

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 707 – NEW TOWNS AND URBAN AREA DEVELOPMENT

Transport – Footbridges/pedestrian tunnels

163TB – Kwun Tong Town Centre redevelopment – provision of grade-separated pedestrian linkages

Members are invited to recommend to Finance Committee –

- (a) the upgrading of part of **163TB**, entitled “Kwun Tong Town Centre redevelopment – provision of grade-separated pedestrian linkages (Yuet Wah Street Pedestrian Linkage)”, to Category A at an estimated cost of \$95.0 million in money-of-the-day prices; and
- (b) the retention of the remainder of **163TB** in Category B.

PROBLEM

We need to construct the Yuet Wah Street Pedestrian Linkage as part of the public road network to improve the overall pedestrian flow and connectivity of the Kwun Tong Town Centre (KTTC) redevelopment with its neighbourhood.

/PROPOSAL

PROPOSAL

2. The Director of Civil Engineering and Development, with the support of the Secretary for Development, proposes to upgrade part of **163TB** to Category A at an estimated cost of \$95.0 million in money-of-the-day (MOD) prices for the construction of the Yuet Wah Street Pedestrian Linkage.

PROJECT SCOPE AND NATURE

3. The part of **163TB** which we propose to upgrade to Category A (the proposed works) comprises –

- (a) construction of a 60-metre long and 4-metre wide elevated covered footbridge connecting Yuet Wah Street to the proposed Lift Tower 1 (comprising two lifts) at Hip Wo Street Rest Garden, together with a proposed staircase connecting the footbridge to the existing staircase;
- (b) construction of a 50-metre long and 4-metre wide at-grade covered pedestrian walkway, supported by a retaining wall, connecting the proposed Lift Tower 1 to Entrance D2 of the Kwun Tong Mass Transit Railway (MTR) Station and the proposed Lift Tower 2 (comprising one lift) at Kwun Tong Road; and
- (c) ancillary works including footpath construction, geotechnical and slope works, drainage and utilities works, landscaping works, and related electrical and mechanical works.

— A site plan and photomontages showing the proposed works are at Enclosure 1.

4. Subject to funding approval of the Finance Committee, we plan to commence the proposed works in April 2013 for completion of Lift Tower 2 in August 2014 and the remaining works in October 2015.

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5. We will retain the remainder of **163TB** in Category B, which covers the construction of two other proposed pedestrian linkages in the area¹. Funding will be sought at a later stage to suit the development programme of the KTTC Main Site.

JUSTIFICATION

6. The Urban Renewal Authority (URA) commenced the KTTC Redevelopment Project in March 2007 which would holistically regenerate the whole town centre of Kwun Tong and improve the living conditions of the residents thereat. The KTTC Redevelopment Project comprises the Yuet Wah Street Site located at the junction of Yuet Wah Street and Hip Wo Street, and the Main Site bounded by Mut Wah Street to the north, Hip Wo Street to the east, Kwun Tong Road to the south and Hong Ning Road to the west. Due to the complexity and scale of the redevelopment project, URA is adopting a phased implementation approach for the redevelopment. The Yuet Wah Street Site is being redeveloped ahead of the Main Site. During the past public consultation exercises conducted by URA for this redevelopment project, there were requests for additional pedestrian linkages to enhance the connectivity of the town centre.

7. To meet the community aspiration for enhancing the connectivity of the KTTC redevelopment with its neighbourhood and to improve traffic circulation in the area, we plan to construct three grade-separated pedestrian linkages¹ in phases and propose to first take forward the construction of the Yuet Wah Street Pedestrian Linkage. The Yuet Wah Street Pedestrian Linkage will also bring vitality and help speed up the regeneration of this wider area to achieve synergy with the KTTC redevelopment.

8. At present, Yuet Wah Street is connected to Kwun Tong Road/Kwun Tong MTR Station Entrance D2 by a staircase with over 180 steps. Pedestrians commuting between Yuet Wah Street and Kwun Tong Road/Kwun Tong MTR Station will either have to climb these steps or make a detour via Hip Wo Street. The absence of pedestrian-friendly facilities in the neighbourhood has created

/difficulties

¹ Apart from the Yuet Wah Street Pedestrian Linkage, the remaining grade-separated pedestrian linkages under **163TB** are (i) a footbridge system across Hip Wo Street near the junction of Hip Wo Street/Mut Wah Street, and (ii) a subway across Hong Ning Road at the junction with Ngau Tau Kok Road.

difficulties for the elderly and the disabled commuting within this part of Kwun Tong. The proposed works, which will put in place a footbridge system with lifts, will provide barrier-free access between Kwun Tong Road/Kwun Tong MTR Station and Yuet Wah Street (including the relocated Kwun Tong Jockey Club Health Centre) to the benefit of the local community, in particular, the aged and the disabled.

9. The design of the Yuet Wah Street Pedestrian Linkage is based on the winning design of an open competition conducted in September 2009. We have since fine-tuned the design to better blend in with the local environment, while ensuring adequate clearance from and minimal impact on the adjacent buildings by installing frosted glass panels to shield the adjacent buildings from the new pedestrian linkage system. The design capacity of the footbridge system will be able to cope with the estimated peak pedestrian flow (2-way) in 2026 of about 2 600 pedestrians per hour near its connection with Yuet Wah Street, and about 2 420 pedestrians per hour and 630 pedestrians per hour at Lift Towers 1 and 2 respectively.

FINANCIAL IMPLICATIONS

10. We estimate the capital cost of the proposed works to be \$95.0 million in MOD prices (please see paragraph 11 below), broken down as follows –

	\$ million
(a) Lift towers and lifts	12.0
(i) civil works	6.7
(ii) electrical and mechanical (E&M) works	5.3
(b) Covered footbridge	36.5
(c) Covered walkway	5.5
(d) Associated demolition, geotechnical, road, footpath, staircase, drainage, sewerage, landscaping and E&M works	13.0

/(e)

		\$ million	
(e)	Consultants' fee for	0.7	
	(i) contract administration	0.5	
	(ii) management of resident site staff	0.2	
(f)	Remuneration of resident site staff	6.8	
(g)	Contingencies	<u>7.5</u>	
	Sub-total	82.0	(in September 2012 prices)
(h)	Provision for price adjustment	<u>13.0</u>	
	Total	<u>95.0</u>	(in MOD prices)

Due to insufficient in-house resources, we propose to engage consultants to undertake contract administration and site supervision of the proposed works. A breakdown of the estimate for consultants' fees and resident site staff costs by man-month is at Enclosure 2.

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

Year	\$ million (Sept 2012)	Price adjustment factor	\$ million (MOD)
2013 – 2014	17.0	1.06250	18.1
2014 – 2015	26.4	1.12625	29.7
2015 – 2016	23.6	1.19383	28.2
2016 – 2017	15.0	1.26545	19.0
	<u>82.0</u>		<u>95.0</u>

12. We have derived the MOD estimate 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 from 2013 to 2017. Subject to funding approval, we will deliver the works under standard re-measurement contract because the quantities of works involved will vary depending on actual ground conditions. The contract will provide for price adjustments.

13. We estimate the annual recurrent expenditure arising from the proposed works to be about \$1 million.

PUBLIC CONSULTATION

14. On 3 May 2011, we consulted the Kwun Tong District Council on the proposed Yuet Wah Street Pedestrian Linkage. Members supported the implementation of the proposed works.

15. We gazetted the proposed works under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) on 16 September 2011 and received no objections. The authorisation notice was gazetted on 9 December 2011.

16. We consulted the Legislative Council Panel on Development on 27 November 2012 on the proposed works. Members generally supported the proposed works.

ENVIRONMENTAL IMPLICATIONS

17. This is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). It will not cause long-term adverse environmental impact. We have included in the project estimate the cost to implement standard pollution control measures during construction, as promulgated by the Director of Environmental Protection.

18. For short-term impacts caused by the proposed works during construction, mitigation measures to reduce nuisance to a range within established standards and guidelines will be implemented under the works contract. These measures include frequent watering of the site to reduce emission of fugitive dust, the use of movable noise barriers/enclosures and silenced plant to reduce noise generation, and the use of temporary drains to discharge site runoff.

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19. At the planning and design stages, we have considered the alignment, design level and construction method of the proposed works to reduce the generation of construction waste where possible. In addition, we will require the contractor to reuse inert construction waste (e.g. excavated soil and rock fill) 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 facilities². We will encourage the contractor 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.

20. 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 the 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.

21. We estimate that the proposed works will generate in total about 545 tonnes of construction waste. Of these, we will reuse about 280 tonnes (51%) of inert construction waste on site and deliver 201 tonnes (37%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 64 tonnes (12%) 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 \$13,427 for this project (based on a unit cost of \$27 per tonne for disposal at public fill reception facilities, and \$125 per tonne³ for disposal at landfills).

/HERITAGE

² Public fill reception facilities are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation. Disposal of inert construction waste in public fill reception facilities requires a licence issued by the Director of Civil Engineering and Development.

³ 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 IMPLICATIONS

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

TRAFFIC IMPLICATIONS

23. The proposed works will not cause any significant traffic impact. Temporary traffic arrangements (TTAs) will be implemented to facilitate the construction works requiring temporary lane closures. A traffic management liaison group comprising representatives of the Hong Kong Police Force, the Transport Department and other concerned government departments will be set up to assess the TTAs.

24. During construction, access through the existing staircase connecting Yuet Wah Street with Kwun Tong Road will be maintained or temporarily diverted for public use. Upon completion of the proposed works, the pedestrian flow along the existing staircase is expected to significantly diminish, yet the majority length of the existing staircase with its connections to the side entrances of the adjacent buildings and the Hip Wo Street Rest Garden will be retained.

LAND ACQUISITION

25. The proposed works requires resumption of about 42 square metres (m²) of private land. The creation of rights of temporary occupation of about 154 m² and easements and other permanent rights of about 12 m² of private land respectively will also be required for the proposed works. The land resumption costs, estimated at \$12,000, will be charged to **Head 701 – Land Acquisition**. A breakdown of the land resumption costs is at Enclosure 3.

/BACKGROUND

BACKGROUND INFORMATION

26. When submitting the draft KTTC Development Scheme Plan for the Town Planning Board's consideration in April 2007, URA conducted a preliminary connectivity study with a view to enhancing the pedestrian network and linkages to the neighbouring areas. Further to the preliminary connectivity study, URA also conducted a preliminary engineering feasibility study which recommended that the Government should build three grade-separated pedestrian facilities during the KTTC redevelopment, including the proposed Yuet Wah Street Pedestrian Linkage, to enhance the connectivity between the KTTC and the adjoining neighbourhood.

27. We upgraded **163TB** to Category B in December 2008.

28. Following the design concept competition in September 2009, we engaged consultants in June 2010 to undertake the detailed design for the proposed works at an estimated cost of about \$1.3 million under the block allocation **Subhead 7100CX** "New towns and urban area works, studies and investigations for items in Category D of the Public Works Programme". The detailed design of the proposed works has been completed.

29. The proposed works will involve the removal of 11 trees including two trees to be felled and nine trees to be transplanted off-site. All the trees to be removed and transplanted are not important trees⁴. We will incorporate planting proposals as part of the proposed works, including a total of three trees, 500 shrubs and 430 m² of grassed area.

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⁴ "Important trees" refers 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 an important person or event;
- (c) trees of precious or rare species;
- (d) trees of outstanding form (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 a trunk diameter equal to or exceeding 1.0 metre (m) (measured at 1.3 m above ground level), or with a height/canopy spread equal to or exceeding 25 m.

30. We estimate that the proposed works will create about 68 jobs (55 for labourers and another 13 for professional/technical staff) providing a total employment of 1 540 man-months.

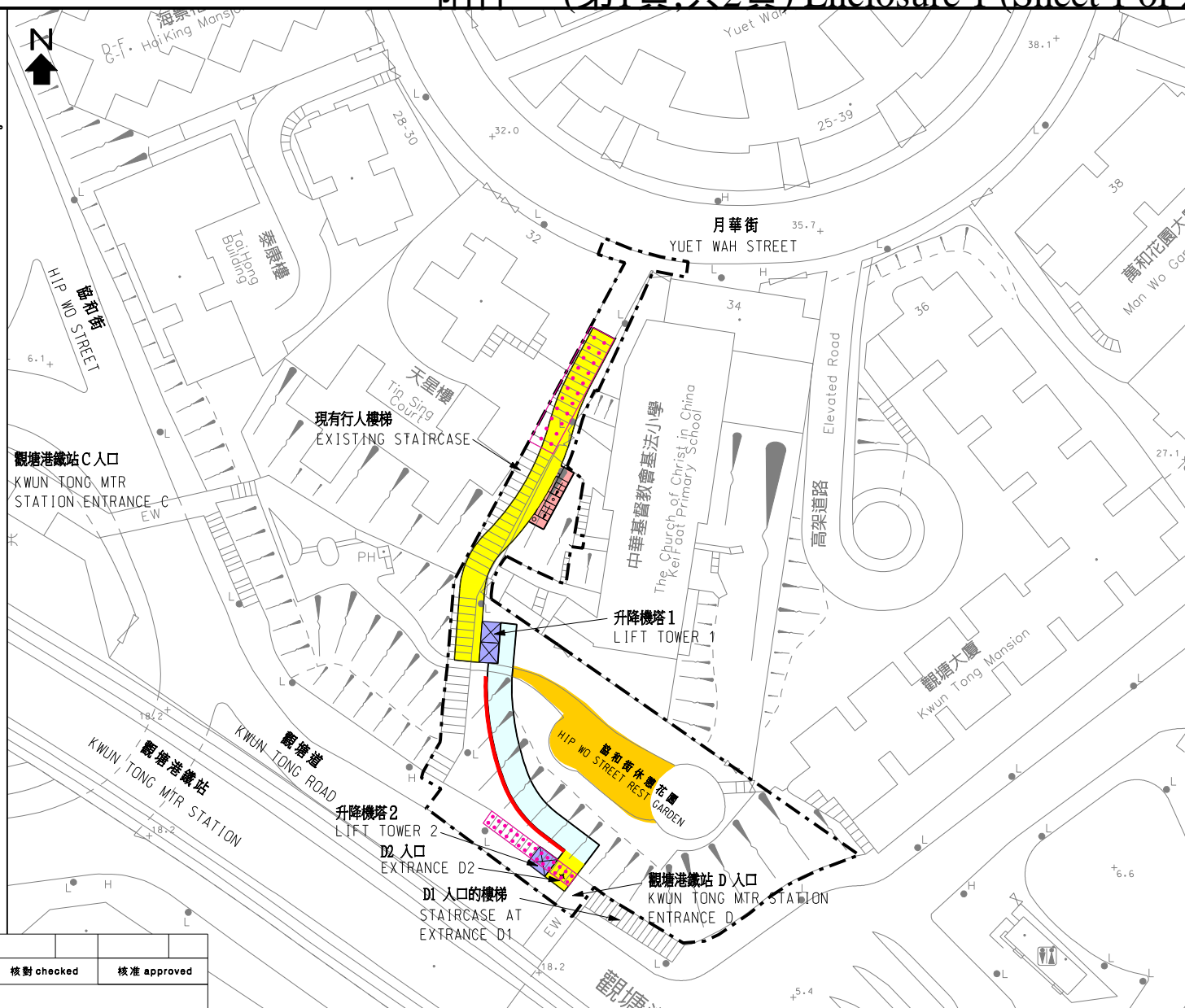
Development Bureau
January 2013

註釋 NOTES:

- 所有水平均為約數，以米為單位，並在香港主水平基準上。
ALL LEVELS ARE APPROXIMATE VALUES AND IN METRES ABOVE HONG KONG PRINCIPAL DATUM.
- 如有需要，施工區界限內現有行人路及樓梯的部分路段或會分階段暫時封閉。
SECTIONS OF EXISTING FOOTPATHS AND STAIRCASES WITHIN LIMIT OF WORKS AREA MAY BE TEMPORARILY CLOSED IN PHASES AS AND WHEN REQUIRED.

圖例 LEGEND:

-  施工區界限
LIMIT OF WORKS AREA
-  擬建的有蓋行人天橋橋面
PROPOSED COVERED FOOTBRIDGE DECK
-  擬建的有蓋行人通道
PROPOSED AT-GRADE COVERED PEDESTRIAN WALKWAY
-  擬建的升降機
PROPOSED LIFTS
-  擬建的有蓋行人樓梯連接擬建的行人天橋及現有行人樓梯
PROPOSED COVERED PEDESTRIAN STAIRCASE CONNECTING PROPOSED FOOTBRIDGE TO EXISTING STAIRCASE
-  擬建的擋土牆
PROPOSED RETAINING WALL
-  現有樓梯將予永久封閉及拆卸
EXISTING STAIRCASES TO BE PERMANENTLY CLOSED AND DEMOLISHED
-  現有協和街休憩花園將予暫時封閉
EXISTING HIP WO STREET REST GARDEN TO BE TEMPORARILY CLOSED



編號 no.	日期 date	內容摘要 description	繪圖 drawn	核對 checked	核准 approved
修訂 REVISION					

2012年至2013年年度工務小組委員會文件 PWSC Submission 2012 - 2013

圖則名稱 Drawing title 觀塘市中心重建計劃- 興建分層行人連接系統 (月華街行人連接系統) 平面圖 KWUN TONG TOWN CENTRE REDEVELOPMENT- PROVISION OF GRADE-SEPARATED PEDSTRIAN LINKAGES (YUET WAH STREET PEDESTRIAN LINKAGE) LAYOUT PLAN	繪圖 Drawn	簽署 Initial	日期 Date	項目編號 Item no.	辦事處 Office 九龍拓展處 KOWLOON DEVELOPMENT OFFICE
	核對 Checked	簽署 Initial	日期 Date	比例 Scale	
	核准 Approved	簽署 Initial	日期 Date	圖則編號 Drawing no.	 土木工程拓展署 CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
K.Y. Lam	Signed	25.01.2013	163TB (PART)		
Alan Wu	Signed	25.01.2013	N.T.S.	KZ 720	
H K Chan	Signed	25.01.2013			



月華街行人連接系統構想圖
PHOTOMONTAGE OF YUET WAH STREET PEDESTRIAN LINKAGE

2012年至2013年年度工務小組委員會文件 PWSC Submission 2012 - 2013

圖則名稱 Drawing title 觀塘市中心重建計劃 - 興建分層行人連接系統 (月華街行人連接系統) KWUN TONG TOWN CENTRE REDEVELOPMENT - PROVISION OF GRADE-SEPARATED PEDESTRIAN LINKAGES (YUET WAH STREET PEDESTRIAN LINKAGE)	繪圖 Drawn	簽署 Initial	日期 Date	項目編號 Item no.	辦事處 Office 九龍拓展處 KOWLOON DEVELOPMENT OFFICE
	K.Y. Lam	SIGNED	25.01.13	163TB (PART)	
	核對 Checked	簽署 Initial	日期 Date	比例 Scale	圖則編號 Drawing no. KZ 719
Alan Wu	SIGNED	25.01.13	N.T.S.		
核准 Approved	簽署 Initial	日期 Date	土木工程拓展署 CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT		
H K Chan	SIGNED	25.01.13			

**163TB (Part) – Kwun Tong Town Centre redevelopment –
provision of grade-separated pedestrian linkages**

**Breakdown of the estimates for consultants' fees and resident site staff costs
(in September 2012 prices)**

		Estimated man- months	Average MPS* salary point	Multiplier (Note 1)	Estimated fee (\$ million)
(a) Consultants' fees for contract administration (Note 2)	Professional	–	–	–	0.5
				Sub-total	0.5
(b) Resident site staff costs ^(Note 3)	Professional	31	38	1.6	3.3
	Technical	103	14	1.6	3.7
				Sub-total	7.0
Comprising –					
(i)	Consultants' fees for management of resident site staff				0.2
(ii)	Remuneration of resident site staff				6.8
				Total	7.5

* MPS = Master Pay Scale

Notes

1. A multiplier of 1.6 is applied to the average MPS salary point to estimate the cost of resident site staff supplied by the consultants. (As at now, MPS salary point 38 = \$65,695 per month and MPS salary point 14 = \$22,405 per month.)
2. The consultants' staff cost for contract administration is calculated in accordance with the existing consultancy agreement for the design and construction of **163TB**. The construction phase of the assignment will only be executed subject to Finance Committee's approval to upgrade part of **163TB** to Category A.
3. The actual man-months and actual costs will only be known after completion of the construction works.

**163TB (Part) – Kwun Tong Town Centre redevelopment –
provision of grade-separated pedestrian linkages**

Breakdown of Land Resumption Costs

	\$
(I) Estimated Land Resumption Costs	10,000
• Compensation for resumption of portion of a private lot with a total area of 42 square metres (m ²)	
• Compensation for creation of easements and other permanent rights in, under or over portions of a private lot with a total area of 12 m ²	
• Compensation for creation of rights of temporary occupation of portion of a private lot with a total area of 154 m ²	
(II) Contingency payment	2,000
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Total	12,000
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