

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

**HEAD 708 – CAPITAL SUBVENTIONS AND MAJOR SYSTEMS AND
EQUIPMENT**

Medical Subventions

78MM – Ward renovation in Kwai Chung Hospital

Members are invited to recommend to the Finance Committee the upgrading of **78MM** to Category A at an estimated cost of \$45.1 million in money-of-the-day prices for the renovation of in-patient wards and clinical areas in Kwai Chung Hospital.

PROBLEM

The physical conditions of the existing in-patient wards and clinical areas in Kwai Chung Hospital (KCH) have deteriorated into an undesirable state.

PROPOSAL

2. The Secretary for Food and Health proposes to upgrade **78MM** to Category A at an estimated cost of \$45.1 million in money-of-the-day (MOD) prices for carrying out renovation of in-patient wards and clinical areas in KCH.

/PROJECT

PROJECT SCOPE AND NATURE

3. The scope of **78MM** comprises the renovation works in the following areas of KCH –

- (a) nine in-patient wards in Blocks L/M and G/H;
- (b) public areas at ward levels of Blocks L/M and G/H;
and
- (c) clinical areas of Service Block¹.

4. The renovation works will cover –

- (a) repairs to spalling concrete;
- (b) re-painting of walls;
- (c) replacement of floor and ceiling tiles;
- (d) replacement of plumbing and drainage pipes in ward toilets, showers, dirty utility rooms and treatment rooms; and
- (e) repairs and replacement of building services installations.

_____ A site plan of KCH is at Enclosure 1.

5. Subject to funding approval of the Finance Committee (FC), we plan to commence the renovation works in July 2013 for completion in December 2014. The wards will be renovated in phases, with each phase covering two wards and requiring three months to complete tentatively. The first pair of renovated wards is therefore expected to be available for use in October 2013. KCH will remain functional at all times and any disruption of services, if unavoidable, will be kept to a minimum.

/JUSTIFICATION

¹ Service Block mainly houses allied health departments such as physiotherapy, occupational therapy, medical social services, etc. and administrative departments.

JUSTIFICATION

6. KCH was established in 1981. After several decades of heavy utilization, the physical conditions of the existing in-patient wards have deteriorated into an undesirable state with problems of spalling concrete, water leakage and electrical malfunctioning. While routine maintenance and ad-hoc repair works have been carried out at KCH over the years, there has been no major refurbishment or renovation since the commissioning of the hospital. Water leakage and blockage of the drainage system in in-patient wards and patient activity areas are perennial problems at KCH, causing not only disruptions to ward operations, but also significant infection control risks.

7. In order to ensure safety of patients, staff and the general public, comply with infection control requirements, and facilitate effective service provision, there is an imminent need to renovate those in-patient wards and clinical areas which are in very unfavourable condition.

8. The existing conditions of the facilities and the physical setting at KCH lack the capability to facilitate the adoption of modern delivery of psychiatric care. To enhance the hospital's capacity to provide quality services in line with the international trend of increasingly focusing on community and ambulatory services in treating mental illness, the Chief Executive announced in the 2013 Policy Address the decision to redevelop KCH. A complete redevelopment of KCH will be part of the modernization of mental health services in Hong Kong, which aims to better meet growing service demand and deliver quality services. Tentatively, subject to the funding approval of the FC, the redevelopment project will be carried out in three phases starting from mid-2015 for completion in early 2023.

9. The renovation project aims to bring about immediate improvement to the physical condition of the hospital that could not wait until the redevelopment. The proposed renovation works are the bare essential for effective and efficient operations of KCH until its redevelopment. There is no overlapping in the scopes of the proposed renovation and the redevelopment project.

/FINANCIAL

FINANCIAL IMPLICATIONS

10. We estimate the capital cost of the project to be \$45.1 million in MOD prices (please see paragraph 11 below), broken down as follows –

	\$ million	
(a) Building ²	25.4	
(b) Building services ³	12.1	
(c) Consultants' fees for	1.1	
(i) contract administration	0.3	
(ii) site supervision	0.8	
(d) Contingencies	2.6	
Sub-total	41.2	(in September 2012 prices)
(e) Provision for price adjustment	3.9	
Total	45.1	(in MOD prices)

Owing to lack of sufficient in-house resources, the Hospital Authority (HA) will engage consultants to undertake contract administration and construction supervision for the project. A detailed breakdown of the estimate for consultants' fees is at Enclosure 2. The construction floor area (CFA) of this project is about 10 217 square metres (m²). The estimated unit cost for renovation, represented by the building and the building services costs, is \$3,670 per m² of CFA in September 2012 prices. We consider this unit cost reasonable as compared with that of similar hospital renovation projects.

/11.

² Building works comprise repairs to spalling concrete, re-painting of walls, replacement of floor and ceiling tiles of the building, etc..

³ Building services works comprise electrical installations, ventilation and air-conditioning, replacement of plumbing and drainage pipes and fire services installation, etc.

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

Year	\$ million (Sept 2012)	Price adjustment factor	\$ million (MOD)
2013 – 14	21.8	1.06225	23.2
2014 – 15	18.4	1.12599	20.7
2015 – 16	1.0	1.19354	1.2
	41.2		45.1

12. We have derived the MOD estimates on the basis of the Government's latest set of assumptions on the trend rate of change in the prices of public sector building and construction output for the period from 2013 to 2016. HA will award the contract on a lump-sum basis because the scope of the works can be clearly defined in advance.

13. We estimate that no additional annual recurrent expenditure is required for this renovation project.

PUBLIC CONSULTATION

14. We consulted the Kwai Tsing District Council (K&TDC) on the proposed project on 11 December 2012. Members of K&TDC supported the proposed renovation project.

15. We consulted the Legislative Council Panel on Health Services on 18 February 2013. Members of the Panel supported the project.

/ENVIRONMENTAL

ENVIRONMENTAL IMPLICATIONS

16. This is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). This project will not cause long term environmental impact. We have included in the project estimates the cost to implement suitable mitigation measures to control short term environmental impacts.

17. The proposed renovation works will only generate very little construction waste. HA will require the consultant to fully consider measures to minimise the generation of construction waste and to reuse/recycle construction waste as much as possible in the implementation of the renovation project. During renovation, we will control noise, dust and site run-off nuisances to within established standards and guidelines through the implementation of mitigation measures in the contract. These include the use of silencers, mufflers, acoustic lining or shields and the building of barrier wall for noisy construction activities, frequent cleaning and watering of the site, and the provision of wheel-washing facilities to prevent dust nuisance.

18. At the planning and design stages, we have considered measures to reduce the generation of construction waste where possible (e.g. using hoardings of materials can be recycled or reused in other projects). In addition, we will require the contractor to reuse inert construction waste on site or in other suitable construction sites as far as possible, in order to minimise the disposal of inert construction waste at public fill reception facilities⁴. We will encourage the contractor to maximise the use of recycled/recyclable inert construction waste, and the use of non-timber formwork to further reduce the generation of construction waste.

19. At the construction stage, we will require the contractor to submit for approval a plan setting out the waste management measures, which will include appropriate mitigation means to avoid, reduce, reuse and recycle inert construction waste. We will ensure that the day-to-day operations on site comply with the approved plan. We will require the contractor to separate the inert portion from

/non-inert

⁴ Public fill reception facilities are specified in Schedule 4 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.

non-inert construction waste on site for disposal at appropriate facilities. We will control the disposal of inert construction waste and non-inert construction waste at public fill reception facilities and landfills respectively through a trip-ticket system.

20. We estimate that the project will generate in total about 350 tonnes of construction waste. Of these, we will deliver about 3 tonnes (0.9%) of inert construction waste to public fill reception facilities for subsequent reuse and we will dispose of the remaining 347 tonnes (99.1%) of non-inert construction waste at landfills. The total cost for accommodating construction waste at public fill reception facilities and landfill sites is estimated to be about \$43,456 for this project (based on a unit cost of \$27 per tonne for disposal at public fill reception facilities and \$125 per tonne⁵ at landfills).

HERITAGE IMPLICATIONS

21. This project will not affect any heritage site, i.e. all declared monuments, proposed monuments, graded historic sites/buildings, sites of archaeological interest and Government historic sites identified by the Antiquities and Monuments Office.

LAND ACQUISITION

22. This project does not require any land acquisition.

BACKGROUND INFORMATION

23. We upgraded **78MM** to Category B in September 2012.

24. KCH is a psychiatric hospital located in the Kowloon West Cluster, providing psychiatric care to those with mental health problems in Kwai Tsing, Tsuen Wan, North Lantau, Mongkok, Sham Shui Po and Wong Tai Sin districts.

/It

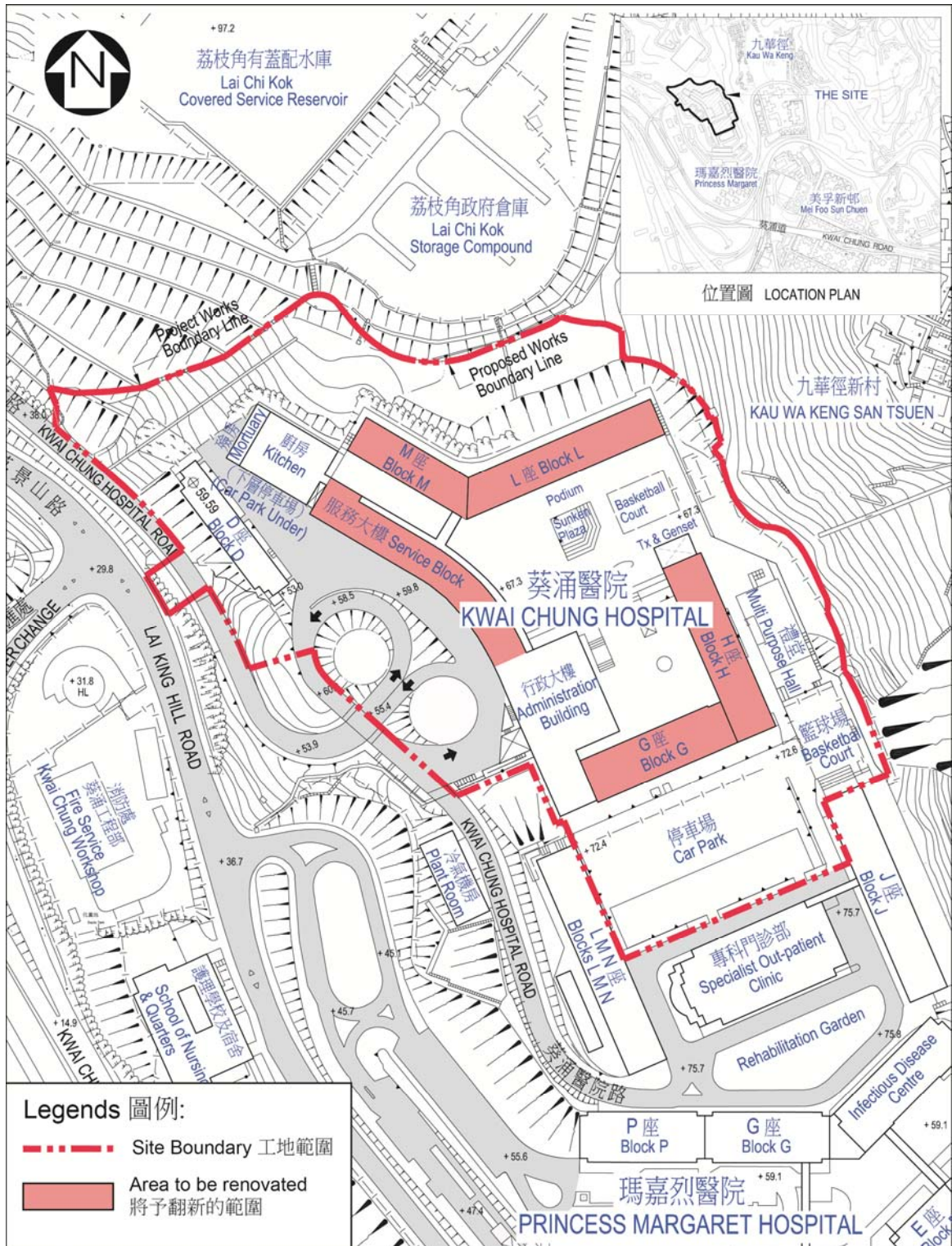
⁵ This estimate has taken into account the cost for developing, operating and restoring the landfills after they are filled and the aftercare required. It does not include the land opportunity cost for existing landfill sites (which is estimated at \$90 per m³), nor the cost to provide new landfills (which is likely to be more expensive) when the existing ones are filled.

It currently has 920 beds and accounts for around a quarter of the total psychiatric bed capacity in the HA. KCH provides acute and chronic services with heavy emphasis on in-patient services for general adult psychiatry. The hospital has subsequently developed child and adolescent services and psycho-geriatric services, established a substance abuse assessment unit and a psychiatric unit for learning disabilities. Day hospital and community-based services have also become important components of the services it provides.

25. We engaged consultants to carry out design and tendering. The total cost of the above-mentioned services is about \$0.8 million. We have charged this amount to block allocation **Subhead 8100MX** “Hospital Authority – improvement works, feasibility studies, investigations and pre-contract consultancy services for building projects”. The above consultancy services have been completed.

26. The proposed ward renovation works will not involve any tree removal or planting proposals.

27. We estimate that the proposed works will create about 40 jobs (35 for labourers and another 5 for professional/technical staff) providing a total employment of 630 man-months.



78MM – Ward Renovation in Kwai Chung Hospital 葵涌醫院病房翻新工程

Site Plan of Existing Kwai Chung Hospital (Not to Scale)

葵涌醫院現時平面圖 (不按比例)

78MM – Ward renovation in Kwai Chung Hospital

Breakdown of the estimates for consultants' fees
(in September 2012 prices)

Consultants' staff costs ^(Note 1)		Estimated man-months	Average MPS* salary point	Multiplier	Estimated fee (\$ million)
(i) Contract administration (Note 2)	Professional	--	--	--	0.1
	Technical	--	--	--	0.2
				Sub-total	0.3
(ii) Construction supervision (Note 2)	Professional	--	--	--	0.3
	Technical	--	--	--	0.5
				Sub-total	0.8
				Total	1.1

* MPS = Master Pay Scale

Notes

1. The actual man-months and actual fees will only be known after completion of the renovation works.
2. The consultants' staff costs for contract administration and construction supervision are calculated in accordance with the existing consultancy agreement for provision of all-in consultancy services for 78MM. The assignment will only be executed subject to Finance Committee's approval to upgrade 78MM to Category A.