LEGISLATIVE COUNCIL PANEL ON DEVELOPMENT

PWP Item No. 710CL – Hung Shui Kiu development, stage 2 – widening of Tin Ha Road and Tan Kwai Tsuen Road

PURPOSE

This paper informs Members of the proposal to upgrade **710CL** "Hung Shui Kiu development, stage 2 – widening of Tin Ha Road and Tan Kwai Tsuen Road" to Category A at an estimated cost of \$106.0 million in money-of-the-day (MOD) prices for widening the existing sub-standard Tin Ha Road (THR) and Tan Kwai Tsuen Road (TKTR) so as to improve road safety.

PROJECT SCOPE

- 2. The revised scope of **710CL** comprises
 - (a) widening of a section of THR of about 1.2 kilometres (km) long between Ping Ha Road and San Lee Uk Tsuen to a standard 7.3 metres (m) wide 2-way 2-lane single carriageway with associated footpaths of 2 m to 2.5 m in width;
 - (b) widening of a section of TKTR of about 550 m long between Castle Peak Road Hung Shui Kiu and the road bend near Meadowlands to a standard 7.3 m wide 2-way 2-lane single carriageway with associated footpaths of not less than 2.1 m in width;
 - (c) construction of box culverts at the widened THR for drainage improvement and road widening; and
 - (d) associated road drainage, landscaping works, environmental mitigation measures, traffic aids, road lighting, re-provisioning of refuse collection points and ancillary works.

Site plans with sections showing the proposed works are at **Enclosure 1**. Subject to the funding approval by the Finance Committee (FC), we plan to commence the proposed works in August 2012 for completion in February 2015.

JUSTIFICATION

- 3. The existing section of THR between Ping Ha Road and San Lee Uk Tsuen is sub-standard, with a carriageway width of 6.3 m on average. Being used heavily by articulated vehicles accessing the adjacent back up areas for containers, it poses severe danger to the pedestrians. For the existing section of TKTR between Castle Peak Road Hung Shui Kiu and the road bend near Meadowlands, it is also sub-standard, with a carriageway width of 6.5 m on average. It poses severe difficulties to the manoeuvring of refuse collection vehicles, coaches, and other heavy vehicles accessing adjacent open storage areas and factories. It is also dangerous for pedestrians as the existing footpaths at some parts of TKTR are as narrow as 0.8 m.
- 4. In view of the undesirable conditions of THR and TKTR and local residents' strong appeal for immediate improvements, we propose to widen the two roads in order to enhance road safety at these locations. The scope of road widening works at THR comprises widening the existing sub-standard carriageway from 6.3 m to 7.3 m and associated construction of drainage works and footpaths. The scope of road widening works at TKTR comprises widening the existing sub-standard carriageway from 6.5 m to 7.3 m and associated construction of drainage works and footpaths. Upon completion of the proposed works, the relevant sections of THR and TKTR will meet the current road design standard with improvement in road safety.

FINANCIAL IMPLICATIONS

5. We estimate the capital cost of the project to be \$106.0 million in MOD prices, broken down as follows –

		\$ million
(a)	Road works	23.7
(b)	Drainage works	12.8
(c)	Box culverts	19.2
(d)	Landscaping works	5.2
(e)	Environmental mitigation	1.5

measures

(f)	Associated traffic aids, road lighting, re-provisioning of refuse collection points and ancillary works		11.8	
(g)	Consultants' fees for		1.2	
	(i) contract administration	0.5		
	(ii) management of resident site staff	0.7		
(h)	Remuneration of resident site staff		9.0	
(i)	Contingencies		8.4	
	Sub-total		92.8	(in September 2011 prices)
(j)	Provision for price adjustment		13.2	
	Total	•	106.0	(in MOD prices)
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PUBLIC CONSULTATION

- 6. We consulted the Ha Tsuen Rural Committee on the proposed works for THR on 5 May 2011, and the Ping Shan Rural Committee on the proposed works for TKTR on 19 May 2011. We also consulted the Traffic and Transport Committee (T&TC) of Yuen Long District Council (YLDC) on 26 May 2011 on the proposed works of both THR and TKTR. Members of the rural committees and the T&TC of YLDC supported the project and urged for its early implementation.
- 7. We gazetted the proposed works for THR and TKTR under the Roads (Works, Use and Compensation) Ordinance (Cap 370) on 8 July 2011 and 22 July 2011 respectively. No objection was received.
- 8. The Secretary for Transport and Housing authorised the proposed works for THR and TKTR without modification. The notices of authorisation of the proposed works for THR and TKTR were gazetted on 23 September 2011 and 7 October 2011 respectively.

ENVIRONMENTAL IMPLICATIONS

- 9. This is not a designated project under the Environmental Impact Assessment Ordinance (Cap 499). We have conducted a preliminary environmental review (PER) for the project. The Director of Environmental Protection agrees with the conclusion of the PER that the project would not cause any long-term adverse environmental impact with implementation of mitigation measures.
- We will incorporate into the works contract the environmental 10. mitigation measures recommended in the PER to control the environmental impacts arising from the proposed construction works to within established standards and guidelines. These measures include paving all temporary accesses with concrete and frequent cleaning and watering of the site to reduce dust nuisance; the use of quiet construction plant and temporary movable noise barriers to mitigate the noise generated from construciton activities; and adoption of the "Code of Practice on Good Management Practice to Prevent Violation of the Noise Control Ordinance (Cap 400) (for Construction Industry)" published by the Environmental Protection Department. For mitigating traffic noise impact on the sensitive receivers along TKTR, we will consider providing low-noise road surfacing. We have included \$1.5 million (in September 2011 prices) in the project estimate for implementation of the above environmental mitigation measures and the provision in the works contract for Environmental Monitoring and Audit.
- 11. We have considered the levels and layout of the proposed works and construction sequence at the planning and design stages 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) on site or in other suitable construction sites as far as possible, in order to minimise the disposal of inert construction waste to public fill reception facilities. We will encourage the contractor to maximise the use of recycled or recyclable inert construction waste, and the use of non-timber formwork to further minimise the generation of construction waste.
- 12. 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 to public fill reception facilities and landfills respectively through a trip-ticket system.

13. We estimate that the project will generate in total about 47 100 tonnes of construction waste. Of these, we will reuse about 4 700 tonnes (10%) of inert construction waste on site and deliver 40 000 tonnes (85%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 2 400 tonnes (5%) of non-inert construction waste at landfills. The total cost for accommodating construction waste at public fill reception facilities and landfill sites is estimated to be \$1.4 million for this project (based on a unit cost of \$27 per tonne for disposal at public fill reception facilities and \$125 per tonne² at landfills).

HERITAGE IMPLICATIONS

14. 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.

LAND ACQUISITION AND CLEARANCE

- 15. For the proposed works at THR, clearance of 29 563 square metres (m²) of Government Land with 25 non-domestic structures is required without involving any resumption of private lot. A number of Short Term Tenancies, Government Land Licenses and Government Land Allocations will also be affected due to the site clearance works. Clearance of crops, fences, gates and irrigation pipes on Government Land will be required. Ex-gratia allowance will be paid to the affected cultivators in line with established policy. The estimated cost of land clearance is \$312,000, which will be charged to **Head 701 Land Acquisition**.
- 16. For the proposed works at TKTR, resumption of three private agricultural lots of 136 m² is required while no building lot will be affected.

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 cubic metre (m³)), nor the cost to provide new landfills (which is likely to be more expensive), when the existing ones are filled.

There is one non-domestic structure to be cleared within the affected lots. The project also involves clearance of 8 823 m² of Government Land with 49 non-domestic structures. A number of Short Term Tenancies and Government Land Allocations will also be affected due to the site clearance works. Clearance of crops, fences, gates and irrigation pipes on both private land and Government Land will also be required. Ex-gratia allowance will be paid to the affected cultivators in line with established policy. The estimated cost of land resumption and clearance is \$743,000, which will be charged to **Head 701 – Land Acquisition**.

BACKGROUND INFORMATION

- 17. The widening and reconstruction of TKTR and the northern section of THR were originally under part of a Category B item **225CL**. The part of works was then put under **710CL** which was included into Category B in October 2004.
- 18. The originally proposed road scheme of **710CL** comprises widening (i) THR from 2 sub-standard lanes to 4 standard lanes (14.6 m in total width) between Ping Ha Road and Ha Tsuen Road (with the provision of noise barriers), and 2 lanes (10.3 m in total width) between Ha Tsuen Road and San Lee Uk Tsuen; and (ii) TKTR from 2 sub-standard lanes to 2 standard lanes (7.3 m in total width) together with the widening of footpaths. This road scheme was gazetted under Cap 370 on 16 May 2008. Since the gazettal, a large number of objections were received, in particular relating to the proposed works at THR. Some of the objections were irresolvable. In end 2008, the Ha Tsuen Interchange Slip Road was open for articulated vehicles to access the Kong Shum Western Highway. This Slip Road serves as an additional route choice that articulated vehicles in the Ha Tsuen area can access the Kong Shum Western Highway directly via Ha Tsuen Road and therefore the articulated vehicle traffic problem on the section of THR between Ping Ha Road and Ha Tsuen Road has been relieved. Transport Department advised that there was no imminent need to widen this section of THR from the existing 2 lanes to 4 lanes. Therefore, the entire proposed works including THR and TKTR widening were de-gazetted on 2 July 2010 under Cap 370 upon consultation with the Ping Shan Rural Committee, Ha Tsuen Rural Committee and the T&TC of YLDC.
- 19. The project scope of **710CL** was subsequently revised in view of the strong objections against the original road scheme gazetted under Cap 370 on 16 May 2008. No objection was received for the revised road scheme gazetted in July 2011 and the works have been authorised subsequently. We also engaged consultants to undertake the detailed design and tendering for the project of revised scope in August 2011 at an estimated cost of \$2.8 million under

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 project has been substantially completed.

- 20. Of the 428 trees within the project boundary of both THR and TKTR, 258 trees will be preserved. The proposed widening works at THR and TKTR will involve the removal of 170 trees, including 135 trees to be felled and 35 trees to be replanted within the project site. All trees to be removed are not important trees³. We will incorporate planting proposals as part of the project, including about 57 trees⁴ and 247 shrubs.
- 21. We estimate that the proposed works will create about 62 jobs (50 for labourers and another 12 for professional/technical staff) providing a total employment of 1 700 man-months.

WAY FORWARD

22. We plan to seek the support of the Public Works Subcommittee for upgrading **710CL** to Category A in January 2012 with a view to seeking funding approval from the FC in April 2012.

ATTACHMENT

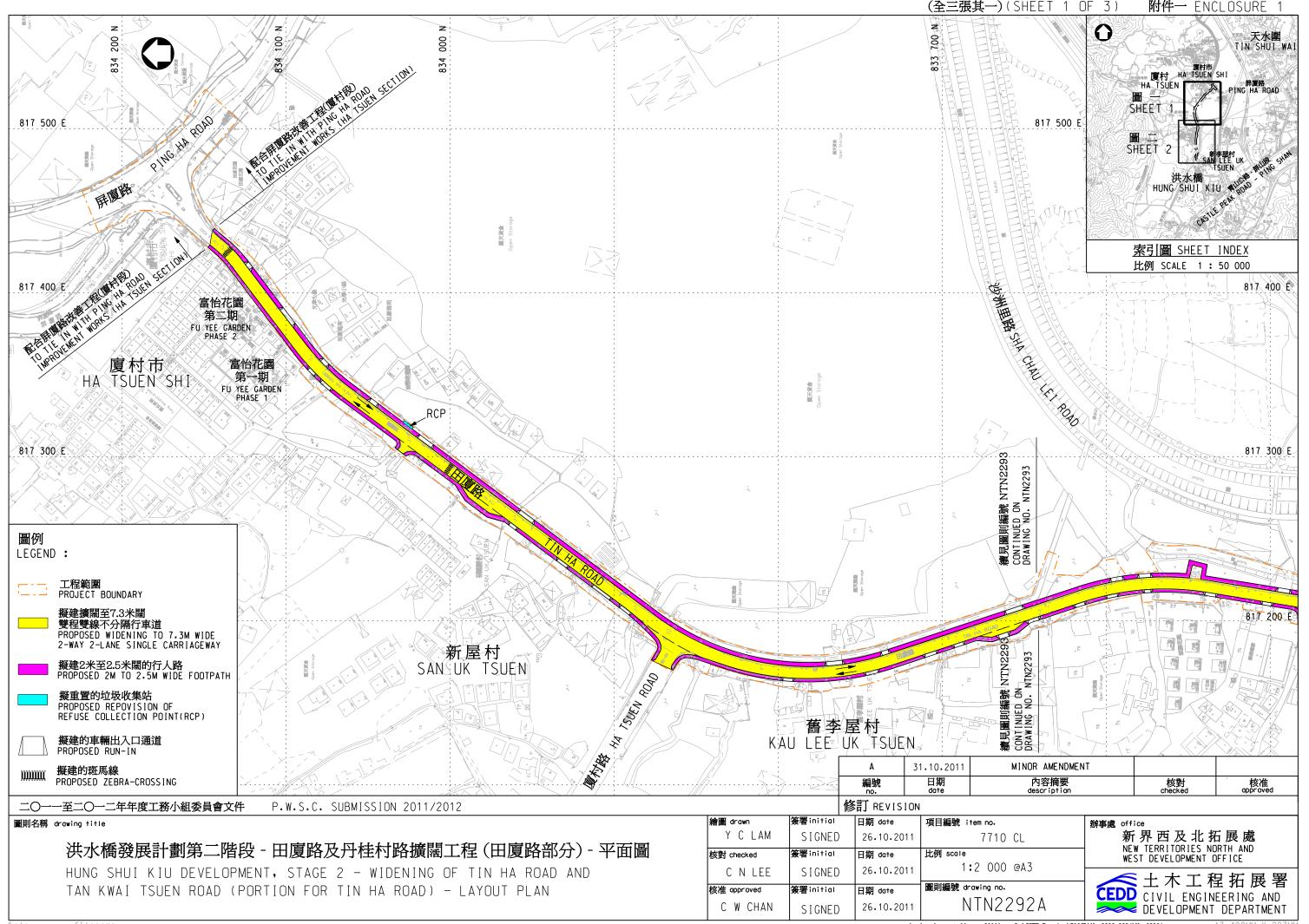
Enclosure 1 – Drawings No. NTN 2292A to NTN 2294A

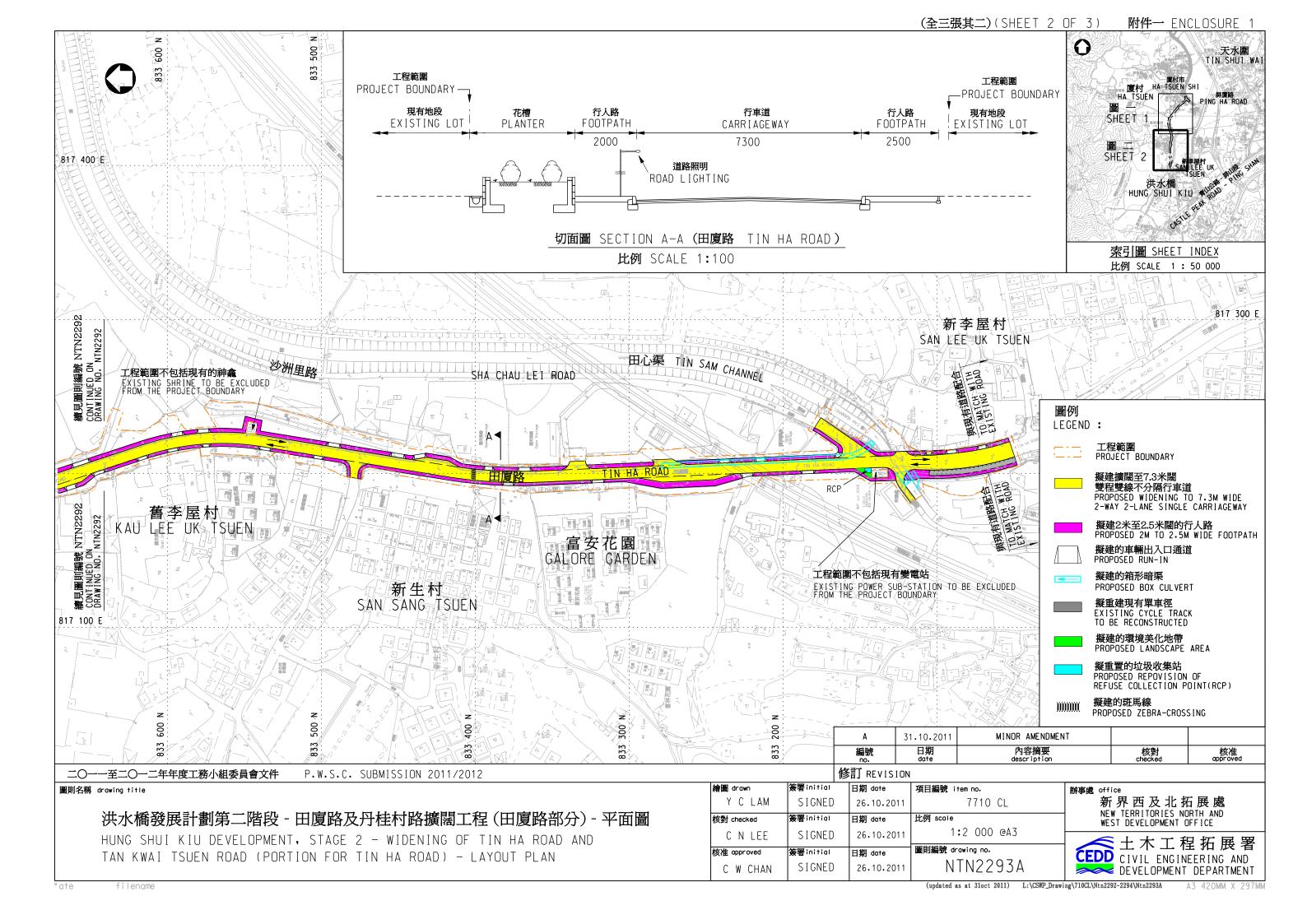
Development Bureau December 2011

- (a) trees of 100 years old or above;
- (b) trees of cultural, historical or memorable significance e.g. Fung Shui tree, tree 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 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 metre (m) (measured at 1.3 m above ground level), or with height/canopy spread equal or exceeding 25 m.

An "important tree" refers to trees in the Register of Old and Valuable Trees, or any other trees that meet one or more of the following criteria:-

The planting of new trees is constrained by limited site area for widening of THR and TKTR and minimisation in the impact on private lots.





NTN2294A

SIGNED

C W CHAN

26.10.2011

CIVIL ENGINEERING AND

DEVELOPMENT DEPARTMENT