

DEFENCE WORKS - 'LIVINALLONGO DEL COL DI LANA/STRADA PALLA-AGAI' LIVINALLONGO DEL COL DI LANA, VENETO, ITALY

Dynamic Barriers

Problem

The flooding events of late October 2018, associated with a very serious windstorm episode, produced in the regional mountain territory and in particular in the Belluno area of Alto Agordino, the destruction of large areas of woods. A significant part of these woods, performed important protective functions in relation to the danger of avalanches to inhabited areas, individual dwellings and their access roads. The need to remove the woody mass on the ground highlighted the need for works to guarantee the stability of the snowpack, leading to avalanche risk prevention. The avalanche area under examination, caused by the crash, is an open slope with a southern exposure and an average slope of 35.5°, and is located above the municipal road for Palla - Agai in the municipality of Livinallongo del Col di Lana. The area extends over an area of approximately 7.5 ha, from an altitude of 1450 m asl to an altitude of 1650 m asl, for a maximum length of approximately 280 m and a width of 420 m. From the surveys carried out, the concrete possibility of rock falls that can detach from the overhanging rock walls was highlighted. This problem is also evident in the meadows below the road, where even recently formed accumulations can be seen. The conditions described above were greatly exacerbated by the flood of October 2018, which led to the reshaping of the debris and helium cover due to the crashing of countless plants.

Solution

In this intervention, rockfall barriers type RB 2000 with an interception height of 4.0 m were installed in order to protect the road infrastructure and houses located downstream of the avalanche site from falling rocks.

Client: Veneto Strade

Designer / Consultant: Eng. M. Artusato

Contractor: Esseti srl Sistemi e Tecnologie

Products used (Qty.)

- Dynamic Barrier RB 2000 1080 mq

Date of construction: 11/2020 - 06/2021



RB 2000 rockfall barriers



Solution details - Energy dissipating devices



RB 2000: a quick to install protection