

## **ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE**

### **HEAD 708 – CAPITAL SUBVENTIONS AND MAJOR SYSTEMS AND EQUIPMENT**

#### **Education Subventions**

#### **83EB – Upgrading facilities of China Holiness College, Sham Shui Po**

Members are invited to recommend to Finance Committee the upgrading of **83EB** to Category A at an estimated cost of \$30.4 million in money-of-the-day prices for upgrading the facilities of the China Holiness College, Sham Shui Po.

#### **PROBLEM**

The existing school premises of China Holiness College are far below current standard.

#### **PROPOSAL**

2. The Secretary for Education and Manpower (SEM), on the advice of the Director of Architectural Services (D Arch S), proposes to upgrade **83EB** to Category A at an estimated cost of \$30.4 million in money-of-the-day (MOD) prices for the construction of a new block and conversion works to the existing China Holiness College in Sham Shui Po.

**/PROJECT .....**

**PROJECT SCOPE AND NATURE**

3. The proposed project consists of the construction of a new block and conversion works to the existing school building. The scope of the project comprises –

(a) A seven-storey new block of 3 276 square metres in construction floor area (CFA) to accommodate –

(i) New facilities

(A) six special rooms;

(B) a preparation room for laboratory;

(C) a guidance activity centre;

(D) a staff common room;

(E) a student activity centre;

(F) a multi-purpose area;

(G) a covered playground;

(H) a basketball court; and

(I) ancillary accommodation including a lift and relevant facilities for the handicapped; and

(ii) Facilities relocated from the existing building

(A) two classrooms;

(B) two special rooms;

(C) a preparation room for laboratory; and

(D) an enlarged library.

/(b) .....

- (b) Conversion to the existing school building to provide –
  - (i) ten classrooms;
  - (ii) one special room;
  - (iii) an enlarged staff room;
  - (iv) a conference room; and
  - (v) an enlarged assembly hall.

—————  
—————  
The project will meet the planning target of providing two square metres of open space per student. A site plan is at Enclosure 1 and views of the school model are at Enclosure 2. The school sponsor plans to start construction works in September 2003 for completion in August 2004.

#### **JUSTIFICATION**

4. The China Holiness College currently operates 12 classes from secondary 1 to secondary 7 with some 460 students. The existing school building was built in 1956 and comprises the following facilities –

- (a) ten classrooms;
- (b) three special rooms;
- (c) a preparation room for laboratory;
- (d) a staff room;
- (e) a library; and
- (f) an assembly hall.

5. The existing school building is not commensurate with the prevailing standard design for a public sector secondary school. It does not have some of the facilities considered essential by today's accommodation standards, such as special rooms (including a language room, a computer room, an art and design room, a music room, a chemistry laboratory and an integrated science laboratory), a guidance activity centre, a student activity centre and a covered playground. The area of the existing assembly hall and library is 64% and 68% below the standard provisions respectively.

6. In line with our established policy, we propose to improve the environment and facilities of the school to the latest standard design and schedule of accommodation for a secondary school as far as practicable. We believe these improvement measures will contribute positively to the effectiveness of teaching and learning. Upon completion of the project, the school will have the following facilities –

- (a) 12 classrooms;
- (b) nine special rooms, including a computer-assisted learning room and a language room;
- (c) two preparation rooms for laboratory;
- (d) a guidance activity centre;
- (e) a staff room;
- (f) a staff common room;
- (g) a student activity centre;
- (h) a conference room;
- (i) a library;
- (j) an assembly hall;
- (k) a multi-purpose area;
- (l) a covered playground;
- (m) a basketball court; and
- (n) ancillary accommodation, including a lift and relevant facilities for the handicapped.

7. During the construction period, the school sponsor will accommodate the teachers and students in a temporary school campus in Lai King so that the teaching and learning activities of the school will not be disrupted.

**FINANCIAL IMPLICATIONS**

8. The school sponsor estimates the capital cost of the project to be \$30.4 million in MOD prices (see paragraph 9 below), made up as follows –

	<b>\$ million</b>	
(a) Piling	3.5	
(b) Building	13.5	
(c) Building services	3.4	
(d) Alternations and additions to the existing building	6.4	
(e) Drainage and external works	1.4	
(f) Consultant's fees for –	1.4	
(i) Contract administration	0.8	
(ii) Site supervision	0.4	
(iii) Out-of-pocket expenses	0.2	
(g) Contingencies	3.0	
	<hr/>	
Sub-total	32.6	(in September 2002 prices)
(h) Provisions for price adjustment	(2.2)	
	<hr/>	
Total	30.4	(in MOD prices)
	<hr/>	

The school sponsor proposes to engage consultants to undertake contract administration and site supervision of the project. A detailed breakdown of the estimate for consultants' fees by man-months is at Enclosure 3. The additional CFA in the new block is about 3 276 square metres. The estimated construction unit cost, represented by the building and building services costs of the new block, is \$5,159 per square metre of CFA in September 2002 prices. D Arch S considers this comparable to similar school projects built by the Government.

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

/2003 .....

Year	\$ million (Sept 2002)	Price adjustment factor	\$ million (MOD)
2003 – 04	5.5	0.94300	5.2
2004 – 05	25.1	0.93003	23.3
2005 – 06	2.0	0.93003	1.9
	<hr/> 32.6 <hr/>		<hr/> 30.4 <hr/>

10. We have derived the MOD estimates on the basis of the Government's latest forecast of trend labour and construction prices for the period 2003 to 2006. The school sponsor will deliver the construction works through a fixed-price lump-sum contract because the contract period will be less than 21 months and the school sponsor can clearly define the scope of works in advance, leaving little room for uncertainty.

11. At present, the annual recurrent expenditure of the school is about \$15.8 million. As the school is under the Direct Subsidy Scheme, the project will not lead to an increase in the level of recurrent subsidy from the Government.

## **PUBLIC CONSULTATION**

12. We have worked out the proposed improvement items in consultation with the school sponsor. The latter is satisfied with the additional facilities. Parents support upgrading school facilities and the temporary reprovisioning. Since the proposed extension and conversion works will be carried out within the existing school boundary, we consider public consultation not necessary.

## **ENVIRONMENTAL IMPLICATIONS**

13. The school sponsor engaged a consultant to conduct a Preliminary Environmental Review (PER) for **83EB** in July 2000. The PER concluded that the school would not be subject to adverse environmental impacts provided that the school sponsor installs insulated windows and air-conditioning to ten classrooms and five special rooms from the 1/F to 6/F at the north-eastern facade of the school building in order to keep the road traffic noise impact within the limits recommended in the Hong Kong Planning Standards and Guidelines.

/The .....

The school sponsor has included \$1.4 million as part of the building services works in the project estimate to implement the above mitigation measures.

14. During construction, the school sponsor 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.

15. At the planning and design stages, the school sponsor has considered measures to reduce the generation of construction and demolition (C&D) materials. The school sponsor has introduced more prefabricated building elements into the school design to reduce temporary formwork and construction waste. These include dry-wall partitioning and proprietary fittings and fixtures. The school sponsor will use suitable excavated materials for filling within the site to minimise off-site disposal. In addition, the school sponsor will require its contractor to use metal site hoardings and signboards so that these materials can be recycled or reused in other projects.

16. The school sponsor will require its 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. The school sponsor will ensure that the day-to-day operations on site comply with the approved WMP. The school sponsor will control the disposal of public fill and C&D waste to designated public filling facilities and landfills respectively through a trip-ticket system. The school sponsor will require its contractor to separate public fill from C&D waste for disposal at appropriate facilities. The school sponsor will record the disposal, reuse and recycling of C&D materials for monitoring purposes. The school sponsor estimates that the project will generate about 400 cubic metres (m<sup>3</sup>) of C&D materials. Of these, the school sponsor will reuse about 40 m<sup>3</sup> (10%) on site, 300 m<sup>3</sup> (75%) as fill in public filling areas<sup>1</sup>, and dispose of 60 m<sup>3</sup> (15%) at landfills. The notional cost of accommodating C&D waste at landfill sites is estimated to be \$7,500 for this project (based on a notional unit cost<sup>2</sup> of \$125/m<sup>3</sup>).

/LAND .....

---

<sup>1</sup> A public filling area is a designated part of a development project that accepts public fill for reclamation purposes. Disposal of public fill in a public filling area requires a licence issued by the Director of Civil Engineering.

<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/m<sup>3</sup>), nor the cost to provide new landfills (which are likely to be more expensive) when the existing ones are filled. The notional cost estimate is for reference only and does not form part of this project estimate.

**LAND ACQUISITION**

17. The project does not require land acquisition.

**BACKGROUND INFORMATION**

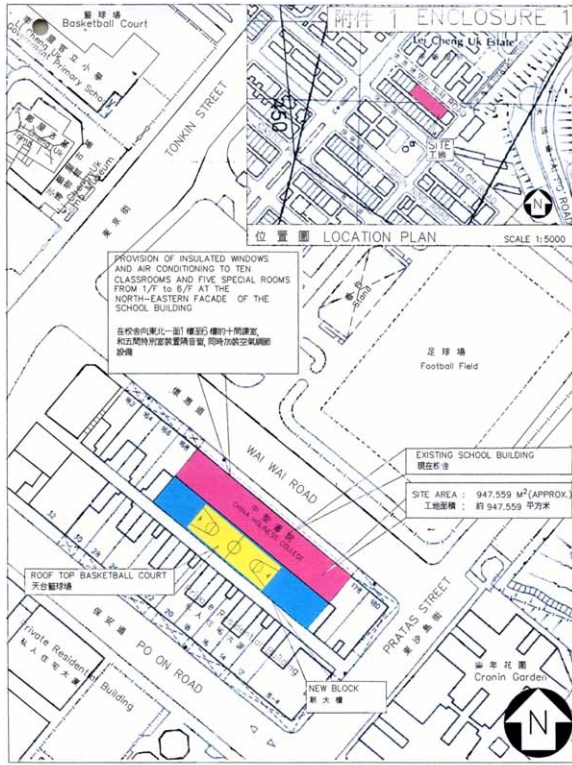
18. We upgraded **83EB** to Category B in October 2001. The school sponsor engaged term contractors to carry out topographical survey, ground investigation, detailed structural investigation in January 2003 and consultants to carry out the PER in July 2000, detailed design in February 2003 and tender documentation in May 2003 for the project. We will charge the Government's contribution of \$2.2 million to block allocation **Subhead 8100QX** "Alternations, additions, repairs and improvements to education subvented buildings". The term contractors and consultants have completed the topographical survey, ground investigation, detailed structural investigation, PER and detailed design of the project. The consultants are finalising the tender documents.

19. We estimate that the project will create some 80 jobs comprising 20 professional/technical staff and 60 labourers, totalling 850 man-months.

-----

Education and Manpower Bureau  
June 2003





PROVISION OF INSULATED WINDOWS AND AIR CONDITIONING TO TEN CLASSROOMS AND FIVE SPECIAL ROOMS FROM 1/F TO 6/F AT THE NORTH-EASTERN FAÇADE OF THE SCHOOL BUILDING  
 在校舍向東北一面1樓至6樓約十間課室，和五間特別室裝置隔音窗，同時加裝空氣調節設備

EXISTING SCHOOL BUILDING  
 舊校舍  
 SITE AREA : 947.559 M<sup>2</sup> (APPROX)  
 土地面積 : 約 947.559 平方米

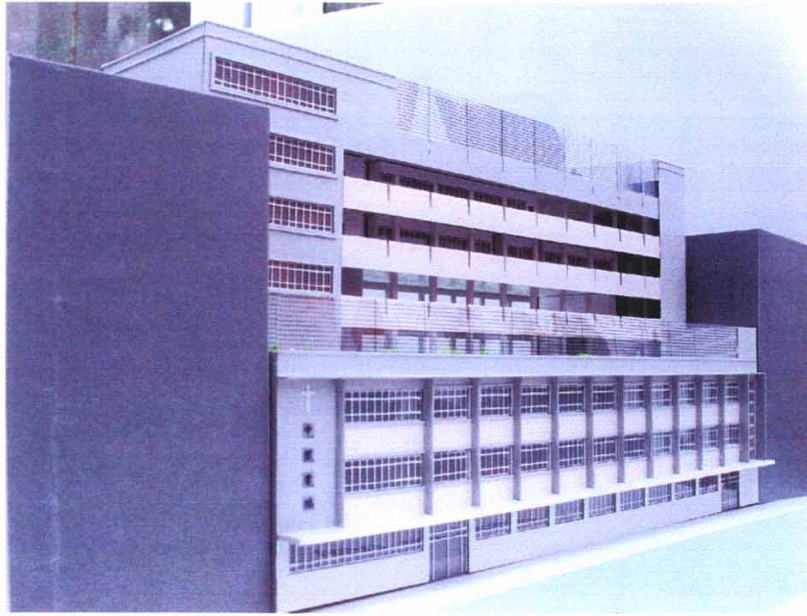
ROOF TOP BASKETBALL COURT  
 天台籃球場

NEW BLOCK  
 新大樓

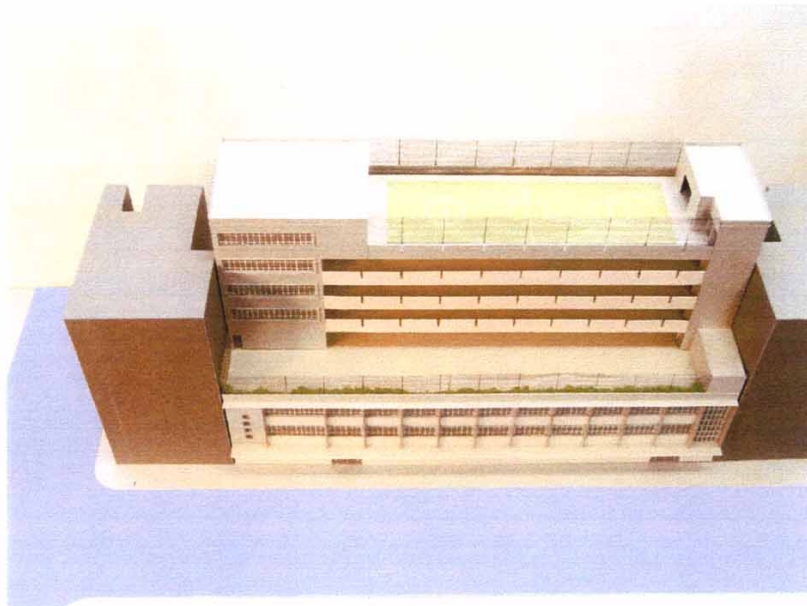
TITLE : 8083 EB  
 深水埗中聖書院設施改善工程  
 UPGRADING FACILITIES OF  
 CHINA HOLINESS COLLEGE,  
 SHAM SHUI PO

SCALE 1:750

附件 2 ENCLOSURE 2



從東面拍攝的校舍模型圖  
VIEW OF SCHOOL MODEL FROM EASTERN SIDE



從東北面拍攝的校舍模型圖  
VIEW OF SCHOOL MODEL FROM NORTH-EASTERN SIDE

TITLE : 8083 EB  
深水埗中聖書院設施改善工程  
UPGRADING FACILITIES OF  
CHINA HOLINESS COLLEGE,  
SHAM SHUI PO

## Enclosure 3 to PWSC(2003-04)41

### 83EB – Upgrading facilities of China Holiness College, Sham Shui Po

#### Breakdown of the estimate for consultants' fees <sup>(Note 1)</sup>

			Estimated man- months	Average MPS* salary point	Multiplier <small>(Note 2)</small>	Estimated fee (\$ million)
(a) Consultants' staff costs						
(i) Contract administration <small>(Note 3)</small>	Professional	–		–	–	0.6
	Technical	–		–	–	0.2
(ii) Site supervision <small>(Note 4)</small>	Technical	13.0		14	1.6	0.4
Sub-total						1.2
(b) Out-of-pocket expenses <small>(Note 5)</small>						
Lithography and other direct expenses						0.2
Sub-total						0.2
Total						1.4

\* MPS = Master Pay Scale

#### Notes

1. The figures are based on estimate prepared by the school sponsor. D Arch S has examined the figures and considered them reasonable.
2. A multiplier of 1.6 is applied to the average MPS point to estimate the cost of resident site staff supplied by the consultants. (At 1 October 2002, MPS point 14 is \$19,195 per month.)

3. The consultants' staff cost for contract administration is calculated in accordance with the existing consultancy agreement for the design and construction of **83EB**. The assignment will only be executed subject to Finance Committee's approval to upgrade **83EB** to Category A.
4. The consultants' staff cost for site supervision is based on the estimate prepared by the school sponsor. We will only know the actual man-months and actual costs after completion of the construction works.
5. Out-of-pocket expenses are the actual costs incurred. The consultants are not entitled to any additional payment for overheads or profit in respect of these items.