

FOUNDATIONS

Slow and Steady Upswing for Foundation Business

By Larry Kahaner

(...)

Gina Beim, Senior Consulting Engineer, Marketing at Pile Dynamics (www.pile.com) in Cleveland, Ohio, says that the electrical utility sector has been a growth area for their products, which includes testing and monitoring systems for all types of deep foundations.

“Two things have happened,” says Beim. “First, the sector is growing so there’s more construction. And second, the nature of the construction of these transmission lines is such that every so often a pole is supported by only one big foundation element: a monopile. It’s very important to test the quality and bearing capacity of this particular foundation element. In other cases, particularly in environmentally sensitive areas, this industry employs helical piles that up until recently had been a challenge to test (for capacity) by dynamic testing. Pile Dynamics has done some research and is now able to recommend

“Our customers tell us that there seems to be a slow but steady increase in work.”

how to undertake dynamic testing for this type of pile, and that is stirring up interest on the part of this industry.”

She adds: “We have traditionally served the driven pile industry, the drilled shafts industry and the auger cast pile industry with instruments to assure quality of these types of piles. More recently, we have made certain recommendations in testing the capacity of helical piles so that they can be tested with the Pile Driving Analyzer. That’s a relatively new development that we are quite excited about, because consultants that provide these services are embracing this new way of testing.”

Beim explains that in the past, the most often used method to evaluate the integrity of a drilled shaft was crosshole sonic logging, which is still by far the most widely-used method but it has some disadvantages. “Thermal integrity profiling is also a method of examining the quality of these drilled shafts; this process is better because it looks at the entire cross-section of the shaft. Crosshole sonic logging does not. Thermal integrity profiling evaluates the alignment of the reinforcement cage and the shape of the shaft, which crosshole sonic logging cannot do, and it’s a test that can be performed much sooner than crosshole sonic logging. With these advantages, people are excited about it. We are seeing more and more interest in our Thermal Integrity Profiler, which performs this new type of integrity test.” ■

