

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

CHANCE CERTIFIED
 INSTALLER
MASON GRADY FOUNDATIONS, LLC
 PENSACOLA, FL / CAIRO, GA

GEOTECHNICAL ENGINEER
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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.

New Condominiums Pensacola, Florida



PROJECT:

Installing CHANCE® Helical Pulldown Micropiles for a new two-story private condominium in a heavily congested area of Downtown Pensacola, FL.

PROBLEM:

The geotechnical investigation conducted at the project site revealed layers of medium dense, loose, and very loose sands to a depth of approximately 18-feet below grade, followed by a layer of dense sand. The soil then became loose again at depths of 30 to 34-feet. A deep foundation system was needed to transfer the structure's loads through the shallow loose layers and into the dense sand layer found at approximately 18-feet.

THE SOLUTION:

The CHANCE Helical Pulldown Micropile (HPM) was chosen as the preferred deep foundation system for this project for several reasons. The main reason being the limited access to the project site and the close proximity of adjacent structures. Helical Piles can be installed with relatively small construction equipment and produce no vibrations during installation, therefore, they are ideal for limited access, heavily congested construction sites.

continued

CASE HISTORY



Installing the pile



Grout encased pile shaft



Completed pile

The piles would need to be installed to a final tip elevation of approximately 21 to 23-feet, therefore, the design team wanted a deep foundation system that did not rely solely on end bearing to achieve capacity due to the loose layer of sand encountered in the borings at approximately 30-feet. The CHANCE HPM derives its' capacity by combining both end-bearing on the helical plates and skin friction along the rough surface of the grout column, the result is a higher capacity pile system. By using the HPM rather than a standard helical pile, the design team was able to reduce the number of piles needed for this project by 25%.

Prior to production pile installation a load test was conducted on site to verify pile capacity. A total of 95 CHANCE model SS150 Helical Pulldown Micropiles were installed. Each pile was installed to support a working load of 30-kips in compression. Pile installation and load testing took approximately one and a half weeks to complete.



Compression load test



Mason Grady Foundations LLC
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CHANCE® Certification #1912-0009-3630

Mason Grady Foundations specializes in CHANCE Helical Pile Systems primarily for foundations and retaining walls. The company is a certified CHANCE installer, we are family owned and operated, and we are a member of the CHANCE Alliance Network.



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