

Geosource Solution Center



Project Name: Interurban Trail
Project Location: Riverside, MO
Contractor: Cobra Contractors – Overland Park, KS
Engineer: HDR – Lee’s Summit, MO



Problem:

Severe erosion from Line Creek was exposing the historic concrete bridge structure and encroaching on the hike / bike trail over the bridge as well as a sanitary sewer line owned by the City of Kansas City.

Solution:

A composite solution using several different technologies – Presto Geoweb with Mirafi geogrids and geotextiles for the retaining wall, Terra Aqua gabion baskets for toe protection under the wall, North American Green erosion control blankets and woven coir mats for the “burrito” wall and slopes as well as live stakes for bank protection

Background:

Back in the early 1900s, the Interurban was an electric rail line that ran from Olathe to St. Joseph. It was taken out-of-service in the 1930s. Portions of the original route are still in use as pedestrian trails, including this section in Riverside, which crosses one of the historical original double-concrete arch bridges.

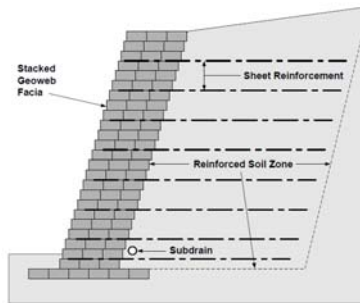
Solution:

Given the steep angle from the trail to the creek, a Geoweb geocell retaining wall was the best option to manage the slope. Due to the height, the wall used a Mirafi geogrid for reinforcement. The owner wanted a more natural-appearing wall, so the outside cells of the retaining wall were soil-filled and seeded. To provide additional protection for the wall, gabion baskets were installed at the base. The engineer used a combination of North American Green blankets, coir mats and live stakes to stabilize banks upstream of the retaining wall.



Results:

The use of several technologies resulted in a composite solution that was cost-effective, provided a vegetated finish and most importantly protects the existing bridge and trail.



Todd Black, P.E.



Utilizing stretcher frames, the Geoweb wall panels are placed and filled with ease.



Here the wall is completed and awaiting the spring and summer growing season



Spring pop of the early vegetation is visible.

Calendar of Events


Feb. 25-27: EC14-IECA Erosion Connection 2014-Nashville, TN
[Click here](#)

[ASP/Quick Supply 2014 Clean and Green Sustainability Conference and Expo](#)

March 11th-Omaha
 March 12th Des Moines
 March 13th-KC, MO
 March 14th St. Louis, MO

[April 29-May 1: Great Rivers/ Great Lakes Joint IECA Great Connections 2014-Davenport, IA](#)
[Click Here](#)

Home Featured Solutions St Louis Hardscapes Specification Sheets Industry Resources Contact Us



Low Impact Development Solutions

"Low Impact Development", as defined by the Low Impact Development Center, "is a comprehensive land planning and engineering design approach with a goal of maintaining and enhancing the pre-development hydrologic regime of urban and developing watersheds."

The EPA states LID is an "an approach to land development (or re-development) that works with nature to

Need Help Finding a Solution?

[Get more information here](#)

Or contact us at:

Toll free: 890.869.9600
 Fax: 636.343.4723
brennar@aspent.com

Customer Resources

- ▶ 2012 Conference
- ▶ Case Studies

A sneak peek of our LID Home Pagecoming soon... Look for it in January 2014 at: aspent.com/LID or quicksupplydm.com/LID