

Park Center Retaining Wall

Alexandria, VA



Project Description: The last area for development of the land held by Erkiletian Construction along Ford Ave. was an old fill site from previous construction activities in the area. Soil conditions at the site consisted of 10 to 25 feet of highly plastic Potomac clay fill soils overlying natural Potomac clays. To meet the site grades construction of a 20-foot high retaining wall supporting both the roadway and parking garage needed to be built over as much as 15 feet of clay fill. GMTI the geotechnical consultant considered caissons and piles to support cast in place walls. Based upon the special global stability requirements in Alexandria for structures built over Potomac marine clays, a Geopier supported segmental retaining wall was the most economical alternative. The Geopier elements extended through the fill into the marine clay in order to provide the needed slope stability factor of safety. Lengths for Geopier elements ranged from 10 to 18 feet deep.

THE GEOPIER ADVANTAGE

- Saved Time & Money versus the option of installing Caissons and Cast in place walls
- Provided required factor of safety for global stability in Potomac Marine Clays

Developer, Owner, GC: Erkiletian Construction Corp., Alexandria, VA

Architect: The Steinberg Collaborative, Houston, TX

Structural Engineer: Meyer Consulting Engineers Corp., Rockville, MD

Geotechnical: PSI (Formerly GMTI), Sterling, VA