

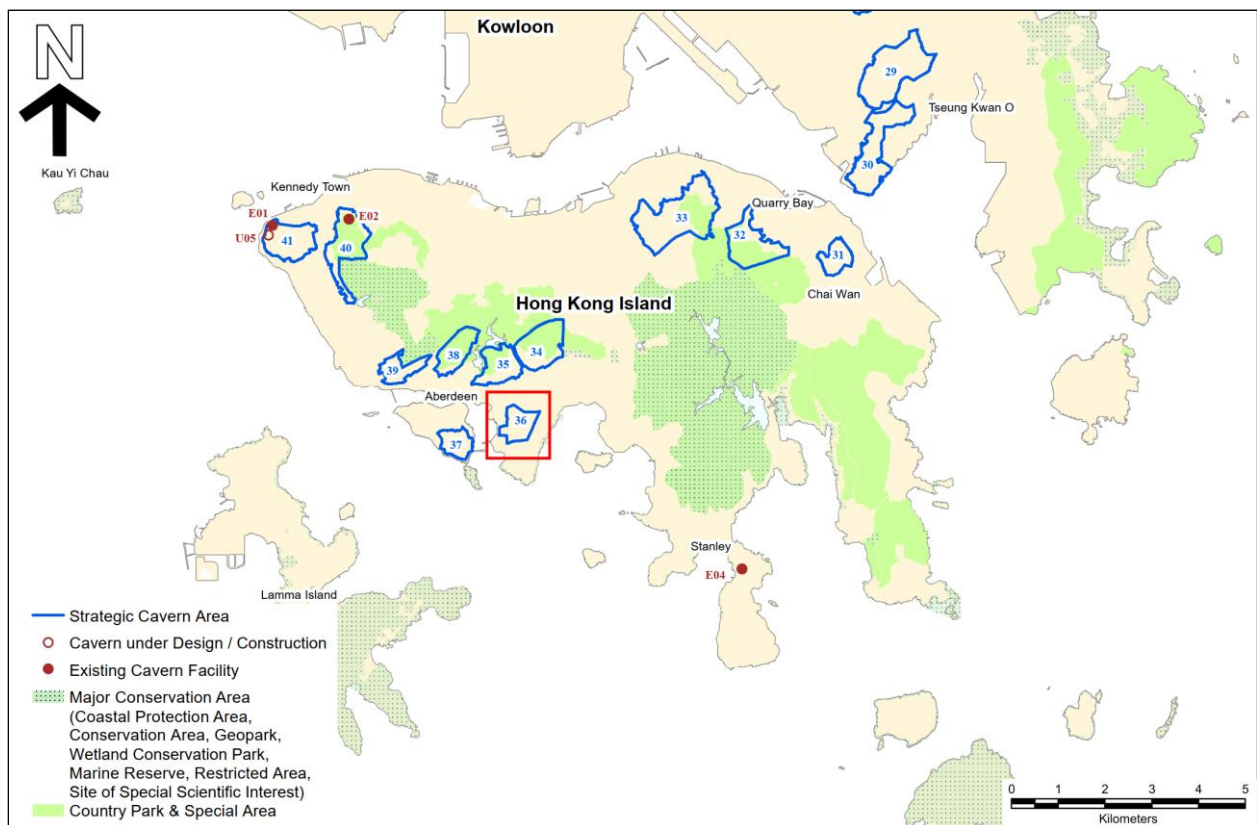
CAVERN MASTER PLAN – INFORMATION NOTE

STRATEGIC CAVERN AREA NO. 36 – NAM LONG SHAN

This Information Note describes the characteristics and development constraints of Strategic Cavern Area No. 36 - Nam Long Shan (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 :	Aberdeen and Ap Lei Chau OZP
Area:	41.7 ha
Maximum elevation in the SCVA:	+285 mPD
Minimum elevation in the SCVA:	+1 mPD

3. District Context

Location

The SCVA is located in the southern part of Hong Kong Island. It occupies the area of Brick Hill (Nam Long Shan) in Wong Chuk Hang. Shouson Hill is to the northeast of the SCVA, Wong Chuk Hang is to the north, Shek Pai Wan and Aberdeen are to the northwest and Po Chong Wan is to the west.

The SCVA is generally hilly with a maximum elevation of about +285 mPD. To the northeast of the SCVA, the area of Shouson Hill is predominantly residential communities with low-rise developments such as Shouson Peak (about 800 m to the northeast of the SCVA). To the northwest of the SCVA, the industrial area in Wong Chuk Hang has been rezoned to “Other Specified Uses” annotated “Business” and gradually transformed into a new business area for information technology and telecommunications industries, non-polluting industries, office and other commercial uses, with medium- to high-rise developments clustering along Wong Chuk Hang Road and Heung Yip Road. To the northwest of the SCVA, Shek Pai Wan and Aberdeen are other residential areas with high-rise developments, including Shek Pai Wan Estate (about 1,100 m to the northwest of the SCVA) and Yue Kwong Chuen (about 1,300 m to the northwest of the SCVA). The industrial related uses in Aberdeen are intended to be phased out gradually through redevelopment for residential uses. To the immediate west of the SCVA, there are some high-rise residential developments (such as Broadview Court at about 200 m to the west of the SCVA), a cluster of schools (e.g. Canadian International School and Victoria Shanghai Academy) and a concentration of industrial undertakings including boatyards in Po Chong Wan. This portion of Aberdeen Channel also serves as the Aberdeen South Typhoon Shelter housing a number of tourism and private recreational facilities including Aberdeen Boat Club (about 400 m to the west of the SCVA) and the Aberdeen Marina Club (about 450 m to the west of the SCVA). Ocean Park, one of the major recreational theme parks in Hong Kong, is located at the northeastern and southern 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/>).

In the proximity of the SCVA, there are a number of key Government, Institution or Community (GIC) facilities supporting the development of surrounding areas and the territory, including a cluster of hospitals and related facilities (such as Grantham Hospital at about 800 m to the north of the SCVA), Hong Kong Police College (at the northern boundary of the SCVA) and Wong Chuk Hang Fresh Water Service Reservoir (at the western boundary of the SCVA).

Access

The SCVA is accessible from its northeastern and western edges via an access road extended from Ocean Park Road, Shum Wan Road and Nam Long Shan Road. Regional connections could be routed through the nearby Wong Chuk Hang Road and Aberdeen Tunnel.

The MTR South Island Line serves the neighbouring areas of the SCVA. The nearest stations include Ocean Park Station (about 550 m to the northeast of the SCVA) and Wong Chuk Hang Station (about 350 m to the north of the SCVA). The MTR South Island Line (West) is proposed to serve the western and southern parts of Hong Kong Island. The South Island Line (West) together with the South Island Line and the Island Line will form a railway loop covering the central and western parts of Hong Kong Island. The South Island Line (West) will comprise a proposed station at Aberdeen (exact location to be confirmed) which will serve the locality in the proximity to 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 the existing GIC zoning (for facilities including Hong Kong Police College). The eastern boundary of the SCVA is defined by private lots and the Ocean Park Funicular Tunnel. The western boundary of the SCVA is defined by Nam Long Shan Road and Shum Wan Road. The southern boundary of the SCVA is defined by the Ocean Park.

4.2. Geology

The solid geology of the SCVA is primarily fine ash vitric tuff with eutaxite, which belongs to Ap Lei Chau Formation. The SCVA is with a rock type that is suitable for the uses of rock caverns. A number of geological features, such as faults, photolineaments and folds, are identified within and in areas surrounding the SCVA. The excavated rocks within the SCVA can be used as road base material and for asphalt production, etc.

Further geological information of the SCVA can be found on the 1:20,000-scale Geological Map Sheet 15 (Hong Kong South & Lamma Island) published by the Geotechnical Engineering Office, Civil Engineering and Development Department.

4.3. Planning

The SCVA is adjacent to various residential, industrial and tourism areas in Wong Chuk Hang, Shek Pai Wan, Aberdeen, Po Chong Wan and Shouson Hill and is also well connected to the rest of the territory by roads and railways. The SCVA is also strategically sandwiched by the northern and southern parts of the Ocean Park.

The areas of Shek Pai Wan, Aberdeen, Po Chong Wan and Shouson Hill are major residential communities consisted of low- to high-rise developments (e.g. Broadview Court, Shek Pai Wan Estate and Shouson Peak) supported by various GIC facilities (e.g. sports hall, school, hospital, service reservoir, etc.). There is also a plan to redevelop the aged Yue Kwong Chuen for improvement of the living environment and provision of more residential flats.

In Po Chong Wan, there is a concentration of industrial undertakings such as boatyards, taking advantage of the proximity to Aberdeen Channel, Aberdeen South Typhoon Shelter and the existing marinas in Sham Wan.

4.4. Environmental

Environmental sensitive receivers to the potential caverns in the SCVA are the nearby residential developments (including Manly Villa and Broadview Court) and schools (including Singapore International School, Victoria Shanghai Academy, Hong Kong Juvenile Care Centre Chan Nam Cheong Memorial School, Marycove School and Canadian International School). The SCVA comprises natural greenery, shrubby and wooded areas, and with natural or modified surface water courses. Coastal Protection Area is located to the east and south of the SCVA along the coastline.

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 via its northeastern and western edges via an access road extended from Ocean Park Road, Shum Wan Road and Nam Long Shan Road. Regional connections could be routed through the nearby Wong Chuk Hang Road and Aberdeen Tunnel.

The extent of potential portal locations are all reasonably accessible from the nearest expressway of Wong Chuk Hang Road and from other areas of Hong Kong via the Aberdeen Tunnel, both of which are with high capacity.

There are local concerns on the traffic capacity of the local roads in the Southern District, particularly for Aberdeen Tunnel and Ap Lei Chau Bridge Road. There are a number of schools (e.g. Singapore International School, Canadian International School, Victoria Shanghai Academy, etc.) in this area and the traffic are busy during the school traffic peak. Project proponents should take into account of the concerns and future developments in the vicinity (e.g. Wong Chuk Hang MTR Station Comprehensive Development) in traffic impact assessment on the potential traffic/construction traffic impact when considering cavern options in the SCVA and review and assess any potential traffic impact on both local and district bases.

4.6. Other Key Issues / Constraints on Cavern Development

The Ocean Park Funicular Tunnel is located approximately 50 m to the east of the SCVA. As it is away from the SCVA boundary, it would not pose any insurmountable constraint to 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 accessible from an access road extended from Ocean Park Road to the northeast; and Shum Wan Road and Nam Long Shan Road to the west.

The access road extended from Ocean Park Road is a narrow restricted road. The extent of potential portal located at a slope adjacent to this road would be suitable to accommodate low traffic-generating activities. Major road upgrading works would be required such that it could be able to support moderate to high traffic-generating activities. Since there is a distance between the potential portal location and the SCVA, a long adit will be required to connect the potential portal and the SCVA. Project proponents should liaise and obtain consent from the relevant parties/stakeholders on the use of the restricted road for potential caverns.

The extent of potential portal location along Shum Wan Road and Nam Long Shan Road are located rather near the residential developments and schools, and so they probably would not be suitable for high traffic-generating activities. Both could be accessed via a run-in/out or priority controlled junction, depending on the proposed use.

There are natural slopes above the potential portal locations. There may be potential natural terrain hazards in the vicinity which will 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.

