State Level Historic Documentation Report

State Project #S251-20-29.07
Federal Project #STP-0020(367)D

JERRY HALL ARCH BRIDGE
Webster County

Prepared by:

Tracy D. Bakic, Structural Historian

WV Department of Transportation
Division of Highways
Technical Support Division
NEPA Compliance & Permitting Section

July 30, 2025

STATE LEVEL HISTORIC DOCUMENTATION
JERRY HALL ARCH BRIDGE

Location:	WV Route 20 over Grassy Creek Webster County West Virginia USGS Diana Quadrangle
Date of Construction:	1924
Builder:	Farris Bridge Company of West Virginia (probable)
Present Owner:	West Virginia Department of Transportation Division of Highways 1334 Smith Street Charleston, WV 25301
Present Use:	Vehicular Bridge
Significance:	Jerry Hall Arch Bridge is historically significant for as a representation of a two-span closed spandrel elliptical concrete arch bridge and a likely example of the work of Farris Bridge Company, a regionally recognized former bridge builder that was based in West Virginia. Examples of both the bridge type and builder are increasingly diminishing resources in West Virginia.
Project Information:	The project has been undertaken due to the deteriorating condition of the bridge and the necessity for a structure that can accommodate two lanes of traffic. Any future deterioration of the bridge will result in its closure. Therefore, this bridge warrants replacement. This documentation was undertaken in July 2025 in accordance with a Memorandum of Agreement among the West Virginia Department of Transportation and West Virginia State Historic Preservation Office. These measures are required due to the replacement of this National Register eligible structure. Tracy D. Bakic, Structural Historian West Virginia Division of Highways Charleston, WV 25305 July 30, 2025

Jerry Hall Arch Bridge spans Grassy Creek and is located in Diana vicinity, northern-central Webster County, West Virginia (WV) on West Virginia Route 20 (WV 20), approximately 0.5 miles south of WV 15 (Guardian Dr) and 0.29 miles north of CO 20/10 (Fisher Run Rd). Grassy Creek is a tributary of the Right Fork Holly River, which feeds into Holly River, a tributary of Elk River. The 2018 average daily traffic rate over the bridge is 1,100 vehicles per day.

The existing Jerry Hall Arch Bridge is a concrete two-arch deck span built in 1924. The 1993 WVDOH bridge inspection report states that this span was built by Luten Bridge Company of York, PA. However, old annual reports of the WV State Road Commission (WVDOH predecessor) and contemporary newspaper references point to the builder being the Farris Bridge Company of WV. The bridge's overall measurements are 109 feet, 10 inches long by 20 feet, seven inches wide. The roadway width is 18 feet, seven inches (between railings).

The superstructure is composed of concrete arch rings and spandrel walls with earthen fill serving as the deck; the deck is topped with an asphalt wearing surface. In engineering terms this bridge is considered a multi-span closed spandrel elliptical arch span; "closed" because the arches are solid/closed with sidewalls (aka spandrel walls), and "elliptical" since the arches were based on ellipse/ovular forms rather than round/circular. Each of the bridge's two arches is skewed and each measures 50 feet, six inches (springline to springline). The arched superstructure is supported on concrete footings (with wingwalls) at the abutment ends and one central solid reinforced concrete pier (with rounded pier nose at both ends)

To each side of the deck is a solid concrete railing (parapet) with impressed rectangular motif (panels) on both interior and exterior sides and a central concrete post. The railings were installed in sections in order to provide expansion joints. At the inward-facing side of the south end of east/upstream railing (south end, interior-facing side) is a bronze plaque that reads "1924 // W. VA // STATE BRIDGE // NO. 690". The bridge includes standard modern flexbeam approach guardrails.

The existing Jerry Hall Arch Bridge is rated in poor condition and is considered structurally deficient and functionally obsolete. The most serious deficiencies include: moderate to heavy spalling at the spandrel walls, with exposed rebar and heavy map cracking with

efflorescence; some spalling, exposed rebar, and hairline cracks at the underside of both arch rings; moderate to heavy spalling and hairline cracking with efflorescence at the base and both ends of the pier; vertical wide crack at upstream/east end of pier; and heavy spalling present at the south end of the west/downstream railing.

Diana & Vicinity

The community of Diana is located within the historic boundaries of Holly District, Webster County. The community is located at the dividing point between the relatively flat Right Fork Holly River basin and the transitional ascent of Elk Mountain leading to the Elk River and Webster Springs. A post office was established at Diana around 1886 and the community became a notable point along the former West Virginia Midland Railroad (WVM), which was originally the Holly River and Addison Railway (HRA). Diana was the eastern hub for the HRA from 1899 to 1902 and then a WVM junction point from 1902 to ca. 1929. Diana had a WVM company office and local commerce that served the wider Right Fork Holly River area (PostalHistory.org; WVNCrails.org).

“Diana has never been a highly populated area, and it has never had a booming, thriving economy. The people of Diana were mostly farmers and woodsmen in the early pioneer days. As the timber and coal industries thrived, so did many small, local businesses; however, as job opportunities within the county went into decline, Diana’s small businesses suffered greatly. Although most of the local community stores have since closed, a few new timber-related businesses have begun to appear” (Pyle 2016:3).

Although there would have earlier been local schoolhouses, in 1938 the Diana Elementary School was opened, providing education for students from the Holly River and Grassy Creek area. In 2014 the school closed and its students were consolidated into the Webster Springs Elementary School. The Diana school building remains, being reused as the Diana Eagles Community Center (Pyle 2016:4-5).

West Virginia Midland Railroad

The West Virginia Midland Railroad (WVM) roughly paralleled the northern 1.8 miles Diana Drive (WV 20), mainly staying to the west side of the road and Grassy Creek; it passed in the vicinity of the subject bridge, about 400+ feet to the west. The earliest section of the WVM was built in 1893-94 by the Holly River Boom & Lumber Company (incorp. 1891). It branched from the West Virginia and Pittsburg(h) Railroad (later B&O) at Holly Junction/Palmer and went to Holly, Marpleton, and up Old Lick Creek. In 1895-96 the lumber company reorganized the railroad

as a separate entity - the Holly River Railroad (incorp. 1896), and a branch was built 1897-98 from Marpleton to Hackers Valley (AbandonedOnline.net; Bakic 2020; ICC 1927:153; Reger 1920:3; Taplines.net; WV 1891:831; *Wheeling Register* 1893, 1894. WVNCRails.org).

John T. McGraw of Grafton, WV purchased the Holly River Railroad in 1898, reorganizing it as the Holly River and Addison Railway (HRA; incorp. 1898) to create a line to Webster Springs. The HRA was extended from Holly to Diana and Hechmer/Jumbo by 1899 and from Diana to Webster Springs in 1902. McGraw reorganized the road again in 1905 as the West Virginia Midland *Railroad* (WVM) and, in 1910-11 built branches from Webster Springs to Breece (Webster Co.) and from Marpleton and along Left Fork Holly River (AbandonedOnline.net; Bakic 2020; ICC 1927:153; Reger 1920:3; Taplines.net; WV 1899:89; WVNCRails.org)

In late July 1924, the WVM was sold to H. B. Curtin of the Pardee & Curtin Lumber Company (P&C). Per charter dated August 5, 1924 the railroad was reorganized as the West Virginia Midland *Railway* and the following year, permission was obtained to extend the line from Webster Springs to Bergoo; this Bergoo extension was completed ca. 1928 (Bakic 2020; Taplines.net; WVNCRails.org).

In 1929 the WVM Bergoo Extension was acquired by the Western Maryland Railway (WM) becoming part of the WM"s Laurel Subdivision. The remaining WVM from Holly to Webster Springs, including through Diana, was abandoned and much of the trackage removed in the 1930s (AbandonedOnline.net; Bakic 2020; Taplines.net; WVNCRails.org).

WV Route 20, incl. Jerry Hall Arch Bridge

WV 20 is today a major north-south route, the longest state route in West Virginia. Its north terminus is at WV 7 near New Martinsville, Wetzel Co and its south terminus is at US 52 in Bluewell, Mercer Co. The subject bridge is on the 9.3-mile portion of WV 20 that is shared with WV 15; its north terminus is at Diana and its south terminus is at Webster Springs. This Diana-Webster Springs portion of WV 20 – locally known as Diana Drive - is not part of a known historic turnpike road. The original northern two miles of Diana Drive stayed to the west side of Grassy Creek. Due to a 1920s realignment project the northernmost half mile (0.5 miles) of the aforementioned two-mile section was rerouted to the east side of the creek

(USGS 1915, 1967; WVSRC 1923); this is the section of WV 20 that the subject bridge is located on.

Jerry Hall Arch Bridge. State of WV Engineers completed the plans for this bridge in September 1921, with revisions made on October 20, 1923 (WVSRC 10/1923). Advertisements for contractor bids for the project were in newspapers by March 11, 1924 (*CDM* 3/1924). The bridge contract was awarded to Farris Bridge Company, written in papers as Farris Construction Co., on April 8, 1924 (*CDM* 4/1924; *CG* 4/1924). The contract also included building the Holly River Bridge No. 920 (aka Junction Arch) at the WV 20/WV 15 juncture to the north. According to annual reports of the WV State Road Commission (predecessor to the WVDOH), the work was authorized to begin on June 6, 1924. The Farris company completed the work during the 1925-26 fiscal year, and the contract closing date was in February 1926 (WVSRC 1925, 1926, 1941). A WVDOH bridge inspection report from the 1990s states that the bridge was built by Luten Bridge Company; however, given the information above, this appears likely to be a mistake (WVDOH 1993). Unfortunately, there is no plaque with a builder's name currently located on the bridge.

The bridge was initially known as the Grassy Creek Bridge and became known as Jerry Hall Arch Bridge many years later. By the 1890s and into the early 1900s the owner of the property surrounding the bridge was reportedly J. C. Schrader (McCourt 2023). In the 1920s the surrounding property owner was Abel Ware (WVSRC 1923). Gerald "Jerry" Hall was born in 1937 in Curtain, WV. His parents were Hayward and Edith Hall. The bulk of Jerry's career was as a surveyor/engineer with WV Division of Highways (WVDOH). He passed away in 2021 (DoddReedFH.com; FamilySearch.org). Jerry eventually owned the property northeast of the project bridge (Parcel 35, Holly District Map 7J); the house on this property was built ca. 1950. Between this house and the bridge is a long driveway that accesses another house, built ca. 1940, that is also owned by the Hall family (Parcel 34, Holly Dist. Map 7J).

Per the above, the existing bridge name – Jerry Hall Arch - was given later, likely in Jerry's adulthood (ca. 1960+). It is/was common practice to identify a bridge with the nearest property owner or landmark. Since Jerry's family lived on adjacent property to this bridge, and Jerry was well known to WVDOH staff maintaining this bridge, it is not surprising that his name became associated with the span.

Original/historic bridge related to the existing Jerry Hall Arch Bridge are on file with WVDOH. A sampling of these plans is attached with this form.

Reinforced Concrete Deck Arch Bridge Context

"The advent of modern concrete technology fostered a renaissance of arch bridge construction in the United States. Stone arch bridges constitute an important chapter in American bridge building, but by the second half of the nineteenth century the labor-intensive nature of masonry arch bridge construction contrasted unfavorably with the ease of metal truss erection. Reinforced concrete allowed the arch bridge to be constructed with much more ease than ever before and maintained the load-bearing capabilities of the form" (P.A.C. Spero & Co. 1995:152).

The earliest known existing reinforced concrete arch bridge in the US was designed by Ernest L. Ransome and built in 1889 in Golden Gate Park, San Francisco. Other early names associated with reinforced concrete arch bridge design were Joseph Melan, Fritz von Emperger and Edwin Thacher. However, it was Daniel B. Luten who, within the first three decades of the 20th century, was the dominant designer, builder and promoter of reinforced concrete arch spans in the US. There were many other companies, though, that incorporated concrete arch bridge design and building as part of their repertoire. In WV concrete arch deck bridges were built steadily through the 1930s and were very popular in the 1910s and 1920s (KCI et al. 2015: 88).

Concrete deck arch bridges include closed spandrel and open spandrel types, each spanning between concrete abutments. The arch proper is called a ring and the spandrel is the area between the ring and the deck. The subject bridge represents a closed spandrel deck arch. In this closed version, spandrel walls are built to each side of the span to retain fill material (rubble, stones, or dry soil) deposited within the spandrel area. Traffic loads over the arch are distributed through the fill. Closed spandrel concrete arch bridges were historically the most economical to build over shorter spans. (Carver 2008: 241; KCI et al. 2015: 321; P.A.C. Spero & Co. 1995:152).

Farris Bridge Company

The Farris Bridge Company was incorporated in WV in 1908 with William Farris as its president; it succeeded the earlier firm of William Farris & Brothers, which was a partnership located in Pittsburgh (*Eng News* 1908; *Iron Age* 1909; WV 1924:149). Farris Bridge Co. initially maintained an office in Pittsburgh, PA but later moved the main office to Charleston, WV (PA 1913). An advertisement from the early 1920s reads "Farris Bridge Company // Bridges, Coal Tipples, Mill Buildings // Toll Bridges Financed and Built // at pre-war prices // Charleston, W. VA. Cumberland Md" (*Mftrs Record* 1922). In the latter 12 years of his life, William Farris lived in Mineral County, WV, near Cumberland Md, but maintained the main office in Charleston. Farris died in December 1924. During Farris's lifetime, the company became known as a prominent builder of bridges in West Virginia and Kentucky (*CET* 1924*; CG* 12/1924; WV 1924:149).

Related to the subject bridge, the company name listed for the contract in old newspapers and WVSRC reports is “Farris Construction Company” (*CDM* 4/1924; *CG* 4/1924; WVSRC 1941). Perusal of online resources did not find any other contemporary era projects with this company name. It is suspected that this was a mistake in transference of information by the state or possibly that, toward the end of William Farris’ tenure and life, there were attempts to change the name to reflect broader types of work the company may have been doing or planning to do.

Of the nine Farris Bridge Company concrete arch bridges known to still exist in WV (as of 2025), the subject Jerry Hall Arch Bridge and Charles Milar Bridge (County Rt 10 over Patterson Creek, Mineral County) are only two-span examples in the State known to exemplify the work of Farris Bridge Company. The remaining seven known Farris Bridge Co. concrete arch bridges are single arch structures.

Luten Association. In a 1993 bridge inspection report, the builder of Jerry Hall Arch Bridge is listed as Luten Bridge Company (WVDOH 1993). The basis for this citing is currently not known. The Luten Bridge Company of York, PA was an agent company licensed to use the designs of engineer Daniel B. Luten. Luten Bridge Co. was a prolific builder of concrete arch bridges in the US, including WV (KCI et al. 2015). Regardless, research for the subject bridge points strongly away from Luten Bridge Co. as the builder.

Eligibility

Jerry Hall Arch Bridge has been determined eligible for listing in the National Register of Historic Places for its engineering significance as a representation of a two-span closed spandrel elliptical concrete arch bridge and a likely example of the work of Farris Bridge Company, a regionally recognized former bridge builder that was based in West Virginia. Examples of both the bridge type and builder are increasingly diminishing resources in West Virginia.

Jerry Hall Arch Bridge will eventually be removed as a result of the planned construction of a new bridge at the existing bridge location.

BIBLIOGRAPHY

AbandonedOnline.net. "Western Maryland Railway Laurel Subdivision." https://abandonedonline.net/location/western-maryland-railway-laurel-subdivision/ (7/2025).

Bakic, Tracy D./WVDOH. West Virginia Historic Property Inventory Form – Former Western Maryland Railway Segment. WVSHPO Site WB-0321. Completed October 9, 2020. WVSHPO concurred resource is NRHP-eligible.

Carver, Martha. *Tennessee's Survey Report for Historic Highway Bridges, Chapter 3: Bridge Companies & Chapter 4: Inventoried Bridge Types*. Nashville, TN: Ambrose Printing Company, 2008.

Charleston Daily Mail (CDM). Call for bids for Grassy Creek Bridge No. 690. March 11, 1924, p10, c7.

---. "Contracts Let for 22 State Bridges." April 9, 1924, p13.

Charleston Gazette (*CG*). "Bridge Contracts Awarded by State." April 10, 1924, p13, c2.

---. "William Farris Dies at Home." Dec. 13, 1924, p7, c5.

Cumberland Evening Times (*CET*). "Obituary – William Farris Funeral." December 15, 1924, p8, c1.

DoddReedFH.com. Obituaries for Gerrald "Jerry" Hall and Retha Hall. Website for Dodd & Reed Funeral Home, Webster Springs, WV. https://www.doddreedfh.com/obituaries/gerald-hall (July 2025).

Engineering News. Note that Farris Bridge Co. was incorporated in Charleston, WV. Nov. 19, 1908, Vol. 60.

FamilySearch.Org. Family Tree and associated sources related to Gerrald & Retha Hall (May 2025).

Interstate Commerce Commission (ICC). *Interstate Commerce Commission Reports, Volume 121, Decision of the Interstate Commerce Commission of the United States (Valuation Reports), December 1926 – March, 1927*. Washington DC: US Gov't Printing Office, 1927.

Iron Age, The. Notification that William Farris & Brothers was succeeded by Farris Bridge Company. March 25, 1909, Vol. 83, p 979.

KCI Technologies / Mead & Hunt, Inc. *West Virginia Statewide Historic Bridge Survey: Final Survey Report*, April 2015.

Manufacturer's Record. Advertisement for Farris Bridge Co. Volume 82, Issue 1 (1922).

McCourt, Rexana (Pardee & Curtin Timberlands, Inc). Personal (email) communication with Tracy Bakic, WVDOH Structural Historian, on Feb. 21, 2023.

P.A.C. Spero & Company and Louis Berger & Associates. *Historic Highway Bridges in Maryland: 1631-1960: Historic Context Report*. Prepared for Maryland State Highway Administration. July 1995, Revised October 1995.

Pennsylvania, State of (PA). *Alphabetical list of charters of corporations enrolled in the Office of the secretary of the commonwealth during the two years begining[sic] June 1, 1911, and Ending May 30, 1913. Including the alphabetical list of foreign corporations registered under*

the requirement of the Act of June 8, 1911, during the two years ending May 31, 1913. Harrisburg, PA: W, Stanley Ray, State Printer, 1913.

PostalHistory.com. Webster County, WV. https://www.postalhistory.com/postoffices.asp?task=display&state=WV&county=Webster (July 2025).

Pyle, A. N. *Losing Diana: Children and Families Reflect on the Closing of a School in Rural West Virginia*, 2016. https://mds.marshall.edu/cgi/viewcontent.cgi?article=2051&context=etd (May 2025).

Reger, David B. *West Virginia Geological Survey – Webster Count and Portion of Mingo District, Randolph County, South of Valley Fork of Elk River*. Morgantown, WV: Morgantown Printing & Binding Company, 1920.

Taplines.net. "The West Virginia Midland." Parts 1-3. Don Hensley. http://www.taplines.net/January/wvmid1.htm (July 2025).

USGS. Diana, WV Quadrangle, 7.5 Minute Series. 1967.

---. Hacker Valley, WV Quadrangle. Surveyed 1913, Edition of 1915.

West Virginia, State of (WV). *Acts of the Legislature of West Virginia, at its Twentieth Regular Session, Commencing January 14, 1891.* Charleston, WV: Moses W. Donnally, Public Printer, 1891.

---. *Acts of the Legislature of West Virginia, at its Twenty-Fourth Regular Session, Commencing January 11, 1899.* Charleston, WV: Press Butler Printing Co, 1899.

---. *West Virginia Handbook and Manual and Official Register, 1924*. [aka, WV Blue Book]. Charleston, WV: Jarrett Printing Company, 1924.

WV Division of Highway (WVDOH). *Inventory Inspection Report: Bridge No. 51-20-29.07 (690), BARS No. 51A039, Jerry Hall Arch over Grassy Creek, WV Route 20*. May 6, 1993.

WV State Road Commission (SRC). *Annual Report of The State Road Commission of West Virginia for the Year Ending June 30, 1925*. Charleston, WV: Tribune Printing Co, 1925.

---. *Annual Report of the State Road Commission of West Virginia for the Year Ending June 30, 1926*. Charleston, WV: Tribune Printing Co., 1926.

---. *Annual Report of the State Road Commission of West Virginia.* Charleston, WV: Mathews Ptg. & Litho. Co., 1941.

---. Plan and Profile for Construction of State Road Project No. 3279-A, Holly & Hacker Valley District, Webster County, Diana-Cleveland Road Sec. A. 1923. On file, WVDOH.

---. Reinforced Concrete Arch, Grassy Creek Bridge on Webster Spring-Cleveland Road over Grassy Creek, Webster Co., W.VA., Designed by State Road Commission, Charleston, W.VA. Project 3279A. Sept. 1921, Revised October 20, 1923.

Wheeling Register. "The Railroads." June 12, 1893, pg 10, c4.

---. "The Railroads." February 24, 1894, pg 5, c3.

WVNCRails.org. "West Virginia Midland Railroad." https://www.wvncrails.org/west-virginia-midland-railroad.html (July 2025).

STATE LEVEL HISTORIC DOCUMENTATION
INDEX TO PHOTOGRAPHS

Jerry Hall Arch Bridge
WV Route 20 over Grassy Creek
Webster County, West Virginia

Photographer(s): Tracy D. Bakic 5/19/2021, 1/5/2023 & 10/8/2024

JERRY HALL ARCH - 1	East/Upstream Elevation. View Northwest. Taken 1/5/2023
JERRY HALL ARCH - 2	East/Upstream Elevation. View Northwest. Taken 1/5/2023
JERRY HALL ARCH – 3	East/Upstream Elevation. View Northwest. Taken 1/5/2023
JERRY HALL ARCH – 4	East/Upstream Elevation. View Southwest. Taken 1/5/2023.
JERRY HALL ARCH – 5	West/Downstream Elev. View East/Northeast. Taken 1/5/2023.
JERRY HALL ARCH – 6	West/Downstream Elev. View Northeast. Taken 10/8/2024.
JERRY HALL ARCH – 7	South Approach. View North/Northeast. Taken 5/19/2021.
JERRY HALL ARCH – 8	North Approach. View South/Southwest. Taken 1/5/2023.
JERRY HALL ARCH - 9	Plaque on East/Upstream Railing, South End. Reads: “1924 / W. VA. / STATE BRIDGE / NO. 690”. View East/Northeast. Taken 10/8/2024.

Original plans for this bridge are on file with WVDOH.

1. East/Upstream Elevation. View Northwest.

2. East/Upstream Elevation. View Northwest.

3. East/Upstream Elevation. View Northwest.

4. East/Upstream Elevation. View Southwest

5. West/Downstream Elevation. View ENE.

6. West/Downstream Elevation. View NE.

7. South Approach. View NNE

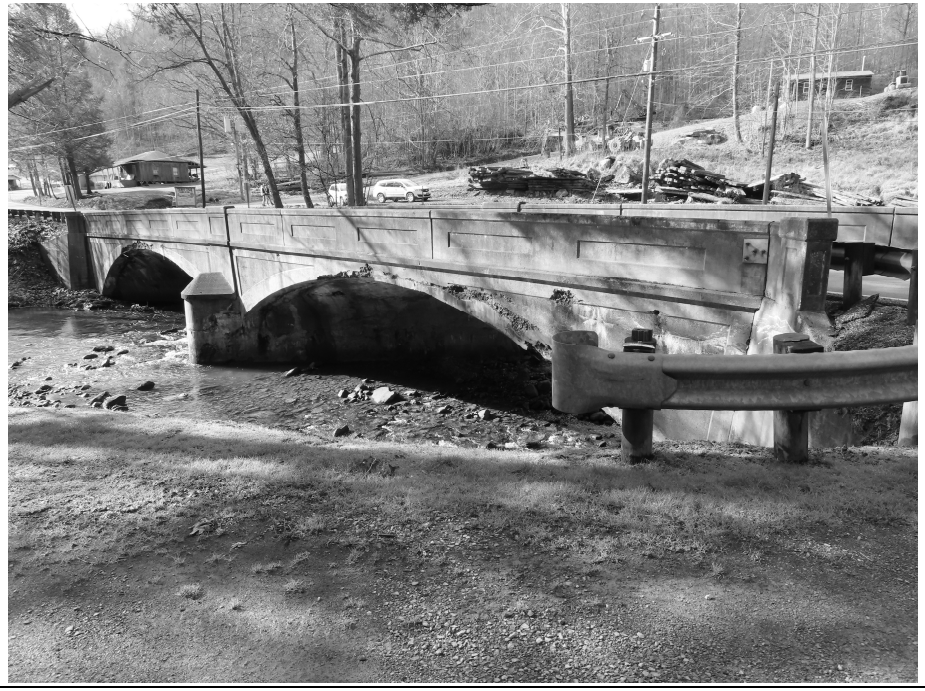
8. North Approach. View SSW.

	
9. Plaque on East/Upstream Railing, South End. View ESE.	

1. East/Upstream Elevation. View Northwest.

2. East/Upstream Elevation. View Northwest.

3. East/Upstream Elevation. View Northwest.



4. East/Upstream Elevation. View Southwest

5. West/Downstream Elevation. View ENE.

6. West/Downstream Elevation. View NE.

7. South Approach. View NNE

8. North Approach. View SSW.

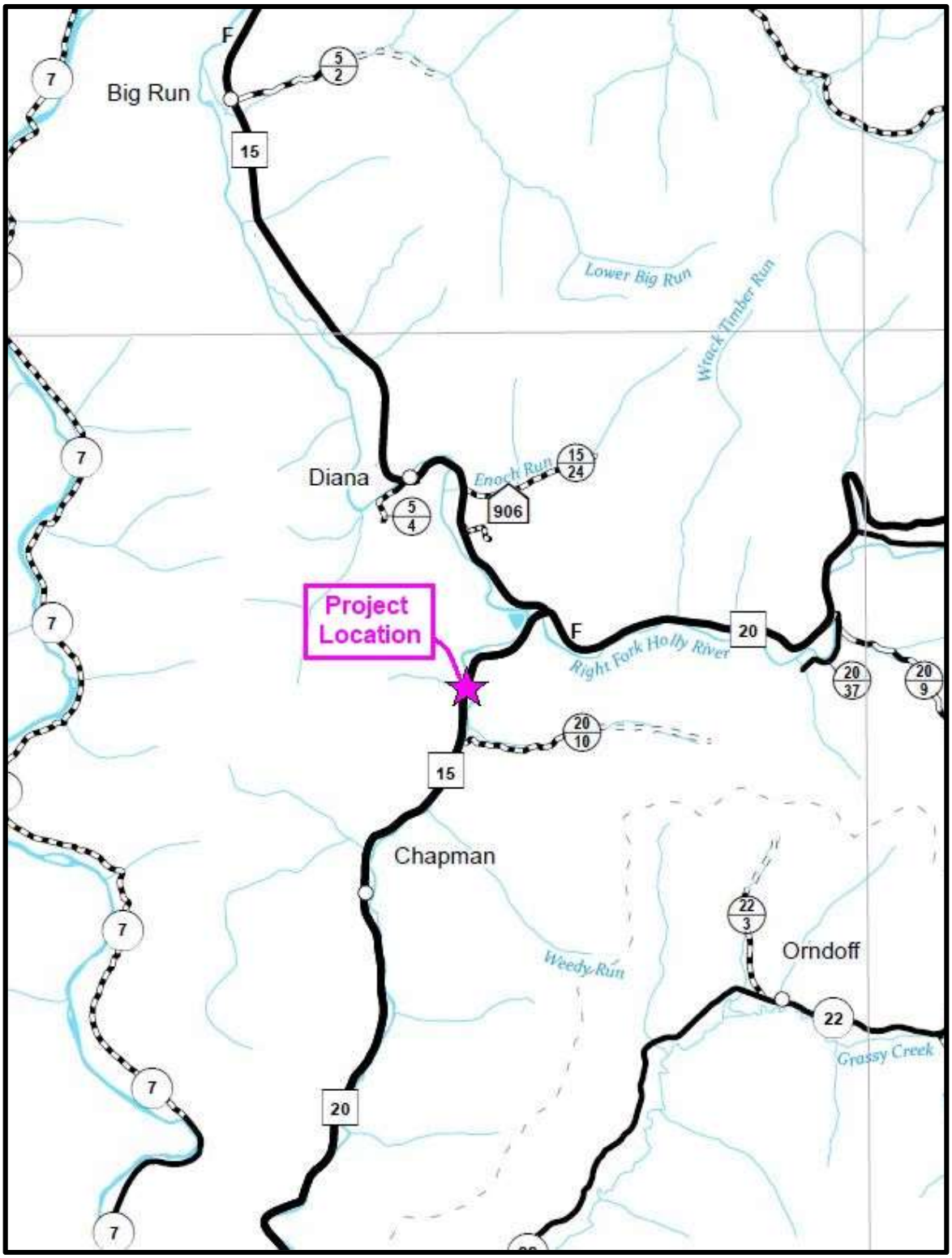
	
9. Plaque on East/Upstream Railing, South End. View ESE.	

PROJECT LOCATION

JERRY HALL ARCH BRIDGE REPLACEMENT PROJECT

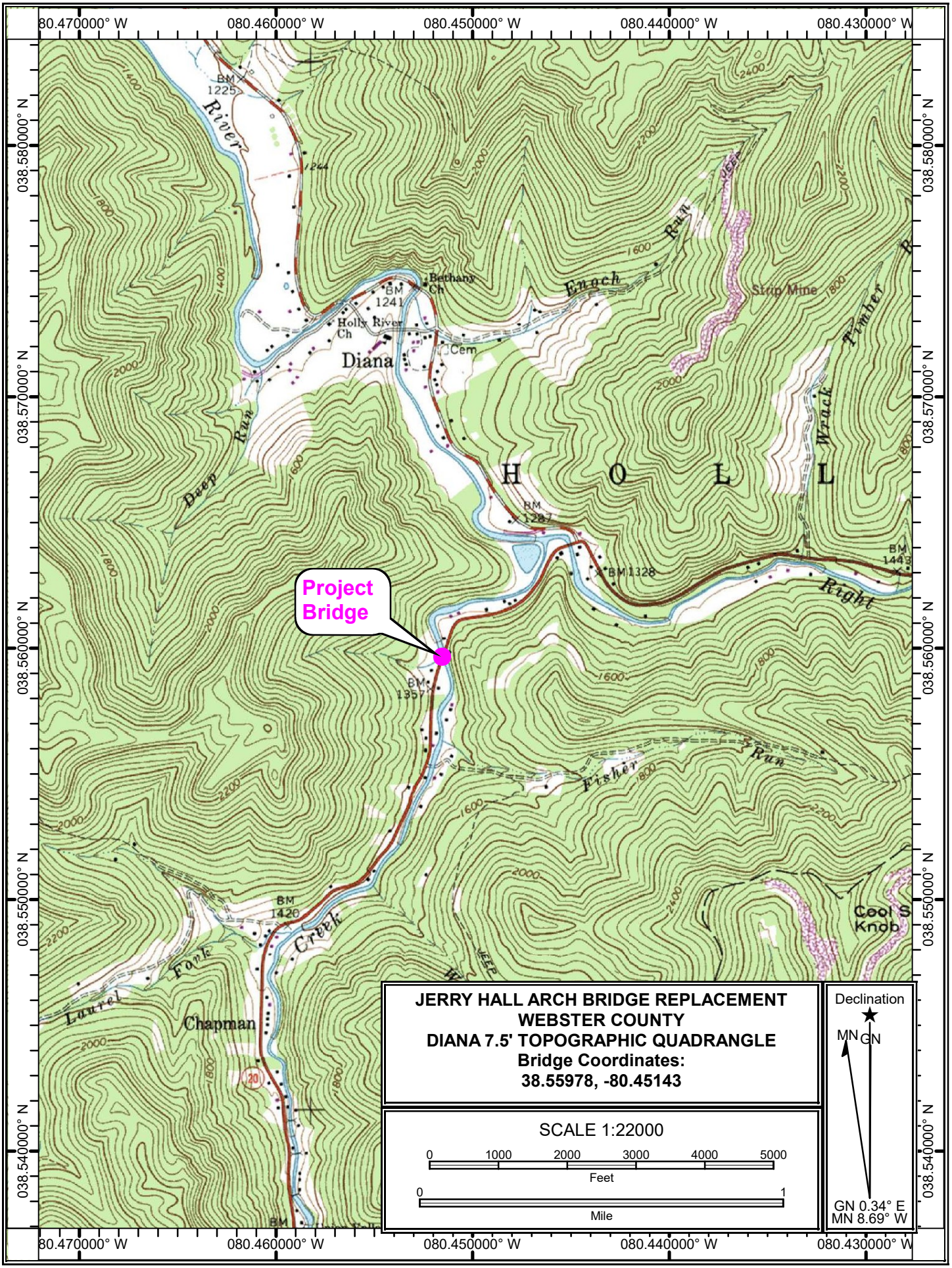
DIANA VICINITY, WEBSTER COUNTY

State Project S251-20-29.07



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS


80.470000° W
080.460000° W
080.450000° W
080.440000° W
080.430000° W
038.580000° N
038.570000° N
038.560000° N
038.550000° N
038.540000° N
Project Bridge
Diana
Bethany Ch
Holly River Ch
Cem
Enoch Run
Strip Mine
Timber
Wrack
H O L L
Deep Run
Fisher Run
Right
Laurel Fork
Creek
Chapman
Cool S Knob
BM 1225
BM 1241
BM 1287
BM 1328
BM 1443
BM 1357
BM 1420
JEEP
20
JERRY HALL ARCH BRIDGE REPLACEMENT
WEBSTER COUNTY
DIANA 7.5' TOPOGRAPHIC QUADRANGLE
Bridge Coordinates:
38.55978, -80.45143
SCALE 1:22000
0 1000 2000 3000 4000 5000
Feet
0 1
Mile
Declination
MN GN
GN 0.34° E
MN 8.69° W

PROJECT LOCATION

JERRY HALL ARCH BRIDGE REPLACEMENT PROJECT

DIANA VICINITY, WEBSTER COUNTY

State Project S251-20-29.07

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

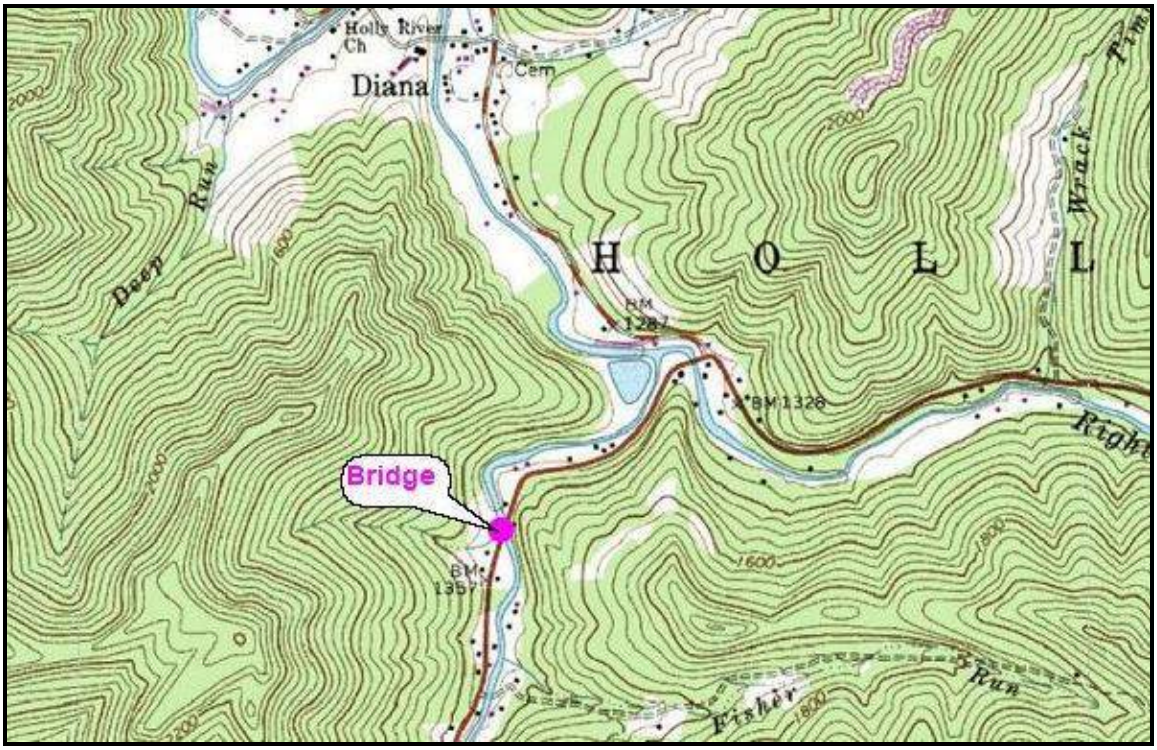
DIVISION OF HIGHWAYS

Internal Rating: CE (Crit. C)

4/18/23

WEST VIRGINIA HISTORIC PROPERTY INVENTORY FORM

Street Address WV-20 over Grassy Creek	**Common/Historic Name/Both** ☐ ☐ ☒ Jerry Hall Arch Bridge Grassy Creek Bridge (original)	**Field Survey #** APE B1	**Site # *(SHPO Only)*** WB-0102_Rev01 WB-0009_Rev02
Town or Community Diana vicinity	**County** Webster	**Negative No.**	**NR Listed Date**
Architect/Builder Farris Bridge Company (probable)	**Date of Construction** 1924	**Style** Reinforced Concrete Arch Bridge	
Exterior Siding/Materials Rein. Concrete	**Roofing Material** N/A	**Foundation** Rein. Concrete	
Property Use or Function **Residence** ☐ **Commercial** ☐ **Other** ☒ *Transportation/ Bridge*	**UTM#** Zone 17N NAD 1983 547787E, 4268067N		
Survey Organization & Date WVDOH March 6, 2023 FR# 23-0426-WB	**Quadrangle Name** Diana **Part of What Survey/FR#** Jerry Hall Arch Bridge Replacement Project State Proj # 51-20-29.07		



WB-0102_Revo1
WB-0009_Rev02

Site No.

Present Owners WVDOT **Phone #**	**Owners Mailing Address**

Describe Setting ____ **Acres**

The subject bridge takes WV 20 (Diana Drive) over Grassy Creek in the Diana vicinity of northern-central Webster County. Grassy Creek is a tributary of the Right Fork Holly River, which feeds into Holly River, a tributary of Elk River. The bridge is 0.5 miles south of WV 15 (Guardian Dr) and 0.29 miles north of CO 20/10 (Fisher Run Rd). The surrounding area is hilly/mountain terrain and forested with development along the roadway, which is mainly residential. There is a lumber/logging business currently located to the west/downstream side of the bridge.

☐ **Archaeological Artifacts Present**

Description of Building or Site (Original and Present): __ **Stories** __**Front Bays**

The existing Jerry Hall Arch Bridge is a concrete two-arch deck span built in 1923. The 1993 WVDOH bridge inspection report states that this span was built by Luten Bridge Company of York, PA. However, old annual reports of the WV State Road Commission (WVDOH predecessor) and contemporary newspaper references point to the builder being the Farris Bridge Company of WV. The bridge's overall measurements are 109 feet, 10 inches long by 20 feet, seven inches wide. The roadway width is 18 feet, seven inches (between railings).

The superstructure is composed of concrete arch rings and spandrel walls with earthen fill serving as the deck; the deck is topped with an asphalt wearing surfaced. In engineering terms this bridge is considered a multi-span closed spandrel elliptical arch span; "closed" because the arches are solid/closed with sidewalls (aka spandrel walls), and "elliptical" since the arches were based on ellipse/ovular forms rather than round/circular. Each of the bridge's two arches is skewed and measures 50 feet, six inches (springline to springline). The arched superstructure is supported on concrete footings (with wingwalls) at the abutment ends and one central solid reinforced concrete pier (with rounded pier nose at both ends)

To each side of the deck is a solid concrete railing (parapet) with impressed rectangular motif (panels) on both interior and exterior sides and a central concrete post. The railings were installed in sections in order to provide expansion joints. At the inward-facing side of the south end of east/upstream railing (south end, interior-facing side) is a bronze plaque that reads "1924 // W. VA // STATE BRIDGE // NO. 690". The bridge includes standard modern flexbeam approach guardrails.

Alterations ☐ **Yes** ☑ **No** **If yes, describe**: N/A

Additions ☐ **Yes** ☑ **No** **If yes, describe:** N/A

Describe All Outbuildings

N/A

Statement of Significance

(See Continuation Sheets)

Bibliographical References

(See Continuation Sheets)

Form Prepared By: Tracy D. Bakic **Date:** March 6, 2023
Name/Organization: West Virginia Division of Highways
Address: 1334 Smith Street
Charleston, WV 25301
Phone #: 304-414-6407

Statement of Significance:

This bridge spans County Rt 20 (CO 20; Diana Road) over Grassy Creek in Diana vicinity, northern-central Webster County. Webster County was established by an act of Virginia General Assembly passed on January 10, 1860, being formed from parts of Braxton, Nicholas, and Randolph counties and named to honor Daniel Webster, a renowned 19th-century American orator and statesman from New England. Upon the county being established, Addison – aka Webster Springs – was chosen as the county seat (Reger 1920:8-9,14; Senate.gov; SWCA 2017; VA 1861:50); this town is historically renowned for is saline springs, having attracted visitors due to their reputed medicinal qualities (Miller 2/2023), Webster County's boundaries changed in 1882, acquiring some additional area to the south from Nicholas and Greenbrier counties (WV 1882:6).

The State of West Virginia was created and admitted to the Union on June 20, 1863, prior to the end of the Civil War. Each county within the new state was subdivided into townships, of which Webster County had three – the townships of Fork Lick, Glady and Holly. On April 9, 1872 a new state constitution was ratified, and the townships were reestablished as magisterial districts. Webster County's kept its three district names the same as the township names. In 1876 a fourth district – Hacker's Valley District - was created from the northern portion of Holly District in 1876 (Census.gov). The subject bridge has historically been within Holly District.

In the 19th century the northern and southern parts of the county were described as having rolling and hilly plateau land. Agriculture in these areas included corn, wheat, oats, rye and grass, and stock-raising. The central and eastern portions of the county were considered rough and rocky with high mountains and not well-suited for cultivation (Maury & Fontaine 1876:419-20).

"In the 1890s, a branch of the Baltimore & Ohio Railroad was built to the town of Cowen from Flatwoods, Braxton County. In the early 1900s, the West Virginia Midland Railroad Company [WVM; earlier called Holly River & Addison Railway] built a narrow-gauge line [from Holly Junction on the above-mentioned B&O line] to Webster Springs. Within a few years rails were laid through much of the county, serving the mines and sawmills. The first two decades of the 20th century were boom years for Webster County. Tourists came on the railroad to partake of the waters of the salt sulfur springs, and the coal and timber industries produced a vibrant economy. . . More than 11,000 people lived in Webster County by 1920" (Miller 1/2023)

"The county had vast resources of timber and 19 seams of coal. The main employer for the timber and coal was the Pardee & Curtin Lumber Company. By the beginning of the 1940s, the timber industry was in decline, but coal mining boomed during World War II. Commercial mining had started in 1917, with an output of approximately 100,000 tons by 1929 and more than two million tons at the end of World War II. In 2009, over 4.5 million tons of coal was produced in Webster County. Surface mines accounted for 3.5 million tons" (Miller 1/2023).

Webster County's population peaked at 18,080 in 1940. The years following World War II saw a decline of coal industry employment and a migration of Webster Countians to factory towns in Ohio and elsewhere. This decline continued until 1970, when the county's population dropped below 10,000. The population was an estimated 8,378 in 2020 (Miller 1/2023).

A large portion of Webster County is within Monongahela National Forest. "With the increased interest in outdoor recreation and the construction of dams at nearby Summersville and Sutton, Webster County has become a popular destination. Since 1960, Webster County has been the site of the Woodchopping Festival. It is also the site of the Point Mountain Reunion, formerly called the Hamrick, Gregory, and Riggleman Reunion, held in August of each year" (Miller 1/2023).

Statement of Significance (cont'd):

West Virginia Midland Railway (WVM). The WVM roughly paralleled the northern 1.8 miles Diana Drive (WV 20), mainly staying to the west side of the road and Grassy Creek; it passed in the vicinity of the subject bridge. The earliest section of the WVM was built in 1893-94 by the Holly River Boom & Lumber Company (incorp. 1891). It branched from the West Virginia and Pittsburg(h) Railroad (later B&O) at Holly Junction/Palmer and went to Holly, Marpleton, and up Old Lick Creek. In 1895-96 the lumber company reorganized the railroad as its own entity - the Holly River Railroad (incorp. 1896), and a branch was built 1897-98 from Marpleton to Hackers Valley (AbandonedOnline.net; Bakic 2020; ICC 1927:153; Reger 1920:3; Taplines.net; WV 1891:831; *Wheeling Register* 1893, 1894. WVNCRails.org).

John T. McGraw of Grafton, WV purchased the Holly River Railroad in 1898, reorganizing it as the Holly River and Addison Railway (HRA; incorp. 1898) to create a line to Webster Springs. The HRA was extended from Holly to Diana and Hechmer/Jumbo by 1899 and from Diana to Webster Springs in 1902. McGraw reorganized the road again in 1905 as the West Virginia Midland *Railroad* (WVM) and, in 1910-11 built branches from Webster Springs to Breece (Webster Co.) and from Marpleton and along Left Fork Holly River (AbandonedOnline.net; Bakic 2020; ICC 1927:153; Reger 1920:3; Taplines.net; WV 1899:89; WVNCRails.org)

In late July 1924, the WVM was sold to H. B. Curtin of the Pardee & Curtin Lumber Company (P&C). Per charter dated August 5, 1924 the railroad was reorganized as the West Virginia Midland *Railway* and the following year, permission was obtained to extend the line from Webster Springs to Bergoo; this Bergoo extension was completed ca. 1928 (Bakic 2020; Taplines.net; WVNCRails.org).

In 1929 the WVM Bergoo Extension was acquired by the Western Maryland Railway (WM) becoming part of the WM"s Laurel Subdivision. The remaining WVM from Holly to Webster Springs was abandoned and much of the trackage removed in the 1930s (AbandonedOnline.net; Bakic 2020; Taplines.net; WVNCRails.org).

Diana (unincorporated). This community established its post office around 1886 and it became a notable point along the WVM. It is located at the dividing point from the relatively flat Right Fork Holly River basin to the transitional ascent of Elk Mountain leading to the Elk River and Webster Springs. Diana was the eastern hub during the early years of the HRA railroad with only the Hechmer/Jumbo endpoint beyond. After the extension of the railroad to Webster Springs, Diana became a junction point for traffic to Jumbo and Webster Springs. A WVM company office at and commerce focused in Diana served the Right Fork Holly River area (PostalHistoroy.org; WVNCrails.org).

"Diana has never been a highly populated area, and it has never had a booming, thriving economy. The people of Diana were mostly farmers and woodsmen in the early pioneer days. As the timber and coal industries thrived, so did many small, local businesses; however, as job opportunities within the county went into decline, Diana's small businesses suffered greatly. Although most of the local community stores have since closed, a few new timber-related businesses have begun to appear" (Pyle 2016:3).

Although there would have earlier been local schoolhouses, in 1938 the Diana Elementary School was opened, providing education for students from the Holly River and Grassy Creek area. In 2014 the school closed and its students were consolidated into the Webster Springs Elementary School. The Diana school building remains, being reused as the Diana Eagles Community Center (Pyle 2016:4-5).

Statement of Significance (cont'd):

WV 20 (Diana Road). WV 20 is today a major north-south route, the longest state route in West Virginia. Its north terminus is at WV 7 near New Martinsville, Wetzel Co and its south terminus is at US 52 in Bluewell, Mercer Co. The subject property is on the 9.3-mile portion of WV 20 that is shared with WV 15; its north terminus is at Diana and its south terminus is at Webster Springs. This Diana-Webster Springs portion of WV 20 – also known as Diana Drive - is not part of a known historic turnpike road. The original northern two miles (est) of Diana Road stayed to the west side of Grassy Creek. Due to a 1920s realignment project the northernmost half mile (0.5 miles) of the aforementioned two-mile section was rerouted to the east side of the creek (USGS 1915, 1967; WV 1923); this is the section of WV 20 that the subject bridge is located on.

Jerry Hall Arch Bridge. State of WV Engineers completed the plans for this bridge in September 1921, within revisions made on October 20, 1923 (WVSRC 1923). Advertisements for contractor bids for the project were in newspapers by March 11, 1924 (*CDM* 3/1924). The bridge contract was awarded to Farris Bridge Company, written in papers as Farris Construction Co., on April 8, 1924 (*CDM* 4/1924; *CG* 1924). The contract also included building the Holly River Bridge No. 920 (aka Junction Arch) at the WV 20/WV 15 juncture to the north. According to annual reports of the WV State Road Commission (predecessor to the WVDOH), the work was authorized to begin on June 6, 1924. The Farris company completed the work during the 1925-26 fiscal year, and the contract closing date was in February 1926 (WVSRC 1925, 1926, 1941). A WVDOH bridge inspection report from the 1990s states that the bridge was built by Luten Bridge Company; however, given the information above, this appears a mistake. Unfortunately, there is no plaque with builder's name located on the bridge.

The bridge was initially known as the Grassy Creek Bridge and became known as Jerry Hall Arch Bridge many years later. By the 1890s and into the early 1900s the owner of the property surrounding the bridge was reportedly J. C. Schrader (McCourt 2023). In the 1920s the surrounding property owner was Abel Ware (WVSRC 1923). Gerald "Jerry" Hall was born in 1937 in Curtain, WV. His parents were Hayward & Edith Hall. The bulk of Jerry's career was as a surveyor/engineer with WVDOH. He passed away in 2021 (DoddReedFH.com; FamilySearch.org). Jerry eventually owned the property northeast of the project bridge (Parcel 35, Holly District Map 7J); the house on this property was built ca. 1950. Between this house and the bridge is a long driveway that accesses another house, built ca. 1940, that is also owned by the Hall family (Parcel 34, Holly Dist. Map 7J).

Per the above, the existing bridge name – Jerry Hall Arch - was given later, likely in Jerry's adulthood (ca. 1960+). It is/was common practice to identify a bridge with the nearest property owner or landmark. Since Jerry's family lived on adjacent property to this bridge, and Jerry was well known to WVDOH staff maintaining this bridge, it is not surprising that his name became associated with the span.

Original/historic bridge related to the existing Jerry Hall Arch Bridge are on file with WVDOH. A sampling of these plans is attached with this form.

Reinforced Concrete Deck Arch Bridge Context

"The advent of modern concrete technology fostered a renaissance of arch bridge construction in the United States. Stone arch bridges constitute an important chapter in American bridge building, but by the second half of the nineteenth century the labor-intensive nature of masonry arch bridge construction contrasted unfavorably with the ease of metal truss erection. Reinforced concrete allowed the arch bridge to be constructed with much more ease than ever before and maintained the load-bearing capabilities of the form" (P.A.C. Spero & Co. 1995:152).

The earliest known existing reinforced concrete arch bridge in the US was designed by Ernest L. Ransome and built in 1889 in Golden Gate Park, San Francisco. Other early names associated with reinforced concrete arch bridge design were Joseph Melan, Fritz von Emperger and Edwin Thacher. However, it was Daniel B. Luten who, within the first three decades of the 20th century, was the dominant designer, builder and promoter of reinforced concrete arch spans in the US (Parsons Brinkerhoff et al. 2005: 53). There were many other companies, though, that incorporated concrete arch bridge design and building as part of their repertoire. In West Virginia, concrete arch deck bridges were built steadily through the 1930s and were very popular in the 1910s and 1920s (KCI et al. 2015: 88).

Statement of Significance (cont'd):

Concrete deck arch bridges include closed spandrel and open spandrel types, each spanning between concrete abutments. The arch proper is called a ring and the spandrel is the area between the ring and the deck. The subject bridge represents a closed spandrel deck arch. In this closed version, spandrel walls are built to each side of the span to retain fill material (rubble, stones, or dry soil) deposited within the spandrel area. Traffic loads over the arch are distributed through the fill. Closed spandrel concrete arch bridges were historically the most economical to build over shorter spans. (Carver 2008: 241; KCI et al. 2015: 321; P.A.C. Spero & Co. 1995:152).

As previously mentioned, the subject bridge was very likely built by the Farris Bridge Company of WV.

Farris Bridge Company of WV. The Farris Bridge Company was incorporated in WV in 1908 with William Farris as its president; it succeeded the earlier firm of William Farris & Brothers, which was a partnership located in Pittsburgh (*Eng News* 1908; *Iron Age* 1909; WV 1924:149). Farris Bridge Co. initially maintained an office in Pittsburgh, PA but later moved the main office to Charleston, WV (PA 1913). An advertisement from the early 1920s reads "Farris Bridge Company // Bridges, Coal Tipples, Mill Buildings // Toll Bridges Finances and Built // at pre-war prices // Charleston, W. VA. Cumberland Md" (*Mftrs Record* 1922). In the latter 12 years of his life, William Farris lived in Mineral County, WV, near Cumberland Md, but maintained the main office is Charleston. Farris died in December 1924. During Farris's lifetime, the company became known as a prominent builder of bridges in West Virginia and Kentucky (*CET* 1924*; CG* 12/1924; WV 1924:149)

Related to the subject bridge, the company name listed for the contract in old newspapers and WVSRC reports is "Farris Construction Company." Perusal of online resources did not find any other contemporary era projects with this company name. It is suspected that this was a mistake in transference of information by the state or possibly that, toward the end of William Farris' tenure and life, there were attempts to change the name to reflect broader types of work the company may have been doing or planning to do.

Daniel B. Luten Designs & Luten Bridge Company. In a 1990 inspection report, the builder of Jerry Hall Arch Bridge is listed as Luten Bridge Company – the basis for citing is not known. The Luten Bridge Company of York, PA was an agent company licensed to use the designs of engineer Daniel B. Luten and this company and was a prolific builder of concrete arch bridges in WV. Regardless, research for this form points strongly away from Luten Bridge Co. as the builder. State of WV engineers designed the Jerry Hall Arch Bridge, and, perhaps at minimum, the design may be influenced by the designs of Daniel B. Luten.

Previous NRHP Eligibility

This bridge was previously determined NRHP-eligible three times. It was first determined eligible in 2001 and was given SHPO Site No. WB-0009. The WVSHPO-concurred 2015 WV Historic Bridge Survey determined Jerry Hall Arch Bridge to be NRHP-eligible under Criterion C and identified the resource as SHPO Site No. WB-0102. In 2016 the bridge was surveyed again; the preparer of the state historic property inventory form (HPI) for this re-survey determined the bridge to be not eligible under any criteria, however, the WVSHPO reviewed this HPI and rated the resource as eligible under Criterion C.

Current Evaluation

Criterion A. Existing WV 20, including Jerry Hall Arch Bridge (blt. 1924), represents highway development that was common throughout the state in the early half of the 20th century, including in areas with growth related to coal or timber industries. Other than general association with the history of the area, there is no reason to believe that the Diana-Webster Springs portion of WV 20 or Jerry Hall Arch Bridge has an important link with events or trends, transportation- or industry-related or other, that have made a significant contribution to the broad patterns of history. Thus, Jerry Hall Arch Bridge does *not* meet NRHP Criterion A for association with events at a national, regional or local level.

Statement of Significance (cont'd):

Criterion B. Per research and public involvement to this point*, this span is not known to have been associated with the significant productive period of some notable person's life, nor to have been associated for any length of time with such a person, nor to be the best representation of such a person's historic contribution. The bridge was initially known as the Grassy Creek Bridge and became known as Jerry Hall Arch Bridge many years later, due to Jerry Hall, a former WVDOH employee, having property directly adjacent to the bridge. The "Jerry Hall Arch" moniker for the span likely came during Jerry's adulthood and WVDOH tenure (ca. 1960+). Although Jerry's years as a public servant were likely valued, no unique or outstanding undertakings with the state have been noted to this point. Due to the above, this span does not meet NRHP Criterion B.

Criterion C. The extant Jerry Hall Arch Bridge is a two-arch reinforced concrete span that was built in 1924. Research for this form points toward the WV-based Farris Bridge Company (Farris Construction Co.) as the bridge's contracted builder. The company is known as a prolific builder of bridges in the West Virginia and Kentucky region.

In the 2015 WV historic bridge survey there were about 12 Farris Bridge Company concrete arch bridges noted as extant in WV; this includes Jerry Hall Arch and the nearby Junction Arch, both in Webster County (which were not identified as Farris Bridge Co. structures in that survey). By early 2023, the number of known existing Farris Bridge Co. arch spans is reduced to nine (9). Of the 9, six are single-span and three are two-span structures.

Known Farris Bridges Company Concrete Arch Bridges Still Existing in WV					
County	**Name/Identifiers**	**Yr built**	**Spans**	**Type**	**Current NRHP Elig. Status**
Grant	Streby Bridge No SHPO # State BARS #12A035	1936	1	Single Span Closed Spandrel Ellip Arch Modified; Widened. Construction date should be researched	NE
Hampshire	Gaston Road Bridge SHPO HM-0799 State BARS #14A041	1924	2	Two-Span Closed Spandrel Ellip Arch	NE
Harrison	Johnstown Arch SHPO HS-0822 State BARS #17A179	1920	1	Single Span Closed Spandrel Ellip Arch	NE
Mineral	Lower Laurel Dale Br SHPO MI-0168 State BARS #29A005	1936	1	Single Span Closed Spandrel Ellip Arch. Construction date should be researched	NE
Mineral	Horseshoe Creek Br SHPO MI-0169 State BARS #29A010	1936	1	Single Span Closed Spandrel Ellip Arch. Const Date may poss. be ca. 1915 per recent Charles Milar Br. research	NE
Mineral	Charles Milar Bridge SHPO MI-0170 State BARS #29A011	ca. 1915	2	Two-Span Closed Spandrel Ellip Arch	E
Preston	Hopemont Arch SHPO PR-0234 State BARS #39A019	1913	1	Single Span Closed Spandrel Ellip Arch Modified; Widened	NE
Webster	**Jerry Hall Arch** **SHPO WB-0120/0009** **State BARS #51A039**	**1924**	**2**	**Two-Span Closed Spandrel Ellip Arch**	**E**
Webster	Junction Arch SHPO WB-0008 State BARS #51A040	1924	1	Single Span Closed Spandrel Ellip Arch Modified; Widened	NE

Statement of Significance (cont'd):

As can be seen on the table on the previous page, only two of the Farris Bridge Co. arch bridges are currently determined NRHP-eligible – Jerry Hall Arch & Charles Milar Bridge; both are associated with current WVDOH projects that expect to remove the bridges for replacement with a new spans. Due to this expected future losses, the number of Farris Bridge Co. arch spans will continue to diminish and could be prudent in the future to reassess the eligibility of the other bridges.

Several contracting firms built concrete arch bridges in WV in the early half of the 20th century and there are still a good number of existing single- and two-span concrete arch bridges in the State. However, the number of those remaining will continue to diminish.

In regard to the above, Jerry Hall Arch Bridge appears to be one (1) of three (3) two-span concrete arch bridges in WV that appears to exemplify the work Farris Bridge Company, a regionally recognized former bridge builder that was based in WV. The bridge is noteworthy as a representation of a two-span closed spandrel elliptical concrete arch bridge, a type increasing diminishing in the WV landscape. This bridge retains a noteworthy level of integrity, particularly in the aspects of design, materials and workmanship. Therefore, Jerry Hall Arch Bridge meets NRHP Criterion C.

Criterion D. This span is not likely to have important information that will contribute to our understanding of human history or prehistory. Construction appears to have utilized commonly known techniques, tools and materials. The potential for information is minimal and, therefore, this span does not meet NRHP Criterion D.

Summary: The Jerry Hall Arch Bridge is *NRHP-eligible* under Criterion C as a notable example of a two-span closed spandrel elliptical concrete arch bridge and as a likely example of the work of Farris Bridge Company, a regionally recognized, WV-based bridge builder. Due to inconsistent periods of construction and/or lack of integrity or cohesiveness of the surrounding built environment, this structure is not a contributor to a historic district.

* Correspondence was conducted with: Preservation Alliance of West Virginia; Webster County Economic Development Authority, Webster County Historical Society, Hacker's Valley Pioneer Descendants, Inc, and Pardee & Curtin Timberlands LLC (Rexana McCourt).

Bibliography:

AbandonedOnline.net. "Western Maryland Railway Laurel Subdivision." https://abandonedonline.net/location/western-maryland-railway-laurel-subdivision/ (March 2023).

Bakic, Tracy D./WVDOH. West Virginia Historic Property Inventory Form – Former Western Maryland Railway Segment. WVSHPO Site WB-0321. Completed October 9, 2020. WVSHPO concurred resource is NRHP-eligible.

Carver, Martha. *Tennessee's Survey Report for Historic Highway Bridges, Chapter 3: Bridge Companies & Chapter 4: Inventoried Bridge Types*. Nashville, TN: Ambrose Printing Company, 2008.

Census.gov. *1880 Census: Volume 1. Statistics of the Population of the United States – General Population Tables – Table III – Population of the Civil Divisions less than counties, n the Aggregate at the censuses of 1880 and 1870 – Oregon through Wyoming Territory*. Pg 365 for Webster County, WV. https://www2.census.gov/library/publications/decennial/1880/vol-01-population/1880_v1-12.pdf?# (March 2023)

Charleston Daily Mail (CDM). Call for bids for Grassy Creek Bridge No. 690. March 11, 1924, p10, c7.

---. "Contracts Let for 22 State Bridges." April 9, 1924, p13.

Charleston Gazette (*CG*). "Bridge Contracts Awarded by State." April 10, 1924, p13, c2.

---. "William Farris Dies at Home." Dec. 13, 1924, p7, c5.

Cumberland Evening Times (*CET*). "Obituary – William Farris Funeral." December 15, 1924, p8, c1.

DoddReedFH.com. Obituaries for Gerrald "Jerry" Hall and Retha Hall. Website for Dodd & Reed Funeral Home, Webster Springs, WV.

Engineering News. Note that Farris Bridge Co. was incorporated in Charleston, WV. Nov. 19, 1908, Vol. 60.

FamilySearch.Org. Family Tree and associated Sources related to Gerrald & Retha Hall.

Iron Age, The. Notification that William Farris & Brothers was succeeded by Farris Bridge Company. March 25, 1909, Vol. 83, p 979.

KCI Technologies / Mead & Hunt, Inc. *West Virginia Statewide Historic Bridge Survey: Final Survey Report*, April 2015.

Maury, M. F., and Wm. M. Fontaine. Resources of West Virginia. Wheeling, WV: Register Company, Printers, 1876.

Manufacturer's Record. Advertisement for Farris Bridge Co. Volume 82, Issue 1 (1922).

McCourt, Rexana (Pardee & Curtin Timberlands, Inc). Personal (email) communication with Tracy Bakic, WVDOH Structural Historian, on Feb. 21, 2023.

Miller, E. Lynn. "Webster County." e-WV: The West Virginia Encyclopedia. January 26, 2023. https://www.wvencyclopedia.org/articles/949 (March 2023)

---. "Webster Springs." E-WV: The West Virginia Encyclopedia. February 28, 2023. https://www.wvencyclopedia.org/articles/953 (March 2023)

P.A.C. Spero & Company and Louis Berger & Associates. *Historic Highway Bridges in Maryland: 1631-1960: Historic Context Report*. Prepared for Maryland State Highway Administration. July 1995, Revised October 1995.

Parsons Brinckerhoff and Engineering and Industrial Heritage (PB & EIH). *A Context for Common Historic Bridge Types, NCHRP Project 25-25, Task 15*. Prepared for the National Cooperative Highway Research Program, Transportation Research Council, National Research Council. October 2005.

Pennsylvania (PA). *Alphabetical list of charters of corporations enrolled in the Office of the secretary of the commonwealth during the two years begining[sic] June 1, 1911, and Ending May 30, 1913. Including the alphabetical list of foreign corporations registered under the requirement of the Act of June 8, 1911, during the two years ending May 31, 1913*. Harrisburg, PA: W, Stanley Ray, State Printer, 1913

Bibliography (cont'd):

Pyle, A. N. *Losing Diana: Children and Families Reflect on the Closing of a School in Rural West Virginia*, 2016. https://mds.marshall.edu/cgi/viewcontent.cgi?article=2051&context=etd (March 2023).

Reger, David B. *West Virginia Geological Survey – Webster Count and Portion of Mingo District, Randolph County, South of Valley Fork of Elk River*. Morgantown, WV: Morgantown Printing & Binding Company, 1920.

Senate.gov. "Daniel Webster." https://www.senate.gov/artandhistory/history/common/generic/Speeches_Webster_7March.htm (March 2023).

SWCA Environmental Consultants. *Historic Resources Survey for the Proposed Kenney R. Hamrick St. Memorial Bridge Replacement Project, Webster Springs, Webster County, West Virginia*. Prepared for WVDOH. February 2017.

Taplines.net. "The West Virginia Midland." Parts 1-3. Don Hensley. http://www.taplines.net/January/wvmid1.htm (March 2023).

USGS. Diana, WV Quadrangle, 7.5 Minute Series. 1967.

---. Hacker Valley, WV Quadrangle. Surveyed 1913, Edition of 1915.

West Virginia, State of (WV). *Acts of the Legislature of West Virginia, at its Adjourned Session, Commencing January 11, 1882*. Wheeling, WV: W. J. Johnson, Public Printer, 1882

---. *Acts of the Legislature of West Virginia, at its Twentieth Regular Session, Commencing January 14, 1891.* Charleston, WV: Moses W. Donnally, Public Printer, 1891

---. *Acts of the Legislature of West Virginia, at its Twenty-Fourth Regular Session, Commencing January 11, 1899.* Charleston, WV: Press Butler Printing Co, 1899.

---. *West Virginia Handbook and Manual and Official Register, 1924*. [aka, WV Blue Book]. Charleston, WV: Jarrett Printing Company, 1924.

WV State Road Commission (SRC). *Annual Report of The State Road Commission of West Virginia for the Year Ending June 30, 1925*. Charleston, WV: Tribune Printing Co, 1925.

---. *Annual Report of the State Road Commission of West Virginia for the Year Ending June 30, 1926*. Charleston, WV: Tribune Printing Co., 1926.

---. *Annual Report of the State Road Commission of West Virginia.* Charleston, WV: Mathews Ptg. & Litho. Co., 1941.

---. Plan and Profile for Construction of State Road Project No. 3279-A, Holly & Hacker Valley District, Webster County, Diana-Cleveland Road Sec. A. 1923. On file, WVDOH.

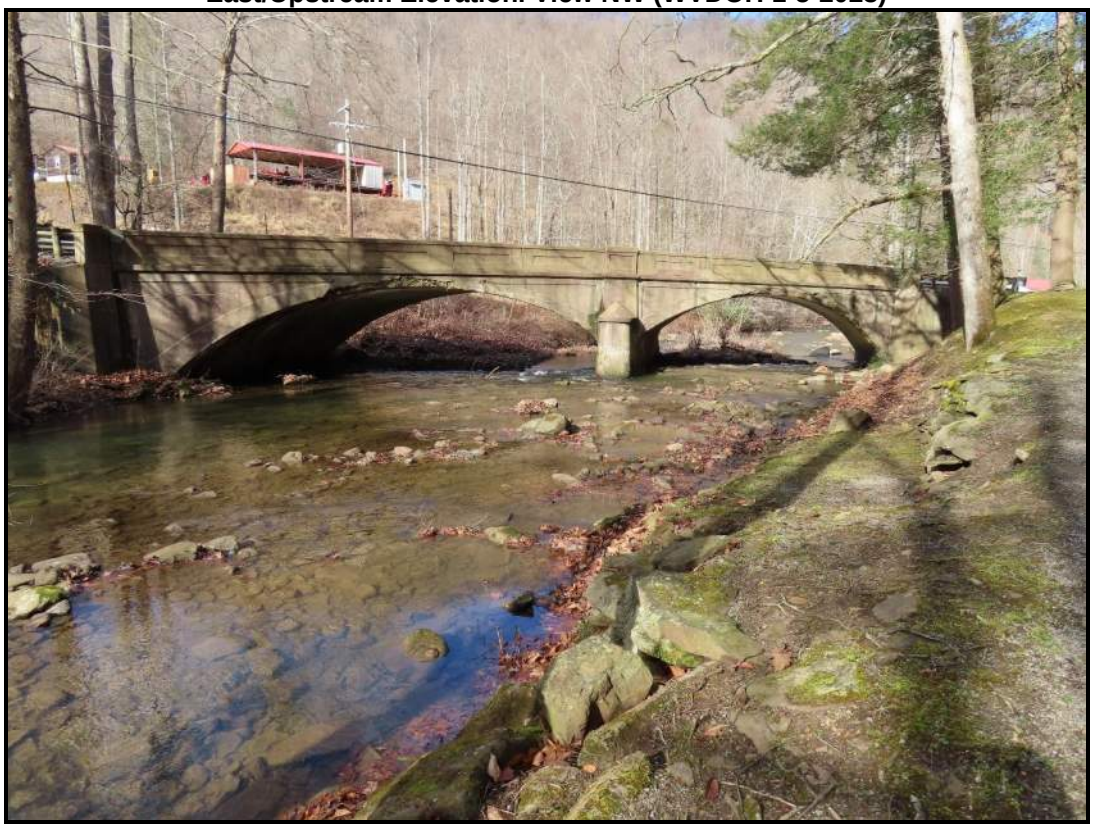
Wheeling Register. "The Railroads." June 12, 1893, pg 10, c4.

---. "The Railroads." February 24, 1894, pg 5, c3.

WVNCRails.org. "West Virginia Midland Railroad." https://www.wvncrails.org/west-virginia-midland-railroad.html (3/2023).

Virginia, State of (VA). *Acts of the General Assembly of the State of Virginia, Passed 1861, in the Eighty-Fifth Year of the Commonwealth*. Richmond, VA: William F. Ritchie, Public Printer, 1861.

East/Upstream Elevation. View NW (WVDOH 1-5-2023)



East/Upstream Elevation. View SW (WVDOH 1-5-2023)

West/Downstream Elevation. View W (WVDOH 1-5-2023)

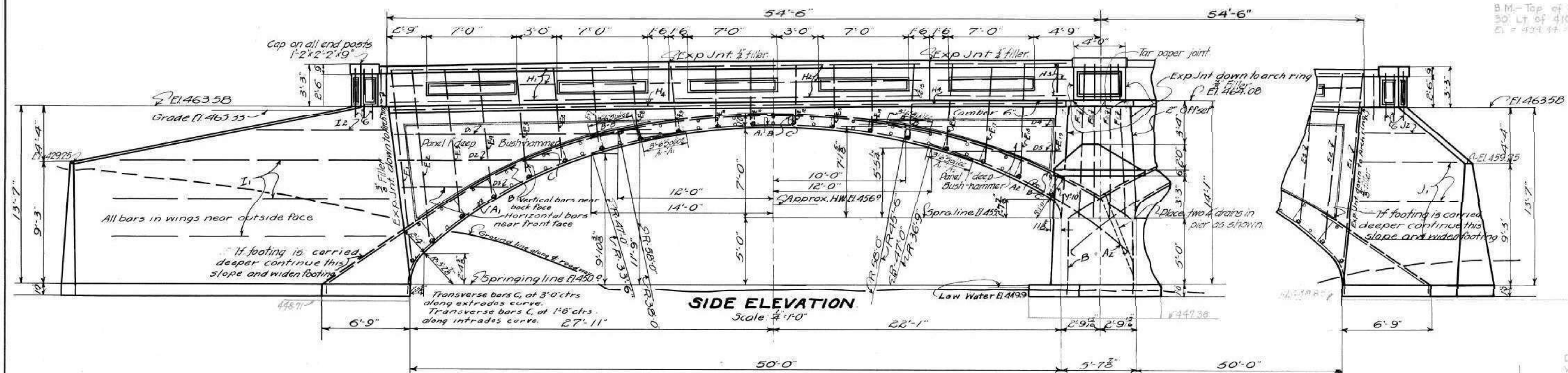
West/Downstream Elevation. View South (WVDOH 1-5-2023)

North Approach. View SSW (WVDOH 1-5-2023)

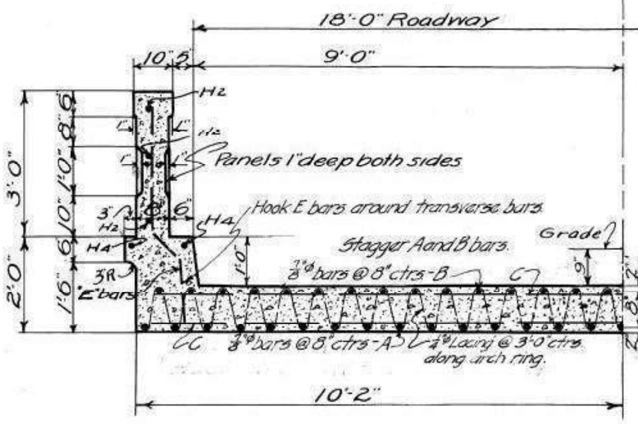
South Approach. View NNE (WVDOH 5-19-2021)

Railing Joint Detail. (WVDOH 5-19-2021)

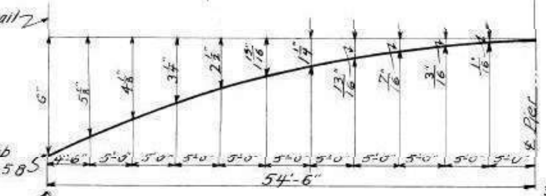
Plaque on East (Upstream) Railing, South End. View ESE (WVDOH 1-5-2023)



SIDE ELEVATION
Scale: 1/8" = 1'-0"



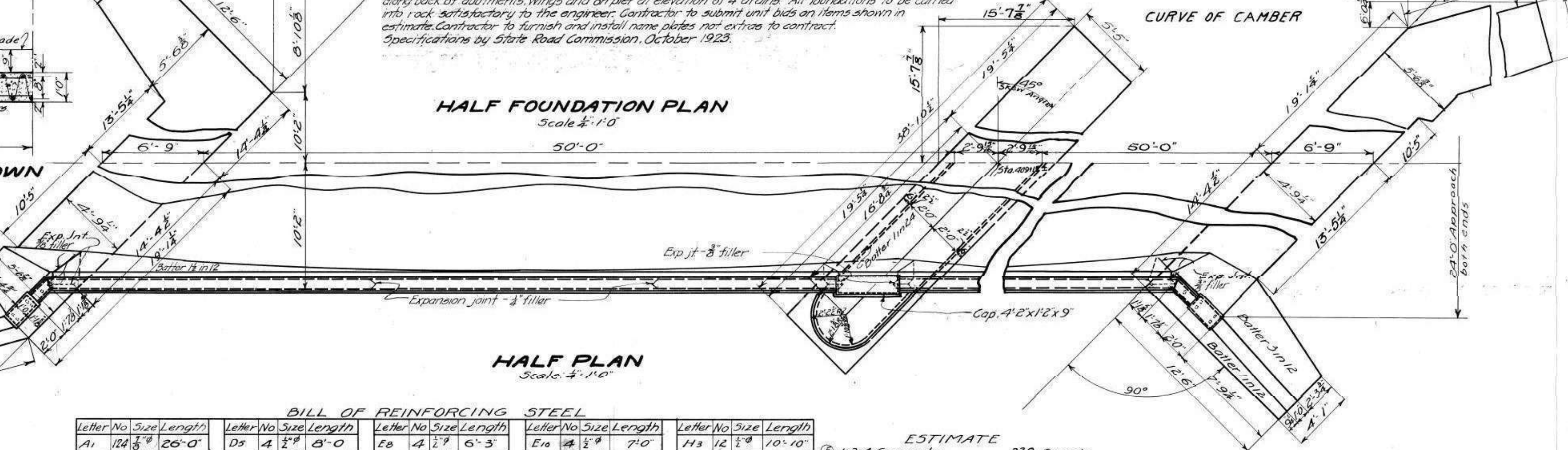
HALF SECTION AT CROWN
Scale: 1/2" = 1'-0"



CURVE OF CAMBER

NOTES;

All concrete above elev. 450.0 to be 1-2-4; below, 1-2½-5. All reinforcing steel to be deformed round bars. Diameter of hooks = 4 diameters of bars. Pass no bars thru expansion joints. Where expansion joints are noted use a prepared filler of thickness noted, and make V-grooved where shown. Overlap spliced bars at least 50 diameters. Bevel all exposed edges and expansion joints 3/4". Use tongue and grooved lumber, not less than 1½" dressed thickness on all exposed work. All exposed work shall have a rubbed finish except where bush-hammering is called for. Place two 4" drains in each long wing and one in each short wing at about elevation 453.0. Place a 12" French drain along back of abutments, wings and on pier at elevation of 4" drains. All foundations to be carried into rock satisfactory to the engineer. Contractor to submit unit bids on items shown in estimate. Contractor to furnish and install name plates not extras to contract. Specifications by State Road Commission, October 1923.



HALF FOUNDATION PLAN
Scale 1/4" = 1'-0"

HALF PLAN
Scale: 1/4" = 1'-0"

BILL OF REINFORCING STEEL

Letter	No	Size	Length	Letter	No	Size	Length	Letter	No	Size	Length	Letter	No	Size	Length	Letter	No	Size	Length
A1	124	7/8"φ	26'-0"	D5	4	1/2"φ	8'-0	E8	4	1/2"φ	6'-3"	E16	4	1/2"φ	7'-0"	H3	12	1/2"φ	10'-10"
A2	67	7/8"φ	18'-0"	E1	4	1/2"φ	15'-3"	E9	4	1/2"φ	5'-8"	E17	4	1/2"φ	8'-0"	H4	16	1/2"φ	26'-6"
B	180	7/8"φ	26'-4"	E2	4	1/2"φ	13'-11"	E10	4	1/2"φ	5'-3"	E18	4	1/2"φ	9'-3"	I1	6	1/2"φ	25'-0"
C	108	1/2"φ	28'-3"	E3	4	1/2"φ	12'-0"	E11	4	1/2"φ	5'-0"	E19	4	1/2"φ	10'-6"	I2	2	1/2"φ	10'-0"
D1	4	1/2"φ	21'-6"	E4	4	1/2"φ	10'-6"	E12	4	1/2"φ	5'-0"	F	8	1/2"φ	12'-0"	J1	6	1/2"φ	10'-6"
D2	4	1/2"φ	12'-6"	E5	4	1/2"φ	9'-0"	E13	4	1/2"φ	5'-3"	G	20	1/2"φ	4'-6"	J2	2	1/2"φ	5'-6"
D3	4	1/2"φ	8'-6"	E6	4	1/2"φ	8'-0"	E14	4	1/2"φ	5'-8"	H1	12	1/2"φ	20'-10"	1/4"φ Lacing	4850	Lin. Ft.	
D4	4	1/2"φ	17'-6"	E7	4	1/2"φ	7'-0	E15	4	1/2"φ	6'-3"	H2	12	1/2"φ	19'-6"				

ESTIMATE

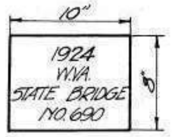
(5) 1:2:4 Concrete	339. Cu. yds.
(7) 1:2½:5 Concrete	30.0 Cu. yds.
7/8"φ Bars	18600 Lbs.
(11) 1/2"φ Bars	3,600 Lbs.
1/4"φ Lacing	810. Lbs.
(1) Dry Excavation	120. Cu. yds.
(2) Wet Excavation	17.5 Cu. yds.
(3) Rock Excavation	17.5 Cu. yds.

FINAL ESTIMATE — 690 & 920 —

Dry Excavation
Wet Excavation
Rock Excavation
Class "A" Concrete
Class "B" Concrete
Steel

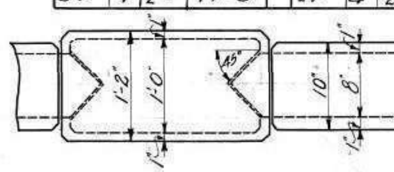
FINAL ESTIMATE — 690 —

Dry Excavation
Wet Excavation
Rock Excavation
Class "A" Concrete
Class "B" Concrete
Steel

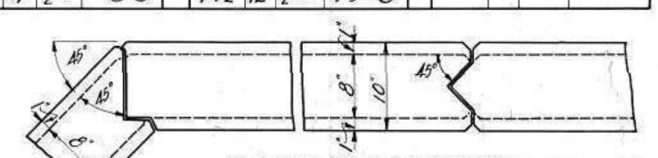


BRONZE NAME PLATE

NOTE - Place name plate in rail. Contractor shall also furnish, without charge, a similar name plate giving name and address of company and year of construction.



DETAIL OF EXP. IN POST



DETAIL OF EXP. IN RAIL

Reference - For situation plan see 690-A.

REINFORCED CONCRETE ARCH
GRASSY CREEK BRIDGE

Spans; 2-50'-0" Rise 12'-0", Skew 45° Roadway 18'-0"

on

WEBSTER SPRING-CLEVELAND ROAD

over

GRASSY CREEK

near Mouth of Grassy Cr.

WEBSTER CO. W.VA.

Designed by

STATE ROAD COMMISSION CHARLESTON W

Scale: As shown Date: Sept. 1921

PROJECT #3279 A Revised October 20, 1923.

Plan corrected in red to show work as constructed. 10-12-25.

West Virginia
Historic Bridge Inventory Form

Bridge No. 51-020/00-029.07 **BARS No.** 51A039 **Federal Bridge No.** 00000000051A039 **Bridge Design No.** 690.0

IDENTIFICATION INFORMATION

SHPO Survey No. WB-0102
Local Name JERRY HALL ARCH
Other Local Name
Owner State Highway Agency
Status Extant - in service

LOCATIONAL AND SETTING INFORMATION

District 07 **County** Webster **Latitude** 38333600 **Longitude** 080265400
Location 0.29 MI N OF CO 20/10
Facility Carried By Structur WV 20
Features Intersected GRASSY CREEK
UTM-Northing
UTM-Easting
UTM Zone
Surrounding Land Use Forested
Type of Development Rural - (undeveloped area outside communities)

STRUCTURAL INFORMATION

Main Span Type Concrete Arch - Deck (continuous)
Main Span Type Code 211
Number of Spans in Main Unit 002
Number of Approach Spans 0000
Structure Length (ft) 109
Length of Maximum Span (ft) 50
Average Daily Traffic 001500 **Year** 2003
Sufficiency Rating 0612 **Skew** 45
(Note: Data current as of April 2006 database)

BRIDGE DESCRIPTIVE INFORMATION

Year Built 1924
Year Reconstructed
Truss Bridge Type
Alteration(s)
Arrangement
Connection Type
Truss Details
Date of Alterations (Year)

Architectural Treatment(s)
Decorative rail/parapet
Decorative pier nose

Bridge Plate Text
(1) plaque. "1924 W. VA. STATE BRIDGE NO. 690"

BRIDGE HISTORY

Engineer or Designer
Builder or Fabricator Luten Bridge Company
Bridge Plan Location District
Additional Details: Concrete deck with asphalt overlay. Concrete abutments and wingwalls. Concrete parapet with incised panels along the interior and exterior, along the spandrel walls and within the endposts. Pier nose present on concrete piers. Guardrail attached to ends of parapet, which has been damaged along several places. Minor concrete patchwork is present, as well as plywood sheeting placed along the underside as a nonstructural repair. Multi-span closed spandrel elliptical arch. WVDOH bridge database records indicate the bridge was constructed by the Luten Bridge Company. Bridge possesses distinctive nonsymmetrical design that was a patented feature of Daniel B. Luten and this feature indicates that the bridge incorporates engineering design related directly to the work of Daniel B. Luten, a nationally recognized bridge designer.

Bridge No.	51-020/00-029.07	BARS No.	51A039	Federal Bridge No.	00000000051A039	Bridge Design No.	690.0

NATIONAL REGISTER EVALUATION INFORMATION

National Register Determination Eligible **Reason Not Evaluated**

National Register Determination Date 2013

This bridge is not eligible for the National Register under Criterion A as it does not have a significant association with an important historic transportation system, program, event, trend, or policy identified through contextual research and survey activities.
This bridge exhibits continuous span design, demonstrating important engineering design or technology as a variation within its class.
This bridge was designed or constructed by an engineer or firm whose work is distinguishable on the national level.
This bridge displays one or more architectural treatments.
This bridge retains the historic integrity necessary to convey its engineering significance and, therefore, is eligible for the National Register under Criterion C.

West Virginia Historic Bridge Inventory Form
Form Prepared By Mead & Hunt and KCI
Form Preparation Date 2013

Internal Rating: CE (Crit. C)

WEST VIRGINIA HISTORIC PROPERTY INVENTORY FORM

Street Address Diana Rd	**Common/Historic Name/Both** ○ ○ ◉ Multi-span concrete bridge	**Field Survey #** N/A	**Site # *(SHPO Only)*** WB-0009 RESURVEY
Town or Community Chapman	**County** Webster	**Negative No.** N/A	**NR Listed Date** N/A
Architect/Builder N/A	**Date of Construction** c1920	**Style** N/A	
Exterior Siding/Materials N/A	**Roofing Material** N/A	**Foundation** poured concrete	
Property Use or Function **Residence** ○ **Commercial** ○ **Other** ◉	**UTM#** 17N 547793 E, 4268077 N		
Survey Organization & Date Tetra Tech, Inc. June 2016	**Quadrangle Name** Diana **Part of What Survey/FR#** Hurricane Sandy Reconnaissance Survey		

Sketch Map of Property
Or Attach Copy of USGS Map

WB-0009 RESURVE Y

Site No.

N

Present Owners	Owners Mailing Address
N/A	N/A
Phone #	

Describe Setting

Bridge spans Grassy Creek, at the base of a densely wooded valley. The slopes beside the bridge are cleared of vegetation and kept manicured on the east side. The west slopes beside the bridge are overgrown with vegetation. The paved road crossing the bridge is SR 20.

N/A **Acres**

☐ **Archaeological Artifacts Present**

Description of Building or Site (Original and Present)

N/A **Stories** N/A **Front Bays**

See Continuation Sheet

(Use Continuation Sheets)

Alterations ○ **Yes** ◉ **No** **If yes, describe**

Additions ○ **Yes** ◉ **No** **If yes, describe**

Describe All Outbuildings

See Continuation Sheet

(Use Continuation Sheets)

Statement of Significance

See Continuation Sheet

(Use Continuation Sheets)

Bibliographical References

See Continuation Sheet

(Use Continuation Sheets)

Form Prepared By: Hannah L. Dye, MA, Architectural Historian **Date:** November 2016

Name/Organization: Tetra Tech, Inc.

Address: 1000 Green River Drive, Suite 101
Fairmont, WV 26554

Phone #: 304-685-6593

WEST VIRGINIA HISTORIC PROPERTY FORM
CONTINUATION SHEET

NAME Multi-span concrete bridge **SITE#** WB-0009 RESURVEY

Description of building or site:

This c1920 , 0 -story, 0 bay bridge is located on Diana Rd in the vicinity of Chapman in Barbour County. The building is constructed on a and stands on a poured concrete foundation. The exterior walls are clad in ; the roof is covered in . The fenestration consists primarily of sash windows.

Description of outbuildings:

This property contains 0 outbuildings including:

No associated outbuildings are visible from the public right-of-way.

Statement of Significance:

No evidence that conclusively ties this resource to any significant events or trends in local history could be identified. For this reason, this resource is recommended not eligible for NRHP listing under Criterion A. A direct association between the bridge and a notorious architect or builder could not be identified. As such, it is recommended not NRHP-eligible under Criterion B. This bridge stands as a poorly-preserved and rapidly deteriorating example of common bridge construction or design in the area. As such, it is not recommended NRHP-eligible under Criterion C.

WEST VIRGINIA HISTORIC PROPERTY FORM
CONTINUATION SHEET

NAME Multi-span concrete bridge **SITE#** WB-0009 RESURVEY

Bibliography

"Brief History of Webster County's Newspapers," Webster Echo, 8-12-1979.

"Camden Had Largest Crowd in its History," Webster Echo, 7-15-1964.

"Carpenters and Mortons Were First in Webster," News Leader, 6-21-1965.

"Cowen Firm Forming," Charleston Gazette, 2-18-1962.

"Cowen A Big Little Town," Webster Republican, 2-29-1968.

Dodrill, William Christian. Moccasin Tracks and Other Imprints. Charleston, West Virginia, Lovett Printing Company, 1915.

"Historic Mollohan's Mill Restoration is Nearly Completed," Webster Republican, 9-19- 1984.

History of Erbacon, WV," Webster Republican, 8-30-1989.

"John Hoff Butcher Explains Hacker Valley Got Name," Webster Republican, 2-19- 1975.

Miller, Sampson Newton. Annals of Webster County, West Virginia, Before and Since Organization, 1860.

"Mollohan Mill...National Register Historic Places," Webster Republican, 10-6- 1982.

"Story of the Battle of Cowen," News Leader, 11-4-1964.

Thompson, R. L. Webster County History and Folklore, From Earliest Time to the Present. Webster Springs, West Virginia, Star Printers, 1942.

"Town Named in Honor of John K. Cowen...," Webster Republican, 5-12-1927.

"Webster County's Early History, Part I, II, III," Beckley Post Herald, 7-4,5,6-1957.

"Webster Has Historical Background," Exponent-Telegram, 9-29-1929.

"Webster County Formed 105 Years Ago," Beckley Post Herald, 5-4-1965.

Webster County Historical Society, Inc. Heritage of Webster County, West Virginia 1994. Upper Glade, West Virginia, Society, 1994.

"Whitaker Falls, A WV Beauty Spot," Times-West Virginian, 12-7-1939.

"World Met Erabacon in the Enquirer," Charleston Gazette, 12-24-1996.

WEST VIRGINIA HISTORIC PROPERTY FORM
CONTINUATION SHEET

NAME Multi-Span Concrete Bridge **SITE#** WB-0009 RESURVEY

WEST VIRGINIA HISTORIC PROPERTY FORM
CONTINUATION SHEET

NAME Multi-Span Concrete Bridge **SITE#** WB-0009 RESURVEY

WEST VIRGINIA HISTORIC PROPERTY FORM
CONTINUATION SHEET

NAME Multi-Span Concrete Bridge **SITE#** WB-0009 RESURVEY

WEST VIRGINIA HISTORIC PROPERTY FORM
CONTINUATION SHEET

NAME Multi-Span Concrete Bridge **SITE#** WB-0009 RESURVEY

Internal Rating: CE

WEST VIRGINIA HISTORIC PROPERTY INVENTORY FORM

Street Address	Common/Historic Name/Both	Field Survey #	Site # *(SHPO Only)*
SR 20 over Grassy Creek	X Multi-span Concrete Bridge		WB-0009
Town or Community	**County**	**Negative No.**	**NR Listed Date**
Diana	Webster	2, see Webster Springs Survey File	
Architect/Builder	**Date of Construction**	**Style**	
	1924	Two-span Concrete Arch Bridge	
Exterior Siding/Materials	**Roofing Material**	**Foundation**	
Concrete		Concrete	
Property Use or Function	**UTM #**		
Residence O Commercial O Other X Transportation:Road			
Survey Organization & Date	**Quadrangle Name**	**Photograph (2" x 3" Contact)**	
WVSHPO 10/12/2000	Diana		

Sketch Map of Property or Attach Copy of USGS Map

Site No.

N

Present Owners	Owners Mailing Address
WVDOH Phone #	

Describe Setting

less than 1 Acres

Small Stream crossing in a rural, wooded setting.

_____Archaeological Artifacts Present

Description of Buildings or Site (Original and Present)

N/A Stories N/A Front Bays

Two span, concrete, filled arch bridge with a concrete parapet. Parapet design is a simple, depressed rectangular motif that rpeats. A rectangular, bronze plaque in the parapet wall reads "1924/W.V.A./STATE BRIDGE/No. 690".

(Use Continuation Sheets)

Alterations [ ] Yes [X] No If yes, describe

Additions [ ] Yes [X] No If yes, describe

Describe All Outbuildings

N/A

(Use Continuation Sheets)

Statement of Significance

Concrete arch bridges are rapidly disappearing onsstate highways--this is a well-preserved, multiple span example with a skewed design--it merits further research.

(Use Continuation Sheets)

Bibliographical References

(Use Continuation Sheets)

Form Prepared By: Alan R. Rowe Date: 2/7/2001

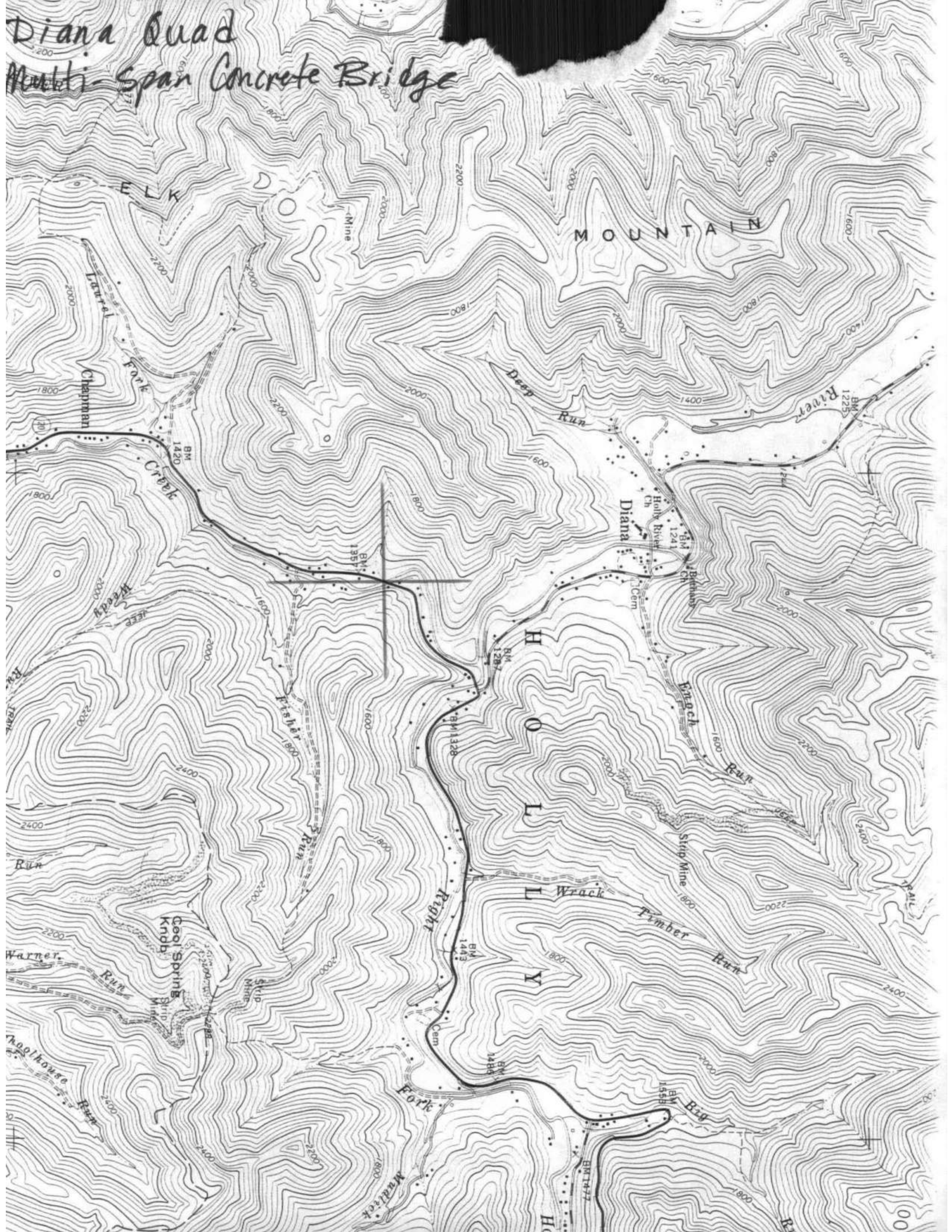
Name/Organization: WVSHPO
Address:

Phone #:

WEST VIRGINIA HISTORIC PROPERTY FORM
CONTINUATION SHEET

NAME Multi-span Concrete Arch Bridge SITE # WB-0009

Diana Quad
Multi-Span Concrete Bridge



MEMORANDUM OF AGREEMENT
BY AND AMONG
THE FEDERAL HIGHWAY ADMINISTRATION,
THE WEST VIRGINIA STATE HISTORIC PRESERVATION OFFICER
AND THE WEST VIRGINIA DIVISION OF HIGHWAYS
REGARDING IMPLEMENTATION OF THE
JERRY HALL ARCH BRIDGE REPLACEMENT PROJECT
STATE PROJECT # S251-20-29.07
FEDERAL PROJECT # STP-0020(367)D
WEBSTER COUNTY, WEST VIRGINIA
July 2023

WHEREAS, the Federal Highway Administration (FHWA), in cooperation with the West Virginia Division of Highways (WVDOH), proposes to replace the Jerry Hall Arch Bridge which spans over Grassy Creek on West Virginia State Route 20 in Webster County, hereinafter referred to as the Project. The Project will involve the demolition of the existing bridge; and

WHEREAS, the FHWA has determined that the Project will have an adverse effect upon the Jerry Hall Arch Bridge, a property eligible for the National Register of Historic Places (NRHP); and

WHEREAS, the FHWA has consulted with the West Virginia State Historic Preservation Officer (WVSHPO) pursuant to 36 CFR Part 800 Implementing Section 106 of the National Historic Preservation Act; (16 U.S.C., 470f); and

WHEREAS, the FHWA has determined that the Project will not affect archaeological properties; and

WHEREAS, the WVDOH has contacted the Preservation Alliance of West Virginia, Webster County Historical Society, Webster County Economic Development Authority, and Hackers Creek Pioneer Descendants, Inc. regarding the Project. None of these groups chose to respond and/or establish ability in relation to reuse of the existing Jerry Hall Arch Bridge; and

WHEREAS, in accordance with 36 CFR 800.6 (a) (1), the FHWA has notified the Advisory Council on Historic Preservation (ACHP) of its adverse effect determination providing the specified documentation, and the ACHP has chosen not to participate in the consultation pursuant to 36 CFR 800.6 (a) (1) (iii); and

NOW, THEREFORE, the FHWA, the WVSHPO and the WVDOH agree that the undertaking will be implemented in accordance with the following stipulations in order to take into account the effects of the undertaking on historic properties.

STIPULATIONS

The FHWA shall ensure that the following stipulations are carried out:

I. Jerry Hall Arch Bridge

a. Jerry Hall Arch Bridge will be documented in its present historic setting. The documentation package will include 5"x7" black and white digital prints in accordance with the NRHP Photo Policy Factsheet (updated May 15, 2013). The documentation package will include hard copies of the information outlined in this stipulation as well as digital copies in the form of PDFs for reports and documents, and TIFF files for photographs. The WVSHPO will be given the opportunity to review the documents before submission of final versions.

b. A brief history of the structure will be included along with fully completed West Virginia Historic Property Inventory forms and copies of any available plan sheets and drawings of the bridge from WVDOH bridge files.

c. WVDOH staff will provide Webster County Historical Society and Webster-Addison Public Library a copy of the Jerry Hall Arch Bridge State Level Historic Documentation for reference and educational purposes.

d. Color brochures about Jerry Hall Arch Bridge will be developed by the WVDOH and distributed to Webster County Historical Society and Webster-Addison Public Library. The brochure will also be provided via an electronic data storage device for the above organizations to print brochures when the original total provided has been exhausted. The WVSHPO will be given the opportunity to review all educational materials developed for this stipulation prior to distribution to the above organizations.

e. Jerry Hall Arch Bridge will be documented on the West Virginia historic bridge website.

f. Jerry Hall Arch Bridge's existing informational plaque will be given to the Webster County Historical Society.

II. Duration

This Memorandum of Agreement (MOA) will expire if its stipulations are not carried out within five (5) years from the date of its execution. At such time, and prior to work continuing on the undertaking, the FHWA shall either (a) execute an MOA pursuant to 36 CFR 800.6, or (b) request, take into account, and respond to the comments of the ACHP under 36 CFR 800.7. Prior to such time, FHWA may consult with other signatories to reconsider the terms of the MOA and amend it in accordance with

Stipulation VI below. FHWA shall notify the signatories as to the course of action it will pursue.

III. Post-Review Discoveries

If any unanticipated effects to or discoveries of historic properties or archaeological sites, including human burial sites and/or skeletal remains, are encountered during the implementation of this undertaking, work shall be suspended in the area of the discovery until the WVDOH has developed and implemented an appropriate treatment plan in consultation with the WVSHPO pursuant to 36 CFR 800.13 (b).

IV. Monitoring and Reporting

Each year following the execution of this MOA until it expires or is terminated, FHWA shall provide all parties to this MOA a summary report detailing work carried out pursuant to its terms. Such report shall include any scheduling changes proposed, any problems encountered, and any disputes and objections received in FHWA's efforts to carry out the terms of this MOA.

V. Dispute Resolution

Should any signatory or concurring party to this MOA object at any time to any actions proposed or the manner in which the terms of this MOA are implemented, FHWA shall consult with such party to resolve the objection. If FHWA determines that such objection cannot be resolved, FHWA will:

a. Forward all documentation relevant to the dispute, including the FHWA's proposed resolution, to the ACHP. The ACHP shall provide FHWA with its advice on the resolution of the objection within thirty (30) days of receiving adequate documentation. Prior to reaching a final decision on the dispute, FHWA shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP, signatories and concurring parties, and provide them with a copy of this written response. FHWA will then proceed according to its final decision.

b. If the ACHP does not provide its advice regarding the dispute within the thirty (30) day time period, FHWA may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, FHWA shall prepare a written response that takes into account any timely comments regarding the dispute from the signatories and concurring parties to the MOA, and provide them and the ACHP with a copy of such written response.

c. FHWA's responsibility to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remain unchanged.

VI. Amendments

This MOA may be amended when such an amendment is agreed to in writing by all signatories. The amendment will be effective on the date a copy signed by all of the signatories is filed with the ACHP.

VII. Termination

If any signatory to this MOA determines that its terms will not or cannot be carried out, that party shall immediately consult with the other parties to attempt to develop an amendment per Stipulation VI, above. If within thirty (30) days (or another time period agreed to by all signatories) an amendment cannot be reached, any signatory may terminate the MOA upon written notification to the other signatories.

Once the MOA is terminated, and prior to work continuing on the undertaking, FHWA must either (a) execute a MOA pursuant to 36 CFR 800.6, or (b) request, take into account, and respond to the comments of the ACHP under 36 CFR 800.7. FHWA shall notify the signatories as to the course of action it will pursue.

EXECUTION of the Memorandum of Agreement by the FHWA, WVSHPO, the WVDOH and the ACHP, and implementation of its terms evidence that the FHWA has afforded the ACHP an opportunity to comment on the Jerry Hall Arch Bridge Replacement Project and its effects on historic properties, and that the FHWA has taken into account the effects of the undertaking on the historic property.

Signatories Page

JASON WORKMAN

Digitally signed by JASON WORKMAN
Date: 2025.06.16 14:27:33 -04'00'

Federal Highway Administration — Date

Susan M Pierce

West Virginia Deputy State Historic Preservation Officer — 8/10/23 — Date

INVITED SIGNATORY:

Jeremy Hunter, P.E.

West Virginia Division of Highways — 8/21/2023 — Date