

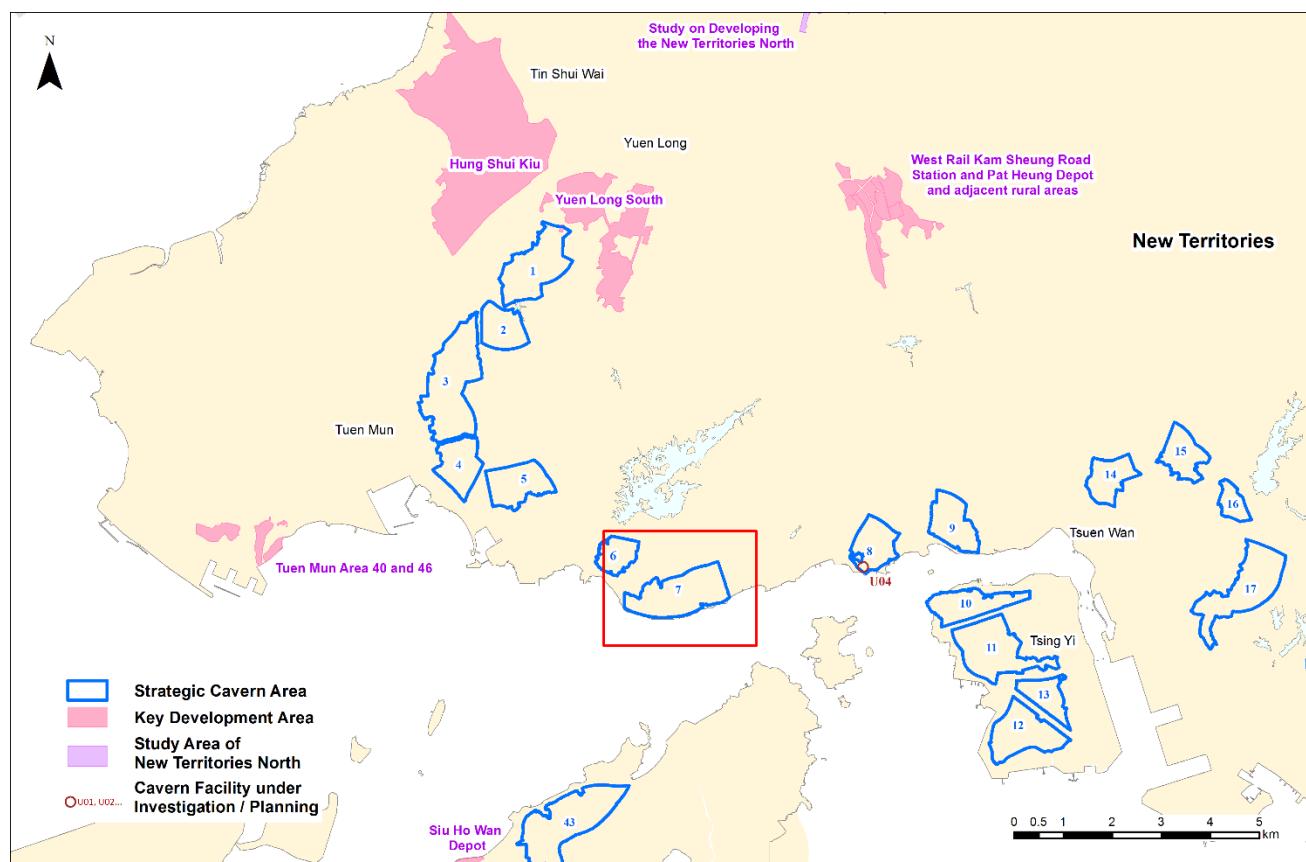
## **CAVERN MASTER PLAN – INFORMATION NOTE**

### **STRATEGIC CAVERN AREA NO. 07 – TSING LUNG TAU**

This Information Note describes the characteristics, key development opportunities and constraints of Strategic Cavern Area No. 07 - Tsing Lung Tau (the SCVA). It indicates the potential land uses suitable for cavern development within the area but would not pre-empt other possible land uses put forward by the project proponents with justifications. 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):   | Approved So Kwun Wat OZP No. S/TM-SKW/13             |
| Area:                          | Approved Tsuen Wan West OZP No. S/TWW/19<br>144.9 ha |
| Maximum elevation in the SCVA: | +306 mPD   |
| Minimum elevation in the SCVA: | +3 mPD   |

## 3. District Context

### Location

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

The SCVA is generally hilly with a maximum elevation of about +306 mPD. The SCVA partially encroaches into Tai Lam Country Park in its northeastern portion. There are two local villages, namely Choi Yuen Tsuen and Ka Loon Tsuen, located at the eastern and southern portions of the SCVA respectively.

In the proximity to the SCVA, Tsing Lung Tau is a residential area with low- to medium-rise residential developments including Vista Cove (at the southern boundary of the SCVA), Vista Cliff (at the southeastern boundary of the SCVA) and Hong Kong Garden (about 100 m to the east of the SCVA). Located to the west of the SCVA, Siu Lam is also mainly a residential area with low- to medium-rise residential developments and local villages. These include Palatial Coast (about 1,000 m to the northwest of the SCVA) and So Kwun Wat San Tsuen (about 2,000 m to the northwest of the SCVA). Located to the north of the SCVA, Tai Lam Chung comprises mainly local villages and Government, Institution and Community (GIC) facilities, including Tai Lam Chung Tsuen (about 350 m to the northwest of the SCVA), Tai Lam Chung Fresh Water Service Reservoir (about 850 m to the northwest of the SCVA), Tai Lam Correctional Institution (about 950 m to the north of the SCVA) and Maritime Services Training Institute (at the western boundary of the SCVA). Tai Lam Country Park and Tai Lam Chung Reservoir are also located to the north of the SCVA. Further to the east of the SCVA, Sham Tseng is another local hub of residential communities comprising local villages and high-rise residential developments.

## Access

The SCVA is accessed from its western and southern boundaries via Castle Peak Road (Tai Lam and Tsing Lung Tau sections). Regional connections could be routed through the nearby Tuen Mun Road and Castle Peak Road. There is no railway serving the locality of the SCVA.

The proposed Tsing Lung Bridge, a part of Route 11 (formerly Route 10), on the eastern part of the SCVA is to connect Yuen Long and North Lantau via Tsing Lung Tau. Project proponents should take into account the latest development of this project.

## Land Use Zoning

Under the Approved So Kwun Wat OZP No. S/TM-SKW/13 and the Approved Tsuen Wan West OZP No. S/TWW/19, the western and southern parts of the SCVA are zoned “Green Belt”, with an “Undetermined” zone and isolated “Government, Institution or Community” (“G/IC”) zones in the southeastern and southwestern parts respectively. The remainder of the SCVA is not covered by any Statutory Plan and is designated as country park. The zonings of the surrounding areas include “Residential (Group B)”, “Residential (Group C)”, “Village Type Development”, “G/IC”, “Green Belt” and “Comprehensive Development Area” to the east, south and west of the SCVA, with the rest being Tai Lam Country Park.

For details of the latest land use zonings on OZPs, please refer to the Town Planning Board website ([http://www\(tpb.gov.hk](http://www(tpb.gov.hk)).

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 burial grounds, private lots and also by an extent at 800 m from the potential portal locations. The southern and western boundaries of the SCVA are defined by Castle Peak Road. The eastern boundary of the SCVA is defined by residential developments (i.e. Hong Kong Garden). 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 primarily medium-grained granite, which belongs to Lantau Granite; and fine-grained granite in the northeastern portion of the SCVA, which belongs to Tai Lam Granite. The SCVA is with the rock types that are suitable for cavern development. A number of geological features, such as inferred faults, photolineaments and isolated dykes, are within and in the areas surrounding the SCVA. The excavated medium-grained granite and fine-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 low- to medium-rise residential developments in Tsing Lung Tau and Tai Lam Chung. It also has good connectivity via major highways namely Tuen Mun Road and Castle Peak Road.

In the vicinity of the SCVA, Tsing Lung Tau, Tai Lam Chung and Siu Lam are mainly residential areas (e.g. Hong Kong Garden and Tai Lam Chung Tsuen) which are supported by various GIC facilities (e.g. service reservoir). Should there be any need for providing additional land for residential use, the SCVA may provide the solution space by, for example, relocating some of the suitable infrastructure facilities to caverns (e.g. service reservoir). By doing so, surface land could be released for other beneficial uses (e.g. residential developments and/or community facilities), and it could also enable more effective utilisation of land resources in Tsing Lung Tau while preserving the natural landscape of the Tai Lam Country Park.

The SCVA could also be used to house those supporting infrastructure facilities that are required by the existing and proposed residential developments. In particular, it is considered suitable for housing ‘Not-In-My-Backyard’ (NIMBY) type of facilities, such as sewage treatment works, to minimise the nuisance to the community.

In view of the close proximity of the SCVA to major highways, i.e. Tuen Mun Road and Castle Peak Road, there is also potential to develop suitable land uses that require convenient transport infrastructure for serving a large catchment area, such as maintenance depot, to meet regional needs. The SCVA overlaps with the alignment of the proposed Tsing Lung Bridge of Route 11 which links up Yuen Long and Lantau Island. The development of the SCVA shall consider the proposed traffic network as well.

#### **4.4. Environmental**

Environmental sensitive receivers to cavern development in the SCVA include the nearby residential areas (e.g. Ka Loon Tsuen and Hong Kong Garden) and occupied facilities such as the Maritime Services Training Institute. The northeastern portion of the SCVA is within Tai Lam Country Park and Water Gathering Grounds. Streams and wooded areas are located close to some of the potential portal locations of the SCVA. In addition, Tai Lam Site of Archaeological Interest and a traditional burial ground adjoin the northwestern boundary of the SCVA.

All potential environmental constraints, which may impose restrictions on the cavern development, 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 cavern development 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 western and southern boundaries via Castle Peak Road (Tai Lam and Tsing Lung Tau sections). Regional connections could be routed through the nearby Tuen Mun Road and Castle Peak Road. The proposed Tsing Lung Bridge landing on the eastern part of the SCVA as part of Route 11 project may provide additional road access to the SCVA. Project proponents should take account of the latest development of this project.

The extent of potential portal locations are all located on Castle Peak Road (Tai Lam and Tsing Lung Tau sections), which is a high-capacity rural road that travels east-west along the coastline between Tuen Mun and Tsuen Wan. Access to Tuen Mun Road expressway is within 3 km from the extent of potential portal locations. This allows for easy connection with the expressway network throughout Hong Kong. The project proponent shall assess the combined traffic impact due to the proposed Tsing Lung Bridge and the development of the SCVA. Further advice on the scope of the Traffic Impact Assessment shall be sought by the project proponents.

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

There are no existing underground facilities found within or in the vicinity of the SCVA.

## 5. Potential Land Uses

The potential land uses for the SCVA are as follows:

| Land use               | Description   |
|------------------------|---|
| Maintenance depot      | <p>The SCVA is located in the urban fringe supported by good road network and is easily accessed via major highways, namely Tuen Mun Road and Castle Peak Road. There is thus potential to develop suitable land uses that require convenient transport infrastructure for serving a large catchment area, such as maintenance depot, to meet the regional needs.</p> <p>Some of the potential portal locations of the SCVA are away from the existing/proposed residential developments, which makes the SCVA more compatible with such land use.</p>  |
| Service Reservoir      | <p>Tsing Lung Tau, Tai Lam Chung and Siu Lam are home of various residential developments and local villages (e.g. Palatial Coast, Hong Kong Garden and Tai Lam Chung Tsuen). The SCVA has the opportunity to develop suitable land uses to support the future development of these residential areas, by relocating and/or expanding some of the suitable infrastructure facilities, such as service reservoir, to caverns.</p> <p>Existing service reservoirs are found in the vicinity of the SCVA. Relocation of the facilities to caverns may be considered, thereby releasing the surface land for other beneficial uses and for integration with future development.</p> |
| Sewage Treatment Plant | <p>The SCVA is adjacent to various major existing residential communities in Tsing Lung Tau, Tai Lam Chung and Siu Lam. There is opportunity for the SCVA to support the future development of these areas by providing additional supporting infrastructure facilities, such as sewage treatment plant.</p> <p>Moreover, housing the NIMBY type of facility in caverns can help minimise the nuisance to the existing/future communities in respect of land use compatibility.</p> <p>Some of the potential portal locations of the SCVA are away from the existing/proposed residential developments, which makes SCVA more compatible with such land use.</p>                |

Note: Zoning amendment/planning application may be required to facilitate the pursuit of the above potential land uses.

## 6. Extent of Potential Portal Locations

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

The SCVA is accessed from its western and southern boundaries via Castle Peak Road (Tai Lam and Tsing Lung Tau sections). The potential portal locations are located at the toe of slopes running alongside the carriageway. The direct road connections would be probable (subject to assessment) and could facilitate a range of traffic generating activities given the high capacity of the roads.

The potential portal locations at the southern boundary of the SCVA are located at toe of man-made slopes, with Tuen Mun Road abutting on the crest of the slopes. The potential portal location at the western boundary of the SCVA is located at the toe of the natural slope. There may be potential natural terrain hazards in the vicinity of this potential portal location, which may require further study by project proponents.

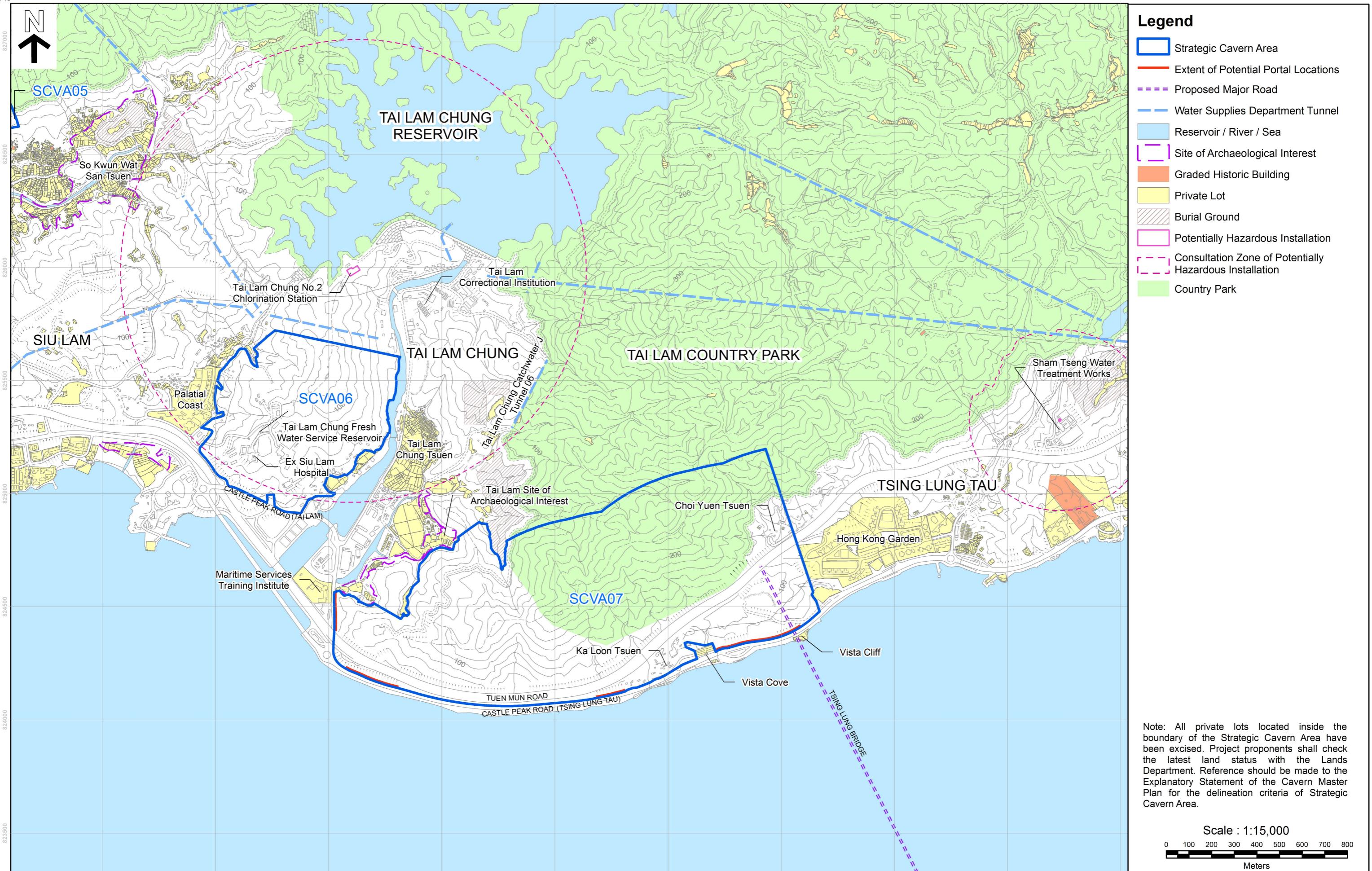
Project proponents should carry out further studies on identifying specific locations of portals for the proposed cavern development.

## 7. Concluding Remarks

This SCVA presents an opportunity for locating suitable land uses in rock caverns to serve the existing and future neighbouring communities in Tsing Lung Tau, Tai Lam Chung and Siu Lam (e.g. by housing service reservoir). It also has the potential to house the NIMBY type of facilities (e.g. sewage treatment plant) to minimise the nuisance to the community. Also, opportunity should be explored to develop uses that could well utilize the convenient transport network available to the SCVA (e.g. maintenance depot). Project proponents for cavern development should take due consideration of the existing and proposed residential developments, environmental sensitive receivers, proposed Tsing Lung Bridge and associated traffic network and accessibility for cavern development, to minimise the interfacing issues and bring about greater synergy and opportunities.

## 8. Notes

The Cavern Master Plan and all supporting documents do not exempt project proponents for cavern development from following the relevant statutory and planning procedures. Information including the potential land uses and 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.



REFERENCE DRAWING OF STRATEGIC CAVERN AREA NO. 07 - TSING LUNG TAU

CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT  
PLANNING DEPARTMENT



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