

## **ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE**

### **HEAD 706 – HIGHWAYS**

#### **Transport – Roads**

#### **173TB – Extension of the CITIC Tower Footbridge to the Legislative Council Complex at Tamar**

Members are invited to recommend to Finance Committee the upgrading of **173TB** to Category A at an estimated cost of \$74.3 million in money-of-the-day prices for the extension of the CITIC Tower Footbridge to the Legislative Council Complex at Tamar.

### **PROBLEM**

We need to extend the existing CITIC Tower Footbridge to the Legislative Council Complex (LCC) at Tamar to provide a direct, separate and covered access route from Admiralty to LCC.

### **PROPOSAL**

2. The Director of Highways, with the support of the Director of Administration, proposes to upgrade **173TB** to Category A at an estimated cost of \$74.3 million in money-of-the-day (MOD) prices for the extension of the CITIC Tower Footbridge to the LCC at Tamar.

/ **PROJECT .....**

**PROJECT SCOPE AND NATURE**

3. The proposed scope of works under 173TB includes –
- (a) construction of an extension of a covered footbridge, comprising a section along Tim Mei Avenue connecting the existing CITIC Tower Footbridge with a clear width of 5.85 metres (m) and a section across Tim Mei Avenue with a clear width of 3.5 m connecting LCC;
  - (b) modification of the existing CITIC Tower Footbridge to facilitate the provision of the new footbridge;
  - (c) construction of a covered link within the premises of LCC to connect the new footbridge with the Office Block of LCC at 1/F level with a staircase connecting the street level;
  - (d) building modification works within the premises of LCC to facilitate connection with the new covered link including –
    - (i) structural supports for the new footbridge;
    - (ii) modification of the existing external façade of the Office Block of LCC to provide an entrance access to the 1/F of the Office Block of LCC;
    - (iii) removal and reconstruction of part of the existing canopy and the whole glazed canopy at the demonstration area next to the Members' Entrance 2 of the Office Block of LCC facing Tim Mei Avenue to facilitate the connection of the new footbridge and construction of the new covered link and staircase; and
    - (iv) modification of the layout and fitting out works including all necessary building services and security provisions, signage etc., of relevant internal space at 1/F of the Office Block of LCC to provide a reception space for the new entrance from the new footbridge; and
  - (e) associated road, landscaping, drainage, traffic aids and road lighting works.

————— A layout plan, sectional drawings, and perspective views (artist's impression) are at Enclosure 1.

4. We have substantially completed the detailed design of the proposed project. Subject to funding approval of the Finance Committee (FC), we plan to commence the construction works in the third quarter of 2013 for completion by the end of June 2015.

## **JUSTIFICATION**

————— 5. At present, any person who wishes to reach LCC from Admiralty via a covered pedestrian walkway needs to first pass through the Central Government Offices (CGO) (i.e. Route (b) as indicated at Enclosure 2). The Legislative Council Commission considered this not desirable as members of the public need to take a longer and less direct way to go from Admiralty to LCC than to CGO. Also, in view of the constitutional role and independent image of the Legislative Council (LegCo), LegCo Members had expressed concerns that pedestrians need to pass through the CGO forecourt before they reach LCC. Members are also concerned about that the only existing covered walkway could be blocked from time to time, for example, by demonstrations at CGO. Extending the existing CITIC Tower Footbridge to LCC will provide a direct, separate and covered access route from Admiralty.

6. With the footbridge extension, persons with disabilities can make use of the existing elevators of LCC to travel between LCC and Admiralty. They can also make use of the elevators for the disabled at the existing footbridge connecting the CITIC Tower Footbridge with CGO to go to LCC via the pavement of Tim Mei Avenue (location of the existing elevators are indicated on Sheet 1 of Enclosure 1).

7. The demonstration area of LCC facing Tim Mei Avenue will be closed during the construction period for safety reasons. Hoardings around the works area will be provided for public safety. Proper safety and diversion measures for the pedestrian flow along the passageway outside the Public Complaints Office of LCC connecting CGO and LCC during construction will be arranged.

8. In respect of the modification works within LCC, we will endeavour to minimise the impact on LegCo's daily operation (such as proper scheduling of noise-intensive works). We will maintain close liaison and coordination with the LegCo Secretariat throughout the construction period and make further arrangements or introduce mitigation measures as and when necessary.

## FINANCIAL IMPLICATIONS

9. We estimate the capital cost of the project to be \$74.3 million in MOD prices, broken down as follows –

	\$ million
(a) Footbridge extension works	32.0
(i) superstructure	15.4
(ii) substructure	16.6
(b) Covered link and LCC modification works	20.8
(i) site works and demolition	3.2
(ii) builder's works within LCC	7.0
(iii) building services	6.0
(iv) furniture and equipment	1.0
(v) energy conservation measures	0.6
(vi) external works and drainage within LCC	3.0
(c) Associated road, landscaping, drainage, traffic aids and road lighting works	1.6
(d) Consultants' fees for	1.8
(i) contract administration	1.7
(ii) management of resident site staff	0.1

	<b>\$ million</b>
(e) Remuneration of resident site staff	1.1
(f) Contingencies	5.8
	<hr/>
Sub-total	63.1 (in September 2012 prices)
(g) Provision for price adjustment	11.2
	<hr/>
Total	74.3 (in MOD prices)
	<hr/>

Due to insufficient in-house resources, we propose to engage consultants to undertake contract administration and site supervision of the project. A breakdown of the estimate for consultants' fees and resident site staff costs by man-months is at Enclosure 3.

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

<b>Year</b>	<b>\$ million (Sept 2012)</b>	<b>Price adjustment factor</b>	<b>\$ million (MOD)</b>
2013 – 2014	9.1	1.06225	9.7
2014 – 2015	23.7	1.12599	26.7
2015 – 2016	14.5	1.19354	17.3
2016 – 2017	9.8	1.26516	12.4
2017 – 2018	3.5	1.34107	4.7
2018 – 2019	2.5	1.41147	3.5
	<hr/>		<hr/>
	63.1		74.3
	<hr/>		<hr/>

11. We have derived the MOD estimates on the basis of the Government's latest set of assumptions of trend rate of change in the prices for public sector building and construction output for the period 2013 to 2019. For the construction of the footbridge extension and modification of the existing CITIC Tower footbridge, we will tender the works under a standard re-measurement contract, as the quantity of the foundation works for the proposed

/project .....

project is subject to variation of the actual ground conditions. For the covered link and the LCC modification works, which will be developed as typical building additional and alteration works, the Architectural Services Department will employ their in-house Term Consultant and Term Contractor to carry out the design and such works. The contracts will provide for price adjustments.

12. We estimate the annual recurrent expenditure arising from this project to be \$0.1 million.

## **PUBLIC CONSULTATION**

13. We consulted the Traffic and Transport Committee of the Central and Western District Council and CITIC Tower Property Management Co., Ltd. on the project in June 2012 and obtained their support to the proposal. Members of the Task Force on Harbourfront Developments on Hong Kong Island of the Harbourfront Commission also held no objection to the proposed project.

14. The Advisory Committee on the Appearance of Bridges and Associated Structures (ACABAS)<sup>1</sup> was consulted on the aesthetic design of the proposed footbridge. The Committee accepted the proposed aesthetic design in August 2012.

15. The proposed works was gazetted under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) (the Ordinance) on 14 and 21 September 2012. No objection was received. The Acting Permanent Secretary for Transport and Housing (Transport) authorised the proposed works under the Ordinance on 11 December 2012 without modification. The notice of authorisation was gazetted on 14 and 21 December 2012.

16. The Legislative Council Commission and the LegCo Panel on Transport endorsed the proposed project at its meeting on 19 March and 19 April 2013 respectively.

## **/ENVIRONMENTAL .....**

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<sup>1</sup> ACABAS comprises representatives of the Hong Kong Institute of Architects, Hong Kong Institution of Engineers, Hong Kong Institute of Planners, Architectural Services Department, Highways Department, Housing Department, Civil Engineering and Development Department, and an academic institution to be invited by the Chairman of ACABAS (such as an architectural school from a local institution), is responsible for vetting the design of bridges and other structures associated with the highway system, including noise barriers and enclosures, from the aesthetic and visual impact points of view.

## ENVIRONMENTAL IMPLICATIONS

17. The project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). It will not cause long-term environmental impact. We have included in the project estimates the cost to implement suitable mitigation measures to control short term environmental impacts. During construction, we will control construction noise, dust and site run-off nuisances to levels within established standards and guidelines through the implementation of mitigation measures as required.

18. At the planning and design stages, we have considered measures to reduce the generation of construction waste where possible. Such measures include reducing the size of the foundations of the structures in order to minimise the quantity of construction waste generated from excavation. In addition, we will require the contractor to reuse inert construction waste (e.g. excavated materials for backfilling) 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>2</sup>. We will also encourage the contractor to maximise the use of recycled or recyclable inert construction waste and non-timber formwork to further reduce the 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, 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 project will generate in total about 757 tonnes of construction waste. Of these, we will reuse about 305 tonnes (40%) of inert construction waste on site and deliver 385 tonnes (51%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 67 tonnes (9%) of non-inert construction waste at landfills.

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<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.

The total cost for accommodating construction waste at public fill reception facilities and landfill sites is estimated to be about \$18,770 for this project (based on a unit cost of \$27 per tonne for disposal at public fill reception facilities and \$125 per tonne<sup>3</sup> at landfills).

## HERITAGE IMPLICATIONS

21. 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.

## TRAFFIC IMPLICATIONS

22. The proposed project will cause localised traffic impact during its construction stage, i.e. parts of the pedestrian area and the fast lanes of both directions of Tim Mei Avenue will have to be temporarily closed. We will specify such requirements for implementing the temporary traffic arrangements in the works contract to minimise the impact on traffic during construction. We will also display publicity boards on site, giving details of the temporary traffic arrangements and the anticipated completion dates of individual sections of works. In addition, we will set up a telephone hotline for public enquiries or complaints.

## LAND ACQUISITION

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

## BACKGROUND

24. We upgraded **173TB** to Category B in May 2012. We have charged a total cost of about \$0.3 million to block allocation **Subhead 6100TX** “Highway works, studies and investigations for items in Category D of the Public Works Programme” for the ground investigation works. We completed the ground investigation works in December 2012.

/25. ....

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<sup>3</sup> 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 per m<sup>3</sup>), nor the cost to provide new landfills (which is likely to be more expensive), when the existing ones are filled.

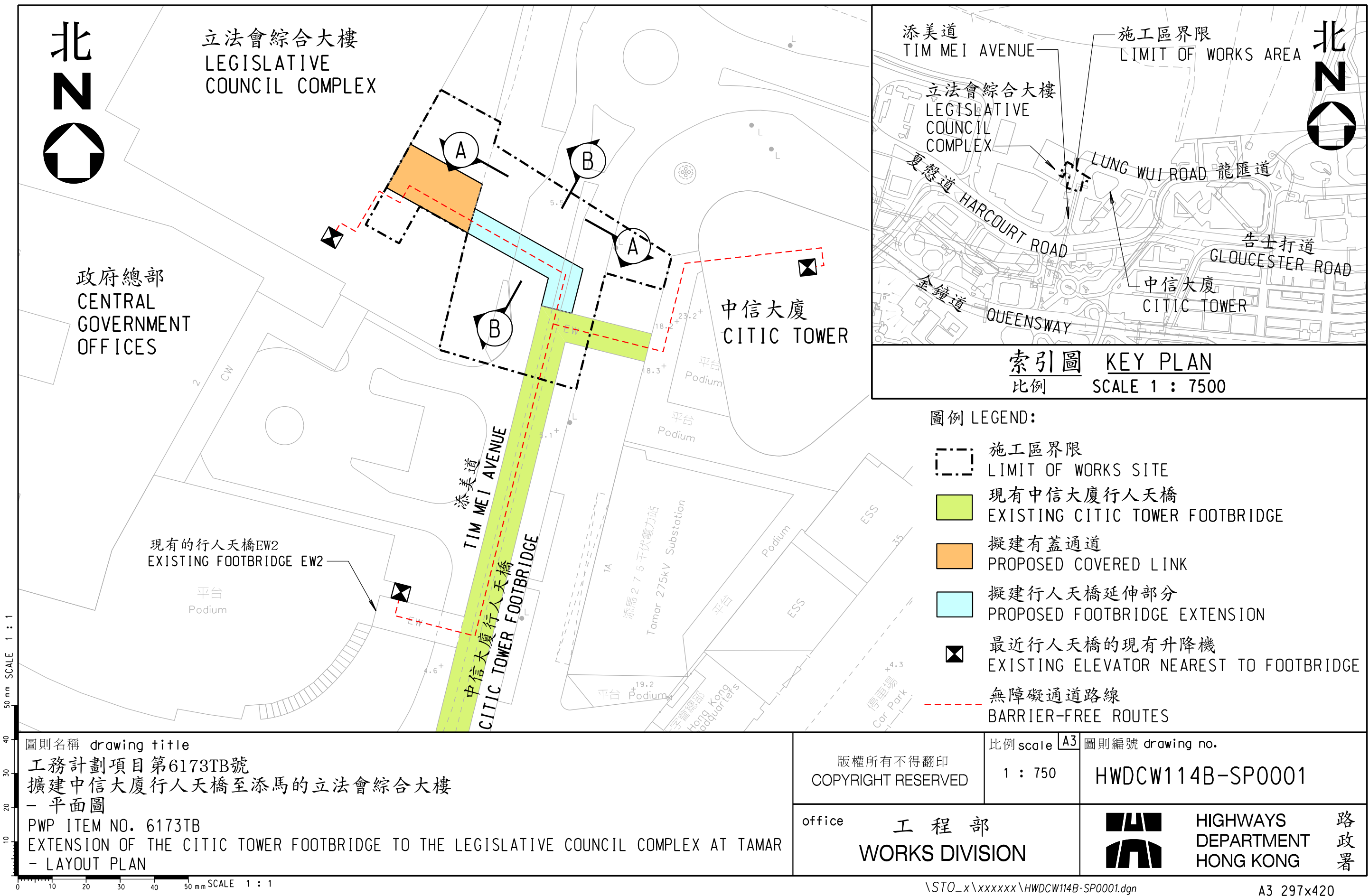


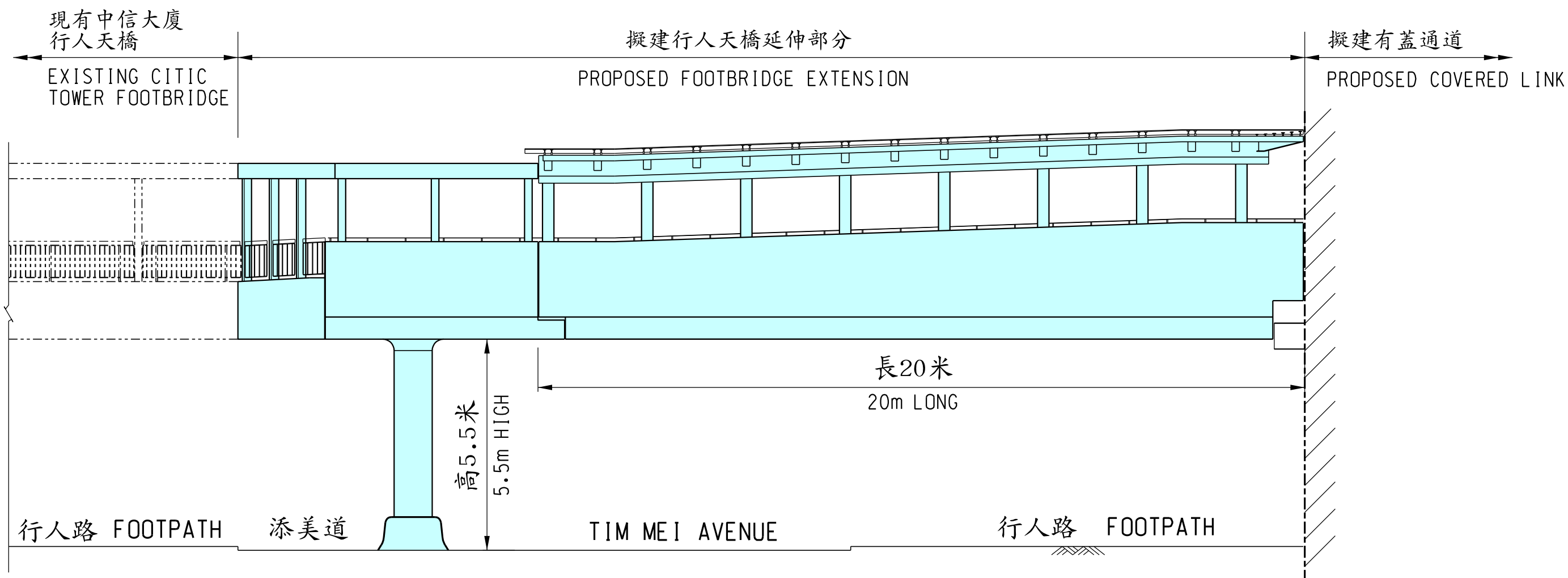
25. The proposed works will not involve any tree removal. We will incorporate a planting proposal of about 270 shrubs as part of the project.

26. We estimate that the proposed works will create 52 jobs (seven for professional/technical staff and 45 for labourers), providing a total employment of 980 man-months.

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Administration Wing, Chief Secretary for Administration's Office  
May 2013





立視 ELEVATION A-A

圖則名稱	drawing title
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工務計劃項目第6173TB號  
擴建中信大廈行人天橋至添馬的立法會綜合大樓  
— 立視圖

PWP ITEM NO. 6173TB  
EXTENSION OF THE CITIC TOWER FOOTBRIDGE TO THE LEGISLATIVE COUNCIL COMPLEX AT TAMAR  
- ELEVATION

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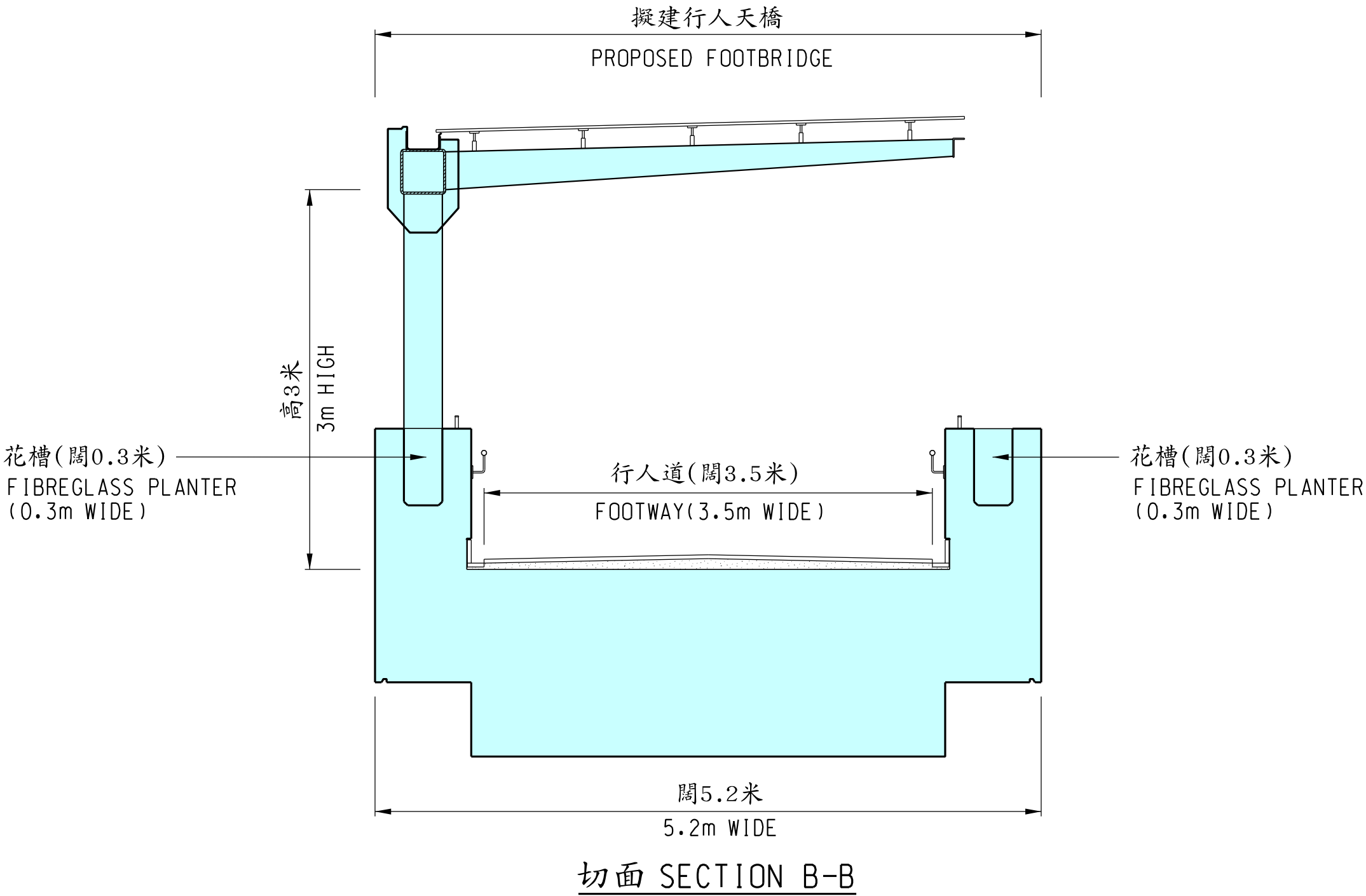
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WORKS DIVISION



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DEPARTMENT  
HONG KONG



圖則名稱 drawing title  
工務計劃項目第6173TB號  
擴建中信大廈行人天橋至添馬的立法會綜合大樓  
- 切面 B-B  
PWP ITEM NO. 6173TB  
EXTENSION OF THE CITIC TOWER FOOTBRIDGE TO THE LEGISLATIVE COUNCIL COMPLEX AT TAMAR  
- SECTION B-B

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圖則名稱 drawing title

工務計劃項目第6173TB號  
擴建中信大廈行人天橋至添馬的立法會綜合大樓  
- 擬擴建行人天橋構思圖 (向北望)

PWP ITEM NO. 6173TB

EXTENSION OF THE CITIC TOWER FOOTBRIDGE TO THE LEGISLATIVE COUNCIL COMPLEX AT TAMAR  
- ARTIST'S IMPRESSION OF PROPOSED FOOTBRIDGE (LOOKING NORTH)

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比例 scale A3  
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DIAGRAMMATIC

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工務計劃項目第6173TB號  
擴建中信大廈行人天橋至添馬的立法會綜合大樓  
- 擬擴建行人天橋構思圖 (向南望)

PWP ITEM NO. 6173TB

EXTENSION OF THE CITIC TOWER FOOTBRIDGE TO THE LEGISLATIVE COUNCIL COMPLEX AT TAMAR  
- ARTIST'S IMPRESSION OF PROPOSED FOOTBRIDGE (LOOKING SOUTH)

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DIAGRAMMATIC

圖則編號 drawing no.

HWDCW114B-SP0005

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50 mm SCALE 1 : 1


<div>圖則名稱 drawing title</div> <div>工務計劃項目第6173TB號</div> <div>擴建中信大廈行人天橋至添馬的立法會綜合大樓</div> <div>- 擬擴建行人天橋內部設計構思圖</div> <div>PWP ITEM NO. 6173TB</div> <div>EXTENSION OF THE CITIC TOWER FOOTBRIDGE TO THE LEGISLATIVE COUNCIL COMPLEX AT TAMAR</div> <div>- ARTIST'S IMPRESSION OF THE INTERNAL VIEW OF PROPOSED FOOTBRIDGE</div>	<div>版權所有不得翻印</div> <div>COPYRIGHT RESERVED</div>	<div>比例 scale</div> <div>A3</div> <div>示意圖</div> <div>DIAGRAMMATIC</div>	<div>圖則編號 drawing no.</div> <div>HWDCW114B-SP0006</div>
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50 mm SCALE 1 : 1

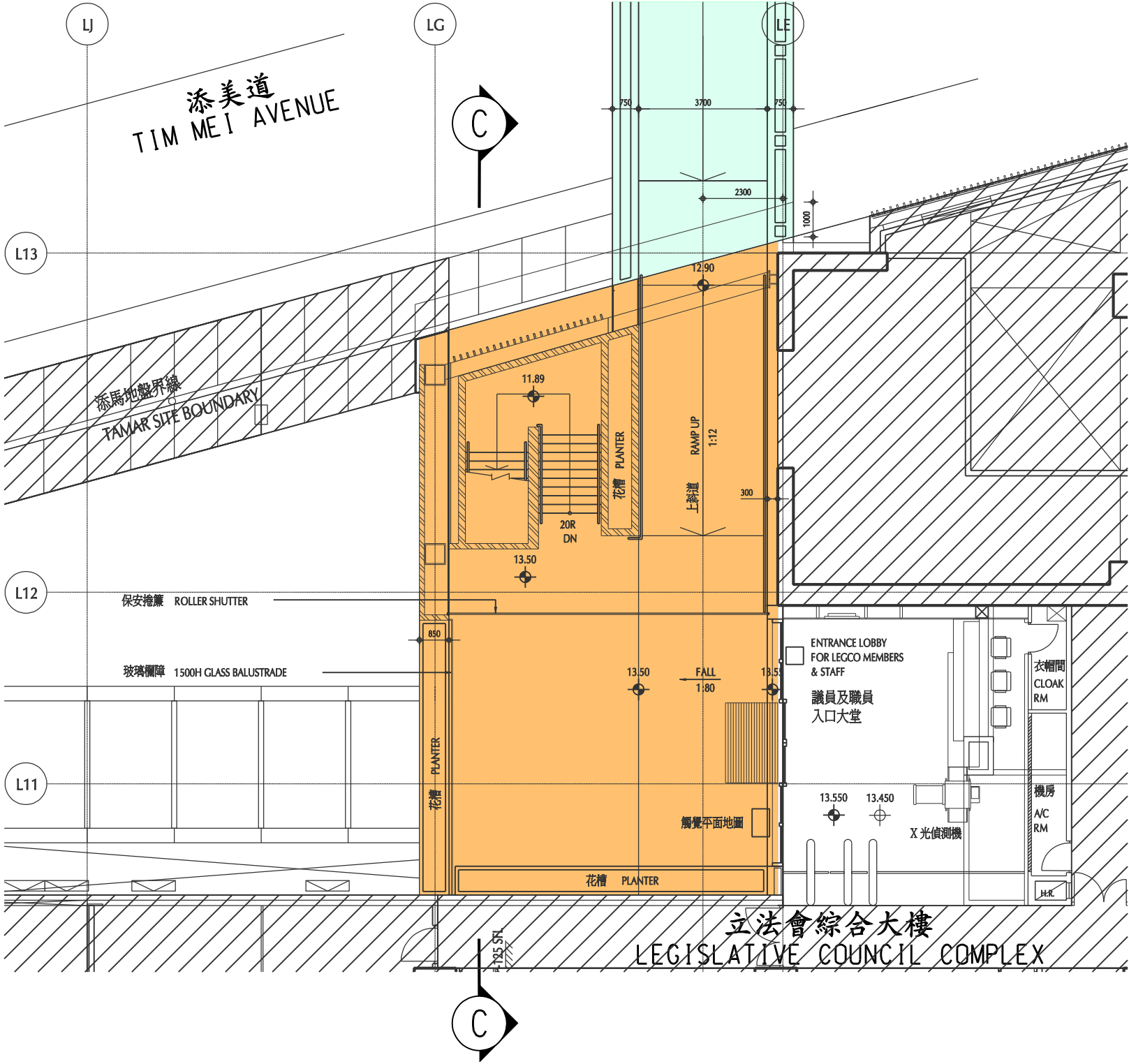
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- 圖例 LEGEND:
- 擬建有蓋通道  
PROPOSED COVERED LINK
  - 擬建行人天橋延伸部分  
PROPOSED FOOTBRIDGE  
EXTENSION
  - 非施工範圍  
NON-WORKS AREA

50 mm SCALE 1 : 1  
40  
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圖則名稱 drawing title  
工務計劃項目第6173TB號  
擴建中信大廈行人天橋至添馬的立法會綜合大樓  
— 一樓平面圖  
PWP ITEM NO. 6173TB  
EXTENSION OF THE CITIC TOWER FOOTBRIDGE TO THE LEGISLATIVE COUNCIL COMPLEX AT TAMAR  
— 1ST FLOOR PLAN

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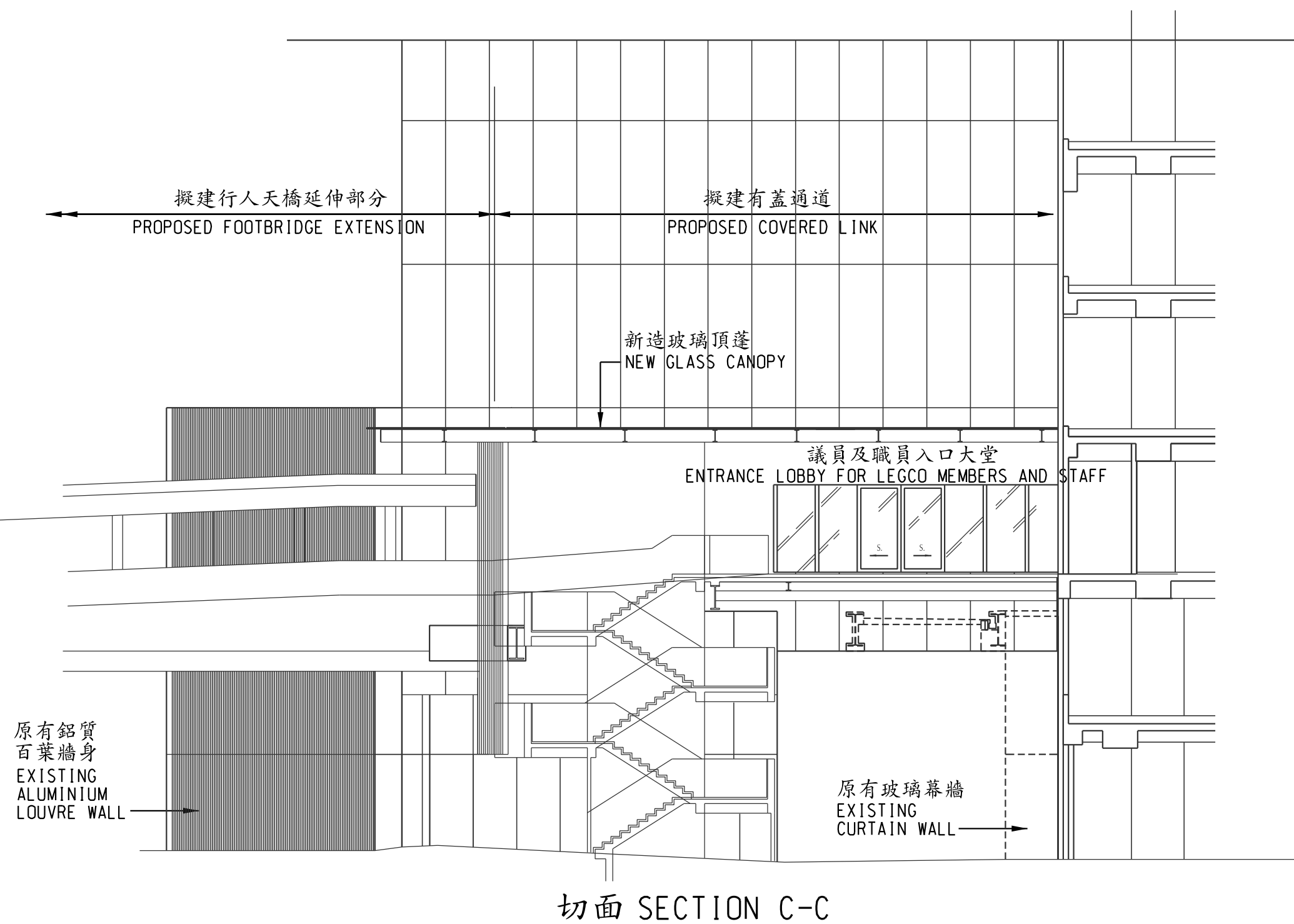
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工務計劃項目第6173TB號  
擴建中信大廈行人天橋至添馬的立法會綜合大樓  
- 切面 C-C

PWP ITEM NO. 6173TB  
EXTENSION OF THE CITIC TOWER FOOTBRIDGE TO THE LEGISLATIVE COUNCIL COMPLEX AT TAMAR  
- SECTION C-C

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50 mm SCALE 1 : 1

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工務計劃項目第6173TB號  
擴建中信大廈行人天橋至添馬的立法會綜合大樓  
— 一樓的入口大堂設計構思圖

PWP ITEM NO. 6173TB  
EXTENSION OF THE CITIC TOWER FOOTBRIDGE TO THE LEGISLATIVE COUNCIL COMPLEX AT TAMAR  
- ARTIST'S IMPRESSION OF THE ENTRANCE LOBBY ON FIRST FLOOR

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比例 scale	A3
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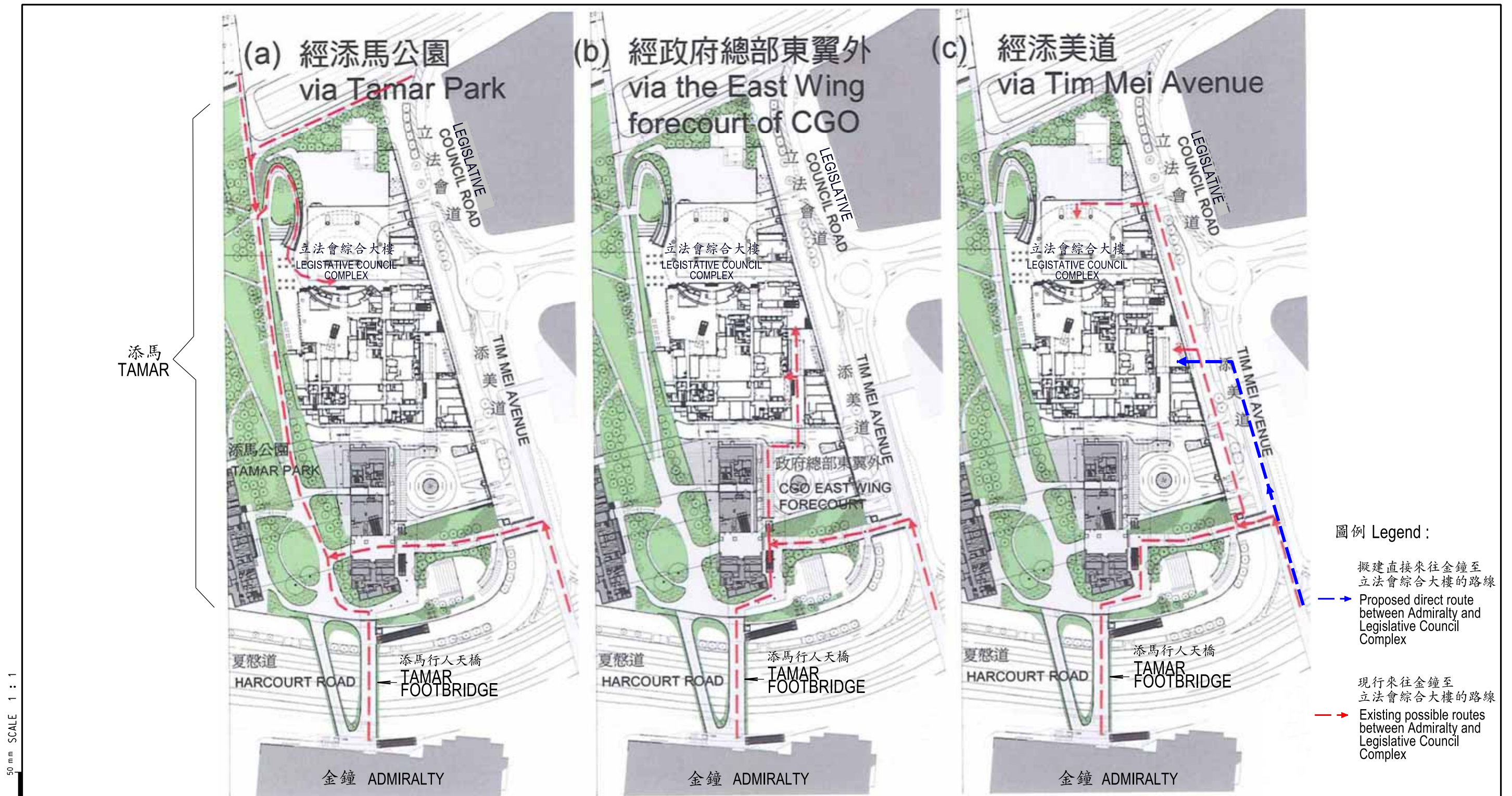
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圖則名稱 drawing title

工務計劃項目第6173TB號

擴建中信大廈行人天橋至添馬的立法會綜合大樓

- 現行三條及擬建來往金鐘至立法會綜合大樓的路線

PWP ITEM NO. 6173TB

EXTENSION OF THE CITIC TOWER FOOTBRIDGE TO THE LEGISLATIVE COUNCIL COMPLEX AT TAMAR

- EXISTING THREE AND PROPOSED ROUTES BETWEEN ADMIRALTY AND THE LEGISLATIVE COUNCIL COMPLEX

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## Enclosure 3 to PWSC(2013-14)10

### 173TB –Extension of Citic Tower Footbridge to LegCo Complex at Tamar

#### Breakdown of the estimates for consultants' fees and resident site staff costs (in September 2012 prices)

		Estimated man- months	Average MPS* salary point	Multiplier (Note 1)	Estimated fee (\$million)
(a)	Consultants' fees for contract administration (Note 2)				
	Professional	–	–	–	1.1
	Technical	–	–	–	0.6
				Sub-total	1.7
(b)	Resident site staff (RSS) costs (Note 3)				
	Professional	7	38	1.6	0.7
	Technical	13	14	1.6	0.5
				Sub-total	1.2
	Comprising –				
(i)	Consultants' fees for management of resident site staff				0.1
(ii)	Remuneration of RSS				1.1
				<b>Total</b>	<b>2.9</b>

\* MPS = Master Pay Scale

#### Note

1. A multiplier of 1.6 is applied to the average MPS salary point to estimate the costs of resident site staff supplied by the consultants. (As at now, MPS point 14 = \$22,405 per month and MPS point 38 = 65,695 per month.)
2. The consultants' fee for contract administration is calculated in accordance with the existing consultancy agreement for the design and construction of **173TB**. The construction phase of the assignment will only be executed subject to Finance Committee's funding approval to upgrade **173TB** to Category A.
3. The actual man-months and actual costs will only be known after completion of the construction works.