

For discussion
on 9 January 2008

PWSC(2007-08)71

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 708 – CAPITAL SUBVENTIONS AND MAJOR SYSTEMS AND EQUIPMENT

Universities

The University of Hong Kong

53EG – 1 800-place student residences at Lung Wah Street, Kennedy Town

Members are invited to recommend to Finance Committee the upgrading of **53EG** to Category A at an estimated cost of \$459.7 million in money-of-the-day prices for the development of 1 800-place student residences at Lung Wah Street, Kennedy Town by the University of Hong Kong.

PROBLEM

The University of Hong Kong (HKU) needs additional hostels to meet the accommodation need of students.

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, proposes to upgrade **53EG** to Category A at an estimated cost of \$459.7 million in money-of-the-day (MOD) prices for the construction of 1 800-place student residences at Lung Wah Street, Kennedy Town.

/PROJECT

PROJECT SCOPE AND NATURE

3. The project will provide 1 800 publicly-funded hostel places in four hostel blocks to be constructed on a podium of ancillary facilities, providing approximately 20 882 square metres (m²) in net operational floor area (NOFA). The scope of 53EG comprises —

- (a) two 25-storey and two 22-storey hostel blocks providing 1 800 hostel places in total, and other ancillary facilities including flats for warden, senior tutor, tutor, manager and domestic attendant, laundries and store rooms;
- (b) a podium of a maximum of 5 storeys accommodating general office, warden office, multi-purpose hall, multi-purpose rooms, computer rooms, reading rooms, meeting rooms, lifts and other supporting facilities;
- (c) 14 covered carparking spaces, six loading/unloading bays and four taxi/private car pick-up/drop-off spaces; and
- (d) open space of approximately 4 209 m², and the associated pedestrian walkway and stairway which will be open to the public.

_____ 4. A site plan is at Enclosure 1. The sectional plan, view of the building (artist's impression) and a list of facilities to be provided are at Enclosures 2 to 4 respectively. HKU plans to start the construction works in the second quarter of 2008 for completion in the second quarter of 2011.

JUSTIFICATION

5. In view of the educational value of hostel life, the Executive Council approved in December 1996 a set of criteria for calculating the level of publicly-funded student hostel provisions for the UGC-funded sector. Under this policy, all undergraduate students should be given the opportunity to stay in student hostels for at least one year of their courses. Furthermore, all research postgraduates, non-local students as well as all undergraduate students whose daily traveling time exceeds four hours, should be provided with student hostel places. In addition, to

/support

support internationalization, the Government has agreed to provide an additional 1 840 publicly-funded student hostel places at the UGC-funded sector to support student exchange activities and to cater for the accommodation needs of non-local exchange students. The Government will fund up to 75% of the capital cost of the approved student hostel provision, with the remainder to be met by the respective institutions using private funds.

6. Under the prevailing student hostel policy and taking into account the additional hostel places for exchange activities, the approved publicly-funded hostel provision for HKU in the 2007/08 academic year is 5 690 places. Given that HKU currently has 3 885 publicly-funded hostel places, the University has a shortfall of about 1 800 publicly-funded hostel places. To address the shortfall, HKU therefore proposes to construct new student residences at a vacant site in Lung Wah Street.

7. The main campus of HKU is already congested and further development is constrained. Currently, the core academic and teaching facilities of HKU are concentrated in the main campus while most of the student hostels are located off-campus at nearby locations. The site at Lung Wah Street is the only site in the Western District that is both immediately available and suitable for HKU's hostel development. Furthermore, as the site is close to HKU's campus and the University's existing student hostel facilities, e.g. HKU's Jockey Club Student Village II and student facilities at Pokfulam Road, the proposed construction of hostels at Lung Wah Street can enhance students' interaction and cultivation of community life.

FINANCIAL IMPLICATIONS

8. The total estimated cost of the project is \$606.3 million (in MOD prices). The Government will fund up to \$459.7 million i.e.75% of the cost for the hostel buildings and the full construction costs for the open space and the pedestrian walkway and stairway which will be open to the public i.e. about \$19.8 million. HKU will contribute the remaining 25% of the construction cost for the hostel places through its private sources of funding.

9. SG, UGC, on the advice of D Arch S, recommends a capital funding of \$459.7 million in MOD prices to be provided by the Government (see paragraph 12 below), made up as follows –

/(a)

		\$ million
(a)	Area and site development	63.4
(b)	Building	312.8
(c)	Building services	91.7
(d)	External works and drainage	21.9
(e)	Consultants' fees for—	17.6
	(i) tender assessment	0
	(ii) contract administration	7
	(iii) site supervision	9
	(iv) out-of-pocket expenses	0
(f)	Furniture and equipment ¹	43.5
(g)	Contingencies	40.7
	Sub-total	591.6 (in September 2007 prices)
(h)	Provision for price adjustment	14.7
	Sub-total	606.3 (in MOD prices)
(i)	Less contribution by HKU (at 25% of the construction cost for the hostel places)	(146.6)
	Total	459.7 (in MOD prices)

10. HKU will engage consultants to undertake tender assessment, contract administration and site supervision of the project. A detailed breakdown of the estimate for consultants' fees by man-months is at Enclosure 5.

/11.

¹ Based on a list of furniture and equipment submitted by HKU.

11. The construction floor area (CFA) of this project is approximately 41 510m². The estimated construction unit cost, represented by the building and building services costs, is \$9,745 per m² of CFA in September 2007 prices. A detailed account of the CFA vis-à-vis the construction unit cost is at Enclosure 6. D Arch S considers the estimated construction unit cost reasonable and comparable with those of similar projects for UGC-funded institutions such as 49EG “900-place student hostel at the Flora Ho Sports Centre Complex” of HKU (with an estimated construction unit cost of \$9,965 per m² of CFA in September 2007 prices).

12. Subject to approval, HKU will phase the expenditure as follows:-

Year	\$ million (Sept 2007)	Price adjustment factor	\$ million (MOD)	Contribution by HKU \$ million	53EG \$ million (MOD)
2007 – 08	4.4	1.00000	4.4	4.4	-
2008 – 09	60.7	1.00750	61.2	61.2	-
2009 – 10	165.0	1.01758	167.9	81.0	86.9
2010 – 11	256.2	1.02775	263.3		263.3
2011 – 12	90.4	1.03803	93.8	-	93.8
2012 – 13	14.9	1.05619	15.7	-	15.7
	<u>591.6</u>		<u>606.3</u>	<u>146.6</u>	<u>459.7</u>

13. 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 2007 to 2013. HKU will tender the works through a fixed price lump-sum contract because it can clearly define the scope of works in advance.

14. The project has no impact on tuition fees. In accordance with established practice, HKU will operate these student hostels on a self-financing basis through charges levied on hostel places. The proposal has no additional recurrent implications on the Government.

/PUBLIC

PUBLIC CONSULTATION

15. The Central and Western District Council (C&W DC) was consulted on 5 October 2006 and most Members indicated in-principle support to the project. Nonetheless, Members had requested HKU to conduct further consultation to gauge the views of the residents in the vicinity. In response, HKU organized consultation sessions with resident representatives in the neighbourhood and C&W DC Members on 21 December 2006. Some participants raised concerns about possible noise problem arising from the new hostels. To minimize possible impact on the neighbourhood, HKU has adopted appropriate features and made necessary adjustments to the design of the project such as lowering the development density of the site; locating the hostel blocks closer to the hill (and hence further away from the residential community at Lung Wah Street); adding architectural fins to the building facades to serve as noise barrier; and increasing the area for greenery. HKU organized a workshop on 31 March 2007 to explain the above measures to local residents and community representatives, and to exchange views on the project design. HKU would continue to maintain a close dialogue with C&W DC and the resident representatives over the development of the project.

16. We consulted the Legislative Council Panel on Education on 10 December 2007. Members had no objection to presenting the funding proposal to PWSC. Some Members expressed concern that the issues raised by the resident representatives in the neighbourhood should be further addressed. HKU representatives assured Members that they would continue to liaise with the residents in this aspect².

ENVIRONMENTAL IMPLICATIONS

17. The project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). HKU has completed a Preliminary Environmental Review for the project in January 2007. The Director of Environmental Protection agreed that the project would not cause long-term environmental impact.

18. HKU has included in the project estimates the provisions required to implement suitable mitigation measures to control short-term environmental impacts to within established standards and guidelines. These include the use of silencers, mufflers, acoustic linings or shields for noisy construction activities, frequent cleaning and watering of the site, and the provision of wheel-washing facilities.

/19.

² A meeting with the resident representatives has been scheduled on 2 January 2008.

19. HKU has considered measures (e.g. adoption of typical floor layout to encourage re-use of formwork) in the planning and design stages to reduce the generation of construction waste where possible. In addition, HKU will require the contractor to reuse inert construction waste (e.g. excavated soil) on site or in other suitable construction sites as far as possible, in order to minimize the disposal of inert construction waste to public fill reception facilities. HKU will encourage the contractor to maximize the use of recycled or recyclable inert construction waste, as well as the use of non-timber formwork to further minimize the generation of construction waste.

20. HKU will also require the contractor to submit for approval a plan setting out the waste management measures, which will include appropriate mitigation measures to avoid, reduce, reuse and recycle inert construction waste. HKU will ensure that the day-to-day operations on site comply with the approved plan. HKU will require the contractor to separate the inert portion from non-inert construction waste on site for disposal at appropriate facilities. HKU will control the disposal of inert construction waste, mixed inert and non-inert construction waste and non-inert construction waste to public fill reception facilities³, sorting facilities³ and landfills respectively through a trip-ticket system.

21. HKU estimates that the project will generate in total about 29 254 tonnes of construction waste. Of these, HKU will reuse about 585 tonnes (2.0%) of inert construction waste on site, deliver 3 510 tonnes (12.0%) of inert construction waste to public fill reception facilities for subsequent reuse, and 2 048 tonnes (7.0%) of mixed inert and non-inert construction waste to sorting facilities to separate the inert from the non-inert portion. In addition, HKU will dispose of 23 111 tonnes (79.0%) of non-inert construction waste at landfills. The total cost for accommodating construction waste at public fill reception facilities and landfill sites, together with the cost for handling mixed inert and non-inert construction waste at sorting facilities, is estimated to be \$3.2 million for this project (based on a unit cost of \$27/tonne for disposal at public fill reception facilities, \$100/tonne at sorting facilities and \$125/tonne⁴ at landfills).

/HERITAGE

³ Sorting facilities and public fill reception facilities are specified in Schedule 3 and Schedule 4 respectively of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation. Disposal of inert construction waste in public fill reception facilities requires a licence issued by the Director of Civil Engineering and Development.

⁴ 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/m³), nor the cost to provide new landfills, (which is likely to be more expensive) when the existing ones are filled.

HERITAGE IMPLICATIONS

22. This project will not affect any heritage site, i.e. all declared monuments, graded historic buildings and sites of archaeological interests.

LAND ACQUISITION

23. The project does not require any land acquisition.

BACKGROUND INFORMATION

24. 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, and refers those supported proposals to the Government for consideration of bidding of funds under the established mechanism. Having examined HKU's proposal, SG, UGC has, in consultation with D Arch S, adjusted the project estimate proposed by HKU to arrive at the project estimate set out in paragraph 9 above.

25. We upgraded **53EG** to Category B in October 2005. HKU engaged consultants in October 2005 to carry out topographical survey and ground investigation, and to prepare detailed design and tender documents at a total cost of \$10.9 million. UGC charged \$8.2 million to block allocation **Subhead 8100EX** "Alterations, additions, repairs and improvements to the campuses of the UGC-funded institutions". The remaining amount of \$2.7 million was funded by HKU's private sources of funding. The consultants have completed the topographical survey, ground investigations and detailed design of the project. HKU is finalising the tender documents for the project.

26. The project will not involve any tree removal within the project site. HKU will incorporate planting proposal as part of the project, including an estimated quantity of 64 trees, 500 shrubs, 800 annuals and 200 climbing plants. Separately, for the beautification of the area and to facilitate the construction works, HKU will transplant 20 trees outside the project site along Lung Wah Street and will plant some 20 additional trees and plants in the area.

/27.

27. HKU estimates that the project will create about 250 jobs (225 for labourers and another 25 for professional/technical staff) providing a total employment of 9 000 man-months.

Education Bureau
December 2007

The University of Hong Kong
53EG – 1 800-place student residences at Lung Wah Street,
Kennedy Town

香港大學

53EG – 堅尼地城龍華街1 800個宿位的學生宿舍

Site Plan 工地平面圖

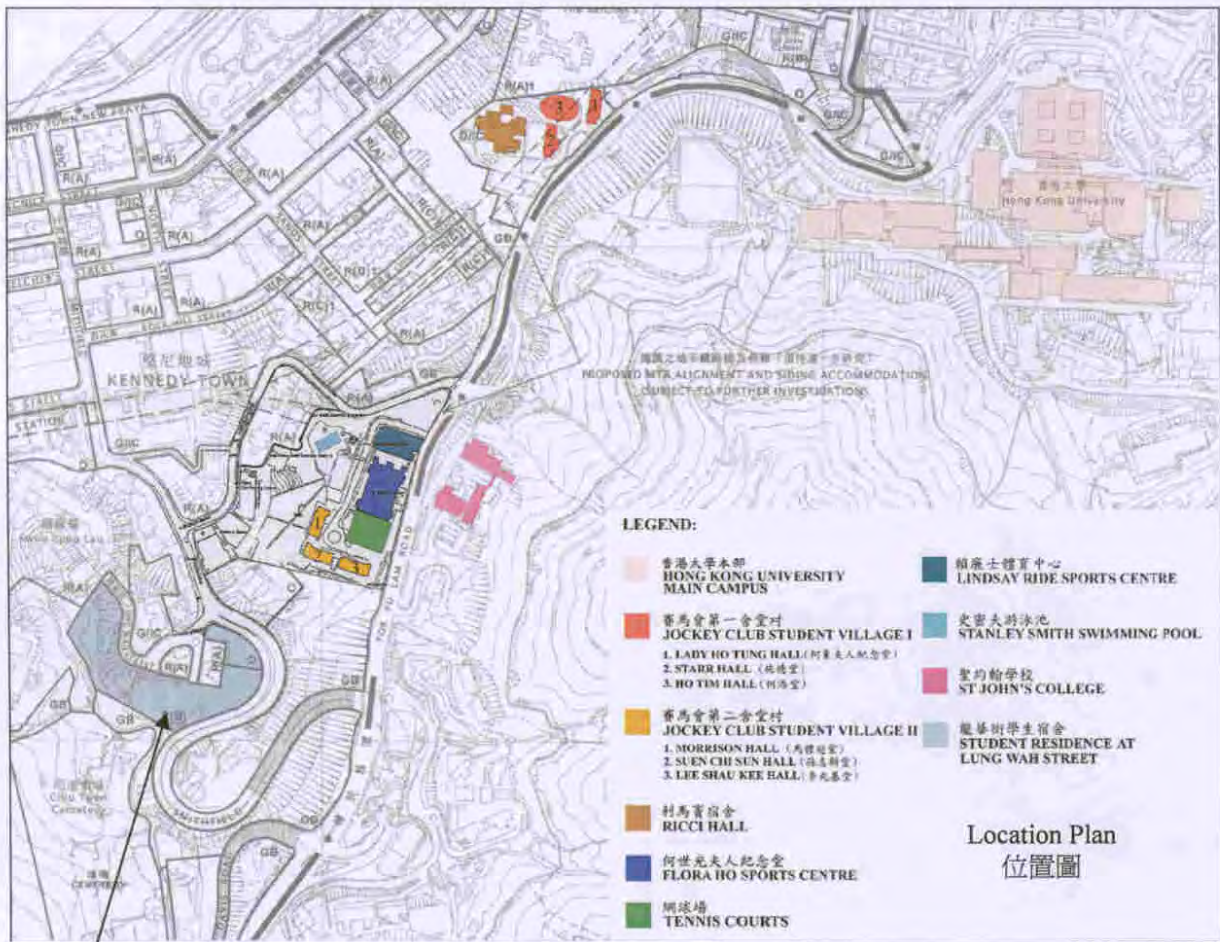


The University of Hong Kong
53EG – 1 800-place student residences at Lung Wah Street,
Kennedy Town

香港大學

53EG – 堅尼地城龍華街1 800個宿位的學生宿舍

Site Plan 工地位置圖



Site for student residences at Lung Wah Street / 龍華街學生宿舍 工地

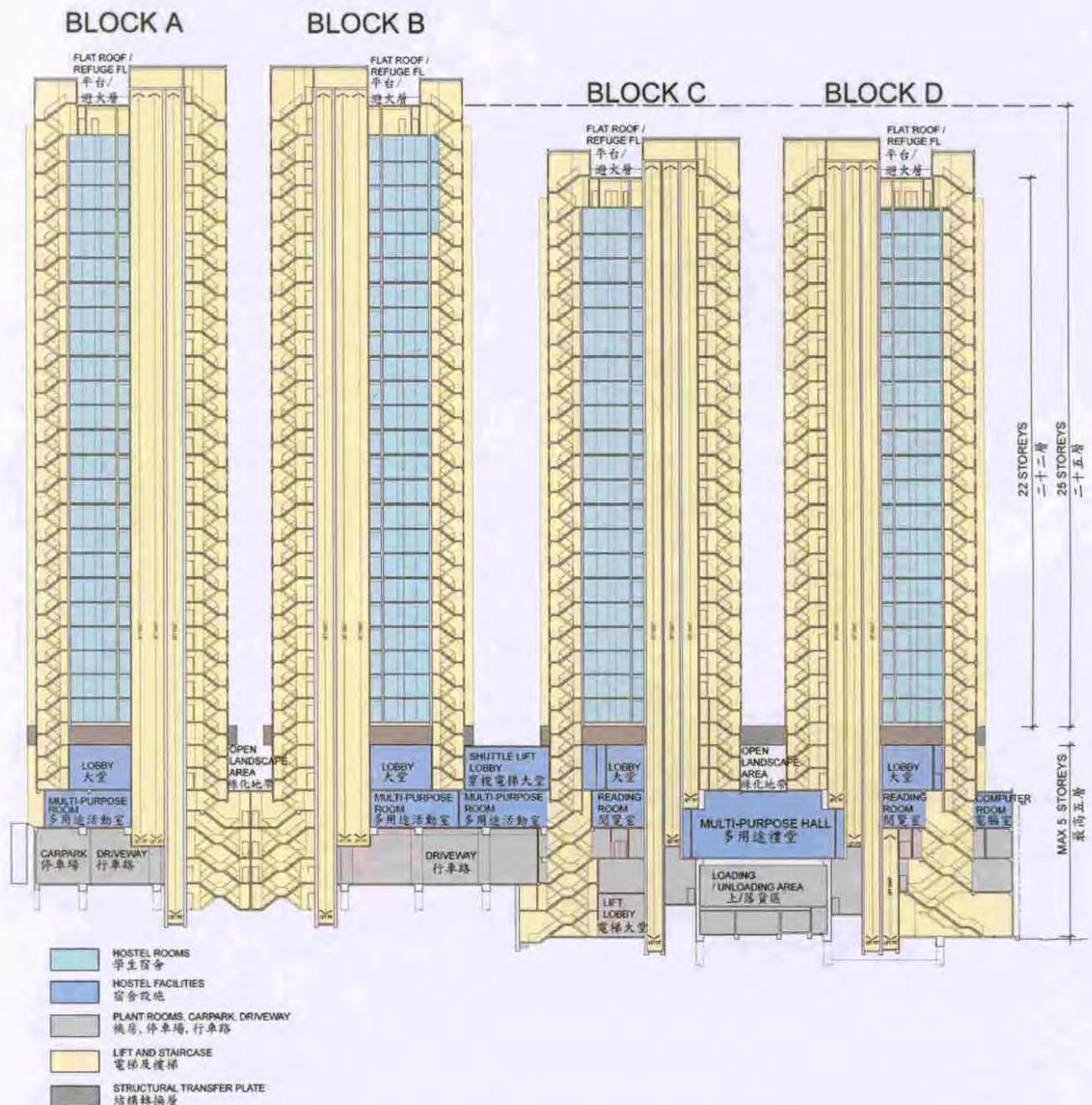
Location Plan 位置圖

The University of Hong Kong
 53EG – 1 800-place student residences at Lung Wah Street,
 Kennedy Town

香港大學

53EG – 堅尼地城龍華街1 800個宿位的學生宿舍

Sectional Plan 截面圖



**The University of Hong Kong
53EG – 1 800-place student residences at Lung Wah Street,
Kennedy Town**

香港大學

53EG – 堅尼地城龍華街1 800個宿位的學生宿舍

View of the building (artist's impression) 外觀構思圖



The University of Hong Kong
53EG – 1 800-place student residences at Lung Wah Street,
Kennedy Town

List of facilities

Facilities	No of unit	Estimated floor area in net operational floor area (NOFA) (m ²)
I. <u>Living accommodation</u>		
(a) Single bedroom	482	3 818
(b) Double bedroom	659	9 885
(c) Warden	6	744
(d) Manager/Senior Tutor	6	433
(e) Tutor	24	360
(f) Domestic staff	8	248
II. <u>Common space</u>		
(a) Lounge	90	2 700
(b) Reading room	4	220
(c) Meeting/conference room	4	120
(d) Guest waiting area	4	56
(e) Computer room/Informal study room	4	260
(f) Student association office	4	120
(g) Multi-purpose hall with cafeteria	1	720
(h) Multi-purpose area	4	620
III. <u>Support space including general office, warden office, laundry and store room</u>		578

20 882

The University of Hong Kong
53EG – 1 800-place student residences at Lung Wah Street,
Kennedy Town

Breakdown of the estimate for consultants' fees ^(Note 1)

		Estimated man- months	Average MPS* salary point	Multiplier <small>(Note 2)</small>	Estimated fees (\$ million)
(a) Consultants' fees ^(Note 3)					
(i)	Tender assessment	Professional	–	–	0.2
(ii)	Contract administration	Professional	–	–	7.6
(b) Site supervision ^(Note 4)					
		Professional	72	38	1.6
		Technical	104	14	1.6
Sub-total					17.5
(c) Out-of-pocket expenses ^(Note 5)					
	Lithography and other direct expenses				0.1
Total					17.6

* **MPS = Master Pay Scale**

Notes

1. Having examined the consultants' fees estimated by HKUST, Director of Architectural Services considers the figures acceptable.
2. A multiplier of 1.6 is applied to the average MPS point to estimate the staff costs for contract staff employed by HKU direct on the project. (As at 1 April 2007, MPS point 38 = \$56,945 per month and MPS point 14 = \$18,840 per month.)

3. The consultants' fees for tender assessment and contract administration are devised in accordance with the existing consultancy agreements obtained through competitive tendering for the design and construction of **53EG**. The assignment will only be executed subject to Finance Committee's approval to upgrade **53EG** to Category A.
4. HKU will only know the actual man-months and actual costs for site supervision after completion of the construction works.
5. Out-of-pocket expenses are the actual costs incurred. The consultants are not entitled to any additional payment for the overheads or profit in respect of these items.

Enclosure 6 to PWSC(2007-08)71

**The University of Hong Kong
53EG – 1 800-place student residences at Lung Wah Street,
Kennedy Town**

Breakdown of the construction floor area (CFA) vis-à-vis the construction unit cost

(a) Breakdown of CFA

	Estimated floor area (m²)
Net operational floor area (NOFA)	20 882
Circulation areas, toilets and carparks	19 298
Mechanical and electrical plants	1 330
CFA	<hr/> 41 510 <hr/>

(b) NOFA / CFA ratio 50.3%

(c) Estimated construction unit cost (represented by the building and building services costs) \$9,745 per m² of CFA (in September 2007 prices)