

PENNSYLVANIA RAILROAD, FRENCH CREEK TRESTLE
(Schuylkill Valley Division, Frazer Branch, Bridge No. 200)
Pennsylvania Historic Railroad Bridges Recording Project
Spanning French Creek, north of Paradise St.
Phoenixville
Chester County
Pennsylvania

HAER No. PA-519

HAER
PA
19-PHOEN,
3-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
National Park Service
1849 C Street, NW
Washington, DC 20240

HISTORIC AMERICAN ENGINEERING RECORD

PENNSYLVANIA RAILROAD, FRENCH CREEK TRESTLE
(Schuylkill Valley Division, Frazer Branch, Bridge No. 200)

HAER
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HAER No. PA-519

Location: Spanning French Creek, north of Paradise St., Phoenixville, Chester County, Pennsylvania.

USGS Quadrangle: Phoenixville, Pennsylvania (7.5-minute series).

UTM Coordinates: 18/455120/4442565

Dates of Construction: 1891-92.

Basis for Dating: Construction contracts.

Dates of Alteration: 1898, 1901, 1914, 1923.

Designer: H. R. Leonard (Chief Engineer, Pennsylvania Railroad).

Fabricators / Builders: Phoenix Bridge Co. (Phoenixville, Pennsylvania); American Bridge Co., Pencoyd plant (Philadelphia).

Present Owner: Norfolk Southern Railroad.

Present Use: Railroad bridge.

Structure Type: Riveted deck girder; riveted half-through girder.

Significance: The French Creek Trestle, with its sixteen plate-girder spans of various ages, is an excellent example of American railroads' practice of recycling main-line structures into branches and sidings.

Historian: Justin M. Spivey, April 2001.

Project Information: The Historic American Engineering Record (HAER) conducted the Pennsylvania Historic Railroad Bridges Recording Project during 1999 and 2000, under the direction of Eric N. DeLony, Chief. The project was supported by the Consolidated Rail Corporation (Conrail) and a grant from the Pennsylvania Historical and Museum Commission (PHMC). Justin M. Spivey, HAER engineer, researched and wrote the final reports. Preston M.

Thayer, historian, Fredericksburg, Virginia, conducted preliminary research under contract. Jet Lowe, HAER photographer, and Joseph E. B. Elliott, contract photographer, Sellersville, Pennsylvania, produced large-format photographs.

Description and History

During its early development as an industrial center, Phoenixville possessed mostly east-west transportation links along the Schuylkill River. The Philadelphia & Reading Railroad constructed its main line parallel to the river in the mid-nineteenth century, a route later duplicated by the competing Pennsylvania Railroad (PRR), working through its Schuylkill Valley subsidiary. While these railroads provided adequate connections to the west, north, and east, southbound traffic had to make an extensive detour through Philadelphia. The Phoenixville & West Chester Railroad (P&WC) was incorporated on 8 March 1882 to build a more direct route to points south. By June 1883, construction had reached the PRR main line at Frazer, at which point P&WC merged with the Schuylkill Valley.¹ A later extension connected with the West Chester Branch of the Philadelphia, Wilmington & Baltimore, another PRR subsidiary.

The Frazer Branch, as the former P&WC was known, connected with the Schuylkill Valley Division through a wye ("Y"-shaped) junction at Phoenixville. It is unclear which, if not both, of the legs dates to 1883. Records of a trestle on the east leg include agreements between PRR and the Phoenix Bridge Co. to construct several spans in 1891, 1892, 1898, and 1901.² These represent only portions of the total length, however, suggesting the existence of an earlier structure. A drawing accompanying the 1892 agreement also shows a single-track deck truss over French Creek not mentioned in the contract, supported on stone piers different from those under the trestle bents.³

The east leg of the wye presently crosses French Creek valley on a riveted plate-girder viaduct of sixteen spans with a total length of 1,027'-0". The longest span, which replaced the deck truss over the creek in 1914, has two lines of girders measuring 108'-6" long and 9'-2-1/2" deep. All of the spans are single-track deck girders supported on reinforced concrete piers, except for a 73'-2" half-through girder over the abandoned Pickering Valley Railroad alignment at the south end. This single-track span, also installed in 1914, is supported on stone piers that appear wide enough to carry two tracks.⁴ The remainder of the girders have lengths between 33'-0" and 65'-0", and probably date from a variety of replacement campaigns.

The concrete piers probably date from a major reconstruction in 1923, as do some girders fabricated at the American Bridge Co.'s Pencoyd plant in Philadelphia. Seeking a low-cost solution, however, PRR bridge engineers also re-used old girders from various locations. Whereas the old spans commonly had two lines of girders, the new spans have four to support heavier train loads. Some of the shorter girders might have been taken from the existing trestle, doubled up, and installed on the new piers. Drawings from this project also note girders taken from Bridge No. 1.56 (4-B) on the Union Railroad of Baltimore, shortened slightly, and doubled

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up in at least one span.⁵ The French Creek Trestle is therefore an excellent example of American railroads' practice of recycling main-line structures into branches and sidings.

Notes

1. Thomas T. Taber III, *Railroads of Pennsylvania: Encyclopedia and Atlas* (Muncy, Pa.: Thomas T. Taber III, 1987), 418.
2. Agreement No. 1525, "Phoenix Bridge Company with the Pennsylvania R. R. Co. for Phoenixville 'Y' and Bge. 26 over Marsh Ditch, Dated Oct. 13, 1890," in folder "Phoenixville, Pa.," Box 754, Construction Contracts, Engineering Department; Agreement No. 1779, "Phoenix Bridge Co. with the Penna. R. R. Co. for Superstructure for Eight (8) Spans of a Single Track Deck Plate Girder Viaduct, Phoenixville, Pa., March 25th, 1892," and Agreement No. 2488, "Phoenix Bridge Co. with the Penna. R. R. Co. for French Creek Viaduct at Phoenixville, May 11th, 1898," in folder "Bridges - Schuylkill Division, 1889-1898," Box 747, Construction Contracts, Engineering Department; and John S. Deans, Phoenix Bridge Co., to William H. Brown, 22 June 1901, in folder "Phoenixville, Pa. 1883-1901," Box 1470, Engineering Department, Chief Engineer. All Pennsylvania Railroad Co. records, Acc. 1807, Hagley Museum & Library, Greenville, Del.
3. Pennsylvania Railroad, "French Creek Trestle, East Leg of Phoenixville 'Y' west of Bridge over French Creek, Phoenixville Br., P. S. V. R. R." (23 Dec. 1891),
4. Pennsylvania Railroad, "Bridge No. 200 near Phoenixville, Pa., Phoenixville Br., Schuylkill Div." (Oct. 1913), milepost 0.54, region/division/branch 101152, aperture card files, Consolidated Rail Corp., Philadelphia, Pa. [hereinafter cited as Conrail aperture cards; transferred to Norfolk Southern Railway Co., Atlanta, Ga.].
5. Pennsylvania Railroad, Office of the Chief Engineer, "Schuylkill Div., Phoenixville Br., Bridge No. 0.54 (Old No. 200), French Creek Trestle, East Leg of 'Y,' Span No. 3" (21 Nov. 1922), in Conrail aperture cards.