

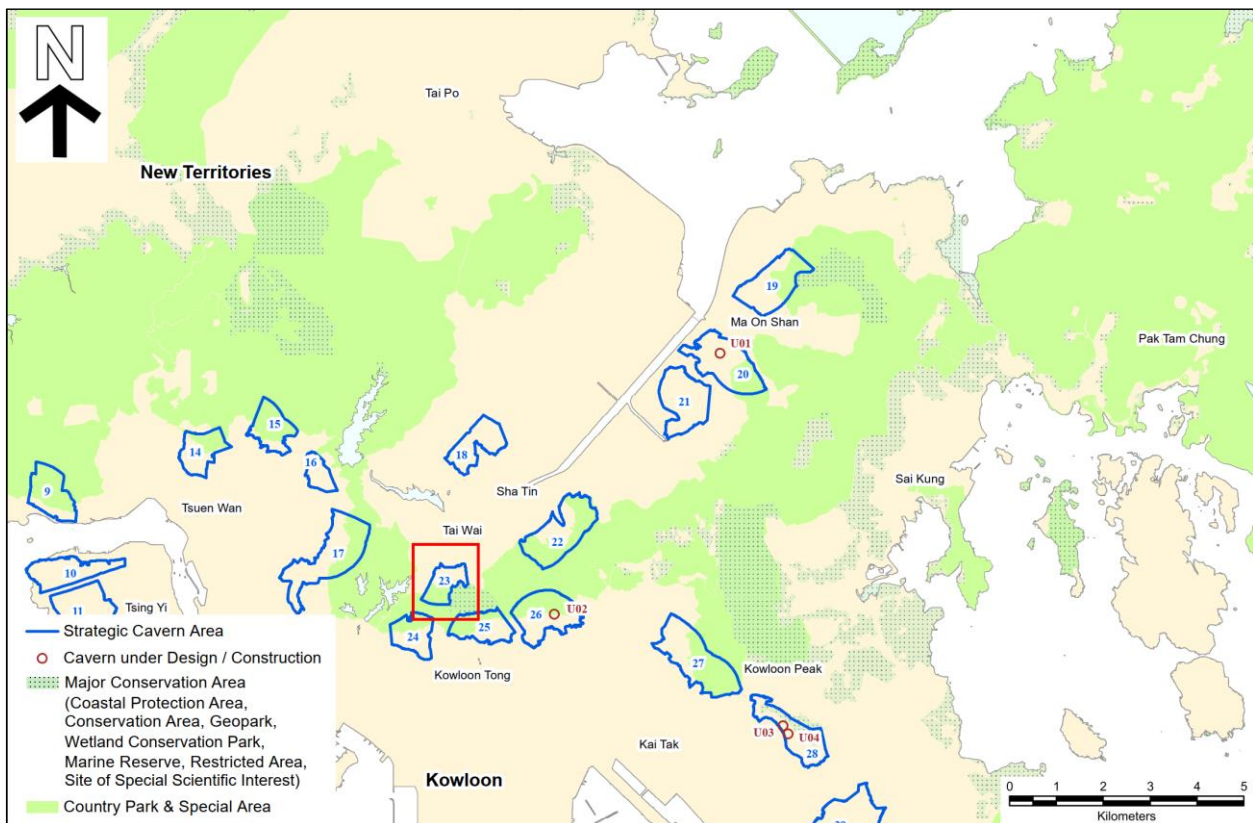
CAVERN MASTER PLAN – INFORMATION NOTE

STRATEGIC CAVERN AREA NO. 23 – TAI WAI WEST

This Information Note describes the characteristics and development constraints of Strategic Cavern Area No. 23 - Tai Wai West (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 :	Sha Tin OZP
Area:	49.7 ha
Maximum elevation in the SCVA:	+380 mPD
Minimum elevation in the SCVA:	+33 mPD

3. District Context

Location

The SCVA is located in the southwestern part of Sha Tin New Town, which is to the north of Kowloon, separated by a range of hills including Lion Rock and Beacon Hill. It covers the hillside area to the southwest of Tai Wai in Sha Tin. Tai Wai is to the northeast of the SCVA, Sha Tin New Town is to the further northeast of the SCVA, Lion Rock Country Park is to the east and south and Kam Shan Country Park is to the west.

The SCVA is generally hilly with a maximum elevation of about +380 mPD. About half of the SCVA encroaches onto Lion Rock Country Park. To the northeast of the SCVA, there are Sha Tin New Town and Tai Wai areas which mainly consist of medium- to high-rise residential developments (e.g. Hin Keng Estate which is about 200 m to the northeast of the SCVA and Festival City which is about 1.1 km to the northeast of the SCVA) and a number of local villages (e.g. Kak Tin Village which is about 1.8 km to the northeast of the SCVA).

In the proximity of the SCVA, there are a number of key Government, Institution or Community (GIC) facilities supporting the development of Sha Tin New Town and Tai Wai, including Sha Tin South Fresh Water Service Reservoir (about 100 m to the east of the SCVA), Sha Tin Water Treatment Works (at the northern boundary of the SCVA) and Union Hospital (about 600 m to the northeast of the SCVA).

Access

The SCVA is accessible from its northern edges via the restricted access roads of Sha Tin Water Treatment Works and Tsing Sha Highway Administration Building respectively. Regional connections could be routed through the nearby Tsing Sha Highway and Lion Rock Tunnel Road.

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/>).

The MTR East Rail Line and Tuen Ma Line run pass at the east of the SCVA. Only Hin Keng Station of Tuen Ma Line is located in the proximity to the SCVA, about 350 m to the northeast 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 northern boundary of the SCVA is defined by Sha Tin Water Treatment Works. The southern boundary of the SCVA is defined by the Beacon Hill Site of Specific Scientific Interest (SSSI). The eastern boundary of the SCVA is defined by the MTR East Rail Line Beacon Hill Tunnel. The western boundary of the SCVA is defined by Eagle's Nest Tunnel and the access road near Tsing Sha Highway Administration Building.

4.2. Geology

The solid geology of the SCVA is coarse-grained granite and quartz monzonite, which belong to Tei Tong Tsui Quartz Monzonite; and coarse-grained granite at the northwestern portion and fine-grained granite at the southeastern portion, both of which belong to Shui Chuen O 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 the areas surrounding the SCVA. The excavated quartz monzonite and fine-grained granite within the SCVA are 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 7 (Sha Tin) and Geological Map Sheet 11 (Hong Kong & Kowloon) published by the Geotechnical Engineering Office, Civil Engineering and Development Department.

4.3. Planning

The SCVA is located in the fringe of existing urban development in Sha Tin New Town and Tai Wai. The SCVA does not have good road connectivity as it can only be accessed by restricted access roads.

The northeastern side of the SCVA is the major residential development areas of Sha Tin New Town and Tai Wai. These areas consist of various medium- to high-rise residential developments (e.g. Hin Keng Estate and Festival City) and local villages (e.g. Kak Tin Village) supported by a number of GIC facilities (e.g. sports ground, hospital, school, service reservoir, fire station, police station, etc.).

4.4. Environmental

Environmental sensitive receivers to the potential caverns in the SCVA are the nearby existing residential developments (e.g. Hin Keng Estate). The SCVA comprises wooded areas and shrubby hillsides, and encroaches onto Lion Rock Country Park and Water Gathering Grounds. Kam Shan Country Park is also in the proximity to the SCVA at its west. Beacon Hill SSSI is in the proximity to the southeast of the SCVA. A number of built heritages are located in the proximity of the SCVA, including So Ancestral Hall (Grade 3 historic building), Law Ancestral Hall (Grade 3 historic building), Yeung Ancestral Hall (Grade 3 historic building) and a government historic site identified by Antiquities and Monuments Office (AMO) namely Ex-Kowloon-Canton Railway Beacon Hill Tunnel. Several traditional permitted burial grounds are also in the vicinity of the SCVA. Species of conservation importance including Chinese Pangolin are recorded within Lion Rock Country Park in the SCVA. Also, there are wooded areas as well as 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 accessible accessed from its northern edge via the restricted access roads of Sha Tin Water Treatment Works and Tsing Sha Highway Administration Building.

The potential portal location next to the Tsing Sha Highway Administration Building is easily accessed from the adjacent expressway. The Tsing Sha Highway is a high-capacity expressway that provides easy connection to the rest of expressway network in Hong Kong. The potential portal location adjacent to the Sha Tin Water Treatments Works is about 2 km from the nearest expressway access point via Che Kung Miu Road. Traffic impact assessment shall be carried out when planning the potential uses of the SCVA.

4.6. Other Key Issues / Constraints on Cavern Development

Three Water Supplies Department tunnels are located within or in the vicinity of the SCVA, i.e. the High Island Main Tunnel passing through the central portion of the SCVA in an east-west direction; a tunnel branched from the High Island Main Tunnel to Sha Tin Water Treatment Work to the north of the SCVA; the Plover Cove Draw-off Tunnel about 400 m to the north of the SCVA. Three vehicle tunnels are located in the vicinity of the SCVA, i.e. the Eagle's Nest Tunnel about 50 m to the west of the SCVA; the Sha Tin Heights Tunnel about 200 m to the north of the SCVA; the Lion Rock Tunnel about 300 m to the east of the SCVA. Two railway tunnels of the East Rail and the Tuen Ma Line are about 50 m and 200 m to the east of the SCVA respectively. The Ex-Kowloon-Canton Railway Beacon Hill Tunnel, which is currently being used as a utility tunnel by The Hong Kong and China Gas Company Limited (Towngas) and Water Supplies Department, is about 100 m to the east of the SCVA. Owing to the difference in elevations with respect to the extent of potential portal locations, the High Island Main Tunnel and its branch tunnel would not pose any insurmountable constraint to the potential uses of rock caverns within the SCVA. As the Plover Cove Draw-off Tunnel, the three vehicle tunnels and the two railway tunnels are distant from the SCVA, they would also not pose any insurmountable constraint to the potential uses of rock caverns in the SCVA.

Wilson Trail Section 5 is located within the SCVA. Project proponents shall take 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 accessed from the restricted road within the Sha Tin Water Treatment Works to the north and another restricted road adjacent to the Tsing Sha Highway Administration Building to the northwest of the SCVA.

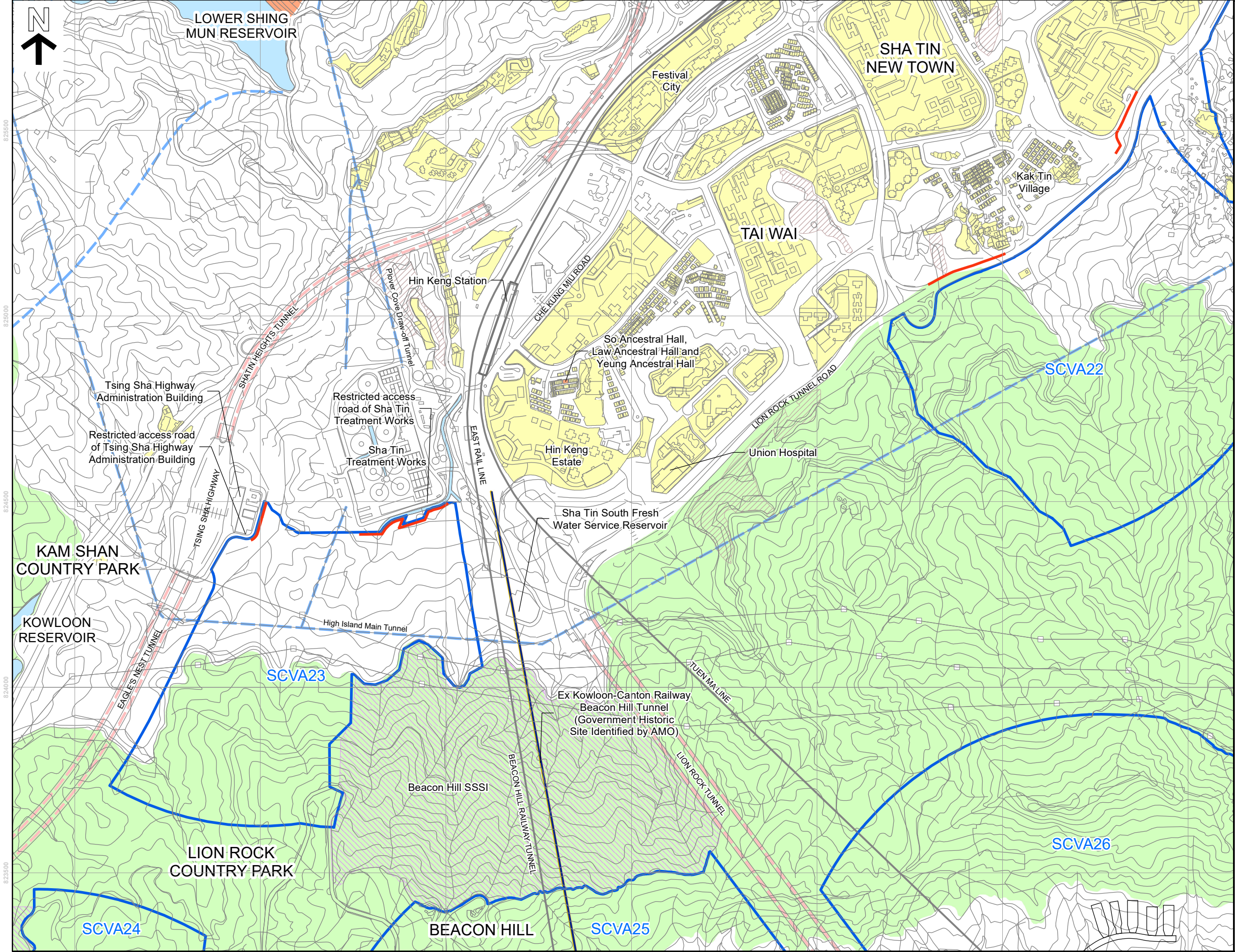
Current access to the potential portal location adjacent to the Sha Tin Water Treatment Works will be adequate for temporary and low traffic-generating activities for cavern projects. However, widening and upgrading of the carriageway would be required for moderate and high traffic-generating activities. The potential portal location adjacent to the Tsing Sha Highway Administration Building is not constrained by other development and therefore, could support a range of traffic generating activities. The access connection to the restricted road from the portal could be provided via a run-in/outs or priority controlled junction, depending on the proposed use. For both potential portal locations, the project proponents shall seek relevant consents from and coordinate with the facility owners.

There are natural slopes above the extent of 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

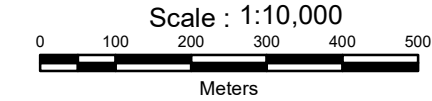
The Cavern Master Plan and all supporting documents do not exempt project proponents for cavern projects from following the relevant statutory procedures. Information including the extent of potential portal locations indicated in this Information Note should serve as reference materials only. In formulation 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
- Extent of Potential Portal Locations
- Existing Railway Line / Light Rail / Tram
- Vehicle Tunnel
- Water Supplies Department Tunnel
- Reservoir / Nullah
- Graded Historic Building
- Government Historic Site Identified by AMO
- Private Lot
- Burial Ground
- Country Park
- Abandoned Tunnel
- 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. 23 - TAI WAI WEST

CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
PLANNING DEPARTMENT



DATE: SEPTEMBER 2025
VERSION: 2nd Edition

SCVA 23