

For discussion
on 28 February 2001

PWSC(2000-01)101

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 711 - HOUSING

Civil Engineering - Land development

572CL - Site formation for public housing development at Tung Tau Cottage Area

Members are invited to recommend to Finance Committee the upgrading of **572CL** to Category A at an estimated cost of \$87.4 million in money-of-the-day prices to carry out site formation and associated infrastructure works for the public housing development at Tung Tau Cottage Area.

PROBLEM

We need to carry out site formation works for building platforms and construction of road, drainage, sewerage and water works for the public housing development at Tung Tau Cottage Area.

PROPOSAL

2. The Director of Civil Engineering, with the support of the Secretary for Housing, proposes to upgrade **572CL** to Category A at an estimated cost of \$87.4 million in money-of-the-day (MOD) prices to carry out site formation and associated infrastructure works for the public housing development at Tung Tau Cottage Area.

/PROJECT

PROJECT SCOPE AND NATURE

3. The scope of **572CL** comprises -
- (a) formation of about 1.5 hectares of building platforms and associated slopes;
 - (b) re-alignment of Pui Man Street to a 230-metre (m) single two-lane carriageway, and construction of about 150 m of associated retaining walls; and
 - (c) associated drainage, sewerage and water works.

— A site plan showing the proposed works is at the Enclosure.

JUSTIFICATION

4. Tung Tau Cottage Area will be developed as a site for a public housing development of about 2 000 flats accommodating about 6 300 persons. These flats are currently scheduled to be completed in two phases. Phase 1 will be ready for occupation in 2006 and Phase 2 in 2007. In order to provide the necessary site formation and infrastructure to tie in with the housing development programme, we plan to commence the proposed works in September 2001 for completion of the Phase 1 works in September 2002 and the Phase 2 works in May 2003.

5. The Housing Authority (HA) is responsible for clearing and demolishing the structures in Tung Tau Cottage Area before commencement of the proposed works. HA is also responsible for constructing the building works after the completion of the site formation works. In order to expedite the development process and to ensure a more co-ordinated implementation approach, we will entrust the site formation and associated infrastructure works to HA. The entrustment arrangement will avoid works interface problems and allows a smooth, phased handover of the proposed works for HA to complete the building works as programmed.

/FINANCIAL

FINANCIAL IMPLICATIONS

6. We estimate the capital cost of the project to be \$87.4 million in MOD prices (see paragraph 7 below), made up as follows -

	\$ million	
(a) Formation of building platforms and associated slopes	26.8	
(b) Re-alignment of Pui Man Street and construction of associated retaining walls	41.2	
(c) Drainage, sewerage and water works	4.3	
(d) Environmental mitigation measures	1.0	
(e) Contingencies	7.3	
(f) Housing Authority on-cost ¹	1.6	
Sub-total	82.2	(in September 2000 prices)
(g) Provision for price adjustment	5.2	
Total	87.4	(in MOD prices)

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

Year	\$ million (Sept 2000)	Price adjustment factor	\$ million (MOD)
2001 - 2002	14.0	1.02550	14.4
			/2002 - 2003

¹ We will reimburse the Housing Authority an on-cost 2% for the management, design and supervision of this project in accordance with Clause (c) of Appendix G, Housing Authority Memorandum of Administrative Agreement, 1974.

2002 - 2003	46.0	1.05627	48.6
2003 - 2004	14.0	1.08795	15.2
2004 - 2005	8.2	1.12059	9.2
	82.2		87.4

8. 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 2005. We will tender the proposed works through a standard remeasurement contract because the quantities of earthworks involved may vary depending on actual ground conditions. The contract will not provide for inflation adjustments as the contract will not exceed 21 months. Housing Department will use in-house resources to supervise the construction works.

9. We estimate the annually recurrent expenditure arising from this project to be \$231,800.

PUBLIC CONSULTATION

10. We consulted the Traffic & Transport Committee of the Wong Tai Sin Provisional District Board on the proposed road works on 17 November 1998. While supporting the proposal, the Committee requested adequate measures be implemented during construction to ensure pedestrian safety and to minimise environmental nuisance caused to the nearby residents. In particular, they were concerned about the impact of the proposed works on the nearby Bishop Ford Memorial School. We will incorporate in the contract necessary measures including provision of a temporary covered pedestrian walkway to the school, erection of temporary noise barriers and the use of construction plant with noise reduction equipment to minimize any adverse environmental impact.

11. We gazetted the proposed road works under the Roads (Works, Use and Compensation) Ordinance on 26 March 1999 and received two objections. The objectors expressed concerns on the potential disturbance to the existing occupants of the Tung Tau Cottage Area during the road construction. We explained to the objectors that the road works would not commence until the cottage area was cleared. Consequently, both objectors withdrew their objections. The Secretary for Transport authorized the road works on 13 August 1999.

12. We consulted the LegCo Panel on Housing on 8 January 2001. Members were concerned about the clearance of Tung Tau Cottage Area. We explained that we would not commence the proposed site formation works until the clearance operation and demolition works were completed, in stages if necessary, before September 2001. Members were also concerned about the pedestrian safety and construction nuisance caused to the Bishop Ford Memorial School. We explained that we would provide and maintain a temporary covered pedestrian walkway throughout the construction period until the completion of the re-alignment of Pui Man Street.

ENVIRONMENTAL IMPLICATIONS

13. The project is not a designated project under the Environmental Impact Assessment Ordinance. Nevertheless, we have completed a Preliminary Environmental Review (PER) for the proposed site formation and associated infrastructure works. The Director of Environmental Protection has agreed to the necessary mitigation measures recommended in the PER. These, which include erection of temporary noise barriers, use of plant with noise reduction equipment and regular watering of the site, will contain the short-term environmental impacts within established standard and guidelines. We have included \$1 million in the project estimate for the implementation of these mitigation measures. The project will not cause any long-term environmental impact.

14. The Director of Housing (D of H) has considered in the planning and design stages the need to minimize the generation of construction and demolition (C&D) materials. The design of the building platforms has been optimized in this respect. We will use suitable excavated materials for filling within the project site to minimize off-site disposal.

15. We estimate that the project will generate about 93 500 cubic metres (m³) of C&D materials. Of these, we will reuse about 15 000 m³ (16.1%) on site, and 78 000 m³ (83.4%) as fill in public filling areas² and dispose of 500 m³ (0.5%) at landfills.

16. D of H will require the contractor to submit a waste management plan for approval. This will ensure the proper disposal of C&D materials and the sorting of C&D materials by category on site to facilitate reuse/recycling of the materials to reduce waste generation. The reusable/recyclable materials will

/include

² A public filling area is a designated part of a development project that accepts public fill for reclamation purpose. Disposal of public fill in a public filling area requires a licence issued by the Director of Civil Engineering.

include paper/cardboard, timber and metal. D of H will ensure that site operations will comply with the approved waste management plan. D of H will control the disposal of public fill and C&D wastes through a trip-ticket system and will require the contractor to separate public fill from C&D wastes for disposal at appropriate locations. To further minimize the generation of C&D materials in the construction stage, D of H will encourage the contractor to use non-timber formwork and recyclable material for temporary works. In addition, the contractor will be required to use metal hoarding and precast units as far as practicable. D of H will record the disposal, reuse and recycling of C&D materials for monitoring purpose.

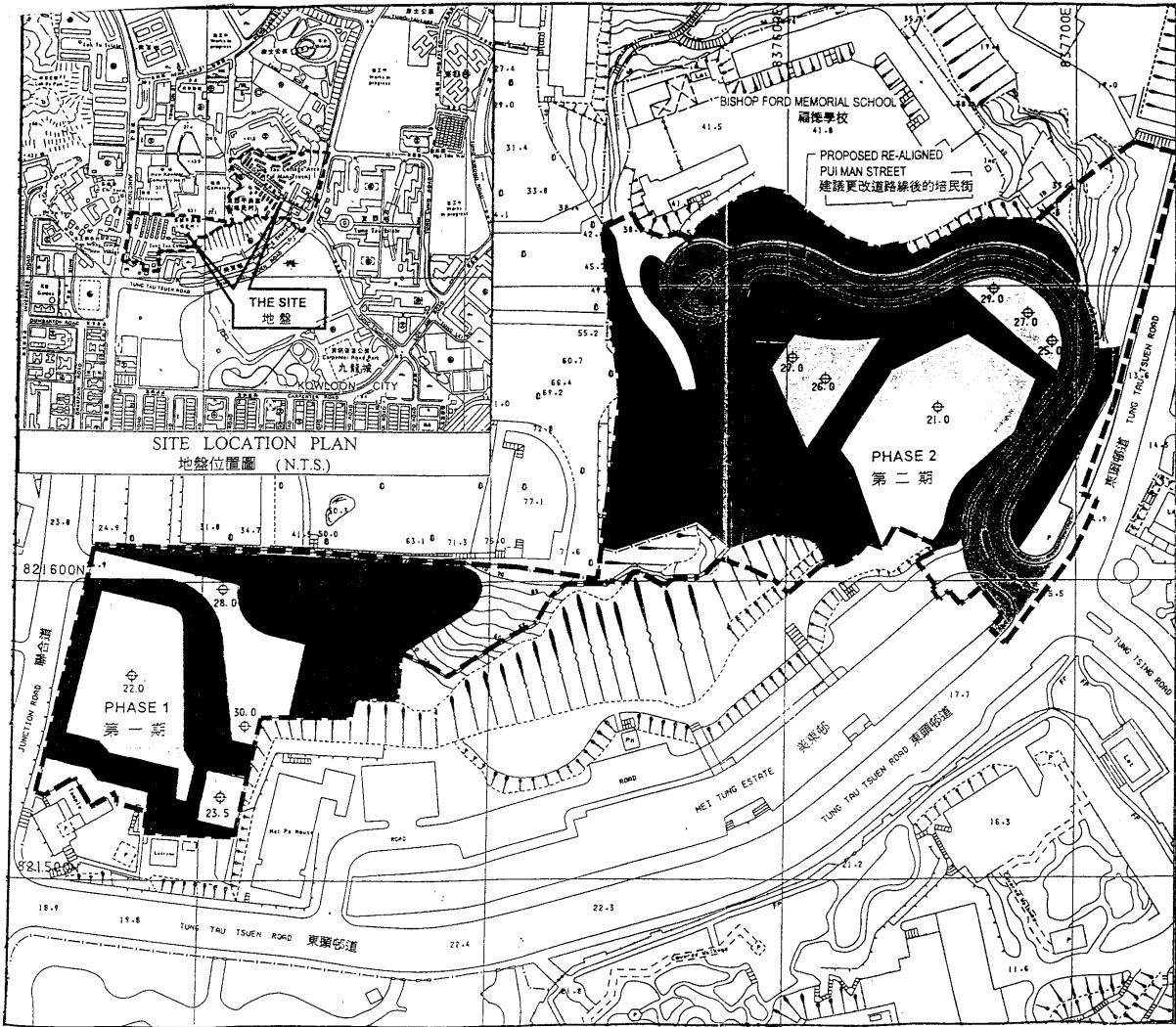
LAND ACQUISITION

17. The proposed works do not require any land acquisition. The clearance of Tung Tau Cottage Area affects 290 households involving 954 persons and requires the demolition of 222 structures including five factory buildings. The clearance operation started in September 1998 and is expected to be completed by the end of the first quarter of 2001. D of H has offered the eligible families accommodation in public rental housing and ex-gratia allowances to the factory operators in line with the existing policy.

BACKGROUND INFORMATION

18. We included **572CL** in Category B of the Public Works Programme in November 1999. D of H has now completed the detailed design for the proposed works using in-house resources.

19. We estimate that the project will create some 110 jobs comprising 15 professional/technical staff and 95 labourers, totalling 1 950 man-months.



- NOTES 註釋:
1. ALL LEVELS ARE IN METRES ABOVE PRINCIPAL DATUM.
所有高度均以超過水平基準的米數計算
 2. ALL DIMENSIONS ARE IN METRES.
所有尺寸均以米為單位
 3. ACCESS BETWEEN PLATFORMS WILL BE DESIGNED AND CONSTRUCTED UNDER FUTURE BUILDING CONTRACT
平台之間的通道將會於未來的建築合約內設計和建造

- LEGEND 圖例:
- PROPOSED SLOPE WORKS
建議的斜坡工程
 - 21.0 PROPOSED PLATFORM LEVEL
建議的平台高度
 - WORKS AREA BOUNDARY
施工區界線
 - PROPOSED RE-ALIGNED PUI MAN STREET
建議更改道路線後的培民街
 - PROPOSED RETAINING WALLS
建議的護土牆
 - PROPOSED PLATFORM
建議的平台

no.	date	description	checked	approved
REVISION				
designed		name	initial	date
drawn		W K WONG	[initials]	15/11/2000
traced		W K WONG	[initials]	15/11/2000
checked		L P LAM	[initials]	15/11/2000
approved		[signature]	[initials]	[initials]

contract no.
file no.
project no. B572CL
project
SITE FORMATION FOR PUBLIC HOUSING DEVELOPMENT AT TUNG TAU COTTAGE AREA
東頭平房區公共房屋發展地盤平整工程
drawing title
SITE PLAN
地盤平面圖
drawing no.
HSD 45
scale
1:1250

office
HOUSING SITES DIVISION
CIVIL ENGINEERING OFFICE
CIVIL ENGINEERING DEPARTMENT
HONG KONG