# ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

# HEAD 707 – NEW TOWNS AND URBAN AREA DEVELOPMENT New Territories North Development Civil Engineering – Land development

# 707CL – Yuen Long south western extension - site formation for school development and the associated roadworks in Area 13

Members are invited to recommend to Finance Committee the upgrading of **707CL** to Category A at an estimated cost of \$34 million in money-of-the-day prices.

## PROBLEM

We need to form land and construct roads and drains to serve the school development in Yuen Long Area 13.

## PROPOSAL

2. The Director of Territory Development (DTD), with the support of the Secretary for Housing, Planning and Lands and the Secretary for Education and Manpower (SEM), proposes to upgrade **707CL** to Category A at an estimated cost of \$34 million in money-of-the-day (MOD) prices for the site formation and the construction of roads and drains to serve three whole-day primary schools in Yuen Long Area 13.

#### PROJECT SCOPE AND NATURE

- 3. The scope of **707CL** comprises
  - (a) formation of approximately 2.2 hectares of land in Yuen Long Area 13 for school development;

- (b) construction of Road A1 of about 280 metres long;
- (c) construction of associated road junctions, footpaths, a loading and unloading bay, a bus bay, parking spaces and stormwater drainage works;
- (d) landscaping works; and
- (e) implementation of an environmental monitoring and audit (EM&A) programme for the works mentioned in items (a) to (d) above.

A site plan showing the proposed works is at Enclosure 1. We plan to commence construction in September 2004 for completion in phases by June 2006.

## JUSTIFICATION

4. It is Government policy to implement whole-day primary schooling for virtually all primary school students by the 2007/08 school year. On 30 January 2004, SEM consulted the LegCo Panel on Education on the planning and provision of school places and the various aspects of the school building programme. Members noted the Administration's plan to seek funding approval for, inter alia, the construction of new primary schools to support the above policy.

5. At present, about 66% primary school students are studying in whole-day primary schools. To facilitate implementation of whole-day primary schooling, SEM plans to construct 46 new schools between the 2004/05 and 2007/08 school years. To date, Finance Committee has approved funding for 15 of these 46 new schools. The three primary schools in Yuen Long Area 13 are among the 46 new school projects planned to achieve the policy target. As planned, the school building works will commence in September 2005. In order to ensure the timely supply of land with adequate infrastructure for the school development, we need to commence the proposed site formation works in September 2004. The proposed roadworks will also improve the access to Lam Hau Tsuen and the future private housing development adjoining Road A1.

## FINANCIAL IMPLICATIONS

6. We estimate the capital cost of the project to be \$34 million in MOD prices (see paragraph 7 below), made up as follows –

	\$ million				
(a)	Site formation		13.0		
(b)	Roadworks		11.6		
(c)	Drainage works		2.8		
(d)	Landscaping works		0.7		
(e)	EM&A programme		0.8		
(f)	Consultants' fees for -		2.8		
	(i) construction stage	0.5			
	(ii) resident site staff costs	2.3			
(g)	Contingencies		3.1		
	Sub-total			(in September 2003 prices)	
(h)	Provision for price adjustment		(0.8)	2003 prices)	
	Total		34.0	(in MOD prices)	

Due to insufficient in-house resources, DTD proposes to engage consultants to supervise the works. A breakdown by man-months of the estimate for the consultants' fees is at Enclosure 2.

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

Year	\$ million (Sept 2003)	Price adjustment factor	\$ million (MOD)
2004 - 2005	8.1	0.98225	8.0
2005 - 2006	18.4	0.97734	18.0
2006 - 2007	6.1	0.97245	5.9
2007 - 2008	2.2	0.96759	2.1
	34.8		34.0

<sup>7.</sup> 

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 2004 to 2008. We will tender the proposed works under a lump-sum contract with firm bills of quantities because we can clearly define the scope of the majority of the works in advance. The contract will not provide for price adjustments, as the contract period will not exceed 21 months.

9. We estimate the annual recurrent expenditure arising from this site formation and road project to be \$220,000.

# PUBLIC CONSULTATION

10. We consulted the Ping Shan Rural Committee and the Social Services, Housing and Publicity Committee of the Yuen Long District Council on 18 October 2002 and 11 November 2002 respectively. The Committees supported the proposed site formation and roadworks.

11. On 6 December 2002, we gazetted the proposed roadworks of **707CL** under the Roads (Works, Use and Compensation) Ordinance and received one objection. The objector considered that the land resumption due to the proposed roadworks would affect his future private housing development. We explained to the objector that the land resumption had been kept to an absolute minimum and the proposed roadworks would also improve the access and drainage facilities to the area. The objector accepted our explanation and withdrew the objection without condition. The Secretary for the Environment, Transport and Works authorised the road scheme on 28 May 2003.

12. We circulated an information paper to the LegCo Panel on Planning, Lands and Works in February 2004 to brief Members on the proposed works. Members have no comments on the project.

## ENVIRONMENTAL IMPLICATIONS

13. In November 1997, we completed an Environmental Impact Assessment (EIA) report on Yuen Long South Development that includes the proposed works of **707CL**. The Director of Environmental Protection endorsed the EIA report in November 1997. The Advisory Council on the Environment accepted the findings of the report in December 1997.

14. The EIA report concluded that the project would have no long-term adverse environmental impact. To control the short-term dust, noise and site run-off impacts during construction to within established guidelines and standards, we will incorporate appropriate pollution control clauses in the works contracts for implementation. We have included in the project estimate a sum of \$800,000 for implementing the EM&A programme.

15. We will require the contractor to submit a waste management plan for approval. The plan will include appropriate mitigation measures to avoid, reduce, reuse and recycle construction and demolition (C&D) materials, including the allocation of an area for waste segregation. We will require the contractor to ensure that the day-to-day operations on site comply with the approved waste management plan. 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 also require the contractor to separate public fill from C&D waste for disposal at appropriate locations and sort the C&D materials by category on-site to facilitate reuse/recycling of paper/cardboard, timber and metal. We will control the disposal of public fill and C&D waste to designated landfills through a trip-ticket system. We will record the disposal, reuse and recycling of C&D materials for monitoring purposes.

16. At the planning and design stages, we have given due consideration in designing the level and layout of the proposed works and the construction sequence so as to minimise the generation of C&D materials as far as possible. We estimate that the proposed works will generate about 11 500 cubic metres (m<sup>3</sup>) of C&D materials. Of these, we will reuse about 800 m<sup>3</sup> (7%) on site, 1 200 m<sup>3</sup> (10%) as fill in public filling areas<sup>1</sup> and dispose of 9 500 m<sup>3</sup> (83%) at landfills. The notional cost of accommodating C&D waste at landfill site is estimated to be \$1.2 million for this project (based on a notional unit cost<sup>2</sup> of \$125/m<sup>3</sup>).

# LAND ACQUISITION

17.

We will resume about 2.78 hectares of agricultural land for the

/proposed .....

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> 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/m<sup>3</sup>), 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.

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proposed works. The land acquisition and clearance will affect 35 households involving 121 persons and 333 structures. Under the existing policy, the Director of Housing will offer eligible families accommodation in public housing. We will charge the land acquisition and clearance cost estimated at \$98.4 million to **Head 701 – Land Acquisition**.

#### **BACKGROUND INFORMATION**

18. We included **707CL** in Category B in October 2003.

19. We have completed the detailed design and site investigation for the proposed works at a cost of about \$700,000 under the block allocation Subhead **7100CX** "New towns and urban area works, studies and investigations for items in Category D of the Public Works Programme".

20. The proposed works will involve transplanting of two trees and felling of 130 trees within the project site. The trees to be transplanted and felled are not important trees<sup>3</sup>. We will incorporate planting proposals as part of the project, including estimated quantities of 180 trees, 1 200 shrubs and 2 500 m<sup>2</sup> of grassed area.

21. We estimate that the proposed works will create about 55 jobs (40 for labourers and another 15 for professional/technical staff) providing a total employment of 900 man-months.

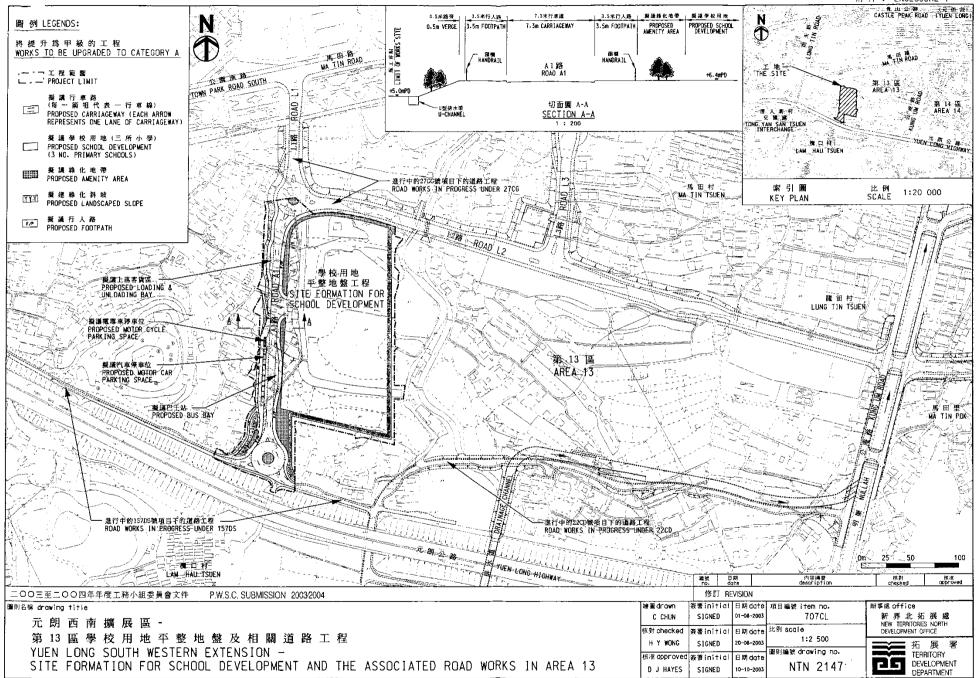
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Housing, Planning and Lands Bureau February 2004

- (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
- (e) trees with trunk diameter exceeding one metre (measured at one metre above ground level).

<sup>&</sup>lt;sup>3</sup> 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 –





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#### Breakdown of the estimate for consultants' fees

Consultants' staff costs			Estimated man- months	Average MPS* salary point	<b>Multiplier</b> (Note 1)	Estimated fees (\$ million)	
(a)	Consultants' fees for construction stage (Note 2)						
	(i)	contract	Professional	-	-	-	0.2
	()	administration	Technical	-	-	-	0.1
	(ii)	preparation of	Professional	-	-	-	0.1
		as-built drawings	Technical	-	-	-	0.1
(b)	Resi	dent site staff	Professional	12	38	1.6	1.1
	costs (Note 3)		Technical	40	14	1.6	1.2
				Tot	Total consultants' staff costs		

#### \* MPS = Master Pay Scale

#### Notes

- A multiplier of 1.6 is applied to the average MPS point to estimate the cost of resident site staff supplied by the consultants. (As 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 asbuilt drawings is calculated in accordance with the existing consultancy agreement for design and construction supervision of the remaining engineering infrastructure works for Yuen Long South Development.
- 3. The consultants' staff cost for site supervision 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.