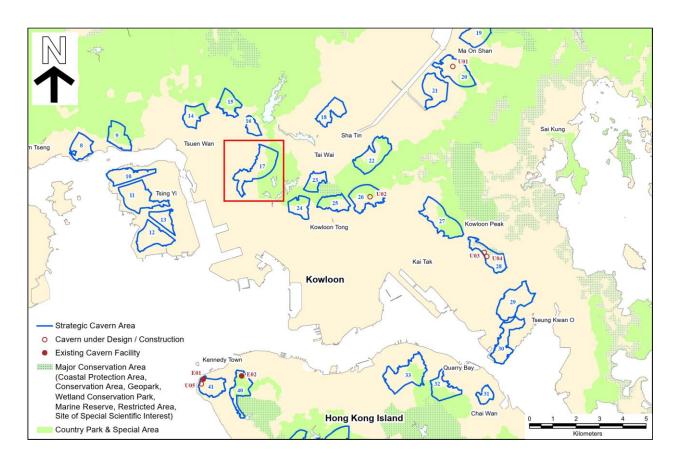
CAVERN MASTER PLAN – INFORMATION NOTE

STRATEGIC CAVERN AREA NO. 17 – GOLDEN HILL

This Information Note describes the characteristics and development constraints of Strategic Cavern Area No. 17 - Golden Hill (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 Plan (OZP)¹: Kwai Chung OZP

Area: 150.8 ha

Maximum elevation in the SCVA: +369 mPD

Minimum elevation in the SCVA: +77 mPD

3. District Context

Location

The SCVA is located at the southeastern part of Kwai Chung, which is geographically at the south of the New Territories. The SCVA covers the foothill area of Golden Hill in Kwai Chung. Shing Mun Country Park is to the north of the SCVA, Kam Shan Country Park is to the east, and Kwai Chung is the south and west.

The SCVA is generally hilly with a maximum elevation of about +369 mPD. About half of the SCVA at its east encroaches onto Kam Shan Country Park. Within the SCVA, Tai Wo Tsuen Fresh Water Service Reservoir and the Central Kwai Chung Park are located in the southwestern portion, and a number of religious institutions including Pak Wan Tung, Chat Sing Kung and Shun Fung Sin Koon are located in the northern portion.

To the south and west of the SCVA, Kwai Chung is mainly comprised of residential communities with high-rise developments and local villages, including Wonderland Villas (adjoining the southeastern boundary of the SCVA), Shek Lei Estate (about 200 m to the northwest of the SCVA), On Yam Estate (adjoining the northern boundary of the SCVA), and Ha Kwai Chung Village (about 100 m to the southwest of the SCVA). These areas are supported by some commercial and industrial developments, as well as a number of key Government, Institution or Community (GIC) facilities, including Lai King Headland Fresh Water Service Reservoir (about 300 m to the southwest of the SCVA), Lai King Headland Salt Water Service Reservoir (about 300 m to the southwest of the SCVA) and Kwai Tsing Theatre (about 500 m to the west of the SCVA).

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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/).

<u>Access</u>

The SCVA is accessible via its northwestern and southwestern edges via On Chuk Street, Shek Pai Street, Lei Pui Street and Tai Lin Pai Road. Regional connection could be routed through the nearby Castle Peak Road (Kwai Chung) and Kwai Chung Road.

The MTR Tsuen Wan Line, Tuen Ma Line and Tung Chung Line are in the vicinity of the SCVA. The closest stations include Kwai Hing Station and Kwai Fong Station of Tsuen Wan Line (about 400 m and 300 m to the west of the SCVA respectively), and Lai King Station (interchange of Tsuen Wan Line and Tung Chung Line; about 850 m to the southwest of the SCVA).

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 a geological feature (photolineament). The northwestern boundary of the SCVA is defined by Shek Pai Street, Lei Pui Street, private lots and residential developments such as Shek Lei Estate and On Yam Estate. The southwestern boundary of the SCVA is defined by Kwai Chung Industrial area, Tai Lin Pai Road and Castle Peak Road (Kwai Chung). The southern boundary of the SCVA is defined by valley topography, private lots and Wonderland Villas. Individual private lots located within the SCVA have been excised from the SCVA. Project proponents shall check the latest land status with the Lands Department. Reference should be made to the Explanatory Statement of the Cavern Master Plan for the delineation criteria of SCVAs.

4.2. Geology

The solid geology of the SCVA is fine-grained granite, which belongs to Needle Hill Granite; medium-grained and coarse-grained granite within the northeastern and southwestern portions of the SCVA, both of which belong 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 fine-grained and medium-grained granite within the SCVA are suitable for reuse as construction aggregate. Other excavated rock can be used as road base materials and for asphalt production, etc.

Further geological information of the SCVA can be found in the 1:20,000-scale Geological Map Sheet 7 (Sha Tin) and Geological Map Sheet 11 (Hong Kong & Kowloon) published by the Geotechnical Engineering Office, Civil Engineering and Development Department.

4.3. Planning

The SCVA is close to the existing urban developments in Kwai Chung. The surrounding areas are also well connected by major road networks and railways to the rest of the territory.

The southern and western sides of the SCVA are the major developed areas of Kwai Chung with residential communities as well as commercial and industrial related developments. These areas consist of various high-rise residential developments (e.g. Shek Lei Estate and On Yam Estate) and local villages (e.g. Ha Kwai Chung Village) supported by a number of GIC facilities (e.g. sports hall, service reservoir, etc.). There are several data centres developed in Kwai Chung, including those located near MTR Kwai Hing Station and Kwai Fong Station.

4.4. Environmental

Environmental sensitive receivers to the potential caverns in the SCVA are the nearby existing residential developments (e.g. On Yam Estate, Shek Lei Estate, Yi Fung Court, Ha Kwai Chung Village, Lai Yiu Estate, Wah Yuen Chuen and Wonderland Villas). The eastern part of the SCVA encroaches onto Kam Shan Country Park and water gathering grounds. The potential portal location at Tai Lin Pai Road is at the boundary of the Central Kwai Chung Park, and close to the Food, Environment and Hygiene Department (FEHD) Kwai Chung Depot. Stone House at Central Kwai Chung Park (Grade 2 historic building) is located within the SCVA. also built heritages, including Dam (Southwest) of Shek Lei Pui Reservoir (Grade 2 historic building) and Dam (Northeast) of Shek Lei Pui Reservoir (Grade 2 historic building), Former The Salvation Army Kwai Chung Girls' Home (the main building, the garage and the corps hall) (Grade 2 historic building), Nos. 4-5, No. 10, No. 14, No. 15, No. 30, No. 32, No. 39, No. 42, No. 42A and No. 43 Kau Wa Keng (Grade 3 historic building), Yiu Kung Ancestral Hall (Grade 3 historic building), and Yeung Ching Study Hall (Grade 3 historic building) located in the vicinity of the SCVA. In addition, an identified old footpath, namely "Tai Po Route (Kowloon City to Sham Chun: Kowloon City to Shing Mun Sub-Section)", is located to the northeast of the SCVA. Also, some natural water courses and streams are within the SCVA and close to the extent of potential portal locations. There are wooded areas within 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 at its northwestern and southwestern edges via On Chuk Street, Shek Pai Street, Lei Pui Street and Tai Lin Pai Road. Regional connection could be routed through the nearby Castle Peak Road (Kwai Chung) and Kwai Chung Road.

The access to the primary road network is via a number of secondary roads that serve the surrounding residential and industrial areas. Proximity to the residential areas might therefore be a constraint to some of the potential uses of rock caverns within the SCVA. On Chuk Street and Lei Pui Street are the access roads to nearby residential developments. These two locations may only be suitable for low traffic generating uses. Shek Pai Street, which connects to Castle Peak Road (Kwai Chung), is expected to have sufficient traffic capacity to accommodate a range of traffic generating uses. Further detailed traffic assessments should be carried out by the project proponents. Consultation with the local District Council and local community is recommended in preliminary proposal stages.

4.6. Other Key Issues / Constraints on Cavern Development

Three Water Supplies Department's Tunnels are located within or in the vicinity of the SCVA, i.e. Tai Po-Butterfly Valley Fresh Water Tunnel and Lower Shing Mun South Conduit (both passing through the eastern portion of the SCVA in north-south direction), and Lower Shing Mun North Conduit (approximately 50 m to the northeastern boundary of the SCVA). Three railway tunnels are located within or in the vicinity of the SCVA, i.e. the Express Rail Link and its Kwai Chung Emergency Access Tunnel (both located in the southwestern portion of the SCVA), and the Tuen Ma Line (about 500 m to the southwestern boundary of the SCVA). There are pylons and overhead power lines running above the SCVA. Due to differences in location and elevation, these tunnels, as well as the pylon and overhead power lines, would not pose any insurmountable constraint to the potential uses of rock caverns within the SCVA.

5. Extent of Potential Portal Locations

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

The potential portal locations are at On Chuk Street, Shek Pai Street and Lei Pui Street to the northwestern portion and Tai Lin Pai Road to the southwestern portion of the SCVA.

The potential portal locations of this SCVA are at the slopes alongside the carriageways. Given that On Chuk Street, Shek Pai Street are the access roads to the nearby residential developments, these two locations may only be suitable for low traffic-generating uses. Shek Pai Street, which connects to Castle Peak Road (Kwai Chung), is expected to have sufficient traffic capacity to accommodate a range of traffic-generating uses. The potential portal location at Tai Lin Pai Road is close to industry developments. It may be suitable for moderate to high traffic-generating uses. Further detailed traffic assessments should be carried out by the project proponents.

Project proponents should take into account the proposed public housing developments at Tai Lin Pai Road and Shek Pai Street when formulating cavern options in any development proposals in its vicinity and consult relevant Government departments, including but not limited to Planning Department and Housing Department, where appropriate.

There are natural slopes above the potential portal locations. There may be potential natural terrain hazards in the vicinity of the potential portals 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.

