

## **2. OUTLINE OF PLANNING AND IMPLEMENTATION PROGRAMME**

### **2.1 How will the Project be Planned and Implemented**

#### **2.1.1 General**

2.1.1.1 The Project Proponent is responsible for the planning and design of the Project. A contractor will be commissioned to carry out the construction work under the supervision of the Project Proponent. During the operational phase, the project proponent will employ an experienced agent to manage and operate the proposed heritage tourism development.

#### **2.1.2 Preliminary Site Investigation Results**

2.1.2.1 A preliminary geotechnical assessment was conducted in June 2003 to investigate the site in order to determine the most appropriate construction method. Most of the site area is located on an elevated platform and is surrounded by slopes and masonry walls. In addition, there are disused tunnels underneath the Subject Site. There are three portals in the site, two facing Canton Road, and one at the southern part of the site facing east.

2.1.2.2 Nineteen (19) useful boreholes were selected in the preliminary geotechnical assessment. These boreholes were retrieved from the Kowloon Canton Railway Corporation (KCRC) project – Kowloon Southern Link (KSL). The results indicated that the site was in general covered by a fill layer of about 1 to 3 metres except a local thick layer of fill noted at the centre of the Main Building of the FMPHQ. The subsequent material is in-situ weathered rock. There is a small percentage of rock at lower level near to the junction of Canton Road and Salisbury Road. The Grade (III) rock with Total Core Recovery (TCR) was found at levels from –5 to +6 mPD. Some corestones were noted in the area close to the Main Building.

#### **2.1.3 Method of Construction**

2.1.3.1 Construction work will be designed and planned similar to the concept plan submitted in the tender. The construction of the Project will be constrained by a number of issues. Apart from the need to preserve the Main Building, Stable Block, Signal Tower, Accommodation Block and the Main Building of the former Fire Station that are classified as Historic Buildings explicated in the Tender Document, many mature trees and shrubs present at the Subject Site, particularly the Banyan Tree marked in the tender document, have historic as well as landscape value and should therefore be preserved as far as possible. Given the need to preserve and not to interfere any historic and other important features within the Site, a series of protection work would be implemented before any extensive site formation can commence.

2.1.3.2 Consequently, the construction of the Project will be tentatively divided into three main stages viz., Site Formation, Foundation Work and Superstructure Work.

##### Site Formation

2.1.3.3 Site formation includes mainly bulk excavation, demolition of existing temporary structure and construction of retaining wall. Designated trees to be retained as well as the historic buildings will be proposed to be protected by means of retaining wall.

2.1.3.4 Subject to the result of the site investigation and detail design, a preliminary proposal of using pile wall/concrete ring/steel ring as the retaining wall to retain the existing trees is considered feasible.

2.1.3.5 For protection works with respect to historic buildings, replacement piling method is considered more suitable than the displacement pile for it would induce less vibration due to driving force and in turn generates less adverse impact on the monuments as well as the surroundings. Based on the limited available ground condition, a preliminary proposal of the proposed protection works are illustrated in Appendix II-1A. A detailed analysis and design of the protection work will be carried out after the result of the site investigation is available.

- 2.1.3.6 Local open cut excavation with a safe slope angle in front of the historic buildings/monuments is proposed to be carried out at first. Tentatively, the construction of retaining wall would be carried out concurrently or afterwards. After the implementation of the protection work for the existing trees to be reserved and the historic buildings, bulk excavation for the remaining area will then be carried out by conventional method using backhoes. According to the preliminary geotechnical assessment result, the area is mainly composed of fill and in-situ materials with small percentage of rock at lower level near to the junction of Canton Road with Salisbury Road. No blasting work is therefore anticipated.

#### Building Foundation

- 2.1.3.7 The construction of building foundation involves shallow foundation work and installation of mini-piles to support the future new buildings. Replacement pile or shallow foundation on reliable stratum appears to be suitable to support the future buildings composed of retail facilities.
- 2.1.3.8 To facilitate the construction of shallow foundation, backhoe with breakers shall be employed to excavate the ground to the founding levels.
- 2.1.3.9 Replacement method rather than displacement method is preferred for piling based on the argument similar to that for site formation.

#### Superstructure Works

- 2.1.3.10 Conventional reinforced concrete structure will be adopted for the new building. Structural system adopting a beam/slab or flat slab arrangement with column frames and shear walls appears to be feasible. The works will involve erection of formwork and falsework, fixing of reinforcement and concreting.
- 2.1.3.11 All the proposed preservation, maintenance, repair, restoration, renovation and building works are subject to the approvals under lease, Town Planning Ordinance (Cap. 131) and the Antiquities and Monuments Ordinance Cap. 53.

## 2.2 What is the Project Time-table

2.2.1.1 A tentative programme for the construction of the project is shown in Table 1. Construction is scheduled to commence at the beginning of Year 2004 and will be divided into three main phases including site formation work, formation of building foundation as well as superstructure construction works. Construction work is planned to be carried out during non-restricted hours (i.e. 0700-1900 hours from Monday to Saturday other than public holidays). The exact schedule of construction depends upon factors such as the granting of necessary permit for its construction and the awarding of the contract to the contractor.

Table 1 Preliminary Construction Programme

Phase	Description	2004												2005												2006														
		J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D			
1.1	Site Formation - Tree Retaining Wall																																							
1.2	Site Formation - Retaining wall for Main Building																																							
1.3	Site Formation - Open Cut Excavation																																							
1.4	Site Formation - Remaining Excavation																																							
2	Building Foundation																																							
3	Superstructure & Furnishing																																							

## 2.3 Are There Any Interactions with Broader Programme Requirements or Other Projects Which shall be Considered

- 2.3.1.1 The construction and operation of the Kowloon-Southern Link (KSL) will have interaction with the Project. As advised by KCRC, a part of the KSL railway system could be planned underneath the Subject Site and will run diagonally across the Site from the side abutting the Canton Road towards the southeastern corner of the Site.
- 2.3.1.2 The section of the KSL railway beneath the Subject Site will be constructed by means of bored tunnelling with the top portion of the railway tunnel not exceeding 2 mPD whereas the other sections in the vicinity will be constructed by conventional cut-and-cover method.
- 2.3.1.3 As advised by KCRC, the anticipated commencement date of construction works for the entire KSL would be around mid 2004. It is therefore envisaged that the construction programme of the Project is likely to overlap to some extent with that of the KSL.
- 2.3.1.4 According to the latest programme provided by KCRC, which is subject to further changes and delay if the gazettal of the KSL slips, construction of the section of the KSL railway system underneath and around the Subject Site is anticipated to begin in late 3<sup>rd</sup> quarter of 2004. The main tunnel excavation works will last for about 7 months from April 2005.
- 2.3.1.5 It is understood that the targeted time for gazettal of the KSL has already slipped. It is unlikely that the construction of KSL would commence earlier than the latest programme provided by KCRC. If there is any slippage of KSL's construction programme, the degree of overlapping of the construction works of the Project with KSL would be even less. This would result in reduction of the cumulative environmental impact. Therefore, the assessment included in this Project Profile has already addressed a conservative scenario with the latest available information related to the KSL.