

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 703 – BUILDINGS

Recreation, Culture and Amenities – Open spaces

422RO – Local open space in Area 25, Fanling/Sheung Shui

Members are invited to recommend to Finance Committee the upgrading of **422RO** to Category A at an estimated cost of \$51.3 million in money-of-the-day prices for the construction of a local open space in Area 25, Fanling/Sheung Shui.

PROBLEM

There are insufficient facilities for skateboarding and BMX cycling in Fanling/Sheung Shui to meet the needs of the community.

PROPOSAL

2. The Director of Architectural Services, with the support of the Secretary for Home Affairs (SHA), proposes to upgrade **422RO** to Category A at an estimated cost of \$51.3 million in money-of-the-day (MOD) prices for the construction of local open space in Area 25, Fanling/Sheung Shui.

/PROJECT

PROJECT SCOPE AND NATURE

3. The project covers two sites with a total area of about 0.39 hectare in Area 25, Fanling/Sheung Shui. The scope of **422RO** includes –

Site 1

- (a) a skateboarding ground;
- (b) an open piazza;
- (c) landscaped sitting-out facilities;
- (d) ancillary facilities including a service block and store room;

Site 2

- (e) a BMX cycling ground;
- (f) landscaped sitting-out facilities; and
- (g) ancillary facilities including a service block and store room.

———— The plans showing the conceptual layout of Sites 1 and 2 of **422RO** are at Enclosures 1 and 2. We plan to start the construction works in January 2010 for completion in January 2012.

JUSTIFICATION

4. The North District currently has a population of about 294 200 which is expected to increase by about 8.4% to 318 900 by 2016. The Hong Kong Planning Standards and Guidelines (HKPSG) suggest a provision of about 63.78 hectares of public open space for the projected population in 2016. At present, there are about 70.03 hectares of public open space (including 42.53 and 27.50 hectares of public open space managed by the Leisure and Cultural Services Department and the Housing Department respectively) in the district.

5. Although the existing provision of public open space in the district generally exceeds the suggested provision in the HKPSG, there is no facility for skateboarding and only one BMX cycling ground (in Pak Wo Road Playground) in the district. The North District Council has strongly requested the provision of more active and innovative recreational facilities, in particular for skateboarding and BMX cycling, for young people in the district. There are 10 secondary and primary schools in the vicinity of the proposed facilities, and we expect that these facilities will be popular with local residents, especially teenagers in the district.

FINANCIAL IMPLICATIONS

6. We estimate the capital cost of the project to be \$51.3 million in MOD prices (see paragraph 7 below), made up as follows –

	\$ million
(a) Site works and site formation	2.1
(b) Building	8.4
(c) Building services	2.7
(d) Drainage	1.2
(e) External works	22.0
(f) Soft landscaping works	0.9
(g) Furniture and equipment ¹	0.1
(h) Consultants' fees	1.7
(i) contract administration	1.4
(ii) management of resident site staff	0.3
(i) Remuneration of resident site staff	4.8
(j) Contingencies	3.6

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

		\$ million	
	Sub-total	47.5	(in September 2008 prices)
(k)	Provision for price adjustment	3.8	
	Total	51.3	(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 and resident site staff costs by man-months is at Enclosure 3. 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 –

Year	\$ million (Sept 2008)	Price adjustment factor	\$ million (MOD)
2009 – 10	1.0	1.03500	1.0
2010 – 11	12.0	1.05570	12.7
2011 – 12	22.0	1.07681	23.7
2012 – 13	8.0	1.09835	8.8
2013 – 14	3.0	1.12032	3.4
2014 – 15	1.5	1.15113	1.7
	47.5		51.3

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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 2009 to 2015. We will deliver the construction works through a lump-sum contract because we can clearly define the scope of the works in advance. The contract will provide for price adjustments.

9. We estimate the annual recurrent expenditure arising from this project to be \$2.1 million.

PUBLIC CONSULTATION

10. We consulted the Recreation and Culture Committee of the North District Council on the scope of the project on 5 January 2006. Members supported the project and requested its early implementation.

11. We consulted the District Facilities Management Committee of the North District Council on the conceptual layouts of the project on 15 January 2009. Members supported the project and requested its early implementation.

12. We circulated an information paper to the Legislative Council Panel on Home Affairs on 14 April 2009. Members did not raise any objection to this project.

ENVIRONMENTAL IMPLICATIONS

13. The project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). The project has very little potential for giving rise to adverse environmental impacts.

14. 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 contract. These include the use of silencers, mufflers, acoustic lining or shields and the building of barrier wall for noisy construction activities, frequent cleaning and watering of the site, and the provision of wheel-washing facilities.

15. We have considered measures in the planning and design stages to reduce the generation of construction waste where possible (e.g. using metal site hoardings and signboards so that these materials can be recycled or reused in other projects). In addition, we will require the contractor to reuse inert construction waste on site (e.g. use of excavated materials for filling within the site) or in other suitable construction sites as far as possible, in order to minimize the disposal of inert construction waste to public fill reception facilities². We will encourage the contractor to maximize the use of recycled or recyclable inert construction waste, as well as the use of non-timber formwork to further minimize the generation of construction waste.

16. 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 and landfills respectively through a trip-ticket system.

17. We estimate that the project will generate in total about 1 480 tonnes of construction waste. Of these, we will reuse about 545 tonnes (36.8%) of inert construction waste on site and deliver 780 tonnes (52.7%) of inert construction waste to public fill reception facilities for subsequent reuse. In addition, we will dispose of 155 tonnes (10.5%) 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 \$40,435 for this project (based on a unit cost of \$27/tonne for disposal at public fill reception facilities and \$125/tonne³ at landfills).

ENERGY CONSERVATION MEASURES

18. This project has adopted various forms of energy efficient features, including –

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² 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.

³ 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/m³), nor the cost to provide new landfills (which is likely to be more expensive), when the existing ones are filled.

- (a) T5 energy efficient fluorescent tubes with electronic ballast and lighting control by occupancy sensors and daylight sensors; and
- (b) Light-emitting diode (LED) type exit signs.

19. The total estimated additional cost for adoption of the above energy efficient features is around \$2,700, which has been included in the cost estimate of the project. The energy efficient features will achieve 1.0% energy savings in the annual energy consumption with a payback period at about 5.6 years.

HERITAGE IMPLICATIONS

20. 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.

LAND ACQUISITION

21. The project does not require any land acquisition.

BACKGROUND INFORMATION

22. We upgraded **422RO** to Category B in October 2007. We engaged an architectural consultant to undertake the detailed design and site investigation, and a quantity surveying consultant to prepare tender documents in October 2008. We charged the total cost of \$2.8 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 detailed design. Site investigation work is in progress and the quantity surveying consultant is finalising the tender documents.

23. The proposed works will involve removal of nine trees, all will be felled. All trees to be removed are not important trees⁴. We will incorporate planting proposals as part of the project, including estimated quantities of 46 trees, 2 000 shrubs, 1 000 ground covers and 50 climbers.

24. We estimate that the proposed works will create about 38 jobs (33 for labourers and five for professional/technical staff) providing a total employment of 670 man-months.

Home Affairs Bureau
May 2009

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 tree, tree as landmark of monastery or heritage monument, and trees in memory of an important person 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 (m) (measured at 1.3 m above ground level), or with height/canopy spread equal or exceeding 25 m.



422RO
 上水粉嶺第25區
 鄰舍休憩用地 (場地1)
 LOCAL OPEN SPACE
 IN AREA 25,
 FANLING / SHEUNG SHUI (SITE 1)

drawn by 繪圖
 Esther Li

date 日期
 3/2009

drawing no. 圖號
 AB / 422RO / XA001

scale 比例
 1:600

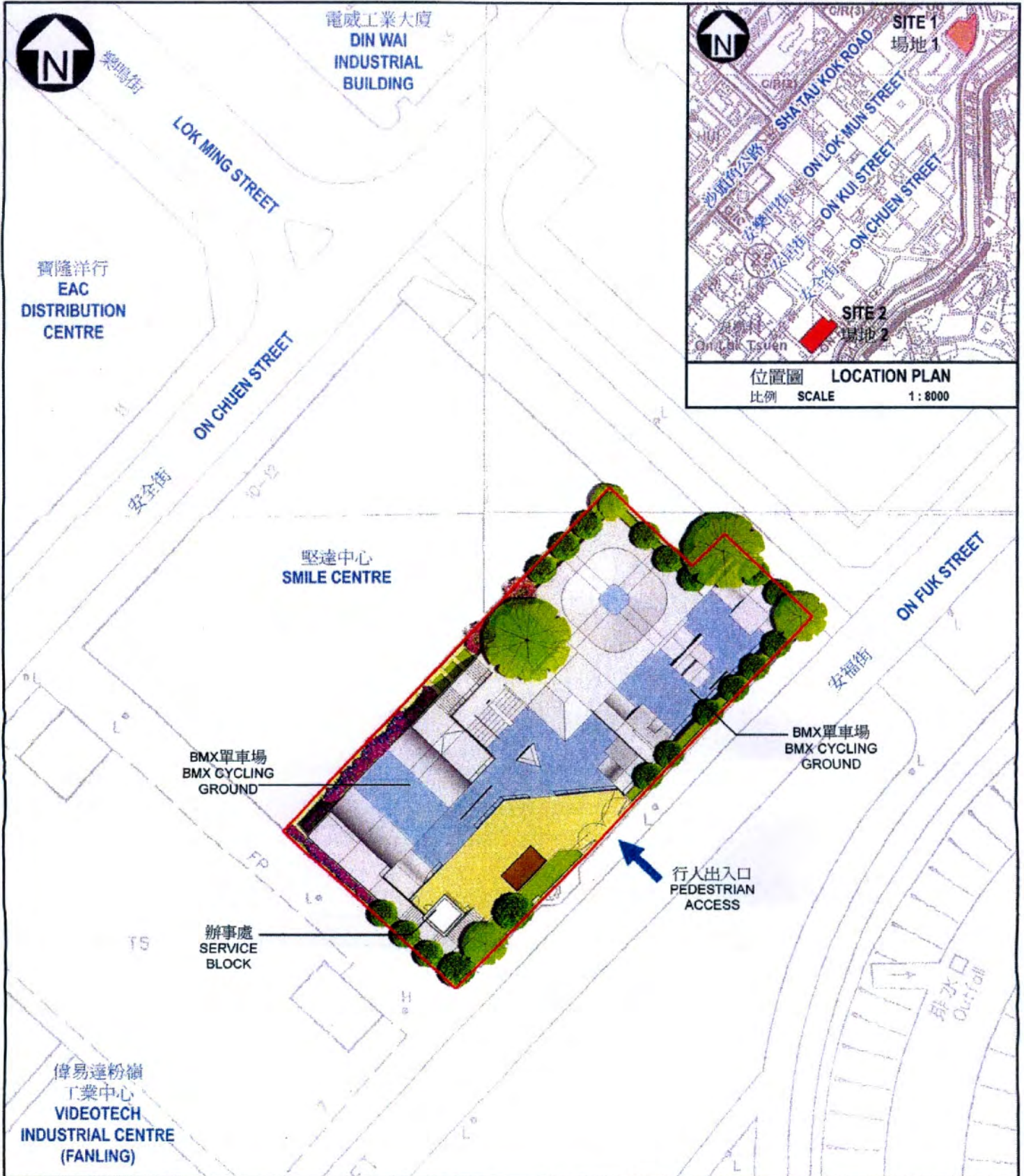
approved 覆核
 Alfred Lai


date 日期
 3/2009

office PROJECT MANAGEMENT BRANCH
 辦事處 工程策劃管理處



ARCHITECTURAL
 SERVICES
 DEPARTMENT 建築署



422RO 上水粉嶺第25區 鄰舍休憩用地 (場地2) LOCAL OPEN SPACE IN AREA 25, FANLING / SHEUNG SHUI (SITE 2)	drawn by 繪圖 Esther Li	date 日期 3/2009	drawing no. 圖號 AB / 422RO / XA002	scale 比例 1 : 600
	approved 覆核 Alfred Lai	date 日期 3/2009	 ARCHITECTURAL SERVICES DEPARTMENT 建築署	
	office PROJECT MANAGEMENT BRANCH 辦事處 工程策劃管理處			

422RO – Local open space in Area 25, Fanling/Sheung Shui

Breakdown of estimates for consultants' fees and resident site staff costs
(in September 2008 prices)

		Estimated Man- months	Average MPS* salary point	Multiplier (Note 1)	Estimated fees (\$ million)
(a) Consultants' fees for contract administration (Note 2)	Professional	--	--	--	0.5
	Technical	--	--	--	0.9
				Sub-total	1.4
(b) Resident site staff costs (Note 3)	Technical	161	14	1.6	5.1
				Sub-total	5.1
Comprising –					
(i) Consultants' fees for management of resident site staff					0.3
(ii) Remuneration of resident site staff					4.8
				Total	6.5

* 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 April 2008, MPS pt. 38 = \$60,535 per month and MPS pt. 14 = \$19,835 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 **422RO**. The assignment will only be executed subject to Finance Committee's approval to upgrade **422RO** to Category A.
3. The consultants' staff cost for site supervision is based on the estimate prepared by the Director of Architectural Services. We will only know the actual man-months and actual costs after completion of the construction works.