

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

### **HEAD 704 – DRAINAGE**

#### **Civil Engineering – Drainage and erosion protection**

#### **138CD – Decking of Jordan Valley nullah in Kwun Tong, Rambler Crest nullah in Tsing Yi, Flower Market Road nullah in Mong Kok and Tonkin Street nullah in Sham Shui Po**

Members are invited to recommend to Finance Committee –

- (a) the upgrading of part of **138CD**, entitled “Decking of Jordan Valley nullah in Kwun Tong, Flower Market Road nullah in Mong Kok and Tonkin Street nullah in Sham Shui Po”, to Category A at an estimated cost of \$215.9 million in money-of-the-day prices; and
- (b) the retention of the remainder of **138CD**, re-titled “Decking of Rambler Crest nullah in Tsing Yi” in Category B.

### **PROBLEM**

The open nullahs at Jordan Valley in Kwun Tong, Flower Market Road in Mong Kok and Tonkin Street in Sham Shui Po have been a source of nuisance to nearby residents. They are often conceived by the public as open sewers emitting bad odour and posing health risks and regarded as urban eyesores not compatible with the surrounding environment.

**/PROPOSAL .....**

## PROPOSAL

2. The Director of Drainage Services, with the support of the Secretary for Development, proposes to upgrade part of **138CD** to Category A at an estimated cost of \$215.9 million in money-of-the-day (MOD) prices for the decking of the open nullahs in Kwun Tong, Mong Kok and Sham Shui Po.

## PROJECT SCOPE AND NATURE

3. The scope of the part of **138CD** which we propose to upgrade to Category A comprises the decking of –

- (a) about 85 metres (m) long by 8.6 m wide of open nullah at Jordan Valley in Kwun Tong;
- (b) about 210 m long by 6.6 m wide of open nullah at Flower Market Road in Mong Kok;
- (c) about 230 m long by 5.5 m wide of open nullah at Tonkin Street in Sham Shui Po; and
- (d) provision of ancillary works.

———— A site plan and typical sections of the proposed works are at Enclosure 1.

4. We plan to commence construction in February 2008 for completion in December 2010.

## JUSTIFICATION

5. To address the problems brought by the open nullahs, the Chief Executive announced in his 2005 Policy Address that the Government would deck over 16 sections of nullahs, including Jordan Valley nullah, Flower Market Road nullah and Tonkin Street nullah, within ten years to improve the living environment.

6. Upon completion of the proposed works, the existing odour nuisance to community in the vicinity of the nullahs will be removed. The quality of living environment will also be improved because the land obtained from the decking of the nullahs will be used for greening and amenity purposes in Mong Kok and Kwun Tong, and for footpath widening purpose in Sham Shui Po.

**/FINANCIAL .....**

**FINANCIAL IMPLICATIONS**

7. We estimate the cost of the proposed works to be \$215.9 million in MOD prices (see paragraph 8 below), made up as follows –

	\$ million	
(a) Construction of decking and ancillary works at	186.3	
(i) Jordan Valley nullah, Kwun Tong	15.9	
(ii) Flower Market Road nullah, Mong Kok	80.9	
(iii) Tonkin Street nullah, Sham Shui Po	89.5	
(b) Environmental mitigation measures	6.2	
(c) Contingencies	18.8	
	<hr/>	
Sub-total	211.3	(in September 2007 prices)
	<hr/>	
(d) Provision for price adjustment	4.6	
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Total	215.9	(in MOD prices)

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

Year	\$ million (Sept 2007)	Price adjustment factor	\$ million (MOD)
2008 - 2009	53.1	1.00750	53.5
2009 - 2010	74.0	1.01758	75.3
2010 - 2011	52.8	1.02775	54.3

/ 2011 - 2012 .....

Year	\$ million (Sept 2007)	Price adjustment factor	\$ million (MOD)
2011 - 2012	21.1	1.03803	21.9
2012 - 2013	8.4	1.05619	8.9
2013 - 2014	1.9	1.07732	2.0
	211.3		215.9

9. 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 from 2008 to 2014. We will tender the proposed works under a standard re-measurement contract because of the uncertainties of the existence and alignment of the underground utilities and the ground conditions. The contract will provide for price adjustments because the contract period will exceed 21 months.

10. We estimate the annual recurrent expenditure arising from the proposed works to be about \$0.5 million.

## **PUBLIC CONSULTATION**

11. We consulted the Environment and Hygiene Committee of Kwun Tong District Council on 29 May 2007, the Food and Environmental Hygiene Committee of Yau Tsim Mong District Council on 19 July 2007, and the Environment and Food Committee of Sham Shui Po District Council on 5 July 2007 and 6 September 2007. All three Committees supported the implementation of the proposed works.

12. During the consultation with the Environment and Food Committee of Sham Shui Po District Council on 5 July 2007, the Committee requested to use the future nullah deck for widening of the Tonkin Street footpaths. Transport Department and Highways Department will take forward the proposed footpath widening works in due course.

13. We consulted the Legislative Council Panel on Development on the proposed works by circulation of an information paper on 15 October 2007. Members raised no objection to the proposed works.

**/ENVIRONMENTAL .....**

## ENVIRONMENTAL IMPLICATIONS

14. The proposal is not a designated project under the Environmental Impact Assessment Ordinance. We completed a Preliminary Environmental Review (PER) for the project in September 2007 and concluded that the project will not cause any long term adverse environmental impacts. We will incorporate the recommendations of the PER into the works contract for implementation.

15. For short-term impacts during construction, we will control noise, dust and site run-off within the established standards and guidelines through implementation of mitigation measures, such as the use of temporary noise barriers and silenced construction equipment to reduce noise generation, water-spraying to reduce emission of dust and working in dry environment with barriers to control water pollution during excavation. We will also carry out regular site inspections to ensure that these recommended mitigation measures and good site practices will be properly implemented. We have included \$6.2 million (in September 2007 prices) in the project estimate for implementing the environmental mitigation measures.

16. We have considered ways in the planning and design stages to reduce the generation of construction waste where possible. For example, we have adopted standardised sections of reinforced concrete structures to minimise the use of formwork and will retain the existing nullah walls to minimise excavation and demolition of existing structures. We will encourage the contractor to maximise the use of recycled or recyclable inert waste, as well as the use of non-timber formwork to further minimise the generation of construction waste.

17. 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 construction waste on site for disposal at appropriate facilities. We will control the disposal of inert construction waste and non-inert construction waste to public fill reception facilities<sup>1</sup> and landfills respectively through a trip-ticket system.

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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.

18. We estimate that the project will generate in total about 7 220 tonnes of construction waste. Of these, we will deliver about 6 270 tonnes (87%) of inert construction waste to public fill reception facilities for subsequent reuse. In addition, we will dispose of 950 tonnes (13%) 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 about \$0.3 million for this project (based on a unit cost of \$27/tonne for disposal at public fill reception facilities and \$125/tonne<sup>2</sup> at landfills).

## HERITAGE IMPLICATIONS

19. This project will not affect any heritage site, i.e. all declared monuments, graded historic buildings and sites of archaeological interests.

## TRAFFIC IMPACTS

20. We have carried out a traffic impact assessment for the proposed works at Tonkin Street in Sham Shui Po which concluded that the proposed works would not cause unacceptable traffic impact. The proposed works at Jordan Valley in Kwun Tong and Flower Market Road in Mong Kok will not encroach upon road carriageways, and hence traffic impact will be insignificant.

## LAND ACQUISITION

21. The proposed works does not involve any land acquisition.

## BACKGROUND INFORMATION

22. In September 2005, we included **138CD** “Decking of Jordan Valley Nullah in Kwun Tong, Rambler Crest Nullah in Tsing Yi, Flower Market Road Nullah in Mong Kok and Tonkin Street Nullah in Sham Shui Po” in Category B.

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<sup>2</sup> The 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.

23. In June 2006, we engaged consultants to carry out ground investigation, traffic impact assessment study, tree surveys and landscape design for **138CD**, at an estimated cost of \$3.56 million. We charged the amount to block allocation **Subhead 4100DX** “Drainage works, studies and investigations for items in Category D of the Public Works Programme”. We have substantially completed the design of the proposed works. The planning and design of the remaining works at Rambler Crest Nullah in Tsing Yi is in progress.

24. Of the 163 trees within the project boundary, 155 trees will be preserved. The proposed works will involve the felling of 8 trees. All trees to be felled are not important trees<sup>3</sup>. We will incorporate planting proposal as part of the project, including estimated quantities of 253 trees and 18 506 shrubs.

25. We estimate that the proposed works will create about 130 jobs (113 for labourers and another 17 for professional/technical staff) providing a total employment of 3 600 man-months.

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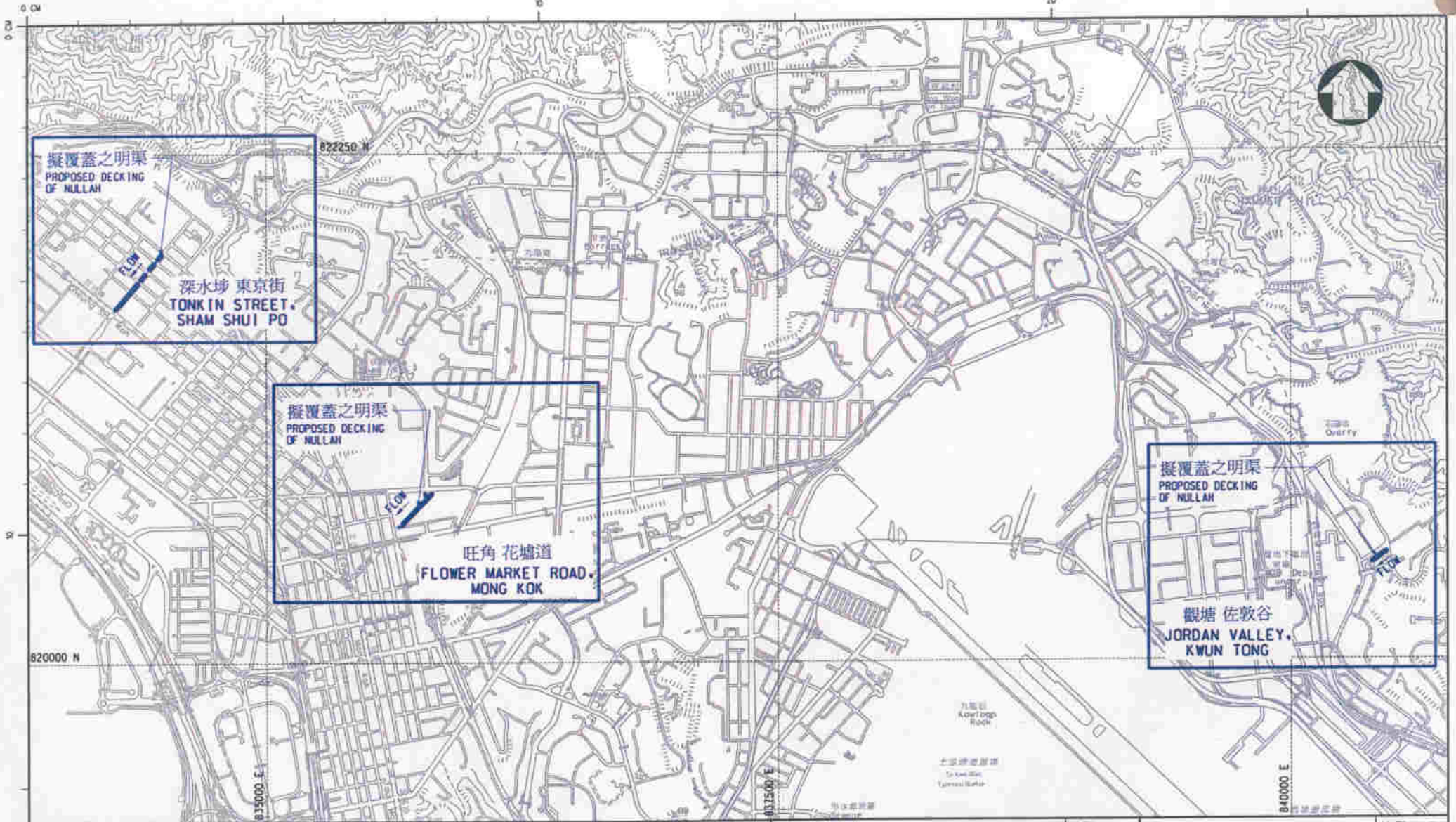
Development Bureau  
December 2007

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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 –

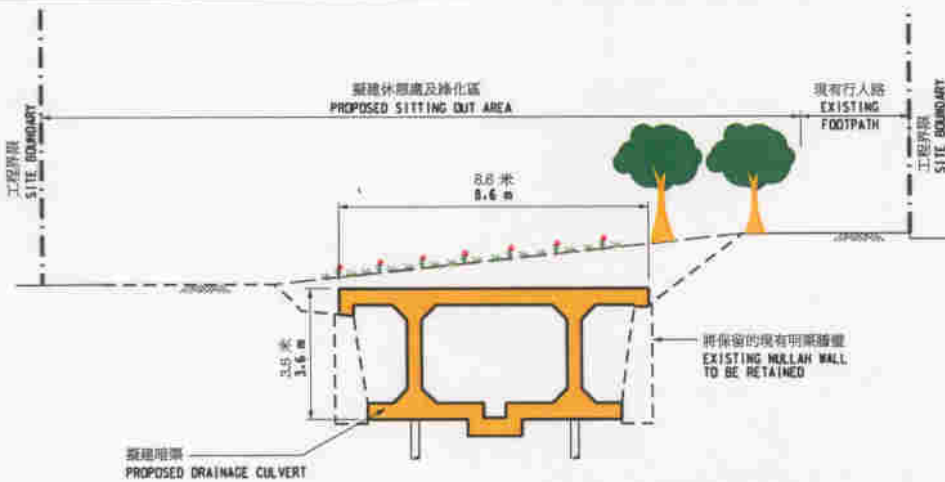
- (a) trees over 100 years old or above;
- (b) trees of cultural, historical or memorable significance e.g. Fung Shui trees, trees as landmark of monastery or heritage monument, and trees in memory of important persons or event;
- (c) trees of precious or rare species;
- (d) trees of outstanding form (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.



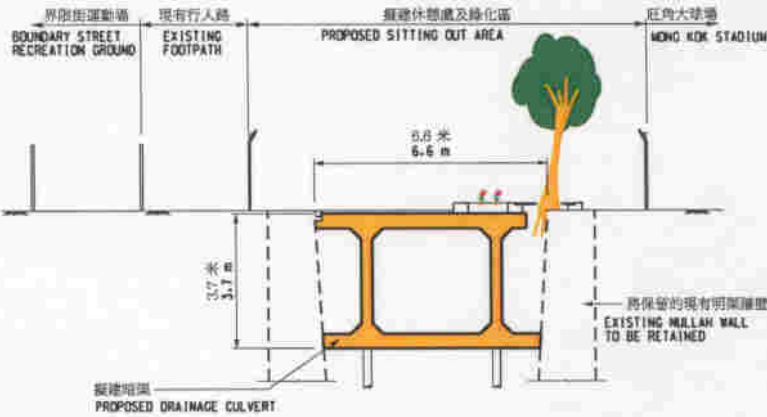


圖則名稱 drawing title 工務工程計劃編號138CD - 觀塘佐敦谷, 青衣藍澄灣, 旺角花墟道 及深水埗東京街明渠覆蓋工程 PWP ITEM No. 138CD - DECKING OF JORDAN VALLEY NULLAH IN KWUN TONG, RAMBLER CREST NULLAH IN TSING YI, FLOWER MARKET ROAD NULLAH IN MONG KOK AND TONKIN STREET NULLAH IN SHAM SHUI PO	繪圖 drawn	H.K. LAI	日期 date	3 SEP 07	圖則編號 drawing no.	SK-T2-07-036	比例 scale	1:25000
	校對 checked	Y.C. NG	日期 date	3 SEP 07	保留版權 COPYRIGHT RESERVED 香港特別行政區政府渠務署 DRAINAGE SERVICES DEPARTMENT GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION			
	審核 vetted	M.L. WONG	日期 date	3 SEP 07				
	部門 office	排水工程處 DRAINAGE PROJECTS DIVISION						

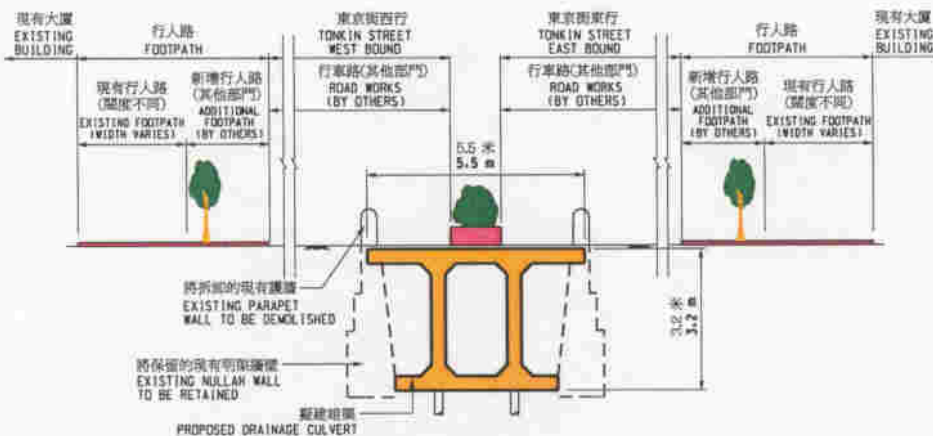




觀塘佐敦谷明渠覆蓋工程之切面圖  
TYPICAL SECTION OF NULLAH DECKING WORKS  
IN JORDAN VALLEY IN KWUN TONG



旺角花墟道明渠覆蓋工程之切面圖  
TYPICAL SECTION OF NULLAH DECKING WORKS  
IN FLOWER MARKET ROAD IN MONG KOK



深水埗東京街明渠覆蓋工程之切面圖  
TYPICAL SECTION OF NULLAH DECKING WORKS  
IN TONKIN STREET IN SHAM SHUI PO

圖則名稱 drawing title	繪畫 drawn	日期 date	圖則編號 drawing no.	比例 scale
工務工程計劃編號138CD- 觀塘佐敦谷, 青衣藍澄灣, 旺角花墟道及深水埗東京街明渠覆蓋工程	H.K. LAI	3 SEP 07	SK-T2-07-037	1:200
PWP ITEM No. 138CD - DECKING OF JORDAN VALLEY NULLAH IN KWUN TONG, RAMBLER CREST NULLAH IN TSING YI, FLOWER MARKET ROAD NULLAH IN MONG KOK AND TONKIN STREET NULLAH IN SHAM SHUI PO	核對 checked	日期 date	保留版權 COPYRIGHT RESERVED	
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	批准 approved	日期 date		
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