

CASE STUDY

LITTLE SANDY CREEK

Pontotoc County, Oklahoma
Submar Project 14616

SUBMAR®



BEFORE



AFTER

EXISTING CONDITIONS

A 20-inch natural gas pipeline crosses Little Sandy Creek in Pontotoc County, Oklahoma. The creek bed is composed of clay, sand, gravel, and riprap. Broken concrete was previously placed on the right-descending bank but has scattered. The meandering creek and sheet flow have degraded the banks. The pipeline is exposed for 110 feet near the right-descending bank and 20 feet near the left-descending bank.

SOLUTION

The site was dewatered using earthen dams and existing riprap and broken concrete was removed. 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.

Also, a Longitudinal Peaked Stone Toe Protection (LPSTP) system was installed upstream and downstream along both banks to prevent future toe scour and bank erosion. Further, bendway weirs were installed to redirect water flow away from the banks. Final grading was performed, seed and erosion control blanket was placed on the disturbed area.

THE Exposed Pipeline Remediation Experts

✉ submar@submar.com

☎ (800) 978-2627

🌐 www.submar.com