

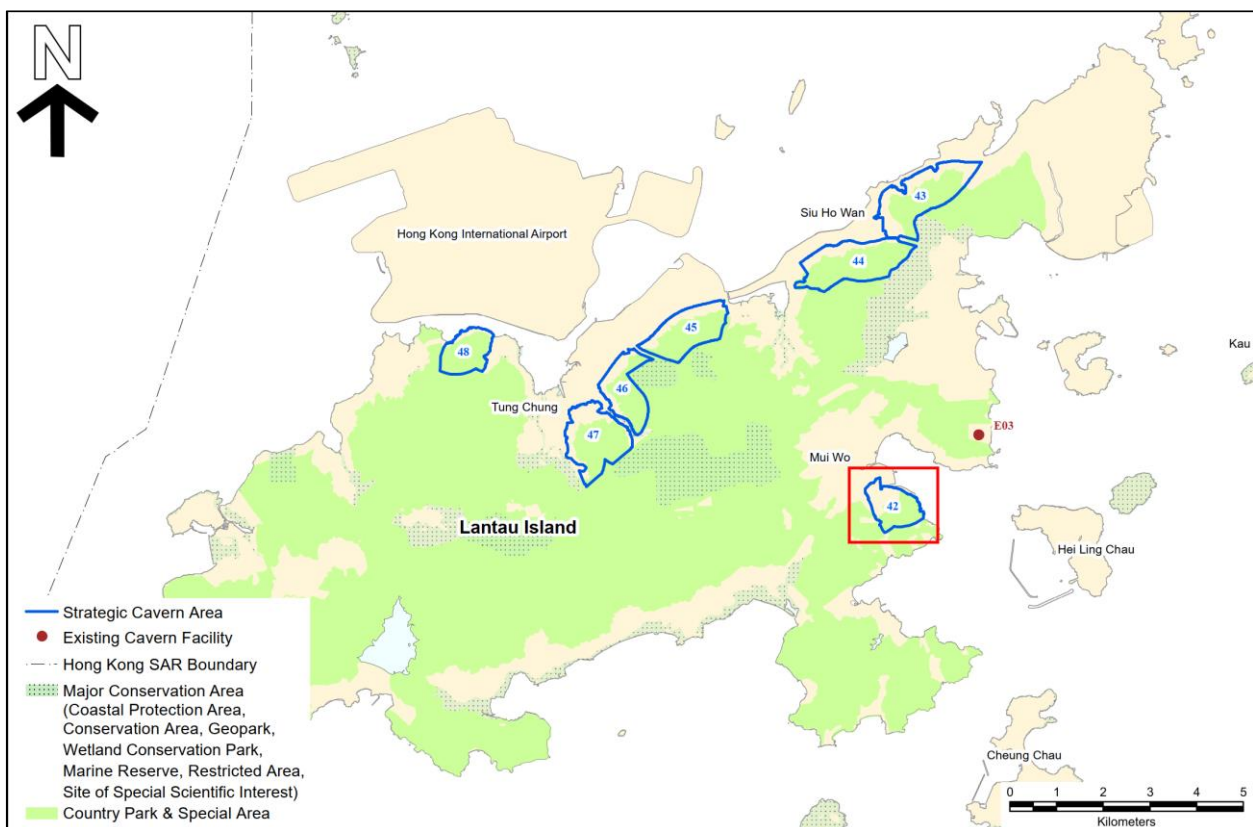
CAVERN MASTER PLAN – INFORMATION NOTE

STRATEGIC CAVERN AREA NO. 42 – MUI WO

This Information Note describes the characteristics and development constraints of Strategic Cavern Area No. 42 - Mui Wo (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 :	Mui Wo Fringe OZP South Lantau Coast OZP
Area:	83.4 ha
Maximum elevation in the SCVA:	+195 mPD
Minimum elevation in the SCVA:	+0 mPD

3. District Context

Location

The SCVA is located in the eastern coast of Lantau Island. It covers the hillside area of southern Mui Wo. Silver Mine Bay is located to the northeast of the SCVA, Lantau South Country Park is to the south, Lantau North Country Park is to the West and Lantau North (Extension) Country Park is to the north.

The SCVA is generally hilly with a maximum elevation of about +195 mPD. More than half of the SCVA encroaches onto Lantau South Country Park. Local villages namely Round Table Village and Lai Chi Yuen Tsuen are located at the northern and western boundaries of the SCVA respectively. Several Government, Institution or Community (GIC) facilities, including Silver Mine Bay Fresh Water Service Reservoir and Silver Mine Bay Water Treatment Works are located in the northwestern portion of the SCVA.

Mui Wo is rural in character with a number of local villages, such as Luk Tei Tong (about 500 m to the northwest of the SCVA) and Tai Tei Tong (about 800 m to the northwest of the SCVA). There are also other residential developments, such as Ngan Wan Estate (about 200 m to the northwest of the SCVA), Ngan Wai Court (about 250 m to the north of the SCVA) and Ngan Ho Court (about 300 m to the northwest of the SCVA). There is also focused development on tourism, i.e. Silvermine Beach Resort (about 450 m to the north of the SCVA). The development of Mui Wo is supported by a number of key GIC facilities, including those mentioned above and the Mui Wo Sewage Treatment Works and Mui Wo Transfer Facility (both at the northern boundary 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 northern edges via Mui Wo Ferry Pier Road and South Lantau Road. Regional connections could be routed through South Lantau Road. Mui Wo is also served by ferry via Mui Wo Ferry Pier (about 300 m to the north of the SCVA) to connect to Central, Peng Chau, Chi Ma Wan, Cheung Chau and Discovery Bay.

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 South Lantau Road, Mui Wo Ferry Pier Road and private lots in Round Table Village. The eastern boundary of the SCVA is defined by Silver Mine Bay coastline. The western boundary of the SCVA is defined by the valley topography and Lantau Trail.

4.2. Geology

The solid geology of the SCVA is primarily feldsparphyric rhyodacite in the central and southern portions, which belongs to East Lantau Rhyodacite; fine-grained quartz syenite in the northwestern portion; and medium-grained granite dykes trending east-west in the eastern and southern portions, which belong to Lantau 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 areas surrounding the SCVA. The excavated medium-grained granite within the SCVA is suitable for reuse as construction aggregate. Other excavated rocks can be used as road base materials and for asphalt production, etc.

Further geological information of the SCVA can be found on the 1:20,000-scale Geological Map Sheet 10 (Silver Mine Bay) published by the Geotechnical Engineering Office, Civil Engineering and Development Department.

4.3. Planning

Although the SCVA is served by vehicular roads, namely South Lantau Road and Mui Wo Ferry Pier Road, connection to other areas in Hong Kong via land transport is not convenient. Water transport by ferry via Mui Wo Ferry Pier provides an alternative mode of transport.

Currently, Mui Wo is rural in character with local villages (e.g. Luk Tei Tong and Tai Tei Tong) and residential developments (e.g. Ngan Wan Estate, Ngan Wai Court and Ngan Ho Court). Given that there is focused development on tourism such as Silvermine Beach Resort, Mui Wo has become a popular tourist spot in particular as a weekend getaway destination.

4.4. Environmental

Environmental sensitive receivers to the potential caverns in the SCVA are the nearby existing residential areas (e.g. Ngan Wan Estate, Ngan Wai Court, Ngan Ho Court, Water Supplies Department (WSD) Silver Mine Bay Staff Quarters, Round Table Village and Lai Chi Yuen Tsuen). The existing GIC facilities (e.g. Mui Wo Sewage Treatment Works and Mui Wo Transfer Facility) and other nearby land uses, e.g. bus depot and open storage, may pose environmental constraints on the potential caverns. There may be potential land contamination associated with those facilities and require further investigation by the project proponents if necessary. The SCVA mainly comprises coastal area, natural greenery, lowland forest and riparian habitats, and the eastern and southern parts of it encroach onto Lantau South Country Park. Also, several graded historic buildings including Yuen's Mansion comprising Main House, East Watchtower, small house attached to East Watchtower, West Watchtower, Front House and Barn (all Grade 2 historic buildings), Watchtower of Luk Tei Tong (Grade 3 historic building), and several traditional permitted burial grounds are located in the vicinity of the SCVA. Ngau Kwu Wan Site of Archaeological Interest, Shui Tseng Wan Site of Archaeological Interest and Chung Hau Site of Archaeological Interest are also located in the proximity. A government historic site identified by Antiquities and Monuments Office (AMO), namely The Boundary Stone of the Li House Bearing an Inscription is in the vicinity of the SCVA. Species of conservation importance including Romer's Tree Frog are recorded at the north periphery of Lantau South Country Park.

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 northern edges via Mui Wo Ferry Pier Road and South Lantau Road. Regional connections could be routed through the South Lantau Road. Currently, Lantau Closed Road Permit is required for vehicle to access the South Lantau Road. Mui Wo is also served by ferry via Mui Wo Ferry Pier (about 300 m to the north of the SCVA) to connect to Central, Peng Chau, Chi Ma Wan, Cheung Chau and Discovery Bay.

Mui Wo is not well connected to the primary road network as it is quite rural in nature. The nearest expressway is in Tung Chung, which is approximately 16 km away via Tung Chung Road, that is the main access road from the North Lantau Highway to Mui Wo. The extent of potential portal location is at least 40 km from the main urban areas of Hong Kong. Current traffic levels along Tung Chung Road are relatively low. This would therefore allow for additional traffic, however, this rural road is considerably steep and winding in parts, which would limit the viability of a high traffic-generating activity.

4.6. Other Key Issues / Constraints on Cavern Development

A proposed Fresh Water Tunnel between Siu Ho Wan and Silver Mine Bay Water Treatment Works is at the western portion of the SCVA. The Shek Pik Supply Tunnel is about 50 m to the west of the SCVA. Owing to the difference in elevations, these tunnels would not pose any insurmountable constraint on the potential uses of rock caverns within the SCVA.

Project proponents should also take into account the latest progress of the proposed developments at Mui Wo and other developments under the Blueprint.

Lantau Trail Section 12, Mui Wo to Pui O Mountain Bike Trail and Mui Wo Mountain Bike Practice Ground are located within the SCVA. Project proponents shall take these facilities 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 generally accessible via South Lantau Road to the northwest and Mui Wo Ferry Road to the northeast.

The extent of potential portal location on South Lantau Road is on the slopes adjacent to the road. The SCVA could be accessed by provision of suitable run-in/out or priority controlled junction, depending on the proposed land-use.

The extent of potential portal location on Mui Wo Ferry Pier Road is restricted by the narrow carriageway width. The current access arrangement to this extent of potential portal location would suit low traffic-generating activities, but would require major upgrading works of the road in order to support moderate to high traffic-generating activities. Further traffic impact assessment would be required subject to the proposed scale and use of the cavern projects. Upgrading or widening of road within or adjacent to Lantau South Country Park to meet traffic needs associated with the proposed portal development should be avoided as far as practicable. The portal and all other aboveground works should avoid encroaching onto the country park. Project proponents should explore alternative access road outside the country park or an alternative location of the portal to reduce any possible ecological, visual and recreational impacts to the country park and its users.

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 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.

