

立法會發展事務委員會

城市地下空間發展：策略性地區先導研究
第二階段公眾參與

有關陳淑莊議員就 2019 年 6 月 25 日會議提交的書面提問

關於陳淑莊議員在 2019 年 6 月 24 日向發展事務委員會提交的書面提問，當中問題(七)至(十二)涉及城市地下空間發展：策略性地區先導研究(下稱「本研究」)第二階段公眾參與事項(立法會文件編號 CB(1)1181/18-19(07))。我們就該部分提問的回應如下：

問題(七)： 在會議文件附件二的研究程序中，指出局方已完成技術評估，局方是否可公開有關評估，若否，原因為何；

回應(七)： 我們考慮了在第一階段公眾參與收集的公眾和持份者的意見，並根據各項初步技術評估的結果，制訂了合適的地下空間發展概念方案。在現正進行中的第二階段公眾參與，我們會就建議優先發展的九龍公園地下空間發展概念方案(下稱「擬議概念方案」)徵詢公眾和持份者的意見，以進一步優化該概念方案。有關初步技術評估亦將會按優化後的擬議概念方案作適當修訂。

隨函夾附上述就制訂擬議概念方案所進行的初步技術評估概要(見附件一，只提供英文版)，以供參閱。該概要亦載列於本研究於本年六月二十八日諮詢城市規劃委員會的公開文件中。

問題(八)： 就現時局方擬議的地下空間附近有數個法定古蹟，局方是否有就此進行文物影響評估或諮詢古物古蹟辦事處以確保有關法定古蹟不受影

響；及
問題(十) : 雖然在優化方案中，九龍公園的高使用量設施將不被納入擬議發展範圍，惟局方可否承諾工程進行期間，有關設施不受影響；

回應(八)及(十) : 本研究已考慮九龍公園附近的法定古蹟，以及園內的歷史建築物和高使用量設施。在制訂擬議概念方案時，我們已諮詢古物古蹟辦事處和相關政府部門的意見，避免觸及園內的歷史建築物及高使用量設施。

我們建議將來在施工期間以圍板圍封工地，亦建議提供合適的緩解及監控措施，以致力保障在工程進行期間，有關的歷史建築結構安全和園內高使用量設施盡量不受影響。

倘若擬議概念方案獲確立可行並作進一步推展，我們將進行下一階段的詳細技術研究，包括文物影響評估及其他不同範疇的工程影響評估，並會繼續與相關政府部門及持份者保持密切溝通，為日後施工階段制訂具體工程規範和緩解及監控措施，以致力減低施工期間對有關設施的影響，以及保障歷史建築結構的安全。

問題(九) : 局方能否在制訂九龍公園概念方案期間，就工程費用及預計興建時間作出估算；及

問題(十一) : 在新方案中，局方雖有加入了社區設施等康樂用地，當中 40% 為社區設施、行人通道及公共空間，當中社區設施的比例為何；局方會否考慮再提高社區設施的比例；事實上，地下空間上的街道和商店已有足夠的零售及餐飲設施，有關用途的比例是否可考慮減少並作其他用途；

回應(九)及(十一) : 根據第一階段公眾參與期間收集到的意見／觀點顯示，公眾希望透過整體規劃，就可創建的地下空間作多元化和有利民生的用途(包括社

區設施和零售及餐飲設施)，以便利市民享用。在擬議概念方案中，社區設施約佔「社區設施、行人通道及公共空間」的 28%。至於零售及餐飲設施，我們參考了海外地下公共空間發展的普遍運作模式，初步建議沿地下行人通道旁適度引入有關元素，以提供舒適及具吸引力的地下空間氛圍，方便市民使用地下空間和公園設施。

本研究現階段持開放態度就九龍公園可開發的地下空間及其用途與分布諮詢公眾意見，故現時就工程費用作出估算屬言之尚早。至於預計興建時間，本研究初步估計若同期發展整個擬議地下空間的發展範圍，所需建造時間約為 3 至 4 年。若以分期發展的方式進行，同時受工程影響的公園面積將較前者為少，建造時間則約需 6 至 7 年。在第二階段公眾參與完成後，我們會詳細考慮收集到的公眾意見，以優化擬議概念方案。倘若擬議概念方案獲確立可行並作進一步推展，我們將進行下一階段的詳細技術研究。

問題(十二)：有關新方案雖已減低對樹木的影響，惟仍有 300 棵樹木需被移走。有關樹木將會如何處理；包括如何移植、移植至何處等；局方能否承諾有關樹木不會被隨便斬去。

回應(十二)：倘若擬議概念方案獲確立可行並作進一步推展，我們會在詳細設計階段及開展工程前進行詳細樹木評估，以確定受發展影響的樹木數量、品種和處理方法，包括移植樹木的安排。同時亦會制訂可持續的樹木種植及園境方案，儘量使用本地原生品種，並提供良好的樹木生長空間和環境。

如若需要進行補償種植，我們會按照相關樹木保育指引，補償數目將不少於被移除樹木的數

目，並會提供足夠的生長空間，以及一併優化九龍公園的園境及設計。

發展局
土木工程拓展署
規劃署
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**Pilot Study on Underground Space Development
in Selected Strategic Urban Areas
Summary of Broad Technical Assessments**

To assess the potential impacts arising from the proposed development, various preliminary technical assessments, including traffic, environment, drainage, fire safety, geotechnics, sewerage and utility infrastructures, had been conducted. The preliminary findings of the relevant assessments are summarised as follows:

Traffic Impact Assessment

2. According to the preliminary Traffic and Transport Impact Assessment (PTTIA), vehicular traffic conditions were assessed by means of junction capacity assessment. The assessment results of vehicular traffic conditions for the design year of 2031 and 2036 show that the operating performance of all study junctions are within capacity for the scenarios with or without Kowloon Park Conceptual Scheme (the Scheme).

3. Pedestrian traffic conditions were assessed by means of pedestrian Level-of-Service (LOS)¹ in the assessment. The PTTIA also showed that at present, the pedestrian LOS of existing pedestrian traffic is acceptable at all assessed footpaths, with exception of northern footpath of Haiphong Road, Canton Road and Nathan Road. The pedestrian LOS assessment for the design year of 2031 and 2036 shows that, with the proposed east-west and north-south pedestrian network interconnecting between Nathan Road, Canton Road, Austin Road, Haiphong Road and the MTR Tsim Sha Tsui Station, pedestrian would be diverted to use the underground connections. As such, the LOS of Haiphong Road and Nathan Road would experience significant improvement, of which the LOS would be improved from LOS “D” to the desirable level, i.e. LOS “C”. Thus, the pedestrian LOS of all the footpaths surrounding Kowloon Park would be maintained not worse than LOS “C”. Since the other assessed footpaths are far away from Kowloon Park, including eastern

¹ Pedestrian LOS is used to assess the performance of footpaths. The assessment of the LOS depends on the pedestrian flows and the width of the footpaths by making reference to the Transport Planning and Design Manual (TPDM), published by the Transport Department. LOS defines the walking environment in six levels by measuring the pedestrian flow rate in terms of the effective width of footpath. According to TPDM, a dead area of 0.5m along building frontages and 1m along shop frontages was deducted in order to obtain the effective width for LOS assessment. LOS “A” and “B” are considered very good and LOS “C” is desirable for most design with predominantly dynamic pedestrian activities, whereas LOS “D”, “E” and “F” are not desirable.

and western sections of Canton Road (adjacent/opposite to Harbour City), the pedestrian impact generated from the proposed development would be insignificant. The LOS of these sections would be maintained at Level “D”.

4. Construction traffic impact assessment has been conducted for the year before the completion year at all junctions affected by road works during construction stage. The assessment result concluded that the operation performance of all assessed junctions is within capacity.

Environmental Review

Ecology

5. According to the preliminary environmental review, Kowloon Park is considered as a generous habitat for avifauna in urbanised area. With wooded areas, pond areas, grassland, mature trees and developed areas, migratory birds and winter bird visitors are attracted to the park, of which the Bird Lake was identified as a breeding ground for wild birds. Considering the ecological importance, a number of mitigation measures will be adopted to minimise the potential environmental impact:

- areas with ecological values such as the Bird Lake, areas with OVTs and dense vegetation, are excluded from development boundary;
- trenchless excavation construction methods will be adopted in constructing underground passages where applicable;
- construction programme will be planned to avoid breeding seasons of the avifauna species for the site area within buffer distance from the identified ecological important trees;
- noise barriers, site hoarding / protective fencing will be provided to delineate of works limit and reduce the disturbance from excavation works; and
- tree preservation, compensatory tree planting and transplanting will be implemented as far as practicable

With proper mitigation measures, the ecological impacts arising from the Scheme during construction and operation stage are considered acceptable.

Tree and Landscape Impact

6. A preliminary broad brush tree group survey was conducted to estimate the quantities and assess the general conditions of the existing trees and tree groups within and around the Scheme. According to the survey, among the total of about

1,400 trees in Kowloon Park, about 44 trees are Old and Valuable Trees (OVTs) including *Albizia lebbek* (大葉合歡), *Ficus microcarpa* (榕樹) and *Cassia fistula* (臘腸樹), etc. In scheme formation, all OVTs and densely vegetated areas have been excluded from the development footprint. The development footprint mainly focuses on the hard pavement areas occupied by some existing facilities, including maze garden, pedestrian footpath and children's playground. According to the broad-brush tree survey, about 300 trees (no Old and Valuable Trees), would be affected. Based on aerial photos taken in 1963, 1973, 1982 and 1993, most of the trees were planted in late 1980s after construction of Kowloon Park. Among the affected trees, while approximately 80% are common exotic species, for example, *Acacia confusa* (台灣相思), *Archontophoenix alexandrae* (假檳榔), *Caryota maxima Blume* (魚尾葵) and *Lagerstroemia speciosa* (大花紫薇), approximately 20% are native species, for example, *Bauhinia x blakeana* (洋紫荊), *Cinnamomum camphora* (樟樹) and *Celtis sinensis* (朴樹). In terms of tree growth, there is about 10% of the affected trees with DBH larger than 500mm while the remaining trees are considered relatively small trees. The general condition and aesthetic value are also considered fair, given that some trees are over-planted in the area without proper growth space. For the general quality of the affected trees, over 90% of trees are fair in form and health condition while less than 5% of trees are good in form. A detailed tree impact assessment will be carried out in detailed design stage to explore the mitigation measures and arrangements for the affected trees in accordance with the prevailing guideline including DEVB TCW No. 7/2015 – Tree Preservation, the latest Guidelines on Tree Preservation during Development issued by Development Bureau and ETWB TCW No. 29/2004 - Registration of Old and Valuable Trees, and Guidelines issued by Environment, Transport and Works Bureau. Tree preservation and transplantation would be accorded priority and implemented as far as practicable. A holistic landscape design, including the adoption of native plant species, will be established to foster better growing environment for trees in the Park. As for the compensatory plantings, the compensatory trees will be no less than the number of trees to be felled down, and planting will be implemented in accordance with the prevailing guidelines so as to uplifting the landscape and design at Kowloon Park.

Visual Impact

7. Besides, potential visual impacts arising from the development are anticipated during the construction and operation stages. With proper mitigation measures, including provision of green roof and buffer planting, reinstatement of landscape areas, aesthetical pleasing design of man-made structures etc., it is anticipated that the visual impact would remain slight to moderate during both stages.

Air and Noise Impact

8. Preliminary assessments on air and noise showed no insurmountable air quality impact and noise impact arising from the proposed development is anticipated. As for the air quality aspect, mitigation measures, for example, dust suppression measures in accordance with the Air Pollution Control (Construction Dust) Regulation and provision of sufficient buffer distance stipulated in Hong Kong Planning Standards and Guidelines are recommended.

9. As for the noise aspect, noise mitigation measures, such as good site practices, movable noise barriers and noise enclosures are recommended to minimise the noise impact. Quantitative construction noise impact assessment would be conducted in detailed design stage.

Cultural Heritage

10. According to Antiquities and Monuments Offices (AMO), a total of twenty-two cultural heritage resources, including six Declared Monuments, six Grade 1, two Grade 2 and two Grade 3 historic buildings as well as a total of six resources without grading/not to be assessed, are identified within the 500m study area of the Scheme. All heritage resources identified have been excluded from the development boundary, with the only exception of the disused air raid tunnels. These tunnels are classified as other cultural heritage resources and proposed to integrate into the Scheme for public display in response to public comments received from PE1. There are indirect impacts on some heritage resources which are located close to the development boundary due to the construction, for example, ground-borne vibration and excessive dust. Regular monitoring will be carried out during construction stage and necessary assessment on the heritage impact on these heritage resources, for example, Heritage Impact Assessment, would be conducted in accordance with Development Bureau Technical Circular (Works) No. 6/2009 in detailed design stage.

Fire Safety Design

11. In view of various natures of proposed usages at the Scheme, different fire safety strategies such as fire engineering and code-compliant design approach would be adopted at different areas. The code-compliant approach would be adopted in full

accordance to relevant fire safety codes and code of practice issued by Buildings Department (BD) and Fire Services Department (FSD). When there is genuine difficulty to comply with the codes, fire engineering approach will be adopted, subject to confirmation with relevant government departments, including BD and FSD in detailed design stage. Meanwhile, Fire Safety Management Plan will also be established to assist occupants to reach the ultimate place of safety and maintain the condition of fire safety provisions. Detail fire safety design and relevant assessment(s) will be conducted in detailed design stage.

Geotechnical Impact

12. According to the preliminary assessment results, the bedrock level within the proposed development is relatively shallow and around 20 – 30m below ground level. The proposed development layout is planned in order to avoid large amount of rock excavation and disturbance to park users. Three historic buildings in the vicinity of the proposed development are founded on shallow foundation and the stability of these buildings shall be maintained by adopting suitable geotechnical design. In addition, considering part of the proposed development falls within the MTR protection zone and a few registered man-made slopes and retaining walls are identified within/in the vicinity of the proposed development, construction works and geotechnical design shall follow relevant guidelines including Works Bureau Technical Circular (WBTC) No. 19/2002 and Environment, Transport and Works Bureau (ETWB) Technical Circular (Works) No. 29/2002.

Drainage, Sewerage, Water Supply and Utilities Impact

13. According to the preliminary drainage, sewerage, water supply and utilities impact assessment, it is concluded that the proposed development will not cause adverse and insurmountable impacts on the existing drainage, sewerage, water supply and utilities systems.