



BROOKWORTH PLAZA SHOPPING CENTER EAST BRADFORD TOWNSHIP, PENNSYLVANIA

Application: A multi-wall installation to support building pads for a new retail strip center and to retain a detention pond behind the center's site.

The Challenge: The center's site featured an 80-foot grade change. In addition, the township wanted green sightlines to the detention pond wall from three nearby residences and an adjacent roadway.



A structural and aesthetic solution is achieved at Brookworth Plaza by combining both the Mesa and SierraScape Systems.

Site Conditions: Native soils did not pose a problem. However, unusually heavy rains through the summer presented runoff issues at the basin site during construction.

Alternative Solutions: The center was originally specified with another segmental block wall system long used by the installation contractor. With the township's request for a green installation, the wall designer proposed a combination solution that included both the Mesa® and SierraScape® Systems. The switch provided single-source convenience and accountability as well as the ability to address structural concerns, aesthetic requirements and political considerations.

The Solution: The entire installation includes eight Mesa Segmental Retaining Walls and one SierraScape Wire-Formed Retaining Wall. Seven Mesa Walls were installed to support the center's building pads. The Mesa Wall that retains the detention pond measures 16 feet 4 inches in height. Tensar® Geogrids extend 27 ft. in the reinforced zone. To address the stormwater basin, free-draining imported stone was used in the reinforced zone, up to the spillway elevation.

PROJECT HIGHLIGHTS

Project:
Brookworth Plaza Shopping Center

Location:
East Bradford Township, Pennsylvania

Installation:
Spring – Summer 2003

Product/System:
Mesa Retaining Wall System
SierraScape Retaining Wall System

Quantity:
28,500 sq. ft. total wall face area

Owner/Developer:
Talleville Properties, Inc.

Engineers:
Civil Engineer: Bohler Engineering, P.C.
Geotechnical Engineer: Underwood
Engineering Testing Laboratories, Inc.
Wall Designer: Gilmore & Associates, Inc.

Site Contractor:
Allan A. Myers, Inc.

Installation Contractor:
Pickering Valley Landscape, Inc.

Materials Supplier:
EP Henry Corporation

CASE STUDY



With a 1:3 setback, the SierraScape Wall is 30 ft. in height. The wall is seeded with sheep's fescue; a grass native to the area and known for its rigorous root system and drought tolerance.

Local Licensee EP Henry provided the systems' products, including the striking twin-tone, brown-charcoal tinted (Dakota Blend) Mesa Units. A representative from Pickering Valley Landscape, a major installation contractor within the region, said the "simplicity of the (Mesa) system was not difficult to grasp."

The Mesa Systems Advantage: Mesa Retaining Wall Systems provide superior, attractive and cost-effective solutions for all your retaining wall needs. They combine the economy and versatility of segmental concrete units with proven geogrid technology to create the new standard in structural wall systems. The only single-source, fully integrated SRW system, the Mesa Systems are designed and detailed to provide optimum efficiency and long-term performance; with their positive mechanical connection, full load transfer is assured from wall face to reinforcement for unsurpassed structural reliability. Easy to handle and install, Mesa Systems are low maintenance as well. Locally available in a wide variety of styles, colors and textures.

Additional Information and Services:

Tensar Earth Technologies, the leader in geosynthetic soil reinforcement, offers a number of integrated retaining wall and reinforced slope systems. Our products and technologies, backed by the most thorough quality assurance practices, are at the forefront of the industry. Highly adaptable, cost-effective and installation-friendly, they provide exceptional, long-term performance under the most demanding conditions. Our support services include site evaluation, design consulting and site construction assistance.

For innovative solutions to your engineering challenges, rely on the experience, resources and expertise that have set the industry standard for more than two decades.



A Mesa Retaining Wall supports the CVS Pharmacy at the Brookworth Plaza project.

For more information on the Mesa Systems or other Tensar Systems, call **800-TENSAR-1**, e-mail info@tensarcorp.com or visit www.tensarcorp.com.

Authorized Representative:

EP HENRY

EP Henry Corporation
201 Park Ave.
Woodbury, NJ 08096
800-444-3679
www.ephensy.com



Tensar Earth Technologies, Inc.
5883 Glenridge Drive, Suite 200
Atlanta, GA 30328
800-TENSAR-1
www.tensarcorp.com