

立法會
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**Public Works Subcommittee of the Finance Committee
of the Legislative Council**

**Minutes of the 7th meeting
held in Conference Room 1 of Legislative Council Complex
on Monday, 7 May 2012, at 2:30 pm**

Members present:

Ir Dr Hon Raymond HO Chung-tai, SBS, S.B.St.J., JP (Chairman)
Hon Alan LEONG Kah-kit, SC (Deputy Chairman)
Hon Fred LI Wah-ming, SBS, JP
Hon James TO Kun-sun
Hon CHAN Kam-lam, SBS, JP
Hon LAU Wong-fat, GBM, GBS, JP
Hon Miriam LAU Kin-yee, GBS, JP
Hon TAM Yiu-chung, GBS, JP
Hon Abraham SHEK Lai-him, SBS, JP
Hon LEE Wing-tat
Hon CHEUNG Hok-ming, GBS, JP
Prof Hon Patrick LAU Sau-shing, SBS, JP
Hon KAM Nai-wai, MH
Hon Cyd HO Sau-lan
Hon Starry LEE Wai-king, JP
Hon CHAN Hak-kan
Dr Hon LEUNG Ka-lau
Hon WONG Kwok-kin, BBS
Hon IP Kwok-him, GBS, JP
Hon Mrs Regina IP LAU Suk-yee, GBS, JP
Hon Tanya CHAN
Hon Albert CHAN Wai-yip

Member attending:

Hon WONG Kwok-hing, MH

Member absent:

Hon Timothy FOK Tsun-ting, GBS, JP

Public officers attending:

Ms Doris HO Pui-ling, JP	Deputy Secretary for Financial Services and the Treasury (Treasury) ³
Mr WAI Chi-sing, JP	Permanent Secretary for Development (Works)
Ms Gracie FOO Siu-wai	Deputy Secretary for Development (Planning and Lands) ¹
Mr Benny WONG Yiu-kam	Deputy Director (1) Environmental Protection Department
Ms Joyce HO Kwok-shan	Principal Assistant Secretary for Financial Services and the Treasury (Treasury) (Works)
Ms Eva CHENG, GBS, JP	Secretary for Transport and Housing
Ms Maisie CHENG, JP	Deputy Secretary for Transport and Housing (Transport) ¹
Mr Edward TO Wing-hang	Principal Assistant Secretary for Transport and Housing (Transport) ⁵
Mr LAU Ka-keung, JP	Director of Highways
Mr CHOW Chun-wah	Project Manager (Hong Kong-Zhuhai-Macao Bridge) Highways Department

Clerk in attendance:

Mr Derek LO	Chief Council Secretary (1) ⁶
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Staff in attendance:

Mr Andy LAU	Assistant Secretary General ¹
Mr Ken WOO	Council Secretary (1) ⁶
Mr Frankie WOO	Senior Legislative Assistant (1) ³
Ms Christy YAU	Legislative Assistant (1) ⁸

Action

The Chairman reported that a total of 32 projects amounting to \$146,065.5 million had been endorsed by the Public Works Subcommittee in the 2011-2012 session so far. Of the total amount endorsed, \$142,573.1 million was related to capital works projects.

Head 706 – Highways

**PWSC(2012-13)11 844TH Hong Kong–Zhuhai–Macao Bridge —
Hong Kong Link Road**

2. The Chairman advised that PWSC(2012-13)11 sought to increase the approved project estimate (APE) of 844TH by \$8,857.3 million from \$16,189.9 million to \$25,047.2 million in money-of-the-day prices. The Panel on Transport had been consulted on the proposed increase in APE at its meeting on 25 April 2012 and Panel members had no objection in principle to the proposal. The gist of Panel discussion was tabled at the meeting.

3. The Chairman declared that he was an independent non-executive director of an engineering company.

Increase in approved project estimate

4. Ms Starry LEE expressed concern about the rapid surge in the project cost by more than \$8.8 billion, which represented about 55% increase of the original project cost approved by the Finance Committee (FC) only six months ago. Pointing out that the project estimate of the Hong Kong-Zhuhai-Macao Bridge (HZMB) project had already been increased by about \$6.5 billion following the delay in its implementation, she urged the Administration to ensure that the increase in APE was reasonable and that the project estimate would not be increased further. Mr WONG Kwok-hing expressed similar concerns.

5. Secretary for Transport and Housing (STH) advised that the Administration had explained to Members when funding proposals on HZMB were submitted to FC in November 2011 that works for HZMB Hong Kong Boundary Crossing Facilities (HKBCF) and advance works for the Tuen Mun-Chek Lap Kok Link (TM-CLKL) had been delayed for nearly one year due to the judicial review proceedings. The construction timetable had to be compressed through increase of labour and plant resources, as well as arrangement of overtime work in order to complete the works on time to dovetail with the commissioning of HZMB in 2016. The aforementioned measures, together with the increase in construction

prices, had led to an increase in the expenditure of approximately \$6.5 billion for the two local projects. The Administration had stressed that the additional expenditure was very conservative and that the estimates did not include the Hong Kong Link Road (HKLR) project because it was inappropriate to make a rough estimate in the absence of tender submissions.

6. To ensure that the increase in APE was reasonable, STH advised that the Administration had appointed a professional consultant to estimate the cost of HKLR. However, under a tight construction programme caused by the delay in commencement of works and in response to the latest market situation as well as the uniqueness and stringent requirements of the works of HKLR, the tenderers had made a higher-than-expected assessment of risks in preparing their tenders. The risk factor, along with the rapid surge in construction prices in the past six months, had led to a higher construction cost.

7. As regards members' concern on whether the project estimate would be increased further, STH pointed out that the HKLR project had undergone a competitive tendering process, during which the submission which best satisfied the stringent technical requirements of the project at the lowest bid price was selected. The project contingencies should provide adequate buffer for meeting unforeseeable circumstances. Based on the current circumstances and with stringent cost control imposed by the consultant, the Administration was confident that the selected tenderer would be able to implement the project within the revised estimate.

Cost increase due to higher-than-expected assessment of the risks

8. Mr IP Kwok-him pointed out that increase of the HKLR construction cost by \$3,440 million attributable to higher-than-expected risk assessment was a huge amount and urged the Administration to give a detailed account of the increment. Ms Miriam LAU expressed similar concerns.

9. Director of Highways (DH) explained that works of HKLR had stringent technical requirements and the delay in commencement of HKLR works had rendered the works programme very tight. On the one hand, tenderers faced difficult work environment as part of the works would be carried out at sea in offshore areas, which were susceptible to disruption under inclement weather conditions. On the other hand, the fact that works of HKLR had to be carried out in the vicinity of North Lantau and the Airport Island after the major facilities in the area had been completed had added to the technical challenges of the project.

Apart from the tunnelling works through the rock layer in the vicinity of sensitive facilities such as fuel storage and the Ngong Ping 360 cable car, the project also involved tunnelling works underneath the Airport Express line and the Airport Road on the Airport Island. Such works had to be carried out with extreme care in order not to affect the operation of the above facilities.

10. DHy further said that in meeting the challenges, tenderers had to adopt designs and construction methods that they were most experienced and conversant with to ensure the timely completion of the project. For example, tenderers had proposed using small-scale tunnel boring machine instead of steel pipe piles as set out in the reference design to enhance accuracy and manageability of the horizontal piling works. The costs of these designs and construction methods were higher than the reference ones, hence resulting in a higher construction cost.

11. Ms Miriam LAU opined that the Administration should have elaborated more about the reasons why tenderers were more conservative in assessing risks of works. Otherwise, the public would have the perception that the amount was not spent directly on the works but was required merely as a compensation due to the compressed works programme. The Chairman shared Ms LAU's views and requested the Administration to provide a detailed breakdown of the cost increase due to the higher-than-expected risk assessment by tenderers before the relevant meeting of FC. The Administration agreed to provide the information.

Admin

Impact of judicial review on increase in project estimate

12. Mr CHEUNG Hok-ming said that Members belonging to the Democratic Alliance for the Betterment and Progress of Hong Kong (DAB) supported the proposal and early commencement of the HZMB-related local projects. He said that some members of the public had expressed grave dissatisfaction that local projects relating to HZMB had been considerably delayed by the proceedings of a judicial review which led to a further cost increase of over \$8.8 billion. He opined that the Civic Party should take the blame for initiating the judicial review. Mr IP Kwok-him, Mr WONG Kwok-hing and Mr CHAN Kam-lam expressed similar views.

13. Mr Albert CHAN dismissed the view that the judicial review was the cause of the project delay and the increase in cost. He said that discussion of HZMB had commenced as early as in the 1990s and the construction costs would have been considerably saved had the project

been implemented back then. He said that it was unfair that some political parties to put the blame on the Civic Party.

14. Mr TAM Yiu-chung opined that the increase in cost was indisputably caused by the judicial review proceedings which had held back the implementation of the project. Stressing that the additional funding sought for the project could have alternatively financed the building of many public housing units, Mr TAM sought clarification from the Administration on Mr Albert CHAN's remark that the judicial review was not the cause of the delay in the construction works.

15. STH explained that following the judicial review that commenced in January 2010, the Administration had to put off the plans to seek funding from FC. Although design and site investigation work were not affected by the judicial review, the authorization from Chief Executive-in-Council and funding application processes were held in abeyance which made the commencement of works impossible. The Court of First Instance handed down its judgment in April 2011 quashing the Environmental Permits relating to HKBCF and HKLR and therefore their construction could not commence until the Court of Appeal handed down its judgment in September 2011 allowing the Director of Environmental Protection's appeal and maintained the validity of the Environmental Permits. Since the judicial review had rendered the works programme of HKLR from very adequate to very tight, the Administration had to introduce various measures to compress the construction timetable and to speed up construction works in order to make up for the delay for completing the relevant works on time by 2016.

16. Mr Alan LEONG said that the Advisory Council on the Environment, which discussed the Environmental Impact Assessment reports of HZMB-related projects on 12 October 2009, had concluded that "the project proponent should be requested to submit the proposal and detailed plan, including the proposed size and management plan, of the proposed Marine Park in the Brothers Islands, in consultation with the Agriculture, Fisheries and Conservation Department, to the Council for comments and advice before the commencement of construction works". He also quoted a statement made by the Administration in a paper provided to the Panel on Development dated 22 February 2011 that, in relation to the investigation and preliminary design for HKBCF, "the project completion date was extended to carry out additional preliminary study for Marine Park in the Brothers Islands in order to fulfill the conditions of the Environmental Permit issued in November 2009". He therefore opined that the delay in the implementation of HZMB-related projects was not caused by the judicial review proceedings. He also

reiterated his stance that the judicial review was not initiated by the Civic Party.

Timeframe of project completion

17. Mr CHAN Kam-lam said that it was pivotal to ensure the completion of HKLR by 2016 to dovetail with the commissioning of HZMB, otherwise it would result in economic losses.

18. STH advised that the works for the Main Bridge as well as the respective link roads in Zhuhai and Macao were progressing as planned. Works for HKLR could still be completed by 2016 if the construction could commence in the first half of 2012. As HZMB connected Hong Kong, Zhuhai and Macao, if HKLR could not be completed on time making it impossible for HZMB to be commissioned in 2016, the three places would then have to bear direct and indirect economic losses.

19. Mr CHAN Kam-lam expressed reservation about the timely completion of the project in 2016 due to the tight schedule and unforeseeable disruptions, such as inclement weather conditions. He asked whether provisions had been included in the contracts to ensure that the project could be completed as scheduled and whether a penalty would be imposed for encouraging the timely completion of the works.

20. DHy responded that if the increase in APE was approved and the Administration could award the contracts in the first half of 2012 as planned, it would set out in the contracts the requirement to open HKLR to traffic by the end of 2016 to dovetail with the commissioning of HZMB. The contracts would also specify in the case of inclement weather that the completion date could only be extended due to the hoisting of black rainstorm signal and typhoon signal number 8 or above during the construction period. Based on weather statistics over the past few years, the total duration for the occurrences of such adverse weather during the construction period was estimated to be about a month. Provisions on penalty for failing to complete the project before the completion date would also be stipulated in the contracts.

21. Mr KAM Nai-wai noted that the project comprised the tunnel contract and the viaduct contract and that the Administration had retendered the tunnel contract due to higher-than-expected tender prices in the first tender exercise. He asked whether the viaduct contract would be retendered in order to lower the tender price. He also asked about the number of submissions received during the tendering exercise and the bid price difference between the submissions.

22. STH replied that the project comprised the tunnel contract and the viaduct contract. The tender prices of the tunnel contract were first found to exceed the original estimates. To protect public funds and ensure fairness of the tendering process, the Administration adopted various measures to alleviate project risks and retendered the contract upon obtaining the advice of the Department of Justice. In view of the higher-than-expected tender prices in the first tender exercise for the tunnel contract, similar modifications were made to the viaduct contract before the close of tender with a view to alleviating tenderers' risk and lowering the tender price.

Project claims

23. Mr Albert CHAN pointed out that the construction of the Hong Kong International Airport on Lantau Island had given rise to claims for billions of dollars. Highlighting the complexity of the HKLR project, he asked whether provisions had been made in the tender documents to cater for the possible claims and whether the amount would be capped.

24. DHy explained that the risk for claims would be minimized through awarding the contracts on a lump-sum basis and appointing a professional consultant to manage and monitor the works closely to ensure full compliance with contractual requirements. STH added that setting out a capped amount in the tender documents was legally inappropriate and might push up the tender prices.

Connectivity between the Hong Kong-Zhuhai-Macao Bridge Main Bridge and Hong Kong Link Road

25. Prof Patrick LAU asked about the coordination between Hong Kong, Zhuhai and Macao in ensuring the technical feasibility of connecting their respective link roads to the Main Bridge. Noting that works for the respective link roads in Zhuhai and Macao were proceeding in full swing, he suggested that the Administration should make reference to its counterparts on designing the project and contracts.

26. STH advised that the three governments were responsible for the implementation of the Main Bridge of HZMB with the works implemented by the Mainland contractors according to international standards. The HZMB Authority, jointly set up by the three governments, would supervise important matters including the quality and safety of the works of the Main Bridge. DHy added that while the contractors of the Main Bridge and HKLR would adopt different designs and construction

methods which they had the most experience and confidence in, the Administration had been working closely with the relevant authority to ensure flawless connection between the Main Bridge and HKLR.

Local projects relating to Hong Kong-Zhuhai-Macao Bridge

27. Mr CHEUNG Hok-ming expressed concern that the construction costs of TM-CLKL and Tuen Mun Western Bypass (TMWB) might be further increased due to the delay in their implementation. He commented that linking up TM-CLKL and TMWB with HKLR was strategically important and expressed concern that these projects could not be completed in tandem for connection with HKLR in 2016.

28. STH advised that the works programme and financial arrangements of various HZMB-related local projects would be affected due to the delay in their implementation. While the southern section of TM-CLKL (the viaduct section connecting HZMB HKBCF and North Lantau Highway) could be completed in 2016 as scheduled to provide access for vehicles entering and leaving HKBCF, the northern section (the sub-sea tunnel connecting HZMB HKBCF and Tuen Mun) could only be completed in 2017. As for TMWB, the Administration had selected an alignment option among ten upon extensive consultation with the Tuen Mun District Council and the local community. Various impact assessments, site investigation and preliminary design for TMWB were underway. The Government would roll out HZMB-related local projects by phases to dovetail with the commissioning of HZMB and meet traffic needs.

29. Pointing out that some members of the public were supportive of the provision of Route 10 to resolve the traffic congestion in Tuen Mun, Mr CHEUNG Hok-ming said that DAB was of the view that TMWB would be far more effective in serving the purpose. In view of the impending saturation of Tuen Mun Road in 2016 with the commissioning of the Kong-Sham Western Highway, he was concerned that the commissioning of HZMB might further aggravate the traffic congestion of Tuen Mun Road if TMWB could not be open to traffic at an appropriate juncture.

30. STH explained that despite an alignment option had been identified for TMWB, quite a number of amendments were required and the Administration would need to properly consult the relevant stakeholders before proceeding to the next stage of work. The Administration was aware of the strong call of the local community and would spare no effort on speeding up the provision of TMWB.

Employment of labour and occupational safety

31. Mr KAM Nai-wai criticized the Administration for having underestimated the project estimate when it sought funding from FC in November 2011. He asked why workers' preference over job opportunities in urban areas as mentioned in the paper had contributed to the increase in APE since this should have been factored in when calculating the original project estimate.

32. STH explained that the shortage in labour supply for the project was unexpected until it was revealed in the tender submissions that subsidies were required to attract workers, who were required to work at remote sites in the Lantau Island and at sea. The Chairman urged the Administration to take forward the project early, or otherwise it might be even more difficult to attract workers for the project, which had to be completed in a tighter schedule.

33. Mr WONG Kwok-hing expressed concern that the tight works programme of HKLR may entail the import of technical labour in addition to construction workers. Mr Alan LEONG said that in the course of the discussion on the HZMB project, some construction associations had appealed to the Administration for lowering the speed in rolling out infrastructural projects due to the shortage in the supply of construction workers.

34. Deputy Secretary for Transport and Housing (Transport)¹ responded that the HKLR project would create about 4 580 jobs for construction workers and technical staff. In no case would the import of labour be justified solely by tight works programme.

35. Mr WONG Kwok-hing was concerned that the safety of construction workers might be compromised as they were required to work under a tight works programme. He requested the Administration to take enhanced measures to ensure workers' safety at construction sites.

36. DHy said that the Administration attached great importance to occupational safety at construction sites and it had specified the relevant occupational safety requirements in the tender documents. The appointed tenderer was required to, among others, demonstrate that all the required safety standards were met to get paid for the contract.

37. The item was voted on and endorsed. Mr Albert CHAN requested to put on record that he abstained from the voting.

38. There being no other business, the meeting ended at 3:34 pm.

Council Business Division 1
Legislative Council Secretariat
24 May 2012