

# CASESTUDY

Type: Residential | Issue: AL201507

# Effects of Failed Concrete Pilings

Previous Inferior Concrete Repair Failed, Causing Continued Damage

**RAM JACK LOCATION:** 

Alabama Ram Jack www.alramjack.com | 877-875-2171 Bessemer, AL

# CASESTUDY 2015



Ram Jack steel piles used to replace previous company's failed repairs

## FAILED CONCRETE PILINGS

### ALABAMA RAM JACK

BESSEMER, AL 877-875-2171 www.alramjack.com



www.ramjack.com/CaseStudies

As a homeowner, when a repair issue arises, one wants nothing more than a job done right the first time at a fair price. So the owners of this residence were less than thrilled about the need for further foundation repairs after paying for an inferior repair method that ultimately failed and required a permanent solution. Alabama Ram Jack was called to take care of the classic brick home in Hoover, Alabama.

### Situation

The customer previously hired a local engineer to evaluate the issue, who recommended increasing the footing depth by placing more concrete under the existing footings. The owner followed the engineer's recommendations despite the substantial cost associated with the proposed repair; however, it did not provide a permanent solution. Settlement continued, and new cracks formed in the brick.

### **Proposed Solution**

Alabama Ram Jack proposed using 18 steel helical piles to penetrate deep into the ground and provide maximum support for the structure. These piles would reach a much greater depth than the previous, more superficial attempt to fix the foundation, penetrating the weak fill soils down to a load-bearing strata to provide necessary support.

### Outcome

Alabama Ram Jack encountered rocky conditions, so five helical piles and 13 driven piles were installed, lifting the foundation 1 in. for maximum practical recovery. The steel piles provided a permanent solution to the recurring foundation problem, and the repair cost was about the same as the previously implemented inferior repair that failed.

Proven Engineered Solutions.





AFTER: Some crack closure achieved with maximum practical recovery of foundation