

CASE HISTORY

NASA Launch Pad

Project Overview

Supporting critical infrastructure at a NASA launch facility requires dependable foundation performance under demanding conditions. For this project, MAGNUM supplied high-capacity helical piles to support launch pad structures—where reliability, installation control, and performance verification are essential to mission success.



Location: Fort Lauderdale, Florida
Piles Installed: 113
Pile Size: 3-inch diameter
Depth: 30 ft total depth

The Challenge

The site presented a very stiff upper soil layer, creating installation resistance that required pre-drilling before pile advancement. Achieving target depths while maintaining production efficiency and capacity verification was critical to keeping the project on schedule.

The Solution

MAGNUM helical piles were selected for their ability to deliver immediate capacity and consistent installation control. A total of 113 helical piles were installed, each designed to reach an ultimate capacity of 90,000 lbs.



To navigate the challenging upper soils, piles were pre-drilled to approximately 20 feet, then advanced to a final target depth of 30 feet. This approach allowed crews to maintain installation progress while ensuring proper embedment.

Performance & Verification

All piles were “tension tested in place”, confirming they achieved the required capacities for the application. This immediate verification provided confidence in performance without delays, supporting efficient progression of the overall project.

- Reliable installation through difficult soil conditions
- Verified load capacity through in-place testing
- Efficient progression despite challenging upper strata
- A dependable foundation solution for critical infrastructure



From the Ground Up

Projects supporting mission-critical infrastructure demand foundation systems that perform without compromise. MAGNUM helical piles delivered the capacity, installation control, and verification needed to support this high-profile application—helping keep construction moving forward with confidence.

