

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

### **HEAD 705 – CIVIL ENGINEERING**

#### **Civil Engineering – Land development**

#### **751CL - Planning and engineering study on Sunny Bay reclamation**

Members are invited to recommend to the Finance Committee the upgrading of **751CL** to Category A at an estimated cost of \$96 million in money-of-the-day prices for carrying out a planning and engineering study on Sunny Bay reclamation and associated site investigation works.

### **PROBLEM**

We need to establish the technical feasibility and appropriate scale of reclamation and development at Sunny Bay as a measure of long-term land supply.

### **PROPOSAL**

2. The Director of Civil Engineering and Development, on the advice of the Director of Planning and with the support of the Secretary for Development, proposes to upgrade **751CL** to Category A at an estimated cost of \$96 million in money-of-the-day (MOD) prices to engage consultants to undertake a planning and engineering study on Sunny Bay reclamation (the Study) and the associated site investigation works.

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## PROJECT SCOPE AND NATURE

3. The scope of **751CL** comprises –
- (a) detailed planning and engineering study to establish the reclamation extent, land uses and the technical feasibility, including formulation of a recommended outline development plan and recommended layout plan, planning and engineering assessments on baseline review, land use options, air ventilation and urban design, site formation and reclamation, traffic and transport, drainage and sewerage, water supplies and utilities etc. and preparation of preliminary design of engineering infrastructure for supporting the proposed developments ;
  - (b) environmental impact assessment (EIA) for the proposed developments and the associated engineering infrastructure;
  - (c) community engagement exercises with relevant stakeholders;
  - (d) formulation of the implementation strategy and programme; and
  - (e) associated site investigation works including supervision.

— A location plan showing the Study area and the potential reclamation site at Sunny Bay (about 60 to 100 hectares) is at Enclosure 1.

4. Subject to funding approval of the Finance Committee, we plan to commence the Study and the associated site investigation works in August 2014 for completion in August 2016.

## JUSTIFICATION

5. Reclamation on an appropriate scale outside Victoria Harbour and rock cavern development have been identified as two possible measures to expand our land resources. We started technical studies and a two-stage public

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engagement (PE) exercise for the “Enhancing Land Supply Strategy (ELSS): Reclamation outside Victoria Harbour and Rock Cavern Development” in July 2011. During the Stage 1 PE conducted from November 2011 to March 2012, there has been wide support for a six-pronged approach<sup>1</sup> for enhancing land supply, including reclamation outside Victoria Harbour.

6. Taking into consideration the public views on site selection criteria, we have identified after the Stage 1 PE five potential near-shore reclamation sites including Sunny Bay<sup>2</sup>, and the potential of constructing artificial islands in the central waters between Hong Kong Island and Lantau as possible means to provide new land.

7. During the Stage 2 PE conducted from March to June 2013, the public was consulted on possible land uses for the proposed reclamation sites and artificial islands as well as areas of concern for further study. For Sunny Bay reclamation site, residential development, commercial uses mainly for tourism-related facilities such as hotels, retail or dining, Government, institution or community uses including parks and recreational or leisure facilities and land reserve are the major supported land uses. Impact on the marine ecology, ecological conservation, transportation, cost effectiveness and the need to expedite land supply are the major concerns. A summary of the views on Sunny Bay reclamation collected during Stage 2 PE is at Enclosure 2.

8. In response to public views on potential impacts on marine ecology and environment arising from reclamation, we are conducting a cumulative environmental impact assessment (CEIA) and a survey on Chinese white dolphins (CWDs) at three reclamation sites (viz Sunny Bay, Siu Ho Wan and Lung Kwu Tan) in the western waters north of Lantau since mid-2013. According to the preliminary findings of CEIA and CWD survey, Sunny Bay is unlikely to be a CWD hotspot and has only low and probably occasional dolphin use, and there is no insurmountable environmental problem for the proposed reclamation.

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<sup>1</sup> The six-pronged approach includes re-zoning, resumption, redevelopment, reclamation outside Victoria Harbour, rock cavern development and re-use of ex-quarry sites.

<sup>2</sup> The remaining potential near-shore reclamation sites are Lung Kwu Tan, Ma Liu Shui, Siu Ho Wan and Tsing Yi Southwest.

9. We thus propose to initiate a planning and engineering study on Sunny Bay reclamation. Lantau is strategically located with several major infrastructure projects under planning or construction, including the Hong Kong-Zhuhai-Macao Bridge (HZMB) and the Tuen Mun-Chek Lap Kok Link under construction, and the Hong Kong International Airport (HKIA)'s Third Runway Project, the Tung Chung New Town Extension and the East Lantau Metropolis under planning. Capitalizing on its location advantages including its proximity to the Hong Kong Disneyland and the Sunny Bay Mass Transit Railway Station, Sunny Bay has the potential to be developed into an entertainment and business node of regional significance for sustaining economic development of Hong Kong.

10. We propose to carry out the Study to develop detailed proposals for reclamation, land uses and engineering infrastructure at Sunny Bay. The following key issues will also be addressed –

- (a) the Study will review the findings and recommendations of previous studies in which a leisure and entertainment node was proposed at Sunny Bay, and the latest strategic planning, traffic, transport and infrastructure proposals relevant to the study area. We will also take account of the latest situation of the Tung Chung New Town Extension as well as the public views collected during the Stage 2 PE for ELSS;
- (b) emphasis will be put on the relationship of the Sunny Bay and the surrounding areas such as the Hong Kong Disneyland, the proposed topside development of the HZMB Hong Kong boundary crossing facilities island and the HKIA north commercial district; and
- (c) the Study will also explore the feasibility of developing a helicopter base for the Government Flying Service at Sunny Bay so as to eliminate the development constraints imposed by the existing helicopter flight route along the northern shore of Lantau, and hence unleash the development potential of the coastal area, including the Tung Chung New Town Extension.

11. We will conduct community engagement activities to gather comments from stakeholders and the public in formulating the development proposals. A community engagement strategy setting out the detailed arrangement and programme of the engagement activities will be formulated under the Study.

## FINANCIAL IMPLICATIONS

12. We estimate the costs of the Study and the associated site investigation works to be \$96 million in MOD prices (please see paragraph 13 below), broken down as follows –

|     |   | <b>\$ million</b> |
|-----|---|-------------------|
| (a) | Consultants' fees for   | 51.0              |
|     | (i) planning study  | 10.1              |
|     | (ii) engineering study  | 29.0              |
|     | (iii) EIA for the proposed developments and associated engineering infrastructure | 10.1              |
|     | (iv) supervision of associated site investigation works                           | 1.8               |
| (b) | Site investigation works  | 23.0              |
| (c) | Expenses for community engagement exercise and other miscellaneous items          | 3.4               |
| (d) | Contingencies   | 7.6               |
|     | Sub-total   | 85.0              |
| (e) | Provision for price adjustment  | 11.0              |
|     | Total   | 96.0              |

(in September 2013 prices)

(in MOD prices)

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In view of the multi-disciplinary nature of the Study requirements and inadequate in-house resources, we propose to engage consultants to undertake the Study and to supervise the associated site investigation works. A breakdown of the estimates for the consultants' fees by man-months is at Enclosure 3.

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

| <b>Year</b> | <b>\$ million<br/>(Sept 2013)</b> | <b>Price<br/>adjustment<br/>factor</b> | <b>\$ million<br/>(MOD)</b> |
|-------------|-----------------------------------|--|-----------------------------|
| 2014 – 2015 | 14.0                              | 1.05450                                | 14.8                        |
| 2015 – 2016 | 46.0                              | 1.11777                                | 51.4                        |
| 2016 – 2017 | 23.0                              | 1.18484                                | 27.3                        |
| 2017 – 2018 | 2.0                               | 1.25593                                | 2.5                         |
|             | <hr/> 85.0 <hr/>                  |  | <hr/> 96.0 <hr/>            |

14. We have derived the MOD estimate on the basis of the Government's latest set of assumptions on the trend rate of change in the prices of public sector building and construction output for the period from 2014 to 2018. We will engage consultants to undertake the Study on a lump sum basis with provision for price adjustment. We will tender the proposed site investigation works under a standard re-measurement contract because the quantity of works involved may vary depending on actual ground conditions. The contract for site investigation works will provide for price adjustment.

15. The Study and the associated site investigation works will not give rise to any recurrent consequences.

## **PUBLIC CONSULTATION**

16. We have completed a two-stage PE exercise on "ELSS: Reclamation outside Victoria Harbour and Rock Cavern Development" as mentioned in paragraphs 5 and 7 above.

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17. As part of the Stage 2 PE, we briefed the Tsuen Wan District Council (TWDC) on, among others, the potential reclamation at Sunny Bay on 28 May 2013. We further consulted the Community Building, Planning and Development Committee of the TWDC on the Study on 17 March 2014. Members had no objection to the Study.

18. We consulted the Legislative Council Panel on Development on 22 April 2014. Members generally supported submitting the funding proposal to the Public Works Subcommittee for consideration.

## **ENVIRONMENTAL IMPLICATIONS**

19. The Study is a designated project under Schedule 3 of the Environmental Impact Assessment Ordinance (EIAO) (Chapter 499). We will prepare and submit an EIA study report in compliance with the requirements under the EIAO, the Technical Memorandum on the EIA Process and the EIA Study Brief. An application for approval of the EIA study report will be submitted to the Director of Environmental Protection under the EIAO. Some works items (such as reclamation, major roads and sewage pumping stations) that may be proposed under the Study to support the developments in Sunny Bay are designated projects under Schedule 2 of the EIAO that require Environmental Permits prior to construction and operation. The assessments to be carried out in the EIA of the Study will cover all necessary aspects such as air quality, water quality and hydraulics, ecology, fisheries, heritage and archaeology, noise, landscape and visual impacts arising from these works items.

20. The Study and the associated site investigation works will only generate very little construction waste. We will require the consultants to fully consider measures to minimise the generation of construction waste and to reuse/recycle construction waste as much as possible in the future implementation of the construction projects.

## **HERITAGE IMPLICATIONS**

21. The Study and the associated site investigation works will not affect any heritage sites, i.e. all declared monuments, proposed monuments, graded historic sites/buildings, sites of archaeological interest and Government historic sites identified by the Antiquities and Monuments Office.

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## LAND ACQUISITION

22. The Study and the associated site investigation works will not require any land acquisition. The Study will examine the need and extent of land acquisition and/or clearance required for implementation of the development at Sunny Bay.

## BACKGROUND INFORMATION

23. On 24 May 2011, we briefed Members on the Administration's plan to launch a two-stage PE on ELSS and conduct technical studies to explore the options of reclamation on an appropriate scale outside Victoria Harbour and rock cavern development. Members expressed support to commence the technical studies and the PE exercise.

24. We upgraded **751CL** in Category B in September 2011.

25. We launched the Stage 1 PE on 10 November 2011 and briefed Members on 22 November 2011 on the progress of the technical studies and Stage 1 PE, key issues including the proposed six-pronged approach of increasing land supply, and the initial site selection criteria for reclamation outside Victoria Harbour and rock cavern development.

26. The Panel on Development held a special meeting on 10 March 2012 to receive public views on the Administration's strategy on enhancing land supply.

27. On 22 January 2013, we briefed Members on the policy initiatives of the Development Bureau in the 2013 Policy Address. Among others, we outlined the results of the Stage 1 PE.

28. We launched the Stage 2 PE on 21 March 2013 and briefed Members on 23 April 2013 that Sunny Bay is one of the five near shore reclamation sites for further consideration.

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29. The Panel on Development held a special meeting on 1 June 2013 to receive public views on the proposed reclamation sites including reclamation at Sunny Bay.

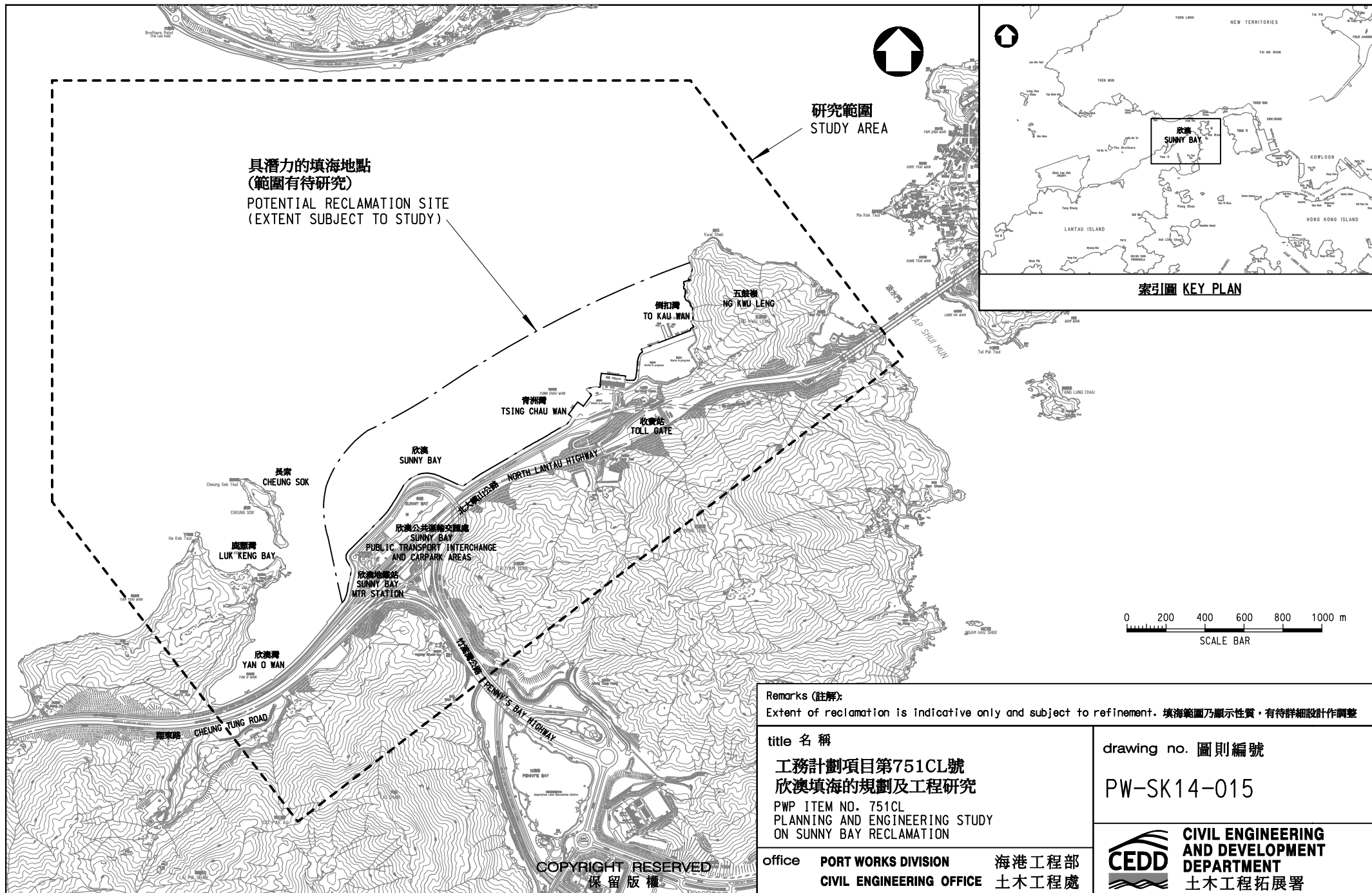
30. On 28 January 2014, we briefed Members on the results of Stage 2 PE.

31. The Study and the associated site investigation works will not directly involve any tree removal or planting proposals. We will require the consultants to take into consideration the need for tree preservation during the Study.

32. We estimate that the proposed Study and the associated site investigation works will create about 54 jobs (12 for labourers and another 42 for professional/technical staff) providing a total employment of 1 021 man-months.

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Development Bureau  
May 2014



Remarks (註解):  
Extent of reclamation is indicative only and subject to refinement. 填海範圍乃顯示性質，有待詳細設計作調整

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| <p>title 名稱</p> <p>工務計劃項目第751CL號<br/>欣澳填海的規劃及工程研究<br/>PWP ITEM NO. 751CL<br/>PLANNING AND ENGINEERING STUDY<br/>ON SUNNY BAY RECLAMATION</p> | <p>drawing no. 圖則編號</p> <p>PW-SK14-015</p>                                       |
| <p>office PORT WORKS DIVISION<br/>CIVIL ENGINEERING OFFICE</p> <p>海港工程處<br/>土木工程處</p>  | <p>CEDD<br/>CIVIL ENGINEERING<br/>AND DEVELOPMENT<br/>DEPARTMENT<br/>土木工程拓展署</p> |

**A summary of views collected in Stage 2 Public Engagement  
on Sunny Bay reclamation**

Land Use

Land reserve and residential development (in particular public rental housing) are the most supported land uses for Sunny Bay reclamation.

2. Other major supported land uses covered uses for commercial, tourism related facilities, retail, dining, theme parks, recreational or leisure facilities, public parks, tourist spots and holiday village.

Aspects of Specific Concerns

3. A considerable number of respondents indicated that reclamation works would increase job opportunities and help alleviating housing problem. Some considered that reclamation at Sunny Bay would be beneficial to local community and economic growth.

4. Impact on landscape or habitats along the shorelines, marine ecology, ecological conservation, transportation, cost-effectiveness and the need to expedite land supply were major concerns about the Sunny Bay reclamation.

5. Other concerns included impact on local community, deterioration of seawater quality, air and noise pollution near the development site, and importance of environmental impact assessment.

## Enclosure 3 to PWSC(2014-15)14

### 751CL – Planning and engineering study on Sunny Bay reclamation

#### Breakdown of the estimates for consultants' fees (in September 2013 prices)

| Consultants' staff costs<br>(Note 1) |  |              | Estimated<br>man-months | Average<br>MPS*<br>salary<br>point | Multiplier<br>(Note 2) | Estimated<br>fees<br>(\$ million) |
|--------------------------------------|--|--------------|-------------------------|------------------------------------|------------------------|-----------------------------------|
| i                                    | Planning study                             | Professional | 49                      | 38                                 | 2.0                    | 6.6                               |
|                                      |  | Technical    | 75                      | 14                                 | 2.0                    | 3.5                               |
| ii                                   | Engineering study                          | Professional | 138                     | 38                                 | 2.0                    | 18.6                              |
|                                      |  | Technical    | 224                     | 14                                 | 2.0                    | 10.4                              |
| iii                                  | Environmental<br>impact assessment         | Professional | 35                      | 38                                 | 2.0                    | 4.7                               |
|                                      |  | Technical    | 115                     | 14                                 | 2.0                    | 5.4                               |
| iv                                   | Supervision of site<br>investigation works | Professional | 10                      | 38                                 | 2.0                    | 1.3                               |
|                                      |  | Technical    | 10                      | 14                                 | 2.0                    | 0.5                               |
| Total                                |  |              |                         |                                    |                        | 51.0                              |

\* MPS = Master Pay Scale

#### Notes

1. The actual man-months and fees will only be known when we have selected the consultants through the usual competitive fee bidding system.
2. A multiplier of 2.0 is applied to the average MPS point to estimate the full staff costs including the consultants' overheads and profit as the staff will be employed in the consultants' offices. (As at now, MPS point 38 = \$67,370 per month and MPS point 14 = \$23,285 per month.)