

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 701 – LAND ACQUISITION

Subhead 1100CA – Compensation and ex-gratia allowances in respect of projects in the Public Works Programme

HEAD 705 – CIVIL ENGINEERING

Support – Boundary facilities (other than road works)

13GB – Liantang/Heung Yuen Wai Boundary Control Point and associated works

Members are invited to recommend to Finance
Committee –

- (a) the upgrading of part of **13GB**, entitled “Liantang/Heung Yuen Wai Boundary Control Point and associated works – reprovisioning of boundary patrol road and associated security facilities” (the proposed works), to Category A at an estimated cost of \$393.5 million in money-of-the-day prices;
- (b) to authorise the Director of Lands to charge against **Head 701 Subhead 1100CA** special ex-gratia payment to a registered landowner whose private lot is affected by the proposed works but, due to the meandering of the Shenzhen River, lies partly within the territory of Shenzhen Municipality; and
- (c) to retain the remainder of **13GB** in Category B.

/PROBLEM

PROBLEM

We need to re-provision a section of the boundary patrol road (BPR) and the associated security facilities including the primary boundary fence (PBF) and other security facilities between Ping Yuen River and Pak Fu Shan for the realignment of Shenzhen River in association with the development of a new Boundary Control Point (BCP) at Liantang/Heung Yuen Wai. We also need to be authorised to offer special ex-gratia payment to a registered landowner whose private lot affected by the proposed works lies partly within the territory of the Shenzhen Municipality.

PROPOSAL

2. The Director of Civil Engineering and Development, with the support of the Secretary for Development, proposes to upgrade part of **13GB** to Category A at an estimated cost of \$393.5 million in money-of-the-day (MOD) prices for the re-provisioning of a section of BPR and the associated security facilities for the development of the new BCP. The Director of Drainage Services (DDS) will implement the works.

3. The Director of Lands, with the support of the Secretary for Development, proposes to charge against **Head 701 Subhead 1100CA** special ex-gratia payment to a registered landowner whose private lot is affected by the proposed works but, due to the meandering of the Shenzhen River, lies partly within the territory of Shenzhen Municipality. Details of the proposed special ex-gratia payment are set out in paragraphs 11 to 13 below.

PROJECT SCOPE AND NATURE

4. The part of **13GB** that we propose to upgrade to Category A comprises –

- (a) re-provisioning of approximately 4.3 kilometres (km) long and 3.5 metres (m) wide BPR between Ping Yuen River and Pak Fu Shan;

/(b)

- (b) reprovisioning of approximately 4.3 km long PBF associated with the BPR mentioned in (a) above in conjunction with other security facilities including lighting and Fence Protection System¹;
- (c) reprovisioning of the Hong Kong Police Force (HKPF) Lo Fong Bridge Post; and
- (d) ancillary works including drainage and landscaping works.

———— A site layout plan is at Enclosure 1.

5. Subject to the approval of the Finance Committee (FC), we plan to commence the construction of the proposed works in February 2012 for completion in February 2015.

6. The remaining parts of **13GB** mainly comprise –

- (a) civil works including site formation for the BCP, construction of a trunk road connecting the BCP with Fanling Highway, diversion/modification works at Lin Ma Hang Road, and related Shenzhen River improvement works; and
- (b) building works including provision of passenger clearance and cargo processing facilities as well as transport and miscellaneous facilities; and provision of accommodation and facilities for Government departments providing services at the BCP.

Funding for the above works will be sought separately when they are ready for upgrading to Category A.

/JUSTIFICATION

¹ The Fence Protection System comprises Video Motion Detectors, a sensor alarm system and closed circuit television (CCTV) cameras, which are connected to a Centralized Monitoring and Control System for monitoring round the clock at the Boundary Command Centre situated at Man Kam To Police Operational Base.

JUSTIFICATION

Reprovisioning of BPR and associated security facilities

7. The Hong Kong Special Administrative Region (HKSAR) Government and the Shenzhen Municipal Government jointly announced at the second meeting of the Hong Kong-Shenzhen Joint Task Force on Boundary District Development on 18 September 2008 the implementation of the Liantang/Heung Yuen Wai BCP for operation in 2018.

8. The Shenzhen River is the boundary river between the HKSAR and the Shenzhen Municipality. To provide flood protection for the proposed BCP and alleviate flooding in the associated river section, a feasibility study jointly commissioned by the HKSAR Government and the Shenzhen Municipal Government was completed in December 2009. It concluded that a section of Shenzhen River between Ping Yuen River and Pak Fu Shan has to be upgraded to a flood protection level of 1 in 50 year return period² rainstorms to cater for the development of the BCP. We plan to commence the proposed river improvement works, which will be undertaken jointly by the Shenzhen Municipal Government and the HKSAR Government, under Stage 4 of the Regulation of Shenzhen River project in 2013 to tie in with the implementation programme of the BCP. The river downstream of the above river section has been upgraded under Stages 1, 2 and 3 of the Regulation of Shenzhen River project completed in 1997, 2000 and 2006 respectively.

9. As the river improvement works will encroach upon the land occupied by the existing BPR alongside the Shenzhen River, it is necessary to reposition the BPR and the associated security facilities on a shifted alignment to make way for the river improvement works and the BCP development. The reprovisioning works have to commence in advance in February 2012 so that adequate works space will be made available timely to suit the construction programmes of the river improvement works and the site formation works for the BCP.

/10.

² “Return period” is the average number of years during which a certain severity of flooding will occur once statistically. A longer return period means a rarer chance of occurrence of a more severe flooding.

10. Separately, in order to take forward the phased implementation of the reduced coverage of the Frontier Closed Area, a Secondary Boundary Fence (SBF) along the southern edge of the existing BPR will be constructed from Pak Hok Chau in the west to Sha Tau Kok in the east under a separate project “Construction of a secondary boundary fence and new sections of primary boundary fence and boundary patrol road” to be implemented in two phases (i.e. **12GB** and **15GB**³). For the new SBF between Ping Yuen River and Pak Fu Shan to be funded under **12GB** and constructed along the re-provisioned BPR as mentioned in paragraph 9 above, the works will be implemented by the DDS in conjunction with **13GB** so as to minimise project interface problems.

Special ex-gratia payment

11. We have to resume land for the proposed works and river improvement works mentioned in paragraphs 8 and 9 above. The northern limit of resumption will be up to the boundary between HKSAR and Shenzhen Municipality. Upon completion of the proposed works, the land to the north of the re-provisioned PBF will be used for the river improvement works.

12. Among the 112 agricultural lots to be resumed for the proposed works, a private agricultural lot registered in the Land Registry is affected by the proposed works and river improvement works in three different ways as shown in the Insert at Enclosure 1. Portions A and B will be required for the proposed works and river improvement works respectively. Portion C will also be required for the river improvement works, but due to the meandering of the Shenzhen River towards Hong Kong over the years, Portion C has become situated within the territory of Shenzhen Municipality, i.e. on the northern side of the boundary as defined by the centre line of the Shenzhen River since 1997. As advised by the Department of Justice, the HKSAR Government cannot resume land outside the HKSAR. We therefore do not have a mandate to pay statutory compensation to the registered landowner with respect to Portion C. However, Portion C will become inaccessible to the registered landowner once Portion A is resumed, as by then Portion C will be bounded by the Shenzhen River to its north and the land resumed for the proposed works and river improvement works to its south. Therefore, the whole lot has to be acquired in one go.

/13.

³ **12GB** will also be discussed at the meeting of the Public Works Subcommittee (PWSC) on 14 December 2011. **15GB** was approved by FC in June 2009. For details of the two projects, please refer to PWSC paper PWSC(2011-12)36.

13. To overcome the land resumption problem caused by the meandering of the Shenzhen River, we propose that special ex-gratia payment at the standard zonal rate be made to the registered landowner for Portion C even though we are not legally bound to do so. This will be at the same rate as the remaining portion of the lot and other lots to be resumed, and will result in the registered landowner receiving payment equivalent to his legal entitlement had the Shenzhen River not changed course. The area of Portion C is about 455 square metres and the estimated amount of the proposed special ex-gratia payment is \$4.4 million. This is in line with the previous arrangements in the implementation of the Regulation of Shenzhen River Stages 1, 2 and 3, and will facilitate smooth land resumption and avoid delay to the clearance exercise.

FINANCIAL IMPLICATIONS

14. We estimate the cost of the proposed works to be \$393.5 million in MOD prices (please see paragraph 15 below), broken down as follows –

	\$ million	
(a) Construction works	258.4	
(i) BPR	129.6	
(ii) PBF	92.4	
(iii) ancillary works including reprovisioning of HKPF Lo Fong Bridge Post, associated drainage and landscaping works	36.4	
(b) Lighting and security systems along the BPR	20.4	
(c) Furniture and equipment ⁴	11.9	
(d) Energy conservation measures	0.3	
(e) Environmental mitigation measures	4.5	
(f) Contingencies	27.7	
Sub-total	323.2 ⁵	(in September 2011 prices) /(g)

⁴ Based on an indicative list of furniture and equipment items for the Fence Protection System and HKPF Lo Fong Bridge Post, and their estimated prices.

⁵ The total project estimate does not include the cost for constructing the SBF between Ping Yuen River and Pak Fu Shan, which will be funded under **12GB**.

		\$ million	
(g) Provision for price adjustment		70.3	
	Total	<u>393.5</u>	(in MOD prices)

15. Subject to FC's approval, we will phase the expenditure as follows –

Year	\$ million (Sept 2011)	Price adjustment factor	\$ million (MOD)
2012 – 13	37.8	1.05375	39.8
2013 – 14	62.9	1.11171	69.9
2014 – 15	73.5	1.17285	86.2
2015 – 16	52.1	1.23736	64.5
2016 – 17	35.9	1.30541	46.9
2017 – 18	32.3	1.37721	44.5
2018 – 19	28.7	1.45296	41.7
	<u>323.2</u>		<u>393.5</u>

16. 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 2012 to 2019. We will deliver the works under re-measurement contract because of the uncertain ground conditions that may affect the quantities of works. The contract will provide for price adjustments.

17. The proposed works will not give rise to any additional annual recurrent expenditure.

/PUBLIC

PUBLIC CONSULTATION

18. We consulted the Ta Kwu Ling District Rural Committee and the North District Council on 8 and 14 April 2011 respectively. Members generally supported the implementation of the proposed works.

19. We gazetted the proposed roadworks under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) on 13 August 2010 and received a total of eight objections to the proposed road scheme. Two of the objections were mainly related to the access to and from a warehouse. Upon our confirmation that the concerned access would be maintained both during and after construction, one of the two objections was withdrawn without condition. Another objection was mainly related to the impact on a boundary wall of a structure. While we confirmed that the boundary wall affected by the proposed works would be reinstated, the objector maintained his objection. The remaining five objections were mainly related to compensation for resuming their lots. We explained to the objectors the prevailing land resumption policy and their statutory rights, but none of the objectors withdrew their objections.

20. On 31 May 2011, the Chief Executive in Council overruled the seven unresolved objections and authorised the road scheme. The authorisation notice was gazetted on 17 June 2011.

21. We consulted the Legislative Council Panel on Development on the proposed works on 22 November 2011. Members supported the proposed works.

ENVIRONMENTAL IMPLICATIONS

22. The proposed works forms part of the Shenzhen River improvement works between Ping Yuen River and Pak Fu Shan, which is a designated project under Schedule 2 of the Environmental Impact Assessment (EIA) Ordinance (EIAO)(Cap. 499) and an environmental permit is required for the construction and operation of the project. In March 2011, the EIA report for the project was approved with conditions under EIAO. The EIA report concluded that the environmental impact of the project can be controlled to within the criteria under EIAO and the Technical Memorandum on EIA Process.

23. We will implement the mitigation measures and the environmental monitoring and audit programme during the construction and operation stages of the proposed works as set out in the approved EIA report, such as landscape planting, watering of the site, covering of materials on trucks, and use of silenced construction plant. We estimate the cost of the mitigation measures to be \$4.5 million (in September 2011 prices) which has been included under paragraph 14(e) as part of the overall estimate of the proposed works.

24. At the planning and design stages, we have considered ways to optimise the design of the works and their construction sequence in order 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 materials 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 facilities⁶. 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.

25. 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.

26. We estimate that the proposed works will generate in total about 207 500 tonnes of construction waste. Of these, we will reuse about 170 000 tonnes (81.9%) of inert construction waste on site and deliver 30 000 tonnes (14.5%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 7 500 tonnes (3.6%) of non-inert construction waste at landfills. The total cost for accommodating

/construction

⁶ 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.

construction waste at public fill reception facilities and landfill sites is estimated to be about \$1.7 million for the proposed works (based on a unit cost of \$27 per tonne for disposal at public fill reception facilities and \$125 per tonne⁷ at landfills).

HERITAGE IMPLICATIONS

27. 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

28. We have to resume about 51 499 m² of agricultural land for the proposed works. Among the 48 structures affected by the proposed works, only one domestic structure was found which has been abandoned without occupancy and is in dilapidated condition. As such, no re-housing arrangement is required. The cost of land resumption and clearance is about \$511 million comprising about \$503 million for resumption of land and about \$8 million for clearance, and will be charged to **Head 701 - Land Acquisition**. A breakdown of the land resumption and clearance costs is at Enclosure 2. Apart from the abovementioned costs, \$4.4 million will be set aside from **Head 701 - Land Acquisition** for the proposed special ex-gratia payment to the affected registered landowner whose lot lies partly within the territory of Shenzhen Municipality (please see paragraphs 11 to 13 above). The cost of land resumption and clearance for the river improvement works will also be charged to **Head 701 - Land Acquisition**. We will provide Members with the details when funding for the river improvement works is sought later.

ENERGY CONSERVATION MEASURES

29. The proposed works will adopt various forms of energy efficient features, including –

- (a) energy efficient luminaries with electronic ballast;
- (b) lighting control by photosensors; and

/(c)

⁷ The 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.

- (c) on-demand control for the lighting system.

30. For renewable energy technologies, we will adopt a small-scale photovoltaic system for environmental benefits.

31. The total estimated additional cost for adoption of the above features is around \$320,000 (including about \$220,000 for energy efficient features), which has been included in the cost estimate of the proposed works. The energy efficient features will achieve 13.5% energy savings in the annual energy consumption with a payback period of about 6.4 years.

BACKGROUND

32. We upgraded **13GB** to Category B in July 2008.

33. On 9 January 2009, the FC approved the upgrading of part of **13GB** to Category A as **14GB** “Liantang/Heung Yuen Wai Boundary Control Point and associated works – investigation and preliminary design” at an estimated cost of \$89.0 million in MOD prices for carrying out the investigation and preliminary design for the development of the BCP. The preliminary design was completed in December 2010.

34. On 30 April 2010, the FC approved the upgrading of another part of **13GB** to Category A as **16GB** “Liantang/Heung Yuen Wai Boundary Control Point and associated works – village reprovisioning works” at an estimated cost of \$51.3 million in MOD prices for the reprovisioning of the existing Chuk Yuen Village to make way for the construction of the BCP. Construction commenced in August 2010 for completion in early 2012.

35. On 18 February 2011, the FC approved the upgrading of another part of **13GB** to Category A as **17GB** “Liantang/Heung Yuen Wai Boundary Control Point and associated works – detailed design and ground investigation” at an estimated cost of \$265.8 million in MOD prices for carrying out the detailed design and ground investigation for the development of the BCP and the associated Shenzhen River improvement works. We engaged consultants in March 2011 to undertake the detailed design of the BCP site formation and the connecting road for completion by mid 2012, and engaged consultants jointly with the Shenzhen Municipal Government in July 2011 to undertake the detailed design of the Shenzhen River improvement works for completion by July 2013.

36. We completed the detailed design of the proposed works by in-house resources in April 2011.

37. Of the 1 406 trees within the boundary of the proposed works, 685 trees will be preserved. Of the remaining 721 trees to be removed, 716 trees will be felled and 5 trees will be transplanted within the site as far as possible. All trees to be removed or transplanted are not important trees⁸. We will incorporate planting proposals as part of the proposed works, including the planting of about 1 957 trees.

38. We estimate that the proposed works will create about 195 jobs (170 for labourers and another 25 for professional/technical staff), providing a total employment of 5 640 man-months.

**Development Bureau
December 2011**

⁸ “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 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 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 m (measured at 1.3 m above ground level), or with a height/canopy spread equal to or exceeding 25 m.

**13GB (Part) – Liantang/Heung Yuen Wai Boundary Control Point
and associated works**

Breakdown of the land resumption and clearance costs

		\$ million
(I)	Estimated resumption cost	457.00
	(a) Agricultural land ex-gratia compensation	457.00
	112 agricultural lots (with a total area of 51 499 square metres (m ²)) will be resumed	
	51 499 m ² x \$8,874 per m ² (please see Notes below)	
(II)	Estimated clearance cost	7.34
	(a) Ex-gratia allowance of crop compensation	7.12
	(b) Ex-gratia allowance for farm structures and miscellaneous permanent improvements to farms	0.20
	(c) Ex-gratia allowance for miscellaneous indigenous Villager matters e.g. “Tun Fu” ceremonial fee	0.02
(III)	Interest and Contingency Payment	46.43
	(a) The interest payment on various ex-gratia compensations for private land	0.0046
	(b) Contingency on the above costs	46.43
	Total	510.77 (say 511)

Notes

1. There are four ex-gratia compensation zones, namely Zones A, B, C and D, for land resumption in the New Territories as approved by ExCo in 1985 and 1996. The boundaries of these zones are shown on the Zonal Plan for Calculation of Compensation Rates. The land to be resumed in the project **13GB** is agricultural land within Compensation Zone “A”.
2. In accordance with G.N. 6195 dated 9 September 2011 on the revised ex-gratia compensation rates for resumed land, the ex-gratia compensation rate of agricultural land for Zone “A” is 120% of the Basic Rate at \$687 per square foot, i.e. \$824.4 per square foot (or \$8,874 per m²).