

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 707 – NEW TOWNS AND URBAN AREA DEVELOPMENT

Kowloon Development

Civil Engineering – Land development

469CL – South East Kowloon development – infrastructure at north apron area of Kai Tak Airport

Members are invited to recommend to Finance
Committee –

- (a) the upgrading of part of **469CL**, entitled “South East Kowloon development – site preparation and drainage works at north apron area of Kai Tak Airport”, to Category A at an estimated cost of \$119.1 million in money-of-the-day (MOD) prices; and
- (b) the retention of the remainder of **469CL** in Category B.

PROBLEM

We need to demolish the passenger terminal building and associated structures remaining in the north apron area of the former Kai Tak Airport (NAKTA) to prepare the site for future developments including the Shatin-to-Central Link (SCL) railway.

/PROPOSAL

PROPOSAL

2. The Director of Territory Development (DTD), with the support of the Secretary for Housing, Planning and Lands, proposes to upgrade part of **469CL** to Category A at an estimated cost of \$119.1 million in MOD prices to carry out site preparation and infrastructure works in NAKTA.

PROJECT SCOPE AND NATURE

3. The scope of **469CL** comprises the following works in NAKTA –

- (a) construction of about six kilometres of box culverts;
- (b) construction of new roads including flyovers and pedestrian streets, and upgrading of existing roads and associated drainage, sewerage and water mains;
- (c) construction of five sewage pumping stations and rising mains to convey sewage to the existing To Kwa Wan sewage treatment plant;
- (d) construction of drainage maintenance depots along with provision of plant and equipment for servicing the drainage culverts;
- (e) open space development and landscaping works;
- (f) demolition of remaining ex-airport facilities, including the passenger terminal building and the Kai Tak car-parking building; and
- (g) provision of necessary environmental mitigation measures and implementation of environmental monitoring and audit (EM&A) programme.

_____ A site plan showing the project scope of **469CL** is at Enclosure 1.

4. The part of the project we now propose to upgrade to Category A comprises –

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- (a) construction of about 600 metres of a twin-cell box culvert and decommissioning of an existing culvert (part of paragraph 3(a) above);
- (b) demolition of the passenger terminal building, the Kai Tak car-parking building and associated structures, along with related land decontamination (paragraph 3(f) above); and
- (c) implementation of an EM&A programme for the works mentioned in items (a) to (b) above.

A site plan showing the proposed works is at Enclosure 2. We plan to start works in April 2004 for completion in September 2006.

JUSTIFICATION

5. The SCL is a key transport project that provides a railway link from Shatin to the urban areas of Kowloon and the Hong Kong Island. A rail depot that is required under the SCL is planned at NAKTA. Operation of the SCL is contingent upon the timely provision of the rail depot and associated supporting facilities. As the rail depot will be located at the site of the passenger terminal building, demolition of the said passenger terminal building and the car-parking building is essential for the construction of the rail depot and associated facilities.

6. We need to complete the building demolition works by mid 2006 in order to hand over the site to the Kowloon-Canton Railway Corporation (KCRC) for construction of the rail depot. Both SCL and the rail depot are tentatively scheduled for commissioning in 2010/2011. To meet this programme, we need to start the building demolition works in April 2004 for completion in mid 2006. The whole contract is scheduled for completion in September 2006.

7. Site investigation works carried out under **440CL** "South East Kowloon development – comprehensive feasibility study" in 1997 have revealed patches of contaminations in the soil underlying NAKTA. We started the decontamination works in most of the NAKTA area under **494CL** "South East Kowloon development at Kai Tak Airport – decontamination and site preparation" in October 1998 and completed the works in April 2002. We will carry out the remaining land decontamination underneath the passenger terminal building and the car-parking building after the buildings are demolished.

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8. To cope with future developments, we will decommission an existing culvert and construct a new twin-cell box culvert along the north side of the proposed rail depot to collect stormwater flow from the surrounding areas. The new culvert will form part of a new drainage network. To make way for the new culvert, we will demolish a portion of the existing subway ramp near the passenger terminal building. We will upgrade and extend the subway in future to serve as a pedestrian link between Kowloon City and NAKTA.

9. We will implement an EM&A programme during the construction stage of the proposed works.

FINANCIAL IMPLICATIONS

10. We estimate the capital cost of the project to be \$119.1 million in MOD prices (see paragraph 11 below), made up as follows –

			\$ million
(a)	Demolition works		40.0
(b)	Land decontamination		10.0
(c)	Drainage works		45.0
(d)	EM&A programme		5.0
(e)	Consultants' fees for		11.0
	(i) construction stage	1.0	
	(ii) resident site staff costs	10.0	
(f)	Contingencies		11.1
	Sub-total		122.1
			(in September 2003 prices)
(g)	Provision for price adjustment		(3.0)
	Total		119.1
			(in MOD prices)

/Due

Due to insufficient in-house resources, DTD proposes to employ consultants to carry out the construction supervision for the proposed works. A breakdown by man-months of the estimate for the consultants' fees is at Enclosure 3.

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

Year	\$ million (Sept. 2003)	Price adjustment factor	\$ million (MOD)
2004 - 2005	20.0	0.98225	19.6
2005 - 2006	60.0	0.97734	58.6
2006 - 2007	36.0	0.97245	35.0
2007 - 2008	6.1	0.96759	5.9
	<u>122.1</u>		<u>119.1</u>

12. We have derived the MOD estimate on the basis of the Government's latest forecast of trend labour and construction prices for the period from 2004 to 2008. We will tender the proposed works under a remeasurement contract as the quantities of earthworks and decontamination works may vary according to the actual ground conditions. The contract will provide for price adjustments, as the contract period will exceed 21 months.

13. We estimate the annual recurrent expenditure arising from the proposed works to be \$0.14 million.

PUBLIC CONSULTATION

14. The draft Kai Tak (North) and Kai Tak (South) Outline Zoning Plans (OZPs), incorporating the revised development scheme of South East Kowloon Development, were last exhibited in August 2001 for public inspection under the Town Planning Ordinance. A total of 40 objections, which mainly aimed to improve different aspects of the development scheme, including the

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development concept, land use zoning and urban design, were received. Five objections were withdrawn subsequently. Among the remaining 35 objections, there was only one proposal advocating the retention of the passenger terminal building for alternative uses, which is within the scope of the proposed works. Since the site was required for the SCL project, the Town Planning Board did not propose amendment to meet this proposal. The draft OZPs together with unwithdrawn objections were then submitted to the Executive Council for consideration. On 25 June 2002, the Chief Executive in Council approved the OZPs and their approval was exhibited under the Town Planning Ordinance on 5 July 2002.

15. Some existing roads in the vicinity of the passenger terminal building and the car-parking building will have to be closed during the construction period. We gazetted the road closure under the Roads (Works, Use and Compensation) Ordinance in January 2003. Two objections were received from tenants of adjacent short term tenancies. The objectors requested to defer the road closure. Despite our explanation, the objectors maintained their objections. On 8 July 2003, the Chief Executive in Council overruled these objections in the public interest and authorised the road scheme without modifications.

16. We consulted the Kowloon City District Council on 9 May 2003, Kwun Tong District Council on 10 June 2003 and Wong Tai Sin District Council on 17 June 2003. Both the Kowloon City and Kwun Tong District Councils supported the proposed works. The Wong Tai Sin District Council, though supportive of the proposed works in general, requested to preserve the Air Traffic Control Tower when demolishing the passenger terminal building for the benefits of preserving buildings with historical value and potential to become a spot of tourist attraction. After our explanation on the technical aspects, the Wong Tai Sin District Council agreed not to preserve the tower *in-situ* and requested the Administration to explore the feasibility of reprovisioning the tower at a nearby location within the South East Kowloon Development (SEKD) boundary instead. We have employed a contractor to take detailed cartographic and photographic records of the tower. We will also require the demolition contractor to retain and store the metal window frames of the tower for possible reuse if the tower is to be re-built in future.

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17. We consulted the Legislative Council (LegCo) Panel on Planning, Lands and Works on the proposed works on 27 January 2004. Members generally supported the project in view of the need to hand over the site to KCRC for construction of the rail depot. In response to a Member, the Administration confirmed that the alternative of entrusting the project to KCRC had been considered and KCRC was consulted. There were no cost saving and programming benefits. We have, after the Panel meeting, further requested KCRC to review the situation. KCRC replied that after reconsidering the case, they are unable to undertake the proposed entrustment works due to resources reason. The Administration also confirmed that the depot at this location would be required in all scenarios/options of the alignment of SCL. A few Members were interested to know if the proposed drainage works would be affected by the Review of the SEKD plan. The Administration clarified that the proposed works would not be affected.

ENVIRONMENTAL IMPLICATIONS

18. Decommissioning of an airport is classified as a designated project under Schedule 2, Part II of the Environmental Impact Assessment Ordinance and an environmental permit is required. The Environmental Impact Assessment (EIA) Report for decommissioning NAKTA was approved by the Director of Environmental Protection on 4 September 1998 and the respective environmental permit was issued on 21 September 1998. With the exception of the passenger terminal building and the car-parking building areas, which were not accessible for land decontamination works as they had been leased out, all decontamination works at the remainder areas of NAKTA were completed in 2002. We achieved satisfactory results on the decontamination works and reported to the EIA Subcommittee of the Advisory Council on the Environment on 2 July 2003 in accordance with the requirements of the environmental permit.

19. We will carry out further site investigations and decontamination works in the passenger terminal building and the car-parking building areas after the buildings are demolished. We will follow the relevant conditions stipulated in the environmental permit and carry out the decontamination works according to statutory standards.

20. We will implement during construction stage the mitigation measures laid down in the EIA Report, and control noise, dust and site surface water run-off nuisances, in compliance with statutory standards and guidelines through environmental pollution control clauses specified in the contract. We will also implement an EM&A programme.

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21. We have considered ways to reuse/recycle the construction and demolition (C&D) materials as much as possible. We will crush the broken concrete generated by the demolition works for reuse in other projects. We will also arrange with the Director of Civil Engineering for possible recycling of the demolition materials.

22. We will require the contractor to submit an enhanced 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 require the contractor to employ sequential demolition technique to facilitate recovery of reusable and recyclable materials as much as possible and to carry out on-site sorting of the C&D materials. To further minimise the generation of C&D materials, we will encourage the contractor to use non-timber formwork and recyclable materials for temporary works. We will require the contractor to recover the recyclable C&D waste consisting of paper and cardboard packagings, plastics and metals for collection by the recycling contractors. We will control the disposal of public fill and C&D waste to the 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.

23. We estimate that the project will generate about 200 000 cubic metres (m³) of C&D materials. Of these, we will reuse about 96 000 m³ (48%) on site or in other projects, about 56 000 m³ (28%) to public filling facilities, about 24 000 m³ (12%) for recycling and dispose of about 24 000 m³ (12%) at landfills. The notional cost of accommodating C&D waste at landfills is estimated to be \$3 million for this project (based on a notional unit cost¹ of \$125/m³).

LAND ACQUISITION

24. The proposed works do not require any land acquisition.

/BACKGROUND

¹ 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.

BACKGROUND INFORMATION

25. On 27 February 1998, the Finance Committee (FC) approved the upgrading of part of **469CL** to Category A as **494CL** and to keep the remainder in Category B. Works upgraded to Category A at an estimated cost of \$316.9 million in MOD price included ground decontamination, demolition of existing buildings and structures in northern part of NAKTA, breaking up of the existing apron slab and formation of land at NAKTA for housing development. We started works in October 1998 and completed them in April 2002.

26. We consulted the LegCo Panel on Planning, Lands and Works on 4 December 2000 regarding funding application to start the detailed design of some of the SEKD works, some of which were at NAKTA.

27. Following the above Panel consultation, FC approved on 23 November 2001 the upgrading of another part of **469CL** to Category A as **694CL** “South East Kowloon development at Kai Tak Airport – consultants’ fees and site investigation” at an estimated cost of \$115.9 million in MOD prices for site investigation and engagement of consultants to carry out detailed design of infrastructure for the planned developments in NAKTA, EIA study and preparation of tender documents for those provisions. The consultancy started in January 2002 and we have completed the detailed design of the proposed works mentioned in paragraph 4 above in September 2003. We have also completed the tender documents for these works. We have obtained the environmental permit for five proposed sewage pumping stations at NAKTA. The detailed design of roads and drainage works has not been finalized, considering that we have undertaken to review the planned developments in SEKD as a whole.

28. At the Public Works Subcommittee (PWSC) meeting held on 31 October 2001, some Members suggested and the Administration agreed to include information in future SEKD PWSC submissions on the progress, scope and approved project estimates of all the SEKD PWP items. The information is at Enclosure 4.

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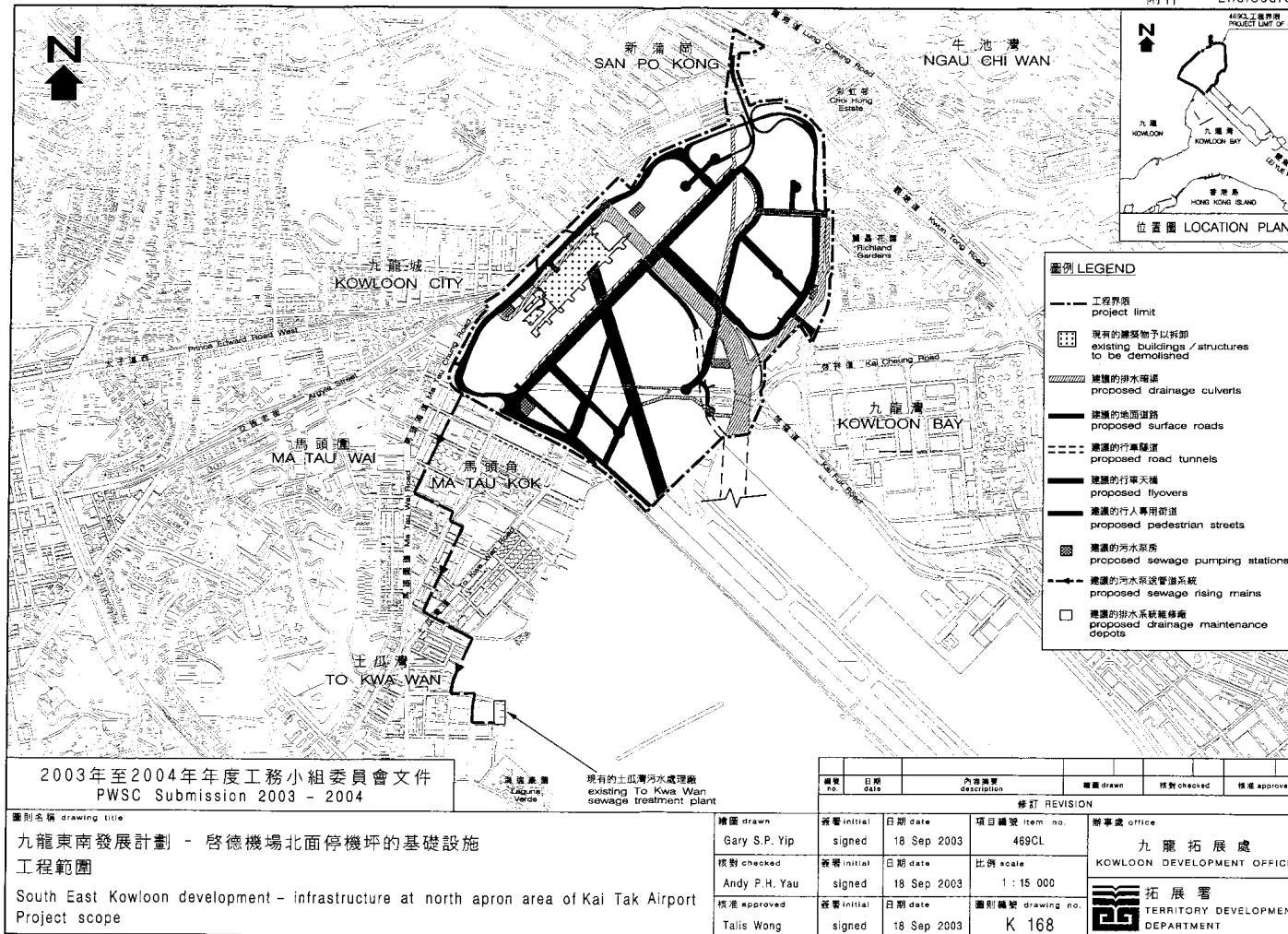
29. The proposed site preparation and drainage works at NAKTA will involve transplanting of 36 trees within the project site. All trees to be transplanted are not important trees². We will incorporate planting proposal as part of the project when implementing roadworks at NAKTA.

30. We estimate that the current project will create some 71 jobs comprising 15 professional/technical staff and 56 labourers, totalling 1 920 man-months.

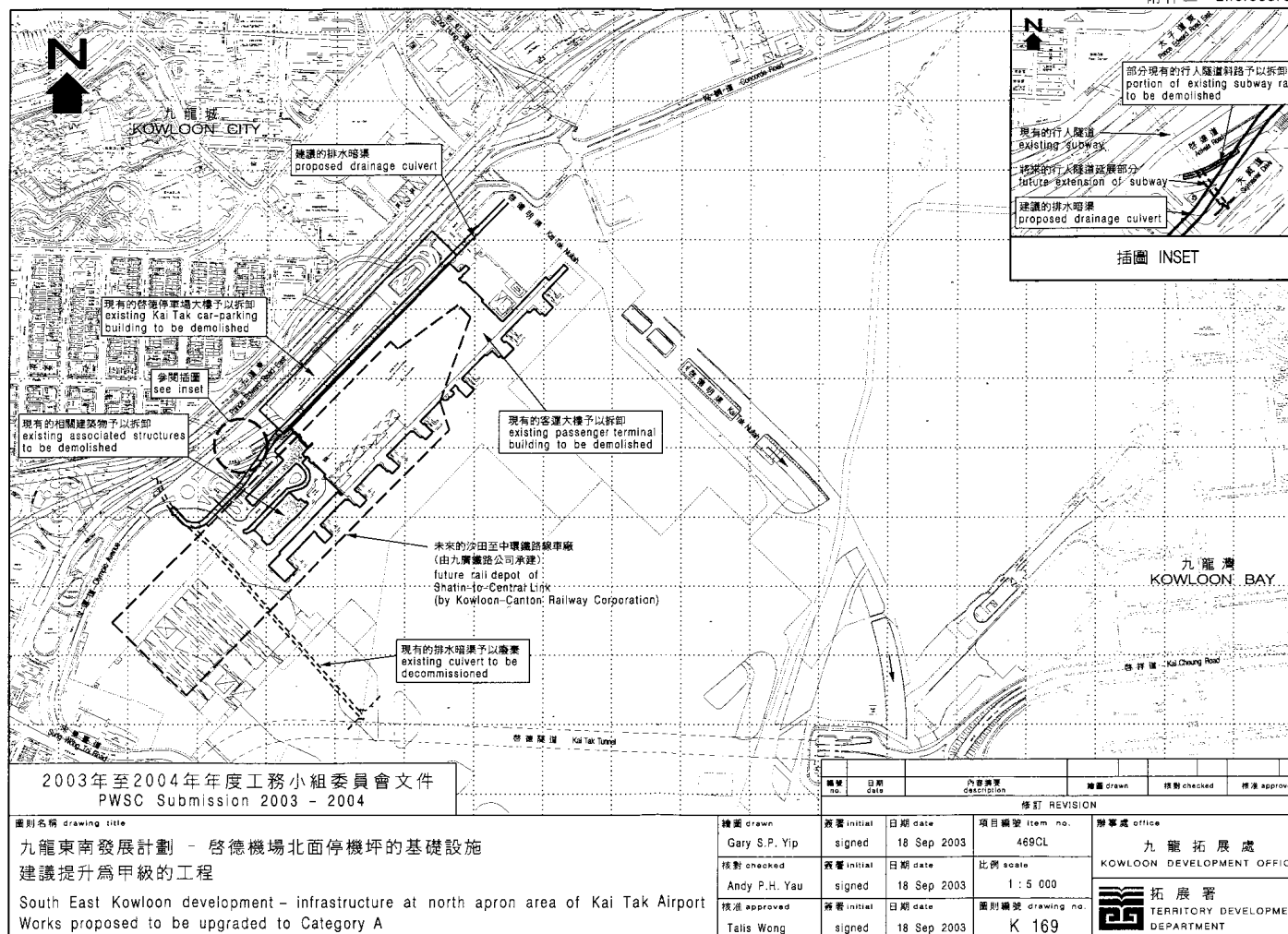
Housing, Planning and Lands Bureau
February 2004

² Important trees include trees on the Register of Old and Valuable Trees, and any other trees which meet one or more of the following criteria –

- (a) trees over 100 years old;
- (b) trees of cultural, historical or memorable significance;
- (c) trees of precious or rare species;
- (d) trees of outstanding form; or trees with trunk diameter exceeding one metre (measured at one metre above ground level).



附件二 Enclosure 2



**469CL – South East Kowloon development – infrastructure at
north apron area of Kai Tak Airport**

Breakdown of the estimate for consultants' fees

Consultants' staff costs			Estimated man- months	Average MPS* salary point	Multiplier (Note 1)	Estimated fees (\$ million)
(a) Consultants' fees for construction stage (Note 2)						
(i) contract administration	Professional		-	-	-	0.53
	Technical		-	-	-	0.22
(ii) preparation of as-built drawings	Professional		-	-	-	0.18
	Technical		-	-	-	0.07
(b) Resident site staff costs (Note 3)	Professional		44	38	1.6	3.94
	Technical		202	14	1.6	6.01
Total consultants' staff costs						<hr/> 10.95
Say						<hr/> 11.00

* 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. (At 1.1.2004, MPS pt. 38 = \$55,993 per month and MPS pt. 14 = \$18,603 per month)
2. The consultants' staff cost for contract administration and preparation of as-built drawings is calculated in accordance with the existing consultancy agreement for design and construction supervision for South East Kowloon development – infrastructure at north apron area of Kai Tak Airport.
3. The consultants' resident site staff cost is based on estimates prepared by the Director of Territory Development. We will only know the actual man-months and actual costs after completion of the construction works.

List of PWP items in Category A under SEKD projects

PWP Item No.	440CL
Project title:	South East Kowloon development – comprehensive feasibility study
Date of upgrading to Category A:	April 1995
Approved project estimate:	\$220 million
Project scope:	The project comprises a comprehensive feasibility study for the whole South East Kowloon area, as well as associated laboratory testing and site investigation works.
Brief account of progress:	<p>(a) The comprehensive feasibility study has been completed. The land use proposals recommended in the study have been translated into the amended Kai Tak (North) and Kai Tak (South) Outline Zoning Plans which were gazetted in August 2001. Several amendments were subsequently made to meet some of the objections received. The Chief Executive in Council approved the OZPs on 25 June 2002 and notification of the approval was gazetted on 5 July 2002.</p> <p>(b) Project account has been finalized.</p>

PWP Item No.	494CL (part upgraded from 469CL)
Project title:	South East Kowloon development at Kai Tak Airport – decontamination and site preparation
Date of upgrading to Category A:	February 1998
Approved project estimate:	\$316.9 million
Project scope:	(a) ground decontamination at the north apron of Kai Tak Airport (NAKTA); (b) demolition of existing buildings and structures in the northern part of NAKTA; and (c) breaking up of the existing apron slab and land formation at NAKTA for housing development.
Brief account of progress:	(a) The civil engineering contract covering the above works was completed in April 2002. (b) Post-decontamination monitoring works were completed in December 2003.
PWP Item No.	694CL (part upgraded from 469CL)
Project title:	South East Kowloon development at Kai Tak Airport – consultants’ fees and site investigation
Date of upgrading to Category A:	November 2001
Approved project estimate:	\$115.9 million
Project scope:	Site investigation works and detailed design for – (a) about 6 kilometres box culverts;

- (b) new roads including flyovers and pedestrian streets, and upgrading of existing roads and associated drainage, sewerage and watermains;
- (c) five sewage pumping stations and rising mains to convey sewage to the existing To Kwa Wan sewage treatment plant;
- (d) drainage maintenance depots along with provision of plant and equipment for servicing the drainage culverts in NAKTA;
- (e) open space development and landscaping works;
- (f) demolition of remaining ex-airport facilities, including the passenger terminal building and Kai Tak car-parking building and decontamination of land underneath the buildings; and
- (g) provision of necessary environmental mitigation measures and implementation of an EM&A programme.

Brief account of progress:

- (a) Consultancy started in January 2002.
- (b) Detailed design for demolition of the passenger terminal building and associated structures remaining in NAKTA has been completed.
- (c) We have obtained environmental permit for five proposed sewage pumping stations on NAKTA.
- (d) Detailed design of roads and drainage works has not yet been finalized, pending review of the planned developments in NAKTA.

PWP Item No.	693CL (part upgraded from 465CL)
Project title:	South East Kowloon development – consultants’ fees and site investigation for Kai Tak Approach Channel reclamation
Date of upgrading to Category A:	November 2001
Approved project estimate:	\$63.8 million
Project scope:	Site investigation works and detailed design for – <ul style="list-style-type: none">(a) treatment of the contaminated sediments (including pilot tests and post-treatment monitoring) in Kai Tak Approach Channel (KTAC);(b) reclamation works in KTAC;(c) 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; and(e) provision of necessary environmental mitigation measures and implementation of an EM&A programme.
Brief account of progress:	<ul style="list-style-type: none">(a) Consultancy started in January 2002.(b) Reclamation works and road tunnel works were gazetted under the Foreshore and Sea-bed (Reclamations) Ordinance and Roads (Works, Use and Compensation) Ordinance respectively in August 2002. No objections to the proposed works were received.

- (c) Laboratory tests on sediment remediation methods have been completed and results presented to the EIA Subcommittee of the Advisory Council on the Environment in July 2003.
- (d) The consultancy was suspended in December 2003, pending review of the SEKD plan.

PWP Item No. **699CL** (part upgraded from **482CL**)

Project title: South East Kowloon development – consultants' fees and site investigation for Kowloon Bay reclamation and engineering works

Date of
upgrading to
Category A: July 2002

Approved
project estimate: \$105.7 million

Project scope: Site investigation works and detailed design for –

- (a) treatment of contaminated sediments (including post-treatment monitoring) at the seabed of Kowloon Bay;
- (b) reclamation for about 61 hectares of land in Kowloon Bay;
- (c) construction of a new seawall, breakwater, and marine facilities including public landing steps;
- (d) demolition of existing breakwaters and marine facilities including Kowloon City vehicular ferry pier, passenger ferry pier and public pier;
- (e) construction of new drainage culverts and improvements to existing hinterland drainage systems necessitated by the proposed reclamation in Kowloon Bay;
- (f) upgrading of existing roads and construction of new roads, a road tunnel, pedestrian streets, footbridges and pedestrian subways with associated drainage, sewerage and water works;

- (g) construction of public transport facilities;
- (h) construction of sewage holding facilities adjacent to the existing To Kwa Wan sewage treatment works and sewage pumping stations;
- (i) relocation of the existing Eastern Quarantine and Immigration Anchorage and mooring buoys within Kowloon Bay;
- (j) provision of landscaping works at the proposed reclamation area;
- (k) provision of environmental protection measures; and
- (l) implementation of an EM&A programme.

Brief account of progress:

- (a) Consultancy started in December 2002.
- (b) The review phase of the project has been completed.
- (c) The consultancy was suspended in December 2003, pending review of the SEKD plan.