

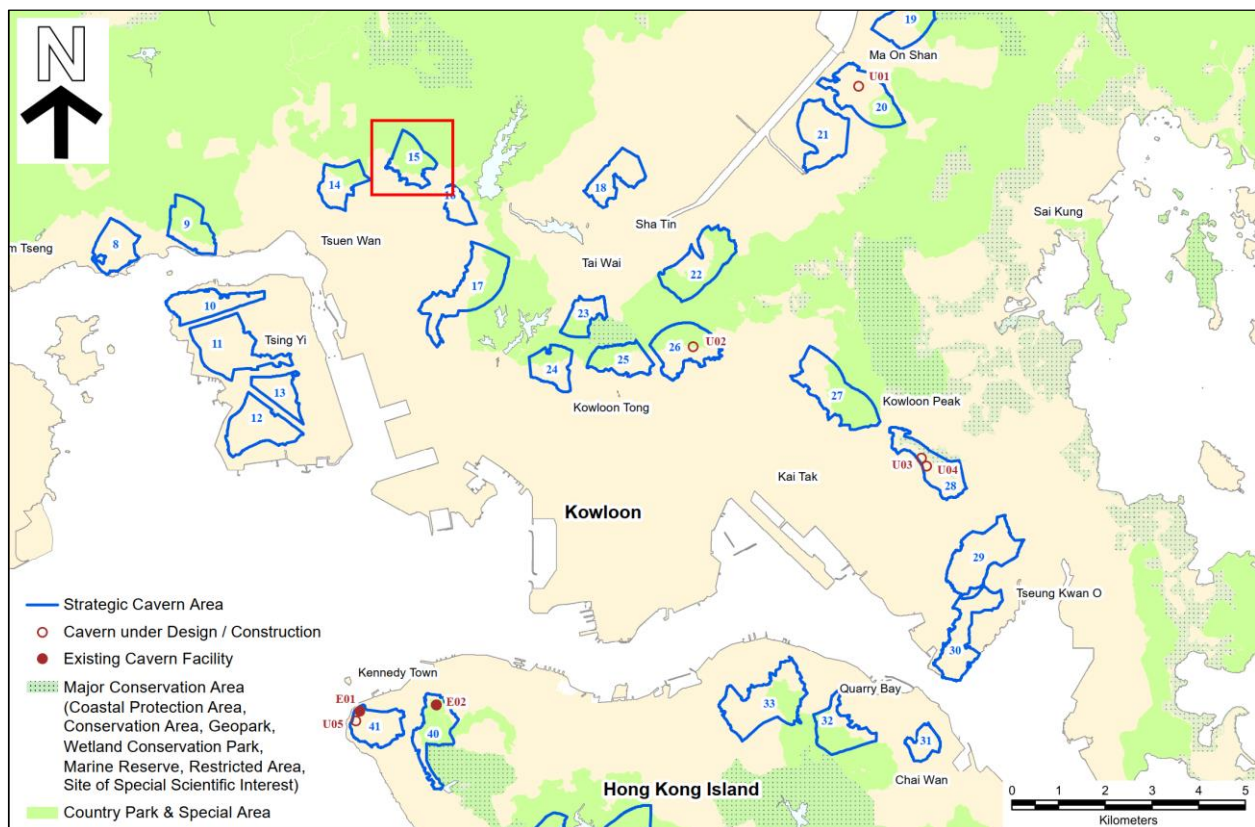
CAVERN MASTER PLAN – INFORMATION NOTE

STRATEGIC CAVERN AREA NO. 15 – TSUEN WAN EAST

This Information Note describes the characteristics and development constraints of Strategic Cavern Area No. 15 - Tsuen Wan 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 Plan (OZP) ¹ :	Tsuen Wan OZP
Area:	67.7 ha
Maximum elevation in the SCVA:	+440 mPD
Minimum elevation in the SCVA:	+103 mPD

3. District Context

Location

The SCVA is located at the northeastern part of Tsuen Wan, which is geographically at the south of the New Territories. The SCVA covers the foothill area of Tai Mo Shan in Tsuen Wan. Fu Yung Shan is to the west of the SCVA, Tsuen Wan is to the southwest, Kwai Chung is to the southeast, and Tai Mo Shan Country Park and Shing Mun Country Park are to the north.

The SCVA is generally hilly with a maximum elevation of about +440 mPD. A majority of the SCVA, including its central and northern portions, encroaches onto Tai Mo Shan Country Park and Shing Mun Country Park. To the west of the SCVA, there are clusters of religious institutions scattered at the foothills of Fu Yung Shan and Tai Mo Shan, including Chuk Lam Sim Yuen (about 1,000 m to the southwest of the SCVA) and Yuen Yuen Institute (about 150 m to the west of the SCVA). To the southwest and southeast, Tsuen Wan and Kwai Chung respectively are both mainly residential communities with medium- to high-rise developments, as well as some local villages, including Lo Wai Village (about 250 m to the southwest of the SCVA), Luk Yeung Sun Chuen (about 1,100 m to the southwest of the SCVA), Cheung Shan Estate (about 150 m to the south of the SCVA) and Lei Muk Shue Estate (about 200 m to the southeast 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 Tsuen Wan Water Treatment Works (about 800 m to the south of the SCVA), Tsuen Wan Fresh Water Service Reservoir (about 850 m to the south of the SCVA), Tsuen Wan No. 2 Fresh Water Service Reservoir (about 300 m to the south of the SCVA), Lo Wai Fresh Water Tank and Lo Wai No. 2 Fresh Water Tank (both about 300 m to the west of the SCVA).

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/>).

Access

The SCVA is accessible at its southern and western edges via Sam Tung Uk Road, Hilltop Road and Sheung Kok Shan Road. Regional connection could be routed through the nearby Cheung Pei Shan Road.

Although both Tsuen Wan and Kwai Chung are served by the MTR Tsuen Wan Line, the SCVA is not in the close proximity to the railway stations. The nearest MTR stations are Tsuen Wan Station (about 1,350 m to the southwest of the SCVA) and Tai Wo Hau Station (about 1,200 m to the south 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 eastern and western boundaries of the SCVA are defined by private lots. The southwestern boundary of the SCVA is defined by private lots, including Yuen Yuen Institute, Hilltop Country Club and Sam Tung Uk Resite Village. The southeastern boundary of the SCVA is defined by private lots and a slip road off Cheung Pei Shan Road.

4.2. Geology

The solid geology of the SCVA is primarily coarse ash crystal tuff within the southern portion, which belongs to Yim Tin Tsai Formation; and coarse ash crystal tuff with tuff breccia, tuffaceous siltstone and sandstone within the northern portion, which all belong to Shing Mun Formation. 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 rocks within the SCVA are suitable for use as road base materials and for asphalt production etc., but not for reuse as construction aggregate.

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

4.3. Planning

The SCVA is close to the existing urban development in Tsuen Wan and Kwai Chung and the clusters of religious institutions in the locality.

The southwestern and southeastern sides of the SCVA are major developed areas in Tsuen Wan and Kwai Chung with residential communities as well as commercial and industrial related developments. These areas consist of various medium- to high-rise residential developments (e.g. Luk Yeung Sun Chuen and Lei Muk Shue Estate) and local villages (e.g. Lo Wai Village) supported by a number of GIC facilities (e.g. service reservoir, etc.).

The western side of the SCVA is home to the clusters of religious institutions at the foothills of Fu Yung Shan and Tai Mo Shan, e.g. Chuk Lam Sim Yuen and Yuen Yuen Institute, which include columbarium and related uses.

There are data centres developed in Tsuen Wan and Kwai Chung, such as those in the Tsuen Wan East Industrial Area which is located further south to the MTR Tsuen Wan Station, and those near MTR Kwai Hing Stations and Kwai Fong Station. Commercial and industrial related uses are found in Tsuen Wan and Kwai Chung (e.g. Nina Tower and Tsuen Wan East Industrial Area).

4.4. Environmental

Environmental sensitive receivers to the potential caverns in the SCVA are the nearby existing residential developments (e.g. Hermita Villa, Sam Tung Uk Resite Village and Lavender Garden) and religious institutions (e.g. Po Kwong Yuen). The majority of the SCVA encroaches onto Shing Mun Country Park and Water Gathering Grounds, with the northern tip of the SCVA within Tai Mo Shan Country Park. Also, there are built heritages, including Lau Ancestral Hall (Tsuen Wan) (Grade 3 historic building), Cheung Ancestral Hall (Tsuen Wan Lo Wai) (Grade 3 historic building), Yuen Tung Po Din of Tung Po Tor Monastery (Grade 2 historic building) and Tin Wong Din & Wai Tor Din (Grade 2 historic building) located in the vicinity of the SCVA. Natural water courses and streams are located within the SCVA. Also, there are wooded areas within the SCVA. Species of conservation importance including Hong Kong Cascade Frog, Hong Kong Newt and Burmese Python, are recorded in Shing Mun Country Park (SMCP) 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 via its southern and western edges via Sam Tung Uk Road, Hilltop Road and Sheung Kok Shan Road. Regional connection could be routed through the nearby Cheung Pei Shan Road.

The potential portal locations on or near the Urban District Distributor corridor constituting Sam Tung Uk Road and Yi Pei Chun Road could allow for easy connection to major roads such as Tuen Mun Road via Tsuen Kam Interchange to the west or via Sam Tung Uk Road and Wo Yi Hop Road to the east. Sam Tung Uk Road is considered to have sufficient traffic capacity in the future to accommodate various uses (subject to further study).

Sheung Kok Shan Road is a single-lane road which is steep and winding in parts. Further traffic assessment have to be carried out and mitigation measures may be required in order to meet the traffic demand for the proposed use.

4.6. Other Key Issues / Constraints on Cavern Development

A Drainage Services Department's tunnel, namely the Tsuen Wan Drainage Tunnel, passes through the southern portion of the SCVA. The railway tunnel of the Express Rail Link passes through the centre of the SCVA in a north-south direction. Due to the difference in elevations, these tunnels would not pose any insurmountable constraint to the potential uses of rock caverns within the SCVA.

Lung Mun Country Trail is also located within the SCVA. Project proponents shall take into account when considering cavern options of development projects.

5. Extent of Potential Portal Locations

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

The SCVA can be accessed from the extent of potential portion locations on Sam Tung Uk Road and Hilltop Road to the south and Sheung Kok Shan Road to the west.

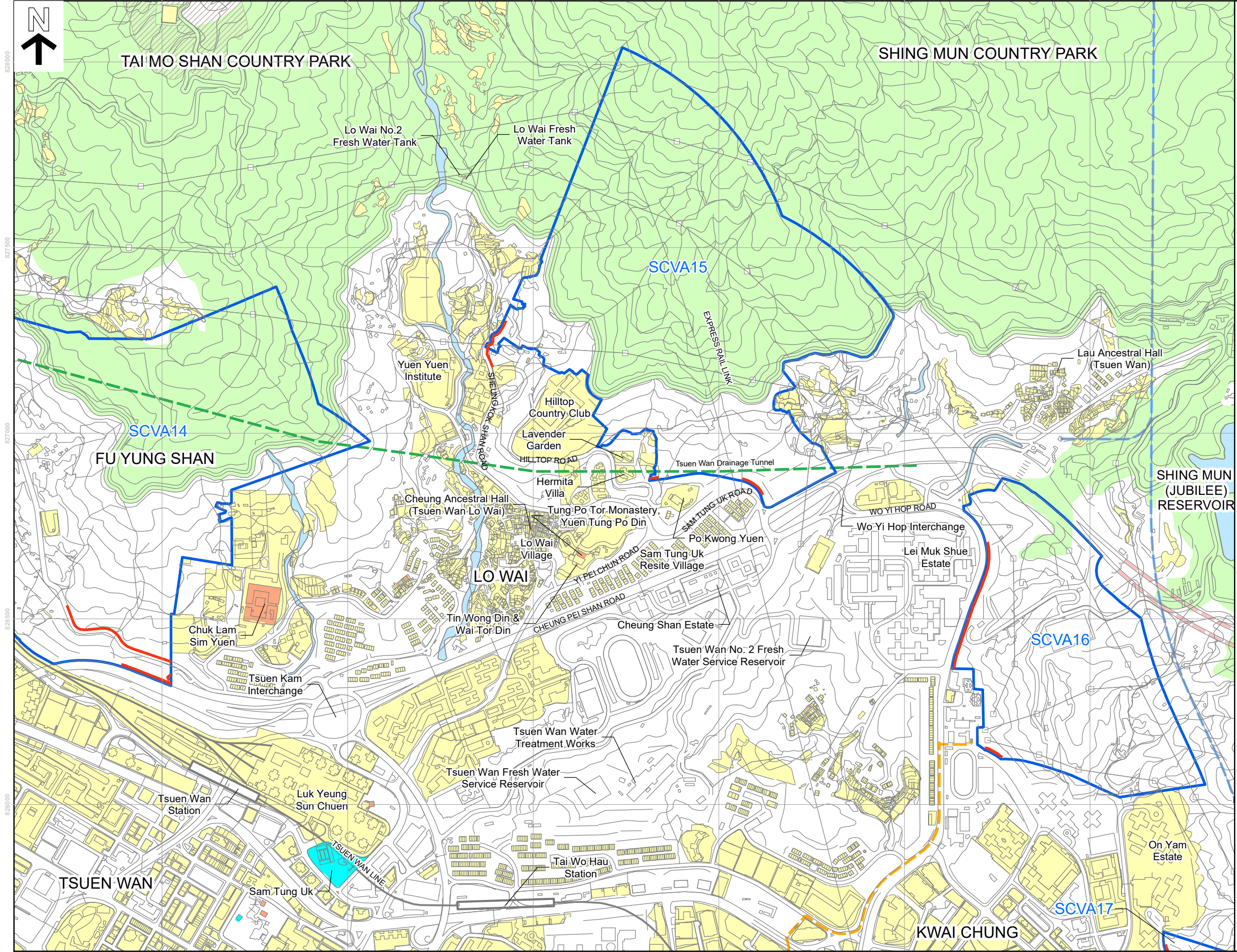
The potential portal locations on Sam Tung Uk Road and Hilltop Road are located at the slopes alongside the carriageways. Providing accesses for the uses of caverns in these locations should take account of the limited sight lines that may be present due to the sharp bends of the roads. Sheung Kok Shan Road is a single-lane road. Further detailed traffic assessment and engineering design on widening or upgrading would be required for it to support the potential uses of rock caverns.

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

Project proponents should carry out further studies on identifying specific locations of portals for the 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.



Legend

- Strategic Cavern Area
- Extent of Potential Portal Locations
- Existing Railway Line / Light Rail / Tram
- Cable Tunnel / Gas Tunnel
- Vehicle Tunnel
- Drainage Services Department Tunnel
- Water Supplies Department Tunnel
- Reservoir / River / Nullah
- Graded Historic Building
- Declared Monument (Historic Building)
- Private Lot
- Burial Ground
- Country Park
- Abandoned Tunnel

Note: All private lots located inside the boundary of the Strategic Cavern Area have been excised. 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 Strategic Cavern Area.

