

## SOUTH PEAK VILLAGE

### SAN PEDRO, LAGUNA, REGION IV-A, PHILIPPINES

#### Reinforced Soil Walls and Slope Reinforcement

##### Problem

A six-meter high stone masonry wall along a creek inside the South Peak Village in San Pedro, Laguna, Philippines has collapsed and thus required urgent rehabilitation. The said wall was designed to support the saleable lot for residential development. Build up of excess pore water pressure behind the wall was the main reason of wall failure as per the post-failure investigation.

##### Solution

FLI engineers explored all possible alternatives to the failed stone masonry wall. Maccaferri engineers proposed a new wall concept - the mechanically-stabilized earth wall, using Terramesh units. Upon review of FLI engineers, the design was approved considering integrity, economy, and ease of installation even on rainy season.

Moreover, the other advantages of the Terramesh system MSE wall over rigid structures are: 1) it reduces build-up of excess pore water pressure behind the wall, 2) it is a flexible structure (allows certain degree of movement), 3) it can be installed easily even by unskilled workforce; 4) it is an environmentally-sound solution that encourages the growth of vegetation and fauna, and 5) aesthetically-looking finish of wall surface.

**Client:** Filinvest Land Inc.

**Designer / Consultant:** Filinvest Land Inc.

**Contractor:** Infracore Philippines Inc.

**Products used (Qty.)**

- |                               |     |
|-------------------------------|-----|
| - Terramesh                   | N/A |
| - MacTex Non-woven Geotextile | N/A |

**Date of construction:** 09/2000 - 12/2000



Before Construction



During Construction



After Completion



After Completion