

## ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

### HEAD 703 – BUILDINGS

#### Recreation, Culture and Amenities – Open spaces

#### 401RO – District open space in Shek Yam Estate - phases 1 and 4, Kwai Chung

Members are invited to recommend to Finance Committee the upgrading of **401RO** to Category A at an estimated cost of \$46.1 million in money-of-the-day prices for the development of a district open space in Shek Yam Estate - phases 1 and 4, Kwai Chung.

### PROBLEM

We need to provide more public open space in Kwai Tsing District.

### PROPOSAL

2. The Director of Architectural Services, with the support of the Secretary for Home Affairs, proposes to upgrade **401RO** to Category A at an estimated cost of \$46.1 million in money-of-the-day (MOD) prices for the development of a district open space in Shek Yam Estate - phases 1 and 4, Kwai Chung.

### PROJECT SCOPE AND NATURE

3. The project site, with a total area of about 1.5 hectares (ha), is located at the junction of Wo Yi Hop Road and Lei Muk Road, Kwai Chung. The scope of **401RO** includes –

- (a) a footpath with jogging facility;
- (b) a fitness corner for the elderly;
- (c) a children play area with play equipment for different age groups;
- (d) landscaped areas for sitting-out, gateball activities, tai chi playing and physical exercise; and
- (e) ancillary facilities including toilets and a store room.

\_\_\_\_\_ A site plan showing the conceptual layout of the proposed open space is at **Enclosure 1**. We plan to start the construction works in April 2007 for completion in January 2009.

#### **JUSTIFICATION**

4. This project is among the 25 projects identified for priority implementation in the January 2005 Policy Address. Kwai Chung is a densely populated residential area with high-rise residential developments such as Shek Yam Estate, Shek Yam East Estate, On Yam Estate, Shek Lei Estate and Ning Fung Court. Currently, it has a population of about 324 700.

5. As a reference, the Hong Kong Planning Standards and Guidelines (HKPSG) suggest a provision of about 65 ha of public open space for the current population in the Kwai Chung area. At present, there are about 72 ha of public open space in Kwai Chung, including about 37 ha of local open space provided by the Housing Department. In considering the development of new leisure and cultural services projects, we also take into account other factors including the views of the District Council, the changing needs of the community and the utilisation rates of existing facilities. The utilisation rate of existing leisure facilities in Kwai Tsing is very high. In particular, the gateball court in Kwai Chung Sports Ground has achieved an average utilisation rate of around 95% in daytime in 2005 and 2006. Further provision of more landscaped areas and sitting-out facilities for the enjoyment of nearby residents would also be highly welcome. The proposed district open space will further improve the living environment and become a popular venue for local residents.

#### **FINANCIAL IMPLICATIONS**

6. We estimate the capital cost of the project to be \$46.1 million in MOD prices (see paragraph 7 below), made up as follows –

/(a) .....

	<b>\$ million</b>	
(a) Site works and slope works	3.8	
(b) Building	3.1	
(c) Building services	4.8	
(d) Drainage works	3.7	
(e) External works	18.2	
(f) Soft landscaping works	4.5	
(g) Consultants' fees for	2.9	
(i) contract administration	1.6	
(ii) site supervision	1.3	
(h) Furniture and equipment <sup>1</sup>	0.2	
(i) Contingencies	3.3	
	44.5	(in September 2006 prices)
(j) Provision for price adjustment	1.6	
	46.1	(in MOD prices)

We propose to engage consultants to undertake contract administration and site supervision of the project. A detailed breakdown of the estimate for the consultants' fees by man-months is at **Enclosure 2**. We consider the estimated project cost reasonable as compared with similar projects undertaken by the Government.

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

/2007 .....

<sup>1</sup> Based on the furniture and equipment provided in existing/planned facilities of similar scale (e.g. office furniture, litter bins and portable signages, etc).

Year	\$ million (Sept 2006)	Price adjustment factor	\$ million (MOD)
2007 – 08	9.8	1.01250	9.9
2008 – 09	17.2	1.02769	17.7
2009 – 10	8.0	1.04310	8.3
2010 – 11	6.0	1.05875	6.4
2011 – 12	3.5	1.08257	3.8
	44.5		46.1

8. 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 2007 to 2012. We will award the contract on a lump-sum basis because we can clearly define the scope of the works in advance, leaving little room for uncertainty. The contract will not provide for price adjustment because the contract period will not exceed 21 months.

9. We estimate the annual recurrent expenditure arising from this project to be \$1.9 million.

## **PUBLIC CONSULTATION**

10. The Recreation and Culture Committee of the Kwai Tsing District Council was consulted on 3 August 2006 on the conceptual layout of the proposed district open space. Members strongly supported the project and urged for its early implementation.

11. We circulated an information paper to the Legislative Council Panel on Home Affairs on 14 November 2006. Members did not raise any objection to the submission of the funding proposal to the Public Works Subcommittee.

**/ENVIRONMENTAL .....**

## ENVIRONMENTAL IMPLICATIONS

12. The project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). The project will not cause long term environmental impact. We have included in the project estimates the cost to implement suitable mitigation measures to control short term environmental impacts.

13. During construction, 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 contracts. These include the use of silencers, mufflers, acoustic lining or shields for noisy construction activities, frequent cleaning and watering of the site, and the provision of wheel-washing facilities.

14. We have considered 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 on site or in other suitable construction sites as far as possible (e.g. use suitable excavated materials for filling within the site, use metal site hoardings and signboards so that these materials can be recycled or reused in other projects), in order to minimise the disposal of C&D materials to public fill reception facilities<sup>2</sup>. 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.

15. We will also require the contractor to submit a waste management plan (WMP) for approval. The WMP will include appropriate 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 also control the disposal of public fill, C&D materials and C&D waste to public fill reception 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 also record the disposal, reuse and recycling of C&D materials for monitoring purposes.

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<sup>2</sup> Public fill reception facilities are specified in Schedule 4 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.

16. We estimate that the project will generate about 13 401 tonnes of C&D materials. Of these, we will reuse about 1 206 tonnes (9.0%) on site, and deliver 11 603 tonnes (86.6%) to public fill reception facilities for subsequent reuse. In addition, we will dispose of 592 tonnes (4.4%) at landfills. The total cost for accommodating C&D materials at public fill reception facilities and landfill sites is estimated to be \$387,281 for this project (based on a unit cost of \$27/tonne for disposal at public fill reception facilities and \$125/tonne<sup>3</sup> at landfills).

## LAND ACQUISITION

17. The project does not require any land acquisition.

## BACKGROUND INFORMATION

18. We upgraded **401RO** to Category B in September 2005. We engaged an architectural consultant to carry out topographical survey in May 2006 and the detailed design in July 2006. In November 2006, we engaged a quantity surveying consultant to prepare the tender documents. We charged the total cost of \$2.2 million to block allocation **Subhead 3100GX** "Project feasibility studies, minor investigations and consultants' fees for items in Category D of the Public Works Programme". The architectural consultant has completed the topographical survey and detailed design of the project. The quantity surveying consultant is finalising the tender documents.

19. The proposed development of the local open space will involve the removal of four trees which are to be transplanted elsewhere. All trees to be removed are not important trees<sup>4</sup>. We will incorporate planting proposals as part

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3 This estimate has taken into account the cost of 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.

4 "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 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 metre (measured at 1.3 metre above ground level), or with height/canopy spread equal or exceeding 25 metres.


of the project, including estimated quantities of 280 new trees, 21 750 shrubs and 3 200 m<sup>2</sup> of grassed area.

20. We estimate that the proposed works will create about 46 jobs (40 for labourers and six for professional/technical staff) providing a total employment of 700 man-months.

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Home Affairs Bureau  
December 2006



401R0 DISTRICT OPEN SPACE IN SHEK YAM ESTATE -PHASES 1 AND 4, KWAI CHUNG 葵涌石蔭邨第1及4期 地區休憩用地	Drawn by K.C. CHAN	Date 06/12/2006	Drawing no. AB/6778/XA001	Scale 1:1000
	Approved by Eddie WU	Date 06/12/2006	 ARCHITECTURAL SERVICES DEPARTMENT 建築署	
Office PROJECT MANAGEMENT BRANCH 3				



## Enclosure 2 to PWSC(2006-07)54

**401RO** – District open space in Shek Yam Estate - phases 1 and 4, Kwai Chung

### Breakdown of the estimate for consultants' fees

Consultants' staff costs		Estimated man-months	Average MPS* salary point	Multiplier (Note 1)	Estimated fee (\$ million)
(a) Contract administration (Note 2)	Professional	–	–	–	1.0
	Technical	–	–	–	0.6
(b) Site supervision (Note 3)	Technical	45	14	1.6	1.3
				<b>Total :</b>	<u>2.9</u>

\*MPS = Master Pay Scale

### Notes

1. A multiplier of 1.6 is applied to the average MPS point to estimate the cost of resident site staff supplied by the consultants. (As at 1 January 2006, MPS point 14 = 18,010 per month.)
2. The consultants' staff cost for contract administration is calculated in accordance with the existing consultancy agreement for the design and construction of **401RO**. The construction stage of the assignment will only be executed subject to Finance Committee's approval to upgrade **401RO** to Category A.
3. We will only know the actual man-months and actual costs after completion of the construction works.