

***Jobes Bridge
Wetzel County
State Project # S352-12-2.35
Federal Project # N/A
FR#: 15-280-WZ***



STATE LEVEL OF HISTORIC DOCUMENTATION

April 2015

***West Virginia
Department of Transportation
Division of Highways
Engineering Division
Environmental Section
(304) 558-2885***

STATE LEVEL HISTORIC DOCUMENTATION
JOBES BRIDGE

Location: County Route 12, over Long Drain Creek
Near Littleton
Wetzel County
West Virginia

USGS Littleton Quadrangle

Date of Construction: 1927

Builder: Lutten Bridge Company
York, Pennsylvania

Present Owner: West Virginia Department of Transportation
Division of Highways
1900 Kanawha Boulevard, Building 5, Room A-110
Charleston, WV 25305

Present Use: Vehicular Bridge

Significance: The Jobes Bridge is significant for its master builder and engineering significance.

Project Information: The project has been undertaken due to the poor condition of the bridge. Any future deterioration of the bridge would result in its closure, the existing bridge warrants replacement. The documentation was undertaken in April 2015 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 prior to replacement of this National Register eligible structure.

Sondra L. Mullins, Structural Historian
West Virginia Division of Highways
Charleston, WV 25301
April 21, 2015

The Jobes Bridge is located in a rural area of Wetzel County on County Route 12, located 1.29 mile south of the junction with US Route 250, over Long Drain Creek. The closest community is Littleton, which is about 3 miles away. The community of Littleton is one of three towns, the other two being Burton and Hundred that collectively make up the Hundred Community. The town of Littleton, originally called Milo, is located in Wetzel County's Clay District. It was named for a pioneer family by the name of Little who settled there. As with Burton and Hundred, a portion of the Baltimore and Ohio (B & O) made its home in Littleton. The railroad did much to encourage settlement there. Little also was a part of the oil and gas boom of the 1880's and became incorporated in 1892. In 1906 Littleton was ravaged by fire. As a result of the fire more than half of the residences in town were destroyed along with several stores, banks, a mill, a schoolhouse, and the B & O Station. As a result of the disaster, Littleton received a new school building. It was one of the first high schools in the state of West Virginia. It closed in 1978 (along with Burton Grade School and Hundred Grade School) when Long Drain School was built in Metz.



The bridge was built in 1927 by the Luten Bridge Company of York, Pennsylvania. The Luten Bridge Company also known as National Bridge Company was founded in 1901 by Daniel B. Luten. Luten's concrete arch designs attained prominence and popularity throughout the eastern United States between 1900 and 1930. By 1907, according to a company catalog, Luten's firm had designed more than 700 bridges; by 1919, some 17,000 spans had been designed by the company. Luten's firm is

known to have built a number of reinforced concrete arches. Daniel Luten received several patents for his concrete arch bridge designs.

The bridge consists of one reinforced concrete arch span (SCDG) supported by two arch shaped girders and stub abutments with full height retaining walls. The overall length is 82'0" and the arch is 60'0" long. In the latest bridge inspection report (August 18, 2014), the bridge is listed in poor condition with a 15 Ton weight limit. The average daily traffic (ADT) in 2013 was 50 vehicles. The bridge is used by local traffic, mail carriers, school buses, and commercial two way traffic.

The Jobs Bridge is eligible for the National Register of Historic Places under Criterion C for its engineering significance and for Luten Bridge Company as a master builder.

BIBLIOGRAPHY

KCI and Mead & Hunt. West Virginia Statewide Historic Bridge Survey: Final Survey Report. May 2014.

West Virginia Division of Highways, Bridge Files, Maintenance Division, Building 5, Capitol Complex, Charleston, West Virginia.

West Virginia Division of Highways, *Phase 1 Cultural Resources Management Report – Jobes Bridge*, Engineering Division, Building 5, Capitol Complex, Charleston, West Virginia, January 16, 2015.

STATE LEVEL HISTORIC DOCUMENTATION
INDEX TO PHOTOGRAPHS

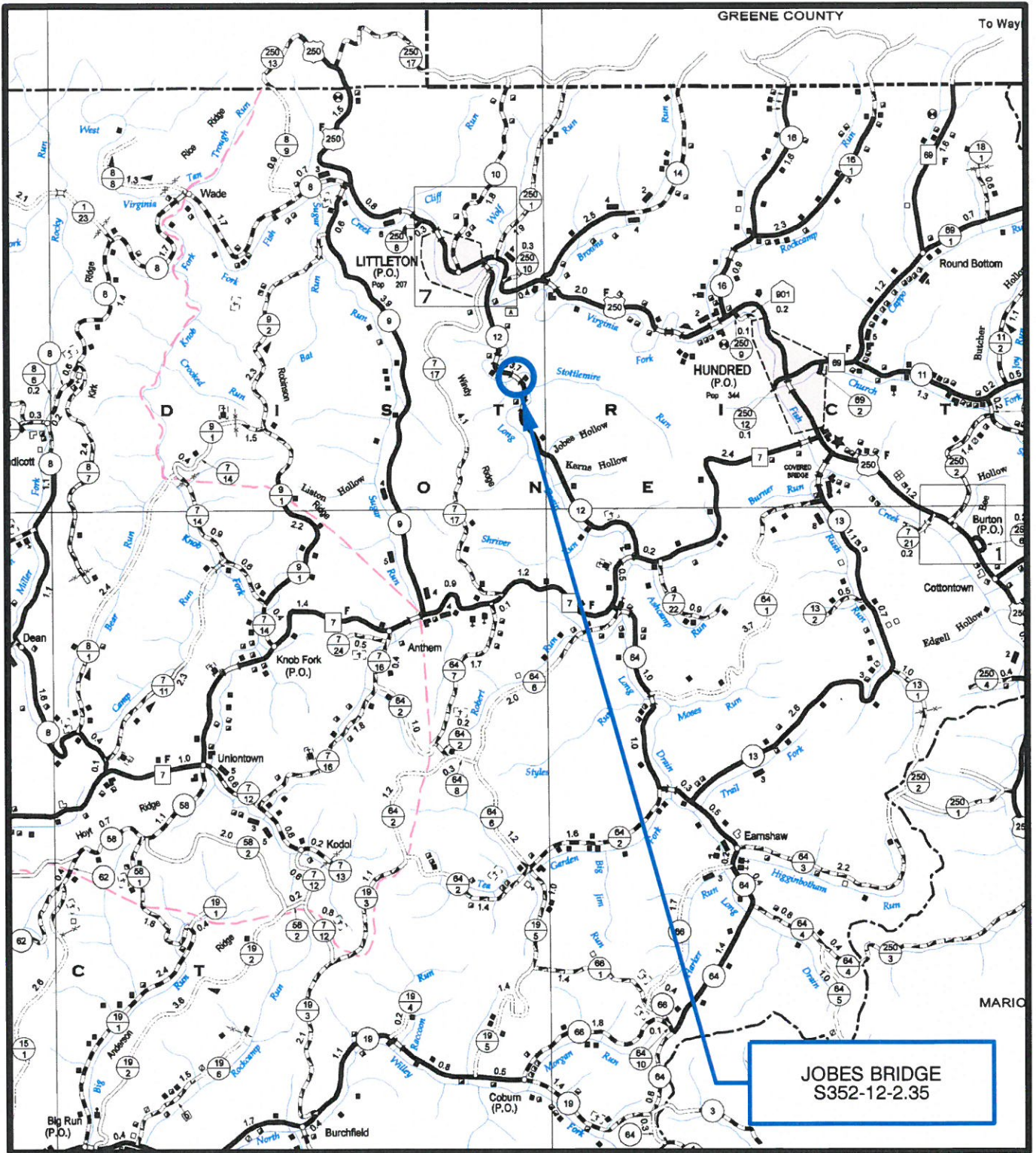
Jobes Bridge
County Route 12
Near Littleton
Wetzel County, West Virginia

Photographer: Sondra Mullins

October 2014

JOBES -1	End view looking northwest
JOBES -2	End view looking southwest
JOBES -3	Concrete deterioration along downstream side of deck
JOBES -4	Guardrail (original parapet wall is missing)
JOBES -5	Abutment #2
JOBES -6	End view looking south
JOBES -7	End view looking north
JOBES -8	Looking inside arch at Abutment #1

No original plans exist for this bridge.



VICINITY MAP

(SCALE: 1"=1 MILE)

PROJECT NUMBER: S352-12-12.35
 FEDERAL PROJECT NUMBER: N/A

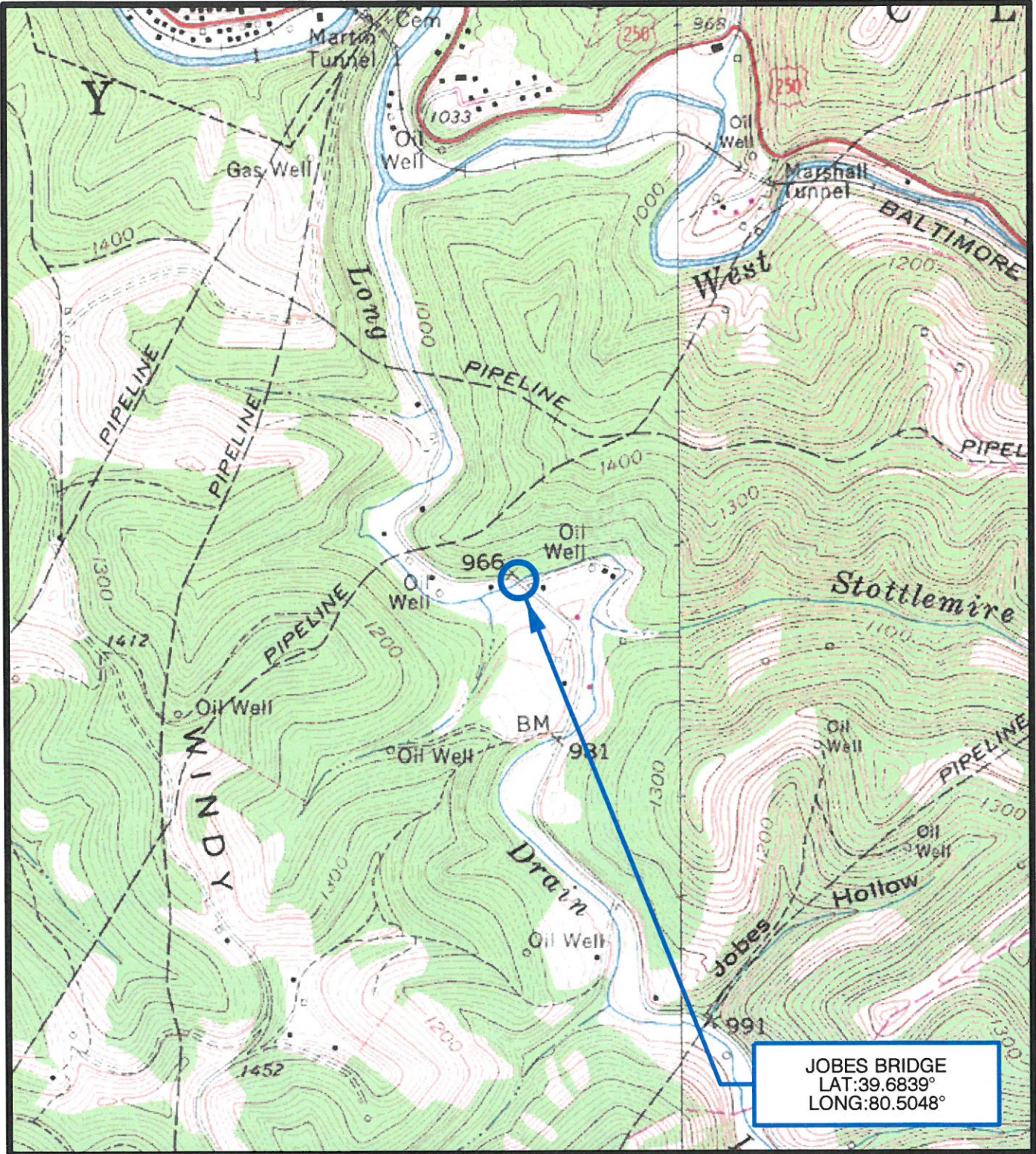
PROJECT NAME: JOBES BRIDGE
 COUNTY: WETZEL



WEST VIRGINIA
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

DATE:
 08/25/14

SHEET
 2 OF 4



SITE LOCATION MAP

(USGS TOPO MAP: LITTLETON WV & PA (NO SCALE))

PROJECT NUMBER: S352-12-12.35
 FEDERAL PROJECT NUMBER: N/A

PROJECT NAME: JOBES BRIDGE
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WEST VIRGINIA
 DEPARTMENT OF TRANSPORTATION
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SHEET
 1 OF 4

NATIONAL REGISTER EVALUATION INFORMATION

National Register Determination

Reason Not Evaluated

National Register Determination Date

This bridge is an example of an uncommon type or displays an unusual design element that represents the individuality or variation of features particular to this bridge type.

This bridge was designed or constructed by an engineer or firm whose work is distinguishable on the national level.

Although this bridge has undergone alterations, it still retains the historic integrity necessary to convey its engineering significance and, therefore, is eligible for the National Register under Criterion C.





1. End view looking northwest



2. End view looking southwest



3. Concrete deterioration along downstream side of deck



4. Guardrail



5. Abutment #2



6. End view looking south



7. End view looking north



8. Looking inside arch at Abutment #1

Jobes Bridge
 over Long Drain
 County Route 12
 1.21 mi. South jct CR7/17
 Wetzel County
 District 6
 IS NOT on the NHS
 ADT - 50 - 2011

BRIDGE INSPECTION REPORT

Type of Inspections Performed:

Interim-Condition Inspection and Report



FIELD INSPECTED BY:

STRUCTURAL EVALUATION BY:

REVIEWED AND APPROVED BY:

**THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS**

Inspection Types

NBI 90 (Routine) Date: 08/18/2014
 (LAST DAY)

Frequency: 12

Periodic

In-Depth

Interim-Condition

Fracture Critical <input type="checkbox"/>	Required: N	Item 93A Date:	Frequency:
Underwater <input type="checkbox"/>	Required: N	Item 93B Date:	Frequency:
Underwater Equipment:			
Other Special <input type="checkbox"/>		Item 93C Date:	Frequency:
Special Code:			
Inventory <input type="checkbox"/>		Inspection Date: 09/01/1995	
Interim <input type="checkbox"/>		Inspection Date:	
Damage/Special <input type="checkbox"/>		Inspection Date:	
Closure <input type="checkbox"/>		Inspection Date:	Frequency:
UB Inspection Required <input type="checkbox"/>			
		Inspection Date:	Frequency:
UB Inspection Vehicle:			



West Virginia Division of Highways

Narrative Report

V 1.2

BARS No. : 52A035

Date : 08/18/2014

PROCEDURE

The data for this Special Inspection was obtained on August 18, 2014. The inspection crew consisted of Inspector J. Robinson and Team Leader A. Hall. The inspection consisted of visually observing all parts of the structure from the railings to the substructure units at ground level. The entire underside was inspected with the aid of a ladder while wearing hip boots. A visual observation was made for scour due to the low clear water.

The structure was last inspected on August 22, 2013 by M. Jarrett. He conducted an Fourth In-Depth Periodic inspection and rated the structure in poor condition. Substructure orientation corresponds with the Straight Line Diagram.

SUMMARY & RECOMMENDATIONS

The structure is in poor condition. The most serious deficiencies previously noted and their current condition are as follows:

1. There are still hairline to 1/8" cracks extending across both arched girders and the underside of the deck. A 1/4" separation exists in the upstream girder near Abutment No. 2. See Photos No. 1 through No.6.
2. There are three guardrail posts that are disconnected from the due to concrete deterioration. See Photo No. 7.
3. The low rated deck girders will be inspected again on or before August 18, 2015.



West Virginia Division of Highways

Photos

V 1.2

BARS No. : 52A035

Date : 08/18/2014



PHOTO NO. 1 - HAIRLINE TO 1/8" CRACKS I THE UPSTREAM GIRDER



PHOTO NO. 2 - 1/8" CRACK IN THE UPSTREAM GIRDER



PHOTO NO. 3 - HAIRLINE TO 18" CRACKS IN THE DOWNSTREAM GIRDER

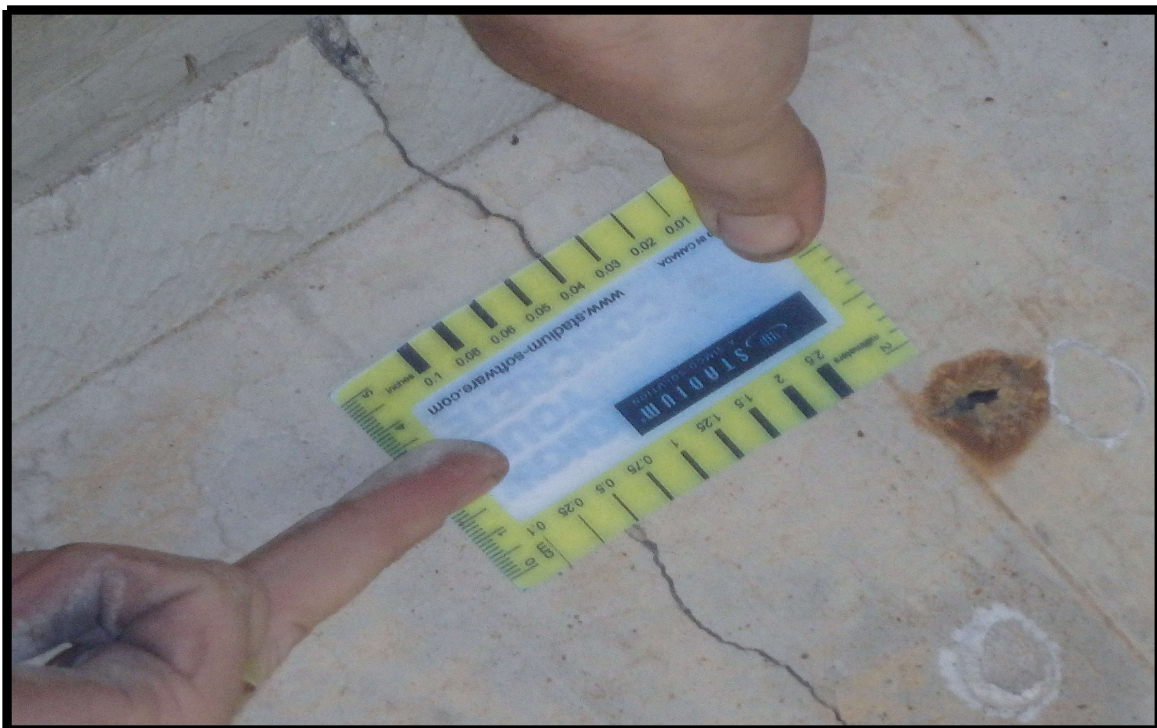


PHOTO NO. 4 - CRACK IN THE DOWSTREAM GIRDER



West Virginia Division of Highways

Photos

V 1.2

BARS No. : 52A035

Date : 08/18/2014



PHOTO NO. 5 - CRACKS WITH EFFLORESCENCE DOWNSTREAM GIRDER NEAR ABUTMENT NO. 1



PHOTO NO. 6 - UP TO 1/4" SEPERATION IN UPSTREAM GIRDER AT ABUTMENT NO. 2



West Virginia Division of Highways

Photos

V 1.2

BARS No. : 52A035

Date : 08/18/2014



PHOTO NO. 7 - DETACHED GUARDRAIL POST

**MEMORANDUM OF AGREEMENT
BY AND AMONG
THE WEST VIRGINIA STATE HISTORIC PRESERVATION OFFICER
AND THE WEST VIRGINIA DIVISION OF HIGHWAYS
REGARDING IMPLEMENTATION OF THE JOBES BRIDGE
REPLACEMENT PROJECT
STATE PROJECT #S352-12-2.35
WETZEL COUNTY, WEST VIRGINIA
FEBRUARY 2015**

WHEREAS, the West Virginia Division of Highways (WVDOH) proposes to replace Jobes Bridge, which spans Long Drain Creek in Wetzel County, hereinafter referred to as the Project. The improvements involve the construction of a new bridge and the removal of the existing bridge using state funds; and

WHEREAS, the WVDOH has determined that the Project will have an adverse effect upon the Jobes Bridge, a property eligible for the National Register of Historic Places (NRHP) under Criterion C; and

WHEREAS, the WVDOH has consulted with the West Virginia State Historic Preservation Officer (WVSHPO) pursuant to West Virginia Code Chapter 29, Article 1 and its implementing regulations (82 CSR 2), as well as 36 CFR Part 800.5 Implementing Section 106 of the National Historic Preservation Act; (16 U.S.C., 470f); and

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

WHEREAS, the WVDOH contacted the Preservation Alliance of West Virginia, and Wetzel County Convention and Visitors Bureau/Wetzel County Museum regarding the Project. No response was received from these groups.

NOW, THEREFORE, 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 WVDOH shall ensure that the following stipulations are carried out:

Jobes Bridge

- I. Jobes 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 National Register of Historic Places and National Historic Landmarks Survey Photo Policy Expansion of March 2008.

- II. A brief history of the structure will be included along with fully completed West Virginia Historic Property Inventory forms. No plans exist for the bridge.
- III. A brochure of the Jobes Bridge will be developed by WVDOH and distributed to the Wetzel County Schools as appropriate for content and grade level. This will be combined with Garrison Bridge (FR#12-785-WZ) and the Lutten Bridge Comprehensive Mitigation Plan. The WVSHPO will be given the opportunity to review all educational materials developed for this stipulation.
- IV. The bridge will be documented on a future website listing historic bridges once the WV Historic Bridge Survey is complete.

V. Duration

This 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 WVDOH shall execute a MOA pursuant to 82 CSR 2.5.4.d. Prior to such time, WVDOH may consult with other signatories to reconsider the terms of the MOA and amend it in accordance. WVDOH shall notify the signatories as to the course of action it will pursue.

VI. Post-Review Discoveries

If any unanticipated 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).

VII. Monitoring and Reporting

Each year following the execution of this MOA until it expires or is terminated, WVDOH 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 WVDOH's efforts to carry out the terms of this MOA.

VIII. Amendments

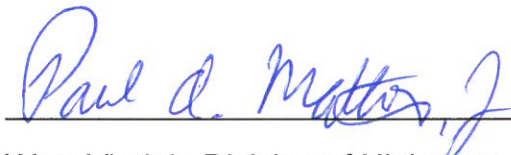
This MOA may be amended when such an amendment is agreed to in writing by all signatories. The amendment will be effective on the date a copy signed by all of the signatories is filed with the SHPO.

IX. Termination

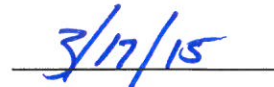
If any signatory to this MOA determines that its terms will not or cannot be carried out, that party shall immediately consult with the other parties to attempt to develop an amendment per Stipulation VIII, above. If within thirty (30) days (or another time period agreed to by all signatories) an amendment 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, WVDOH must execute a MOA pursuant to 82 CSR 2.5.4.d.

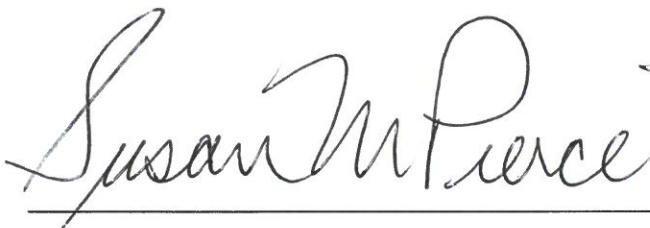
EXECUTION of the Memorandum of Agreement by the WVSHPO and the WVDOH, and implementation of its terms evidence that the WVDOH has afforded the SHPO an opportunity to comment on the Jobs Bridge Replacement project and its effects on historic properties, and that the WVDOH has taken into account the effects of the undertaking on the historic property.




West Virginia Division of Highways



Date



West Virginia Deputy State Historic Preservation Officer



Date