

For discussion on  
9 May 2008

**Legislative Council Panel on Home Affairs**  
**Redevelopment of the Hong Kong Sports Institute**

**Purpose**

The Administration plans to invite the Public Works Subcommittee (PWSC) to consider the second-stage funding application for the main works of the Redevelopment of the Hong Kong Sports Institute (the Project) at an estimated cost of \$1,707.5 million in money-of-the-day (MOD) prices on 21 May 2008. This paper sets out the details of the estimated main works cost of the Project, and the additional recurrent financial implications of \$23.5 million per annum for the Hong Kong Sports Institute Limited (HKSIL) to operate the redeveloped Hong Kong Sports Institute (HKSI).

**Background**

2. At the meeting of the Legislative Council Panel on Home Affairs held on 11 April 2008, Members noted the latest progress of the Project and wished to have detailed information of the latest estimate of the cost of the main works of the Project.

3. In the submission to PWSC in May 2007 concerning the first-stage funding for the preparatory works (including ground investigation, condition and structural surveys and consultancy services for detailed design and tender documentation) of the Project, we informed PWSC that the consultant then appointed by HKSIL estimated that the main works cost of the Project (with provision for price adjustment) would be about \$1,263.2 million (Original Estimate of the Main Works Cost). The figure was prepared on the following basis -

- (a) the conceptual master layout plan (CMLP) of the Project completed in April 2007;
- (b) the prevailing construction unit costs in September 2006; and

- (c) the price adjustment factors in March 2007 for conversion into money-of-the-day prices (MOD prices).

However, the figure was only a rough estimate for the purpose of providing PWSC with an indicative figure.

### **Latest Estimate of the Costs of the Main Works of the Project**

4. With the support of PWSC and the approval of the Finance Committee of funding of \$52.9 million in MOD prices in June 2007, HKSIL appointed the Architectural Lead Consultant and Quantity Surveying Consultant (HKSIL Consultants) to proceed with the preparatory works required for the planning and detailed designs of the main works of the Project. Taking into account findings of the relevant studies under the preparatory works, adopting the pricing of the approximate quantities measured from the finalised design drawings in September 2007 prices, and applying the price adjustment factors in March 2008, HKSIL Consultants calculated a detailed estimate of the costs for the main works of the Project (i.e. the Updated Estimate of the Main Works Cost) at \$1,707.5 million in MOD prices. The breakdown of the Original Estimate of the Main Works Cost and the Updated Estimate of the Main Works Cost of the Project is at **Annex A**.

5. Members' attention is also drawn to the following factors accounting for the difference between the Original Estimate of the Main Works Cost and the Updated Estimate of the Main Works Cost of the Project -

- (a) additional costs for extra works items not originally envisaged;
- (b) escalation of construction and overhead costs between 2006 and 2007;  
and
- (c) effect relating to the adjustment factors for derivation of costs in MOD prices.

6. To facilitate comparison, HKSIL has arranged to convert the Original Estimate of the Main Works Cost and the Updated Estimate of the Main Works Cost back to the September 2006 prices. An analysis of the difference

between the Original Estimate of the Main Works Cost and the Updated Estimate of the Main Works Cost of the Project is as follows -

	<u>\$ Million</u>
<b>Original Estimate of the Main Works Cost in MOD prices indicated in the PWSC paper issued in May 2007</b>	<b>1,263.2</b>
Less: Provision for price adjustment (based on the estimates of phased expenditure derived by price adjustment factors in March 2007)	(26.8)
	<hr/>
<b>Base estimate of the main works cost in September 2006 prices</b> (based on the CMLP completed by HKSIL in April 2007)	<b>1,236.4</b>
<b>Changes due to design development</b>	
Add: (A) Additional piling works	37.2
(B) Additional refurbishment works	36.3
(C) Adjustment in contingencies	11.3
Less: (D) Adjustment in other requirements	(3.7)
	<hr/>
<b>Revised base estimate of the main works cost in September 2006 prices</b>	<b>1,317.5</b>
Add: Provision for escalation of construction and overhead costs between 2006 and 2007	245.8
	<hr/>
<b>Revised base estimate of the main works cost in September 2007 prices</b>	<b>1,563.3</b>
Add: Provision for price adjustment (based on the revised base estimate of phased expenditure derived by price adjustment factors in March 2008)	144.2
	<hr/>
<b>Updated Estimate of the Main Works Cost in MOD prices</b>	<b><u>1,707.5</u></b>

Information to PWSC in May 2007

7. According to the Technical Feasibility Statement (TFS) completed by HKSIL in April 2007, the base estimate of main works cost of the Project was \$1,236.4 million in September 2006 prices. With the then price adjustment factors, in May 2007, HKSIL advised that the Original Estimate of the Main Works Cost would be about \$1,263.2 million (in MOD prices).

Changes due to Design Development

8. Since their appointment in October 2007, HKSIL Consultants have conducted various preparatory works studies and developed a detailed design after consultations with the relevant stakeholders. In this connection, there are a few changes to the main works requirement and costs due to design development which are set out in paragraphs 9 to 13 below.

(A) Additional Piling Works

9. The findings of the ground investigation revealed the following two crucial factors that would have cost implications on the foundation works -

- (a) the bedrock level of the site is at 31m to 65m below ground, which is rather different from the previous design assumption for the foundation works (at 35m to 45m below ground); and
- (b) the soil on the site of the new rowing boathouse is too weak to support any major structures and so the previously assumed shallow foundation for the new rowing boathouse is required to be changed to a pile foundation.

10. In view of the above, the foundation design has been reviewed, concluding that the required quantities of the foundation works have to be increased. The cost of site formation and piling is therefore adjusted upwards from \$97.5 million to \$134.7 million, representing an increase of \$37.2 million in September 2006 prices.

(B) Additional Refurbishment Works

11. In preparation of the TFS, the then consultants appointed by HKSIL

had advised that there were quite a number of repair works required to be carried out at the HKSI buildings. After being appointed, HKSIL Consultants conducted a detailed condition survey on the existing sports complex and the 25m indoor swimming pool, covering building and building services aspects. The survey revealed that the repair works required for rectification of building defects, such as water seepage, spalling concrete, debonded floor and wall finishes, corrosion of metal space frame structure and windows, delaminated waterproofing membrane and roof ponding, would be far more substantial than those expected in the TFS. Moreover, a complete replacement of existing building services systems is required as the existing systems are too old and unfit for HKSI's long-term use. These additional requirements have led to an increase in cost for refurbishment works by \$36.3 million, from \$152.3 million to \$188.6 million in September 2006 prices.

(C) Adjustment in Contingencies

12. The contingencies originally provided only covered some categories of the cost items including site formation and piling, demolition and hoarding, building and building services, refurbishment works, and drainage and external works. As it is considered necessary to make provision of contingencies for decanting works and temporary velodrome, and the additional works items (additional piling and refurbishment works set out in paragraph 9 to 11 above) as well, the provision for contingencies has been increased by \$11.3 million, from \$96.5 million to \$107.8 million in September 2006 prices.

(D) Adjustment in Other Requirements

13. With some minor fine-tuning to the project scope and design, the funding requirement for other aspects has been reviewed and adjusted, leading to a net decrease of funding requirement by \$3.7 million in September 2006 prices.

14. Taking into account the adjustment as stipulated in paragraphs 9 to 13 above, the revised base estimate of the main works cost in September 2006 prices would be \$1,317.5 million, which is \$81.1 million higher than the base estimate of the main works cost at \$1,236.4 million in September 2006 prices.

### Escalation of Construction and Overhead Costs between 2006 and 2007

15. There has been a rising trend of construction and overhead costs in the local market between 2006 and 2007 in the light of the booming construction activities in neighbouring markets. HKSIL Consultants, taking the September 2007 prices as the basis to prepare the estimated cost for the main works (i.e. by pricing the approximate quantities taken from the latest design drawings with unit rates obtained from tenders of similar projects returned in September 2007), advised that the revised base estimate of the main works cost in September 2007 prices would be \$1,563.3 million. The net increase of the main works cost (with changes due to design development) from September 2006 prices to September 2007 prices is \$245.8 million (or about 18.7%), which is solely attributable to the escalation of the construction and overhead costs within a one-year period. For Members' reference, the Tender Price Index<sup>1</sup> of the Architectural Services Department during the period from September 2006 to September 2007 indicates an increase of 20.6% in building work costs.

### Effect relating to the Change in Price Adjustment Factors from March 2007 to March 2008

16. Based on HKSIL Consultants' advice, with the revised estimate of the main works cost of the Project at \$1,563.3 million in September 2007 prices, and by applying the price adjustment factors in March 2008 to the cost, the Updated Estimate of the Main Works Cost in MOD prices is \$1,707.5 million, indicating that the provision for price adjustment is \$144.2 million. Other than the change in the base estimates, the increase in provision for price adjustment can be explained by the change in price adjustment factors and the change in phased expenditure associated with the change in works programme. On price adjustment factors, if the latest phased expenditure is projected with the price adjustment factors in March 2007, the estimate of the main works cost would be \$1,600.3 million (\$107.2 million less than the Updated Estimate of the Main Works Cost at \$1,707.5 million in MOD prices). The effect of price adjustment factors on the estimated main works cost of the Project is at **Annex B**.

---

<sup>1</sup> Tender Price Index is a quarterly index compiled primarily as an aid to adjust building cost data for estimation purpose.

## **Additional Recurrent Subvention to HKSIL**

17. According to the financial statements (audited) of HKSIL for the year ended 31 March 2007, the operating expenditure of HKSIL in 2006-07 was \$154.5 million (including athletes training programme and direct financial support to athletes). It should be noted that the Administration has not provided subvention to cover HKSIL's operating expenses in full, while HKSIL has all along been required to optimise the usage of its facilities and to identify other sources of funding to cover its overall expenditure budget.

18. In 2008-09, Home Affairs Bureau (HAB) will provide HKSIL with \$135.4 million to enable HKSIL to discharge its role as the delivery agent in the provision of high performance sports for talented sportsmen and sports women in Hong Kong. With the addition of new and expanded facilities after the redevelopment, HKSIL envisages that its overall operating expenditure will increase by at least about \$23.5 million per annum, representing an increase of about 17% over the 2008-09 recurrent subvention. The breakdown of the expenditure components of the additional recurrent subvention, as compared with similar items in HKSIL's 2006-07 financial statements (audited) are as follows -

	<b>Expenditure in 2006-07 \$ million</b>	<b>Additional recurrent cost \$ million</b>	<b>Percentage of change</b>
(a) Staff and related costs*	85.6	2.5	3%
(b) Government rates & rent	3.8	3.0	79%
(c) Utilities (electricity, water, etc)	6.7	6.2	93%
(d) Repair and maintenance	2.2	8.7	395%
(e) Other facility operating (e.g. hire of services) and office expenses	4.9	3.1	63%
<b>Total</b>	<b>103.2</b>	<b>23.5</b>	<b>23%</b>

\* including costs of coaching staff and supporting staff related to elite training programmes

19. On paragraph 18(a) above, the additional requirement is for additional staffing to augment the expanded operation, with better synergy in the operation under the redeveloped mode. For paragraph 18(b) and 18(c), as the total indoor construction floor area of HKSI will increase from about 23 000 m<sup>2</sup> at present to around 81 000 m<sup>2</sup> upon redevelopment, there will be additional requirement on Government rates & rent and utilities. On paragraph 18(d), the additional requirement on repair and maintenance is relatively substantial. As advised by HKSIL and HKSIL Consultants, that is due to the addition of more equipment, of which much has advanced technical features, and the need to step up the maintenance of HKSI's facilities for suitable, longer-term use. On paragraph 18(e) regarding other facility operating and office expenses, HKSIL has advised that they would be mainly on provision of services (e.g. management and cleaning services) for the new facilities such as the new bowling centre.

20. According to the works programme, the Project will proceed in two phases with phase one to cover upgrading/refurbishment works to existing facilities and phase two to embrace construction of new facilities. By making reference to the works programmes and noting that the majority of the new facilities of the Project are planned to be completed in the third quarter of 2010, an additional recurrent subvention of about \$17.8 million per annum will be allocated to HKSIL in 2010-11. The remaining amount of about \$5.7 million will be allocated to HKSIL from 2011-12 onwards upon the full completion of the Project. The actual timing of allocation will be determined according to the actual progress of the Project.

### **Monitoring of the Subvention to HKSIL**

21. The Administration has established effective monitoring systems to oversee government funding provided to subvented organisations. In adherence to the current practice for monitoring the subvention to HKSIL, HAB has entered into a service agreement with HKSIL which spells out the performance targets to be attained by HKSIL. To ensure optimal use of the new and expanded facilities after the completion of the Project and that public money is used properly and cost-effectively, new performance targets on aspects like utilisation rates of the respective HKSI facilities will be included in the future service agreement with HKSIL.

## **Way Forward**

22. Subject to Members' support, we plan to submit the second-stage funding application of the main works of the Project at \$1,707.5 million in MOD prices to the PWSC for consideration at its meeting on 21 May 2008.

**Home Affairs Bureau**

**May 2008**

**Breakdown of Estimated Main Works Cost  
of the Redevelopment of the Hong Kong Sports Institute**

Item	Original Estimate (\$M)	Updated Estimate (\$M)
(a) Site formation and piling	97.5	163.0
(b) Demolition and hoarding	8.0	9.7
(c) Building	383.8	464.4
(d) Building services	210.5	254.7
(e) Refurbishment works (including building services)	152.3	228.2
(f) Drainage and external works	113.0	134.9
(g) Decanting works and temporary velodrome	37.4	47.1
(h) Consultants' fees	54.9	43.8
(j) Furniture and equipment	82.5	87.3
(j) Contingencies	96.5	130.2
Base estimate	<u>1,236.4</u>	<u>1,563.3</u>
Provision for price adjustment	26.8	144.2
Estimate in MOD prices	<u>1,263.2</u>	<u>1,707.5</u>

**Redevelopment of the Hong Kong Sports Institute  
Main Works Cost Estimate (in Money-of-the-day (MOD) prices)**

**Original Estimate in May 2007**

(Based on price adjustment factors in March 2007)

Year	Base Estimate \$ million (in September 2006 prices)	Price Adjustment Factor	Estimate in MOD Price \$ million
2008-2009	217.5	1.00649	218.9
2009-2010	428.7	1.01656	435.8
2010-2011	397.5	1.02672	408.1
2011-2012	158.0	1.03699	163.8
2012-2013	34.7	1.05514	36.6
<b>Total</b>	<b>1,236.4</b>		<b>1,263.2</b>

**Updated Estimate in April 2008**

(Based on price adjustment factors in March 2008)

Year	Revised Base Estimate \$ million (in September 2007 prices)	Price Adjustment Factor	Estimate in MOD Price \$ million
2008-2009	100.3	1.02575	102.9
2009-2010	575.0	1.06293	611.2
2010-2011	682.7	1.10545	754.7
2011-2012	147.2	1.14967	169.2
2012-2013	58.1	1.19566	69.5
<b>Total</b>	<b>1,563.3</b>		<b>1,707.5</b>