# ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

**HEAD 706 – HIGHWAYS** 

**Transport – Railways** 

57TR – Hong Kong Section of Guangzhou–Shenzhen–Hong Kong Express Rail Link – construction of non-railway works

Members are invited to recommend to Finance Committee the upgrading of **57TR** to Category A at an estimated cost of \$11,800.0 million in money-of-the-day prices for the non-railway works for the Hong Kong section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link.

#### **PROBLEM**

We need to undertake the non-railway works in conjunction with the railway works for the Hong Kong section (HKS) of the Guangzhou– Shenzhen–Hong Kong Express Rail Link (XRL).

#### **PROPOSAL**

2. The Director of Highways, with the support of the Secretary for Transport and Housing, proposes to upgrade **57TR** to Category A at an estimated cost of \$11,800.0 million in money-of-the-day (MOD) prices for carrying out the non-railway works for the HKS of the XRL.

/PROJECT ....

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#### PROJECT SCOPE AND NATURE

- 3. The scope of **57TR** comprises
  - (a) construction of essential public infrastructure works (EPIW) including
    - (i) three footbridges linking to the Kowloon Station, two footbridges linking to the Austin Station, a footbridge linking to the public transport interchange at the north of Jordan Road and a footbridge above new Road D1A near Man Cheong Street;
    - (ii) two subways linking to the Austin Station and the footpath located at west of Lin Cheung Road;
    - (iii) construction of a depressed road system and associated atgrade roads and noise barriers/enclosures at Austin Road West and Lin Cheung Road; and
    - (iv) construction of new Road D1A and reconstruction of Wui Man Road and erection of associated noise barriers/enclosures;
  - (b) construction of the reprovisioning, remedial and improvement works (RRIW);
  - (c) construction of the enabling works
    - (i) for the topside property development at Site A<sup>1</sup>;
    - (ii) for the future West Kowloon Cultural District (WKCD) development above West Kowloon Terminus (WKT); and
    - (iii) for the future footbridges at Sham Mong Road;
  - (d) construction and provision of government facilities/equipment at the WKT including the boundary control facilities (BCF), special fire fighting equipment for use in the XRL tunnel during the construction and operation phases and the other associated equipment; and

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The site was zoned as Comprehensive Development Area (1) on the draft South West Kowloon Outline Zoning Plan No. S/K20/22A on top of the West Kowloon Terminus for non-railway development.

(e) fees for consultants appointed by the Government for monitoring and vetting the work of the MTR Corporation Limited (MTRCL) relating to the EPIW, RRIW, enabling works and the concerned government facilities/ equipment.

A list of EPIW, RRIW and enabling works, together with the respective drawings, are at Enclosures 1, 2 and 3 respectively.

4. Subject to the approval of the Finance Committee (FC), construction of the above non-railway works is expected to commence in December 2009 for completion in tandem with the railway works of the HKS of the XRL in 2015. Separate funding applications will be made for the construction cost of the railway works (PWSC(2009-10)68) and the cost of a special ex-gratia rehousing package exclusively for residents affected by land resumption and clearance for the XRL project (PWSC(2009-10)72).

#### **JUSTIFICATION**

## **EPIW**

- 5. To facilitate the operation of the XRL and enhance the accessibility of WKT and its connectivity with the nearby areas, we propose to construct the EPIW items mentioned in paragraph 3(a). The depressed road system at Austin Road West and Lin Cheung Road will separate the through traffic between other districts from the local traffic to WKT, the WKCD and other local developments. It will contribute to smooth traffic in the West Kowloon. It will also create an atgrade pedestrian area which provides a comfortable walking environment embracing the WKT, WKCD, nearby railway stations and developments.
- 6. The depressed road system is one of the recommendations in the West Kowloon Reclamation Development Traffic Study conducted by the Transport Department. With the implementation of these recommendations as shown at Enclosure 4, the reserved capacity of major junctions at the West Kowloon district will remain acceptable up to at least 2031, taking into consideration the increased traffic demand arising from the WKT, WKCD and new developments in the vicinity.

### **RRIW**

7. As regards the RRIW items mentioned in paragraph 3(b) above, certain sites along the HKS of the XRL, which currently accommodate government facilities, will be occupied either temporarily or permanently for the construction and/or operation of the HKS of the XRL. Reprovisioning of these facilities in conjunction with the construction of the HKS of the XRL is necessary.

## **Enabling Works**

- At the meeting of the Executive Council on 22 April 2008, the Council decided that the development right of Site A will not be granted to the MTRCL, and the site should be disposed of by Government in accordance with the prevailing land policy with due attention paid to ensuring proper integration with the XRL terminus. The current plan is to erect office buildings at the site. Separately, the WKT will be extended to occupy the underground level of part of the WKCD development. The current planning assumption is to allow mediumrise structures up to 70mPD (which is the height limit specified on the statutory outline zoning plan) to be built at the extension area. Enabling works which include those for foundation, noise and vibration mitigation (including isolated slab track) and transfer plate will be carried out. The topside property development at Site A and the relevant part of the future WKCD development will be located above and supported by the WKT. The enabling works items mentioned in paragraphs 3(c)(i) and 3(c)(ii) need to be constructed as part of the XRL project, as erection of the foundation facilities within WKT after the operation of the XRL would not be possible without suspending the railway operation.
- 9. The XRL tunnel will be in conflict with the foundations of three proposed public footbridges along Sham Mong Road, which are currently under planning by the Civil Engineering and Development Department. The enabling works mentioned in paragraph 3(c)(iii) entail construction of some footbridge piles so as to protect the XRL tunnel from being affected by the future piling works for the three footbridges.

/Government.....

### **Government Facilities/Equipment**

10. The government facilities mentioned in paragraph 3(d) include mainly the construction of the BCF such as customs, immigration, quarantine facilities; provision of the equipment/facilities for a dedicated emergency team, road-rail dual mode fire appliances and other associated fire fighting equipment for use by the Fire Services Department in case of emergencies / incidents in the XRL tunnel during the construction and operation of HKS of the XRL; and other government facilities / equipment such as closed circuit television, public address and radio system for user Government departments to operate the BCF in the terminus.

### **Project Cost**

11. In the Legislative Council (LegCo) Brief for the HKS of the XRL presented to the Railways Subcommittee on 2 May 2008, the then estimated capital cost for the HKS of the XRL covering the design and construction of both railway works and non-railway works was \$39.5 billion in 2009 prices or \$44 billion in MOD prices. A comparison on railway works cost and non-railway works cost between that estimate and the latest estimate in September 2009 is set out in **Table 1** below –

<b>Table 1</b> – Comparison of project cost estimates (including design
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All figures in	Estimate	Project	Price escalation	September
2009 prices	announce	enhancements	(\$billion)	2009
	d in April	(\$billion)		estimate
	2008			(\$billion)
	(\$billion)			
(a) Railway	35.4	7.7	10.6	53.7
works cost				
(b) Non-railway	4.1	5.0	2.4	11.5
works cost				

12. The cost estimate for the non-railway works of the HKS of the XRL has risen from \$4.1 billion to \$11.5 billion, representing an increase of \$7.4 billion. Price escalation (\$2.4 billion) accounts for about one-third of the increase. The estimate announced in April 2008 adopted a relatively conservative set of assumption on the inflation factors (5% in 2007, 4.5% in 2008 and 3.5% in 2009). Such inflation factors prepared by the MTRCL, though already higher than the Government Economist's corresponding forecast at that time, are still far lower than the actual inflation in the construction sector during recent years.

- 13. Construction prices surged rapidly in the past three to four years and the HKS of the XRL is no exception. For the HKS of the XRL, the latest estimate reflects an overall escalation of the project cost of some 42% between 2006 and 2009, which is in line with the relevant magnitude of 48% of the MTR West Island Line project. In view of the latest trend of the relevant construction prices, the 42% increase is considered reasonable.
- 14. Enhancements to the non-railway works (\$5 billion) account for the rest of the cost increase. The works include enabling works for topside development at Site A, construction of road improvement network surrounding the terminus and serving the West Kowloon area, additional equipment and facilities for the Government as well as additional EPIW and RRIW identified during the design stage. They are essential for the safe and efficient operation of the XRL. The costs of these items were not included in the project cost estimate in April 2008 because the necessary design parameters for the facilities were not available at that time. These could only be developed in conjunction with the detailed design of the WKT and the railway works.
- 15. The design cost approved at \$2,782.6 million in MOD prices by FC in July 2008 covering both railway and non-railway works has been included under **52TR**. Excluding this sum from the aggregate total in Table 1, the construction costs of the railway and non-railway works of the HKS of the XRL are set out in **Table 2** below –

 $\begin{tabular}{ll} \textbf{Table 2}-construction cost of railway and non-railway works of the HKS of the XRL \\ \end{tabular}$ 

	Estimate	Estimate
	(in September 2009 prices)	(MOD)
	(\$billion)	(\$billion)
Construction of railway works	51.4	55.0
Construction of non-railway	11.0	11.8
works		

/Project.....

# **Project Management Cost**

16. As in the case of railway works, the non-railway works will also be entrusted to MTRCL. The entrustment under this **57TR** covers the construction, testing and commissioning of the EPIW, RRIW, and government facilities at the WKT. MTRCL's project management cost<sup>2</sup> under **57TR** is estimated at \$699 million (in September 2009 prices).

## Vetting by independent engineering consultants

- 17. In the PWSC Note (PWSCI(2008-09)6) prepared to facilitate Members' consideration of the funding application for the design and site investigation of the XRL project, we undertook to employ independent consultants to assess the cost estimate for the project, including the project management cost. The Highways Department (HyD) engaged two independent engineering consultants (IECs) to assess the reasonableness of the construction cost and project management cost of the HKS of the XRL respectively.
- 18. One IEC has reviewed the rates and quantities of the cost items of the project and checked against the latest construction price trends and scope of the proposed works. It considers the estimate of construction costs reasonable. Furthermore, under the project entrustment arrangement, the Government will pay for the actual costs of the construction works based on prices established from appropriate tendering processes, and HyD will closely monitor the payment process.
- 19. Having reviewed and analyzed the manpower budget data given by MTRCL in the light of the nature and scale of the project and benchmarked against the relevant costs of other railway projects, the other IEC considered the estimate of project management cost reasonable. The entire project management cost for the design and construction of both railway and non-railway works represents about 7.38% of the cost of the relevant works entrusted to MTRCL plus contingency. It is lower than the relevant rate of the recent West Island Line (9.8%). As a general reference, the project management cost for entrustment works between the Government and the MTRCL is capped at 16.5% of the total cost of the entrustment works.

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<sup>&</sup>lt;sup>2</sup> Project management cost for the project includes staff, accommodation and corporate costs for the project team and project headquarters team, as well as and other support services for the teams. The project team provides support for the design management, project planning and management, and construction supervision; while the project headquarters team provides support for project control, planning and programming, procurement, and contract administration etc. Support services cover human resources, legal services, public relations, finance and information technology etc.

# FINANCIAL IMPLICATIONS

20. We estimate the cost of **57TR** to be \$11,800.0 million in MOD prices, broken down as follows –

	\$ million	
<ul> <li>(a) construction of EPIW</li> <li>(I) seven footbridges at WKT</li> <li>(II) two subways at WKT</li> <li>(III)depressed roads at part of Austin Road West and Lin Cheung Road, reconstruction of Wui Man Road and construction of Road D1A, and associated noise barriers / enclosures</li> </ul>	1,808.8 280.0 138.8 1,390.0	
(b) construction of RRIW	1,200.0	
(c) enabling works	3,519.0	
<ul> <li>(I) enabling works for Site A</li> <li>(II) enabling works for WKCD</li> <li>(III)enabling works for footbridges at Sham Mong Road</li> <li>(d) construction of BCF</li> <li>(e) project management cost payable to the MTRCL for planning, management and supervision of the project, covering overheads and management expenses of the MTRCL</li> </ul>	1,880.0 1,604.0 35.0 2,609.0 699.0	
(f) fees for consultants appointed by the Government for monitoring and vetting MTRCL's work including cost	38.0	
(g) provision of Government facilities / equipment including fire fighting equipment, and other furniture and equipment <sup>3</sup>	200.0	/ <b>\$ million</b>

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<sup>&</sup>lt;sup>3</sup> Based on an indicative list of furniture and equipment items required, including furniture and equipment in BCF.

(h) contingencies	Sub-total	\$ million 953.8 11,027.6	(in September 2009 prices)
(i) provision for price adjustment	Total <sup>-</sup>	772.4 11,800.0	(in MOD prices)

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

Year	\$ million (Sep 2009)	Price adjustment factor	\$ million (MOD)
2009 – 2010	22.1	1.00000	22.1
2010 – 2011	1,299.9	1.02000	1,325.9
2011 – 2012	2,755.7	1.04040	2,867.0
2012 – 2013	2,719.8	1.06121	2,886.3
2013 – 2014	2,076.6	1.08243	2,247.8
2014 – 2015	1,112.6	1.11220	1,237.4
2015 – 2016	777.3	1.14557	890.5
2016 – 2017	149.9	1.17993	176.9
2017 – 2018	43.6	1.21533	53.0
2020 - 2021	70.1	1.32802	93.1
	11,027.6		11,800.0

- 22. We have derived the MOD estimate on the basis of the Government's latest forecast of trend rate of change in the prices of public sector building and construction output for the period 2009 to 2021. The MTRCL will tender the proposed works with price adjustments where appropriate. We will engage consultants to undertake the service described in paragraph 20(f) above on a lump sum basis with the provision for price adjustment.
- 23. We estimate that the additional annual recurrent expenditure upon completion of the EPIW, RRIW, enabling works, and government facilities under the HKS of the XRL is about \$500.2 million.

#### **PUBLIC CONSULTATION**

- Apart from the public consultation of the entire HKS of XRL, extensive public consultation has been carried out for the EPIW and RRIW. We started public consultation in May 2008. In particular for the EPIW at West Kowloon, we consulted Yau Tsim Mong (YTM) District Council (DC) on 26 February 2009 on the WKT-related roadworks and associated footbridges and subway connections.
- 25. We consulted the Advisory Committee on the Appearance of Bridges and Associated Structures<sup>4</sup> (ACABAS) on 19 May 2009 for the two reprovisioned footbridges at Sham Mong Road and on 17 November 2009 for the footbridge above new Road D1A and the reprovisioned footbridge at West Kowloon. The ACABAS accepted the proposed aesthetic designs. Regarding other footbridges, noise barriers/enclosures and subway entrances above ground level etc., we will consult ACABAS in late 2009/early 2010.

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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 Institute 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 the aesthetic and visual impact points of view.

- We gazetted the HKS of the XRL scheme including the EPIW and RRIW under the Railways Ordinance (Cap. 519) (the Ordinance) on 28 November and 5 December 2008, and its amendments and corrections to the scheme on 30 April and 8 May 2009. Among the 119 objections to the scheme and its amendments, two objections were specifically related to the EPIW/RRIW. One of the objectors raised concerns on the access to his building during construction of the proposed road works around WKT. We had responded to the objector that the access would not be affected. The objector maintained his objection. The other objector raised concerns on the impacts of the reprovisioned footbridge at Hoi Fai Road on his lot. We had clarified with the objector of the need of the reprovisioning works and made minor changes in the design to address his concerns. The objector was satisfied with our response and withdrew his objection unconditionally<sup>5</sup>.
- 27. After considering the unresolved objections and the proposed modifications, the Chief Executive-in-Council authorized the scheme of the HKS of the XRL (including EPIW and RRIW), and the amendments and corrections to the scheme with modifications under the Railways Ordinance on 20 October 2009. The notice of authorization was gazetted on 30 October 2009. Details of the unresolved objections are reported in the LegCo Brief on the HKS of XRL Authorization of Scheme issued on 21 October 2009. We also briefed the Subcommittee on Matters Relating to Railways of the LegCo Panel on Transport (the Subcommittee) on 22 October 2009 on the railway scheme. The Subcommittee received deputations on 6 November and 13 November 2009.
- 28. We consulted the Subcommittee on the HKS of the XRL project including the EPIW, RRIW, enabling works and government costs in the form of draft submissions to the PWSC on 16 and 17 November 2009. The Subcommittee has no objection for the XRL project to be submitted to PWSC and FC for consideration. Some Members requested the Administration to submit more detailed information to PWSC about the proposed road enhancements to address the traffic problems in West Kowloon and the accessibility of WKT from other districts. The requested supplementary information will be submitted separately for Members' consideration.

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conditions is treated as an unresolved objection which will then be submitted to the Chief Executive-in-Council for consideration.

<sup>&</sup>lt;sup>5</sup> Under the Railways Ordinance, an objection that is withdrawn unconditionally is treated as if the objector had not lodged the objection. An objection which is not withdrawn or withdrawn with

#### ENVIRONMENTAL IMPLICATIONS

- 29. The depressed roads at part of Austin Road West and Lin Cheung Road, the new Road D1A, and reconstruction of Wui Man Road of the non-railway works are designated project elements under Schedule 2 of the Environmental Impact Assessment (EIA) Ordinance (Cap. 499) and an environmental permit (EP) is required for these road works. The Director of Environmental Protection issued the EP for the road works at West Kowloon on 14 October 2009. The EIA Report concluded that with the implementation of recommended mitigation measures, the environmental impacts of the road works at West Kowloon can be controlled to within the criteria under the EIA Ordinance.
- 30. For those non-railway works other than the road systems mentioned in paragraph 29, they are non-designated projects, the construction impacts of which will have little potential of giving rise to adverse environmental impacts. We will implement pollution control measures during their construction to meet all relevant environmental standards and requirements. We have included in the project estimate the cost to implement suitable mitigation measures to control these short-term environmental impacts. An environmental monitoring and audit (EM&A) programme will be implemented to monitor the cumulative construction noise and dust impact arising from the construction of the concurrent works.
- 31. The MTRCL has considered measures in the planning and design stages of the non-railway works to reduce the generation of construction waste where possible. In addition, the MTRCL will require the contractor to reuse inert construction waste (e.g. excavated rock and soil materials) 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>6</sup>. The MTRCL will encourage the contractor to maximise the use of recycled / recyclable inert construction waste, as well as the use of non-timber formwork to further reduce the generation of construction waste.

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Public fill reception facilities are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation. Disposal of inert construction waste in public fill reception facilities requires a licence issued by the Director of Civil Engineering and Development.

32. The MTRCL will also 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. The MTRCL will ensure that the day-to-day operations on site comply with the approved plan. The MTRCL will require the contractor to separate the inert portion from non-inert construction waste on site for disposal at appropriate facilities. The MTRCL 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.

33. The MTRCL estimates that the EPIW and RRIW project will generate in total about 1 399 800 tonnes of construction waste. Of these, the MTRCL will reuse about 65 000 tonnes (4.7%) of inert construction waste on site and deliver 1 327 400 tonnes (94.8%) of inert construction waste to public fill reception facilities for subsequent reuse. The MTRCL will dispose of the remaining 7 400 tonnes (0.5%) 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 \$37 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).

#### HERITAGE IMPLICATIONS

34. The proposed non-railway works will not affect any heritage site, i.e. all declared monuments, proposed monuments, graded historic sites/buildings, sites of archaeological interest and Government historic sites identified by the Antiquities and Monuments Office.

## LAND ACQUISITION

35. The proposed non-railway works do not require any land acquisition.

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This estimate has taken into account the cost for developing, operating and restoring the landfills after they are filled and the aftercare required. It does not include the land opportunity cost for existing landfill sites (which is estimated at \$90 per m³), nor the cost to provide new landfills (which is likely to be more expensive) when the existing ones are filled.

#### BACKGROUND INFORMATION

- 36. We upgraded **52TR** "Hong Kong Section of Guangzhou-Shenzhen-Hong Kong Express Rail Link design and site investigation" in July 2008 at an estimated cost of \$2,782.6 million in MOD prices for the design and site investigation of the HKS of the XRL including the non-railway works. We have substantially completed the planning and design for the HKS of the XRL.
- 37. We upgraded **57TR** "Hong Kong Section of Guangzhou-Shenzhen-Hong Kong Express Rail Link construction of non-railway works" to Category B in November 2009.
- 38. Of the 390 trees within the project boundary, 120 trees will be felled and 270 trees preserved. All of them are not "important trees". We will incorporate planting proposals as part of the project, including no less than 120 new trees and around 12 000m<sup>2</sup> of grassed area.
- 39. According to the MTRCL's assessment, the HKS of the XRL will create about 11 000 jobs (9 200 for labourers and another 1 800 for professional/technical staff) during the peak period, providing a total employment of 377 800 man-months.

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Transport and Housing Bureau November 2009

<sup>&</sup>lt;sup>8</sup> "Important trees" refer to trees in the Register of Old and Valuable Trees, or any other trees that meet one or more of the following criteria –

<sup>(</sup>a) trees of 100 years old or above;

<sup>(</sup>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 important persons or events;

<sup>(</sup>c) trees of precious or rare species;

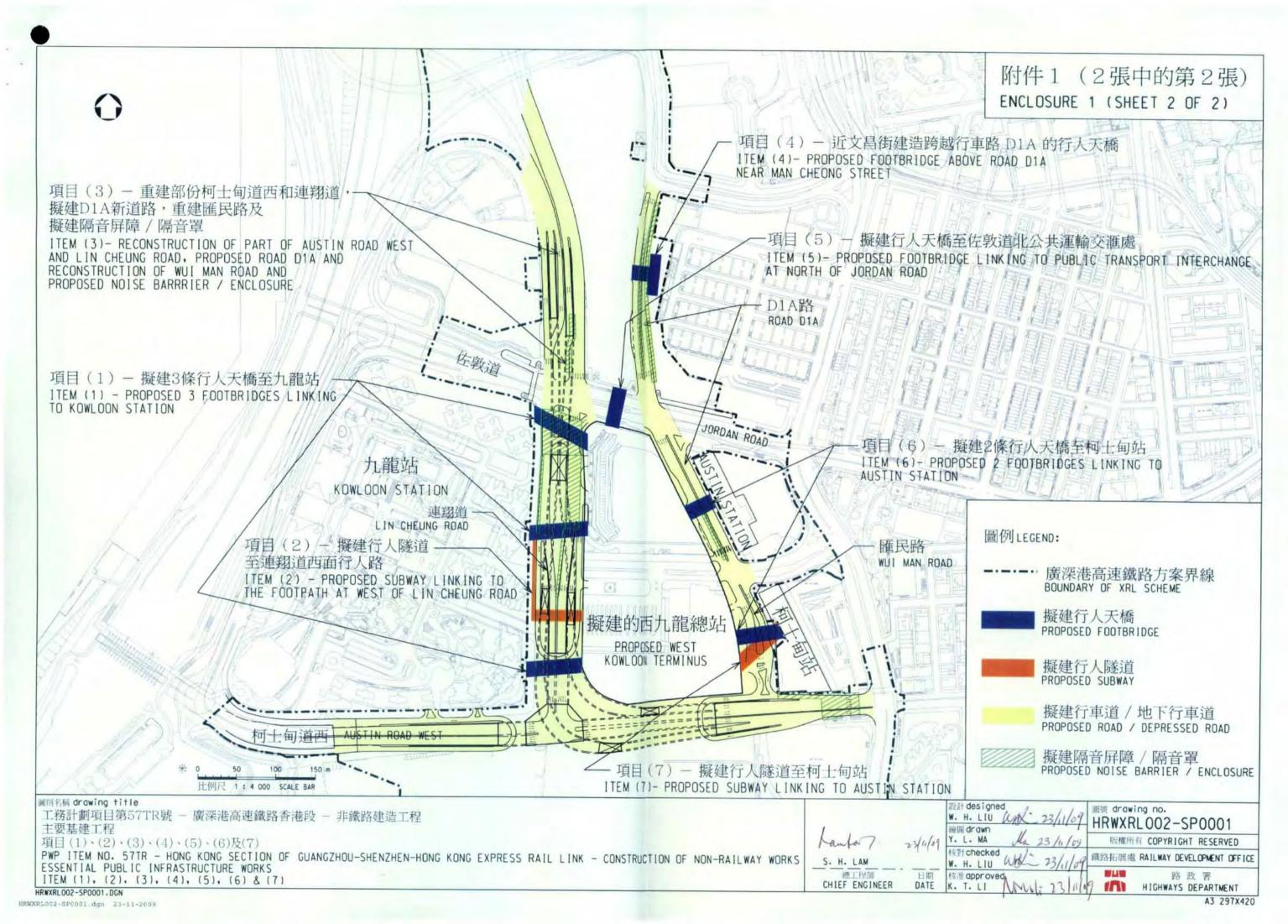
<sup>(</sup>d) trees of outstanding form (taking account of overall tree size, shape and any special features) e.g. trees with curtain like aerial roots, trees growing in unusual habitat; or

<sup>(</sup>e) trees with trunk diameter equal or exceeding 1.0 metre (measured at 1.3 metre above ground level), or with height/canopy spread equal or exceeding 25 metres.

# **Enclosure 1 (Sheet 1 of 2)**

# **List of Essential Public Infrastructure Works (EPIW)**

Item	Location	Description	Drawing
1	West Kowloon	Three proposed footbridge links to Kowloon Station	
2	West Kowloon	Proposed subway link to the footpath at west of Lin Cheung Road	
3	West Kowloon	Reconstruction of part of Austin Road West and Lin Cheung Road, proposed Road D1A and reconstruction of Wui Man Road and proposed noise barriers/enclosures	Enclosure 1
4	West Kowloon	Proposed footbridge above Road D1A near Man Cheong Street	(Sheet 2 of 2)
5	West Kowloon	Proposed footbridge link to public transport interchange at north of Jordan Road	
6	West Kowloon	Two proposed footbridge links to Austin Station	
7	West Kowloon	Proposed subway link to Austin Station	



# **Enclosure 2 (Sheet 1 of 11)**

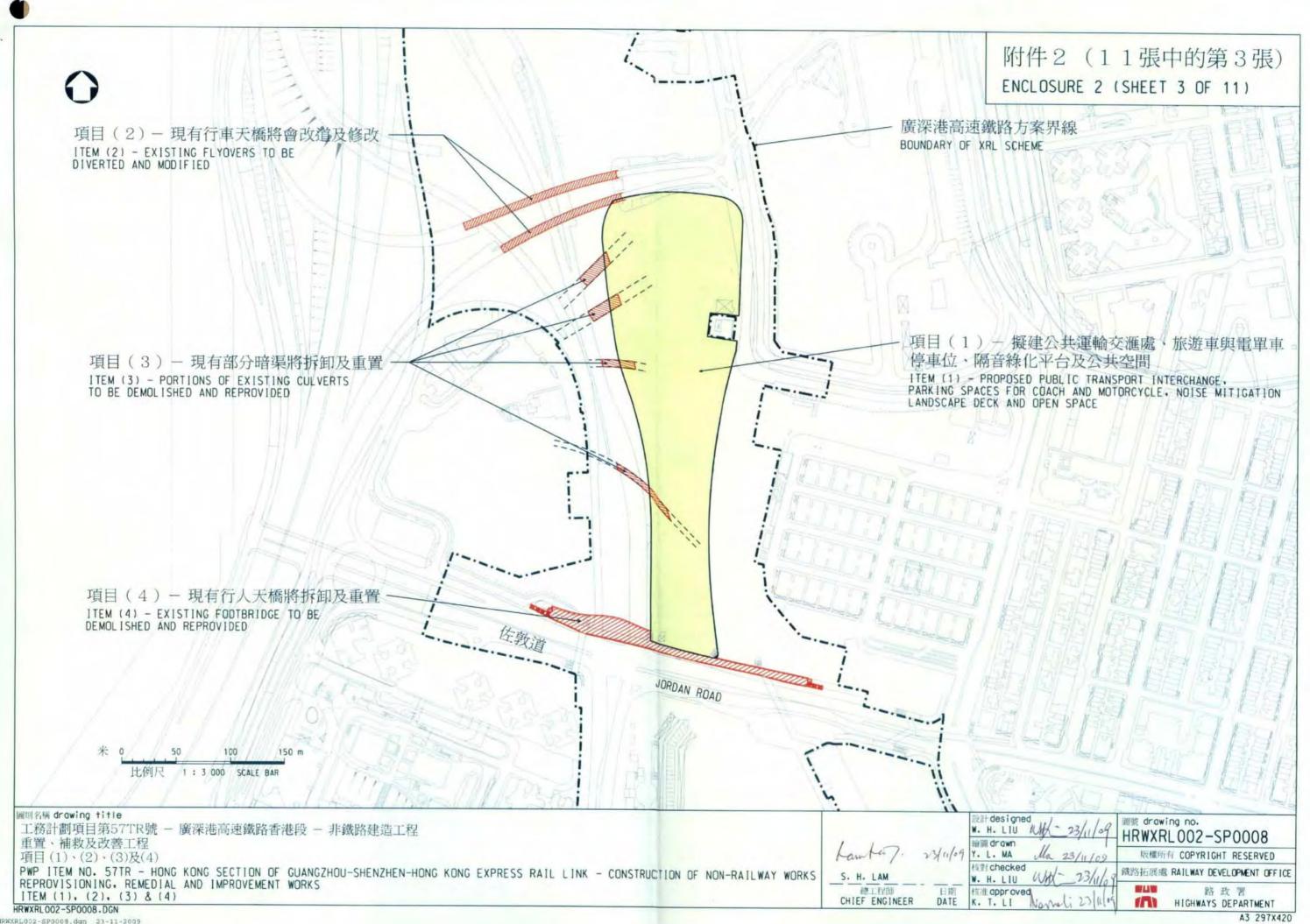
# List of Reprovisioning, Remedial and Improvement Works (RRIW)

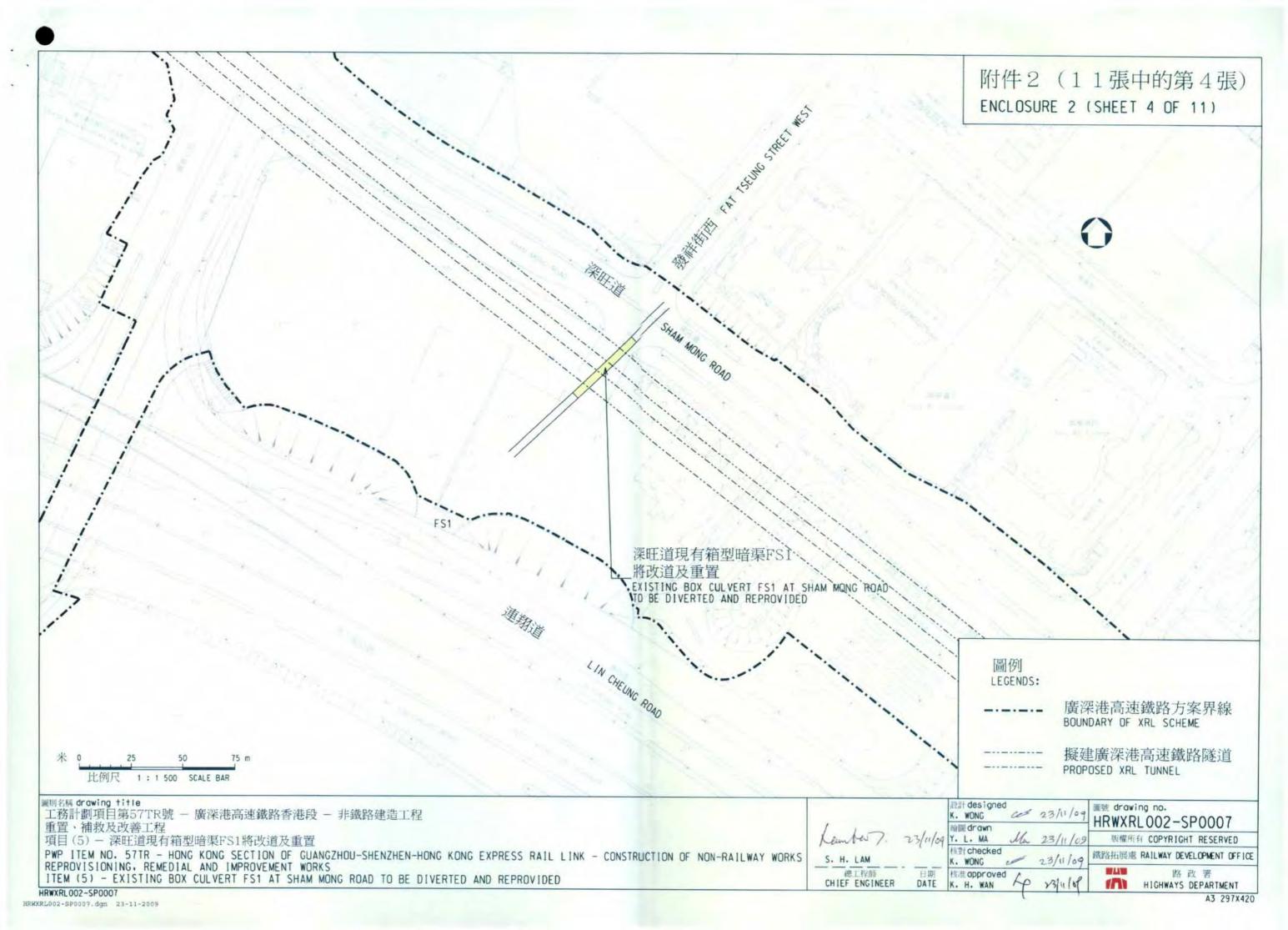
(Item locations are shown in Enclosure 2 (Sheet 2 of 11))

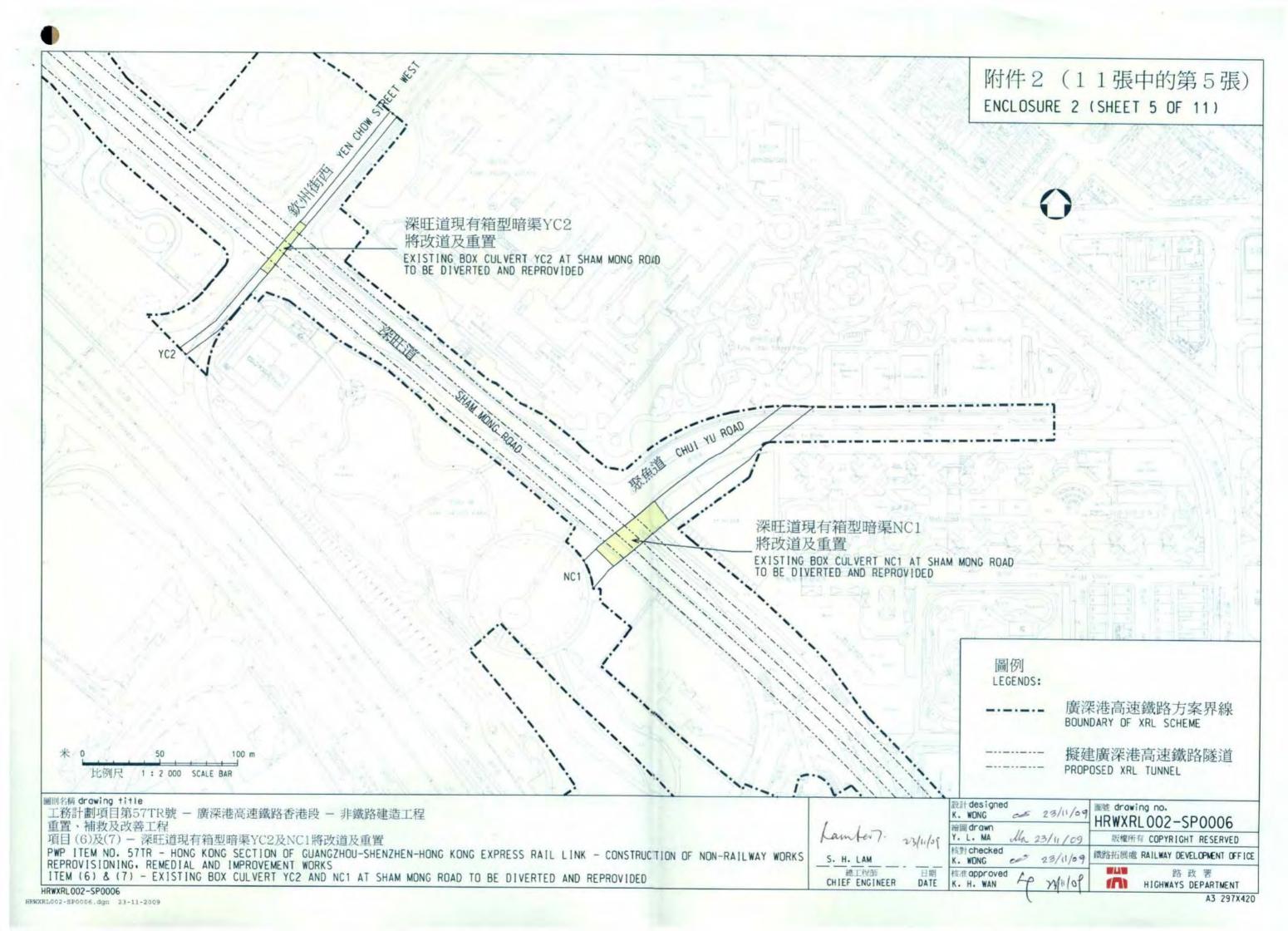
Item	Location	Description	Drawing
1	West Kowloon	Proposed public transport interchange, parking spaces for coach and motorcycle, noise mitigation landscape deck and open space	
2	West Kowloon	Existing flyovers to be diverted and modified	Enclosure 2 (Sheet 3 of 11)
3	West Kowloon	Portions of existing culverts to be demolished and reprovided	
4	West Kowloon	Existing footbridge to be demolished and reprovided	
5	Sham Shui Po	Existing Box Culvert FS1 at Sham Mong Road to be diverted and reprovided	Enclosure 2 (Sheet 4 of 11)
6	Sham Shui Po	Existing Box Culvert YC2 at Sham Mong Road to be diverted and reprovided	Enclosure 2
7	Sham Shui Po	Existing Box Culvert NC1 at Sham Mong Road to be diverted and reprovided	(Sheet 5 of 11)
8	Lai Chi Kok	Existing Box Culvert WD1 at Lai Po Road to be diverted and reprovided	Enclosure 2 (Sheet 6 of 11)
9	Tai Kok Tsui	Portions of existing footbridge KF118 near Sham Shing Road to be demolished and reprovided	Enclosure 2 (Sheet 7 of 11)
10	Sham Shui Po	Portions of existing footbridge KF119 near Hoi Fai Road to be demolished and reprovided	Enclosure 2 (Sheet 8 of 11)
11	Sham Shui Po	Portions of Nam Cheong Park to be used as temporary works site and reprovided	Enclosure 2 (Sheet 9 of 11)
12	Tsuen Wan	Existing Bus Terminus at Cheung Shan Estate to be relocated for ventilation building use	Enclosure 2 (Sheet 10 of 11)
13	Lai Chi Kok	Proposed Lai Chi Kok Interchange flyover underpinning works	Enclosure 2 (Sheet 11 of 11)
14	Tai Kok Tsui	Chui Yu Road planting area to be used as temporary works site and reprovided	Enclosure 2 (Sheet 9 of 11)

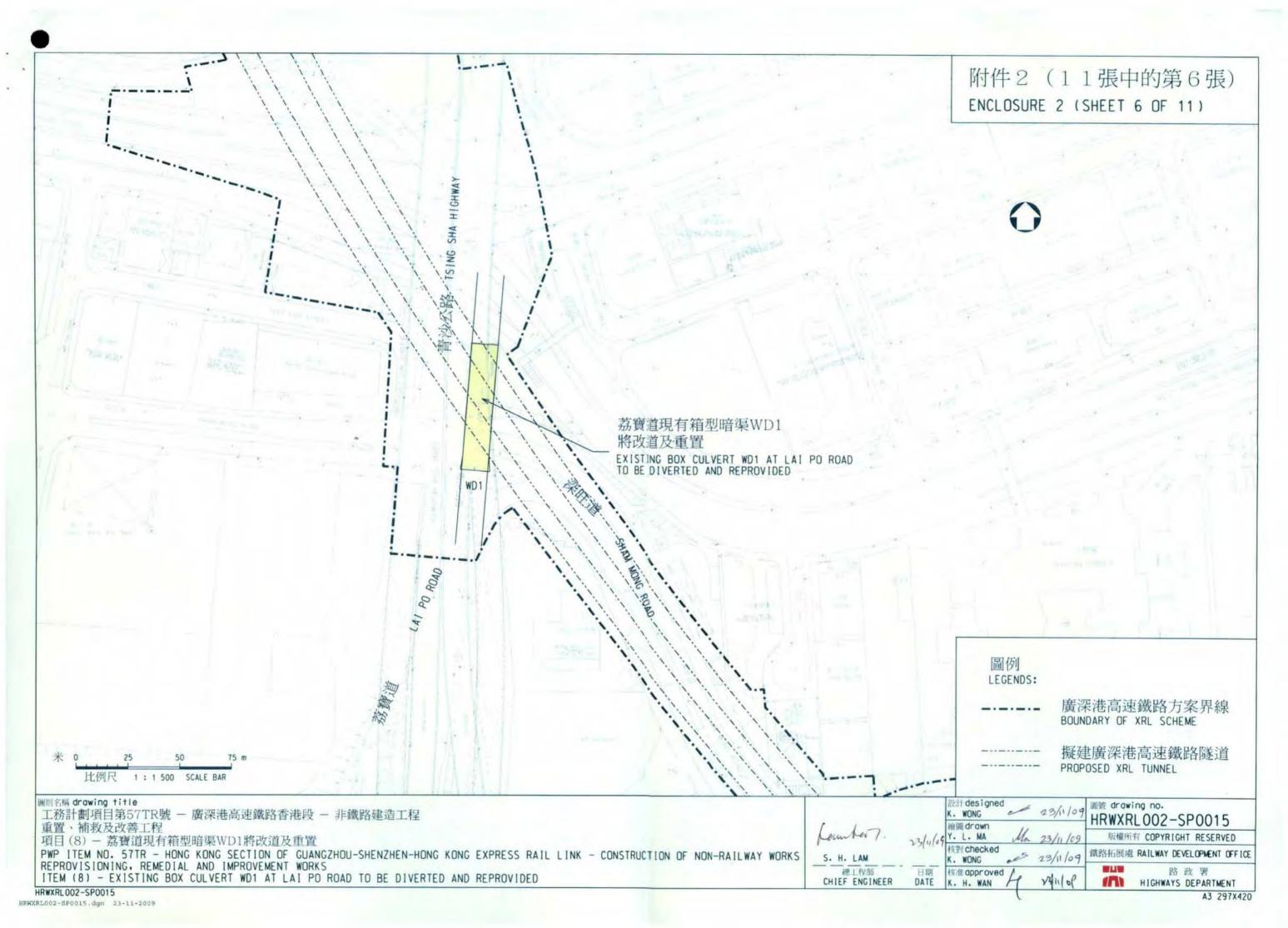
附件2(11張中的第2張) ENCLOSURE 2 (SHEET 2 OF 11) 項目(12) - 遷移象山邨現有巴士站給擬建通風大樓使用 ITEM (12) - EXISTING BUS TERMINUS AT CHEUNG SHAN ESTATE TO BE RELOCATED FOR VENTILATION BUILDING USE TSUEN WAN 葵涌 KWAI CHUNG 項目(13) - 荔枝角交滙處天橋地基承托工程 TSING Y ITEM (13) - PROPOSED LAI CHI KOK INTERCHANGE FLYOVER UNDERPINNING WORKS 項目(8) - 荔寶道現有箱型暗渠WD1將改道及重置 ITEM (8) - EXISTING BOX CULVERT WD1 AT LAI PO ROAD 項目(5) - 深旺道現有箱型暗渠FS1將改道及重置 TO BE DIVERTED AND REPROVIDED ITEM (5) - EXISTING BOX CULVERT FS1 AT SHAM MONG ROAD TO BE DIVERTED AND REPROVIDED 項目(9) - 部分近深盛路行人天橋編號KF118將拆卸及重置 ITEM (9) - PORTIONS OF EXISTING FOOTBRIDGE KF118 NEAR SHAM SHING ROAD TO BE DEMOLISHED AND REPROVIDED 項目(6) - 深旺道現有箱型暗渠YC2將改道及重置 ITEM (6) - EXISTING BOX CULVERT YCZ AT SHAM MONG ROAD 項目(7)-深旺道現有箱型暗渠NC1將改道及重置 TO BE DIVERTED AND REPROVIDED TTEM (7) - EXISTING BOX CULVERT NCT AT SHAM MONG ROAD TO BE DIVERTED AND REPROVIDED 項目(14) - 聚魚道休憩公園旁的種植區將作為臨時工地及重置 項目(11) - 南昌公園內部分地方將作為臨時工地及重置 1TEM (14) - CHUI YU ROAD PLANTING AREA TO BE USED AS TEMPORARY WORKS SITE AND REPROVIDED ITEM (11) - PORTIONS OF NAM CHEONG PARK TO BE USED AS TEMPORARY WORKS SITE AND REPROVIDED 項目(10) - 部分近海輝道行人天橋編號KF119將拆卸及重置 ITEM (10) - PORTIONS OF EXISTING FOOTBRIDGE KF119 NEAR HO! FAI ROAD TO BE DEMOLISHED AND REPROVIDED 項目(2) - 現有行車天橋將會改道及修改。 ITEM (2) - EXISTING FLYOVERS TO BE DIVERTED AND MODIFIED 項目(1) 一 擬建公共運輸交滙處、旅遊車與電單車停車位、隔音線化平台及公共空間 ITEM (1) - PROPOSED PUBLIC TRANSPORT INTERCHANGE. PARKING SPACES FOR COACH AND MOTORCYCLE. NOISE MITIGATION LANDSCAPE DECK AND OPEN SPACE 項目(3) - 現有部分暗渠將拆卸及重置 ITEM (3) - PORTIONS OF EXISTING CULVERTS TO BE DEMOLISHED AND REPROVIDED 尖沙咀 項目(4) - 現有行人天橋將拆卸及重置 1000 2000 m ITEM (4) - EXISTING FOOTBRIDGE TO BE TSIM SHA TSUI 比例尺 1:40 000 SCALE BAR DEMOLISHED AND REPROVIDED 圖削名稱 drawing title 設計designed 應號 drawing no. 工務計劃項目第57TR號 - 廣深港高速鐵路香港段 - 非鐵路建造工程 K. K. LEI HRWXRL002-SP0010 繪圖drawn € 重置、補救及改善工程 Y. L. MA 版權所有 COPYRIGHT RESERVED 位置圖 核對 checked PWP ITEM NO. 57TR - HONG KONG SECTION OF GUANGZHOU-SHENZHEN-HONG KONG EXPRESS RAIL LINK - CONSTRUCTION OF NON-RAILWAY WORKS 鐵路拓展處 RAILWAY DEVELOPMENT OFFICE S. H. LAM K. K. LEI REPROVISIONING, REMEDIAL AND IMPROVEMENT WORKS 練工作的 路政署 核准approved LOCATION PLAN CHIEF ENGINEER DATE C. W. YUNG HIGHWAYS DEPARTMENT HRWXRL002-SP0010.DGN A3 297X420

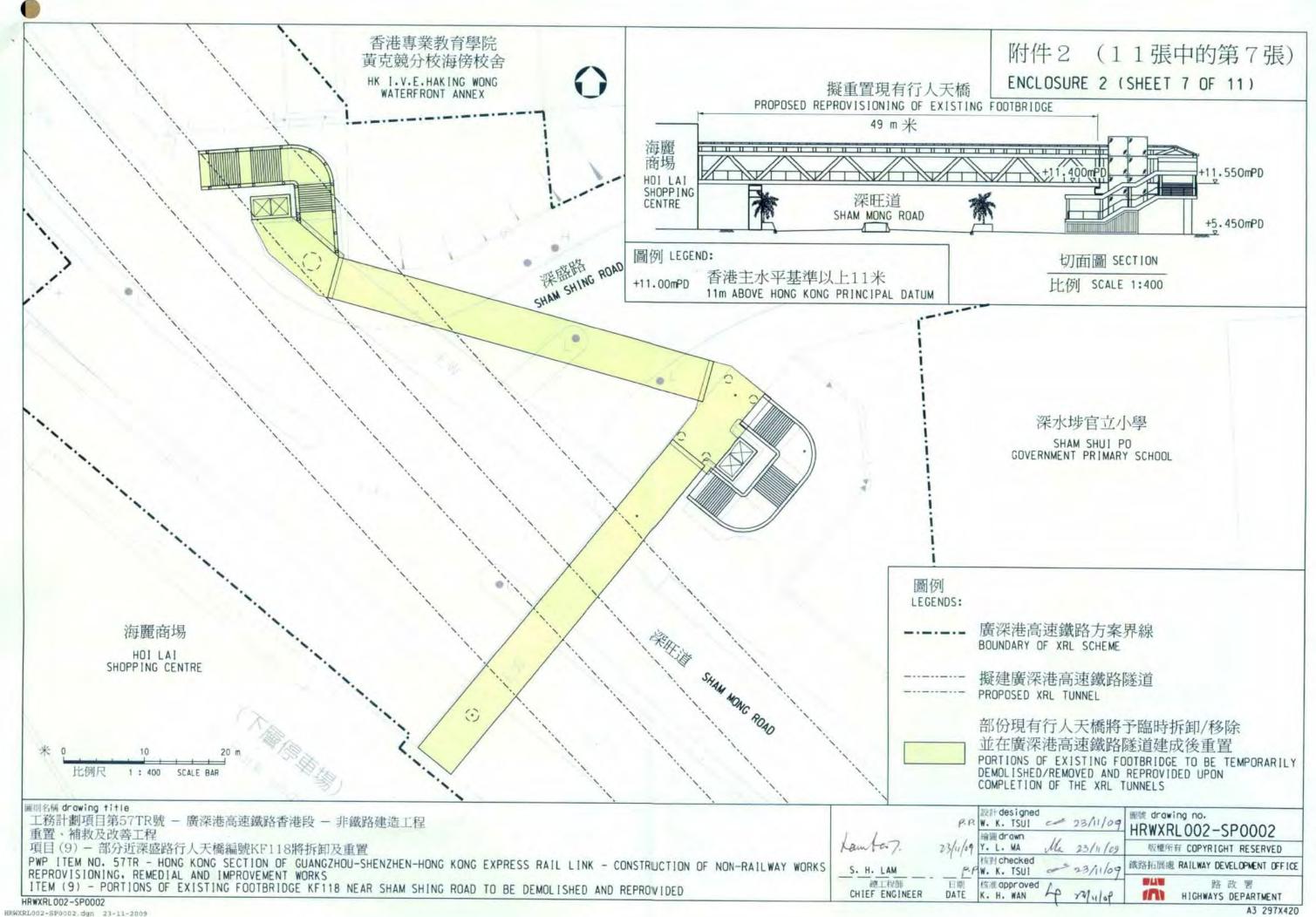
HRWXRL002-SP0010.dgn 23-11-2009

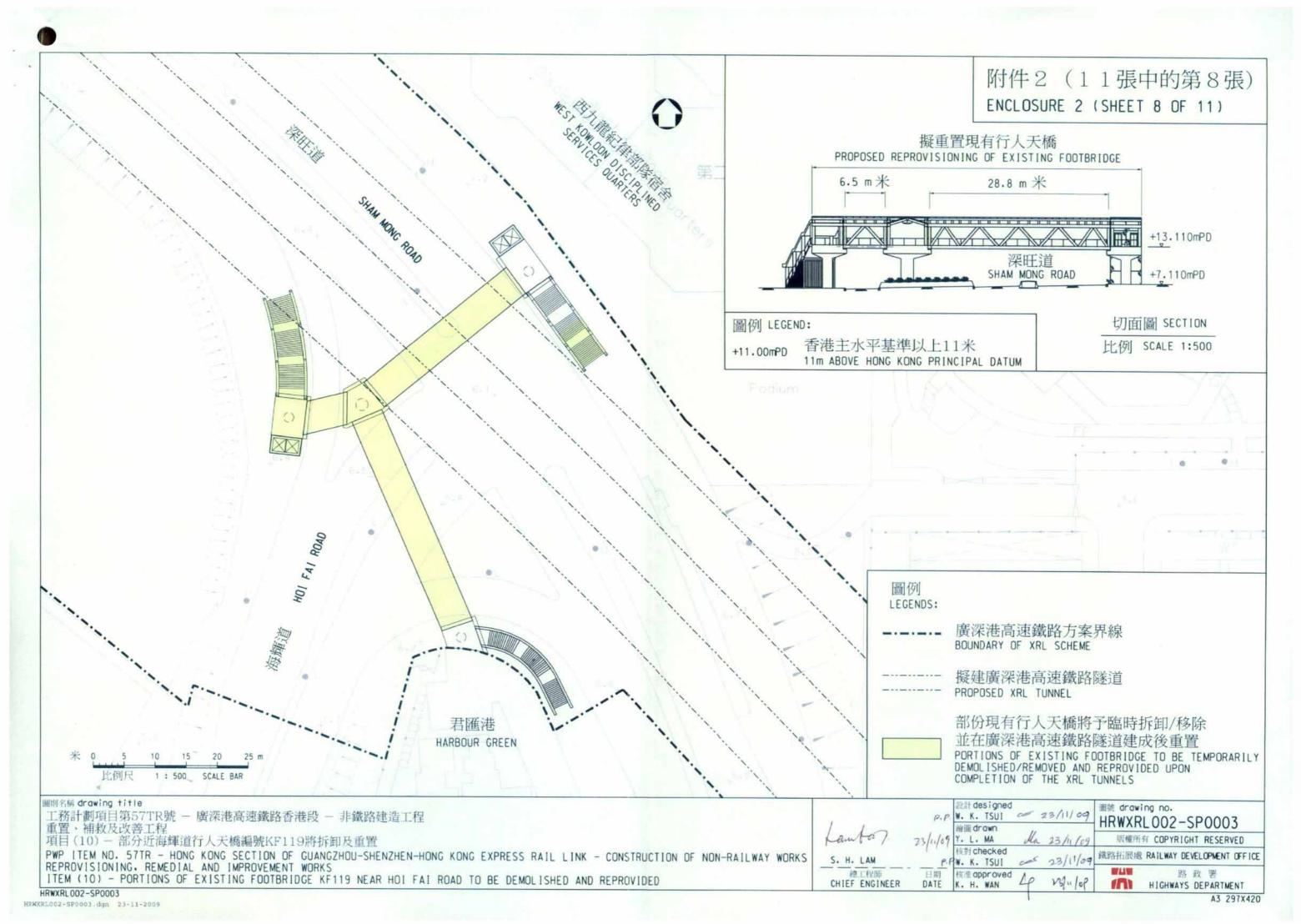


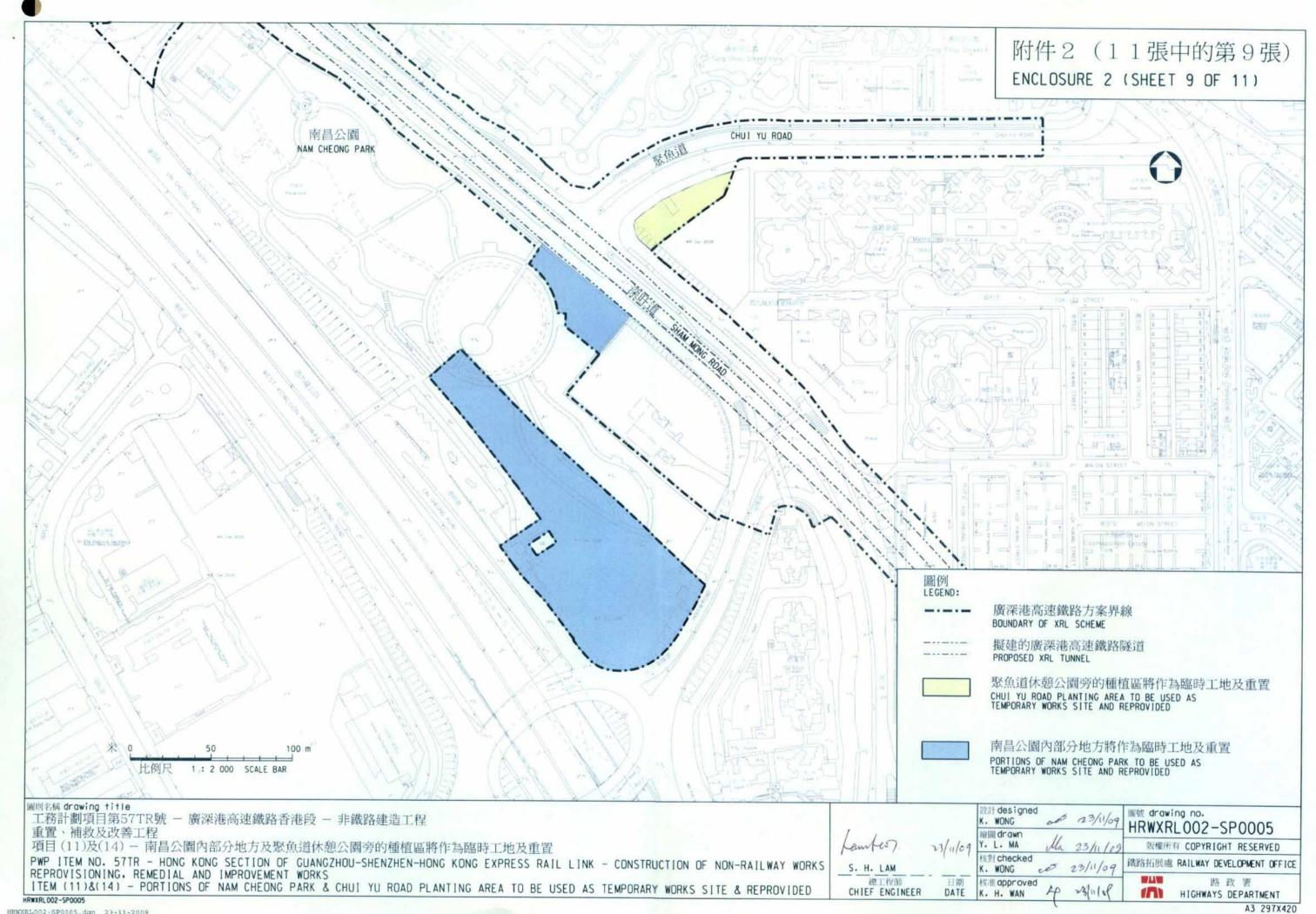




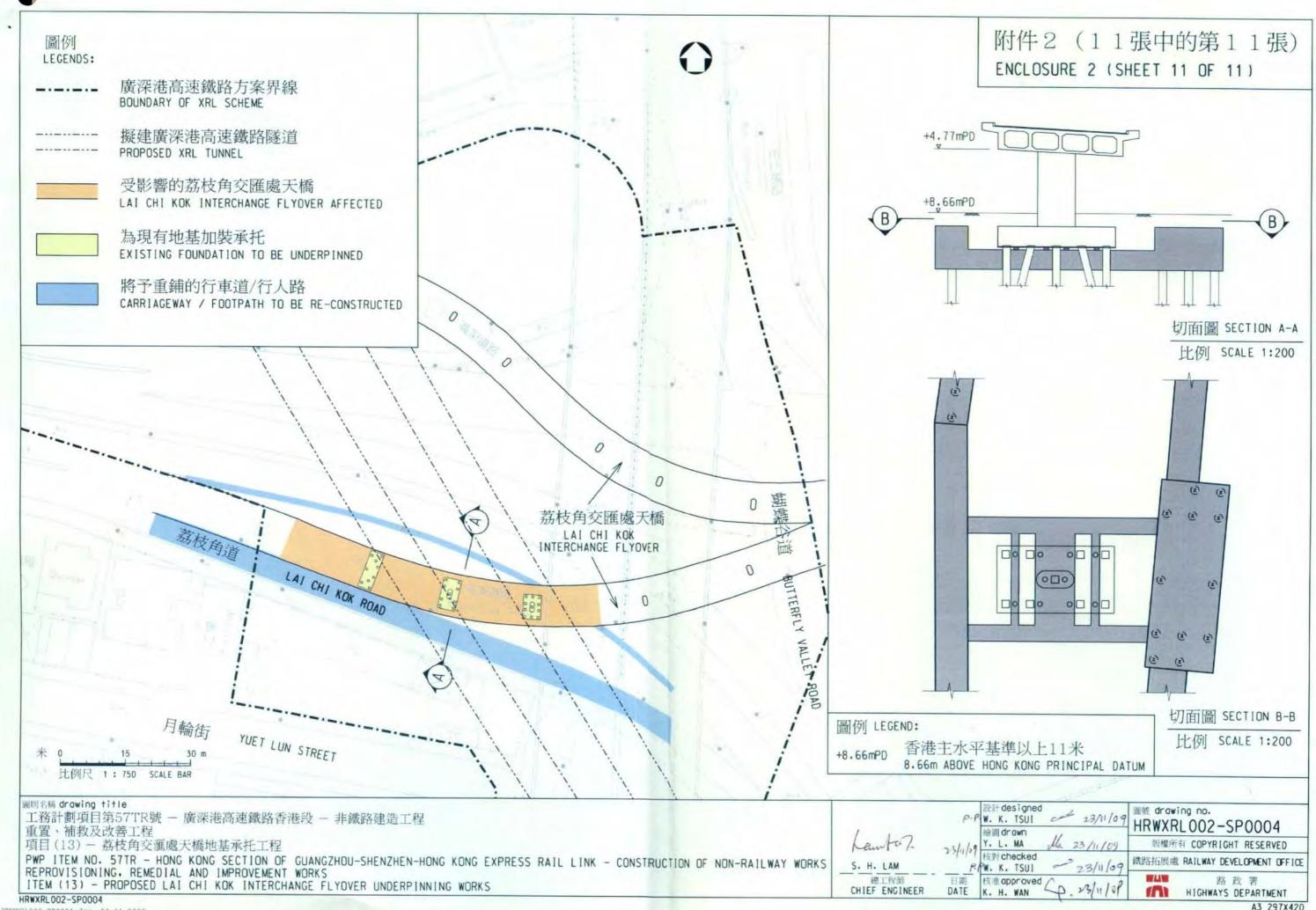








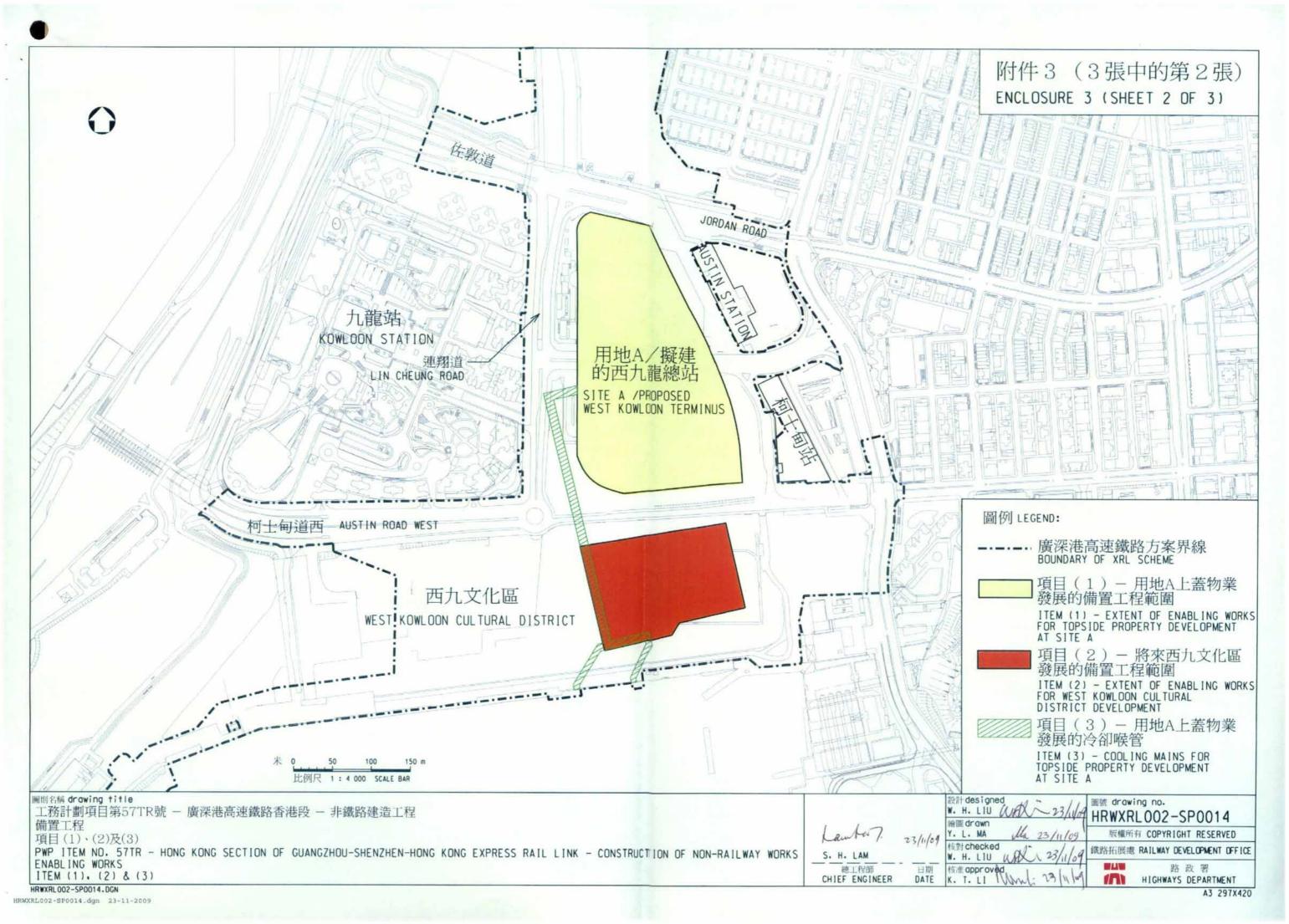


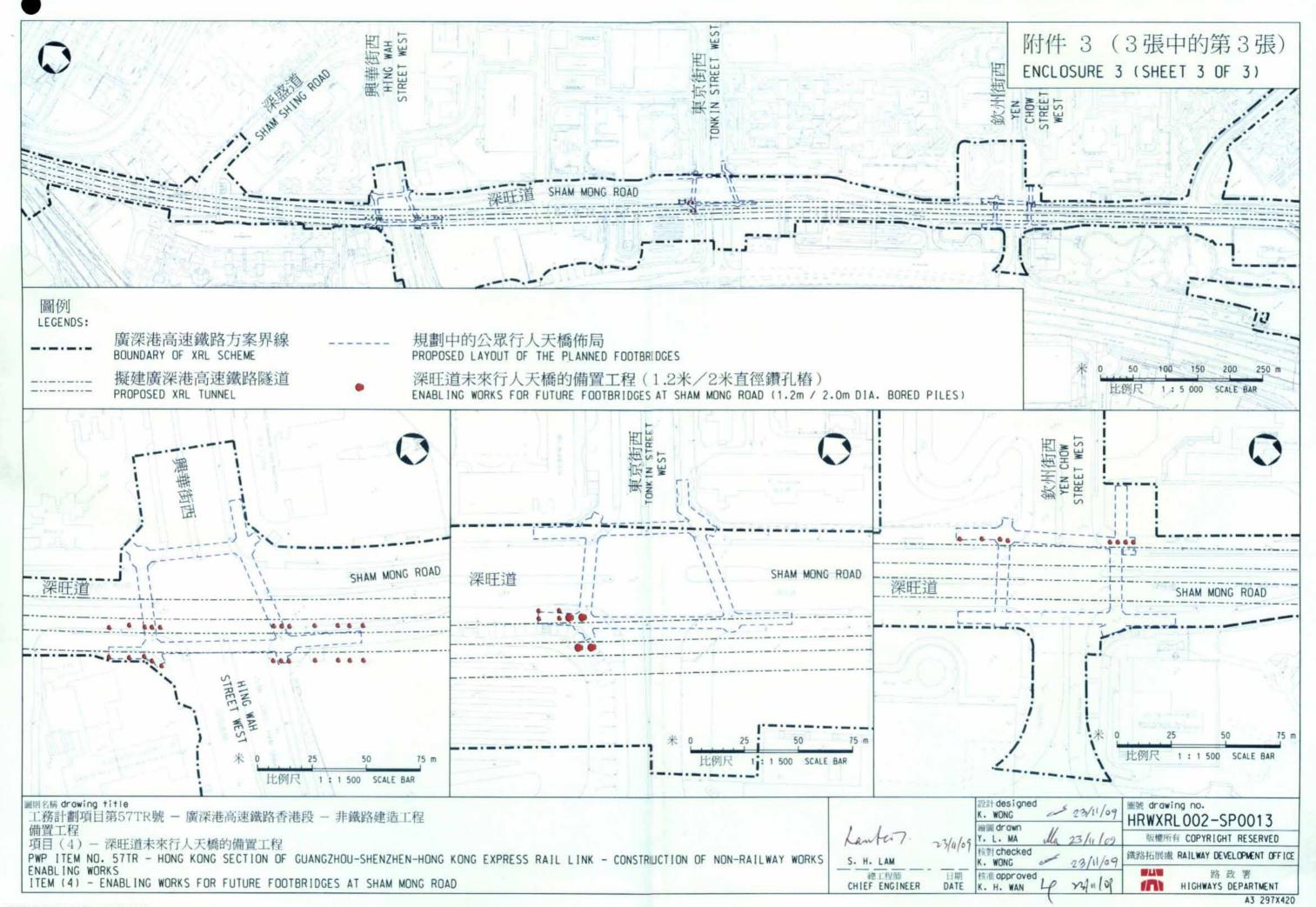


# **Enclosure 3 (Sheet 1 of 3)**

# **List of Enabling Works**

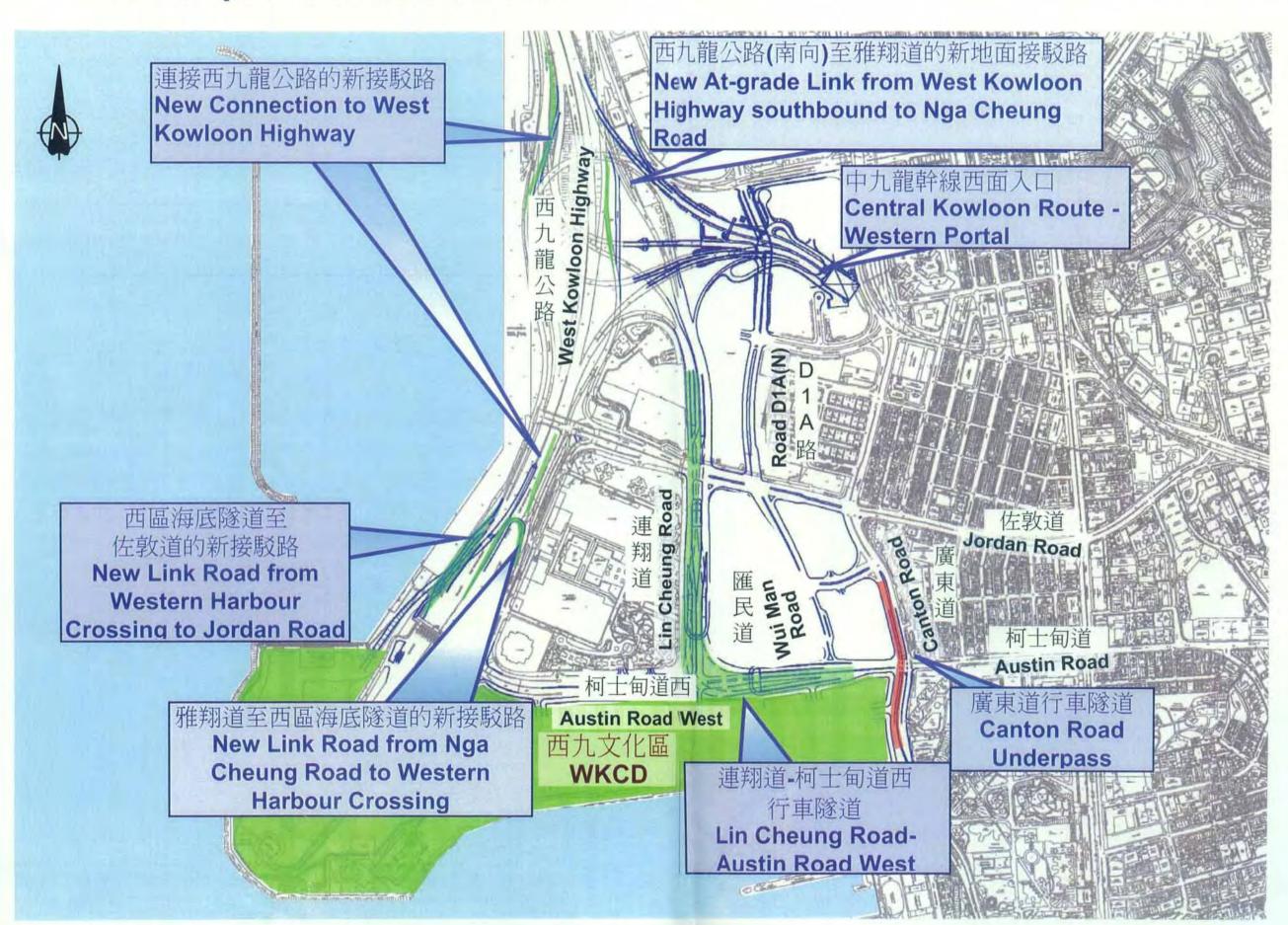
Item	Location	Description	Drawing
1	West Kowloon	Enabling works for topside property development at Site A	
2	West Kowloon	Enabling works for West Kowloon Cultural District Development	Enclosure 3 (Sheet 2 of 3)
3	West Kowloon	Cooling Mains for topside property development at Site A	
4	Sham Shui Po	Proposed protection works for XRL tunnels along Sham Mong Road.	Enclosure 3 (Sheet 3 of 3)





# 道路改善計劃

# **Road Improvement Schemes**



附件4(2張中的第2張) Enclosure 4 (Sheet 2 of 2)

日後路口容量 (道路改善工程實施後於2031年的情況)
Future Junction Capacity (with improved Road Network in 2031)

