

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

### **HEAD 703 – BUILDINGS**

**Food Supply – Abattoirs, wholesale markets, and other territory-wide food  
supply facilities**

**49FS – Extension of Man Kam To food inspection facilities**

Members are invited to recommend to Finance Committee the upgrading of **49FS** to Category A at an estimated cost of \$176.1 million in money-of-the-day prices for the extension of Man Kam To food inspection facilities.

### **PROBLEM**

There are insufficient food inspection facilities and vehicle holding areas at the Man Kam To Food Control Office (MKTFCO).

### **PROPOSAL**

2. The Director of Architectural Services, with the support of the Secretary for Food and Health, proposes to upgrade **49FS** to Category A at an estimated cost of \$176.1 million in money-of-the-day (MOD) prices for the extension of Man Kam To food inspection facilities.

**/PROJECT .....**

## PROJECT SCOPE AND NATURE

3. The project covers three neighbouring sites with a total area of 1 363 square metres (m<sup>2</sup>) at Man Kam To Closed Area. The proposed scope of works under **49FS** includes –

- (a) demolition of existing structures;
- (b) widening and upgrading works of an access road to facilitate maneuvering of large vehicles and construction of a new underground pedestrian walkway for internal staff access between the work sites;
- (c) provision of 23 parking spaces capable of fitting large vehicles (with capacity up to 44 tonnes) for inspection and detention; and
- (d) provision of ancillary facilities including three inspection rooms, six interview rooms, two duty rooms, one composite house for detector dogs to rest, three walk-in freezer rooms and three walk-in chiller rooms with back-up power supply/emergency generator for storage of detained food.

———— A site layout plan is at Enclosure 1 and the view of the proposed development  
———— (artist's impression) is at Enclosure 2. We plan to start the extension works in July 2010 for completion in December 2012.

## JUSTIFICATION

4. By virtue of the agreement between the Governments of Hong Kong Special Administrative Region and Shenzhen in 1998, vehicles carrying fresh food like vegetables, fish, meat, poultry and eggs from the Mainland must enter Hong Kong through the Man Kam To Boundary Control Point. Frontline staff of the Centre for Food Safety (CFS) under the Food and Environmental Hygiene Department carry out daily random inspections on vehicles carrying imported food at the MKTFCO, verify certification documents accompanying each imported food consignment, check the seals on vehicles, and collect samples of various food categories for chemical, microbiological and other tests.

5. The MKTFCO came into operation in 1996. It is a modest establishment with five ancillary inspection parking spaces designed for inspection of vehicles under five tonnes. With the steady increase in volume of food supplied from the Mainland to Hong Kong (the number of food vehicles has increased from 340 per day in 2007 to the present 400 per day) and vehicles over five tonnes becoming more and more common, the existing facilities have become inadequate to meet CFS's operational requirements, particularly during peak hours (e.g. bunching of vegetable trucks crossing the border in the evening).

6. The Administration is in the process of preparing a new Food Safety Bill, the proposals of which include enhancing control of certain high risk imported food categories. When the legislation comes into force, the workload at the MKTFCO is expected to increase accordingly.

7. After the completion of **49FS**, we expect that the handling capacity of the MKTFCO can be increased from about 50 000 food vehicles to 100 000 food vehicles per year. The current capacity and operation of the MKTFCO will not be affected during the implementation of the extension works.

## FINANCIAL IMPLICATIONS

8. We estimate the capital cost of the project to be \$176.1 million in MOD prices (please see paragraph 9 below), broken down as follows –

	<b>\$ million</b>
(a) Demolition	2.8
(b) Site works	7.8
(c) Building	30.4
(d) Building services	20.1
(e) Drainage	8.8
(f) External works	64.9

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		<b>\$ million</b>	
(g)	Additional energy conservation measures	1.4	
(h)	Furniture & equipment <sup>1</sup>	3.9	
(i)	Consultants' fees	4.0	
	(i) contract administration	3.6	
	(ii) management of resident site staff	0.4	
(j)	Remuneration of resident site staff	6.6	
(k)	Contingencies	14.7	
	Sub-total	165.4	(in September 2009 prices)
(l)	Provision for price adjustment	10.7	
	Total	176.1	(in MOD prices)

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-months is at Enclosure 3. The construction floor area (CFA) of **49FS** is 1 363 square metres (m<sup>2</sup>). The estimated construction unit cost, represented by building and building services costs, is \$37,051 per m<sup>2</sup> of CFA in September 2009 prices. We consider the estimated construction unit cost reasonable as compared to that of other project built by the Government.

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<sup>1</sup> The estimated cost of furniture and equipment is based on an indicative list of items required.

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

Year	\$ million (Sept 2009)	Price adjustment factor	\$ million (MOD)
2010 – 2011	12.0	1.02000	12.2
2011 – 2012	40.0	1.04040	41.6
2012 – 2013	64.0	1.06121	67.9
2013 – 2014	28.0	1.08243	30.3
2014 – 2015	14.0	1.11220	15.6
2015 – 2016	7.4	1.14557	8.5
	165.4		176.1

10. We have derived the MOD estimates 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 2010 to 2016. 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.

11. At present, the annual recurrent expenditure for the MKTFCO is \$17.5 million. We estimate the additional annual recurrent expenditure upon completion of the project to be \$23.6 million.

## **PUBLIC CONSULTATION**

12. The Government consulted the Ta Kwu Ling Rural Committee and Sheung Shui Rural Committee on 25 May 2009. Both Committees supported the project but expressed concern over the noise and light pollution the enlarged facilities may cause. They asked that mitigation measures be taken to minimise the nuisance to villagers living in the vicinity. Taking into account their concerns, the Government will adopt appropriate design measures to minimise the noise level. We will also select suitable lighting and adjust the lighting angle in order to minimise light nuisance to nearby villagers as far as possible.

13. The Government consulted the North District Council on 11 June 2009. The District Council agreed that the Government needed additional facilities for inspection of imported food and raised no objection to the project. We will take into account their views on the proposed project, such as ensuring the site entrance is wide enough in order to reduce the traffic impact in the neighbouring area.

14. We also consulted the Legislative Council Panel on Food Safety and Environmental Hygiene on 10 November 2009. The Panel supported the proposal.

### **ENVIRONMENTAL IMPLICATIONS**

15. This is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). Architectural Services Department has completed a Preliminary Environmental Review (PER) and Director of Environmental Protection has agreed to its findings. The PER concluded that with the provision of the recommended mitigation measures, the project would have no long term adverse environmental impact.

16. During construction, we will control noise, dust and site runoff nuisances to within established standards and guidelines through the implementation of mitigation measures in the relevant contracts. 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.

17. We have considered measures in the planning and design stages to reduce the generation of construction waste where possible (e.g. using metal site hoardings and signboards, which can be recycled or reused in other projects). In addition, we will require the contractor to reuse inert construction waste on site (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 to public fill reception facilities<sup>2</sup>. We will encourage the contractor to maximise the use of recycled or recyclable inert construction waste, as well as the use of non-timber formwork to further minimise the generation of construction waste.

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<sup>2</sup> 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.

18. We will also 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 to public fill reception facilities and landfills respectively through a trip-ticket system.

19. We estimate that the project will generate in total about 6 752 tonnes of construction waste. Of these, we will reuse about 6 145 tonnes (91.0%) of inert construction waste on site and deliver 329 tonnes (4.9%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 278 tonnes (4.1%) 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 \$43,633 for this project (based on a unit cost of \$27 per tonne for disposal at public fill reception facilities and \$125 per tonne<sup>3</sup> at landfills).

## ENERGY CONSERVATION MEASURES

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

- (a) heat recovery fresh air pre-conditioners in the air-conditioned spaces for heat energy reclaim of exhaust air;
- (b) T5 energy efficient fluorescent tubes with electronic ballast and lighting control by occupancy sensors and daylight sensors;
- (c) light-emitting diode (LED) type exit signs; and
- (d) building energy management system.

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<sup>3</sup> 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 m<sup>3</sup>), nor the cost to provide new landfills (which is likely to be more expensive) when the existing ones are filled.

21. For renewable energy technologies, we will install photovoltaic system and solar hot water system for environmental benefits.
22. For green features, we will provide roof garden and green roof at ancillary services blocks for environmental and amenity benefits.
23. For recycled features, we will provide rainwater recycling system for irrigation purpose with a view to conserving water.
24. The total estimated additional cost for adoption of the energy conservation measures is around \$1.4 million (including \$21,700 for energy efficient features), which has been included in the cost estimate of this project. The energy efficient features will achieve 0.6% energy savings in the annual energy consumption with a payback period of about 7.8 years.

#### **HERITAGE IMPLICATIONS**

25. 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**

26. The project does not require land acquisition.

#### **BACKGROUND INFORMATION**

27. We upgraded **49FS** to Category B in March 2008. We engaged consultants to carry out a PER in April 2009 and a Traffic Impact Assessment (TIA) in May 2009. We employed contractors to carry out topographical survey in May 2009 and site investigation in July 2009. We also employed a quantity surveying consultant to prepare the tender documents in November 2008. We charged the total cost of \$4.6 million to block allocation **Subhead 3100GX** "Project feasibility studies, minor investigations and consultants' fees for items in Category D of Public Works Programme". The contractors and consultants have completed the PER, TIA, topographical survey and site investigation. The quantity surveying consultant is finalising the tender documents.



28. The TIA consultant concluded that with the recommended junction improvement and widening of site entrance, the local road network should be able to cope with the traffic flow generated by the proposed project.

29. The proposed construction works will include removal of 102 trees, comprising 95 trees to be felled and seven trees to be replanted within the project site. All trees to be removed are not important trees<sup>4</sup>. We will incorporate planting proposals as part of the project, including estimated quantities of 100 trees and 2 000 shrubs.

30. We estimate that the proposed works will create about 95 jobs (85 for labourers and another 10 for professional/technical staff) providing a total employment of 2 500 man-months.

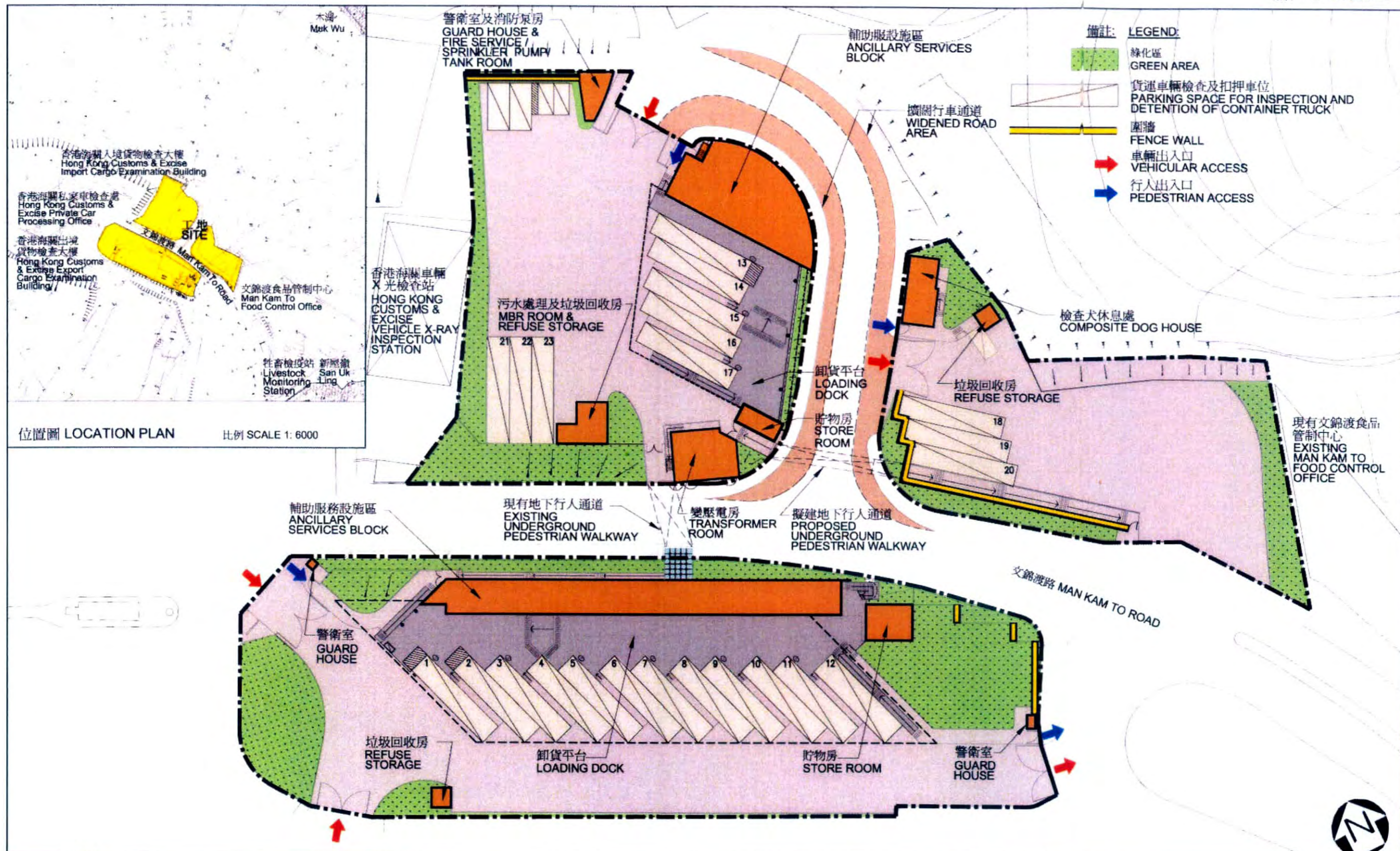
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Food and Health Bureau  
December 2009

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<sup>4</sup> “Important trees” refer to trees in the Register of Old and Valuable Trees, or any other trees that meet one or more of the following criteria –

- (a) trees of 100 years old or above;
- (b) trees of cultural, historical or memorable significance e.g. Fung Shui tree, tree as landmark of monastery or heritage monument, and trees in memory of an important person or event;
- (c) trees of precious or rare species;
- (d) trees of outstanding form (taking account of overall tree sizes, shape and any special features) e.g. trees with curtain like aerial roots, trees growing in unusual habitat; or
- (e) trees with trunk diameter equal or exceeding 1.0 metre (m) (measured at 1.3 m above ground level), or with height/canopy spread equal or exceeding 25 m.





位置圖 LOCATION PLAN 比例 SCALE 1: 6000

- 備註: LEGEND:**
- 綠化區 GREEN AREA
  - 貨運車輛檢查及扣押車位 PARKING SPACE FOR INSPECTION AND DETENTION OF CONTAINER TRUCK
  - 圍牆 FENCE WALL
  - 車輛出入口 VEHICULAR ACCESS
  - 行人出入口 PEDESTRIAN ACCESS

049 FS 文錦渡食品檢驗設施擴建工程 EXTENSION OF MAN KAM TO FOOD INSPECTION FACILITIES	drawn by	RW	date	OCT 09	drawing no	AB/7236/001	scale	NTS
	approved	D. Fedoruk	date	OCT 09				
	office	PROJECT MANAGEMENT BRANCH 3						
					ARCHITECTURAL SERVICES DEPARTMENT			






從東南面望向文錦道食品管制辦事處的構思圖  
VIEW OF THE MAN KAM TO FOOD CONTROL OFFICE FROM SOUTH-EASTERN DIRECTION  
(ARTIST'S IMPRESSION)



從西北面望向有蓋檢驗平台的構思圖  
VIEW OF THE COVERED INSPECTION PLATFORM FROM NORTH-WESTERN DIRECTION  
(ARTIST'S IMPRESSION)



從東南面望向有蓋檢驗平台的構思圖  
VIEW OF THE COVERED INSPECTION PLATFORM FROM SOUTH-EASTERN DIRECTION  
(ARTIST'S IMPRESSION)

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## Enclosure 3 to PWSC(2009-10)79

### 49FS – Extension of Man Kam To food inspection facilities

#### Breakdown of the estimates for consultants' fees and resident site staff costs (in September 2009 prices)

		Estimated man- months	Average MPS* salary point	Multiplier (Note 1)	Estimated fee (\$ million)
(a) Consultants' fee for contract administration <sup>(Note 2)</sup>	Professional				1.6
	Technical				2.0
				Sub-total	3.6
(b) Resident site staff costs <sup>(Note 3)</sup>	Professional	15	38	1.6	1.5
	Technical	173	14	1.6	5.5
				Sub-total	7.0
Comprising –					
(i) Consultants' fees for management of resident site staff					0.4
(ii) Remuneration of resident site staff					6.6
			<b>Total</b>		10.6

\* MPS = Master Pay Scale

#### Notes

1. A multiplier of 1.6 is applied to the average MPS point to estimate the cost of resident site staff supplied by the consultants. (As at now, MPS point 14 = \$19,835 per month and MPS point 38 = \$60,535 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 **49FS**. The assignment will only be executed subject to the Finance Committee's approval to upgrade **49FS** to Category A.
3. The actual man-months and actual costs will only be known after completion of the construction works.