For discussion **PWSC(2008-09)63**
on 21 January 2009

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 706 – HIGHWAYS
Transport – Roads
720TH – Widening of Tolo Highway/Fanling Highway between Island House Interchange and Fanling

Members are invited to recommend to Finance Committee –

(a) the upgrading of part of **720TH**, entitled "Widening of Tolo Highway between Island House Interchange and Tai Hang", to Category A, at an estimated cost of $4,486.9 million in money-of-the-day prices; and

(b) the retention of the remainder of **720TH** in Category B.

PROBLEM

We need to widen the section of Tolo Highway between Island House Interchange and Fanling to cope with the anticipated traffic demand arising from the future development of the Northeast New Territories (NENT).

/ PROPOSAL…..

PROPOSAL

2. The Director of Highways, with the support of the Secretary for Transport and Housing, proposes to upgrade part of **720TH** to Category A at an estimated cost of $4,486.9 million in money-of-the-day (MOD) prices for the construction works of the widening of Tolo Highway between Island House Interchange and Tai Hang.

PROJECT SCOPE AND NATURE

3. The full scope of **720TH** (the Project) includes the widening of Tolo Highway between Island House Interchange and Tai Hang (Stage 1) and that of Fanling Highway from Tai Hang to Wo Hop Shek Interchange (Stage 2).

4. The part of the Project we now propose to upgrade to Category A comprises –

(a) widening of the section of Tolo Highway between Island House Interchange and Tai Hang of approximately 5.7 kilometres (km) long from a dual three-lane carriageway to a dual four-lane carriageway, with standard hard shoulders on both directions of the carriageway;

(b) widening of the sections of Tolo Highway from dual two-lane to dual three-lane at Island House Interchange and Lam Kam Road Interchange; widening of the northbound and southbound sections of Tolo Highway from a two-lane carriageway to a three-lane carriageway and from a two-lane carriageway to a four-lane carriageway respectively at Tai Po North Interchange; and realignment of the associated slip roads at the three interchange sections;

(c) realignment of a section of Tai Wo Service Road West;

(d) construction of 12 vehicular bridges and modification of seven existing vehicular bridges;

(e) installation of the following along the carriageway –

(i) vertical noise barriers of about 6 km long, ranging from 2 metres (m) to 8 m high;

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(ii) single-leaf cantilever noise barriers of about 3.2 km long, 5 m high with 3 m or 4.5 m bend; and

(iii) double-leaf cantilever noise barriers of about 600 m long, 5 m high with 3 m bend;

(f) provision of a traffic control and surveillance system (TCSS);

(g) associated civil, structural, landscaping, electrical and mechanical works, and works on environmental mitigation, drainage, road lighting, water mains and traffic aids; and

(h) implementation of an environmental monitoring and audit (EM&A) programme for the works mentioned in paragraph 4(a) to 4(g) above.

A plan, with cross-section illustrations, showing the proposed works is at Enclosure 1.

5. We have substantially completed the detailed design for Stage 1 of the Project. We plan to commence the Stage 1 construction works in May 2009 for completion in phases by April 2013. We plan to commence the Stage 2 construction works in June 2010 for completion in 2014.

JUSTIFICATION

6. Tolo Highway and Fanling Highway form a strategic road link serving the NENT and cross-boundary traffic. In recent years, traffic during peak hours has been operating near the design capacities at some sections of the highways. Traffic queues stretching from Island House Interchange up to Tai Po North Interchange frequently occur during peak hours.

7. In view of the future developments in the NENT, it is anticipated that both the population and the cross-boundary traffic in the area will experience a significant growth which will in turn exacerbate the traffic condition of Tolo Highway and Fanling Highway.

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8. According to the recent survey and traffic forecast, the observed/ projected traffic volume to capacity (v/c) ratios[1] of Tolo Highway between Island House Interchange and Tai Hang during peak hours with and without the proposed Stage 1 works are shown in the following table –

Year	**2008**	**2011**	**2016**	**2021**
v/c ratio without the proposed Stage 1 works	0.98	1.09	1.23	1.37
v/c ratio with the proposed Stage 1 works	–	–	0.91	1.00

9. To cope with the anticipated traffic demand from the NENT development and growth in cross-boundary traffic, we propose to widen the section of Tolo Highway between Island House Interchange and Tai Hang from a dual three-lane carriageway to a dual four-lane carriageway. We also plan to widen the highway interchange sections described in paragraph 4(b) above to improve the merging and diverging arrangements to meet current standards. Since Tolo Highway and Fanling Highway are not yet provided with hard shoulders as they were constructed some 20 years ago, we plan to construct full-width hard shoulders along the highways where practicable.

10. As Tolo Highway forms part of the strategic Route 9, we propose to provide a TCSS comprising variable message signs, lane control signals, variable speed limit signs, closed-circuit television cameras (CCTV) and vehicle detectors in Stage 1 of the Project to enhance the efficiency and effectiveness of traffic and incident management. To ensure the TCSS operates as an integrated system for the entire Tolo Highway, it will also cover the section between Ma Liu Shui Interchange and Island House Interchange.

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[1] Volume to capacity (v/c) ratio is an indicator which reflects the performance of a road. A v/c ratio equal to or less than 1.0 means that a road has sufficient capacity to cope with the volume of vehicular traffic under consideration and the resultant traffic will flow smoothly. A v/c ratio above 1.0 indicates the onset of congestion; that above 1.2 indicates more serious congestion with traffic speeds deteriorating progressively with further increase in traffic.

FINANCIAL IMPLICATIONS

11. We estimate the cost of the construction works of Stage 1 of the Project to be $4,486.9 million in MOD prices (see paragraph 13 below), made up as follows –

			$ million
(a)	Roads and drains		651.6
	(i) construction of new carriageway	329.3	
	(ii) reconstruction of existing carriageway	224.6	
	(iii) public lighting	13.0	
	(iv) traffic aids, sign gantry, etc.	84.7	
(b)	Earthworks		819.2
	(i) slopeworks	214.2	
	(ii) retaining walls	605.0	
(c)	Vehicular bridges		884.3
	(i) construction of 12 new vehicular bridges	795.9	
	(ii) demolition and modification of existing bridges	88.4	
(d)	Landscaping works		45.4
(e)	Noise barriers		737.7
	(i) vertical	284.5	
	(ii) single-leaf cantilever	381.6	
	(iii) double-leaf cantilever	71.6	
(f)	TCSS		166.3

/**$ million** …..

			$ million	
(g)	Site investigation		10.0	
(h)	Consultants' fees		328.9	
	(i) construction supervision and contract administration	7.7		
	(ii) resident site staff costs	299.7		
	(iii) EM&A programme	10.2		
	(iv) Electrical and Mechanical Services Trading Fund (EMSTF)[2]	11.3		
(i)	Contingencies		320.7	
		Sub-total	3,964.1	(in September 2008 prices)
(j)	Provision for price adjustment		522.8	
		Total	4,486.9	(in MOD prices)

A breakdown of the estimate for consultants' fee is at Enclosure 2.

12. Item (a) under paragraph 11 includes road pavements, street furniture, traffic aids, drainage and temporary traffic arrangement measures. Item (b) under paragraph 11 includes slope cutting, embankment filling and retaining wall construction. Item (c) under paragraph 11 includes the demolition and modification of existing bridges and construction of temporary bridges. Item (g) under paragraph 11 includes the site investigation works which could not be done during the detailed design stage due to access difficulties.

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[2] Upon its establishment from 1 August 1996 under the Trading Funds Ordinance, the EMSTF charges government departments for design and technical consultancy services for electrical and mechanical (E&M) installation. The services rendered for this project include checking consultants' submissions on all E&M installations and providing technical advice to the Government on all E&M works and their impacts on the project.

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

Year	$ million (Sept 2008)	Price Adjustment Factor	$ million (MOD)
2009 –10	474.7	1.04000	493.7
2010 –11	854.1	1.08160	923.8
2011 –12	1,139.0	1.12486	1,281.2
2012 –13	831.7	1.16986	973.0
2013 –14	529.4	1.21665	644.1
2014 –15	135.2	1.26532	171.1
	3,964.1		4,486.9

14. We have derived the MOD estimate on the basis of the Government's latest forecast of the trend rate of change in the prices of public sector building and construction output for the period 2009 to 2015. We will tender the proposed works under re-measurement contracts because the quantities of earthworks and foundation of noise barriers may vary depending on actual ground conditions. The contracts will provide for price adjustments.

15. We estimate the additional annual recurrent expenditure upon completion of the Stage 1 improvement works to be about $11.5 million.

PUBLIC CONSULTATION

16. We consulted the Traffic and Transport Committee (T&TC) of the Tai Po District Council (TPDC) on 13 September 2007 and 14 March 2008 on the Project. We also consulted the Tai Po Rural Committee on 12 May 2007 and 11 March 2008. Both supported the Project and requested its early implementation.

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17. We gazetted the road scheme for the proposed Stage 1 works under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) (the Ordinance) on 26 October 2007 and received three objections. All of them remained unresolved. Details of the unresolved objections[3] are as follows –

(a) Objector No.1 objected to the resumption of his lots. He claimed that the time schedule for land resumption and clearance was not given and the actual amount of compensation was not known. In addition, he considered that the Administration should compensate him for the loss incurred for not implementing the Project in 2003. We advised the objector on the target commencement date for the proposed works and explained that the Administration was not in a position to advise the amount of compensation until the time of resumption as the actual amount would be subject to the prevailing rate at the time of land reversion. We also explained that he would be compensated in accordance with the prevailing land resumption policy. Despite our explanation, the objector maintained his objection;

(b) Objector No.2 objected to the resumption of a portion of her lot. She claimed that the operation of her garage on the lot would be adversely affected by the land resumption and requested the Administration to confirm the area of the residual portion of her lot that would not be resumed. In order to minimize the impact on the operation of this objector's garage, the road scheme was slightly modified by constructing a short section of retaining wall so as to reduce the area to be resumed within her lot. The objector accepted our proposed modifications in resolving her concern on the operation of her garage. However, as the Administration would only advise the area of the portion of the lot to be resumed under the Ordinance but not the area of the residual portion of her lot, the objector maintained her objection; and

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[3] Under the Ordinance, an objection that is withdrawn unconditionally is treated as if the objector has not lodged the objection. An objection which is not withdrawn or withdrawn with conditions is treated as an unresolved objection and will be submitted to the Chief Executive-in-Council for consideration.

(c) Objector No.3 also requested the Administration to consider resuming the residual portion of his lot which is outside the scope of resumption for Stage 1 of the Project in addition to the required area, as he claimed that the residual portion would have no economical/commercial value. In addition, the objector requested the Administration to advise the actual amount of compensation for partial resumption of his lot. He was of the view that the compensation should cover other loss/cost in relation to the resumption. We responded to the objector that the residual portion of the objector's lot did not satisfy the requirements under the existing resumption policy and the Administration was not in a position to advise the amount of compensation until the time of resumption as the actual amount would be subject to the prevailing rate at the time of land reversion. We also explained that he would be compensated in accordance with the prevailing land resumption policy. Subsequently, the objector requested the Administration to provide staircases and accesses to the residual portion of his lot if his earlier request for the resumption of his entire lot would not be considered. We explained that access to the residual portion of his lot would be maintained throughout and after the construction period. The objector did not respond to our further explanation and thus the objection is considered unresolved.

18. Having considered the unresolved objections and the modifications, the Chief Executive-in-Council authorised the proposed Stage 1 works under the Ordinance on 3 June 2008. The authorisation notice was published on 27 June 2008.

19. We consulted the Legislative Council Panel on Transport on the construction works of Stage 1 of the Project on 19 December 2008. The Panel generally supported the proposal in paragraph 2 above and requested the Administration to present the temporary traffic arrangement proposal for the information of the Public Works Subcommittee of Finance Committee.

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20. We have consulted the Advisory Committee on the Appearance of Bridges and Associated Structures[4] on the proposed aesthetic design of the noise barriers and the vehicular bridges under the proposed Stage 1 works. The Committee accepted the proposed aesthetic design.

ENVIRONMENTAL IMPLICATIONS

21. The Project is a designated project under the Environmental Impact Assessment (EIA) Ordinance (Cap. 499). The Director of Environmental Protection approved the EIA report for the Project in July 2000 with conditions. An environmental permit is required for the construction and operation of the Project.

22. To facilitate the application for environmental permit, we have recently completed an environmental review (ER) of the approved EIA report. The EIA report and the ER concluded that the environmental impact of the Project can be controlled to within the criteria under the EIA Ordinance and the Technical Memorandum on the EIA Process. We shall implement the measures recommended in the approved EIA report, the ER report and the EM&A manual. The key mitigation measures include the installation of noise barriers at varying heights, laying of low noise road surfacing and compensatory planting for the loss of woodland habitats. We estimate the cost of implementing the environmental mitigation measures to be $769.7 million. We have included this cost in the overall project estimate.

23. During construction, we will control noise, dust and site run-off nuisance to comply with the established guidelines and standards through the implementation of appropriate mitigation measures. We will implement an EM&A programme during the course of construction to ensure that proactive measures are adopted to avoid the occurrence of adverse environmental impacts.

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[4] The Advisory Committee on the Appearance of Bridges and Associated Structures, 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 semi-enclosures, from the aesthetic and visual impact points of view.

24. We have minimised the cutting of existing slopes and maximized the angle of cut slopes through optimal road alignment design in the planning and design stages to reduce the generation of construction waste as much as possible. In addition, we will require the contractor to reuse inert construction waste (e.g. excavated rock and soil materials) on site or in other suitable construction sites as far as practicable to minimise the disposal of construction waste to public fill reception facilities[5]. We will encourage the contractor to maximise the use of recycled or recyclable inert construction waste, as well as the use of non-timber formwork to further minimise the generation of construction waste.

25. 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 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[6].

26. We estimate that the proposed Stage 1 works will generate about 999 580 tonnes of construction waste. Of these, we will reuse about 537 400 tonnes (53.8%) of inert construction waste on site and deliver about 434 600 tonnes (43.5%) of inert construction waste to public fill reception facilities for subsequent reuse. In addition, we will dispose about 27 580 tonnes (2.7%) 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 about $15.2 million for the proposed Stage 1 works (based on an unit cost of $27/tonne for disposal at public fill reception facilities and $125/tonne[7] at landfills).

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[5] 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.

[6] The trip ticket system is to track the disposal of construction waste generated under public works contracts and to ensure its proper disposal at designated disposal facilities.

[7] 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/m^3), nor the cost to provide new landfills (which is likely to be more expensive) when the existing ones are filled.

HERITAGE IMPLICATIONS

27. This project 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

28. We will resume about 9 240 and 130 square metres (sq. m.) of agricultural land and building land respectively for the proposed works. The land acquisition and clearance will affect seven households involving 29 persons and eight domestic structures. The Director of Housing will offer the eligible clearees accommodation in public housing in accordance with the existing housing policy. We will charge the land acquisition and clearance costs, estimated to be $59.5 million, to **Head 701 – Land Acquisition**. A breakdown of the land resumption and clearance costs is at Enclosure 3. We have reviewed the design of the project to minimise the land acquisition cost.

TEMPORARY TRAFFIC ARRANGEMENTS

29. We will implement temporary traffic arrangements (TTAs) to facilitate the Stage 1 construction works, involving lane closures, traffic diverging and other arrangements. To minimise the adverse traffic impact caused by the works on this strategic link formed by Tolo Highway and Fanling Highway, we will maintain the same number of traffic lanes in each direction of the existing carriageway during peak hours in the construction period. We also plan to construct the additional lanes of the carriageway first so as to provide space for diverting the existing traffic before carrying out works on the existing carriageway. Works inevitably requiring lane closures, such as dismantling of existing bridges and erection of major falseworks, will be carried out at night (or non-working days) as far as practicable.

30. We will consult the relevant District Council(s) (DC) prior to the implementation of major TTAs especially those involving lane closures. A traffic management liaison group (TMLG) comprising representatives from the Highways Department (HyD), Police, the Transport Department and other concerned Government departments will be set up to assess the TTAs to be proposed by the contractors. HyD and their consultants will regularly report to

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the relevant DC(s) on the planning and operation of the TTAs. We will also require the contractor to set up a traffic recovery unit with towing vehicles to stand by at peak hours to facilitate timely removal of broken-down vehicles so that normal traffic can be resumed as quickly as possible in case of major incidents.

BACKGROUND INFORMATION

31. We upgraded **720TH** to Category B in September 1998.

32. In December 1998, we upgraded part of **720TH** to Category A as **735TH** "Widening of Tolo Highway/Fanling Highway between Island House Interchange and Fanling – studies and preliminary design" at an approved project estimate (APE) of $27.8 million in MOD prices. We engaged consultants in February 1999 to undertake the investigation and preliminary design for the project. The consultants completed the works in September 2000.

33. In December 2000, we upgraded part of **720TH** to Category A as **751TH** "Widening of Tolo Highway/Fanling Highway between Island House Interchange and Fanling – detailed design and ground investigation" at an APE of $71.9 million in MOD prices. We engaged consultants in March 2001 to undertake the detailed design and ground investigation works.

34. We first gazetted the road scheme for the Project under the Ordinance on 26 April 2002. Thereafter, the programme of the Project was put under further review as the traffic condition was considered acceptable then and there was no urgent need to implement the Project. Taking into consideration the on-going increase in traffic flow in the NENT, we resumed planning for the Project in January 2007.

35. Of the about 16 150 trees within the project boundary of Stage 1, about 5 030 trees will be preserved. The proposed Stage 1 works will involve the removal of about 11 120 trees, including about 10 930 trees to be felled and about 190 trees to be transplanted within the project site. The majority of the trees affected are common species and were planted within existing man-made slope areas when and after Tolo Highway was constructed. All the trees to be felled are

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either of invasive weedy species, poor health or form (e.g. leaning or contorted form), located on steep slopes, low post-transplantation survival rate or impractical to prepare proper root balls. Of the 12 important trees[8] identified within the project site, 11 can be retained and the remaining one will be transplanted to a new location within the project site. A summary of important trees involved is provided at Enclosure 4. We will incorporate planting proposals as part of the proposed Stage 1 works, including an estimated quantity of about 3 620 heavy standard trees, 44 000 seedlings, 50 500 shrubs which totals to approximately 98 780 m^2 of woodland planting area. The total number of trees to be planted will outweigh the number of trees affected by the Project. We have briefed the T&TC of the TPDC and green groups on the tree proposal and received no adverse comment on it.

36. Regarding the recycling/reusing of trees felled during construction of the Stage 1, we propose the following measures –

(a) producing Country Park facilities by using the tree trunks of felled trees of suitable size, species and shape as far as possible. The recovered timber may be used to produce park furniture, fences, benches, steps, etc.; and

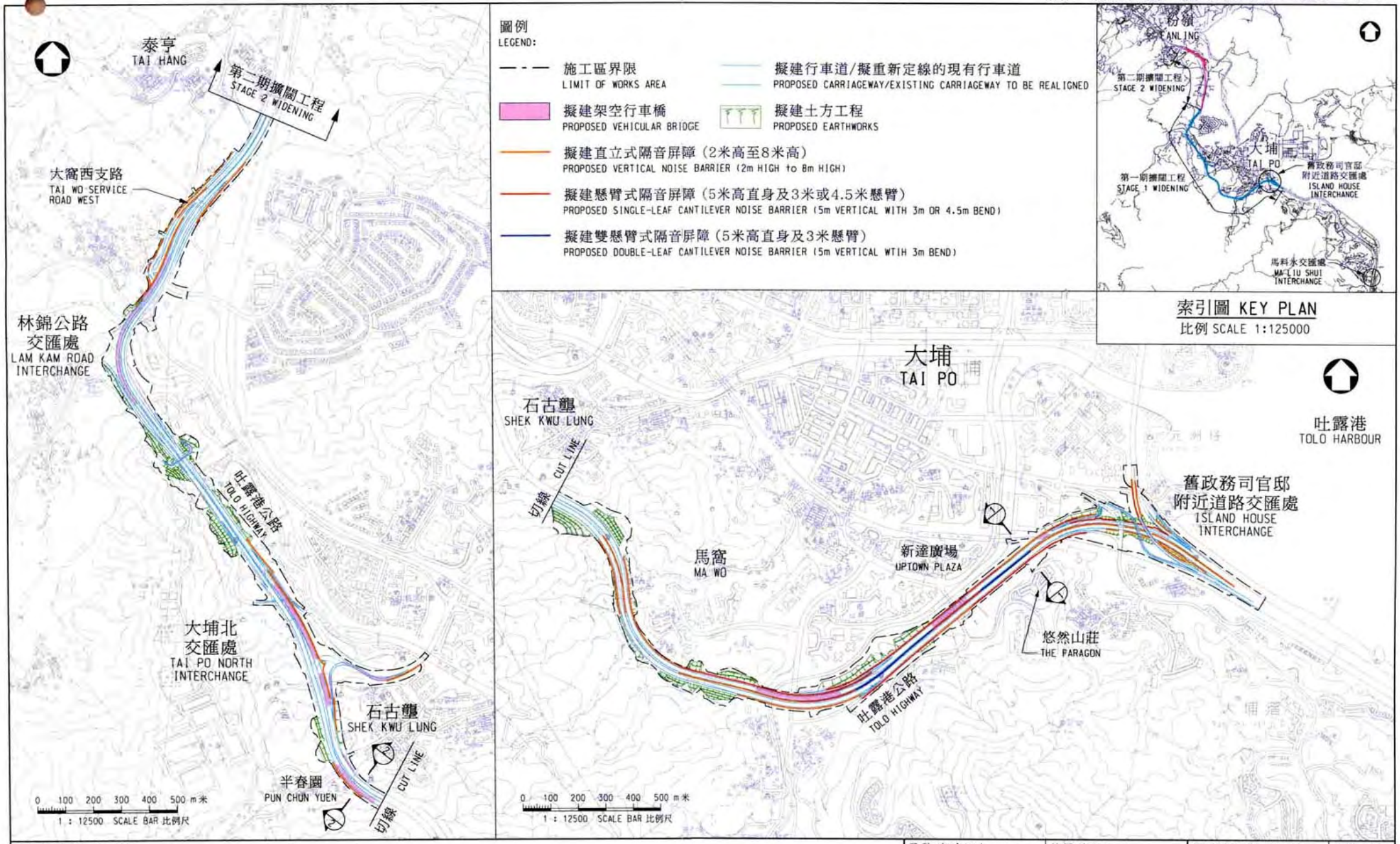
(b) looking into the feasibility to produce mulch and compost by chopping the tree trunks to small pieces. The material produced may be used to control erosion and improve growing conditions for plants.

/37. …..

[8] "Important trees" refer 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 tree, tree 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 meter (measured at 1.3 metre above ground level), or with height/canopy spread equal or exceeding 25 metres.

37. We estimate that the proposed Stage 1 construction works will create about 2 280 jobs (440 for professional/technical staff and 1 840 for labourers) providing a total employment of about 77 900 man-months.

Transport and Housing Bureau
January 2009



圖則名稱 drawing title

工務計劃項目第720TH號(部分)
舊政務司官邸附近道路交匯處與泰亨之間的吐露港公路擴闊工程 - 平面圖

PWP ITEM NO. 720TH (PART)
WIDENING OF TOLO HIGHWAY BETWEEN ISLAND HOUSE INTERCHANGE AND TAI HANG - LAYOUT PLAN

設計 designed	SIGNED	繪圖 drawn	SIGNED	圖則編號 drawing no.	比例 scale
K.F.TAM	10/12/08	S.K.TSE	10/12/08	HMW6720TH-SP0001	如圖示 AS SHOWN
覆核 checked	SIGNED	批准 approved	SIGNED		
Y.M.LAM	10/12/08	K.M.BOK	10/12/08		

主要工程管理處
MAJOR WORKS PROJECT MANAGEMENT OFFICE

HIGHWAYS DEPARTMENT HONG KONG 路政署 香港

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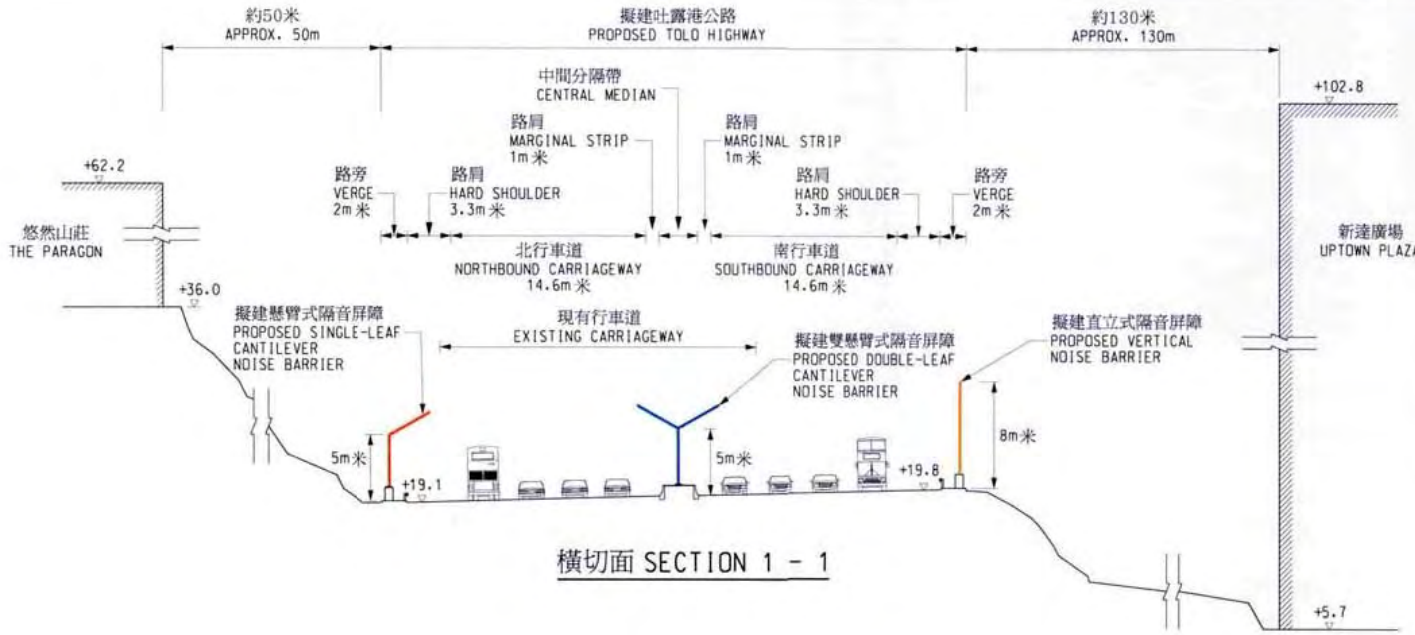
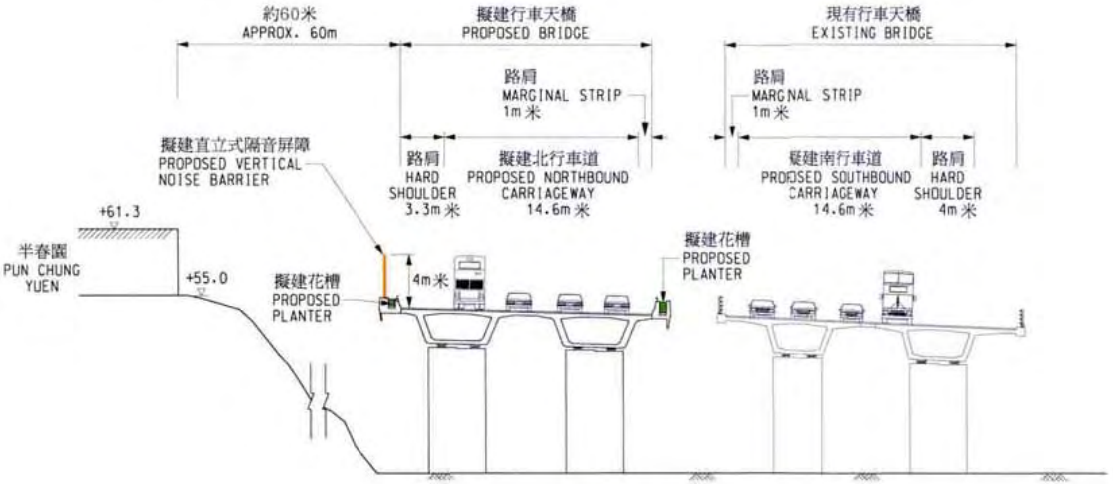
A3 420 x 297



橫切面 SECTION 1 - 1



橫切面 SECTION 2 - 2

圖則名稱 drawing title

工務計劃項目第720TH號(部分)
舊政務司官邸附近道路交匯處與泰亨之間的吐露港公路擴闊工程 - 切面圖
PWP ITEM NO. 720TH (PART)
WIDENING OF TOLO HIGHWAY BETWEEN ISLAND HOUSE INTERCHANGE AND TAI HANG - SECTIONS

設計 designed	SIGNED	繪圖 drawn	SIGNED	圖則編號 drawing no.	比例 scale
K.F.TAM	10/12/08	P.K.CHEN	10/12/08	HMW720TH-SP0002	示意圖 DIAGRAMMATIC
覆核 checked	SIGNED	批准 approved	SIGNED		
Y.M.LAM	10/12/08	K.M.BOK	10/12/08		

主要工程管理處
MAJOR WORKS PROJECT MANAGEMENT OFFICE

HIGHWAYS DEPARTMENT HONG KONG 香港路政署

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720TH – Widening of Tolo Highway/Fanling Highway between Island House Interchange and Fanling

Breakdown of the estimate for consultants' fee for Stage 1 construction works (in September 2008 prices)

			Estimated man-months	Average MPS* salary point	Multiplier (Note 1)	Estimated fee ($ million)
Consultants' staff costs						
(a)	Construction supervision and contract administration(Note 2)	Professional	–	–	–	3.7
		Technical	–	–	–	4.0
(b)	Resident site staff	Professional	1 135	38	1.6	109.9
		Technical	5 980	14	1.6	189.8
(c)	EM&A programme	Professional	41	38	2.0	5.0
		Technical	132	14	2.0	5.2
(d)	EMSTF					11.3
					Total	328.9

* MPS = Master Pay Scale

Notes

1. A multiplier of 2.0 is applied to the average MPS point to arrive at the full staff costs including the consultants' overheads and profit as the staff will be employed in the consultants' offices. A multiplier of 1.6 is applied to the average MPS point in case of resident site staff supplied by the consultants. (As at 1 April 2008, MPS pt. 38 = $60,535 per month, and MPS pt. 14 = $19,835 per month)

2. The consultants' fees for construction supervision and contract administration are estimated in accordance with Agreement No. CE 58/2000 titled "Design and Construction Assignment for Widening of Tolo Highway/Fanling Highway between Island House Interchange and Fanling". The construction phase of the assignment in respect of Stage 1 widening work will only be executed subject to Finance Committee's approval to upgrade the respective part of **720TH** to Category A.

Enclosure 3 to PWSC(2008-09)63

720TH – Widening of Tolo Highway/Fanling Highway between Island House Interchange and Fanling

Breakdown of land resumption and clearance cost for Stage 1 works

		$ million	$ million
Land resumption cost			**52.984**
(a)	Agricultural Land Ex-gratia Compensation – There are eight and 32 lots affected by the project within Compensation Zone "A" and "C" respectively. The total areas involved are 33 749 square feet (sq.ft.) or 3 135 sq. m in Zone A and 65 748 sq. ft. or 6 108 sq. m in Zone C respectively[1]	37.053	
(b)	Building Land Ex-gratia Compensation and relevant compensation allowance[2] – The two building lots affected by the project are within Compensation Zone "A". The total area involved is 1 393 sq.ft.	15.667	
(c)	Interest payment on land compensations for private land	0.264	
Clearance cost			**6.492**
(a)	Compensation for crops	4.672	
(b)	Ex-gratia compensation for miscellaneous permanent improvements to farms	0.200	
(c)	"Tun Fu" ceremonial fees	0.080	
(d)	Clearance cost for temporary structures	1.540	
Total land resumption and clearance costs			**59.476** **Say 59.5**

Notes:

1. The agricultural land to be resumed in Stage 1 of the Project is within Compensation Zone "A" and Zone "C". The ex-gratia compensation rate for Zone "A" is 120% and Zone "C" is 50% of the Basic Rate for agricultural land. The Basic Rate for ex-gratia compensation of agricultural land is $505 per sq.ft. effective from 1 October 2008. Hence the ex-gratia compensation rate used for estimating the resumption cost of Zone "A" and Zone "C" are $606 per sq.ft and $252.5 per sq.ft respectively (i.e. 120% and 50% of $505 per sq.ft.).

2. Owners of building land will be offered compensation based on professional valuation plus ex-gratia compensation. The compensation is estimated at $15.667 million.

Enclosure 4 to PWSC(2008-09)63

720TH – Widening of Tolo Highway/Fanling Highway between Island House Interchange and Fanling – Stage 1

Summary of "important trees"

Tree Ref. no.	Tree Species		Maintenance Department [1]	Tree size			Form [3] (Good/ Fair/ Poor)	Health Condition (Good/ Fair/ Poor)	Amenity Value (High/ Med/ Low)	Recommendation (Retain/ Transplant/ Fell)	Remarks
	Botanical name	Chinese Name		Overall Height (m)	Trunk [2] Diameter (m)	Crown Spread (m)					
TA	Ficus virens	大葉榕	AFCD	8.5	1	6	Fair	Fair	Medium	Retain	DBH[2] > 1m
TB	Ficus virens	大葉榕	AFCD	9.5	1	9	Fair	Fair	Medium	Retain	DBH > 1m
TD	Machilus spp.	楠(屬)	AFCD	20	1.3	20	Fair	Fair	Medium	Retain	DBH > 1m
TE	Michelia x alba	白蘭	LCSD	12	1	10	Fair	Fair	Medium	Retain	DBH > 1m
TF	Cinnamomum camphora	樟	LCSD	12	1	10	Poor	Fair	Low	Retain	DBH > 1m
TG	Cinnamomum camphora	樟	LCSD	12	1	10	Poor	Fair	Low	Retain	DBH > 1m.
T13309	Melaleuca quinquenervia	白千層	HyD	13	1	6	Fair	Fair	Medium	Transplant	DBH > 1m.
T20193	Celtis sinensis	朴樹	AFCD	18	1	15	Fair	Fair	Medium	Retain	DBH > 1m
T20194	Ficus microcarpa	細葉榕	AFCD	17	1	15	Fair	Fair	Medium	Retain	DBH > 1m
T13088.1	Melaleuca quinquenervia	白千層	LCSD	9	1	7	Fair	Fair	Medium	Retain	DBH > 1m
T13076	Melaleuca quinquenervia	白千層	LCSD	15	1	10	Fair	Fair	Medium	Retain	DBH > 1m
T19739	Bombax ceiba	木棉	AFCD	12	1.2	10	Fair	Fair	Medium	Retain	DBH>1.2m

(1) Maintenance Department :
AFCD - Agriculture, Fisheries and Conservation Department
LCSD - Leisure and Cultural Services Department
HyD - Highways Department

(2) Trunk diameter of a tree refers to its diameter at breast height (DBH) (i.e. measured at 1.3 m above ground level).

(3) The form of a tree will take into account of the overall tree size, shape, and any special features.