

knapps covered bridge rehabilitation

Location:	Burlington Township, Bradford County, District 3-0
Completion Date:	2004
Construction Cost:	\$961,171
MPMS #:	5105
Contact Information:	Christopher D. King 570.368.4255 chriking@state.pa.us
Theme:	Leverage and preserve existing investments; Understand the context; plan and design within the context
Project Overview:	<p>Knapp's Bridge is the only remaining covered bridge in Bradford County and is listed on the National Register of Historic Places. Knapp's Bridge is also the highest covered bridge in the Commonwealth of Pennsylvania. The goal of this project was restoration of Knapp's Bridge for modern use while retaining the original historic character of the bridge. Design challenges were threefold: (1) to select materials and construction methods that met the approval of the Pennsylvania Historical and Museum Commission (PHMC), (2) to strengthen timber members and the structural connections between the arch and truss system to accommodate modern vehicle traffic and (3) to develop abutment repair methods to improve aesthetics while facilitating superstructure repair operations.</p> <p>Newspaper articles kept the public informed from design through construction and curious onlookers observed the process. Lycoming Supply workers paid meticulous attention to construction details. Existing and new timber members needed to fit together perfectly and needed to fit onto reconstructed abutments. The craftsmanship of the workers stands out in the exceptional quality and beauty of the finished project, which has given the community pride in its historical resource and returned a vital transportation link to the community.</p>
Lessons Learned:	Coordinate early and often with the agency (and groups) that have special concerns related to the historic fabric of the bridge. In addition to how the bridge functioned, the PHMC was very concerned with the historic materials on the bridge and replacing them in-kind once it was determined materials could not be salvaged.
Awards:	The major rehabilitation of Knapp's Covered Bridge in Bradford County was honored with a statewide quality award for bridges. The project received the Pennsylvania Partnership for Highway Quality (PPHQ) Award for Structures (150 feet or less). PennDOT Engineering District 3-0, Dewberry-Goodkind, Inc. (designer), Lycoming Supply, Inc. of Williamsport (primary contractor), and Bradford County Government (owner) will receive plaques for the quality rehabilitation project. Knapp's Bridge was one of nine (9) projects statewide nominated for the PPHQ Bridge Award for Structures 150-feet or less.

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