



Castle Oil Bulk Diesel Storage Tanks

Bronx, New York

The Geopier GP3® system was recommended over a traditional pile support option due to the opportunity for substantial reduction of the project timeline and cost

Description: Construction of two bulk oil storage tanks at a height of 62 feet with diameters of 70 and 75 feet. The tank design load exerted pressures of 5,000 psf.

Subsurface Conditions: Soil conditions consisted of five to nine feet of miscellaneous fill underlain by alluvial sand, silty sand and bedrock. Groundwater was encountered at a depth of 10 to 12 feet.

Geopier Solution: A total of 514 Rammed Aggregate Pier® (RAP) elements were installed within a production schedule of 8 days to support the tanks. Major obstructions were encountered requiring removal coordination with the owner. The Geopier GP3® system provided substantial reductions in the project schedule and afforded significant cost savings to the original proposed pile foundation-structural slab system.



PROJECT TEAM

Owner:

Castle Port Morris Terminals, Inc.

Geotechnical Engineer:

RPMS Engineers

Structural Engineer:

RPMS Engineers

Geopier Installer:

GeoConstructors, Inc.

Geopier Designer:

GeoStructures, Inc.