

**LAGONOY - PRESENTACION ROAD, CAMARINES SUR, ROCKFALL BARRIER**  
**CAMARINES SUR, REGION V, PHILIPPINES**

Dynamic Barriers

**Problem**

Certain sections along Lagonoy - Presentacion Road in Camarines Sur are characterized with steep slope with loose fragments occasionally falling, bouncing, rolling, and sliding down along the slope due to weathering actions.

With the Convergence and Special Support Program Special Road Fund, DPWH Regional Office 5 seeks to address possible safety concerns in identified critical areas using Maccaferri Dynamic Rockfall barriers to capture falling boulders and protect the road infrastructure and passers-by in the event of rockfall.

Rockfall simulations have been performed and the impact energy identified is 1500 kJ.

**Solution**

Maccaferri RB1500 has been proposed as it has undergone EAD 340059-00-0106 assessment and has proven to be a competent barrier. The fence is designed to withstand the impact of multiple impact scenarios.

After rigorous screening and qualification in terms of product performance and quality compliance, the proposal was approved and accepted by DPWH Regional Office 5. Subsequently, construction works were awarded to ALRO Constructions. The following potential issues were considered in determining the suitability of a solution: the ability to mitigate the range of identified hazards, road safety, cost considerations, and constructability. The fence option presented was the best fit for the site and met all the requirements.

Maccaferri Philippines, Inc. (MPI) provided design and technical assistance to the client and the contractor. Maccaferri is involved from the project's preliminary design stage until completion. The MPI team assisted in the preparation of barrier installation and maintenance method statements to guide the contractor in their work. Site concerns during installation by the Client and Contractor were also addressed promptly.

Maccaferri dynamic barriers have been shown to have low maintenance costs due to the system's durability to withstand multiple impacts, with only damaged components requiring replacement after an assessment by a competent person.

**Client:** Department of Public Works and Highways Regional Office 5

**Designer / Consultant:** Department of Public Works and Highways Regio

**Contractor:** ALRO Construction

**Products used (Qty.)**

- Dynamic barrier RB 1500 300 linear meters

**Date of construction:** 08/2021 - 02/2022



Completed



Completed



Completed project with vegetation



Completed project with vegetation



Completed



Completed project with vegetation