

NOTE FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

Supplementary Information on 561TH — Widening of Tolo Highway between Island House Interchange and Ma Liu Shui Interchange

INTRODUCTION

When Members of the Legislative Council Panel on Transport discussed **561TH** — “Widening of Tolo Highway between Island House Interchange and Ma Liu Shui Interchange” at the meeting on 22 November 2002, the Administration undertook to provide supplementary information on the breakdown of the reduced project cost.

THE ADMINISTRATION’S RESPONSE

Background

2. The Public Works Subcommittee (PWSC) recommended and the Finance Committee (FC) approved the funding proposal for project item **561TH** on 21 October and 13 November 1998 respectively, at an estimated cost of \$2,507.2 million in money-of-the-day (MOD) prices.

The initial project estimate

3. The approved project estimate of \$2,507.2 million was prepared in mid-1998 based on the then prevailing contract rates. Having secured FC’s funding approval in November 1998, we pressed full steam ahead to finalise tender documentation in late 1998 and completed various design reviews and refinements in January 1999. This led to savings in a number of areas and enabled us to reduce the project estimate to \$1,846.9 million in MOD prices.

/4.

4. We awarded the contract on 29 March 1999. Due to a very competitive environment in early 1999, the accepted tender price was about 30% lower than our revised estimate. Taking account of the lower price adjustment factors issued in March 1999, we further adjusted the project estimate in April 1999 to \$1,201.6 million in MOD prices. Overall, the post-tender estimate in April 1999 was 52% lower than the approved project estimate in October 1998.

5. The table below compares the major cost items in the approved project estimate with those in subsequent revisions —

Item	(A) Approved project estimate in October 1998 (\$ million)	(B) Pre-tender estimate in January 1999 (\$ million)	(C) Post-tender estimate in April 1999 (\$ million)
1. Roads and drains	523.5	433.6	315.0
2. Reclamation and seawalls	336.2	306.2	173.4
3. Widening of existing vehicular bridges and extension of existing pedestrian subways	69.0	50.6	41.7
4. CCTV and emergency telephone systems	35.7	25.4	24.7
5. Noise barriers	593.1	310.2	223.3
6. Landscaping works	45.1	17.3	13.4
7. Reprovisioning of affected facilities in CUHK	3.0	3.3	3.2
8. Consultants' fees	137.1	137.1	137.1
9. Contingencies (10%)	174.3	128.4	93.2
Sub-total (in Dec 97 prices)	1,917.0	1,412.1	1,025.0
10. Inflation allowance	590.2*	434.8*	176.6**
Total (in MOD prices)	2,507.2	1,846.9	1,201.6

* based on price adjustment factors set out in the PWSC paper in October 1998

** based on price adjustment factors issued in March 1999

/Changes

Changes between Columns (A) and (B)

6. The changes arising from design revision are detailed below —
- (a) Item 1 — the quantities of road and drainage works were reduced by about 17% due to a revision of the road profile and drainage layout. The estimated cost was adjusted from \$523.5 million to \$433.6 million.
 - (b) Item 2 — This project had close interface with the Pak Shek Kok reclamation project. Refinements in the seawall design¹ and reclamation method² allowed the cost for these works to be reduced by \$30 million.
 - (c) Item 5 — With more site investigation data available, the foundations of the noise barriers within the central median were revised from piled foundations to shallow spread footing foundations at a late stage of design review. Together with the corresponding reduction in steel reinforcement for the foundations, this had reduced the cost from \$593.1 million to \$310.2 million.
 - (d) Items 9 and 10 — As a result of the lower estimated cost of works, the contingencies and inflation allowance were correspondingly reduced.

Changes between Columns (B) and (C)

7. The basis for the further cost reductions in the post-tender estimate is summarised below —
- (a) Items 1 to 6 — The principal reason for the reduction in the tender price by about 30% was due to the general fall in tender prices for public works projects following the Asian financial crisis.
 - (b) Item 9 — As a result of the lower tender price, the project contingencies were correspondingly reduced.
 - (c) Item 10 — As a result of the lower tender price, the inflation allowance was correspondingly reduced. In addition, the price adjustment factors adopted in April 1999 are lower than that adopted for the PWSC/FC submission.

/Latest

¹ The quantity of band drains for inducing early settlement of seawall was reduced, due to a revised phasing of the work and after more comprehensive information regarding the extent of marine mud had been obtained.

² More land-based filling operation, which was cheaper in cost, was used to replace marine filling operation.

Latest Estimates

8. We anticipate that the contract for the construction works will be completed in early 2003 and estimate that the outturn project cost is about \$880 million. The latest reduction of a further \$321.6 million, from \$1,201.6 million (in MOD prices) to \$880 million (in MOD prices), is principally attributable to —

- (a) a decrease in both the scale and value of works after re-measurement of quantities, in particular at the interface with other projects, such as the infrastructure developments at Pak Shek Kok, and changes to construction methods (by \$92.1 million);
- (b) a reduction in consultancy's fees (by \$9.7 million);
- (c) deflation (as against the \$176.6 million allowed for inflation); and
- (d) reduction in contingencies (by \$43.2 million).

The above estimate of \$880 million, however, has not made any allowance for the additional cost for further modifying the noise barriers which will be the subject of a separate paper for the Legislative Council Panel on Transport.
