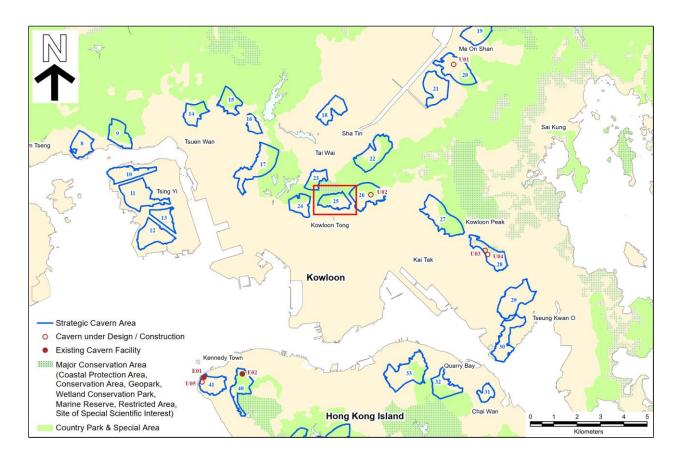
CAVERN MASTER PLAN – INFORMATION NOTE

STRATEGIC CAVERN AREA NO. 25 – BEACON HILL EAST

This Information Note describes the characteristics and development constraints of Strategic Cavern Area No. 25 - Beacon Hill East (the SCVA). It also denotes the extent of potential portal locations. The spatial context of the SCVA is illustrated in the Reference Drawing appended to this Information Note.

Reference should be made to the Explanatory Statement of the Cavern Master Plan for its background and purposes, as well as the definition and delineation criteria of SCVAs.

1. Location Plan



2. Strategic Cavern Area Details

Outline Zoning Plans (OZPs)¹: Shek Kip Mei OZP

Kowloon Tong OZP

Area: 69.7 ha

Maximum elevation in the SCVA: +399 mPD

Minimum elevation in the SCVA: +95 mPD

3. District Context

Location

The SCVA is located at Beacon Hill, partly in West Kowloon and partly in Lion Rock Country Park. Lion Rock Country Park is to the north of the SCVA, Eagle's Nest is to the west, Shek Kip Mei is to the southwest and Kowloon Tong to the southeast.

The SCVA is generally hilly with a maximum elevation of about +399 mPD. About half of the SCVA encroaches onto Lion Rock Country Park. To the southwest of the SCVA, Shek Kip Mei is mainly comprised of residential communities with medium-rise developments, including Beacon Heights (about 300 m to the southwest of the SCVA), Dynasty Heights (about 350 m to the southwest of the SCVA), Mount Beacon (about 400 m to the south of the SCVA), Chak On Estate (about 650 m to the southwest of the SCVA), planned public housing development at Chak On Road South (about 750 m to the southwest of the SCVA) and planned student hostel developments at Tat Hong Avenue (about 450 m to the south of the SCVA). To the immediate southeast side of SCVA is planned residential housing development at Lung Cheong Road. While to the further southeast of the SCVA, Kowloon Tong is mainly comprised of low- to medium-rise developments, including One Beacon Hill (about 350 m to the south of the SCVA), Mont Verra (about 200 m to the west of the SCVA) and Mont Rouge (about 100 m to the west of the SCVA). In addition, there is also one planned low-density residential development to the west of the SCVA (at Yin Ping Road).

¹ For details of the latest land use zonings on the OZPs, please refer to the Town Planning Board Statutory Planning Portal 3 (https://www.ozp.tpb.gov.hk/).

In the proximity of the SCVA, there are a number of key Government, Institution or Community (GIC) facilities supporting the development of Shek Kip Mei and Kowloon Tong as well as the territory, including Beacon Hill High Level Fresh Water Service Reservoir (at the south of the SCVA), Water Supplies Department Mechanical and Electrical Workshop and Phoenix House (a half-way house of the Correctional Services Department; both near the southern boundary of the SCVA), Beacon Hill Intermediate Level Fresh Water Service Reservoir and Beacon Hill Intermediate Level Salt Water Service Reservoir (both near the southern boundary of the SCVA), Lion Rock High Level No. 2 Fresh Water Primary Service Reservoir (at the southeastern boundary of the SCVA), Hong Kong Baptist Hospital and Hong Kong Baptist University (both about 400 m to the southeast of the SCVA), and City University of Hong Kong (about 750 m to the south of the SCVA) including Run Run Shaw Creative Media Centre and Student Residence (both about 400 m to the south of the SCVA).

Access

The SCVA is accessible from its southeastern and southern edges via Lung Cheung Road and Lung Yan Road. Regional connections could be routed through Lung Cheung Road and the nearby Tai Po Road.

The MTR East Rail Line and Kwun Tong Line serve the locality of Shek Kip Mei and Kowloon Tong. The nearest stations include Kowloon Tong Station (interchange station of both lines; about 800 m to the south of the SCVA) and Lok Fu Station (Kwun Tong Line; about 1.1 km to the southeast of the SCVA). Given the significant elevation difference between these railway stations and the SCVA, the SCVA would not be easily accessed by the public using the railway transit.

Existing / Planned Facility in SCVA

There is no existing or planned cavern facility within the SCVA.

4. Summary of Characteristics of Strategic Cavern Area

4.1. Boundary

The northern boundary of the SCVA is defined by the Beacon Hill Site of Special Scientific Interest (SSSI). The eastern boundary of the SCVA is defined by Lion Rock Tunnel. The southern boundary of the SCVA is defined by Lung Cheung Road, Lung Yan Road, Beacon Hill Intermediate Level Fresh Water Service Reservoir, Beacon Hill Intermediate Level Salt Water Service Reservoir and Lion Rock High Level No. 2 Fresh Water Primary Service Reservoir.

4.2. Geology

The solid geology of the SCVA is primarily medium-grained granite within the southern portion, which belongs to Kowloon Granite; and coarse-grained granite within the northern portion, which belongs to Sha Tin Granite. The SCVA is with the rock types that are suitable for the uses of rock caverns. A number of geological features, such as faults, photolineaments and isolated dykes, are identified within and in the areas surrounding the SCVA. The excavated medium-grained granite within the SCVA is suitable for reuse as construction aggregate. Other excavated rock can be used as road base material and for asphalt production, etc.

Further geological information of the SCVA can be found on the 1:20,000-scale Geological Map Sheet 11 (Hong Kong & Kowloon) published by the Geotechnical Engineering Office, Civil Engineering and Development Department.

4.3. Planning

The SCVA is located in the fringe of the existing urban development in Shek Kip Mei and Kowloon Tong. The SCVA is not easily accessed by the public due to the difference in elevation between the SCVA and the nearby railway stations.

The southwestern and southeastern sides of the SCVA are major residential development areas in Shek Kip Mei and Kowloon Tong. These areas consist of various medium-rise residential developments (e.g. Chak On Estate, planned public housing development at Chak On Road South, planned student hostel developments at Tat Hong Avenue, Beacon Heights, Dynasty Heights and Mount Beacon) and low- to medium-rise residential developments (e.g. One Beacon Hill, Mont Verra, Mont Rouge and the one planned low-density residential developments at Yin Ping Road and Lung Cheung Road) supported by a number of GIC facilities (e.g. university, hospital, service reservoir, etc.).

4.4. Environmental

Environmental sensitive receivers to the potential caverns in the SCVA are the nearby existing and planned residential developments (e.g. Chak On Estate, planned public housing development at Chak On Road South, planned student hostel developments at Tat Hong Avenue, Beacon Heights, Mont Verra, Mont Rouge, Dynasty Heights, Mount Beacon, One Beacon Hill, Elizabethan Court, Beverley Heights, Vista Panorama and the planned low-density residential developments at Yin Ping Road and Lung Cheung Road). The SCVA comprises wooded areas and shrubby hillsides, and encroaches onto the Lion Rock Country Park. Beacon Hill SSSI adjoins the northern boundary of the SCVA. Water Gathering Grounds are located to the north of the SCVA. There are natural or modified surface water courses within the SCVA. The Civil Aviation Department Beacon Hill Approach Secondary Surveillance Radar (ASSR) Station and

another radar station are located in the northwestern portion of the SCVA. Potential land contamination in the vicinity should be investigation due to possible often uses of oils and chemicals for the facilities. A government historic site identified by Antiquities and Monuments Office (AMO) namely the Ex-Kowloon-Canton Railway Beacon Hill Tunnel which is now being used as a utility tunnel by The Hong Kong and China Gas Company Ltd. (Towngas) and Water Supplies Department, runs through the SCVA in a north–south direction. Two government historic sites identified by AMO, namely New Kowloon Boundary Stone (near Lion Rock High Level No. 2 Primary Service Reservoir) and New Kowloon Boundary Stone (near Beacon Hill Intermediate Level Fresh Water Service Reservoir) are to the south-eastern portion of SCVA. Species of conservation importance including Chinese Pangolin are recorded within Lion Rock Country Park in the SCVA.

All potential environmental constraints, which may impose restrictions on the potential caverns, should be identified and taken into account under the Environmental Impact Assessment Ordinance (EIAO) and other relevant ordinances, such as the Country Parks Ordinance. Project proponents are required to take into account the potential environmental constraints when planning each project and undertaking the environmental impact assessment under the EIAO to determine its environmental acceptability, potential environmental impacts and environmental mitigation measures required.

4.5. Traffic

The SCVA can be accessed from its southeastern and southern edges via restricted access roads branched off from Lung Cheung Road and Lung Yan Road.

The potential portal locations are located very close to the eastbound carriageway of Lung Cheung Road, which is an Urban Trunk Road, allowing good connections to the primary road network and so the other areas of Hong Kong. However, the traffic capacity of Lung Cheung Road during the peak periods is expected to become saturated in future, so potential projects using these potential portal locations may only be suitable for low traffic-generating uses or moderate traffic-generating uses outside peak periods.

4.6. Other Key Issues / Constraints on Cavern Development

The railway tunnel of MTR East Rail Line and the Ex-Kowloon-Canton Railway Beacon Hill Tunnel both pass through the central portion of the SCVA in a north–south direction. Owing to the difference in elevation, these tunnels would not pose any insurmountable constraint to the potential uses of rock caverns within the SCVA.

Another railway tunnel of Tuen Ma Line is about 400 m to the east of the SCVA, and a vehicle tunnel, namely the Lion Rock Tunnel, is about 50 m to the east of the SCVA. A small abandoned tunnel shelter is located about 200 m to the southeastern boundary of the SCVA next to the entrance of Lion Rock Tunnel. As they are distant from the SCVA, they would not pose any insurmountable constraint to the potential uses of rock caverns.

MacLehose Trail Section 5 and War Relics Trail (Lion Rock and Ma On Shan) are located within the SCVA. Project proponents shall take into account when considering cavern options.

5. Extent of Potential Portal Locations

The extent of the potential portal locations is shown on the Reference Drawing.

The SCVA is accessed from a road branched off from Lung Yan Road on the southern edge, and from an access road to the Lion Rock High Level No. 2 Fresh Water Primary Service Reservoir to the south-eastern edge of the SCVA.

Both of the potential portal locations are on narrow and restricted-access roads of the Water Supplies Department. The current access roads conditions would only be suitable for low traffic-generating activities. Both roads would require major widening/upgrading works in order to support moderate to high traffic-generating activities, which would require dual way vehicle access to the proposed cavern facilities. The project proponents shall seek consents from and coordinate with the Water Supplies Department when pursuing the cavern project.

There are natural slopes above the potential portal locations. There may be potential natural terrain hazards in the vicinity which may require further study by the project proponents.

Project proponents should carry out further studies on identifying specific locations of portals for projects considering cavern options.

6. Remarks to Information Note

The Cavern Master Plan and all supporting documents do not exempt project proponents for cavern projects from following the relevant statutory procedures. Information including the extent of potential portal locations indicated in this Information Note should serve as reference materials only. In formulation of development proposals, project proponents should conduct the necessary studies and assessments relevant to each project stage. Reference should be made to the "Implementation" section of the Explanatory Statement of the Cavern Master Plan for further details.

