

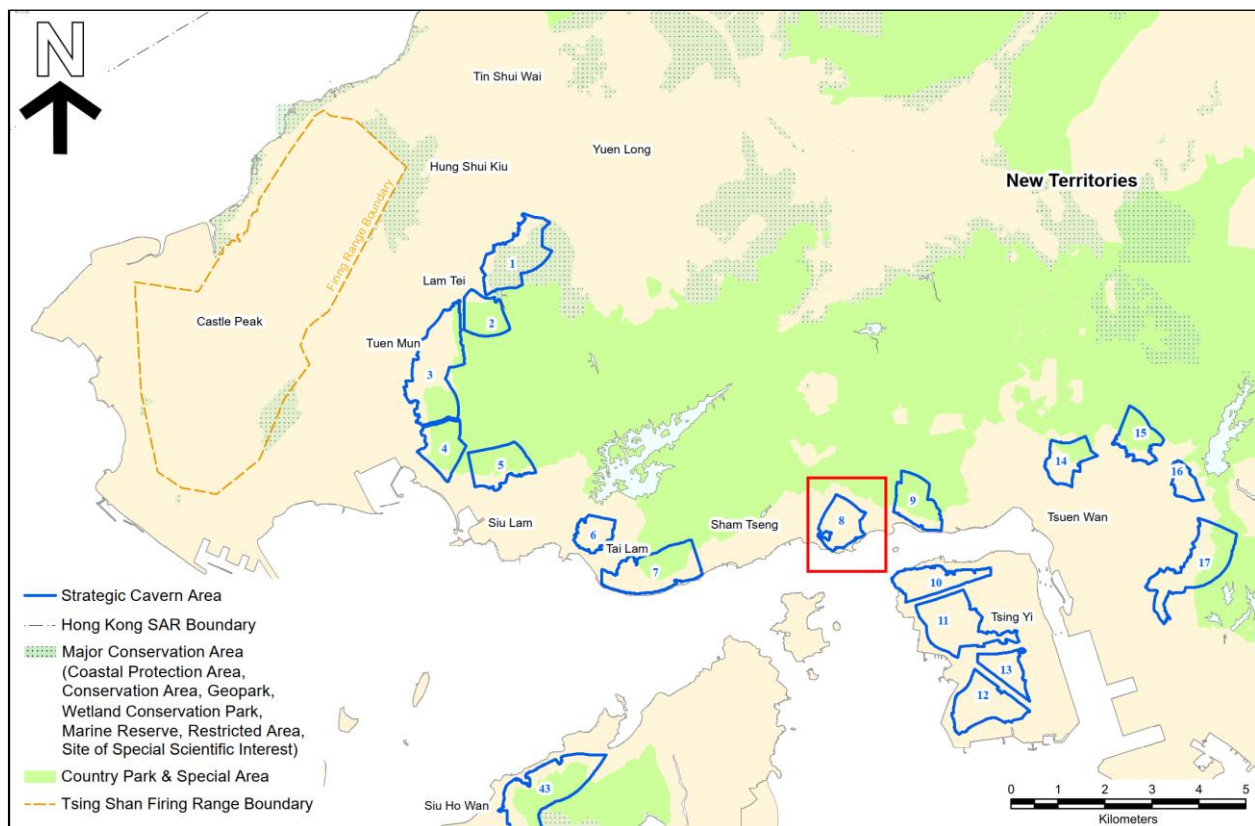
CAVERN MASTER PLAN – INFORMATION NOTE

STRATEGIC CAVERN AREA NO. 08 – SHAM TSENG SOUTH

This Information Note describes the characteristics and development constraints of Strategic Cavern Area No. 08 - Sham Tseng South (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 West OZP
Area:	73.8 ha
Maximum elevation in the SCVA:	+180 mPD
Minimum elevation in the SCVA:	+7 mPD

3. District Context

Location

The SCVA is located at Sham Tseng in the western part of the New Territories. Tsing Lung Tau is to the west of the SCVA, Ting Kau is to the east, Tai Lam Country Park is to the north and Ma Wan across Ma Wan Channel is to the south.

The SCVA is generally hilly with a maximum elevation of about +180 mPD. Sham Tseng East Village is located on the southwestern part of the SCVA. An area to the southwest of Sham Tseng East Village has been excluded from the SCVA as it comprises areas zoned “Village Type Development” located at both sides of Tuen Mun Road.

Surrounding the SCVA, Sham Tseng is a residential area with low- to high-rise developments as well as local villages, including Ocean Pointe (about 100 m to the southwest of the SCVA) and Sham Tseng Village (about 600 m to the west of the SCVA). Similarly, along the coastal area fronting Ma Wan Channel, Tsing Lung Tau is to the west of the SCVA and Ting Kau to the east of the SCVA are also residential communities with low- to medium-rise developments.

In the proximity of the SCVA, there are a number of key Government, Institution or Community (GIC) facilities supporting the development of Sham Tseng, including Sham Tseng Water Treatment Works (about 1,350 m to the west of the SCVA), Sham Tseng West Fresh Water Service Reservoir (about 1,300 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 from its southern boundary via Castle Peak Road (Sham Tseng and Ting Kau sections). Regional connections could be routed through Castle Peak Road, Tuen Mun Road and Tsing Long Highway. There is no railway serving the locality 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 northeastern boundary of the SCVA is defined by Tsing Long Highway. The southern boundary of the SCVA is defined by Castle Peak Road (Sham Tseng and Ting Kau sections), and private lots. The eastern boundary of the SCVA is defined by Tuen Mun Road and private lots. The western boundary of the SCVA is defined by the valley topography and private lots. The area in the southwestern part of the SCVA has been excluded from the SCVA as it comprises areas zoned “Village Type Development” located at both sides of Tuen Mun Road. Individual private lots located on the hillside 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 primarily medium-grained granite, which belongs to Lantau Granite; and fine-grained granite within the northern portion, which belongs to Tai Lam Granite. The SCVA is with the rock types that are suitable for the uses of rock caverns. A number of geological features, such as inferred faults, photolineaments and isolated dykes, are within and in the areas surrounding the SCVA. The excavated fine-grained granite and medium-grained granite within the SCVA are suitable for reuse as construction aggregate.

Further geological information of the SCVA can be found in the 1:20,000-scale Geological Map Sheet 6 (Yuen Long) published by the Geotechnical Engineering Office, Civil Engineering and Development Department.

4.3. Planning

Although the SCVA is not served by railway, it is close to the existing urban developments in Sham Tseng, Tsing Lung Lau and Ting Kau. The SCVA is also well connected to the rest of the territory by major highways, namely Castle Peak Road and Tuen Mun Road. The areas surrounding the SCVA are mainly the residential development areas in Sham Tseng, Tsing Lung Lau and Ting Kau. These areas consist of various high- to low-rise residential developments (e.g. Bellagio and Ocean Pointe) as well as local villages (e.g. Sham Tseng Village) supported by a number of GIC facilities (e.g. sewage treatment plants, service reservoirs, water treatment plants).

4.4. Environmental

Environmental sensitive receivers to the potential caverns in the SCVA include the nearby existing residential developments (e.g. Ocean Pointe, Golden Villa, Vista Del Mar and Sham Tseng East Village). Natural or modified water courses and wooded areas are located within the SCVA and some are close to the extent of potential portal locations. A Grade 3 historic building of Homi Villa (zoned “Other Specified Uses” annotated “Tourism and Recreation Related Uses”), is located in close proximity to the south of the SCVA. Water Gathering Grounds are located in the proximity to the north of 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 southern boundary via Castle Peak Road (Sham Tseng and Ting Kau sections). Regional connections could be routed through Castle Peak Road, Tuen Mun Road and Tsing Long Highway.

4.6. Other Key Issues / Constraints on Cavern Development

A Water Supplies Department (WSD) tunnel, the Tai Lam Chung Supply Tunnel No. 03, is located within the northern part of the SCVA. Due to the difference in elevation, this tunnel would not pose any insurmountable constraint to the potential uses of rock caverns in the SCVA. Two other WSD tunnels, the Tai Lam Chung Catchwater LMNO Tunnel 04 and the Tai Lam Chung Catchwater LMNO Tunnel 02, are approximately 300 m to the north and northwest respectively of the SCVA. A vehicle tunnel, the Tai Lam tunnel, is approximately 100 m to the north of the SCVA. A cable tunnel, the CLP Sham Tseng to Ma Wan Cable Crossing, is approximately 100 m to the southwest of the SCVA. Due to the differences in locations and elevations, these tunnels would also 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 on Castle Peak Road (Sham Tseng and Ting Kau sections) are located at the toe of slopes alongside the carriageway. Castle Peak Road (Sham Tseng and Ting Kau sections) is a dual carriageway and could support a range of traffic-generating activities.

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 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.



Legend

- Strategic Cavern Area
- Extent of Potential Portal Locations
- Cable Tunnel / Gas Tunnel
- Vehicle Tunnel
- Water Supplies Department Tunnel
- Reservoir / River / Nullah / Sea
- Site of Archaeological Interest
- Graded Historic Building
- Private Lot
- Burial Ground
- Country Park

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.

