RAMJACK®

2013 CASE STUDY

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MEMPHIS PYRAMID
Bass Pro Shops
Memphis, Tennessee

MEMPHIS PYRAMID REDEVELOPMENT PROJECT
Montgomery Martin & Ram Jack

155 TRIPLE HELICAL PILES INSTALLED
How Ram Jack Raised the Footings on Time & on Budget

Ram Jack Tennessee
www.ramjacktn.com | 731-686-0370
Milan, TN

MEMPHIS PYRAMID | REDEVELOPMENT PROJECT
Memphis, TN

CASE STUDY **2013**

Perched near the Mississippi River in Memphis, Tennessee, the Memphis Pyramid is an iconic landmark. The former sports arena was built in 1991 and stands 321 ft. tall, approximately 32 stories. The City of Memphis has completed the demolition of the interior making way for redevelopment of the property. When redevelopment is complete, the facility will provide 220,000 square feet of retail space to its new tenant, Bass Pro Shops.

PROBLEM

The footings under (supporting) the precast concrete (10' wide x 44' tall) panels at the base of the pyramid had settled up to 6". This settlement caused panels to crack and pull away from the upper deck mezzanine level. The soils report indicated a very soft soil layer beginning approximately 15' below grade. The blow count of the soil ranged between 1 and 10 until about 45' below grade. Additionally, weather would pose a problem with keeping schedules on-time; with so many contractors completing various phases of work, rain at the job site could cause a domino-effect of delays for repairs and installations.

SOLUTION

Ram Jack Tennessee was awarded the opportunity to work with Montgomery Martin on the Memphis Pyramid Redevelopment Project, Package 3A - Seismic. Starting in Quadrant 4 (Q4) (NE corner) 16 triple helicals were driven an average depth of 58'. Quadrant 3 (Q3) (NW corner) was next on the schedule; however, the Ram Jack team immediately discovered the sub-strata soil difference from Q4 where the first 7 triple helicals went an average depth of 94'. When moving to Quadrant 2 (Q2), Ram Jack Tennessee had to bring in a larger excavator to help in the excavation process to clear the debris within the top 8-10'of soils. Completion of the foundation phase of the project included installation of 155 helical piles.

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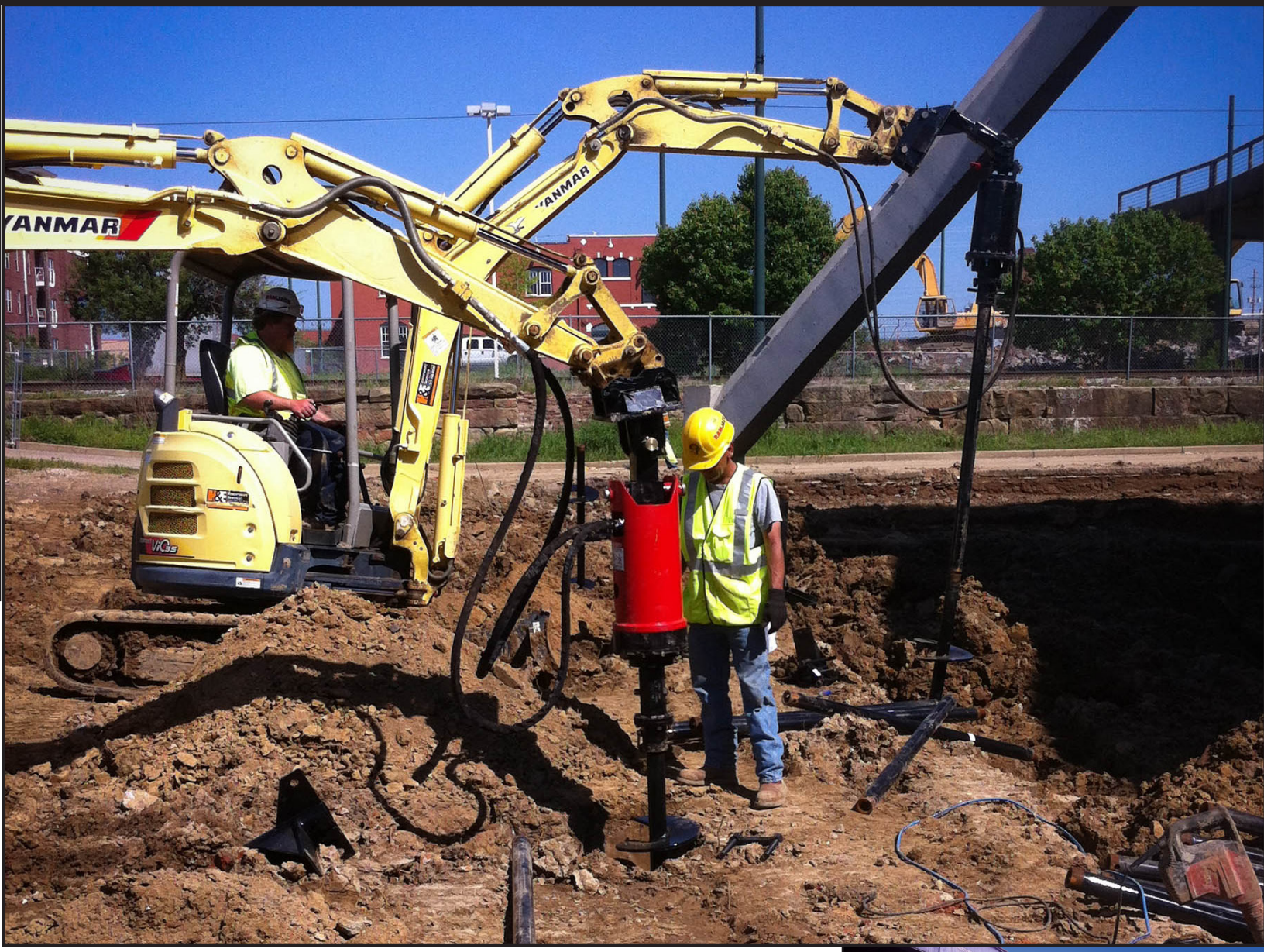
731-686-0370



OUTCOME

Although rain caused delays, Ram Jack Tennessee finished on time and within budget. They were able to raise the footings using the Ram Jack patented helical piling system.

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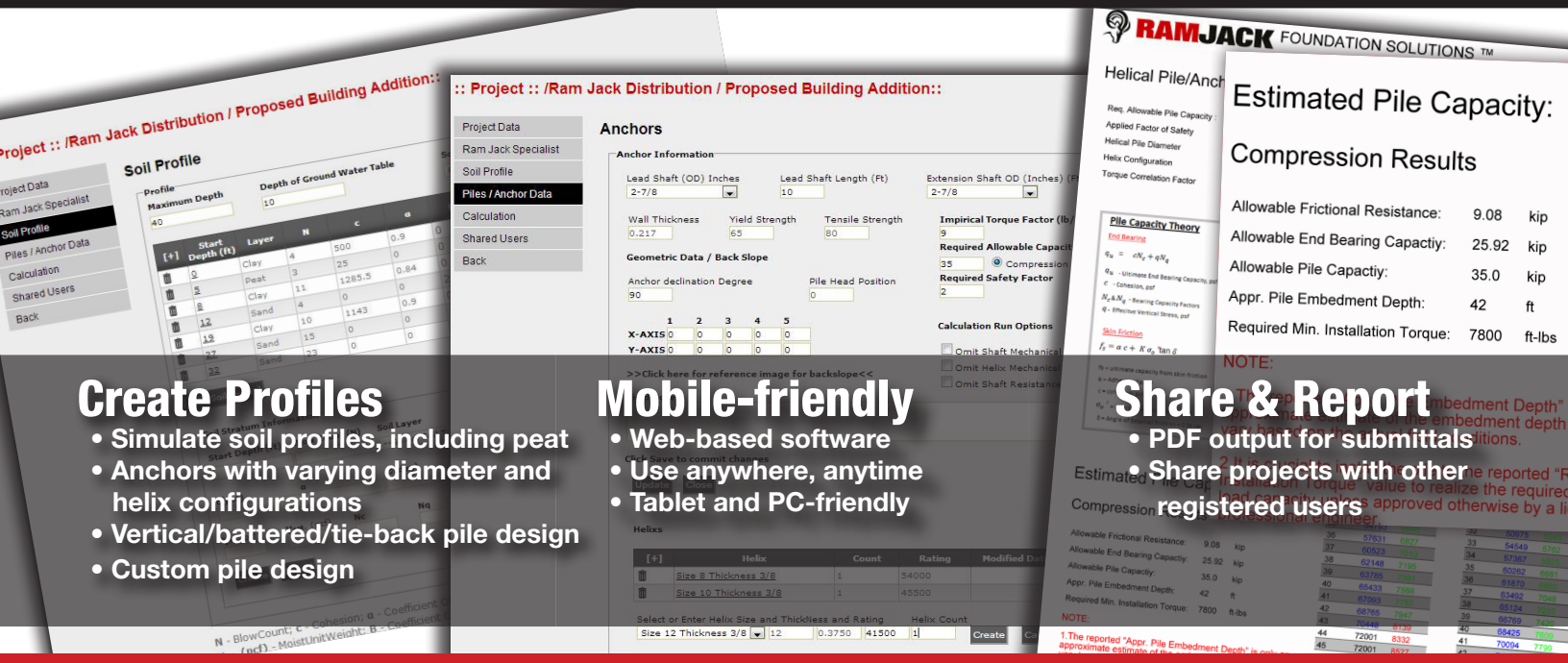

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