Green Infrastructure & Stormwater Management CASE STUDY

Boston Architectural College - Green Alley

Location: Back Bay, Boston, MA
Client: Boston Architectural College
Design Firm(s): Halvorson Design Partnership, Inc. Landscape Architect and Nitsch Engineering, Inc.
Landscape architect/Project contact: Halvorson Design Partnership, Inc. / Bob Uhlig, ASLA
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ASLA Chapter: Boston

Project Specifications

Project Description: Project seeks to transform the alley between two buildings for the Boston Architectural College into surfaces which distinctly identify the school and also serve as a city model for pervious paving, groundwater infiltration and stormwater runoff pollution reduction. This site is located in an area where low groundwater is problematic for the durability of historic wood pile foundations. To further enhance the groundwater infiltration, stormwater runoff from the two buildings will have plumbing modified both internally and externally to supplement the groundwater infiltration from the site and further reduce the amount and quality of off site stormwater runoff.

Project Type:
Institutional/education
A retrofit of an existing property

Design features: Green roof, downspout removal, porous pavers, and subsurface aggregate material that was specified to both be structurally supportive of vehicular travel and also serve as an appropriate granular material to accept stormwater and provide pre-treatment.

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: Not applicable

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? Geothermal component is being considered.

Cost & Jobs Analysis

Estimated Cost of Stormwater Project: $100,000-$500,000 (Public funding: State - MA Department of Environmental Projection Section 319 Nonpoint Source Pollution Grant Program)

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: Not applicable

Cost impact of conserving green/open space for stormwater management over traditional site design/site development approaches (grey infrastructure)? Did not influence costs.

Number of jobs created: Not yet constructed

Job hours devoted to project:

Planning and Design: Not Available - approx 5 months design duration
Construction: Not yet constructed
Annual Maintenance: Not available

Performance Measures

Community & economic benefits that have resulted from the project: Not yet available