# ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

#### **HEAD 703 - BUILDINGS**

Support - Boundary facilities (other than road works)
179GK - Expansion and modification works at Sha Tau Kok Control Point

Members are invited to recommend to Finance Committee the upgrading of **179GK** to Category A at an estimated cost of \$47.2 million in money-of-the-day prices for the expansion and modification works at Sha Tau Kok Control Point.

#### **PROBLEM**

The existing accommodation at Sha Tau Kok Control Point (STKCP) is not sufficient to cope with the operational requirements of the user departments and to allow for improvements to be made to passenger facilities.

#### **PROPOSAL**

2. The Director of Architectural Services (D Arch S), with the support of the Secretary for Security, proposes to upgrade **179GK** to Category A at an estimated cost of \$47.2 million in money-of-the-day (MOD) prices for the expansion and modification works at STKCP.

#### PROJECT SCOPE AND NATURE

3. The scope of **179GK** comprises the expansion and modification of the existing main building and ancillary facilities at STKCP to provide additional accommodation. The proposed expansion and modification works include –

(a) Additional accommodation for four user departments with an additional net operational floor area (NOFA<sup>1</sup>) of 397.8 square metres (m<sup>2</sup>)

### Customs and Excise Department (C&ED)

(with an additional NOFA of 205.5 m<sup>2</sup>)

- (i) construction of a two-storey extension at the southern end of the existing main building to accommodate additional facilities including offices, a uniform/stationery store, an equipment store, a computer room, two cargo manifest stores, a case processing room, three interview rooms, a seizure store, a search room, and an X-ray machine operation room;
- (ii) construction of two single-storey structures, in replacement for the existing fibre-glass structures, at the incoming and the outgoing cargo examination platforms to accommodate the Cargo and Vehicle Processing Unit, and
- (iii) construction of a dog kennel with food and equipment stores for customs detector dogs;

### **Immigration Department (ImmD)**

(with an additional NOFA of 115.3 m<sup>2</sup>)

(iv) construction of a two-storey extension at the northern end of the existing main building to accommodate additional facilities including offices, a detention room, a conference-cum-multi-function room, an interview room and a record office;

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NOFA is a standard term to describe the floor area actually allocated to the users for carrying out the intended activities. Unlike Construction Floor Area (CFA) which takes into account all areas within the building structure envelope, NOFA does not include areas for toilet, bathroom and shower, lift lobby, stair hall, public/shared corridor, stairwell, escalator and lift shaft, pipe/services duct, refuse chute and refuse room, balcony, verandah, open deck and flat roof, loading/unloading area, mechanical plant room etc.

#### **Department of Health (DH)**

(with an additional NOFA of 58 m<sup>2</sup>)

(v) reprovisioning of the port health office to a permanent office within the main building to accommodate two consultation rooms, two disinfection rooms, two isolation rooms, two store rooms and two reception/waiting areas;

# **Food and Environmental Hygiene Department (FEHD)** (with an additional NOFA of 19 m<sup>2</sup>)

- (vi) provision of a permanent food inspection office within the main building; and
- (b) Improvement of public facilities with an additional NOFA of 218 m<sup>2</sup>
  - (i) construction of two 20-metre long covered walkways connecting the main building to the re-boarding area (for outbound passengers) and the alighting area (for inbound passengers), with handrails spanning the whole length of the walkway;
  - (ii) construction of two canopies, one each at the boarding area and the alighting area, for southbound passengers by coaches and shuttle buses; and
  - (iii) relocation of the existing customs clearance cubicle to the less busy part of the main building to improve the public circulation area.

A site plan is at Enclosure 1 and an artist's impression view of the main building of STKCP after completion of works is at Enclosure 2. We plan to start construction works in November 2004 for completion in June 2006. As STKCP will maintain its normal operation during the construction period, we will closely liaise with the relevant Mainland authorities to minimise congestion and disturbances to the public.

#### **JUSTIFICATION**

4. STKCP first came into operation in March 1985. Since then, cross-boundary traffic in terms of passenger, vehicle and cargo consignment throughputs<sup>2</sup> at the control point have increased significantly. To cope with this tremendous growth, we have extended the operating hours of STKCP by two hours from 0700-1800 hours to 0700-2000 hours since December 1997. Over the years, government departments have increased their staff deployments and established new offices at STKCP. To meet the expanded operational needs of these government departments and to improve services to the public, we need to expand and modify our facilities at STKCP. The proposed works would increase the total NOFA of STKCP from 737 m<sup>2</sup> by 615.8 m<sup>2</sup> to 1 352.8 m<sup>2</sup>.

#### C&ED

- 5. The existing space provision for C&ED is about 285 m<sup>2</sup>. It is proposed to provide additional space of 205.5 m<sup>2</sup> to house the additional staff for handling the rapid growth in traffic and for construction of a dog kennel.
- 6. The C&ED staff deployment has increased from 50 since 1985 to 86 to cope with the traffic growth. In addition, C&ED regularly deploys special operation teams to STKCP, including the Control Point Investigation Team, Mobile X-ray Team, Customs Detector Dog Team and the Textile Tactical Team, to strengthen the enforcement actions against smuggling and drug trafficking activities at the border. Depending on the manpower requirement of the special operation, up to an additional 22 officers might be deployed. However, office provision and staff accommodation have not increased correspondingly. As an interim measure, some facilities at STKCP have been made available on an improvised basis. For instance, two cargo containers have been used as staff changing rooms. A container office and two fibre-glass structures have been erected as a temporary means to accommodate the officers and equipment of the Cargo and Vehicle Processing Unit.

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The throughputs of passenger, vehicle and cargo consignment in 2003 are 1 753 234, 845 118 and 366 816 respectively as compared with 456 950, 174 389 and 93 538 in 1986. The figures indicate a drastic increase of throughput of 284%, 385% and 292% for passenger, vehicle and cargo consignment respectively.

At present, there is no dog kennel at STKCP. The four Dog Bases<sup>3</sup> 7. are far away from STKCP and much time is spent on travelling when the Dogs Unit is deployed to provide detective service at STKCP. The proposed provision of a dog kennel at STKCP will facilitate the deployment of the Dogs Unit and enhance the support services for anti-smuggling operations at STKCP as well as the neighbouring Lo Wu and Man Kam To control points.

#### **ImmD**

- 8. The existing space provision for ImmD is about 300 m<sup>2</sup>. It is proposed to provide additional space of 115.3 m<sup>2</sup> to cope with the increase in staff establishment, the growing workload and new business requirements for various information technology projects.
- 9. The ImmD staff deployment to STKCP has increased from 55 to 63 to cope with the growth in traffic flow since the extension of operating hours in December 1997 and the implementation of the Individual Visit Scheme in August ImmD has been pursuing three Immigration Information Technology 2003. Projects at immigration control points since 1999 to meet the growing demand for high quality services and the increasing traffic flow. The Projects include Automated Passenger Clearance, Automated Vehicle Clearance and Entry/Exit Processing and Records System. As an interim arrangement, ImmD has refurbished the existing general office to accommodate the computer equipment, and has converted the conference room as the workplace for backroom staff. Such temporary arrangement is unsatisfactory and could no longer meet the operational requirement when the Immigration Information Technology Projects are fully implemented in 2006-07.

#### DH

There is currently no permanent accommodation for port health office<sup>4</sup> at STKCP. Since the outbreak of Severe Acute Respiratory Syndrome

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The four Dog Bases are located at Tai Lam Chung, Kwai Chung, Tuen Mun and Chek Lap Kok.

Permanent port health office has already been set up in China Ferry Terminal, Macau Ferry Terminal, and two boundary control points in Lok Ma Chau and Lo Wu and DH plans to incorporate isolation facilities into these control points. For new control points such as Tuen Mun Ferry Pier, Shenzhen Western Corridor Boundary Crossing Facilities and Sheung Shui to Lok Ma Chau Spur Line, the port health office cum isolation facilities have already been included in the project designs.

(SARS) last year, DH has stepped up port health control measures at various boundary control points. Temporary health kiosks and medical posts are set up at different areas that belong to other departments. These temporary medical posts in the main building lack special ventilation requirements (e.g. non-recirculatory air supply) and infection control facilities (e.g. isolation rooms) for handling suspected cases of SARS and other air-borne infectious diseases. It is necessary to set up a permanent port health office with standard provision of consultation rooms, disinfection rooms, isolation rooms and store rooms at STKCP.

#### **FEHD**

11. STKCP is the only land boundary control point without a food inspection office and FEHD has to share the facilities with C&ED when performing duties. STKCP is the third land boundary control point apart from Man Kam To and Lok Ma Chau where FEHD conducts inspection and sampling of food imported from the Mainland for bacteriological, chemical, radioactive and toxicological analyses. This is to ensure that imported food is unadulterated and uncontaminated and complies with all import conditions imposed under the relevant regulations. The provision of a food inspection office is necessary to enhance the effectiveness and efficiency of the food control work at STKCP.

#### **Public facilities**

At present, passengers of coaches and shuttle buses arriving at STKCP have to alight/board at the waiting areas, part of which are uncovered. Passengers have to walk for about 16 metres to the main building in the open without proper shelter and connecting facilities. The proposed covered walkways and canopies at the alighting/boarding areas will help alleviate the discomfort of the passengers especially during hot summer days and inclement weather. We also plan to relocate the customs clearance cubicle to the less busy part of the main building so as to release at least 25 m² space for the clearance hall to provide a more comfortable environment for public queuing. This increases the provision for the queuing space from 175 m² by approximately 15% to about 200 m².

#### FINANCIAL IMPLICATIONS

13. We estimate the total capital cost of **179GK** to be \$47.2 million in MOD prices (see paragraph 14 below), made up as follows –

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			\$ million			
(a)	Building		23.1			
(b)	Building services		7.8			
(c)	Drainage and external works		9.2			
(d)	Furniture and equipment <sup>5</sup>		2.1			
(e)	Consultants' fees for (i) contract administration (ii) quantity surveying services (iii) site supervision	0.9 0.2 1.7	2.8			
(f)	Contingencies		4.2			
	Sub-total		49.2	(at September 2003 prices)		
(g)	Provisions for price adjustment		(2.0)	2003 prices)		
	Total		47.2	(in MOD prices)		
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D Arch S proposes to engage consultants to undertake contract administration, quantity surveying services and site supervision for the project. A breakdown of the estimate for consultants' fees by man-months is at Enclosure 3. The construction floor area (CFA) of the project is about 2 971 m<sup>2</sup>. The estimated construction unit cost, represented by the building and the building services costs, is \$10,401 per m<sup>2</sup> of CFA in September 2003 prices. D Arch S considers this unit cost reasonable as compared with similar projects built by the Government.

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

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Calculation of the estimated cost of furniture and equipment is based on an indicative list of items required, including audio and visual equipment for conference room, standard office furniture and equipment, relocation of customs clearance cubicle, rewiring of computers, telephone points and data lines, relocation of Automated Passenger Clearance System/Automated Vehicle Clearance System and electronic engineering consultancy fee.

	Price				
Year	\$ million (Sep 2003)	adjustment factor	\$ million (MOD)		
2004 - 05	5.0	0.97150	4.9		
2005–06	20.0	0.95450	19.1		
2006–07	18.0	0.95450	17.2		
2007–08	5.0	0.96643	4.8		
2008-09	1.2	0.98455	1.2		
	49.2		47.2		

- 15. We have derived the MOD estimates on the basis of the Government's latest forecast of trend labour and prices of public sector building and construction output for the period 2004 to 2009. We intend to award the contract on a fixed-price lump-sum basis because we can clearly define the scope of works in advance, leaving little room for uncertainty. The contract will not provide for price adjustments because the contract period will not exceed 21 months.
- 16. We estimate the annual recurrent expenditure arising from the project to be \$1.98 million.

#### **PUBLIC CONSULTATION**

17. We did not consult the North District Council on the project as the project falls within the boundary of the STKCP and does not have any impact on the neighbourhood and community. We consulted the Legislative Council Panel on Security on 2 April 2004 on the proposed expansion and modification works. Members raised no objection to the proposal.

#### **ENVIRONMENTAL IMPLICATIONS**

18. This is not a designated project under the Environmental Impact Assessment Ordinance. The project will have little potential for giving rise to adverse environmental impacts.

- 19. During construction, we will control noise, dust and site run-off nuisances to within established standards and guidelines through the implementation of mitigation measures in the relevant contract. 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.
- 20. At the planning and design stages, we have considered measures to reduce the generation of construction and demolition (C&D) materials. We have introduced more prefabricated building elements into the project design to reduce temporary formwork and construction waste. These include dry-wall partitioning and proprietary fittings and fixtures. We will use suitable excavated materials for filling within the site to minimize off-site disposal. In addition, we will require the contractor to use metal site hoardings and signboards so that these materials can be recycled or reused in other projects.
- D Arch S will require the contractor to submit a waste management plan (WMP) for approval. The WMP will include appropriate mitigation measures to avoid, reduce, reuse and recycle C&D materials. D ArchS will ensure that the day-to-day operations on site comply with the approved WMP. D Arch S will control the disposal of public fill and C&D waste to designated public filling facilities and landfills respectively through a trip-ticket system. D Arch S will require the contractor to separate public fill from C&D waste for disposal at appropriate facilities. We will record the disposal, reuse and recycling of C&D materials for monitoring purposes.
- We estimate that the project will generate about 2 150 cubic metres (m³) of C&D materials. Of these, we will reuse about 130 m³ (6.0%) on site, 1 690 m³ (78.6%) to fill in public filling areas<sup>6</sup>, and dispose of 330 m³ (15.4%) at landfills. The notional cost of accommodating C&D waste at landfill sites is estimated to be \$41,250 for this project (based on a notional unit cost<sup>7</sup> of \$125/m³).

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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.

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 are likely to be more expensive) when the existing ones are filled. The notional cost estimate is for reference only and does not form part of this project estimate.

#### LAND ACQUISITION

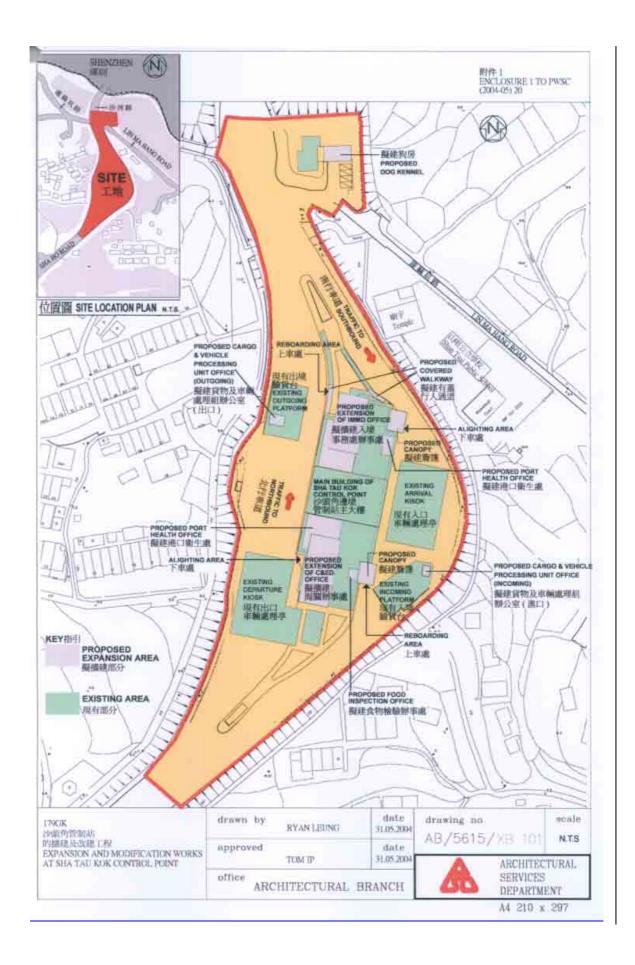
23. The project does not require any land acquisition.

#### **BACKGROUND INFORMATION**

- We upgraded **179GK** to Category B in November 2002. We have employed a term contractor to carry out ground investigations and a consultant to carry out topographical surveys at a total cost of \$110,000. We have also employed consultants to prepare tender drawings and tender documents at a total cost of \$1.62 million. We have charged these amounts to block allocation **Subhead 3100GX** "Project feasibility studies, minor investigations and consultants' fees for items in Category D of the Public Works Programme". The term contractor and the consultant have completed the ground investigations and topographical surveys respectively. The other consultants are finalising the tender drawings and tender documents.
- 25. The proposed construction of **179GK** will not involve any tree removal or planting proposals.
- We estimate that the proposed works will create about 55 jobs (47 for labourers and another eight for professional/technical staff) providing a total employment of 750 man-months.

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Security Bureau June 2004





VIEW OF THE BUILDING FROM THE WEST (ARTIST'S IMPRESSION) NOTE: EXISTING OUTGOING PLATFORM IS NOT SHOWN

從西面望向建築物(構思圖) 註:現有出境驗貨台未有顯示

179GK 沙頭角管制站 的擦她及改建工程 EXPANSION AND MODIFICATION WORKS AT SHA TAU KOK CONTROL POINT  $\begin{array}{ccc} \text{drawn by} & \text{RYAN LEUNG} & \begin{array}{c} \text{date} \\ 28.05.2004 \end{array} \\ \text{approved} & \begin{array}{c} \text{TOM IP} \end{array} & \begin{array}{c} \text{date} \\ 28.05.2004 \end{array} \end{array}$ 

office ARCHITECTURAL BRANCH

drawing no.
AB/5615/XB 102

scale N.T.S



ARCHITECTURAL SERVICES DEPARTMENT

A4 210 x 297

## 179GK - Expansion and modification works at Sha Tau Kok Control Point

#### Breakdown of the estimate for consultants' fees

Consultants' staff costs		Estimated man- Months	Average MPS* salary point	Multiplier (Note 1)	Estimated Fee (\$million)
Contract administration	Professional	-	-	-	0.7
(Note 2)	Technical	-	-	-	0.2
Quantity surveying	Professional	-	-	-	0.1
Services (Note 3)	Technical	-	-	-	0.1
Site supervision	Professional	_	_	_	_
(Note 4)	Technical	57	14	1.6	1.7
				Total	2.8

<sup>\*</sup> 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 1.1.2004, MPS point 38 = \$55,993 per month and MPS point 14 = \$18,603 per month)
- (2) The consultant's staff cost for contract administration is calculated in accordance with the existing consultancy agreement for the design and construction of **179GK**. The assignment will only be executed subject to Finance Committee's approval to upgrade **179GK** to Category A.
- (3) The consultant's staff cost for quantity surveying services is calculated in accordance with the existing consultancy agreement for the provision of quantity surveying services for **179GK**. The assignment will only be executed subject to Finance Committee's approval to upgrade **179GK** to Category A.
- (4) The consultant's staff cost for site supervision is based on the estimates prepared by the Director of Architectural Services. We will only know the actual man-months and actual costs after completion of the construction works.