CASE HISTORY

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

DANBRO DISTRIBUTORS

Philadelphia, PA

CERTIFIED CHANCE® INSTALLER

AUDUBON ENVIRONMENTAL & HELICAL PIERS

Shamong, NJ

PROFESSIONAL ENGINEER

KBA ENGINEERING SERVICES

Manasquan, NJ

GENERAL CONTRACTOR

D.E.N.J., INC.

Manasquan, NJ

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.

Windsor Avenue, New Jersey



PROJECT:

Elevate foundation of a home impacted by Hurricane Sandy to meet new zoning requirements.

PROBLEM:

CHANCE® Helical Piles needed to be installed under an existing two story home that was supported by cribbing. The height of the cribbing was such that the standard equipment only had 3 feet of head room to operate. In addition to head room restrictions, soil boring samples revealed an organic layer approximately 7 feet below grade with a water table of 2 feet below grade.

SOLUTION:

The effects of Hurricane Sandy reached farther than the destruction that could be seen after the storm. Floodplain zoning maps and minimum elevation regulations were revised for homes along waterways. Poor soil content in the active soil zone along the southern edge of Goose Creek led engineers from KBA Engineering Services to specify helical piles to reach stable soil approximately 20 feet below grade.

continued

HELICAL FOUNDATION SOLUTIONS

CASE HISTORY





Armed with the foundation design requirements from KBA Engineering Services, General Contractor D.E.N.J., Inc. enlisted the experienced and Certified CHANCE® installation crew from Audubon to install the necessary piles. To meet the design requirements, twenty six RS2875.203 helical piles with 8, 10 and 12 inch helices were installed to an average depth of 20 feet to reach the required torque of 35 kips. The use of standard, small equipment was necessary due to the limited head clearance combined with existing yard features.

Each pile was terminated to bolt a new construction cap on top. "We attached 6" x 6" plates that sit on top of the helical piles. These are embedded in the grade beam--sometimes up to 10 inches so it works in compression and tension," explains Chuck Tauscher of Audubon.

Homeowners looking to take advantage of the New Jersey's Reconstruction, Rehabilitation, Elevation and Mitigation (RREM) Program will know they are on solid foundation with CHANCE® helical piles. Through the RREM program, homeowners can receive up to \$150,000 in grant money to make repairs and improvements due to the new zoning requirements.

KEY BENEFITS:

• LIMITED ACCESS

height restrictions in addition to obstructions in the yard dictated the use of small equipment

• 30 YEAR CHANCE® PRODUCT WARRANTY

fully transferrable warranty for the remainder of the home's 30 year warranty upon sale of the home

• REACH COMPETENT SOIL BELOW ACTIVE ZONE

organic soil and high water table required an average 20' install depth

LOW TO NO VIBRATION/NOISE

minimal vibration experienced by home supported on cribbing



