

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 711 – HOUSING

Government Offices – Intra-governmental services

68KA – Reprovisioning of Civil Aid Service and Fire Services Department facilities to Site 17, West Kowloon Reclamation, Yau Ma Tei

Members are invited to recommend to Finance Committee the upgrading of **68KA** to Category A at an estimated cost of \$256.9 million in money-of-the-day prices for the reprovisioning of the existing Civil Aid Service and Fire Services Department facilities at Caroline Hill Road, Argyle Street and Hok Yuen Street to Site 17, West Kowloon Reclamation, Yau Ma Tei.

PROBLEM

We need to reprovision the Civil Aid Service (CAS) and Fire Services Department (FSD) facilities currently located at Caroline Hill Road and Argyle Street to Site 17 of the West Kowloon Reclamation to enable the release of these two sites for housing and other developments. We also need to reprovision the existing CAS facilities at Hok Yuen Street to the new site at the West Kowloon Reclamation to achieve optimal site utilisation.

/PROPOSAL

PROPOSAL

2. The Director of Architectural Services (D Arch S), with the support of the Secretary for Housing, Planning and Lands and the Secretary for Security, proposes to upgrade **68KA** to Category A at an estimated cost of \$256.9 million in money-of-the-day (MOD) prices for reprovisioning the following CAS and FSD facilities from their present locations to Site 17, West Kowloon Reclamation, Yau Ma Tei, and upgrading these facilities to present-day standards –

- (a) the CAS Headquarters (CAS HQ) at Caroline Hill Road, Causeway Bay;
- (b) the CAS Kowloon Training Centre (CAS KTC) and the FSD Kowloon Rescue Training Centre (FSD KRTC) at Argyle Street, Kowloon City; and
- (c) the CAS Cadet Training Centre (CAS CTC) at Hok Yuen Street, Hung Hom.

PROJECT SCOPE AND NATURE

3. The scope of **68KA** comprises the construction of the following –

- (a) an eight-storey CAS HQ building of 11 250 square metres in construction floor area (CFA), which includes the CAS Central Command Centre (CAS CCC), offices, four conference rooms, a training resources centre, nine classrooms, three cadet training workshops, a 200-seat multi-purpose hall, a fitness training centre, store rooms, a canteen, a motor cycle depot (for 26 motor cycles) and car parking spaces (for 20 vehicles and 13 lorries);
- (b) a four-storey FSD KRTC building of 3 870 square metres in CFA, part of which is extended further by five storeys to form a rescue tower of 440 square metres in CFA. The four-storey building includes two live-fire training floors, a breathing apparatus training floor, a simulated tunnel and chute floor (all floors with training monitoring systems), a first-aid room, store rooms and a conference room; and

/(c)

- (c) common training facilities for CAS and FSD, which include a rescue hut (within the FSD KRTC building), an artificial climbing wall (on the exterior of the FSD KRTC building), a debris pile area¹ and an open drill yard of 2 000 square metres serving also as a parade ground.

———— A site plan is at the Enclosure. We plan to start the construction works in April 2003 for completion in November 2005.

JUSTIFICATION

Under-utilisation of the sites at Caroline Hill Road and Argyle Street

4. The two sites at Caroline Hill Road and Argyle Street are currently under-utilised. We propose to re-provision the CAS and the FSD facilities at these two sites to Site 17 of West Kowloon Reclamation with a view to releasing the two sites for redevelopment. To achieve cost efficiency and optimise the utilisation of the proposed site at the West Kowloon Reclamation, we also propose to re-provision the CAS CTC from Hok Yuen Street to the site at the West Kowloon Reclamation. The two sites at Caroline Hill Road and Argyle Street, with a total area of about 15 000 square metres, are planned for land sale upon completion of the re-provisioning project. The site at Hok Yuen Street with an area of about 2 240 square metres is currently planned to be used for extension of an existing school adjacent to the site.

Need for upgrading the existing CAS and FSD facilities

5. The existing CAS and FSD facilities at Caroline Hill Road and Argyle Street were constructed some 30 years ago and are out-of-date.

6. The existing CAS rescue training facilities and smoke chamber at Argyle Street were built on an open space without covered lecture rooms. Training sessions have to be suspended during inclement weather. The existing debris pile for simulating collapsed building scenarios is an outdated design which cannot fully meet the current training needs of CAS volunteers. The new training facilities of debris pile will simulate both rubbles and confined space of collapsed building scenarios for rescuers. It will also provide field practice of tunnel rescue for buried victims. The CAS CCC at the new building will be equipped with

/computer-aided

¹ The debris pile area is for rescue training under simulated collapsed building scenarios.

computer-aided technology for video conference between CAS CCC and CAS Mobile Command Unit on scene and image capturing of incident site for effective monitoring of the situation and strengthening of rescue support where necessary.

7. The existing FSD KRTC at Argyle Street is a four-storey building with open training compartments, which are not provided with any special fire services training installation or tailor-made safety monitoring systems. Currently, only simple search and rescue training in dark or smoke-logged condition simulated by burning solid fuel can be carried out. To enhance the operational skills and capabilities of fire-fighters in dealing with different kinds of fire and rescue scenes and to better ensure their occupational safety, it is necessary to provide FSD with advanced and purpose-built training facilities provided with safety measures² for simulating realistic fire ground situations and special service incidents.

8. Upon reprovisioning, we will take the opportunity to upgrade the facilities to present-day standards and requirements. The proposed upgrading will not only improve the operational efficiency of the two departments, but also enhance the safety and effectiveness of training for both CAS volunteers and FSD operational staff.

Optimal site utilisation

9. The co-location of the CAS and FSD facilities will have the advantages of achieving optimal site utilisation³ and cost-efficiency, as the two departments can share the common training facilities⁴ (including the parade ground, rescue training facilities, artificial climbing wall and classrooms). Besides, the new FSD KRTC is more conveniently located than the existing one at

/Argyle

² Appropriate safety measures will be provided during the design, construction and operation of the fire services training facilities to minimise potential hazards. These measures include proper and clear rules and procedures for the safe use of fire services training facilities and safety designs such as complete enclosure of training areas, and safety monitoring systems linked to mechanical ventilation system with automatic shutdown of live-fire training installation.

³ The buildable area of the site is limited by underground drainage reserves and the Mass Transit Railway tunnel beneath the site. This factor renders the site particularly suitable for this development which requires substantial areas of open yard.

⁴ CAS will mainly use the classrooms after office hours, during weekends and on public holidays, and the trainees of FSD can use the classrooms located in CAS building during office hours with prior arrangement with CAS. Similar arrangement will also be applied to the use of parade ground, rescue training facilities and artificial climbing wall.

Argyle Street. This enables operational crews of the Kowloon Region on in-service training at the new training centre to react to emergency call-outs in the region more efficiently. As for CAS, the convenient location of the new CAS HQ, CAS KTC and CAS CTC will also facilitate the promotion of CAS activities and enhance the efficiency of CAS operations.

FINANCIAL IMPLICATIONS

10. We estimate the capital cost of 68KA to be \$256.9 million in MOD prices (see paragraph 11 below), made up as follows –

	\$ million	
(a) Piling	39.0	
(b) Building	111.0	
(c) Building services	44.0	
(d) Drainage and external works	16.0	
(e) Specialist fire services training installations ⁵	23.0	
(f) Furniture and equipment ⁶	2.8	
(g) Contingencies	23.0	
Sub-total	258.8	(in September 2002 prices)
(h) Provision for price adjustment	(1.9)	
Total	256.9	(in MOD prices)

/The

⁵ Special fire services training installations include those for live-fire simulation, breathing apparatus training, tunnel and chute training, and associated smoke filtration and smoke extraction. A specialist sub-contractor under the building contract will be responsible for the design and installation of the specialist fire services training installation inside the FSD KRTC building.

⁶ Based on an indicative list of items required, including standard office furniture and equipment items, classroom furniture, telephone and fax lines, equipment for CAS CCC, audio-visual equipment and fitness training equipment for fitness training centre.

The CFA of **68KA** is about 15 560 square metres. The construction unit cost, represented by the building and building services costs, is \$9,961 per square metre of CFA in September 2002 prices. The construction unit cost is comparable to that of similar projects built by the Architectural Services Department.

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

Year	\$ million (Sept 2002)	Price adjustment factor	\$ million (MOD)
2003 – 04	33.0	0.99250	32.8
2004 – 05	92.0	0.99250	91.3
2005 – 06	93.8	0.99250	93.1
2006 – 07	30.0	0.99250	29.8
2007 – 08	10.0	0.99250	9.9
	258.8		256.9

12. We derived the MOD estimates on the basis of the Government's latest forecast of trend labour and construction prices for the period 2003 to 2008. We will deliver the piling and superstructure works through two separate fixed price lump-sum contracts because each of their contract period will be less than 21 months and we can clearly define the scope of works in advance, leaving little room for uncertainty.

13. The project will not give rise to any additional annual recurrent expenditure.

PUBLIC CONSULTATION

14. We consulted the Food and Environmental Hygiene Committee of the Yau Tsim Mong District Council on 16 May 2002. Members of the Committee supported the proposed project. We also issued an information paper on the project for circulation to the Legislative Council Panel on Housing and the Legislative Council Panel on Security on 28 May 2002. We did not receive any comments from members.

ENVIRONMENTAL IMPLICATIONS

15. We completed a Preliminary Environmental Review (PER) for the project in November 1998. The PER concluded that the proposed development would not have long-term environmental impact on the surrounding areas. The Director of Environmental Protection vetted the PER and agreed that an Environmental Impact Assessment would not be necessary.

16. 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 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.

17. 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 minimise 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.

18. 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 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 designated public filling 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. We estimate that the project will generate about 12 800 cubic metres (m³) of C&D materials. Of these, we will reuse about 500 m³ (4%) on site, 10 800 m³ (84%) as fill in public filling areas⁷, and dispose of 1 500 m³ (12%) at landfills. The notional cost of accommodating C&D waste at landfill sites is

/estimated

⁷ 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.

estimated to be \$187,500 for this project (based on a notional unit cost⁸ of \$125/m³).

LAND ACQUISITION

19. The project does not require land acquisition.

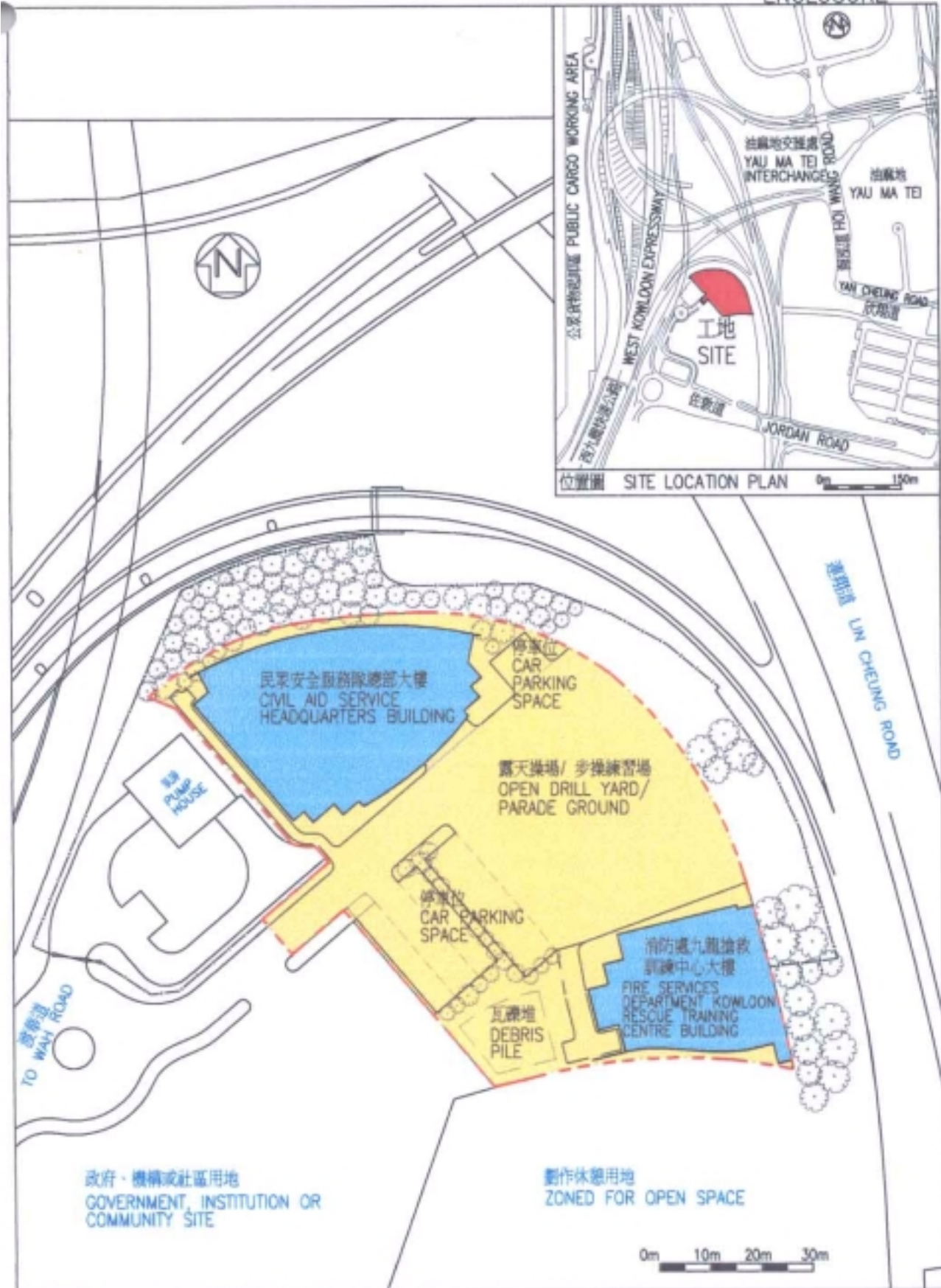
BACKGROUND INFORMATION

20. We upgraded **68KA** to Category B in October 2000. We engaged a consultant to carry out a PER in November 1997 and a term contractor to carry out site investigation for the project in August 2001 at a total cost of \$838,000. In April 2002, we employed a specialist consultant to conduct a review on the preliminary risk assessment in the PER and recommend detailed control measures and safety requirements for the specialist fire services training installation at a cost of \$185,000. We charged these amounts to block allocation **Subhead B100HX** "Minor housing development related works, studies and investigations for items in Category D of the Public Works Programme". The consultant and the term contractor have completed the PER and the site investigation respectively. The specialist consultant has also completed the review and identified detailed requirements for inclusion in the tender documents. D of Arch S has completed the detailed design and is finalising the tender documents of the piling contract with in-house staff resources. He is now finalising the detailed design of the superstructure contract.

21. We estimate that the proposed works under **68KA** will create some 245 jobs comprising three professional staff, seven technical staff and 235 labourers, totalling 3 850 man-months.

Housing, Planning and Lands Bureau
November 2002

⁸ 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 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.



B068KA
 把民衆安全服務隊及消防處設施遷往
 油麻地西九龍填海區第17號地盤重置
 REPROVISIONING OF CIVIL AID SERVICE
 AND FIRE SERVICES DEPARTMENT
 FACILITIES TO SITE 17, WEST KOWLOON
 RECLAMATION, YAU MA TEI

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drawing no.	scale
AB/6002/XE001	1:1000
 ARCHITECTURAL SERVICES DEPARTMENT	