Innovative Support System for College

THE PROBLEM

CNC Foundations installed aggregate piers at the College of William & Mary in Williamsburg, Va. The soils at the project site consisted of a mixture of clays, sands, and silts with varying strengths.

OUR SOLUTION

The aggregate piers and a tower crane pad were installed in both the theatre and music areas of the Fine and Performing Arts Center Phi Beta Kappa Memorial Hall to increase the soil-bearing capacity to 5,000 psf and reduce settlements to less than 1 in.

CNC utilized a direct-push method of aggregate pier installation, which not only reduces spoils that must be managed but densifies and reinforces the variable soil profile to ensure the project settlement requirements are achieved. The work was performed in phases, with two separate mobilizations, and near existing site features to meet the project sequence and schedule.

QUALITY CONTROL AND ASSURANCE

The project's design was confirmed with a full-scale modulus test performed by CNC's field team. CNC's VSC installation equipment is outfitted with computer-monitoring systems that are unique in the marketplace. CNC's proprietary data logger shows the number of piles, the time it took to install the piles, and the bar pressure achieved on every lift.

"Our computer-monitoring system is another method of checks and balances, which allows us to move through the schedule of the project a little quicker," says CNC President Jason Courtney. "This gives a general contractor and an engineer-of-record peace of mind throughout the project, accelerates schedules and better utilizes dollars."

1ST CHOICE