



Green Infrastructure & Stormwater Management CASE STUDY

Court 5 South Building Green Roof and 500-Gallon Cistern Project

Location: U.S. Dept. of Agriculture, South Building, Washington, D.C.

Client: USDA

Design Firm(s): In-house design

Landscape architect/Project contact: Ed Murtagh, Sustainable Operations Manager at USDA

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Project Specifications

Project Description: USDA staff designed and installed a 3,500 sq/ft green roof on a USDA courtyard building roof. The existing stone ballast was removed and a Green Paks green roofing system was installed. Adjacent to the green roof, a 500-gallon cistern was installed to capture the runoff from an adjacent 1,000 sq/ft roof.

Project Type:

Government Complex

A retrofit of an existing property

Design features: Green roof and cistern.

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

Demonstrate compliance to E.O. 13508

Impervious area managed:

Less than 5,000 sq/ft

Amount of existing green space/open space conserved or preserved for managing stormwater on site: . No



Did the client request that other factors be considered, such as energy savings, usable green space, or property value enhancements? Not available

Cost & Jobs Analysis

Estimated Cost of Stormwater Project: \$50,000-\$100,000 (Public funding: Federal - landscaping funds for the complex were used)

Was a green vs. grey cost analysis performed? No

Number of jobs created: Not available

Job hours devoted to project:

Planning and Design: Not available

Construction: Not available

Annual Maintenance: Not available

Performance Measures

Stormwater reduction performance analysis:

The project was a green roof demonstration. The performance of the green roof was based on the depth of the green roof that could be installed on an existing roof structure.

Community & economic benefits that have resulted from the project: The offices overlooking this courtyard had a stark gray view. The green roof will greatly enhance the working conditions in these offices.

Additional Information

This project was installed using Melwood Horticultural Services and USDA volunteers. This project was also intended to provide hands on learning experiences for all those involved.