

## CASE STUDY

# PERKIOMEN CREEK

Montgomery County, Pennsylvania  
*Submar Project 16975*

# SUBMAR®



## BEFORE



## AFTER

## EXISTING CONDITIONS

An 18-inch natural gas and fuel pipeline crosses a tributary to Perkiomen Creek in Montgomery County, Pennsylvania in a 50-foot wide right-of-way. The creek bed is composed of shale, gravel, and sand while the banks are composed of clay, rock, and gravel. A fallen tree has caused scouring along the right-descending bank, resulting in lateral migration and exposing the pipeline for 4 feet.

## SOLUTION

The site was dewatered using sandbags dams. 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, 500 feet of Longitudinal Peaked Stone Toe Protection (LPSTP) were installed along both banks to prevent future toe scour and bank erosion. Uniformly graded rock was installed on the slopes to act as bank paving. A 1 foot thick natural stream substrate was placed on top of the mat and subgrade rock system. Final grading was performed, seed and straw was placed on the disturbed area.

THE Exposed Pipeline Remediation Experts

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