

**For information**

**Legislative Council Panel on Planning, Lands and Works  
126CD - Drainage improvement in East Kowloon**

**PURPOSE**

This paper informs Members on the Administration's proposal to part-upgrade **126CD** "Drainage Improvement in East Kowloon" to Category A at an estimated cost of about \$252 million in money-of-the-day (MOD) prices.

**BACKGROUND**

2. In September 2000, we completed a comprehensive review of the drainage systems in East Kowloon under **80CD** "Drainage master plan study in Sai Kung, East Kowloon and Southern Lantau" (the Study). The Study identified that some of the existing drainage systems in East Kowloon are inadequate to meet the required flood protection standard and recommended a programme of drainage improvement works to tackle the flooding problems in the areas.

3. In April 2002, we included **126CD** "Drainage improvement in East Kowloon" in Category B for the drainage improvement works in East Kowloon. The scope of **126CD** comprises the construction of about 19 kilometres (km) of box culvert and drains in East Kowloon to be implemented in two packages. Package A comprises drainage improvement works in Tsim Sha Tsui, To Kwa Wan, Wong Tai Sin and Yau Tong. Package B comprises drainage improvement works in Hung Hom, Kowloon City, San Po Kong and Kwun Tong.

4. In April 2003, we included an item under block allocation **Subhead 4100DX** "Drainage works, studies and investigations for items in Category D of the Public Works Programme", at an estimated cost of \$13.0 million in MOD prices, for engaging consultants to undertake site investigations, surveys, traffic impact assessment and detailed design for the project. We will substantially complete the detailed design for Package A in June 2004. Planning for the improvement works under Package B is underway.

## PROJECT SCOPE

5. The scope of the proposed works to be part-upgraded to Cat A under **126CD** comprises -

- (a) construction of about 0.6 km drains ranging from 900 millimetres (mm) in diameter to 1800 mm in diameter and 0.2 km box culverts with size 2.0 metres (m) x 2.0 m in Tsim Sha Tsui;
- (b) construction of about 2.0 km drains ranging from 375 mm in diameter to 2100 mm in diameter and 0.6 km box culverts with size ranging from 1.0 m x 0.9 m to 3.6 m x 1.8 m in To Kwa Wan;
- (c) construction of about 1.0 km drains ranging from 750 mm in diameter to 2100 mm in diameter and 1.0 km box culverts with size ranging from 2.4 m x 2.0 m to 4.0 m x 2.3 m in Wong Tai Sin;
- (d) construction of about 0.2 km drains with size 1500 mm in diameter in Yau Tong; and
- (e) ancillary works

A site plan showing the locations of the proposed works is at **Enclosure**. We plan to start construction in December 2004 for completion in November 2008.

## JUSTIFICATION

6. The drainage catchment area of East Kowloon covers major residential, industrial and commercial districts in part of Tsim Sha Tsui, To Kwa Wan, Wong Tai Sin, Yau Tong, Hung Hom, Kowloon City, San Po Kong and Kwun Tong. We developed the existing drainage systems decades ago to meet the flow requirements and standards at that time. We have completed a comprehensive assessment of the drainage system in this catchment area under the Study and concluded that the existing system requires improvement to alleviate the risk of flooding in the districts.

7. To bring early improvement to the flood prone areas in East Kowloon, we will carry out the drainage improvement works in two packages. Package A covers Tsim Sha Tsui, To Kwa Wan, Wong Tai Sin and Yau Tong,

which are in general more susceptible to flooding, and Package B will cater for Hung Hom, Kowloon City, San Po Kong and Kwun Tong. Under the proposed Package A works, we shall replace existing drains of insufficient capacity with larger drain pipes or box culverts. Upon the completion of works, the standard of flood protection in Tsim Sha Tsui, To Kwa Wan, Wong Tai Sin and Yau Tong would be raised generally to withstand a rainstorm with a return period of one in 50 years<sup>1</sup>.

## FINANCIAL IMPLICATIONS

8. We estimate the project cost of the proposed works to be about \$252 million<sup>2</sup> (in MOD prices). Breakdown of the cost is as follows -

Item	\$ million	
(a) Drainage works	212.0	
(b) Consultants' fees for	24.0	
(i) contract administration	1.0	
(ii) site supervision	23.0	
(c) Contingency	<u>24.0</u>	
Sub-total :	260.0	(in September 2003 prices)
(d) Price adjustment	(8.0)	
Total :	252.0	(in MOD prices)

9. We estimate that the annual recurrent expenditure arising from this project to be about \$0.3 million.

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<sup>1</sup> "Return period" means the average number of years during which a certain severity of flooding will occur once, statistically. A longer return period means a rare chance of occurrence of a more severe flooding.

<sup>2</sup> This is the latest estimate. We are finalizing the cost estimates and there may be some adjustments in our submission to the Public Works Subcommittee for consideration.

## **PUBLIC CONSULTATION**

10. We consulted the Wong Tai Sin District Council, Yau Tsim Mong District Council, Kowloon City District Council and Kwun Tong District Council on the proposed works on 9 March 2004, 18 March 2004, 1 April 2004 and 15 April 2004 respectively. All supported the implementation of the proposed drainage improvement works.

## **ENVIRONMENTAL IMPLICATIONS**

11. **126CD** is not a designated project under Environmental Impact Assessment Ordinance. We completed the Environmental Review (ER) for the proposed works in February 2004. The ER concluded that there would be no insurmountable impacts on the air quality, water, waste management, visual impacts and ecology aspects. In addition, we have carried out assessments and mitigation proposal for the potential construction noise impacts for all construction works during the design stage. For short-term impacts during construction, we will control noise, dust and site run-off within established standards and guidelines through the implementation of mitigation measures, such as the use of temporary noise barriers and silenced construction plants to reduce noise generation, water-spraying to reduce emission of fugitive dust and strict control on diversion of sewage flows in the works contracts. For night-works identified as necessary at several locations, we will apply for Construction Noise Permits under the Noise Control Ordinance and restrict the plant type used to minimise the noise level. We will incorporate a relevant clause into the works contract to require the contractor to carry out the recommended environmental mitigation measures to control pollution and disposal of contaminated soil in accordance with the relevant regulations during construction.

12. We will encourage the contractors to use steel instead of timber in formwork and temporary works to reduce the generation of waste. We shall require the contractor under the contract to submit a waste management plan to the Engineer for approval, with appropriate mitigation measures including the allocation of an area for waste segregation. We shall ensure that the day-to-day operations on site comply with the waste management plan. We shall require the contractor to implement necessary measures to minimize the generation of construction and demolition (C&D) materials and to reuse C&D materials as fill material as far as possible. We will control disposal of C&D materials and waste to public filling areas and landfills respectively through a trip-ticket system. We will record the disposal and reuse of C&D materials for monitoring purposes.

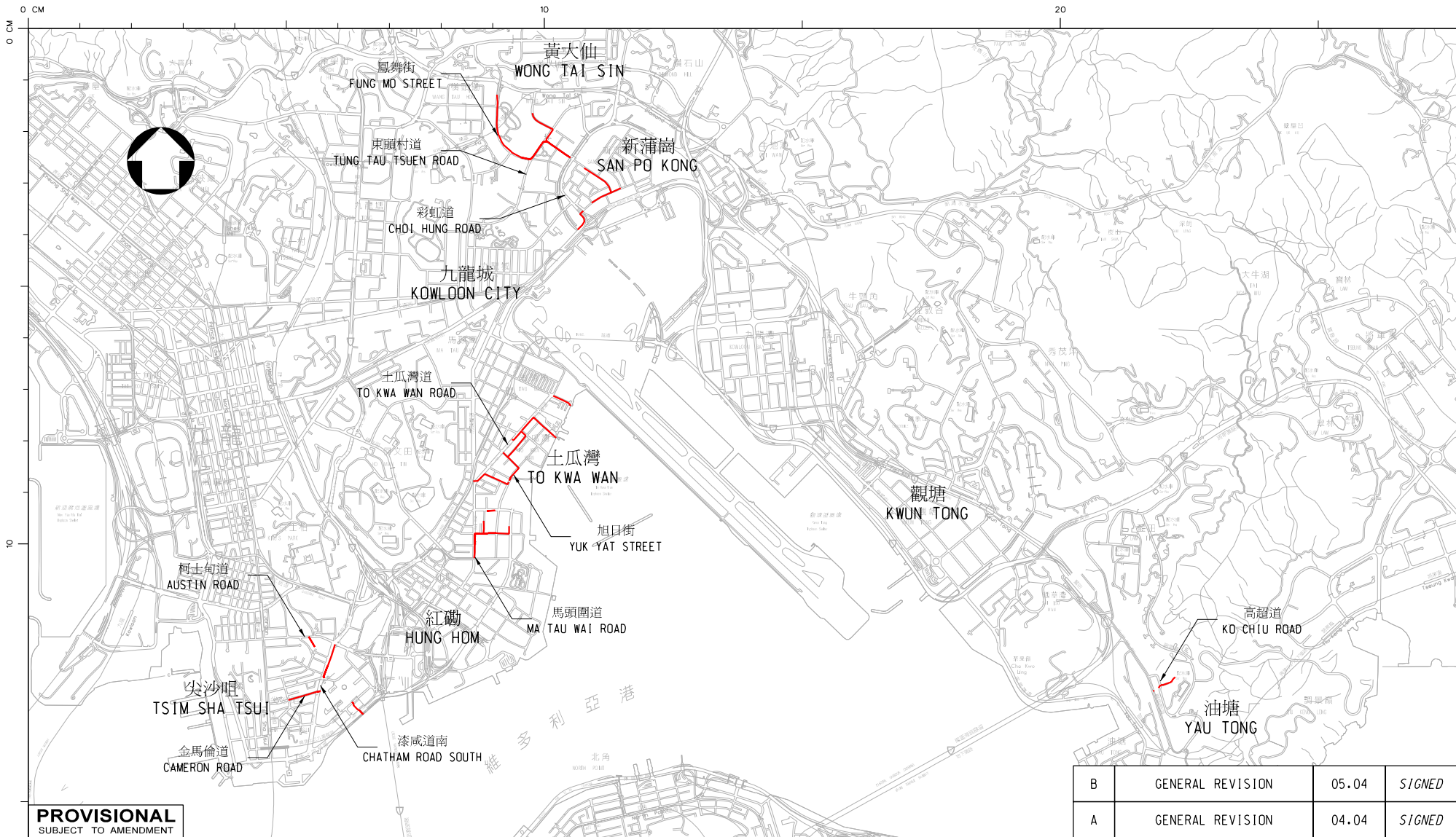
## TRAFFIC IMPLICATONS

13. To minimise possible disruption to traffic during construction, we have substantially completed the traffic impact assessment for the proposed works. During construction, we will maintain smooth traffic flow through temporary traffic management measures as far as possible and display notice boards on site to explain the reason of temporary traffic arrangements and the expected completion date of the concerned section of works. In addition, telephone hotlines will be set up for the public to make enquiries or lodge complaints. Construction works in busy road sections will be carried out in non-peak hours. We will also establish a Traffic Management Liaison Group (TMLG) under the contract to discuss, scrutinise and agree on the proposed temporary traffic management measures. Representatives from Transport Department, Hong Kong Police Force, Highways Department, District Offices and various road public transport operators will be invited to attend the TMLG meetings and every temporary traffic arrangement has to be agreed by the TMLG before implementation. The TMLG will also take into account all relevant factors such as site restrictions, existing and future traffic conditions, pedestrian safety, access to buildings/shop fronts and provision of emergency vehicles access while considering the temporary traffic arrangements.

## WAY FORWARD

14. We intend to submit our proposal of part-upgrading of **126CD** for consideration by the Public Works Subcommittee in June 2004 with a view to seeking the funding approval of Finance Committee in July 2004.

Environment, Transport and Works Bureau  
May 2004



B	GENERAL REVISION	05.04	SIGNED
A	GENERAL REVISION	04.04	SIGNED

**PROVISIONAL**  
SUBJECT TO AMENDMENT

圖則名稱 drawing title  
**東九龍雨水排放系統改善計劃 - A部分**  
 DRAINAGE IMPROVEMENT IN EAST KOWLOON -  
 PACKAGE A

繪畫 drawn	SIGNED C. K. LAM	日期 date	03.04
核對 checked	SIGNED C. W. KO	日期 date	03.04
批核 approved		日期 date	
部門 office	工程管理部 PROJECT MANAGEMENT DIVISION		

圖則編號 drawing no.  
**DPM/126CD/1804B**  
 比例 scale  
 N. T. S.

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