

**For discussion  
on 14 December 2018**

**Legislative Council Panel on Transport**

**Review of Assessment Mechanism for  
Hillside Escalator Links and Elevator Systems Proposals**

**PURPOSE**

This paper informs and consults Members on the proposed revisions to the assessment mechanism for hillside escalator links and elevator systems (HEL) proposals.

**EXISTING ASSESSMENT MECHANISM FOR HEL PROPOSALS AND  
IMPLEMENTATION PROGRESS**

2. For the purpose of establishing an assessment mechanism for HEL proposals, the Transport Department (TD) commissioned a consultancy study in May 2008. We then consulted the Legislative Council (LC) Panel on Transport on the proposed assessment mechanism in May 2009 and reported the assessment results to the Panel in February 2010 (the relevant LC papers are at **Annex I** and **Annex II**).

3. The assessment mechanism established in 2009 comprises two stages, namely Initial Screening and Detailed Scoring. HEL proposals have to first pass the Initial Screening for Detailed Scoring based on their circumstantial factors, beneficial factors and implementation factors, which were evaluated in an integrated manner.

4. Among the 20 HEL proposals assessed at that time, 2 were screened out in the Initial Screening stage<sup>1</sup>. The latest progress of the remaining 18 proposals is as follows –

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<sup>1</sup> Two proposals were screened out: one due to existence of a similar HEL facility located in close proximity and the other one due to level difference of less than 6m.

- (a) 3 proposals have been completed and opened for public use;
- (b) 4 proposals are under construction;
- (c) 1 proposal with funding approval obtained in June 2018 is planned to commence construction in the first quarter of 2019;
- (d) 5 proposals are at various stages of planning, investigation and design;
- (e) 3 proposals with their preliminary technical feasibility studies just completed;
- (f) 1 proposal is in the preliminary technical feasibility study stage; and
- (g) 1 proposal is having its scope determined for subsequent preliminary technical feasibility study.

5. Walking is one of the key elements in making Hong Kong a sustainable city. The Government announced in the Policy Address released in January 2017 that we would promote “Walk in HK”. Under the initiative, the Government consolidates past efforts in fostering a “pedestrian-friendly” environment, and enhances walkability in Hong Kong under a coordinated and holistic strategy with a view to encouraging people to walk more and rely less on motorised transport. The Government also announced in the same Policy Address that the Government would continue to implement the abovementioned ranked HEL projects and conduct a study to review and improve the assessment mechanism established in 2009, as well as on this basis, carry out screening, shortlisting and prioritization of the proposals received in the past few years. By when preparation for commissioning the consultancy study commenced, we received a total of 114 HEL proposals. The said consultancy study commenced in December 2017 and will take around 30 months to complete.

## **REVIEW OF THE ASSESSMENT MECHANISM FOR HEL PROPOSALS**

6. Making reference to the past experience in implementing HEL projects, the consultant engaged by TD reviewed the assessment mechanism established in 2009 and proposed to improve its assessment criteria and prioritisation method.

7. Firstly, if a proposal solely involves crossing a single road or connecting to a single footbridge, it will be evaluated under the criteria for footbridge construction<sup>2</sup>; and if a proposal forms an integral part of another public works project, it will be considered under that respective project. Furthermore, the proposed revised assessment mechanism will not be applicable to proposals entirely falling within the boundary of hospitals or Public Rental Housing estates. Such proposals will be passed to the Hospital Authority or the Housing Department for consideration. The proposed assessment mechanism is also not applicable to proposals entirely falling within or solely connecting to private development/land to ensure proper use of public funds.

8. Apart from the proposals mentioned in paragraph 7 above that will be considered or handled separately, the revised assessment mechanism will still assess HEL proposals in two stages: (I) Initial Screening and (II) Detailed Scoring. The details of the proposed revised assessment mechanism are as follows:

(I) Initial Screening

9. We propose to retain Initial Screening in the revised assessment mechanism in order to screen out proposals which are obviously infeasible or unjustified for implementation. Different from the 2009 assessment mechanism, we suggest conducting more comprehensive preliminary technical assessments in the Initial Screening Stage to better ascertain the feasibility of proposals. After conducting preliminary technical assessments and drawing up preliminary alignments, HEL proposals with any of the following conditions will be screened out –

- (a) inadequate land / infeasible land resumption (e.g. there is / are existing building(s) on the concerned land area) for construction of the proposed HEL;
- (b) similar facility / facilities is / are already provided or committed within 300m of the proposed HEL;
- (c) insurmountable technical difficulties in the construction or operation of the proposed HEL;

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<sup>2</sup> The footbridge related proposals will be assessed according to the relevant criteria stipulated in the Transport Planning and Design Manual published by the TD, including the anticipated pedestrian utilization, traffic speed, road safety, availability of alternative crossing facilities, etc.

- (d) level difference to overcome is less than 6m;
- (e) the proposed HEL will affect heritage site(s)<sup>3, 4</sup> or important tree(s)<sup>5</sup>; or
- (f) gradient to overcome is less than 1:8.

10. The abovementioned criteria (e) and (f) are new. Criterion (e) aims to ensure that heritage site(s) and valuable tree(s) will not be affected whilst criterion (f) aims to ensure that the proposals can enhance accessibility of hilly areas. Footpaths with gradient less than 1:8 are common over the territory. They can generally be coped with and are accepted by pedestrians whilst walking on footpaths with gradient steeper than 1:8 may start to be taxing, and thus have a need for HEL.

## (II) Detailed Scoring

11. HEL proposals which pass the Initial Screening will be scored from the “Social Benefits” and “Cost-effectiveness” aspects such that we may accord priority to HEL proposals with higher scores in both the “Social Benefits” and “Cost-effectiveness” aspects.

12. In the assessment mechanism established in 2009, the Detailed Scoring evaluate the circumstantial, beneficial and implementation factors of the HEL proposals in an integrated manner, and “Cost-effectiveness” is only one of the criteria under the implementation factor which importance might be off-set by other criteria. The proposed revised assessment mechanism will appraise

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<sup>3</sup> That is, there is no heritage sites within the proposed works area (please refer to footnote 4 on the definition of heritage sites)

<sup>4</sup> Heritage sites cover declared monuments and proposed monuments, graded historic sites or buildings according to the Antiquities and Monuments Ordinance (Cap. 53), sites of archaeological interest and government historic sites identified by the Antiques and Monuments Office.

<sup>5</sup> “Important trees” refer to trees in the Register of Old and Valuable Trees, or any other tree that meets 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 person or event;
- (c) trees of precious or rare species;
- (d) trees of outstanding forms (taking account of the 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 of or exceeding 1.0m (measured at 1.3m above ground level), or with height/canopy spread of or exceeding 25m.

“Social Benefits” and “Cost-effectiveness” independently, and thereby ascertain that the proposal not only has evident benefits to and recognition from the local residents but is at the same time, cost effective.

13. In terms of “Social Benefits”, we seek to prioritise proposals which can serve the most residents and provide a more convenient walking route to the public. We will therefore assess the “Social Benefits” of HEL proposals along three factors: (i) Number of beneficiaries and target, (ii) Implementation Readiness, and (iii) Convenience. As for “Cost-effectiveness”, we will compare the HEL proposals based on their estimated project cost per user (i.e. the estimated project cost divided by the estimated number of users).

14. The assessment criteria for Detailed Scoring include:

(a) Social Benefits

(i) Number of beneficiaries and target (total score: 60) – with consideration to the following criteria –

- Expected pedestrian flow of the proposed HEL (score: 40);
- Population of 65 year-old or above and whether there is any hospital / rehabilitation centre / nursing home in the beneficial catchment<sup>6</sup> (score: 20);

(ii) Implementation Readiness (total score: 30) – with consideration to the following criteria

- Whether land resumption / creation of easement in accordance to the Road (Works, Use and Compensation) Ordinance (Chapter 370) is required (score: 10);
- Environmental impact of the proposed HEL (score: 10); and
- Visual impact of the proposed HEL and its distance between adjacent buildings (score: 10);

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<sup>6</sup> Beneficial catchment is defined as the area within a radius of 300m from entrance/exit points of the proposed HEL.

(iii) Convenience (total score: 10) – with consideration to the following criteria

- Level difference of the proposed serving area to be overcome by the proposed HEL (score: 3);
- Anticipated journey saving time (score: 3); and
- Whether the proposed HEL connects with existing major public transport facilities or those that are to be implemented (score: 4); and

(b) Cost-effectiveness<sup>7</sup> – estimated project cost per user (i.e. the estimated project cost (including construction cost and recurrent cost) divided by the estimated number of users).

15. Taking account of the experience in implementing HEL projects, we have reviewed the 2009 assessment mechanism and propose to suitably re-adjust the weightings of and improve the assessment criteria in the “Social Benefits” aspect. For example:

- a major consideration of the assessment mechanism established in 2009 is the pedestrian flow of the walkway(s) back then, whereas the proposed revised assessment mechanism adopts the expected pedestrian flow of the HEL proposal one of its assessment criteria. By predicting the change in commuting habits and routing of the public after the commissioning of the proposed HEL, the usage of the HEL proposal can be more accurately reflected;
- making reference to the experience in taking forward HEL projects, the preliminary technical assessments will more thoroughly consider the impact of the HEL proposal to its surrounding environment and sites or buildings of historic or archaeological significance so as to evaluate whether an environmental impact assessment (“EIA”) is required for implementing the HEL proposal in accordance to the Environmental

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<sup>7</sup> “Cost-effectiveness” of a HEL proposal is measured by dividing the estimated project cost (including capital cost and recurrent cost) by the number of users. A lower estimated project cost per user indicates that the proposal is more cost-effective. Hence, it will have a higher score. A HEL is expected to undergo major maintenance every 20 years and thus the operating cost is calculated based on a 20-year life cycle.

Impact Assessment Ordinance (Cap. 499)<sup>8</sup> or a Heritage Impact Assessment<sup>9</sup> according to the relevant technical circular promulgated by the Development Bureau. Proposals not requiring such assessment(s) can be implemented more quickly and thus will get a higher score under “Implementation Readiness”. In addition, in the scoring process, we will consider the visual impact of the HEL proposal to the residents nearby as well as its distance with the adjacent buildings so as to better address the public’s concern.

## **NEXT STEPS**

16. We will examine the 114 proposals received in the past few years. After screening out proposals that will not be considered under the scope of HEL (see paragraph 7 above), we will draw up the preliminary alignments for the remaining proposals and carry out Initial Screening according to the revised assessment mechanism.

17. After that, we will select a batch of HEL proposals according to their scores in the “Social Benefits” aspect, and invite the respective District Council concerned to ascertain certain relevant technical details of the proposal(s) (e.g. the proposed alignments, whether to opt for escalator(s) or elevator systems). Based on the ascertained technical details, we will then evaluate the estimated project cost per user of this batch of HEL proposals and arrive at their respective score in the “Cost-effectiveness” aspect. Subsequently, based on the integrated score of both the “Social Benefits” and “Cost-effectiveness” aspects of the HEL proposals, we will come up with not less than 20 HEL proposals for priority implementation.

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<sup>8</sup> If the HEL project is defined as a designated project under Schedule 2 of the EIA Ordinance (Cap. 499), the project proponent will take time to conduct an EIA and submit an EIA report to the Director of Environmental Protection for approval in order to conclude that the environmental impact of the proposed works can be controlled to within the criteria under EIA Ordinance and the Technical Memorandum on EIA Process. An environmental permit will then be issued by the Director of Environmental Protection for the construction of the project.

<sup>9</sup> Even if there is no heritage sites within the proposed works area, if it is found that there is any declared monuments, proposed monuments, graded historic sites or buildings, sites of archaeological interest or government historic sites identified by the Antiques and Monuments Office within 50m measured from the project sites (including the proposed works area), time should be taken in the project planning stage to conduct a Heritage Impact Assessment in accordance with the Technical Circular (Works) No. 6/2009 as promulgated by the Development Bureau and the advice from the Antiquities and Monuments Office, as well as to devise mitigation measures and carry out public engagement exercises.

18. We plan to conduct preliminary technical assessments and draw up preliminary alignments of the 114 HEL proposals received, as well as carry out the subsequent Initial Screening and scoring in terms of the “Social Benefits” aspect in 2019. Starting from early 2020, we will conduct local consultations on HEL proposals with relatively higher score in the “Social Benefits” aspect with a view to ascertaining their alignments and details and determining their scores in the “Cost-effectiveness” aspect. We aim to prioritise the HEL proposals according to their scores in both the “Social Benefits” and “Cost-effectiveness” aspects so as to come up with the first batch of HEL proposals within 2020. We will then take forward their implementation following the public works procedures starting from 2021.

19. As for the HEL proposals not included in the first batch, we will, after the smooth implementation of the proposals under the first batch, further consider and follow up on them together with any other new proposals received.

## **ADVICE SOUGHT**

20. Members are invited to offer views on the proposed revised assessment mechanism.

**Transport and Housing Bureau**  
**Transport Department**  
**December 2018**



**For discussion  
on 22 May 2009**

## **Legislative Council Panel on Transport**

### **Establishment of an Assessment System for Provision of Hillside Escalator Links and Elevator Systems**

#### **PURPOSE**

This paper briefs Members on the proposed assessment system for provision of hillside escalator links and elevator systems.

#### **BACKGROUND**

2. In view of the growing number of requests from the public for the provision of hillside escalator links and elevator systems, the Chief Executive announced in the 2008-09 Policy Address that the Administration would establish an assessment system for the provision of these pedestrian facilities. The proposed assessment system aims at providing a more comprehensive set of objectives and transparent evaluation criteria in determining the merits and priority of proposals on hillside escalator links and elevator systems.

3. The Transport Department has commissioned a consultancy study to establish the proposed assessment system. The consultant has found that there is no overseas experience in setting up a similar assessment system for hillside escalator links and elevator systems. With reference to the existing seven assessment criteria used in Hong Kong (**Enclosure**) which were presented to the Panel on Transport of the Legislative Council in 2002, the consultant proposes an assessment system comprising an initial screening and a scoring system.

#### **THE ASSESSMENT SYSTEM**

4. The proposed initial screening helps screen out proposals which are obviously infeasible or unjustifiable for implementation. A proposal will not be taken forward if it has any of the following characteristics –

- (a) land unavailability – inadequate land and / or infeasible land resumption to possibly accommodate the proposed facility;
- (b) redundancy – similar facility / facilities is / are already provided or committed in close proximity<sup>1</sup> to the proposed facility;
- (c) insurmountable construction or operational difficulties ; or
- (d) small level difference – level difference to be overcome is less than six metres (m).

5. Proposals which pass the proposed initial screening will be evaluated by the proposed scoring system based on the following set of evaluation criteria –

- (a) Circumstantial factors
  - (i) existing population / employment within catchment<sup>2</sup> ;
  - (ii) existing population of 65 year-old or above within catchment ;
  - (iii) topographical conditions, i.e. steep gradient / level difference ;
  - (iv) connectivity with other existing / committed pedestrian facilities ;
  - (v) connectivity with existing / committed mass public transport facilities within catchment ;
  - (vi) connectivity with existing / committed centres of activity within catchment ;
  - (vii) steadiness of existing pedestrian flow ;
- (b) Beneficial factors
  - (viii) revitalization of / benefits to local community ;
  - (ix) journey time / cost saving ;
  - (x) improvement to existing traffic conditions ;
  - (xi) improvement to existing pedestrian conditions ;
  - (xii) road safety ;
  - (xiii) tourism promotion;

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<sup>1</sup> A facility located within 300 m of the proposed facility is generally regarded as one within close proximity.

<sup>2</sup> Catchment is defined as the area within the radius of 300 m from every entrance/access point of the proposed facility.

- (c) Implementation factors
  - (xiv) land requirement ;
  - (xv) technical / environmental constraints ; and
  - (xvi) cost-effectiveness.

6. According to the relative importance of the circumstantial, beneficial and implementation factors, weightings of 40, 35 and 25 are allocated to the factors respectively to form a total score of 100.

7. Higher scores would be given to a proposal which is comparatively more beneficial, ready for construction and cost-effective. Based on the scores obtained, the relative rankings among various proposals on hillside escalator links and elevator systems will be determined in an objective manner. Those proposals with higher rankings will obviously have priority to proceed to the next stage of planning and investigation to ascertain their technical feasibility, to be followed by public engagement exercises as necessary.

8. However, the proposed assessment system will not be applicable to the following proposals –

- (a) proposals which cross a single road – they will be evaluated under the criteria for footbridge construction;
- (b) proposals which entirely fall within the boundary of public housing estates – the Housing Department will consider the feasibility of the escalator and elevator systems within the boundary of public housing estates separately; or
- (c) proposals which form an integral part of major projects – justifications for them will be considered as part of the respective major projects.

## **WAY FORWARD**

9. We aim at finalizing the proposed assessment system in the second half of 2009.

**ADVICE SOUGHT**

10. Members are invited to note and comment on this paper.

**Transport and Housing Bureau  
May 2009**

**Enclosure**

**The Existing Criteria for Provision  
of Hillside Escalator Links and Elevator Systems**

- The catchment of the proposed system should either be reasonably populated, or there exists a commercial element which would be further enhanced to attract users.
- There should be a steady flow of users throughout the day. Areas where usage is confined to certain short periods of the day, such as school area, do not alone justify the provision of the system.
- The gradient of the area should be steep. Escalator links would be suitable for streets with steep gradient whereas elevator systems would be more appropriate for linking areas with large drop in vertical level.
- Priority should be given to systems that can connect to railway stations or major public transport interchanges.
- Environmental considerations (e.g. whether the provision could encourage the habit of walking which is environmentally friendly and would reduce the reliance on vehicular transport).
- Consideration would also be given to developed areas with severe physical constraints for building additional road links or expanding public transport services, and yet where major re-development schemes are anticipated to generate substantial traffic demand.
- Social benefits arising from the provision of escalator links/elevator systems (e.g. beneficial effects on those with disabilities, the elderly and tourists).

**For discussion  
on 26 February 2010**

**Legislative Council Panel on Transport**

**Assessment Results on Proposals for  
Provision of Hillside Escalator Links and Elevator Systems**

**PURPOSE**

This paper briefs Members on the assessment results on the proposals for the provision of hillside escalator links and elevator systems using the proposed assessment system.

**BACKGROUND**

2. The Transport Department commissioned a consultancy study in May 2008 to establish an assessment system for the provision of hillside escalator links and elevator systems. The proposed assessment system aims at providing a comprehensive set of objectives and transparent evaluation criteria in determining the merits and relative priority of proposals on hillside escalator links and elevator systems. We consulted the Legislative Council Panel on Transport (the Panel) on the assessment system at its meeting on 22 May 2009. We agreed at the meeting that we would update the Panel on the finalized assessment system and the assessment outcome in due course.

**THE FINALISED ASSESSMENT SYSTEM**

3. On the basis of the structure of the assessment system as presented to the Panel in May 2009, we have now worked out the scoring scale for the assessment. The details of the finalized assessment system, with the respective weight of each criterion under the three key factors for assessment (i.e. circumstantial, beneficial and implementation factors), are set out at **Annex A**. The scoring scale reflects public views that we

received regarding the assessment system.

4. As advised by the consultant, similar evaluation ranking system for the provision of hillside escalator links and elevator systems is not found established in other cities/countries. Owing to the lack of similar references, the system established is entirely based on local experiences only. However, having reviewed the proposed assessment system in terms of assessment methodology, data collection processes involved and scoring mechanism after conducting test runs, the consultant has confirmed that the system is sufficiently robust and at the same time sufficiently general for long-term application. We hence finalised the assessment system on this basis.

5. Based on the rankings from the assessment system, we will prioritize the proposed hillside escalator links and elevator systems for conducting feasibility studies to ascertain the actual technical feasibility and detailed cost estimates for the proposals. The actual works programme for implementing the proposals will take into account different factors such as structural and geotechnical complexity of the proposals, land resumption requirements, temporary traffic arrangements requirements, duration of construction, etc.

## **THE ASSESSMENT RESULT**

6. Based on the ranking system<sup>1</sup>, we have assessed a total of 20 proposed hillside escalator and elevator systems, including 4 in Hong Kong Island, 5 in Kowloon, and 11 in the New Territories. The final scores of the proposals range from 29.1 to 51.5. A list of the 20 proposals is given in **Annex B** and plans showing their locations are at **Annex C**. The final scores and resultant rankings of the proposals are tabulated in **Annex D**.

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<sup>1</sup> As pointed out in para. 5 of Annex A, the assessment system is not applicable to proposals which cross a single road; entirely fall within the boundary of public housing estates; or form an integral part of major projects. The proposals will be separately considered / evaluated under other arrangements.

## **WAY FORWARD**

7. Although the technical / environmental constraints have already been assessed under “Implementation Factors” of the scoring system during the evaluation of the proposals, the assessment has been done using a desk-top approach (e.g. review of plans for the identification of major underground utilities, and assessment of anticipated traffic and environmental impacts due to the construction and operation of the proposed facility). To enable us to better determine when and how we are to take forward the projects, we will conduct feasibility studies on the proposals, starting with those ranked top ten in the assessment, to ascertain their actual technical feasibility and detailed cost estimates. In particular, as most of the proposals are likely to be complex in engineering terms given the steep gradient, detailed studies into the structural and geotechnical aspects of a proposal will be necessary. The feasibility of a proposal would also be subject to detailed examination of issues such as land resumption requirements, environmental impacts, temporary traffic arrangements during construction, etc. We will look into all these issues as well as work out detailed cost estimates for construction in the technical feasibility studies.

8. If the outcome of the technical feasibility studies reveals that there are insurmountable construction difficulties in respect of certain proposals, we would need to reconsider whether they should be taken forward. As for the proposals that are considered technically feasible, we will work out the actual works programme for implementation having regard to such factors as technical findings in the feasibility studies, their relative priorities in the initial assessment, the duration of their construction, and the availability of resources, etc.. The actual number of proposals that would be taken forward would depend on the availability of resources, and we will apply for funds in accordance with established procedures.

9. We will conduct assessment exercises periodically to assess new proposals received as well as to re-assess those received in previous exercises which have not been committed for implementation due to their relatively lower priority.



## **LOCAL CONSULTATION**

10. Having regard to the natural interest of districts concerned in the finalized assessment system and assessment results in respect of hillside escalators and elevator systems proposed, Transport Department will in due course meet with the District Councils concerned to explain the assessment system, as well as how the Administration will take forward the proposals in question. The views of the District Councils will also be sought on the proposals within their districts so that they could be taken into account as we take forward the technical feasibility studies.

## **ADVICE SOUGHT**

11. Members are invited to note and comment on this paper.

**Transport and Housing Bureau**  
**February 2010**

**Annex A****Details of the Assessment System for  
Provision of Hillside Escalator Links and Elevator Systems**

The assessment system on provision of hillside escalator links and elevator systems comprises initial screening and scoring stages.

**Initial Screening**

2. The initial screening helps screen out proposals which are obviously infeasible or unjustifiable for implementation. A proposal will not be taken forward if it has any of the following characteristics –

- (a) land unavailability – inadequate land and / or infeasible land resumption to possibly accommodate the proposed facility;
- (b) redundancy – similar facility / facilities is / are already provided or committed in close proximity<sup>1</sup> to the proposed facility;
- (c) insurmountable construction or operational difficulties; or
- (d) small level difference – level difference to be overcome is less than six metres (m).

**Scoring System**

3. Proposals which pass the initial screening will be evaluated by the scoring system based on the following set of evaluation criteria (figures in brackets denote their respective maximum score) –

- (a) Circumstantial factors (total score : 40)
  - (i) existing population / employment within catchment<sup>2</sup> (6);

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<sup>1</sup> A facility located within 300 m of the proposed facility is generally regarded as one within close proximity.

<sup>2</sup> Catchment is defined as the area within the radius of 300 m from every entrance/access point of the proposed facility.

- (ii) existing population of 65 year-old or above within catchment (5);
  - (iii) topographical conditions, i.e. steep gradient / level difference (11);
  - (iv) connectivity with other existing / committed pedestrian facilities (4);
  - (v) connectivity with existing / committed mass public transport facilities within catchment (4);
  - (vi) connectivity with existing / committed centres of activity within catchment (4);
  - (vii) steadiness of existing pedestrian flow (6);
- (b) Beneficial factors (total score : 35)
- (viii) revitalization of / benefits to local community (6);
  - (ix) journey time / cost saving (8);
  - (x) improvement to existing traffic conditions (6);
  - (xi) improvement to existing pedestrian conditions (6);
  - (xii) road safety (6);
  - (xiii) tourism promotion (3);
- (c) Implementation factors (total score : 25)
- (xiv) land requirement (6);
  - (xv) technical / environmental constraints (6); and
  - (xvi) cost-effectiveness (13).

4. The respective weightings for the circumstantial, beneficial and implementation factors, as well as the individual items thereunder, reflect their relative importance, forming a total score of 100. Based on the scores obtained, the relative rankings among various proposals on hillside escalator links and elevator systems will be determined in an objective manner. Those proposals with higher rankings will obviously have priority to proceed to the next stage of planning and investigation.

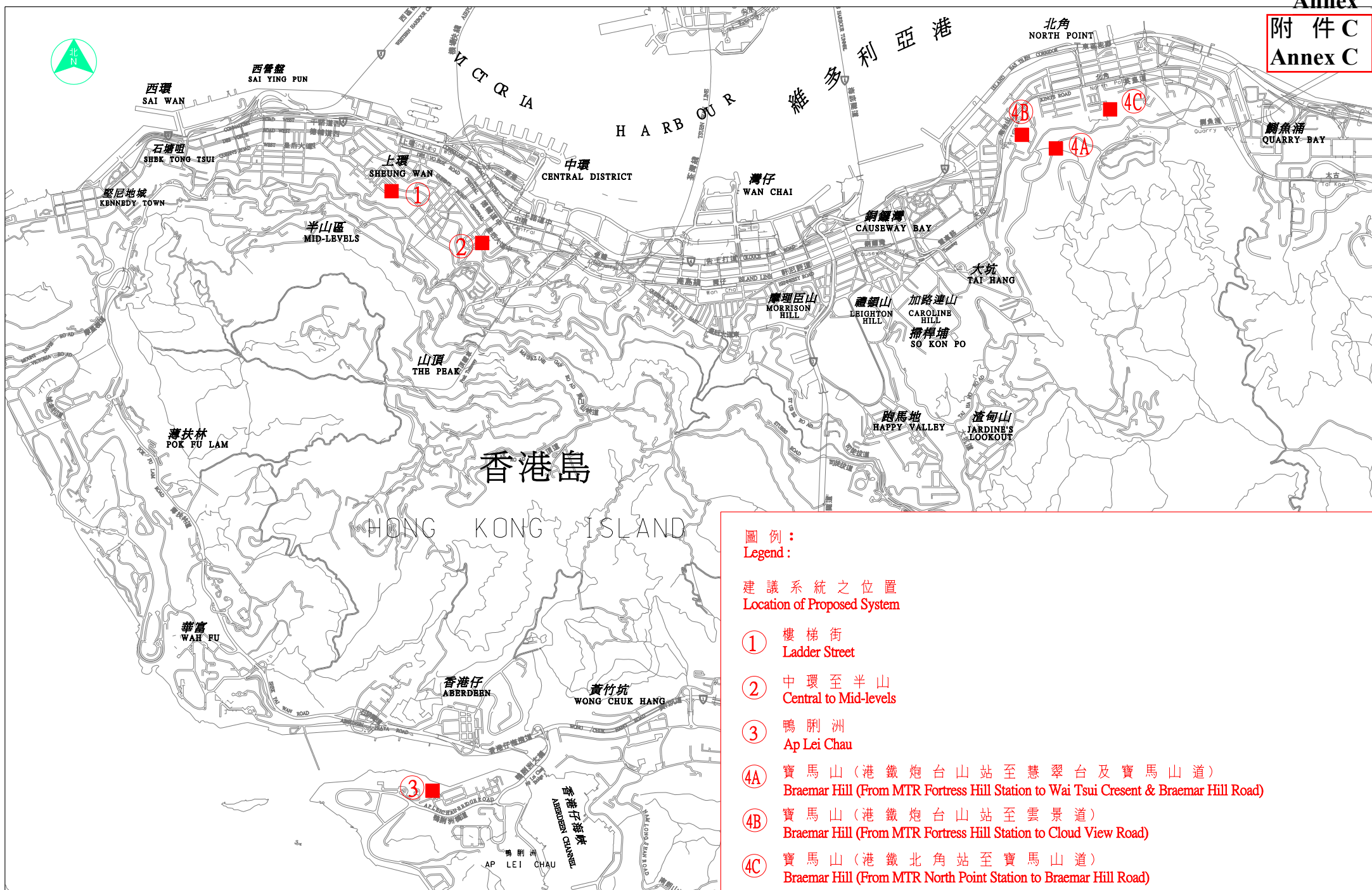
5. However, the proposed assessment system will not be applicable to the following proposals –

- (a) proposals which cross a single road – they will be evaluated under the criteria for footbridge construction;
- (b) proposals which entirely fall within the boundary of public housing estates – the Housing Department will consider the feasibility of the escalator and elevator systems within the boundary of public housing estates separately; or
- (c) proposals which form an integral part of major projects – justifications for them will be considered as part of the respective major projects.

### List of Proposals for Provision of Hillside Escalator Links and Elevator Systems

Requested System		District
Hong Kong Island		
Escalator Link System at Ladder Street		Central & Western
Additional Escalator Link System between Central and Mid-levels		Central & Western
Escalator Link System at Ap Lei Chau		Southern
Pedestrian Link at Braemar Hill <sup>1</sup>	Option A - From MTR Fortress Hill Station to Wai Tsui Crescent and Braemar Hill Road	Eastern
	Option B - From MTR Fortress Hill Station to Cloud View Road	Eastern
	Option C - From MTR North Point Station to Braemar Hill Road	Eastern
Kowloon		
Lift and Pedestrian Walkway System at Waterloo Hill		Kowloon City
Escalator Link System at Yuet Wah Street		Kwun Tong
Lift and Pedestrian Walkway System at Luen On Street		Kwun Tong
Pedestrian Link at Chuk Yuen North Estate		Wong Tai Sin
Pedestrian Link at Tsz Wan Shan		Wong Tai Sin
New Territories		
Escalator Link System between Sha Tin Sui Wo Court and MTR Fo Tan Station		Sha Tin
Lift and Pedestrian Walkway System between Saddle Ridge Garden and Sai Sha Road		Sha Tin
Escalator Link System between Hong Sing Garden and Po Hong Road		Sai Kung
Lift and Pedestrian Walkway System between Castle Peak Road and Kung Yip Street		Kwai Tsing
Lift and Pedestrian Walkway System between Kwai Shing Circuit and Hing Shing Road		Kwai Tsing
Lift and Pedestrian Walkway System between Wo Tong Tsui Street and Kwai Hing Road		Kwai Tsing
Lift and Pedestrian Walkway System between Tsing Yi Road West and Tsing Yu Street		Kwai Tsing
Lift and Pedestrian Walkway System between Hing Shing Road and Tai Wo Hau Road		Kwai Tsing
Lift and Pedestrian Walkway System between Lai King Hill Road and Lai Cho Road		Kwai Tsing
Lift and Pedestrian Walkway System between Lai Cho Road and Wah Yiu Road		Kwai Tsing
Lift and Pedestrian Walkway System between Lai King Hill Road and Princess Margaret Hospital		Kwai Tsing

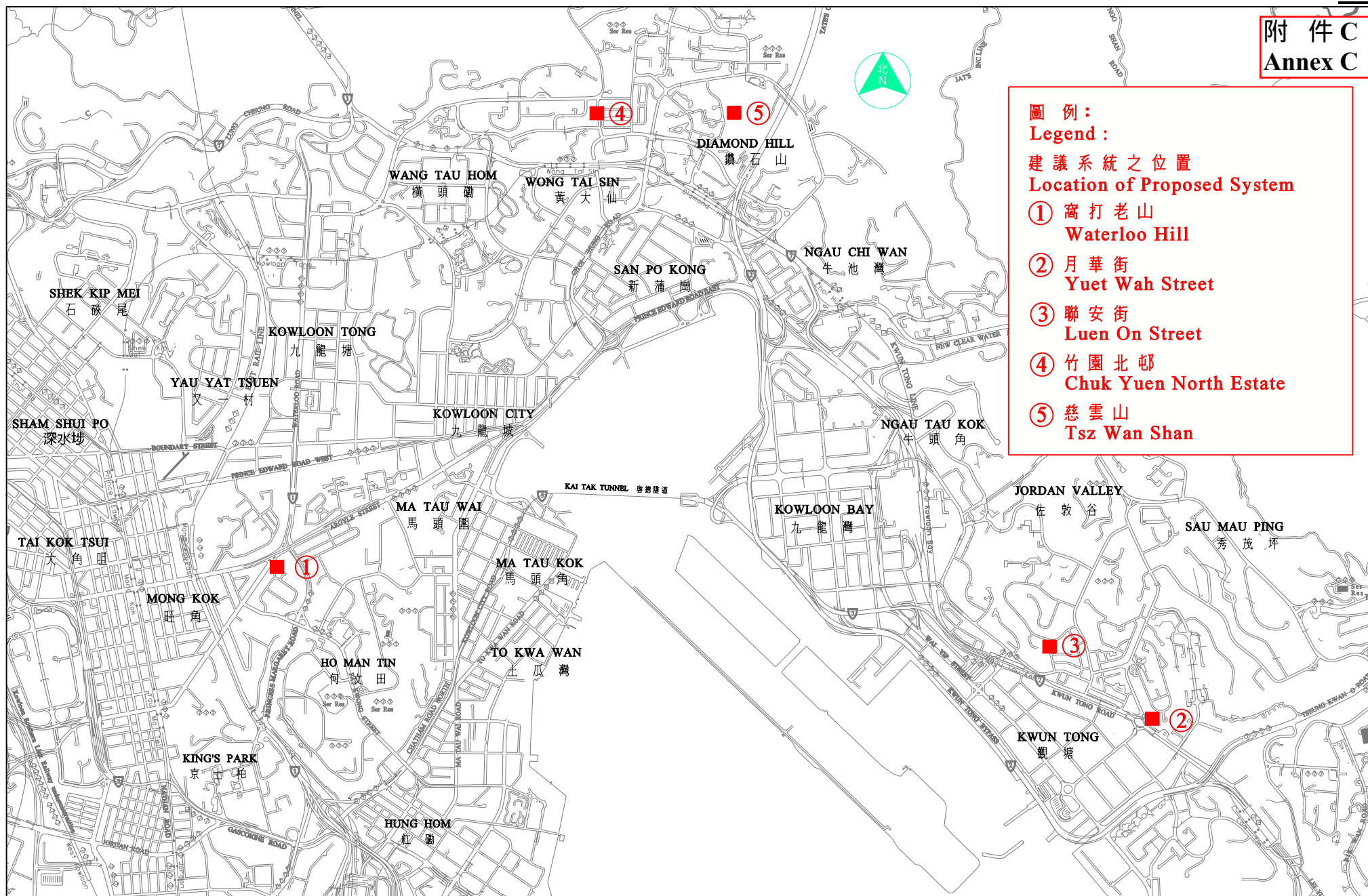
Note 1 : For Pedestrian Link at Braemar Hill, three options were considered and assessed using the ranking system.



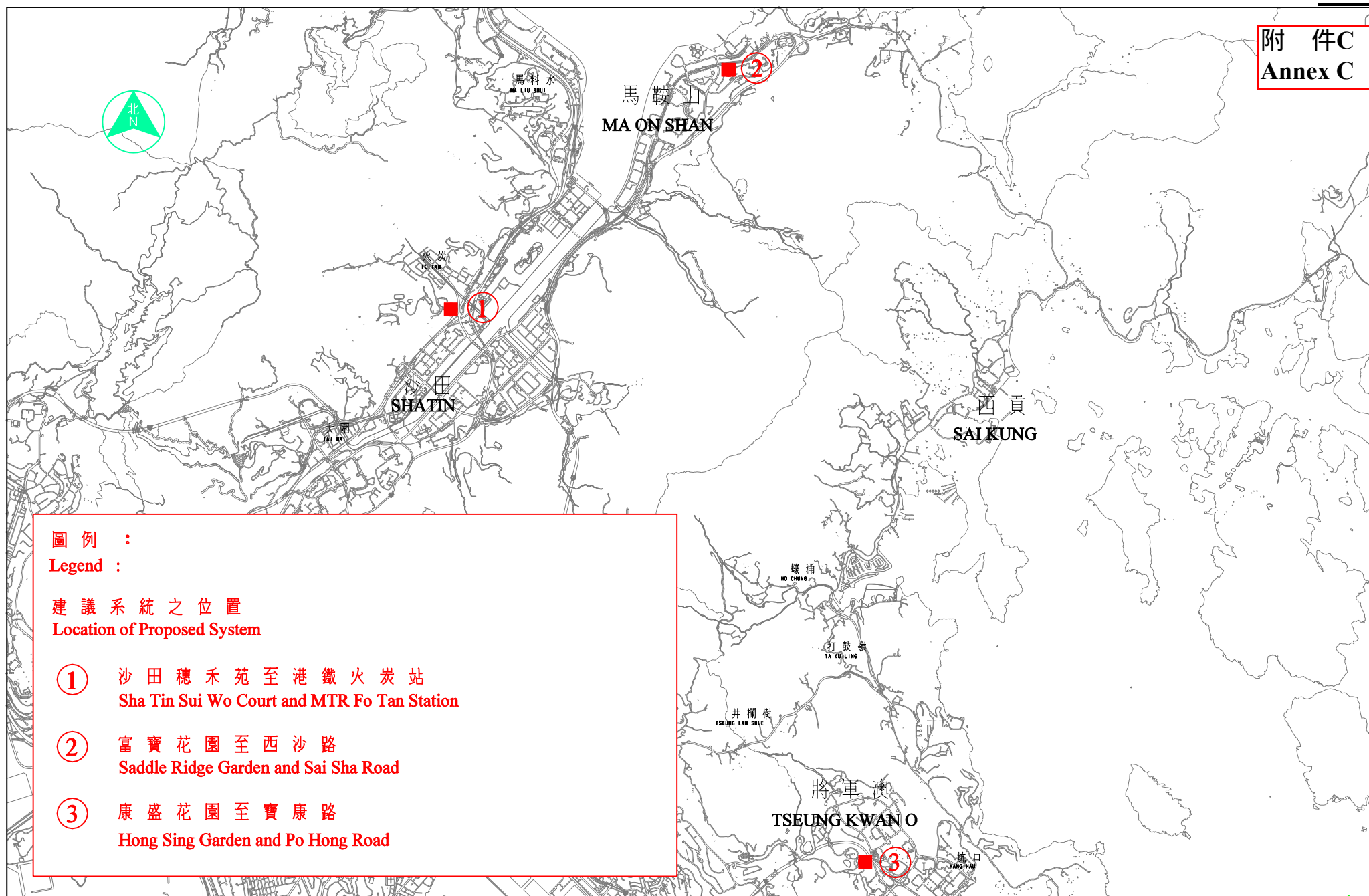


# 附件 C

## Annex C



附件C  
Annex C



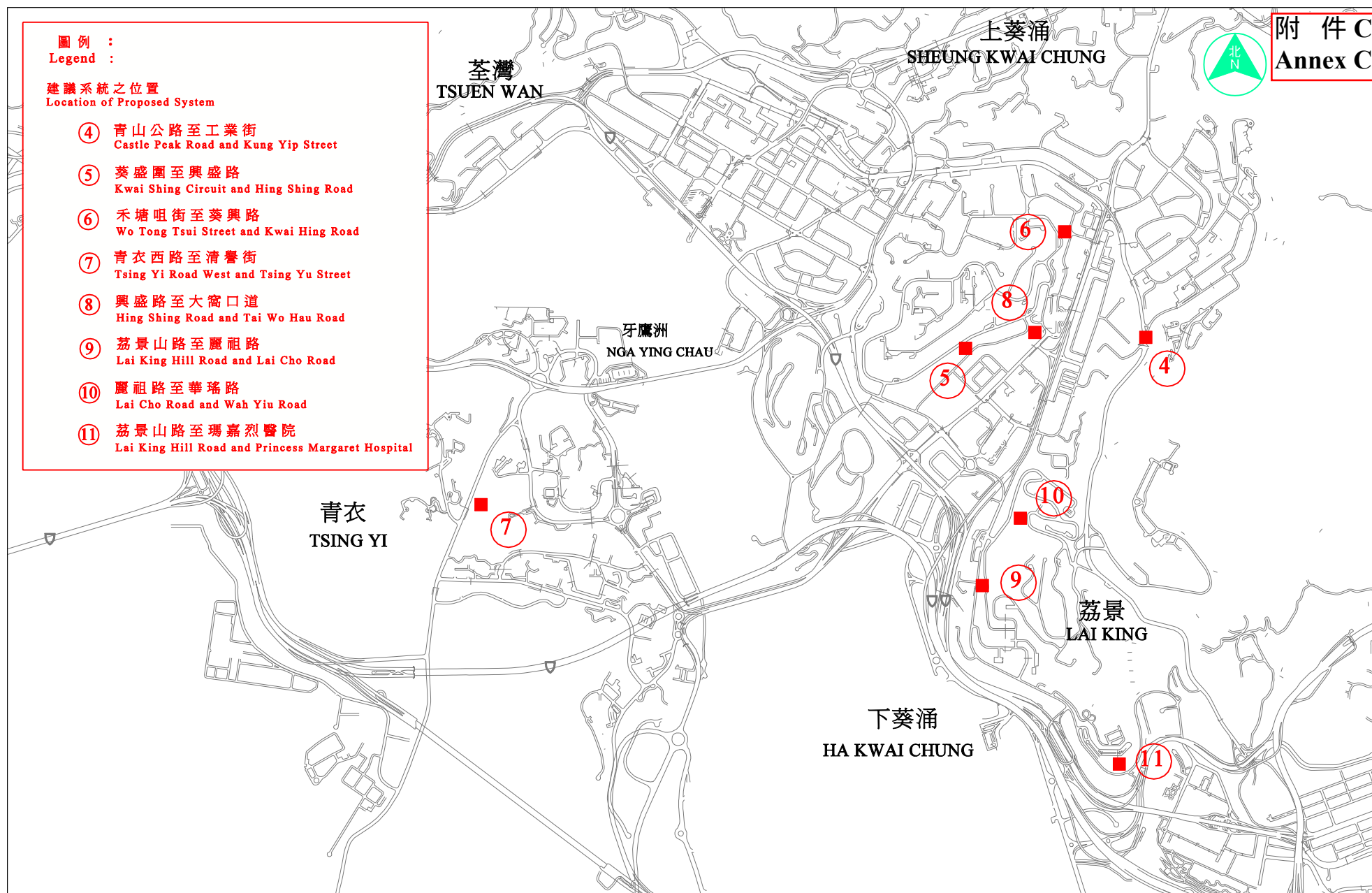




圖例：  
Legend：

建議系統之位置  
Location of Proposed System

- ④ 青山公路至工業街  
Castle Peak Road and Kung Yip Street
- ⑤ 葵盛圍至興盛路  
Kwai Shing Circuit and Hing Shing Road
- ⑥ 禾塘咀街至葵興路  
Wo Tong Tsui Street and Kwai Hing Road
- ⑦ 青衣西路至清譽街  
Tsing Yi Road West and Tsing Yu Street
- ⑧ 興盛路至大窩口道  
Hing Shing Road and Tai Wo Hau Road
- ⑨ 荔景山路至麗祖路  
Lai King Hill Road and Lai Cho Road
- ⑩ 麗祖路至華瑤路  
Lai Cho Road and Wah Yiu Road
- ⑪ 荔景山路至瑪嘉烈醫院  
Lai King Hill Road and Princess Margaret Hospital



### Scores and Resultant Rankings of Proposals for Provision of Hillside Escalator Links and Elevator Systems

Rank	District	Requested System		Circumstantial Sub-total Score (Max 40)	Beneficial Sub-total Score (Max 35)	Implementation Sub-total Score (Max 25)	Final Score (Max 100)	
1	Wong Tai Sin	Pedestrian Link at Tsz Wan Shan		28.5	13.4	9.6	51.5	
2	Eastern	Pedestrian Link at Braemar Hill <sup>1</sup>	Option A <sup>2</sup> - From MTR Fortress Hill Station to Wai Tsui Crescent and Braemar Hill Road	<u>20.4</u>	<u>16.1</u>	<u>10.7</u>	<u>47.2</u>	47.2
			Option B - From MTR Fortress Hill Station to Cloud View Road	20.4	12.9	13.3	46.6	
			Option C - From MTR North Point Station to Braemar Hill Road	20.1	15.7	6.3	42.1	
3	Kwai Tsing	Lift and Pedestrian Walkway System between Tsing Yi Road West and Tsing Yu Street		13.9	17	15.6	46.5	
4	Central & Western	Escalator Link System at Ladder Street		17.1	12.0	16.2	45.3	
5	Kwai Tsing	Lift and Pedestrian Walkway System between Kwai Shing Circuit and Hing Shing Road		7.8	19.7	14.8	42.3	
6	Kwai Tsing	Lift and Pedestrian Walkway System between Castle Peak Road and Kung Yip Street		15.1	13.7	12.9	41.7	
7	Kwai Tsing	Lift and Pedestrian Walkway System between Lai Cho Road and Wah Yiu Road		9.8	16.6	12.1	38.5	

Rank	District	Requested System	Circumstantial Sub-total Score (Max 40)	Beneficial Sub-total Score (Max 35)	Implementation Sub-total Score (Max 25)	Final Score (Max 100)
8	Wong Tai Sin	Pedestrian Link at Chuk Yuen North Estate	10.7	17.4	8.7	36.8
9	Kowloon City	Lift and Pedestrian Walkway System at Waterloo Hill	7.8	12.6	15.9	36.3
10	Kwai Tsing	Lift and Pedestrian Walkway System between Lai King Hill Road and Lai Cho Road	10.7	10.5	14.7	35.9
11	Kwai Tsing	Lift and Pedestrian Walkway System between Wo Tong Tsui Street and Kwai Hing Road	10.8	8.6	16.1	35.5
12	Kwun Tong	Lift and Pedestrian Walkway System at Luen On Street	8.7	13.0	13.5	35.2
13	Kwun Tong	Escalator Link System at Yuet Wah Street	11.4	8.2	15.5	35.1
14	Sai Kung	Escalator Link System between Hong Sing Garden and Po Hong Road	12.4	14.5	7.9	34.8
14	Kwai Tsing	Lift and Pedestrian Walkway System between Lai King Hill Road and Princess Margaret Hospital	5.4	12.1	17.3	34.8
16	Sha Tin	Lift and Pedestrian Walkway System between Saddle Ridge Garden and Sai Sha Road	7.8	11.0	14.7	33.5

Rank	District	Requested System	Circumstantial Sub-total Score (Max 40)	Beneficial Sub-total Score (Max 35)	Implementation Sub-total Score (Max 25)	Final Score (Max 100)
17	Kwai Tsing	Lift and Pedestrian Walkway System between Hing Shing Road and Tai Wo Hau Road	9.8	8.6	13.5	31.9
18	Sha Tin	Escalator Link System between Sha Tin Sui Wo Court and MTR Fo Tan Station	10.7	14.1	4.3	29.1
NA	Central & Western	Additional Escalator Link System between Central and Mid-levels <sup>3</sup>	Screened out in initial screening stage			
NA	Southern	Escalator Link System at Ap Lei Chau <sup>4</sup>	Screened out in initial screening stage			

Note 1: For Pedestrian Link at Braemer Hill, three options were considered and assessed using the ranking system.

Note 2: Option A which scores the highest point, is selected to represent the Pedestrian Link at Braemer Hill.

Note 3: The proposal was screened out in initial screening stage of the ranking system as similar facility, i.e. the existing Escalator Link System between Central and Mid-levels, has already been provided in close proximity.

Note 4: The proposal was screened out in initial screening stage of the ranking system as its level difference did not exceed 6m.