

SITE PREPARATION

NEW CONSTRUCTION

»» REMEDIAL REPAIR

HELICAL PULLDOWN® MICROPILE

ATLAS RESISTANCE® PIERS

»» HELICAL UNDERPINNING

EARTH RETENTION

RETAINING WALLS

HELICAL TIEBACK

SOIL SCREW®

PIPELINE STABILIZATION

TELECOM/SUBSTATION

UTILITY/SOLAR

CHANCE® DISTRIBUTOR
FOUNDATION TECHNOLOGIES, INC.
 Lawrenceville, GA

CERTIFIED CHANCE®
 INSTALLER
MASON GRADY FOUNDATIONS
 Cairo, GA

PROJECT ENGINEER
JGP STRUCTURAL GROUP
 Tallahassee, FL

GENERAL CONTRACTOR
RILEY PALMER CONSTRUCTION
 Tallahassee, FL

Hubbell Power Systems, Inc. is the world's leading helical pile/anchor manufacturer. The CHANCE® brand offers a technically advanced, cost effective solution for the Civil Construction and Electric Utility and Telecommunications markets.

Jefferson County Historical High School



“ Because of the limited access and problematic soil conditions, the project was a perfect fit for helical piles. It was also a great example of the versatility of helical piles. No other product could be installed with such ease inside this old building with no risk to the existing foundations, while permanently supporting the new beams, old beams, and new concrete footings. We were thrilled to be part of such a unique project, and work on a building with such historical significance. ”

-MASON FRASCONA - MASON GRADY FOUNDATIONS, LLC

PROJECT:

Rehabilitation of the historic school built in 1852 located in Monticello, FL

BACKGROUND:

Built in 1852, the Monticello High School (also known as the Jefferson Academy and Jefferson County High School) was the first brick public school built in Florida. The school was built under the direction of Samuel Carroll, a builder/plantation owner from Virginia using locally made bricks fired in a kiln at the George Taylor Plantation. The school was added to the National Registry of Historic Places in 1999, but has been vacant since 1991 due to needed repairs. The State Legislature approved funding for the historic school rehabilitation in 2010.

THE PROBLEM:

The plans called for shoring of the existing floor system and roof trusses to use the lower level as a museum and the second story converted into courtrooms. Soil testing identified layers of highly plastic clays, therefore requiring a deep foundation solution to support the design.

continued



Custom mobile unit installing pile



New construction caps set into new footing



Drive head mounted to Boxer 320

THE SOLUTION:

CHANCE Helical piles were the best deep foundation solution for this application because they can be installed easily in areas with limited access utilizing hand-held or small construction equipment. CHANCE type SS150/RS2875.276 helical combo piles with a single 6" helix were specified to support the new footings and girders. The combo pile consists of a square shaft lead section and a round shaft extension. The square shaft is better suited to penetrate dense soil. The round shaft extensions offer more lateral resistance with more of the shaft exposed to the surrounding soil. The hollow round shaft extensions can also be filled with grout to increase stiffness and to help protect against corrosion.

The piles were installed with an Eskridge 8K drive-head that was mounted on a Boxer 320 Compact Utility Loader and for the less accessible areas a custom built mobile unit was used. New construction caps were added to the piles for connection to the poured concrete footings and a specially designed walkway style bracket was added to the piles to allow for connection to the new wood support beams.

Pile depths ranged from 20-22 feet below existing grade with 18KIP working load in compression. Final installation torques were 4,800 - 5,200 ft-lbs. Helical pile installation took approximately three weeks to complete.

KEY BENEFITS:

- LIMITED ACCESS
- TIME TO INSTALL FASTER THAN CONCRETE
- STANDARD EQUIPMENT FOR INSTALLATION
- LABOR SAVINGS - SMALLER CREWS
- NO SPOILS TO REMOVE
- ALL WEATHER INSTALLATION
- IMMEDIATE PROOF TESTING AND LOADING
- LOW TO NO VIBRATION/NOISE



Mason Grady Foundations LLC
 GA 229.872.3991 FL 850.688.2005
 CHANCE® Certification #1912-0009-3630



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