

## **NOTE FOR PUBLIC WORKS SUBCOMMITTEE OF THE FINANCE COMMITTEE**

### **Supplementary information on 17EA – Redevelopment of La Salle Primary School at 1D La Salle Road, Kowloon**

#### **INTRODUCTION**

When Members considered paper PWSC(2000-01)10 on **17EA** - Redevelopment of La Salle Primary School at 1D La Salle Road at the Public Works Subcommittee meeting on 3 May 2000, the Administration agreed to provide the following information -

- (a) a cost comparison between **17EA** and a 36-classroom standard primary school, as well as the cost of the lower ground carpark of **17EA**;
- (b) the open space provision of schools adopting the Year 2000 design; and
- (c) the disposal of proceeds generated from the land transaction between La Salle College and a private developer.

#### **THE ADMINISTRATION'S RESPONSE**

##### **Cost comparison between 17EA and a 36-classroom standard primary school**

2. A comparison of the cost estimate of **17EA** and the projected cost of a 36-classroom standard primary school<sup>1</sup> is at Enclosure 1. Members may wish to

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<sup>1</sup> We do not have any standard design for a 36-classroom primary school. The "standard cost" of a 36-classroom primary school adopted in this comparison is projected proportionately from the standard cost of a 30-classroom primary school.

note that the construction unit cost of **17EA** is \$5,837 per square metre, comparable to similar school projects built by the Government.

### **Cost of lower ground car park**

3. The cost of the lower ground carpark in **17EA** is \$12.7 million, most of which goes to “site formation” (\$4.6 million), “building” (\$4.5 million) and “building services” (\$1.5 million). This arrangement is needed to improve the open space provision of **17EA** from 0.96 square metres per student to 1.25 square metres per student (the current planning standard is two square metre per student). D Arch S considers the construction cost for the lower ground carpark reasonable.

4. The Administration will actively consider a similar approach, on a case by case basis, for future school projects where the open space provision falls far below the planning parameter of two square metres per student, and where the cost of providing an underground car park will not be unduly high.

### **Open space provision of schools adopting Year 2000 design**

5. The open space provision of Year 2000 design school projects which have already been approved by the Finance Committee is set out in Enclosure 2. There are 45 projects in total.

6. Members will note that the overwhelming majority (44 out of 45) of school projects adopting the Year 2000 design exceed, meet, or are very close to our planning parameter of 2 square metres open space per student. Indeed, the open space provision for 31 of these school projects exceeds two square metres per students, and seven reach or exceed three square metres per student. Eight projects, with an open space provision of between 1.7 square metres and 1.9 square metres per student, fall slightly short of our planning parameter because of site constraints. One school project in Fanling (**255EP**) has only 1.3 square metres per student. This is because it occupies a site area of only 3 005 square metres, much smaller than the standard site area of 4 700 square metres required for a 24-classroom school (site plan at Enclosure 3). Although the site is small, we have used it to construct a 24-classroom since there are many bi-sessional schools operating at full capacity with 24 classes or more in each session in the vicinity, and so we need to make full use of the site to enable a nearby bi-sessional school to convert to whole-day schooling. To provide more open space for students of this school, we have moved the carparking spaces, which are usually within the school compound, to the vicinity of the school.

**Disposal of proceeds generated from a land transaction between La Salle College and a private developer**

7. The redevelopment of La Salle College in 1978 was the result of a land transaction between the school authority and a private developer made in accordance with the school's land grant conditions. Under the terms of the redevelopment, the developer was allowed to use part of the site for residential development. In return, the developer agreed to construct a new school building and provide \$8 million to the school authority for relocation costs and maintenance of above standard facilities not covered by Government.

8. The information in paragraph 7 above is not relevant to the funding application of **17EA**. This is because **17EA** arises from the need to help achieve Government's policy target of whole-day primary schooling. Under the established policy, Government is responsible for funding this and similar redevelopment or reprovisioning projects, irrespective of the financial position of the relevant school sponsoring bodies.

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Education and Manpower Bureau  
May 2000

(W0071/WIN3)

**Enclosure 1 to PWSCI(2000-01)6**

**A comparison of the projected cost of  
a 36-classroom standard primary school project  
with the estimated cost of 17EA**

		<b>Projected cost of a 36-classroom standard primary school*</b>		<b>17EA</b>
		<b>\$ million (in December 1999 prices)</b>		
(a)	Demolition and temporary reprovisioning	N.A.	11.39	(See note A)
(b)	Site Formation	N.A.	10.17	(See note B)
(c)	Piling	11.05	15.73	(See note C)
(d)	Building	60.80	65.15	(See note D)
(e)	Building services	14.13	18.75	(See note E)
(f)	Drainage and external works	11.05	8.45	(See note F)
(g)	Consultants' fees	N.A.	4.56	(See note G)
(h)	Furniture and equipment	N.A.	5.50	(See note H)
(i)	Contingencies	10.71	13.97	
Total		107.74	153.67	
(j)	Construction floor area	12 843 m <sup>2</sup>	14 373 m <sup>2</sup>	
(k)	Construction unit cost {[(d)+(e)]÷(j)}	\$5 834/m <sup>2</sup>	\$5 837/m <sup>2</sup>	

**\* Assumptions for the projected cost of a 36-classroom standard primary school**

1. The estimation is based on the assumption that no demolition works are required.

2. The estimation is based on the assumption that the school site is uncomplicated and without abnormal environmental restrictions. No allowance is reserved for specific environmental restrictions such as the provision of insulated windows, air-conditioning and solid boundary walls to mitigate noise impacts on the school.
3. No site formation works/geotechnical works are required as they are normally carried out by other government departments under a separate engineering vote before the handing-over of the project site for school construction.
4. Piling cost is based on the use of 112 numbers of steel H-piles at an average depth of 30 metres, on the assumption 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.
5. Cost for drainage and external works is for a standard 36-classroom primary school site area of 7 570 square metres built on an average level site without complicated geotechnical conditions, utility diversions, etc. (i.e. a greenfield site).
6. No consultancy services are required.
7. Furniture and equipment costs are excluded as they are usually borne by the sponsoring body.
8. The standard cost for comparison purposes is subject to review regularly. We will review, and revise if necessary, the standard cost which should be adopted for future projects.

## Notes

- A. **17EA** is a redevelopment of an existing school in-situ. Demolition works are therefore required. In the initial construction stage, eight classrooms of the existing school building need to be demolished. Minor alteration of the existing school building is also required for temporary reprovisioning of the eight classrooms since it is necessary to maintain normal school operation during the construction of the new school building. The cost for demolishing the eight classrooms is about \$8.5 million, and that for temporary reprovisioning of the eight classrooms about \$2.9 million.
- B. For **17EA**, site formation is required for two reasons. First, the site is not on level ground, and some excavation works are therefore necessary for levelling the area. Secondly, the site area for **17EA** is about 1 000 square metres smaller than that required for a 36-classroom primary school. To provide adequate space, in particular open space for some 1 440 students, the carpark

has to be built on a lower ground level with the football pitch/basketball courts reprovisioned above it. This involves extra excavation works and hence site formation costs.

- C. The site investigation results of **17EA** indicate that deeper piles are required for part of the site due to the nature of the soil. In addition, since the piling works would not be completed within the summer vacation, pre-bored piling method (which is a more expensive method) is required for about 25% of the piles, in order to reduce the noise and disturbance caused to the students when the new school term commences in September 2000.

Pre-bored piling is one of the various non-percussive piling methods, which aims to, amongst others, reduce noise disturbance to the neighbourhood. We have adopted non-percussive piling methods in other school projects including those fall under the School Improvement Programme, to reduce noise disturbance to students. We will adopt these piling methods for future school projects whenever necessary.

- D. The building cost for **17EA** is higher because of the provision of the car park at the lower ground level and the double-loaded corridor design of the building.

The carpark needs to be provided at the lower ground level. If the carpark were to be provided on the ground level, the open space provision would only be as little as 0.96 square metres per student<sup>1</sup> as compared with the planning parameter of two square metres per student. With the carpark area reprovisioned at the lower ground level, the open space provision will be increased to 1.25 square metres per student.

In addition, the building adopts a double-loaded corridor design (i.e. with teaching rooms and other supporting facilities on both sides) which is a compact building design to cater for the comparatively small site.

- E. The higher building services cost for **17EA** is due to the following factors -
- (i) Due to the double-loaded corridor design of the school premises, additional sprinklers and related facilities have to be provided to meet fire safety requirements and these lead to a higher building services cost (\$1.75 million).

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<sup>1</sup> According to the current practice, the area of any carpark is not counted towards the open space provision.

- (ii) The Preliminary Environment Review identified traffic noise arising from Boundary Street and La Salle Road as a key environmental issue. To minimize the impact of noise, air-conditioning will be provided to 31 classrooms, two remedial teaching rooms and four special rooms (\$1.35 million).
  - (iii) The construction of the lower ground carpark for **17EA** also contributes to a higher building services cost (\$1.52 million).
- F. The lower cost for drainage and external works is attributed to the small site area of **17EA** compared with that required for a 36-classroom school.
- G. For **17EA**, the total consultancy fees are estimated to be about \$10 million. Those incurred before tendering are about \$5.93 million and those after tendering about \$4.56 million. Following existing practice, the consultancy fees incurred before tendering are funded under the block allocation **Subhead 8100QX** of the Capital Works Reserve Fund.
- H. For **17EA**, the cost of furniture and equipment, estimated to be \$5.5 million, will be borne by Government as the school is an existing bi-sessional school which will be converted to whole-day operation.

**Enclosure 2 to PWSCI(2000-01)6**

**Open Space Provision per Student for Schools adopting Year 2000 design**

**Primary Schools**

<b>Project Code</b>	<b>Projects</b>	<b>Date of PWSC Meeting</b>	<b>Scheduled Completion Date</b>	<b>Open Space per student (square metres)</b>
<b>226EP</b>	Primary school at Aldrich Bay reclamation, Shau Kei Wan	7.10.1998	August 2000	2.5
<b>239EP</b>	Two 24-classroom primary schools in South Horizons, Ap Lei Chau	7.10.1998	August 2000	2.0
<b>244EP</b>	A 24-classroom primary school in Lok Wah Estate, Kwun Tong	7.10.1998	August 2000	1.7
<b>245EP</b>	Primary school at West Kowloon reclamation, Tai Kok Tsui	7.10.1998	August 2000	2.8
<b>246EP</b>	Primary school in Siu Sai Wan	7.10.1998	August 2000	1.9
<b>248EP</b>	Primary school in Area 31, Tin Shui Wai	7.10.1998	August 2000	2.7
<b>249EP</b>	Primary school in Area 1, Tsing Yi	7.10.1998	August 2000	3.0
<b>250EP</b>	Primary school at West Kowloon reclamation, Yau Ma Tei	7.10.1998	August 2000	2.6
<b>251EP</b>	Primary school at Shek Yam Estate Phase 2, Kwai Chung	7.10.1998	August 2000	2.6
<b>253EP</b>	Primary school in Area 90B, Sha Tin	7.10.1998	August 2000	2.9
<b>254EP</b>	Primary school in Area 100, Sha Tin	7.10.1998	August 2000	2.7
<b>255EP</b>	A 24-classroom primary school in area 39A, Fanling	7.10.1998	August 2000	1.3
<b>257EP</b>	Primary school in Po Lam Road Housing Development, phase 1, Po Lam Road	25.11.1998	May 2001	2.8
<b>238EP</b>	Primary school in Area 77, Sha Tin	16.12.1998	August 2000	3.1
<b>260EP</b>	Primary school in Yau Tong Estate redevelopment, phase 2, Yau Tong	16.12.1998	November 2000	2.4



<b>Project Code</b>	<b>Projects</b>	<b>Date of PWSC Meeting</b>	<b>Scheduled Completion Date</b>	<b>Open Space per student (square metres)</b>
<b>259EP</b>	Primary school in Area 31, Tung Chung	20.1.1999	July 2002	1.9
<b>247EP</b>	Two 24-classroom primary schools at Kowloon Tong	26.5.1999	July 2001	1.9
<b>262EP</b>	A 24-classroom primary school in public housing estate, Aldrich Bay, phase 4	2.6.1999	May 2002	2.7
<b>233EP</b>	Fourth primary school in Whampoa Garden	16.6.1999	May 2001	1.7
<b>263EP</b>	Primary school at Area 27, Tin Shui Wai	16.6.1999	June 2001	2.0
<b>264EP</b>	Second primary school in Area 101, Tin Shui Wai	16.6.1999	December 2002	2.0
<b>258EP</b>	Primary school in Area 29, Tuen Mun	20.10.1999	July 2001	2.4
<b>265EP</b>	Primary school at Hung Hom Bay, Kowloon	20.10.1999	July 2001	3.0
<b>269EP</b>	Three primary schools at Po Kong Village Road, Kowloon	20.10.1999	June 2001	4.0
<b>270EP</b>	Primary school at Yee Shun Street, Chai Wan	20.10.1999	June 2001	2.5
<b>271EP</b>	Primary school in Area 44, Fanling	20.10.1999	June 2001	2.1
<b>266EP</b>	Primary school at Kin Tak Street, Yuen Long	26.1.2000	July 2001	2.1
<b>278EP</b>	Primary school in Sau Mau Ping Estate, Phase 9	26.1.2000	December 2001	2.7
<b>232EP</b>	Primary school in Lai Chi Kok Estate, phase 4	17.5.2000	July 2002	3.1
<b>273EP</b>	Primary school at Fat Tseung Street, Sham Shui Po	17.5.2000	July 2002	3.1
<b>13EA</b>	Redevelopment of Heep Yunn Primary School at No.1 Farm Road, Kowloon	24.2.1999	July 2001	1.9
<b>B195EP</b>	Primary school in Area 110, Tin Shui Wai	11.2.1998	June 2001	2.0
<b>B196EP</b>	Primary school in Area 105, Tin Shui Wai	20.1.1999	January 2001	2.5

<b>Project Code</b>	<b>Projects</b>	<b>Date of PWSC Meeting</b>	<b>Scheduled Completion Date</b>	<b>Open Space per student (square metres)</b>
<b>B201EP</b>	Primary school in Area 101, Tin Shui Wai, Yuen Long	28.4.1999	May 2001	2.9

### Secondary Schools

<b>Project Code</b>	<b>Projects</b>	<b>Date of PWSC Meeting</b>	<b>Scheduled Completion Date</b>	<b>Open Space per student (square metres)</b>
<b>224ES</b>	Secondary school at West Kowloon reclamation, Yau Ma Tei	7.10.1998	August 2000	2.6
<b>225ES</b>	Secondary school at Nga Ying Chau, Tsing Yi	7.10.1998	August 2000	2.2
<b>226ES</b>	Secondary school in Area 90, Sha Tin	7.10.1998	August 2000	2.7
<b>227ES</b>	Secondary school in Area 77, Sha Tin	7.10.1998	August 2000	2.3
<b>228ES</b>	Secondary school in Lok Wah Estate, Kwun Tong	7.10.1998	August 2000	1.7
<b>229ES</b>	Fourth secondary school in Siu Sai Wan	7.10.1998	August 2000	2.0
<b>231ES</b>	Secondary school at West Kowloon reclamation, Tai Kok Tsui	7.10.1998	August 2000	2.9
<b>206ES</b>	Secondary school in Area 40, Fanling	16.12.1998	August 2000	2.8
<b>235ES</b>	Two secondary schools at Fat Tseung Street, Sham Shui Po	17.5.2000	July 2002	3.1
<b>B165ES</b>	Secondary school in Area 110, Tin Shui Wai	11.2.1998	June 2001	1.9
<b>B169ES</b>	Secondary school in Area 101, Tin Shui Wai, Yuen Long	28.4.1999	May 2001	2.8