Green Infrastructure & Stormwater Management
CASE STUDY

Ohio Street Pilot Project

Location: 600 block of East Ohio Street, near downtown Indianapolis, IN
Client: City of Indianapolis
Design Firm(s): Williams Creek Consulting
Landscape architect/Project contact: Williams Creek Consulting
Email: allyson.pumphrey@indy.gov
ASLA Chapter: None

Project Specifications

Project Description: The Ohio Street Pilot Project is a partnership effort to improve the 600-700 block of East Ohio Street. The completed project improves drainage, handicap accessibility, and replaced deteriorating urban infrastructure to capitalize on recent private investment in the area and to encourage future private investment as a means to continue strengthening the Cole-Noble neighborhood. The I-65 off ramp to Ohio Street and the proximity of the on ramps designate this area as a gateway to the City and will carry substantial 2010 SuperBowl traffic. The project is anchored by a small rain garden grant awarded to Indianapolis Downtown Incorporated (IDI) by United Water.

Project Type:
Transportation corridor/streetscape
A retrofit of an existing property

Design features: Rain garden, porous concrete curb and gutter, and porous concrete sidewalks.

This project was designed to meet the following specific requirements or mandates:
Local ordinance

Impervious area managed: 5,000 sq/ft to 1 acre

Amount of existing green space/open space conserved or preserved for managing stormwater on site: less than 5,000 sq/ft

The regulatory environment and regulator was apprehensive about the project.
Did the client request that other factors be considered, such as energy savings, usable green space, or property value enhancements? Application of standards created by the City of Indianapolis for green stormwater infrastructure: the Green Supplemental Document. Also, the Sustainable Infrastructure Initiative, which expedites plan review for green projects. Both are located at: http://www.sustainindy.org/sustainable-infrastructure.cfm

Cost & Jobs Analysis
Estimated Cost of Stormwater Project: $50,000-$100,000 (Public funding: Local)

Was a green vs. grey cost analysis performed? Yes

Cost impact of conserving green/open space to the overall costs of the site design/development project: All existing green space/open space was preserved in this project. The green spaces were transformed from turf and mulched beds into rain gardens. The cost of additional plantings was provided through a grant.

Cost impact of conserving green/open space for stormwater management over traditional site design/site development approaches (grey infrastructure)? Significantly reduced costs (10% or greater savings). Traditional (grey) stormwater infrastructure did not exist in this area, so the use of green infrastructure (porous pavements and rain gardens) were a significant cost savings over putting in new grey stormwater infrastructure. Also, it is located within a combined sewer area, so adding stormwater to an already over-burdened system was not desirable.

Number of jobs created: Not available

Job hours devoted to project: Not available
Planning and Design: Not available
Construction: Not available
Annual Maintenance: Not available

Performance Measures
Community & economic benefits that have resulted from the project: Excerpt from press release: “This project is significant because it allows DPW the opportunity to utilize sustainable infrastructure on multiple levels,” said David Sherman, DPW director. “We’re analyzing everything from the interaction of soil types, surface materials, pollutant sources and infiltration rates to broad policy implications on initial cost, maintenance and life cycle. With input from community development corporations and neighborhood groups, we’ve been able to get a better understanding of what will be genuinely sustainable for the long term.”
The Ohio Street project has relied on partnerships within the neighborhood, including the Cole Noble District Neighborhood Association, Indianapolis Downtown Inc., and local business owners such as The Nature Conservancy, The Buchanan Group and Easley Winery. “Our neighborhood has been plagued by crumbling sidewalks, deteriorating streets and drainage concerns for decades now,” said Bruce Buchanan, president of the Cole-Noble District Neighborhood Association. “We’re excited about the infrastructure improvements that we’ve seen in our area and the commitment to improve quality of life that Mayor Ballard shares with our association.”

The Ohio Street project will remove an estimated 1.3 million gallons of storm water from the combined sewer system annually, which represents more than 90 percent of the annual rainfall volume for the Ohio Street watershed area. “This project illustrates the spirit and vision of The Nature Conservancy,” said Mary McConnell, state director for The Nature Conservancy. “When we decided to invest in this location and in sustainable elements for our building, we hoped it would inspire sustainable practices throughout the area. We’re glad to see that it has.”

**Project Recognition**
Green Infrastructure Grant from United Water & the City of Indianapolis’ Office of Sustainability

**Additional Information**