For information

Legislative Council Panel on Transport

Reconstruction of Causeway Bay Flyover and associated widening of Victoria Park Road

PURPOSE

This paper informs Members of our proposal to upgrade **323TH** – Reconstruction of Causeway Bay Flyover (CBF) and associated widening of Victoria Park Road (VPR) to Category A to carry out the reconstruction of CBF and associated widening of VPR.

PROJECT SCOPE AND NATURE

- 2. The latest scope of **323TH** will include
 - (a) demolition of the existing CBF and the adjoining footbridge;
 - (b) construction of a 210-metre (m) long single two-lane flyover connecting the VPR to Gloucester Road (the new CBF);
 - (c) construction of a covered footbridge spanning across the VPR;
 - (d) widening and realignment of a 170-m westbound section of the VPR from four to five traffic lanes and realignment of a 225 m eastbound section of VPR;
 - (e) landscaping works at the Victoria Park and Causeway Bay Promenade; and
 - (f) associated works including road realignment and rehabilitation, drainage, landscaping, street lighting and electrical and mechanical (E&M) works.

A site plan with typical section of the new CBF and elevation of the proposed footbridge is at **Enclosure**.

- 2 -

JUSTIFICATION

3. The VPR is an important urban trunk road linking Causeway Bay with the Cross Harbour Tunnel, Aberdeen Tunnel and the Central/Wan Chai districts. The existing CBF is a single-lane carriageway bringing traffic from the VPR to the section of Gloucester Road outside Victoria Park. The CBF is the most direct route for traffic from the Cross Harbour Tunnel, Central/Wan Chai districts to approach Causeway Bay, Tai Hang and Happy Valley areas.

Reconstruction of the CBF

- 4. The CBF is currently overloaded with traffic coming from Cross Harbour Tunnel and Central/Wan Chai districts, especially during peak hours. Traffic congestion is particularly acute when horse-racing takes place at Happy Valley and the traffic queue would tail back to the tunnel tube, affecting the throughput of the Cross Harbour Tunnel. Besides, owing to traffic congestion at the CBF, the queuing traffic along the VPR eastbound leading to the CBF often holds up the onward traffic from Gloucester Road to Hong Kong east.
- 5. To relieve traffic congestion at the CBF, we need to reconstruct the flyover to provide a single two-lane carriageway, with one lane designated for traffic to Causeway Bay area and the other for traffic heading towards Tai Hang areas. The location of the new CBF would also be shifted southwards to the right side of the VPR eastbound to allow better redistribution of traffic heading towards Causeway Bay, Happy Valley and Hong Kong east, thereby avoiding the holding up of eastbound traffic along VPR and Gloucester Road. In connection with the reconstruction of the CBF, we will realign a section of the VPR eastbound carriageway to make way for the new CBF approach ramp. The projected traffic volume to capacity (v/c) ratios¹ of CBF during peak hours in 2003, 2007 and 2011, before and after reconstruction of CBF, are as follows:

-

Volume to capacity (v/c) ratio is an indicator which reflects the performance of a road. A v/c ratio equal to or less than 1.0 means that a road has sufficient capacity to cope with the volume of vehicular traffic under consideration and the resultant traffic will flow smoothly. A v/c ratio above 1.0 indicates the onset of congestion; that above 1.2 indicates more serious congestion with traffic speeds deteriorating progressively with further increase in traffic.

- 3 -

V/C Ratio of CBF	Year		
V/C Rado of CDF	2003	2007	2011
Before Reconstruction	1.06	1.08	1.10
After Reconstruction	-	0.63	0.64

Reprovisioning of a footbridge

6. With the reconstruction of the CBF, the footbridge in conjunction with the CBF has to be reprovisioned. The new footbridge would be built across the VPR, linking up the Victoria Park and Causeway Bay Promenade to serve as a safe and convenient connection for pedestrians. We will also install two lifts at the footbridge to facilitate access for the disabled and elderly.

Local widening of the VPR westbound

- 7. The IEC connects to the VPR outside the Victoria Park. To the south of the IEC, the VPR westbound is a single two-lane carriageway with its fast lane heading to the Cross Harbour Tunnel and Wan Chai/Central districts and the other lane heading towards Causeway Bay. Due to the narrowing of the VPR westbound outside Victoria Park, the fast-lane traffic from the VPR has to merge and compete with the fast moving traffic in the slow lane of IEC. Such arrangement is highly undesirable from a traffic engineering angle and has resulted in traffic queue of some 1.6 kilometres in length along the slow lane of the IEC during peak hours. To alleviate the traffic congestion at the IEC, we need to remove the bottleneck by widening the VPR westbound from four to five traffic lanes.
- 8. The project will require permanent alienation of 1 162 square metres (m²) of land from the Victoria Park. By demolishing the existing CBF, we will be able to compensate for the alienation with an open space of equal floor area, resulting in negligible net loss in area to the Victoria Park. There will also be temporary alienation of 3 826 m² of land in total from the Victoria Park and Causeway Bay Promenade to cater for the temporary traffic arrangement at VPR. We will reinstate the landscape at the Victoria Park and Causeway Bay Promenade affected by both the permanent and temporary alienation.

FINANCIAL IMPLICATIONS

9. We estimate the cost of the project to be \$141.8 million in MOD prices, made up as follows –

			\$ million	
(a)	Demolition works		8.6	
(b)	CBF		83.3	
(c)	Footbridge		12.9	
	(i) civil works	9.0		
	(ii) E&M works	3.9		
(d)	Road, drainage and landscaping works		5.2	
(e)	Landscaping works at Victoria Park and Causeway Bay Promenade		5.6	
(f)	Consultants' fees		18.0	
	(i) construction supervision and contract administration	4.7		
	(ii) resident site staff costs	13.3		
(g)	Contingencies	<u>.</u>	11.6	_
		Sub-total	145.2	(in September 2003 prices)
(h)	Provision for price adjustment	_	(3.4)	_
		Total:	141.8	(in MOD prices)

10. We estimate the annual recurrent expenditure upon completion of the project to be \$547,000. It is expected to generate 134 jobs, comprising 43 professional/technical staff and 91 labourers, totalling about 2 630 man-months.

ENVIRONMENTAL IMPLICATIONS

- 11. The reconstruction and subsequent operation of the CBF is a designated project under the Environmental Impact Assessment (EIA) Ordinance and an environmental permit is required. Having regard to the project profile, the Director of Environmental Protection (DEP) is satisfied that the impact of the proposed flyover reconstruction and the proposed mitigation measures described in the project profile meet the requirements of the Technical Memorandum on EIA Process. DEP granted permission to the Director of Highways to apply directly for an environmental permit under the EIA Ordinance on 31 May 2003 with conditions and issued the environmental permit on 16 September 2003. We will implement the mitigation measures set out in the project profile and as required by DEP. We estimate the cost of implementing the environmental mitigation measures to be \$100,000 and have included this cost in the overall project estimate.
- 12. For the associated local widening of the VPR, DEP has conducted an Environmental Review (ER) and concluded that the proposed road widening works would not cause long-term environmental impact. We will implement appropriate mitigation measures to control short-term environmental impact during construction.
- 13. The proposed works will involve transplanting of 53 numbers of tress within the project site. All trees to be transplanted are not important trees². We will incorporate planting proposals as part of the project, including estimated quantities of 100 trees, 200 shrubs and 3 500 square metres of grassed area.

PUBLIC CONSULTATION

14. We consulted the Transport and Traffic Committees (T&TCs) of the then Wan Chai and Eastern Provisional District Boards on the project on 24 June and 23 October 1997 respectively. Members supported the project. We further consulted the T&TCs of the Eastern and Wan Chai District Councils

Important trees include trees on the Register of Old and Valuable Trees, and any other trees which meet one or more of the following criteria -

⁽a) trees of over 100 years old;

⁽b) trees of cultural, historical or memorable significance;

⁽c) trees of precious or rare species;

⁽d) trees of outstanding form; or

⁽e) trees with trunk diameter exceeding 1.0 metre..

on 20 September and 4 December 2001 respectively and Members supported the project as well. For the proposed tree transplanting works under the project, we consulted the Food, Environment and Hygiene Committee of the Wan Chai District Council on 20 December 2001. Noting that the Administration had minimized impacts on the trees and would transplant the affected ones to the Victoria Park, the Committee had no objection to the project.

15. We gazetted the road scheme under the Roads (Works, Use and Compensation) Ordinance (the Ordinance) on 21 June 2002 and received two objections. Both objectors withdrew their objections unconditionally after the Administration explained the details of the project to them. The Permanent Secretary for the Environment, Transport and Works (Environment and Transport), under delegated authority from the Secretary for Environment, Transport and Works, authorized the project under the Ordinance and the notice of the authorization was gazetted on 27 June 2003.

LAND ACQUISITION

16. The proposed works do not require land acquisition.

THE WAY FORWARD

17. We intend to submit the project to the Public Works Sub-Committee (PWSC) and Finance Committee (FC) of the Legislative Council in October 2003 and November 2003 respectively for upgrading the project to Category A. Subject to funding approval, we plan to commence construction in April 2004 and complete the works in July 2007.

ADVICE SOUGHT

18. Members are invited to note the content of this paper.

Environment, Transport and Works Bureau October 2003

