

CASE STUDY

Daytona Beach, FL



CANTSINK™
— SUPPORTING INNOVATION —



LandShark Bar/ Grill Beach Patio Expansion

Helical Piles Provide Foundation Support for Patio Expansion on Sand

SITUATION

LandShark Bar & Grill in Daytona Beach, Florida required a new-construction deep foundation capable of meeting the site's required scour-depth elevation. Because the work took place at an active, operating restaurant, the foundation installation had to be completed safely and efficiently while minimizing disruption to the business, its customers, and the surrounding property. As a coastal site, the design also needed to account for future erosion and soil loss below the scour-depth elevation.

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SCOPE OF WORK

RM Enterprises contracted Cantsink to furnish and install 15 helical piles for the new construction, per an engineered foundation design provided by The Foundation Firm. Each pile was to be installed at the location shown on the engineered foundation plan, advanced to a minimum depth of 13 feet, and torqued to the specified minimum installation torque of 10,000 ft-lb. Positioning tolerance was specified at ± 3 inches and installation-angle tolerance at ± 2 degrees, with a minimum required factor of safety of 2.0.

Working under contract with RM Enterprises, Cantsink used specialized hydraulic equipment to install the piles with minimal excavation and site disturbance — avoiding the soil spoils and concrete curing period associated with conventional deep-foundation systems. Installation depth, alignment, positioning, and torque were monitored throughout to confirm the engineered requirements were satisfied.

ANCHOR SYSTEM

15 Cantsink helical piles were installed using 4.0-inch schedule 40 shafts with a 4.50-inch outside diameter and a single 14-inch helix configuration, meeting a minimum installation depth of 13 feet and minimum installation torque of 10,000 ft-lb.

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RESULTS

Cantsink successfully installed all 15 helical piles in accordance with the engineered foundation plan. Through close coordination with RM Enterprises, the work was completed while LandShark Bar & Grill remained operational, with minimal excavation and disturbance to the property.

The completed system provided an efficient deep-foundation solution satisfying the project's structural loading and scour-depth requirements.