

AMUYONG
ALFONSO, CAVITE, REGION IV-A, PHILIPPINES**Reinforced Soil Walls and Slope Reinforcement****Problem**

The Provincial Engineer's Office of Cavite has proposed the construction of a reinforced concrete wall at Brgy. Amuyong, Alfonso, Cavite for the purpose of retaining the soil below the shoulder of a portion of the municipal road, which has collapsed due to heavy rains.

However, the required cut on the existing soil for the foundation of the designed reinforced concrete (RC) wall has been limited. In this, the designed RC wall was revised with a smaller wall height. To compensate the required height while recognizing the limitation of space for construction, a reinforced soil structure was needed.

Solution

Maccaferri proposed a 5m-high reinforced soil slope (RSS) for the project using MacGrid woven polyester geogrid for soil reinforcement combined with MacBag soil bags for the erosion protection of the fascia following a wrap-around construction technique. After evaluation of the Provincial Engineer, also due to its economical aspect, the design was approved. The reinforced backfill of the RSS retaining structure has been required to be compacted to a minimum 95% of MDD by Standard Proctor.

The site has a nice weather for vegetation, thus after a month of construction, plants started growing at the facing of the RSS.

Client: Cavite Provincial Engineer's Office

Designer / Consultant: Provincial Engineer's Office

Contractor: Jeddai Construction

Products used (Qty.)

- MacGrid WG	N/A
- MacTex Non-woven Geotextile	N/A
- MacDrain W	N/A
- MacBag	N/A

Date of construction: 01/2017 - 04/2017



Site Preparation



During Construction



During Construction



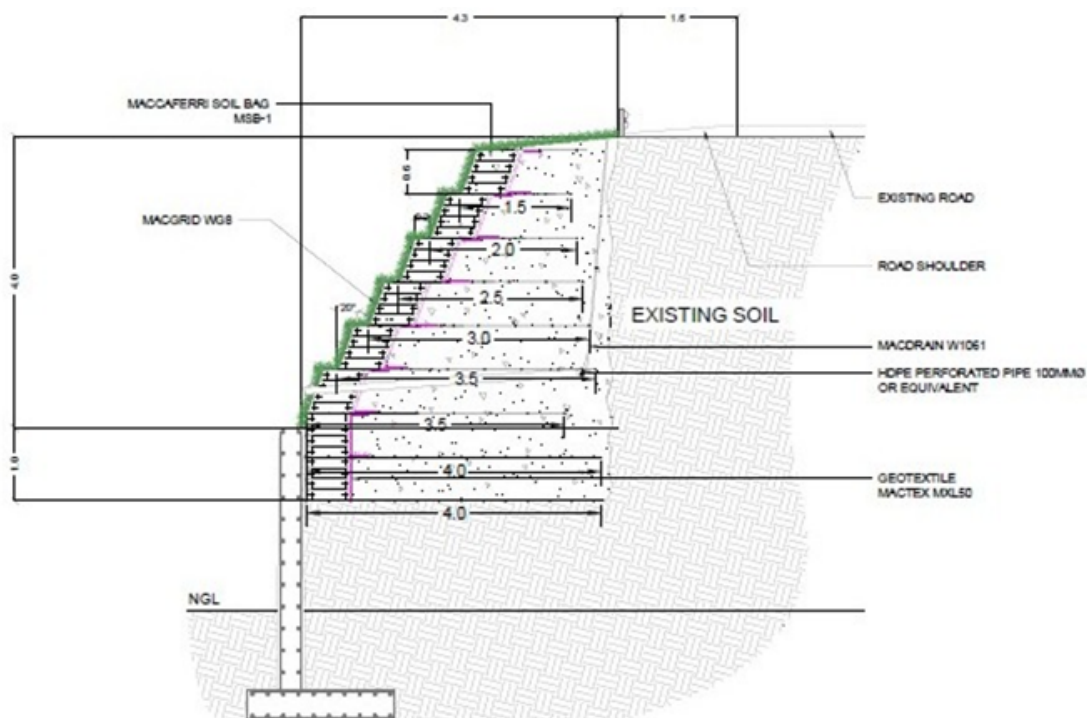
Project Completed



Project Completed



Project Completely Vegetated



Typical Cross Section Detail

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