



International Place - Phase III

Memphis, Tennessee

The project structural engineer determined the use of the Geopier GP3® system would provide the most economic foundation for the project

Description: Construction of a new 10 story office tower with maximum column loads on the order of 1,350 kips and a separate two story parking garage with column loads of up to 600 kips.

Subsurface Conditions: Very stiff to hard silty clay and clayey silt underlain by dense sandy soils.

Geopier Solution: The project structural engineer determined the use of the Geopier GP3® system would provide the most economic foundation for the project, saving over 40% of foundation costs compared with auger cast piles or belled piers. The Rammed Aggregate Pier® (RAP) system was used to provide support of shallow foundations designed for an allowable bearing pressure of 8,000 psf. Over 600 RAP elements were installed at the site in about 13 working days with an average of nearly 50 piers installed per day. Modulus testing for the project revealed less than 0.4 inch of deflection at the maximum RAP design stress of 18,000 psf. Use of the Geopier System was a contributing factor in the selection of this project by the National Council of Structural Engineers Association (NCSEA) as the Outstanding Project of 2002.



PROJECT TEAM

Owner:

Highwood Properties

Geotechnical Engineer:

PSI, Inc.

Structural Engineer:

Sheridan Structural Solutions, Inc.

General Contractor:

Holder Construction Co.

Geopier Installer:

Peterson Contractors, Inc.

Geopier Designer:

GFC-Midsouth, LLC