

Post Meadows Streambank Stabilization Case Study



The Midwest's Most Trusted Site Solutions Provider

Project: Post Meadows Streambank

Salesperson: Guy Litteken

Stabilization Project

Owner: City of O'Fallon

Location: O'Fallon, Missouri

Engineer: Reitz & Jens

Application/Solution:

Contractor: Wehemeyer Farms

Streambank

Installed: Fall 2014

Market Sector: Municipal

case study



case study

Challenge

Residents in the Post Meadows Subdivision first reported flooding and eroding slopes encroaching on their property in 2005 and more formally in 2008 with the City of O'Fallon. The City has a \$0.05 sales tax that it fully funds the Storm Water and Parks Departments. They have a storm water priority list and in 2011 this project site was funded and the city and residents worked together to identify what reaches of Tributary 15 would be repaired.

Solutions

Reitz and Jens, a consulting firm in St. Louis County performed the analysis and design for the project. They used a combination of Heavy Stone Revetment for channel degradation and lining many of the outside bends and native seeding, live stakes and a newer technology in the industry. A High Performance Turf Reinforcement Mat (HP-TRM) whereby a Heavy Duty TRM is combined with percussion soil and/or rock anchors to provide the ultimate strength in "green" protection.

Results

PP5 Xtreme by Western Excelsior was approved by the engineer and owner and was successfully installed and is currently providing protection that before could only be matched with Heavy Limestone Revetment or other "hard armor" surfaces. The residents were able to preserve many trees and include natives and grasses in this riparian corridor due to the flexibility of the PP5 Xtreme and its superior anchor system provided by Gripple. It's a win-win for the residents and the owner. By combining solutions they both benefit from an engineered solution and gain an asset by producing a living stream and riparian area vs. a rock lined storm channel.



1 A Bosch Hammer can be used for extremely dense and/or rocky soils.



2 A lightweight hand operated gas hammer is very operator friendly.



3 Rock anchors for use on dense and/or rocky soils.



Products

Manufacturers included in solutions and product:

Product:

PP5 Xtreme

Manufacturer:

Western Excelsior

Product:

Terra Lock Anchor

Manufacturer:

Gripple, Inc.



4 Notice the extension of the barbs for extreme pull-out resistance.



5 Vegetation nearing 70% coverage.



6 The PP5 Xtreme warps easily into the rock transition.



7 Panoramic view of one of the channel bends.

Company Information

ASP Enterprises, Inc. and Quick Supply Co. For more than three decades, A.S.P. Enterprises and Quick Supply Co. has served the erosion control industry with integrity and expertise. We provide engineers and landscape contractors the exceptional value for their money and have grown to become the Midwest's full-line distributor of erosion-control, geosynthetics, storm water management products, wall block, landscape pavers, and drainage products.

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