

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 707 - NEW TOWNS AND URBAN AREA DEVELOPMENT
Kowloon Development
Civil Engineering - Land development
**465CL - South East Kowloon development – waterfront facilities and Kai
Tak Nullah/Kwun Tong typhoon shelter reclamation**

Members are invited to recommend to Finance
Committee -

- (a) the upgrading of part of **465CL**, entitled “South East Kowloon development - consultants’ fees and site investigation for Kai Tak Approach Channel reclamation”, to Category A at an estimated cost of \$63.8 million in money-of-the-day (MOD) prices; and
- (b) the retention of the remainder of **465CL** in Category B.

PROBLEM

The Kai Tak Nullah is heavily polluted. Site investigation and detailed design works are required before we can treat the contaminated sediments and implement the proposed reclamation of the Kai Tak Approach Channel (KTAC) and related works.

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PROPOSAL

2. The Director of Territory Development (DTD), with the support of the Secretary for Planning and Lands, proposes to upgrade part of **465CL** to Category A at an estimated cost of \$63.8 million in MOD prices for site investigation and engagement of consultants to undertake detailed design for KTAC reclamation.

PROJECT SCOPE AND NATURE

3. The scope of **465CL** comprises -

KTAC

- (a) treatment of the contaminated sediments (including pilot tests and post-treatment monitoring) in KTAC;
- (b) reclamation of about 28 hectares in KTAC;
- (c) construction of new drainage systems (including widening and extension of Kai Tak Nullah and Jordan Valley box culvert, advance work for future road tunnels underneath the box culverts) and improvements to existing drainage systems necessitated by the proposed reclamation in KTAC;
- (d) demolition of the existing airport taxiway bridge across KTAC;

Kwun Tong and Cha Kwo Ling

- (e) treatment of the contaminated sediments (including post-treatment monitoring) in Kwun Tong typhoon shelter;
- (f) reclamation of about 37 hectares in Kwun Tong typhoon shelter and Cha Kwo Ling;
- (g) construction of new drainage systems and improvements to existing drainage systems necessitated by the proposed reclamation in Kwun Tong typhoon shelter and Cha Kwo Ling;

/(h)

- (h) reprovisioning of Kwun Tong and To Kwa Wan typhoon shelters, and waterfront facilities at Kwun Tong and Cha Kwo Ling;
- (i) demolition of Kwun Tong passenger ferry pier, and demolition and reprovisioning of Kwun Tong vehicular ferry pier and public pier;
- (j) construction of seawalls and demolition of breakwaters;
- (k) formation of land for refuse transfer station and public filling barging point;
- (l) construction of public transportation facilities; and
- (m) construction of basic infrastructure to serve new marine facilities and reprovisioned piers.

4. The part of the project we now propose to upgrade to Category A comprises site investigation and engagement of consultants to carry out detailed design, Environmental Impact Assessment (EIA) study and preparation of tender documents for the works as described in paragraphs 3(a) - 3(d) above including the necessary related environmental mitigation and monitoring & audit measures.

———— A site plan showing details of the works is at Enclosure 1.

JUSTIFICATION

5. The KTAC is the downstream section of the storm water system for a large area in East Kowloon. The overall catchment area of the Kai Tak Nullah which discharges to KTAC is about 1 100 hectares. For many years, factory owners along the upstream of the Kai Tak Nullah, namely in San Po Kong, Diamond Hill, Wong Tai Sin etc., have connected the sewer system to the storm water drains improperly. This results in water pollution and the emission of obnoxious odour in KTAC, causing much environmental nuisance. A large quantity of pollutants that are highly contaminated with heavy metals and other toxins from upstream has been

/deposited

deposited on the bed of the KTAC over the years¹. For environmental reasons, there is an urgent need to treat the contaminated sediments to permanently remove the bad odour. The treatment works will also eliminate potential risk of methane generation to the planned development on the KTAC reclamation.

6. According to the revised South East Kowloon Development (SEKD) scheme, the KTAC reclamation will provide about 28 hectares of land for housing and other related developments. To ensure timely delivery of the reclaimed land for the planned developments, we need to start the sediment-treatment and reclamation works in August 2003 for completion by the end of 2006. In turn, the site investigation and detailed design works have to start in January 2002 for completion in July 2003.

7. The KTAC reclamation will also bring about the added benefit of receiving the excavated materials to be generated from two adjacent site formation projects as filling material for reclaiming KTAC. These projects are **564CL** "Development near Choi Wan Road and Jordan Valley" and **566CL** "Development at Anderson Road", both of which are managed by the Director of Civil Engineering (DCE). Construction works for these two projects are presently scheduled to start in November 2001 and December 2002 respectively. DCE estimates that a total of 16 million cubic metres of excavated materials will need to be disposed of under these two projects between 2002 and 2007. Subject to detailed design, we will be able to accept about one-fifth of the excavated materials in the KTAC reclamation. This arrangement will bring overall benefit to the environment and can result in cost savings to the projects concerned.

FINANCIAL IMPLICATIONS

8. We estimate the capital cost of the project to be \$63.8 million in MOD prices (see paragraph 9 below). Breakdown is as follows -

	\$ million
(a) Site investigation works and pilot tests	20.0
	/(b)

¹ The situation has improved in recent years. This is the result of the enactment of the Water Pollution Control Ordinance (1980) and the Waste Disposal Ordinance (1980), as well as implementation of the East Kowloon Sewerage Master Plan. However, permanent treatment of the contaminated sediments is still required.

(b) Consultants' fees for		38.0	
(i) supervision of site investigation works and pilot tests		3.0	
(ii) EIA study		2.5	
(iii) detailed design		30.0	
(iv) preparation of tender documents		2.5	
(c) Contingencies		5.8	
	Sub-total	63.8	(in September 2001 prices)
(d) Provision for price adjustment		-	
	Total	63.8	(in MOD prices)

Due to insufficient in-house resources, DTD proposes to engage consultants to supervise the site investigation works, carry out the EIA study and other detailed design, and prepare tender documents. A breakdown by man-months of the estimate for the consultants' fees is at Enclosure 2.

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

Year	\$ million (Sep 2001)	Price adjustment factor	\$ million (MOD)
2001 – 2002	4.0	1.00000	4.0
2002 – 2003	40.0	0.99700	39.9

/2003 - 2004

2003 – 2004	19.8	1.00398	19.9
	<hr/>		<hr/>
	63.8		63.8
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10. We have derived the MOD estimate on the basis of the Government's latest forecast of trend labour and construction prices for the period 2001 to 2004. We will award the proposed consultancy on a lump sum basis with provision for price adjustments as the consultancy period will exceed 12 months. We will tender the site investigation works under a standard remeasurement contract because the amount of works involved may vary depending on actual ground conditions. The contract will not provide for price adjustments as the contract period will not exceed 21 months.

11. The proposed site investigation works and consultancy have no recurrent financial implications.

PUBLIC CONSULTATION

12. We consulted the Legislative Council Panel on Planning, Lands and Works (PLW) on 8 June 2000 in respect of the SEKD Preliminary Layout Plan. Members supported the plan in general.

13. We consulted the Legislative Council Panel on PLW again on 4 December 2000 concerning funding application for site investigation and detailed design of KTAC reclamation. The Panel raised no objection to the project. A panel member enquired about the water quality in the Kwun Tong typhoon shelter after the proposed reclamation. The EIA report subsequently completed in June 2001 under the comprehensive feasibility study for the revised SEKD scheme has confirmed that the proposed reclamation would not cause any adverse water quality impact.

14. Following substantial completion of the comprehensive feasibility study for the revised SEKD scheme under **440CL** "South East Kowloon development – comprehensive feasibility study", we presented the study findings to the EIA Sub-committee of the Advisory Council on the Environment on 3 September 2001. The Sub-committee had no adverse comments on the proposed reclamation.

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15. We consulted the Kwun Tong, Wong Tai Sin and Kowloon City District Councils on 11 June 2001, 12 June 2001 and 14 June 2001 respectively. All the District Councils raised no objections to the KTAC reclamation which will permanently remove the odour problem in the area. In particular, we have received requests to proceed with the reclamation works as soon as possible.

16. We circulated an information paper on this project to the LegCo Panel on PLW in October 2001.

ENVIRONMENTAL IMPLICATIONS

17. The proposed site investigation works and consultancy will not have environmental implications. Under the comprehensive feasibility study for the revised SEKD scheme, we have completed an EIA report for the entire scheme. The report was subsequently approved by the Director of Environmental Protection on 25 September 2001 under the EIA Ordinance.

18. The works in this project covered by the proposed consultancy require an environmental permit under the EIA Ordinance. We will carry out a separate, detailed EIA study as part of the detailed design process to assess the environmental impact of the project. We will incorporate all the measures recommended in the detailed EIA report into the detailed design and relevant works contract. We will apply for and obtain the environmental permit before we start the construction of the works.

19. The proposed site investigation works and consultancy will only generate a minimal amount of construction and demolition material (C&DM). We will require the consultants to fully consider measures to minimize the generation of C&DM and to reuse/recycle C&DM as much as possible during implementation of the construction project in future.

LAND ACQUISITION

20. The proposed site investigation works and consultancy do not require any land acquisition.

/BACKGROUND

BACKGROUND INFORMATION

21. We included **465CL** in Category B of the Public Works Programme in September 1996 for the engineering and reprovisioning works associated with the reclamation of KTAC and Kwun Tong typhoon shelter. The works form part of the SEKD scheme.

22. The SEKD feasibility consultancy study was completed in December 1998. However, in view of the large number of objections to the scale of the proposed reclamation, we have conducted a series of extensive public consultations to collect views on the SEKD scheme. Afterwards, we carried out a quick review under the same consultancy agreement in March 1999 to determine the minimum practicable reclamation option. The review recommended reducing the reclamation size for this development from 299 hectares to 161 hectares.

23. In November 1999, we commenced a separate consultancy to conduct comprehensive feasibility study for the revised SEKD scheme, based on the smaller reclamation scenario. The study was completed in June 2001. We propose to further reduce the reclamation size from 161 hectares to 133 hectares.

24. We estimate that the proposed site investigation and detailed design works will create some 95 jobs comprising 50 professional/technical staff and 45 labourers, totalling 1 215 man-months.

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Breakdown of the estimate for consultants' fees

Consultants' staff costs			Estimated man- months	Average MPS* salary point	Multiplier	Estimated fees (\$ million)
(a)	Supervision of site investigation works and pilot tests	Professional	20	38	1.7	2.1
		Technical	26	14	1.7	0.9
(b)	EIA study	Professional	12	38	2.4	1.7
		Technical	17	14	2.4	0.8
(c)	Detailed design	Professional	150	38	2.4	21.7
		Technical	177	14	2.4	8.3
(d)	Preparation of tender documents	Professional	10	38	2.4	1.4
		Technical	23	14	2.4	1.1
Total consultants' staff costs						38.0

*MPS = Master Pay Scale

Notes

1. A multiplier of 2.4 is applied to the average MPS point to estimate the full staff costs including the consultants' overheads and profit, as the staff will be employed in the consultants' offices. A multiplier of 1.7 is applied in the case of site staff supplied by the consultants. (At 1.4.2001, MPS pt. 38 = \$60,395 per month and MPS pt. 14 = \$19,510 per month)
2. The figures given above are based on estimates prepared by the Director of Territory Development. We will only know the actual man-months and fees when we have selected the consultants through the usual competitive lump sum fee bid system.