

**Legislative Council Panel on Education**

**25EA –Redevelopment of St. Stephen’s Girls’ Primary School  
at Park Road, Mid-levels**

This note informs Members of the Secretary for Education and Manpower’s plan to upgrade **25EA** under **Head 708** to Category A. The project will be considered by Legislative Council Public Works Subcommittee (PWSC) on 23 November 2005.

2. A copy of the draft PWSC paper of the aforementioned project is attached for Members’ advance information. The estimated cost of the project may be subject to minor revision, having regard to the additional cost to be incurred with the implementation of the Construction Waste Disposal Charging Scheme in December 2005. An updated cost estimate will be reflected in the final PWSC paper.

3. For Members’ background reference, we also attach a copy of the minutes of relevant discussion of the project at the District Council.

4. This is one of the six projects for redevelopment and reprovisioning purposes covered in the recent School Building Programme review. At the panel meeting on 24 October 2005, Members generally supported our recommendation to proceed with all the six projects.

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Education and Manpower Bureau  
November 2005

# DRAFT

For discussion  
on 23 November 2005

PWSC(2005-06)XX

## ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

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

#### Education Subventions

#### 25EA – Redevelopment of St. Stephen's Girls' Primary School at Park Road, Mid-levels

Members are invited to recommend to Finance Committee the upgrading of **25EA** to Category A at an estimated cost of \$88.1 million in money-of-the-day prices for the redevelopment of St. Stephen's Girls' Primary School at Park Road, Mid-levels.

### PROBLEM

St. Stephen's Girls' Primary School (the School) in Mid-levels is operating in substandard conditions.

### PROPOSAL

2. The Secretary for Education and Manpower (SEM), on the advice of the Director of Architectural Services (D Arch S), proposes to upgrade **25EA** to Category A at an estimated cost of \$88.1 million in money-of-the-day (MOD) prices for the in-situ redevelopment of the School.

### PROJECT SCOPE AND NATURE

3. The project scope comprises the demolition of the existing school premises and construction of a new 24-classroom primary school premises adopting a non-standard design with the following facilities –

- (a) 24 classrooms;
- (b) six special rooms, including a computer-assisted learning room, a general studies room and a language room;
- (c) four small group teaching rooms;
- (d) a guidance activity room;
- (e) two interview rooms;
- (f) a staff room;
- (g) a staff common room;
- (h) a student activity centre;
- (i) a conference room;
- (j) a library;
- (k) an assembly hall (which can be used for a wide range of physical activities such as badminton, gymnastics and table-tennis);
- (l) a multi-purpose area;
- (m) a basketball court at rooftop of the classroom block;
- (n) a running track<sup>1</sup>;
- (o) a green corner<sup>2</sup>; and
- (p) ancillary accommodation, including a medical room, a lift and relevant facilities for the handicapped.

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<sup>1</sup> Making optimal use of the space of the campus, a 40-metre running track will be provided.

<sup>2</sup> A green corner is a designated area inside the campus to enable students to develop an interest in horticulture and the natural environment. The green corner may include a greenhouse, a weather station and planting beds.

By sharing open space with the adjacent St. Stephen's Girls' College, which is under the same school sponsoring body, **25EA** will meet the planning target of providing two square metres (m<sup>2</sup>) of open space per student. A site plan is at Enclosure 1 and views of the new school premises (artist's impression) are at Enclosure 2. The school sponsor plans to start the demolition of the existing school premises in February 2006 and start the construction works of the new school premises in May 2006 for completion in June 2008.

## JUSTIFICATION

4. The School is currently an 18-classroom whole-day primary school with an enrolment rate of 100% in the 2004/05 school year. The existing school premises, built in 1968 on a small site, falls short of the provision as stipulated in the current standard schedule of accommodation for a 24-classroom primary school. Certain essential facilities for effective teaching and learning, such as the general studies room, language room, student activity centre and assembly hall, are lacking. The current open space provision of 1.1 m<sup>2</sup> per student also falls short of the latest planning standard.

5. The existing school premises is deteriorating and requires frequent repair in recent years. D Arch S advised that improvement works under the School Improvement Programme<sup>3</sup> would not be feasible due to the site constraints. Redevelopment is considered to be the most cost-effective way to provide a quality teaching and learning environment for teachers and students of the School. During the construction period of the new school premises, students will use the premises of ex-Pokfulam Government Primary School in Pok Fu Lam.

6. Upon completion, the new school premises will provide six additional classrooms for whole-day primary schooling. We propose a scope slightly larger than the current one because we consider that a 24-classroom primary school is of an optimal size for school development, taking into account the larger room for deployment of resources and students' interest. If the school site permits, we should go for the optimal scale of development. Taking into account this provision, we currently estimate that there would be a shortfall of 33 primary classes in the Central and Western District by the 2010/11 school year.

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<sup>3</sup>

The School Improvement Programme involves some 740 existing schools to provide additional space and upgraded facilities to support teaching and learning.

**FINANCIAL IMPLICATIONS**

7. The school sponsor estimates the capital cost of the project to be \$88.1 million in MOD prices (see paragraph 8 below). D Arch S has examined and endorsed the cost estimate, made up as follows –

		<b>\$ million</b>	
(a)	Demolition	2.7	
(b)	Site formation	7.2	
(c)	Piling	12.5	
(d)	Building	33.9	
(e)	Building services	12.9	
(f)	Drainage	1.6	
(g)	External works	2.4	
(h)	Furniture and Equipment (F&E) <sup>4</sup>	3.1	
(i)	Consultants' fees for –	3.7	
	(i) Contract administration	2.2	
	(ii) Site supervision	1.2	
	(iii) Out-of-pocket expenses	0.3	
(j)	Contingencies	8.0	
	Sub-total	88.0	(in September 2005 prices)
(k)	Provision for price adjustment	0.1	
	Total	88.1	(in MOD prices)

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Based on an indicative list of F&E items required by the School which was compiled on the basis of a survey on serviceability of the existing F&E of the School and the standard F&E reference list prepared by the Education and Manpower Bureau for new 24-classroom primary schools.

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 construction floor area (CFA) of the new school premises under **25EA** is about 7 551 m<sup>2</sup>. The estimated construction unit cost of the new school premises, represented by the building and building services costs, is \$6,198 per m<sup>2</sup> of CFA in September 2005 prices. D Arch S considers this comparable to similar school projects built by the Government. A comparison of the reference cost of a 24-classroom primary school based on an uncomplicated site with no unusual environment or geotechnical constraints with the estimated cost of the new school premises is at Enclosure 4.

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

Year	\$ million (Sept 2005)	Price adjustment factor	\$ million (MOD)
2005 – 06	0.0	1	0.0
2006 – 07	19.7	1.00125	19.7
2007 – 08	50.4	1.00125	50.5
2008 – 09	9.7	1.00125	9.7
2009 – 10	8.2	1.00125	8.2
	<hr/> 88.0 <hr/>		<hr/> 88.1 <hr/>

9. We have derived the MOD estimate 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 2006 to 2010. The school sponsor will deliver the demolition works of the existing school premises, the site formation and piling works and the construction works of the new school premises through three lump-sum contracts because the school sponsor can clearly define the scope of works in advance. The contracts will not provide for price adjustment because the contract periods will not exceed 21 months each.

10. The cost of F&E, estimated to be \$3.1 million, will be borne by the Government as the new school premises will provide space for redevelopment of the School and additional classes for whole-day schooling. This is in line with the existing policy.

11. The annual recurrent expenditure of the School was \$13.7 million in the 2004/05 school year. Upon redevelopment of the School, the annual recurrent expenditure is estimated to be \$18.7 million, with the difference being largely attributable to the anticipated increase in the number of operating classes upon completion of the new school premises.

## **PUBLIC CONSULTATION**

12. We consulted the Food, Environment, Hygiene and Works Committee under the Central and Western District Council on 27 January 2005. Members of the Committee supported the redevelopment of the School.

13. We consulted the Panel on 24 October 2005 on our recent review of projects under planning in the School Building Programme. The Panel supported our recommendation to proceed with six projects for redevelopment and reprovisioning purposes, including the current proposal.

## **ENVIRONMENTAL IMPLICATIONS**

14. The consultant employed by the school sponsor has completed and the Director of Environmental Protection has agreed to a class assessment document which sets out the mitigation measures necessary for this class of projects. With such mitigation measures in place, the project will not have long term environmental impacts. We have included in the project estimate the cost to implement all necessary measures to mitigate the environmental impacts.

15. Insulated windows and air-conditioning will be provided for rooms exposed to traffic noise above 65dB, i.e. exceeding the limits recommended in the Hong Kong Planning Standards and Guidelines. The School Sponsor has included the cost of these mitigation measures, detailed below, as part of the building services works in the project estimate –

<b>Mitigation measures</b>	<b>Estimated cost \$ million (in September 2005 prices)</b>
(a) Insulated windows and air-conditioning for –	
(i) 24 classrooms and two small group teaching rooms from 4/F to 9/F at the north-western façade	2.00

- |      |  |      |
|------|--|------|
| (ii) | two small group teaching rooms on the 6/F at the south-eastern façade  | 0.19 |
| (b)  | Insulated windows for guidance activity room on the 9/F and medical room on the 4/F at the north-western façade <sup>5</sup> | 0.01 |

16. During construction, the school sponsor will control noise, dust and site run-off nuisances to within established standard 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 sites, and the provision of wheel-washing facilities.

17. 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 contractors to use metal site hoardings and signboards so that these materials can be recycled or reused in other projects.

18. The school sponsor will require its contractors to submit waste management plans (WMPs) for approval. The WMPs 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 WMPs. It will control the disposal of public fill and C&D waste to designated public filling facilities and landfills respectively through a trip-ticket system. It will also require its contractors to separate public fill from C&D waste for disposal at appropriate facilities, and will record the disposal, reuse and recycling of C&D materials for monitoring purposes. The school sponsor estimates that the project will generate about 7 400 cubic metres (m<sup>3</sup>) of C&D materials. Of these, the school sponsor will reuse about 500 m<sup>3</sup> (6.8%) on site, 6 600 m<sup>3</sup> (89.2%) as fill in public filling areas<sup>6</sup>, and dispose of 300 m<sup>3</sup> (4.0%) at landfills. The notional cost of

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<sup>5</sup> These rooms are provided with air-conditioning according to the schedule of accommodation of standard primary school.

<sup>6</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 license issued by the Director of Civil Engineering and Development.



accommodating C&D waste at landfill sites is estimated to be \$37,500 for this project (based on a notional unit cost<sup>7</sup> of \$125/m<sup>3</sup>).

## LAND ACQUISITION

19. The project does not require land acquisition.

## BACKGROUND INFORMATION

20. We upgraded **25EA** to Category B in March 2004. The school sponsor engaged consultants to undertake the detailed design and tender documentation in July 2004, as well as the topographical survey and site investigation in November 2004. We will charge the estimated cost of \$2.6 million for these services to block allocation **Subhead 8100QX** "Alterations, additions, repairs and improvements to education subvented buildings". The consultants engaged by the school sponsor have carried out these services except for the tender documents which are being finalised.

21. Renovation works for ex-Pokfulam Government Primary School are being carried out at an estimated cost of \$12 million. These are mainly conversion and upgrading works required to bring the premises, which were constructed more than 50 years ago and vacated since 2001, up to the minimal standards required for temporary occupation by the School operating 18 classes. The works include conversion and fitting-out works for classrooms, special rooms and administrative area, renovation of existing lavatories, staircase and corridors, replacement of worn-out wiring, etc. We will charge this amount to block allocation **Subhead 8100QX**. After the School moves into its new premises, the renovated premises of the ex-Pokfulam Government Primary School may be used to meet the temporary accommodation needs of other schools.

22. The proposed redevelopment of the School will not involve any tree removal or planting proposal.

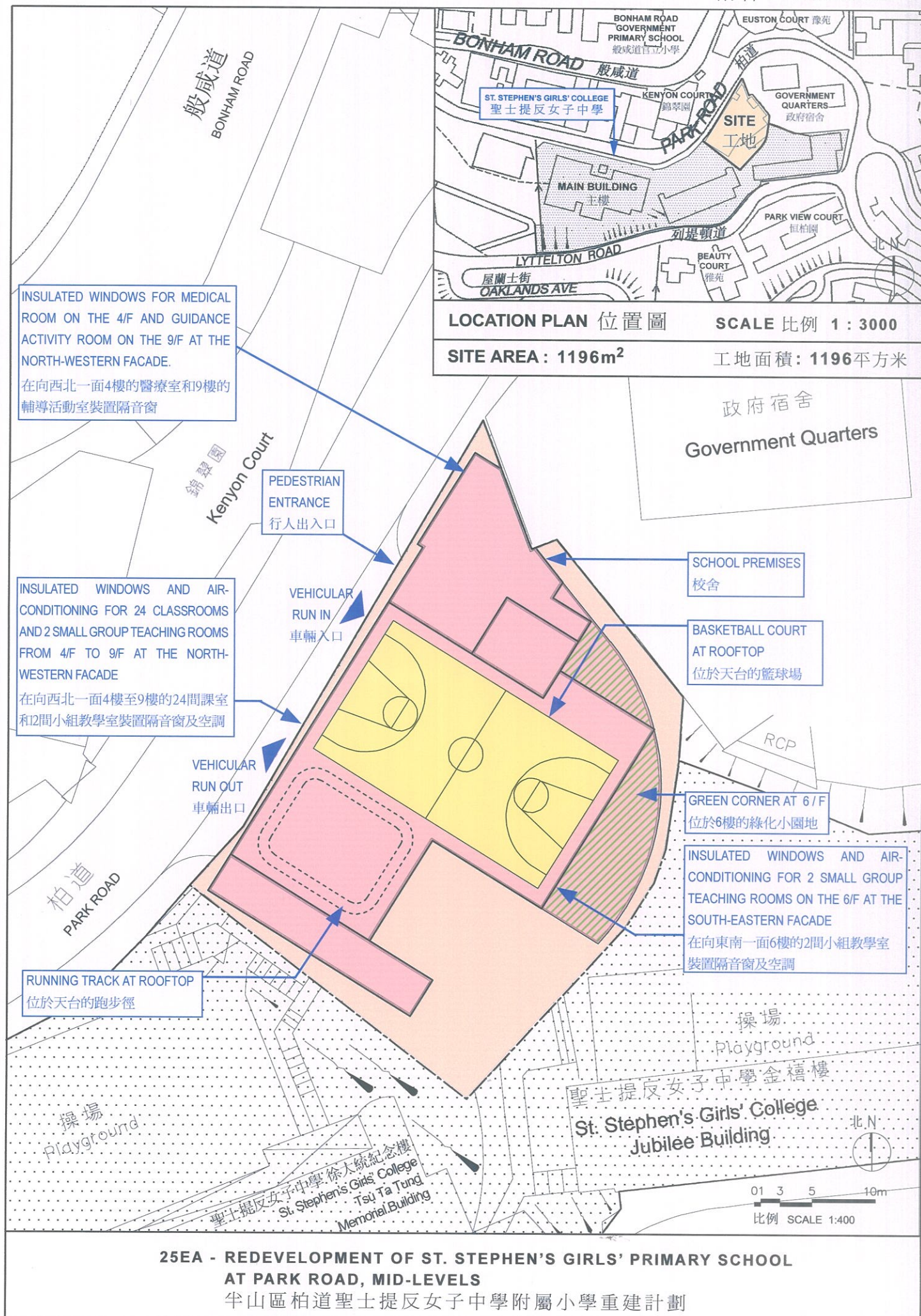
23. We estimate that the proposed works will create about 80 jobs (70 for labourers and another 10 for professional/technical staff) providing a total employment of 1 350 man-months.

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Education and Manpower Bureau  
November 2005

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<sup>7</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.







從西面望向新校舍的構思圖

VIEW OF THE NEW SCHOOL PREMISES FROM WESTERN DIRECTION (ARTIST'S IMPRESSION)



從南面望向新校舍的構思圖

VIEW OF THE NEW SCHOOL PREMISES FROM SOUTHERN DIRECTION (ARTIST'S IMPRESSION)

**25EA - REDEVELOPMENT OF ST. STEPHEN'S GIRLS' PRIMARY SCHOOL  
AT PARK ROAD, MID-LEVELS**

半山區柏道聖士提反女子中學附屬小學重建計劃

## 25EA – Redevelopment of St. Stephen’s Girls’ Primary School at Park Road, Mid-levels

### Breakdown of the estimate for consultants’ fees

			Estimated man- months	Average MPS* salary point	Multiplier (Note 1)	Estimated fee (\$ million)
(a)	Consultants’ staff costs					
(i)	Contract administration <sup>(Note 2)</sup>	Professional	—	—	—	2.2
(ii)	Site supervision <sup>(Note 3)</sup>	Technical	42	14	1.6	1.2
					Sub-total	3.4
(b)	Out-of-pocket expenses <sup>(Note 4)</sup>					
	Lithography and other direct expenses					0.3
					Sub-total	0.3
					Total	3.7

\* 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 2005, 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 **25EA**. The assignment will only be executed subject to Finance Committee’s approval to upgrade **25EA** to Category A.
3. We will only know the actual man-months and actual costs for site supervision after completion of the works.
4. 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.

**Enclosure 4 to PWSC(2005-06)xx**

**A comparison of the reference cost of  
a 24-classroom primary school project  
with the estimated cost of the new school premises under 25EA**

**\$ million  
(in September 2005 prices)**

		<b>Reference cost*</b>	<b>25EA</b>	
(a)	Demolition	—	2.7	(See note A)
(b)	Site formation	—	7.2	(See note B)
(c)	Piling	7.5	12.5	(See note C)
(d)	Building	41.0	33.9	(See note D)
(e)	Building services	11.4	12.9	(See note E)
(f)	Drainage	1.7	1.6	(See note F)
(g)	External works	6.8	2.4	(See note F)
(h)	Furniture and Equipment (F&E)	—	3.1	(See note G)
(i)	Consultants' fees	—	3.7	(See note H)
(j)	Contingencies	6.8	8.0	
	Total	<hr/> 75.2 <hr/>	<hr/> 88.0 <hr/>	
(k)	Construction floor area	9 129 m <sup>2</sup>	7 551 m <sup>2</sup>	
(l)	Construction unit cost {[(d) + (e)] ÷ (k)}	\$5,740/m <sup>2</sup>	\$6,198/m <sup>2</sup>	

**\* Assumptions for reference cost**

1. The estimation is based on the assumption that the school site is uncomplicated and without unusual environmental restrictions. No allowance is reserved for specific environmental restrictions such as the provision of insulated windows, air-conditioning and boundary walls to mitigate noise impacts on the school.
2. No site formation works/geotechnical works are required as they are normally carried out by other government departments under a separate engineering vote before handing over the project site for school construction.
3. Piling cost is based on the use of 101 steel H-piles at an average depth of 30 metres, assuming that percussive piling is permissible. It also includes costs for pile caps, strap beams and testing. No allowance is reserved for the effect of negative skin friction due to fill on reclaimed land.
4. Costs for drainage and external works are for a standard 24-classroom primary school site area of 4 700 square metres built on an average level site without complicated geotechnical conditions, utility diversions, etc. (i.e. a “green-field” site).
5. No consultancy services are required.
6. F&E costs are excluded as they are usually borne by the sponsoring bodies of the new schools.
7. The reference cost for comparison purpose is subject to review regularly. The Director of Architectural Services will review, and revise if necessary, the reference cost which should be adopted for future projects.

**Notes**

- A. Additional cost is required for demolition of the existing school premises.
- B. Site formation works is required to form the platform level for the construction of the new school premises.
- C. The piling cost is higher because of the use of 60 pre-bored steel H-piles at an average depth of 50 metres for the new school premises. This piling system is used because of the presence of a declared monument (Main Building of St. Stephen’s Girls’ College) 20 metres away from the site and an old retaining wall adjacent to the site.

- D. The building cost is lower because of the smaller construction floor area.
- E. The building services cost is higher because of the provision of noise mitigation measures, sprinkler installation and an additional wheelchair lifting platform for the School. Owing to limited site area, sprinkler protected double-loaded corridor design is adopted for meeting fire safety requirements. The wheelchair lifting platform is required for connecting ground floor lift lobby with the entrance level.
- F. The drainage and external works costs are lower because of the relatively small site area.
- G. The cost of F&E, estimated to be \$3.1 million, will be borne by the Government as the new school premises will provide space for redevelopment of the School and additional classes for whole-day schooling.
- H. Consultants' fees are required for contract administration, site supervision and out-of-pocket expenses.



中西區區議會  
二〇〇四至〇五年度  
食物環境衛生及工務委員會  
第八次會議紀錄

日期：二〇〇五年一月二十七日

時間：下午二時三十分

地點：香港中環統一碼頭道 38 號  
海港政府大樓 14 樓  
中西區區議會會議室

出席者：

主席

鄭麗琼女士\*

副主席

楊浩然先生\*

委員

陳捷貴先生, JP\*

陳財喜先生 (下午 2 時 30 分至 4 時)

陳特楚先生, MH, JP\*

鍾蔭祥先生\*

何俊麒先生 (下午 4 時 35 分至 6 時 30 分)

甘乃威先生\*

黎國雄博士 (下午 2 時 30 分至 3 時 15 分)

林乾禮先生 (下午 2 時 30 分至 4 時 20 分)

林文傑先生, JP (下午 3 時 35 分至 4 時 40 分)

戴卓賢先生 (下午 2 時 30 分至 4 時 40 分)

胡楚南先生, JP\*

楊位款先生, MH (下午 2 時 30 分至 4 時 25 分)

楊少銓先生\*

阮品強先生\*

註：\* 出席整個會議的議員

( ) 議員出席時間



### 增選委員

陳志城先生  
陳耀強先生  
張國柱先生  
黎永權先生  
梁耀忠先生  
黃秀玲女士

### 嘉賓

#### 第 4 項

鄭念泰先生	土木工程拓展署高級工程師/工程
謝孟軒先生	土木工程拓展署工程師/轉運站

#### 第 5 項

袁偶然先生	渠務署工程師
陳紹璋先生	路政署總工程監督(西區)

#### 第 6 項

陳震暉先生	土木工程拓展署總土力工程師/防止山泥傾瀉部 2
林國斌先生	土木工程拓展署高級土力工程師/設計 1

#### 第 7 項

藍列群女士	房屋署助理署長(產業出售)
張建發先生	資產管理總經理
陳少琼女士	商場經理(一)/九龍東及港島

#### 第 8 項

梁國恩先生	教育統籌局項目經理(建校)
陳育麒先生	教育統籌局項目主任(建校)
簡煥珠女士	聖士提反女子中學校董會副主席暨項目董事
藍黃珍妮牧師	聖士提反女子中學附屬小學校監
張敏妍女士	聖士提反女子中學附屬小學署理校長
徐福燊先生	聖士提反女子中學建築委員會委員
陳韻明女士	巴馬丹拿建築及工程師有限公司董事
陳祖聲先生	巴馬丹拿建築及工程師有限公司高級聯營董事
余漢江先生	利比建築工料測量師有限公司董事

第 8 項：半山區柏道聖士提反女子中學附屬小學重建計劃

(中西區環工會文件第 3/2005 號)

(下午 4 時 22 分至 4 時 40 分)

20. 教育統籌局梁國恩先生及校方代表於會上介紹聖士提反女子中

## 負責者

學附屬小學重建計劃的背景、工程內容及影響。

21. 委員普遍支持重建計劃，並發表意見如下：

- (a) 鍾蔭祥先生詢問重建工程對環境方面會施行甚麼環保措施，及如何處理塵埃對附近民居的影響。胡楚南先生關注工程的噪音問題。
- (b) 楊少銓先生就討論文件第 5 項，欲了解何謂「非標準設計」及其與「標準設計」的分別。
- (c) 陳捷貴先生希望隨著新校舍建立而更能改善附近交通擠塞的情況，而他建議新校舍增設私家車車位。他詢問將會加高建築的校舍會否影響鄰近住戶。
- (d) 副主席及阮品強先生關心重建校舍的費用。阮先生欲了解重建費用的來源是來自撥款或自行籌款，和學生在重建校舍期間的上課地點安排。

22. 部門代表回應委員的提問如下：

- (a) 教統局梁國恩先生表示，當局自二〇〇五年開始採取「非標準設計」，以求能夠提高彈性符合個別學校需要及配合地形環境。「非標準設計」與「標準設計」的校內設施皆一樣，按照標準用途分配表提供。校舍的重建費用是來自政府資助。而校方會安排學生在重建校舍期間到南區前薄扶林官立小學上課。  
(回應副主席、楊少銓先生及阮品強先生)
- (b) 巴馬丹拿建築及工程師有限公司陳祖聲先生指出會減少開挖工程和採用較靜的施工方式，以降低噪音及塵埃對附近民居的影響。在地理位置上，由於聖士提反女子中學金禧樓後面的住宅大廈位於山坡高處，故不會被新建較高的學校大樓所遮擋。另外，校舍將增設泊車位以舒緩下課後的路面交通情況。  
(回應鍾蔭祥先生、胡楚南先生及陳捷貴先生)

## 負責者

- (c) 聖士提反女子中學建築委員會徐福桑先生表示現正與建築署商討重建校舍費用，並初步估計為 8,000 萬元。此項重建計劃皆得到家長會支持。  
(回應副主席及阮品強先生)