

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 706 – HIGHWAYS

Transport – Roads

718TH – Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha

Members are invited to recommend to Finance Committee an increase in the approved project estimate of **718TH** from \$629.8 million by \$58.7 million to \$688.5 million in money-of-the-day prices.

PROBLEM

The approved project estimate (APE) for **718TH** is insufficient to cover the cost of the works under the project.

PROPOSAL

2. The Director of Highways, with the support of the Secretary for the Environment, Transport and Works, proposes to increase the APE for **718TH** from \$629.8 million by \$58.7 million to \$688.5 million in money-of-the-day (MOD) prices.

PROJECT SCOPE AND NATURE

3. The scope of **718TH** comprises –

/(a)

- (a) widening and realignment of a 3.6-kilometre (km) section of Tung Chung Road (TCR) between Lung Tseng Tau and Pak Kung Au from a single-lane road for two-way traffic to a single two-lane road for two-way traffic, with a footpath having a minimum width of 1.6 metres (m);
- (b) construction of a 2.6-km long single two-lane road between Pak Kung Au and Cheung Sha with a footpath having a minimum width of 1.6 m, including elevated highway structures of a total length of 750 m;
- (c) provision of 21 passing bays/bus lay-bys along TCR;
- (d) provision of a roundabout at Cheung Sha;
- (e) provision of traffic control and surveillance system (TCSS); and
- (f) associated works including road rehabilitation, drainage, utility, environmental mitigation measures, landscaping, slope stabilisation, traffic aids, road safety enhancement measures, lighting and electrical and mechanical (E&M) works.

———— A site plan with typical road sections is at Enclosure 1.

JUSTIFICATION

4. The increase in the APE of \$58.7 million is required to cover the additional costs associated with the following –

- (a) higher-than-expected tender outturn price; and
- (b) provision for additional road safety enhancement measures.

Details for the additional costs for the project are set out in paragraphs 5 to 7 below.

/Higher

Higher-than-expected tender outturn price

5. We invited tenders on 3 October 2003 and received 12 tenders on 28 November 2003. The actual tender prices of all the tenders were higher than our original estimate. The higher-than-expected tender price may be attributable to the tenderers being more cautious about the difficult site conditions, the strict environmental measures to be adopted and the tight construction programme of the project, thus adopting more conservative tender prices despite the intense competition in the market. After assessing the tenders, we found that an additional \$50.7 million is needed to cover the price of the recommended tender taking into account the latest price trend.

Additional road safety enhancement works

6. In the light of the recommendations in the Report on Enhancement of Highway Safety issued by the Independent Expert Panel of Tuen Mun Road Incident in December 2003, Transport Department has proposed some additional safety enhancement works at TCR, including the high containment safety barrier fences along the edges of steep slopes and physical central barriers on tight curvatures to enhance the safety of this vital road link in Lantau. We will require the contractor to undertake these additional road safety enhancement works at an estimated cost of \$8.0 million. Since these additional measures were only identified after tender was invited for the project, the cost was not included in the original estimate.

Overall Review

7. Upon a review of the financial position of the project, we consider it necessary to increase the APE of **718TH** from \$629.8 million by \$58.7 million to \$688.5 million in MOD prices to ensure adequate funds are available to cover the cost of the project. A breakdown of the proposed increase of \$58.7 million is as follows –

	Amount in MOD prices (\$ million)	% of the total increased amount
<u>Additional funding required</u>		
(a) Additional fund to cover the price of the recommended tender	50.7	86.4%

/(b)

	Amount in MOD prices (\$ million)	% of the total increased amount
(b) Additional road safety enhancement measures at TCR	8.0	13.6%
Total	58.7	100.0%

A comparison of the cost breakdown of the APE and the revised project estimate in MOD prices, together with reasons leading to the proposed increase in the APE, are set out in Enclosure 2.

FINANCIAL IMPLICATIONS

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

Year	\$ million (in MOD prices)
2004 – 2005	150.0
2005 – 2006	260.0
2006 – 2007	200.0
2007 – 2008	55.0
2008 – 2009	23.5
	688.5

9. The proposed increase in the APE will not give rise to additional recurrent expenditure.

/PUBLIC

PUBLIC CONSULTATION

10. The proposed increase in the APE does not involve any substantial change in the scope of the works. We consider that further public consultation is not necessary for the proposed increase in the APE.

ENVIRONMENTAL IMPLICATIONS

11. The proposed increase in the APE will not give rise to any environmental implications.

LAND ACQUISITION

12. The proposed increase in the APE does not require any land acquisition.

BACKGROUND INFORMATION

13. On 18 July 2003, the Finance Committee approved the upgrading of **718TH** to Category A at an estimated cost of \$629.8 million in MOD prices.

14. Subject to approval of the increase in the APE, we will commence the construction contract in June 2004 for completion in March 2007.

15. We estimate that the proposed additional road safety enhancement measures at TCR will create about 15 jobs (12 for labourers and another three for professional/technical staff) providing a total employment of 260 man-months.

Environment, Transport and Works Bureau
April 2004

Enclosure 2 to PWSC(2004-05)10

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Lung Tseng Tau and Cheung Sha**

A comparison of the APE and the revised project estimate in MOD prices is as follows –

	APE (\$ million) (i)	Revised Project Estimate (\$ million) (ii)	Difference (ii) – (i)
(a) Roads and drainage works	92.0	119.0	27.0
(b) Earthworks and retaining walls	280.0	248.7	(31.3)
(c) Elevated highway structures	106.7	166.1	59.4
(d) Traffic control and surveillance system (TCSS)	5.4	4.1	(1.3)
(e) Landscaping works	7.6	4.5	(3.1)
(f) Consultants' fees	80.9	80.9	0.0
(i) construction supervision and contract administration	9.6	9.6	
(ii) resident site staff costs	65.6	65.6	
(iii) environmental monitoring and audit programme	5.4	5.4	

(iv)

	APE (\$ million) (i)	Revised Project Estimate (\$ million) (ii)	Difference (ii) – (i)
(iv) Electrical and Mechanical Services Trading Fund (EMSTF) charges	0.3	0.3	
(g) Additional road safety enhancement measures	0.0	8.0	8.0
(h) Contingencies	57.2	57.2	0.0
Total	629.8	688.5	58.7

2. As regards **(a) to (e) (Roads and drainage works, earthworks and retaining walls, elevated highway structures, TCSS and landscaping works)**, the overall increase of \$50.7 million in the costs was due to higher tender prices than our original estimate taking account of latest price trend.

3. As regards **(g) (Additional road safety enhancement measures)**, this is the extra cost to cover the additional measures proposed by Transport Department to enhance the road safety of TCR in the light of the recommendations in the Report on Enhancement of Highway Safety issued by the Independent Expert Panel of Tuen Mun Road Incident.