

(translation)

**Legislative Council Public Works Subcommittee
meeting on 1 November 2017**

**440RO – District Open Space Adjoining
Public Housing Development at Anderson Road**

Supplementary Information

PURPOSE

On 1 November 2017, the Public Works Subcommittee (PWSC) recommended **440RO** be submitted to the Finance Committee (FC) for consideration. Members requested that the following supplementary information be provided –

- (a) a brief description of the differences between "lump sum contract" and "new engineering contract" for carrying out public works projects;
- (b) the method of estimating the price adjustment and criteria of using contingency sum under the "lump sum contract";
- (c) details of the following estimated construction cost of the proposed project; (i) breakdown of the administration and supervision items under on-cost payable to the Hong Kong Housing Authority; and (ii) cost for purchasing the children's play facilities;
- (d) the average maintenance time required for children's play facilities in children's playgrounds in public housing estates; and the reasons for the time required;

- (e) the measures that the Administration can take to shorten the repair time of the children's play facilities and their considerations in adopting modular components that can be combined to form different children's play facilities in the future. If modular components can be adopted, please submit details including when such adoption can commence; if not, reasons for that;
- (f) guidelines on how pesticides can be safely and properly applied in the turf area managed by the Leisure and Cultural Services Department (LCSD), including the application standards of pesticides and the personal safety of employees and turf users ;
- (g) explanation on why the jogging track cannot be extended to cover the entire proposed district open space and the reason on why it is not feasible for the jogging track to pass through the emergency vehicular access within the site; and
- (h) the schedule to consult local residents for the children's play facilities in proposed district open spaces and the measures on how to ensure the proposed works can be completed on or before the second quarter of 2020.

GOVERNMENT'S RESPONSES

2. The Government's responses to the matters set out in paragraph 1 above are listed below –

- (a) Lump sum contract form is usually adopted in projects with comparably simple design and low risks. Under the lump sum contract form, contractor tenders a lump sum and commits to complete the works according to the requirements stipulated in the contract. Therefore, the contractor needs to bear certain construction risks, such as the actual quantities of works exceeding the estimated ones, unforeseen ground conditions of the site, etc.

The Government has strived to promote collaborative partnership in the implementation of public works contracts so as to enhance the management efficiency and cost effectiveness of works contracts. Since 2009, the Government have adopted the New Engineering Contract (NEC) form in public works projects, to let works departments and construction industry stakeholders, including consultants and contractors, actively participate and build up relevant experience. The NEC form enhances the mechanism for handling construction risks in works contracts. The contracting parties are required to adopt a partnering approach to take forward construction works, thereby avoiding or minimising disputes. The contracting parties need to co-manage risks and if one party becomes aware of any risks which could lead to an increase in project cost or a delay, it has the obligation to notify the other party promptly so that they can discuss mitigation measures collaboratively to reduce the chance of having budget overrun or delay.

- (b) In most Capital Works Contracts (including "lump sum contract"), there are terms for price adjustment to adjust the total contract sum taking into account the price fluctuation of labour and materials. This system can relieve the tenderers' need to cater for uncertain factors and hence add on price adjustment in the tender price. The tender sum offered in the "lump sum contract" is mainly determined by the tenderers' valuation of project cost according to the market conditions at the time of tendering; the estimation of price adjustment in the tender sum is worked out according to the method set out in the tender document, based on the estimated proportion of wages of different trades of labourers and quantity of materials. The amount payable for the price adjustment within the contract sum will be calculated based on the wages of different trades of labourers and quantity of materials estimated by the tenderers at the time of tendering and the actual price fluctuation.

When estimating the project cost, the Government will normally reserve a certain amount for contingencies (which amounts to approximately 10% of total project cost) in order to cater for those additional expenditures arising from unforeseen reasons during construction stage. When these problems arise, we will review the situation to consider whether the contingency sum has to be expended.

- (c) (i) The Government plans to entrust the design and construction of the proposed works to the Hong Kong Housing Authority (HA). The on-cost payable to HA is 12.5% of the estimated construction cost, including design (4.8%), contract administration (4.8%) and administration overhead (2.9%) of the project.

(ii) We have allowed about \$2.5M for purchasing children's play facilities and fitness equipment for the proposed district open space. Of this \$2.5M quantum, \$1.2M is allowed for purchasing children's play facilities. The associated cost has been allowed under "External Works" of the project cost (Item 9(e) of PWSC(2017-18)18 Paper refers).

- (d) In the event of any damage to the children's play facilities in children's playgrounds in public housing estates, the average maintenance time required is about 30 days and not more than 3 months. This includes placing order and delivery of the facilities' components. At present, about 26 groups of children's play facilities are yet to be repaired, accounting for about 0.6% of the children's play facilities in all public housing estates.

- (e) Children's play facilities of the Leisure and Cultural Services Department (LCSD)

Currently, the LCSD manages over 630 venues with children's playground. Most of them composed of different types of play components, such as the multi-play equipment with combination of slides, hang bridges, climbing frames; sensory walls with combination of touch, hearing and visual panels. However, as children's play equipment in various venues is procured through

an open tender, children's play equipment is not modular components provided by a single contractor.

The procedure and duration for repairing the children's play facilities depend on a host of factors including the types of play equipment, the condition of defective facilities and whether the facilities are still within the warranty period. In general, if the children's play equipment is within the warranty period or minor repair works, it will take 2 to 3 week's time for completion. For large scale replacement of children's play equipment, like replacement of slides, climbing frames, etc., it will take 2 to 3 month's time for completion. Since 2013, LCSD has kept stock of the spare parts of children's play equipment commonly required for repairs so as to shorten the time required for placing order and delivery of the concerned parts.

Considerations in adopting the modular component

Since the design of each children's playground must take into account a number of factors such as the topography, area, actual environment and the opinions of the relevant District Councils, the use of a single type of modular component to form children's play facilities may not be able to meet these requirements.

In addition, children's play facilities are currently procured through a fair and equitable mechanism. Suppliers also have standard components for their products. The requirement to adopt a single type of modular component not only stifles healthy competition but also reduces creativity, making the facilities standardised and lacking uniqueness. This arrangement may not be able to meet the current public expectations of the government in providing diversified and innovative recreational facilities in parks. Therefore, LCSD has no plan to adopt modular components to form children's play facilities.

- (f) LCSD has set out safety guidelines to ensure the safe and proper application of pesticides in its premises to safeguard the safety of staff and turf area users. According to the guidelines, the pesticides to be applied must be listed in the register of the

Agriculture, Fisheries and Conservation Department and must be packed and labeled according to their specifications. Staff applying pesticides must be properly trained. When applying pesticides, staff should use rope and fence to cordon off the pesticide application area and post notices at prominent locations. They should not allow staff without protective gear, citizen or animal to enter the application area. Advisory notice should be posted at prominent locations after pesticide application. Rope or fence should be used to cordon off the applied turf area and the label of pesticide should be referred to determine the cordon-off period. If the label does not contain the relevant information, the area should be cordon-off for at least 12 hours.

- (g) Due to the topographic constraint of the site, after the provision of a 7-a-side soccer pitch and associated toilets and changing rooms, there was only limited space for the remaining landscaping and pedestrian access. Therefore, we could not extend the jogging track to the whole area of the open space in our design. In addition, since we need to keep the emergency vehicular access in the middle of the open space for connecting to the existing underground drainage facilities, and that the shock absorbing materials used in the jogging track are not suitable for use in emergency vehicular access, extending the jogging track and passing through the emergency vehicular access is not feasible. Nevertheless, we will revise the design of the jogging track by connecting it to the hard-paved pedestrian access around the 7-a-side soccer pitch so that the public can choose to run around the entire open space or to use only the jogging track. At the same time, we have also considered to provide some additional branches to the jogging track in the central lawn with a view to lengthen the jogging track. The total length of the jogging track can be increased by 10 %
- (h) We propose to meet with relevant stakeholders, including local residents, on the children's play facilities in the proposed district open space in December 2017. We aim at exchanging opinions with all attendants as soon as possible with a view to optimising the relevant children's play facilities.

To ensure timely completion of the project, we have fully considered the construction site constraints and the construction sequences when determining the overall construction period. We will expedite the relevant administrative procedures of the procurement process, and endeavour to complete necessary preparation works in good time, including detailed design and tender documents, to ensure a smooth and efficient procurement process. In the meantime, we have also considered to complete and commission part of the facilities in the proposed district open space for early public enjoyment. These facilities, including children's play facilities, fitness facilities for the elderly, fitness facilities, jogging track, the central lawn, management office and baby care room, are expected to be completed one quarter ahead of the schedule, i.e. by the first quarter of 2020. Lastly, we will closely monitor the contractor's progress during the course of construction so as to ensure that the works can be completed on schedule.

Transport and Housing Bureau
December 2017