政 府 總 部
民 政 事 務 局

香港灣仔
港灣道十二號
灣仔大樓二十五樓

GOVERNMENT SECRETARIAT
HOME AFFAIRS BUREAU
25/F, WANCHAI TOWER
12 HARBOUR ROAD
WAN CHAI
HONG KONG

Our Ref : SF(35) to HAB CS CR 7/1/27

電話號碼 Tel. No.: (852) 3102 5991
傳真號碼 Fax No.: (852) 3102 5997

By email

14 May 2019

Ms Doris LO
Clerk to the Public Works Subcommittee
Legislative Council Secretariat
Legislative Council Complex
1 Legislative Council Road
Central
Hong Kong

Dear Ms Lo,

Public Works Subcommittee
Meeting on 8 May 2019 – Follow-up Actions

At the Public Works Subcommittee meeting on 8 May 2019, Members requested supplementary information in relation to agenda item, PWSC(2018-19)46. Feedback from the Government and West Kowloon Cultural District Authority is set out at Annex for Members' reference.

Yours sincerely,

(Ms YING Fun-fong)
for Secretary for Home Affairs

Enclosure

c.c.
Chief Executive Officer, West Kowloon Cultural District Authority
Project Manager (South), Civil Engineering and Development Department

Annex

Legislative Council Public Works Subcommittee Meeting on 8 May 2019
LC Paper No. PWSC(2018-19)46 – Issues requiring Follow-up Actions

In discussing LC Paper No. PWSC(2018-19)46 at the Public Works Subcommittee (PWSC) meeting on 8 May 2019, Members requested the Government to provide supplementary information on issues raised. Our reply is set out below:

1. **The Administration to consider separate discussion and voting for the three items in this paper, i.e. PWP Item no. 175BF "Relocation of supporting operational facilities of Tsim Sha Tsui and Fire Station Complex, Fire Services Club and other Fire Services accommodations to To Wah Road, Kowloon", PWP Item no. 754CL "Infrastructure Works for West Kowloon Cultural District, Phase 1" and PWP Item no. 763CL "Integrated Basement for West Kowloon Cultural District - remaining works" in the Finance Committee (FC) meeting.**

   PWP Item no. 175BF aims at releasing the site for the development of the eastern entrance of the Avenue of West Kowloon Cultural District (WKCD). PWP Item no. 754CL aims at enhancing the pedestrian connection between the Artist Square Development Area and MTRCL Kowloon Station. PWP Item no. 763CL provides underground roads to enhance the internal and external vehicular connections of WKCD as well as other traffic support facilities including parking spaces and loading/unloading lay-bys. All the three Items are for improving the accessibility of WKCD to dovetail with the phased development of WKCD and are time critical to commence the study or works in 2019. In order to let Members fully understand the infrastructural works proposals and accessibility improvement measures for WKCD, we consider it most appropriate to bundle the three Items for discussion in the PWSC meeting and FC meeting. We nevertheless have no objection to separate voting for the three Items in FC meeting.

2. **To provide the following supplementary information on the Integrated Basement (IB) of WKCD:**

   (a) whether and how the Administration has improved the cost effectiveness of the project and reduced the cost by optimizing the design of the IB; and

   Given the large scale of the IB, we have put much emphasis on minimizing the project cost during planning and design stages. Some examples are illustrated below:

(i) Top level of the IB would be at some 5 metres above the existing ground level. Such arrangement could significantly reduce the depth and volume of excavation works as well as the scale of lateral support system, thus reducing the construction cost.

(ii) The layout of different facilities within the basement has been carefully planned and designed with a view to optimizing the space in the basement. For instance, a mezzanine floor is introduced between B1 and B2 levels of the IB in Zone 2 where headroom requirements of the facilities permit. This measure helps accommodate an additional floor thus achieving the floor area requirement without the need of deeper excavation.

(iii) Cost-effective solutions have been employed for the essential basement structures and foundation works as far as practicable. For instance, the engineering consultants have adopted different types of foundation including bored piles and pre-bored H-piles for different areas of IB to accord with specific loading and functional requirements.

(iv) The construction of IB involves substantial excavation works. Apart from reusing the excavated materials in WKCD, the surplus will be delivered to other projects or public fill reception facilities for reuse. We have, at the design stage, formulated a technically feasible solution for setting up a barging point on site in order to deliver the excavated materials off site by sea as far as possible, thereby improving work efficiency and reducing construction cost.

(b) a table setting out the total floor area of the whole IB, floor area of each level, floor area by different uses and total length of the underground road (UR) in the IB.

The total construction floor area (CFA) of the whole IB, CFA of each floor and total length of UR within the IB is tabled below:

	Total CFA of IB (m^2)	**CFA of B1 Level of IB (m^2)**	**CFA of Mezzanine Floor of IB (m^2)**	**CFA of B2 Level of IB (m^2)**	**Length of UR (m)**
Zone 3A	40,000	20,000	5,000	15,000	230
Zone 3B	47,000	16,500	8,000	22,500	230
Zone 2A	81,500	43,000	18,500	20,000	300
Zone 2BC	118,000	37,500	29,500	51,000	500

The CFAs in the IB are mainly to accommodate the UR, carparks, loading/unloading areas and facilities (e.g. public facilities, plant rooms and refuse collection points) to support the topside developments.

3. To provide the following supplementary information on the proposed Artist Square Bridge:

(a) a table showing the construction cost per square metre of the proposed Artist Square Bridge and those of other similar footbridges completed by the Government in recent years (characteristics and constraints of the projects could be listed out for reference); and

The proposed works have the following characteristics and constraints:

- As the proposed footbridge will span over the existing highway bridge at Austin Road West, the deck of proposed footbridge will be built at a level about 15 metres above ground which is greater than the 7 metres height requirements for typical footbridges.
- As provision of intermediate pier support at the existing highway bridge is infeasible, the span of proposed footbridge is about 79m which is longer than that of typical footbridges.
- As the piling location of the proposed footbridge is situated at an area with deep bedrock, pile length is relatively long.
- As the proposed footbridge piling works are in the vicinity of the airport railway tunnel, the construction difficulties are increased.
- The proposed footbridge will span over the existing highway bridge at Austin Road West. Due to the restrictions arising from the existing highway bridge structure, the construction method and sequence including temporary traffic arrangement are different from those normally employed for typical footbridge construction, thus increasing the construction difficulties. For instance, uses of heavy lifting plants and provision of temporary supports on the existing highway bridge are all under restrictions.

Since each footbridge project has its own characteristics and construction conditions, it is hard to make direct comparison. For the proposed footbridge, the construction cost per square metre is estimated to be:

	Estimated Cost ($ million) (in money-of-the-day prices)
Footbridge (including main deck, pier, foundation, lifts, escalators and staircases)	280.0
Average Cost* (per square metre)	0.32

* Gross plan area of about 865 square metres, including escalators, staircase and lift tower

In view of the distinct characteristics and complexity of the proposed footbridge, we consider the above-mentioned cost per square metre a reasonable estimate.

(b) the detailed breakdown of the annual recurrent expenditures of $3.0 million arising from the proposed works, how the figures are worked out and the change in the estimated annual recurrent expenditures for the next 10 years (including whether the expenditures will increase along with the aging of lifts and escalators).

The annual recurrent expenditures of the proposed footbridge mainly include electricity charges for the operation of footbridge, costs for cleaning, inspection and maintenance of the footbridge structures and lifts/escalators, as well as costs for maintenance of greening works. According to the general arrangement for public infrastructure, the completed facilities will be handed over to government departments concerned for management, operation and maintenance.

The budgeted annual recurrent expenditures of the proposed footbridge are about $3.0 million with the breakdown as follows:

Items	**Estimated Cost ($ million)**
Footbridge structures and ancillary provisions (including cleansing and greening works maintenance)	about 0.95
Lifts	about 0.94
Escalators	about 0.46
Electrical installations and other facilities	about 0.65
Total	about 3.00

The above estimate is prepared based on the average annual maintenance expenditures and will be the ceiling of annual recurrent budget. It has been agreed with the departments responsible for maintenance. Upon completion of the works, the departments concerned will work out the required annual maintenance expenses to accord with the actual circumstances.

Home Affairs Bureau
Civil Engineering and Development Department
West Kowloon Cultural District Authority

May 2019