

**Reclamation of Sai Wan Typhoon Shelter  
and Associated Engineering Works at Cheung Chau**

**PROJECT PROFILE**

**1. BASIC INFORMATION**

1.1 Project Title

Reclamation of Sai Wan Typhoon Shelter and Associated Engineering Works at Cheung Chau.

1.2 Purpose and Nature of Project

The project concerns the reclamation of about 1.4 ha of land at Sai Wan typhoon shelter, Cheung Chau for the provision of four housing sites and local open space etc., and site formation of about 0.6 ha for a primary school. Construction of new roads and drains on the reclamation, as well as upgrading of certain roads at Sai Wan to emergency vehicular access (EVA) standard are also included in the project.

1.3 Name of Project Proponent

Hong Kong Island & Islands Development Office, Territory Development Department.

1.4 Location and Scale of Project and History of Site

Location : Sai Wan, Cheung Chau

Scale of Project (Drawing No. HKI-Z92 refers) :

- (a) about 1.4 ha of reclamation including construction of about 200m of seawall and public landing steps;
- (b) site formation of about 0.6 ha;
- (c) construction of emergency vehicular access (EVA) including extension and widening of a section of Peak Road West;

- (d) drainage and sewerage works; and
- (e) construction of a public loading and unloading area at the new waterfront.

History of Site : There are a number of indigenous villages at Sai Wan.

#### 1.5 Number and Types of Designated Projects to be Covered

This project profile covers the following designated project :

- (a) reclamation at Sai Wan typhoon shelter (including associated dredging), which is more than 1 ha in size and the boundaries of which are less than 100m from an existing residential area [Item C.2, Part I of Schedule 2 under Environmental Impact Assessment Ordinance (EIAO)]; and which occupies an area on plan in excess of 10% of any enclosed or semi-enclosed waterbody (Item C.3, Part I of Schedule 2 under EIAO).

#### 1.6 Name and Telephone Number of Contact Person

## 2. **OUTLINE PLANNING AND IMPLEMENTATION PROGRAMME**

- 2.1 It is intended to engage consultants to undertake the EIA, design and construction supervision for this project. The construction works will be carried out by contractor(s) through tendering.
- 2.2 It is tentatively scheduled that the EIA will commence in late 2000 for completion in mid/late 2001. This will be followed by design and the relevant statutory procedures, with construction scheduled to commence in early 2003 for completion in 2005.
- 2.3 It is expected that this project has no major interaction with other projects.

## 3. **POSSIBLE IMPACTS ON THE ENVIRONMENT**

This project will involve dredging and filling works for the seawall and reclamation;

removal of existing breakwater and seawall; site formation works; construction of EVA and associated retaining walls; laying of stormwater drains, sewers and utilities; and construction of a loading/unloading area. It is anticipated that during the reclamation and other construction activities associated with the project, potential noise, air, water, waste, cultural heritage, visual and landscape impacts may arise. As the land formed under the project is mainly for residential and educational facilities, no significant operational phase environmental impacts are expected. Detailed information is provided in the following sub-sections.

### 3.1 Water Quality

During the dredging and filling processes and the removal of existing breakwater and seawall, sediment within the Sai Wan typhoon shelter comprising fine marine mud may become suspended in the water column and affect the quality of waterbody in the typhoon shelter.

### 3.2 Noise

During the construction stage, the operation of marine and land plants may generate intermittent and transient noise nuisance to the nearby noise sensitive receivers. There may also be limited scale of noise impacts on local resident induced by plying motorised sampans/kaitos using the public landing steps and village vehicles using the loading and unloading area.

### 3.3 Air Quality

During the construction stage, dust generated from the transportation and storage of fill materials and gaseous emissions from construction plants may have an impact on the air quality, especially in dry seasons.

### 3.4 Visual Quality and Landscape

With the introduction of new residential sites, public landing steps and a loading and unloading area, there may be a loss of visual quality and landscape at the site and its surrounding areas.

### 3.5 Natural Habitat/Ecology

The reclamation is at an existing typhoon shelter. The school site is adjacent to a

countryside conservation area (CCA).

### 3.6 Cultural Heritage

The school site, the seabed of the typhoon shelter and the site south-east of the reclamation are identified as areas of archaeological interest. The EIA study will analyse any potential impacts on cultural heritage and recommend appropriate mitigation measures.

## 4. **MAJOR ELEMENTS OF THE SURROUNDING ENVIRONMENT**

4.1 Sensitive receivers and sensitive parts of the natural environment, which may be affected by the proposed project, include the following :

- (a) existing village type residential developments to the south of the reclamation;
- (b) an existing Chinese temple to the west of the reclamation;
- (c) visual value of the surrounding environment; and
- (d) sites of archaeological interest indicated in para 3.6 above.

4.2 Major elements of the surrounding environment and existing and/or relevant past land uses on site which might affect the area in which the project is proposed to be located include the following:

- (a) an existing pier at the breakwater; and
- (b) two existing stormwater outfalls discharging into Sai Wan typhoon shelter.

## 5. **ENVIRONMENTAL PROTECTION MEASURES TO BE INCORPORATED IN THE DESIGN AND ANY FURTHER ENVIRONMENTAL IMPLICATIONS**

### 5.1 Water Quality

Preliminary calculations indicated the dredging of some 21 000m<sup>3</sup> of sediment from within Sai Wan typhoon shelter would be required for the construction of a seawall trench. Approximately 80 000m<sup>3</sup> of fill will be used for the reclamation. The

semi-enclosed nature of the typhoon shelter and the associated hydrodynamics are likely to confine suspended sediments within the typhoon shelter, and in addition sediment control mitigation measures will be provided to contain the sediment losses during construction.

By implementing adequate construction site drainage according to the practices outlined in ProPECC PN 1/94 “Construction Site Drainage”, the surface runoff can be controlled satisfactorily without significant adverse impact during construction.

## 5.2 Noise

The noise level arising from construction activities will be regulated by the licensing conditions of construction noise permits issued under the Noise Control Ordinance.

The mitigation measures recommended in ProPECC PN 2/93 “Noise from Construction Activities – Non-statutory” will be implemented, as appropriate, to control the noise impacts. In addition, quieter powered mechanical equipment (PME) and/or movable noise barriers can be used to reduce the noise generated to acceptable levels during construction.

## 5.3 Air Quality

The potential dust impacts arising from construction activities will be controlled by the Air Pollution Control Ordinance and its subsidiary Regulations. Appropriate dust suppression measures such as watering will be adopted during construction.

## 5.4 Visual Quality and Landscape

The potential issues of visual and landscape impacts of the project will be addressed and studied in the EIA.

## 5.5 Natural Habitat/Ecology

The EIA will analyse any potential impacts on the natural habitat/ecology and recommend mitigation measures as appropriate.

## 5.6 Cultural Heritage

Archaeological investigations will be carried out at the various sites of archaeological interest and rescue excavations will be undertaken as appropriate prior to commencement of construction activities.

5.7 Apart from the above-mentioned mitigation measures, the EIA study will investigate in detail the environmental and archaeological impacts and propose appropriate mitigation measures which will be incorporated into the design and implemented during construction. The effectiveness of such mitigation measures adopted will also be closely monitored by implementing appropriate monitoring and audit schemes to ensure their effectiveness.

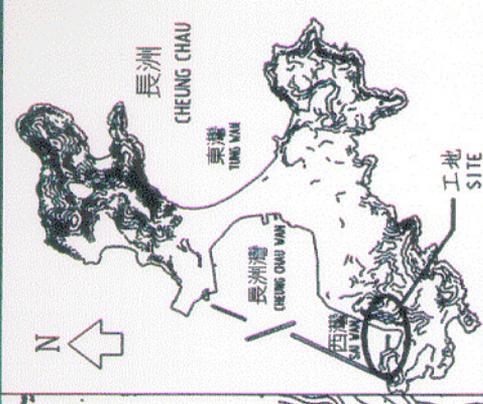
## 6. USE OF PREVIOUSLY APPROVED EIA REPORTS

There is no previous EIA reports prepared for Sai Wan, Cheung Chau for a project of similar nature.

**Attachment** : Drawing No. HKI -Z92

Hong Kong Island and Islands Development Office  
Territory Development Department

註 NOTES :



圖例 LEGEND :

— 工程界限  
PROJECT BOUNDARY

— 擬建之緊急車輛通道  
PROPOSED EMERGENCY VEHICULAR ACCESS

繪圖 drawn	日期 date
W T Fung	30-3-2000
核對 checked	日期 date
K T Wong	30-3-2000

圖則名稱 drawing title  
**長洲西灣避風塘填海及相關工程**  
Reclamation of Sai Wan Typhoon Shelter and Associated Engineering Works at Cheung Chau

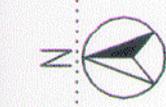
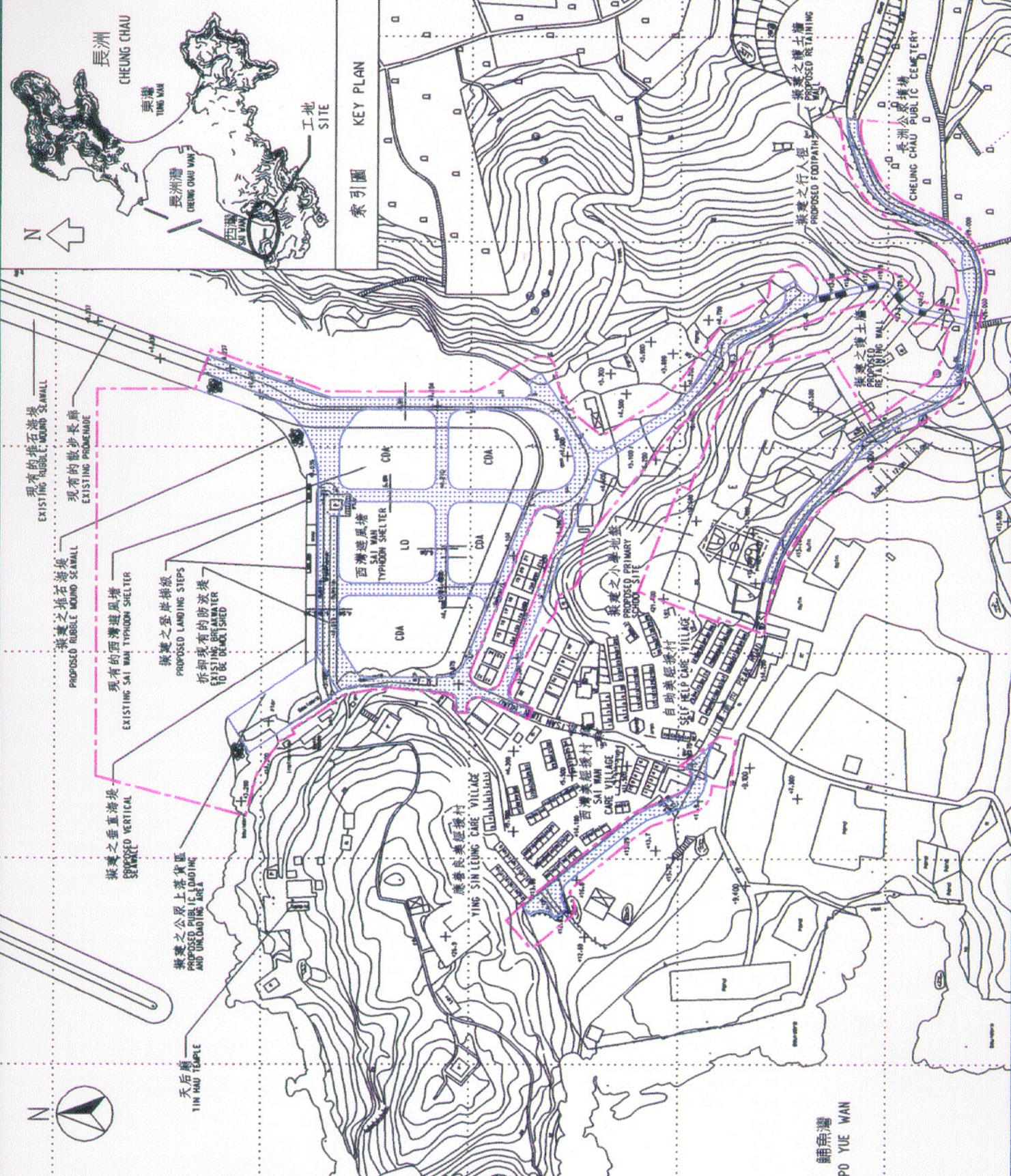
圖則編號 drawing no.  
**HK I-292**

比例 scale  
1 : 2500

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索引圖 KEY PLAN



鋪魚灣  
PO YUE WAN