Green Infrastructure & Stormwater Management CASE STUDY

Concord Cooperative Recycling Facility

Location: Concord, NH
Client: CMA Engineers
Design Firm(s): CMA Engineers, Ironwood Design Group (landscape architects)
Landscape architect/Project contact: Jeffrey R. Hyland, ASLA
Email: jhyland@fewood.com
ASLA Chapter: Boston

Project Specifications

Project Description: For this project Ironwood is a sub-consultant supplying conceptual design, permitting assistance, and final construction document preparation. In addition Ironwood is working with the Jordan Institute for LEED certification related to site improvements. Project components and design efforts: parking lot layout, bus drop-off area, porous bituminous pavement, building entrance plaza with bioretention cell, a rain garden with drip line collection system, solar powered site lighting, facility signage, planting, and gray water irrigation system.

Project Type:
Industrial
Part of a new development

Design features: Rain garden, bioswale, cistern, porous pavers, and porous asphalt.

This project was designed to meet the following specific requirements or mandates:
State statute, local ordinance, 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: 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? LEED, maintenance

Cost & Jobs Analysis

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

Was a green vs. grey cost analysis performed? No

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:

Planning and Design: 300
Construction: Not available
Annual Maintenance: Not available

Performance Measures

Stormwater reduction performance analysis:
100%