

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 708 – CAPITAL SUBVENTIONS AND MAJOR SYSTEMS AND EQUIPMENT

Universities

City University of Hong Kong

18EJ – Landmark Building

20EJ – Multi-media Building

Members are invited to recommend to Finance Committee –

- (a) the upgrading of part of **18EJ**, entitled “Landmark Building – stage 1” and part of **20EJ**, entitled “Multi-media Building – stage 1” to Category A at an estimated cost of \$29.2 million and \$46.4 million respectively in money-of-the-day prices; and
- (b) the retention of the remainder of **18EJ** and **20EJ** in Category B.

PROBLEM

The City University of Hong Kong (CityU) requires additional accommodation to address the shortage of space within the existing campus.

/PROPOSAL

PROPOSAL

2. The Secretary-General, University Grants Committee (SG, UGC), on the advice of the University Grants Committee (UGC) and the Director of Architectural Services (D Arch S) as UGC's Technical Adviser, and with the support of the Secretary for Education and Manpower, proposes to upgrade part of the following two projects to Category A at an estimated total cost of \$75.6 million in money-of-the-day (MOD) prices –

	\$ million (MOD)
(a) 18EJ – Landmark Building – stage 1	29.2
(b) 20EJ – Multi-media Building – stage 1	46.4
Total	<u>75.6</u>

PROJECT SCOPE AND NATURE

18EJ – The Landmark Building

3. The scope of **18EJ** comprises the construction of a 19-storey multi-use academic and administration building with a net operational floor area¹ (NOFA) of 16 000 square metres at an existing open carpark within the University campus. When completed, it will house administrative offices including Council Chamber, function rooms and meeting rooms, a multi-floor learning resources centre with study facilities, student activity areas and support facilities. An indicative list of facilities subject to detailed design is at Enclosure 1.

4. The project will be implemented in two stages –

(a) Stage 1 – Pre-contract consultancy

Stage 1 comprises a pre-contract consultancy for the detailed design and preparation of tender documents for the construction works under stage 2 of the project,

/and

¹ For the purpose of this submission, we define NOFA as the net floor area of all rooms and spaces provided for the primary function and purpose of the building and excluding any structure and partitions, circulation, staircase, staircase halls, lift landings, space occupied by toilet and shower facilities, mechanical and electrical services such as lifts and air-conditioning systems.

and the provision of advice on architectural, engineering, environmental, lighting, acoustic, technical interior, quantity surveying services, etc; and

- (b) Stage 2 – Site formation and construction works of the Landmark Building

Stage 2 involves the site formation and removal of a portion of rock slope adjacent to the existing open carpark, and the actual construction of the Landmark Building.

20EJ – The Multi-media Building

5. The scope of **20EJ** comprises the construction of the Multi-media Building, with a NOFA of 13 400 square metres. The new building will be constructed on a formed platform with an ingress and egress off the access road serving the nearby student hostels along Cornwall Road. It will house under one roof the various academic departments and research centres associated with creative media and media engineering. It will provide a complex of teaching and research laboratories, lecture theatres/classrooms, office facilities, amenities facilities, media resource centres and support facilities. An indicative list of facilities subject to detailed design is at Enclosure 2.

- 6. The project will be implemented in two stages –

- (a) Stage 1 – Site formation works and pre-contract consultancy for works under stage 2

Stage 1 comprises two parts. The first part includes the site formation works including the removal of a hill to provide the platform for the building, re-routing of the two existing watercourses, construction of a retaining structure and formation of a natural slope along the slip road from Lung Cheung Road to the northern part of the site. The second part covers a pre-contract consultancy for the detailed design and preparation of tender documents for the construction works under stage 2 of the project, and the provision of advice on architectural, engineering, environmental, lighting, acoustic, technical interior and quantity surveying services, etc; and

- (b) Stage 2 – Construction works of the Multi-media Building

7. The site plans are at Enclosures 3 and 4. We now seek funding approval for stage 1 of the two projects as referred to in paragraphs 4(a) and 6(a) above. For **18EJ**, CityU plans to commence stage 1 in July 2002 for completion in June 2003, and stage 2 in October 2003 for completion in October 2006. For **20EJ**, the stage 1 pre-contract consultancy work is scheduled to start in July 2002 for completion in June 2003 and the site formation works will begin in February 2003 for completion in January 2004. As for stage 2, CityU plans to commence it in February 2004 for completion in March 2006. We will seek the necessary funding approval from the Finance Committee for stage 2 works nearer the time.

JUSTIFICATION

8. The space made available through appropriate conversion and rationalisation of space utilisation in existing premises is quite limited. The existing campus of CityU, designed and built in phases in the mid-eighties and completed in the early nineties, has been operating for almost 16 years. As a result of development over time, CityU falls short of space to carry out core teaching and research activities. To address the problem, some of the administrative and academic support units have moved to leased premises nearby to make way for the provision of facilities such as classrooms, laboratories, student and staff amenities, specialist laboratories, research centres and applied strategic development centres at the main campus. CityU is currently leasing over 4 000 square metres of space outside the campus for some of the administrative and academic support units' activities. A floor of the covered carpark has been converted for academic use by the School of Creative Media on a temporary basis since 1998. To provide permanent and proper accommodation for its academic and administrative activities, CityU proposes the two development proposals.

9. According to a study on space and accommodation at UGC-funded institutions completed in February 2000, CityU has a 27% shortfall in accommodation provision equivalent to 35 400 square metres in NOFA. CityU plans to construct three major buildings, namely, the Landmark Building, the Multi-media Building, and the Academic Building and Student Activities Centre, to meet the existing space shortfall. These buildings will be used to accommodate both the administrative offices and facilities for teaching and research. The NOFA to be provided by these three buildings under planning is as follows –

/Landmark

Project title	NOFA (m ²)
Landmark Building	16 000
Multi-media Building	13 400
Academic Building and Student Activities Centre ²	5 960
Total	<u>35 360</u>

FINANCIAL IMPLICATIONS

10. We estimate the total capital cost of **18EJ** and **20EJ** in September 2001 prices to be about \$640 million and \$550 million respectively. The respective costs of stage 1 are estimated to be \$29.2 million and \$46.4 million in MOD prices (see paragraph 11 below), made up as follows –

	18EJ \$ million	20EJ \$ million	
(a) Site formation works	–	21.4	(in September 2001 prices)
(b) Consultants' fees for –	29.7	25.7	
(i) Detailed design	22.3	18.9	
(ii) Contract and tender documentation	7.4	6.3	
(iii) Site supervision	–	0.5	
Sub-total	<u>29.7</u>	<u>47.1</u>	(in MOD prices)
(c) Provision for price adjustment	(0.5)	(0.7)	
Total	<u>29.2</u>	<u>46.4</u>	

/A

² The funding approval for the Academic Building and Student Activities Centre is tentatively scheduled for submission to the subcommittee in late 2002.

A detailed breakdown of the estimate for the consultants' fees by man-months is at Enclosure 5.

11. Subject to approval, CityU will phase the expenditure as follows –

Year	\$ million (Sep 2001)		Price adjustment factor	\$ million (MOD)	
	18EJ	20EJ		18EJ	20EJ
2002 – 03	14.1	10.0	0.98625	13.9	9.9
2003 – 04	15.6	33.1	0.98378	15.3	32.6
2004 – 05	–	4.0	0.98378	–	3.9
	<u>29.7</u>	<u>47.1</u>		<u>29.2</u>	<u>46.4</u>

12. We derived the MOD estimates on the basis of Government's latest forecast of trend labour and construction prices for the period 2002 to 2005. CityU will deliver the consultancies and works through fixed-price lump-sum contracts because it can clearly define the scope of works in advance, leaving little room for uncertainty.

13. **18EJ** and **20EJ** will have no impact on tuition fees. CityU will meet the additional recurrent costs associated with the two projects from its recurrent grants.

PUBLIC CONSULTATION

14. We consulted the Legislative Council Panel on Education on 18 March 2002 on the projects. Members had no objection to the proposed projects.

/ENVIRONMENTAL

ENVIRONMENTAL IMPLICATIONS

15. During the site formation works for the Multi-media Building site, the contractor will control noise, dust and site run-off nuisances to within established standards and guidelines through the implementation of mitigation measures in the relevant works 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.

16. At the planning and design stages, CityU has taken into consideration the site profile and contours in particular the platform levels of the developments with a view to minimising cutting and excavation. CityU will require the contractor to convert and use suitable excavated materials for filling within the site to minimise off-site disposal. To further minimise the generation of construction and demolition (C&D) materials, CityU will encourage the contractor to use non-timber formwork and recyclable materials for temporary works. In addition, CityU will require the contractor to use metal site hoardings and signboards so that these materials can be recycled or reused in other projects.

17. CityU will require the contractor to submit a waste management plan for approval, with appropriate mitigation measures, including the allocation of an area for waste segregation. CityU will ensure that the day-to-day operations on site comply with the waste management plan. CityU will specify the disposal of C&D materials to designated public filling facilities through a trip-ticket system for the Multi-media Building site formation contract. CityU estimates that the projects will generate about 100 000 cubic metres (m³) of excavated materials. Of these, CityU will reuse about 15 000 m³ (15%) on site and 85 000 m³ (85%) as fill in public filling areas³. CityU will record the disposal, re-use and re-cycling of C&D materials for monitoring purposes.

LAND ACQUISITION

18. The two projects do not require land acquisition.

/BACKGROUND

³ 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.

BACKGROUND INFORMATION

19. Under existing procedures, UGC-funded institutions submit capital works proposals to the UGC annually. The UGC examines all these proposals carefully, with professional advice provided by D Arch S who acts as UGC's Technical Adviser. The UGC refers those proposals it supports to the Government. Having examined CityU's proposals, SG, UGC has, in consultation with D Arch S, agreed with the project estimate proposed by CityU as set out in paragraph 2 above.

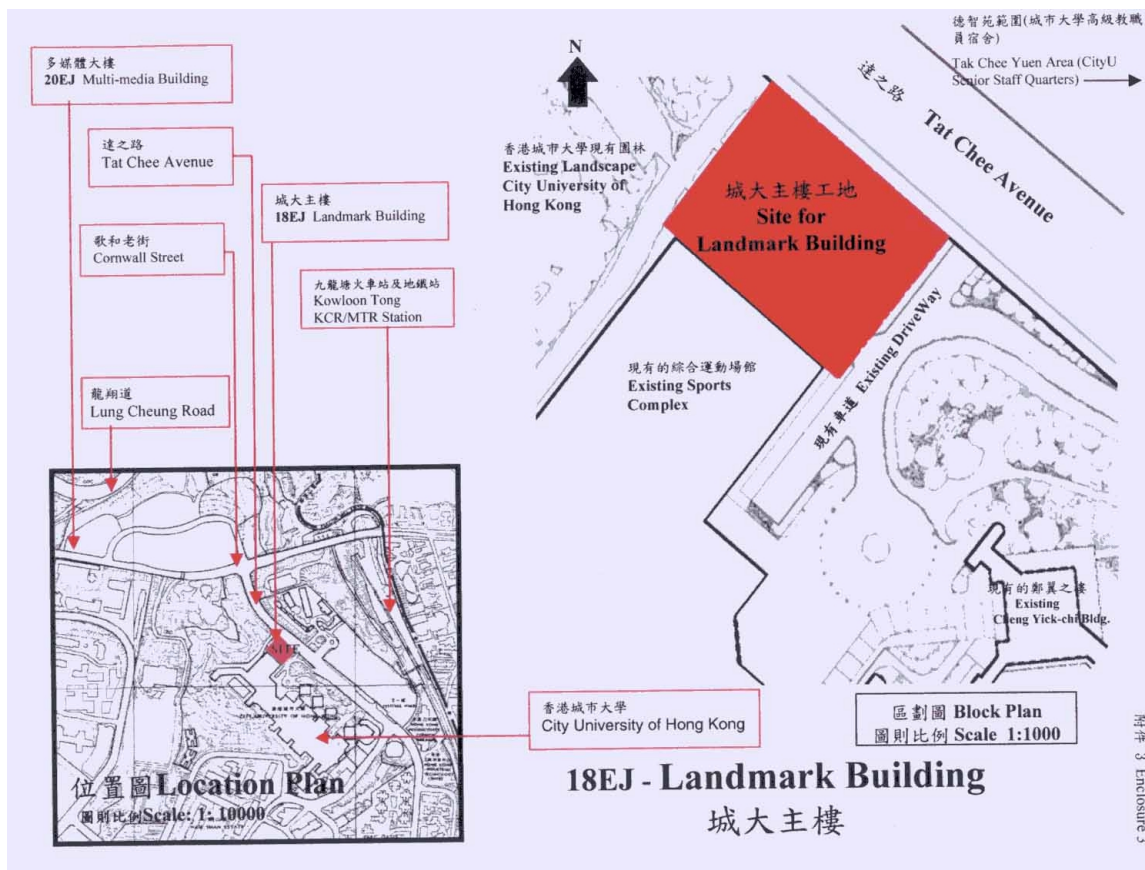
20. We upgraded **18EJ** and **20EJ** to Category B in September 2001 and March 2002 respectively.

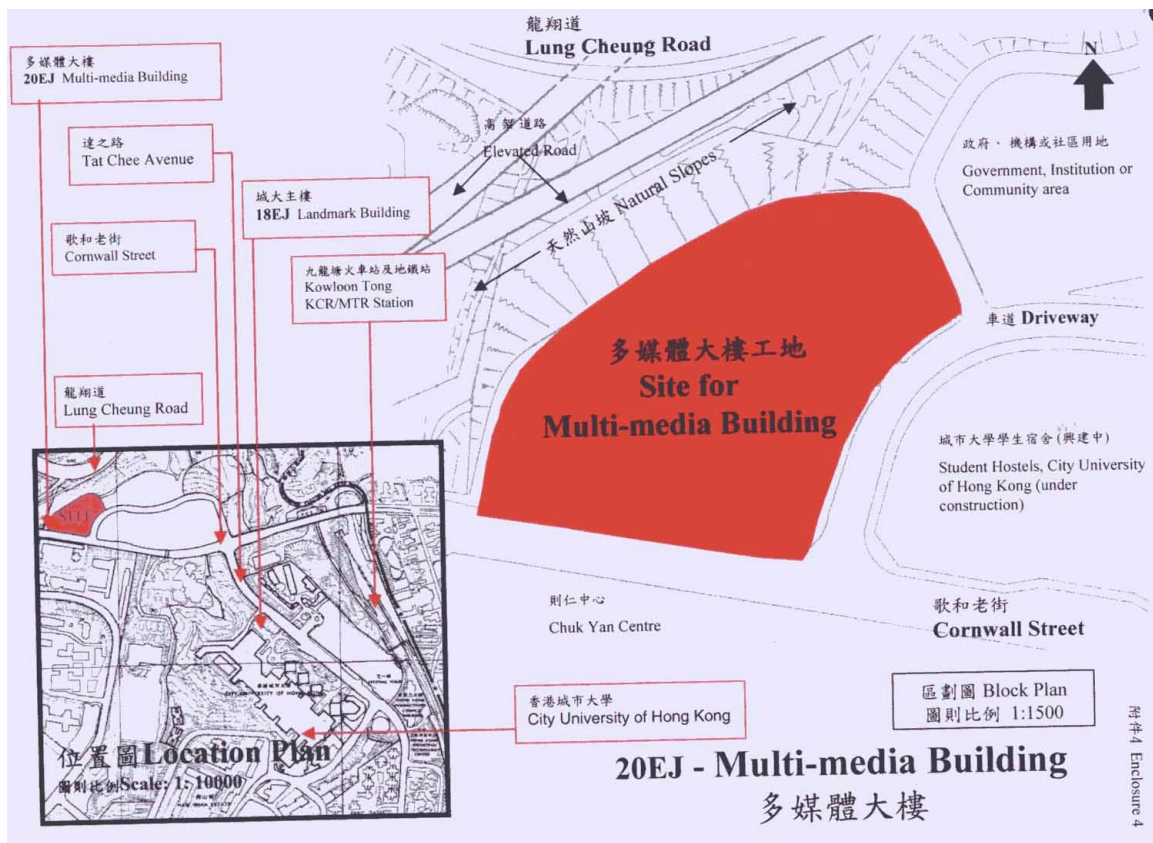
21. CityU estimates that stage 1 of **18EJ** and **20EJ** will create about 85 jobs, with a total of 1 100 man-months comprising 15 professional staff, 50 technical staff and 20 labourers.

Education and Manpower Bureau
April 2002

Indicative list of facilities for 18EJ

Facilities	Estimated floor area in NOFA (m²)
(a) Administrative offices including Council Chamber, function rooms and meeting rooms	4 460
(b) Multi-floor learning resources centre with study facilities	7 830
(c) Student activities areas	1 980
(d) Support facilities (e.g. service and storage area)	1 730
Total	<hr/> 16 000 <hr/>





Enclosure 2 to PWSC(2002-03)10

Indicative list of facilities for 20EJ

Facilities	Estimated floor area in NOFA (m²)
(a) Teaching laboratories	3 910
(b) Research laboratories	3 350
(c) Lecture theatres/classrooms	1 680
(d) Office facilities	1 350
(e) Amenities facilities	1 600
(f) Media resource centres	840
(g) Support facilities (e.g. service and storage area)	670
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Total	13 400
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**City University of Hong Kong
18EJ – Landmark Building
20EJ – Multi-media Building**

Breakdown of the estimate for consultants' fees

			Estimated man-months		Average MPS* salary point	Multiplier	Estimated fee (\$ million)	
			18EJ	20EJ			18EJ	20EJ
(a) Consultants' staff costs –								
(i)	Detailed design	Professional	105	90	38	2.4	15.2	13.0
		Technical	152	125	14	2.4	7.1	5.9
(ii)	Contract and tender documentation	Professional	35	30	38	2.4	5.1	4.3
		Technical	50	42	14	2.4	2.3	2.0
(b)	Site supervision by resident site staff employed directly by CityU	Professional	–	3.5	38	1.7	–	0.4
		Technical	–	4.2	14	1.7	–	0.1
Total							29.7	25.7

* MPS = Master Pay Scale

Notes

1. A multiplier of 2.4 is applied to the average MPS point to estimate the full staff costs including the consultants' overheads and profit, as the staff will be employed in the consultants' offices. A multiplier of 1.7 is applied in the case of site staff employed by CityU direct on the projects. (At 1 April 2001, MPS point 38 is \$60,395 per month and MPS point 14 is \$19,510 per month.)
2. The figures given above are based on estimates prepared by CityU. D Arch S has examined the figures and considered them reasonable.