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#### LEGISLATIVE COUNCIL BRIEF

# MASS TRANSIT RAILWAY WEST ISLAND LINE AND SOUTH ISLAND LINE AND ROUTE 4

#### **INTRODUCTION**

At the meeting of the Executive Council on 28 June 2005, the Council ADVISED and the Chief Executive ORDERED that –

- (a) the MTR Corporation Limited (MTRCL) should be asked to proceed with the preliminary planning and design of the proposed "West Island Line" (WIL), involving the extension of the MTR Island Line (heavy capacity rail) from Sheung Wan to Kennedy Town with two intermediate stations at Sai Ying Pun and University;
- (b) negotiations with the MTRCL on the detailed scope, cost and implementation programme for the WIL should commence;
- (c) the MTRCL's proposed "South Island Line (West)" (SILW), which will be a medium capacity rail line running along the western side of the Hong Kong Island from University to Wong Chuk Hang with three intermediate stations at Cyberport, Wah Fu and Aberdeen, and its proposed "South Island Line (East)" (SILE), which will be a medium capacity rail line running from Admiralty to South Horizons with three intermediate stations at Ocean Park, Wong Chuk Hang and Lei Tung, should be kept under review and their way forward considered in the light of the results of the review on the planning of tourism and commercial development in the Southern District due to be completed by the end of 2005 and our consideration of Ocean Park's redevelopment proposal; and

- (d) the proposed Route 4 should be kept under review and its way forward considered in the light of our decision on the SILW and SILE.
- 2. The background on the WIL, SILW/SILE and Route 4 is set out at Annex A.

#### **JUSTIFICATIONS**

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#### **West Island Line (WIL)**

3. Residents in Western District have long been demanding the western extension of the MTR Island Line from Sheung Wan ever since the commissioning of the MTR Island Line in 1985. In early 2003, the Administration asked the MTRCL to proceed with further planning of the proposed extension of the MTR Island Line from Sheung Wan to University (previously called "Belcher") with an intermediate station at Sai Ying Pun. As the future of the proposed Western District Development (WDD), which involved reclamation along the shoreline of Kennedy Town, was unclear at that time, it was decided that the planning for the extension from University to Kennedy Town should be held in abeyance pending the way forward for the Although the WDD has now been dropped and, as a result, the catchment population of the WIL will not include the numbers that the WDD was to accommodate (about 9 000 residential and 1 000 employment), there are adequate transport and economic justifications to take the WIL forward and extend the MTR Island Line from Sheung Wan to Kennedy Town.

#### Transport and Economic Justifications

4. The WIL will provide a quicker and more convenient alternative to commuters in both the Western and Central Districts who are now relying mainly on road-based transport modes. At present, traffic congestion along the main corridors of Connaught Road, Des Voeux Road and Queen's Road (including the section between Sheung Wan and Kennedy Town) is prevalent. Traffic queues, aggravated by kerbside loading and unloading activities on Des Voeux Road and Queen's Road and traffic weaving, can be observed at many locations in the area. During rush-hours, traffic queues along Queen's Road Central and Des Voeux Road Central can be as long as 1km. The traffic congestion problems will persist and continue to hamper the smooth

operation of franchised buses, Green Minibuses (GMB) and other road-based transport modes between Western District and Central. While it may be possible to introduce even more stringent traffic management measures to control kerbside loading and unloading activities, such control measures will greatly affect the commercial activities in the area and invite strong objections from the shop operators and the local community. As Western District is fully developed, there are serious constraints in constructing any new roads to alleviate the traffic congestion problem. The WIL will divert passengers of road-based transport to rail services and is, therefore, fully justified on transport grounds.

- 5. The WIL will pass through the major population and employment centres in Western District. The catchment population of the three additional stations at Sai Ying Pun, University and Kennedy Town will total 140 000 in 2016, while the corresponding catchment employment will be about 60 000. About 80% of the population and 75% of the employment will be within the walk-in catchment of its stations. Furthermore, the University of Hong Kong is a major source of rail patronage. Based on the 2003-based Territorial Population and Employment Data Matrices, it is forecast that the tertiary school places in Western District in 2016 would be around 12 000. The WIL will provide commuters with a convenient alternative transport means and help reduce traffic on the road. In terms of journey time, travelling by road-based transport modes for the 2.8km between Kennedy Town and Sheung Wan now takes about 15 to 25 minutes during rush-hours. When the WIL is in place, the journey time by the MTR between the two locations will be no more than eight minutes.
- 6. The economic benefits accrued to transport infrastructure is generally measured in terms of time saving to road users. The Economic Internal Rate of Return (EIRR) of the WIL is about 10% per annum measured in real terms. It is estimated that the WIL will benefit the public a total time saving of 12 million hours in 2016. Taking into account the monetised time saving, as well as all other benefits, the net economic benefits less recurrent cost in 2016 are estimated at \$730 million. Moreover, if the SILW and SILE are built, the WIL will link up with them to form a rail loop joining the population centres and tourism nodes in Southern District and the economic benefits of the WIL will be even higher.

## Public Support

7. The local community of Western District, the Central and Western District Council and the Legislative Council have long been strongly demanding the early provision of the WIL. At its recent meeting in February 2005, the Legislative Council Panel on Transport passed the three motions at Annex B, and the two relating to the WIL urge the Administration to proceed with the construction of the WIL between Sheung Wan and Kennedy Town as soon as possible (the third one concerns the SIL).

#### Impact on Non-rail Public Transport Modes

8. The transport trade has expressed concern over the impact of the WIL on their business. We will carry out a detailed study to ascertain the impact as more details become available upon more detailed planning of the WIL. The impact on road-based public transport modes can be mitigated by reorganising the public transport network within the railway catchment areas to ensure an efficient and well-co-ordinated public transport network with railways as the backbone while maintaining a viable network of bus and green minibus services after the commissioning of the WIL. We will consult the relevant District Councils, the road-based public transport trade and the local community on the reorganisation plan. Our assessment is that, with the reorganisation of the existing public transport network, e.g. enhancing the feeder role of GMB to connect to the WIL, the concern of the road-based transport trade may be addressed. We will consider the impact assessment and consultation results when the time comes for us to make a final decision on whether to proceed with the construction of the WIL.

### WIL - From Sheung Wan to Kennedy Town

9. Given the justifications as elaborated in paragraphs 4-7 above, we consider that the MTRCL should be asked to proceed with further planning and preparations for the WIL.

#### South Island Line (West)/South Island Line (East) and Route 4

10. Route 4 and the SILW will serve duplicating functions. As regards the SILE, we would need to take into account the results of the review (being conducted by Planning Department in response to the one of the motions at Annex B and due for completion by the end of 2005) on the planning of tourism and commercial development in the Southern District and our consideration of Ocean Park's redevelopment proposal¹. We will keep the proposed SILW/SILE and Route 4 under review and take into account our assessment of Ocean Park's proposal and Planning Department's review results in deciding the way forward. We will have due regard to the demand of the community in Southern District for the SILW and SILE, as well as the serious concerns raised by the non-rail public transport trade over the proposed rails. On this front, we will carry out an impact assessment the results of which will be taken into full consideration as we map out a proposed way forward.

#### FINANCIAL IMPLICATIONS OF WIL

11. According to MTRCL, the WIL will not be financially viable without Government's financial support. We will start our negotiation with MTRCL on the detailed cost of the project as well as the funding arrangements.

#### **ECONOMIC IMPLICATIONS OF WIL**

12. MTRCL estimates that the WIL will generate an economic internal rate of return (EIRR) of 10% per annum. This includes time saving to road users, operating cost saving for operators and safety benefits. The WIL will also expand the overall capacity and catchment of the MTR system, stimulate economic activities and revitalise older areas within the catchment.

#### **ENVIRONMENTAL IMPLICATIONS**

13. The WIL will be a designated project under the Environmental Impact

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<sup>&</sup>lt;sup>1</sup> Ocean Park submitted a redevelopment proposal to the Government in February 2005. It is being examined by us from the legal, financial, planning, lands, transport and engineering aspects.

Assessment (EIA) Ordinance. The environmental impact for the WIL will be assessed by the MTRCL.

14. The MTRCL will address in the EIA Study under the EIA Ordinance various key environmental issues including the operational noise impact, construction impact in particular noise nuisance and water quality, the ground borne noise transmission to the various properties along the alignment, the disposal of construction and demolition materials, and the impact on cultural heritage.

#### SUSTAINABILITY IMPLICATIONS

15. According to our initial sustainability assessment, the WIL should help improve mobility and air quality in the long-term through enabling more commuters to switch from road transport to rail. The identified potential problems, including the noise during construction and operation, air pollution from works sites, loss of open space and waste generated from tunnel excavation will be addressed carefully at the detailed planning stage in consultation with the relevant government departments. Temporary traffic arrangements will also be put in place where necessary to minimise disruption to the public during the construction period. The sustainability implications of the project will be reviewed upon completion of the further detailed planning.

#### **PUBLICITY**

16. A press release announcing the Executive Council's decision will be issued.

#### **SUBJECT OFFICER**

17. The subject officer is Mr Raymond W F HO, Principal Assistant Secretary for the Environment, Transport and Works (Transport) (Tel. 2189 2187).

# **Environment, Transport and Works Bureau June 2005**

## BACKGROUND INFORMATION ON WEST ISLAND LINE SOUTH ISLAND LINE AND ROUTE 4

#### West Island Line/South Island Line

The Island Line Extensions (ILE), which comprises the North Hong Kong Island Line (NIL) and WIL, is one of the six rail projects shortlisted for implementation in the Railway Development Strategy 2000 (RDS-2000).

- 2. In response to the request of the Administration, the MTRCL submitted a project proposal for the ILE (i.e. NIL & WIL) on 16 July 2001.
- 3. Subsequently in April 2002, the MTRCL submitted a revised proposal for the ILE taking into account, amongst other things, the change in population forecast, the change of land use for the Comprehensive Development Area Site near the proposed Exhibition station and the options for delinking part of WIL from Western District Development (WDD).
- 4. In June 2002, the MTRCL submitted a preliminary proposal for a medium capacity SIL. The proposed scheme was a monorail system looping from the proposed Belcher station (now renamed as University station) of the WIL to Ocean Park via Ap Lei Chau and eventually terminating at the existing Wanchai station.
- 5. As a result of the reduction in forecast employment and uncertainty associated with WDD, the Executive Council decided on 21 January 2003, and the Legislative Council Panel on Transport (the Panel) was briefed on 24 January 2003 that completion of NIL should be deferred to beyond 2016 and that
  - (a) MTRCL should be asked to proceed with further planning on the WIL Phase 1 from Sheung Wan to Belcher with a possible link with SIL;

- (b) planning for WIL Phase 2 from Belcher to Kennedy Town should be held in abeyance until the way forward for the WDD reclamation is clear:
- (c) development of SIL should be considered along with Route 4 (previously called Route 7); and
- (d) MTRCL should be asked to modify the preliminary proposal of SIL to come up with a more cost effective scheme.
- 6. In July 2003, MTRCL appointed a consultant to undertake a feasibility study for SIL as well as the section of WIL from Sheung Wan to Belcher. It was to explore possible options and recommend the best option for a new railway to serve the Western and Southern Districts.
- 7. In March 2004, MTRCL submitted the Project Proposal for WIL/SIL to the Administration. The WIL/SIL scheme, recommended in the March 2004 Proposal, comprises the following key elements
  - (a) a proposed Island Line extension from Sheung Wan to Sai Ying Pun:
  - (b) a proposed WIL from Sai Ying Pun to Wong Chuk Hang;
  - (c) a proposed SIL from South Horizons to Admiralty; and
  - (d) a proposed depot at Wong Chuk Hang with property development above.
- 8. At its meeting on 28 May 2004, the Panel passed a motion urging the Government to suspend the planning of the WIL/SIL, pending a review of the population growth in Western and Southern Districts, and the development of Southern District into a tourism/commercial centre.

- 9. After taking into account the views expressed by various parties, the MTRCL subsequently refined the railway scheme and undertook further studies on the feasibility of phased implementation of the projects. In February 2005, MTRCL submitted to the Administration a revised proposal for Phased Implementation of WIL and SIL. The revised scheme consists of three major components
  - (a) the West Island Line (WIL): the proposed extension of the MTR Island Line (heavy capacity rail) from Sheung Wan to Kennedy Town with two intermediate stations at Sai Ying Pun and University ("Belcher" has been replaced with "University");
  - (b) the South Island Line (West) (SILW): the proposed medium capacity rail line running from University to Wong Chuk Hang with three intermediate stations at Cyberport, Wah Fu and Aberdeen; and
  - (c) the South Island Line (East) (SILE): the proposed medium capacity rail running from Admiralty to South Horizons with three intermediate stations at Ocean Park, Wong Chuk Hang and Lei Tung.

## Appendix Their alignments are shown at Appendix.

10. At the meeting of the Panel on 25 February 2005, the Panel passed three motions urging the Administration to implement the WIL, SIL as well as Route 4 as soon as possible.

#### **Route 4**

- 11. In early 1998, the Administration obtained funding approval from Finance Committee to undertake an Investigation and Preliminary Design Consultancy Study for the section of Route 4 between Kennedy Town and Aberdeen at a cost of \$66 million. The study was completed in August 2000.
- 12. In July 2001, the Administration put forward a proposal to proceed with an engineering review on the section of Route 4 between Kennedy Town and Pok Fu Lam.

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- 13. The Panel was concerned that the phased implementation of Route 4 could not help satisfy the transport needs of the local community. The Panel passed a motion at the meeting on 13 July 2001 strongly requesting the Administration to construct Route 4 from Kennedy Town to Aberdeen mainly in tunnel form as soon as possible.
- 14. In September 2001, the Panel received views from local bodies and green groups on Route 4. There were divided views among the attending deputations on the development of rail and road infrastructure in the areas.
- 15. The Administration commissioned a Study in early 2002 to develop a number of dual 2-lane alignments for the route, as well as considering the option of upgrading existing roads.
- 16. In early 2003, the Administration briefed the Panel on the findings of the Study. The capital cost of Route 4 is \$10 billion (in September 2001 prices) and the construction cost of the Interim Measures for improving Pok Fu Lam Road is about \$50 million.
- 17. At the meeting on 25 February 2005, the Panel was briefed on the tunnel and coastal options of Route 4.

# 西港島線/南港島線的修訂方案(2005年2月)

Revised Proposal for WIL/SIL (February 2005)



# Three Motions passed by the Legislative Council Panel on Transport at the Meeting held on 25 February 2005 in Discussing Route 4/WIL and SIL

立法會交通事務委員會在二零零五年二月二十五日之會議 討論四號幹線/西港島線/南港島線時 所通過之三項動議:

"鑑於港島西區居民爭取興建西港島線地鐵支線已達二十年之久,本委員會促請政府與地鐵有限公司盡快就興建西港島線達成協議,連接上環至堅尼地城,以徹底解決港島西區居民的交通需要。"

"為解決港島西區和南區長期面對的交通問題,本委員會支持盡快落實區內的鐵路及道路網絡發展計劃,包括應盡快將地鐵港島綫西延至堅尼地城,同時必須設站於西營盤和大學,以及盡快興建南港島鐵路及四號幹線。本委員會促請政府積極與地鐵有限公司商討符合公眾利益的財務安排,以便及早展開相關工程,並在鐵路新站的選址和設計過程中充分諮詢區內居民意見。"

"本委員會促請政府盡快全面規劃及落實南區的旅遊及商業發展,並同時與地鐵有限公司商討,興建符合成本效益的南港島鐵路,確保有足夠的交通設施配合南區的發展及滿足該區居民的交通需要。"