

# Timonium II Office & Parking Garage

Timonium, MD



**Project Description:** Development of a new 8-story building and 3-story parking garage structure over an old gravel quarry required some innovative foundations. Half of the buildings could be supported using footings sized for 8 ksf allowable bearing pressure on the existing dense gravel. However the remaining half, where the gravel had been mined now consisted of 10 to 15 feet of soft sandy clays mixed with logs and debris. Geopier elements placed through the fill were used to support footings designed for 8 ksf for column loads up to 1350 kips. A total of 356 Geopier elements were used to support half of the two structures. The project was built in 1999 and was designed to limit total settlements to less than 1 inch and differential settlements to less than ½ inch for both the Geopier and non-Geopier supported footings.

## THE GEOPIER ADVANTAGE

- The method of augering and rammed aggregate piers allowed for positive identification of the fill/natural soil interface thus assuring predicted performance.
- Saved time and money compared to any over-excavation and replacement option
- Provided high allowable bearing pressure allowing the entire structure to use footings sized for 8 ksf

**Owner & General Contractor:** Merritt Development, Baltimore, MD

**Structural Engineer:** Carroll Engineering, Timonium, MD

**Geotechnical Engineer:** Herbst/Benson Engineers, Reistertown, MD