

Scottdale Library Plaza – Stormwater Retrofit

Design Features: Rain garden, pervious concrete and native landscaping

Date of Installation: 2009

Location: Scottdale Library, Scottdale Borough, PA

Client: Jacobs Creek Watershed Association, Scottdale Library, Scottdale Borough

Installation Cost: \$52,500, PA DEP Growing Greener/EPA 319 grant funding

Partners: Westmoreland Conservation District, Jacobs Creek Watershed Association, Scottdale Borough, Scottdale Library, Country Farms Inc.

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The completed plaza captures and treats runoff from the 2 year storm with permeable concrete, a rain garden and native landscaping.

Project Description

The Scottdale Library Plaza was created as a public gathering place and outdoor education space for the public library. The plaza design included a sustainable stormwater management solution and educational demonstration using a raised planter for native landscaping, a pervious concrete patio, and a rain garden that captures and treats a portion of the library roof runoff. The space retrofitted an abandoned street and reused a stormwater inlet as an overflow structure in the rain garden.

Benefits/Performance Measures

Impervious area managed: 1,800 square feet of plaza and approximately 2,000 square feet of roof.

Stormwater reduction performance analysis: Runoff from a 2" storm event on 2,000 sq ft of roof and 1,800 sq ft of plaza is approximately 500 cu ft and is fully managed by the 1,800 sq ft plaza.

Community and economic benefits that have

resulted from the project: The raised native landscaping planter, permeable concrete, and rain garden provides catchment for debris and pollutants, provides cooling for heated runoff, and provides volume reduction and water quality improvements to the Jacobs Creek Watershed in an area where little currently exists.

Related information: The project included pavement demolition, excavation, installation of rain garden with engineered soil mix, underdrain system, and landscaping, installation of permeable concrete, and a raised concrete unit planter for native landscaping.

Maintenance Recommended

[Link to maintenance guidelines for similar projects](#)

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Additional Information



An abandoned street is a perfect opportunity for managing stormwater runoff from the street and the roof.



An existing inlet at the low end of the site is used as an overflow for larger storms. The rain garden has an engineered soil mix to infiltrate roof water which enters the garden from the roof's downspout.

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The completed rain garden is landscaped with a grass that can handle versatile conditions.



The plaza controls stormwater runoff and provides an outdoor education space for the neighboring library.