





THE Exposed Pipeline Remediation Experts



(800) 978-2627

www.submar.com

EXISTING CONDITIONS

A 24-inch natural gas pipeline crosses Little Mulberry Creek in Chilton County, Alabama in a 50-foot wide right-of-way. The soil in the creek bed is composed of clay and sand, and the banks are well-vegetated with trees and grass. Headcutting in the stream has degraded the bed, eroding away the sand layer, and exposing the pipeline for 10 feet. The landowner had placed riprap in the stream to prevent erosion and to facilitate a pump in the stream. Smaller pieces of riprap have moved due to high flow. Further, river weights were located on top of the pipeline.

SOLUTION

The site was dewatered using sandbag dams and pumps. The existing river weights were buried. Both banks and the streambed were graded, and a geotextile material was placed on top of the grade.

A Submar articulating concrete mat system was installed from high bank to high bank to armor the pipeline. All edges of the mat system were toed into anchor and flank trenches that were backfilled with existing material and rip rap. A subgrade rock grade control was installed downstream of the mat system to prevent headcutting. Geotextile and rock were installed on the banks for bank paving. After final grading was performed, erosion control blanket, seed, and straw were placed on the disturbed areas.