

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

### **HEAD 711 – HOUSING**

#### **Transport – Interchanges/bus termini**

#### **80TI – Public Transport Interchange at Container Port Road and Junction Improvement Works along Kwai Chung Road, Kwai Chung**

Members are invited to recommend to the Finance Committee the upgrading of **80TI** to Category A at an estimated cost of \$72.7 million in money-of-the-day prices.

### **PROBLEM**

We need to provide a public transport interchange (PTI) and to improve two road junctions to support the new public rental housing (PRH) development at ex-Kwai Chung Police Married Quarters (ex-KCMQ).

### **PROPOSAL**

2. The Director of Highways, with the support of the Secretary for Transport and Housing, proposes to upgrade **80TI** to Category A at an estimated cost of \$72.7 million in money-of-the-day (MOD) prices for the construction of a PTI and junction improvement works.

**PROJECT SCOPE AND NATURE**

3. The scope of works under the project includes –
- (a) construction of a PTI with four bays, each for coaches, franchised buses, green minibuses and taxis;
  - (b) improvement works at the junctions of Kwai Chung Road/Kwai Foo Road and Kwai Chung Road/Kwai Yik Road; and
  - (c) associated works including drainage, public lighting facilities, fire services systems and landscaping works.

———— Site plans showing the proposed works are at Enclosures 1 to 3.

4. Subject to funding approval of the Finance Committee, we plan to commence the construction works in late 2015 for completion in late 2017 to tie in with the population intake of PRH development.

**JUSTIFICATION**

5. The public housing site at ex-KCMQ will be developed to meet the increasing demand for public housing. The construction works have commenced in January 2014 for completion by end 2017 to provide about 860 flats for a population of about 2 400.

6. To support the PRH development at ex-KCMQ site, we need to mitigate the traffic congestion in the locality and near the existing PTI adjacent to Kwai Fong MTR Station as recommended in the traffic impact assessment. In addition, the traffic at the two road junctions at Kwai Chung Road/Kwai Foo Road and Kwai Chung Road/Kwai Yik Road during peak hours will approach their design capacities by 2018. We propose to construct a new PTI at Container Port Road, as well as re-align and upgrade the two existing junctions to increase the junction capacity so as to cope with the anticipated increase in traffic.

With the completion of the improvement works mentioned in paragraph 3(b) above, the reserve capacity<sup>1</sup> of the two traffic signal junctions would be significantly improved. Details are as follow –

Junction	2018 (without improvements)	2018 (with improvements)
	Reserve Capacity (AM Peak)	
Kwai Chung Road/ Kwai Foo Road	4%	22%
Kwai Chung Road/ Kwai Yik Road	-2%	22%

7. When approving the re-zoning of the ex-KCMQ site for PRH use, the Town Planning Board requested that the proposed PTI be completed prior to population intake of the PRH development in early 2018. We plan to entrust the construction of the proposed works to the Hong Kong Housing Authority (HA) to ensure proper coordination with the adjacent PRH development. Upon completion of the construction works, the PTI and associated facilities will be handed over to the relevant departments for management and maintenance.

## FINANCIAL IMPLICATIONS

8. We estimate the capital cost of the project to be \$72.7 million in MOD prices (please see paragraph 9 below), broken down as follows –

	\$ million
(a) Construction of PTI	40.9
(i) roadworks	19.2
(ii) drainage works	15.3
(iii) structural works	5.0
(iv) lighting and fire services systems	1.4
	/ (b) .....

<sup>1</sup> The traffic condition of a signal-controlled junction is indicated by its reserve capacity (RC). A positive RC figure indicates that the junction is operating with spare capacity. A negative RC figure indicates that junction is overloaded, resulting in traffic queues and longer travel time.

		<b>\$ million</b>	
(b)	Junction improvement works	5.4	
(c)	Associated works (including landscaping works)	2.8	
(d)	Environmental mitigation measures	0.3	
(e)	On-cost payable to HA <sup>2</sup>	7.8	
(f)	Contingencies	5.7	
	Sub-total	62.9	(in September 2014 prices)
(g)	Provision for price adjustment	9.8	
	Total	72.7	(in MOD prices)

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

<b>Year</b>	<b>\$ million (Sept 2014)</b>	<b>Price adjustment factor</b>	<b>\$ million (MOD)</b>
2015 – 2016	9.5	1.06000	10.0
2016 – 2017	34.6	1.12360	38.9
2017 – 2018	6.2	1.19102	7.4
2018 – 2019	6.3	1.26248	8.0
2019 – 2020	6.3	1.32876	8.4
	62.9		72.7

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<sup>2</sup> On-cost payable to HA for the entrustment of the design and construction of the proposed works will be 15.8% of the estimated construction cost.

10. We have derived the MOD estimates on the basis of the Government's latest set of assumptions on the trend rate of change in the prices of public sector building and construction output for the period 2015 to 2020. Subject to funding approval, HA will deliver the proposed works under a standard re-measurement contract because the quantities of the proposed works may vary depending on actual site conditions. The contract will provide for price adjustments.

11. We estimate the annual recurrent expenditure arising from the proposed works to be about \$1.6 million.

## **PUBLIC CONSULTATION**

12. We consulted the Traffic and Transport Committee of Kwai Tsing District Council on the proposed works on 13 December 2012. Members supported the proposed works.

13. We gazetted the road scheme under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) on 6 June 2014 and no objection was received. The authorisation notice was subsequently gazetted on 5 September 2014.

14. We consulted the Legislative Council Panel on Housing on the proposed works on 3 November 2014. Members supported submitting the funding proposal to the Public Works Subcommittee for examination.

## **ENVIRONMENTAL IMPLICATIONS**

15. This is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). The proposed works will not cause long-term environmental impacts. HA will implement the standard pollution control measures during construction of the proposed works as promulgated by the Director of Environmental Protection.

16. We have included provisions in the project estimate to implement suitable mitigation measures to control short-term environmental impacts during construction. HA will specify in the relevant contract the requirement for the contractor to implement mitigation measures to control noise, dust, and site run-off nuisances during construction within the level specified under the published standards and guidelines. These include the use of silencers, mufflers, acoustic lining or shields for noisy construction activities, frequent cleaning and watering of the site.

17. HA will require the contractor to reuse inert construction waste (e.g. excavated soil) on site or in other suitable construction sites as far as possible, in order to minimise the disposal of inert construction waste at public fill reception facilities<sup>3</sup>. HA will encourage the contractor to maximise the use of recycled/recyclable inert construction waste, and the use of non-timber formwork to further reduce the generation of construction waste.

18. At the construction stage, HA will require the contractor to submit for approval a plan setting out the waste management measures, which will include appropriate mitigation means to avoid, reduce, reuse and recycle inert construction waste. HA will ensure that the day-to-day operations on site comply with the approved plan. HA will require the contractor to separate the inert portion from non-inert construction waste on site for disposal at appropriate facilities. HA will control the disposal of inert construction waste and non-inert construction waste at public fill reception facilities and landfills respectively through a trip-ticket system.

19. HA estimates that the project will generate in total about 4 200 tonnes of construction waste. Of these, HA will reuse about 85 tonnes (2%) of inert construction waste on site and deliver about 4 000 tonnes (95%) of inert construction waste to public fill reception facilities for subsequent reuse. HA will dispose of the remaining 115 tonnes (3%) of non-inert construction waste at landfills. The total cost for accommodating construction waste at public fill reception facilities and landfill sites is estimated to be \$0.12 million for this project (based on a unit cost of \$27 per tonne for disposal at public fill reception facilities and \$125 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation).

/ **HERITAGE** .....

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<sup>3</sup> Public fill reception facilities are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N). Disposal of inert construction waste in public fill reception facilities requires a license issued by the Director of Civil Engineering and Development.

## HERITAGE IMPLICATIONS

20. The project will not affect any heritage site, i.e. all declared monuments, proposed monuments, graded historic sites or buildings, sites of archaeological interest and Government historic sites identified by the Antiquities and Monuments Office.

## LAND ACQUISITION

21. The project does not require any land acquisition.

## BACKGROUND INFORMATION

22. We upgraded **80TI** to Category B in September 2013. We completed the detailed design of the project in November 2014.

23. No old and valuable trees have been identified in the site. Of the 98 trees within the site boundary, 51 trees will be preserved. The project will involve felling of 47 trees. All trees to be removed are not important trees<sup>4</sup>. We will incorporate planting proposals as part of the proposed works, including planting of 55 trees and 6 000 shrubs.

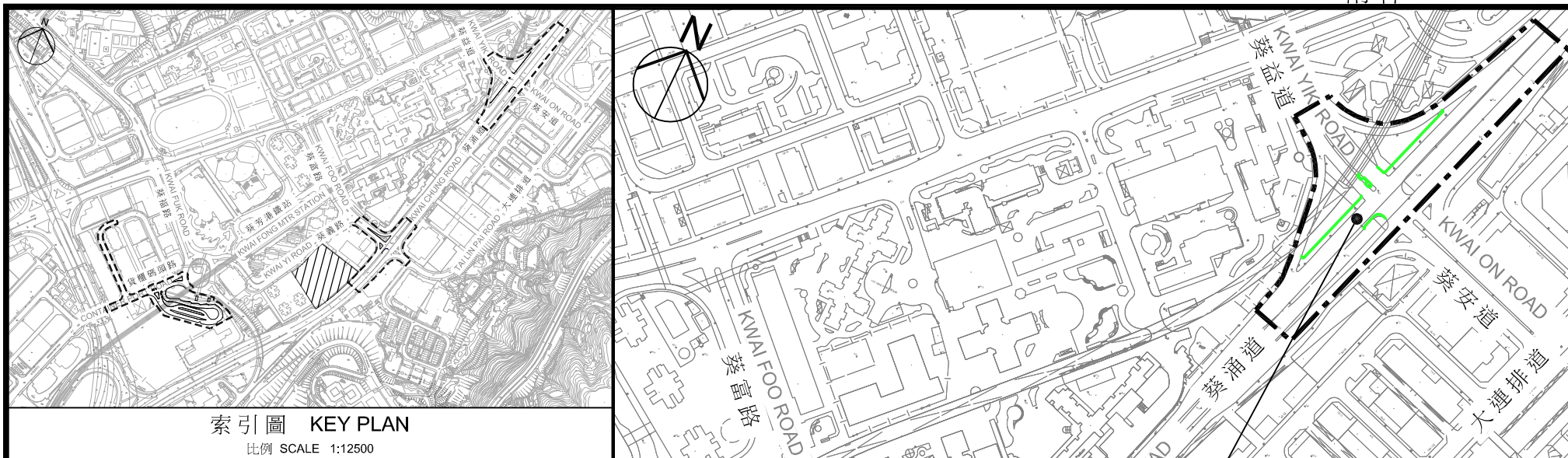
24. We estimate that the proposed works will create about 57 jobs (41 for labourers and another 16 for professional/technical staff) providing a total employment of 1 132 man-months.

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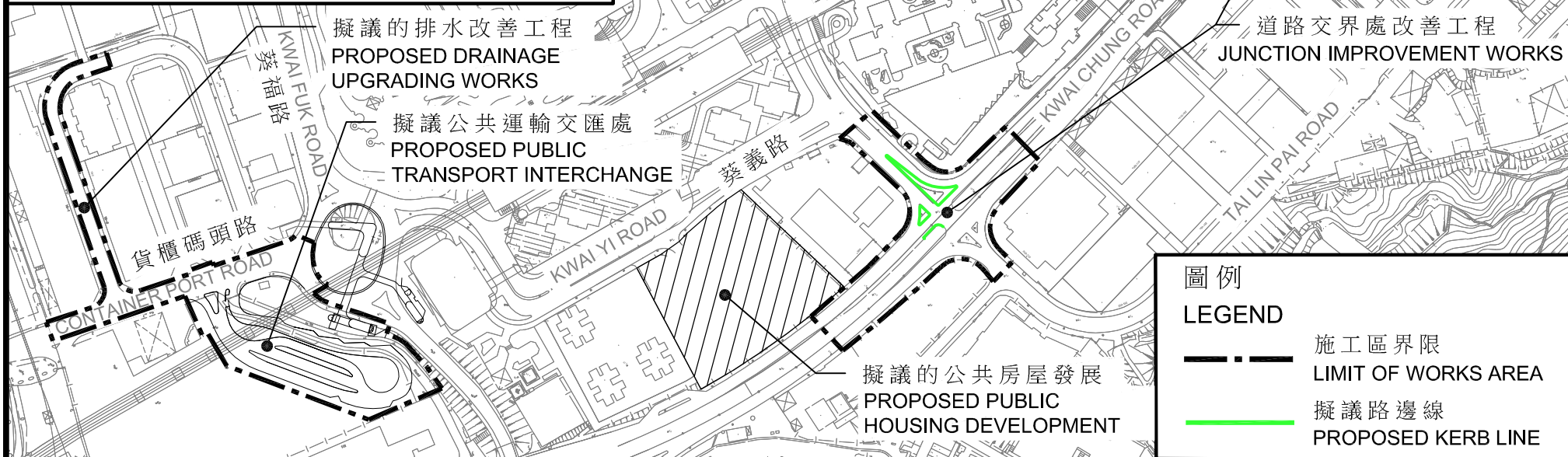
## Transport and Housing Bureau February 2015

<sup>4</sup> “Important trees” refer to trees on the Register of Old and Valuable Trees, or any other trees that meet one or more of the following criteria –



- (a) trees of 100 years old or above;
- (b) trees of cultural, historical or memorable significance e.g. Fung Shui trees, trees as landmark of monastery or heritage monument, and trees in memory of an important person or event;
- (c) trees of precious or rare species;
- (d) trees of outstanding form (taking account of overall tree sizes, shape and any special features) e.g. trees with curtain like aerial roots, trees growing in unusual habitat; or
- (e) trees with trunk diameter equal or exceeding 1.0 metre (m) (measured at 1.3 m above ground level), or with height/canopy spread equal or exceeding 25 m.



索引圖 KEY PLAN  
比例 SCALE 1:12500



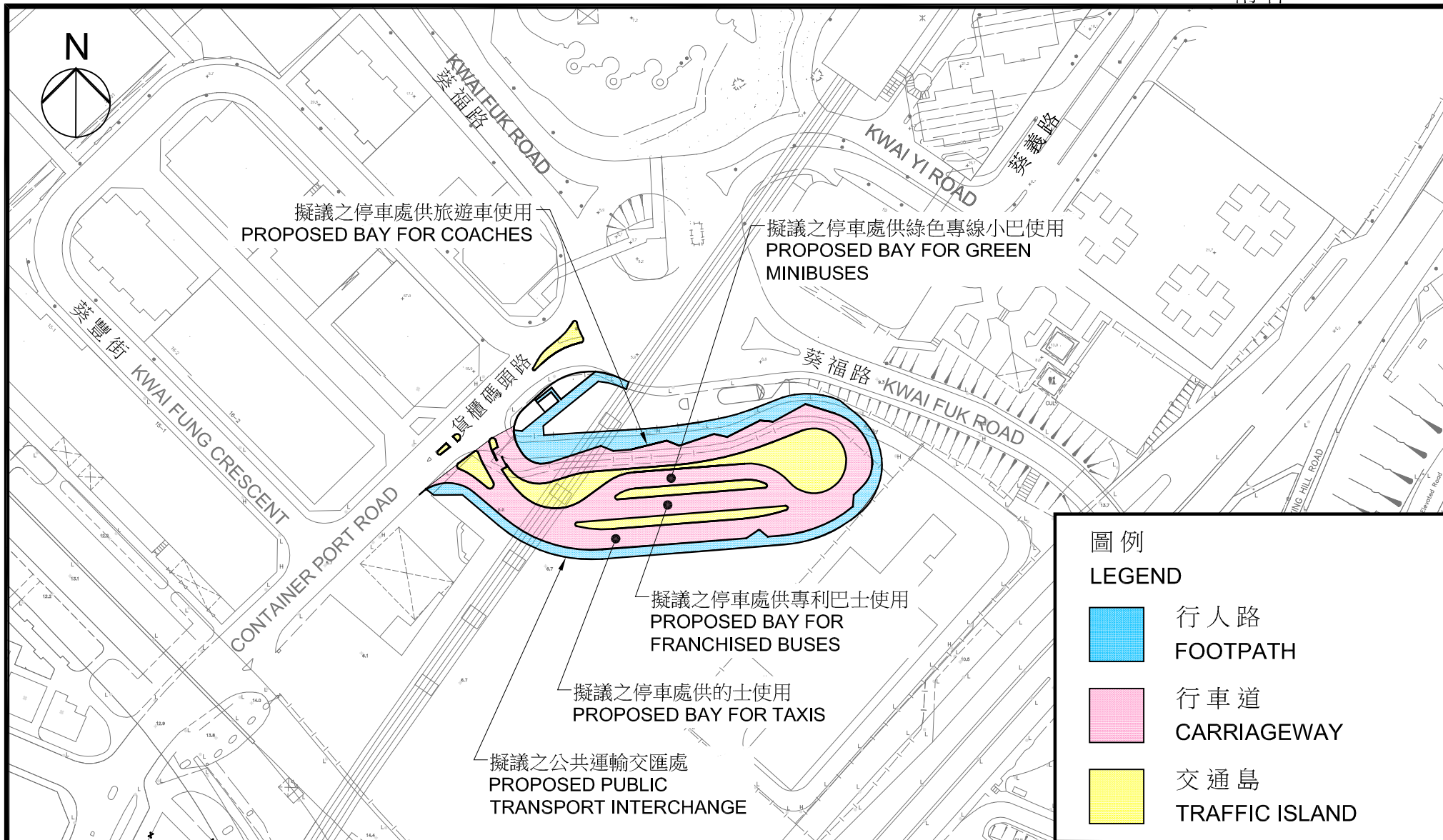
圖例  
LEGEND

-  施工區界限  
LIMIT OF WORKS AREA
-  擬議路邊線  
PROPOSED KERB LINE

工務計劃項目編號 80TI -  
葵涌 - 貨櫃碼頭路的公共運輸交匯處及葵涌道道路交界處改善工程  
PWP ITEM No. 80TI  
PUBLIC TRANSPORT INTERCHANGE AT CONTAINER PORT ROAD AND  
JUNCTION IMPROVEMENT WORKS ALONG KWAI CHUNG ROAD, KWAI CHUNG

工地平面圖  
SITE PLAN  
比例 SCALE 1:4000

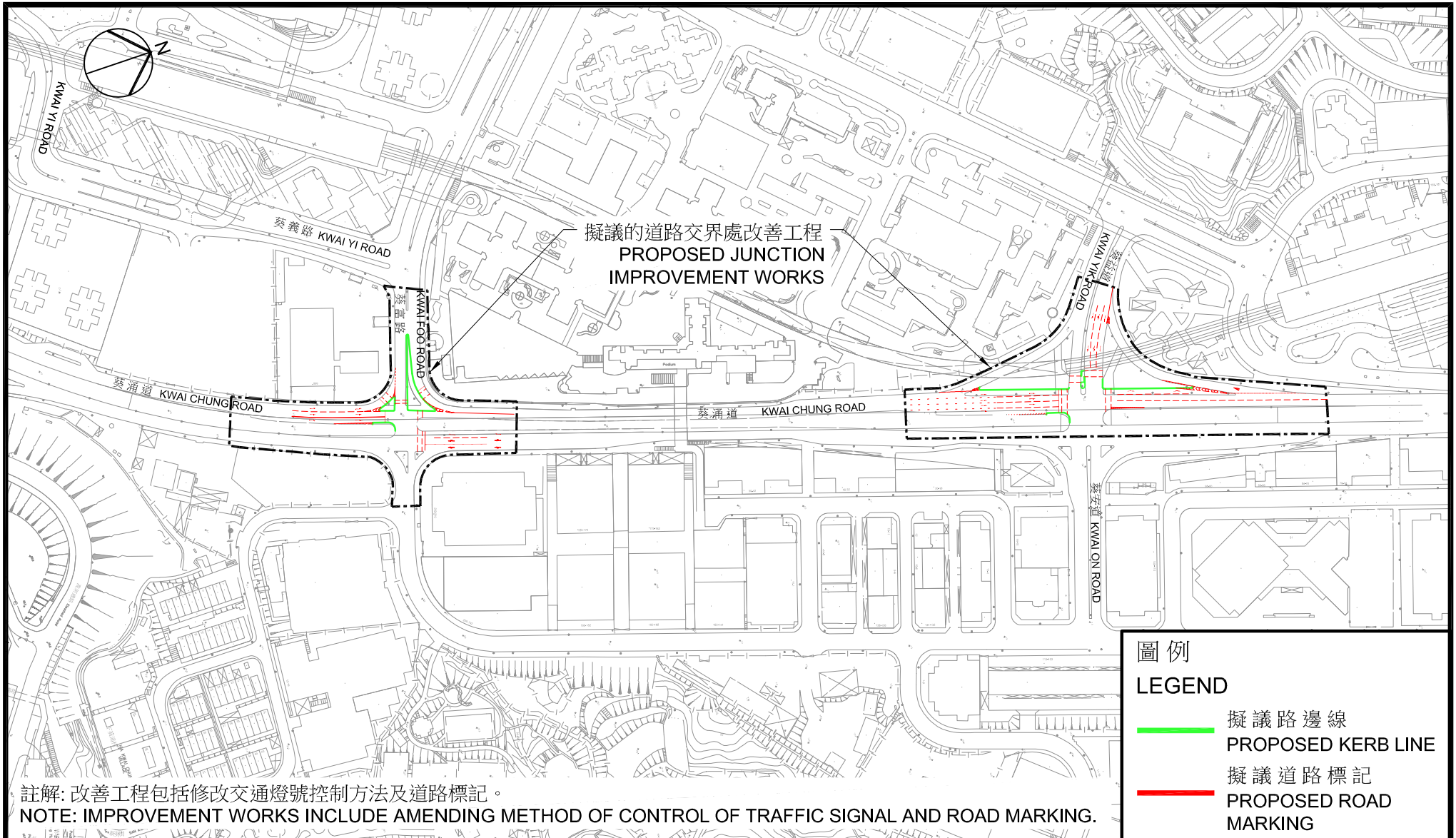




工務計劃項目編號 80TI  
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 JUNCTION IMPROVEMENT WORKS ALONG KWAI CHUNG ROAD, KWAI CHUNG

工地平面圖  
 SITE PLAN

比例 SCALE 1:2000



工務計劃項目編號 80TI  
 葵涌 - 貨櫃碼頭路的公共運輸交匯處及葵涌道道路交界處改善工程  
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 JUNCTION IMPROVEMENT WORKS ALONG KWAI CHUNG ROAD, KWAI CHUNG

工地平面圖  
 SITE PLAN

比例 SCALE 1 : 3500