

Case Study

application CR 46A Terraced Vegetated Slope
location Sanford, FL
product Miragrid® 3XT and Miramesh® GR

job owner Seminole County
engineer SRDI
contractor Gibbs and Register

TenCate™ develops and produces materials that function to increase performance, reduce costs and deliver measurable results by working with our customers to provide advanced solutions.

THE CHALLENGE

This project in Seminole county (North of Orlando, FL) was a road widening project from a 2 lane to a 4 lane county road. The challenge was to look for a way to overcome an 8' change in grade from one side of the road to the other. The County engineers were interested in an economical solution that would provide the most aesthetic solution possible. The system chosen was the Miramesh® GR wire wall system utilizing TenCate's Miragrid® products.

THE DESIGN

The main challenge/objective was to come up with a viable solution that was economical and easy to install. Aesthetics were also a concern. The design, performed by Soil Reinforcement Design, Inc. called for Miramesh® GR and the Miragrid® 3XT with a wire basket facing. The Miramesh® GR is a fairly open high tenacity monofilament polypropylene product and the Miragrid® 3XT is a polyester geogrid product that provides excellent reinforcement for walls and slopes and has low creep values. A terraced vegetated wall was chosen in lieu of sheet piling or modular block wall.

THE CONSTRUCTION

The installation was started in June of 2007 and completed a month later by Gibbs and Register. John Rodriguez, the project manager with Gibbs and Register lead the installation team on the project and had never installed a wire wall system before. The installation of the system was easy, economical and aesthetically pleasing. The total length of the wall was approximately 400' and tapered from 8'.



THE PERFORMANCE

The Miramesh® GR and Miragrid® 3XT system worked out both from an economical and aesthetic perspective. The facing on the wall can include hydroseeding the face with grass, honeysuckle, small bushes, etc. These varying options for the facing allow for flexibility even in this economical system. The other potential remedies included were the use of concrete, rebar, etc., which would have cost much more than the TenCate™ system for both materials and installation. This job was a success and should last for many years to come.



TenCate™ Geosynthetics North America assumes no liability for the accuracy or completeness of this information or for the ultimate use by the purchaser. TenCate™ Geosynthetics North America disclaims any and all express, implied, or statutory standards, warranties or guarantees, including without limitation any implied warranty as to merchantability or fitness for a particular purpose or arising from a course of dealing or usage of trade as to any equipment, materials, or information furnished herewith. This document should not be construed as engineering advice.

Mirafi® is a registered trademark of TenCate™ Geosynthetics North America.

12.07

365 South Holland Drive Tel 800 685 9990 Fax 706 693 4400
Pendergrass, GA 30567 Tel 706 693 2226 www.mirafi.com



TENCATE
materials that make a difference