

# Home Depot

Ewing, NJ



**Project Description:** The site for a Home Depot store located at North Olden Avenue and Arctic Parkway in Ewing, New Jersey was underlain by up to 11 feet of debris laden fill and soft alluvial soils. Three foundation support options were considered: over excavation of the fill soils, 20 foot long caissons, and Geopier elements extending through the fill soils. Geopier Foundations, which increased the bearing capacity of the fill soils to support standard spread footings, proved to be the most cost effective solution. A total of 233 Geopier elements were installed to a minimum depth of 8 feet to support wall and column loads that ranged from 1.5 kips/ft to 4.0 kips/ft and 23 kips and 99 kips, respectively.

## THE GEOPIER ADVANTAGE

- Saved time and money compared to the over excavation and caisson options
- Eliminated the time risk associated with the over excavation option for a “fast track” store opening
- Eliminated the cost associated with wasting a significant amount of debris laden fill.

**Owner:** The Home Depot USA, Inc., South Plainfield, NJ

**General Contractor:** The Troast Group, Inc., Paramus, NJ

**Structural Engineer:** WD Partners, Columbus, OH

**Geotechnical Engineer:** NTH Consultants, Ltd., Exton, PA

**Geopier Installer:** Foundation Service Corporation, Reinbeck, IA