

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 703 – BUILDINGS

Fitting Out – Internal security

173IC – Fitting out works for customs and quarantine facilities at the Asia Airfreight Terminal 2

Members are invited to recommend to Finance Committee the upgrading of **173IC** to Category A at an estimated cost of \$18.8 million in money-of-the-day prices for carrying out fitting out works for customs and quarantine facilities at the Asia Airfreight Terminal 2 at the Hong Kong International Airport.

PROBLEM

We need to provide customs and quarantine (CQ) facilities in the second air cargo terminal (Terminal 2) of Asia Airfreight Terminal Company Limited (AAT), which is being constructed by AAT at the Hong Kong International Airport (HKIA) to meet the demand of growing air cargo throughput.

PROPOSAL

2. The Director of Architectural Services (D Arch S), with the support of the Secretary for Economic Development and Labour, proposes to upgrade **173IC** to Category A at an estimated cost of \$18.8 million in money-of-the-day (MOD) prices for carrying out fitting out works for CQ facilities at the AAT Terminal 2 at HKIA.

/PROJECT

PROJECT SCOPE AND NATURE

3. The scope of **173IC** comprises the design and fitting out works for the CQ facilities located primarily on Ground Level to Level 3 of Terminal 2. The proposed works involve a construction floor area (CFA) of 1 040 square metres (m²) or a net operational floor area (NOFA¹) of 522 m², with the following facilities –

- (a) Customs and Excise Department (C&ED) – NOFA of 485 m²
 - eight computer network equipment rooms, three interview/case processing rooms, three special equipment rooms, two exit guard booths, a general provision store, a mini-shipment team office, an export cargo examination team office, a service counter/operational room, a cargo surveillance/breakdown team office, changing rooms², an export cargo examination hall and a general cargo examination hall;
- (b) Agriculture, Fisheries and Conservation Department (AFCD) – NOFA of 37 m²
 - a general office, an interview room and examination areas.

———— A site plan of Terminal 2 is at Enclosure 1. Layout plans of the proposed additional
———— CQ facilities on Ground Level to Level 3 of Terminal 2 are at Enclosures 2 and 3
———— respectively. Perspective views of Terminal 2 are at Enclosure 4. To tie in with the construction programme of Terminal 2, we plan to start the fitting out works in May 2006 for completion in December 2006 in respect of the CQ facilities on Ground Level to Level 2 to meet the initial operation of Terminal 2, and in July 2007 for those CQ facilities on Level 3 to support the full operation of Terminal 2 by then.

/JUSTIFICATION

¹ NOFA is a standard term used to describe the floor area actually allocated to the users for carrying out the intended activities. Unlike CFA which takes into account all areas within the building structure envelope, NOFA does not include areas for toilets, bathrooms and showers, lift lobbies, stair halls, public/shared corridors, stairwells, escalators and lift shafts, pipe/services ducts, refuse chutes and refuse rooms, balconies, verandahs, open decks and flat roofs, loading/unloading areas, mechanical plant rooms, etc.

² Existing and additional changing room facilities will all remain in the existing Asia Airfreight Terminal (i.e. Terminal 1) to economise the use of floor space.

JUSTIFICATION

4. Air cargo has been a key component of the logistics industry especially in respect of high value goods. In 2004, air cargo throughput of HKIA reached 3.1 million tonnes at a value of \$1,340 billion, accounting for 36% of Hong Kong's imports and 28% of total exports. By the end of 2004, air cargo throughput at HKIA had, on average, grown 11.3% per year since 1998. According to the Airport Authority (AA)'s forecast, HKIA's air cargo throughput is expected to grow at an average rate of 6% per annum up to 2020.

5. AAT is one of the two general air cargo operators at HKIA. Its business has been growing rapidly by 10% per annum since 1999. It handled about 550 000 tonnes or around 18% of the airport's cargo throughput in 2004, representing 14% growth over 2003. This is well above the original design capacity of 420 000 tonnes a year for AAT's facilities at the existing Asia Airfreight Terminal (i.e. Terminal 1).

6. In order to cater for the increasing demand, AAT has decided to invest and construct a new Terminal 2 with a design capacity of 910 000 tonnes per annum. Construction works are on-going and the new facilities are scheduled to commence operation in two phases in December 2006 (Ground Level to Level 2) and in July 2007 (Level 3).

7. Timely expansion by AAT is essential for maintaining HKIA's competitiveness as a hub for international air cargo traffic, especially at a time when HKIA is facing fierce competition from neighbouring aviation centres. To enable the relevant Government departments to maintain effective and efficient CQ control, we need to provide adequate government facilities at the new Terminal 2.

8. According to the established arrangement, AAT will provide rent-free accommodation for Government's use, while the Government will be responsible for the fitting out works. For this particular project, AAT has also agreed to re-provision, at its own cost, the existing CQ facilities for C&ED, AFCD and Food and Environmental Hygiene Department in Terminal 1 to Terminal 2. In the circumstances, the Government only needs to fit out the additional government accommodation required by C&ED and AFCD to meet the expanded operation at Terminal 2.

/FINANCIAL

FINANCIAL IMPLICATIONS

9. We estimate the cost of the project to be \$18.8 million in MOD prices (see paragraph 10 below), made up as follows –

	\$ million	
(a) Building ³	4.2	
(b) Building services ⁴	3.7	
(c) Furniture and equipment ⁵	7.9	
(d) Entrustment fees for the design and fitting out works ⁶	1.3	
(e) Contingencies	1.7	
	<hr/>	
Sub-total	18.8	(in September 2005 prices)
(f) Provision for price adjustment	<hr/> 0.0	
Total	<hr/> 18.8	(in MOD prices)

The CFA of **173IC** is 1 040 m². The estimated construction unit cost, represented by the building and the building services costs, is \$7,596 per m² of CFA in September 2005 prices. D Arch S considers the estimated project cost reasonable as compared with other similar fitting out works undertaken by the Government.

/10.

³ Building works refer to partitioning, wall/floor/ceiling finishes such as wall painting, carpeting and false ceiling, doors with ironmongeries, building fixtures, signages and graphics, built-in furnitures, plumbing and drainage installations, etc.

⁴ Building services works refer to electrical installation such as lighting and power, mechanical ventilation and air-conditioning installations, fire services installations and cable containments for extra low voltage installations, etc.

⁵ Based on an indicative list of furniture and equipment items and their estimated prices.

⁶ Subject to further negotiation with AAT, entrustment fees estimated at 16% of the value of the entrusted works would be paid to AAT for carrying out the entrusted design and fitting out works for the additional CQ facilities.

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

Year	\$ million (Sept 2005)	Price adjustment factor	\$ million (MOD)
2006 – 07	3.0	1.00125	3.0
2007 – 08	13.0	1.00125	13.0
2008 – 09	1.5	1.00125	1.5
2009 – 10	1.3	1.00125	1.3
	18.8		18.8

11. 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 2006 to 2010. As the fitting out works for the additional CQ facilities are integral to and inseparable from both the Terminal 2 development and the reprovisioning works to be undertaken by AAT, we intend to entrust the design and fitting out works for **173IC** to AAT. AAT will deliver the works of **173IC** through an instruction to carry out additional works under the construction contract for the Terminal 2 development.

12. We estimate the annual recurrent expenditure arising from **173IC** to be \$25.0 million.

PUBLIC CONSULTATION

13. The AA has consulted the relevant stakeholders, including the Carrier Liaison Group comprising airlines providing air cargo services, the Hong Kong Association of Freight Forwarding And Logistics Limited, and the Hong Kong Shippers Council. They supported the AAT Terminal 2 development and the provision of expanded CQ services therein.

14. We consulted the Legislative Council Panel on Economic Services on 29 November 2005. Members generally supported this project.

/ENVIRONMENTAL

ENVIRONMENTAL IMPLICATIONS

15. The project is not a designated project under the Environmental Impact Assessment Ordinance. It will not cause any long-term environmental impact. During construction, the contractor will be required to control noise, dust and site run-off 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 for noisy construction activities, frequent cleaning and watering of the site, and the provision of wheel-washing facilities.

16. At the planning stage, we have considered measures to reduce the generation of construction and demolition (C&D) materials. We have introduced more prefabricated building elements into the fitting out works to reduce temporary formwork and construction waste. These include dry-wall partitioning and proprietary fittings and fixtures.

17. We 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. We will require AAT to ensure that the day-to-day operations on site comply with the approved WMP. We will control the disposal of public fill and C&D waste to public fill reception facilities, and landfills respectively through a trip-ticket system. We 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.

18. We estimate that the project will generate about 18 tonnes C&D materials. Of these, we will deliver about five tonnes (27.8%) to public fill reception facilities⁷ for subsequent reuse. In addition, we will dispose of 13 tonnes (72.2%⁸) at landfills. The total cost for accommodating C&D materials at public fill reception facilities and landfill sites is estimated to be \$1,760 for this project (based on a unit cost of \$27/tonne for disposal at public fill reception facilities and \$125/tonne⁹ at landfills).

/LAND

⁷ Public fill reception facilities are specified in Schedule 4 of the Waste disposal (Charges for Disposal of Construction Waste) Regulation. Disposal of public fill in public fill reception facilities requires a licence issued by the Director of Civil Engineering and Development.

⁸ There is a higher percentage of C&D wastes to be disposed of at landfills as the works of this project are for fitting out works in the building interior without involvement of any site formation works nor soil excavation for building construction works.

⁹ This estimate has taken into account the cost for developing, operating and resorting 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.

LAND ACQUISITION

19. This project does not require land acquisition.

BACKGROUND INFORMATION

20. We upgraded **173IC** to Category B in September 2005.

21. The proposed fitting-out works will not involve any tree removal or planting proposals.

22. We estimate that the project will create about 15 jobs (12 for labourers and another three for professional/technical staff) providing a total employment of 160 man-months.

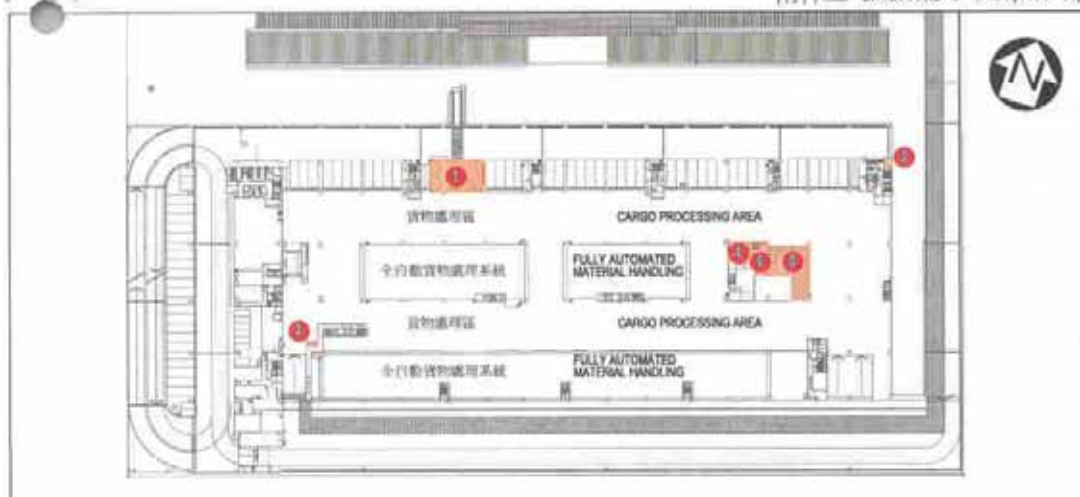
Economic Development and Labour Bureau
December 2005



1731C
 亞洲空運中心二號空運大樓
 裝置海關及檢疫設施
 Fitting-out works for customs
 and quarantine facilities at
 the Asia Airfreight Terminal 2

Drawn by	K.H. CHAN	Date	10-2005
Approved	K.C. MAK	Date	10-2005
Office	PROJECT MANAGEMENT BRANCH 2		

Drawing no.	Scale
AB/6986/XA001	N.T.S.
 ARCHITECTURAL SERVICES DEPARTMENT	



亞洲空運中心二號空運大樓 - 第一層平面圖 * 最後設計可能有所修改
 ASIA AIRFREIGHT TERMINAL - TERMINAL 2 - FIRST FLOOR LAYOUT PLAN * LAYOUT SUBJECT TO DESIGN DEVELOPMENT

- 擬建裝置設施工程(包括增加及重置設施)
 PROPOSED FITTING-OUT WORKS (INCLUDING ADDITIONAL AND REPROVISIONING FACILITIES)
- 1 驗貨廳, 辦公室, 服務台, 特別儀器室, 行動室, 會面/案件處理室, 系水間及驗貨室(海關)
EXAMINATION HALL, OFFICE, SERVICE COUNTER, SPECIAL EQUIPMENT ROOM, OPERATION ROOM, INTERVIEW/CASE PROCESSING ROOM, PANTRY AND DUTY COLLECTION OFFICE (CAO)
 - 2 電腦網絡儀器室(海關)
COMPUTER NETWORK EQUIPMENT ROOM (CAO)
 - 3 貨物檢驗申請處(食環署)
FOOD INSPECTION OFFICE (FHO)
 - 4 電腦網絡儀器室(海關)
COMPUTER NETWORK EQUIPMENT ROOM (CAO)
 - 5 寫字樓, 會面室及驗貨區(海關)
GENERAL OFFICE, AN INTERVIEW ROOM AND EXAMINATION AREA (CAO)
 - 6 轉口貨物倉, 職員檢查處及辦公室, 驗貨室及驗稅室(海關)
TRANSFERMENT BOND RESPONSIBLE CARGO EXAMINATION HALL & OFFICE, EXHIBIT STORE AND DUTY COLLECTION OFFICE (CAO)



亞洲空運中心二號空運大樓 - 地面平面圖 * 最後設計可能有所修改
 ASIA AIRFREIGHT TERMINAL - TERMINAL 2 - GROUND FLOOR LAYOUT PLAN * LAYOUT SUBJECT TO DESIGN DEVELOPMENT

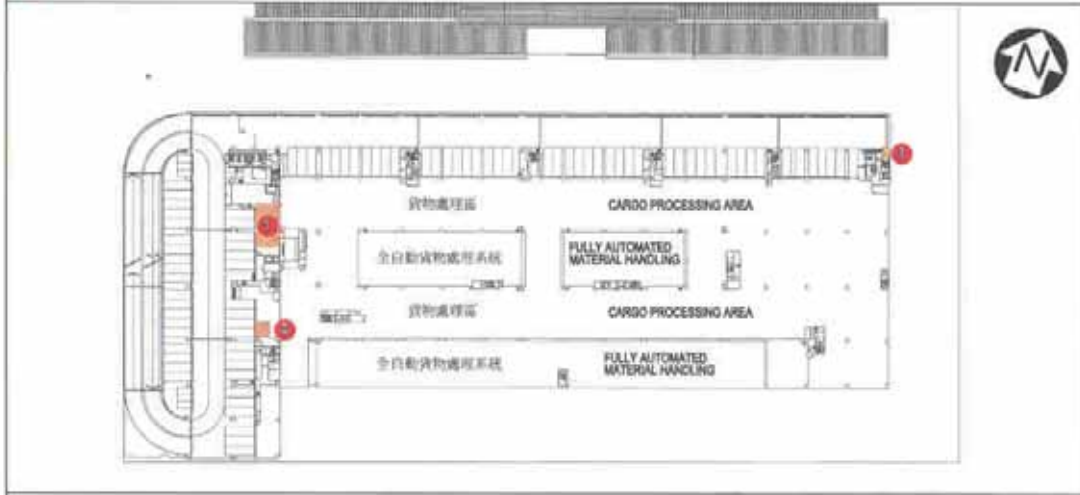
- 擬建裝置設施工程(包括增加及重置設施)
 PROPOSED FITTING-OUT WORKS (INCLUDING ADDITIONAL AND REPROVISIONING FACILITIES)
- 1 電腦網絡儀器室(海關)
COMPUTER NETWORK EQUIPMENT ROOM (CAO)
 - 2 驗貨亭(海關)
EXIT GUARD BOOTH (CAO)
 - 3 運貨貨物檢查處及辦公室, 電腦網絡儀器室, 會面/案件處理室及特別儀器室(海關)
EXPRESS SHIPMENT EXAMINATION HALL & TEAM OFFICE, COMPUTER NETWORK EQUIPMENT ROOM, INTERVIEW/CASE PROCESSING ROOM AND SPECIAL EQUIPMENT ROOM (CAO)
 - 4 驗貨亭(海關)
EXIT GUARD BOOTH (CAO)

1731C 亞洲空運中心二號空運大樓 裝置海關及檢疫設施 Fitting-out works for customs and quarantine facilities at the Asia Airfreight Terminal 2	Drawn by	K.H. CHAN	Date	10-2005	Drawing no.	AB/6986/XA002	Scale	N.T.S.
	Approved	K.C. MAK	Date	10-2005	ARCHITECTURAL SERVICES DEPARTMENT			
	Office	PROJECT MANAGEMENT BRANCH 2						




亞洲空運中心二號空運大樓 - 第三層平面圖 ★ 最後設計可能有所修訂
 ASIA AIRFREIGHT TERMINAL - TERMINAL 2 - THIRD FLOOR LAYOUT PLAN ★ LAYOUT SUBJECT TO DESIGN DEVELOPMENT

- 擬建裝置設施工程(包括增加及重設設施)
 PROPOSED FITTING-OUT WORKS (INCLUDING ADDITIONAL AND REPROVISIONING FACILITIES)
- ① 服務櫃檯、行李車、驗貨場、貨物監察所/貨運辦公室、特別值機室及會訊/案件處理室/海關
 SERVICE COUNTER, OPERATIONAL ROOM, EXAMINATION HALL, CARGO SURVEILLANCE/SHADOW TEAM OFFICE, SPECIAL EQUIPMENT ROOM AND INTERVIEW CASE PROCESSING ROOM (CAE2)
- ② 電腦網絡儲蓄室(海關)
 COMPUTER NETWORK EQUIPMENT ROOM (CAE2)
- ③ 電腦網絡儲蓄室(海關)
 COMPUTER NETWORK EQUIPMENT ROOM (CAE2)



亞洲空運中心二號空運大樓 - 第二層平面圖 ★ 最後設計可能有所修訂
 ASIA AIRFREIGHT TERMINAL - TERMINAL 2 - SECOND FLOOR LAYOUT PLAN ★ LAYOUT SUBJECT TO DESIGN DEVELOPMENT

- 擬建裝置設施工程(包括增加及重設設施)
 PROPOSED FITTING-OUT WORKS (INCLUDING ADDITIONAL AND REPROVISIONING FACILITIES)
- ① 出口貨物檢查處及辦公室、特別值機室及電腦網絡儲蓄室(海關)
 EXPORT CARGO EXAMINATION HALL & TEAM OFFICE, SPECIAL EQUIPMENT ROOM AND COMPUTER NETWORK EQUIPMENT ROOM (CAE2)
- ② 電腦網絡儲蓄室(海關)
 COMPUTER NETWORK EQUIPMENT ROOM (CAE2)
- ③ 小貨件辦公室及物料供應室(海關)
 MINI-SHIPMENT TEAM OFFICE AND GENERAL PROVISION STORE (CAE2)


1731C 亞洲空運中心二號空運大樓 裝置海關及檢疫設施 Fitting-out works for customs and quarantine facilities at the Asia Airfreight Terminal 2	Drawn by K.H. CHAN	Date 10-2005	Drawing no. AB/6986/XA003	Scale N.T.S.
	Approved K.C. MAK	Date 10-2005	 ARCHITECTURAL SERVICES DEPARTMENT	
	Office PROJECT MANAGEMENT BRANCH 2			



從東南面望向亞洲空運中心二號空運大樓的構思圖
 VIEW OF THE ASIA AIRFREIGHT TERMINAL 2 FROM SOUTH-EAST DIRECTION (ARTIST'S IMPRESSION)



從西北面望向亞洲空運中心二號空運大樓的構思圖
 VIEW OF THE ASIA AIRFREIGHT TERMINAL 2 FROM NORTH-WEST DIRECTION (ARTIST'S IMPRESSION)

173IC 亞洲空運中心二號空運大樓 裝置海關及檢疫設施 Fitting-out works for customs and quarantine facilities at the Asia Airfreight Terminal 2	Drawn by K.H. CHAN	Date 10-2005	Drawing no. AB/6986/XA004	Scale N.T.S.
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	Office PROJECT MANAGEMENT BRANCH 2			