

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

Head 711 – HOUSING

Transport – Interchanges/bus termini

81TI – Public Transport Interchange and Associated Works at Kiu Cheong Road East, Ping Shan

Members are invited to recommend to the Finance Committee the upgrading of **81TI** to Category A at an estimated cost of \$602.2 million in money-of-the-day prices.

PROBLEM

We need to provide a public transport interchange (PTI) and associated works to support the new Home Ownership Scheme (HOS) development at Kiu Cheong Road East, Ping Shan.

PROPOSAL

2. The Director of Highways, with the support of the Secretary for Transport and Housing, proposes to upgrade **81TI** to Category A at an estimated cost of \$602.2 million in money-of-the-day (MOD) prices for the construction of a PTI and associated works.

PROJECT SCOPE AND NATURE

3. The scope of works under the project includes –
- (a) demolition of two existing PTIs and associated services and structures; and
 - (b) construction of –
 - (i) a PTI with four bays for franchised buses;
 - (ii) a footbridge with a pedestrian lift across Ping Ha Road linking to Tin Shui Wai West Rail Station;
 - (iii) footpaths, cycle tracks and road side laybys at Kiu Fat Street and Ping Ha Road;
 - (iv) cycle parking area; and
 - (v) associated works including covers for the PTI, drainage, public lighting facilities, electrical and mechanical systems, and landscaping works.

————— A site plan of the proposed works is at Enclosure 1. Artist's impression
————— drawings of the proposed PTI and the footbridge are at Enclosures 2 and 3
respectively.

4. Subject to funding approval of the Finance Committee, we plan to commence the construction works in late 2015 for completion in early 2018 to tie in with the population intake of the HOS development.

JUSTIFICATION

5. The public housing site at Kiu Cheong Road East, Ping Shan will be developed to meet the increasing demand for public housing. The construction works have commenced in September 2014 for completion by early 2018 to provide about 2 400 flats for a population of about 7 700.

6. There are two existing PTIs within and adjoining the development site. We need to vacate the PTI at Kiu Fat Street to provide land for the HOS development. We also need to reconstruct the existing PTI at Ping Ha Road to accommodate the public transport services in the two existing PTIs as well as to meet the demand for public transport services arising from the HOS development. We also propose to construct a footbridge with a pedestrian lift for crossing Ping Ha Road and linking to Tin Shui Wai West Rail Station. The footbridge will enhance the accessibility to the West Rail station, pedestrian connectivity in the vicinity and pedestrian safety.

7. To tie in with the population intake of the HOS development in early 2018, there is a need to complete the construction of PTI and associated works by then. The PTI and associated works will be in close proximity to the new HOS development. We anticipate that the proposed works and the new HOS development will have significant interface. Further, considering that there will be limited vehicular access and the congested works area, we plan to entrust the design and construction of the proposed works to the Hong Kong Housing Authority (HA) for implementation. This arrangement will allow better coordination of the PTI project and the adjoining HOS development to ensure timely completion of the PTI and associated works. 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 \$602.2 million in MOD prices (please see paragraph 9 below), broken down as follows –

	\$ million
(a) Demolition of existing PTI	11.2
(b) Construction of PTI	117.7
(i) covers to bus bays	79.2
(ii) road works	17.6
(iii) drainage works	15.0
(iv) lighting systems	5.9

	\$ million	
(c) Construction of footbridge across Ping Ha Road	256.4	
(i) bridge deck	152.7	
(ii) foundation	97.0	
(iii) lighting and electrical & mechanical systems	6.5	
(iv) drainage works	0.2	
(d) Construction of footpaths, cycle tracks and laybys	15.3	
(e) Construction of cycle parking area	3.1	
(f) Environmental mitigation measures	3.0	
(g) On-cost payable to HA ¹	64.3	
(h) Contingencies	47.1	
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Sub-total	518.1	(in September 2014 prices)
(i) Provision for price adjustment	84.1	
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Total	602.2	(in MOD prices)
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9. Subject to funding approval, we will phase the expenditure as follows –

Year	\$ million (Sept 2014)	Price adjustment factor	\$ million (MOD)
2015 – 2016	60.0	1.06000	63.6
2016 – 2017	200.0	1.12360	224.7
2017 – 2018	184.0	1.19102	219.1
2018 – 2019	55.2	1.26248	69.7
2019 – 2020	18.9	1.32876	25.1
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	518.1		602.2
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¹ 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 \$5 million.

PUBLIC CONSULTATION

12. We consulted the Traffic and Transport Committee of Yuen Long District Council (YLDC) on the proposed works on 23 May and 25 July 2013. YLDC Members noted the proposed works and urged for the early implementation of the footbridge. Members also requested the provision of a wet market and cooked food centre, which will be provided within the HOS development.

13. We consulted the Advisory Committee on the Appearance of Bridges and Associated Structures² (ACABAS) on 17 September 2014. The ACABAS accepted the proposed aesthetic design in principle.

14. We gazetted the proposed works under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) (the Ordinance) on 25 April 2014, and no objection was received. The authorisation notice was subsequently gazetted on 18 July 2014.

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² The Advisory Committee on the Appearance of Bridges and Associated Structures, which comprises representatives of the Hong Kong Institute of Architects, the Hong Kong Institution of Engineers, the Hong Kong Institution of Planners, an academic institution, Architectural Services Department, Highways Department, Housing Department and Civil Engineering and Development Department, is responsible for vetting the design of bridges and other structures associated with the public highway system, including noise barriers and semi-enclosures, from aesthetic and visual impact points of view.

15. 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

16. This is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). The PTI will be covered to mitigate noise impacts to the noise sensitive receivers in the vicinity as recommended in HA's Environmental Assessment Study conducted in February 2014. The project 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.

17. 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.

18. 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 minimize the disposal of inert construction waste at public fill reception facilities³. HA will encourage the contractor to maximize the use of recycled/recyclable inert construction waste, and the use of non-timber formwork to further reduce the generation of construction waste.

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³ 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.

19. 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.

20. HA estimates that the project will generate in total about 30 940 tonnes of construction waste. Of these, HA will reuse about 620 tonnes (2%) of inert construction waste on site and deliver about 29 390 tonnes (95%) of inert construction waste to public fill reception facilities for subsequent reuse. HA will dispose of the remaining 930 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 \$0.9 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 IMPLICATIONS

21. 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

22. The project does not require any land acquisition.

BACKGROUND INFORMATION

23. We upgraded **81TI** to Category B in September 2013. We completed the detailed design of the project in November 2014.

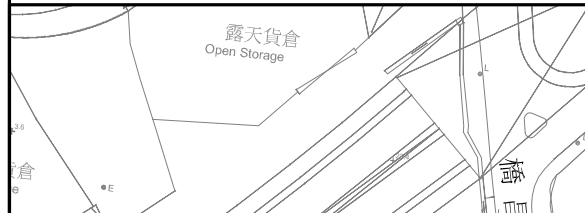
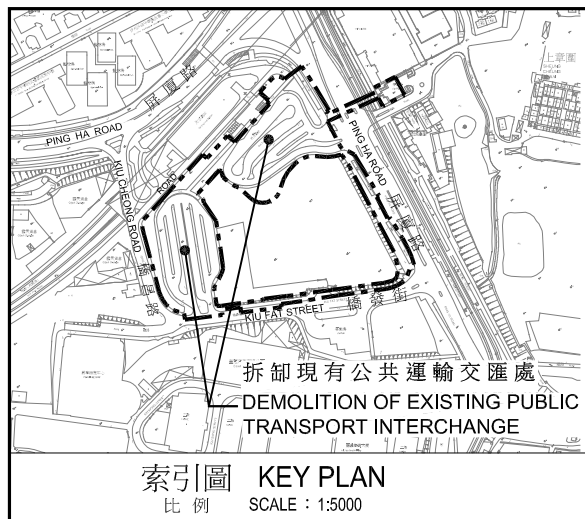
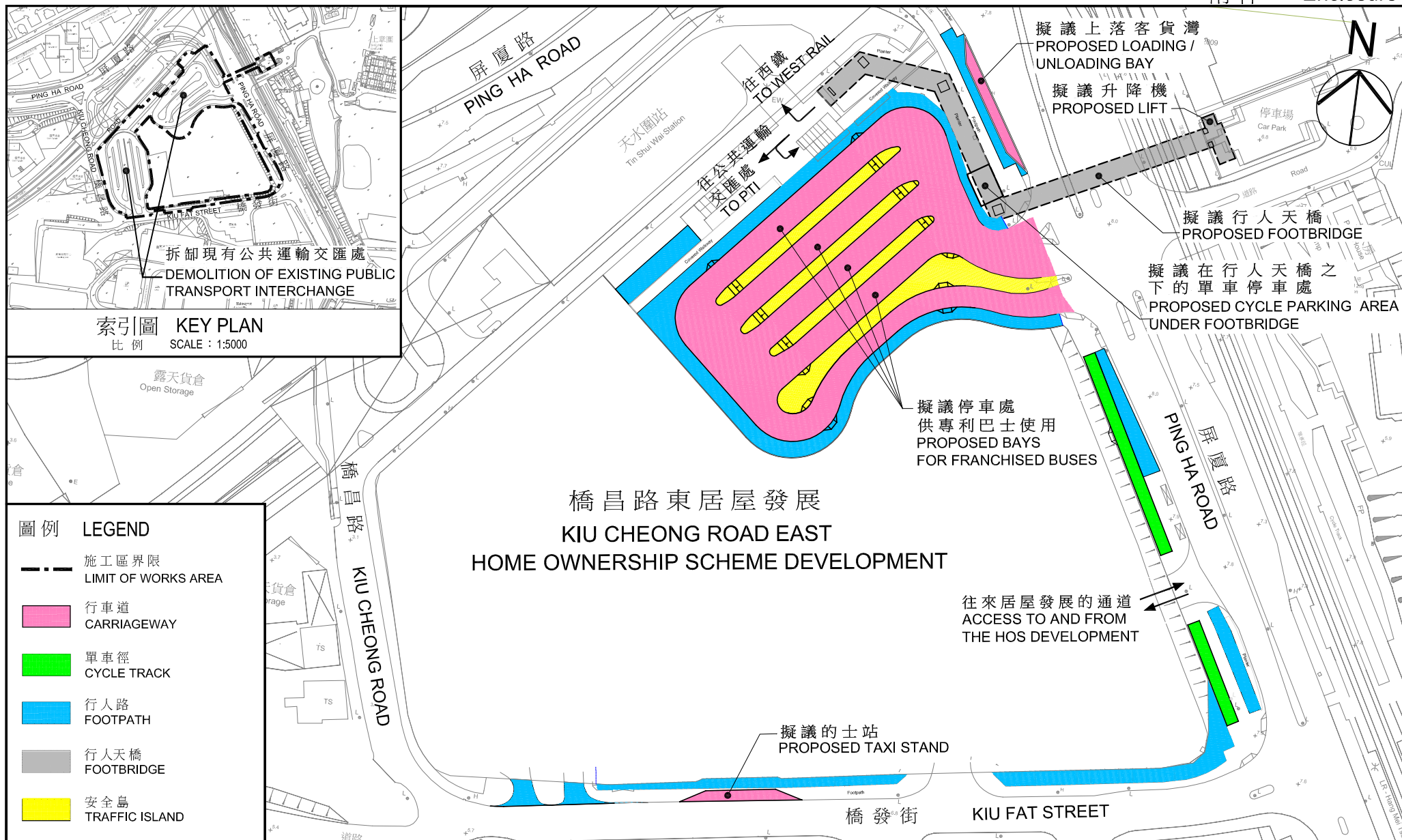
24. No old and valuable trees have been identified in the site. Of the 166 trees within the site boundary, 12 trees will be preserved. The project will involve removal of 154 trees, including 128 trees to be felled and 26 trees to be transplanted elsewhere. All trees to be removed are not important trees⁴. We will incorporate planting proposals as part of the proposed works, including planting of 130 trees and 300 shrubs.

25. We estimate that the proposed works will create about 340 jobs (250 for labourers and another 90 for professional/technical staff) providing a total employment of 8 550 man-months.

Transport and Housing Bureau
February 2015

⁴ “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.



圖例 LEGEND

	施工區界限 LIMIT OF WORKS AREA
	行車道 CARRIAGEWAY
	單車徑 CYCLE TRACK
	行人路 FOOTPATH
	行人天橋 FOOTBRIDGE
	安全島 TRAFFIC ISLAND

橋昌路東居屋發展
 KIU CHEONG ROAD EAST
 HOME OWNERSHIP SCHEME DEVELOPMENT

工務計劃項目編號 81TI
 屏山橋昌路東公共運輸交匯處及相關工程
 PWP ITEM NO. 81TI
 PUBLIC TRANSPORT INTERCHANGE AND ASSOCIATED WORKS AT KIU CHEONG ROAD EAST, PING SHAN

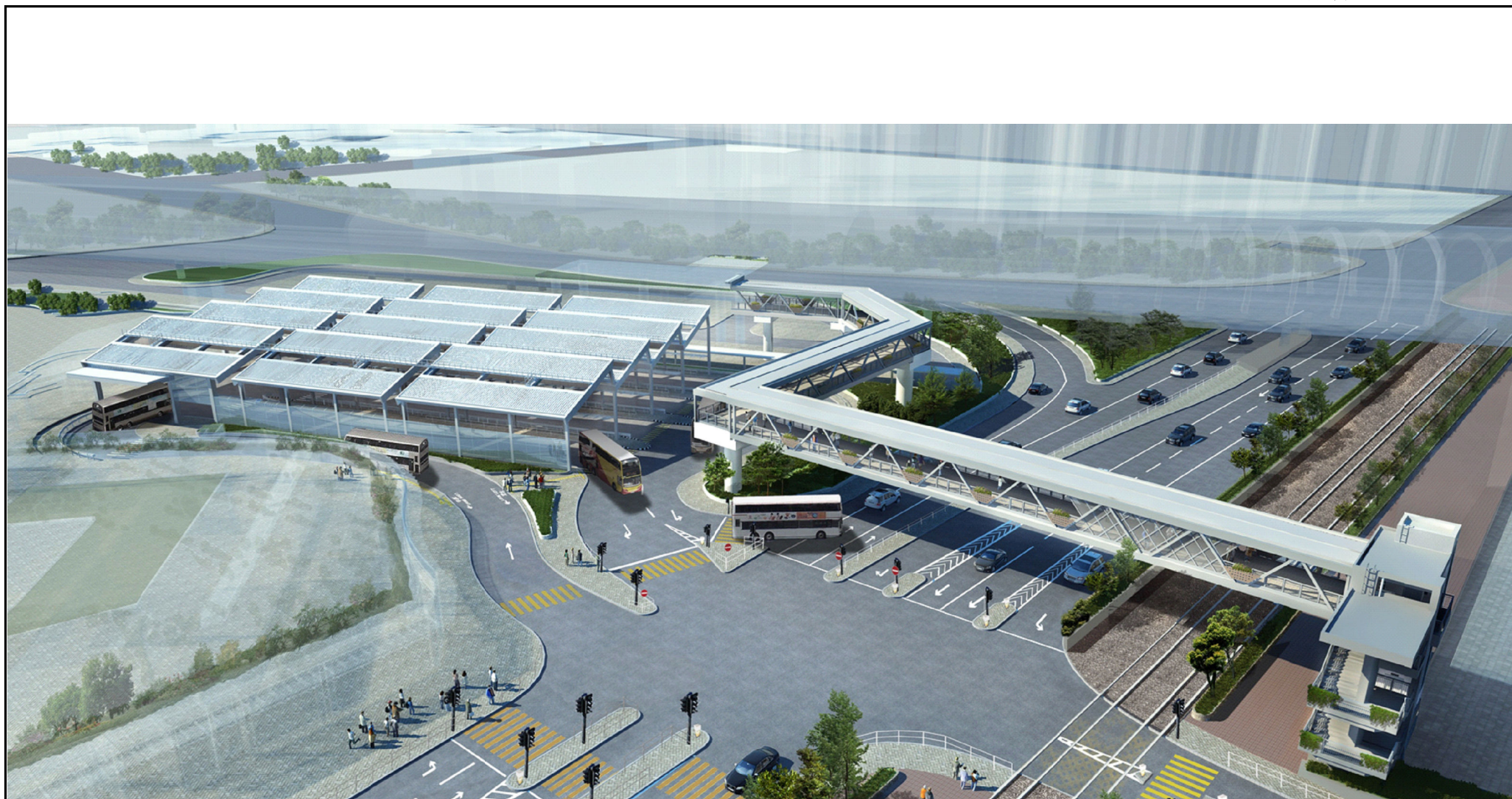
工地平面圖
 SITE PLAN
 比例 SCALE: 1:1500



工務計劃項目編號 81TI
屏山橋昌路東公共運輸交匯處及相關工程
PWP ITEM NO. 81TI

PUBLIC TRANSPORT INTERCHANGE AND ASSOCIATED WORKS AT KIU CHEONG ROAD EAST, PING SHAN

構思圖
Artist's Impression
Drawing



工務計劃項目編號 81TI
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PUBLIC TRANSPORT INTERCHANGE AND ASSOCIATED WORKS AT KIU CHEONG ROAD EAST, PING SHAN

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