

## **Legislative Council Panel on Transport**

### **185TB – Lift and Pedestrian Walkway System between Tai Wo Hau Road and Wo Tong Tsui Street, Kwai Chung**

#### **PURPOSE**

This paper seeks Members' views on the funding proposal for upgrading **185TB** "Lift and Pedestrian Walkway System between Tai Wo Hau Road and Wo Tong Tsui Street, Kwai Chung" (the Project) to Category A.

#### **PROJECT SCOPE AND NATURE**

2. The proposed scope of works under the Project includes –
  - (a) construction of a covered inclined lift system of about 40 metres in length with 2 inclined lifts connecting Tai Wo Hau Road and Wo Tong Tsui Street; and
  - (b) ancillary works including associated geotechnical, road, drainage, utilities, landscaping, public lighting, and electrical and mechanical (E&M) works, etc.
3. A layout plan and artist's impression of the Project are at **Enclosure 1**.
4. Subject to funding approval of the Finance Committee (FC) within this legislative session, the Highways Department (HyD) plans to commence the construction of advance works for underground utilities diversion in the first quarter of 2018 and the main works in the second quarter of 2018 for completion in 2021.

#### **JUSTIFICATIONS**

5. At present, residents in the vicinity of Tai Wo Hau Road and Wo Tong Tsui Street mainly rely on a staircase of about 120 steps for travelling between Tai Wo Hau Road (near Kwai Chung Estate) and Wo Tong Tsui Street (near Kwong Fai Circuit).

6. There are many residential buildings, schools as well as care and attention homes for the elderly in the vicinity of Tai Wo Hau Road and Wo Tong Tsui Street. The area currently has a population of about 40 000 residents (including about 4 000 elderly). We plan to implement the Project for the convenience of the public (in particular the elderly and the disabled) for travelling between Tai Wo Hau Road and Wo Tong Tsui Street, and to promote walking as an alternative to other means of transport.

7. A lift system with two inclined lifts will be constructed under the Project so as to provide a comfortable, convenient, safe, environmentally friendly and barrier-free pedestrian facility to the locals, facilitating the elderly and those in need to travel between Tai Wo Hau Road and Wo Tong Tsui Street. We expect that the usage rate of the proposed lift system will be about 8 600 pedestrian trips per day.

## **FINANCIAL IMPLICATIONS**

8. We estimate the capital cost of the Project to be \$249.4 million in money-of-the-day (MOD) prices.

## **PUBLIC CONSULTATION**

9. The Government established in 2009 a set of objective and transparent scoring criteria for assessing proposals for hillside escalator links and elevator systems (hereinafter referred to as "hillside escalator links") to determine the priority for conducting preliminary technical feasibility studies for the 20 proposals received at that time. In this regard, the Government consulted the Legislative Council (LegCo) Panel on Transport in May 2009. Upon completion of the assessment, the results were reported to the Panel on Transport in February 2010. Two proposals were screened out initially, and 18 others were ranked. The Government indicated at the time that preliminary technical feasibility studies for the proposals ranked top ten in the assessment would be conducted by batches, and that the remaining proposals would be followed up after the smooth implementation of the top ten proposals. Later on, after reviewing the manpower resources, the HyD completed the preliminary technical feasibility studies for the proposals ranked 11th and 12th. The Project is ranked 11th. The current progress of the above-mentioned 18 hillside escalator links proposals is at **Enclosure 2**.

10. The HyD consulted the Traffic and Transport Committee of the Kwai Tsing District Council on the Project on 1 September 2016. The Committee expressed its support for the implementation of the Project and looked forward to the early start of the construction.

11. We gazetted the Project under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) (the Ordinance) on 2 and 9 December 2016. No objection was received during the statutory period. The Project was subsequently authorised under the Ordinance.

12. The HyD has consulted the Advisory Committee on the Appearance of Bridges and Associated Structures (ACABAS)<sup>1</sup> on the aesthetic design of the lift system of the Project. The Committee accepted the proposed aesthetic design.

## **ENVIRONMENTAL IMPLICATIONS**

13. The Project is not a designated project under Schedule 2 of the Environmental Impact Assessment Ordinance (Cap. 499). It will not cause long-term environmental impact. The HyD will control construction noise, dust and site run-off nuisances to levels within established standards and guidelines through the implementation of mitigation measures as required. The required expenses of implementing the environmental mitigation measures have been included in the project estimates.

14. At the planning and design stages, the HyD has considered optimizing the alignment of the Project, reducing the size of the foundations of the structures and adjusting the method of construction to reduce the generation of construction waste as far as possible. In addition, the HyD will require the contractor to reuse inert construction waste (e.g. excavated materials for backfilling) 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>2</sup>. The HyD will also require the contractor to maximise the use of recycled or recyclable inert construction waste, as well as encourage the use of non-timber formwork to further minimise the generation of construction waste.

15. At the construction stage, the HyD will require the contractor to submit for the Government's approval a plan setting out the waste management measures, which will include appropriate mitigation measures to avoid, reduce,

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<sup>1</sup> ACABAS, comprising representatives of the Hong Kong Institute of Architects, the Hong Kong Institution of Engineers, the Hong Kong Institute of Planners, the Architectural Services Department, the Highways Department, the Housing Department, the Civil Engineering and Development Department, and an academic institution to be invited by the Chairman of ACABAS (such as an architectural faculty from a local institution), is responsible for vetting the design of bridges and other structures associated with the highway system, including noise barriers and enclosures, from the aesthetic and visual impact points of view.

<sup>2</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.

reuse and recycle inert construction waste. The HyD will ensure that the day-to-day operations on site comply with the approved plan. The HyD will require the contractor to separate inert construction waste from non-inert construction waste on site to facilitate their transportation to appropriate facilities for disposal. The HyD will control the disposal of inert construction waste and non-inert construction waste at public fill reception facilities and landfills respectively for disposal through a trip-ticket system.

16. The HyD estimates that the Project will generate in total 12 540 tonnes of construction waste. Of these, we will reuse 1 900 tonnes (15.2%) of inert construction waste on site and deliver 10 200 tonnes (81.3%) of inert construction waste to public fill reception facilities for subsequent reuse. In addition, we will dispose of the remaining 440 tonnes (3.5%) 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 about \$810,000 for the Project (the amount is based on a unit cost of \$71 per tonne for disposal at public fill reception facilities and \$200 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N)).

## **HERITAGE IMPLICATIONS**

17. 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.

## **TREE IMPLICATIONS**

18. In order to make way for the proposed facilities and strengthen the slopes nearby, the Project will require removal of about 62 trees. According to established guidelines, tree preservation and removal proposal will be submitted to the Lands Department for approval. All trees to be removed are not important trees<sup>3</sup>. The HyD will incorporate planting proposals into the Project, including the compensatory planting of about 62 new trees.

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<sup>3</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 –

- (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 important persons or events;
- (c) trees of precious or rare species;
- (d) trees of outstanding forms (taking account of overall tree sizes, shapes and any special features) e.g. trees with curtain like aerial roots, trees growing in unusual habitats; or
- (e) trees with trunk diameter equal or exceeding 1.0 m (measured at 1.3 m above ground level), or with height/canopy spread equal or exceeding 25 m.

## LAND ACQUISITION

19. The Project does not require land resumption.

## TRAFFIC IMPLICATIONS

20. The HyD has conducted traffic impact assessment for the Project, covering the traffic impact during construction period. According to the assessment findings, with the implementation of appropriate temporary traffic arrangements (TTA), the Project during its construction stage will not cause significant impact on the local traffic network in the area concerned. To facilitate the related construction works, the HyD will implement TTA and set up a traffic management liaison group to assess the effectiveness of the TTA. This group comprises representatives from the contractor, the Police Force, the Transport Department and other concerned government departments. The HyD will specify requirements for implementing the TTA into the works contracts to minimise the traffic impacts during construction. The HyD will also display publicity boards on site, giving details of the TTA and the anticipated completion dates of individual sections of works. In addition, the HyD will set up a telephone hotline for public enquiries or complaints.

## EMPLOYMENT OPPORTUNITIES

21. We estimate that the Project will create 80 jobs (15 for professional/technical staff and 65 for labourers), providing a total employment of 2 600 man-months.

## BACKGROUND

22. We upgraded the Project to Category B in September 2014. We engaged an engineering consultant to undertake the preliminary design, investigation and ground investigation works in August 2015. The total cost of the above consultancy service and investigation works is about \$2.2 million, funded by block allocation **Subhead 6100TX** "Highway works, studies and investigations for items in Category D of the Public Works Programme". These consultancy service and investigation works have been completed.

23. In order to expedite the progress of the Project, we will engage an engineering consultant in mid-2017 to undertake the detailed design at the same time. The estimated cost for the detail design services in the said consultancy is about \$4.9 million, and will be funded by **Subhead 6100TX** "Highway works, studies and investigations for items in Category D of the Public Works Programme".

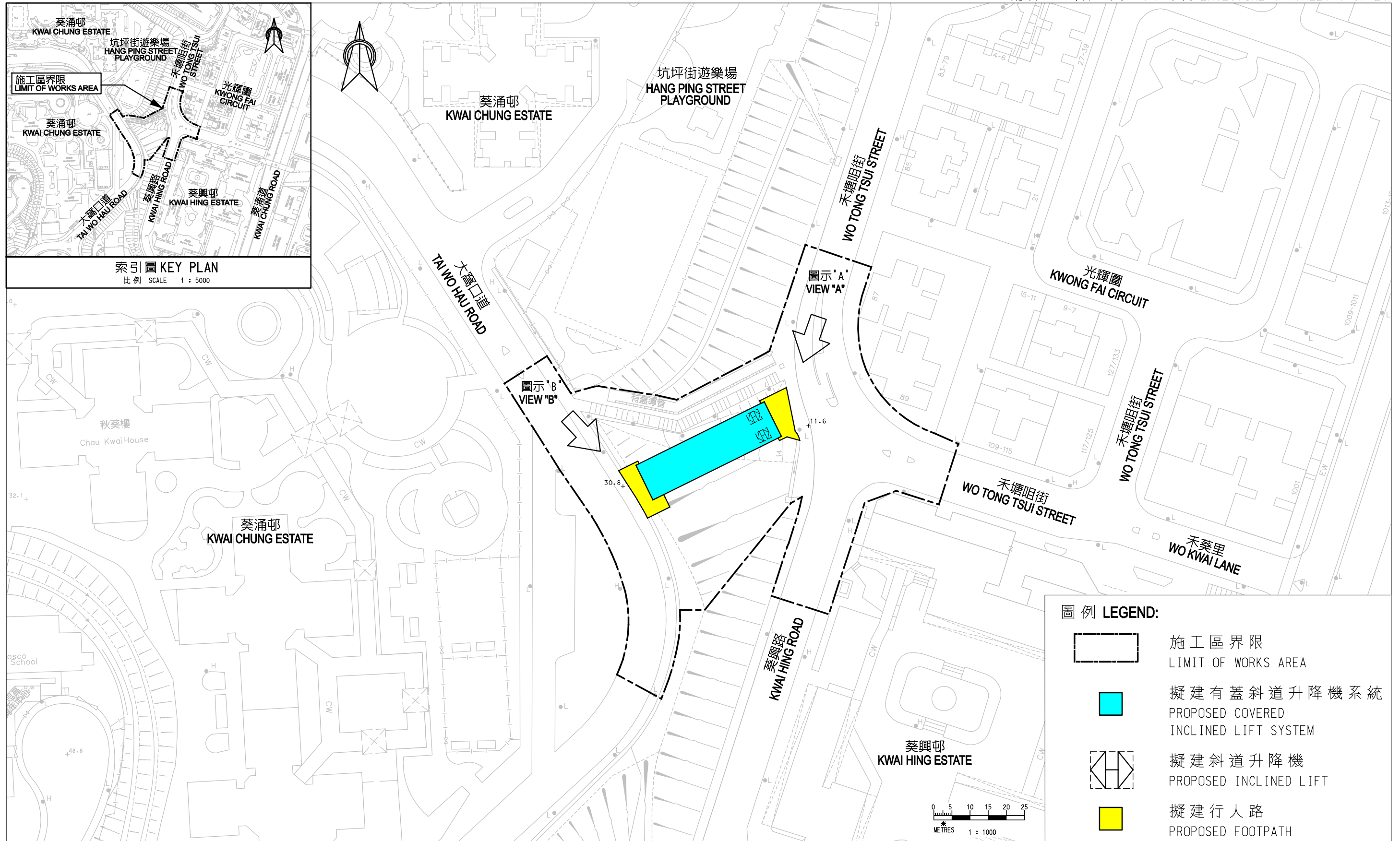
## **WAY FORWARD**

24. We plan to submit the proposal for upgrading the project of **185TB** as mentioned in paragraph 2 above to Category A to the Public Works Subcommittee to seek its support, and to seek funding approval from the FC.

## **ADVICE SOUGHT**

25. Members are invited to note the content of this paper and provide comments.

**Transport and Housing Bureau  
Highways Department  
April 2017**



圖則名稱 DRAWING TITLE

工務計劃項目第185TB號  
葵涌大窩口道至禾塘咀街升降機及行人通道系統  
- 平面圖

PWP ITEM NO. 185TB  
LIFT AND PEDESTRIAN WALKWAY SYSTEM BETWEEN TAI WO HAU ROAD AND WO TONG TSUI STREET, KWAI CHUNG  
- LAYOUT PLAN

圖號 DRAWING NO.  
CE75/TPP/WTTS/001

比例 SCALE  
1:1000  
or AS SHOWN

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圖示 "A"  
VIEW "A"



圖示 "B"  
VIEW "B"

圖則名稱 DRAWING TITLE

工務計劃項目第185TB號  
葵涌大窩口道至禾塘咀街升降機及行人通道系統  
- 擬建升降機系統構思圖

PWP ITEM NO. 185TB  
LIFT AND PEDESTRIAN WALKWAY SYSTEM BETWEEN TAI WO HAU ROAD AND WO TONG TSUI STREET, KWAI CHUNG  
- ARTIST'S IMPRESSION OF PROPOSED LIFT SYSTEM

圖號 DRAWING NO.  
CE75/TPP/WTTS/002

比例 SCALE  
不適用  
N/A

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**Current progress of the proposals of the hillside escalator links**

Rank	Proposal	Progress of Project
1	Pedestrian Link at Tsz Wan Shan	The pedestrian link is implemented under the Shatin to Central Link project. The construction works commenced in July 2012. As at end March 2017, 12 out of the 15 facilities under this pedestrian link have already been completed and opened for public use, while one facility is expected to be completed in the second quarter of 2017. Regarding the two remaining facilities, the target completion date is the third quarter of 2017.
2	Braemar Hill Pedestrian Link	<p>The preliminary technical feasibility study has been completed. The HyD has engaged consultants to carry out the investigation and preliminary design.</p> <p>The HyD consulted and obtained the support from the Planning, Works and Housing Committee of the Eastern District Council on the design scheme in September 2016. The HyD is currently making preparation for the gazetting of the works.</p>
3	Lift and Pedestrian Walkway System at Cheung Hang Estate, Tsing Yi	The Government obtained funding approval from the LegCo in May 2016. The construction works commenced in February 2017 and are expected to be completed in mid-2019.
4	Escalator Link and Pedestrian Walkway System at Pound Lane	<p>The preliminary technical feasibility study has been completed. The HyD has engaged consultants to carry out the investigation and preliminary design.</p> <p>In 2015, the HyD consulted the Central and Western District Council (C&amp;WDC) and held a public forum on the refined proposal. The HyD is currently collating and analysing the comments received with a view to briefing the C&amp;WDC on the progress of the proposal in the first half of 2017.</p>
5	Lift and Pedestrian Walkway System between Kwai Shing Circuit and Hing Shing Road	The Government obtained funding approval from the LegCo in May 2016. The invitation to tender for this proposal ended in February 2017. The HyD is assessing the relevant tenders with a view to commencing the construction works in the second quarter of 2017 for completion in 2020.
6	Lift and Pedestrian Walkway System between Castle Peak Road and Kung Yip Street	<p>The preliminary technical feasibility study has been completed. The HyD has engaged consultants to carry out the investigation and preliminary design.</p> <p>The HyD consulted and obtained the support from the Traffic and Transport Committee of the Kwai Tsing District Council on the design scheme in April 2016. The HyD is currently making preparation for the gazetting of the works.</p>

Rank	Proposal	Progress of Project
7	Lift and Pedestrian Walkway System between Lai Cho Road and Wah Yiu Road	The preliminary technical feasibility study has been completed. The HyD has engaged consultants to carry out the investigation and preliminary design.
8	Pedestrian Link near Chuk Yuen North Estate	<p>The preliminary technical feasibility study has been completed. The HyD has engaged consultants to carry out the investigation and preliminary design.</p> <p>The HyD consulted and obtained the support from the Traffic and Transport Committee of the Wong Tai Sin District Council on the preliminary design in July 2016. The HyD is currently making preparation for the gazetting of the works.</p>
9	Lift and Pedestrian Walkway System at Waterloo Hill	The Government obtained funding approval from the LegCo in May 2016. The construction works commenced in December 2016 and are expected to be completed in mid-2019.
10	Lift and Pedestrian Walkway System between Lai King Hill Road and Lai Cho Road	It is revealed in the preliminary technical feasibility study that the project involves two dangerous private slopes. The HyD will revisit this proposal after the parties concerned have completed repairing the dangerous slopes.
11	Lift and Pedestrian Walkway System between Tai Wo Hau Road and Wo Tong Tsui Street	<p>The preliminary technical feasibility study has been completed. The HyD has engaged consultants to carry out the investigation and preliminary design, and such works have been completed.</p> <p>The HyD consulted and obtained the support from the Traffic and Transport Committee of the Kwai Tsing District Council on the preliminary design in September 2016.</p> <p>The Government published the notice of authorization to execute the works under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) in February 2017.</p> <p>The Government plans to seek funding approval from the LegCo within this legislative session to take forward the construction works for the proposal.</p>
12	Lift and Pedestrian Walkway at Luen On Street	<p>The preliminary technical feasibility study has been completed. The HyD has engaged consultants to carry out the investigation and preliminary design.</p> <p>The consultants are studying the alignment and preliminary design scheme for reducing land acquisition and minimising environmental impacts.</p>

<b>Rank</b>	<b>Proposal</b>	<b>Progress of Project</b>
13	Yuet Wah Street Pedestrian Linkage	To complement the Kwun Tong Town Centre Redevelopment, the Civil Engineering and Development Department commenced construction for this project in April 2013. The Linkage has been completed and opened for public use since October 2015.
14 (same ranking )	Escalator Link System between Hong Sing Garden and Po Hong Road	This proposal will be followed up after the smooth implementation of the higher-ranking proposals.
14 (same ranking )	Lift and Pedestrian Walkway System between Lai King Hill Road and Princess Margaret Hospital	The Hospital Authority commenced works in November 2015. The works have been completed and the facility has been opened for public use since January 2017.
16	Lift and Pedestrian Walkway System between Saddle Ridge Garden and Sai Sha Road	This proposal will be followed up after the smooth implementation of the higher-ranking proposals.
17	Lift and Pedestrian Walkway System between Hing Shing Road and Tai Wo Hau Road	This proposal will be followed up after the smooth implementation of the higher-ranking proposals.
18	Escalator Link System between Sha Tin Sui Wo Court and MTR Fo Tan Station	This proposal will be followed up after the smooth implementation of the higher-ranking proposals.