

For information
4 December 2009

Legislative Council Panel on Transport
Subcommittee on Matters Relating to Railways

Progress Report on the South Island Line (East)

Introduction

This paper briefs Members on the latest progress of the proposed South Island Line (SIL) (East) project.

Background

2. The SIL (East) will be a seven-kilometre long medium capacity railway, running between Admiralty and South Horizons with intermediate stations at Ocean Park, Wong Chuk Hang and Lei Tung, and its alignment is shown at Annex 1.

3. We last briefed the Subcommittee on the latest progress of the planning of SIL (East) project on 15 May and 17 September 2009. The proposed SIL (East) railway scheme was gazetted on 24 July 2009.

Latest Progress

4. Since the commencement of the preliminary planning and design of the SIL (East) in early 2008, the Government and the MTR Corporation Limited (MTRCL) conducted extensive consultation. The local community including the District Council was briefed on the proposed railway scheme. From early 2008 to present, we have attended nine meetings organized by the Planning and Development of South Island Line (Focus Group), which is formed under the Southern District Council (SDC), to exchange views on issues related to the project.

5. As mentioned above, the project has been gazetted for the statutory consultation process. After the gazettal of the project, the Government and the MTRCL have continued to explain the proposed scheme to the SDC, concerned groups, local communities, and individuals whose rights of land use are affected. The Government and the MTRCL have been in close contact with the SDC and the local communities. The MTRCL has commenced detailed planning and

design of the SIL (East) in August 2009 and carrying out the assessment in accordance with the Environmental Impact Assessment Ordinance.

6. The Government and the MTRCL have reviewed the proposed scheme in response to the following motion passed in the Subcommittee meeting held on 17 September:

“That this Subcommittee requests the MTRCL and the Government to re-examine the locations of the following facilities and the alignment of the South Island Line (SIL) (East), including :

1. the temporary Barging Point at Tin Wan Praya Road;
2. the temporary magazine at Chung Hom Shan;
3. the rail alignment for the section adjacent to the Tung Wah Group of Hospitals Jockey Club Rehabilitation Complex (JCRC).

This Subcommittee also requests the MTRCL and the Government to consider adopting a full tunnel option for the construction of SIL (East), and expeditiously consult this Council and the public on the financing arrangements for SIL (East), including the property developments above the rail stations.”

The progress of the review is as follows:

The rail alignment for the section adjacent to the JCRC

7. The proposed viaduct section of the SIL (East) will run adjacent to the JCRC at Wang Chuk Hang. The parents and representatives of the JCRC have requested for noise enclosure to be erected for the section adjacent to the JCRC, the viaduct structure to be lowered and be moved farther away from the complex.

8. We fully appreciate the concerns of the parents and representatives of the JCRC about the potential impact on the centre brought about by the railway. In order to enhance communication, visit to existing operating railway with viaduct section was arranged. In the past few months, the Government and the MTRCL have been in close contact with the parents and representatives of the JCRC. Meetings have been held on a regular basis with positive response to the concerns raised by the parents and representatives of the JCRC.

9. After months of efforts on the detailed design, the MTRCL has come up with revisions to the original scheme to meet the concerns of the JCRC. These include erecting noise enclosures at the section adjacent to the JCRC, moving the viaduct structure farther away from the JCRC by at least 18 metres and lowering the viaduct structure such that the top of the noise enclosure will be

about the same as the ground level of the JCRC. We believe the suggested amendments will be able to address the concerns of most residents and representatives of the JCRC about the design of the viaduct.

10. The MTRCL has also conducted technical assessment on the electromagnetic fields generated by the railway, including magnetic and radio frequency, with reference to the information of electronic medical equipments provided by the JCRC. Results showed that the railway system would not affect the operation of the electronic medical equipments of the JCRC. MTRCL's professional engineers shared the results with the JCRC on 16 September.

11. In the meeting held on 13 November, we further explained to the parents and representatives of the JCRC the latest design of the viaduct. We will continue to stay in touch with the JCRC.

Proposed Temporary Barging Point at Tin Wan Praya Road

12. Since the construction of the SIL (East) will unavoidably generate large amounts of excavated materials, and the public barging points for Construction & Demolition materials (C&D materials) on the Hong Kong Island have no spare capacity to meet the needs of the SIL (East) project, the MTRCL proposed that temporary barging points for C&D materials be established at Tin Wan Praya Road in Kellett Bay and Lee Nam Road in Ap Lei Chau to facilitate the disposal of excavated materials by marine transport, so that the impact of dump trucks on road-based traffic and the environment could be minimized.

13. In view of the concerns of the District Council and the local communities on the barging point at Kellett Bay, the Government is looking for alternate location for this proposed barging point. The MTRCL is now exploring the feasibility of co-using the barging facility at a work site of the Drainage Services Department (DSD) at Telegraph Bay, which has been in smooth operation, to suit the scheduled implementation of the two projects. As compared with the site at Kellet Bay, the proposed site is farther away from residential development and the number of people being affected in the vicinity will be smaller. The MTRCL will continue to study this proposal in detail and consult the District Council, local communities and the concern groups. It is hoped that the District Council and the community will appreciate that this proposal is a balanced option.

Proposed Magazine at Chung Hom Shan

14. Since certain sections of the SIL (East) will be built under the rock stratum, it is expected that tunnelling will be done by blasting, in association with other construction methods and there is a need to set up a temporary magazine site. To ensure that the SIL (East) will be completed and commissioned on time, the MTRCL has compared several possible locations, and proposed a remote area

at Chung Hom Shan as the location for the temporary magazine for overnight storage of explosives.

15. At present, all the explosives used for construction works are stored at a government explosives depot at Kau Shat Wan on Lantau Island. The Government and the MTRCL have studied the feasibility of delivering explosives to various work sites of the SIL (East), twice daily, by marine transport. In order to achieve this, it is required to identify a suitable site for construction of a temporary pier for loading/unloading explosives along the coastline of the Southern District. The basic condition is that the temporary pier is suitable for use by the designated vessels for carrying explosives as agreed by the Mines Division, and an adequate separation between the pier and its nearby buildings. We have conducted preliminary study and based on the information available to us so far, there is no suitable site for the establishment of a temporary pier for loading/unloading explosives along the coastline of the Southern District.

16. In addition, the Dangerous Goods Ordinance (DGO) stipulates that explosives can only be delivered by marine transport from government magazine at Kau Shat Wan on Lantau Island within the harbour between the hours of sunrise and sunset. Under these constraints, explosives must first be shipped from the Kau Shat Wan depot to designated piers and then delivered by land transport to the work sites where the explosives will be installed. Such a delivery process is very time-consuming. It is estimated that the blasting operation can only begin at 11:00 a.m. at the earliest. As 10 to 12 hours are required for preparation work between two blasting operations, the second blasting operation can only begin from about 9:00 p.m. to 11:00 p.m. Special consideration will be required on the noise impact when carrying out blasting operations in the evening. In view of the above and according to our current implementation programme, if a temporary magazine site cannot be set up for the SIL (East) and only one blast per day is permitted, the completion of the project is expected to experience a delay of about 1 year.

17. The MTRCL has investigated the feasibility of setting up a magazine for storage of explosives at the Shek O Quarry site. However, it is noted that the Quarry site is located farther away from the works sites, the lengthy delivery route will run along Shek O Road and Tai Tam Road, which is narrow and with sharp bends, and part of the route overlaps with that for the Chung Hom Shan site. Having considered various factors thoroughly, including the distance from residential area, access by vehicles, and distance from blasting sites, the proposed remote area at Chung Hon Shan is regarded as the most suitable location.

18. Taking account of the various factors thoroughly, we found it necessary to set up a temporary magazine for the project. Chung Hom Shan is the most preferred site option as it can achieve a balance among different factors, such as the distance between the magazine and the residential areas nearby, the

availability of direct access and the distance of the transportation route.

19. The proposed site at Chung Hom Shan is about 250m from Chung Hom Kok Road and more than 300m from the nearest residential area. There is a slope of about 60 m high separating the proposed site and the residential area. The MTRCL will provide two separate rooms, each with individual entrance/exit, for storage of explosives and detonators so as to reduce the chance of accidents. Moreover, the MTRCL will construct an earth bund of up to 2.7 m high, with a base of up to 3 m thick in the vicinity of the store. Inside and around the store, fire fighting and security installations will be provided. Moreover, security guards will be deployed 24-hours. The explosives and detonators will be transported separately by different vehicles. As explosives have to be ignited by detonators, such an arrangement can further minimise the chance of accidents.

20. In view of the concern expressed by residents about the proposed temporary magazine at Chung Hom Shan and the safety of explosives delivery, a quantitative risk assessment on the storage and conveyance of explosives is being conducted by the MTRCL. The assessment report will be reviewed by the Mines Division and forms part of the EIA Study Report. The EIA Study Report will be available for public inspection in the internet. Moreover, the MTRCL will adopt stringent risk control and safety measures in accordance with the standards stipulated in the DGO to ensure safe storage, conveyance and use of explosives during the construction stage of the project. Given that Hong Kong has a long history of using explosives in construction works and there is no accident involving the delivery of explosives, thus proving that the storage, conveyance and handling of explosives have been very safe.

Consideration of the Viaduct option and the Tunnel option

21. As regards the SIL (East) alignment to be constructed entirely underground, the MTRCL has looked into the tunnel option and briefed the Members of the Railway Subcommittee in the meetings held on 16 January and 17 September 2009.

22. The Government and the MTRCL have reviewed the proposal of building the SIL (East) entirely underground (i.e. the tunnel option) and taken various factors into consideration, including its impact on the works programme, its overall benefits and impacts at district level, relevant planning and environmental considerations and technical feasibility. For details, please refer to information paper LC Paper No. CB(1)2582/08-09(03) submitted to the Subcommittee on Matters Relating to Railways of the Transport Panel for discussion at its meeting on 17 September 2009. To pursue the tunnel option, it is expected that the construction period will be increased by about three to four years, serious impact to the heavy marine traffic already encountered at the

Aberdeen Channel, and the need for permanent clearance of some shipyards on the north shore of the Channel. Upon analysis, it is found that the current option of having a viaduct section between Wong Chuk Hang and Ap Lei Chau is preferable to that of building the SIL (East) entirely underground.

Topside Development and Funding Arrangement of the Railway Project

23. The SIL (East) is not financially viable and funding support from Government is needed. Highways Department has engaged consultants to assess the financial details of the project estimate. The government will study the planning parameters and scope of development at the railway station and depot site, and will continue to study the proposal of granting the property development rights at railway station and depot sites along SIL (East) to bridge the funding gap of the project. In this respect, we propose to reserve the Wong Chuk Hang Estate site and the site to the north of the Ocean Park Station for private housing development, and the MTRCL will have to pay market land premium to the Government. In the course of applying for rezoning of land use for these two sites, approval from the Town Planning Board will be needed.

Project Programme

24. Detailed design, handling of objections after gazettal and EIA for the SIL (East) are underway. The Government and the MTRCL will continue to maintain close communication and liaison with the District Council and the local community. The construction work for the SIL (East) is expected to commence in 2011 for commissioning in 2015.

25. Members are invited to note the contents of this paper.

**Transport and Housing Bureau
December 2009**

圖例
LEGEND

— 現有鐵路路線
EXISTING RAIL LINE

— 擬建南港島線（東段）
PROPOSED SOUTH ISLAND LINE (EAST)

附件一
Annex 1



南港島線（東段）

SOUTH ISLAND LINE (SIL) (EAST)