GEOTECHNICAL / REINFORCED SOIL WALLS
Product: Terramesh® System

Problem
In 1994, V3 Consulting Engineers in Pietermaritzburg, designed a reinforced soil wall to prevent any further failure along the Old Howick Road which is well known for its unstable soil embankments.

Solution
A Terramesh® retaining structure consisting of gabion facing 1m wide and reinforcing mesh tails 3m long was constructed.

The mesh tail (80 x 100 x 2.7mm Class A Galvanised and PVC coated) extended into the embankment to reinforce the soil.

The units were placed on a firmly compacted foundation before being filled with a 100 - 250mm size rock from Willow Fountain quarry.

Geotextile was then cut to length and attached to the rear of the gabion facing before backfilling commenced.

All the Terramesh® units were laced together to create a monolithic structure.

Benefits
The utilisation of local unskilled labour proved that the installation of the gabion structure was labour intensive.

The erection of a Terramesh® wall, minimised the quantity of rock required (+60% less than the traditional mass gravity structure).

As well as being cost effective, the structure is also aesthetically pleasing.

The maximum elongation of the reinforcing component of the Terramesh® units is only 2%.

Client name:
PIETERMARITZBURG TOWN COUNCIL

Consultant:
V3 CONSULTING ENGINEERS

Product used:
TERRAMESH® SYSTEM

Construction info:
Construction date: 1994
Completion date: 1994
Typical Section

As part of the ISO 9001 Management Systems, guided research and development programmes, information contained herein is continuously updated. Please confirm with Maccaferri SA (Pty) Ltd the latest version of the Product’s Specification available.