Green Infrastructure & Stormwater Management CASE STUDY

Greenwood Park

Location: Birmingham, AL
Client: Private
Design Firm(s): Nimrod Long and Associates, ENTRIX
Landscape architect/Project contact: Ryan Collins, ASLA
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ASLA Chapter: Alabama

Project Specifications

Project Description: The developer is a private entity building a stormwater treatment facility on city owned land that was acquired through FEMA flood mitigation funding. The land is set aside as floodplain and cannot be developed. Preserving this as green space is the City’s goal, but no funding was available for conversion to appropriate public use. The developer is building a stormwater quality remediation project through detention of runoff from off site as well as new paving on site. The detained water will be pumped into vegetated swales to facilitate sediment deposition and pollutant removal.

Project Type:
Open space - park
A retrofit of an existing property

Design features: Bioretention facility, bioswale.

This project was designed to meet the following specific requirements or mandates:
Developer/client preference

Impervious area managed: greater than 5 acres

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? Not applicable
**Cost & Jobs Analysis**

**Estimated Cost of Stormwater Project:** $500,000-$1,000,000 (Public funding: No public money used, private funds only)

**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:** The developer is a private entity building a stormwater treatment facility on city owned land that was acquired through FEMA flood mitigation funding. The land is set aside as floodplain and cannot be developed. Preserving this as green space is the City’s goal, but no funding was available for conversion to appropriate public use.

**Cost impact of conserving green/open space for stormwater management over traditional site design/site development approaches (grey infrastructure)?** Did not influence costs. The project was conceived as an public use park and stormwater quality improvement facility, so the cost was not affected by this choice.

**Number of jobs created:** not known

**Job hours devoted to project:**
- Planning and Design: over 1000
- Construction: Not available
- Annual Maintenance: Not available

**Performance Measures**

**Stormwater reduction performance analysis:**
The project detains and treats first flush runoff generated from off site (970 acre watershed) as well as the parking lot improvements made on site.

**Community & economic benefits that have resulted from the project:** The project is under construction, so benefits are not yet known.