



Green Infrastructure & Stormwater Management CASE STUDY

Pioneer School Low Impact Development Project

Location: Shelton, WA

Client: Pioneer School District

Design Firm(s): Mason Conservation District

Landscape architect/Project contact: Karin Strelloff, Environmental Specialist, Mason Conservation District (now Student ASLA)

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ASLA Chapter: Washington

Project Specifications

Project Description: This project was funded by a Washington State Department of Ecology Water Quality grant. The project was designed to address flooding problems at a public school and to provide a demonstration site for low impact development tools for stormwater management. The majority of plants used in the landscape were native species. The project includes a pervious parking lot; 2 bioretention swales; 2 rain gardens; numerous landscape beds with soil amendment. Students were involved in planting the rain gardens.

Project Type:

Institutional/education

A retrofit of an existing property

Design features: Rain garden, bioswale, porous pavers, and conversion of lawn areas to native plantings with trees/shrubs/ground cover layers.

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

County ordinance, 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: 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? Educational component for staff and students at school (and their families). Also, a community education component.

Cost & Jobs Analysis

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

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: Conserving existing green space and enhancing it with compost amendments and native plantings resulted in a small cost increase compared to the benefit for stormwater management.

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

Community & economic benefits that have resulted from the project:

- Demonstration site of LID techniques for relatively new County Low Impact Development Ordinance (Mason County, WA).
- Decrease of stormwater runoff from previous parking lot and adjacent roads.
- Improved community awareness of LID and stormwater management, and associated problems with polluted stormwater runoff.
- Jobs for local contractors.