RAM JACK TRANSFORMS THE HALLS OF JUSTICE

Custom Brackets and Triple-Helix Configurations Preserve the Structural Integrity of a Historic Courthouse

Alabama Ram Jack
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Bessemer, AL
The Limestone County Courthouse is a beautiful, historic building that not only represents justice and peace, but also the heart of the South in Athens, Alabama. With a beautiful stairway leading to a decadent entry surrounded by ornate columns and a clock for all to see, it looks more like a museum than a public office.

**PROBLEM**

While the 1919 construction had a gorgeous exterior, the interior was in need of updates, which included removing interior walls and enlarging interior rooms. In order to provide adequate support to the structure after the remodel, increased foundational support was required.
PROPOSED SOLUTION
Alabama Ram Jack proposed the installation of a system of helical piles to support the new footings inside the building. A subsurface investigation was not necessary, and it was assumed that the underlying ground was stiff. The project specifications assumed that the helical piles would be only 6 ft. long and that Ram Jack’s industry-leading 2 7/8 in. helical piles would suffice. In addition, the plans specified that constant third-party inspections would take place during the entire process of installation.

OUTCOME
After demolition, Alabama Ram Jack faced a number of obstacles with the courthouse, including excessively deep and wide existing footings as well as an extensive system of interior shoring that limited the available space for helical pile installation. Additionally, Alabama Ram Jack could not use mechanical equipment inside the historic structure; therefore, all piles were installed using handheld drivers. After the first pile reached bedrock at a depth of 31 ft. without generating significant torque, it was clear that the soil was not as stiff as originally anticipated.

Alabama Ram Jack quickly dealt with each of the obstacles to complete the job effectively and efficiently. First, Ram Jack supplied custom, heavy-duty, fold out brackets in areas of need to provide added support to the structure. Next, Ram Jack used a triple 8”/12”/14” helix configuration strategically spaced to ensure the building was supported prior to the piles reaching bedrock. Ram Jack Manufacturing supplied custom brackets along with the large helical assemblies, and Alabama Ram Jack installed sixty-one (61) piles to an average depth of 24 ft. in just 14 working days. The remodel was completed successfully, and the historic building’s structural integrity was restored.
Create Profiles
- Simulate soil profiles, including peat
- Anchors with varying diameter and helix configurations
- Vertical/battered/tie-back pile design
- Custom pile design

Mobile-friendly
- Web-based software
- Use anywhere, anytime
- Tablet and PC-friendly

Share & Report
- PDF output for submittals
- Share projects with other registered users

Helical Pile Design Software: Foundation Solutions™

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