

### Green Valley Road, Low Volume Road Project

**Design Features:** Multiple cross pipes, mitered inlet pipes, regraded ditch lines, and stabilized streambank.

**Date of Installation:** 2023

**Location** Green Valley Road, Hempfield Township, Westmoreland County

**Client:** Hempfield Township

**Cost:** \$42,517.47 of Low Volume Road funds were used with an in-kind contribution of \$13,042.22 from the township. The total cost of the project was \$55,559.69

**Project Partners:** Hempfield Township, Westmoreland Conservation District, and the Penn State Center for Dirt and Gravel Road Studies.

**Project Contact:** Kelly Brestensky, [kelly@wcdpa.com](mailto:kelly@wcdpa.com)



*Finished streambank stabilization showing the stabilized roadside.*

### Project Specifications

In order to disconnect the road drainage from Township Line Run, four new cross pipes were installed and one existing cross pipe was replaced. Previously, multiple springs and runoff flowed down the roadside ditch to a cross pipe leading directly to the stream. Approximately 200' of the streambank was eroding and threatening the road's integrity. This section of streambank was stabilized to prevent further erosion.

### Benefits/Performance Measures

Through the installation of the additional cross pipes, the amount of water entering directly into the stream is greatly limited. The additional controlled outlets allowed the water to drop out the sediment and infiltrate back into the ground limiting the amount of sediment that enters the stream.

The streambank stabilization protects the stream adjacent to the road. This reduced the amount of sediment that was entering the stream due to erosion.

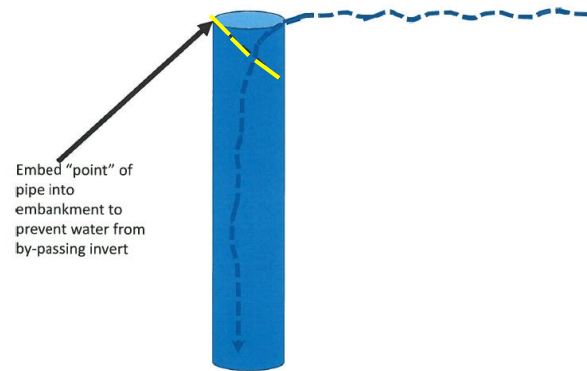
The installed practices help the township by reducing the amount of maintenance that must be performed on the road. Ultimately saving the township money, while also improving water quality.





***(Before):*** Multiple springs/ road runoff causing water to flow down the road edge creating unstable/eroding ditches.

Pipe miter, view from standing over pipe.



***(Above):*** Mitering the ends of the pipes increases the opening which allows water to flow through more easily.

***(After):*** Multiple cross pipes were installed diverting the springs/ road runoff under the road to a stable outlet.

