

## Legislative Council Panel on Development

### 99WC – Water supply to Northwestern Tuen Mun

#### PURPOSE

This paper informs Members of our proposal to upgrade part of **99WC – “Water supply to Northwestern Tuen Mun”** to Category A at an estimated cost of \$30.3 million in money-of-the-day (MOD) prices for laying water mains to provide fresh and salt water supplies to the new developments in Area 54, Tuen Mun.

#### PROJECT SCOPE

2. The part of **99WC** which we propose to upgrade to Category A comprises –

- (a) laying of about 700 metres (m) long fresh water mains ranging from 150 millimetres (mm) to 300 mm diameter along San Fuk Road and near Kei Lun Wai; and
- (b) laying of about 700 m long salt water mains ranging from 100 mm to 150 mm diameter alongside the proposed fresh water mains mentioned in (a) above.

— 3. A layout plan showing the proposed works is at **Enclosure**.

4. Subject to the funding approval of the Finance Committee (FC), we plan to commence construction of the proposed works in October 2012 for completion in March 2016.

5. We will retain the remainder of **99WC** in Category B, which comprises the laying of about 7 100 m long fresh and salt water mains ranging from 100 mm to 600 mm diameter in northwestern Tuen Mun. Funding for the remainder of **99WC** will be sought at a later stage.

## JUSTIFICATION

6. Developments in Tuen Mun Area 54 mainly include public rental housing (PRH), school and Government, Institution or Community (GIC) facilities. In order to provide fresh and salt water supplies to the new developments in Tuen Mun Area 54, we need to extend the existing fresh and salt water mains at San Fuk Road to these new developments.

7. The proposed works fall within the project boundary of **681CL -“Formation, roads and drains in Area 54, Tuen Mun - phase 2”**. The Civil Engineering and Development Department (CEDD) intends to seek funding approval from the FC in May 2012 to upgrade part of **681CL** to Category A to construct the Tuen Mun Area 54 sewage pumping station and associated sewerage works as phase 2 stage 2 works. To avoid interface problems arising from two contractors working on the same site and repeated road openings, we plan to entrust the construction of the proposed works to CEDD for implementation in conjunction with the phase 2 stage 2 works of **681CL**.

## FINANCIAL IMPLICATIONS

8. We estimate the cost of the proposed works to be \$30.3 million in MOD prices, made up as follows –

	\$ million
(a) Laying of fresh water mains	12.7
(b) Laying of salt water mains	10.2
(c) Environmental mitigation measures	0.6
(d) Contingencies	2.2
	<hr/>
Sub-total	25.7 (in September 2011 prices)
(e) Provision for price adjustment	4.6
	<hr/>
Total	30.3 (in MOD prices)
	<hr/>

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

<b>Year</b>	<b>\$ million (September 2011)</b>	<b>Price adjustment factor</b>	<b>\$ million (MOD)</b>
2012 – 2013	0.5	1.05325	0.5
2013 – 2014	7.7	1.11118	8.6
2014 – 2015	10.0	1.17229	11.7
2015 – 2016	5.0	1.23677	6.2
2016 – 2017	2.5	1.30479	3.3
	<hr/>		<hr/>
	25.7		30.3
	<hr/>		<hr/>

## **PUBLIC CONSULTATION**

10. We consulted the Environment, Hygiene and District Development Committee (EHDDC) of the Tuen Mun District Council (TMDC) by circulation of an information paper in February 2012. No objection to the proposed works was received.

## **ENVIRONMENTAL IMPLICATIONS**

11. This is not a designated project under the Environmental Impact Assessment Ordinance (Cap 499). The works will not have any long-term environmental impact. We have included a sum of \$0.6 million (in September 2011 prices) in the project estimate for the implementation of standard pollution control measures to mitigate short-term environmental impacts during the construction stage. These measures include frequent watering of the site, provision of wheel-washing facilities, covering of materials on trucks and use of silenced construction plant.

12. At the planning and design stages, we have considered the design of the proposed works and the construction sequence 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 or recyclable inert construction waste, and the use of non-timber formwork to further reduce the generation of construction waste.

13. 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 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 at public fill reception facilities and landfills respectively through a trip-ticket system.

14. We estimate that the project will generate in total about 4 200 tonnes of construction waste. Of these, we will reuse about 1 000 tonnes (24%) of inert construction waste on site and deliver 3 000 tonnes (71%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 200 tonnes (5%) 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 \$106,000 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

15. 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.

---

<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 filling reception facilities requires a licence issued by the Director of Civil Engineering and Development.

<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 will be implemented within the project boundary of **681CL**. All necessary land resumption and clearance of the affected private land were completed in October 2011.

## **BACKGROUND INFORMATION**

17. **99WC** was included in Category B in February 2000.

18. We have substantially completed the detailed design of the proposed works using in-house resources.

19. The CEDD manages the project **681CL**, which comprises formation of land for PRH, school and GIC developments, construction of roads, drainage, sewerage, slopes and landscaping works, provision of noise mitigation measures and other ancillary works in Tuen Mun Area 54.

20. The CEDD is now in the process of upgrading part of **681CL** to Category A for the phase 2 stage 2 works comprising the construction of a sewage pumping station and associated sewerage works in Tuen Mun Area 54.

21. The proposed works will not involve any tree removal or planting proposals.

22. We estimate that the proposed works will create about ten jobs (nine for labourers and another one for professional/technical staff) providing total employment of 355 man-months.

## **WAY FORWARD**

23. We plan to seek the support of the Public Works Subcommittee in April 2012 for the proposed part-upgrading of **99WC** to Category A with a view to seeking funding approval from the FC in May 2012.

