

CIRCULO VERDE
BAGUMBAYAN, QUEZON CITY, METRO MANILA, PHILIPPINES**Reinforced Soil Walls and Slope Reinforcement****Problem**

Circulo Verde is a 10-hectare master planned residential condominium community located at Calle Industria, Bagumbayan, Quezon City, Philippines by Ortigas & Company.

The finished grade of the development has been raised a few meters high above the adjacent Marikina River for protection against incessant flooding. In this, the Project Consultant, DCCD, designed a wall system composed of mechanically-stabilized earth wall on top of a sheet pile wall.

Solution

Based on the data provided by the Project Consultant, an MSE wall system of heights varying from 5.5 meters to 8.9 meters, and with length of about 226 meters featuring Anchor Diamond Pro concrete blocks for fascia has been designed and recommended by Maccaferri. MacGrid high-tenacity woven polyester geogrids were used for soil reinforcements of the MSE wall.

The reinforced backfill of the MSE wall has been required to be compacted to minimum 95% of MDD by Standard Proctor.

With the rock-like finish of the Anchor Diamond Pro concrete blocks for the facing of MSE wall, aesthetics requirement was met. The wall has proven to be effective and has been tested by several floods to date.

Client: New Arcond Builders, Inc. (NABI)

Designer / Consultant: DCCD

Contractor: AMCON & COMPANY

Products used (Qty.)

- Anchor Diamond Pro Blocks	N/A
- MacTex Non-woven Geotextile	N/A
- MacGrid WG	N/A

Date of construction: 01/2016 - 09/2016



Circulo Verde



February 2016 - During Construction



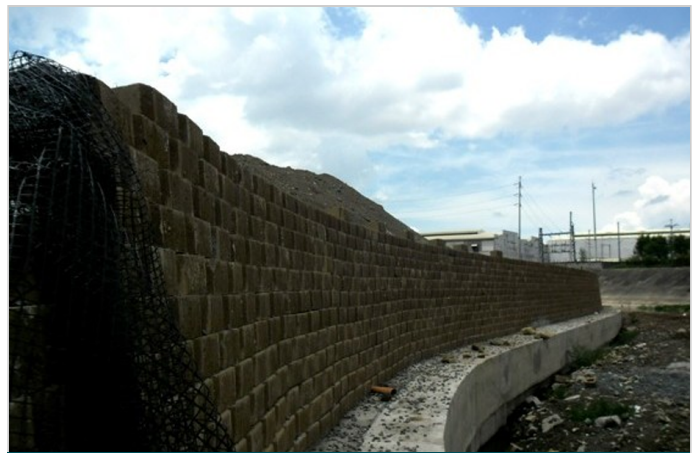
March 2016- Partial Completion of the Project



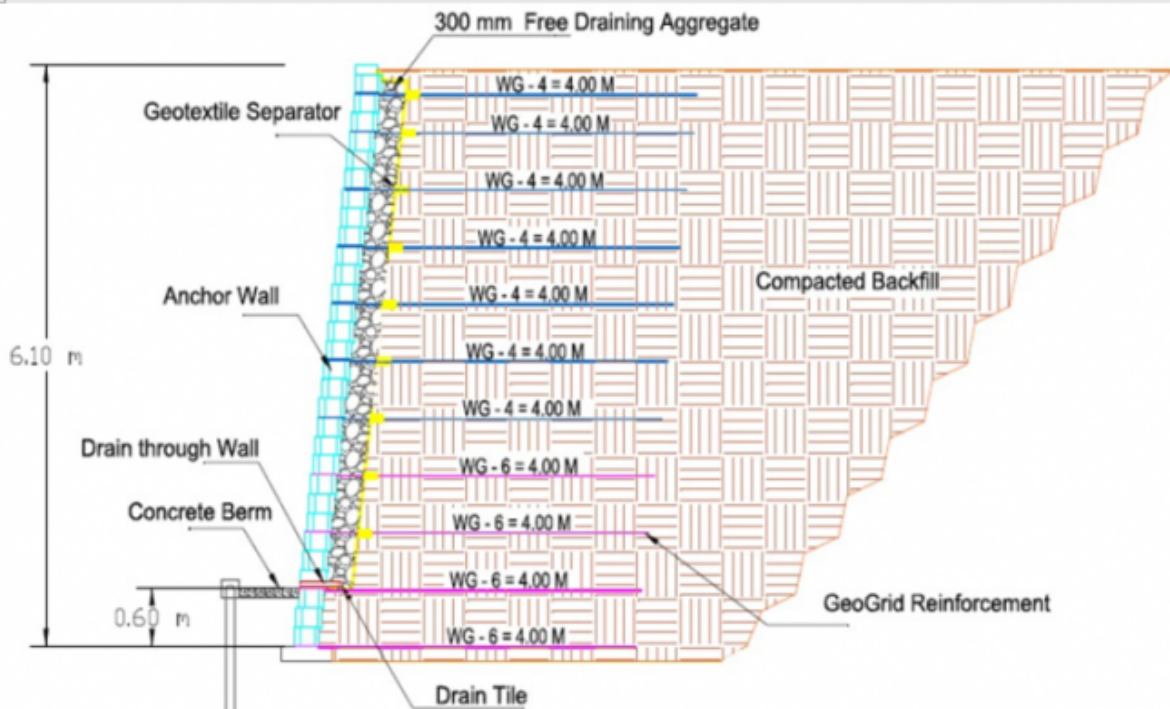
March 2016- Partial Completion of the Project



May 2016 - During Construction



May 2016 - During Construction



Typical Cross Section Detail

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