Green Infrastructure & Stormwater Management
CASE STUDY

Stepping Stones Museum for Children

Location: Mathews Park, 303 West Avenue, Norwalk, CT
Client: Stepping Stones Museum for Children
Design Firm(s): T. Palmer Landscaping
Landscape architect/Project contact: Aris W. Stalis, ASLA
Email: arisstalis@sbcglobal.net
ASLA Chapter: Connecticut

Project Specifications

Project Description: As a museum for children, the expansion created the opportunity to integrate the experience of visitors with nature more. From the initial planting of materials, an increase in wildlife was recognized by staff and visitors, as birds came to feed on the fruits of the newly planted trees. As the separation between children and nature grows, the site has brings together the two. Additionally, the site design creates the practicality, of improving the quality of storm water, that eventually discharges into the Norwalk River, which continues to strive to improve it’s own water quality.

Project Type:
Institutional/education
A retrofit of an existing property

Design features: Bioretention facility, rain garden, green roof, porous pavers, and curb cuts.

This project was designed to meet the following specific requirements or mandates:
Designed for LEED Gold Certification

Impervious area managed: 1 acre to 5 acres

Amount of existing green space/open space conserved or preserved for managing stormwater on site: 5,000 sq/ft to 1 acre

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? For LEED calculations, green space areas was part of the calculations.

Cost & Jobs Analysis

Estimated Cost of Stormwater Project: $500,000-$1,000,000 (Public funding: None - privately funded.)

Related Information:

- Total construction budget - $6,627,896.00;
- Total site construction cost - $828,029.00;
- Total cost for landscaping – $148,666.00;
- Value for green roof. - $45,300.00

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 development of green infrastructure increased cost for the project, but this the value should be compared with the goals of the museum, both to improve outdoor programming space, and to create a more inviting environment for visitors and the public.

Cost impact of conserving green/open space for stormwater management over traditional site design/site development approaches (grey infrastructure)? Did not influence costs. The analysis for traditional stormwater development was not analyzed. Conservative calculations for stormwater volumes was utilized, with a minor decrease in volume recognized, without incorporating rain garden volumes, infiltration, or green roof addition.

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

Stormwater reduction performance analysis:
The increased development, saw a net reduction of stormwater leaving the site, without incorporating volumes for rain gardens, or infiltration.
Community & economic benefits that have resulted from the project: The site is part of a greater public park, that provides amenities to the park visitors. Future developments are planned in the community, that will benefit from the improved outdoor spaces created.

Additional Information
Links to images: http://www.steppingstonesmuseum.org