



The Fitzgerald at UB Midtown

Baltimore, MD



For a major mixed-use development in urban Baltimore, Menard installed CMCs as an alternative to deep foundations providing an economical solution that reduced settlement and met performance criteria and scheduling requirements.

Project Summary

The Fitzgerald at UB Midtown is a major public-private development on the University of Baltimore campus and part of the University's ongoing rejuvenation of central Baltimore.

The Fitzgerald comprises 275 luxury apartments, 24,000 square feet of street-level retail and a 1,245 space public parking garage. The southern section of the building consists of a five-story apartment building with a retail ground level. The northern section consists of an eight-story precast concrete parking structure with an adjacent six-story residential building over one level of parking.

To eliminate the need for the heavy pile caps and grade beams associated with deep foundations, Menard proposed a design-build ground improvement solution using Controlled Modulus Columns (CMCs).

Ground Conditions

The Fitzgerald is located on a 125,000 square foot site of a former freight depot and a surface parking lot. The subsurface conditions consisted of an upper uncontrolled fill layer of approximately 8.5 feet to 28.5 feet, underlain by dense silty sands and/or weathered bedrock at depths ranging from 17 feet to 32 feet.

Ground Improvement Solution

To support the foundations, Menard installed approximately 1,400 CMCs to stiffen the ground and reduce settlement within design specifications.

By implementing the CMC solution, Menard was able to provide a number of cost-saving benefits to the project: removing costly heavy pile caps and grade beams, eliminating uncontrolled fill from the site, and expediting the schedule by working around building sections still in the design process thus limiting the turnaround time of the CMC re-design to maintain the construction schedules.