Westmoreland Conservation District

Stormwater Program

Mount Pleasant Borough – Frick Park Rain Gardens

Design features: Rain garden, concrete unit block wall, block weir

Date of Installation: 2013

Location: Frick Park, Mount Pleasant Borough, Westmoreland County PA

Client: Mount Pleasant Borough

Installation Cost: $30,000, PA DEP Growing Greener / EPA 319 grant funding

Partners: Westmoreland Conservation District, Borough of Mount Pleasant

Project contact: Kathy Hamilton RLA, kathyh@wcdpa.com

A decorative grass fills the rain garden, but the stepped weir between the upper and lower rain garden cell can be seen.

Project Description

This project is a stormwater management retrofit to capture and treat stormwater from an active park. Pollutants and runoff were being discharged directly into an adjacent roadway storm system and into an unnamed tributary of Jacobs Creek. Two unused areas of the park were developed into landscaped rain gardens. The system captures and retains storm-water runoff from the adjacent surfaces reducing the volume of runoff from the park and providing water quality improvements.

Benefits/Performance Measures

Impervious area managed: 0.1 acres

Stormwater reduction performance analysis: Runoff from a 1" storm event on 0.1 acres of impervious area is fully managed by 600 sq ft of rain gardens which captures 300 cu/ft total runoff.

Community and economic benefits that have resulted from the project: The rain gardens provide 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 demolition of an old water fountain and wall, excavation, instal-lation of rain garden with engineered soil mix, underdrain system, concrete unit walls and landscaping.

Recommended Maintenance

Link to maintenance guidelines for similar projects

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Additional Information

An existing timber wall holds back a slope where water pools and freezes in the winter, creating a hazardous condition in front of the Borough building.

A tiered rain garden created with a concrete unit wall system keeps water from running onto the nearby pavement.

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An old and broken water fountain niche in the park next to the Borough building where rain water runs off a hillside, is an opportunity for stormwater management.

A rain garden behind a new retaining wall captures runoff before it gets to a heavily traveled pedestrian walkway and parking lot.

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A concrete unit wall system holds back an existing hillside and the design layers of a rain garden.