

## **LEGISLATIVE COUNCIL BRIEF**

### **KOWLOON SOUTHERN LINK**

#### **INTRODUCTION**

At the meeting of the Executive Council on 24 September 2002, the Council ADVISED and the Chief Executive ORDERED that -

- a) KCRC should be asked to proceed with the detailed planning and design of the KSL; and
- b) Negotiation with KCRC on the detailed scope, cost, implementation programme should commence with a view to drawing up a project agreement for KSL in 2004.

#### **BACKGROUND AND ARGUMENT**

##### **General**

2. The KSL is one of the six rail projects recommended by the Railway Development Strategy 2000 (RDS-2000). It is an extension of West Rail from Nam Cheong Station to connect with the KCR Extension to Tsim Sha Tsui. The KSL's completion window is set for 2008 – 2013. The KSL will enable some one million population (in 2016) within West Rail's 1-km catchment to have more direct access to the main employment/business areas in urban Kowloon. The KSL will also provide an efficient east-west link in the southern part of the Kowloon peninsula. Upon KSL's completion, both West Rail (WR) and East Rail (ER) will terminate with cross-platform interchange at the Hung Hom Mass Transportation Centre (MTC), where interchanges with the Shatin to Central Link (SCL) and possibly the Express Rail Link from Hong Kong to Guangzhou via Shenzhen will also be provided.

3. Following the Chief Executive-in-Council's approval of 9 January 2001, we invited KCRC to submit a Project Proposal for the KSL. KCRC subsequently submitted their Proposal on 13 July 2001.

4. A summary of the main features of KCRC's Proposal and our assessment is set out below.

## **KCRC's KSL Proposal**

### **(A) Route Alignment**

A 5. There is no other practicable alignment option for the section between West Kowloon Station (WKN) and Nam Cheong Station at **Annex A**. For the section between WKN and East Tsim Sha Tsui Station, KCRC has considered four options –

- a) Canton Road (CAR) Alignment: along Canton Road and then turning eastwards underneath the former Marine Police Headquarters (FMPHQ) into Salisbury Road;
- b) Kowloon Park Drive Alignment: along the Kowloon Park Drive before turning eastwards with a very sharp curve beneath the YMCA building into Salisbury Road;
- c) Kowloon Point Alignment: beneath seabed at Kowloon Point and then turning eastwards under the Ocean Terminal into Salisbury Road near Star Ferry; and
- d) Harbour City Alignment: parallel to the existing seawall along Harbour City and then turning eastwards under Ocean Terminal, Omni Hotel and Star House into Salisbury Road.

B 6. The plan showing the four alignment options is at **Annex B**. We concur with KCRC that the CAR option is the preferred one as it provides an acceptable alignment for rail operation, better serves the main business area, minimizes land resumption and disruption to existing major development/facilities, and avoids works in the harbour. The schematic temporary traffic arrangements during the construction along the CAR have been assessed and found to be acceptable in principle. We will study the traffic arrangements in detail as KCRC develops the construction programme with a view to minimising disruption at ground level given Tsim Sha Tsui is a prime commercial and tourism area.

## **(B) Stations**

7. KCRC proposes two stations, one at West Kowloon and the other at Canton Road under the CAR alignment.

8. There are two construction options for the Canton Road alignment, namely, the Cut & Cover Option and the Bored Tunnel Option, which interface with the station design. Their station layouts are at **Annex C**. The Bored Tunnel option can only provide an inconvenient station layout where the concourse is off-line from the platforms. It also requires the resumption of two multi-storey buildings along Canton Road and affects the FMPHQ heritage site (in particular the two historical fire station buildings there), which is being planned as a tourist attraction. Although the Bored Tunnel option will cause lesser disruption at the ground level and to the traffic during the construction stage, that due to the Cut & Cover option is considered acceptable as mentioned in paragraph 6 above. On balance, we agree with KCRC that the Cut & Cover option is more practical.

## **(C) Interface with the SCL**

9. KCRC's proposal is to reschedule the existing platforms in Hung Hom as a terminal for the WR-cum-KSL as mentioned in paragraph 2 above. Under the SCL project, KCRC intends to modify the Hung Hom Station to provide a better interchange between the ER, WR and SCL.

## **(D) Land Requirements**

10. No major resumption of private land is required. Only an underground strata will be resumed for the construction of a ventilation tunnel. A small piece of some 550m<sup>2</sup> of non-building land may also be resumed for a possible entrance to the Station from the west side of Canton Road.

11. As regards Government land, KCRC will reprovide the affected public facilities through integration with the railway design and construction.

12. KCRC also proposes to have temporary works areas on a number of Government sites. We will firm up with KCRC about the exact requirements in the detailed planning and design stage.

13. Subject to the final land requirement, the compensation and clearance costs under the Cut & Cover CAR Option, which KCRC has to bear, amount to about \$0.4 billion in December 2000 prices.

**(E) Cost Estimate**

14. KCRC's estimate for the capital cost of KSL (Cut & Cover CAR Option) is \$9.2 billion in December 2000 prices, as compared to an order of costs of \$7-8 billion (in 1998 prices) in RDS-2000. The cost increase is due to the additional CAR Station. A breakdown for the cost estimate is as follows –

	<b>\$ billion</b>
Construction	7.0
Design, Project Management and other general costs	1.3
Land Costs	0.4
Contingency	0.5
<b>Total</b>	<b>9.2</b>

15. The estimated construction cost for associated Essential Public Infrastructure Works amounts to about \$0.5 billion in December 2000 prices. Details are set out in paragraphs 19 and 20 below.

**(F) Fares**

16. KCRC's proposal suggests a fare structure for KSL allowing WR passengers from Northwest New Territories to reach the destinations in South Kowloon and Hung Hom for an additional fare of \$0.5 - \$1 on top of the respective proposed fares to Nam Cheong. KCRC's proposal assumes that the fare structure will increase in line with inflation.

**(G) Patronage Forecasts and IRR**

17. In KCRC's submission, the 2016 marginal weekday patronage forecast is 270,000. The heaviest loaded section is between Nam Cheong and WKN with a peak hour one-way demand of 48,000. KCRC considers the project financially viable even without support of property development profits.

## **(H) Financing Arrangement**

18. KCRC considers that KSL can be wholly financed by internal resources and debt. To fund this project, KCRC estimates that it will require to borrow an additional HK\$7.3 billion in 2005 and 2006. KCRC's sensitivity analysis has confirmed that the project will remain financially viable and the Corporation can maintain the financial health in a range of downside testing scenarios.

## **(I) Essential Public Infrastructure Works (EPIW)**

19. To enable the rail operation of KSL, KCRC has looked into the EPIWs which are to be funded by Government. KCRC proposes a pedestrian subway along Haiphong Road linking CAR and the MTR Tsim Sha Tsui Station. Its justification, feasibility, routing, connection between the two stations, and implementation arrangement will be further studied in conjunction with both railway corporations, having regard to the area-wide pedestrian linkages being studied.

20. KCRC also proposes two potential subways linking WKN to the existing subways at Jordan Road and Austin Road. Subject to justification on traffic grounds, the estimated total cost (including KCRC's on-cost) of these three subways and other minor items of the EPIWs is in the order of some \$0.5 billion in December 2000 prices.

## **(J) Project Timeframe**

21. Based on the assumptions to secure Government's instruction to proceed in January 2002 and arrange advance works as mentioned in paragraph 22 below, KCRC originally proposed to commence construction of KSL in April 2004 for opening the railway in stages between end 2007 and end 2008. The full completion date is in line with the RDS-2000's recommended time window of 2008 – 2013. We will study the phased opening and firm up the programme with KCRC. Our latest master programme for the project showing the critical activities and a full completion date of end 2008/early 2009 is at

D Annex D.

## **(K) Advance Works**

22. To facilitate the KSL's main construction works, KCRC has proposed to arrange advanced works prior to the authorization of the railway scheme under Cap 519 Railways Ordinance (RO). They include temporary reprovisioning of Haiphong Road Temporary Market, tree transplanting for

Kowloon Park Drive Children's Playground, temporary reprovisioning of Jordan Road footbridge, underpinning of the Yau Ma Tei Interchange Elevated Road, and the route protection works at Olympic Station Development Site D.

23. Where appropriate and justified on programme grounds, we will arrange for their implementation upon consultation with and agreement by the concerned parties, at KCRC's costs and on a no-commitment basis prior to the authorization of the scheme under the RO. In particular, for advance works involving transport infrastructures, before their implementation, we will establish with KCRC that these advance works will not affect any private rights and will only have minor traffic implications.

### **(L) Overall Assessment**

24. There is a clear need to extend West Rail from Nam Cheong to Tsim Sha Tsui East to complete the connection between West Rail and East Rail. This will enhance the accessibility of the West Rail passengers to the business centre in South Kowloon, which is conducive to further development in the western part of the territory. The connection between the two KCR lines will also enhance the east-west linkage in the southern part of the Kowloon peninsula and accessibility to the Hung Hom MTC.

25. Overall speaking, while some issues need to be refined, KCRC's KSL Proposal is reasonable in both technical and financial terms. In particular, the project is financially robust and within KCRC's ability to finance through commercial debts and internal resources. We therefore recommend that KCRC should be invited to proceed with the detailed planning and design of the KSL with a view to its early completion. We also recommend to start negotiation with KCRC on the detailed scope, cost and implementation programme with a view to drawing up a project agreement for KSL in 2004.

### **THE WAY FORWARD**

26. We will in the next few days invite KCRC to proceed with the project and start negotiation with KCRC on the Project Agreement as mentioned in paragraph 25 above. Based on the programme at **Annex D**, we intend to gazette the railway scheme under RO in the first half of 2003 and seek Chief Executive-in-Council's authorization under the RO in the first half of 2004. We also expect that the EIA report will be made available for public inspection at the same time as the gazettal so that public views on the project can be dealt with in a holistic manner. The main construction is programmed to start in mid 2004 for completion around end 2008/early 2009.

## **FINANCIAL AND STAFFING IMPLICATIONS**

27. KCRC does not require any financial support from Government for the KSL project, except for the EPIWs costing in the region of \$0.5 billion that Government opts to implement. We will firm up the EPIWs when developing the railway scheme further in the detailed planning and design stage, and bid for the required resources in the usual manner.

28. The KSL will enhance the competitiveness and business case of West Rail. This is conducive to KCRC's financial position for future listing.

29. In the past few years, provisions for annual staff costs and operating expenses for the implementation of the KSL have been earmarked for various departments including the Transport Bureau, Highways Department, Transport Department, Territory Development Department, Fire Services Department, Planning Department and Lands Department.

## **ECONOMIC IMPLICATIONS**

30. The KSL, as one of the six recommended rail projects in RDS-2000, is crucial for meeting the transport and economic needs of the community in the coming years. In particular, the KSL will support further development of the western part of the territory, and will provide it with an additional choice of rail services to urban Kowloon. The KSL will also enhance development in Southern Kowloon.

31. We estimate that the rail project will yield an economic internal rate of return exceeding 15%. Approximately 3,000 job opportunities in the construction and related fields will be generated during the project implementation.

32. In accordance with the RDS-2000 recommendation, the KSL is a natural extension of the KCR system, and KCRC is the natural operator. Hence consideration for an alternative operator does not arise.

## **ENVIRONMENTAL IMPLICATIONS**

33. KCRC has planned the whole KSL alignment in tunnel and where practicable, building it by tunnelling method. In preparing the KSL Project Proposal, KCRC has also carried out a preliminary environmental assessment and identified some potential environmental impacts, in particular the possible

ground borne noise and the need for preserving mature trees, where necessary and practicable. These potential impacts will be resolved in the detailed planning stage.

34. The KSL is a designated project under Cap 499 Environmental Impact Assessment Ordinance (EIAO). An environmental permit is required for the construction and operation of the project. When the KSL is taken forward for detailed planning, design and implementation, the EIAO will be fully complied with in selecting the optimal alignment for the rail and the associated subway, recommending the best practicable construction methods, identifying potential environmental impacts and devising effective mitigation measures to avoid the impacts to the maximum possible extent. Meanwhile, to expedite the project programme, KCRC started the EIA study for completion around end this year based on an EIA study brief issued by the Environmental Protection Department under EIAO.

35. The KSL will encourage commuters to switch to rail from road traffic. This will have a positive effect on the environment.

## **SUSTAINABILITY IMPLICATIONS**

36. The proposed KSL will help improve mobility and air quality in the long term, albeit marginally from a territory wide perspective. The identified potential problems, including the possible ground borne noise during operation of KSL, and at the construction stage, the noise and air pollution from work sites and waste generated from tunnel excavation, as well as the need to preserve mature trees, etc 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 minimize disruptions during the construction period.

## **PUBLIC CONSULTATION**

37. In taking forward the KSL, we will follow the EIAO and RO, under which the public will have the statutory right to express their views on the EIA report and the railway scheme respectively. Apart from this statutory mechanism, we will also arrange for further consultation with the concerned statutory and consultative bodies, the local communities or other relevant parties for development of the proposal. We will carry out the first round of such consultations soon in due course.

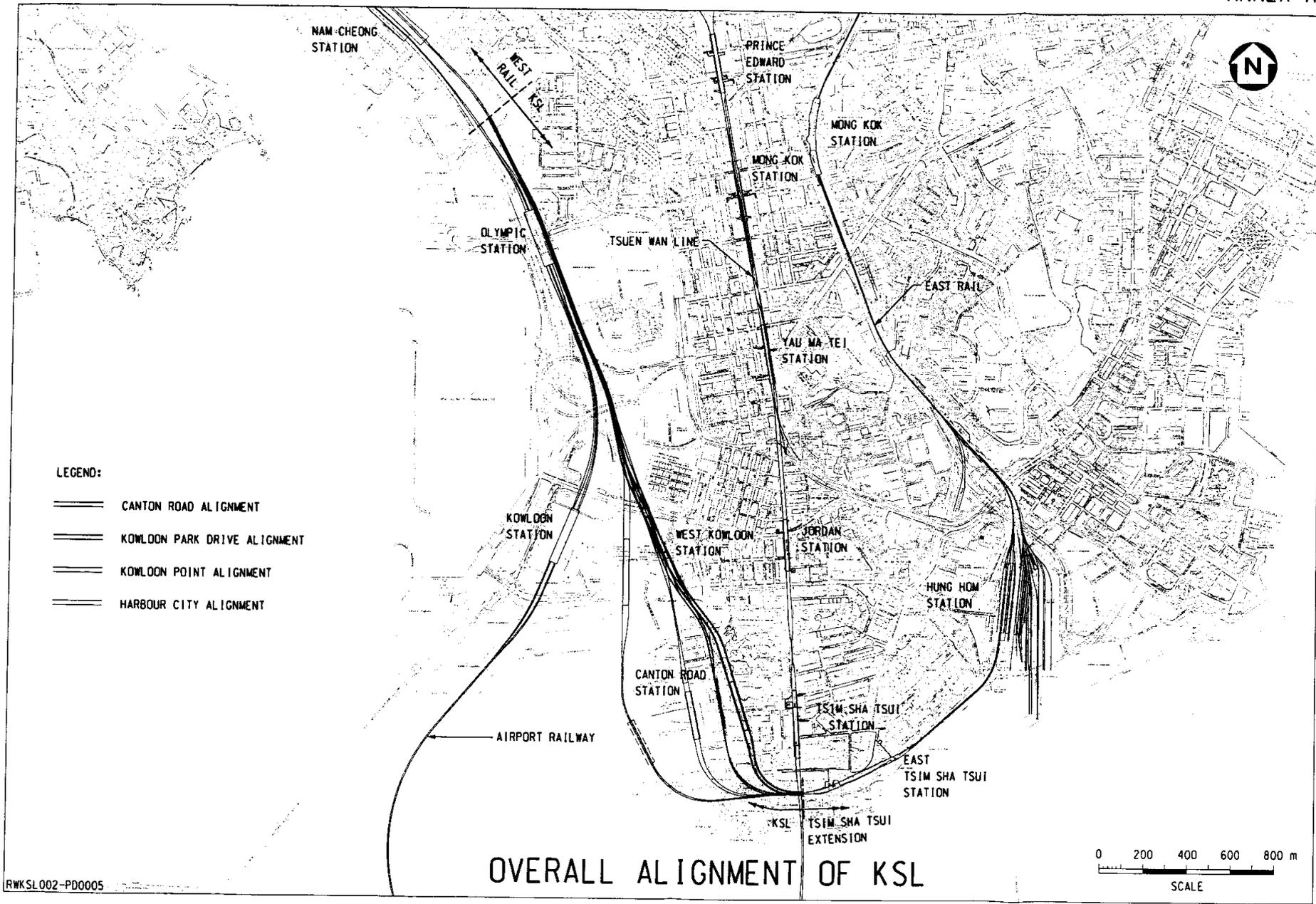
## **PUBLICITY**

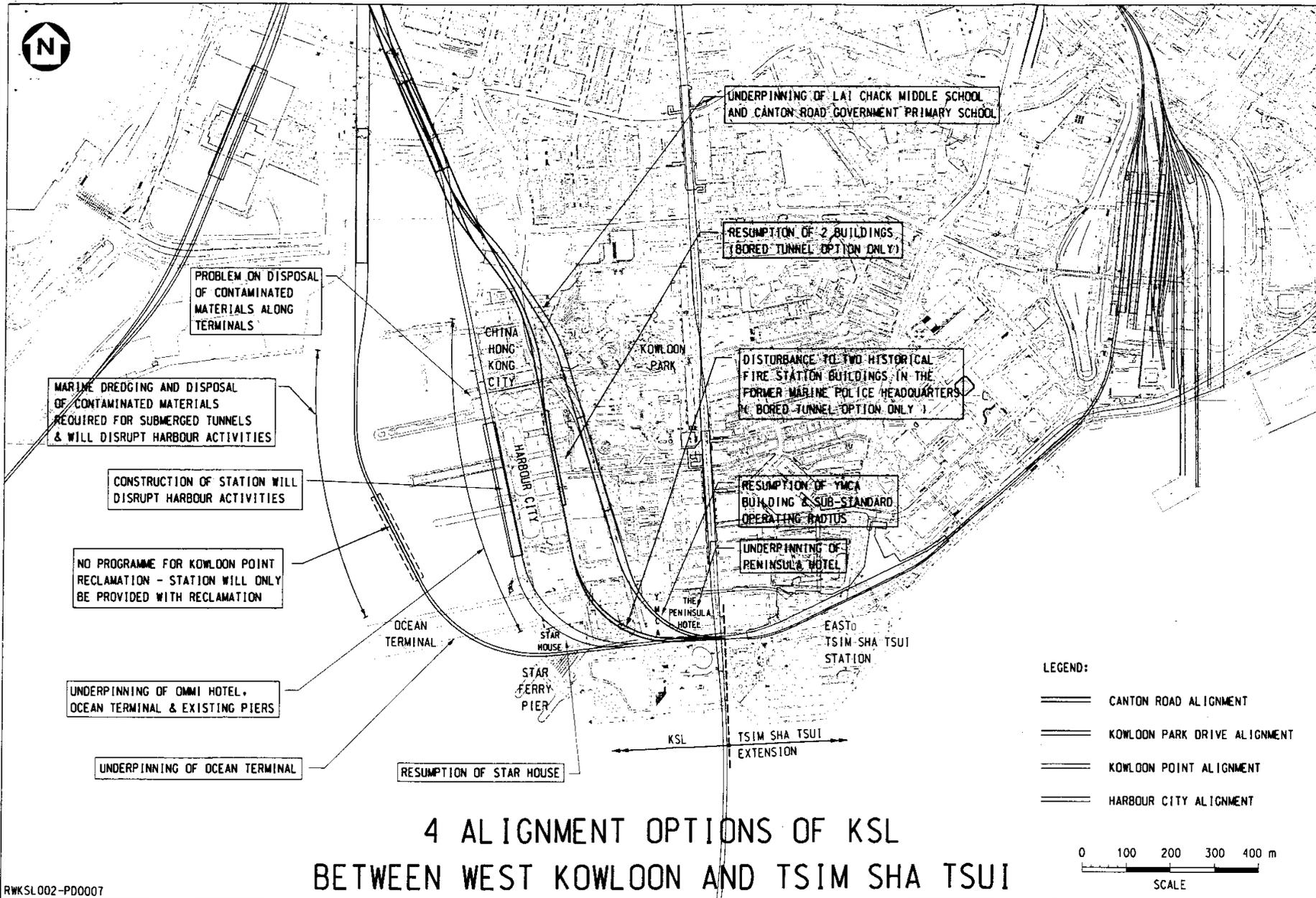
38. Apart from this Legislative Council Brief, we will also issue a press release today. A briefing to the Legislative Council Panel on Transport will also be arranged at the earliest opportunity.

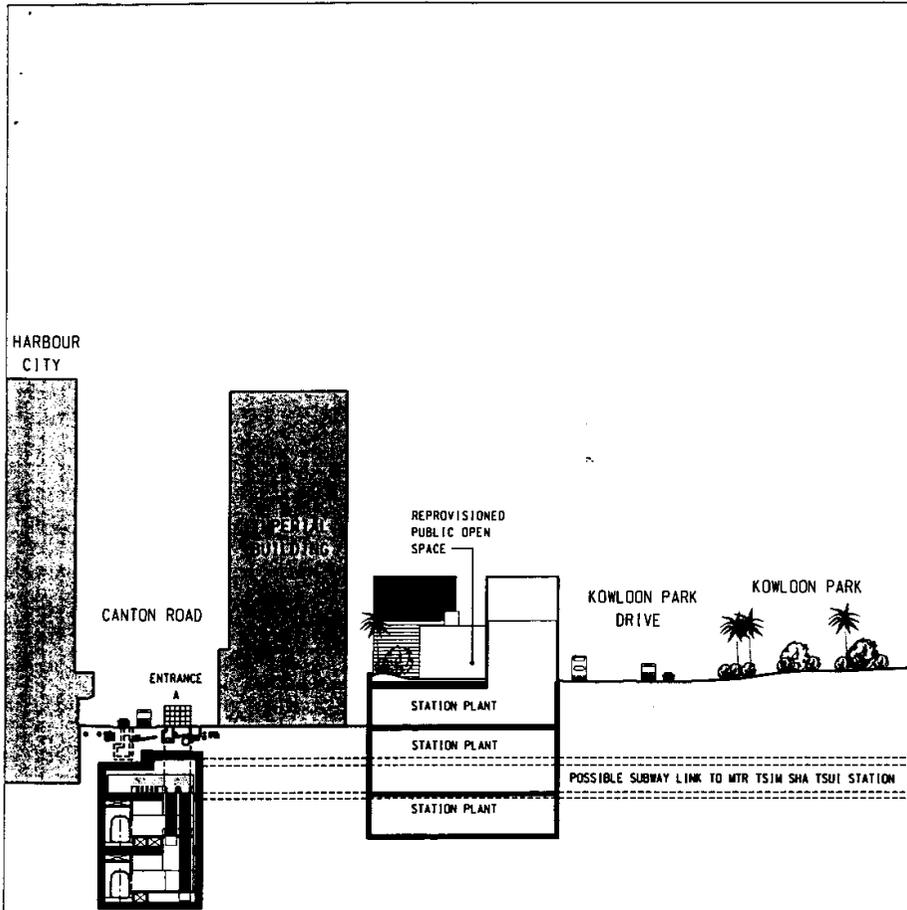
## **SUBJECT OFFICER**

39. The subject officer is Mr WAN Man-lung, Principal Assistant Secretary for the Environment, Transport and Works (Transport and Works) (Tel. 2189 2187).

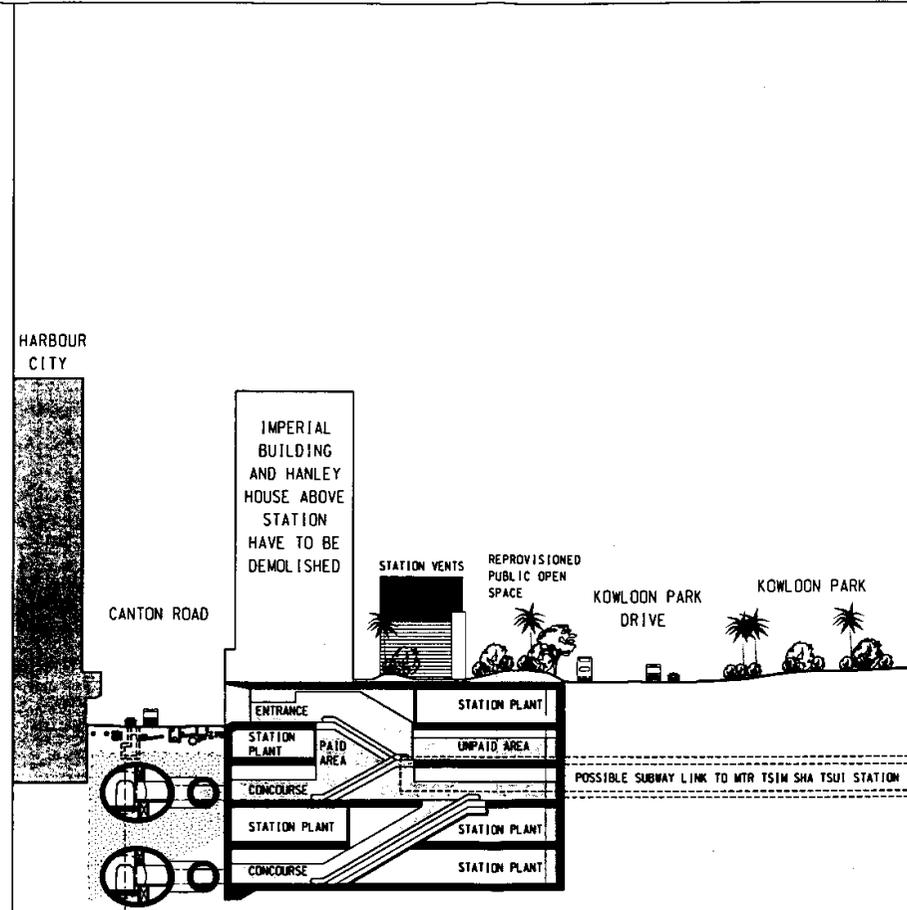
**Environment, Transport and Works Bureau**  
**24 September 2002**  
**(ETWB(T)CR 12/1016/99)**







CANTON ROAD STATION - CUT & COVER OPTION



CANTON ROAD STATION - BORED TUNNEL OPTION



## KSL Master Programme

	2002	2003	2004	2005	2006	2007	2008	2009
<b>* Project Initiation</b> - Government Instruction to Proceed - Environmental Impact Assessment Ordinance (EIAO) • EIAO Procedures • Public Exhibition of EIA Report • Issue Environmental Permit - Railways Ordinance (RO) • Gazettal of Railway Scheme • Objection Period • RO Procedures • Authorization of the Scheme - Project Agreement	▼   ▼ ▼ ▼  							
<b>* Design/Construction/Commissioning</b> - Preliminary Design - Detailed Design - Land Resumption/Clearance - Pre-qualification/Tender/Contract Award - Construction	    