

Reinforced Slope Protection for Road Widening in Claveria, Misamis Oriental

Cagayan De Oro City



Project Completed

TYPE OF PROJECT	YEAR OF CONSTRUCTION	CLIENT	CONTRACTOR	DESIGNER
Reinforced Soil Walls And Slope Reinforcement	2025	Pyramid Consolidated Builders	Pyramid Consolidated Builders	
PROD. RELATED TerraMesh (650 Sqm)				

Challenge

In Claveria, Misamis Oriental, a road widening project required expanding the existing carriageway toward a steep cliffside area that was highly prone to landslides and erosion. The unstable terrain presented significant geotechnical risks, making it unsafe for conventional retaining methods. To ensure long-term road stability and public safety, a reinforced slope protection system was necessary to support the new embankment.



Completed Project



Completed Project

Solution

To address these challenges, Maccaferri Philippines implemented a Mechanically Stabilized Earth (MSE) wall system using Terramesh System®, an engineered solution designed to reinforce slopes and provide structural integrity to road embankments. Covering an area of approximately 650 square meters, the system integrated several geosynthetic components for enhanced performance, MacTex® for separation and filtration, MacDrain® for effective drainage, geogrids for soil reinforcement, and HDPE pipes for surface and subsurface water management. Together, these materials formed a robust and well-drained structure capable of withstanding heavy loads and reducing landslide risk.

The completed MSE wall provided a stable and reliable foundation for the widened roadway, ensuring safety for motorists and resilience against future slope movements. Through its combination of reinforcement, drainage, and erosion control, Maccaferri's engineered system has transformed a high-risk cliffside into a secure and sustainable infrastructure asset for Claveria, Misamis Oriental.