

**ITEM FOR PUBLIC WORKS
SUBCOMMITTEE
OF FINANCE COMMITTEE**

HEAD 706 - HIGHWAYS

Transport - Roads

**38TR - West Rail (phase 1) - essential public infrastructure works for the
Tuen Mun section**

Members are invited to recommend to Finance Committee the upgrading of **38TR** to Category A at an estimated cost of \$493.5 million in money-of-the-day prices for the construction of the essential public infrastructure works for the West Rail (phase 1) Tuen Mun section.

PROBLEM

The existing road network and transport interchange facilities are insufficient to cope with the future traffic and transport demand upon commissioning of the Tuen Mun North Station and Tuen Mun Centre Station of the West Rail (phase 1) in 2003.

PROPOSAL

2. The Director of Highways (DH_y), with the support of the Secretary for Transport, proposes to upgrade **38TR** to Category A at an estimated cost of \$493.5 million in money-of-the-day (MOD) prices for the construction of the essential public infrastructure works (EPIW) for the Tuen Mun section of the Kowloon-Canton Railway Corporation (KCRC)'s West Rail (phase 1) project.

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PROJECT SCOPE AND NATURE

3. The scope of **38TR** comprises -
- (a) **Tuen Mun North (TMN) Station sub-section**
 - (i) construction of an elevated public transport interchange (PTI) at the TMN Station;
 - (ii) provision of a 184-metre long, 10-metre wide vehicular access ramp linking the northern portion of the PTI, and re-configuration of Tsing Lun Road roundabout; and
 - (iii) provision of a 124-metre long, 13.5-metre wide vehicular access ramp linking the southern portion of the PTI to Castle Peak Road, and widening of a 230-metre long section of Castle Peak Road;
 - (b) **Tuen Mun Centre (TMC) Station sub-section**
 - (i) construction of an at-grade PTI;
 - (ii) provision of a 190-metre long, 7.3-metre wide vehicular access ramp linking the TMC Station with Kin Fung Circuit, and associated modifications of the Circuit;
 - (iii) construction of a 55-metre long, 6-metre wide footbridge and another 27-metre long, 6-metre wide footbridge crossing Tuen Mun Heung Sze Wui Road , with the provision of a lift for the physically disabled to the latter footbridge connecting Kai Man Path; and
 - (iv) improvement to the road junctions of Tuen Mun Heung Sze Hui Road/Yan Ching Street, Tuen Mun Heung Sze Hui Road/Pui To Road, Ho Pong Street/Pui To Road, and Pui To Road/Tsun Wen Road.

/JUSTIFICATIONS ..

JUSTIFICATIONS

4. In June 1998, the KCRC completed the West Rail Western Area Technical Study which established the need to provide a package of EPIW, as described in paragraph 3 above, to tie in with the commissioning of the TMN and TMC Stations of the West Rail (phase 1) in 2003.

TMN Station sub-section

5. We need to build a PTI with associated vehicular and pedestrian access to the TMN Station to facilitate convenient interchange with other modes of transport for commuters. Locating over the Tuen Mun River Channel, the PTI for the TMN Station will be built on an elevated platform and comprise two portions adjoining the southern and northern ends of the station. The PTI will include a bus terminus with 3 bays, 2 bays for coaches and franchised buses, 4 green minibus stands with a capacity of 12 vehicles, 4 taxi stands with a capacity of 26 vehicles and loading/unloading areas for 16 general vehicles.

6. In order to provide access from existing road networks to the PTI, we need to construct two vehicular access ramps to link Castle Peak Road and Tsing Lun Road to the southern and northern portions of the PTI respectively.

7. In anticipation of the additional traffic demand from the commissioning of the West Rail (phase 1) in 2003, we will improve the existing road networks related to the TMN Station so as to enhance their traffic handling capacities. These will include reconfiguring the roundabout from Tsing Lun Road near the northern portion of the PTI, and widening a short section of Castle Peak Road near the southern portion of the PTI.

TMC Station sub-section

8. We need to build a PTI with associated vehicular and pedestrian access to the TMC Station to facilitate convenient interchange with other modes of transport for commuters. The at-grade PTI will include a bus terminus with 6 bays, 5 green minibus stands for 15 vehicles, 2 taxi stands with a capacity of 17 taxis and a loading/unloading area for 16 general vehicles.

9. In order to provide access from the existing road networks to the PTI of the Station, we will build one vehicular access ramp, linking the Kin Fung Circuit with the PTI. In addition, we will provide two footbridges crossing Tuen Mun Heung Sze Wui Road to facilitate pedestrian circulation in the area, by providing a direct link for people from Kai Man Path and Tuen Mun San Hui to the TMC Station and the associated PTI. They will replace the existing at-grade pedestrian crossing across Tuen Mun Heung Sze Wui Road which will subsequently be removed to avoid conflicts between vehicular and pedestrian traffic.

10. In order to meet additional traffic demand from the commissioning of the West Rail (phase 1), we will also improve four existing road junctions in the vicinity to the TMC Station, including the provision of additional turning lanes and reconfiguration of the junctions, so as to enhance their traffic handling capacities.

11. We intend to entrust **38TR** to the KCRC for implementation in conjunction with the West Rail (phase 1) project in order to avoid interface problems between the two projects and to enable their simultaneous completion of these works, by having one single contract package for related works in the same area. Past experience indicates that this arrangement could result in savings up to 10% of the estimated engineering cost.

FINANCIAL IMPLICATIONS

12. We estimate the cost of this project to be \$493.5 million in MOD prices (see paragraph 13 below), made up as follows -

	\$ million
(a) TMN Station sub-section	
(i) Construction of PTI facilities	62.7
(ii) Construction of two vehicular access ramps	130.3

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(b) TMC Station sub-section			
(i) Construction of PTI facilities		39.1	
(ii) Construction of vehicular access ramp linking Kin Fung Circuit with associated modification works		50.8	
(iii) Footbridges with lift for TMC station		27.5	
(iv) Improvements to existing roads and junctions		38.5	
(c) On-cost ¹ payable to KCRC		57.6	
(d) Contingencies		40.7	
	Sub-total	<u>447.2</u>	(at December 1998 prices)
(e) Provision for price adjustment		46.3	
	Total	<u>493.5</u>	(in MOD prices)

13. Subject to approval, we will phase the expenditure as follows -

Year	\$ million (Dec 1998)	Price adjustment factor	\$ million (MOD)
1999 – 2000	40.1	1.02625	41.2

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¹ An on-cost at 16.5% of the project base cost, i.e. items (a) and (b) in paragraph 12 will be payable to KCRC for undertaking the technical studies, design and construction supervision of the EPIW under 38TR.

2000 – 2001	120.6	1.06217	128.1
2001 – 2002	124.7	1.09934	137.1
2002 – 2003	103.6	1.13782	117.9
2003 – 2004	41.3	1.17765	48.6
2004 – 2005	16.9	1.21886	20.6
	447.2		493.5

14. We have derived the MOD estimate on the basis of Government's latest forecast of trend of labour and construction prices over the period 1999 and 2005. The KCRC will tender the works under lump sum contracts without provision for inflation.

15. We estimate the additional annual recurrent expenditure arising from the proposed works to be \$8.4 million.

PUBLIC CONSULTATION

16. DHy and the KCRC consulted the Tuen Mun Provisional District Board and the Tuen Mun Rural Committee on 25 February and 23 April 1998 respectively on the EPIW under **38TR** together with the West Rail (phase 1) project. Members supported the railway project in principle. However, members expressed concern on the possible noise nuisance and traffic impact from the proposed works during construction. We have addressed their concerns in the Environmental Impact Assessment Study and Traffic Impact Assessment Study. We will implement various environmental mitigation measures and traffic diversion schemes to minimise disruption during the construction stage.

17. We gazetted the EPIW under **38TR** together with the West Rail (phase 1) project under the Railways Ordinance on 3 October 1997. We received three objections against **38TR**. Two objections related to environmental concerns

on the original location of the proposed vehicular access ramp on the north of the TMN Station. Both objectors withdrew their objections when we proposed to relocate the ramp to the present location. The third objection related to the proposed location of the PTI for the TMC Station. We met the objector and explained the reasons for selecting the proposed location of the PTI, taking into account the station configuration, convenience of access and the flooding risk of the nearby Tuen Mun River Channel. However, the objector still maintained his objection. Having considered the above objections together with other unwithdrawn objections to the railway scheme for the West Rail (phase 1), the Chief Executive-in-Council authorized the West Rail (phase 1) project together with the EPIW under 38TR in accordance with the Railways Ordinance on 15 September 1998.

ENVIRONMENTAL IMPLICATIONS

19. The road improvement works in paragraph 3(b)(iv) constitute a designated project under Schedule 2 of the Environmental Impact Assessment (EIA) Ordinance (Cap.499). Environmental permits are required for the construction and operation of the project. The KCRC has prepared an EIA report and submitted it to the Director of Environmental Protection (DEP) on 19 May 1999. We will carry out public consultation with the Advisory Council on the Environment (ACE) and members of the public. The report has not identified the need for any noise mitigation measures for the TMN and TMC stations. Nevertheless, we will implement mitigation measures imposed as conditions for approval of the EIA report.

20. For short-term construction impact, we will control the noise, dust and site runoff nuisances to comply with established guidelines and standards through implementation of environmental pollution control measures and environmental monitoring and audit programme in the construction contract.

LAND ACQUISITION

21. The proposed EPIW under item 3(a)(ii) in paragraph 3 above will occupy approximately 544 square metres of private land vested in the Housing Authority. The land was resumed under the West Rail (phase 1) project

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and no person was affected by the clearance. The Director of Lands will handover the required land to the KCRC in June 1999 for construction of item 3(a)(ii) of the proposed EPIW.

BACKGROUND INFORMATION

22. On 27 February 1998, Finance Committee (FC) approved an equity injection of \$29 billion from the Capital Investment Fund to the KCRC for construction of the West Rail (phase 1). We also informed FC that the Government would need to carry out essential public infrastructure works in the order of \$3,135 million in December 1997 prices² to enable West Rail to open to the public.

23. Following authorization by the Chief Executive-in-Council in September 1998, the KCRC commenced construction of the West Rail (phase 1) in October 1998. The first phase of West Rail will provide, by late 2003, a domestic passenger railway line serving Tuen Mun, Yuen Long, Tin Shui Wai, Kam Tin, Tsuen Wan West, Mei Foo and Sham Shui Po.

24. The Tuen Mun section of the West Rail (phase 1) includes the construction of the TMN Station, the TMC Station and a section of railway viaducts connecting the stations up to Tin Shui Wai Station.

25. We included **38TR** in Category B in September 1998.

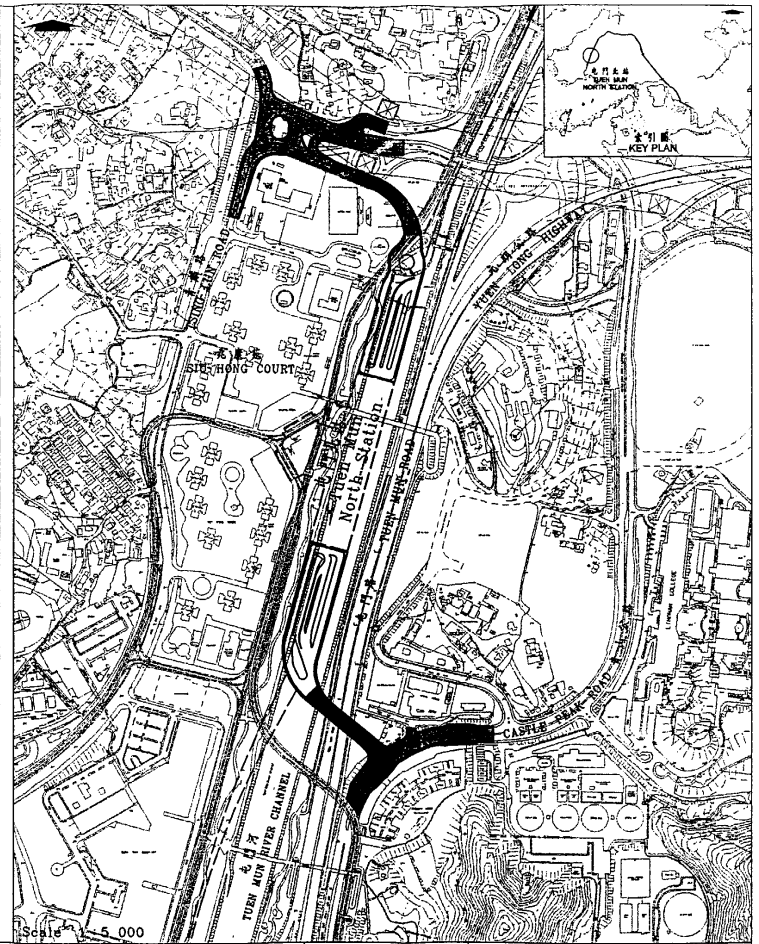
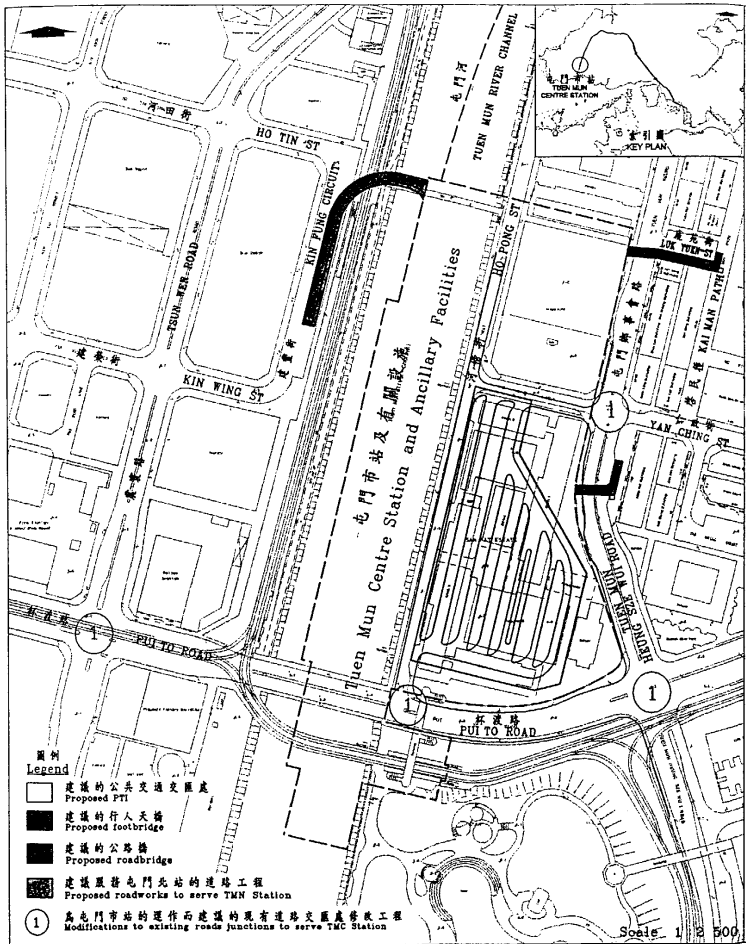
26. On 12 March 1999, FC approved the upgrading to Category A of **42TR** for the EPIW of the West Rail (phase 1) Tsuen Wan section. On 12 May 1999, the Public Works Subcommittee endorsed the proposal to upgrade to Category A **39TR** and **40TR** for the EPIWs of the West Rail (phase 1) Sham Shui Po and Kam Tin sections respectively. The recommendations for **39TR** and **40TR** has been submitted to the FC for approval on 11 June 1999. We are also submitting the funding proposal of **37TR** for the EPIW of Yuen Long section to this meeting for endorsement.

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² This is the cost estimate of the EPIWs at the time of the FC submission. As most of the detailed design of the EPIWs have been finalised and some works have already been tendered, we now have an updated cost estimate of the works. The latest estimated cost of the EPIWs is at \$3,119 million in MOD prices.

27. We plan to entrust the construction of **38TR** to the KCRC under the same works contracts for the TMN and TMC Stations. We aim to start the essential public infrastructure works in July 1999 and complete the construction works by October 2003.

Transport Bureau
June 1999



project no. 工程編號 38TR 九鐵西鐵(第一期) KCRC West Rail (Phase I) 屯門段的主要公共基礎設施工程 Essential Public Infrastructure Works for Tuen Mun Section	drawn by K S YAU	date 2/6/99	drawing no. RW9716	scale AS SHOWN <small>(at A3 size)</small>
	approved K W FUNG	date 2/6/99	路政署 HIGHWAYS DEPARTMENT	
	office 鐵路拓展處 RAILWAY DEVELOPMENT OFFICE			

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