



Green Infrastructure & Stormwater Management CASE STUDY

Lindenhurst Memorial Library Eco-Parking Lot

Location: Lindenhurst, NY

Client: Lindenhurst Memorial Library

Design Firm(s): Retnauer Design Associates

Landscape architect/Project contact: Robert S. Retnauer, RLA, ASLA

Email: bob@retnauer-design.com

ASLA Chapter: New York

Project Specifications

Project Description: Planning, design and construction of a sustainable 20-space parking lot including permeable paver parking surface (with gravel underdrain), adjacent bioswale, native plantings, solar/LED site lighting and recycled site appurtenances.

Project Type:

Institutional/education

Part of a new development

Design features: Bioswale and porous pavers.

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

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 supportive of the project.

Did the client request that other factors be considered, such as energy savings, usable green space, or property value enhancements? No.

Cost & Jobs Analysis

Estimated Cost of Stormwater Project: \$100,000-\$500,000 (Public funding: Federal, state)

Was a green vs. grey cost analysis performed? Yes, the cost of the green design was approx. twice the cost of a traditional stormwater system.

Cost impact of conserving green/open space to the overall costs of the site design/development project: No effect.

Cost impact of conserving green/open space for stormwater management over traditional site design/site development approaches (grey infrastructure)? Significantly increased.

Number of jobs created: 10

Job hours devoted to project:

Planning and Design: 120

Construction: 160

Annual Maintenance: 5

Performance Measures

Stormwater reduction performance analysis:

Approx. 20% reduction from previous undeveloped site.

Community & economic benefits that have resulted from the project: The project has created a new aesthetic for parking lots within the community surrounding the Library.

Project Recognition

Local newspaper and media recognition