



Clean Water. Healthy Life.

# BEST PRACTICES *for* STORMWATER MANAGEMENT IN METROPOLITAN KANSAS CITY

## BIORETENTION | INFILTRATION

Zona Rosa, I-29 & Barry Road, Kansas City, Missouri

### Goals

To integrate responsible land stewardship, ethical land management, and environmentally sound, sustainable development.

### Description

Zona Rosa is a 93-acre, mixed-use, new urban community in Kansas City, Missouri. Prior to development, a significantly degraded stream flowed along the northern perimeter of the site. TranSystems, with assistance from its subconsultant, developed a comprehensive, multi-faceted stormwater management program – a key component of which included restoration and enhancement of the existing stream. This stormwater management program met significant engineering challenges while simultaneously preserving and protecting the natural environment. Several BMPs were incorporated to control water quantity, improve water quality, and sustain the viability of both the stream and the site, including:

- Soil erosion and sediment control program employed during construction
- Sediment basin/detention system used during and after construction
- Stream restoration that included formation of forested and upland prairie buffers, soil bioengineering, grade controls, water pools, and the creation of riparian wetlands to improve wildlife habitat

### Community Benefits & Lessons Learned

TranSystems' stormwater management program resulted in significantly improved water quality based on testing conducted prior to, during, and following construction. The quality of the water that exists on site today is actually better than what existed prior to Zona Rosa's development.

The investment in stormwater management will help protect the value of the land and subsequent development by mitigating the economic impact of future soil erosion and flooding in Zona Rosa, Weatherby Lake, and the surrounding area.

### Funding Sources and Partnerships

Transportation Development District (TDD) financed the improvements on NW Prairie View Road, Congress and Missouri Highway 152.

### Contact

Kevin Rohner, P.E.  
TranSystems Corporation  
2400 Pershing Road, Suite 400  
Kansas City, Missouri 64108  
(816) 329-8600  
karohner@transystems.com



*Native wetland and upland plants becoming established within one of the detention basins.*



*Stream channel restoration using native plants.*



*Native wetland and prairie plants and the presence of water attracts wildlife to the detention basins.*