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United States Department of the Interior  
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES  
REGISTRATION FORM

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1. Name of Property

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historic name: Pennsylvania Railroad District

other name/site number: Conrail: Little Juniata River Bridges and Tunnels  
Spruce Creek to Birmingham Section

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2. Location

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street & number: Conrail mile markers 213.73 to 218.88

not for publication: N/A

city/town: Spruce Creek

vicinity: N/A

state: PA county: Huntingdon

code: 061 zip code: 16683  
16686

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3. Classification

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Ownership of Property: Private

Category of Property: District

Number of Resources within Property:

Contributing	Noncontributing	
_____	_____	buildings
_____	_____	sites
12	_____	structures
_____	_____	objects
12	0	Total

Number of contributing resources previously listed in the National Register:   0  

Name of related multiple property listing: Industrial Resources of  
Huntingdon County

4. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1986, as amended, I hereby certify that this X nomination request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property X meets      does not meet the National Register Criteria.      See continuation sheet.

Dr. Brent D. Glass

*Brent D. Glass*

*1/30/90*

Signature of certifying official

Date

Pennsylvania Historical and Museum Commission

State or Federal agency and bureau

In my opinion, the property      meets      does not meet the National Register criteria.      See continuation sheet.

Signature of commenting or other official

Date

State or Federal agency and bureau

5. National Park Service Certification

I, hereby certify that this property is:

     entered in the National Register       
     See continuation sheet.

     determined eligible for the National Register       
     See continuation sheet.

     determined not eligible for the National Register     

     removed from the National Register     

     other (explain):     

Signature of Keeper

Date of Action

6. Function or Use

Historic Functions:  
16 Transportation

Subfunctions:  
16A Rail-Related

Current Functions :  
16 Transportation

Subfunctions:  
16A Rail-Related

7. Description

Architectural Classification:

80 Other

Other Description: railroad bridges and tunnels

Materials: foundation N/A roof N/A
walls N/A other brick, stone

Describe present and historic physical appearance. X See continuation sheet.

8. Statement of Significance

Certifying official has considered the significance of this property in relation to other properties: statewide.

Applicable National Register Criteria: AC

Criteria Considerations (Exceptions) :

Areas of Significance: Engineering
Transportation

Period(s) of Significance: 1850-1939

Significant Dates : 1850 1900

Significant Person(s): N/A

Cultural Affiliation: N/A

Architect/Builder: Pennsylvania Railroad

State significance of property, and justify criteria, criteria considerations, and areas and periods of significance noted above. X See continuation sheet.

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## 9. Major Bibliographical References

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 See continuation sheet.

Previous documentation on file (NPS):

- preliminary determination of individual listing (36 CFR 67) has been requested.
- previously listed in the National Register
- previously determined eligible by the National Register
- designated a National Historic Landmark
- recorded by Historic American Buildings Survey # \_\_\_\_\_
- recorded by Historic American Engineering Record # PA 061.057

Primary Location of Additional Data:

- State historic preservation office
- Other state agency
- Federal agency
- Local government
- University
- Other -- Specify Repository: Conrail

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## 10. Geographical Data

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Acreage of Property: approx. 50 acres

UTM References:		Zone	Easting	Northing	Zone	Easting	Northing
A	17	741630	4499465	B	17	741305	4499580
C	17	740810	4499550	D	17	740020	4499415

 See continuation sheet.Verbal Boundary Description:  See continuation sheet.Boundary Justification:  See continuation sheet.

## =====

## 11. Form Prepared By

Name/Title: Deborah L. Suciu - Historic Preservation Specialist

Organization: PHMC - BHP

Date: November 1989

Street &amp; Number: Box 1026 - State Museum

Telephone: (717) 783-5796

City or Town: Harrisburg

State: PA ZIP: 17108-1026

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DESCRIPTION:

The Pennsylvania Railroad District includes ten stone arch railroad bridges, two parallel tunnels and the right-of-way which links them. The district extends for 5.15 miles on the Conrail right-of-way in Huntingdon County. This was the most highly constructed area in terms of the number of bridges and tunnels per mile necessary to carry the Pennsylvania Railroad right-of-way. The right-of-way follows and crosses the Little Juniata River through the mountain ridges in northwestern Huntingdon County. From the initial railroad survey, the topography of the land limited the placement of the right-of-way and reduced the ability to avoid crossings.

The group of ten stone arch railroad bridges, located between the village of Spruce Creek and the Borough of Birmingham, are catalogued by their Conrail identification numbers which in turn correspond to the mileage from Philadelphia. All are multiple semi-circular arch bridges of stone ashlar; the majority are skewed. All have been reinforced and/or widened by the addition of concrete spandrels or by the extension of the arches in reinforced concrete.

MILE	DATE	LENGTH	MAINTENANCE	UTM
<u>215.06</u>	(1899):	5 arch, 298'	long, major repair 1933	(17.741630.4499465)
<u>215.27</u>	(1899):	3 arch, 164'	long, major repair 1932	(17.741305.4499580)
<u>215.60</u>	(1900):	4 arch, 228'	long, major repair 1962	(17.740810.4499550)
<u>216.14</u>	(1902):	5 arch, 287'	long, major repair 1960	(17.740020.4499415)
<u>216.49</u>	(1892):	4 arch, 162'	long, major repair 1962	(17.739780.4499955)
<u>217.25</u>	(1890):	5 arch, 230'	long, major repair 1962	(17.739140.4500940)
<u>217.50</u>	(1889):	3 arch, 194'	long, major repair 1918	(17.738780.4500980)
<u>218.42</u>	(1886):	3 arch, 164'	long, major repair 1962	(17.737625.4501875)
<u>218.71</u>	(1888):	4 arch, 221'	long, major repair 1963	(17.737280.4502180)
<u>218.88</u>	(1887):	3 arch, 158'	long, major repair 1958	(17.737060.4502375)

On the easternmost end of the nominated property, milemarker 213.73, lie the two railroad tunnels. The Pennsylvania Railroad 1151-foot long brick-arched tunnel through a spur of Tussey Mountain is 32 feet wide. It was built in 1850 for the Pennsylvania Railroad's original single track, but later accomodated two tracks. Its eastern rock-faced stone portal retains its original appearance, while the western portal was widened and combined with the western portal of a second tunnel

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constructed in 1900 when the main line was four-tracked. This original structure is now used for a single eastbound track.

The 1075-foot long brick-arched tunnel through the same mountain is 32 feet wide and was built in 1900 to accomodate two tracks during the four tracking of the mainline. It now accomodates a single westbound track. Its eastern rock-faced stone portal is separated from the earlier 1850 tunnel by a narrow strip of woods, while the western openings of the two tunnels are joined in a double portal.

The original bridges on this right-of-way were constructed of iron. The historic sketches and photographs indicate there were both deck truss and deck girder examples among these. The reason for converting to stone arches is not certain; perhaps the iron bridges were deteriorating as the weight of the locomotives increased, and stone was considered a stronger and longer-lasting material. All have now survived at least twice as long as the iron bridges they replaced.

Major reinforcement of these stone arch bridges with steel and/or concrete occurred as early as 1886 and as recently as 1963. The modifications were directed at strengthening the bridges for the increased number of and weight of passing locomotives. The changes that occurred around the turn of the century appear to have been directed more toward widening the decks than toward correcting defects in the stonework. All modifications which took place before 1940 contribute to the eligibility of the structures. As an engineering feat, the bridges are impressive as a successful engineering effort to cross difficult terrain and they retain the integrity of the original right-of-way.

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SIGNIFICANCE:

The Pennsylvania Railroad District is eligible under Criterion C for engineering significance. It is an example of engineering developed by the railroad company in an effort to overcome the difficult terrain in northwestern Huntingdon County. In order to cross the mountains the right-of-way followed the path of least resistance along the Little Juniata River. This, however, created the necessity of crossing the river many times in a relatively short distance. The district is also eligible under Criterion A for its role as an important link in the transportation of goods and people through or within Huntingdon County.

These stone arch bridges and tunnels, built between 1850 and 1902, carry the Pennsylvania Railroad main line over the Little Juniata River ten times, and through Tussey Mountain in 5.15 miles. The railroad's route along the Little Juniata must have tormented the original engineers and contractors and those who followed during the four tracking. After the replacement of some of the iron bridges with stone, the commencement of four tracking raised an issue of width. Those replaced before 1892 had to be widened to accommodate the extra track. The resulting pre-1940 alterations to the bridges contribute to the integrity of the district. The railroad track and bed is eligible as the original alignment and grade of the right-of-way has been maintained.

Although altered in 1899-1900 with the construction of the second tunnel, the 1850 tunnel has maintained its alignment and purpose. It continued to be a significant link in the transportation from Philadelphia west to Altoona and Pittsburgh. The second tunnel represents the continued importance of the right-of-way as a transportation link.

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SOURCES:

Africa, J. Simpson. History of Huntingdon and Blair Counties, Pennsylvania (Philadelphia: Louis H. Everts, 1883), pp. 37, 320.

Alexander, Edwin P. On the Main Line (New York: Bramhall House, 1971), p. 88-93. [Photographs of terrain and original bridges]

Bowen, Eli. The Pictorial Sketch-Book of Pennsylvania (Philadelphia: Willis P. Hazard, 1852), p. 105.

Conrail. List of Undergrade and Overhead Structures. Office of the Chief Engineer-Maintenance of Way (Philadelphia, 1 January 1988), p. 20-21.

Dailide, Vyto., Conrail, Industrial Engineering Division, phone interview, December 1989.

Rung, Albert M. Rung's Chronicles of Pennsylvania History, Vol. II (Huntingdon: Huntingdon County Historical Society, 1984), p. 304-05.

Shedd, Nancy S., and Harshbarger, Jean P. Second Century 1887-1987: A Hunt-ingdon County Bicentennial Album (Huntingdon: Huntingdon County Historical Society, 1987), p. 23.

The Globe. Huntingdon, Pa., 1899-1900.

U.S. Census. Population Schedule, Spruce Creek Township, Huntingdon County, 1900. [Microfilm, Huntingdon County Historical Society]



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UTM References: (con't)

E	17	739780	4499955	F	17	739140	4500940
G	17	738780	4500980	H	17	737625	4501875
I	17	737280	4502180	J	17	737060	4502375
K	17	742942	4499190	L	17	742942	4499200

VERBAL BOUNDARY DESCRIPTION:

The boundary begins at a point 15 feet to the north of the centerline of the eastbound track of the Conrail right-of-way, 213.73 miles from Philadelphia. The boundary heads south for about 350 feet to a point 15 feet south of the centerline of the westbound track of the Conrail right-of-way. From this point and the point of origin the two sides of the boundary turn west and follow the Conrail right-of-way at a distance of 15 feet north of the centerline of the eastbound track, and 15 feet south of the centerline of the westbound track, except at the location of bridges where the boundary expands to 40 feet to either side of the centerline for the length of the bridge. Both boundaries continue to parallel the right-of-way west for 5.15 miles, at that point the boundary paralleling the westbound track turns north at a right angle and intersects the boundary paralleling the eastbound track.

BOUNDARY JUSTIFICATION:

The boundary includes the right-of-way, the two tunnels and the ten stone arch bridges nominated.

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# **National Register of Historic Places Continuation Sheet**

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This nomination contains material taken directly from the unpublished report prepared in 1988 for the Historic American Engineering Record (see Bibliographical References).

The author of that report, Nancy Shedd, is a major contributor to the text of this nomination although not the preparer.



CONTOUR II  
MINIMAL 100 FT

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SPRUCE

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