Green Infrastructure & Stormwater Management CASE STUDY

Hillsborough Community College - Southshore Campus

Location: Ruskin, FL
Client: Hillsborough Community College
Design Firm(s): Goulds Evans, Inc, Ekistics Design Studio, Inc. and Charlotte Engineering
Landscape architect/Project contact: Thomas Levin, ASLA
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ASLA Chapter: Florida

Project Specifications

Project Description: Innovative site design features for water management and the outdoor environment were integrated by a collaborative effort of the project A/E team. The campus parking lot was designed with bioswales and a series of compartmentalized detention ponds to effectuate a treatment train effect. The building's water reclamation design funnels rainwater from the roof to a reservoir used for low volume irrigation and toilet flushing before discharge to the detention ponds and returned to the storage reservoir in times of low water. Native and drought tolerant vegetation was oriented to direct breezes into interior courtyards and breezeways as well as provide water filtration and wildlife habitat.

Project Type:
Institutional/education
Part of a new development

Design features: Bioretention facility, rain garden, bioswale, and cistern.

This project was designed to meet the following specific requirements or mandates:
State statute, county ordinance, developer/client preference

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 indifferent to the project.

Cost & Jobs Analysis

Estimated Cost of Stormwater Project: $10,000-$50,000 (Public funding: 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: Slight increase in project cost

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

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 project was designed to meet State mandated water quality requirements.

Community & economic benefits that have resulted from the project: The project maximized stormwater harvesting, reuse and stormwater treatment in a high profile education environment. There was a high integration between architecture and landscape in meeting overall green and sustainable goals.

Project Recognition

Green Building Best Practice Award, Council for Sustainable Florida

Additional Information

Links to images: http://www.ekisticsdesignstudio.com/site/?p=238
http://www.greenboarstudio.com/uploads/003-HCC_SouthShore_Building_Brochure_Optimized.pdf