For discussion **PWSC(2009-10)36**
on 20 May 2009

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 703 – BUILDINGS
Recreation, Culture and Amenities – Sports Facilities
245RS – Conversion of secondary pool of Lai Chi Kok Park Swimming Pool into indoor heated pool

Members are invited to recommend to Finance Committee the upgrading of **245RS** to Category A at an estimated cost of $166.7 million in money-of-the-day prices for the conversion of secondary pool of Lai Chi Kok Park Swimming Pool into indoor heated pool.

PROBLEM

There is no indoor heated swimming pool in the Sham Shui Po (SSP) district to meet the needs of local residents.

PROPOSAL

2. The Director of Architectural Services, with the support of the Secretary for Home Affairs, proposes to upgrade **245RS** to Category A at an estimated cost of $166.7 million in money-of-the-day (MOD) prices for the conversion of secondary pool of Lai Chi Kok Park Swimming Pool into indoor heated pool.

/PROJECT…..

PROJECT SCOPE AND NATURE

3. The project site occupies an area of about 15 422 square metres (m^2). The proposed scope of works under **245RS** includes—

(a) provision of a light-weight cover and retractable sidewalls at the secondary pool, with suitable modifications to ancillary facilities;

(b) provision of a new heating system at the secondary pool;

(c) provision of a covered walkway with heating from the exits of the changing rooms to the secondary pool, which can be enclosed during winter months;

(d) demolition of the existing children's fun pool adjacent to the secondary pool; and

(e) associated improvements to ventilation and hot water systems in changing rooms.

A site plan is at Enclosure 1. An artist's impression of the proposed development is at Enclosure 2. We plan to start construction in February 2010 for completion in June 2012.

JUSTIFICATION

4. Currently, there are three public swimming pools in the SSP district: Lei Cheng Uk Swimming Pool, Sham Shui Po Park Swimming Pool and Lai Chi Kok Park Swimming Pool, the latter two with outdoor heated main pools. These pools are heavily patronised by residents in the district, which has a population of about 375 900 people. Attendance figures for Lei Cheng Uk Swimming Pool, Sham Shui Po Park Swimming Pool and Lai Chi Kok Park Swimming Pool show that there is an annual increase of some 5-10% in the attendance at these facilities, indicating the growing popularity of swimming among local residents. In addition, the average monthly attendance at Lai Chi Kok Park Swimming Pool is the third highest amongst the eight outdoor heated public swimming pools in Hong Kong.

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5. Swimming has become increasingly popular in Hong Kong, and there is a growing demand for year-round swimming facilities. Indoor heated swimming pools, in particular, are becoming more popular, and the average monthly attendance for indoor heated pools during November 2008 and December 2008 was over 355 000. There is currently no public indoor heated swimming pool in the SSP district, and we expect that local residents will welcome the proposed project.

FINANCIAL IMPLICATIONS

6. We estimate the capital cost of the project to be $166.7 million in MOD prices (see paragraph 7 below) as follows –

			$ million
(a)	Site works		4.1
(b)	Building		79.6
(c)	Building services		30.1
(d)	Drainage		7.5
(e)	External works		3.4
(f)	Additional energy conservation measures		2.5
(g)	Furniture and equipment[1]		0.1
(h)	Consultants' fees for		5.2
	(i) Contract administration	4.5	
	(ii) management of resident site staff	0.7	
(i)	Remuneration of resident site staff		7.1

/**$ million**…..

[1] The estimated cost of furniture and equipment is based on an indicative list of items required, including recreation and sports equipment, office furniture, first aid equipment, and mobile racks.

		$ million	
(j)	Contingencies	14.0	
	Sub-total	153.6	(in September 2008 prices)
(k)	Provision for price adjustment	13.1	
	Total	166.7	(in MOD prices)

We propose to engage consultants to undertake contract administration and site supervision of the project. A detailed breakdown of the estimates for the consultants' fees and resident site staff costs by man-months is at Enclosure 3. The construction floor area (CFA) of the project is 7 860 m^2. The estimated construction unit cost, represented by the building and the building services costs, is $13,957 per m^2 of CFA in September 2008 prices. We consider this comparable to similar projects built by the Government.

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

Year	**$ million (Sept 2008)**	**Price adjustment factor**	**$ million (MOD)**
2010 – 11	30.0	1.05570	31.7
2011 – 12	60.0	1.07681	64.6
2012 – 13	40.0	1.09835	43.9
2013 – 14	20.0	1.12032	22.4
2014 – 15	3.6	1.15113	4.1
	153.6		166.7

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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 2010 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 $5.0 million.

PUBLIC CONSULTATION

10. We consulted the Community Affairs Committee of the SSP District Council on the proposed scope and the design layout of the project on 31 May 2007 and 19 March 2009 respectively. Members endorsed the proposal.

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

ENVIRONMENTAL IMPLICATIONS

12. 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 any adverse environmental impact.

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 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.

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14. 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 minimise the disposal of inert construction waste to public fill reception facilities[2]. We will encourage the contractor to maximise the use of recycled or recyclable inert construction waste, 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 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.

16. We estimate that the project will generate about 15 130 tonnes of construction waste. Of this, we will reuse about 7 560 tonnes (50.0%) of inert construction waste on site and deliver 5 310 tonnes (35.1%) of inert construction waste to public fill reception facilities for subsequent reuse. In addition, we will dispose of 2 260 tonnes (14.9%) 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 $425,870 for this project (based on a unit cost of $27/tonne for disposal at public fill reception facilities and $125/tonne[3] at landfills).

/**ENERGY**…..

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

ENERGY CONSERVATION MEASURES

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

(a) T5 energy efficient fluorescent tubes with electronic ballast and lighting control by daylight sensors;

(b) light-emitting diode (LED) type exit signs; and

(c) heat pump for domestic hot water, space heating and dehumidification.

18. For renewable energy technologies, we will adopt photovoltaic panel and solar hot water system for environmental benefits.

19. For greening features, we will adopt vertical greening near the changing rooms.

20. For recycled features, we will adopt a rainwater recycling system for plant room floor cleansing with a view to conserving water.

21. The total estimated additional cost for adoption of the above features is around $2.5 million (including $1.2 million for energy efficient features), which has been included in the cost estimate of the project. The energy efficient features will achieve about 5.4% energy savings in the annual energy consumption with a payback period at about 8.5 years.

HERITAGE IMPLICATIONS

22. This 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.

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LAND ACQUISITION

23. The project does not require any land acquisition.

BACKGROUND INFORMATION

24. We upgraded **245RS** to Category B in November 2007. We engaged an architectural consultant in November 2008 to undertake the detailed design and site investigation. We engaged a quantity surveying consultant in September 2008 to prepare tender documents. We charged the total cost of $3.2 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 detailed design. Site investigation is in progress and the quantity surveying consultant is finalising the tender documents.

25. The proposed works will involve removal of one tree which will be transplanted within the SSP district. The tree to be transplanted is not an important tree[4]. We will incorporate vertical greening as part of the project.

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[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.

26. We estimate that the proposed works will create about 106 jobs (93 for labourers and another 13 for professional/technical staff) providing a total employment of 2 300 man-months.

Home Affairs Bureau
May 2009

Enclosure 1 附件一

Project Title 245RS Conversion of secondary pool of Lai Chi Kok Park Swimming Pool into indoor heated pool 把荔枝角公園游泳池的副池改建爲室內暖水池	drawn by 繪圖 BONG LEUNG	date 日期 03/09	drawing no. 編號 PMB/6822/XA00	scale 比例 1:1250
	approved 覆核 VETUS LAU	date 日期 03/09		
	office 辦事處 PROJECT MANAGEMENT BRANCH 工程策劃管理處		ARCHITECTURAL SERVICES DEPARTMENT	

Project Title 245RS Conversion of secondary pool of Lai Chi Kok Park Swimming Pool into indoor heated pool 把荔枝角公園游泳池的副池改建爲室內暖水池	**Drawing Title** Aerial View of the proposed conversion from North-western Direction (Artist's Impression) 西北方向鳥瞰透視圖	drawn by 繪圖 BONG LEUNG	date 日期 04/09	drawing no. 編號 PMB/6822/XA01
		approved 覆核 VETUS LAU	date 日期 04/09	scale 比例 N.T.S.
		office 辦事處 PROJECT MANAGEMENT BRANCH 工程策劃管理處		ARCHITECTURAL SERVICES DEPARTMENT 建築署

245RS – Conversion of secondary pool of Lai Chi Kok Park Swimming Pool into indoor heated pool

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

			Estimated man-months	Average MPS* salary point	Multiplier (Note 1)	Estimated fee ($ million)
(a)	Consultants' fees for contract administration (Note 2)	Professional	–	–	–	1.8
		Technical	–	–	–	2.7
					Sub-total	4.5
(b)	Resident site staff costs (Note 3)	Professional	9	38	1.6	0.9
		Technical	218	14	1.6	6.9
					Sub-total	7.8
	Comprising –					
	(i) Consultants' fees for management of resident site staff				0.7	
	(ii) Remuneration of resident site staff				7.1	
					Total	**12.3**

* MPS = Master Pay Scale

Notes

1. A multiplier of 1.6 is applied to the average MPS point to arrive at 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 **245RS**. The assignment will only be executed subject to Finance Committee's approval to upgrade **245RS** 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.