

For discussion  
on 17 January 2001

PWSC(2000-01)84

## ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

### HEAD 703 - BUILDINGS

#### Education – Tertiary/other

**85ET - Improvement works to existing government schools based on the recommendations of the Education Commission Report No. 5 – phase 4**

### HEAD 708 –

#### Education Subventions

**19EC - Improvement works to existing aided secondary schools based on the recommendations of the Education Commission Report No. 5 – phase 4**

**20EC - Improvement works to existing aided primary schools based on the recommendations of the Education Commission Report No.5 – phase 4**

Members are invited to recommend to Finance Committee to –

- (a) revise the project scope of **85ET**, **19EC** and **20EC**; and
- (b) increase the project estimates in money-of-the-day prices –
  - (i) for **85ET** from \$382.1 million by \$725.6 million to \$1,107.7 million;

/(ii) .....

- (ii) for **19EC** from \$542.0 million by \$1,099.9 million to \$1,641.9 million; and
- (iii) for **20EC** from \$433.3 million by \$1,179.8 million to \$1,613.1 million

to carry out improvement works at 122 schools under phase 4 of the School Improvement Programme.

## PROBLEM

We need to carry out improvement works to 122 schools under phase 4 of the School Improvement Programme (SIP).

## PROPOSALS

2. The Director of Architectural Services (DArchS), with the support of the Secretary for Education and Manpower (SEM), proposes to –

- (a) revise the project scope of **85ET**; and
- (b) increase the project estimate of **85ET** from \$382.1 million by \$725.6 million to \$1,107.7 million in money-of-the-day prices

to carry out improvement works for 30 **government schools** (an increase of 18 schools from the original 12 approved in June 2000) in accordance with the project scope set out in paragraph 7.

3. The Director of Education (DE), on the advice of DArchS and with the support of SEM, proposes to –

- (a) (i) revise the project scope of **19EC**; and
- (ii) increase the project estimate of **19EC** from \$542.0 million by \$1,099.9 million to \$1,641.9 million in money-of-the-day prices

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to carry out improvement works for 42 aided secondary schools (an increase of 26 schools from the original 16 approved in June 2000) in accordance with the project scope set out in paragraph 7; and

- (b) (i) revise the project scope of **20EC**; and
- (ii) increase the project estimate of **20EC** from \$433.3 million by \$1,179.8 million to \$1,613.1 million in money-of-the-day prices

to carry out improvement works for 50 **aided primary schools** (an increase of 36 schools from the original 14 approved in June 2000) in accordance with the project scope set out in paragraph 7.

4. A list of the 127 SIP-feasible schools in phase 4 (i.e. five funded under block allocation Head 708 Subhead 8100QX, another 42 (12 government + 16 aided secondary + 14 aided primary) approved in June 2000 and a further 80 (18 government + 26 aided secondary + 36 aided primary) proposed above is at Enclosure 1.

5. Improvement works, which will be staggered, have commenced. We expect to complete the programme for all 127 schools by mid-2003.

#### **PROJECT SCOPE AND NATURE**

6. In SIP phase 4, we propose to upgrade the facilities of schools to year 2000 school design as far as it is practicable within a budget ceiling. As a general guide, the budget ceiling is set at 42% of the average cost (inclusive of consultancy fees, furniture and equipment and other related costs) of a new school of the same type and size. For example, in respect of a secondary school with 30 classrooms, the budget ceiling for SIP purposes is \$42.97 million. As for a primary school of 30 classrooms, the budget ceiling is \$36.50 million. However, the budget ceiling for a school may, in exceptional cases, exceed the 42% limit to take account of such considerations as land issues, age and condition of building, and educational factors.

7. The full scope of works for SIP phase 4 includes the following facilities -

(a) Core items

These are items required by statute or are essential to maintaining quality teaching and learning activities and should be fully covered in all SIP projects as far as it is practicable. The core items include a computer-assisted learning room, a language room, additional classrooms for meeting various policy objectives, a staff room, a library and a transformer room (if necessary). A project that cannot cover all core items will be classified as a special case for individual consideration.

(b) Other items

Schools will be allowed to prioritise, within the budget ceiling, their requirements for other items in the schedule of accommodation for year 2000 school design, on top of the facilities mentioned in (a) above. These include additional classrooms, a preparation room for computer-assisted learning, a multi-purpose room, a staff common room, interview rooms, a student activity centre, a conference room, a deputy principal's office, a discipline master's office, a school social worker office, remedial teaching rooms and a multi-purpose area.

## JUSTIFICATION

8. In February 1998, Finance Committee approved proposals under **85ET**<sup>1</sup>, **19EC** and **20EC** to engage consultants for site investigation and feasibility studies (FS) to enable improvement works to be eventually carried out for 30 government schools and 70 aided schools, including 13 schools transferred from phase 3. As FS had already been completed for the 13 schools, it was only necessary to select a further 57 aided schools. To allow for withdrawals and non-

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<sup>1</sup> A new subhead **87ET** under Head 703 was subsequently assigned in place of **85ET** for pre-construction works (i.e. site investigation, feasibility study, detailed design and contract documentation) for 30 government schools.

feasible schools, we advised Members that we would carry out FS for 71 aided schools (57 schools plus 25%). In other words, site investigation and FS would be carried out for 101 schools (30 government schools and 71 aided schools) in phase 4. From a pool of 114 schools (including 13 aided schools from phase 3), we would select 100 schools for follow up detailed design and contract documentation work to upgrade them to year 2000 school design as far as it is practicable.

9. In May 2000, we approached this Sub-committee to proceed with improvement works for schools which could be upgraded to year 2000 school design at a relatively low cost. We adopted this prudent approach because a review on the cost effectiveness of the SIP was then in progress. Our yardstick was that the estimated cost of improvement works should not exceed one-third of the total construction cost of a new school of the same type and size. Upon endorsement of this Sub-committee, Finance Committee approved on 16 June 2000 funding for improvement works in 12 government schools and 30 aided schools<sup>2</sup>, including 12 from the pool of 42 schools in phase 2A<sup>3</sup>. The schools approved to proceed with improvement works included ten government secondary schools and two government primary schools under **85ET**, 16 aided secondary schools under **19EC** and 14 aided primary schools under **20EC**. In addition, there were five other aided schools the improvement works for which would cost less than \$15 million each. The five projects were funded from block allocation Head 708 Subhead 8100QX. In other words, approval was given for 47 schools to proceed to construction works. In summary, we had a total of 156 schools to be considered for improvement works in phase 4 (114 schools in paragraph 8 plus 42 schools brought forward from phase 2A), 47 of which having received funding approval to proceed to improvement works, leaving 109 schools for further consideration.

10. In the same submission in May 2000, we reported in broad terms the result of the SIP consultancy review which the consultant had just completed. In June 2000, we submitted in an information note to this Sub-committee details of the final result of the cost effectiveness review. The review concluded that SIP could be delivered cost-effectively. It recommended two guidelines for determining whether a school should be included in SIP. The first guideline is

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<sup>2</sup> As it was decided not to proceed with construction works for the remaining 40 aided schools under **19EC** and **20EC** pending the cost effectiveness study, the funding approved for detailed design and contract documentation for these schools was utilised to meet part of the construction cost of 30 aided schools. In other words, we only sought "top up" funding from FC for the improvement works for 42 schools.

<sup>3</sup> Phase 2A schools originally belonged to Phases 1 and 2 of the SIP but were not taken forward when studies showed that their scope for improvement was limited.

that the cost of improvement works should not normally be more than 42% of the average cost of a new school of the same type and size. The other guideline is that the average construction cost per square metre for the additional net floor area (NFA) to be provided through SIP should not be higher than a “trend line” as illustrated below –

<b>Additional NFA Provided</b>	<b>Cost Per m<sup>2</sup></b>
1 400m <sup>2</sup>	\$30,000
1 000m <sup>2</sup>	\$42,000
600m <sup>2</sup>	\$52,000

If the SIP project estimate exceeds the 42% threshold or if the average cost per NFA is way above the “trend line”, it will be necessary to bring down the project cost by adjusting the scope of works. The objective in adopting this revised approach is to ensure cost effectiveness. In exceptional circumstances, we may exceed the threshold to take account of such considerations as land issues, age and condition of buildings, and educational factors.

11. Since June 2000, we have taken a decision to re-provision four schools and included in phases 2 and 3 four other schools which had been found feasible as funds were available in the project votes to accommodate them. Of the 101 remaining schools in phase 4, only 80 were found to be technically feasible<sup>4</sup>.

12. Using the higher cost threshold (42% as against one-third) as the budget ceiling and the guideline on the average construction cost per square metre for the additional NFA to be provided, DArchS has reviewed the 42 schools initially selected for funding in June 2000 where the amount of improvement works had been kept down by the previous budget ceiling. DArchS considers that the scope of improvement works for 23 of them can be expanded against those previously approved by Finance Committee. Accordingly, we now propose to expand the scope of **85ET, 19EC and 20EC** to cover the improvement works for 122 schools. The changes are summarised below –

/Project .....

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<sup>4</sup> There are 21 technically non-feasible schools. Education Department (ED) is consulting with 17 schools (ten primary, five secondary and two special schools) on the long-term arrangements, including reprovisioning or in situ redevelopment. The other four schools have indicated that they have no intention to be reprovisioned/redeveloped and ED is considering internal conversion works for them.

Project No	Approved scope	Proposed Scope	Proposed change in APE
85ET	<ul style="list-style-type: none"> <li>Improvement works for ten government secondary schools (SS) and two government primary schools (PS)</li> </ul>	<ul style="list-style-type: none"> <li>Improvement works for 18 government SS (with expanded scope for the original ten SS) and 12 government PS</li> </ul>	} }+ \$725.6 m } from \$382.1m } to \$1,107.7m }
19EC	<ul style="list-style-type: none"> <li>Pre-contract works for 27 SS (11 of which funded up to feasibility study stage)</li> <li>Improvement works for 16 SS</li> </ul>	<ul style="list-style-type: none"> <li>Full scope of pre-contract works for 42 SS</li> <li>Improvement works for 42 SS (with expanded scope for nine of the original 16 SS)</li> </ul>	} } }+ \$1,099.9m } from \$542.0m } to \$1,641.9m }
20EC	<ul style="list-style-type: none"> <li>Pre-contract works for 44 PS (30 of which funded up to feasibility study stage)</li> <li>Improvement works for 14 PS</li> </ul>	<ul style="list-style-type: none"> <li>Full scope of pre-contract works for 50 PS</li> <li>Improvement works for 50 PS (with expanded scope for four of the original 14 PS)</li> </ul>	} } } }+ \$1,179.8m } from \$433.3m } to \$1,613.1m }
Total	<ul style="list-style-type: none"> <li>Pre-contract works for 71 aided schools (41 of which funded up to feasibility study stage)</li> <li>Improvement works for 12 government schools, 16 aided SS and 14 aided PS</li> </ul>	<ul style="list-style-type: none"> <li>Full scope of pre-contract works for 92 aided schools</li> <li>Improvement works for 30 government schools, 42 aided SS and 50 aided PS</li> </ul>	} } } }+ \$3,005.3m } from \$1,357.4m } to \$4,362.7m }

## FINANCIAL IMPLICATIONS

13. We estimate the total capital cost of the three projects will increase from \$1,357.4 million, by \$3,005.3 million, to \$4,362.7 million in money-of-the-day (MOD) prices. The annual recurrent consequences at 2000-01 price level are \$110.0 million. Details are provided below –

	85ET Approved Estimate (\$m)	85ET Revised Estimate (\$m)	19EC Approved Estimate (\$m)	19EC Revised Estimate (\$m)	20EC Approved Estimate (\$m)	20EC Revised Estimate (\$m)
(a) Site and structural investigations	-	-	6.9	9.0	11.0	13.1
(b) Site formation	0.6	1.6	11.1	36.2	14.7	60.6
(c) Piling	33.9	93.2	59.3	189.1	39.3	162.5
(d) Building	168.3	462.9	210.5	654.8	156.1	626.6
(e) Building services	90.5	248.9	83.9	266.6	68.2	271.8
(f) Drainage and External works	20.8	57.2	22.4	71.3	17.2	71.6
(g) Furniture and equipment	20.5	60.6	28.4	84.9	20.3	82.1
(h) Cabling & computer relocation cost	1.4	4.0	2.0	4.2	1.0	4.2
(i) Consultants' fees	7.8	26.7	59.0	100.4	56.2	104.7
(i) feasibility study	-	-	19.0	21.7	20.0	24.6
(ii) detail design	-	-	10.0	12.0	8.0	11.0
(iii) contract documentation	-	-	15.0	19.1	15.6	19.3
(iv) contract administration	7.8	18.0	9.1	23.3	6.6	22.1
(v) project management	-	8.7	5.9	24.3	6.0	27.7
(j) Site supervision staff cost <sup>5</sup>	-	29.5	-	44.6	-	46.7
(k) Contingencies	15.2	43.4	24.3	61.9	22.4	59.1
Sub-total (in Sept. 2000 prices)	359.0	1,028.0	507.8	1,523.0	406.4	1,503.0
(l) Provision for price adjustment	23.1	79.7	34.2	118.9	26.9	110.1
Total (in MOD prices)	382.1	1,107.7	542.0	1,641.9	433.3	1,613.1
Annual recurrent consequences		30.8		32.1		47.1

/A .....

<sup>5</sup> For funding purpose, the site supervision staff costs, including additional supervision requirement for foundation works, are assumed to be 3.5% (for 85ET), 3.7% (for 19EC) and 4% (for 20EC) respectively of the estimated construction costs. The additional supervision requirement is imposed by a Practice Note for Authorised Persons and Registered Structural Engineers issued by the Building Authority in June 2000.



A breakdown of the cost estimates for consultants' fees is at Enclosure 2.

14. Subject to approval, we will phase the expenditure as follows –

Year	\$million (Sept 2000)			Price Adjustment Factor	\$million (MOD)		
	85ET	19EC	20EC		85ET	19EC	20EC
Actual expenditure up to 31.3.2000	-	17.6	23.2	-	-	17.6	23.2
2000 – 01	-	15.0	13.0	1.00000	-	15.0	13.0
2001 – 02	55.0	58.0	80.0	1.02550	56.4	59.5	82.0
2002 – 03	430.0	595.0	725.0	1.05627	454.2	628.5	765.8
2003 – 04	375.0	600.0	480.0	1.08795	408.0	652.8	522.2
2004 – 05	143.0	175.0	105.0	1.12059	160.2	196.1	117.7
2005 – 06	25.0	50.0	62.0	1.15421	28.9	57.7	71.6
2006 – 07	-	12.4	14.8	1.18884	-	14.7	17.6
	<u>1,028.0</u>	<u>1,523.0</u>	<u>1,503.0</u>		<u>1,107.7</u>	<u>1,641.9</u>	<u>1,613.1</u>

15. We derived the MOD estimates on the basis of the Government latest forecast of trend labour and construction prices for the period from 2000 to 2007. We will tender the contracts on a fixed-price lump-sum basis because we can clearly define the scope of works in advance, leaving little room for uncertainty. We consider the project cost of this proposal reasonable as compared with similar projects.

## **PUBLIC CONSULTATION**

16. There is broad agreement among legislators and the education sector that the Government should expedite the programme. We have consulted all the 127 schools in SIP phase 4.

## ENVIRONMENTAL IMPLICATIONS

17. The project will not cause any long-term environmental adverse impact. For those additional rooms in schools that will be subject to adverse noise impact, we will provide window insulation and air conditioning as recommended in the Noise Abatement Measure in School Programme at an estimated cost of \$16.0 million, \$22.4 million and \$26.6 million for **85ET**, **19EC** and **20EC** respectively.

18. During construction, we will control noise, dust and site run-off nuisances through the implementation of pollution control measures recommended by the Director of Environmental Protection for SIP. These include the use of silencers, mufflers, acoustic lining or shields for noisy construction activities, as well as frequent cleaning and watering of the site, etc.

19. Ways of minimizing the generation of construction and demolition (C&D) materials were considered at the planning and design stage. We will require the contractor to implement necessary measures to minimize the generation of C&D materials. Where such materials are produced, we will try to reuse and recycle them. If this is not possible, C&D materials will be disposed of through designated public filling facilities and/or in landfills through a trip-ticket system. The reuse, recycling and disposal of C&D materials will be properly recorded for monitoring purposes. We estimate the C&D materials to be generated and recycled or disposed of at public fill or at landfills by the proposed projects to be as follows –

Project. No	Total C&D materials generated m <sup>3</sup>	C&D materials reused/recycled at site		Inert C&D materials to public fills		Organic materials to landfills	
		m <sup>3</sup>	%	m	%	m	%
<b>85ET</b>	15 500	3 300	21.3	9 800	63.2	2 400	15.5
<b>19EC</b>	16 450	3 550	21.6	10 400	63.2	2 500	15.2
<b>20EC</b>	21 750	4 600	21.1	13 750	63.2	3 400	15.6
Total	53 700	11 450	21.3	33 950	63.2	8 300	15.5

## LAND ACQUISITION

20. The projects do not require any land acquisition.

/BACKGROUND .....

**BACKGROUND INFORMATION**

21. The SIP was one of the recommendations of Education Commission Report No. 5 which was endorsed by the Executive Council in February 1993. It is being implemented in phases, with the first phase commencing in mid-1994. The current position is that improvement works have been completed in 331 schools under phases 1 to 3, with work in progress for 53 schools. We are proceeding with improvement works for 127 schools under phase 4, five of which are funded by block allocation Head 708 Subhead 8100QX. The remaining 122 schools are the subject of this paper. A further 342 schools are being dealt with in the final phase under paper PWSC(2000-01)85 which is also scheduled for consideration by Members at this meeting.

22. We estimate that the proposed works in phase 4 will create the following job opportunities during the construction period –

<b>Project. No</b>	<b>Professional Staff</b>	<b>Technical Staff</b>	<b>Labourer</b>	<b>Total no. of staff</b>	<b>Total man-months</b>
<b>85ET</b>	20	45	855	920	19 770
<b>19EC</b>	40	90	1 500	1 630	28 120
<b>20EC</b>	40	85	1 445	1 570	27 770

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Education and Manpower Bureau  
January 2001

(PWSC0337/WIN15)



**(b) 42 schools approved on 16 June 2000****(i) Improvement works to be provided to ten government secondary schools and two government primary schools under 85ET**

		Remedial Teaching Room	Staff Room	Staff Common Room	Interview Room 1	Interview Room 2	Student Activity Centre	Computer Assisted Learning	Preparation Room for CAL	Library	Language Room	Additional Classroom	Multi-purpose Room	Conference Room	Deputy Principal's Office	Discipline Master's Office	Social Worker's Office	Multi-purpose Area in m <sup>2</sup>
Kwun Tong Government Secondary School	Original scope	0	0	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0
	Additional		1															156
Sha Tin Government Secondary School	Original scope	0	1	0	0	0	1	0	0	0	1	1	1	1	1	1	0	403
	Additional				1			1	1								1	-88
Helen Liang Memorial Secondary School.	Original scope	0	1	1	1	0	0	1	1	0	1	2	0	1	1	1	1	0
	Additional					1	1											203
Clementi Secondary School	Original scope	0	1	1	1	1	1	1	1	0	1	3	1	1	0	1	1	0
	Additional																	342
Sir Ellis Kadoorie Secondary School	Original scope	0	1	1	1	0	1	1	1	0	1	1	1	1	0	1	1	66
	Additional														1	-1	-1	178
Tseung Kwan O Government Secondary School	Original scope	0	1	1	0	0	1	1	1	0	1	1	1	1	1	1	1	334
	Additional				1													338
Shau Kei Wan Government Secondary School	Original scope	0	1	1	1	0	1	1	1	0	1	2	1	1	1	1	1	0
	Additional																	110
Tsuen Wan Government Secondary School	Original scope	0	1	1	0	0	1	1	1	0	1	2	0	0	0	0	0	0
	Additional				1	1							1	1	1	1	1	
Chiu Lut Sau Memorial Secondary School	Original scope	0	1	1	1	1	0	1	1	0	1	2	0	1	0	0	1	0
	Additional						1											210
South Tuen Mun Government Secondary School	Original scope	0	1	1	1	1	0	1	1	0	1	2	1	1	1	1	1	0
	Additional						1											
Li Cheng Uk Government Primary School	Scope of Work	1	1	1	1	0	1	1	1	1	0	2	0	1	0	1	0	210
Sir Ellis Kadoorie(s) Primary School	Scope of Work	4	1	0	1	1	1	0	0	1	1	8	0	0	0	0	0	0

## (b) (ii) Improvement works to be provided to 16 aided secondary schools under 19EC

School Name		Staff Room	Staff Common Room	Library	Interview Room 1	Interview Room 2	Student Activity Centre	Computer Assisted Learning (CAL) Room	Preparation Room for CAL	Language Room	Additional Classroom	Multi-purpose Room	Conference Room	Deputy Principal's Office	Discipline Master's Office	Social Worker Office	Multi-purpose Area in m <sup>2</sup>
Wong Shiu Chi Secondary School	Original scope	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	60
	Additional																438
PLK 1984 College	Original scope	1	1	0	1	1	1	1	1	1	4	0	1	1	1	0	0
	Additional											1					
TWGHs Kwok Yat Wai College	Original scope	1	1	0	1	1	0	1	1	0	6	0	1	1	1	1	0
	Additional						1										
YCH Tung Chi Ying Memorial Sec Sch	Original scope	1	0	0	1	1	1	1	1	0	3	0	1	1	1	0	0
	Additional		1							1		1					
Christian Alliance College	Original scope	1	1	0	1	1	1	1	1	1	1	1	0	1	1	1	0
	Additional												1				110
Tsung Tsin College	Original scope	1	1	0	1	1	1	1	1	1	1	1	1	0	1	0	0
	Additional													1		1	
Valtorta College	Original scope	1	0	0	1	1	0	1	1	1	2	0	0	0	0	0	0
	Additional		1	1			1							1	1	1	
MFC Prevocational Sch (Chai Wan)	Original scope	1	1	0	0	0	0	0	0	0	10	0	0	0	0	0	0
	Additional						1										
Caritas St Paul Prevocational School	Original scope	1	1	0	1	1	0	1	1	0	5	0	0	0	0	0	0
	Additional			1						1			1				
Lingnan Dr Chung Wing Kwong Memorial Secondary School	Scope of work	0	1	0	1	1	1	1	1	1	0	0	1	0	0	0	0
Pooi Tun Secondary School	Scope of work	1	1	0	1	1	1	1	1	1	0	0	1	1	1	1	0
Carmel Secondary School	Scope of work	1	0	0	1	0	0	0	0	1	0	1	0	1	0	0	0
Canossa College	Scope of work	1	0	0	1	1	1	1	1	1	2	1	1	2	1	1	334
PLK Vicwood KT Chong Sixth Form College	Scope of work	1	1	0	1	1	1	1	1	1	0	0	0	0	0	1	0
Hong Kong Chinese Women's Club College	Scope of work	1	0	0	0	0	1	1	1	0	2	0	0	0	0	0	0
Yu Chung Keung Memorial College	Scope of work	1	1	0	1	1	1	1	1	1	4	1	1	1	1	1	37

**(b) (iii) Improvement works to be provided to 14 aided primary schools under 20EC**

School Name		Remedial Teaching Room	Staff Room	Staff Common Room	Library	Interview Room 1	Interview Room 2	Student Activity Centre	Computer Assisted Learning (CAL) Room	Preparation Room for CAL	Language Room	Additional Classroom	Conference Room	Discipline Master Office	Multi-purpose Area in m <sup>2</sup>
St Rose of Lima 's School	Original scope	0	1	1	0	1	1	1	0	0	0	15	0	0	0
	Additional	1			1				1	1					
Apleichau St Peter Catholic Primary School	Original scope	0	0	1	1	0	0	0	1	1	1	0	0	0	0
	Additional							1							150
Ho Ming Primary School	Original scope	0	1	1	1	1	1	1	1	1	1	0	1	1	622
	Additional														45
STFA Ho Yat Tung Primary School	Original scope	2	0	1	1	1	1	0	1	1	1	0	1	0	0
	Additional							1							
Sin To School	Scope of work	0	0	0	0	1	0	1	0	0	0	0	1	1	270
Cheung Chau Church Kam Kong Primary School	Scope of work	0	0	1	1	1	0	0	1	1	1	2	1	1	0
Shan Tsui Public School	Scope of work	2	1	0	1	0	0	1	1	1	0	3	0	1	0
Yuen Kong School	Scope of work	0	0	0	1	0	0	0	1	1	0	3	0	0	0
Lee Chi Tat Memorial School	Scope of work	0	1	1	1	1	1	1	1	1	1	0	1	0	439
TWGH Lo Yu Chik Primary School	Scope of work	0	1	1	1	1	1	0	1	1	1	0	1	0	0
FDBWA Yan Kow School	Scope of work	0	0	1	0	1	1	1	1	0	1	0	0	0	0
St Joseph's Primary School	Scope of work	1	1	1	1	1	0	1	1	1	0	0	0	0	0
Building Contractors' Association School *	Scope of work	2	0	0	1	0	0	1	1	0	0	0	0	0	0
Precious Blood Primary School (Wah Fu Estate) *	Scope of work	-	-	-	-	-	-	-	-	-	-	-	-	-	-

\* - Scope to be confirmed.

**(c) 80 additional schools****(i) Improvement works to be provided to eight government secondary schools under 85ET**

School Name	Staff Room	Staff Common Room	Interview Room 1	Interview Room 2	Student Activity Centre	Computer Assisted Learning Room (CAL)	Preparation Room for CAL	Additional Classroom	Language Room	Multi-purpose Room	Conference Room	Deputy Principal's Office	Discipline Master's Office	School Social Worker's Office	Multi-purpose Area in m <sup>2</sup>
Homantin Government Secondary School	1	1	1	1	1	1	1	3	1	1	1	1	1	0	0
NT Heung Yee Kuk Tai Po District Secondary School	1	1	1	1	1	1	1	0	1	1	1	1	1	1	96
Queen Elizabeth School	1	0	1	0	1	1	1	2	1	1	0	1	1	1	0
Sheung Shui Government Secondary School	1	1	1	1	1	1	1	0	1	1	1	1	1	1	198
Tai Po Government Secondary School	1	1	1	0	1	1	1	0	1	1	1	1	1	1	357
Tin Shui Wai Government Secondary School	1	1	1	1	1	1	1	2	1	1	1	1	1	1	172
Yuen Long Public Secondary School	1	1	1	1	1	1	1	0	1	1	1	1	1	1	102
Practical Education Centre *	0	1	0	0	0	1	1	0	0	1	1	0	0	0	206

**(ii) Improvement works to be provided to ten government primary schools under 85ET**

School Name	Remedial Teaching Room	Staff Room	Staff Common Room	Library	Interview Room 1	Interview Room 2	Student Activity Centre	Computer Assisted Learning Room	Preparation Room for CAL	Language Room	Additional Classroom	Conference Room	Discipline Master's Office	Multi-purpose Area in m <sup>2</sup>
Fanling Government Primary School	1	1	1	1	1	1	1	1	1	1	0	0	0	0
Hoi Pa Street Government Primary School	2	1	1	1	1	1	1	1	1	1	0	1	0	324
Hung Hom Government Primary School	2	0	0	1	1	1	1	1	1	0	2	0	0	0
Island Road Government Primary School	3	1	1	1	1	0	1	0	0	0	0	0	1	170
Jordan Road Government Primary School	1	0	1	0	1	1	1	1	1	1	0	1	0	0
Tin Shui Wai Government Primary School	0	1	1	1	1	1	1	1	1	1	1	1	1	375
Tseung Kwan O Government Primary School	0	1	1	1	1	1	1	1	1	1	1	1	0	440
Yuen Long Government Primary School	2	1	0	1	1	1	1	1	1	1	0	1	0	262
Canton Road Government Primary School *	1	0	0	0	0	0	0	1	1	1	1	1	1	0
North Point Government Primary School *	2	1	1	1	1	1	1	1	1	1	0	1	1	206

\* - Scope to be confirmed



**(c) 80 additional schools****(iii) Improvement works to be provided to 26 aided secondary schools under 19EC**

School Name	Staff Room	Staff Common Room	Interview Room 1	Interview Room 2	Student Activity Centre	Computer Assisted Learning Room (CAL)	Preparation Room for CAL	Additional Classroom	Language Room	Multi-purpose Room	Conference Room	Deputy Principal's Office	Discipline Master's Office	School Social Worker's Office	Multi-purpose Area in m <sup>2</sup>
Buddhist Tai Kwong Middle School	1	0	0	0	1	0	0	0	0	0	1	0	0	0	320
Cognitio College - Kowloon	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
FDBWA Szeto Ho Secondary School	1	1	0	0	0	1	0	0	1	0	0	0	0	0	67
HKMA K.S. Lo College	1	1	1	1	1	1	1	0	1	1	1	0	1	1	524
Holy Carpenter Prevocational School	1	1	1	1	1	0	0	6	0	0	0	0	0	0	0
Ju Ching Chu Secondary School (Tuen Mun)	1	1	1	1	1	1	1	0	1	1	1	1	1	1	285
Kei Chi Secondary School	1	1	1	1	1	1	1	1	1	1	1	0	0	0	420
Kwai Chung Methodist College	1	1	1	1	1	1	1	0	1	1	0	0	0	1	0
Kwok Tak Seng Catholic Secondary School	1	1	1	1	1	1	1	0	1	1	1	1	1	1	120
Kwun Tong Maryknoll College	1	1	1	1	1	1	1	0	1	1	1	1	1	1	240
Maryknoll Secondary School	1	1	1	1	1	1	1	0	1	1	1	0	1	0	96
Ning Po College	1	1	1	0	1	1	1	0	1	1	1	0	0	0	300
St. Francis Xavier College	1	1	1	1	1	1	1	1	1	0	1	1	1	1	145
St. Francis Xavier's School, Tsuen Wan	1	1	1	1	1	1	1	0	1	1	1	1	1	1	408
St. Paul's School (Lam Tin)	1	1	1	1	1	1	1	0	1	1	1	1	1	1	560
St. Stephen's Church College	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Buddhist Fat Ho Memorial College *	1	1	1	1	1	1	1	0	1	1	1	1	1	1	112
De La Salle Secondary School, N.T. *	0	1	0	0	1	1	0	2	1	1	1	0	0	0	0
Lai Chack Middle School *	0	0	1	1	0	1	1	0	1	0	0	0	0	0	0
Man Kiu College *	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0
NLSI Lui Kwok Pat Fong College *	1	1	1	1	1	1	1	1	1	1	1	1	1	1	160
Notre Dame College *	1	1	1	1	1	1	0	0	1	1	1	1	1	1	0
PLK Wai Yin College *	0	1	1	0	1	0	0	0	1	1	1	0	0	0	0
St Mary's Church College *	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
St. Peter's Secondary School *	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0
Ying Wa College *	1	1	1	1	1	1	1	0	1	1	1	1	1	1	170

\* - Scope to be confirmed

**(c) 80 additional schools**

## (iv) Improvement works to be provided to 36 aided primary schools under 20EC

School Name	Remedial Teaching Room	Staff Room	Staff Common Room	Library	Interview Room 1	Interview Room 2	Student Activity Centre	Computer Assisted Learning Room	Preparation Room for CAL	Language Room	Additional Classroom	Conference Room	Discipline Master's Office	Multi-purpose Area in m <sup>2</sup>
Buddhist Ching Kok Lin Association School	2	1	1	1	1	1	1	1	1	1	2	1	1	225
Bui O Public School	0	1	0	1	1	0	1	1	1	0	3	0	0	0
Canossa Primary School	0	0	1	1	1	0	1	1	1	1	0	0	0	0
CCC Mong Wong Far Yok Memorial Primary School	0	0	1	0	1	1	1	0	0	1	0	0	0	0
Emmanuel Primary School, Kowloon	1	0	0	1	1	0	1	1	1	0	0	1	1	0
FDBWA Mrs Fung Ping Shan Primary School	0	0	1	1	1	1	1	1	1	1	0	1	1	370
HK & Macau Lutheran Church Primary School	0	1	1	1	1	1	1	1	1	1	0	1	1	483
Kam Tin Mung Yeung Public School	0	0	1	1	1	0	0	0	0	0	0	0	1	0
Lam Tin Methodist Primary School	0	1	1	1	1	1	1	1	1	1	1	1	0	270
Ling To Primary School	2	1	0	1	1	1	1	1	1	1	0	1	0	0
Lok Sin Tong Leung Kau Kui Primary School	0	1	1	1	1	1	1	1	1	1	0	1	1	500
Ma On Shan Ling Liang Primary School	0	1	1	1	1	1	1	1	1	1	0	1	0	542
Mary of Providence Primary School	0	0	1	1	1	1	0	0	0	0	0	1	1	205
SKH Yan Laap Primary School	1	1	1	1	1	1	1	1	1	1	0	1	0	0
St Patrick's School	2	1	1	1	1	1	1	0	0	1	0	1	0	67
Tai Po Methodist School	0	1	1	1	1	1	1	1	1	1	1	1	1	565
The Endeavourers Leung Lee Sau Yu Memorial Primary School	0	1	1	1	1	1	1	1	1	1	0	1	1	425
Tsuen Wan Lutheran Primary School	2	1	1	1	1	1	1	1	1	1	0	1	0	367
Tung Koon District Society School	2	1	1	1	1	0	1	1	1	1	0	1	1	0
TWGHs Sin Chu Wan Primary School	2	1	1	1	1	1	1	1	1	1	0	1	0	315
TWGHs Tam Shiu Primary School	2	1	1	1	1	1	1	1	1	1	0	1	1	262
YCH Choi Hin To Primary School	2	1	1	1	1	1	1	1	1	1	0	1	1	391
Mary Rose School *	0	1	0	1	0	0	1	1	0	0	0	1	0	0
Saviour Lutheran School *	0	1	1	1	1	1	1	0	0	0	1	0	0	0
TWGHs Kwan Fong Kai Chi School	2	1	1	0	1	1	1	1	0	0	0	1	0	40
GCEPSA Kwun Tong Primary School *	2	1	1	1	1	1	1	1	1	1	0	1	1	0
Good Shepherd Primary School *	2	1	1	1	1	0	1	1	1	1	0	1	1	0
HK & Macau Lutheran Church Wong Chan Sook Ying Memorial School *	2	1	1	1	1	0	1	1	1	1	6	1	1	0
North Point Methodist Primary School *	0	1	0	1	1	1	1	1	0	0	0	1	0	0
Po Kok Branch School *	2	1	1	1	1	1	1	1	1	1	0	0	0	0
Precious Blood Primary PM School *	1	1	1	1	1	0	1	1	1	1	0	1	0	150
Pun U Association Wah Yan Primary School *	0	1	0	0	0	0	0	1	0	1	0	0	0	0
SKH Ho Chak Wan Primary School *	0	1	1	1	1	1	1	1	1	1	1	1	1	544
SKH Lui Ming Choi Memorial Primary School *	2	0	1	1	0	0	1	1	1	0	0	0	0	0
Yuk Yin School *	2	1	1	1	1	0	1	1	1	1	6	1	1	210
Princess Alexander Red Cross Res School *	2	1	1	0	1	0	1	1	0	0	1	0	0	0

\* - Scope to be confirmed

**DETAILS OF CONSULTANTS' FEES**  
**Financial Implications**

Category of works/items			85ET	19EC	20EC	Unit Cost	85ET	19EC	20EC
			Estimated man-months			(\$)	(\$m)	(\$m)	(\$m)
(I)	Feasibility study								
(a)	Architectural discipline	Professional	-	54.3	62.3	138,060	-	7.5	8.6
		Technical	-	52.5	63.5	45,732	-	2.4	2.9
(b)	Building services discipline	Professional	-	26.8	30.4	138,060	-	3.7	4.2
		Technical	-	26.3	30.6	45,732	-	1.2	1.4
(c)	Structural engineering discipline	Professional	-	26.8	30.4	138,060	-	3.7	4.2
		Technical	-	26.3	30.6	45,732	-	1.2	1.4
(d)	Quantity surveying discipline	Professional	-	10.9	10.1	138,060	-	1.5	1.4
		Technical	-	10.9	10.9	45,732	-	0.5	0.5
	Sub-total		-	-	-	-	-	21.7	24.6
(II)	Detailed design								
(a)	Architectural discipline	Professional	-	26.8	24.7	138,060	-	3.7	3.4
		Technical	-	28.4	24.1	45,732	-	1.3	1.1
(b)	Building services discipline	Professional	-	13.7	12.3	138,060	-	1.9	1.7
		Technical	-	13.1	13.1	45,732	-	0.6	0.6
(c)	Structural engineering discipline	Professional	-	13.7	12.3	138,060	-	1.9	1.7
		Technical	-	13.1	13.1	45,732	-	0.6	0.6
(d)	Quantity surveying discipline	Professional	-	10.9	10.1	138,060	-	1.5	1.4
		Technical	-	10.9	10.9	45,732	-	0.5	0.5
	Sub-total		-	-	-	-	-	12.0	11.0
(III)	Contract documentation								
(a)	Architectural discipline	Professional	-	45.6	45.6	138,060	-	6.3	6.3
		Technical	-	45.9	45.9	45,732	-	2.1	2.1
(b)	Building services discipline	Professional	-	22.4	23.2	138,060	-	3.1	3.2
		Technical	-	21.9	21.9	45,732	-	1.0	1.0
(c)	Structural engineering discipline	Professional	-	22.4	23.2	138,060	-	3.1	3.2
		Technical	-	21.9	21.9	45,732	-	1.0	1.0
(d)	Quantity surveying discipline	Professional	-	13.0	13.7	138,060	-	1.8	1.9
		Technical	-	15.3	13.1	45,732	-	0.7	0.6
	Sub-total		-	-	-	-	-	19.1	19.3

**DETAILS OF CONSULTANTS' FEES (Cont'd)**  
**Financial Implications**

Category of works/items			85ET	19EC	20EC	Unit Cost	85ET	19EC	20EC
			Estimated man-months			(\$)	(\$m)	(\$m)	(\$m)
(IV)	Contract administration								
(a)	Architectural Discipline	Professional	39.1	44.2	42.0	138,060	5.4	6.1	5.8
		Technical	41.6	45.9	43.7	45,732	1.9	2.1	2.0
(b)	Building services discipline	Professional	19.5	21.8	19.6	138,060	2.7	3.0	2.7
		Technical	19.7	24.0	21.9	45,732	0.9	1.1	1.0
(c)	Structural engineering discipline	Professional	19.5	21.8	19.6	138,060	2.7	3.0	2.8
		Technical	19.7	24.0	24.0	45,732	0.9	1.1	1.1
(d)	Quantity surveying discipline	Professional	18.0	37.0	35.6	138,060	2.5	5.1	4.9
		Technical	19.7	39.3	39.3	45,732	0.9	1.8	1.8
	Sub-total						18.0	23.3	22.1
(V)	Project management	Professional	63.0	176.0	200.6	138,060	8.7	24.3	27.7
		Sub-total		-	-	-	-	8.7	24.3
	Total						26.7	100.4	92.2

**Notes**

The unit cost is based on the average Master Pay Scale (MPS) salary point of 38 for professional staff and 14 for technical staff, multiplied by 2.4 to include the consultants' overheads and profit as the staff will be employed in the consultant's offices. (At 1.4.2000, MPS pt. 38 = \$57,525p.m. and MPS pt.14 = \$19,055p.m.)