ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 706 – HIGHWAYS

Transport – Footbridges and pedestrian tunnels

166TB – Provision of barrier-free access facilities at public footbridges, elevated walkways and subways

Members are invited to recommend to the Finance Committee –

- (a) the upgrading of part of **166TB**, entitled "Provision of barrier-free access facilities at public footbridges, elevated walkways and subways design works and phase 1 construction works", to Category A at an estimated cost of \$292.1 million in money-of-the-day prices; and
- (b) the retention of the remainder of **166TB** in Category B.

PROBLEM

Some of the existing public footbridges, elevated walkways and subways available for public use which are managed by Transport Department and maintained by Highways Department (HyD) are not equipped with barrier-free access facilities.

PROPOSAL

2. The Director of Highways, with the support of the Secretary for Transport and Housing, proposes to upgrade part of **166TB** to Category A at an estimated cost of \$292.1 million in money-of-the-day (MOD) prices for engaging consultants to undertake the design of the barrier-free access facilities at about 180 existing footbridges, elevated walkways and subways and for the retrofitting of barrier-free access facilities at six footbridges and four subways.

PROJECT SCOPE AND NATURE

- 3. The part of **166TB** which we now propose to upgrade to Category A comprises
 - (a) Design works (the Design Works) comprising:
 - (i) the design of lift or ramp retrofitting works at about 180 public footbridges, elevated walkways and subways ¹;
 - (ii) the associated site investigation works and supervision of such works;
 - (iii) the associated impact assessments on the environment, traffic, heritage and other relevant aspects; and
 - (iv) the preparation of tender documents and assessment of tenders for the retrofitting works mentioned in paragraph 3(a)(i) above.

/ (b)

During the period between July 2010 and May 2011, HyD has commenced three investigation consultancies to investigate the technical feasibility of the retrofitting works at a total of 172 footbridge, elevated walkway and subway structures. The estimated cost of the consultancies is about \$20.6 million (in MOD prices), which is funded under **Subhead 6100TX** "Highway works, studies and investigations for items in Category D of the Public Works Programme". Based on HyD's earlier experience in similar lift/ramp retrofitting works, we expect that the retrofitting works at about 90% of these structures (i.e. about 155 structures) will be technically feasible. Together with the retrofitting works at another 19 structures whose technical feasibility has already been confirmed earlier (at a cost of \$2.2 million (in MOD prices), which is funded under **Subhead 6100TX** "Highway works, studies and investigations for items in Category D of the Public Works Programme"), design works for about 180 structures will be required.

(b) Construction of lifts or ramps at six footbridges and four subways² (the Retrofitting Works) in accordance with the specifications set out in the Transport Planning and Design Manual (TPDM) published by the Transport Department³, comprising:

- (i) construction of a total of 13 lifts and the associated civil and electrical and mechanical (E&M) works at five footbridges and three subways⁴;
- (ii) construction of three ramps of about two to three metres (m) in width and a total of about 100 m in length at two footbridges and one subway⁴; and
- (iii) associated drainage, modification, landscaping, and lighting works.

The distribution of the concerned pedestrian facilities by districts covered by the Design Works is at Enclosure 1. Details of the Retrofitting Works are set out in at Enclosure 2; plans and artist's impression of each item are at Enclosure 3.

4. The remainder of **166TB** comprises construction of barrier-free access facilities for the some 180 pedestrian facilities mentioned in paragraph 3(a)(i) above.

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\$1.1 million and \$4.99 million (in MOD prices) respectively, and are funded under Subhead 6100TX

The technical feasibility study and detailed design of the retrofitting works at the 10 structures have been completed under two investigation and design consultancies respectively. The estimated costs are

[&]quot;Highway works, studies and investigations for items in Category D of the Public Works Programme".

The TPDM is published primarily as a working document for Transport Department staff, but also provides information and guidance to others involved in the planning and design of transport infrastructures in Hong Kong.

Two lifts and a ramp will be constructed at one of the footbridges. Please see Enclosure 2 for details.

5. Subject to funding approval of the Finance Committee, we plan to commence the Design Works mentioned in paragraph 3(a) above in August 2011 for completion in phases by end 2015. As for the Retrofitting Works mentioned in paragraph 3(b) above, we plan to commence the works in November 2011 for completion by mid-2014. For the remaining retrofitting works under **166TB** mentioned in paragraph 4 above, we intend to seek funding from the Legislative Council in several batches after the completion of the design work as soon as possible with a view to commencing the construction in phases between 2013 and 2015 for completion of the majority of the works by 2016-17 and the rest by 2017-18.

JUSTIFICATION

- It is the policy of the government to provide barrier-free access 6. Some of the existing footbridge, elevated walkway and subway facilities. structures constructed in earlier years are not equipped with proper barrier-free access facilities (i.e. not provided with ramps or lifts, or the ramps provided do not comply with the standard as stipulated in the TPDM), and alternative at-grade crossings are not available in the vicinity (i.e. approximately within 100 m from the structure in question). To achieve the policy goal of providing barrier-free access, it is necessary to provide lifts or ramps at the pedestrian facilities mentioned above. Towards this end, HyD has been embarking on a lift or ramp retrofitting programme for such footbridges, elevated walkways and subways, wherever technically feasible. HyD has been taking forward the programme in small packages, funded under the block allocation Subhead 6100TX "Highway works, studies and investigations for items in Category D of the Public Works Programme".
- 7. Up to late 2010, out of a total of about 1 540 public footbridges, elevated walkways and subways under the purview of HyD, most structures (about 1 270) already have lifts or up-to-standard ramps, or alternative at-grade crossings are available in the vicinity. Retrofitting works at 12 structures are in progress or under active planning for implementation of the works shortly⁵. As regards other public footbridges, elevated walkways and subways under the purview of HyD, save for the 56 structures of which the retrofitting works of lifts/ramps were confirmed not feasible after investigation, HyD will take forward the retrofitting works at the remaining about 210 structures full steam.

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⁵ Apart from the retrofitting works at three facilities which are being carried out under **7271RS** "Cycle Tracks Connecting North West New Territories with North East New Territories – Sheung Shui to Ma On Shan section" and **6153TB** "Enhancement of footbridges in Tsim Sha Tsui East" respectively, the investigation and design consultancies as well as construction works for the retrofitting works at other nine facilities are being / will be carried out under 12 minor works projects, the estimated cost of which is \$110.16 million (in MOD prices), which is funded under **Subhead 6100TX** "Highway works, studies and investigations for items in Category D of the Public Works Programme".

8. The earlier plan of HyD was to complete all the retrofitting works in phases according to their order of priority before 2020. We appreciate the wish of the public for the early provision of barrier-free access to the above-mentioned pedestrian facilities. Taking account of the past experience in taking forward other retrofitting works and having reviewed the overall work plan, the Administration is of the view that there is room to expedite the programme for the retrofitting of lifts or ramps. The Financial Secretary has also set out in his 2011-12 Budget the goal to complete the majority of the barrier-free access facilities retrofitting works by 2016-17. In order to avoid a substantial reduction of funding available for other works items under the block allocation **Subhead 6100TX** in the coming years due to the acceleration of the implementation of the above retrofitting works, the Administration proposes to create a public works programme item to take forward the outstanding design and retrofitting works in phases, with the majority of the works scheduled for completion by 2016-17 and the rest (such as those that involve public objections or are technically complex) by 2017-18, in line with the target set out in the 2011-12 Budget.

FINANCIAL IMPLICATIONS

9. We estimate the costs of the Design Works and the Retrofitting Works to be \$292.1 million in MOD prices (please see paragraph 10 below), broken down as follows –

	\$ m i	illion	
(A) The Design Works for the retrofitting works at about 180 footbridges, elevated walkways and subways			
(a) Design consultancy fees		68.9	
(b) Site investigation works		26.1	
(B) The Retrofitting Works at ten			
footbridges and subways			
(a) Construction of lifts		94.3	
(i) civil works	61.5		
(ii) E&M works	32.8		
(b) Construction of ramps		8.1	
(c) Associated modification, lighting,		16.3	
drainage and landscaping works			
(d) Consultants' fees		1.8	
(i) contract administration	0.6		
(ii) management of resident site	0.6		
staff (RSS)			/ \$ million

				\$ m	illion	
	(iii)	Electrical and Mechani	ical	0.6		
		Services Trading Fund				
		$(EMSTF)^6$				
(e)	Remu	neration of RSS			15.3	
()						
(C)	Cont	ingencies			23.0	
` '		\mathcal{E}	_			_
			Sub-total		253.8	(in September
						2010 prices)
						/
(D)	Provi	sion for price adjustment			38.3	
(-)		r	Total			(in MOD prices)
			= 0 0002		_, _ , _,	(p1100s)

A detailed breakdown of the estimate for consultants' fees and RSS costs by man-months is at Enclosure 4.

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

Year	\$ million (Sept 2010)	Price adjustment factor	\$ million (MOD)
2011 – 2012	25.4	1.04525	26.5
2012 – 2013	83.0	1.10143	91.4
2013 – 2014	83.5	1.16201	97.0
2014 - 2015	50.0	1.22592	61.3
2015 – 2016	6.2	1.29335	8.0
2016 – 2017	4.2	1.36448	5.7
2017 – 2018	1.5	1.43953	2.2
	253.8		292.1
			/11

Since the establishment on 1 August 1996 under the Trading Fund Ordinance, the EMSTF charges government departments for design and technical consultancy services for E&M installations provided by the Electrical and Mechanical Services Department.

11. We have derived the MOD estimates on the basis of the Government's latest set of assumptions on the trend rate of change in the prices of public sector building and construction output for the period 2011 to 2018. For the Design Works, we will engage consultants on a lump sum basis. For the Retrofitting Works, we will tender the proposed works under lump sum contracts since the quantities of the key parts of the proposed works are unlikely to change during construction. We will allow for price adjustment in the contracts.

12. The Design Works will not give rise to any recurrent expenditure. We estimate the annual recurrent expenditure upon completion of the Retrofitting Works to be \$3.1 million.

PUBLIC CONSULTATION

- 13. We have been maintaining contact with the relevant District Councils regarding the arrangements for the retrofitting works for footbridges, elevated walkways and subways structures not yet equipped with suitable barrier-free facilities in various districts.
- 14. We consulted the LegCo's Panel on Transport on the proposed works on 2 June 2011. Members are generally supportive of the proposed works but requested the Administration to speed up the completion of the works. The Administration agreed to examine during the detailed design stage whether there is room to further expedite the works. Members also requested the Administration to provide information on the 19 facilities for which the detailed design of the retrofitting works will be conducted in the initial batch, the other facilities for which the detailed design work will be conducted after the technical feasibility is confirmed, and the 56 facilities for which retrofitting works have been confirmed not feasible after investigation. We will provide such information in writing in due course, prior to the Public Works Subcommittee meeting.
- 15. For the Retrofitting Works at ten footbridges and subways mentioned under paragraph 3(b), we consulted the relevant District Councils on the proposed Retrofitting Works. The District Councils concerned agreed to the implementation of the works and called for early implementation. A summary of the details of the consultation is tabulated at Enclosure 5.

16. We consulted the Advisory Committee on the Appearance of Bridges and Associated Structures (ACABAS) ⁷ on the aesthetic designs of the above-mentioned Retrofitting Works in batches in June, August and December 2010, and January, February and April 2011. The Committee accepted the proposed aesthetic designs.

17. When we commence the Design Works of barrier-free access facilities at the about 180 public footbridges, elevated walkways and subways mentioned in paragraph 3(a) above, we shall consult the relevant District Councils and ACABAS on the details of the proposed retrofitting works for finalising the detailed design as well as the implementation programme.

ENVIRONMENTAL IMPLICATIONS

- 18. The Design Works and the associated site investigation works will only generate very little construction waste. We will require the consultant to fully consider measures to minimize the generation of construction waste and to reuse/recycle construction waste as much as possible in the future implementation of the construction projects.
- 19. The Retrofitting Works are not designated projects under the Environmental Impact Assessment Ordinance (Cap. 499). It will not cause long-term adverse environmental impact. Nevertheless, we have included in the project estimates the cost to implement suitable mitigation measures to control short-term environmental impacts during the construction stage.
- 20. At the construction stage, we will require the contractor to control noise, dust and site run-off nuisances to within established standards and guidelines through the implementation of mitigation measures in the contract. These include frequent cleaning and watering of the site, the use of silenced construction plants, provision of temporary noise screens at works locations, etc.

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The ACABAS (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 enclosures, from the aesthetic and visual impact points of view.

21. At the planning and design stages, we have considered measures to reduce the generation of construction waste where possible. In the design of the lift towers, we have adopted pre-fabricated steel structural frames to minimise wastage and a high pile cap level to reduce the amount of excavation works required. The lift towers will integrate with the landing platforms and hence separate column for supporting the latter will not be required; this will help reduce the temporary formworks and ground excavation works required for column construction. In addition, we will require the contractors to reuse inert construction waste (e.g. excavated soil) 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 facilities⁸. We will encourage the contractors to maximise the use of recycled / recyclable inert construction waste, and the use of non-timber formwork to further reduce the generation of construction waste.

- At the construction stage, we will require the contractor to submit for approval a plan setting out the waste management measures, which will include appropriate mitigation means to avoid, reduce, reuse and recycle inert construction waste. We will ensure that the day-to-day operations on site comply with the approved plan. We will require the contractor to separate the inert portion from non-inert construction waste on site for disposal at appropriate facilities. We 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.
- We estimate that the Retrofitting Works will generate in total about 3 400 tonnes of construction waste. Of these, we will reuse about 400 tonnes (11.8%) of inert construction waste on site and deliver another 2 500 tonnes (73.5%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 500 tonnes (14.7%) of non-inert construction waste at landfills. The total cost for disposal of construction waste at public fill reception facilities and landfill sites is estimated to be \$0.13 million for the Retrofitting Works (based on an unit cost of \$27 per tonne for disposal at public fill reception facilities and \$125 per tonne at landfills).

/ HERITAGE.....

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 license issued by the Director of Civil Engineering and Development.

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.

HERITAGE IMPLICATION

24. The Design Works and Retrofitting 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 Monument Office (AMO). We will carry out heritage impact assessment and implement suitable mitigation measures to the satisfaction of the AMO if the project is to affect any heritage site.

LAND ACQUISITION

25. The Design Works and Retrofitting Works do not require any land acquisition and land clearance.

BACKGROUND INFORMATION

- Among the public footbridges, elevated walkways and subways involving design works as mentioned in paragraph 3(a) above, 19 structures had their technical feasibility for retrofitting works confirmed by an investigation consultancy undertaken by HyD in February 2008. The cost of the consultancy is \$2.2 million (in MOD prices), and is funded under **Subhead 6100TX** "Highway works, studies and investigations for items in Category D of the Public Works Programme". As for the retrofitting works in respect of the remaining 172 facilities, HyD has commenced three investigation consultancies between July 2010 and May 2011 to investigate the technical feasibility of the retrofitting works. The estimated cost of the consultancies is about \$20.6 million (in MOD prices), which is funded under **Subhead 6100TX** "Highway works, studies and investigations for items in Category D of the Public Works Programme".
- We engaged consultants in February 2008 and February 2010 respectively to undertake technical feasibility study and detailed design of the retrofitting works at the ten concerned pedestrian facilities mentioned in paragraph 3(b) above. The estimated costs are \$1.1 million and \$4.99 million (in MOD prices) respectively, and are funded under **Subhead 6100TX** "Highway works, studies and investigations for items in Category D of the Public Works Programme".
- 28. In accordance with the Roads (Works, Use and Compensation) Ordinance (Cap. 370), the Chief Highway Engineer/Bridges and Structures of Highways Department authorised the execution of the Retrofitting Works as minor works under delegated authority on 6 May 2011.

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29. The Design Works will not involve any tree removal or planting proposals. We will require the consultants to consider the need for tree preservation during the planning and design of the project. We will also incorporate tree planting proposals, where possible, in the construction phase for the retrofitting works of the other facilities in the future.

- 30. Of the 220 trees within the project boundaries of the Retrofitting Works, 203 trees will be preserved and 17 trees will be transplanted. All trees to be transplanted are not important trees¹⁰. We will incorporate planting proposals as part of the Retrofitting Works, including about 25 shrubs and about 560 ground covers.
- 31. We estimate that the Retrofitting Works will create about 124 jobs (82 for labourers and another 42 for professional/technical staff) providing a total employment of about 3 642 man-months.

Transport and Housing Bureau June 2011

[&]quot;Important trees" refer to trees in the Registry of Old and Valuable Trees, and 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 form (taking account of overall tree sizes, shape and any special features), e.g. trees with curtain like aerial roots, trees growing in unusual habitat; or

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

166TB (Part) – Provision of barrier-free access facilities at public footbridges, elevated walkways and subways

<u>Distribution of Public Footbridges, Elevated Walkways and Subways to be</u> covered by the proposed Design Works (by Districts)

191 pedestrian facilities have been / are being investigated under four consultancy studies. 19 pedestrian facilities have been confirmed technically feasible and about 90% of the remaining 172 pedestrian facilities will be technically feasible for retrofitting works of barrier-free access facilities.

	No. of pedestrian facilities			
District	Confirmed Feasible			
	so far	_		
(i) Central & Western	-	22		
(ii) Wan Chai	6	20		
(iii) Eastern	-	7		
(iv) Southern	-	7		
(v) Yau Tsim Mong	1	14		
(vi) Sham Shui Po	3	3		
(vii) Kowloon City	1	12		
(viii) Wong Tai Sin	1	7		
(ix) Kwun Tong	2	8		
(x) Tsuen Wan	-	12		
(xi) Tuen Mun	1	10		
(xii) Yuen Long	-	3		
(xiii) Kwai Tsing	-	15		
(xiv) Sha Tin	-	5		
(xv) North	1	14		
(xvi) Tai Po	3	12		
(xvii) Sai Kung	-	1		
(xviii) Islands	-	-		
TOTAL	19	172		

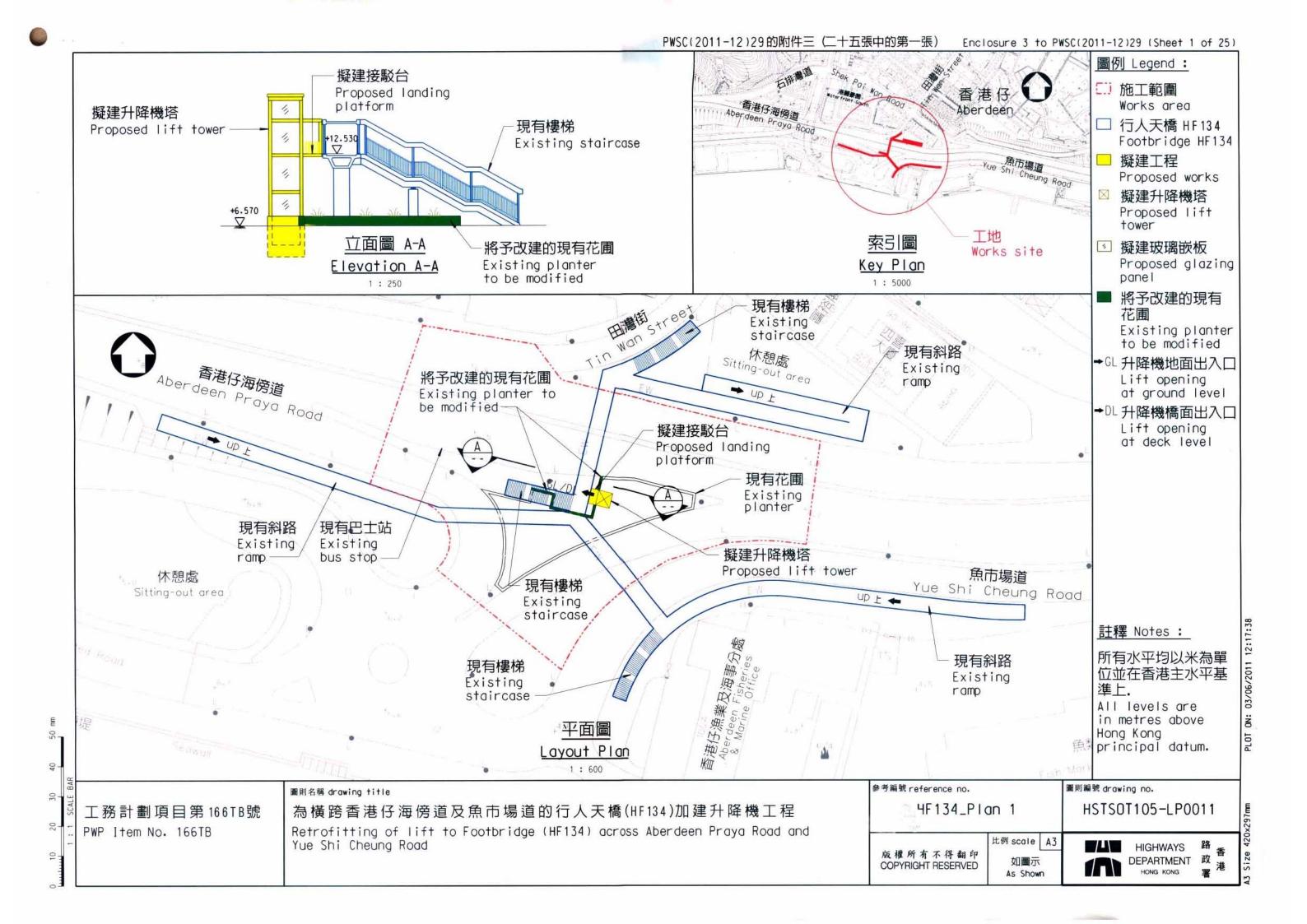
166TB (Part) – Provision of barrier-free access facilities at public footbridges, elevated walkways and subways

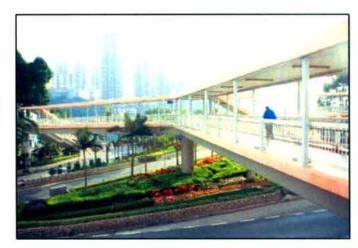
Details of the proposed barrier-free access facilities works at the 10 public footbridges and subways

- 1. Footbridge (HF134) across Aberdeen Praya Road and Yue Shi Cheung Road
 - construction of one lift (capacity: 12 persons) with internal size of 1.5 metres (m) x 1.4 m and a landing platform at the southern side of the footbridge
- 2. Subway (HS16) across Aberdeen Praya Road near Old Main Street, Aberdeen
 - construction of one lift (capacity: 12 persons) with internal size of 1.5 m x 1.4 m at the northern end together with the demolition of the existing northern stepped ramp
 - construction of one lift (capacity: 12 persons) with internal size of 1.5 m x 1.4 m and a subway extension at the southern end
- 3. Subway (KS47) across Tai Po Road near Pei Ho Street, Shek Kip Mei
 - construction of a total of two lifts (capacity: 12 persons) with internal size of 1.5 m x 1.4 m at the northern side and southern side together with the demolition of the southern and northern staircases of the subway
- 4. Footbridge (KF25) across Waterloo Road near Suffolk Road, Kowloon Tong
 - construction of one lift (capacity: 12 persons) with internal size of 1.5 m x 1.4 m and a landing platform at the western end together with demolition of the western staircase
 - construction of one lift (capacity: 12 persons) with internal size of 1.5 m x 1.4 m and a landing platform at the eastern end together with the demolition of the eastern stepped ramp
- 5. Footbridge (NF87) across Tsuen Wan MTR Depot near Mega Trade Centre
 - modification of the northern stepped ramp of the footbridge to form a standard ramp of 25 m long x 2.9 m wide

- 6. Footbridge (NF109) across Castle Peak Road near Fou Wah Centre, Tsuen Wan
 - construction of one lift (capacity: 12 persons) with internal size of 1.5 m x 1.4 m, a landing platform and a ramp of 12 m long x 2 m wide at the northern end
 - construction of one lift (capacity: 12 persons) with internal size of 1.5 m x 1.4 m, a landing platform and a staircase at the southern end together with demolition of the southern stepped ramp
- 7. Footbridge (NF106) across Tsing Yi Heung Sze Wui Road near Vigor Industrial Building
 - construction of one lift (capacity: 9 persons) with internal size of 1.4 m x 1.25 m and two landing platforms at the eastern end of the footbridge
- 8. Subway (NS19) across Ching Hong Road near Mayfair Gardens, Tsing Yi
 - construction of one lift (capacity: 12 persons) with internal size of 1.5 m x 1.4 m and an extension of a covered walkway at the eastern end of the subway
- 9. Subway (NS38) across Tai Po Road near Fo Tan Road, Sha Tin
 - construction of a ramp of 60 m x 3 m at the southern side together with demolition of the southern staircase of the subway and associated slope stabilization / upgrading works
- 10. Footbridge (NF122) across Choi Yuen Road and San Wan Road at Pak Wo Road, Sheung Shui
 - construction of one lift (capacity: 12 persons) with internal size of 1.5 m x 1.4 m and a landing platform at the southern side near Choi Yuen Road together with demolition and reconstruction of the southern staircase
 - construction of one lift (capacity: 12 persons) with internal size of 1.5 m x 1.4 m and a landing platform at the northern end

Note: Apart from the project specific details set out above, the various items also include associated drainage, modification, landscaping and lighting works.



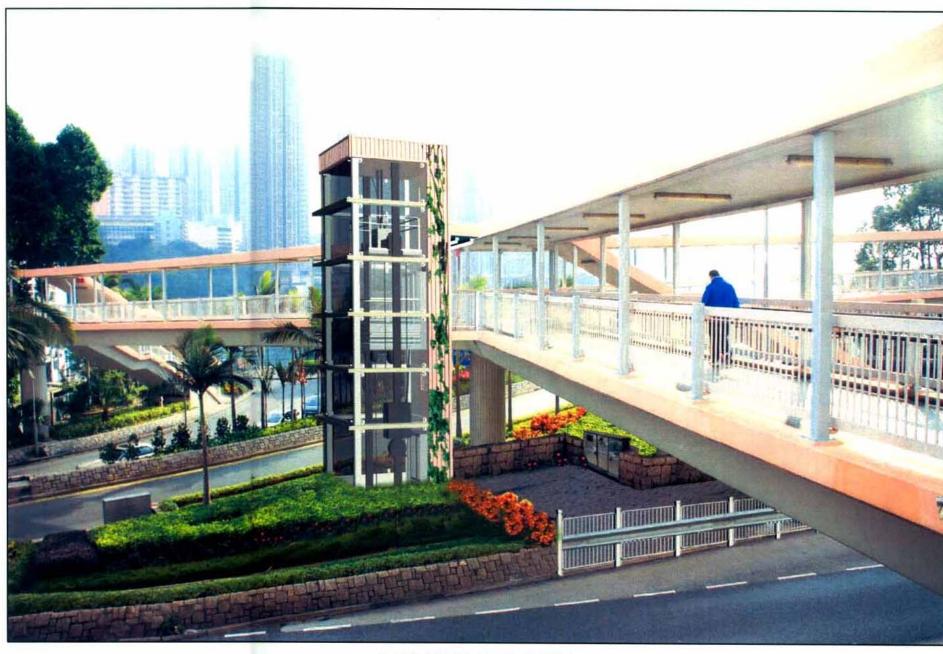


現有的景觀 Existing view



平面圖 Layout Plan 1: 1500

視點 View point



擬建構築物的景觀 View of the proposed structure

工務計劃項目第166TB號 PWP Item No. 166TB

圖則名稱 drawing title

為橫跨香港仔海傍道及魚市場道的行人天橋(HF134)加建升降機工程 - 擬建升降機的美工構思圖

Retrofitting of lift to Footbridge (HF134) across Aberdeen Praya Road and Yue Shi Cheung Road - Artist's impression of proposed lift

參考編號 reference no.

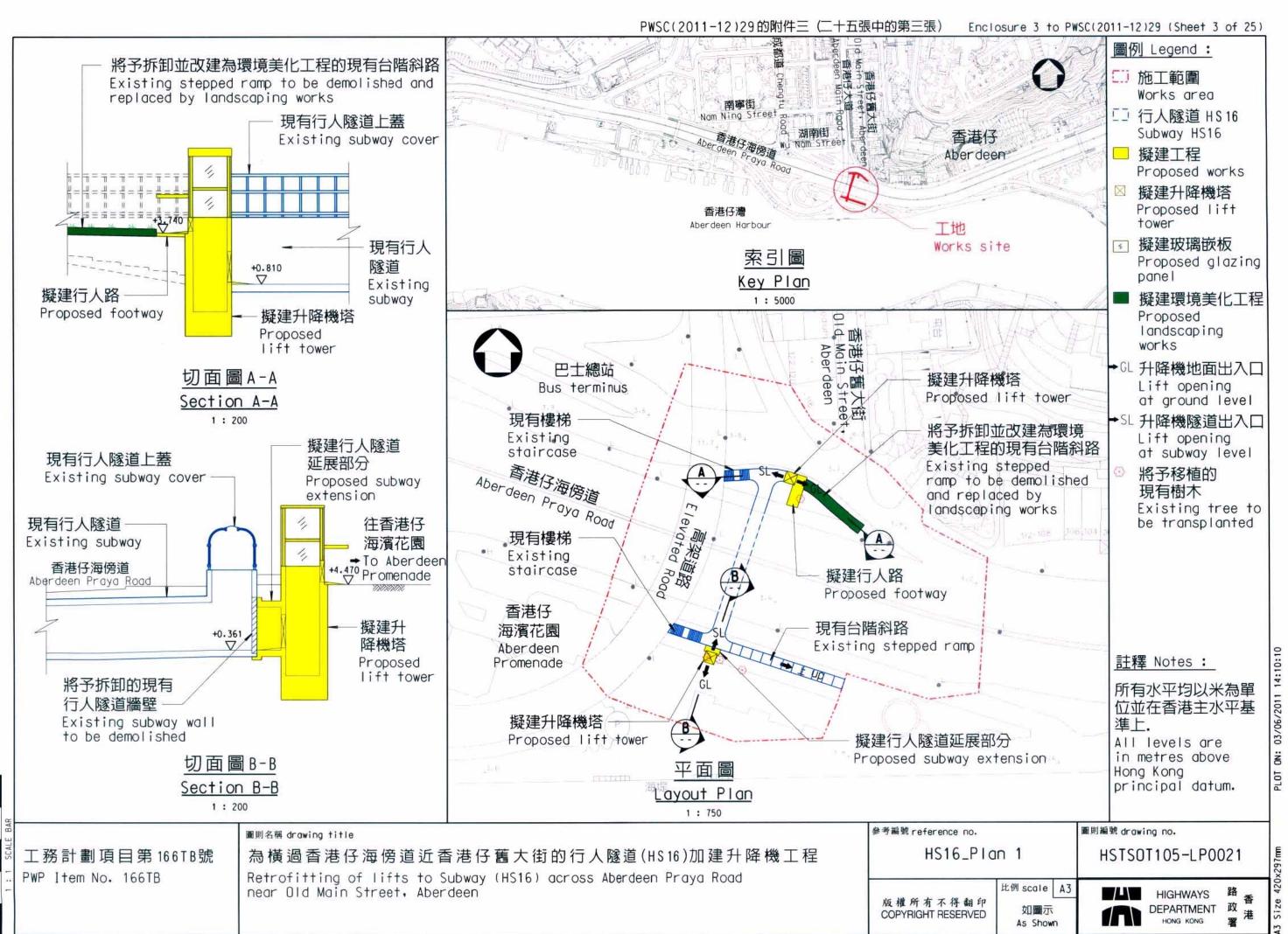
HF134_Plan 2

圖則編號 drawing no.

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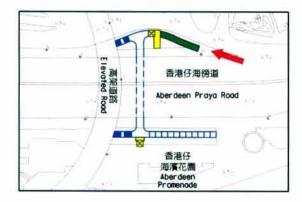
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HIGHWAYS DEPARTMENT 政





現有的景觀 Existing view



平面圖 Layout Plan 1: 1500

圖例 Legend:

視點 View point



擬建構築物的景觀 View of the proposed structure

工務計劃項目第166TB號 PWP Item No. 166TB

圖則名稱 drawing title

為橫過香港仔海傍道近香港仔舊大街的行人隧道(HS16)加建升降機工程 擬建升降機的美工構思圖

Retrofitting of lifts to Subway (HS16) across Aberdeen Praya Road near Old Main Street, Aberdeen - Artist's impression of proposed lifts

參考編號 reference no.

HS16_Plan 2

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HSTSOT105-LP0022

HIGHWAYS DEPARTMENT 政

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現有的景觀 Existing view



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圖例 Legend:

→ 視點 View point



擬建構築物的景觀 View of the proposed structure

工務計劃項目第166TB號 PWP Item No. 166TB

圖則名稱 drawing title

為橫過香港仔海傍道近香港仔舊大街的行人隧道(HS16)加建升降機工程 - 擬建升降機的美工構思圖

Retrofitting of lifts to Subway (HS16) across Aberdeen Praya Road near Old Main Street, Aberdeen - Artist's impression of proposed lifts

參考編號 reference no.

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HS16_Plan 3

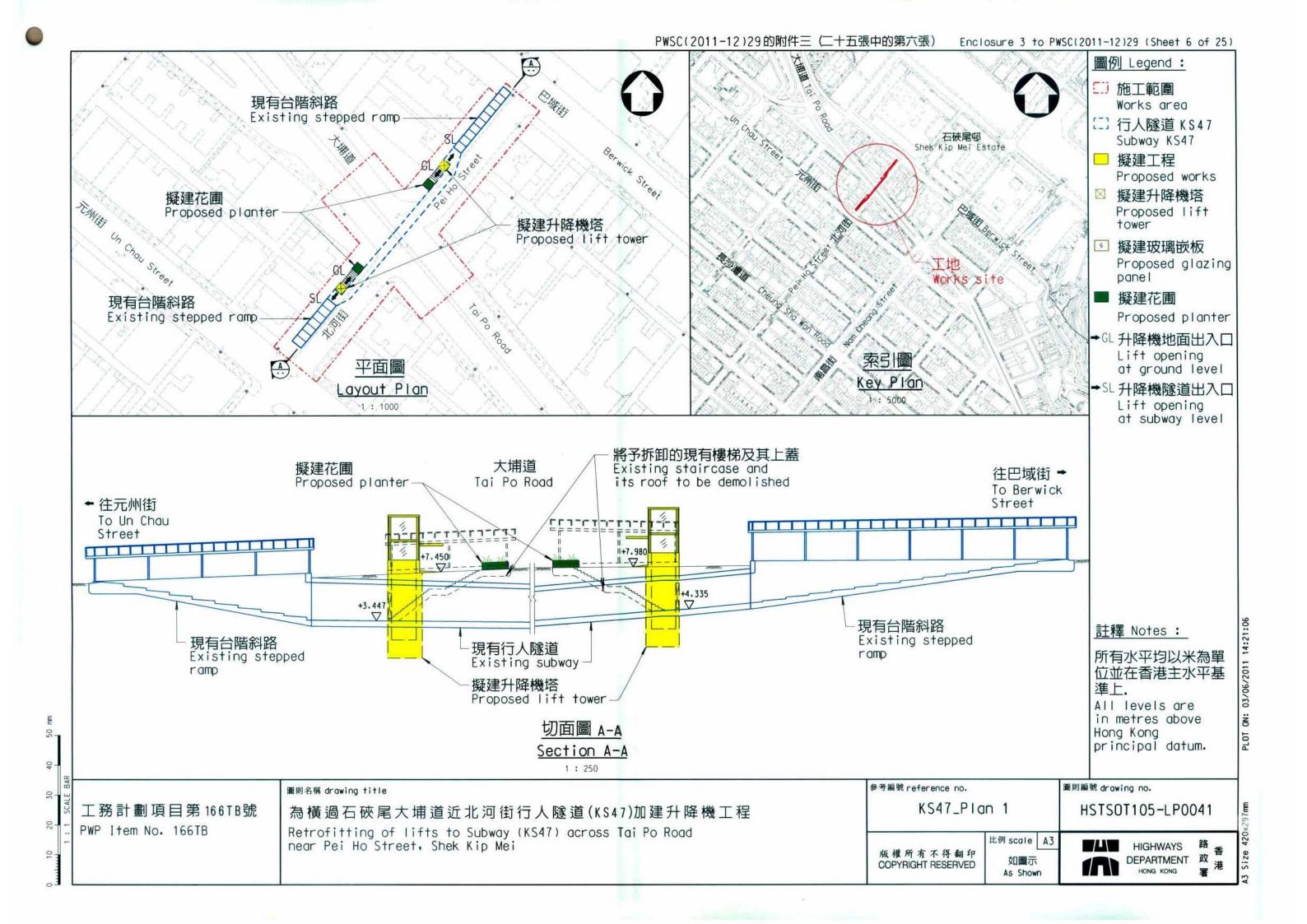
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現有的景觀 Existing view



平面圖 Layout Plan

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圖例 Legend:

視點 View point



擬建構築物的景觀 View of the proposed structure

工務計劃項目第166TB號 PWP Item No. 166TB

圖則名稱 drawing title

為橫過石硤尾大埔道近北河街行人隧道(KS47)加建升降機工程- 擬建升降機的美工構思圖

Retrofitting of lifts to Subway (KS47) across Tai Po Road near Pei Ho Street, Shek Kip Mei - Artist's impression of proposed lifts

參考編號 reference no.

KS47_Plan 2

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現有的景觀 Existing view



平面圖 Layout Plan

1: 2000

圖例 Legend:

視點 View point



擬建構築物的景觀 View of the proposed structure

工務計劃項目第166TB號 PWP Item No. 166TB

圖則名稱 drawing title

為橫過石硤尾大埔道近北河街行人隧道(KS47)加建升降機工程- 擬建升降機的美工構思圖

Retrofitting of lifts to Subway (KS47) across Tai Po Road near Pei Ho Street, Shek Kip Mei - Artist's impression of proposed lifts

參考編號 reference no.

KS47_Plan 3

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比例 scale A3 如圖示

圖則編號 drawing no. HSTSOT105-LP0043



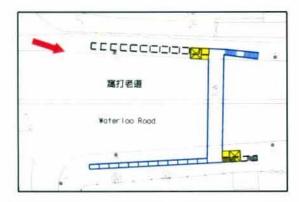
DEPARTMENT 政 HONG KONG 署



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現有的景觀 Existing view



平面圖 Layout Plan 1:1000

圖例 Legend:

▶ 視點 View point



擬建構築物的景觀 View of the proposed structure

工務計劃項目第166TB號 PWP Item No. 166TB

圖則名稱 drawing title

為橫跨九龍塘窩打老道近沙福道的行人天橋(KF25)加建升降機工程- 擬建升降機的美工構思圖

Retrofitting of lifts to Footbridge (KF25) across Waterloo Road near Suffolk Road, Kowloon Tong - Artist's impression of proposed lifts

參考編號 reference no.

KF25_Plan 2

HSTSOT105-LP0032

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比例 scale A3 如圖示

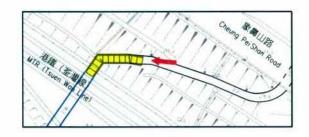
As Shown

圖則編號 drawing no.

HIGHWAYS DEPARTMENT 政 HONG KONG

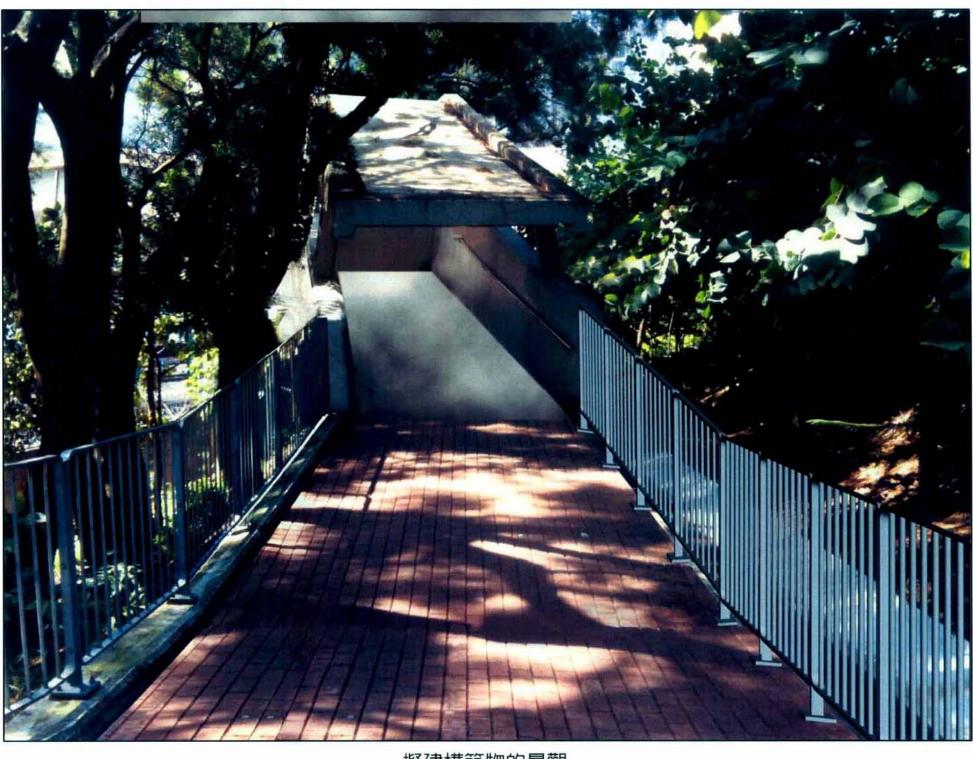


現有的景觀 Existing view



平面圖 Layout Plan 1: 1500

視點 View point



擬建構築物的景觀 View of the proposed structure

工務計劃項目第166TB號 PWP Item No. 166TB

圖則名稱 drawing title

為橫跨荃灣港鐵車廠近時貿中心的行人天橋(NF87)改建台階斜路工程 - 擬改建台階斜路的美工構思圖

Modification of existing stepped ramp of Footbridge (NF87) across Tsuen Wan MTR Depot near Mega Trade Centre - Artist's impression of modification of existing stepped ramp

參考編號 reference no.

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NF87 11an 2

比例 scale A3

如圖示 As Shown HSTSOT105-LP0052

圖則編號 drawing no.

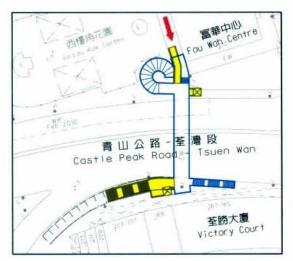
DEPARTMENT 政 HONG KONG 署

HONG KONG

As Shown



現有的景觀 Existing view



平面圖 Layout Plan 1: 1250

視點 View point



擬建構築物的景觀 View of the proposed structure

工務計劃項目第166TB號 PWP Item No. 166TB

圖則名稱 drawing title

為橫跨荃灣青山公路近富華中心的行人天橋(NF109)加建升降機工程 - 擬建升降機的美工構思圖

Retrofitting of lifts to Footbridge (NF109) across Castle Peak Road near Fou Wah Centre, Tsuen Wan - Artist's impression of proposed lifts

參考編號 reference no.

NF109_Plan 2

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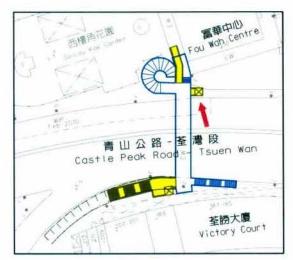
比例 scale A3 如圖示 As Shown

圖則編號 drawing no. HSTS *105-LP0072



HIGHWAYS DEPARTMENT 政 HONG KONG 署

現有的景觀 Existing view



平面圖 Layout Plan 1: 1250

視點 View point



擬建構築物的景觀 View of the proposed structure

圖則名稱 drawing title

- 擬強,十降機的美工構思圖

Retrofitting of lifts to Footbridge (NF109) across Castle Peak Road near Fou Wah Centre, Tsuen Wan - Artist's impression of proposed lifts

參考編號 reference no.

NF109_Plan 3

圖則編號 drawing no. HSTSOT105-LP0073

工務計劃項目第166TB號 PWP Item No. 166TB

比例 scale A3 版權所有不得翻印 COPYRIGHT RESERVED 如圖示 As Shown



現有的景觀 Existing view



平面圖 Layout Plan 1: 1250

視點 View point



擬建構築物的景觀 View of the proposed structure

工務計劃項目第166TB號 PWP Item No. 166TB

圖則名稱 drawing title

為橫跨荃灣青山公路近富華中心的行人天橋(NF109)加建升降機工程 - 擬建升降機的美工構思圖

Retrofitting of lifts to Footbridge (NF109) across Castle Peak Road near Fou Wah Centre, Tsuen Wan - Artist's impression of proposed lifts

參考編號 reference no.

NF109_Plan 4

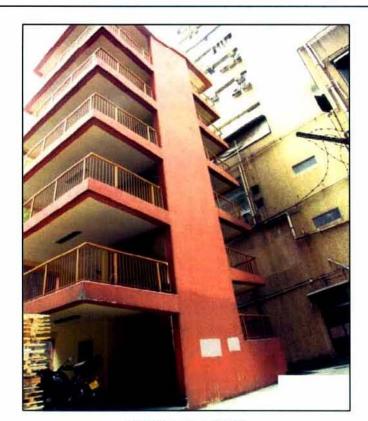
圖則編號 drawing no.

HSTSOT105-LP0074

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比例 scale A3 如圖示 As Shown

HIGHWAYS DEPARTMENT 政

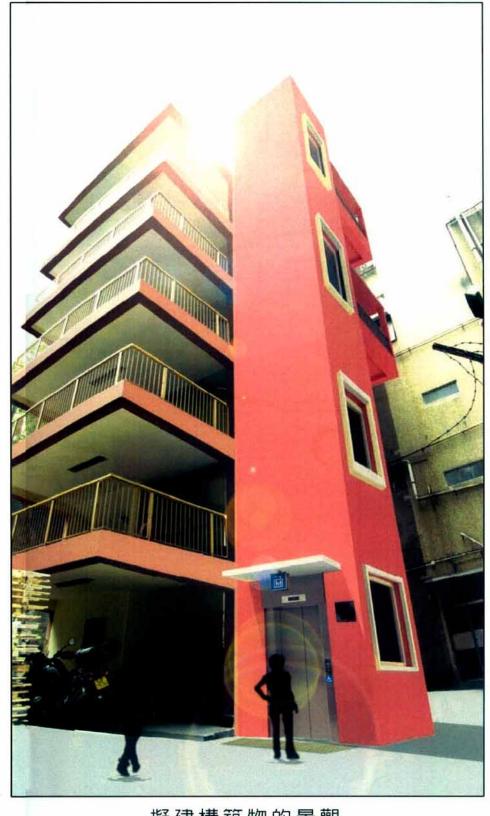


現有的景觀 Existing view



平面圖 Layout Plan 1: 1500

➡ 視點 View point



擬建構築物的景觀 View of the proposed structure

工務計劃項目第166TB號 PWP Item No. 166TB

圖則名稱 drawing title

為橫跨青衣鄉事會路近偉力工業大廈的行人天橋(NF106)加建升降機工程- 擬建升降機的美工構思圖

Retrofitting of lift to Footbridge (NF106) across Tsing Yi Heung Sze Wui Road near Vigor Industrial Building - Artist's impression of proposed lift

參考編號 reference no.

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NF106_Plan 2

比例 scale A3 版權所有不得翻印

如圖示 As Shown 圖則編號 drawing no.

HSTSOT105-LP0062



DEPARTMENT 政

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現有的景觀 Existing view



平面圖 Layout Plan 1:1000

視點 View point



擬建構築物的景觀 View of the proposed structure

工務計劃項目第166TB PWP Item No. 166TB

圖則名稱 drawing title

為橫過青衣青康路近美景花園的行人隧道(NS19)加建升降機工程- 擬建升降機的美工構思圖

Retrofitting of lift to Subway (NS19) across Ching Hong Road near Mayfair Gardens, Tsing Yi - Artist's impression of proposed lift

參考編號 reference no.

NS19_Plan 2

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圖則編號 drawing no.

HSTSOT105-LP0092



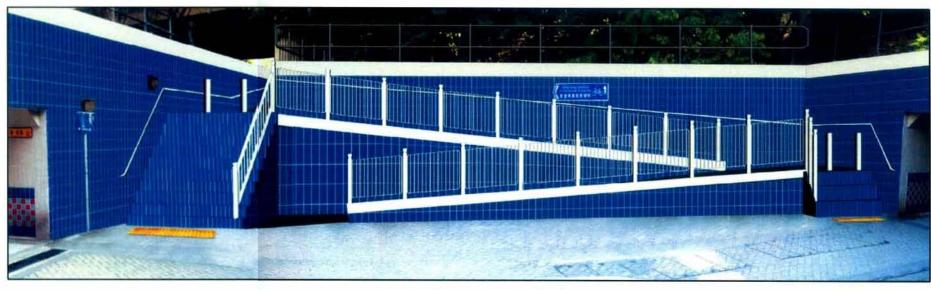
DEPARTMENT 政



現有的景觀 Existing view



平面圖 Layout Plan 1:1000



擬建構築物的景觀 View of the proposed structure

視點 View point

工務計劃項目第166TB號 PWP Item No. 166TB

圖則名稱 drawing title

為橫過沙田大埔公路近火炭路的行人隧道(NS38)加建斜路工程 擬建斜路的美工構思圖

Retrofitting of a ramp to Subway (NS38) across Tai Po Road near Fo Tan Road, Sha Tin - Artist's impression of proposed ramp

參考編號 reference no.

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NS38_Plan 2

圖則編號 drawing no.

CTSOT105-LP0102

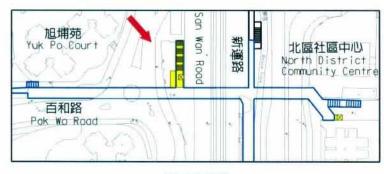
比例 scale A3 如圖示 As Shown

HIGHWAYS

DEPARTMENT 政 HONG KONG 署

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現有的景觀 Existing view



平面圖 Layout Plan 1:2000

視點 View point



擬建構築物的景觀 View of the proposed structure

工務計劃項目第166TB號 PWP Item No. 166TB

圖則名稱 drawing title

為橫跨上水彩園路及新運路的百和路行人天橋(NF122)加建升降機工程- 擬建升降機的美工構思圖

Retrofitting of lifts to Footbridge (NF122) across Choi Yuen Road and San Wan Road at Pak Wo Road, Sheung Shui - Artist's impression of proposed lifts

參考編號 reference no.

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NF122_Plan 2

比例 scale A3 如圖示

As Shown

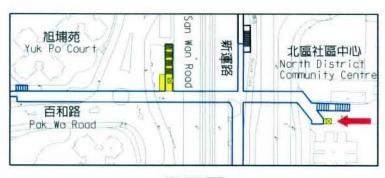
HSTSOT105-LP0082

圖則編號 drawing no.

HIGHWAYS DEPARTMENT 政 HONG KONG



現有的景觀 Existing view



平面圖 Layout Plan

1: 2000

圖例 Legend:

視點 View point



擬建構築物的景觀 View of the proposed structure

工務計劃項目第166TB號 PWP Item No. 166TB

圖則名稱 drawing title

為橫跨上水平 司路及新運路的百和路行人天橋(NF122)加建升降機工程 - 擬建升降機]美工構思圖

Retrofitting of lifts to Footbridge (NF122) across Choi Yuen Road and San Wan Road at Pak Wo Road. Sheung Shui - Artist's impression of proposed lifts

參考編號 reference no.

NF122_Plan 3

圖則編號 drawing no.

HSTSOT105-LP0083

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比例 scale A3 如圖示 As Shown

DEPARTMENT 政

166TB (Part) – Provision of barrier-free access facilities at public footbridges, elevated walkways and subways

Breakdown of estimates for consultants' fees and resident site staff costs (in September 2010 prices)

			Estimated man- months	Average MPS* salary point	Multiplier (Note 1)	Estimated fee (\$ million)
(a)	Consultants' fee for	Professional	414.1	38	2.0	48.2
	detailed design (Note 2)	Technical	518.9	14	2.0	20.7
					Sub-total	68.9
(b)	Consultants' fee for	Professional				0.3
` /	contract administration (Note 3)	Technical				0.3
					Sub-total	0.6
(c)	Resident site staff	Professional	34.4	38	1.6	3.2
, ,	costs (Note 4)	Technical	398.0	14	1.6	12.7
	Comprising:-				Sub-total	15.9
	(i) Consultants' fees for management of resident site staff					0.6
	(ii) Remuneration of resident site staff					15.3
					Total	85.4

^{*} MPS = Master Pay Scale

Notes

- 1. A multiplier of 2.0 is applied to the average MPS point to estimate the cost of consultants' staff supplied by the consultants. A multiplier of 1.6 is applied to the average MPS point to estimate the cost of resident site staff supplied by the consultants. (As at now, the pay at MPS pt. 38 is \$58,195 per month and the pay at MPS pt. 14 is \$19,945 per month.)
- 2. The actual man-months and actual costs will only be known when we have selected the consultants.

- 3. The consultants' staff cost for the contract administration is calculated in accordance with the existing consultancy agreement. The construction phase of the assignment will only be executed subject to Finance Committee's approval to upgrade part of **166TB** to Category A.
- 4. The actual man-months and actual costs will only be known after completion of the construction works.

$166TB\ (Part)-Provision\ of\ barrier-free\ access\ facilities\ at\ public\ footbridges,\ elevated\ walkways\ and\ subways$

Summary of District Council consultation

	Location*	District Council Consultation			
	Location	District	Committee**	Date	Comments
1	Footbridge (HF134) across Aberdeen Praya Road and Yue Shi Cheung Road				
2	Subway (HS16) across Aberdeen Praya Road near Old Main Street, Aberdeen	Southern	TTC	14 February 2011	No objection
3	Subway (KS47) across Tai Po Road near Pei Ho Street, Shek Kip Mei	Sham Shui Po	THC	29 July 2010	No objection
4	Footbridge (KF25) across Waterloo Road near Suffolk Road, Kowloon Tong	Kowloon City	TTC	10 March 2011	Supported
5	Footbridge (NF87) across Tsuen Wan MTR Depot near Mega Trade Centre		TTC	7 Manual 2011	NI - alaine di an
6	Footbridge (NF109) across Castle Peak Road near Fou Wah Centre, Tsuen Wan	Tsuen Wan	TTC	7 March 2011	No objection

	Location*	District Council Consultation			
	Location	District	Committee**	Date	Comments
7	Footbridge (NF106) across Tsing Yi Heung Sze Wui Road near Vigor Industrial Building	Kwai Tsing	TTC	12 August 2010	No objection
8	Subway (NS19) across Ching Hong Road near Mayfair Gardens, Tsing Yi			14 April 2011	No objection
9	Subway (NS38) across Tai Po Road near Fo Tan Road, Sha Tin	Sha Tin	TTC	8 March 2011	Supported
10	Footbridge (NF122) across Choi Yuen Road and San Wan Road at Pak Wo Road, Sheung Shui	North	TTC	14 March 2011	No objection

Legend: * HF, KF or NF – footbridges; HS, KS or NS – subways. **TTC – Traffic and Transport Committee; THC – Transport and Housing Affairs Committee.