



THE HONG KONG HOUSING AUTHORITY

Memorandum for the Building Committee

Increase in Approved Contract Sum

**Foundation for Redevelopment of Shek Pai Wan Estate Phase 1
(Contract No. 173 of 1999)**

PURPOSE

To seek Member's approval to increase the Approved Contract Sum of Foundation for Redevelopment of Shek Pai Wan Estate Phase 1 from \$87.315M to \$104.942M.

BACKGROUND

2. The tender for the Foundation for Redevelopment of Shek Pai Wan Estate Phase 1 (Contract No. 173 of 1999) was approved by the Building Committee on 22 June 2000 (Paper No. BCT 33/2000 refers). The Approved Contract Sum was \$87.315M and the Approved Project Development Budget for Phase 1 & 2 (Paper No. BC 155/99 dated 23 September 1999 refers) is \$3,257.199M of which \$108.322M (including Development Contingency of 10%) has been allowed for Phase 1 foundation works.

CONTRACT SUM

3. The foundation contract commenced on 25 July 2000 and is anticipated to complete by mid-December 2001. Since the commencement of the Contract, several major quality initiatives on foundation works were implemented by the Authority. Coupled with the enhanced contractor's superintendence requirements promulgated by the Buildings Authority vide PNRC 45 and various variations required under the Contract, the final contract sum is anticipated to be \$104.942M, which exceeds the approved contract sum by \$17.627M or 20% requiring the approval of the Building Committee. The excess is mainly due to -

(a) Adjustment of Re-measurement and Provisional Sum	+ 1.436M
(b) Variations due to Quality Enhancement Measures *	+ 8.643M
(c) Works transferred from other Phase & Contract to better suit site logistic *	+ 6.018M
(d) Additional piles required to cope with enhanced transfer plate design criteria	+ 1.530M
<hr/> Total	<hr/> +17.627M

(*Refer to **Annex A** for breakdown of these major adjustments)

PROJECT BUDGET

4. (a) The Approved Project Development Budget for Redevelopment of Shek Pai Wan Estate Phase 1 & 2 (Paper No. BC 155/99 dated 23 September 1999 refers) is \$3,257.199M, of which \$108.322M (including Development Contingency of 10%) has been allowed for Phase 1 foundation works.
- (b) The Estimated Final Contract Sum of \$104.942M is within the Approved Project Development Budget for this foundation contract.

AVAILABILITY OF FUNDS

5. (a) The current estimated annual expenditures for the Foundation Contract are as follows -

<u>2001/02</u>	<u>Post 31.3.2002</u>
\$62.436M	\$6.60M

- (b) The overall estimated expenditure for the whole project in 2001/02 is now estimated at \$88.937M which exceeds the provision in the Approved Capital Budget of \$68.393M stipulated in Paper No. FC 72/2000. This excess will be met by savings from other projects. In the next Capital Budget Review, the provision of funds will be revised to meet the excess.

RECOMMENDATION

6. It is recommended that the Estimated Final Contract Sum of \$104.942M as detailed in paragraph 3 above be approved to enable future payments and Final Accounts for the foundation contract to be settled.

PRESUMPTION

7. It is not thought that Members will have any objection to the recommendation at paragraph 6 above. If no objection or request for discussion is received by the Committee's Secretary **by noon on 5 July 2001**, Members' approval will be presumed.

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Richard MAK
Secretary, Building Committee
Tel No. : 2761 7141
Fax No. : 2761 0019

File Ref : HD(PM1)HK25-1/PB
Date : 23 June 2001

**FOUNDATION FOR REDEVELOPMENT OF
SHEK PAI WAN ESTATE PHASE 1**

Breakdown of Major Adjustments

Variations due to Quality Enhancement Measures

- | | |
|--|------------------------|
| <p>(a) To line up with Buildings Authority new practices</p> <ul style="list-style-type: none"> • Quality supervision plan requirement as per PNRC 45 (also known as PNAP 242) and supervision of Ground Investigation works, also endorsed by DCMBI P18/00. | <p>+ 4.220M</p> |
| <p>Note:</p> <p>\$4.050M for additional Contractor's personnel including 1 Authorized Signatory, 1 Construction Engineer, and 2 Construction Manager with appropriate qualifications.</p> <p>\$0.170M for Office and equipment for additional personnel.</p> | |
| <ul style="list-style-type: none"> • Additional pile testing requirements for Steel H-piles as per PNAP 66.
(PIL1 T230P – Proving bedrock and PIL1 T1650P – Core testing) | <p>+ 1.270M</p> |
| <p>(b) DCMBI P18/00</p> | |
| <ul style="list-style-type: none"> • New requirement on bell-out, and pile cap consent procedure | <p>+ 1.655M</p> |
| <ul style="list-style-type: none"> • Additional predrilling for type 4b piles | <p>+ 1.270M</p> |
| <ul style="list-style-type: none"> • Additional predrilling for type 3 piles | <p>+ 0.228M</p> |
| | <p>+8.643M</p> |

**Works transferred from other Phase & Contract
to better suit site logistic**

- (a) Some piles transferred from Phase 2 to Phase 1 + 1.098M
Foundation Contract to facilitate early commencement
of Phase 1 building works

Note:

\$1.057M for piling works

\$0.041M for pile cap works.

- (b) Some backfilling and retaining wall constructions + 4.920M
transferred from Phase 1 building contract to Phase 1
foundation contract to form a proper site access and
working areas for the building contractor.

Note:

\$0.370M for earthworks

\$4.100M for Screenwall

\$0.450M for 10% contingency

+ 6.018M

Justifications

If item (a) is not carried out under this contract, the superstructure of the elevated EVA will have to rest on piles constructed by 2 different contractors with 2 different completion dates. It inevitably affects the commencement of its superstructure works. It is contractually not desirable because of unclear responsibility.

Moreover, this arrangement can enable early completion of the elevated EVA with no additional cost to the project.* It is important to note that the elevated EVA will function as a secondary construction access at level +46.0mPD for Phase 1 Building Contract in this difficult site with sloping topography and a podium of almost 100% site coverage. Early completion of this access is essential.

If item (b) is not carried out under this contract, the main contractor will need longer mobilization time to form a proper site access.

Moreover, it is better for the foundation contractor who possesses better knowledge on the underground conditions and civil engineering expertise to construct the earth retaining screen wall and earthwork.

Proposed arrangement can add value to the process with no additional cost to the project.*

* Corresponding saving will be achieved in other Phase and Contract because of reduced scope of works..