GP3®

Wal-Mart Addition

West Lafayette, Indiana

The Geopier Rammed Aggregate Pier® System was used to support new fill, floor slab and foundations as well as provide slope stabilization over soft organic soils

Description: Construction of an 80,000 square foot, one story addition to an existing Wal-Mart store. Construction included placement of up to 11 feet of new fill over a portion of the project with side slopes of three horizontal to one vertical extending into existing wetlands. Maximum column loads of approximately 150 kips.

Subsurface Conditions: Primarily clay fill from the original construction. Beneath the clay fill, a layer of the original topsoil was encountered. An area to the west side of the project included organic soils from the wetlands.

Geopier Solution: The Geopier GP3® system provided significant cost savings and schedule advantage as compared to conventional overexcavation/ replacement that would otherwise have been required. Over 800 Geopier Rammed Aggregate Pier® (RAP) elements were placed beneath the proposed column and wall locations for support of structural loads. RAP elements were also placed in area of new fill to help accelerate potential consolidation of underlying soft and organic soils. The Geopier® solution also provided for increased stability of the new slope adjacent to the existing wetlands.

PROJECT TEAM

Owner:
Wal-Mart

Geotechnical Engineer:
PSI

Civil Engineer:
Crawford, Murphy & Tilly, Inc.

General Contractor:
Hudson Construction

Geopier Installer:
Peterson Contractors, Inc.

Geopier Designer:
GFC Great Lakes

130 Harbour Place Drive, Suite 280, Davidson, NC 28036
800.371.7470 | www.geopier.com | info@geopier.com | marketing@geopier.com

GEOPIER®
Tensar.