

THE HONG KONG HOUSING AUTHORITY

Memorandum for Building Committee

Revised Master Layout and Development Cost Budget for Redevelopment of Tsing Yi Area 10 Phase 3

PURPOSE

To seek Members' approval to the revised Master Layout and Development Cost Budget for Redevelopment of Tsing Yi Area 10 Phase 3.

BACKGROUND

2. The site is at Tsing Yi Area 10. It comprises of five phases of work with Phases 1, 2 and 3 occupying the Tsing Yan Temporary Housing Area (THA) site and Phases 4 and 5 occupying the existing Cheung Hang Commercial Centre, Carport and Bus Terminus site. (See **Part I** of **Annex**)

3. The Phase 3 works provide the carparks for the Phases 1 and 2 domestic blocks with Phase 1 now under construction and temporary reprovisioning of carparks in case Phases 4 and 5 should proceed. It also incorporates a Primary School for the region of Kwai Tsing.

4. The previous Master Layout and Development Cost Budget for the Phase 3 works incorporating a 7-storeyed carport with reprovision of the existing bus terminus at the Phase 3 site, and a standard Primary School in a separate site was approved by the Building Committee (BC) in October 1999 vide Paper No. BC 171/99.

5. Arising from comments of Members at BC Meeting in October 1999 and as reported to BC Meeting in November 1999 under Matters Arising, the Project Team has prepared a revised design with the Primary School built on top of a 2-storeyed podium Carport in one combined site, thus achieving more efficient use of land and enhancing the environmental impact to the estate.

CONSULTATION

6. Consultation with relevant parties on the revised design is still in progress, but the general support of the major stakeholders, namely Education Department and Transport Department has been sought and verification made with Fire Services Department that the proposal is technically feasible and acceptable.

7. Where required, resubmission to Strategic Planning Committee (SPC) will be made on changes in the brief requirement arising from the revised design.

8. The proposed design of the Carport and School are within the limit of the permitted loading stipulated for building within the MTRC Protection Zone.

MASTER LAYOUT PROPOSAL

9. The Revised Master Layout at **Part IIA** of **Annex** incorporates the following main design features—

- (a) Extension of the main pedestrian route of covered walkway system in Phases 1 and 2 to connect the Carport and School Buildings in this phase.
- (b) Separate vehicular access to the Carport and School at podium roof which allows earlier takeover of the carport while construction work of the School goes on.
- (c) Retention of the existing Bus Terminus at the Phase 3 site. Omission of Public Transport Interchange in the previous design with substantial cost saving and marginal increase in cost to the School.
- (d) Reduction in carpark provision from 515 nos. to 282 nos. of private cars.

10. The details of accommodation in **Phase 3** comprises of –
- (a) One 2-storeyed Carport for 282 nos. of private cars and 34 nos. of motor cycles, taking into consideration of the proposed change for Phase 1 from Rental to Buy or Rent Option (BRO) and for Phase 2 from HOS to Rental;
 - (b) A standard 30-classroom Primary School at podium level, adopting the HD March 99 Edition (Arch SD 2000 Design); and
 - (c) Associated external works.

OPTIONS

11. The anticipation of the varied scenarios which could arise from the outcome of negotiation with Education Department on the provision of the Primary School and Carport in one site, the following fallback options are considered -

A. Education Department accepting the design proposal in the Revised Master Layout in paragraph 9

- (a) The only possible impact to the Phase 3 works is slippage of the School programme on the part of Education Department.
- (b) The design in the Master Layout has allowed separate vehicular access to the podium roof for construction of the School. In general, the building services and access for the School and Carport are separated. This will enable the Carport to be completed earlier for use to meet the Phase 3 programme in advance of the completion of the School.

B. Education Department abandoning the provision of Primary School in the Tsing Yi Area 10 Phase 3 Site

- (a) The impact will arise when the School is abandoned after piling award and commencement.

- (b) The additional cost of piling for the School is estimated to be \$4.505M which would have to be absorbed in the Carport, i.e. by HA Budget.
- (c) Taking into account that the permissible plot ratio of the Tsing Yi Area 10 THA site has already been fully maximised in the development of Phases 1 and 2, the only possible use of the structure intended for the school is for provision of a Residential Care Home for Elderly (RCHE) within the loading limit.
- (d) Initial study on this design option was made by the Project Team and attached to **Part IIB** of **Annex** indicating that it is technically feasible and further study will be made on their viability if so required in the final outcome on the school with Education Department. A revised submission will then be made to SPC and BC.

C. Education Department reverting to the design proposal of the Primary School as approved in previous Master Layout vide Paper No. BC 171/99 (Part IIC of Annex).

- (a) There will be serious impact to programme with completion of the Carport delayed by three months up to present moment with reprovision work in Phase 1 required for clearing the existing Bus Terminus at the Phase 3 site held back since October 1999.
- (b) This delay will progressively be increased depending on the time of Education Department making their final decision.

PROJECT DEVELOPMENT BUDGET

12. Based on the revised Master Layout Plan, the proposed Project Development Budget for Phase 3 is estimated to be **\$99.142M**. The breakdown of the Budget Calculations is given in **Part III** of the **Annex**. The key elements are as follows –

			Approved Project Development Budget (\$M) (based on BC 171/99)	Revised Project Development Budget (\$M) (based on revised design in this submission)	Difference (\$M)
(a)	Site Development Cost	1. Site Formation	0.583	0.528	(0.055)
		2. Demolition	0.564	0.306	(0.258)
		Sub-total (a)	1.147	0.834	(0.313)
(b)	Construction Cost	3. Foundation	16.604	5.057	(11.547)
		4. Building/incl. Ext. work	154.729	71.311	(83.418)
		5. Soft Landscape & Others	0.714	0.495	(0.219)
		Sub-total (b)	172.047	76.863	(95.184)
(c)	Project Management Cost	6. Professional Services Overheads			
		7. Consultant Fees			
		8. Consultant Site Staff	24.247	10.878	(13.369)
	(a+b)x14%	Sub-total (c)	24.247	10.878	(13.369)
(d)	Other Project Cost	9. Ancillary Project Expenses			
		10. Miscellaneous Costs	3.464	1.554	(1.910)
	(a+b)x2%	Sub-total (d)	3.464	1.554	(1.910)
(e)	Development Contingency	11. Risk Provision			
		12. Allowable Variance	20.091	9.013	(11.078)
	(a+b+c+d)x10%	Sub-total (e)	20.091	9.013	(11.078)
TOTAL PROPOSED PROJECT DEVELOPMENT BUDGET (a)+(b)+(c)+(d)+(e)			<u>\$220.996M</u>	<u>\$99.142M</u>	<u>(\$121.854M)</u>

The difference indicates a reduction of \$121.854M over the previously approved design proposal of the Carport despite that HA would subsidize the additional cost of the School on top of the previous agreed estimate as if the School were on ground.

PROJECT DEVELOPMENT COSTS

13. The Revised Project Development Costs of Phase 3 (calculated using the revised Project Development Budget taking into account the adjustment of the commonly shared items within the Project and divided by the construction floor area of the respective cost portions) and the Overall Unit Costs of Construction compared with June 1999 Cost Yardstick are as follows with details shown in **Part III** of the **Annex**.

	(a)	(b)	(c)	(d)
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	Unit Cost of Proposed Development Budget (\$/m ² Construction Floor Area (CFA))	SPC's Approved Project Development Unit Development Cost Ceiling (Paper No. SPC 52/98)	Overall Unit Cost of Construction Included in (a) (Excluding external works and others)	June 1999 Cost Yardsticks Adjusted to Tender- In-Date
Car Parking	\$6,957/m ² CFA	\$9,666/m ² CFA	\$5,482/m ² CFA	\$4,375/m ² CFA
Commercial	\$15,972/m ² CFA			\$11,271/m ² CFA

14. The proposed Unit Cost of Project Development Budget is within SPC's Approved Unit Development Cost Ceiling.

15. The difference between the Overall Unit Cost of Construction (excluding external works and others) and June 1999 Cost Yardsticks adjusted to tender-in-date is mainly due to the following -

- (a) Comparatively less effective layout dictated by site constraint;
- (b) Provision of School over Carport requiring the use of transfer structure; and
- (c) Cantilevered structure of EVA required to reach the school at podium level.

16. Based on the proposed Scheme Design in this submission, the Project Development Budget for the Primary School in Phase 3 will remain unchanged as **\$113.500M**, same as previously approved budget in Paper No. BC 171/99 and funding for the Primary School is provided under Public Works Programme Funds. In this regard, increase in cost of \$2.5M arising from external works for the School being relocated over the Carport roof is proposed to be absorbed into the Housing Authority (HA) budget. The breakdown of the Budget Calculations is given in **Part III** of the **Annex**.

AVAILABILITY OF FUNDS

17. The estimated yearly expenditure based on the Site Development and Construction Cost portion of the proposed Project Development Budget in HA Fund is shown below and will be included in the next capital budget updating of the Authority.

Estimated Expenditure (\$M)

	1999/00 (\$M)	2000/01 (\$M)	2001/02 (\$M)	Post 31.3.2002 (\$M)	Total (\$M)
Estimated	0	9.936	65.714	34.627	110.277
Allowed in FC 65/98	2.233	1.262	33.255	410.074	446.824

18. Provisions for 2000/01 allowed in the Housing Authority's proposed Annual Budget (Paper No. FC65/98 refers) is not adequate and will be met by virement of fund from other projects.

DEVELOPMENT PROGRAMME

19. The revised development programme are as detailed at **Part IV** of the **Annex**. The key dates as compared with the previously approved design are as follows –

		As per BC 171/99	Revised Programme
(a)	Master Layout and Project Development) Budget)	Approval by BC	10/99 1/00
(b)	Detailed Design	Approval by DDRP	12/99 03/00
(c)	Piling and Building (Combined contract)	Commencement Completion (Primary School) Completion (Carport)	08/00 11/00 02/02 07/02 06/02 02/02

20. The revised development programme thus allows advancement of completion of the Carport by four months from June 2000 to February 2000 but requires the School completion to slip by five months from February 2002 to July 2002, because of construction sequence and the revised programme is being agreed with the Education Department.

RECOMMENDATION

21. It is recommended that the revised Master Layout and Project Development Budget of **\$99.142M** for Redevelopment of Tsing Yi Area 10 Phase 3 and in the **Annex** to this paper be approved.

DISCUSSION

22. At the next meeting of the Building Committee to be held on 20 January 2000, Members will be invited to approve the recommendation in paragraph 21 above.

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File Ref. : HD(AR) 7/908/3

Date : 17 January 2000