

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 706 - HIGHWAYS

Transport – Roads

37TR - West Rail (phase 1) - essential public infrastructure works for the Yuen Long section – remaining works

Members are invited to recommend to Finance Committee the upgrading of **37TR**, entitled “West Rail (phase 1) - essential public infrastructure works for the Yuen Long section – remaining works” to Category A at an estimated cost of \$32.0 million in money-of-the-day prices.

PROBLEM

The existing Long Yat Road and its junction with Castle Peak Road will not be able to cope with the future traffic demand upon the commissioning of the Yuen Long (YUL) Station of the West Rail (phase 1) in 2003 and the planned developments in the vicinity of the YUL Station.

PROPOSAL

2. The Director of Highways (DHy), with the support of the Secretary for Transport, proposes to upgrade **37TR** to Category A at an estimated cost of \$32.0 million in money-of-the-day (MOD) prices for the construction of the essential public infrastructure works (EPIW) around the YUL Station of the Kowloon-Canton Railway Corporation (KCRC)’s West Rail (phase 1) project.

/ **PROJECT**

PROJECT SCOPE AND NATURE

3. The proposed scope of **37TR** comprises -
- (a) widening of a section of Long Yat Road (east of the Sun Yuen Long Centre) from a 7.3-metre wide two-lane one-way southbound road to a 15-metre wide four-lane two-way road (3 southbound and 1 northbound lanes) and modification of the road junction of Long Yat Road/Castle Peak Road; and
 - (b) indirect mitigation measures in the form of window insulation and air-conditioners for the Sun Yuen Long Centre, Block 5 dwellings with facades facing the roadworks in item (a) above.

A site plan is at Enclosure 1 for Members' reference.

JUSTIFICATIONS

4. In December 1997, KCRC completed the West Rail Western Area Technical Study which established the need to provide a package of EPIW to tie in with the commissioning of the YUL Station of the West Rail (phase 1) in 2003.

5. At present, the section of Long Yat Road east of the Sun Yuen Long Centre is a two-lane one-way southbound road and the road junction of Long Yat Road/Castle Peak Road is a priority junction. With the commissioning of the YUL Station by 2003 and the completion of the planned developments in Comprehensive Development Area (CDA) 12 and 15¹, we need to widen this section of Long Yat Road to a four-lane two-way road (3 southbound and 1 northbound lanes) and modify the road junction of Long Yat Road/Castle Peak Road to a signalised junction. These improvement works will permit right-turning of traffic from Castle Peak Road to Long Yat Road for direct access to the Public Transport Interchange south of the YUL Station, CDA 15 and the village north of the YUL Station, and left-turning of traffic from Castle Peak Road to CDA 12.

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¹ The planned developments in CDA 12 & 15, which include residential and commercial developments, are scheduled for completion by 2005-06 and 2006-07 respectively. The estimated population intake is about 17 000.

6. The increased traffic volume will generate traffic noise above the levels stipulated in the Hong Kong Planning Standards and Guidelines and will affect the Sun Yuen Long Centre, Block 5 dwellings with facades facing the completed roadworks. We have examined the provision of direct mitigation measures in the form of roadside barriers and noise enclosures along the roadworks areas to address the traffic noise impact. However, the study findings indicated that these measures are impracticable as their presence will restrict access by emergency vehicles. As a result, we need to provide indirect mitigation measures in the form of window insulation and air-conditioners for the affected dwellings. We estimate that about 180 dwellings are eligible for these indirect mitigation measures.

7. We have entrusted to KCRC the construction of the EPIW around the YUL station including the public transport interchange facilities for the YUL Station, the new access road, footpath and cycle track alongside the northern boundary of the YUL Station, the footbridges linking the YUL Station to Yuen Long Town and Kau Hui, and associated environmental mitigation measures under **45TR** for implementation in conjunction with the railway project. This could avoid interface problems between the two projects and to enable simultaneous completion of these works, by having one single contract for related works in the same area. As the items in paragraph 3 are associated with these works, we intend to entrust also **37TR** to KCRC for similar reasons and to tie in with the completion of the works under **45TR**. Past experience also indicates that this arrangement could result in savings up to 10% of the estimated engineering cost.

FINANCIAL IMPLICATIONS

8. We estimate the cost of this project to be \$32.0 million in MOD prices (see paragraph 9 below), made up as follows -

	\$ million
(a) Widening of a section of Long Yat Road (east of the Sun Yuen Long Centre) and modification of the road junction of Long Yat Road /Castle Peak Road	12.8
(b) Indirect mitigation measures for the Sun Yuen Long Centre	9.4

/ (c)

(c) On-cost ² payable to KCRC	3.7	
(d) Contingencies	2.6	
	28.5	(at December 1998 prices)
(e) Provisions for price adjustment	3.5	
	32.0	(in MOD prices)

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

Year	\$ million (Dec 1998)	Price Adjustment Factor	\$ million (MOD)
2000 – 2001	10.1	1.05814	10.7
2001 – 2002	8.5	1.11104	9.4
2002 – 2003	5.7	1.16660	6.6
2003 – 2004	2.5	1.22493	3.1
2004 – 2005	1.7	1.28617	2.2
	28.5		32.0

10. We have derived the MOD estimate on the basis of Government's latest forecast of trend labour and construction prices over the period 2000 to 2005. KCRC will include the roadworks in the YUL Station Contract under a lump sum contract without price fluctuation.

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² An on-cost at 16.5% of the project base cost (i.e. items (a) and (b) in paragraph 8) will be payable to KCRC for undertaking the technical studies, design and construction supervision of the EPIW under 37TR.

11. We estimate the annually recurrent expenditure arising from the proposed works to be \$0.06 million.

PUBLIC CONSULTATION

12. Representatives of DHy and KCRC consulted the Yuen Long Provisional District Board on 26 February 1998, the Shap Pat Heung Rural Committee on 15 July 1997, the Ping Shan Rural Committee on 29 September 1997, the Ha Tsuen Rural Committee on 30 September 1997 and the Pat Heung Rural Committee on 17 January 1998 on the EPIW under **37TR** together with the West Rail (phase 1) project. Members supported the project in principle.

13. We gazetted the proposed roadworks under **37TR** together with the West Rail (phase 1) project under the Railways Ordinance on 3 October 1997. We received no objection to the proposed roadworks in paragraph 3 above.

14. The Environmental Impact Assessment (EIA) report for the EPIW around the YUL Station was completed on 21 June 1999. We displayed the EIA report for public inspection at the Yuen Long District Office, Environmental Protection Department Resource Centre and KCRC's Sha Tin Office from 25 June to 24 July 1999. We received no written comment on the EIA report from the public. We consulted the Yuen Long Provisional District Board and its Environmental Improvement Committee on 24 June and 22 July 1999 respectively. Members expressed no adverse comment on the EIA report, including the indirect mitigation measures proposed for the Sun Yuen Long Centre, Block 5. We also consulted the Yuen Long Town Area Committee on 15 July 1999. Members raised no objection to the proposed indirect mitigation measures and the related roadworks.

ENVIRONMENTAL IMPLICATIONS

15. The road improvement works in paragraph 3(a) constitute a designated project under Schedule 2 to the Environmental Impact Assessment Ordinance (Cap. 499). An environmental permit is required for the construction and operation of the project. The Advisory Council on the Environment endorsed the EIA report on 19 July 1999. The Director of Environmental Protection approved the EIA report and issued the environmental permit to KCRC on 20 August 1999. We will implement all recommended mitigation measures identified in the approved EIA report and imposed as conditions for approval.

16. The approved EIA report identified operational road traffic noise as the key environmental concern for the proposed widening of Long Yat Road. We have exhausted all possible direct noise mitigation measures. We will alleviate the potential noise impacts to the identified noise sensitive receivers on Block 5 of Sun Yuen Long Centre by providing indirect mitigation measures in the form of window insulation and air-conditioners for the affected dwellings. We estimate the cost of implementing these indirect measures to be \$9.4 million. We have included this cost in the overall project estimate.

17. For other short-term construction impacts identified in the EIA report on the proposed roadworks, we will control the noise, dust and site runoff nuisances to comply with established standards through implementation of environmental pollution control measures and environmental monitoring and audit programme in the construction contract. Examples of mitigation measures to be taken during construction include installation of noise barriers next to operating equipment, avoidance of simultaneous noisy activities, application of water sprays to reduce fugitive dust.

18. We have considered in the planning and design stages ways to reduce the generation of construction and demolition material (C&DM) as much as possible. The project will produce about 3 800 cubic metres of C&DM. Some 2 660 cubic metres of C&D waste will be disposed of at landfills and some 1 140 cubic metres of public fill will be delivered to suitable public filling areas. We shall require the contractor under the contract to submit a waste management plan to the Project Engineer for approval, with appropriate mitigation measures including the allocation of an area for waste segregation. The Project Engineer shall ensure that the day-to-day operation on-site complies with the waste management plan submitted. We shall separate public fill from C&D waste for disposal at appropriate locations and sort the C&DM by category on-site to facilitate reuse/recycling in order to reduce the generation of waste. The recycled materials shall include paper/cardboard, timber and metal. We shall reuse/recycle C&DM on-site to reduce waste generation. We shall control the disposal of C&DM to the designated public filling facility and/or landfill through a trip ticket system. We shall record the disposal, reuse and recycling of C&DM for monitoring purpose.

LAND ACQUISITION

19. The proposed EPIW mentioned in paragraph 3(a) will occupy approximately 10 230 square metres of government land. The proposed works

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will also occupy approximately 550 square metres of private land, which has already been resumed under the West Rail (phase 1) project. The land resumption did not involve clearance of any families. The Director of Lands handed over the land concerned to KCRC in May 1999.

20. The estimated cost of acquisition and clearance of the land occupied by the proposed roadworks is about \$1.96 million. KCRC will bear this cost according to the West Rail Project Agreement between the Administration and KCRC.

BACKGROUND INFORMATION

21. On 27 February 1998, Finance Committee (FC) approved an equity injection of \$29 billion from the Capital Investment Fund to KCRC for construction of 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 prices to enable West Rail to be opened to the public.

22. Following authorisation by the Chief Executive-in-Council in September 1998, KCRC commenced construction of West Rail (phase 1). 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.

23. The Yuen Long Section of West Rail (phase 1) includes the construction of the YUL Station, Long Ping (LOP) Station and Tin Shui Wai (TIS) Station and railway tracks connecting the stations up to the TIS Station.

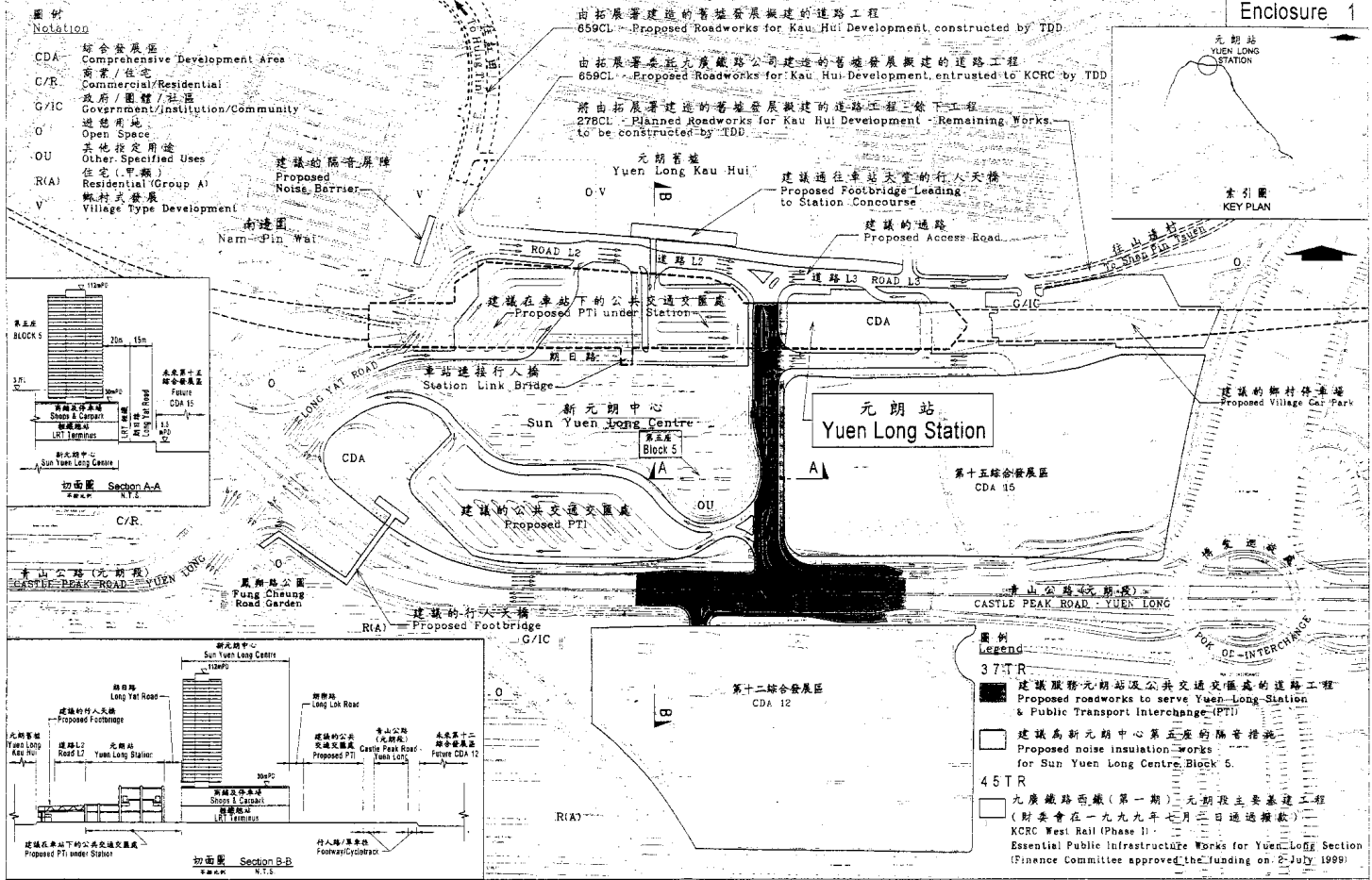
24. We included **37TR** in Category B of the Public Works Programme in September 1998. On 2 July 1999, FC approved the upgrading of part of this project to Category A as **45TR**, entitled “West Rail (phase 1) – essential public infrastructure works for the Yuen Long section”. The approved project estimate was \$685.1 million in MOD prices. The scope of **45TR** comprises mainly the construction of public transport interchange facilities, road improvement works, footpaths, cycle tracks, footbridges and associated environmental mitigation measures for the EPIW around the YUL, LOP and TIS Stations.

25. On 26 October 1999, the Chief Executive-in-Council endorsed the proposed indirect mitigation measures for the Sun Yuen Long Centre, Block 5 as identified in the EIA report. As a result of the proposed roadworks under **37TR**, the EIA report also identified the need to provide indirect mitigation measures for planned residential developments in CDA 12 and 15. To ensure that the indirect mitigation measures are to be properly implemented by the developers, we will include the requirements related to it as planning conditions for approving the developers' Master Layout Plans for CDA 12 and 15.

26. We plan to commence construction of **37TR** in early 2000 for completion in 2003 to tie in with the commissioning of the YUL Station in 2003.

27. As regards the EPIW for other sections, FC approved the upgrading to Category A of **42TR** for Tsuen Wan Section on 12 March 1999, **39TR** and **40TR** (part-upgrading) for Sham Shui Po and Kam Tin sections respectively on 11 June 1999, and **37TR** (part-upgrading) and **38TR** for Yuen Long and Tuen Mun sections respectively on 2 July 1999. The remaining part of **40TR** would be submitted to the Public Works Subcommittee for consideration in due course.

Transport Bureau
December 1999



37 TR
 九廣鐵路西鐵(第一期) - 元朗段主要基建工程 - 餘下工程
 KCRC West Rail (Phase I) - Essential Public Infrastructure Works for Yuen Long Section - Remaining Works

Project No. 37 TR
 37 TR
 九廣鐵路西鐵(第一期) - 元朗段主要基建工程 - 餘下工程
 KCRC West Rail (Phase I) - Essential Public Infrastructure Works for Yuen Long Section - Remaining Works

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