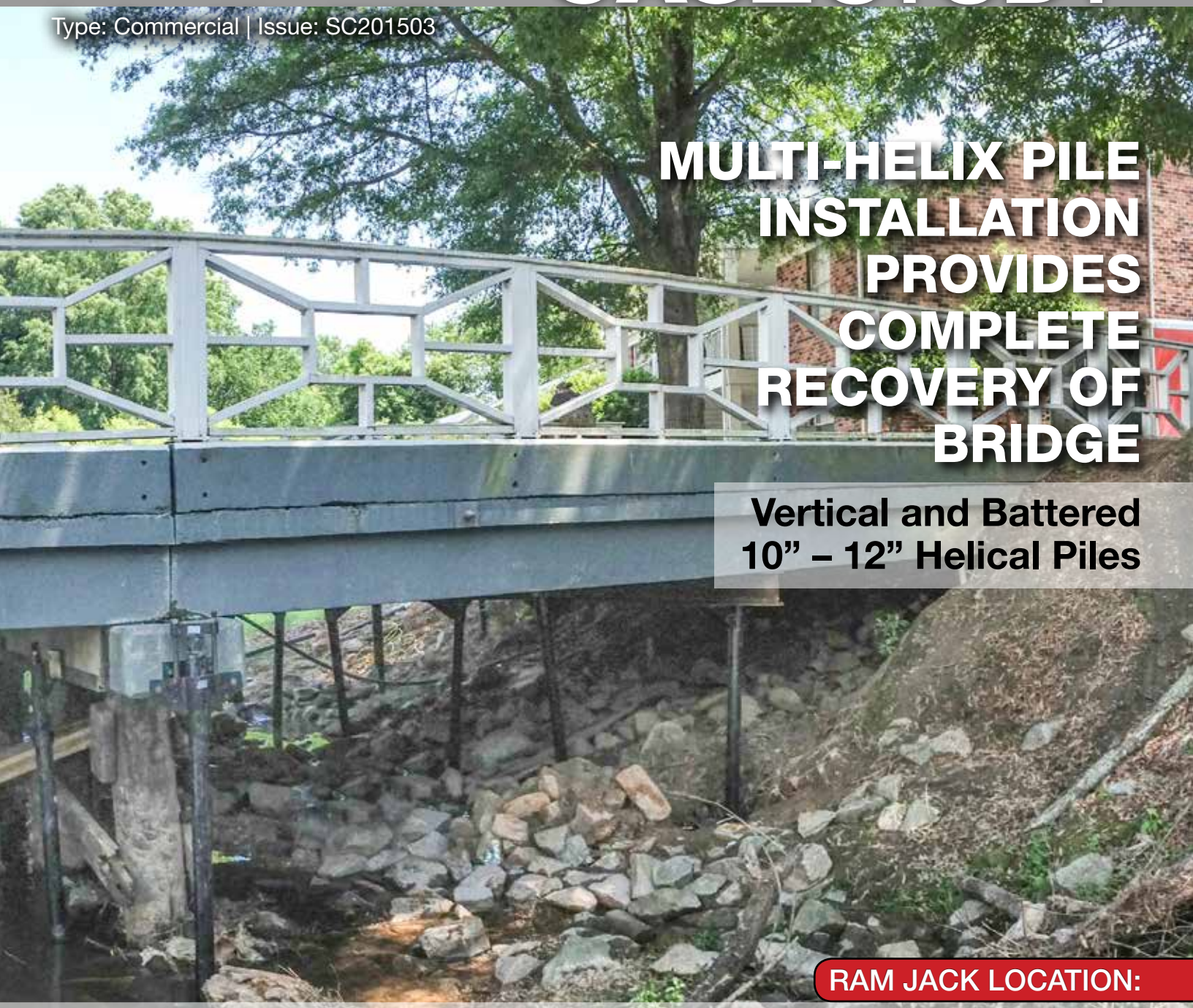
RAMJACK®

2015 CASE STUDY

Type: Commercial | Issue: SC201503



MULTI-HELIX PILE INSTALLATION PROVIDES COMPLETE RECOVERY OF BRIDGE

Vertical and Battered 10” – 12” Helical Piles

RAM JACK LOCATION:

Ram Jack South Carolina

www.ramjackse.com | 866-735-3085

Ridgeway, SC

WILLOW CREEK APARTMENTS | BRIDGE RECOVERY
Columbia, South Carolina

CASE STUDY 2015

BEFORE: Sagging in middle of bridge indicative of settling *(Photo taken during set-up, prior to installation)*

A bridge supported by driven wood piles, connecting two sections of an apartment complex designed for vehicles, crosses a 20 ft. wide creek. The fire marshal had been monitoring the bridge for several years to ensure emergency vehicles could use the bridge safely. The settlement of the bridge was deemed unsafe; if the bridge wasn't repaired, the apartments would be condemned.

PROBLEM

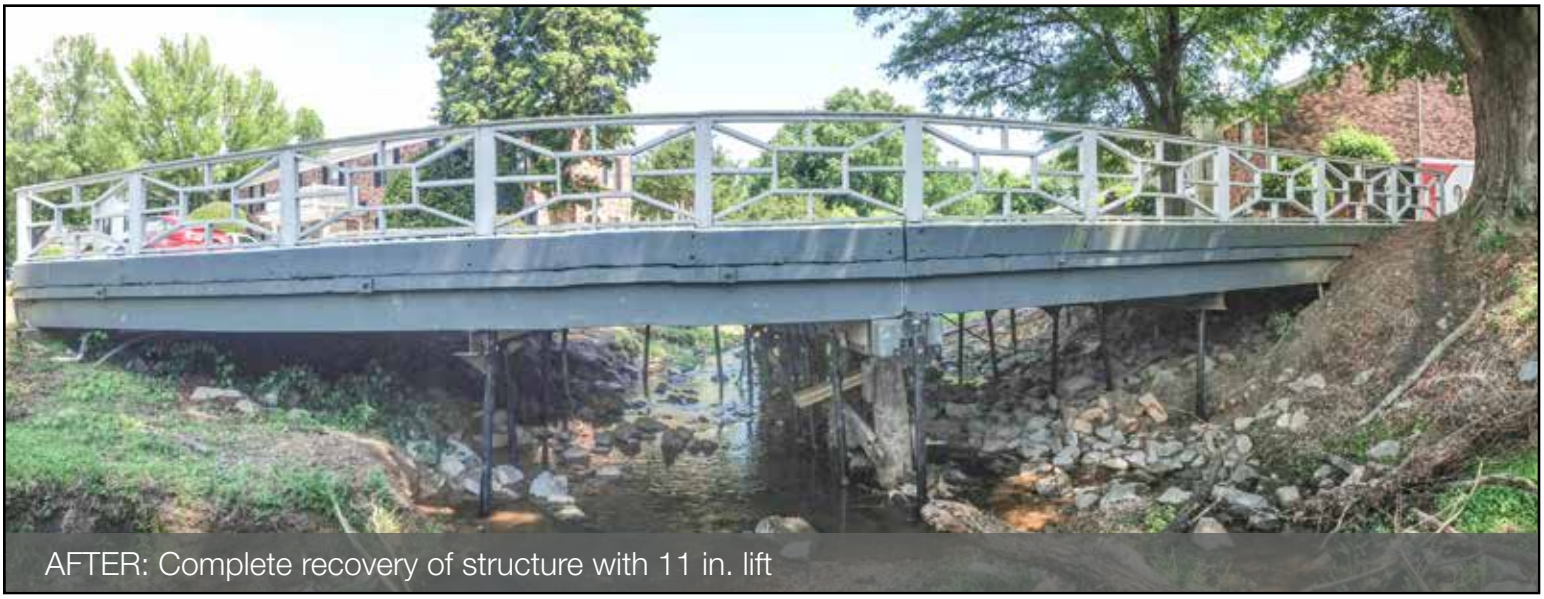
The creek below the bridge had slowly eroded the soil below, causing the bridge supports to sink. While it happened slowly over several years, the cumulative damage was significant. Cracks formed in the concrete support beams. The support beams and piles would need to be replaced.

PROPOSED SOLUTION

Ram Jack South Carolina proposed using (32) piles strategically placed to support the various beams of the bridge: (12) supporting the center beam, (12) supporting one side of the bridge, and (8) battered, cradling new 8 in. wide flange beams.

OUTCOME

In only three days, (32) 2 ⅞" double helix 10"-12" helical piles with 9 ft. guide sleeves were installed to an average depth of 10 ft. Two (2) 8 in. wide flange beams were added for additional support. The bridge was lifted 11 in. for a complete recovery of the structure.



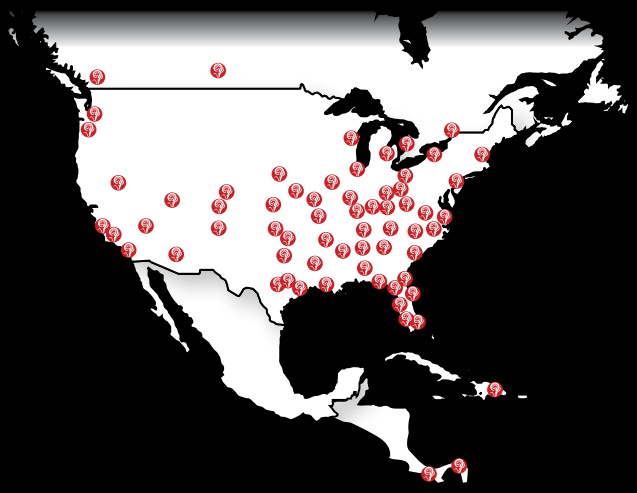
AFTER: Complete recovery of structure with 11 in. lift

RAMJACK®

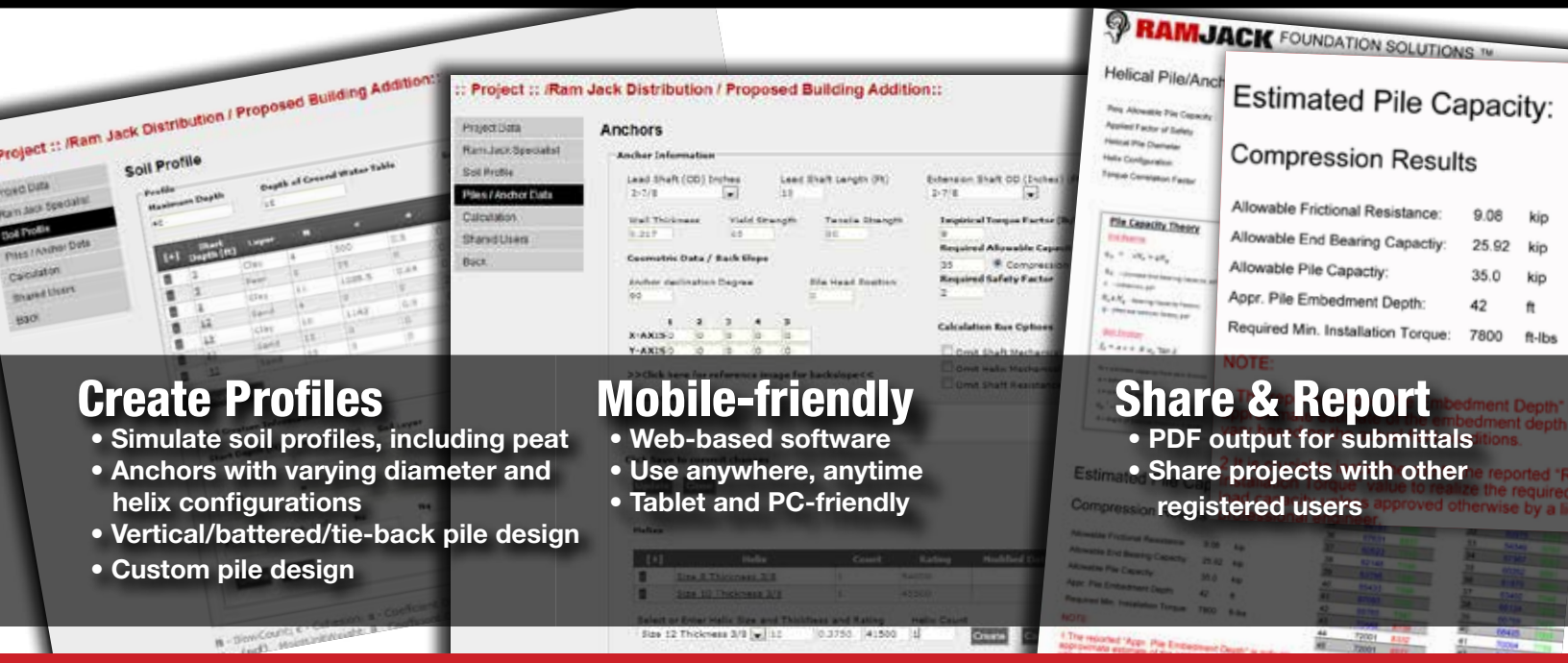
- Engineered Foundation Solutions
- Products Manufactured in the USA
- 50+ Locations Nationwide

ICC ES

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

- Web-based software
- Use anywhere, anytime
- Tablet and PC-friendly

Share & Report

- PDF output for submittals
- Share projects with other registered users

www.ramjack.com/FoundationSolutions

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