# CITY OF WEST LAFAYETTE

WET WEATHER PROGRAM

## **Blackbird Pond Stormwater Improvements**

Located at Lindberg and McCormick roads, the Blackbird Farms neighborhood is comprised of 170 two-story and patio homes built in the 1990s. This private community provides a country-like setting for residents and is home to Blackbird Pond, which is located south of the community.

Adjacent to Blackbird Pond is a dedicated detention basin that helps to manage stormwater quantity and prevents flooding during and after wet weather. The detention basin flows into the Indian Creek, an existing county drain. The existing embankment that separates the detention basin from Blackbird Pond as well as the supporting city and county drainage systems downstream of the Blackbird Farms are in need of improvement.



## **Erosion Control to Improve Neighborhood Drainage**



To improve stormwater drainage in the Blackbird Farms community, the City of West Lafayette is considering various improvements including modifications to the detention basin as well as channel armoring to support and stabilize the Indian Creek county drain.

Ditch armoring is the use of textiles, rip rap and native vegetation to stabilize shorelines and prevent erosion. Rocks and armor will be placed along the shorelines of the detention basin and the Indian Creek county drain to prevent the structures from eroding. Ditch armoring will help stabilize the county drain and prevent it from changing course. Downstream channel stabilization, improved flow control structures, wetland plantings and shoreline rehabilitation will stabilize existing

#### **Native Plantings to Remove Stormwater Pollutants**

#### Highlights

**Project:** Detention basin retrofit and bank stabilization

**Estimated Project Cost:** \$800,000

**Status:** Planning **Project Benefits:** 

- · Improved drainage in neighborhood
- Enhanced water quality downstream
- Reduced pollutants in local waterways
- Stabilization of shorelines and improved erosion control
- Compliance with state and federal regulations

erosion, improve water quality, and ensure continued operation of the drainage system.

The Blackbird Pond Stormwater Improvements project is part of the West Lafayette's capital improvement program to improve the water quality of the Wabash River and other local streams and to address poor drainage conditions. The projects will reduce chronic flooding and satisfy the requirements of the U.S. Environmental Protection Agency and the Indiana Department of Environmental Management.