

Location:	Borough of Harmony, Butler County, District 10-0
Completion Date:	9.01.01
Construction Cost:	\$1,293,806
MPMS #:	24454
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Themes:	Leverage and preserve existing investments; Understand the context; plan and design within the context

Project Overview: This project includes the construction of a two span composite steel structure carrying SR 36 over Red Bank Creek at the Town of Brookville in Jefferson County. The Borough Engineer, representing the community asked that the structure be designed to blend into the Historic District of Brookville. He specifically requested that the structure not be a pre-stressed reinforced concrete. Consequently, the structure was designed with weathering steel girders to provide a rustic look and to eliminate the need for future painting. Period lighting matching the lighting in the town was specified, the parapets have special detailing making them more appealing and form liners were used when placing abutment and pier concrete to approximate the look of cut stone.

Several stakeholders were involved in this “first-time” project and each left with knowledge to apply in future situations. The Town of Brookville, the Township Engineer, the contractor, and PennDOT all gained a new perspective on this project.

Lessons Learned: The design team worked collaboratively with the Borough Engineer to develop a design solution that will be sensitive to the historic context of Brookville, utilizing various innovative design and construction techniques.

This was one of the first State jobs in Pennsylvania using form liners and it involved an initial purchase cost for the liners and a learning curve for efficient use, thus adding some cost and time to the project. Part of the learning curve included staining of the concrete issues where initial written specifications were not clear enough for the contractor to know what types of stains were acceptable and how they were to be applied. Several options were tried and ultimately a method was found to be suitable for the project.

harmony bridge

