure is well received.

7. The proposed enhancement works to the two footbridges include replacing existing features with a skylight roof, recessed downlights, combined metal and glass parapets and artificial granite floor tiles. These improvements seek to offer a pleasant environment to pedestrians strolling along the footbridges. They also include replacing the ramps with twin lifts³ to release about 650 square metres of land for greening and public enjoyment, and for facilitating pedestrian movement. The proposed enhancement works do not require structural alterations, and is a cost-effective means to upgrade the footbridges for the benefit of users, and enhance the aesthetic quality of the locality.

/FINANCIAL

¹ Existing and planned pedestrian and public transport facilities for improving the connectivity between TSTE and other parts of TST are shown at Enclosure 5.

² Since its opening in April 2004, the Avenue of Stars (AoS) has become one of the must-see attractions for visitors to Hong Kong. The New World Development Co. Ltd. funded and constructed the AoS and then donated the project to the Government.

³ The replacing of ramps with twin lifts is in line with a previous suggestion raised by the Commissioner for Rehabilitation in response to our proposal for an earlier project for replacing the ramps of the two footbridges with lifts in 2001 and 2002.

FINANCIAL IMPLICATIONS

8. We estimate the cost of the project to be \$59.6 million in MOD prices (see paragraph 9 below), made up as follows –

	\$ million	
(a) Enhancement works	27.6	
(i) replacement of steel roofing, metal parapet, flooring and fluorescent lights	11.7	
(ii) installation of architectural cladding	14.2	
(iii) repainting	1.7	
(b) Construction of lifts and staircase	21.1	
(i) civil works	14.6	
(ii) E&M works	6.5	
(c) Demolition works	1.6	
(d) Footpath paving, landscaping, drainage works	1.6	
(e) Electrical and Mechanical Services Trading Fund (EMSTF) charges ⁴	1.0	
(f) Contingencies	5.3	
	<hr/>	
Sub-total:	58.2	(in September 2007 prices)
(g) Provision for price adjustment	1.4	
	<hr/>	
Total:	59.6	(in MOD prices)

/9.

⁴ Since the establishment on 1 August 1996 under the Trading Fund Ordinance, the EMSTF charges government departments for design and technical consultancy services for E&M installations provided by the Electrical and Mechanical Services Department. The services rendered for this project include carrying out the design on all E&M installations and providing technical advice to the Government on all E&M works and their impacts on the project from maintenance and general operation points of view.

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

Year	\$ million (Sep 2007)	Price Adjustment Factor	\$ million (MOD)
2008 – 2009	4.7	1.00750	4.7
2009 – 2010	26.9	1.01758	27.4
2010 – 2011	17.4	1.02775	17.9
2011 – 2012	6.1	1.03803	6.3
2012 – 2013	3.1	1.05619	3.3
	58.2		59.6

10. We have derived the MOD estimates on the basis of the Government's latest forecast of trend rate of change in the prices of public sector building and construction output for the period 2008 to 2013. We will tender the proposed works under a standard remeasurement contract because the quantity of the foundation works of the lifts and staircase is subject to variation due to actual ground conditions. We will allow for price adjustment in the contract as the construction period will exceed 21 months.

11. We estimate the annual recurrent expenditure for the enhanced footbridges is about \$1.9 million.

PUBLIC CONSULTATION

12. We consulted the Advisory Committee on the Appearance of Bridges and Associated Structures⁵ on the aesthetic design of the footbridge enhancement works on 22 August 2006. The Committee accepted in principle the proposed aesthetic design.

/13.

⁵ The Advisory Committee on the Appearance of Bridges and Associated Structures, which comprises representatives of the Hong Kong Institute of Architects, the Hong Kong Institution of Engineers, an academic institution, Architectural Services Department, Highways Department, Housing Department, Planning Department, and Civil Engineering and Development Department, is responsible for vetting the design of bridges and other structures associated with highway system from the aesthetic and visual impact points of views.

13. We consulted the local stakeholders represented by the Tsim Sha Tsui East Property Developers Association Limited and the Traffic and Transport Committee of the Yau Tsim Mong District Council on 24 October and 16 November 2006 respectively. They supported the project.

14. We gazetted the proposed works under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) (the Ordinance) on 27 April 2007 and received no objection. The Permanent Secretary for Transport and Housing (Transport), under delegated authority from the Secretary for Transport and Housing, authorised the proposed works under the Ordinance on 26 July 2007 and the notice of authorisation was gazetted on 3 August 2007.

15. The Equestrian Events (Hong Kong) of the Games of the XXIX Olympiad Company Limited (the Company) has also been consulted. In anticipation that a large number of overseas visitors and media will visit Hong Kong for the Olympic and Paralympic Games in August and September 2008 and as TST is very popular among tourists, the Company suggests that the Project should commence after completion of the Games. We are prepared to accept this suggestion and adjust the works timetable accordingly.

16. We consulted the Legislative Council Panel on Economic Development on 26 November 2007. The Panel supported the project in general and called on the Administration to implement appropriate mitigation measures to minimise the environmental impacts arising from the project and any inconvenience that may be caused to retail shops, visitors and drivers. Members also requested the Administration to consult the relevant committee to ensure that the proposed design of the lifts and access routes are user-friendly to people with physical disabilities. We accept the Panel's suggestions and shall implement mitigation measures as mentioned in paragraph 18 below for controlling environmental impacts during the construction period. To minimise the impacts on retail shops as well as vehicular and pedestrian traffic, we shall carry out the project in phases over a two-year period and confine the extents of hoardings to be erected at the project site to a minimum as far as possible. We shall make suitable arrangements for diverting the traffic and pedestrians and map out appropriate

/contingency

contingency measures to cater for the breaking down of the lifts⁶. In response to Members' request, we consulted the Sub-committee on Access⁷ of the Rehabilitation Advisory Committee on 4 December 2007. The Sub-committee generally supported the project and found the proposed designs agreeable.

ENVIRONMENTAL IMPLICATIONS

17. The project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). It has very little potential for giving rise to adverse environmental impacts. We undertake to implement the standard pollution control measures during construction, as promulgated by the Director of Environmental Protection.

18. We have included in the project estimate the cost to implement suitable mitigation measures to control short-term environmental impacts during construction stage. These measures include frequent cleaning and watering of the site, covering of materials on trucks, use of silenced construction plant, and the provision of mobile noise barriers.

19. We have considered measures in the planning and detailed design stage to reduce the generation of construction waste where possible. In the design of the new staircase and its pile caps, we have minimised the number of columns and raised the levels of the pile caps in order to reduce the generation of construction waste. In addition, we will require the contractor to reuse suitable construction waste (e.g. excavated materials and demolition materials as filling materials) on site as far as possible, in order to minimise their disposal to public fill reception facilities⁸. We will encourage the contractor to maximise the use of recycled or recyclable inert construction waste, as well as the use of non-timber formwork to further minimise the generation of construction waste.

/20.

⁶ For contingencies, each lift will be equipped with a battery back-up system to prevent trapping of lift passengers in case of power failure and a telemetry system which will automatically transmit all lift fault signals to a 24-hour-manned remote monitoring centre for immediate maintenance service.

⁷ The Sub-committee on Access set up under the Rehabilitation Advisory Committee is a key government advisory machinery on access and facilities for people with disabilities. Its membership comprises people with disabilities, experts from the construction industry, academics and representatives of relevant government departments. The Sub-committee has been maintaining close ties with people with disabilities and local organisations to listen to their views on access and facilities of government venues in the community, before providing the Administration with recommendations for improvement.

⁸ Public fill reception facilities are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation. Disposal of public fill in public fill reception facilities requires a license issued by the Director of Civil Engineering and Development.

20. We will also 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 whenever practicable 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 to designated public fill reception facilities and landfills respectively through a trip-ticket system.

21. The demolition of footbridge ramps and staircase will generate about 340 tonnes of scrap metal which will be separated for collection by recycling contractors. We estimate that the project will generate about 3 400 tonnes of construction waste. Of these, we will reuse about 600 tonnes (18%) of inert construction waste on site and deliver about 2 700 tonnes (79%) of inert construction waste to public fill reception facilities for subsequent reuse. In addition, we will dispose of about 100 tonnes (3%) 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 \$85,400 for this project (based on a unit cost of \$27/tonne for disposal at public fill reception facilities and \$125/tonne⁹ at landfills).

HERITAGE IMPLICATIONS

22. The project will not affect any heritage site, i.e. all declared monuments, proposed monuments, graded historic sites/buildings, sites of archaeological interest and Government historic sites identified by the Antiquities and Monuments Office.

LAND ACQUISITION

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

/BACKGROUND

⁹ 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 is likely to be more expensive) when the existing ones are filled.

BACKGROUND INFORMATION

24. We upgraded **153TB** to Category B in October 2005, and commenced ground investigation for the project in July 2006 at an estimated cost of \$310,000 in MOD prices under **Subhead 6100TX** “Highway works, studies and investigations for items in Category D of the Public Works Programme”. The ground investigation works was completed in July 2007.

25. The Finance Committee (FC) approved the upgrading of **3385RO** “Tsim Sha Tsui Promenade Beautification Project” to Category A at an estimated cost of \$183.2 million in MOD prices in February 2004. The project gives a major facelift to the waterfront between the Hong Kong Cultural Centre and the Hong Kong Museum of Art, and the promenade along the Tsim Sha Tsui East. The project has been substantially completed.

26. FC approved the upgrading of **3074TI** “Transport link in Tsim Sha Tsui East” to Category A at an estimated cost of \$275.7 million in MOD prices in June 2005. The scope of the project includes the construction of a new Public Transport Interchange (PTI) in TSTE with a podium garden to replace the existing PTI adjacent to the TST Star Ferry Pier and two footbridges. The project has been completed and the facilities have been opened for public use since August 2007.

27. The Director of Architectural Services completed the project “Improvement Works to the Urban Council Centenary Garden and Mody Road Garden” at an estimated cost of \$14.8 million in MOD prices in January 2006 to give the Gardens a facelift. The construction cost was charged to **Subhead 3004GX**.

28. The proposed works will involve transplanting of nine trees within the project boundary. All of them are not important trees¹⁰. We will incorporate planting proposal as part of the project, including estimated quantities of 20 trees and 4 000 shrubs.

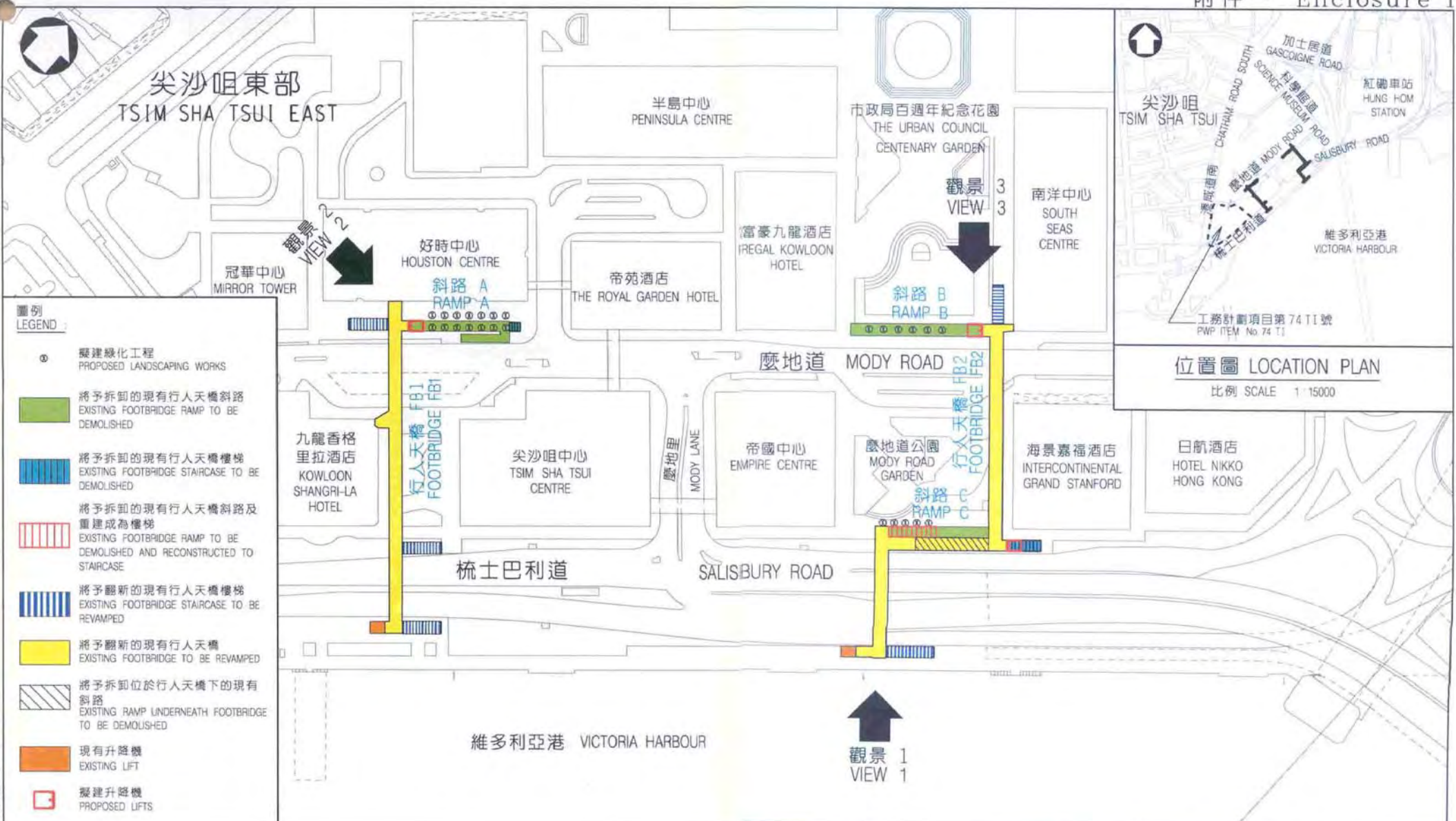
/29.

¹⁰ An “Important tree” 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 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 metre (measured at 1.3 metre above ground level), or with height/canopy spread equal or exceeding 25metres.

29. We estimate that the proposed works will create about 78 jobs (8 for professional/technical staff and 70 for labourers) providing a total employment of 1 280 man-months.

Commerce and Economic Development Bureau
January 2008



位置圖 LOCATION PLAN
比例 SCALE 1 : 15000

- 圖例 LEGEND**
- 擬建綠化工程
PROPOSED LANDSCAPING WORKS
 - 將予拆卸的現有行人天橋斜路
EXISTING FOOTBRIDGE RAMP TO BE DEMOLISHED
 - 將予拆卸的現有行人天橋樓梯
EXISTING FOOTBRIDGE STAIRCASE TO BE DEMOLISHED
 - 將予拆卸的現有行人天橋斜路及重建成為樓梯
EXISTING FOOTBRIDGE RAMP TO BE DEMOLISHED AND RECONSTRUCTED TO STAIRCASE
 - 將予翻新的現有行人天橋樓梯
EXISTING FOOTBRIDGE STAIRCASE TO BE REVAMPED
 - 將予翻新的現有行人天橋
EXISTING FOOTBRIDGE TO BE REVAMPED
 - 將予拆卸位於行人天橋下的現有斜路
EXISTING RAMP UNDERNEATH FOOTBRIDGE TO BE DEMOLISHED
 - 現有升降機
EXISTING LIFT
 - 擬建升降機
PROPOSED LIFTS

50mm SCALE 1 : 1

drawing title 圖則名稱
工務計劃項目第 153TB 號
尖沙咀東部行人天橋改善工程 - 平面圖
 PWP ITEM No. 153TB
ENHANCEMENT OF FOOTBRIDGES IN TSIM SHA TSUI EAST - LAYOUT PLAN

designed 設計 S.K. WONG	date 日期 06.11.2007	drawing no. 圖號 HWDYM055A-SP0001	scale 比例 A3 1 : 1500 OR AS SHOWN
drawn 繪圖 T.L. WONG	date 日期 06.11.2007	版權所有 COPYRIGHT RESERVED	
approved 核准 Y.K. LAU	date 日期 06.11.2007	HIGHWAYS DEPARTMENT HONG KONG 路政署	
office 辦事處 工程處 WORKS DIVISION			




現有行人天橋的橋面
EXISTING FOOTBRIDGE DECK



drawing title 圖則名稱

工務計劃項目第 153TB 號 - 尖沙咀東部行人天橋改善工程
翻新後的行人天橋橋面(觀景 1)

PWP ITEM No. 153TB - ENHANCEMENT OF FOOTBRIDGES IN TSIM SHA TSUI EAST
FOOTBRIDGE DECK AFTER REVAMPING (VIEW 1)

designed 設計 S.K. WONG	date 日期 06.11.2007	drawing no. 圖號 HWDYM055A-SP0002	scale 比例 N.T.S.	A4
drawn 繪圖 S.P. YIP	date 日期 06.11.2007	版權所有 COPYRIGHT RESERVED		
approved 核實 Y.K. LAU	date 日期 06.11.2007	 HIGHWAYS DEPARTMENT HONG KONG	路政署 香港	
office 辦事處 工程部 WORKS DIVISION				




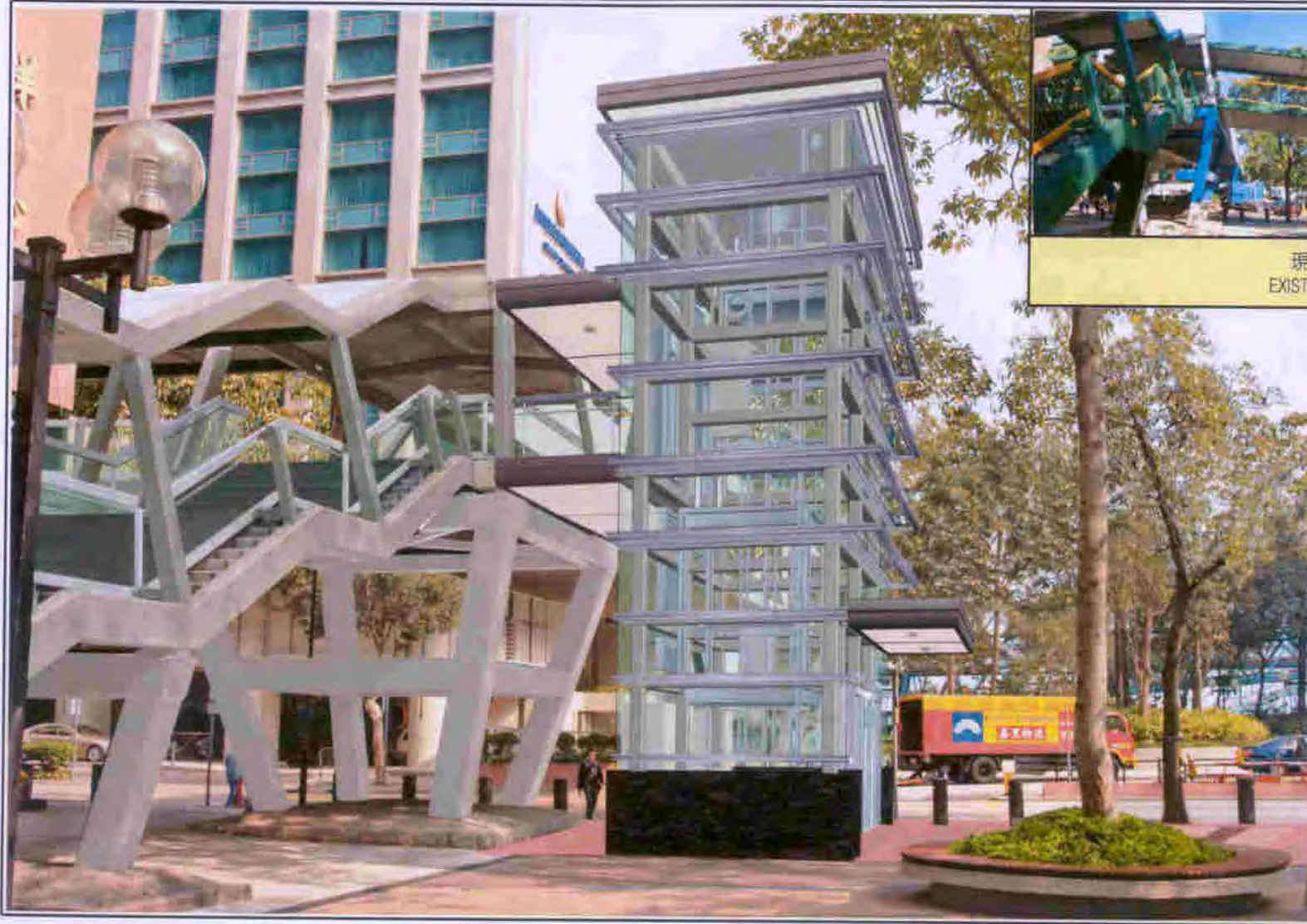
現有行人天橋樓梯
EXISTING FOOTBRIDGE STAIRCASE

drawing title 圖則名稱

工務計劃項目第 153TB 號 - 尖沙咀東部行人天橋改善工程
翻新後的行人天橋樓梯(觀景 2)

PWP ITEM No. 153TB - ENHANCEMENT OF FOOTBRIDGES IN TSIM SHA TSUI EAST
FOOTBRIDGE STAIRCASE AFTER REVAMPING (VIEW 2)

designed 設計 S.K. WONG	date 日期 06.11.2007	drawing no. 圖號 HWDYM055A-SP0003	scale 比例 A4
drawn 繪圖 S.P. YIP	date 日期 06.11.2007		N.T.S.
approved 核實 Y.K. LAU	date 日期 06.11.2007	版權所有 COPYRIGHT RESERVED	
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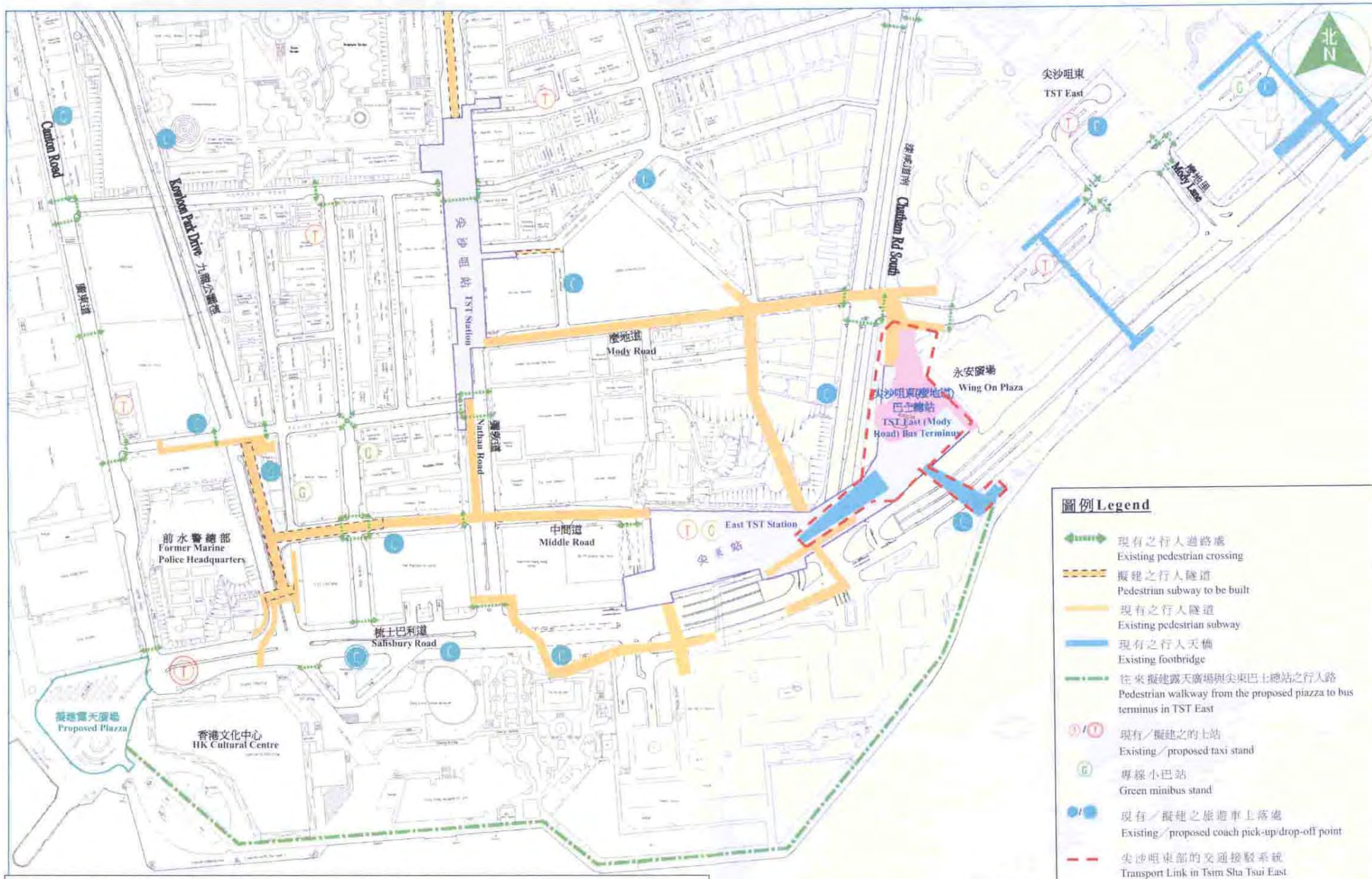
現有行人天橋
EXISTING FOOTBRIDGE

drawing title 圖則名稱

工務計劃項目第 153TB 號 - 尖沙咀東部行人天橋改善工程
擬建的升降機 (觀景 3)

PWP ITEM No. 153TB - ENHANCEMENT OF FOOTBRIDGES IN TSIM SHA TSUI EAST
PROPOSED LIFT (VIEW 3)

designed 設計 S.K. WONG	date 日期 06.11.2007	drawing no. 圖號 HWDYM055A-SP0004	scale 比例 A4
drawn 繪圖 S.P. YJP	date 日期 06.11.2007	N.T.S.	
approved 校核 Y.K. LAU	date 日期 06.11.2007	版權所有 COPYRIGHT RESERVED	
office 辦事處 工程部 WORKS DIVISION		 HIGHWAYS DEPARTMENT HONG KONG 路政署 香港	



工務計劃項目第 153TB 號 - 尖沙咀東部行人天橋改善工程
 尖沙咀行人及公共運輸設施
 PWP Item No. 153TB - Enhancement of Footbridges in Tsim Sha Tsui East
 Pedestrian and Public Transport Facilities in Tsim Sha Tsui

圖例 Legend

- 現有之行人過路處
Existing pedestrian crossing
- 擬建之行人隧道
Pedestrian subway to be built
- 現有之行人隧道
Existing pedestrian subway
- 現有之行人天橋
Existing footbridge
- 往來擬建露天廣場與尖東巴士總站之行人路
Pedestrian walkway from the proposed piazza to bus terminus in TST East
- 現有/擬建之的士站
Existing/proposed taxi stand
- 專線小巴站
Green minibus stand
- 現有/擬建之旅遊車上落處
Existing/proposed coach pick-up/drop-off point
- 尖沙咀東部的交通接駁系統
Transport Link in Tsim Sha Tsui East