Project Profile for Essential Public Infrastructure Works Associated with West Rail Stations

(A) Basic Information

1. Project Title

Essential Public Infrastructure Works Associated with West Rail Stations

2. Purpose and Nature of the Project

West Rail Phase I will provide a domestic passenger service linking Tuen Mun with West Kowloon, and includes nine new stations. In connection with the new stations at Kam Tin, Yuen Long, Tin Shui Wai and Tuen Mun Centre, essential public infrastructure works will be required, including,

- a) Eastern Access Road to Kam Tin station
- b) modification to Long Yat Road and Roads L1, L2 and L3 serving Yuen Long station;
- c) modification to Tin Fuk Road, Ping Ha Road and Tin Yiu Road serving Tin Shui Wai station; and
- d) improvement to Tuen Mun Heung Sze Wui Road, Yan Ching Street, Pui To Road, Ho Pong Street and Kin Fung Circuit serving Tuen Mun Centre station.

3. Name of Project Proponent

The project proponent for EPIWs is Railway Development Office, Highways Department while construction works are entrusted to KCRC.

4. <u>Description, Location and Scale of Project</u>

The locations of the proposed road works at Kam Tin, Yuen Long, Tin Shui Wai and Tuen Mun Centre are shown on Drawings no. SK-C-775, SK-C-888, SK-C-811 and SK-C-824 respectively.

In Kam Tin, the Eastern Access Road will be constructed to connect Kam Tin station, Kam Sheung Road and Kam Tin Bypass. The Eastern Access Road is a dual-two lane carriageway with a roundabout adjacent to the station. The road is mainly at-grade with two bridges over the two branches of the Kam Tin River.

In Yuen Long, Long Yat Road and Castle Peak Road are the two major existing roads serving the Sun Yuen Long Centre area. The existing Long Yat Road will be re-aligned for the Public Transport Interchange (PTI) access and

emergency vehicle access (EVA) to service Yuen Long station. Prior to the re-alignment of Long Yat Road, roads L1, L2 and L3 of 2-3 lanes wide will be constructed to accommodate the existing traffic at Long Yat Road. In association with the construction and realignment of these roads, road junctions at L1/L2, L2/L3 and Long Yat Road/Castle Peak Road will be widened.

In Tin Shui Wai, the Tin Fuk Road/Ping Ha Road junction will be moved about 25 m to the north and hence Tin Fuk Road and Ping Ha Road will be realigned. Approximately 400 m of the existing Tin Fuk Road will be widened to a dual 2 lane road. The western bound carriageway of Tin Fuk Road will gradually increase to 4 lanes as it approaches the Tin Fuk Road/Ping Ha Road junction. Tin Yiu Road will also be modified to allow for all movements at the junction.

In Tuen Mun, the existing road network and junctions at Tuen Mun Heung Sze Wui Road, Yan Ching Street, Pui To Road and Ho Pong Street will be widened. At the junction of Tuen Mun Heung Sze Wui Road/Yan Ching Street, the existing carriageway of Tuen Mun Heung Sze Wui Road will be widened to dual 2 lanes in both northbound and southbound direction. At the junction of Tuen Mun Heung Sze Wui Road/Pui To Road, each carriageway approaching to the junction will widened to 4 lanes and one addition lane will be provided at the exits of the junction. Road improvement works will also include widening at the Ho Pong Street/Pui To Road junction.

Across the Tuen Mun Nullah, an access ramp of 7.3 m wide will be constructed to connect Kin Fung Circuit and Ho Pong Street. Kin Fung Circuit will also be improved to accommodate the access ramp.

5. History of Site

The road works at Yuen Long, Tin Shui Wai and Tuen Mun Centre will be mainly carried out at the existing roads within the town centres. The Eastern Access Road is located in a rural area of Kam Tin. The land use of the western section of Eastern Access Road is mainly agricultural land and as the road moves toward Kam Sheung Road and Kam Tin Road, the land use is dominated by industrial use, such as open storage and factories.

6. Number and Types of Designated Projects to be Covered

Eastern Access Road in Kam Tin; modification to Long Yat Road and Roads L1/L2/L3 serving Yuen Long station; modification to Tin Fuk Road/Ping Ha Road/Tin Yiu Road serving Tin Shui Wai station and improvement to roads serving Tuen Mun Centre station are the four designated projects. All these projects are classified as Category A1 under Schedule 2 of the Environmental Impact Assessment Ordinance (EIAO).

Name and Telephone Number of Contact Person(s)

(B) Outline of Planning and Implementation Programme

Construction works will be phased suitably with that of the Yuen Long, Tin Shui Wai and Tuen Mun Centre stations and associated infrastructure to afford the most efficient construction programme. The target commencement and completion dates are May 1999 and November 2003 respectively.

(C) Possible Impact on the Environment

The at-grade roads will be constructed using conventional methods of construction for projects of this nature in Hong Kong SAR. It is expected that construction activities will include minor excavation, bulldozing and paving. For construction of the access ramp at Tuen Mun Centre across the nullah, works will include construction of foundation, column and road deck. Construction of two bridges is also required over the Kam Tin River channel at the Eastern Access Road.

The majority of the works are to be constructed within the gazetted scheme boundary of the West Rail project. The EIA study of West Rail has already identified all the potential environmental impacts associated with the construction phase of the stations and the associated works.

As all the proposed road works are located within either existing developed areas or for the Eastern Access Road, agricultural and light industrial uses, there are no buildings or structures of known historical interest, and environmental impacts in terms of conservation, ecology, cultural and heritage interest are not considered to be significant.

The key environmental concerns are noise, air quality, water quality and waste issues. These have been comprehensively addressed in the West Rail EIA and appropriate environmental mitigation measures have been recommended. Details are described in Section F(4) below.

During operation, it is anticipated that the key potential environmental impact will be road traffic noise at the nearby planned and existing noise sensitive receivers. A comprehensive list of noise sensitive receivers has been included in the West Rail FAR and the relevant section is abstracted and listed in Section D below and additional noise sensitive receivers will be established with the agreement of EPD for the Eastern Access Road.

(D) Major Elements of the Surrounding Environment

The existing and planned sensitive receivers and sensitive parts of the natural environmental which might be affected by the proposed project are identified as below:

Kam Tin Area

- village houses along Kam Tin Road and Kam Sheung Road
- village houses to the south of Kam Tin Station

Yuen Long Area

- Choi Uk Tsuen
- Tung Tau Tsuen
- Yuen Long Kau Hui
- Sun Yuen Long Centre
- Nam Pin Wai
- Shung Tak Catholic Primary School

Tin Shui Wai

- Tin Yiu Estate
- QE School Old Student's Association Primary School
- T.W.G.H.'s Kwok Yat Wai Prevocational School
- Proposed Primary School in Tin Shui Wai Area 3
- Proposed Secondary School in Tin Shui Wai Area 3

Tuen Mun Centre

- residential buildings along Tuen Mun Heung Sze Wui Road
- residential buildings along Ho Pong Street
- industrial buildings along the western side of Tuen Mun Nullah
- Tuen Mun Town Park

(E) Environmental Protection Measures

The recommended mitigation measures in the West Rail FAR for construction of the road works will be adopted. While for operational stage, mitigation measures as listed below will be considered,

- acoustic barriers and insulation
- buffer zones and landscaping
- site layout and building design
- application of Chapters 9 and 10 of the Hong Kong Planning Standards and Guidelines

(F) Use of Previously Approved EIA Reports

1. Title of Approved EIA Report

KCRC West Rail Final Assessment Report West Kowloon to Tuen Mun Centre Contract No. TS900 Environmental Impact Assessment

2. Date of Approval: 23 March 1998

3. Environmental Aspects Addressed in the Approved EIA Report

The EIA study of the West Rail has identified all the potential environmental impacts, assessed the extent of impacts, and made recommendations for appropriate mitigation measures associated with construction and operation of the West Rail, its associated facilities and the associated road works. The alignment runs from West Kowloon at approximately 500 m south of the proposed Yen Chow Street station and terminates at Tuen Mun Centre station. The areas of assessment included noise, air quality, water quality, landscape and visual issues, landuse issues, archaeological and cultural issues, ecology, waste, land contamination and hazards issues.

4. Relevance of the Findings on Environmental Impacts and Recommended Mitigation Measures

The key potential environmental impacts associated with the road works would be noise, air quality and water quality impacts. The extent of impacts and the cumulative impacts arising from construction of the road works and the railway have been evaluated in the EIA study. Appropriate mitigation measures have also been recommended to mitigate any impacts to the relevant environmental criteria. The EIA study concluded that with the implementation of the recommended mitigation measures as listed in the table below, there will be no unacceptable environmental impacts during construction stage.

Table 1 Essential Public Infrastructure Works - List of the Relevant Sections of the West Rail EIA FAR

Issue	Description	Section	Page
Noise	Prediction of Impact	7.3.2.2	233
		8.3.2.2	330
	Recommended Mitigation	5.3.2.4	76
		7.3.2.4	236
		8.3.2.4	333
	Conclusion	7.3.2.7	239
		8.3.2.7	338
Air Quality	Prediction of Impact	7.4.1.3	255
		8.4.1.3	349
	Recommended Mitigation	5.4.1.5	89
		7.4.1.5	257
		8.4.1.5	351
	Conclusion	7.4.1.6	258
		8.4.3	356
Waste	Potential Sources and	7.10.1.1	311
	Prediction of Impacts	8.10.1.1	397
	Evaluation of Impacts	7.10.2.1	314
		8.10.2.1	400
	Recommended Mitigation	7.10.3.2	317
		8.10.3.2	404
	Conclusion	7.10.4	319
		8.10.4	406
Water Quality	Prediction of Impact	7.5.1.4	262
		8.5.1.4	363
	Recommended Mitigation	7.5.1.6	267
		8.5.1.6	369
	Conclusion	7.5.3	277
		8.5.3	375







