

Hess Service Station West Roxbury, Massachusetts



Description: Construction of a 1,600 square foot gasoline service station and 8-pump canopy at the site of a former gas station as a part of a regional upgrade.

Subsurface Conditions: Approximately 15 to 18 feet of highly variable “urban” fill overlying very dense glacial till. The “urban” fill contained brick, concrete, wood, and steel fragments. Groundwater was not encountered.

Design Details: *Geopier*® soil reinforcement was used to reinforce the uncontrolled fill deposits, provide uniform bearing support for the building and fuel island canopy, and limit the post-construction settlement. A total of 30 *Geopier* elements were installed to penetrate the fill. Casing was used to prevent caving of the granular fill soils. Following site demolition and clearing, *Geopier* installations were completed in two days at the confined urban site, significantly reducing the project construction schedule compared to other alternatives.

Geopier Licensee: Helical Drilling Inc., Braintree, MA

General Contractor: LaMountain Brothers, Oxford, MA

Owner: Amerada Hess Corporation, Woodbridge, NJ

Geotechnical Engineer: The Geotechnical Group, Needham, MA

Structural Engineer: Core States Engineering, Flemington, NJ

Reference: Mr. Brian Conway - Amerada Hess Corp. (908) 636-3000

Mr. Matthew Taylor - The Geotechnical Group (781) 449-6450