For information 2 May 2008

Legislative Council Panel on Transport Subcommittee on Matters Relating to Railways

Progress Report on the South Island Line

Introduction

This paper briefs Members on the current position in the planning of the proposed South Island Line (SIL) (East).

Background

- 2. We last briefed the Subcommittee on 11 January 2008 on the Executive Council's decision that the MTR Corporation Limited (MTRCL) should be asked to proceed with the preliminary planning and design of the 7-km SIL (East), which will run from Admiralty to South Horizons, with three intermediate stations at Ocean Park, Wong Chuk Hang and Lei Tung Estate.
- 3. At the same time, the MTRCL was asked to explore the feasibility of various options in providing a station in Happy Valley.

Progress in Planning

Preliminary Planning and Design

4. The MTRCL commenced its preliminary planning and design of the SIL (East) project in February 2008. Ground investigation work is in progress to obtain the geological information for the design of the railway works. The consultancy for the environmental impact assessment study is expected to commence in May 2008.

Public Consultation Programme

5. We consulted the Southern District Council (SDC) on 17 January and 28 February 2008 about the planning and the public consultation exercise of the SIL (East) respectively. Since then, we have attended the meetings organised by the SIL Focus Group, which is formed under the

SDC, to monitor the progress of the implementation programme of the SIL (East), and to exchange views on issues related to the project. The MTRCL, in collaboration with the SDC, kicked-off the Stage-1 public consultation programme in early March 2008, which comprises roving exhibitions in community centres and shopping malls from 10 March 2008 to 20 April 2008, and 5 public forums in March and April 2008. The preliminary design of the railway scheme, which will be drawn up having regard to the views expressed in the Stage-1 consultation and will consist of its alignment, station locations and railway facilities such as station entrances and ventilation shafts, will be available towards the end of this year. The MTRCL will then conduct Stage-2 public consultation seeking the views from the general public on the scheme.

MTRCL's Happy Valley Station Options Review Report

6. While proceeding with the preliminary design, the MTRCL has conducted an options review study of providing a station in Happy Valley. In the initial stage of the study, two optional locations had been considered, namely (i) near Fung Fai Terrace and (ii) at the Happy Valley Tram Terminus. Subsequently, options of station to serve the Happy Valley Racecourse were suggested and these include (iii) within the Racecourse and (iv) adjacent to the Grandstand of the Hong Kong Jockey Club. The locations of these four options are shown at **Annex A**.

Station located near Fung Fai Terrace (Option 1)

7. The station is proposed to be located in a cavern at some 70 metres deep underneath Fung Fai Terrace, with proposed entrances at the junction of Shan Kwong Road and Village Road, and at the Tram Terminus. Both entrances are to be served by passenger lifts only, which might be a concern about fire safety and evacuation. For the construction of the deep shaft and the long adit to the station concourse, temporary occupation of the whole playground at Crescent Garden at Wong Nai Chung Road will be required. It is expected that considerable impacts on local traffic will be encountered during the construction period. Resumption of private land will also be required for the firemen's access and associated ventilation shafts and for the proposed entrance at the junction of Shan Kwong Road and Village Road. The station is about 600 metres from the public entrance of the Racecourse.

Station located at Happy Valley Tram Terminus (Option 2)

8. The station is proposed to be located beneath Wong Nai Chung Road and Crescent Garden, with three proposed entrances at Sing Woo Road Rest Garden, at the Happy Valley Tram Terminus and inside Crescent Garden. Unlike Option 1 above, this station would need to be constructed by cut-and-cover techniques, with diaphragm walls along the perimeter of the station box extending down to the underlying rock at a depth of about 50 metres. The station excavation will be at 30 metres deep below ground. During the 6-year period of construction stage, serious traffic impact, including the tram services, at Wong Nai Chung Road is anticipated. These include partial lane closure and temporary traffic diversion at various sections along Wong Nai Chung Road. The entrance is about 300 metres from the nearest public entrance of the Racecourse.

Station located within the Racecourse (Option 3)

9. The station is proposed to be located under the existing rugby pitch and hockey field, with proposed entrances at the sports facilities inside the Racecourse, at the Happy Valley Tram Terminus, in Crescent Garden and at the entrance to the Grandstand. Traffic congestion during construction would be less disruptive because the station box would be constructed inside the Racecourse. This option would require a temporary access bridge crossing the racetrack to enable the construction vehicles to gain access into the works site throughout the construction period. Other means of providing such access may not be technically feasible or practicable. Moreover, the station will have to occupy permanently one of the existing hockey fields and reprovisioning arrangement for the affected hockey field will be required.

Station next to Public Entrance to the Grandstand of the Racecourse (Option 4)

10. The station is proposed to be located under Wong Nai Chung Road between the public entrance to the Grandstand of the Racecourse and the Hong Kong Cemetery. Entrances would be provided at the entrance to the Grandstand. To serve the Happy Valley residential district, a long adit of about 300 metres will be built to link up the Tram Terminus with the station. With such configuration, this option would not be attractive to the residents of Happy Valley. As for construction, the station box and the long subway adit have to be constructed by top down cut-and-cover construction method between diaphragm walls. It would require all southbound traffic on Wong Nai Chung Road between

the Aberdeen Tunnel entry slip road and Shan Kwong Road to be diverted for the full duration of the 6.5 years construction. Full completion of the station up to base slab level is required before tunnelling works can commence at each end of the station. This would very much lengthen the time for construction, thereby delaying the completion and commencement of operation of the SIL (East).

Summary of Findings

11. The results of the Study revealed that all the options have considerable implications for the SIL (East) project in terms of cost and programme. The summary is as follows:-

	Option	Additional	Additional	Additional
		cost over	length of	time for
		original	tunnel section	completion
		proposal		
1	Near Fung Fai Terrace	HK\$ 1.6	1.5 km	10 months
		billion		
2	At Happy Valley Tram	HK\$ 2.4	2.4 km	23 months
	Terminus	billion		
3	Within the Racecourse	HK\$ 2.8	2.5 km	11 months
		billion		
4	Adjacent to the	HK\$ 2.1	1.5 km	31 months
	Grandstand of the HKJC	billion		

- 12. For the various location options, there will be an increase of route length, to various extent, between Admiralty and Ocean Park because of the required railway track curvature and the need to avoid unstable ground for tunnelling. The journey time from the Southern District to Admiralty via Happy Valley will be increased by 2 to 4 minutes. This would result in a reduction of the economic benefits of the project. Also, there will be significant impacts to the traffic during construction (in Options 1, 2 and 4) and recreational facilities in the long term (in Options 1 to 3). Due to the small population catchment of about 19,000, a station in Happy Valley would attract less than 10,000 passengers daily.
- We will continue to discuss with parties concerned whether a station in Happy Valley should be provided in the light of the above findings.

Provision of Public Toilets

14. The MTRCL will include the provision of toilet facilities within, or adjacent to, stations in the overall design parameters for all future new lines, including SIL (East), subject to any concerns raised by residents in the vicinity about the location of external ventilation exhausts, and any other regulatory approval.

Works Programme

- 15. We plan to start the construction of the SIL (East) in 2011 for completion no later than 2015.
- 16. Members are invited to note the contents of this paper.

Transport and Housing Bureau May 2008

