

## ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

### HEAD 707 – NEW TOWNS AND URBAN AREA DEVELOPMENT Kowloon Development Transport – Roads 785TH – Trunk Road T2

Members are invited to recommend to Finance Committee –

- (a) the upgrading of part of **785TH**, entitled “Trunk Road T2 – investigation and design” to Category A, at an estimated cost of \$133.6 million<sup>1</sup> in money-of-the-day (MOD) prices; and
- (b) the retention of the remainder of **785TH** in Category B.

### PROBLEM

We need to carry out the investigation and design works for Trunk Road T2. The road will connect the proposed Central and Kowloon Route (CKR) and Tseung Kwan O–Lam Tin Tunnel (TKO–LT Tunnel) to form Route 6, an east-west express link between West Kowloon and Tseung Kwan O (TKO).

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<sup>1</sup> The cost estimate is updated from \$133.3 million, as stated in the information paper to the Panel on Transport (Transport Panel) of the Legislative Council (LegCo) issued in March 2009, to \$133.6 million in MOD prices due to the update of the price adjustment factors for conversion of constant prices to MOD prices in effect starting from 31 March 2009.

## PROPOSAL

2. The Director of Civil Engineering and Development, with the support of the Secretary for Transport and Housing, proposes to upgrade part of **785TH** to Category A at an estimated cost of \$133.6 million in MOD prices to engage consultants to undertake the investigation, design and the associated site investigation works of Trunk Road T2.

## PROJECT SCOPE AND NATURE

3. The scope of **785TH** comprises –
- (a) a dual two-lane trunk road of approximately 3.6 kilometres (km) long connecting the CKR and TKO-LT Tunnel. About 2.6 km of the trunk road is in the form of a tunnel;
  - (b) temporary reclamation for construction of the tunnel, temporary relocation of existing breakwaters of the Kwun Tong Typhoon Shelter and reconstruction of sewage submarine outfall at the Kwun Tong Preliminary Treatment Works;
  - (c) ventilation and administration buildings and a traffic control and surveillance system; and
  - (d) associated civil, electrical, mechanical, landscaping and environmental protection and mitigation works.

———— A plan showing the preliminary alignment of Trunk Road T2 is at Enclosure 1.

4. The part of **785TH** we now propose to upgrade to Category A comprises –
- (a) impact assessments on environment, traffic, marine, heritage and other related aspects;

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- (b) the detailed design of the works described in paragraph 3 above; and
- (c) associated site investigations and supervision.

5. We plan to start the investigation and design works of Trunk Road T2 in October 2009 for completion in early 2012. We intend to start the construction works in 2012 for completion in 2016. The total project cost of **785TH** is about \$7.9 billion in September 2008 prices.

## **JUSTIFICATION**

6. Trunk Road T2, together with the proposed CKR and TKO-LT Tunnel, will form Route 6 in the strategic road network. Route 6 will provide an east-west express link between West Kowloon and Tseung Kwan O (TKO). Route 6 will also provide the necessary relief to the existing heavily utilised road network in the central and eastern Kowloon areas, and reduce the related environmental impacts on these areas. A location plan showing the indicative alignment of Route 6 is at Enclosure 2.

7. The CKR is planned to complete in 2016 to avoid serious congestion in major east-west road links such as Gascoigne Road Flyover and Chatham Road North. The TKO-LT Tunnel is also planned to complete in 2016 to meet the anticipated traffic demand generated from further development of TKO. Trunk Road T2, being the middle section of Route 6 connecting the CKR and TKO-LT Tunnel, is therefore targeted to complete in 2016 to tie in with the completion of the remaining sections of Route 6.

## **THE PROPOSED INVESTIGATION AND DESIGN WORKS**

8. The proposed investigation and design works are for the detailed design of Trunk Road T2. We will also carry out environmental impact assessments in association with the investigation and design works to assess the environmental impacts and identify the mitigation measures required. To comply with the Protection of the Harbour Ordinance (Cap. 531), cogent and convincing materials on the temporary reclamation works will be prepared and

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public consultation will be conducted. As the Civil Engineering and Development Department does not have the necessary in-house resources, we need to employ consultants to undertake the investigation and design works of Trunk Road T2.

## FINANCIAL IMPLICATIONS

9. We estimate the cost of the investigation and design works of Trunk Road T2 to be \$133.6 million in MOD prices (see paragraph 10 below), made up as follows –

	<b>\$ million</b>	
(a) Consultants' fees	94.0	
(i) Impact assessments (environment, traffic, marine, heritage, etc.)	22.7	
(ii) Detailed design	69.1	
(iii) Supervision of site investigations	2.2	
(b) Site investigations	19.9	
(c) Contingencies	11.0	
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	Sub-total	124.9
		(in September 2008 prices)
(d) Provision for price adjustment	8.7	
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	Total	133.6
		(in MOD prices)

\_\_\_\_\_ A detailed breakdown of the estimate for consultants' fees by man-months is at Enclosure 3.

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

Year	\$ million (September 2008)	Price adjustment factor	\$ million (MOD)
2009 – 10	12.5	1.03500	12.9
2010 – 11	36.5	1.05570	38.5
2011 – 12	52.5	1.07681	56.5
2012 – 13	23.4	1.09835	25.7
	124.9		133.6

11. We have derived the MOD estimate on the basis of the Government's latest forecast of the trend rate of change in the prices of public sector building and construction output for the period 2009 to 2013. We will engage consultants to undertake the investigation and design works on a lump sum basis with provision for price adjustment as the duration of the consultancy agreement will exceed 12 months. 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 adjustments.

12. The proposed investigation and design and the associated site investigation works will not give rise to any recurrent consequence.

## **PUBLIC CONSULTATION**

13. We consulted the Kwun Tong, Wong Tai Sin and Kowloon City District Councils on 6 January, 6 January and 22 January 2009 respectively on the latest progress of Kai Tak Development (KTD) (formerly known as South East Kowloon Development) which covered the investigation and design works of Trunk Road T2. They are generally supportive of the early implementation of the project.

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14. On 20 January 2009, the Administration provided the Panel on Development (Development Panel) of the LegCo with an overview of the current implementation plan for KTD and the scope of seven KTD-related infrastructure projects which the Administration plans to seek funding approval from the Finance Committee (FC) of the LegCo in the second quarter of 2009, including the investigation and design works of Trunk Road T2. Members of the Development Panel noted the proposed implementation plan of KTD.

15. We circulated an information paper on the investigation and design works of Trunk Road T2 to the Transport Panel of the LegCo on 16 March 2009. Members did not raise any objection to the proposal in paragraph 4 above.

### **ENVIRONMENTAL IMPLICATIONS**

16. As part of KTD, Trunk Road T2 was included in the Schedule 3 Environmental Impact Assessment (EIA) Report of KTD submitted to the Director of Environmental Protection under the Environmental Impact Assessment Ordinance (Cap. 499) on 24 October 2008 and it was approved on 4 March 2009. In addition, as Trunk Road T2 is a Schedule 2 Designated Project requiring an Environmental Permit for construction, we will carry out an EIA study as part of the investigation and design works to assess the potential environmental impacts of the road and identify the mitigation measures required.

17. The proposed investigation and design works will not give rise to any adverse environmental implication and will only generate very little construction waste. We will require the consultant to fully consider measures to minimise the generation of construction waste and to reuse/recycle construction waste as much as possible in the next implementation stage of the project.

### **HERITAGE IMPLICATIONS**

18. The proposed investigation and design works will not affect any heritage site, 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

19. The proposed investigation and design works will not require any land acquisition.

## BACKGROUND INFORMATION

20. Arising from the Court of Final Appeal's Judgment in January 2004 on harbour reclamation<sup>2</sup>, the Administration has conducted a comprehensive review on the KTD which covered Trunk Road T2, comprising a Planning Review and an Engineering Review. The Planning Review aimed at formulating the overall development plan of KTD. After extensive public engagement conducted from 2004 to 2006, the Kai Tak Outline Zoning Plan was completed and approved by the Chief Executive in Council in November 2007. Following the Planning Review, the Engineering Review was commissioned to assess the engineering feasibility and environmental acceptability of the recommendations made in the Planning Review.

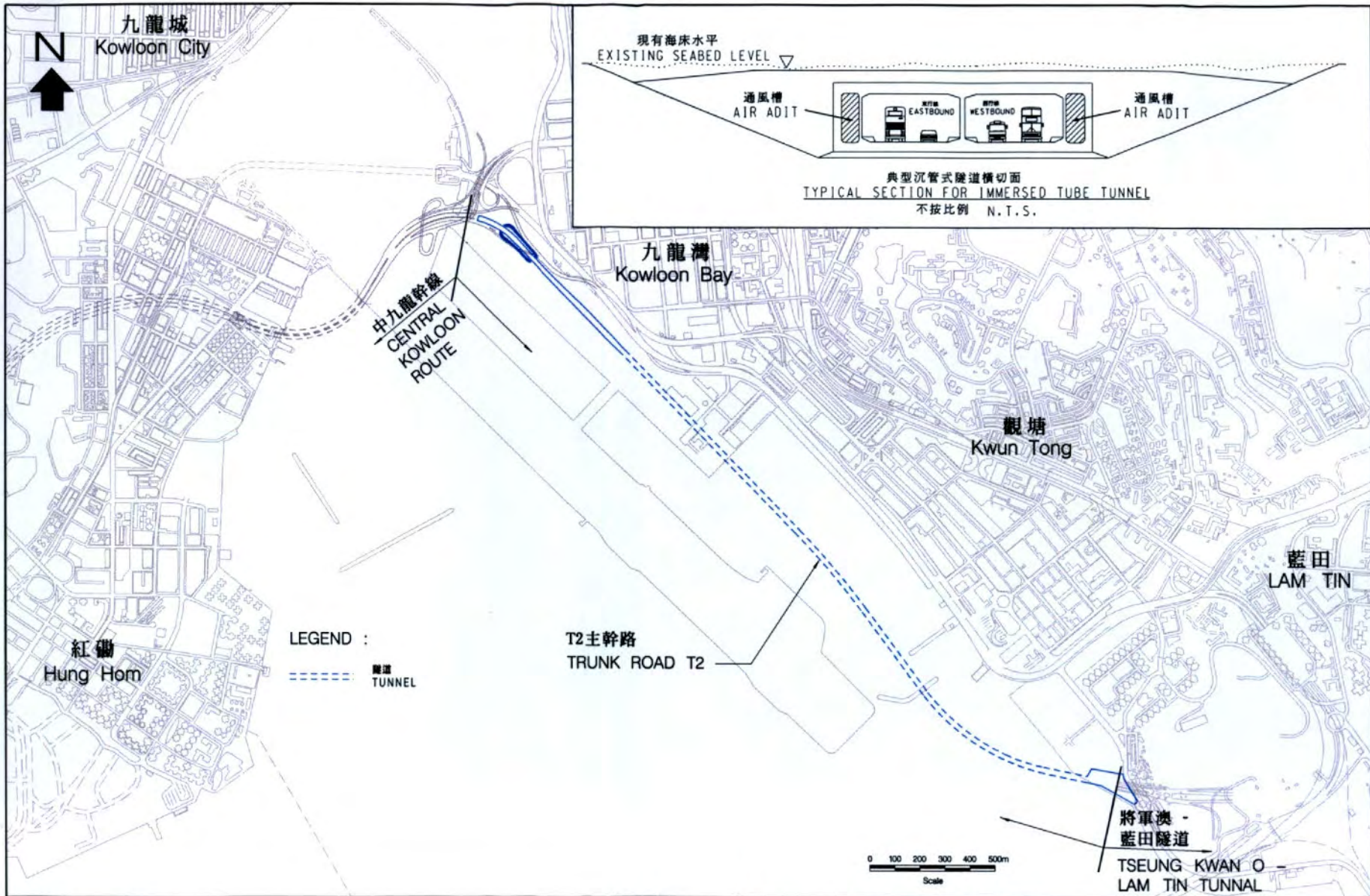
21. We upgraded **785TH** to Category B in October 2008.

22. The proposed investigation and design and its associated site investigation works will not involve any tree removal or planting proposals. We will require the consultants to take into consideration the need for tree preservation during the investigation and design stage. We will also incorporate tree planting proposals, where possible in the construction stage.

23. We estimate that the proposed works will create about 67 jobs (51 for professional/technical staff and 16 for labourers), providing a total employment of 1 480 man-months.

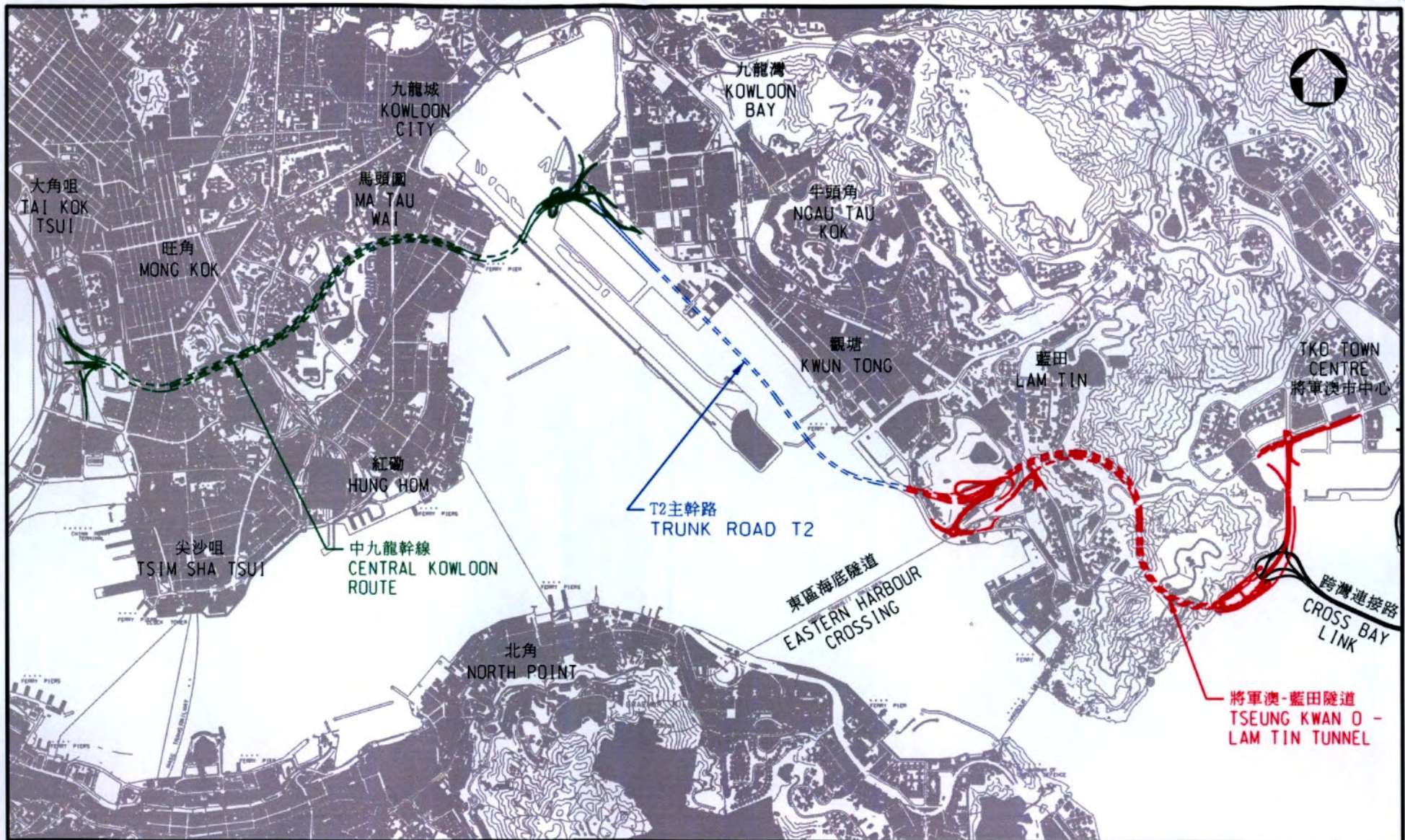
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Transport and Housing Bureau  
April 2009

<sup>2</sup> The judicial review applied by the Society for Protection of the Harbour Limited on 25 September 2003.



圖則名稱 Drawing title  <b>T2主幹路 TRUNK ROAD T2</b>	繪圖 Drawn Tony Tsui	簽署 Initial signed	日期 Date 9 Dec 2008	項目編號 Item no. - N.A. -	辦事處 Office <b>九龍拓展處 KOWLOON DEVELOPMENT OFFICE</b>
	核對 Checked David Leung	簽署 Initial signed	日期 Date 9 Dec 2008	比例尺 Scale As shown	
	核准 Approved - N.A. -	簽署 Initial - N.A. -	日期 Date - N.A. -	圖則編號 Drawing no. KZ 555	土木工程拓展署 CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT





圖則名稱 drawing title

六號幹線示意走線位置圖  
 LOCATION PLAN OF THE INDICATIVE  
 ALIGNMENT OF ROUTE 6

繪圖 drawn W.L. LEUNG	簽署 initial signed	日期 date 10.12.08
核對 checked DAVID LEUNG	簽署 initial signed	日期 date 10.12.08
核准 approved --	簽署 initial --	日期 date --

項目編號 item no. N.A.
比例 scale 1 : 40 000 (FOR A4)
圖則編號 drawing no. KZ 556

辦事處 office  
 九龍拓展處  
 KOWLOON DEVELOPMENT OFFICE

 土木工程拓展署  
 CIVIL ENGINEERING  
 AND DEVELOPMENT  
 DEPARTMENT



**Enclosure 3 to PWSC(2009-10)23**

**785TH – Trunk Road T2**

**Breakdown of the estimate for consultants' fees (in September 2008 prices)**

		<b>Estimated man- months</b>	<b>Average MPS* salary point</b>	<b>Multiplier (Note 1)</b>	<b>Estimated fees (\$ million)</b>
Consultants' fees for <small>(Note 2)</small>					
(a) Impact assessments (environment, traffic, marine, heritage, etc.)	Professional	132	38	2.0	16.0
	Technical	169	14	2.0	6.7
(b) Detailed design	Professional	403	38	2.0	48.8
	Technical	513	14	2.0	20.3
(c) Supervision of site investigations	Professional	12	38	2.0	1.4
	Technical	20	14	2.0	0.8
					<hr/>
<b>Total</b>					<b>94.0</b> <hr/>

\* MPS = Master Pay Scale

**Notes**

1. A multiplier of 2.0 is applied to the average MPS point to arrive at the full staff costs, including the consultants' overheads and profit as the staff will be employed in the consultants' offices. (As at 1 April 2008, MPS pt. 38 = \$60,535 per month and MPS pt. 14 = \$19,835 per month.)
2. The actual man-months and fees will only be known when we have selected the consultants through the usual competitive bid system.