

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

### **HEAD 705 – CIVIL ENGINEERING**

#### **Civil Engineering – Multi-purpose**

**35CG – Greening master plan for Kowloon West – studies and works**

**36CG – Greening master plan for Hong Kong Island – studies and works**

Members are invited to recommend to Finance Committee –

- (a) the upgrading of part of **35CG** and part of **36CG**, entitled “Greening master plans for Kowloon West and Hong Kong Island – works for Tsim Sha Tsui and Central”, to Category A at an estimated cost of \$38.4 million in money-of-the-day prices; and
- (b) the retention of the remainders of **35CG** and **36CG** in Category B.

### **PROBLEM**

We need to improve the living environment in Hong Kong by implementing greening works recommended in the greening master plans (GMPs) for Tsim Sha Tsui and Central.

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## PROPOSAL

2. The Director of Civil Engineering and Development, with the support of the Secretary for the Environment, Transport and Works, proposes to upgrade parts of **35CG** and **36CG** to Category A at an estimated cost of \$38.4 million in money-of-the-day (MOD) prices to carry out greening works in Tsim Sha Tsui and Central.

## PROJECT SCOPE AND NATURE

3. The scopes of **35CG** and **36CG** comprise development of GMPs, detailed design and implementation of greening works for selected areas in Kowloon West<sup>1</sup> and on Hong Kong Island<sup>2</sup> respectively.

4. The parts of **35CG** and **36CG** which we now propose to upgrade to Category A comprise the following –

- (a) planting and establishment of about 600 trees and 160 000 shrubs in Tsim Sha Tsui within the area shown blue in the plan at Enclosure 1;
- (b) planting and establishment of about 300 trees and 50 000 shrubs in Central within the area shown blue in the plan at Enclosure 2;
- (c) ground preparation, soil improvement and tree mounting fixtures;
- (d) construction of associated planters; and
- (e) ancillary works including irrigation facilities.

5. Some photomontages of the proposed greening works at their mature state are at Enclosure 3.

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<sup>1</sup> These include Tsim Sha Tsui, Yau Ma Tei, Mong Kok, Sham Shui Po, Cheung Sha Wan, Kowloon City, Kowloon Tong, Hung Hom and Ho Man Tin. The development of GMP and detailed design of greening works for Tsim Sha Tsui have been completed separately under a pilot study.

<sup>2</sup> These include Central, Sheung Wan, Wan Chai, Causeway Bay, North Point, Quarry Bay, Shau Kei Wan, Chai Wan, Sai Ying Pun, Kennedy Town and Aberdeen. The development of GMP and detailed design of greening works for Central have been completed separately under a pilot study.

6. We plan to commence the proposed greening works in May 2006 for completion in February 2007.

## JUSTIFICATION

7. The Administration has been striving to uplift the quality of our living environment through implementation of GMPs in selected urban areas that seek to define an overall greening framework by identifying suitable locations for planting with desirable themes and species, thus paving way for continuous and consistent results.

8. In recognition of the fact that greening opportunities arise under different time frames, GMPs will embody a full spectrum of short, medium and long-term measures. Short-term measures are those conforming to the district layout, posing no direct conflict with land use and/or traffic arrangements. Greening opportunities associated with urban renewal or redevelopments are classified as medium-term measures. Long-term measures depict the ultimate greening vision setting aside known constraints such as land availability and congested underground installations, achieved through deployment of innovative means including tree corridors, roof/podium gardens and vertical greening.

9. Following completion of the GMPs for Tsim Sha Tsui and Central and building on positive response received from key stakeholders, we intend to carry out the proposed greening works under **35CG** and **36CG** to bring about noticeable improvements in these two districts bearing the overarching themes of “Jade Necklace” and “Heart of Gold” respectively.

## FINANCIAL IMPLICATIONS

10. We estimate the capital cost of the project to be \$38.4 million in MOD prices (see paragraph 11 below), made up as follows –

		<b>\$ million</b>		
		<b>35CG</b>	<b>36CG</b>	<b>Total</b>
(a)	Greening works	24.6	9.5	34.1
	(i) planting and establishment of trees and shrubs	9.8	3.8	13.6

/(ii) .....

	<b>\$ million</b>			
	<b>35CG</b>	<b>36CG</b>	<b>Total</b>	
(ii) ground preparation and tree mounting	5.5	2.4	7.9	
(iii) provision of associated planters	4.9	1.3	6.2	
(iv) ancillary works	4.4	2.0	6.4	
(b) Contingencies	2.4	0.9	3.3	
Sub-total	27.0	10.4	37.4	(in September 2005 prices)
(c) Provision for price adjustment	0.7	0.3	1.0	
Total	27.7	10.7	38.4	(in MOD prices)

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

Year	<b>\$ million (Sept 2005)</b>		<b>Price adjustment factor</b>	<b>\$ million (MOD)</b>	
	<b>35CG</b>	<b>36CG</b>		<b>35CG</b>	<b>36CG</b>
2006 – 2007	11.9	4.6	1.01500	12.1	4.7
2007 – 2008	8.2	3.1	1.03023	8.4	3.2
2008 – 2009	6.9	2.7	1.04568	7.2	2.8
	27.0	10.4		27.7	10.7

12. We have derived the MOD estimates based on the Government's latest forecast of trend rate of change in the prices for public sector building and construction output from 2006 to 2009. The proposed greening works mentioned in paragraph 10(a) above will be tendered through a standard remeasurement

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contract because the quantities may vary depending on actual site constraints and underground utilities with no provision for price adjustment as the contract period will not exceed 21 months. We will deploy in-house resources to supervise the proposed greening works.

13. We estimate that the annual recurrent expenditure arising from the proposed greening works for Tsim Sha Tsui and Central to be \$1.0 million and \$400,000 respectively.

## **PUBLIC CONSULTATION**

14. We briefed the Yau Tsim Mong District Council in December 2004 on a conceptual framework and consulted it as well as the Yau Tsim Mong South Area Committee on the GMP for Tsim Sha Tsui on 28 April and 17 May 2005 respectively. Similarly, we briefed the Working Group on Greening and Beautification Works in the Central & Western District under the Central & Western District Council in June 2005 on a conceptual framework and presented the draft GMP for Central to the District Council on 21 July 2005. In both cases, there was unequivocal support for our initiative.

15. The Town Planning Board also welcomed greening measures embodied in the GMPs for Tsim Sha Tsui and Central presented to it on 8 July and 7 October 2005 respectively.

16. The Legislative Council Panel on Planning, Lands and Works endorsed in general the development and implementation of GMPs at its meeting on 13 July and 22 November 2005 subject to a few suggestions. We reverted to the Panel on 28 February 2006 with follow-up actions and detailed financial implications arising from the proposed greening works in Tsim Sha Tsui and Central. No objection was raised thereat.

## **ENVIRONMENTAL IMPLICATIONS**

17. This is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). The project has no long-term environmental impact, whilst short-term construction impacts could be mitigated through measures to control noise, dust, and site run-off nuisances.

18. We have considered suitable measures in the planning and design stages to reduce the generation of construction and demolition (C&D) materials where possible. In addition, we will require the contractor to reuse inert C&D materials (e.g. 'excavated soil') on site or in other suitable construction sites as far as possible, so as to minimise the disposal of C&D materials to public fill reception facilities. We will encourage the contractor to maximise the use of recycled or recyclable C&D materials, as well as the use of non-timber formwork to further minimise the generation of construction waste.

19. We will require the contractor to submit a waste management plan (WMP) for approval. The WMP will include mitigation measures to avoid, reduce, reuse and recycle C&D materials. We will ensure that the day-to-day operations on site comply with the approved WMP. We will control the disposal of public fill and C&D waste to public fill reception facilities, sorting 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.

20. We estimate that the project will generate about 20 000 tonnes of C&D materials. Of these, we will reuse about 2 000 tonnes (10%) on site, deliver about 16 000 tonnes (80%) to public fill reception facilities<sup>3</sup> for reuse elsewhere and about 400 tonnes (2%) to sorting facilities<sup>3</sup> to retrieve the inert portion for reuse, and dispose of about 1 600 tonnes (8%) at landfills. The total cost for accommodating C&D materials at public fill reception facilities and landfill sites together with the cost for handling the materials at sorting facilities is estimated to be \$672,000 for this project (based on unit cost of \$27/tonne for disposal at public fill reception facilities, \$100/tonne at sorting facilities and \$125/tonne<sup>4</sup> at landfills).

## LAND ACQUISITION

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

### **/BACKGROUND .....**

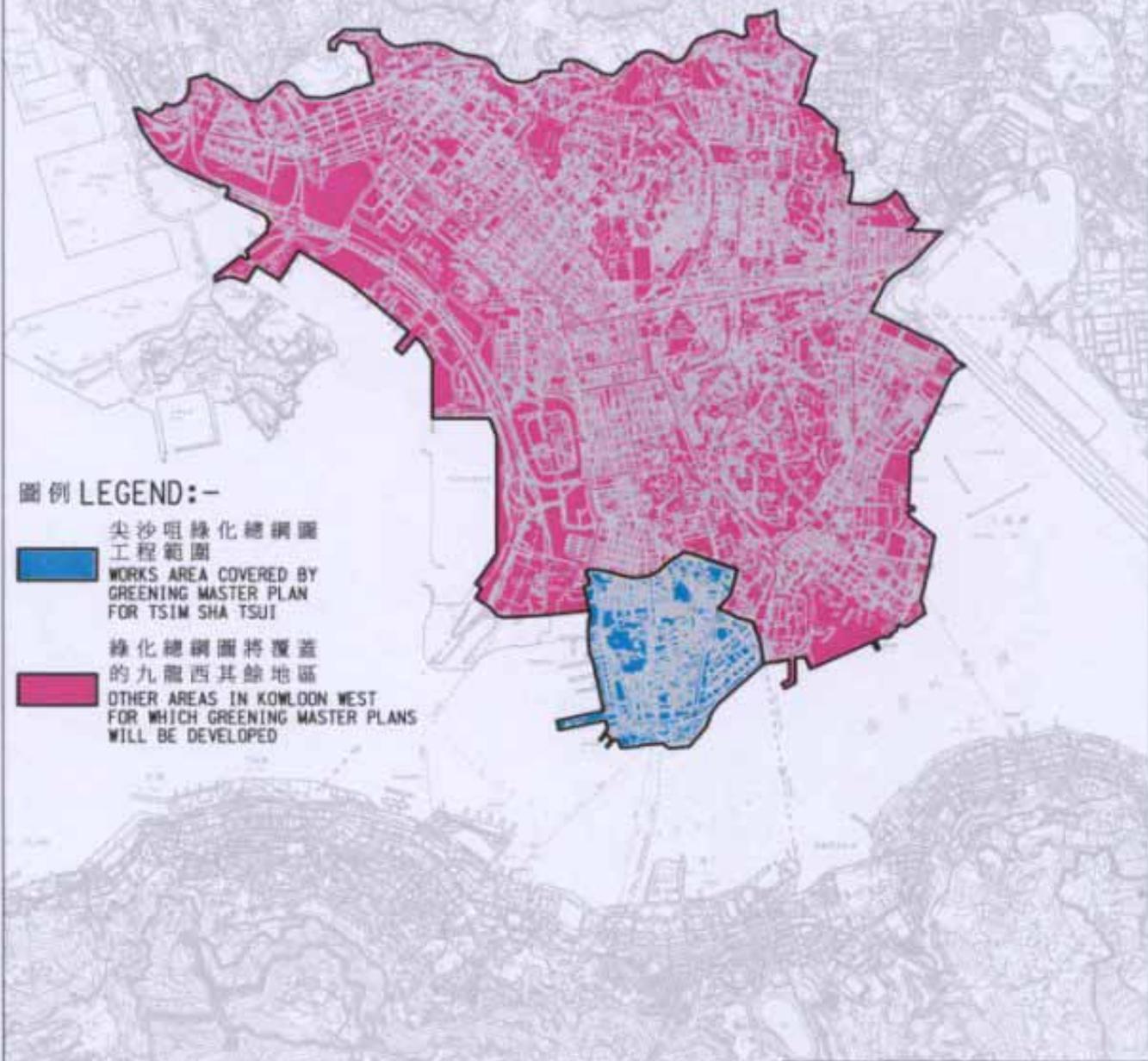
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<sup>3</sup> Sorting facilities and public fill reception facilities are specified in Schedules 3 and 4 respectively of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation. Disposal of public fill in public fill reception facilities requires a licence issued by the Director of Civil Engineering and Development.

<sup>4</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/m<sup>3</sup>), nor the cost to provide new landfills (which is likely to be more expensive) when the existing ones are filled.

**BACKGROUND INFORMATION**

22. We upgraded **35CG** and **36CG** to Category B in September 2005.
23. We engaged consultants to undertake the development of GMPs for Tsim Sha Tsui and Central in September and December 2004 respectively under the block allocation **Subhead 5101CX** “Civil engineering works, studies and investigations for items in Category D of the Public Works Programme” at a total cost of \$2.6 million. Detailed design of the greening works in Tsim Sha Tsui and Central were subsequently undertaken using in-house staff resources.
24. In order to ascertain the response from local stakeholders before full scale implementation, we completed six pilot schemes in Tsim Sha Tsui in November 2005 under block allocation **Subhead 5101CX** at an estimated cost of \$2.4 million. We also included an item under block allocation **Subhead 5101CX** at a cost of \$1.7 million to engage term contractor to conduct site investigation in Tsim Sha Tsui and Central which was completed in February 2006.
25. At the meeting on 21 December 2005, we withdrew two funding applications for part-upgrading of **35CG** and **36CG** to carry out greening works in Tsim Sha Tsui and Central as well as to develop GMPs for other selected areas in Kowloon West and on Hong Kong Island. Taking account of the feedback received from Members on visual impact, planning process, design approach and community participation, we intend to proceed at this stage with the proposed greening works in Tsim Sha Tsui and Central, followed by a separate submission on development of GMPs later on.
26. The proposed works will not involve any tree removal.
27. We estimate that the proposed works will create about 63 jobs (55 for labourers and another eight for professional/technical staff) providing a total employment of 730 man-months.

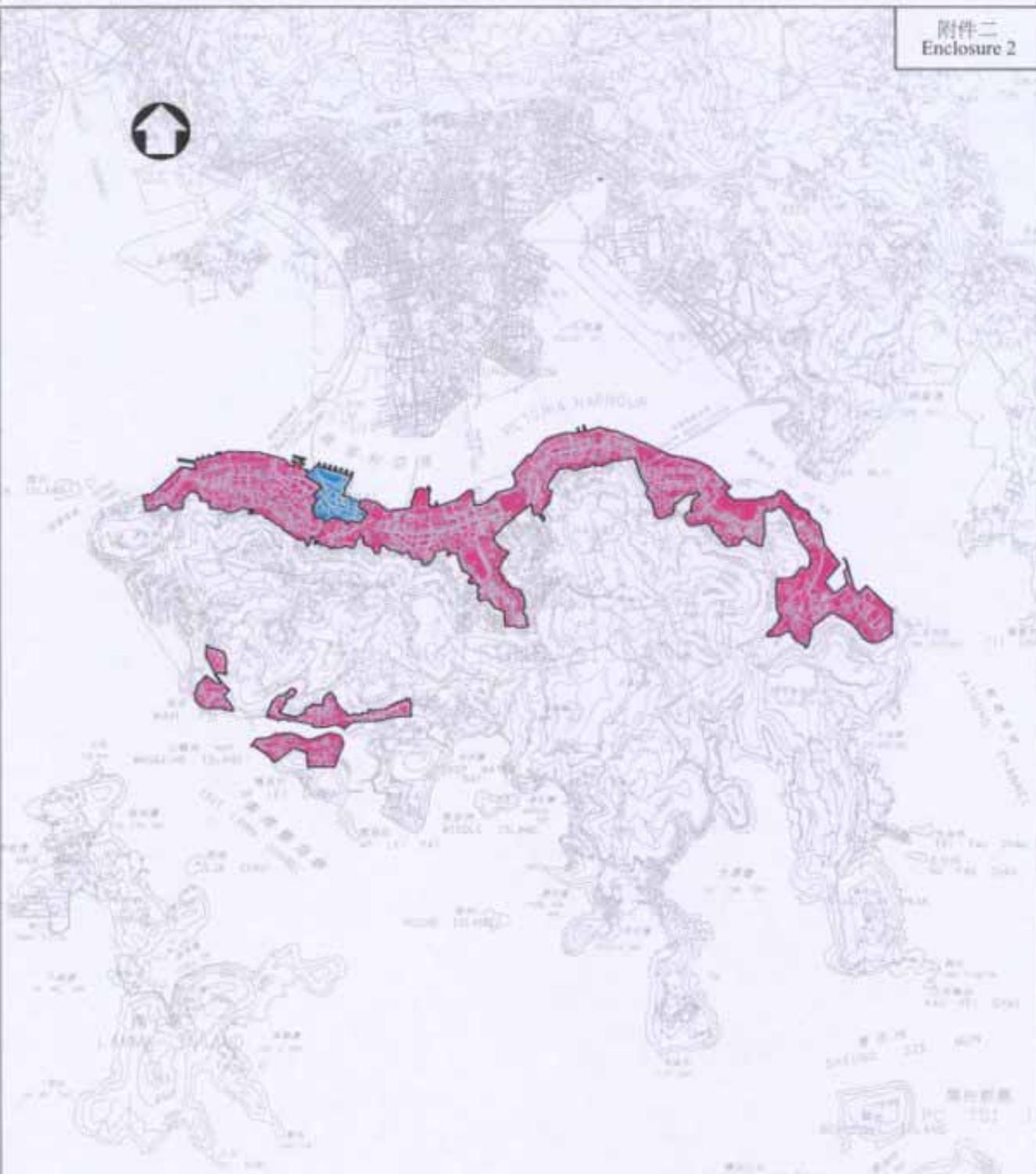


圖例 LEGEND:-

- 尖沙咀綠化總綱圖工程範圍  
WORKS AREA COVERED BY GREENING MASTER PLAN FOR TSIM SHA TSUI
- 綠化總綱圖將覆蓋的九龍西其餘地區  
OTHER AREAS IN KOWLOON WEST FOR WHICH GREENING MASTER PLANS WILL BE DEVELOPED

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名稱 title	姓名 name	簽署 Initial	日期 date	圖號 drawing no.
工務計劃項目第35CG號	C P SUEN	<i>CP</i>	20/1/06	HQS G155
九龍西綠化總綱圖	K M CHIU	<i>KM</i>	20/1/06	
- 研究及工程	P M CHAN	<i>PM</i>	20/1/06	
PMP ITEM No. 35CG	辦事處 office			比例 scale
GREENING MASTER PLAN FOR KOWLOON WEST - STUDIES & WORKS	總部 HEADQUARTERS			1:50000
				 土木工程拓展署 CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT



圖例 LEGEND:-

- 中環綠化總綱圖工程範圍  
WORKS AREA COVERED BY  
GREENING MASTER PLAN FOR CENTRAL
- 綠化總綱圖將覆蓋的香港島其餘地區  
OTHER AREAS ON HONG KONG ISLAND FOR  
WHICH GREENING MASTER PLANS WILL BE DEVELOPED

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工務計劃項目第36CG號 香港島綠化總綱圖 - 研究及工程 PWP ITEM No. 36CG GREENING MASTER PLAN FOR HONG KONG ISLAND - STUDIES & WORKS	繪圖 drawn	C P SUEN		20/1/06	圖則編號 drawing no. <b>HQS G156</b>	比例 scale 1:100000		
	核對 checked	K M CHIU		20/1/06				
	核准 approved	P M CHAN		20/1/06				
辦事處 office	總部 HEADQUARTERS			土木工程拓展署 CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT				

Before 前



After 后

Example at Nathan Road  
例子 - 彌敦道

Before 前



After 後

Example at Salisbury Road  
例子 - 梳士巴利道

Before 前



After 後

Example near Exchange Square  
例子 - 交易廣場附近

Before 前



After 后

Example at junction of Queensway and Cotton Tree Drive

例子 - 金鐘道與紅棉道交界