File Ref.: THB(T)CR 11/1016/99

LEGISLATIVE COUNCIL BRIEF

THE MASS TRANSIT RAILWAY WEST ISLAND LINE

INTRODUCTION

At the meeting of the Executive Council on 23 October 2007, the Council ADVISED and the Chief Executive ORDERED that -

- (a) the MTRCL should be asked to proceed with further planning and detailed design of the proposed West Island Line (WIL) project;
- (b) the ex-Upper Level Police Station (ex-ULPS) site at High Street should be used for the reprovisioning of the facilities of the existing David Trench Rehabilitation Centre (DTRC) currently located at Bonham Road;
- (c) the funding gap of the WIL project should be bridged by a capital grant with funding from **Head 708 Capital Subvention and Major Systems and Equipment** under the Capital Works Reserve Fund (CWRF); and
- (d) a two-stage approach should be adopted for seeking funding from the Legislative Council (LegCo) to cover the design phase expenditure and subsequently the funding gap arising from the construction, operation and maintenance of the WIL.
- 2. Members are invited to note the contents of this paper.

JUSTIFICATIONS

MTRCL's Latest Proposal of WIL

3. In June 2005, we invited the MTRCL to proceed with the preliminary planning and design of the WIL project. In October 2005, the MTRCL commenced the preliminary design and the Environmental Impact Assessment Study of the project. It submitted the Revised Project Proposal of the WIL to Government on 31 August 2006.

4. The WIL is an extension of the existing MTR Island Line, from Sheung Wan Station to Kennedy Town with two intermediate stations at Sai Ying Pun and University. The WIL is approximately 3 km long. Its proposed alignment is shown at **Annex A**.

Transport and Economic Justifications

Α

- 5. Residents travelling to and from the Central and Western District are now relying on road-based transport modes. At present, congestion along Connaught Road West, Des Voeux Road West and Queen's Road West (including the section between Sheung Wan and Kennedy Town) does occur. As Western District has been fully developed, there are serious constraints in building new roads or widening existing ones to alleviate the congestion. An underground railway is a more feasible way to improve the traffic conditions in the district and provide greater convenience to the travelling public. The Central and Western District Council (C&WDC) and the local community have been pressing for the early construction of the WIL.
- 6. The WIL will cover the major population and employment centres in Western District. By 2016, the catchment population of the three additional stations at Sai Ying Pun, University and Kennedy Town is estimated to be 140 000, while the corresponding catchment employment will be about 60 000.
- 7. A road journey during the rush hours for the 3 km between Kennedy Town and Sheung Wan now takes 15 to 25 minutes. In comparison, the same journey by MTR will be no more than eight minutes. The WIL will thus bring significant transport benefits.
- 8. 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 8% per annum in real terms. It is estimated that the WIL will save the public a total of 12 million hours in 2016. The economic benefits including time saving over 40 years of operation of the WIL are estimated to be about \$44 billion in 2006 prices after netting the operating cost.
- 9. The Central and Western District is a traditional district with much room for rejuvenation. The WIL will provide the impetus for such rejuvenation as more economic activities and redevelopment are expected with the improvement in traffic conditions. This cannot be achieved by other road-based public transport modes. As explained in paragraph 5 above, traffic on existing roads is already congested and there are serious constraints in building new roads or widening existing ones.

MAIN ISSUES

Reprovisioning David Trench Rehabilitation Centre (DTRC) at the ex-Upper Level Police Station (ex-ULPS)

- 10. For the proposed Sai Ying Pun Station, an entrance has to be provided at Bonham Road to serve passengers in the Mid-levels. Along the section of Bonham Road in the vicinity of the station, all land lots have been developed, mostly for private buildings and a few for Government, Institution or Community (G/IC) facilities. As private land resumption should be avoided as far as possible, the existing DTRC site at No. 9B of Bonham Road is identified to be most suitable for locating the station entrance, taking into account its location, the impact on existing services and cost of reprovisioning works.
- 11. The vacant ex-ULPS at High Street is considered the most suitable site within Western District for the reprovisioning of DTRC. Since the ex-ULPS building is a Grade III historical building, it is proposed that the building should be preserved with minimum intervention for the reprovisioning. Such proposed usage will not affect the historical value of the building. As the gross floor area inside the building is not enough to meet the need of the DTRC facilities, the existing huts at the sloped platform of the site will have to be rebuilt to make up for the shortfall. Design of the new structure will be compatible with the historical building. Departments concerned and the MTRCL will discuss the detailed reprovisioning arrangements. There will be no gap in the services provided by the DTRC.

Reprovisioning of the Kennedy Town Swimming Pool (KTSP)

- 12. In the MTRCL's preliminary project proposal submitted in February 2005, the Kennedy Town Station was proposed to be located under the Forbes Street Playground, coming into conflict with some very well established tree-walls. The C&WDC has strongly advocated the preservation of these tree-walls in view of their significant heritage and amenity values. A review done by the MTRCL concluded that it would be necessary to shift the Kennedy Town Station eastward by 70m from the original proposed location to keep a sufficiently safe distance from the tree-walls. The new location will also mean easier access for the passengers. It will, however, encroach into the existing KTSP site.
- 13. The KTSP is proposed to be reprovisioned at the Kennedy Town Praya, adjacent to the existing Belcher Bay Park. It is consistent with the planning intention for this site to be used as open space/leisure space, as recommended in the land use review currently conducted by Planning Department (PlanD). Since the Kennedy Town Praya site is not covered by the

approved Kennedy Town and Mount Davis Outline Zoning Plan (OZP) No. S/H1/14, PlanD will seek to extend the boundary of the OZP to cover the site with suitable zoning to facilitate the reprovisioning. Amendments to the OZP will be subject to the approval of the Town Planning Board. The reprovisioning of the KTSP will be funded under the WIL project and the new pool facilities will comply with the prevailing standards. The existing KTSP will be demolished only when the new pool is ready for opening.

Use of the ex-Abattoir Site as Works Area

14. The ex-Abattoir and Incinerator site in Kennedy Town has been identified as a major works area to support the construction of the WIL. The Civil Engineering and Development Department (CEDD) has plans for demolition of the existing buildings, structures and chimneys, and decontamination of the underground soil subsequently. CEDD will first proceed with the demolition of the structures and allow the temporary use of the site for WIL works by mid 2009, to be followed by decontamination after the construction.

Reprovisioning of Lorry Parking Spaces

15. The Kennedy Town Praya site for reprovisioning the swimming pool is being used as a temporary car park. The loss of these parking spaces due to the construction of the WIL should be reprovisioned, as far as possible, to meet the needs from various business trades in Western District, including those in association with cargo handling and the wholesale food market. The site near the portal of the Western Harbour Crossing is considered most appropriate.

Barging Point within Western District Public Cargo Working Area (PCWA)

16. WIL construction works will generate about 800,000 cu. m. of excavated materials. To minimise impact on the local road network due to transportation of such materials, a temporary barging point is necessary for the materials to be transported by sea to Government reception facilities in Tseung Kwan O or Tuen Mun as far as possible. A small portion of the Western District PCWA will be released for setting up this barging point.

Station Entrance at University of Hong Kong

17. For the proposed University Station, two entrances will be provided at Pokfulam Road for passengers at the Mid-levels, particularly the students and staff of the University of Hong Kong (HKU). The entrance at the west will be linked to the proposed centennial campus expansion of HKU by a footbridge across Pokfulam Road. The other entrance will be located at the existing West Gate of HKU in front of Haking Wong Building. The lift at this

entrance will serve the Station concourse level, the Pokfulam Road level and the podium level of HKU.

LAND RESUMPTION

18. Western District is highly developed and congested. The majority portion of the WIL running tunnels, stations and adits will be located deep underground to avoid conflict with ground level features as far as possible. Notwithstanding extensive efforts in considering different engineering schemes and in keeping the land to be resumed to the absolute minimum, resumption of a very small number of private land lots in Western District, is yet unavoidable. This is to facilitate construction works and to provide entrances to stations.

FINANCIAL ARRANGEMENTS

The Funding Gap

19. The estimated capital cost of the WIL is \$8.9 billion (2006 prices), including the costs for design and construction of the railway works as well as the reprovisioning of Government facilities affected by the WIL. The MTRCL has recently indicated to us that the corresponding estimated funding gap of the project is about \$6 billion (January 2007 Net Present Value).

Need for Funding Support for WIL

- 20. Railways as the backbone of our transport system is our stated policy. The WIL project will bring significant transport and economic benefits as well as providing an environmentally friendly and efficient mass carrier for the Central and Western District. The C&WDC has been urging for the early implementation of the WIL project. The project is fully justified on transport and economic grounds and will be welcomed by the local community for reasons mentioned in paragraphs 5 to 9 above.
- 21. During the initial public offering (IPO) of the MTRCL in 2000, the Government acknowledged to investors through the IPO Prospectus that
 - (a) the MTRCL will require an appropriate commercial rate of return on its investment in any new railway project;
 - (b) in order for particular railway projects to earn a commercial rate of return for the MTRCL and for the MTRCL to maintain its financial standing and profile, financial and other support from the Government may be required;
 - (c) the return required by the MTRCL for any new railway project would ordinarily be between 1% and 3% above Weighted Average of Cost of Capital (WACC); and

(d) the Government will not require the MTRCL to construct and operate any future railway project without the MTRCL's agreement.

Forms of Funding Support

- i. Granting of Property Development Rights
- 22. rail-plus-property model whereby making property developments above railway stations/depots and on land adjacent to the railway, an integral part of the railway development for achieving synergy purpose has been considered for the WIL. However, its alignment goes through the well built-up areas of Western District. The Sai Ying Pun and University Stations are located deep below ground, underneath existing structures. The only location along the alignment with the potential for property development is the Kennedy Town (KET) Station, which is partly located at the existing Kennedy Town Swimming Pool site and partly below the Forbes Street Playground. The expected return from property development with a small area of 1.9 hectare, would be substantially below the estimated total funding gap of \$6 billion.

ii. Capital Grant

- 23. The Government has in the past mainly relied on granting property development rights as the means for providing financial support to bridge the funding gap for most of the railway projects. However, due to the lack of suitable sites along or adjacent to the WIL alignment, alternative methods to provide the funding would have to be considered. For the WIL, Government proposes to provide a capital grant as financial support. The grant is intended as an upfront inducement to lower the capital costs of the project in order to provide the incentive for the MTRCL to embark on the project which it would otherwise not undertake at all given the financial non-viability. It is not our intention for the Government to subsidise the operation of railway lines on a recurrent basis.
- 24. Upon receipt of the capital grant, the MTRCL will commence the WIL project and will bear all the commercial risks associated with the construction and operation of the rail line in future. To illustrate, should the patronage and the corresponding fare revenue arising from the WIL turn out to be substantially lower than those assumed in determining the funding gap amount, the Government has no obligation to provide any further financial support to the MTRCL.

Criteria for Providing Capital Grant to a Railway Corporation

25. Historically, capital subventions for capital works under the CWRF were provided only to non-profit-making organisations, such as the Hospital Authority, tertiary institutions and school sponsoring bodies. Since this is the

first time such a grant is proposed to be given to a listed company operating under commercial principles, there is a need to set out the criteria for non-government projects under which capital grants can be provided to profit-oriented organisations –

- (a) the capital subvention should be given for the purpose of inducing the organisation in question to undertake a project which it would otherwise not undertake;
- (b) the project in question should be a major infrastructure which is expected to bring about significant social, economic and environmental benefits to the public in line with the policy objectives of the Government, but is projected to be financially not viable to the organisation in question;
- (c) the Government should have given due consideration to the availability of other alternative organisations that are capable of undertaking the project without the capital subvention, as well as all other viable means for causing the project to be undertaken, and have come to the view that the capital subvention is the most appropriate means; and
- (d) requests for such capital subvention, if supported by the Government, should be approved by the Finance Committee (FC) of LegCo before the capital grant can be released.
- 26. The WIL is a long-awaited transport infrastructure for the Western District with strong public support. There are also transport, economic and environmental justifications for implementing the project. We consider that all the criteria in paragraph 25 above have been met. In addition, the funding request would be scrutinised by FC. We also recommend that these criteria be adopted in future for similar cases where such funding model is considered to be most appropriate for the project.

Two-Stage Funding Support

27. In order to more accurately determine the amount of Government funding that would be required, it is proposed to provide funding support in two stages. The first stage covers the design phase expenditure. The design phase is also essential for defining, in more detail, the project scope and ascertaining more accurately the project cost. Highways Department and the Financial Services and Treasury Bureau (FSTB) will engage independent consultants to check the details of the cost figures, and the computation of the amount of the funding gap of the project. In fact, it is common practice for major public works to seek funding in two stages respectively for design and construction costs. The second stage funding support, covering the remainder of the funding gap for the WIL project, will be released after the

railway scheme has been authorized under the Railways Ordinance and the Project Agreement is established.

- 28. We will seek funds under CWRF Head 708 from the FC for providing financial support to the MTRCL for the WIL project under the two-stage approach.
- 29. It has to be noted that the forms of funding support for railway projects are project-specific. Government will consider the most viable options for providing funding support for each railway project on a case-by-case basis, having regard to, among other things, the alignment of the railway and the need for co-ordinating above-station development. The rail-plus-property model, among others, will remain as possible options.

Essential Public Infrastructure Works (EPIW)

30. Some EPIW, which are to be funded by Government, have been identified for enhancing pedestrian or vehicular flows in the vicinity of the WIL stations. The estimated capital cost for the EPIW is about \$100 million. As in previous railway projects, we intend to entrust the EPIW to the MTRCL for design and construction. Also, same as in other railway projects, funding for the EPIW is to be charged under **Head 706- Highways** of the CWRF.

IMPACT ON NON-RAIL PUBLIC TRANSPORT MODES

- 31. We have assessed the impact of WIL on the road-based public transport modes and forecast that a moderate percentage of passengers of these modes will be diverted to the WIL.
- 32. Different levels of intermodal coordination would be required in order to maintain the overall efficiency of the public transport services affected and to minimize wasteful competition and duplication of resources after the commissioning of the WIL. These include network reorganisation, route diversion and frequency adjustment.
- 33. We will consult the affected road-based public transport trades and the District Councils concerned on the preliminary service reorganisation scenarios at an appropriate time.

WORKS PROGRAMME

34. We plan to gazette the WIL railway scheme later in October 2007. On the basis that the objections can be handled timely, the construction of the WIL will commence in 2009 for completion in 2013/2014.

IMPLICATIONS OF THE PROPOSAL

35. The proposed WIL has financial, civil service, economic, environmental and sustainability implications as set out in **Annex B**. The proposal is in conformity with the Basic Law, including the provisions concerning human rights. It has no productivity implications.

PUBLIC CONSULTATION

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- 36. We have been staying in very close touch with the C&WDC on the progress of the WIL project. The DC members have all along been asking for the early implementation of the project.
- 37. Representatives of Transport and Housing Bureau, HyD and TD have attended a series of public forums with the locals that were organized by the DC members and various political parties.
- 38. We consulted the Legislative Council Panel on Transport in February 2005. The Panel has urged for the early implementation of WIL. The Subcommittee of Matters relating to Railways of the Legislative Council Panel on Transport expressed similar sentiments when they were briefed on the latest progress of the WIL in March 2007.

PUBLICITY

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

SUBJECT OFFICER

40. The subject officer is Mr. Henry Chan, Principal Assistant Secretary for Transport and Housing (Transport), (Tel. 2189 2187).

Transport and Housing Bureau 23 October 2007

西港島線走線圖

Alignment of The West Island Line (WIL)



IMPLICATIONS OF THE WIL PROJECT

FINANCIAL AND CIVIL SERVICE IMPLICATIONS

The WIL will not be a financially viable project based on fare revenue alone, when considered from an investment point of view of the MTRCL. Funding support to the MTRCL is required for the implementation of the project. The MTRCL estimates that without property support, the funding gap for WIL would be around \$6 billion (January 2007 Net Present Value). We will firm up with the MTRCL the funding gap in the detailed planning and design stage. We recommend that the whole of the funding gap be bridged by provision of a capital grant to the MTRCL and the funding support be provided in two stages, with the first stage at an estimated amount of \$400 million covering the design phase expenditure and the second stage for the remaining main portion of the funding support at an amount of \$5.6 billion. Once the Government has decided to go ahead with the project, the relevant parties will seek the capital and recurrent funding through the established resource allocation procedures.

ECONOMIC IMPLICATIONS

- 3. Based on the revised proposal submitted by the MTRCL in August 2006, we estimated that WIL would generate the economic benefits including time saving over 40 years of operation of WIL of about \$44 billion in 2006 prices (net of operating cost). The economic benefits include time savings to road users, operating cost savings for operators and safety benefits. The Economic Internal Rate of Return (EIRR) of the WIL is about 8% per annum.
- 4. Apart from the economic benefits mentioned above, the provision of mass transit mode of transport should help elevate overall economic efficiency (e.g. reliability, connectivity, comfort, cleanliness, air quality and noise environment etc) and revitalise old areas in the Western District, thereby bringing along other indirect benefits.

ENVIRONMENTAL IMPLICATIONS

- 5. The WIL is a designated project under the Environmental Impact Assessment (EIA) Ordinance. An EIA Study for the WIL is being undertaken by the MTRCL.
- 6. The MTRCL will address in the EIA Study various key environmental issues including the construction and operational noise impacts, in particular the ground borne noise transmission to the various properties along the alignment, water quality impact, waste management, the issues of

land contamination, the impact on cultural heritage as well as landscape and visual impact.

SUSTAINABILITY IMPLICATIONS

7. According to our initial sustainability assessment, the proposed WIL should help improve mobility and air quality in the long term through enabling more commuters to switch from road to rail transport. 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 departments. Temporary traffic arrangements will also be put in place to minimise disruption during the construction period. The sustainability implications of the project will be reviewed upon completion of further detailed planning.