



RAM JACK[®]

2014 CASE STUDY

Type: Residential | Issue: AL201403

RAM JACK TO THE RESCUE

Building a Retaining
Wall to Secure a
Classic Home From
Flood Damage

RAM JACK LOCATION:

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

CASE STUDY 2014

Cracks in exterior due to flood-induced settling.

FOUNDATION & RETAINING WALL RECOVERY

ALABAMA RAM JACK

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



This classically designed house nestled in the heart of Pelham, Alabama boasts classic brick construction, complete with white shutters surrounding the neatly aligned windows and traditional style columns beneath the front porch. Although the home's timeless beauty reflects the bygone era in which it was built, its age was beginning to show. When a city water-main broke and flooded the home, worsening an already settling foundation and damaging a retaining wall, the homeowner called Alabama Ram Jack for help.

Situation

The home had already been settling prior to the flood damage. In fact, only five years prior, another foundation repair company had installed helical piles to lift a settling area of the home. Cracks were visible in the exterior brick walls, and a growing fissure in the interior floor was growing too large to ignore. The homeowner was hoping Ram Jack could provide a permanent solution.

Proposed Solution

Alabama Ram Jack proposed replacing the existing helical piles with deep-driven steel piles that would penetrate below any seasonal water and potential flood damage. Additionally, Ram Jack proposed the construction of a new restrained-concrete retaining wall to replace the existing one. Helical tie-back anchors would be installed to provide added lateral support.

Outcome

Ram Jack successfully executed its plan, installing 10 helical piles with interior slab brackets to an average depth of 10 ft. inside the home and a combination of 12 driven piles with side load brackets and 10 helical piles to an average depth of 30 ft. around the home's exterior. These new piles replaced the existing ones, which previously reached a depth of only 5 ft. The structure was lifted 1.25 in., closing the exterior cracks in the brick wall and providing the structural support the home needs to withstand normal wear and tear and unforeseen circumstances in the future.



A new concrete retaining wall laterally supported by helical tie-back anchors.



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