ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 703 – BUILDINGS Law and Order – Correctional services 76LC – Redevelopment of Tai Lam Centre for Women

Members are invited to recommend to Finance Committee the upgrading of **76LC** to Category A at an estimated cost of \$946.6 million in money-of-theday prices for the redevelopment of Tai Lam Centre for Women.

PROBLEM

We need to partially redevelop the Tai Lam Centre for Women (TLCW) to alleviate its problem of overcrowding and enhance its facilities.

PROPOSAL

2. The Director of Architectural Services, with the support of the Secretary for Security, proposes to upgrade **76LC** to Category A at an estimated cost of \$946.6 million in money-of-the-day (MOD) prices for the partial redevelopment of the TLCW.

/PROJECT

PROJECT SCOPE AND NATURE

3. The proposed in-situ redevelopment of TLCW, which is located at Tai Lam Chung Road in Tuen Mun, will comprise two phases of work. The scope of the proposed works involves –

Phase 1

- (a) construction of a new complex block to house the following facilities
 - a hospital unit with 60 beds for general patients in the institution (3 wards with 20 beds each) and 10 pairs of bedstead of maternity and baby. There will also be an out-patient clinic, a dental treatment room, a dispensary, an x-ray room, and other supporting facilities;
 - (ii) a rehabilitation unit including a counselling room for inmates, an activity room, a religious service room, a parent-child centre, a multimedia learning centre-cum-classroom, a library and other supporting facilities;
 - (iii) a Category A prisoner¹ unit including 44 cells, day rooms, workshops, a dining hall and other supporting facilities;

Phase 2

1

- (b) demolition of the existing hospital block and a dormitory block to make way for construction of a new block providing 240 penal places for remands. The major facilities to be provided at the new remand block will include day rooms, dining halls, workshops, a religious service room, a library and other supporting facilities; and
- (c) demolition of the existing block accommodating the communication room, reception office, gate lodge and visit room and in-situ reprovisioning of these facilities in a new multi-purpose block to be constructed.

/4.

Category A prisoners are those sentenced to imprisonment of 12 years or above.

4. Six other existing blocks will be retained². The location and site plan, and artist's impression drawing are at Enclosures 1 to 5. Subject to funding approval of the Finance Committee, we plan to start the construction works of phase 1 in August 2012 for completion by end 2014, while phase 2 will start after phase 1 for completion in November 2016. The institution will maintain full operation during the redevelopment period and CSD will enhance security measures in the institution during the redevelopment.

JUSTIFICATION

Overcrowding

5. TLCW is the only maximum security institution for female offenders under the Correctional Services Department. For the past five years, the average daily penal population of TLCW was 464, representing an average occupancy rate of 176% as compared to the design capacity of 263. Overcrowding is the most serious in the hospital, remand unit and Category A prisoner unit, with an average occupancy rate of 162%, 533% and 115% respectively. Although the commissioning of the redeveloped Lo Wu Correctional Institution (LWCI) in mid-2010 has alleviated the overcrowding problem in most of the female institutions³, as LWCI is only a medium security institution, it cannot take over remands and Category A prisoners from the TLCW to relieve its overcrowding problem. Hence, there is a pressing need to redevelop TLCW to increase its capacity. After redevelopment, the total number of penal places will increase from 263 to 371.

/Aging

² The six existing blocks to be retained include one administration block, three dormitory blocks and two operational blocks for kitchen, laundry and dining purposes.

³ Currently, there are six panel institutions for women - Nei Kwu Correctional Institution, Lai King Correctional Institution, Wai Lan Rehabilitation Centre, Chi Lan Rehabilitation Centre, LWCI and TLCW.

Aging facilities

6. As the TLCW was converted from a former government staff quarters and has been in operation for 43 years, most of its core facilities are outdated and aging. Their standard can hardly meet the current requirements of penal management and security. We therefore propose to enhance the custodial facilities of TLCW through better design⁴ and installation of new security control systems⁵.

7. Moreover, the provision of rehabilitation facilities for inmates is inadequate. Currently, it is difficult for TLCW to organise activities for inmates as there are not sufficient activity rooms. The current learning and rehabilitation facilities, such as library, computer rooms and classrooms are not sufficient and that hinder inmates' development in these areas. Furthermore, the existing medical, nursing and health facilities can only provide basic services which do not meet the standard nowadays. To provide a better environment and services for persons in custody, we propose to provide a rehabilitation unit in the new complex block with additional and upgraded facilities.

FINANCIAL IMPLICATIONS

8. We estimate the capital cost of the project to be \$946.6 million in MOD prices (please see paragraph 10 below), broken down as follows –

		\$ million
(a)	Site works and demolition	13.0
(b)	Piling	33.5
(c)	Site formation and geotechnical works	25.7

/(d)

⁴ For example, optimal design of self-contained type accommodation will be adopted in the new blocks (i.e. day room, sleeping accommodation and workshop are arranged under one roof for a specific type of inmates) to shorten escort time and route.

⁵ For example, new electro-mechanical security locks will be installed for detention cells.

\$ million

(d)	Building ⁶		361.1	
(e)	Building services ⁷		144.7	
(f)	Drainage		30.1	
(g)	External works		34.3	
(h)	Additional energy conservation measures		10.4	
(i)	Furniture and equipment ⁸		12.0	
(j)	Consultants fees for		3.8	
	(i) contract administration	3.0		
	(ii) management of resident site staff	0.8		
(k)	Remuneration of resident site staff		2.2	
(1)	Contingencies		67.0	
	Sub-total		737.8	(in September
(m)	Provision for price adjustment		208.8	2011 prices)
	Total		946.6	(in MOD prices)
				/9

⁶ Building works comprise construction of the substructure and superstructure of the buildings, which include a complex block consisting of hospital unit, rehabilitation unit and Category A prisoner unit, a remand block and a multi-purpose function block. The building works will be carried out under site constraints, high security conditions and phasing requirements.

⁷ Building service works comprise electrical installation, ventilation and air-conditioning, fire protection system, lifts, and security systems etc. Such works include the upgrading of existing building service installations, interfacing works with existing systems and temporary provisions for maintaining the normal operation during construction.

⁸ The estimated cost of furniture and equipment is based on an indicative list of items required.

9. Owing to insufficient in-house resources, we propose to engage consultants to undertake contract administration and site supervision of the project. A detailed breakdown of the estimates for the consultants' fees and resident site staff costs by man-month is at Enclosure 6. The construction floor area (CFA) of **76LC** is about 13 700 square metres (m^2) . The estimated construction unit cost, represented by the building and the building services costs, is \$36,920 per m² of CFA in September 2011 prices. We consider this reasonable as compared with similar projects built by the Government.

Year	\$ million (Sept 2011)	Price adjustment factor	\$ million (MOD)
2012 – 13	20.0	1.05325	21.1
2013 - 14	90.0	1.11118	100.0
2014 - 15	120.0	1.17229	140.7
2015 - 16	130.0	1.23677	160.8
2016 - 17	150.0	1.30479	195.7
2017 – 18	95.0	1.37656	130.8
2018 - 19	75.0	1.45227	108.9
2019 - 20	57.8	1.53214	88.6
	737.8		946.6

10.

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

11. 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 2012 to 2020. We will deliver the project through a design-and-build contract. We will award the contract on a lump-sum basis because we can clearly define the scope of the works in advance. The contract will provide for price adjustments.

12. We estimate the annual recurrent expenditure arising from this project to be \$8.9 million.

PUBLIC CONSULTATION

13. We consulted the Environment, Hygiene and District Development Committee of the Tuen Mun District Council (TMDC) on 18 March 2011 on the proposed redevelopment of the TLCW. A letter was also sent to the Tuen Mun Rural Committee (TMRC) on 31 March 2011 to consult village representatives on the project. The concerned committee of TMDC supported the redevelopment project. The TMRC and relevant village representatives had no comment on the project.

14. We consulted the Legislative Council Panel on Security on 7 June 2011. Members supported the proposal in principle. Some Members requested information (e.g. location, penal capacity and occupancy rate etc.) on the 10 penal institutions which have been in operation for 40 years or more by 2012 and the vocational training provided for prisoners. We provided the relevant information to the Panel on 21 May 2012.

ENVIRONMENTAL IMPLICATIONS

15. The project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). We completed a Preliminary Environment Review (PER) in September 2010 which concluded that the project would not cause long-term adverse environmental impact. We have included in the project estimates the cost to implement suitable mitigation measures to control short-term environmental impacts.

16. During construction, we will control noise, dust and site runoff nuisances to levels within established standards and guidelines through the implementation of mitigation measures as required. These include the use of silencers, mufflers, acoustic lining or shields and the building of barrier walls for noisy construction activities, frequent cleaning and watering of the site, and the provision of wheel-washing facilities to prevent dust nuisance.

/17.

17. At the planning and design stages, we have considered measures to reduce the generation of construction waste where possible (e.g. using metal site hoardings and signboards so that these materials can be recycled or reused in other projects). In addition, we will require the contractor to reuse inert construction waste (e.g. use of excavated materials for filling) within the 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 facilities⁹. 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.

18. 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 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.

19. We estimate that the project will generate in total about 16 530 tonnes of construction waste. Of these, we will reuse about 5 990 tonnes (36.3%) of inert construction waste on site and deliver 8 750 tonnes (52.9%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 1 790 tonnes (10.8%) 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 \$460,000 for this project (based on a unit cost of \$27 per tonne for disposal at public fill reception facilities and \$125 per tonne¹⁰ at landfills).

/HERITAGE

⁹ Public fill reception facilities are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap.354N). Disposal of inert construction waste in public fill reception facilities requires a licence issued by the Director of Civil Engineering and Development.

¹⁰ 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.

HERITAGE IMPLICATIONS

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

LAND ACQUISITION

21. The project does not require any land acquisition.

ENERGY CONSERVATION MEASURES

22. This project has adopted various forms of energy efficient features, including –

- (a) variable refrigerant volume (VRV) air-conditioning system;
- (b) T5 energy efficiency fluorescent tubes with electronic ballast and lighting control by occupancy sensors;
- (c) light emitting diode (LED) type exit signs;
- (d) heat pump for domestic hot water; and
- (e) automatic on/off switching of lighting and ventilation fan inside the lift.

23. For renewable energy technologies, we will install a solar hot water system and a photovoltaic system for environmental benefits.

24. For green features, we will provide greening on rooftop for environmental and amenity benefits.

25. For recycled features, we will provide rainwater recycling system for irrigating the greenery.

/26.

26. The total estimated additional cost for adoption of the energy conservation measures is around \$10.4 million (including about \$1.0 million for energy efficient features), which has been included in the cost estimate of this project. The energy efficient features will achieve 5% energy savings in the annual energy consumption with a payback period of about 8 years.

BACKGROUND INFORMATION

27. We upgraded **76LC** to Category B in August 2009. We employed contractors to carry out topographical survey in October 2009 and ground investigations in May 2010. We engaged consultants to carry out geotechnical assessment and utility mapping in October 2009 and carry out a PER, asbestos survey, traffic impact assessment, preliminary drainage and waterwork impact assessment in November 2009. We also employed a quantity surveying consultant to prepare the tender documents in July 2011. We charged the total cost of \$1.9 million to block allocation **Subhead 3100GX** "Project feasibility studies, minor investigations and consultants' fees for items in Category D of the Public Works Programme". The contractors and consultants have completed all the above consultancy services and works.

28. The only existing tree within the project boundary will be preserved. We will incorporate planting proposals as part of the project, including planting of about 500 shrubs and 10 000 ground covers.

29. We estimate that the proposed works will create about 285 jobs (260 for labourers and another 25 for professional/technical staff) providing a total employment of 9 400 man-months.

Security Bureau June 2012





Enclosure 2 附件二



Enclosure 3 附件三



Enclosure 4 附件四



76LC Redevelopment of Tai Lam Centre for Women 重建大欖女懲教所

PERSPECTIVE VIEW OF PROPOSED DEVELOPMENT 擬 議 項 目 構 思 透 視 圖

Enclosure 5 附件五



76LC Redevelopment of Tai Lam Centre for Women 重建大欖女懲教所

PERSPECTIVE VIEW OF NEW COMPLEX BLOCK AND REMAND BLOCK 新綜合大樓及還押犯大樓構思透視圖

Enclosure 6 to PWSC(2012-13)28

76LC – Redevelopment of Tai Lam Centre for Women

Breakdown of the estimates for consultants' fees and resident site staff costs (in September 2011 prices)

 (a) Consultant fees' for contract administration^(Note 2) (b) Resident site staff costs Professional				Estimated man- months	Average MPS* salary point	Multiplier (Note 1)	Estimated fee (\$ million)
$\begin{array}{ccc} \text{contract} & \text{Technical} & & & 0.8 \\ \text{administration}^{(Note 2)} & \text{Technical} & & & & 0.8 \\ \text{Sub-total} & 3.0 \\ \end{array}$ $\begin{array}{ccc} \text{(b)} & \text{Resident site staff costs} & \text{Professional} & & & & & \\ \text{Technical} & 88.5 & 14 & 1.6 & 3.0 \\ & & & & & & & & & & & & \\ & & & & & $	(a)	Consultant fees' for	Professional				2.2
Sub-total 3.0 Sub-total 3.0 (b) Resident site staff costs Professional		contract administration ^(Note 2)	Technical				0.8
(b) Resident site staff costs Professional Technical						Sub-total	3.0
(Note 3) Technical 88.5 14 1.6 3.0 Sub-total 3.0 Comprising – (i) Consultants' fees for management of resident site staff 0.8 (ii) Remuneration of resident site staff 2.2 Total 6.0	(b)	Resident site staff costs	Professional				
Sub-total 3.0 Comprising – 0.8 (i) Consultants' fees for management of resident site staff 0.8 (ii) Remuneration of resident site staff 2.2 Total 6.0		(Note 3)	Technical	88.5	14	1.6	3.0
Comprising – (i) Consultants' fees for management of resident site staff (ii) Remuneration of 2.2 Total 6.0						Sub-total	3.0
 (i) Consultants' fees for management of resident site staff (ii) Remuneration of resident site staff 2.2 Total 6.0 		Comprising –					
(ii) Remuneration of resident site staff2.2Total6.0		(i) Consultants' fees for management of resident site staff				0.8	
Total 6.0		(ii) Remuneration of resident site staff				2.2	
						Total	6.0

*MPS = Master Pay Scale

Notes

- 1. A multiplier of 1.6 is applied to the average MPS salary point to estimate the cost of resident site staff supplied by the consultants. (As at now, MPS point 14 = \$21,175 per month)
- 2. The consultants' staff cost for contract administration is calculated in accordance with the existing consultancy agreement for the design and construction of **76LC**. The assignment will only be executed subject to the Finance Committee's approval to upgrade **76LC** to Category A.
- 3. The actual man-months and actual costs will only be known after completion of the construction works.