

GEOPIER®

RAMMED AGGREGATE PIER® Technology - Success Story



Geopier® Elements Were Used to Support a 3-Story FedEx Facility

CLIENT'S CHALLENGE

A new 3-story material handling facility was recently completed for FedEx at the Memphis International Airport. The planned facility incorporated wide bay spacings of up to 60-feet which created heavy column loads exceeding 1,500 kips. Deep foundations were originally considered to support the heavy column loads to provide settlement control.

SUBSURFACE CONDITIONS

Soil conditions on this site consisted of up to 4 feet of existing FILL, where encountered, followed by a firm lean clay extending to depths of about 24 feet. The upper stratum of soils was then followed by followed by a very dense sand and gravel stratum to the boring termination depths. Groundwater was encountered in the borings at depths of 28 to 38 feet below existing grade.

GEOPIER® SOLUTION

The Geopier® Ground Improvement system was compared to the original deep foundation solution analyzing both cost and overall construction duration. After comparison with the deep foundation option the construction team decided to choose the Geopier system for this project. The Geopier team worked closely with the General Contractor and Structural Engineer to help save the owner over \$500,000 and time savings exceeding a couple months when compared to the deep foundation option.



FedEx Warehouse

Memphis, TN

FEDEX Express

Owner

Yates/Grinder Haizlip

General Contractor

Geotechnology, Inc.

Geotechnical Engineer

Chad Stewart & Associates, Inc.

Structural Engineer

GEOPIER IS GROUND IMPROVEMENT®

www.geopier.com | (800) 371-7470



“Geopier was great to work with. They were able to resolve tough issues and adjust designs to meet our needs - a true collaborative effort. I would most definitely recommend Geopier on future projects. The experience and speed of construction was great. The engineering staff was always available to take calls and also have solutions to fixes relatively fast.”

- Eric Lyon, Project Manager, Yates Construction