CASE HISTORY
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ALICE CREEK
DALLAS, TEXAS, USA

**Product:** Gabions & Gabion Mattresses

**Introduction and Problem**

Property owners along Alice Creek were losing their backyards and facing potential foundation damage to their homes due to heavy rains and increased storm water runoff from a nearby residential subdivision.

Neighborhood residents and a local pastor joined together and approached the City of Dallas about the problem. By doing so, funding was provided by the City of Dallas for a project to stabilize the banks of the creek, which would reclaim the backyards of Alice Creek and prevent future damage to their homes.

**Solution**

The City of Dallas provided a design for a gravity wall with mattresses on the sides of the walls to be placed in the middle of the creek, providing adequate armament.

The unique aspect of this design was that the bottom 6 feet of each wall was constructed in PVC gabion baskets and gabion mattresses; everything above 6 feet was constructed in galvanized material.

The reason for this specific design was that most of the erosion was occurring at the bottom, causing a slumping effect. Since water levels do not typically rise above 6 feet, except in rare, major flood situations, the design was extremely effective and kept costs low.

The City of Dallas contracted with DCI Contracting, Inc., to complete the project. DCI Contracting, Inc., took the time and effort to hand place the rock and ensured that the internal tie wire was in place, keeping the cells of the basket straight with clean lines. The result was an aesthetically pleasing structure.

**Client**

CITY OF DALLAS- PUBLIC WORKS DEPARTMENT AND TRINITY WATERSHED MANAGEMENT DEPARTMENT

**Main Contractor**

DCI CONTRACTING, INC.

**Designer**

DOYLE ENGINEERING GROUP

**Products Used**

MACCAFERRI PVC AND GALVANIZED GABIONS AND GABION MATTRESSES

**Date of Construction**

SEPTEMBER 2011
Completed Project

Mattresses are joined to gabions, resulting in a wall that contours to the natural bend of the creek.

Illustrates the radius and curvature that can be achieved with a gabion basket.