



Green Infrastructure & Stormwater Management CASE STUDY

Flowers Park, Phase 1

Location: New Rochelle, NY

Client: City of New Rochelle

Design Firm(s): Stantec Planning & Landscape Architecture PC

Landscape architect/Project contact: Gary Sorge, FASLA, AICP

Email: gary.sorge@stantec.com

ASLA Chapter: Connecticut

Project Specifications

Project Description: This project focused on the replacement of a synthetic turf athletic field severely damaged by floodwaters within a densely developed local watershed.

Project Type:

Open space - park

Part of a redevelopment project

Design features: Subsurface infiltration galleries used to eliminate site run-off.

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

Local ordinance, conform to FEMA regulations

Impervious area managed: 1 acre to 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? Yes.

Cost & Jobs Analysis

Estimated Cost of Stormwater Project: \$1,000,000-\$5,000,000 (Public funding: Federal, local)

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: Stormwater infrastructure/infiltration galleries were placed below grade to eliminate periodic on- and off-site flooding and to preserve much needed park recreation space.

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). To achieve the same result within the community, due to space limitations, would have been cost prohibitive. The use of on-site material and galleries to raise the field and provide subsurface storage and infiltration was beneficial to the entire neighborhood.

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:

Retains 86% of 2-year storm event for 13.66-acre watershed and reduces watershed 10-year peak flow by over 70%.

Community & economic benefits that have resulted from the project: Flood reduction provides benefit (including financial) to neighboring residents and businesses. Improved recreation facility enhances value of adjacent property. Optimal utilization of field reduces need for further field development elsewhere.

Project Recognition

American Sports Builders Award 2010

Additional Information

Links to images: Images will be provided upon request.