



Green Infrastructure & Stormwater Management CASE STUDY

AMCOL International Bioswale

Location: Hoffman Estates, IL

Client: AMCOL International

Design Firm(s): Pizzo & Associates, Daniel Weinbach & Partners

Landscape architect/Project contact: Andy Stahr, ASLA

Email: andys@pizzo.info

ASLA Chapter: Illinois



Photo: Pizzo & Associates

Project Specifications

Project Description: AMCOL International Headquarters is a LEED certified building incorporating innovative landscape features to replicate the environmentally sensitive nature of the building. The landscape features include rain gardens, bioswales, and prairie buffers which filter and manage on-site stormwater runoff. The benefits of these features reduce runoff and pollution from the site by naturally filtering water and increasing on-site infiltration rates.

Installation of the bioswales, rain gardens, and prairie buffer include placement of gravel mulch and planting substrate, planting of 26,000 native perennial plugs and installation of approximately 6 acres of native seed.

Project Type:

Commercial
Part of a new development

Design features: Rain garden, bioswale, and curb cuts. The use of native plants within rain gardens and bioswales along with the entire campus surrounded by wet-mesic prairie enhances the overall function of every stormwater management design.

This project was designed to meet the following specific requirements or mandates: To meet funding criteria, developer/client preference, LEED accredited credentials



Photo: Pizzo & Associates

Amount of existing green space/open space conserved or preserved for managing stormwater on site: 1 acre to 5 acres

The regulatory environment and regulator was supportive of the project.

Did the client request that other factors be considered, such as energy savings, usable green space, or property value enhancements? The client was very adamant about using native plants to enhance property aesthetics, eliminate irrigation, and provide the most environmentally productive green space.

Cost & Jobs Analysis

Estimated Cost of Stormwater Project: \$100,000-\$500,000 (Public funding: None)

Was a green vs. grey cost analysis performed? No

Cost impact of conserving green/open space to the overall costs of the site design/development project: By converting all turf and non-native landscape vegetation with native prairie species the cost of maintenance lowered overtime compared to traditional landscaping costs. The use of irrigation and fertilizer was eliminated from site, reducing on-site

water pollution. These native species also act as a filter and sponge for off-site runoff and on-site parking lot run off collected in each design bioswale.

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).

Number of jobs created: 5

Job hours devoted to project: Not available

Planning and Design: Not available

Construction: Not available

Annual Maintenance: Not available

Performance Measures

Stormwater reduction performance analysis:

All stormwater is retained on site.

Community & economic benefits that have resulted from the project: AMCOL International is located in Hoffman Estate's Prairie Stone Business Park. Vacant lots were sold after the 2nd year of project completion and neighboring corporations within the business park have become interested in converting turf to prairie and using on site sustainable stormwater features.

Project Recognition

2011 ILCA Gold Award, Illinois
Landscape Contractors Award

Additional Information

Links to images: All images provided by Pizzo & Associates.



Photo: Pizzo & Associates