

For discussion
on 11 November 1998

PWSC(98-99)37

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 707 - NEW TOWNS AND URBAN AREA DEVELOPMENT

Hong Kong Island and Islands Development

Civil Engineering - Land development

193CL - Peng Chau development, package 4, engineering works

Members are invited to recommend to Finance Committee the upgrading of **193CL** to Category A at an estimated cost of \$167.3 million in money-of-the-day prices for the engineering works of Peng Chau development, package 4.

PROBLEM

Most of the existing footpaths in the built-up areas in the south-western part of Peng Chau are not wide enough for the operation of standard fire appliances.

PROPOSAL

2. The Director of Territory Development, with the support of the Secretary for Planning, Environment and Lands, proposes to upgrade **193CL** to Category A at an estimated cost of \$167.3 million in money-of-the-day (MOD) prices for the reclamation of about 1.3 hectares of land and the construction of a network of emergency vehicular access (EVA) in the south-western part of Peng Chau.

PROJECT .. |

PROJECT SCOPE AND NATURE

3. The scope of **193CL** comprises -
- (a) the construction of a 630-metre seawall and the reclamation of about 1.3 hectares of land to provide local open space;
 - (b) the construction of a 700-metre long EVA and promenade with a total width of 6 metres on the reclaimed land mentioned in (a) above;
 - (c) upgrading of sections of existing roads to EVA standard; and
 - (d) the associated drainage, sewerage, diversion of water mains and landscaping works;

JUSTIFICATION

4. At present, different areas in the south-western part of Peng Chau are connected by footpaths ranging from 1.5 metres to 3.5 metres in width only. As these footpaths are not up to the width standard of 4.5 meters for EVAs, standard fire appliances cannot be used in fire fighting and rescue operations. The Director of Fire Services therefore provides emergency services to the residents in Peng Chau by means of mini-fire trucks and mini-ambulances which gain access to different parts of the island through these narrow footpaths.

5. From 1989 to 1998, the population of Peng Chau has grown from about 6 300 people to 7 700 people. At the same time, with the increase in population, newer buildings in Peng Chau are being planned to be built up to six storeys. These relatively more intense developments will pose potential safety problems as the rescue facilities and equipment on mini fire trucks are only able to carry out rescue operations effectively on buildings of up to three storeys high. Therefore, the Director of Fire Services considers it essential to provide and use standard fire appliances equipped with more powerful pumping equipment and more efficient aerial fire fighting/rescue facilities in Peng Chau. Standard fire

/appliances ..

appliances, which are already widely used in urban areas, need to operate on vehicle access of a minimum width of 4.5 meters. As the existing footpaths in the south-western part of Peng Chau do not meet this requirement, we need to upgrade the footpaths to form an identified EVA network to the required standard. In conjunction with the proposed roadworks, we also need to divert some existing watermains affected by the works.

6. The provision of the EVA network would require reclamation along the south-western coastline to provide land for the construction of a part of the proposed EVA system along the waterfront. The proposed reclamation will also provide land for local open space to address the general shortage of such facilities in that part of the island. In association with the proposed reclamation works, we need to construct storm water drains on the land to be reclaimed. Furthermore, we will also provide the necessary sewerage connections to the unsewered areas affected by this project.

FINANCIAL IMPLICATIONS

7. We estimate the capital cost of the project to be \$167.3 million in MOD prices (see paragraph 8 below), made up as follows -

	\$ million
(a) Reclamation and seawalls	68.0
(b) Roadworks	28.0
(c) Sewers and stormwater drains	10.0
(d) Waterworks	3.0
(e) Landscaping works	4.0
(f) Consultants' fees for	14.0

(i) construction stage	1.7		
(ii) Site staff costs	12.3		
(g) Contingencies		13.0	
	Sub-total	140.0	(at December 1997 prices)
(i) Inflation allowance		27.3	
	Total	167.3	(in MOD prices)

A breakdown by man months of the consultants' fees is at the Enclosure.

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

Year	\$ million (Dec 1997)	Price adjustment factor	\$ million (MOD)
1999 - 2000	50.0	1.12890	56.4
2000 - 2001	55.0	1.19663	65.8
2001 - 2002	25.0	1.26843	31.7
2002 - 2003	10.0	1.34454	13.4
	<hr/> 140.0 <hr/>		<hr/> 167.3 <hr/>

9. We have derived the MOD estimate on the basis of the Government's latest forecast of trend labour and construction prices over the period 1998 to 2003. We will tender the proposed works under a lump sum contract because we can clearly define the scope of works in advance. We will provide for inflation adjustment in the contract because the construction period will exceed 21 months.

10. We estimate the annually recurrent expenditure to be \$0.66 million.

PUBLIC CONSULTATION

11. We consulted the Peng Chau and Discovery Bay Area Committee on the proposed works on 13 September 1995 and 29 November 1995. The Committee supported the proposal.

12. We gazetted the proposed reclamation works under the Foreshore and Sea-bed (Reclamations) Ordinance on 16 August 1996, and received one objection from the owner of a restaurant on grounds of the impact of the reclamation on his business. The Chief Executive in Council overruled the objection in the public interest and authorized the works without modifications on 27 March 1998.

13. We gazetted the proposed road scheme under the Roads (Works, Use and Compensation) Ordinance on 14 March 1997, and received two objections from the residents. The objectors were concerned that the proposed road scheme would cause nuisance and disruption to their work and business. The Chief Executive in Council overruled the objection in the public interest and authorized the works without modifications on 31 July 1998.

ENVIRONMENTAL IMPLICATIONS

14. The Director of Environmental Protection completed an Environmental Review of the proposed engineering works in January 1996 and concluded that no Environmental Impact Assessment was necessary. This has taken into account the fact that the scale of the proposed works was small and the proposed reclamation basically followed the alignment of the original coastline.

15. To address short-term impact during construction, we will incorporate relevant clauses in the works contract to control dust, noise, site run-off and impact on water quality to within established standards and guidelines.

LAND ACQUISITION

16. We will resume about 0.12 hectares of agricultural land and 0.08 hectares of building land for the project. The land acquisition and clearance will affect 43 households involving 120 people. The Director of Housing will rehouse the families affected in public housing in line with existing policy on rehousing. We will charge the cost of land acquisition and clearance, estimated at \$18 million, to **Head 701 - Land Acquisition**.

BACKGROUND INFORMATION

17. We included **193CL** in Category B in 1990 for the engineering works of Peng Chau development, package 4. In view of the more urgent commitments under the Airport Core Programme, we planned to start the works in 1995. Arising from the need to rehouse the affected cleartees in public housing in Peng Chau, we decided to revise the programme further to dovetail the implementation of this project with the completion and intake of the new rural public housing estate in 1996. This has resulted in further deferment of the implementation schedule. We had explained the reasons for this delay to the then Islands District Board in the course of submitting the annual Lantau and Islands Development Programme to the District Board for information. The Board expressed no objection to the revised implementation programme.

18. We engaged consultants to undertake the site investigation and design of the project and charged the cost of \$4.3 million to the block allocation **Subhead 7100CX** "New towns and urban area works, studies and investigations for items in Category D of the Public Works Programme". The consultants have completed the detailed design and working drawings. We plan to start the works in February 1999 for completion in August 2001.

Enclosure to PWSC(98-99)37

193CL - Peng Chau development, package 4, engineering works

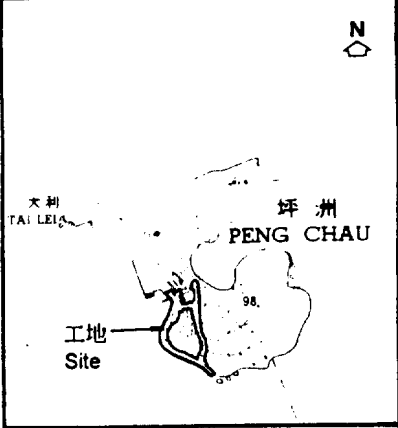
Breakdown of the estimate for consultants' fees

Consultants' staff costs		Estimated man months	Average MPS* salary point	Multiplier factor	Estimated fee (\$million)
(a) Contract administration	Professional	7	40	3.0	1.2
	Technical	3	16	3.0	0.2
(b) Preparation of as-built drawings	Professional	0.5	40	3.0	0.1
	Technical	3	16	3.0	0.2
(c) Resident site staff costs	Professional	45	40	2.1	5.6
	Technical	160	16	2.1	6.7
Total consultants' staff costs					14.0

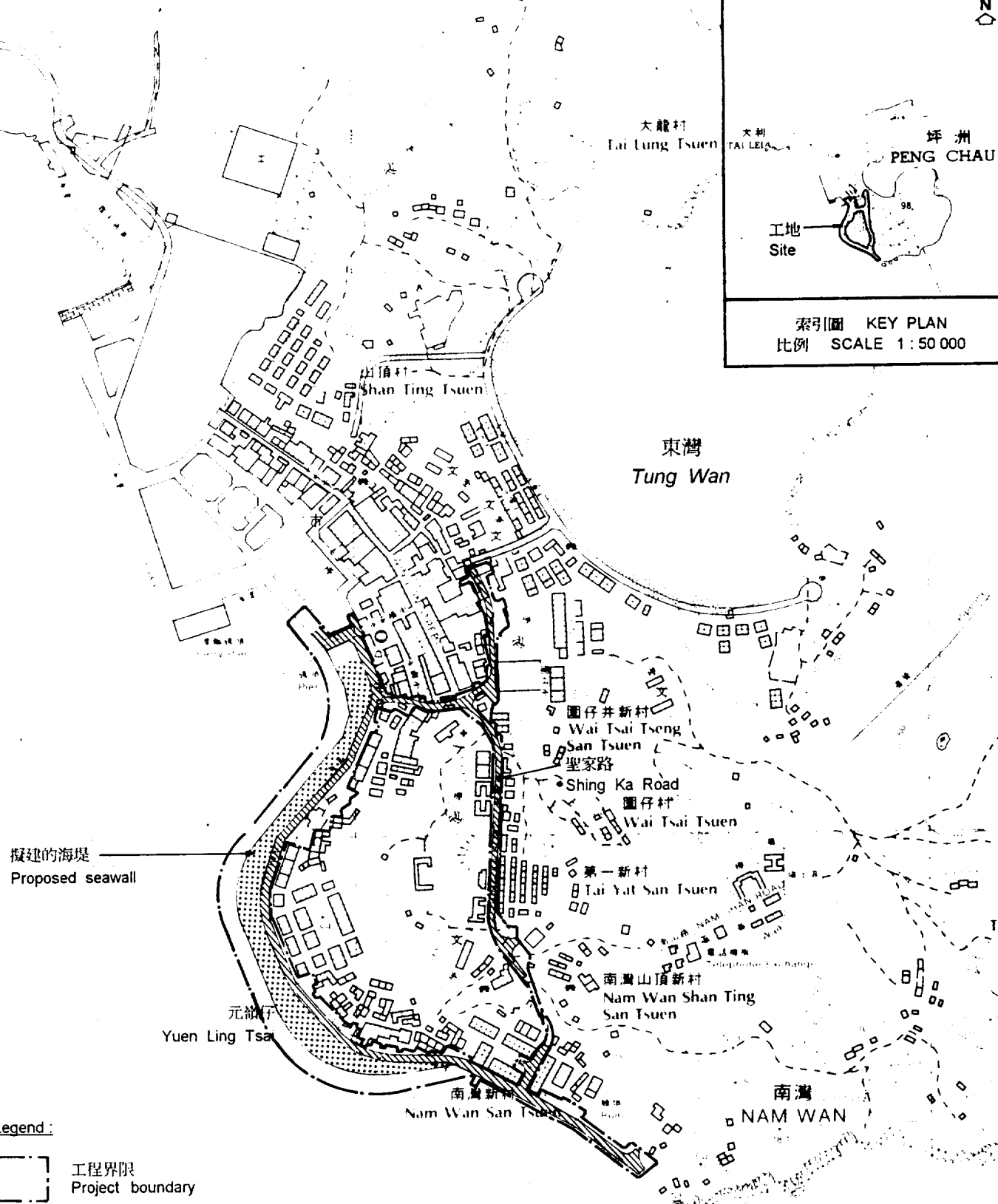
* MPS = Master Pay Scale




Notes




1. A multiplier factor of 3 is applied to the average MPS point to arrive at the full staff costs including the consultants' overheads and profit, as the staff will be employed in the consultants' offices. A multiplier factor of 2.1 is applied to the average MPS point in the case of resident site staff supplied by the consultants. (At 1.4.97, MPS pt. 40 = \$59,210 p.m. and MPS pt. 16 = \$19,860 p.m.).
2. The figures given above are based on estimates prepared by the Director of Territory Development. The consultancy works for this project have been included as part of the overall consultancy agreement for Development in Islands/Sai Kung Districts.



索引圖 KEY PLAN
比例 SCALE 1 : 50 000



- 圖例 Legend:**
-  工程界限
Project boundary
 -  擬建的緊急車輛通道
Proposed emergency vehicular access
 -  擬建的遊憩用地
Proposed open space

一九九八至九九年度工務小組委員會文件 PWSC Submission 1998/99	繪圖 drawn	簽署 initial	日期 date	項目編號 item no.	辦事處 office 港島及離島拓展處 HONG KONG ISLAND AND ISLANDS DEVELOPMENT OFFICE
	C M Lo		2.9.98	193CL	
圖則名稱 drawing title 坪洲發展計劃第4組工程 Peng Chau development, package 4, engineering works	核對 checked	簽署 initial	日期 date	比例 scale	拓展署 TERRITORY DEVELOPMENT DEPARTMENT
	S O Leung		2.9.98	1 : 5 000	
	核准 approved	簽署 initial	日期 date	圖則編號 drawing no.	
	C H Wong		2.9.1998	HKI-278	