

## **ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE**

**HEAD 707 - NEW TOWNS AND URBAN AREA DEVELOPMENT**  
**Hong Kong Island and Islands Development**  
**Civil Engineering - Land development**  
**112CL - Peng Chau development, package 3 - design and stage 1 engineering works**

Members are invited to recommend to Finance Committee to increase the approved project estimate for **112CL** from \$98.3 million by \$36.7 million to \$135.0 million in money-of-the-day prices.

### **PROBLEM**

The approved project estimate of **112CL** is not sufficient for the remaining works under the project.

### **PROPOSAL**

2. The Director of Territory Development (DTD), with the support of the Secretary for Planning and Lands, proposes to increase the approved project estimate for **112CL** from \$98.3 million by \$36.7 million to \$135.0 million in money-of-the-day (MOD) prices.

### **PROJECT SCOPE AND NATURE**

3. The scope of the project comprises -
- (a) design works for the whole of package 3 of the Peng Chau development;

/(b) .....

- (b) reclamation and site formation of 5.74 hectares (ha.) of land along the north-western coast of Peng Chau together with the associated roads and drainage works; and
- (c) construction of a sewage treatment plant at Tai Lei Island and the associated works.

4. The works under items 3(a) and 3(c), and part of item 3(b) above have been substantially completed. We now propose to complete the remaining works under item 3(b) including reclamation and site formation of about 1.4 ha. of land together with the associated roads and drainage works (a site plan is at Enclosure 1). However, the approved project estimate is not sufficient to carry out the works because we have to cover the increase in construction cost of items 3(b) and 3(c) and to provide additional facilities due to the revision of the Peng Chau North Layout Plan.

#### JUSTIFICATION

5. The proposed developments under **112CL** are covered by the Peng Chau North Layout Plan. To facilitate the reclamation works at Peng Chau North, we awarded Contract No. IS 2/87 in April 1991, which included, among other works, the advanced reclamation and site formation works for provision of an industrial site for the relocation of a nearby pipe factory. However, soon after the commencement of the contract, the factory ceased operation. To re-assess the demand for industrial land at Peng Chau, reclamation and site formation works for the industrial site of 1.4 ha. was withheld (see Enclosure 2) and a planning review was conducted. Apart from these withheld works, the cost of which is \$10 million, all the works under Contract No. IS 2/87 were completed in April 1993.

6. In mid-1992, the Director of Planning completed the review and recommended the reclamation works should proceed for residential and commercial developments to meet the future housing demand in Peng Chau. The Peng Chau North Layout Plan was subsequently revised in 1995 and the required statutory procedures for the project under the relevant ordinances were also completed in mid 1999.

/7. ....

7. Following a review of the financial position of the project, we find that the approved project estimate is not sufficient to cover the increase in cost or price fluctuation for completed works<sup>1</sup> during the period from April 1991 to September 1995, and the increase in cost of the remaining works, totalling \$15.5 million. Moreover, an addition of \$8 million is required to provide additional works, including a landscaped promenade cum emergency vehicular access and additional roads and drains resulted from the change of planning layout of Peng Chau North.

8. Taking into account the corresponding increase in site staff cost, consultants' fees, etc., and the need for provision for contingencies as well as price adjustment amounting to \$13.2 million, DTD considers it necessary to increase the approved project estimate for **112CL** from \$98.3 million by \$36.7 million to \$135.0 million in MOD prices to proceed the remaining works. A summary of the reasons for the proposed increase of \$36.7 million is as follows –

Factor	Amount (\$ million)	% of the total increased amount
(a) Price variations	15.5	46
(i) increase in cost for works completed (including increase in cost for works of \$3.3 million attributable to the sewage treatment works)	4.6	
(ii) increase in cost for remaining works since preparation of last cost estimate	10.9	
		/(b) .....

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<sup>1</sup> The increase in cost or price fluctuation for completed works includes the increase in cost due to inflation for the delay of completion of the Sewage Treatment Plant (STP) at Tai Lei Island. The construction work of the STP was originally scheduled for commencement in mid-1992 upon the completion of the Lantau Port Peninsula Study (LPPS). Since the LPPS could only be completed in end-1992, we started the works of the STP under a separate contract in 1993 and completed them in 1995.

(b)	Specification changes - additional road works, drainage and landscaped promenade	8.0	24
(c)	consultants' fees for design and construction stages	3.2	10
(d)	site staff costs	2.9	9
(e)	contingencies (on remaining works only)	3.8	11
	Sub-total	33.4	100
		(in December 1999 prices)	
(f)	Provision for price adjustment	3.3	
	Total	36.7	(in MOD prices)

A comparison of the cost breakdowns of the approved project estimate (in November 1990 prices) and the revised project estimate (in December 1999 and in MOD prices) is at Enclosure 3.

## FINANCIAL IMPLICATIONS

9. Subject to approval, we will phase the expenditure as follows -

Year	\$ million (Dec 1999)	Price adjustment factor	\$ million (MOD)
Up to 31 March 2000 <sup>2</sup>	90.7	-	90.7
2000 - 2001	7.0	1.00000	7.0
2001 - 2002	13.5	1.04500	14.1
			/2002 - 2003 .....

<sup>2</sup> This is the actual expenditure up to 31 March 2000.

Year	\$ million (Dec 1999)	Price adjustment factor	\$ million (MOD)
2002 - 2003	13.5	1.10770	15.0
2003 - 2004	7.0	1.17416	8.2
	131.7		135.0

10. We have derived the MOD estimate on the basis of the latest Government's forecasts of trend labour and construction prices over the period between 2000 and 2004. We will tender the remaining works under a lump sum contract because we can clearly define the scope of works in advance. The contract will provide for inflation adjustment as the contract period will exceed 21 months.

11. We estimate the annually recurrent expenditure arising from the remaining works to be \$0.24 million.

## **PUBLIC CONSULTATION**

12. In the light of the revision of the Peng Chau North Layout Plan, we consulted the Peng Chau and Discovery Bay Area Committee on the proposed remaining works on 14 May 1997. Prior to the gazettal of the proposed road scheme in the remainder of the project under the Roads (Works, Use and Compensation) Ordinance (see paragraph 14 below), we further consulted the Islands Provisional District Board on the project by circulation on 2 March 1999. Members of the Area Committee and the Provisional District Board supported the proposed works.

13. We gazetted the proposed reclamation works under the Foreshore and Sea-bed (Reclamations) Ordinance on 31 December 1998 and received no objection. The Director of Lands authorised the reclamation works on 19 March 1999.

14. We gazetted the proposed road scheme in the remainder of the project under the Roads (Works, Use and Compensation) Ordinance on 26 March 1999 and received no objection. The Secretary for Transport authorised the works on 25 June 1999.

## **ENVIRONMENTAL IMPLICATIONS**

15. We conducted an environmental review in July 1997 and concluded that the proposed remaining works under the project will not cause long term environmental impact. For short term environmental impacts during construction, we will control noise, dust and site run-off to within established standards and guidelines by incorporating standard environmental pollution control clauses into the works contract.

16. We have considered in the planning and design stages to minimize the generation of construction and demolition material (C&DM). We shall reuse the public fill generated from the project. We estimate that about 100 cubic metres of construction and demolition (C&D) waste will be generated and disposed of at landfills. We shall require the contractor to use steel instead of timber in formwork and temporary works to reduce the generation of C&D waste. We shall also require the contractor to sort the C&DM on site to facilitate reuse, recycling and disposal as appropriate. We shall control the disposal of C&D waste to the designate landfill through a trip-ticket system. We shall record the disposal, reuse and recycling of C&DM for monitoring.

## **LAND ACQUISITION**

17. We will resume the pipe factory site (about 0.32 ha.) for the remaining works (see Enclosure 2). In addition, the Director of Lands will clear about 0.28 ha. of Government land which will affect nine households involving 29 people. These families will be offered ex-gratia allowances and, where eligible, accommodation in public housing in accordance with the established rehousing policy. We will charge the costs of land acquisition and payment of ex-gratia allowance, estimated at \$15.1 million, to Head 701 - Land Acquisition.

**/BACKGROUND .....**

**BACKGROUND INFORMATION**

18. We upgraded **112CL** “Peng Chau development, package 3, engineering works<sup>3</sup>” to Category A in December 1977 at an estimated cost of \$29.55 million for the formation of land (including reclamation of 2.3 ha. of land), engineering infrastructure and a sewage treatment plant at north Peng Chau.

19. Since the upgrading of the project to Category A, Finance Committee has approved revisions to the project estimate for **112CL** as detailed below -

<b>Time</b>	<b>Reasons for Revision</b>	<b>Revised Project Estimate (\$ million)</b>
December 1982	<ul style="list-style-type: none"> <li>- To change the scope of <b>112CL</b>, retitled "Peng Chau development, package 3 - design and stage 1 engineering works", and to include an additional reclamation of 1.9 ha. of land at west Peng Chau near the new ferry pier; and</li> <li>- To downgrade part of <b>112CL</b> as <b>194CL</b>, entitled "Peng Chau development, package 3 - stage 2 engineering works", to Category B for formation of land for a rural public housing estate, roadworks and associated sewers and stormwater drains.</li> </ul>	69.0
October 1984	- To include the reclamation of 1.34 hectare of land originally under <b>194CL</b> . However, the project estimate of <b>112CL</b> remained the same because the additional cost was offset by savings resulting from low tender price of works tendered in late 1982.	69.0

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<sup>3</sup> Package 3 of Peng Chau development comprises stages 1 and 2 engineering works. Whilst the design for the stages 1 and 2 engineering works and the construction of stage 1 engineering works are carried out under **112CL**, the construction of stage 2 engineering works is carried out under **194CL** “Peng Chau development, package 3, stage 2 engineering works”. Finance Committee approved the upgrading of **194CL** to Category A in January 1989.

Time	Reasons for Revision	Revised Project Estimate (\$ million)
April 1991	- To take account of the reprogramming of works and the increase in cost of engineering works.	98.3

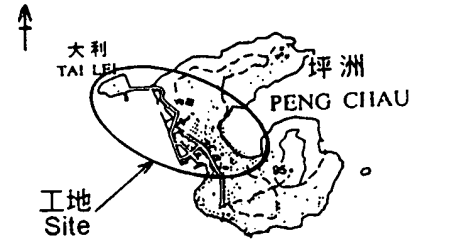
20. We have now completed most of the works under the project. The remaining works are the reclamation and site formation of 1.4 ha. of land together with the associated roads and drainage works. The consultants have completed the detailed design and working drawings for the remaining works. Subject to funding approval, we plan to start the works in September 2000 for completion in September 2002.

21. We estimate that the remaining works will create some 45 new jobs comprising two professional/managerial staff, six technical/ancillary staff and 37 labourers during the construction period.

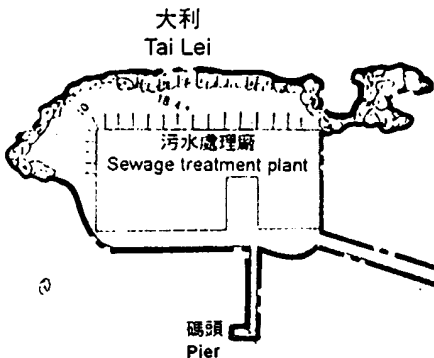
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Planning and Lands Bureau  
April 2000





索引圖 Key Plan  
比例 Scale 1:50 000



圖例 LEGEND:

坪洲發展計劃第 3 組工程  
Peng Chau Development, package 3 engineering works

112CL 的工程範圍：  
Works under 112CL :

已完成工程  
Works Completed

餘下工程  
Remaining Works

194CL 的工程範圍 (工程進行中)  
Works under 194CL (in progress)

散步長廊  
Promenade

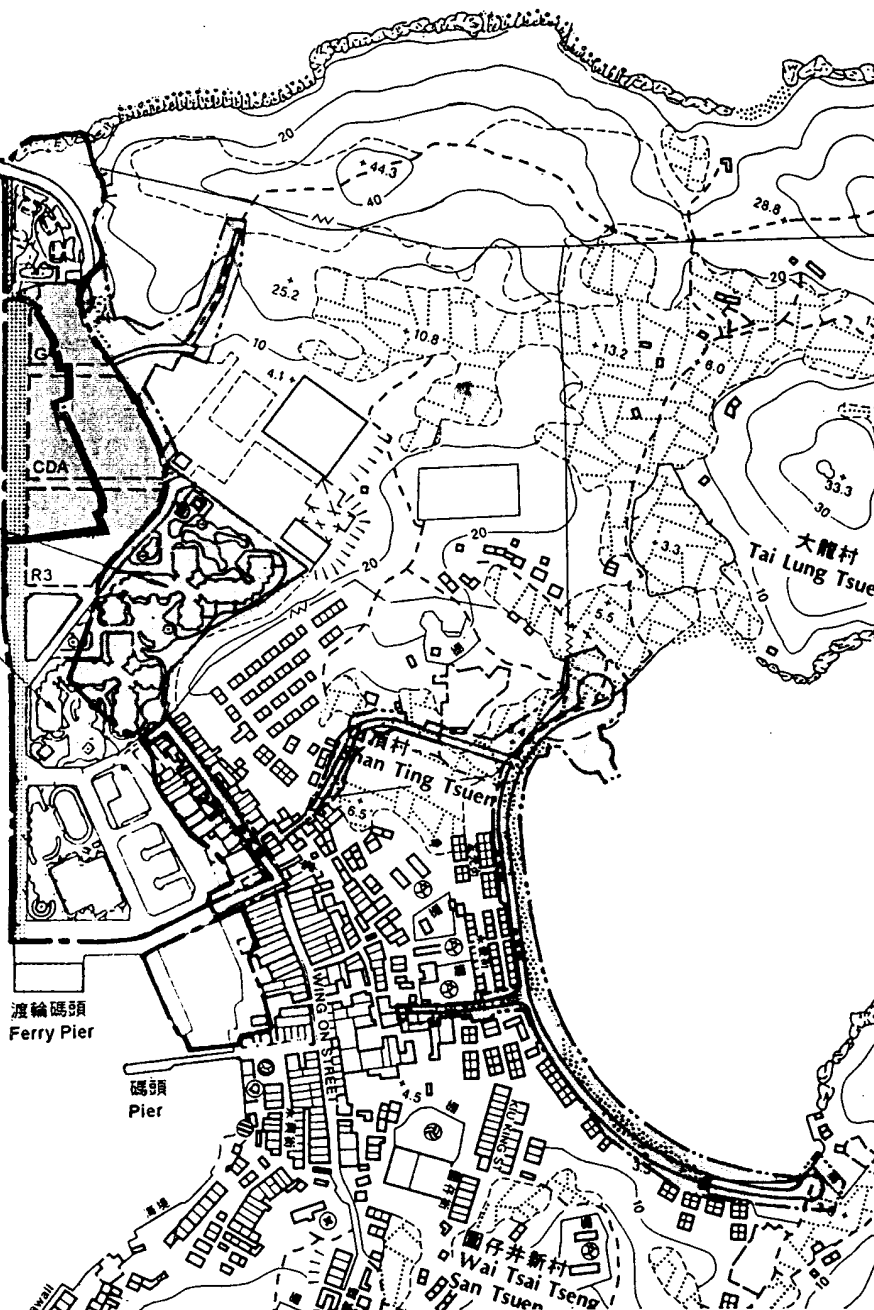
現有海岸線  
Existing Shore Line

土地用途 LAND USE:

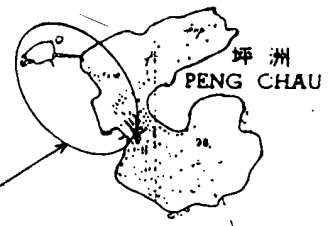
政府  
Government

綜合發展區  
Comprehensive Development Area

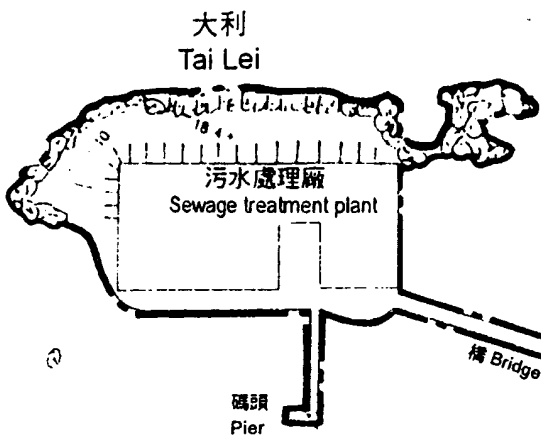
住宅發展密度第 3 區  
Residential - Zone 3



二〇〇〇至二〇〇一年度工務小組委員會文件 PWSC Submission 2000-2001	繪圖 drawn	簽署 initial	日期 date	項目編號 item no.	辦事處 office
	H. C. Lau	<i>HL</i>	31-3-2000	112CL	港島及離島拓展處 HONG KONG ISLAND AND ISLANDS DEVELOPMENT OFFICE
圖則名稱 drawing title 坪洲發展計劃第 3 組工程 Peng Chau development, package 3 engineering works	核對 checked	簽署 initial	日期 date	比例 scale	拓展署 TERRITORY DEVELOPMENT DEPARTMENT
	S. O. Leung	<i>SL</i>	31-3-2000	1:5000	
	核准 approved	簽署 initial	日期 date	圖則編號 drawing no.	
C. H. Wong	<i>CHW</i>	31-3-2000	HKI - 357		



索引圖 Key Plan  
比例 Scale 1:50 000

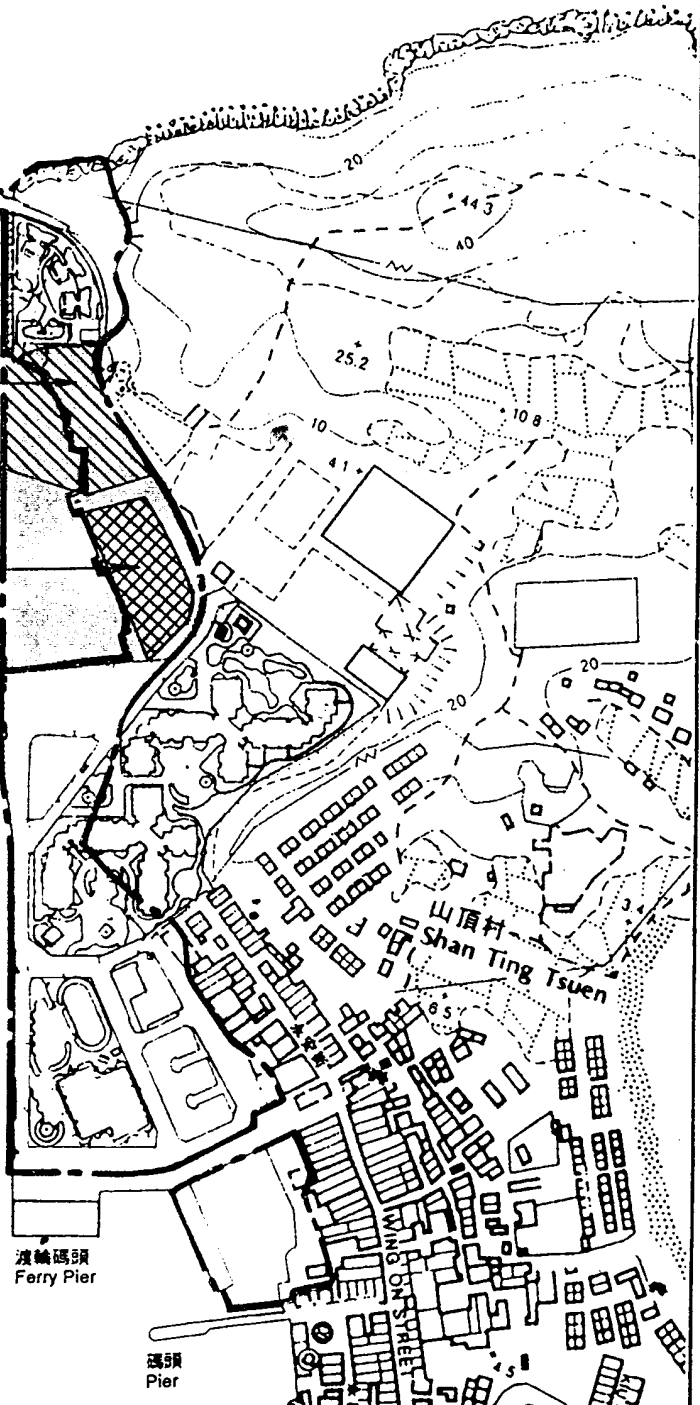


從合約 IS 2/87 號刪除的 (遷建鋼管廠) 工程部分  
Part of works (for relocation of the pipe factory)  
excised from Contract No. IS 2/87

須收回的鋼管廠土地  
Pipe factory site to be resumed

圖例 LEGEND:

- 112CL 的工程界限  
Works Boundary of 112CL
- 已完成工程  
Works Completed
- 餘下工程  
Remaining Works
- 現有海岸線  
Existing Shore Line



二〇〇〇至二〇〇一年度工務小組委員會文件 PWSC Submission 2000-2001		繪圖 drawn H. C. Lau	簽署 initial <i>HL</i>	日期 date 31-3-2000	項目編號 item no. 112CL	辦事處 office 港島及離島拓展處 HONG KONG ISLAND AND ISLANDS DEVELOPMENT
圖則名稱 drawing title 坪洲發展計劃第 3 組 - 設計及第 1 階段工程 Peng Chau development, package 3 - design and		核對 checked S. O. Leung	簽署 initial <i>SL</i>	日期 date 31-3-2000	比例 scale 1:4 000	拓展署 TERRITORY DEVELOPMENT
		核准 approved	簽署 initial	日期 date	圖則編號 drawing no.	

**Enclosure 3 to PWSC(2000-01)9**

**112CL - Peng Chau development, package 3 - design and stage 1 engineering works**

A comparison of the approved project estimate as approved by the Finance Committee on 26 April 1991 (in November 1990 prices) and the revised project estimate in December 1999 prices and in MOD prices is as follows -

		<b>Approved Estimate (\$ million)</b>		<b>Revised Estimate (\$ million)</b>	
(a)	Stage 1 engineering works -	86.5		110.0	
	(i) works completed up to November 1990	34.8		34.8	
	(ii) works completed under Contract No. IS 2/87	23.1		13.5	
	(iii) works completed under the sewage treatment works contract	23.5		27.7	
	(iv) remaining works	5.1		34.0	
(b)	Consultants' fees for design and construction stages	5.3		8.5	
(c)	Site staff costs	6.5		9.4	
(d)	Contingencies	-		3.8	
		-----		-----	
		98.3	(in November 1990 prices)	131.7	(in December 1999 prices)
(e)	Provision for price adjustment			3.3	
				-----	
				135.0	(in MOD prices)
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2. **As regards (a) (stage 1 engineering works)**, of the total increase of \$23.5 million -

- (a) \$3.3 million is due to the increase in construction costs for the sewage treatment works under paragraph 1(a)(iii) above during the period between November 1990, when we prepared the last estimate, and December 1993, when we started the works;
- (b) \$1.3 million is required for meeting price fluctuation payments due under the contracts for works completed under paragraph 1(a)(ii) (i.e. \$0.4 million) and 1(a)(iii) (i.e. \$0.9 million) above;
- (c) \$10.9 million is due to the increase in construction costs for the remaining works under paragraph 1(a)(iv) above during the period between November 1990, when we prepared the last estimate, and December 1999;
- (d) \$8.0 million is for additional roads, drainage and landscaped promenade cum emergency vehicular access to be incorporated in the remaining works under paragraph 1(a)(iv) above in accordance with the new land use layout plan; and
- (e) A saving of \$10 million has been identified for the excised works (for relocation of the pipe factory) under Contract No. IS 2/87 (paragraph 1(a)(ii) above refers). The same amount is now included under remaining works at paragraph 1(a)(iv)above.

3. **As regards (b) (consultants' fees for the design and construction stages)**, of the total increase of \$3.2 million -

- (a) \$1.6 million is due to the abortive design in connection with the part of the reclamation works that we subsequently excised from the works pending a planning review because the pipe factory, for which we intended to relocate to the site being excised, ceased operation soon after the commencement of the contract; and

- (b) \$1.6 million is for the increase in consultants' fees for design and construction stages estimated at about 5.5% of the increase in cost of works under paragraph 1(a)(iv) above. The consultants' fees are based on a percentage scale of the cost of construction works as laid down in the consultancy agreement.

4. **As regards (c) (site staff costs)**, the increase of \$2.9 million is due to the increase in site staff costs estimated at about 10% of the increase in cost of works under paragraph 1(a)(iv) above, which is consistent with the prevailing site staff costs for contracts of similar size and nature.

5. **As regards (d) (contingencies)**, we retain \$3.8 million as contingencies for the remaining works.

[CL112-02.DOC]