

For information

## Legislative Council Panel on Development

### **140CD – Reconstruction and rehabilitation of Kai Tak Nullah from Po Kong Village Road to Tung Kwong Road – remaining works**

#### **PURPOSE**

This paper informs Members of the proposal to upgrade **140CD** to Category A, at an estimated cost of \$1,602 million in money-of-the-day (MOD) prices, for the reconstruction and rehabilitation of Kai Tak Nullah from Po Kong Village Road to Tung Kwong Road.

#### **PROJECT SCOPE**

2. The scope of works under **140CD** includes -
  - (a) reconstruction and rehabilitation of a section of Kai Tak Nullah from Po Kong Village Road to Tung Kwong Road of about 600 metres (m) long;
  - (b) construction of a box culvert of about 400 m long alongside the Kai Tak Nullah from Wong Tai Sin Police Station to Tung Tai Lane;
  - (c) relocation of affected existing watermains and sewers; and
  - (d) associated works, including landscaping works and in-situ reprovisioning of an existing footbridge near Tung Tai Lane.

The site plan and the artist's impression of the reconstructed/rehabilitated nullah are at **Enclosures 1** and **2** respectively.

3. Subject to the approval of the Finance Committee, we plan to commence construction of the works proposed in paragraph 2 in late 2011 with a view to completing the proposed works under paragraph 2(a), (b) and (c) in phases from 2015 onwards and all the proposed works including those under paragraph 2(d) in mid-2017.

## JUSTIFICATION

4. The drainage capacity of Kai Tak Nullah is inadequate to meet the current flood protection standard and the areas in the vicinity of the nullah in Wong Tai Sin are susceptible to flooding. Flooding incidents occur along Choi Hung Road especially at its junction with Shatin Pass Road and severely affect the traffic networks of Wong Tai Sin and its adjacent districts during heavy rainstorms. The bottleneck of the Kai Tak Nullah that limits its drainage capacity is the 400 m long section between Wong Tai Sin Police Station and Tung Tai Lane. The bottleneck also adversely affects the functioning of the upstream drainage system. Whilst it is not possible to widen the nullah without affecting the existing Choi Hung Road, we propose to provide a box culvert alongside the nullah to remove the bottleneck. In addition to the proposed box culvert, it is necessary to deepen the nullah and relocate the existing watermains and sewers away from the nullah to improve its drainage capacity and mitigate the flooding risk to the surrounding areas.

5. The above improvement works will affect an existing footbridge across Kai Tak Nullah near Tung Tai Lane. It is necessary to re-provide the footbridge in-situ as part of the project.

6. In planning for our proposed drainage works, we originally proposed to deck the section of Kai Tak Nullah between Po Kong Village Road and Tung Tai Lane. Indeed, in the early years, decking of nullahs was welcomed by District Councils and the local community as a means to improve the environment. However, in the course of local consultation, some Wong Tai Sin District Council members and concern groups drew reference to some overseas experience in river revitalisation projects which have the effect of uplifting the local city environment and providing leisure ambience to residents. The Drainage Services Department has fully engaged the local groups in exploring alternatives to decking and the urban design planning work subsequently undertaken by the Kai Tak Office under the Civil Engineering and Development Department has given an added dimension to the discussions. There are clear public aspirations for revitalising the nullah into a special green river and townscape feature to enhance the visual quality and image of the nullah. Accordingly, we have revised the design to provide an undecked nullah, together with the associated beautification works. We will rehabilitate the nullah into a green river corridor without decking in urban area and introduce aesthetic, greening, landscaping and ecological elements at the sides and bottom of the nullah. Upon completion, the proposed works will improve the living environment through enhancement of townscape of the area, provision of a scenic and leisure place for the enjoyment of the public, as well as fostering closer connection with adjacent areas.

## FINANCIAL IMPLICATION

7. We estimate the cost of the proposed works to be \$1,602 million in MOD prices, broken down as follows –

	<b>\$ million</b>
(a) Nullah reconstruction and rehabilitation	458.0
(b) Construction of box culvert	287.0
(c) Relocation of affected existing watermains and sewers	145.0
(d) Associated works, including landscaping works and footbridge reprovisioning	94.0
(e) Environmental mitigation measures	27.0
(f) Consultants' fees for	7.5
(i) contract administration	3.1
(ii) management of resident site staff	4.4
(g) Remuneration of resident site staff	123.3
(h) Contingencies	114.0
	Sub-total <u>1,255.8</u> (in September 2010 prices)
(i) Provision for price adjustment	<u>346.2</u>
	Total <u>1,602.0</u> (in MOD prices)

## **PUBLIC CONSULTATION**

8. We consulted the Wong Tai Sin District Council on 8 March 2011 on the proposed works. Members generally supported the proposed works.

## **ENVIRONMENTAL IMPLICATIONS**

9. This is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). We have carried out the Preliminary Environmental Review (PER) which concluded that the project will not cause any long-term adverse environmental impacts. We have included \$27 million (in September 2010 prices) in the project estimate to implement suitable mitigation measures recommended by the PER to control short-term environmental impacts during construction.

10. At the planning and design stages, we have considered ways to optimise the size and extent of the proposed underground drainage works in order to reduce the generation of construction waste where possible. In addition, we 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, in order to minimize the disposal of inert construction waste at public fill reception facilities<sup>1</sup>. We will encourage the contractor to maximize the use of recycled / recyclable inert construction waste, and the use of non-timber formwork to further reduce the generation of construction waste.

11. At the construction stage, we 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 measures include the use of temporary noise barriers, quieter construction equipment, frequent cleaning and watering of the site, etc. We will carry out regular site inspections to ensure that these recommended mitigation measures and good site practices will be properly implemented on site.

12. 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 to separate the inert portion from non-inert

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<sup>1</sup> 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.

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.

13. We estimate that the project will generate in total about 51 000 tonnes of construction waste. Of these, we will reuse about 2 000 tonnes (4%) of inert construction waste on site and deliver 46 000 tonnes (90%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 3 000 tonnes (6%) 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 \$1.6 million for this project (based on a unit cost of \$27 per tonne for disposal at public fill reception facilities and \$125 per tonne<sup>2</sup> at landfills).

## **HERITAGE IMPLICATIONS**

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

## **TRAFFIC IMPLICATIONS**

15. The proposed works at Choi Hung Road will be carried out in phases in order to maintain the existing two-lane traffic at both Choi Hung Road northbound and southbound. During construction, we will establish a Traffic Management Liaison Group (TMLG) to discuss, scrutinise and review the proposed temporary traffic arrangements. We will maintain close contact with Transport Department, the Hong Kong Police Force, Highways Department, the relevant District Offices and relevant District Councils, various public transport operators and utility undertakers. We will invite their representatives to attend the TMLG meetings for reviewing and endorsement of the proposed temporary traffic arrangements before implementation.

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<sup>2</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.

## LAND ACQUISITION

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

## BACKGROUND INFORMATION

17. In October 2005, we upgraded **140CD** to Category B. In July 2006, we engaged consultants to carry out preliminary design, surveys, site investigations, testing, impact assessments and detailed design for the works under **140CD** at an estimated cost of \$13.8 million in MOD prices. We charged the cost to block allocation **Subhead 4100DX** “Drainage works, studies and investigations for items in Category D of the Public Works Programme”.

18. In July 2010, we upgraded part of **140CD** to Category A as **162CD** “Reconstruction and rehabilitation of Kai Tak Nullah from Po Kong Village Road to Tung Kwong Road – stage 1” at an approved project estimate of \$159.4 million in MOD prices for local road widening works at Choi Hung Road adjacent to the section of Kai Tak Nullah near Wong Tai Sin Police Station and construction of additional twin-cell box culvert adjoining the Kai Tak Nullah across Prince Edward Road East. Construction commenced in August 2010 for completion by late 2012.

19. Of the 131 trees within the boundary of the proposed works, 88 trees will be preserved. Of the remaining 43 trees to be removed, 24 trees will be transplanted and 19 trees will be felled. All the trees to be removed are not important trees<sup>3</sup>. We will incorporate planting proposal as part of the proposed works, including planting of 39 trees.

20. We estimate that the proposed works will create about 300 jobs (245 for labourers and 55 for professional/technical staff) providing total employment of 18 100 man-months.

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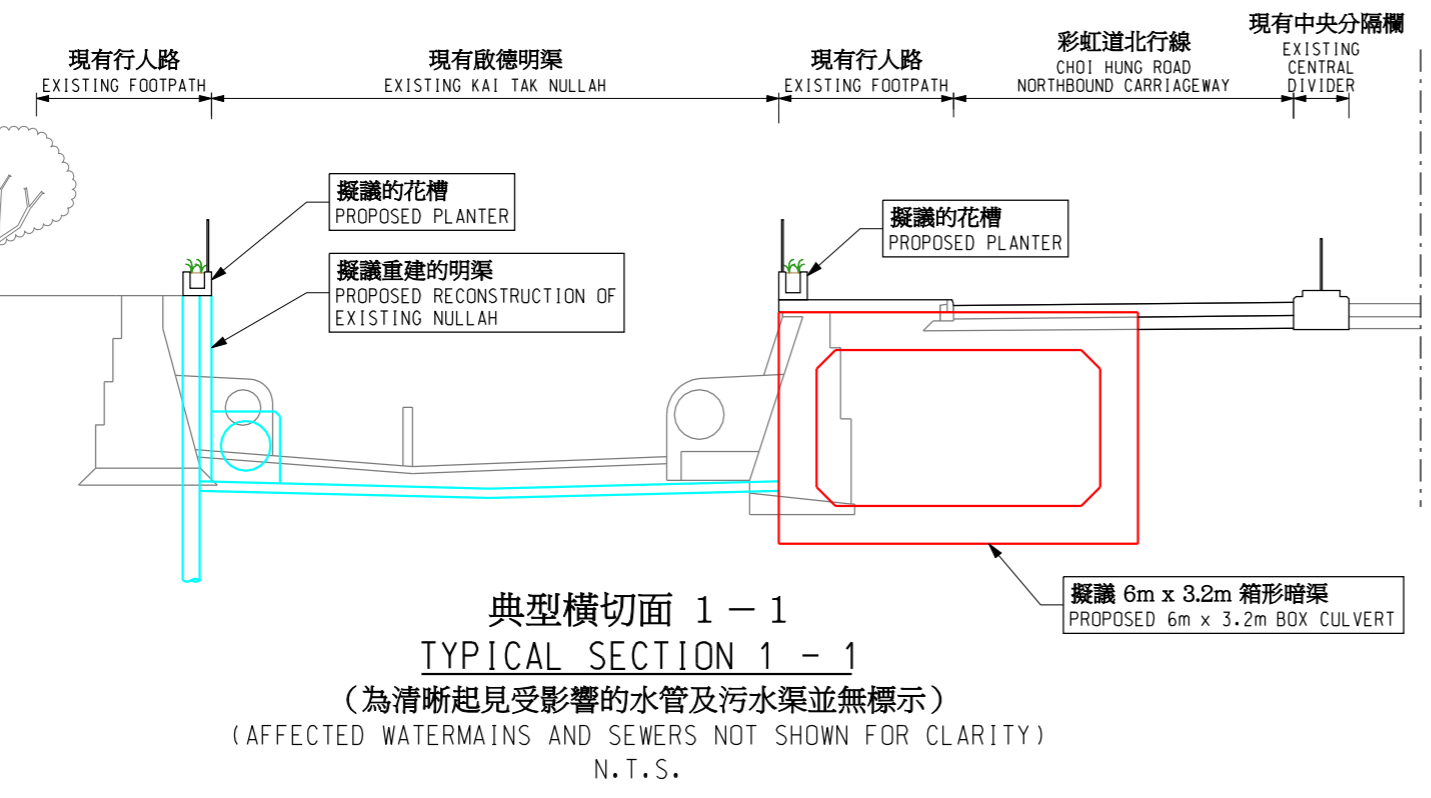
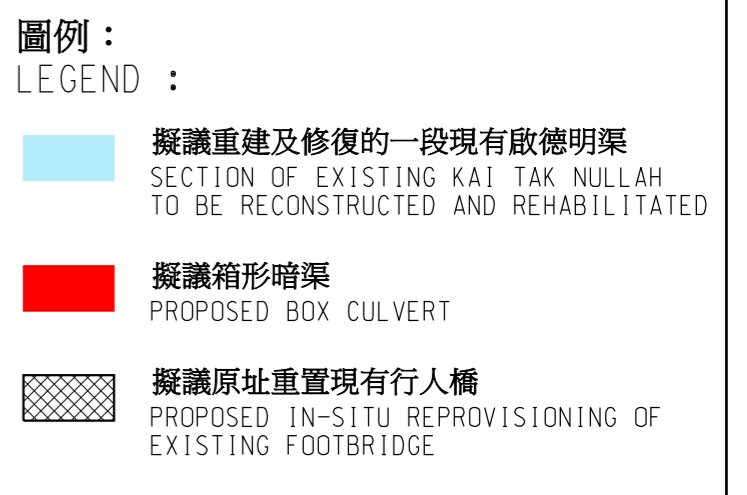
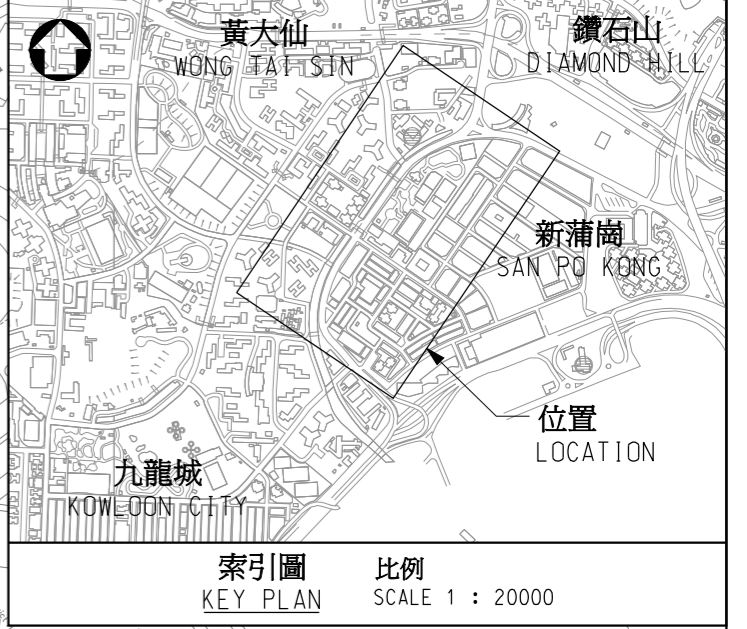
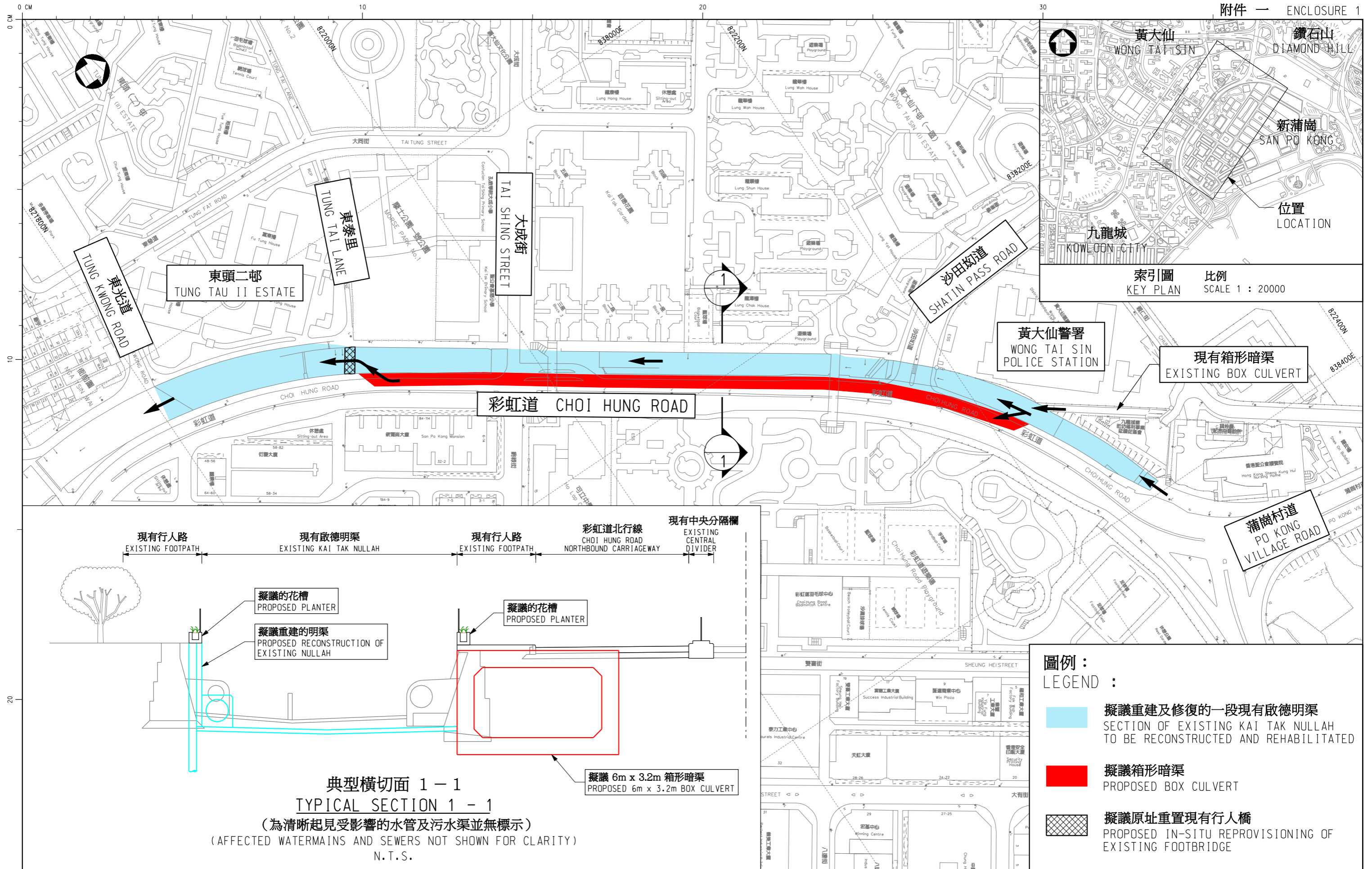
<sup>3</sup> “Important trees” refer to trees in the Register of Old and Valuable Trees, or any other trees that meet one or more of the following criteria –

- (a) trees of over 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 important persons 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.

## **WAY FORWARD**

21. We plan to seek the support of the Public Works Subcommittee for upgrading **140CD** to Category A in June 2011 with a view to seeking funding approval from the Finance Committee in July 2011.

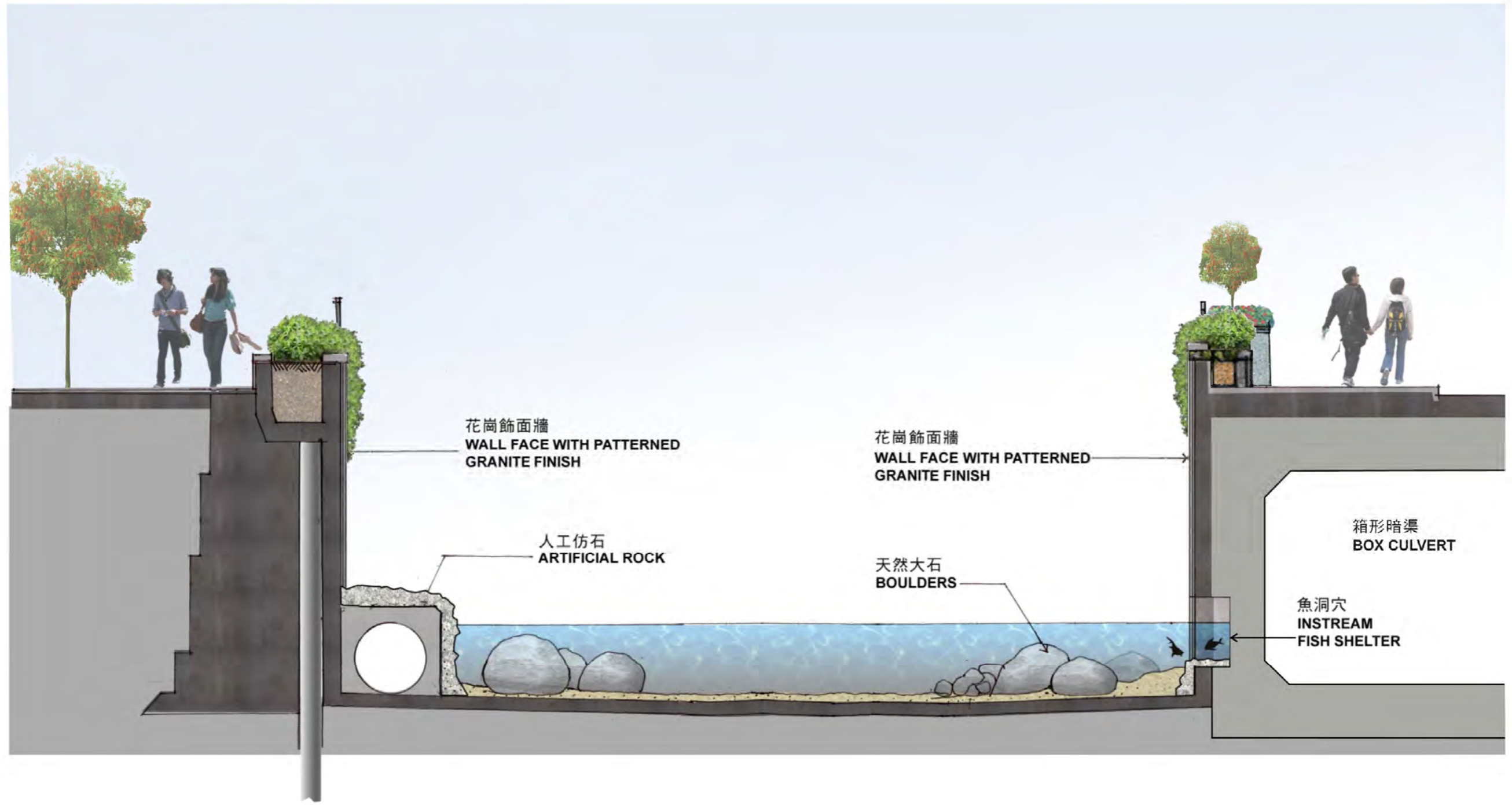
**Development Bureau**  
**May 2011**



圖則名稱 drawing title	繪畫 drawn	日期 date	圖則編號 drawing no.	比例 scale
工程計劃編號和名稱： 4140CD - 重建和修復一段由蒲崗村道至東光道的啟德明渠 - 餘下工程 PROJECT NO. AND TITLE： 4140CD - RECONSTRUCTION AND REHABILITATION OF KAI TAK NULLAH FROM PO KONG VILLAGE ROAD TO TUNG KWONG ROAD - REMAINING WORKS	T.M. SIU		DPM/140CD/0002	1 : 2000 OR AS SHOWN
	核對 checked	日期 date	保留版權 COPYRIGHT RESERVED	
	W.H. CHEUNG		香港特別行政區政府渠務署 DRAINAGE SERVICES DEPARTMENT GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION	
	批核 approved	日期 date		
	K.S. TONG			
	部門 office		工程管理部 PROJECT MANAGEMENT DIVISION	



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重建和修復啟德明渠的構想圖  
 ARTIST'S IMPRESSION OF THE RECONSTRUCTED / REHABILITATED KAI TAK NULLAH

圖則名稱 drawing title

工程計劃編號和名稱：

4140CD - 重建和修復一段由蒲崗村道至東光道的啟德明渠 - 餘下工程

PROJECT NO. AND TITLE:

4140CD - RECONSTRUCTION AND REHABILITATION OF KAI TAK NULLAH FROM PO KONG VILLAGE ROAD TO TUNG KWONG ROAD - REMAINING WORKS

繪畫 drawn	T.M. SIU	日期 date
核對 checked	W.H. CHEUNG	日期 date
批核 approved	K.S. TONG	日期 date
部門 office	工程管理部 PROJECT MANAGEMENT DIVISION	

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DPM/140CD/0003	N.T.S.
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