



Scobbo Installs (8) Large Diameter Helical Piles from a Barge for the Huntington Lighthouse Historical Society Pier on Long Island



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Project Name & Location:	Huntington Lighthouse Historical Society - Huntington, NY
Project Date:	Spring 2018
Project Type:	Deep Foundation Support for Pier
Helical Pile Installation Contractor:	Frank Scobbo Contractors , Long Island & Piscataway
Engineering Company:	Newport Engineering - Oyster Bay, New York
Helical Pile Specifications:	(8) 7.00" Diameter x .408" Wall Helical Piles with (1) 18.0" Dia x 1.0" Wall Helix Bearing Plate. The Minimum Tension Load was (25) Tons with Average Torque of 30,000 ft. lbs.; All Piles were Galvanized
Soils & Embedment Depth:	Sandy Soils with Average Embedment Depth of 20 ft.; Total Pile Length was 40 ft.
Project Timeline:	(2) Days for Installation; (2) Days for Grouting
Helical Pile Manufacturer:	IDEAL Group, Webster, NY

Lighthouse History (Abbreviated)

This lighthouse housed members of the Lighthouse Service, and then the US Coast Guard, for 55 years. In 1939, the US Lighthouse Service was dissolved and the operation taken over by the US Coast Guard. After the Coast Guard automated the light in 1949, the handsome and unique lighthouse gradually slipped into decline. By 1985, the deterioration of the lighthouse had become so great that the Coast Guard was ready to destroy it and erect a steel tower on the ruins. They would have done that, too, if it had not been for the cries of protest from the boaters, shipping interest and local inhabitants. The Coast Guard relented when a group of concern citizens led by Janis Harrington, with the help of her father-in-law, Dr. Douglas Harrington organized the non-profit group, Save Huntington's Lighthouse Inc. whose stated goal was to save and restore the lighthouse. In 1988, the Huntington Lighthouse was added to the National Register for Historic Building, Reference No. 890000501. The Huntington Lighthouse is currently owned by the Huntington Preservation Society (formerly Save Huntington Lighthouse Inc.) and is an active aid to navigation with the light as the main signaling device along with the foghorn, which is maintained by the US Coast Guard. The tower height is 48 feet tall with the focal plane of the light at 42 feet above mean high water. In 1949, the Coast Guard automated the light and installed the foghorn to replace the bell.



Project Description

The Huntington Lighthouse Historical Society decided that a new pier was needed for accommodating boats wanting to tie up for visits. The project required significant planning due to the timetables for tides and the potential for stormy waters.

7.00" O.D. X 4.08" wall helical piles were used, and each 25' lead section was configured with (1) 18" diameter by 1.0" thick helix bearing plate. Final average installation depth was 40 feet. On average, 30,000 ft. lbs. of torque was required to seat the piles into 20 feet of sand.

Scobbo owns a very large deck barge that was used to float the equipment and supplies along side the targeted installation site. The barge is equipped with 30" diameter spuds that resist the rotational forces of the torque motor and boom.

The engineer of record selected galvanized helical piles with the .408" wall thickness and also specified that each pile was to be filled with 4000 psi grout and a single #9 rebar for added strength. The engineer calculated that the life of the piles in the salt water would be a minimum of 45 years.

Due to tides, installation took (2) days and grouting took an additional (2) days.

The Marine Construction Division of Scobbo Contractors was contracted to construct the new platform pier. The timber sub-frame consists of (4) 2.5 CCA 2"x14" frames. The pier is 12' x 28'. Platform pier construction took (3) weeks to complete with tide and weather conditions.

The helical piles were manufactured by IDEAL Foundation Systems in Webster, NY.

