



CASE STUDY CHECKLIST

COMPANIES

PROJECT NAME: Lincoln Terminal

PROJECT LOCATION: Natchez Ms.

PROJECT OWNER: Lincoln Terminal

PROJECT TYPE: Helical Foundations

INSTALLER: Engineered Solutions of Georgia

GC: Attaway Services

ARCHITECT: A&C Drafting and Design

CIVIL ENGINEER:

STRUCTURAL ENGINEER: Smith Engineering Co. Inc.

GEOTECHNICAL ENGINEER: PSI Engineering

PILE SPECIFICATIONS

PRODUCT USED: Ideal 5.5-inch, and 3.5-inch multi blade leads

NUMBER OF PILES: Total of 1321 helical piles

NOTES: 5 Different sized tank foundations were installed for a new distribution center

PILE LENGTH: 60 – 65 ft to hard sand layer

BOND LENGTH:

ACHIEVED BOND:

LOADS

ANTICIPATED: Required pier loads were 90k, 108k, and 146k

ACTUAL: Same as the required loads or greater.

ACHIEVED BOND:

ULTIMATE COMPRESSION:



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ULTIMATE TENSION:

LATERAL:

SIEMIC:

PROJECT OVERVIEW SUMMARY: Installed 1321 Helical Piles for multiple tank foundations inside the levy for the Mississippi River.

KEY CHALLENGE POINTS: Elevation of the site was 9 ft. below river elevation during the Delta rainy season. The project time restraints were the biggest challenge. Once the notice to proceed was issued the foundations were to be in place by the end of April.

KEY SOLUTION POINTS: A hard sand layer was encountered at 60 – 65 ft in depth with no bedrock in this area. The helical leads had to be changed with this discovery to a 5 blade 16-inch helix in order to lock into this zone of hard sand

PLEASE PROVIDE ANY QUALITY PHOTO'S THAT YOU MAY HAVE.

INSTALLATION TIME FRAME: 3 Months

PRELIMINARY SCHEMATIC/CROSS SECTION AVAILABLE? N/A

LOAD TEST CURVE AVAILABLE? No

LOAD TEST RESULTS: Load tests to be determined

SOIL BORINGS: Borings varied from 10 ft to 100 ft.

GEOLOGY: Marshy Mississippi delta soils

COST DATA: 2.6 Million with concrete footings

SEND TO JOHN FOR REVIEW