

## CEBU TRANSCENTRAL HIGHWAY

### CEBU, REGION VII, PHILIPPINES

#### Slope Protection

##### Problem

The Cebu Transcentral Highway is located in Barangay Cansamoroy, Balamban, in the province of Cebu, and is approximately 33 kilometers long. It's one of Cebu's most ground-breaking transportation development as it makes land travel to several destinations in Cebu's central and northwestern regions faster and easier.

However, certain sections in Balamban Transcentral Highway imposed danger to the infrastructure and motorists passing by. Contractors and designers sought to prevent hazards such as falling rocks or boulders, landslides, and debris flows during heavy rainfall or typhoons.

##### Solution

Maccaferri Rockfall Protection system was used in mitigating these natural hazards as it proved to be extremely efficient in performing its function, durable, economical, and environmentally friendly. The 329-meter long Maccaferri's Dynamic Rockfall Barriers 750 kJ or Catch Fences were installed on the slope face to intercept and manage falling rocks or boulders before they fall onto the infrastructure. This energy absorption device is a simple yet effective mechanism because it maintains performance throughout the entire design life of the structure.

In addition, Maccaferri's Steelgrid® MO and Maccaferri's Erosion Control Mat were secured to the slope face to prevent surface erosion from run-off. Maccaferri's Steelgrid® MO is a geocomposite that includes steel cables integrated longitudinally into the double twist mesh as the edging wire and at the center of the roll. Maccaferri's Erosion Control Mat is a geomat made from a three-dimensional matrix of UV stabilized, non-degradable synthetic fibers, heat bonded where they cross. It is used for long-term erosion protection applications as it immediately increases the soil's resistance to erosion by providing an environment that enhances the growth of vegetation through the mat. Slope stability is projected to improve over time as the structure self-vegetates, leading to an aesthetically beautiful green face that blends in perfectly with the environment.

**Client:** Department of Public Works and Highways

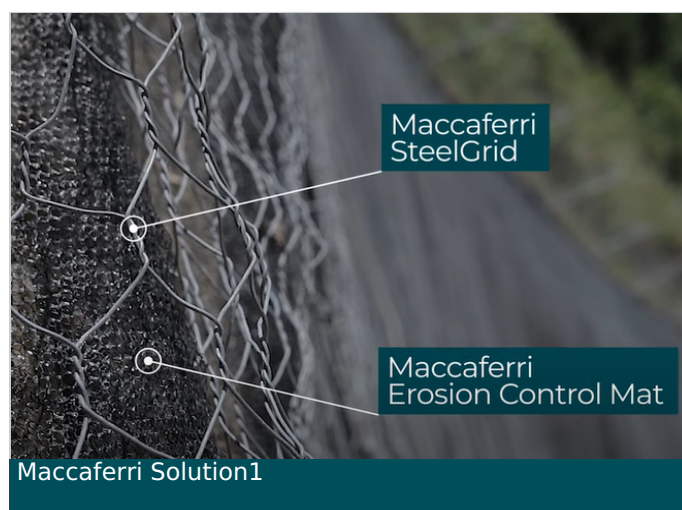
**Designer / Consultant:** Department of Public Works and Highways

**Contractor:** Helm Construction and Supplies

##### Products used (Qty.)

- Dynamic barrier RB 750	328 meter
- MacMat	N.A.
- Steelgrid	N.A.

**Date of construction:** 07/2021 - 09/2021





329 meter long



Completed



Completed