MACCAFERRI

CASE HISTORY

Rev: 3, Issue Date 16.10.2024

REAVERS LANE DEBRIS FLOW PROTECTION WORK

QUEENSTOWN, SOUTH ISLAND, NEW ZEALAND

Debris Flow Barriers

Problem

Skyline Queenstown is a tourist attraction service in Queenstown, New Zealand. The location is in hilly terrain and natural channels are observed at several locations. One of such location is identified by the client. The channel section with frequent debris flow was an obstruction for ongoing construction activities and needed emergency protection work.

Solution

Various solutions were explored by the designer for this problem. After due diligence, Maccaferri debris flow barrier was selected as emergency protection measure. 3m high channelized barrier was designed to withstand 100kPa debris pressure with 4.5m/s velocity. The barrier was designed to accommodate approx. 500cum volume of debris. The channel section was 9.5m wide at top and 4m wide at bottom. Horizontal ropes were provided at 3 levels with 1.5m spacing apart.

Client: Skyline Queenstown

Designer / Consultant: Geosolve ltd.

Contractor: Headsup Access ltd.

Products used (Qty.)

- Debris Flow Barriers	100kPa DFB - 9.5m wide & 3m ht

Date of construction: 11/2023 - 12/2023

Google Maps Google Earth



Before construction



Installed barrier



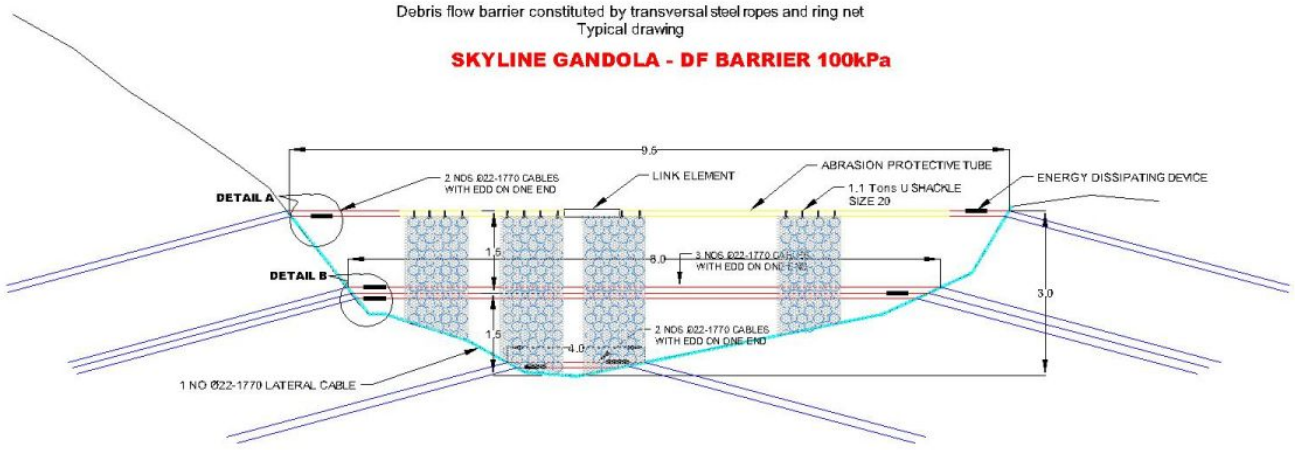
Installed barrier



Connection



Installed barrier



Typical cross section

Maccaferri (Malaysia) Sdn. Bhd.
Unit 511, Block G, Phileo Damansara 1, No. 9, Jalan 16/11, Off Jalan Damansara, 46350
Petaling Jaya, Selangor Darul Ehsan, Malaysia
T: +60 3 7955 7800
E: info.my@maccaferri.com