



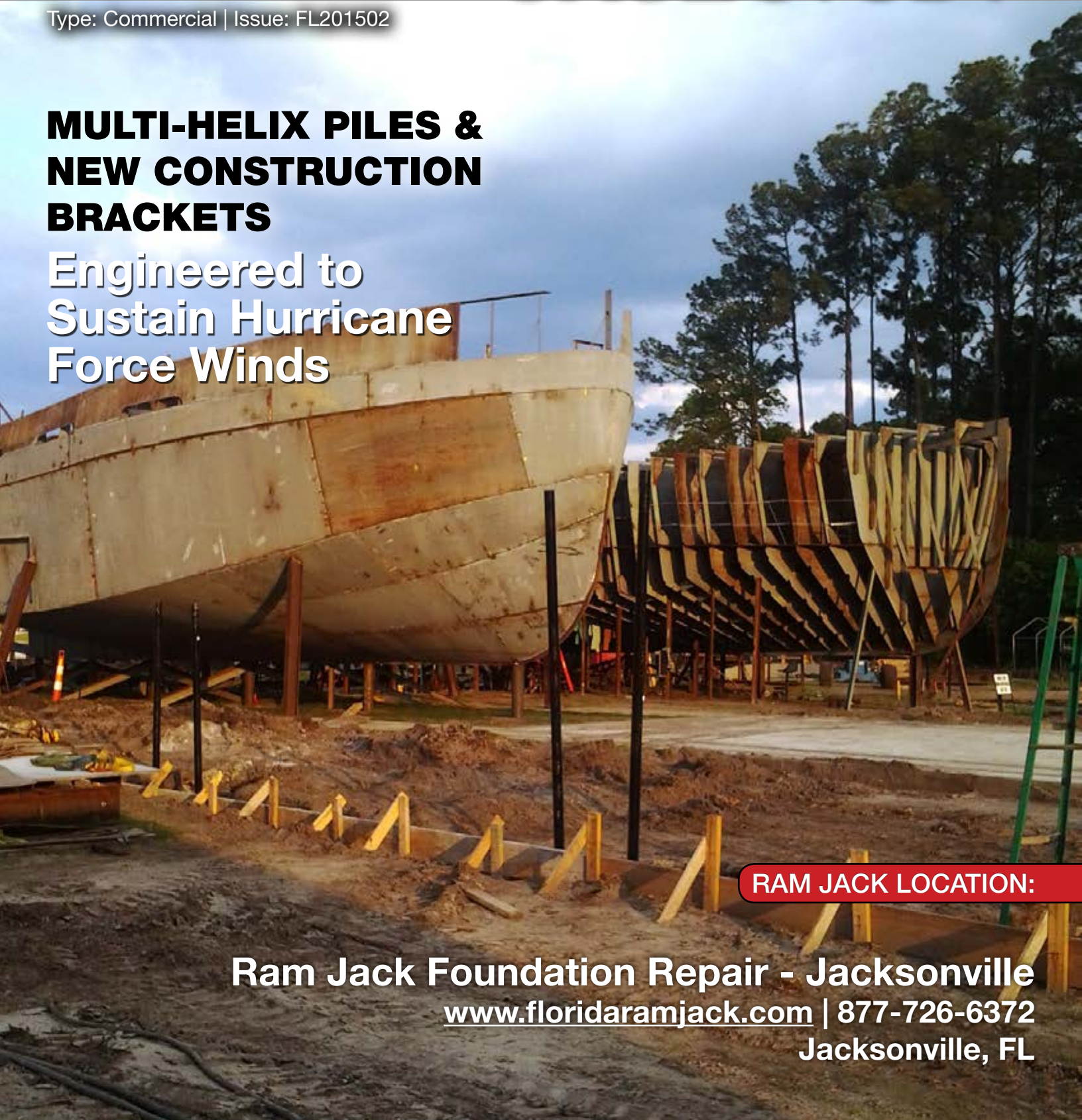
RAM JACK[®]

2015 CASE STUDY

Type: Commercial | Issue: FL201502

MULTI-HELIX PILES & NEW CONSTRUCTION BRACKETS

Engineered to
Sustain Hurricane
Force Winds



RAM JACK LOCATION:

Ram Jack Foundation Repair - Jacksonville
www.floridaramjack.com | 877-726-6372
Jacksonville, FL

ST. JOHNS SHIP BUILDING, INC.

Palatka, FL

CASE STUDY 2015

St. Johns Ship Building, Inc., a full service ship building and marine repair company in Palatka, Florida, developed plans to install an addition to the existing tug boat fabrication area, increasing their current fabrication space by an additional 11,000 ft².

PROBLEM

The entire fabrication area would then be enclosed with a metal building and have built-in rails for sliding the ships into the river once they're assembled. Located about 30 miles from the Florida coast and along the St. Johns River, the shipyard's addition had to be designed for both compression and tension based on the wind loads and the possibility of hurricane force winds in that region of Florida.

New Construction Bracket

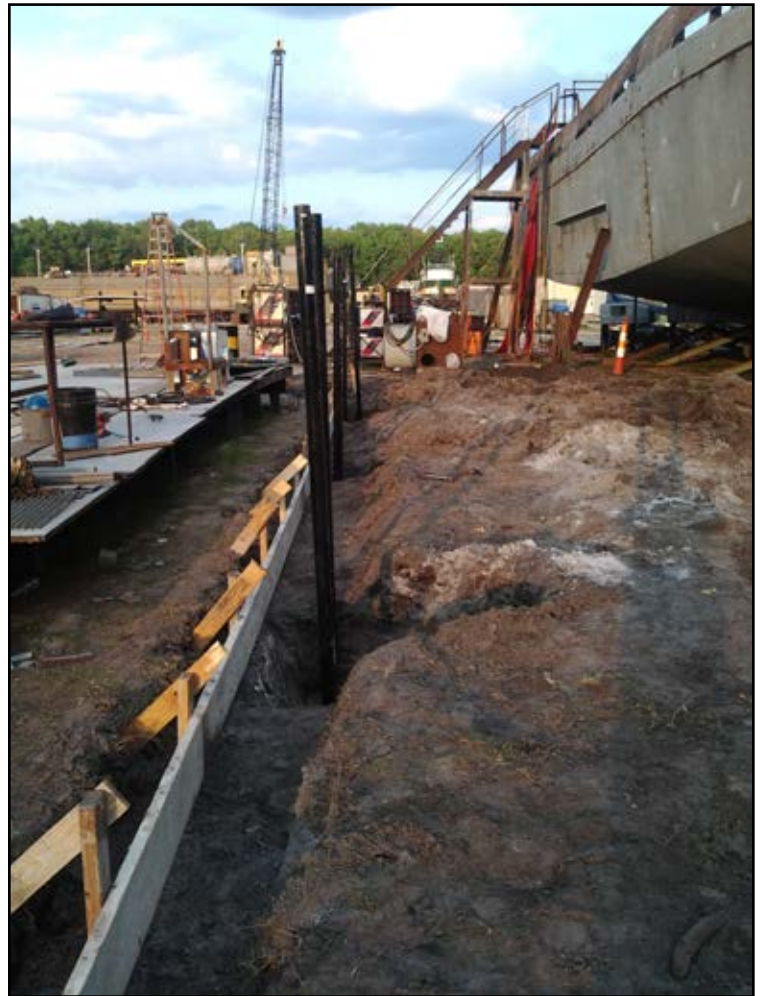


PROPOSED SOLUTION

The designers of the new facility, Robert E. Taylor, AIA, PA and Conestoga - Rovers & Associates, proposed the use of Ram Jack's 8"/10"/12" multi-helix piles in the foundation of the building. Based on the soil information collected and the calculated loads of both the building and the ships that would be assembled in the fabrication area, the design called for helical piles with a 72 kip ultimate capacity. This foundation design called for two (2) helical piles with new construction brackets to be placed in each of the (21) 4 ft. x 4 ft. x 20 in. footings to carry and hold the projected loads of dead, live, and wind loads.

OUTCOME

All 42 helical piles were installed over a three-day period to an average depth of 31ft. with 8,000 ft-lbs. of torque using a Bobcat 341 mini-excavator and a two-person crew. The installation proceeded without problems and on budget.



Ram Jack's ICC-recognized New Construction Brackets have been tested and confirmed by an IAS accredited testing lab. Brackets can be loaded in compression and/or tension immediately after the pile is installed.



- Engineered Foundation Solutions
- Products Manufactured in the USA
- 50+ Locations Nationwide



Recognized as Code Compliant to Meet International Building Codes



HELICAL PILE DESIGN SOFTWARE: FOUNDATION SOLUTIONS™

Create Profiles

- Simulate soil profiles, including peat
- Anchors with varying diameter and helix configurations
- Vertical/battered/tie-back pile design
- Custom pile design

Mobile-friendly

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- Use anywhere, anytime
- Tablet and PC-friendly

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