

20MW ORMOC BATTER ENERGY STORAGE SYSTEM - SLOPE PROTECTION

ORMOC, LEYTE, PHILIPPINES, REGION VIII, PHILIPPINES

Slope Protection

Problem

The new innovations of renewable energy have widely diversified in the country. One of the renewable sources is the Battery Energy Storage Systems which is part of the expanding portfolios into cleaner energy at the Philippines. The SMC Global Power Holding Corp. has proudly had its own growing Battery Storage located at Brgy. Milagro, Ormoc City, Leyte.

The project site has found to be on an elevated natural slope which is around 8 meters high with an initial riprap slope protection. Since the elevated area has its battery storages, the slope must be protected and free from erosion due to high load carriage of the area. Minor erosion problem is the main concern of this project.

Active Geoanchor Inc. is seeking for a cost-effective alternative solution to traditional slope protection and erosion control protection while providing a structural sound structure.

Solution

To address dangers of slope instability such as surficial erosion, Maccaferri's Erosion Control Mat - MacMat R were used for the slope protection of Ormoc Battery Energy Storage. The erosion mat gives higher shear resistance to prevent erosion within the slope surface. Overall, significant cost savings were realized by the client against the concrete slope protection.

Client: SMC Global Power Holdings Corp.

Designer / Consultant: Active Geoanchor Inc.

Contractor: Active Geoanchor Inc.

Products used (Qty.)

- MacMat R - Steel 12 rolls

Date of construction: 09/2022 - 10/2022



During Construction



During Construction



During Construction



During Construction



During Construction



During Construction