

## whatHistoricalServicesUnitdoes

- Research and Write Historic Reports
- Determine National Register Eligibility
- Determine Historic Boundaries
- Determine Effects to Historic Properties
- Mitigate Adverse Effects to Historic Properties
- Complete Historic Documentations for Specific Historic Properties
- Historic Turnpike Research and Analysis
- Coordinate with Federal, State, and Local Resource Agencies
- Conduct Public Workshops for Specific Bridge and Highway Projects

## contactus

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fourth street  
**bridge**  
*marion county*

The City of Fairmont held an election on May 21, 1910, to issue \$75,000 in bonds for the erection of a bridge at Fourth Street and for improvements to the water system. The bridge was erected in 1911-12 by the City of Fairmont, which engaged the engineering firm of Layton F. Smith of Baltimore. In November 1911, the Monthly Journal of the Engineers Club of Baltimore reported that "Mr. R.H. Moffitt is now in Fairmont, W. Va., where he has charge of the construction of the Fourth Street Viaduct." Smith notes that the bridge's unusual cantilevered design resulted from the fact that the City of Fairmont wished to build the two abutments by day labor, so the viaduct is designed not to rest on the abutments at all, "the shore spans being cantilevers and the abutments being used merely to hold back the earthfill at each end." It is likely that bridge construction was completed in 1912, as the 1912 Sanborn Fire Insurance Map of Fairmont shows a concrete bridge at Fourth Street. Layton F. Smith (d. 1936) was a noted engineer-architect of reinforced concrete buildings and structures in the first quarter of the twentieth century. Between 1904 and 1914, Smith was a representative of the Trussed Concrete Steel Company of Baltimore. In 1914, Smith opened an office at 513 N. Charles Street, Baltimore, for private practice as an engineer-architect specializing in the design of reinforced concrete structures. In January 1907 Smith patented a reinforced concrete column (Patent No. 841,463), which is similar to the design of the columns used on the Fourth Street Bridge.

## Fourth Street Bridge History

The Fourth Street Bridge is individually significant under National Register of Historic Places (NRHP) Criterion C for its engineering technology as an early (1911-12) example of a rigid frame, reinforced concrete cantilevered bridge and for its association with Layton F. Smith, a noted designer of reinforced concrete structures in the first quarter of the twentieth century. Rigid frames make use of continuous concrete connections between beams and substructure columns and/or foundations. This technology made the most of the ability of concrete to be cast monolithically and allowed reduction in material quantities. The bridge is also a contributing element of the Fleming-Watson Historic District, which was listed in the NHRP on November 29, 2001. The district is significant under Criteria A for community planning and development and under Criterion C for architecture.



**Location:** Fourth Street, Fairmont, WV in the Fleming-Watson Historic District  
**Type:** Rigid Frame, Reinforced Concrete Cantilevered Bridge  
**Length:** 251 feet  
**Year constructed:** 1912  
**Contractor:** Layton F. Smith, Baltimore, Maryland