# Islands District Council Tourism, Agriculture, Fisheries and Environmental Hygiene Committee <u>Paper No. TAFEHC 12/2017</u>

# Landslip Prevention and Mitigation Programme Natural Terrain Hazard Mitigation Works at Natural Hillsides above Silver Mine Bay, Lantau Island (Study Area No. 10SW-A/SA2)

## Purpose

The purpose of this circulation paper is to provide information on the natural terrain hazard mitigation works proposed by the Civil Engineering and Development Department (CEDD) at the natural hillsides above Silver Mine Bay, Lantau Island.

## Background

The Government's strategy for management of natural terrain landslide risk aims at containing the natural terrain landslide risk to a level that is as low as reasonably practicable. Study and mitigation of natural terrain landslide hazards affecting existing developments are systematically carried out under the Landslip Prevention and Mitigation Programme, following the 'react-to-known-hazard' principle.

Pursuant to the above strategy, the Geotechnical Engineering Office of CEDD carried out a natural terrain hazard study for the natural hillsides above Silver Mine Bay (see attached Figure 1). The study reveals that there are debris flow and open hillslope failure hazards, which would affect the Methodist Retreat Centre and village houses of Tung Wan Tau Tsuen at the toe of the Study Area. Hazard mitigation works are therefore considered necessary for the sake of public safety.

## **Scope of Works**

Various factors have been taken into account in the design of the hazard mitigation works, which include the technical feasibility, cost-effectiveness, traffic impact, environmental impact and future maintenance. As shown on the attached Figure 1, the proposed hazard mitigation works comprise the following:

- (i) construction of 4 nos. of flexible barriers; and
- (ii) provision of landscape and greening measures.

## **Traffic Arrangement during Construction**

Occasional transportation of construction materials to the site via Ngan Shek Street and Tung Wan Tau Road will be required. Appropriate temporary traffic management schemes with the agreement from the relevant government departments (including the Transport Department and Traffic Management Office of the Hong Kong Police Force) will be implemented to minimise the impacts on road users. As the transportation of construction materials is only required occasionally and on an as-needed basis, no significant impact on the road traffic is anticipated.

### **Environmental Impact**

Limited vegetation clearance will inevitably be required for providing site access and space for construction of the necessary mitigation measures. However, no tree felling will be required. Appropriate measures will also be taken to protect the existing trees during execution of the works. Landscape and greening works will be carried out in order to restore the natural hillsides to a natural setting. We will provide resident site staff to closely monitor the levels of noise, dust and muddy water generated during the course of construction so as to minimise adverse environmental impacts.

### Land Matter

The above proposed works are to be constructed on Government land. No private land resumption is required.

### **Construction Programme**

The design of the proposed hazard mitigation works is now in progress. The works are tentatively scheduled for commencement in the fourth quarter of 2017 and targeted for completion by the fourth quarter of 2020 (i.e. about 3 years of construction time).

#### **Local Consultation**

A local consultation for the proposed works has been carried out with the stakeholders and was finished on 30 September 2016. No adverse comment on the proposed works was received.

#### **Contact Person**

Should members of the District Council require any further information, please feel free to contact the following officers:

Mr. FU Chun Yin, Anthony	Tel.: 2762 5461
(Geotechnical Engineer)	Email: anthonycyfu@cedd.gov.hl
Mr. CHING Kam Hung, Raymond	Tel.: 2762 5423
(Senior Geotechnical Engineer)	Email: khching@cedd.gov.hk

Geotechnical Engineering Office Civil Engineering and Development Department March 2017