

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

HEAD 703 - BUILDINGS

Education - Primary

233EP - Fourth primary school in Whampoa Garden

Members are invited to recommend to Finance Committee the upgrading of **233EP** to Category A at an estimated cost of \$91.1 million in money-of-the-day prices for the construction of a 24-classroom primary school in Whampoa Garden.

PROBLEM

We need to provide additional primary schools in Kowloon City District for the implementation of whole-day primary schooling.

PROPOSAL

2. The Director of Architectural Services (D Arch S), with the support of the Secretary for Education and Manpower, proposes to upgrade **233EP** to Category A at an estimated cost of \$91.1 million in money-of-the-day (MOD) prices for the construction of a 24-classroom primary school in Whampoa Garden, Kowloon City District.

PROJECT SCOPE AND NATURE

3. The proposed primary school is a standard design 24-classroom school building. It will have -

- (a) 24 classrooms;
- (b) six special rooms, including a computer-assisted learning room and a language room;
- (c) four remedial teaching rooms;
- (d) a guidance activity/interview room;
- (e) two interview rooms;
- (f) two staff rooms and a staff common room;
- (g) a student activity centre;
- (h) a conference room;
- (i) a library;
- (j) an assembly hall (which can also be used for a wide range of physical activities such as badminton, gymnastics and table-tennis);
- (k) a multi-purpose area ;
- (l) two basket ball courts (one at the ground level and one on the roof of the assembly hall block); and
- (m) ancillary accommodation including a lift and relevant facilities for the handicapped.

JUSTIFICATIONS

4. To meet the increase in demand for primary school places and to help achieve the policy target of enabling 60% of pupils in public sector schools to study on a whole-day basis by the commencement of the school year 2002/03, the Director of Education (D of E) has been making plans to construct an additional 73 primary schools for completion by August 2002. To date, five of these schools have been completed, 41 school projects have been upgraded to Category A and are at various stages of construction and two projects are pending upgrading to

Category A¹. Another two projects, **263EP** and **264EP**, will also be considered by Members at this meeting (see papers PWSC(1999-2000)49 and PWSC(1999-2000)50).

5. Kowloon City District currently has 31 public sector primary schools providing 525 classrooms. Whilst no additional classrooms are required to meet the increase in demand for school places by the school year 2002/03, **233EP** will enable existing bi-sessional primary schools in the district to convert into whole-day operation.

FINANCIAL IMPLICATIONS

6. We estimate the capital cost of the project to be \$91.1 million in MOD prices (see paragraph 7 below), made up as follows -

	\$ million	
(a) Piling	5.3	
(b) Building	48.5	
(c) Building services	11.5	
(d) Drainage and external works	7.5	
(e) Furniture and equipment	4.0	
(f) Contingencies	7.3	
	Sub-total	84.1 (at December 1998 prices)
(g) Provision for price adjustments	7.0	
	Total	91.1 (in MOD prices)

/The

¹ At the PWSC meetings on 26 May 1999 and 2 June 1999, Members endorsed the upgrading of **247EP** and **262EP** at estimated costs of \$207.1 million and \$107.3 million respectively in MOD prices for the construction of three 24-classrooms primary schools, two in Kowloon Tong and one in Aldrich Bay. Finance Committee will consider the recommendations on 11 June 1999 and 25 June 1999 respectively.

The construction floor area of **233EP** is 9 129 square metres. The construction unit cost, represented by building and building services costs, is \$6,572 per square metre at December 1998 prices. D Arch S considers this construction unit cost reasonable. A comparison of the standard cost of a 24-classroom primary school with the project estimate of this school is at the Enclosure.

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

Year	\$ million (Dec 1998)	Price adjustment factor	\$ million (MOD)
1999 - 2000	0.5	1.02625	0.5
2000 - 2001	40.8	1.06217	43.3
2001 - 2002	37.3	1.09934	41.0
2002 - 2003	5.5	1.13782	6.3
	84.1		91.1

8. We derived the MOD estimates on the basis of Government's latest forecast of trend labour and construction prices for the period 1999 to 2003. We will tender the works under fixed-price lump-sum contract because we can clearly define the scope of works in advance, leaving little room for uncertainty.

9. We estimate the additional annually recurrent expenditure for the school to be \$16.0 million.

PUBLIC CONSULTATION

10. We consulted the Kowloon City Provisional District Board in March 1999. Members of the Board supported the project.

ENVIRONMENTAL IMPLICATIONS

11. Based on the Preliminary Environment Review completed by D Arch S in April 1998, the Director of Environmental Protection agreed that the proposed school would not be subject to any adverse environmental impacts.

12. We will control noise, dust and site run-off nuisances during the construction through the implementation of appropriate mitigation measures in the relevant contracts.

LAND ACQUISITION

13. The project does not require any land acquisition.

BACKGROUND INFORMATION

14. We upgraded **233EP** to Category B in July 1998. D Arch S has completed site investigations for the project and is in the process of completing the detailed working drawings and tender documents using in-house staff resources. We plan to start the construction works in December 1999 for completion in May 2001.

Education and Manpower Bureau
June 1999

Enclosure to PWSC(1999-2000)48

**A comparison of the standard cost of a 24-classroom
primary school project with the estimated cost of 233EP**

		Standard cost*	233EP	
		\$ million (at Dec 1998 prices)		
(a)	Piling	8.6	5.3	(See note A)
(b)	Building	48.5	48.5	
(c)	Building services	11.5	11.5	
(d)	Drainage and external works	7.5	7.5	
(e)	Furniture and equipment	-	4.0	(See note B)
(f)	Contingencies	7.6	7.3	
	Total	83.7	84.1	
(g)	Construction floor area	9 129m ²	9 129m ²	
(h)	Construction unit cost { [(b)+(c)] ÷ (g) }	\$6,572/m ²	\$6,572/m ²	

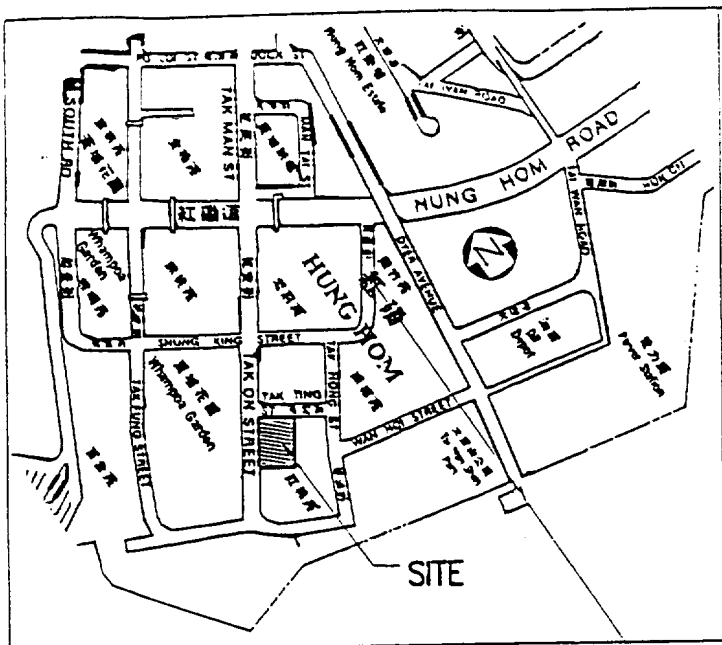
* Assumptions for standard cost

- (1) 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.

- (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 the handing-over of the project site for school construction.
- (3) Piling cost is based on the use of 101 numbers of steel H-piles at an average depth of 30 metres. 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) Cost for drainage and external works is 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 greenfield site).
- (5) No consultancy services are required.
- (6) Furniture and equipment costs are excluded as they are usually borne by the sponsoring body.
- (7) The standard cost for comparison purpose is subject to review regularly. We will review, and revise if necessary, the standard cost which should be adopted for future projects.

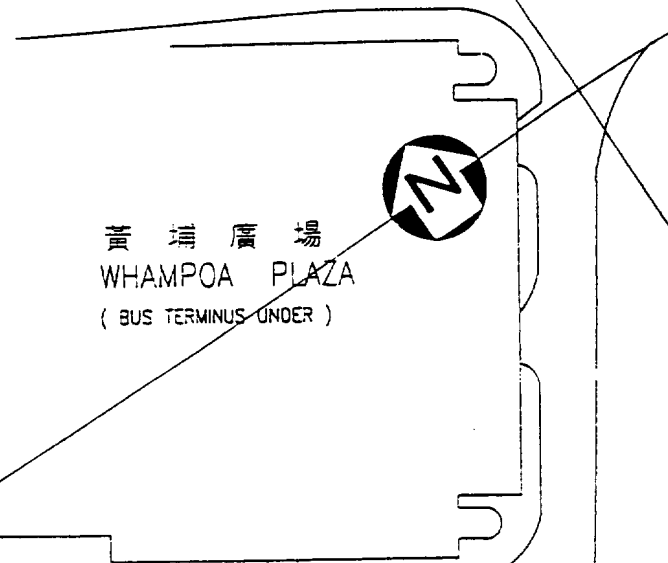
Notes

- A. The piling cost is lower because the bedrock levels of the site are at an average depth of 18 metres against the assumed depth of 30 metres for standard cost.**
- B. The cost of furniture and equipment, estimated to be \$4 million, will be borne by the Government as the schools will be allocated to an existing bi-sessional school for conversion to whole-day operation.**



LOCATION PLAN

1 : 10 000



德定街

行人出入口
PEDESTRIAN
ENTRANCE

TAK TING STREET

擬建小學
PROPOSED PRIMARY
SCHOOL
(24 CLASSROOMS)

聖公會德基小學
SKH FUNG KEI
PRIMARY SCHOOL

TAK ON STREET

TAK HONG STREET

德康街

車輛出入口
INGRESS/
EGRESS POINT

德安街

BASKETBALL
COURT

黃埔花園
WHAMPOA GARDEN

紅棉苑
COTTON MANSION

SITE AREA = 3,705 SQ. METER (APPROX.)

title (233EP)
黃埔花園第四所
二十四間課室小學
FOURTH 24-CLASSROOM
PRIMARY SCHOOL AT
WHAMPOA GARDEN

drawn by
M.F. WONG

date
3.8.98

approved
WILSON LAM

date
3.8.98

office
ARCHITECTURAL BRANCH

drawing no.
AB/5896/XC101

scale
1:1000



ARCHITECTURAL
SERVICES
DEPARTMENT