



Riparian Corridor Project Profile

Lola Valley - Kinloch Streambank Stabilization Project

Background

This riparian, floodplain park that lines the banks of the Lola Valley Creek has been a popular picnic site since its beginning in 1933. Its rolling green slopes along the river have been a haven for winter sledding, spring flowers and summer picnics. The Upper Rouge River meanders through the Park. In 2006, it was discovered that streambank erosion had exposed a Wayne County sanitary interceptor sewer. Wayne County took this as an opportunity to improve water quality and wildlife habitat by utilizing soil bioengineering techniques to repair the eroding banks.

Project Overview

The project had three components: infrastructure protection, soft soil bioengineering, a native buffer zone. Three separate project areas were developed. First, 85 linear feet of exposed sewer was protected through the installation of a vegetated geogrid with a gabion basket base. Second, 75 linear feet of the existing floodplain was enlarged through the excavation of a new shelf which was covered in boulders and integrated black willow stake plantings. Finally, the opposite bank was stabilized with live willow stakes. A buffer zone of native plants approximately 25 feet wide was planted above the bank at both sites. The new vegetated riparian streambank will provide new wildlife habitat and water quality benefits as well as stabilizing the soil, thereby protecting the sewer.



The eroded bank with the exposed 85 feet of interceptor sanitary sewer before the project (Dec 2006, Picture—R. Alsaigh)



The finished bank with added floodplain storage shelf. (Picture—M. Best)



The restored bank three months after installation. (Picture—M. Best)

Methods Used

Native Seeding and Planting
Soft Soil Bioengineering
Riparian Buffer

Materials Used

Soil, gabion baskets, fiber erosion control blankets, backhoe, bulldozer, live staked, native plant seed, native trees and shrubs, boulders



The installation of the gabion baskets was completed with heavy machinery. (Picture—M. Best)



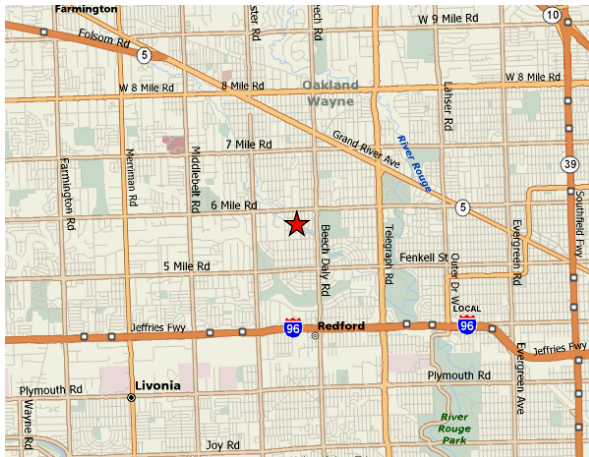
A Blanding's Turtle (*Emys blandingii*), which is protected by Michigan law as a special concern species, was observed at the project site just after installation. (Picture—R. Alsaigh)

Cost

The total project cost for the contracted work was approximately \$75,000. Additional minor costs were incurred for design, permit fees and project oversight

Permits

A \$100 permit from the Michigan Department of Environmental Quality was approved for this project.



Riparian area after installation and buffer planting. (Nov 2005)

Partners

Wayne County Department of Environment, Wayne County Parks and Posen Construction, Inc.



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Lola Valley—Kinloch

Streambank Stabilization Project

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August 1st, 2007