



Logistics Health Inc. Headquarters

LaCrosse, Wisconsin

By successfully utilizing the Geopier Impact® dry displacement process, the soil reinforcement required to improve the loose water bearing sands was efficient and cost-effective

Description: Construction of a 20,000 square foot, six-story office building located on the Mississippi River. The column loads are up to 860 kips and the wall loads are up to 18.9 kips per foot.

Subsurface Conditions: The soil conditions generally consist of up to 15 feet of loose to very loose sand fill underlain by 60 feet of loose to medium dense native sand. Groundwater was encountered at depths of 10 to 15 feet.

Geopier Solution: The Geopier Impact® system was selected for the project, although other foundation support options were considered, such as H-piles and overexcavation and replacement. By utilizing the dry-displacement Rammed Aggregate Pier® (RAP) process, construction in loose water bearing sands was efficient and cost effective. Densification of the surrounding matrix soil was so significant that adjacent RAP elements were difficult to install. As a result, some RAP elements were shortened and a full scale load test was performed to measure



performance of the revised RAP configuration. Geopier elements generally ranged in depth from 15 to 30 feet to reinforce the soils.

PROJECT TEAM

Owner:

Logistics Health, Inc.

Geotechnical Engineer:

Chosen Valley Testing, Inc.

Structural Engineer:

Harwood Engineering

General Contractor:

C.D. Smith Construction, Inc.

Geopier Installer:

Peterson Contractors, Inc.

Geopier Designer:

GFC-Midwest