

**File Reference: THB(T)CR 10/1016/99**

**Legislative Council Panel on Transport  
Subcommittee on Matters relating to Railways**

**Funding Application for the Design of  
the Shatin to Central Link**

**Purpose**

This note seeks Members' support in providing funding to cover the design and site investigation of the proposed Shatin to Central link (SCL) project at an estimated cost of \$2.407 billion in money-of-the-day prices.

**Background**

2. At the meeting of the Executive Council on 11 March 2008, the Council advised and the Acting Chief Executive ordered, inter alias, that -

- (a) the MTR Corporation Limited (MTRCL) should be asked to proceed with the further planning and design of the SCL based on the scheme jointly developed by the Kowloon-Canton Railway Corporation (KCRC) and the MTRCL (the M-Scheme); and
- (b) further discussion should be carried out with the MTRCL on the implementation details of the M-Scheme based on the concession approach to fund the project.

3. We plan to commence the design works for the SCL in August 2008 for completion in 2010 so that the construction can commence in mid 2010 after the authorization of the railway scheme under the Railways Ordinance.

## **Project Scope and Nature**

4. The SCL is intended to comprise –
  - (a) the Tai Wai to Diamond Hill Link connecting Tai Wai with Diamond Hill;
  - (b) the East Kowloon Line extending the rail from Diamond Hill to Hung Hom; and
  - (c) the Fourth Rail Harbour Crossing extending the rail from Hung Hom to Hong Kong Island.
5. The scope of the project (6051TR) we now propose to upgrade to Category A comprises –
  - (a) The design works for the SCL including railway works, the reprovisioning, remedial and improvement works (RRIW) and the essential public infrastructure works (EPIW) in connection with the SCL;
  - (b) the associated site investigations and works supervision;
  - (c) carrying out impact assessments on the environment, traffic, marine and other related aspects; and
  - (d) preparation of tender documents and assessment of tenders.
6. Funding for the construction works will be sought separately at a later stage.

## **Justifications**

7. Detailed justifications of the SCL project are given in the Legislative Council Brief issued on 11 March 2008.

## **Financial Implications**

8. Under the concession approach, the Government will be responsible

for providing, at its cost, the necessary railway infrastructure of the SCL. Upon completion of the SCL, the MTR Corporation Limited (MTRCL) will be granted a service concession for the right to operate the railway and pay the Government/Kowloon-Canton Railway Corporation (KCRC) service concession payments. Hence, the SCL will be implemented as a Public Works Project with funding for the design and construction of the railway to be arranged by the Government.

9. The current proposed works cover the design of the railway scheme, the RRIW and EPIW, including all civil, architectural, electrical and mechanical, signalling and control works, and the associated modifications required at the existing railway lines. We will also carry out impact assessments on the environment, traffic, marine and other related aspects, in order to identify the impacts and the mitigation measures required, including those related to heritage preservation. We shall entrust the proposed works with the MTRCL. We will employ independent consultants during the detailed design stage to establish checking and control procedures on the estimated capital costs of the project and the on-cost calculation.

10. The current estimated cost of the design works, including the overheads and management expenses of the MTRCL, is \$2.407 billion (in MOD prices). Details are given in the draft Paper for Public Works Sub-committee at  
— **Annex A.**

### **Way Forward**

11. We plan to consult the Public Works Sub-committee at its meeting on 7 May 2008 and will seek the approval of the Finance Committee on 23 May 2008.

### **Advice Sought**

12. Members are invited to support the above funding proposal to cover the design and site investigation of the proposed SCL project.

**Transport and Housing Bureau**  
**March 2008**

**For discussion  
on 7 May 2008**

**PWSC(2008-09)XX**

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

### **HEAD 706 – HIGHWAYS**

#### **Transport – Railways**

#### **6051TR – Shatin to Central Link – design and site investigation**

Members are invited to recommend to Finance Committee to upgrade **6051TR** to Category A at an estimated cost of \$2,407.6 million in money-of-the-day prices.

### **PROBLEM**

We need to undertake the design and supervision of site investigations for the proposed Shatin to Central Link (SCL) project.

### **PROPOSAL**

2. The Director of Highways, with the support of the Secretary for the Transport and Housing, proposes to upgrade **6051TR** to Category A at an estimated cost of \$2,407.6 million in money-of-the-day (MOD) prices for the design and site investigation for the SCL.

### **PROJECT SCOPE AND NATURE**

3. The scope of **6051TR** comprises –
- (a) the design works for the SCL including railway works, the reprovisioning, remedial and improvement works (RRIW) (see paragraph 9) and the essential public infrastructure works (EPIW) (see paragraph 10) in connection with the SCL;

- (b) the associated site investigations and works supervision;
- (c) impact assessments on the environment, traffic, marine and other related aspects; and
- (d) preparation of tender documents and assessment of tenders.

4. We plan to commence the design works in August 2008 for completion in 2010. We intend to commence construction of the SCL in 2010 for completion of the Tai Wai to Hung Hom section in 2015 and the cross harbour section in 2019.

## JUSTIFICATION

5. The SCL is one of the priority railways recommended for implementation in the Railway Development Strategy 2000<sup>1</sup>.

6. The SCL is intended to comprise –

- (a) the Tai Wai to Diamond Hill Link connecting Tai Wai with Diamond Hill;
- (b) the East Kowloon Line extending the rail from Diamond Hill to Hung Hom; and
- (c) the Fourth Rail Harbour Crossing extending the rail from Hung Hom to Hong Kong Island.

7. Along the SCL, there will be nine stations, namely Tai Wai, Diamond Hill, Kai Tak, To Kwa Wan, Ma Tau Wai, Homantin, Hung Hom, Exhibition, and Admiralty. A plan showing the proposed SCL alignment is at Enclosure 1. As a strategic railway expanding the catchment<sup>2</sup> of the railway network in Hong Kong, the SCL will serve a wide catchment of 300 000 residential and 283 000 employment population. The SCL will –

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<sup>1</sup> The Railway Development Strategy 2000 maps out the preferred railway network expansion plan for Hong Kong up to 2016.

<sup>2</sup> The area within the 500m radius of a railway station is defined as the catchment of the railway.

- (a) help redistribute railway passenger flows to relieve the existing railway lines in urban Kowloon and on Hong Kong Island;
- (b) be an important component of the Kai Tak Development providing public transport service not only to the proposed new commercial and residential developments in the area, but also the Multi-Purpose Stadium Complex and other leisure facilities planned at Kai Tak;
- (c) help relieve the reliance on road-based public transport in the existing developed areas, and alleviate the traffic congestion and environmental nuisance on existing road networks, including the demand on the Hung Hom Cross Harbour Tunnel; and
- (d) stimulate the redevelopment of the To Kwa Wan and Kowloon City areas.

8. The SCL will carry about one million railway passengers per day and generate annual transport benefits of \$4.1 billion in terms of time saving to travellers in 2021. It will yield a high Economic Internal Rate of Return of 10% measured in real terms. The new railway will also help improve the local employment situation by providing 11 000 employment opportunities during construction and another 9 600 employment opportunities during its operation.

9. There are sites along the SCL currently accommodating Government facilities that are to be occupied either temporarily or permanently for the construction and/or operation of the SCL. We need to re-provision these existing facilities in conjunction with the construction of the SCL. These facilities are grouped as RRIW under the SCL project. A preliminary list of RRIW is at Enclosure 2, which is subject to changes along with the progress of design and planning of the SCL.

10. We need to provide a package of EPIW to facilitate the operation of the SCL. A preliminary list of EPIW is at Enclosure 3, which is subject to changes along with the progress of design and planning of the SCL.

11. Under the concession approach, the Government will be responsible for providing, at its cost, the necessary railway infrastructure of the SCL. Upon

completion of the SCL, the MTR Corporation Limited (MTRCL) will be granted a service concession for the right to operate the railway and pay the Government/Kowloon-Canton Railway Corporation (KCRC) service concession payments. Hence, the SCL will be implemented as a Public Works Project with funding for the design and construction of the railway to be arranged by the Government.

12. The current proposed works cover the design of the railway scheme, the RRIW and EPIW, including all civil, architectural, electrical and mechanical, signalling and control works, and the associated modifications required at the existing railway lines. We will also carry out impact assessments on the environment, traffic, marine and other related aspects, in order to identify the impacts and the mitigation measures required, including those related to heritage preservation. We shall entrust the proposed works with the MTRCL.

13. Under the principles agreed between Government and the MTRCL to be applied to such entrustments, the entrustor (Government in this case of SCL project) will pay the actual costs based on prices established from verifiable procurement processes. Services to be provided by trustee (the MTRCL in this case of SCL project) for management and supervision will be covered by an on-cost. The on-cost for the design work under **6051TR** as shown in item (d) of para. 15 is a provisional figure. This sum will be off-set in the final on-cost payable to the MTRCL for the design and construction of the whole SCL project which will be based on the actual expenditure of the design and construction works undertaken.

14. We will employ independent consultants during the detailed design stage to establish checking and control procedure on the capital cost estimate of the project, including the on-cost.

## **FINANCIAL IMPLICATIONS**

15. We estimate the cost of the design and site investigation for the SCL to be \$2,407.6 million in MOD prices (see paragraph 16 below), made up as follows –

**\$ million**

(a)	Consultants' fees for design for railway works, RRIW and EPIW, and impact assessments	1,532.6	
(b)	Site investigation	52.9	
(c)	Design for railway systems and specialist items	447.7	
(d)	On-cost payable to the MTRCL for project planning and management, overheads and management expenses of the MTRCL	335.5	
	Sub-total	2,368.7	(in September 2007 prices)
(e)	Provision for price adjustment	38.9	
	Total	2,407.6	(in MOD prices)

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

Year	\$ million (Sep 2007)	Price adjustment factor	\$ million (MOD)
2008 – 2009	812.5	1.00750	818.6
2009 – 2010	1,135.7	1.01758	1,155.7
2010 – 2011	304.5	1.02775	312.9
2011 – 2012	116.0	1.03803	120.4
	2,368.7		2,407.6

17. We have derived the MOD estimates on the basis of the Government's latest forecast of the trend rate of change in the prices of public sector building and construction output for period from 2008 to 2012.



18. The proposed design and site investigation works for the SCL will not give rise to any annual recurrent expenditure.

## **PUBLIC CONSULTATION**

19. We have been in dialogue with the Legislative Council, various District Councils such as Wong Tai Sin, Kowloon City, Sha Tin, Central and Western, Wan Chai, Northern, Eastern, and Yau Tsim Mong, and the concerned local communities on the SCL and related issues. Further consultation with the concerned statutory and consultative bodies, the local communities and other relevant parties including affected public transport trades/operators will continue.

20. We consulted the Subcommittee of Matters relating to Railways of the Legislative Council Panel on Transport on 27 March 2008. Members did not raise any objection to the proposed design and investigation work for SCL. [To be confirmed]

## **ENVIRONMENTAL IMPLICATIONS**

21. The SCL project is a designated project under Schedule 2 of the Environmental Impact Assessment (EIA) Ordinance (Cap. 499) and an environmental permit is required for the construction and operation of the project. The MTRCL will submit the EIA report to the Director of Environmental Protection for approval under the EIA Ordinance, including making the EIA report available for comments by the public and the Advisory Council on the Environment.

22. The proposed design and site investigation works will only generate very little construction waste. We will require the MTRCL to fully consider measures to minimise the generation of construction waste and to reuse/recycle construction waste as much as possible in the future implementation of the SCL project.

## **HERITAGE IMPLICATIONS**

23. The proposed design and investigation work will not affect any heritage site, i.e. all declared monuments, proposed monuments, graded historic

sites/buildings, sites of archaeological interests and Government historic sites identified by the Antiquities and Monuments Office.

## **LAND ACQUISITION**

24. The proposed design and site investigation works do not require any land acquisition.

## **BACKGROUND INFORMATION**

25. The SCL is one of the railway projects recommended for implementation in Railway Development Strategy 2000. As the SCL is not a natural extension of any of the existing railway networks, the KCRC and MTRCL were invited to submit proposals in 2001. In June 2002, the Chief Executive in Council ordered that the KCRC should be awarded with the SCL project based on its Conforming Proposal.

26. In December 2002, the MTRCL offered to extend its Kwun Tong Line to Ho Man Tin and Whampoa with a view to replacing the KCRC's proposed Whampoa Automated People Mover.

27. In September 2003, the KCRC submitted a preferred SCL scheme to Government. The preferred SCL scheme would make use of the East Rail Line crossing the harbour to form the Fourth Rail Harbour Crossing. Moreover, it would comprise an Automated People Mover system at Tsz Wan Shan for replacing the previously proposed Tsz Wan Shan Station, a new Causeway Bay North Station, and Ma Tau Kok Station for replacing the To Kwa Wan Station and Ma Tau Wai Station in the Conforming Proposal.

28. In November 2003, having considered the MTRCL's proposal on Kwun Tong Line Extension, Government invited the MTRCL to further review the Kwun Tong Line Extension scheme to improve its performance. In February 2004, the MTRCL submitted a revised Kwun Tong Line Extension proposal to Government.

29. On 24 February 2004, the Executive Council gave approval for inviting the KCRC and the MTRCL to commence negotiation on a possible rail merger on the basis of a set of parameters including the early resolution of interchange arrangement for new rail projects under planning, notably the SCL.

The MTRCL and KCRC completed their discussion and reported the outcome of their discussion to Government in September 2004, which includes an SCL scheme to be implemented under the rail merger scenario.

30. Based on the SCL preferred scheme and with some further refinements, the KCRC, on 21 September 2004, submitted a draft Final Proposal on the KCRC SCL scheme to Government. The MTRCL and KCRC also submitted a Technical and Financial Report on the SCL Scheme under rail merger scenario and the Kwun Tong Line Extension to Government in July 2005.

31. On 11 April 2006, the Chief Executive in Council agreed that the proposed Memorandum of Understanding for the proposed rail merger could be executed and the consultation with LegCo should proceed. The relevant legislative process for the rail merger has been completed on 11 July 2007. The implementation of the rail merger commenced on 2 December 2007.

32. On 11 March 2008, the Executive Council agreed that the MTRCL should be asked to proceed with the further planning and design of the SCL based on the scheme jointly developed by the then MTRCL and KCRC previously.

33. We upgrade **6051TR** to Category B in March 2008 [to be confirmed after seeking approval of in-year bid].

34. The proposed project will not involve any tree removal or planting proposals.

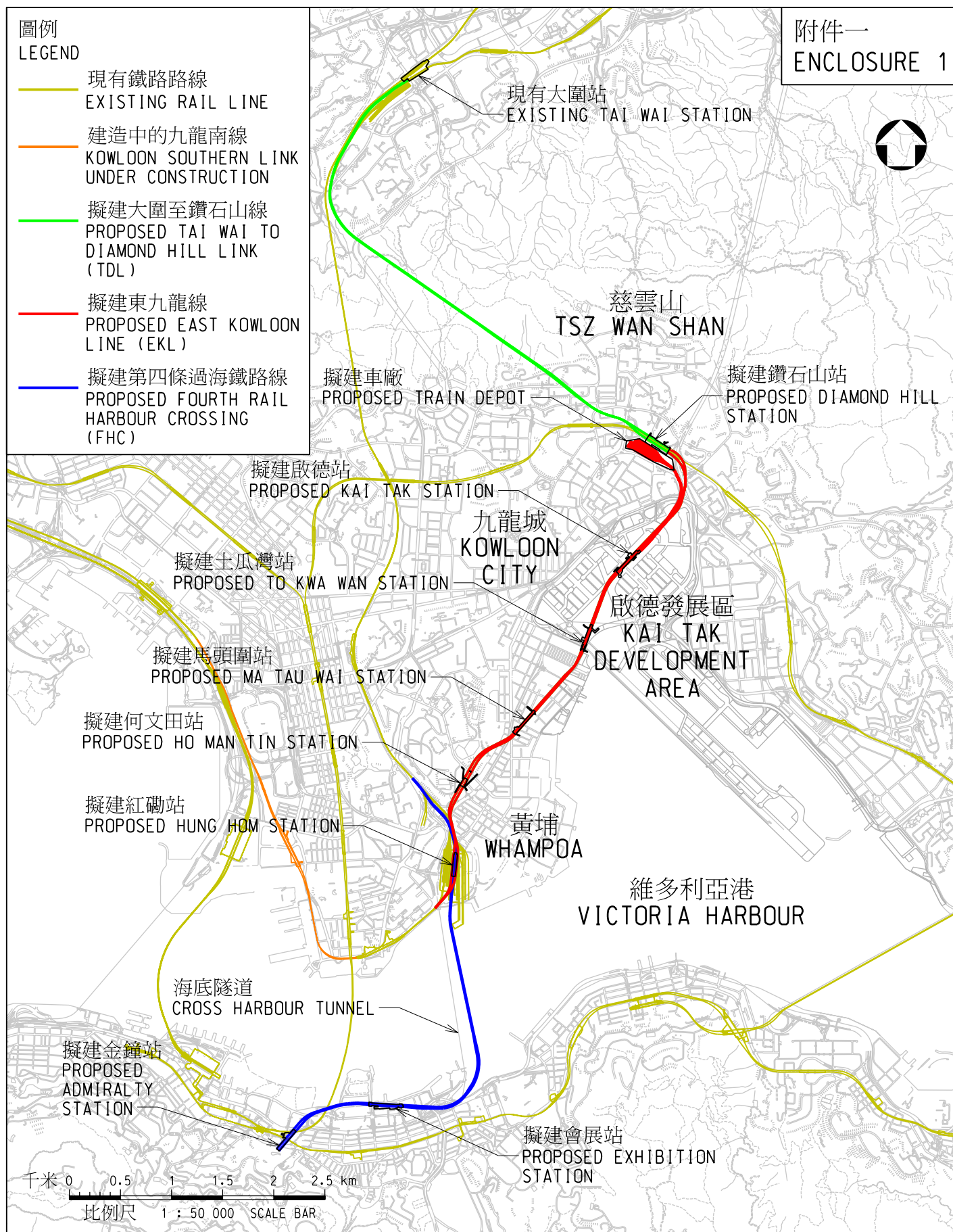
35. We estimate that the works in paragraph 3 will create about 890 jobs (180 for labourers and another 710 for professional/technical staff) providing a total employment of about 16 000 man-months.

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Transport and Housing Bureau  
May 2008

圖例  
LEGEND

- 現有鐵路路線  
EXISTING RAIL LINE
- 建造中的九龍南線  
KOWLOON SOUTHERN LINK  
UNDER CONSTRUCTION
- 擬建大圍至鑽石山線  
PROPOSED TAI WAI TO  
DIAMOND HILL LINK  
(TDL)
- 擬建東九龍線  
PROPOSED EAST KOWLOON  
LINE (EKL)
- 擬建第四條過海鐵路線  
PROPOSED FOURTH RAIL  
HARBOUR CROSSING  
(FHC)

附件一  
ENCLOSURE 1



圖則名稱 drawing title

工務計劃項目第XXX號  
沙田至中環線 - 設計及地盤勘測  
PWP ITEM NO. XXX  
SHATIN TO CENTRAL LINK -  
DESIGN AND SITE INVESTIGATION

圖號 drawing no.

HRWSCL003-SK0136

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鐵路拓展處 RAILWAY DEVELOPMENT OFFICE



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**6051TR – Shatin to Central Link – Design and Site Investigation**

**The preliminary list of the Reprovisioning, Remedial and Improvement Works (RRIW)**

1. NT South Animal Management Centre and Shatin Plant Quarantine Centre;
2. EMSD workshops near Sung Wong Toi Road, To Kwa Wan;
3. International Mail Centre;
4. Police Officers' Club;
5. Wan Chai Sports Ground;
6. Harbour Road Sports Centre;
7. Wanchai Swimming Pool;
8. Wan Chai North Public Transport Interchange; and
9. Miscellaneous LCSD facilities as listed below -
  - (i) Football field inside Hin Tin Playground;
  - (ii) Ma Tau Wai Road / To Kwa Wan Road Garden;
  - (iii) Garden at Yan Fung Street;
  - (iv) Rest Garden at Chatham Road North;
  - (v) Rest Garden at Winslow Street;
  - (vi) Tung Lo Wan Garden;
  - (vii) Tunnel Approach Rest Garden;
  - (viii) Harbour Road Garden;
  - (ix) Playground at junction of Fenwick Pier Street and Convention Avenue; and
  - (x) Harcourt Garden.

**6051TR – Shatin to Central Link – design and site investigation**

**Preliminary list of the essential public infrastructure works (EPIW)**

1. Provision of a temporary public transport interchange (PTI) at Diamond Hill Comprehensive Development Area Site;
2. Walkway system enhancements at Tsz Wan Shan and Diamond Hill Station Entrance extension;
3. Provision of a PTI and a EMSD workshop site near To Kwa Wan Station;
4. Construction of a new subway crossing Kowloon City Road and Ma Tau Wai Road;
5. Filling up the disused Air Raid precaution tunnels;
6. Provision of lay-bys at Shun Yung Street;
7. Provision of a temporary PTI at Phase 1 of the Ex-Valley Road estate site;
8. Construction of a new subway across Chatham Road North;
9. Improvement to the existing PTI at Hung Hom Station Podium;
10. Upgrading Cheong Wan Road vehicular parapets;
11. Road junction modification near Exhibition Station; and
12. Re-configuration of Rodney Street junction.