## Legislative Council Public Works Subcommittee Meeting on 29 March 2019

# 780CL – Site formation and infrastructure works for public housing development at Wang Chau, Yuen Long

## **Supplementary Information**

#### **PURPOSE**

When the captioned project was discussed at the Legislative Council Public Works Subcommittee meeting on 29 March 2019 (PWSC(2018-19)40 refers), Members requested the Government to provide the following supplementary information –

- (a) the number and distribution of public housing units to be constructed on the five platforms in the Wang Chau public housing development Phase 1, Yuen Long (WCPHD1);
- (b) the completion date of the report of the engineering feasibility study for site formation and infrastructure works for remaining phases (i.e. Phases 2 and 3) of public housing development at Wang Chau and the date of submission to the Legislative Council;
- (c) (i) in respect of the capital cost and phased expenditure of the proposed project mentioned in paragraphs 6 and 8 of the paper, the reduction in the estimated cost of the road works after review by the Project Cost Management Office of the Development Bureau; and
  - (ii) the reasons for requiring phased expenditure of project cost in 2024-25 and 2025-26.

### **GOVERNMENT RESPONSES**

- 2. The required information is set out below
  - (a) The public housing development under WCPHD1 is now under the design stage. According to the current public housing design, the proposed public housing blocks under planning will be rested on platforms at different levels on the eastern and western sides. The four public housing blocks on the eastern side will straddle three stepped platforms at different levels, while those five public housing blocks on the western side will be rested on two site platforms.

Over 2 000 units will be constructed on the eastern side and nearly 2 000 units will be constructed on the western side, providing about 4 000 units in total. The approximate locations and distribution of the proposed public housing blocks are shown in Figure 1.

(b) The engineering feasibility study for site formation and infrastructure works for remaining phases (i.e. Phases 2 and 3) of public housing development at Wang Chau has been substantially completed. We, together with the consultants, are finalising the relevant reports and the recommendations in view of the complicated development concerns and technical constraints involved in the study.

The target of providing a total of 17 000 housing units under Wang Chau development project has remained unchanged. We plan to proceed with the zoning amendment proposal for Phases 2 and 3 of public housing development at Wang Chau in 2019. The reports and the recommendations of the study will be released to the public during consultation.

(c)(i) The proposed "underpass" is an essential part of the proposed access road for the housing development. It is not purely providing access to the permitted burial ground. The "underpass" comprises a carriageway and footpaths. Its location plan and perspective drawing are shown in Figure 2. The cost of the footpath connected to the permitted burial ground and located above the proposed "underpass" only accounts for a very small amount of the estimated cost of the proposed underpass.

The project includes the construction of a single two-lane carriageway of about 400 metres (m) long with footpaths, connecting Long Ping Road to different platforms of the proposed public housing development. As the WCPHD1 will be built along hillside, site formation works are required and a number of site platforms

have to be built under the project to fit in with the existing hilly terrain and geographical setting.

The proposed site platforms will be constructed at levels approximately between +6.0 metre above Principal Datum (mPD) and +16.0mPD. The proposed carriageway and footpaths will start at the proposed road junction with Long Ping Road at a level of about +5.5mPD and extend uphill to connect to various platforms. A section of the carriageway and footpaths will pass through the middle of an existing ancestral grave and the permitted burial ground (i.e. the location of the proposed "underpass").

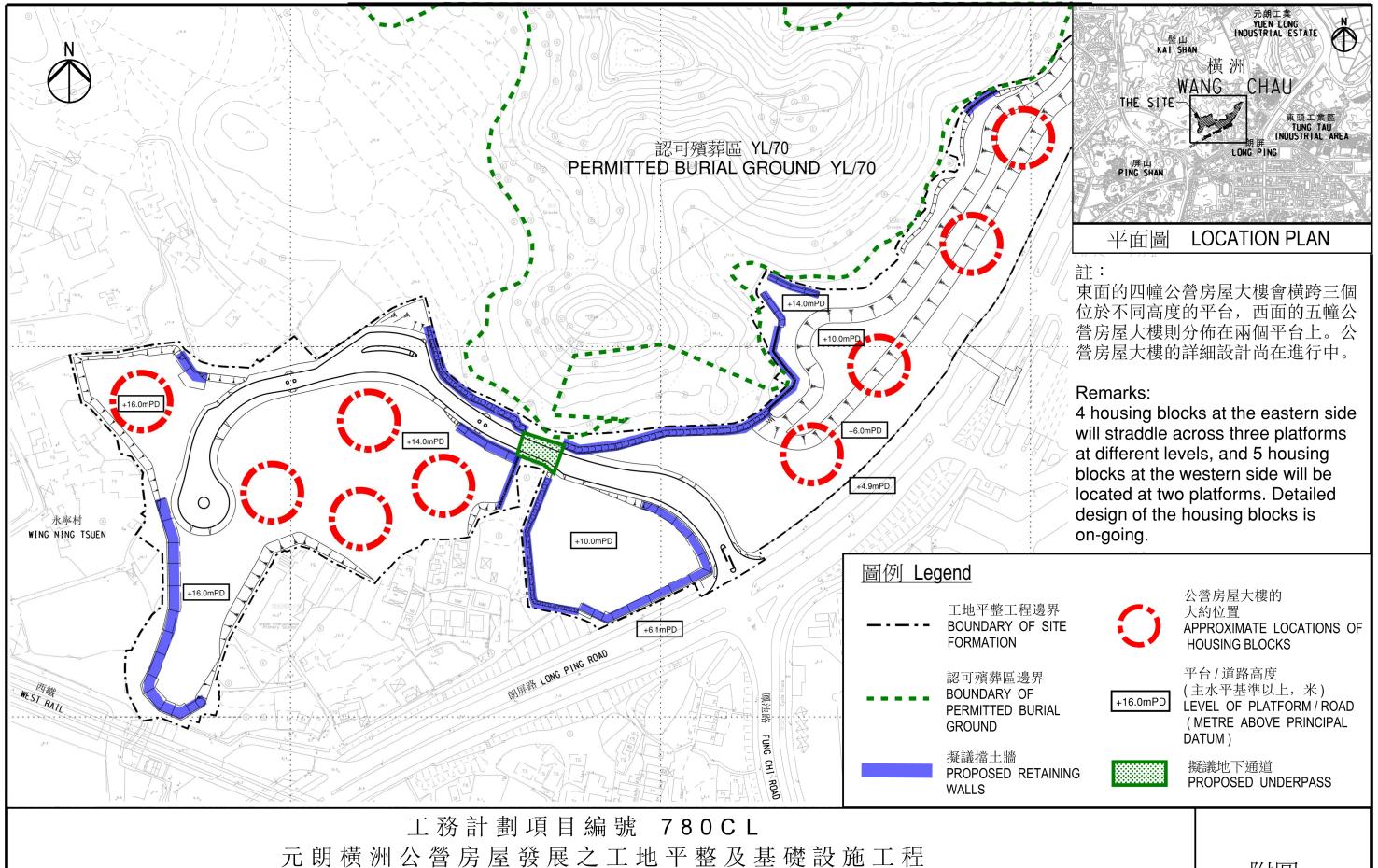
As gradient of carriageway has to comply with the design standards set out in the Transport Planning and Design Manual, the section of carriageway, i.e. at the location of the proposed "underpass", has to be constructed at a level approximately between +10.4mPD and +10.9mPD. Since the existing ground level at that location is about +20.0mPD to +22.0mPD, the height difference between the existing ground level and the proposed carriageway will exceed 10m. Massive excavation is, therefore, required for the construction of the section of carriageway and footpaths there. Besides, due to site constraints, there is insufficient space for the construction of slopes on both sides of the proposed carriageway and footpaths. Vertical retaining structures must be constructed. The alignment of the road section and the design of the associated structures are also constrained by the ancestral grave and the permitted burial ground on the two sides of the proposed is necessary to construct a new footpath above the "underpass" to facilitate public access to the permitted burial ground. Having regard to different factors, we consider that the design of a box-type reinforced concrete vehicular tunnel should be most suitable and cost-effective for the construction of the said section of Such design can provide space for the construction of the carriageway. carriageway and the footpaths alongside as well as the footpath above the "underpass" for access to the permitted burial ground as proposed in the project.

As regards the design and estimated cost of the project, around 10% of the project cost was reduced after vetting by the Project Cost Management Office of the Development Bureau in 2016. The reduction is already reflected in the current estimated cost of the project.

(ii) As mentioned in paragraph 4 of Paper No. PWSC(2018-19)40, subject to funding approval by the Finance Committee, we plan to commence the proposed works in the third quarter of 2019. The site formation works are expected to be completed

in phases in 2022, whereas the infrastructure works are expected to be completed in 2024. Upon completion of the works, expenditure is required within the maintenance period. In addition, we will need some time to finalise the accounts of the works contracts and assess the works-related claims after completion of the works. Therefore, we expected that there will be expenditure in 2024-25 and 2025-26.

Transport and Housing Bureau Civil Engineering and Development Department April 2019



PWP ITEM NO. 780CL SITE FORMATION AND INFRASTRUCTURE WORKS FOR PUBLIC HOUSING DEVELOPMENT AT WANG CHAU, YUEN LONG 附圖一 FIGURE 1

