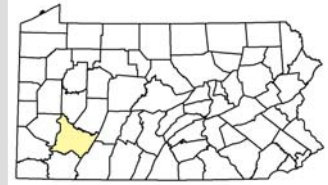


Worksite in Focus

Westmoreland County Powdermill Nature Reserve

11/2/04



Project Background

In need of additional parking, Powdermill Nature Reserve sought an environmentally sensitive solution that handles increased visitors and related traffic loads without an ugly scarring of the surrounding landscape. To accomplish this, the Reserve added:

- A new driveway with Driving Surface Aggregate* (DSA-as modified) to improve circulation and provide second access to Rte. 381;
- 2 new parking areas: a bus parking lane underlain with Geogrid® (see photo below) and a pervious grassed automobile lot (60' x 100').

Project Considerations

Where the new driveway crossed two small drainage ways (see Site Plan below), French mattresses*, constructed of clean stone wrapped in non-woven geotextile fabric, were installed. This low-cost, low-maintenance technique connects the hydrology on either side of the road allowing water to percolate through the stone while the fabric prevents sediment movement.



Above: Construction of the bus parking lane. Geogrid® was used to add support and tensile strength.

* For more information on DSA and French Mattress construction please see the DSA Informational Bulletin and the French Mattress Technical Bulletin available at www.dirtandgravelroads.org.

Project Facts

Project:	Nimick Nature Center Driveway & Parking Lot
Project Owner:	Powdermill Nature Reserve
Affected Watershed:	Powdermill Run, Youghiogheny River
Project Length:	550 ft
Date Completed:	October 2003

Cost Summary

Project Cost:	\$35,049
Geoblock® Parking Lot	\$26,833
Contract	\$1,980
Materials (geosynthetics)	\$1,580
Stone	\$4,056
Tree Removal	\$600
In-Kind Contributions:	\$8,300

This project was completed with monies raised by the Powdermill Nature Reserve.

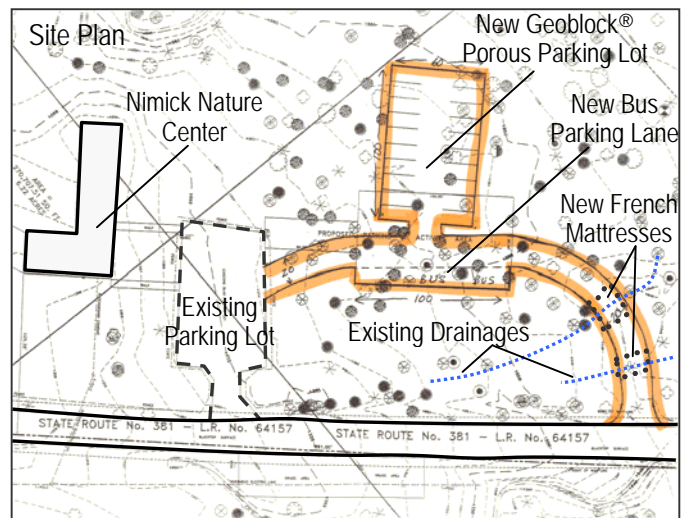
For More Information

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Driveway Construction Sequence

1. Trees were cleared along the proposed right-of-way and non-woven geotextile fabric was rolled out. Additional lengths of fabric were laid perpendicular to the driveway at two locations to allow construction of the French mattresses (see photo 1).
2. #3 stone was tailgated on top of fabric along the entire length of the right-of-way.
3. The perpendicular fabric sections were wrapped over the #3 stone to create the French mattresses (see photos 2 & 3).
4. #2b stone was tailgated over the entire length of the driveway, including the French mattresses. A modified version of DSA was placed over the #2b stone and rolled to create the driving surface (see photo 4).



Project Results

Environmentally sensitive maintenance practices were employed to minimize cost, reduce future maintenance demands and expand visitor infrastructure while staying in tune with natural surroundings. This collaborative project brought together several diverse partner organizations to reinforce Powdermill’s environmental ethic that teaches respect for nature by showcasing how human handiwork can “lay lightly on the land.”



Project Partners

- Powdermill Nature Reserve
- Center for Dirt & Gravel Road Studies
- Westmoreland Conservation District
- Sustainable Forestry Initiative of PA
- Kennametal Inc



Site Map & Directions

From the PA Turnpike (Interstate 76), exit at Donegal/Ligonier/PA 711 (#91). Turn left onto Route 31 after the toll booth. Follow Route 31 to Route 381 north. The Nimick Nature Center is 6 miles ahead on the left.

