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BRIDGE BACK HOME IN "ITS DOTAGE"

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For more than a century, the Doty Road Bridge carried vehicles over New Jersey's Ramapo River in an area traditionally called "The Ponds" (Figure 1). Named after the Doty family, early settlers to Oakland Borough in Bergen County, New Jersey, the single-lane, 80-foot-long bridge was constructed in 1891. Recently, the New York District found a home for the retired landmark in Phoenixville, Pennsylvania, where it was originally constructed and where it will continue to serve the public.

In the late 19th century, Bergen County requested that a bridge be constructed after winter floods swept away an earlier bridge. The county literally found the bridge by thumbing through a catalogue. They purchased a 5-panel, wrought iron, Pratt Pony Truss Bridge with Phoenix Columns from the Phoenixville Bridge Company, a wholly owned subsidiary of the Phoenix Iron and Steel Company, located in Phoenixville, Pennsylvania. The company sold hundreds of bridges, viaducts, and highway spans in the United States and Canada. Whole bridges were prefabricated by the company in an almost kit-like fashion. The customers ordered the parts they needed. The parts were shipped to local engineers who customized the designs for their particular location. All of the bridge panel sections were sent to the job site with all of the riveting work completed. The only thing that local engineers had to do was literally "pin" the bridge together.

Many of the bridges were constructed using the bridge company's famous Phoenix Columns and truss designs, invented by the company. The Phoenix Column is hollow and circular and made up of four, six, or eight wrought-iron segments that are flanged and riveted together (Figure 2). Phoenix Column truss bridges were widely used in the late 1800s because the column facilitated the erection of tall structures, eliminating the requirement for heavy, thick load-bearing walls, and also because of its application in the construction of bridges, viaducts, and elevated rail lines.

In 1983, the bridge was condemned because of its poor condition and another bridge was inserted through the middle of the original structure relieving the old bridge from carrying any traffic. In 1989, the structure was determined eligible for listing in the National Register of Historic Places.

The Doty Road Bridge is located where the U.S. Army Corps of Engineers, New York District's Ramapo River at Oakland Flood Control Project is currently under construction. Several years ago, project managers determined that the bridge would be an obstruction during floods and that it should be removed and replaced by a new bridge by the New Jersey Department of Transportation. The New Jersey Historic Preservation Office stated that something needed to be done with the bridge in terms of mitigation because it is a cultural resource.

Lynn Rakos, a New York District Archeologist, took the lead in



Figure 1: The Doty Road Bridge, a 19th-century "catalog bridge," carried vehicles over New Jersey's Ramapo River for more than a century.

finding a home for the bridge, particularly its trusses since the rest of the bridge was deteriorated. Rakos said. "Our goal was to provide it to a nonprofit at no charge and to make sure it would still be accessible to the public." Rakos marketed the trusses nationwide. She called historical societies, distributed fliers and marketing materials to state park managers and engineers, and placed an advertisement in Preservation Magazine. She received emails and calls from a wide range of individuals. "Engineering professors, interested in the bridge's history, told me that they would like a piece of the truss and another man wanted to place it by a stream on his ranch in North Dakota," said Rakos.

One of Rakos' more interesting calls came from the Phoenixville Area Economic Development Corporation (PAEDCO), a nonprofit organization that is trying to bring economic life into Phoenixville, Pennsylvania. The New York District, after evaluating all of its offers, decided to work with PAEDCO. PAEDCO, in cooperation with the county and state, purchased 27 acres in northern Phoenixville to create a park. The plans for the park include creating walking and biking trails along French Creek and placing the trusses of the bridge over the creek connecting the park to the trails, as decorative elements.

PAEDCO "purchased" the truss for a symbolic dollar. After years of searching for a home for the bridge, on a rainy and cold day on December 11, 2002, the bridge was disassembled and trucked from Oakland Borough to Phoenixville, where it was crafted over a century ago (Figure 3). "We sent the bridge home in its dotage," said Rakos. She adds, "It is unique that bridges get moved. This doesn't happen too often. With the enthusiasm of PAEDCO, I have confidence it will be a happy ending."



Figure 2: One of the Phoenix Columns is visible on the truck during moving day,



Figure 3: On a rainy and cold day in December 2002, the bridge was disassembled and trucked from New Jersey to Phoenixville, Pennsylvania, where it was originally crafted.