

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 707 – NEW TOWNS AND URBAN AREA DEVELOPMENT Recreation, Culture and Amenities – Open spaces 414RO – Improvement works at Mui Wo

Members are invited to recommend to Finance Committee –

- (a) the upgrading of part of **414RO**, entitled “Improvement works at Mui Wo, phase 1”, to Category A at an estimated cost of \$193.1 million in money-of-the-day prices; and
- (b) the retention of the remainder of **414RO** in Category B.

PROBLEM

We need to enhance the road safety and provide better recreational facilities in the Mui Wo area, thereby enhancing its tourism attractiveness.

PROPOSAL

2. The Director of Civil Engineering and Development, with the support of the Secretary for Development, proposes to upgrade part of **414RO** to Category A at an estimated cost of \$193.1 million in money-of-the-day (MOD) prices for the construction of the improvement works at Mui Wo, phase 1.

/PROJECT

PROJECT SCOPE AND NATURE

3. The part of **414RO** which we propose to upgrade to Category A (the Phase 1 works) comprises –

- (a) a 230-metre (m) long and 11.5-m wide segregated pedestrian walkway and cycle track along the waterfront between Mui Wo Cooked Food Market and River Silver;
- (b) a 35-m long and 4.8-m wide footbridge across River Silver;
- (c) a civic square near Mui Wo old town provided with associated landscaped area, recreational and leisure facilities and a performance venue;
- (d) eight amenity areas in villages at Mui Wo; and
- (e) ancillary works including information boards, signage, landscaping, drainage and utilities works.

———— Layout plans and artist's impression of the Phase 1 works are at Enclosures 1 to 5.

4. Subject to funding approval of the Finance Committee, we plan to commence the Phase 1 works in August 2013 for completion in November 2015.

5. We will retain the remainder of **414RO** in Category B, which covers infrastructural works to further enhance the attractiveness and recreational potential of Mui Wo, thus improving the local economy. Funding for the remainder of **414RO** will be sought in phases to dovetail with the implementation programme of the project.

JUSTIFICATION

6. In an effort to rejuvenate the local community and enhance road safety in Mui Wo, we propose to implement various local improvement works in Mui Wo. There is general support for the Government to implement the proposed improvement works in a phased manner and proceed as soon as practicable with the Phase 1 works.

7. In terms of enhancing road safety, while bicycle is the main mode of transport in Mui Wo, there is currently no cycle track between the Mui Wo ferry pier and River Silver, and cyclists travelling between the ferry pier and the various residential clusters in Mui Wo hinterland have to share Ngan Kwong Wan Road with motorists. The local communities have a major safety concern on this shared use arrangement. The proposed works could enhance road safety by segregating cycle track from pedestrian walkway and existing carriageway. This could also enhance the traffic flow conditions along the section of Ngan Kwong Wan Road. Upon completion of the proposed works along the waterfront between Mui Wo Cooked Food Market and River Silver, there would be a segregated cycle track to enhance traffic safety and also a pedestrian walkway on suspended deck serving as a waterfront promenade for public enjoyment. The new pedestrian walkway and cycle track will connect to the existing road network at Chung Hau via the footbridge at River Silver. We propose to construct a new footbridge alongside the existing footbridge across River Silver to accommodate the new pedestrian walkway and cycle track respectively. The relevant layout plan and artist's impression of the segregated pedestrian walkway and cycle track are at Enclosures 2 and 3.

8. The proposed local improvement works could also provide better recreational facilities and improve the local environment. The construction of a civic square, comprising landscaped area, recreational and leisure facilities¹ and an associated performance venue, will provide a public open space to meet the district's need for recreational facilities, as well as space for holding festive events and street performance activities. The proposed works will improve the landscaping environment of Mui Wo old town, provide a rest garden to local residents and enhance the attractiveness to tourists and visitors. The artist's impression and relevant conceptual layout plan of the civic square are at Enclosures 4 and 5. In addition, the construction of eight amenity areas in nearby villages (as shown at Enclosure 1) will improve the local environment and provide rest points for local residents and visitors.

FINANCIAL IMPLICATIONS

9. We estimate the capital cost of the Phase 1 works to be \$193.1 million in MOD prices (please see paragraph 10 below), broken down as follows –

/(a)

¹ The facilities comprise (i) a woodland garden; (ii) a play lawn with boulder stones; (iii) a children playground for 2 to 12-year-olds; and (iv) exercise equipment for the elderly.

		\$ million
(a)	Construction of	126.6
	(i) a segregated pedestrian walkway and cycle track	56.7
	(ii) a footbridge across River Silver	11.3
	(iii) a civic square	40.1
	(iv) amenity areas	4.3
	(v) landscaping works	5.8
	(vi) other ancillary works	8.4
(b)	Environmental mitigation measures	2.2
(c)	Consultants' fees for	2.2
	(i) contract administration	1.6
	(ii) management of resident site staff	0.6
(d)	Remuneration of resident site staff	17.2
(e)	Contingencies	14.8
	Sub-total	163.0 (in September 2012 prices)
(f)	Provision for price adjustment	30.1
	Total	193.1 (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-months is at Enclosure 6.

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

/2013-2014

Year	\$ million (Sept 2012)	Price adjustment factor	\$ million (MOD)
2013 – 2014	16.5	1.06250	17.5
2014 – 2015	52.1	1.12625	58.7
2015 – 2016	52.1	1.19383	62.2
2016 – 2017	29.8	1.26545	37.7
2017 – 2018	8.9	1.34138	11.9
2018 – 2019	3.6	1.41180	5.1
	<hr/> 163.0 <hr/>		<hr/> 193.1 <hr/>

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 from 2013 to 2019. Subject to funding approval, we will deliver the Phase 1 works under a target cost contract² with provision for price adjustments.

12. We estimate the annual recurrent expenditure arising from the proposed works to be about \$1.1 million.

PUBLIC CONSULTATION

13. We convened two public fora on 8 September 2007 and 31 May 2008 during the feasibility study stage to establish consensus for the preliminary design of the proposed improvement works at Mui Wo. There was general support and consensus for phased implementation of the proposed improvement works.

/14.

² We will adopt a target cost contract approach in implementing the proposed works. Target cost contract means that the contractor will tender for a target price. Pursuant to a pre-determined share percentage with the Government, the contractor will share either the cost savings if the actual cost of works is below the target price or the cost in excess if the actual cost of works is above the target price. The Government's share of the cost in excess is capped at 10% above the target price.

14. We consulted the Mui Wo Rural Committee (MWRC) on 28 December 2011 on the project. The MWRC supported the Phase 1 works and urged the Government to implement them as soon as practicable.

15. With the detailed design of the Phase 1 works presented at a public forum on 14 January 2012, the attendees supported the proposed works and demanded for their early implementation. At the subsequent consultation with the Islands District Council (IsDC) on 20 February and 22 October 2012, members also supported the Phase 1 works and urged for their early implementation.

16. We gazetted the proposed road scheme (covering items (a) and (b) in paragraph 3 above) under the Roads (Works, Use and Compensation) Ordinance, Cap 370 ("the Ordinance") on 4 May 2012. During the statutory exhibition period, one objection was received. The objector's major concerns were insufficient public consultation, unreasonable scope, irrational justification, and impact on Mui Wo residents during construction. He also proposed widening the carriageway for bike lanes as an alternative. The objection remained unresolved after exchange of views through correspondence and a meeting on 16 August 2012. The objector confirmed on 31 August 2012 not withdrawing his objection to the proposed road scheme. Having considered the objection, the Chief Executive in Council authorised the proposed road scheme without modification on 4 December 2012. The notice of authorisation was gazetted on 21 December 2012.

17. We consulted the Legislative Council Panel on Development on 26 February 2013 on the proposed works. Members supported the proposed works.

ENVIRONMENTAL IMPLICATIONS

18. This is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). We completed a Preliminary Environmental Review (PER) in April 2009 and the Director of Environmental Protection agreed to its findings. The PER concluded that with the implementation of the recommended monitoring and mitigation measures, the project will not cause long-term environmental impacts. We have included \$2.2 million (in September 2012 prices) in the project estimate the cost to implement suitable monitoring and mitigation measures to control short-term environmental impacts.

19. During construction, we will control potential noise, dust and site run-off nuisances arising from the construction works to within established standards and guidelines through the implementation of monitoring and mitigation measures in the relevant contract. These measures include use of silenced construction plant, frequent cleaning and watering of the site, covering of materials on trucks and the provision of wheel-washing facilities, and noise and water quality monitoring.

20. At the planning and design stages, we have considered the design and construction sequence of the proposed improvement works to reduce the generation of construction waste where possible. In addition, we will require the contractor to reuse inert construction waste (e.g. use of excavated material for filling within the site) 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 facilities³. 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.

21. 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 mitigating 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.

22. We estimate that the project will generate in total about 11 850 tonnes of construction waste. Of these, we will reuse about 1 890 tonnes (16.0%) of inert construction waste on site and deliver 7 920 tonnes (66.8%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 2 040 tonnes (17.2%) of non-inert construction waste at landfills. The total cost for accommodating construction waste at public fill

/reception

³ 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.

reception facilities and landfill sites is estimated to be \$468,840 for this project (based on a unit cost of \$27 per tonne for disposal at public fill reception facilities and \$125 per tonne⁴ at landfills).

HERITAGE IMPLICATIONS

23. The proposed 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 Monuments Office.

TRAFFIC IMPLICATIONS

24. The proposed works will not cause any significant traffic impact. Temporary traffic arrangements (TTAs) will be implemented to minimise the impact on traffic during construction, particularly when the construction works would require temporary lane closures. A traffic management liaison group comprising representatives of the Police, the Transport Department and other concerned government departments will be set up to endorse the TTAs.

LAND ACQUISITION

25. The proposed works do not require any land acquisition.

BACKGROUND INFORMATION

26. In late 2004, the Government proposed a Concept Plan for Lantau (Lantau Concept Plan) as the guidelines for a balanced and coordinated approach for the future planning of sustainable developments in Lantau. We included 414RO in Category B in October 2006.

/27.

⁴ 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.

27. In view of the public support for the local improvement works for facelift of Mui Wo, the Government proposed in the Revised Lantau Concept Plan issued in May 2007 improvement works for Mui Wo to rejuvenate local community, boost local economy and in particular enhance road safety for motorists, cyclists and pedestrians. To establish a consensus of public opinions on how the proposed improvement works should best be carried forward, we launched a series of public consultations since 2007 to seek the views of relevant stakeholders, including the residents of Mui Wo, MWRC, IsDC, green groups and other concern groups, on the proposed improvement works.

28. We engaged consultants to undertake a feasibility study in July 2007 on the improvement works for Mui Wo Facelift. The feasibility study was completed in December 2009 at a cost of \$3.55 million, which was charged to block allocation **Subhead 7100CX** “New towns and urban area works, studies and investigation for items in Category D of the Public Works Programme”.

29. To proceed further with the project, we then engaged consultants to undertake detailed design for the proposed works in October 2009 at an estimated cost of about \$6.16 million under block allocation of **Subhead 7100CX** “New towns and urban area works, studies and investigation for items in Category D of the Public Works Programme”. We have substantially completed the detailed design of the proposed works in December 2012.

30. Of the 322 trees located within the boundary of the site of the proposed works, 230 trees will be preserved. The remaining 92 trees will have to be removed, which include 38 trees to be felled and 54 trees to be replanted within the project site. All trees to be removed are not important trees⁵. We will incorporate planting proposals as part of the proposed improvement works, including estimated quantities of 68 trees, 13 000 shrubs, and 200 m² of grassed area.

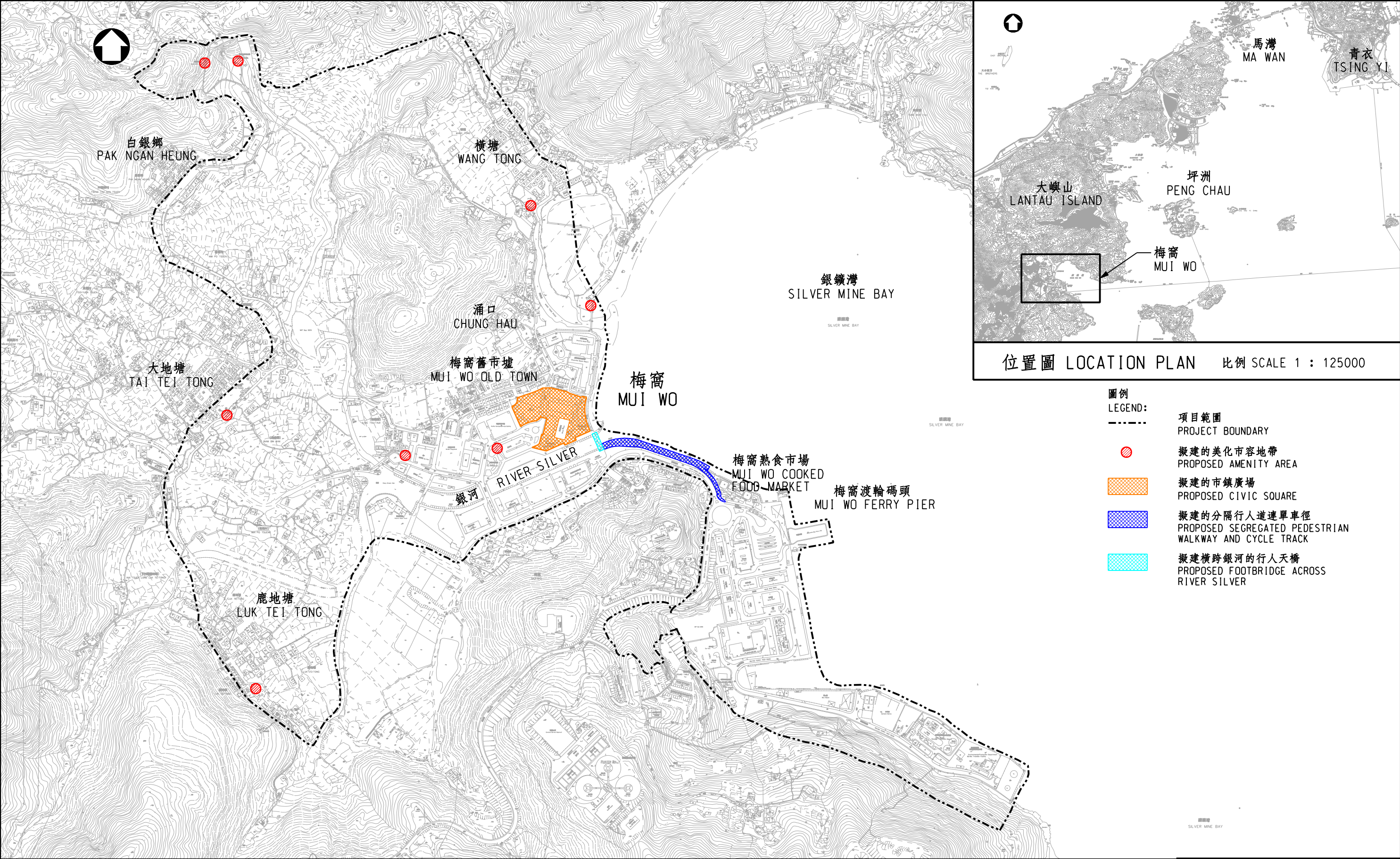
/31.

⁵ “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 –

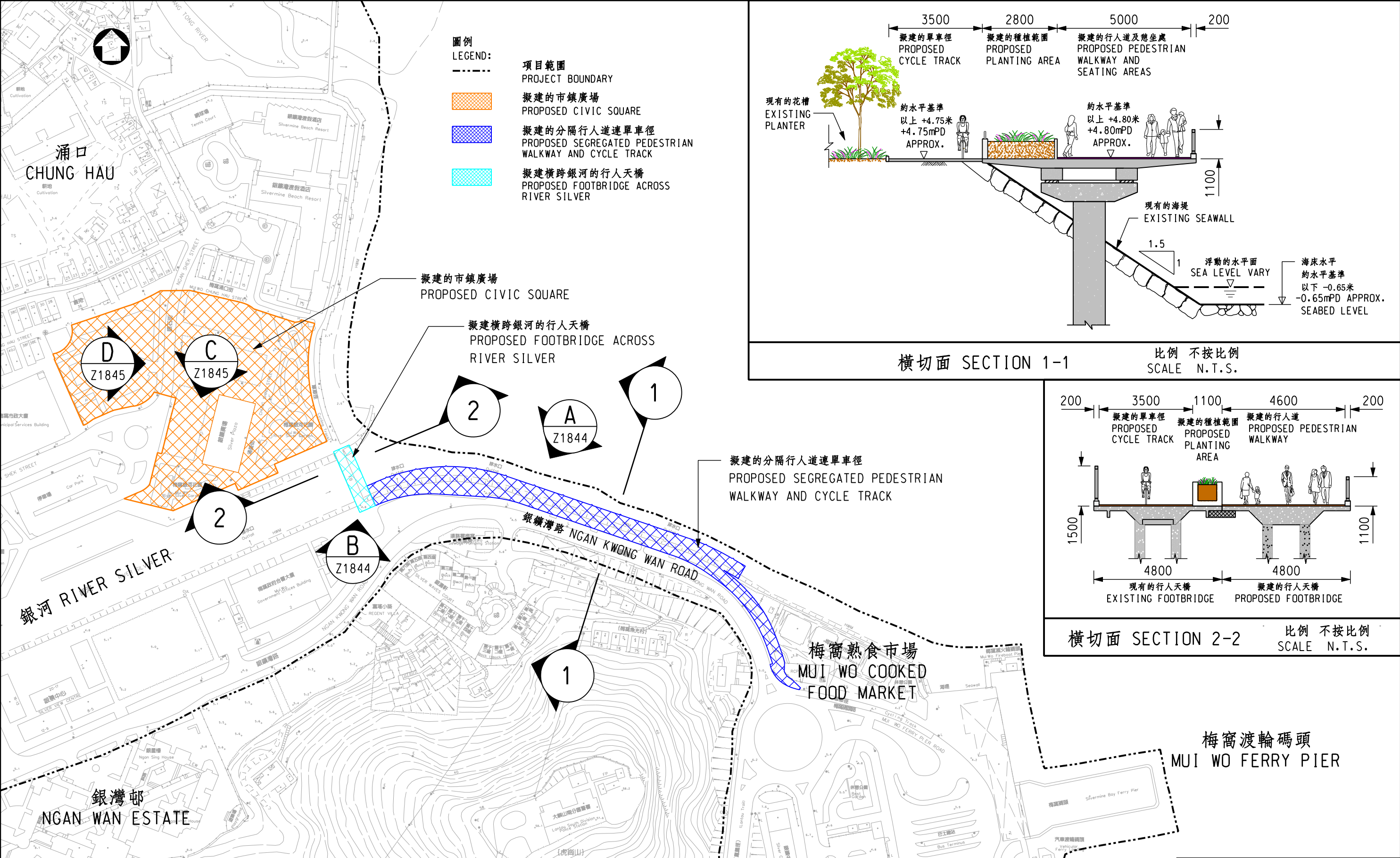
- (a) trees of 100 years old or above;
- (b) trees of cultural, historical or memorable significance, e.g. Fung Shui trees, trees as landmark of monastery or heritage monument, and trees in memory of an important person or event;
- (c) trees of precious or rare species;
- (d) trees of outstanding form (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.

31. We estimate that the proposed works will create about 115 jobs (95 for labourers and another 20 for professional/technical staff) providing a total employment of 2 370 man-months.

Development Bureau
March 2013



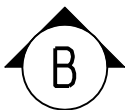
圖則名稱 drawing title 梅窩改善工程第一期 - 平面圖 IMPROVEMENT WORKS AT MUI WO, PHASE 1 - LAYOUT PLAN	繪圖 drawn	簽署 initial	日期 date	項目編號 item no. 7414R0	辦事處 office 港島及離島拓展處 HONG KONG ISLAND AND ISLANDS DEVELOPMENT OFFICE
	核對 checked	簽署 initial	日期 date	比例 scale 1 : 7000 @A3	
	核准 approved	簽署 initial	日期 date	圖則編號 drawing no. HKI-Z1842	土木工程拓展署 CEDD CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT



圖則名稱 drawing title 梅窩改善工程第一期 — 分隔行人道連單車徑,橫跨銀河的行人天橋和市鎮廣場平面圖 IMPROVEMENT WORKS AT MUI WO, PHASE 1 – GENERAL LAYOUT FOR SEGREGATED PEDESTRIAN WALKWAY AND CYCLE TRACK, FOOTBRIDGE ACROSS RIVER SILVER AND CIVIC SQUARE	繪圖 drawn	簽署 initial	日期 date	項目編號 item no. 7414R0	辦事處 office 港島及離島拓展處 HONG KONG ISLAND AND ISLANDS DEVELOPMENT OFFICE
	核對 checked	簽署 initial	日期 date	比例 scale 1 : 2000 @A3	
	核准 approved	簽署 initial	日期 date	圖則編號 drawing no. HKI-Z1843	土木工程拓展署 CEDD CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

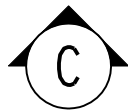


支撐面板行人道連單車徑(構思圖)
PEDESTRIAN WALKWAY ON SUSPENDED DECK AND CYCLE TRACK (ARTIST'S IMPRESSION)

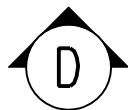


銀河上的行人天橋(構思圖)
FOOTBRIDGE ACROSS RIVER SILVER (ARTIST'S IMPRESSION)


圖則名稱 drawing title 梅窩改善工程第一期 - 分隔行人道連單車徑構思圖 IMPROVEMENT WORKS AT MUI WO, PHASE 1 - ARTIST'S IMPRESSION OF SEGREGATED PEDESTRIAN WALKWAY AND CYCLE TRACK	繪圖 drawn	簽署 initial	日期 date	項目編號 item no. 7414R0	辦事處 office 港島及離島拓展處 HONG KONG ISLAND AND ISLANDS DEVELOPMENT OFFICE
	核對 checked	簽署 initial	日期 date	比例 scale N.T.S.	
	核准 approved	簽署 initial	日期 date	圖則編號 drawing no. HK I-Z1844	土木工程拓展署 CEDD CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT



市鎮廣場的康樂消閒區(構思圖)
RECREATION & LEISURE AREA IN CIVIC SQUARE (ARTIST'S IMPRESSION)



市鎮廣場的表演場地(構思圖)
PERFROMANECE VENUE IN CIVIC SQUARE (ARTIST'S IMPRESSION)

圖則名稱 drawing title 梅窩改善工程第一期 - 市鎮廣場構思圖 IMPROVEMENT WORKS AT MUI WO, PHASE 1 - ARTIST'S IMPRESSION OF CIVIC SQUARE	繪圖 drawn	簽署 initial	日期 date	項目編號 item no. 7414R0	辦事處 office 港島及離島拓展處 HONG KONG ISLAND AND ISLANDS DEVELOPMENT OFFICE
	核對 checked	簽署 initial	日期 date	比例 scale N.T.S.	
	核准 approved	簽署 initial	日期 date	圖則編號 drawing no. HK I-Z1845	 土木工程拓展署 CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT



- 圖例
LEGEND:
- 邊界線
SITE BOUNDARY
 - 現有樹木
EXISTING TREE
 - 建議樹木
PROPOSED TREE PLANTING
 - 建議移植樹
PROPOSED TRANSPLANTED TREES
 - 建議灌木
PROPOSED SHRUB PLANTING
 - 建議草坪
PROPOSED LAWN AREA
 - 建議裝飾鋪地
PROPOSED DECORATIVE PAVING
 - 建議座位
PROPOSED SEATING BENCH
- 1 2-5歲兒童遊樂場
CHILDREN'S PLAYGROUND FOR 2- 5 YEARS OLD
 - 2 5-12歲兒童遊樂場
CHILDREN'S PLAYGROUND FOR 5-12 YEARS OLD
 - 3 主長廊
MAIN PROMENADE
 - 4 現有士多房
EXISTING UTILITY ROOM
 - 5 林地花園
WOODLAND GARDEN
 - 6 加高花槽
RAISED PLANTER
 - 7 遊玩草坪及石塊
PLAY LAWN WITH BOULDER STONES
 - 8 雕刻
DISPLAY
 - 9 表現觀賞區
PERFORMANCE VIEWING AREA
 - 10 銀鑽廣場
SILVER PLAZA
 - 11 消防通道
EVA ROAD
 - 12 長者健身設備及活動場地
ELDERLY EXERCISE EQUIPMENT AND ACTIVITY SPACE
 - 13 表演舞台(設暢通無阻的通道)
PERFORMANCE STAGE (WITH BARRIER FREE ACCESS)
 - 14 停車位
PARKING AREA
 - 15 單車停放處
BICYCLE PARKING

圖則名稱 drawing title

梅窩改善工程第一期 - 市鎮廣場概念設計圖則
IMPROVEMENT WORKS AT MUI WO, PHASE 1 -
CIVIC SQUARE CONCEPTUAL LAYOUT PLAN

繪圖 drawn

簽署 initial

日期 date

項目編號 item no.

7414R0

核對 checked

簽署 initial

日期 date

比例 scale

1 : 600 @A3

核准 approved

簽署 initial

日期 date

圖則編號 drawing no.

HKI-Z1846

辦事處 office

港島及離島拓展處
HONG KONG ISLAND AND ISLANDS
DEVELOPMENT OFFICE

CEDD 土木工程拓展署
CIVIL ENGINEERING AND
DEVELOPMENT DEPARTMENT

414RO (Part) – Improvement works at Mui Wo**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	–	–	–	0.9
		Technical	–	–	–	0.7
					Sub-total	1.6
(b)	Resident site staff costs (Note 3)	Professional	88	38	1.6	9.2
		Technical	239	14	1.6	8.6
					Sub-total	17.8
Comprising –						
(i)	Consultants' fees for management of resident site staff					0.6
(ii)	Remuneration of resident site staff					17.2
					Total	19.4

* MPS = Master Pay Scale

Notes

1. 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, MPS point 38 = \$65,695 per month and MPS point 14 = \$22,405 per month).
2. The consultants' staff cost for the contract administration is calculated in accordance with the existing consultancy agreement for the design and construction of **414RO**. The construction phase of the assignment will only be executed subject to Finance Committee's approval to upgrade part of **414RO** to Category A.
3. The actual man-months and actual costs will only be known after completion of the construction works.