COSTS

- Labor and materials costs were $36,000
- Design costs were $3,500 through the Rutgers Cooperative Extension Water Resources Program (other costs may be higher)

MAINTENANCE

Regular maintenance for this pervious paver area includes mowing, irrigation (as necessary especially in the first year) and fertilizers (if needed). Irrigation and fertilizers were not required at this site.

Replacement seeding may be necessary if bare areas become apparent. If erosion becomes apparent, the flow should be slowed, perhaps with river stone to break the velocity.

Deicing salts should not be used as this would negatively impact the grasses.

A snowplow may be used to clear the surface. The blade does not have to be lifted when plowing.

For more information please contact:

Pat Rector
Environmental and Resource Management Agent
Cooperative Extension of Morris County
Rutgers New Jersey Agricultural Experiment Station
P.O. Box 900
Morristown, NJ 07963-0900
Phone: 973-285-8303
Fax: 973-605-8195
Email: rector@njaes.rutgers.edu

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The Parsippany Department of Public Works (DPW) facility is approximately three acres. Most of the area consists of impervious surfaces. During a 1.25 inch two hour water quality storm, an estimated 71,275 gallons (9,801 ft$^3$) of stormwater runoff are generated at the facility.
THE SITUATION

The Troy Brook is adjacent to the Parsippany-Troy Hills Department of Public Works (DPW) facility. The Troy Brook has an impairment for biological life, and the Troy Brook Regional Stormwater Management Plan has identified the DPW facility as an area that contributes to localized flooding issues in the stream. The emergency access road behind the buildings had previously allowed stormwater runoff to the stream.

The stormwater runoff carried sediment and phosphorus, while the runoff from the roof downspouts ponded and caused flooding in the offices in the building.

THE SOLUTION

Utilizing funding from a Section 319(h) of the Clean Water Act grant from the NJDEP, permeable grass pavers were installed. Grass pavers are placed on roads or parking areas that do not receive heavy traffic. The pavers allow grass to grow between them, facilitating infiltration and decreasing the amount of runoff from the area. The pavers have reduced stormwater runoff from the road area and the side bank. Drainage from the rooftop that had previously caused flooding in the offices is also directed to the pavers, and the rooftop runoff is infiltrated. The offices no longer flood. During Hurricane Irene when Parsippany-Troy Hills received over seven inches of rain, the office in the building did not have any water whatsoever!

GRASS PAVERS

The grass paver area is approximately 180 ft. x 12 ft. (2,160 ft²), with runoff of approx. 2,000 ft² from the road and 7,160 ft² from the roof. An estimated 105,862 gallons/yr. of rainwater is now being captured and treated onsite.