

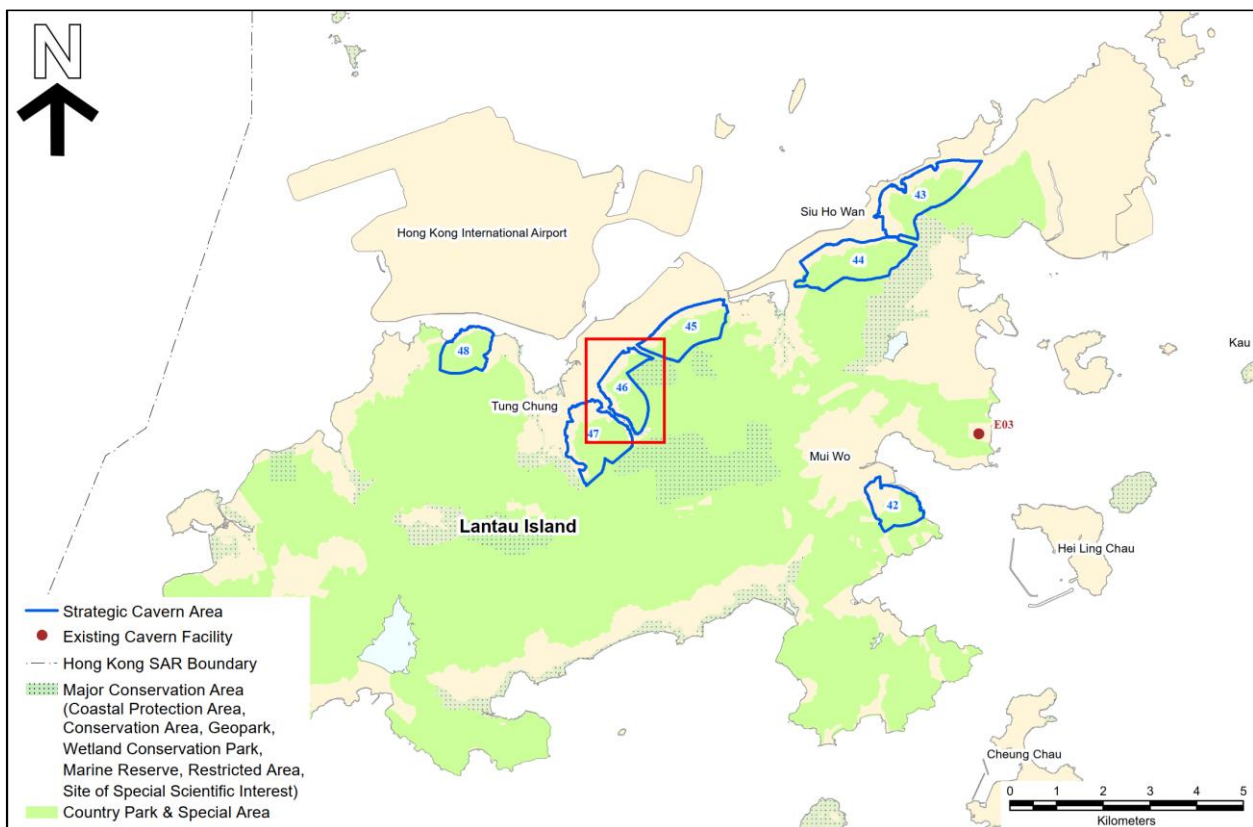
## **CAVERN MASTER PLAN – INFORMATION NOTE**

### **STRATEGIC CAVERN AREA NO. 46 – TUNG CHUNG SOUTH**

*This Information Note describes the characteristics and development constraints of Strategic Cavern Area No. 46 - Tung Chung 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) <sup>1</sup> :	Tung Chung Town Centre Area OZP
Area:	106.6 ha
Maximum elevation in the SCVA:	+429 mPD
Minimum elevation in the SCVA:	+7 mPD

## 3. District Context

### Location

The SCVA is located in the northern part of Lantau Island. It covers the hillside area of Pok To Yan to the south of Tung Chung. Lantau North (Extension) Country Park is to the east and south of the SCVA, Tung Chung New Town is to the north and northwest, the Hong Kong International Airport (HKIA) and Hong Kong Boundary Crossing Facilities (HKBCF) of the Hong Kong-Zhuhai-Macao Bridge (HZMB) are to the further north.

The SCVA is generally hilly with a maximum elevation of about +429 mPD. A majority of the SCVA encroaches onto Lantau North (Extension) Country Park. To the north and northwest of the SCVA, Tung Chung New Town mainly consists of high-rise residential developments, including Caribbean Coast (about 300 m to the north of the SCVA), Seaview Crescent (about 550 m to the north of the SCVA), Yu Tung Court (about 100 m to the north of the SCVA) and Yat Tung Estate (about 250 m to the northwest of the SCVA). There are also a number of local villages adjacent to the SCVA, including Ma Wan New Village, Shan Ha (Pa Mei) Village and Chek Lap Kok New Village (all at the western boundary of the SCVA). The development of Tung Chung New Town is supported by various key Government, Institution or Community (GIC) facilities, including Tung Chung Municipal Services Building (about 350 m to the north of the SCVA) and North Lantau Hospital (about 150 m to the west of the SCVA).

There are proposals for development of Tung Chung East and Tung Chung West with a view to extending Tung Chung New Town into a distinct community with supporting community and commercial facilities. Tung Chung East Extension Area is on new land formed by reclamation located to the northeast of the SCVA while Tung Chung West Extension Area is located to the west of the SCVA. In addition, several developments, including construction of sewage rising

---

<sup>1</sup> 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/>).

mains under Tung Chung New Town Extension project and realignment of Cheung Tung Road under HZMB project, will be/was conducted within the area in Tung Chung.

#### Access

The SCVA is accessible from its northern and western edges via Cheung Tung Road, Yu Tung Road and Tung Chung Road. Regional and cross-boundary connections could be routed through the adjacent North Lantau Highway, Tuen Mun-Chek Lap Kok Link and HZMB.

The MTR Airport Express and Tung Chung Line run along the North Lantau Highway to the north of the SCVA. The nearest station to the SCVA is Tung Chung Station of Tung Chung Line, which is about 450 m to the northwest of the SCVA. Tung Chung East Station (about 1.3 km to the northeast of the SCVA) and Tung Chung West Station (about 700 m to the west of the SCVA) are proposed to support the future development in the extension areas.

#### 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 valley topography, Cheung Tung Road and the Hong Kong Buddhist Association Chan Ma Mee York Memorial Camp. The eastern boundary is defined by Pok To Yan and Por Kai Shan Site of Special Scientific Interest (SSSI). The western boundary of the SCVA is defined by Yu Tung Road, valley topography, private lots and local villages, including Ma Wan New Village and Shan Ha (Pa Mei) Village. The southern boundary of the SCVA is defined by private lots at Wong Lung Hang.

#### **4.2. Geology**

The solid geology of the SCVA is primarily rhyolite lava and tuff, which belong to Lantau Volcanic Group. The SCVA is with the rock types that are suitable for the uses of rock caverns. A number of geological features, such as faults and photolineaments, are identified within and in areas surrounding the SCVA. The excavated rocks within the SCVA 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 9 (Tung Chung) published by the Geotechnical Engineering Office, Civil Engineering and Development Department.

#### **4.3. Planning**

The SCVA is close to the existing urban development in Tung Chung New Town, HKIA and HKBCF, and is close to the proposed Tung Chung New Town Extension Areas and the SCVA is well connected by major highways and railway to the rest of the territory and across the boundary to the Mainland.

The northern and western sides of the SCVA are respectively the major existing and proposed residential development areas in Tung Chung New Town and its extension. These areas consist of various high-rise residential developments (e.g. Caribbean Coast, Yu Tung Court, Yat Tung Estate, Yu Tai Court, Mun Tung Estate and the proposed developments in Tung Chung West Extension Area) supported by a number of GIC facilities (e.g. municipal services building, hospital, school, service reservoir, etc).

The SCVA is situated at a strategic location near the HKIA, HKBCF and Tung Chung New Town and served with major trunk roads including North Lantau Highway, Tuen Mun-Chek Lap Kok Link and the HZMB enabling regional and cross-boundary connections.

#### **4.4. Environmental**

Environmental sensitive receivers to the potential caverns in the SCVA are the nearby existing residential developments (e.g. Yu Tung Court, Ma Wan New Village, Shan Ha (Pa Mei) Village, Chek Lap Kok New Village, Yu Tai Court, Mun Tung Estate and the proposed public housing developments in Area 23), schools (e.g. Po Leung Kuk Mrs Ma Kam Ming Cheung Fook Sien College and HKFEW Wong Cho Bau Secondary School), and the North Lantau Hospital. The SCVA encroaches onto Lantau North (Extension) Country Park and its hillside areas comprise natural greenery and Water Gathering Grounds. Pok To Yan and Por Kai Shan SSSI is located to the east of the SCVA. The Wong Lung Hang Ecologically Important Stream (EIS) is located to the west and south of the SCVA. Ma Wan Chung Site of Archaeological Interest, Fu Tei Wan Kiln (relocated to Tung Chung) Site of Archaeological Interest, Sha Tsui Tau Site of Archaeological Interest, Tung Chung Game Board Carving Site of Archaeological Interest, and a historical building namely Tin Hau Temple in Tung Chung (Grade 2 historic building) are located in the vicinity of the SCVA. Also, two declared monuments, Tung Chung Fort and Tung Chung Battery, are located to the west and northwest of the SCVA respectively. There are natural or modified surface water courses 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 from its northern and western edges via Cheung Tung Road, Yu Tung Road and Tung Chung Road. Regional and cross-boundary connections could be routed through the adjacent North Lantau Highway, Tuen Mun-Chek Lap Kok Link and HZMB.

The SCVA is located adjacent to the North Lantau Highway which provides access between Chek Lap Kok and other main areas of Hong Kong. Access to the highway from the SCVA is via the Tung Chung Eastern Interchange, which is located at the northern edge of the SCVA. The SCVA is also located close to the HKIA, about 3 km in distance.

The project proponent would be required to assess the traffic impacts to the road networks in the vicinity and carry out traffic improvement measures so as to ensure that the traffic infrastructure could cope with the additional traffic flow brought by the project when considering cavern options in the SCVA.

#### **4.6. Other Key Issues / Constraints on Cavern Development**

A Water Supplies Department's tunnel, namely Tung Chung Tunnel, is approximately 100 m to the south of the SCVA. Tung Chung Line railway tunnel is approximately 400 m to the north of the SCVA. As they are far from the SCVA boundary, they would not pose any insurmountable constraint on the potential uses of rock caverns.

### **5. Extent of Potential Portal Locations**

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

The SCVA is generally accessible from Cheung Tung Road to the north; Yu Tung Road and a roundabout at the eastern end of Tung Chung Road to the northwest; and the natural slope opposite to Wong Lung Hang Road to the southwest.

The potential portal locations along Cheung Tung Road and Yu Tung Road are on roadside slopes. The SCVA could be accessed by provision of suitable run-in/out or priority controlled junctions, depending on the proposed use. The location at Cheung Tung Road may be constrained by restricted sight line due to the curvature of the road, which would be subjected to further investigation. Yu Tung Road is a dual carriageway so the turning movement will be limited to a single direction unless substantial road modification works are carried out, which is subjected to detailed traffic impact assessment and engineering design.

The extent of potential portal location at the end of Tung Chung Road, where there is a roundabout located at the east of Yu Tai Court, would require the provision of a priority controlled junction for moderate to high traffic-generating activities subject to detailed traffic impact assessment and engineering design. Project proponents should take consideration of the latest development of the site including the traffic conditions, and carry out necessary traffic impact assessments associated with the proposed use in the cavern project.

The extent of potential portal location on the toe of natural slope opposite Wong Lung Hang Road is currently not accessible by any road networks. Construction of new roads may generate adverse environmental impacts to the adjacent Wong Lung Hang EIS and its surrounding conservation area and hence the access should be limited for pedestrian use as emergency exit for potential caverns in the SCVA. As Wong Lung Hang EIS, Lantau North (Extension) Country Park, local villages and conservation area are located in close proximity, any potential environmental impacts should be well assessed and minimised as far as possible.

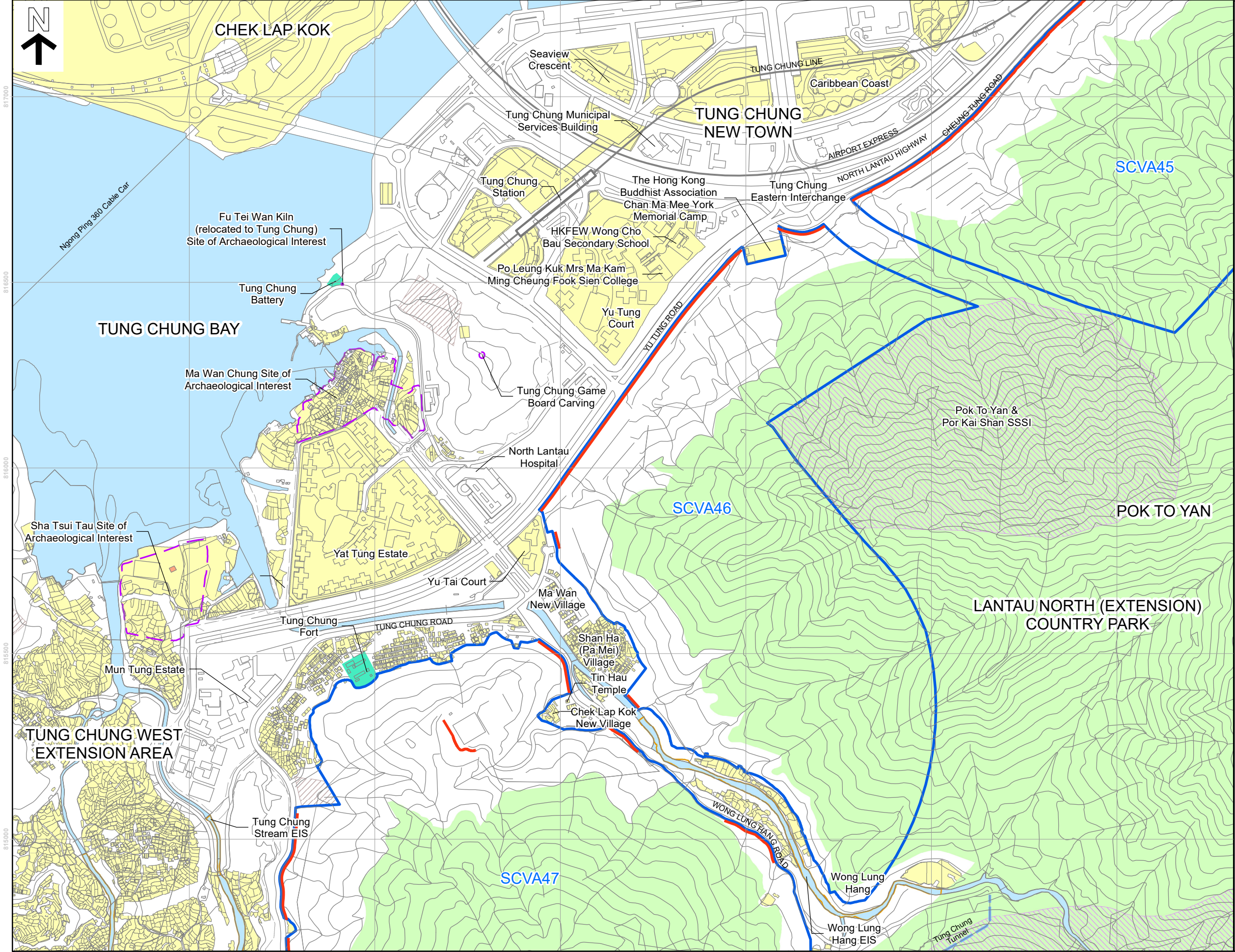
There are natural slopes above the potential portal locations. There may be potential natural terrain hazards in the vicinity which may require further study by the project proponents.

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.

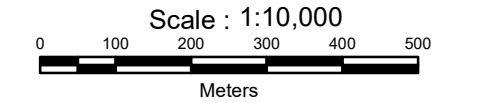




Legend

- Strategic Cavern Area
- Extent of Potential Portal Locations
- Existing Railway Line / Light Rail / Tram
- Water Supplies Department Tunnel
- River / Nullah / Sea
- Site of Archaeological Interest
- Graded Historic Building
- Declared Monument (Site of Archaeological Interest)
- Private Lot
- Burial Ground
- Country Park
- Ecologically Important Stream (EIS)
- Site of Special Scientific Interest

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.



REFERENCE DRAWING OF STRATEGIC CAVERN AREA NO. 46 - TUNG CHUNG SOUTH

CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT  
PLANNING DEPARTMENT



DATE: SEPTEMBER 2025  
VERSION: 2nd Edition

SCVA 46