

Chester County Bridge #111 Rehabilitation

Carrying Allerton Road over the East Branch of the Brandywine Creek
East Bradford Township, Chester County, PA



This project is the rehabilitation of Chester County Bridge #111, a 115 year old truss bridge carrying Allerton Road over the East Branch of Brandywine Creek in East Bradford Township, Chester County, Pennsylvania. Known as the Jefferis Bridge, it is within the Worth-Jefferis Historic District, a 1,800-acre rural historic district with a period of significance of 1707 to 1943. The bridge is located at the point where the British Army crossed the creek on September 11, 1777 on their way to the Battle of Brandywine. While not a contributing resource to the historic district, the bridge is individually eligible for the National Register. The bridge is a single span riveted metal through Pratt truss bridge. The bridge superstructure has been described as “an individually significant example of its type and design” with the Pratt through truss form, riveted truss member end connections, rolled steel floorbeams supported by U-shaped floorbeam hangers, and the decorative lattice railing identified as character-defining and significant features. (TranSystems, 2017)

The bridge superstructure has an overall length of 104', and a curb-to-curb deck width that averages 14'-5½". It is currently posted for an 8 ton weight restriction and 12'-1" vertical clearance. Based on recent inspections, the superstructure is rated in poor condition and the substructure is in fair condition. The bridge is functionally obsolete due to the narrow, one lane bridge width.

The purpose of this project is to rehabilitate the existing structure to increase its load carrying capacity and improve safety, while maintaining the historic character of the structure. Safety improvements are proposed to protect the trusses, increase sight distance across the bridge, maintain or improve the vertical clearance, and add safety features (guide rail) for motorist protection, without adverse effect on the identified character-defining and significant historic features of the bridge. The bridge will remain a one lane bridge with a posted weight restriction after rehabilitation.

Environmental studies have identified suitable bog turtle habitat within 300' of the limits of disturbance of construction. Therefore, protective measures will be implemented during construction to prevent impacts to bog turtles that may be present, and work in the stream will be restricted to winter months.

During construction, traffic will be detoured around the site onto SR 0842 (South Creek Road and South Bridge Road) for approximately 12 months. Construction is anticipated to begin in the Fall of 2021 and be completed in early 2023.

If you would like additional information about this project, or care to contribute comments concerning it, please feel free to contact one of the following:

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