



**STATE LEVEL HISTORIC DOCUMENTATION REPORT  
HAYMOND HIGHWAY OVER ELK CREEK  
BRIDGE REPLACEMENT PROJECT  
IN HARRISON COUNTY, WEST VIRGINIA**

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US Army Corps of Engineers

FR No. 21-1016-HS-3

**July 2022**

STATE LEVEL HISTORIC DOCUMENTATION  
HAYMOND HIGHWAY BRIDGE

Location: Haymond Highway, spanning Elk Creek  
Harrison County, West Virginia

USGS Clarksburg Quadrangle

Date of Construction: 1917

Builder: Luten Bridge Company

Present Owner: City of Clarksburg  
222 West Main Street  
Clarksburg, WV 26301

Present Use: Vehicular Bridge

Significance: The Haymond Highway Bridge is historically and technologically significant as an example of a Luten Arch Bridge, a design patented by Daniel B. Luten, nationally recognized bridge engineer. Constructed by the Luten Bridge Company, the bridge was constructed in 1917 and spans Elk Creek. The 112-foot-long bridge contains a 20-foot-wide concrete deck with full height concrete crib walls. The bridge consists of an elliptical arch concrete rib and spandrel columns which support the deck slab. A new deck and railing were constructed in 1971. The bridge stands as an extant example of the Luten Arch, a patented design significant for its innovative use of reinforcements used to alleviate tension and load, which created a significantly lighter bridge. The bridge is eligible for listing in the National Register of Historic Places under Criterion A and C.

Project Information: This documentation was conducted on behalf of the City of Clarksburg owing to the poor condition of the bridge structure. Future deterioration of the bridge would likely lead to bridge closure; therefore, the existing structure warrants replacement. The recordation was conducted in June 2022 in accordance with a Memorandum of Agreement between the City of Clarksburg, United State Army Corps of Engineers, and the West Virginia State Historic Preservation Office. These measures are required prior to the replacement of this National Register eligible structure. The project was completed as part of the Haymond Highway Bridge Replacement Project.

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July 2022

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## 1.0 HISTORIC CONTEXT

### 1.1 Harrison County

The Haymond Highway Bridge is located in a small residential city neighborhood southeast of the historic commercial center of the City of Clarksburg in Harrison County. The county boasts largely wooded, low rolling hills, drained by the West Fork River and its tributaries. Prior to the arrival of the earliest European settlers, the area was used by Native Americans as hunting territory. In the early 18<sup>th</sup> century, England made many attempts to encourage settlement in what was then northwestern Virginia, including the suspension of tax payments on land west of the Allegheny Mountains and granting soldiers land if they enlisted in the French and Indian War. At the end of the war, France was forced to relinquish its claim to the land in the area, resulting in more permanent English settlement. However, treaties were never made between Virginia and the Native Americans, resulting in continued disputes due to forced removal from colonial expansion (Haymond 1910). By 1770, the City of Clarksburg saw its first recorded settlers, John Nutter and Daniel Davidson. Within a couple years of arriving, Nutter and his brother Thomas constructed a fort southeast of present-day Clarksburg on Elk Creek. Nutter's Fort became a haven of security to many families of settlers and a central point of defense for the Virginia militia during conflicts with the Native Americans in the following decades despite being very remote and uninhabited (Haymond 1910).

Harrison County was formed by parts of neighboring Monongalia County in May 1784 by an act of Assembly and named in honor of Benjamin Harrison who was Virginia's Governor from 1781 to 1784 and one of the signers of the Declaration of Independence. Immediately following its formation, a land office was opened to grant patents to interested settlers, resulting in eighty patents issued that year and 960 surveys completed for patents the following year: a testament to the influx of settlers arriving in the area (Stafford 2019). Shortly after in 1785, Clarksburg was officially chartered as a town by the state of Virginia and named the county seat. Named after George Roberts Clark, a Virginia General who served in the Revolutionary War, Clarksburg remained sparsely populated despite being the county seat, with only 43 taxpaying inhabitants recorded that same year (Haymond 1910).

The principal industries of Clarksburg in the early 19<sup>th</sup> century were gristmills, tanneries, potteries, and saltworks. Agriculture, however, was the predominant economy in the remaining areas of Harrison County. Despite these industries, Clarksburg experienced slow development during this time, in part by a lack of accessible transit routes. In 1831, construction on the Northwestern Turnpike began and arrived in Clarksburg five years later. This road was chartered in order to connect Winchester in northeastern Virginia to Parkersburg on the Ohio River, resulting in greater access to the City of Clarksburg as well as the surrounding areas (Pauley 1982). This road, which was the predecessor to modern day U.S. Route 50, provided a new route across the Appalachian Mountains and became vitally important to the growth of Clarksburg's economy.

The second major transportation improvement in the county came when the Baltimore and Ohio (B&O) Railroad from Baltimore to Wheeling was completed in 1852 with a route that bypassed Clarksburg. Due to competition with the Chesapeake and Ohio Canal for trade with coal fields in eastern Maryland, the railroad built the B&O Railroad Potomac River Crossing at Harpers Ferry to avoid C&O's right-of-way. The construction of the river crossing allowing for the opening of the first trans-Appalachian railroad in the country and provided an important connection to the Ohio

River. However, much of central and northern Virginia were not being served by the new mainline. Calls for a railroad system in northwestern Virginia came from larger cities like Clarksburg, where entrepreneurs were eager to capitalize on the natural resources in the area. (Past and Present Consultants 1998). The Northwestern Virginia Railroad (the predecessor to the Parkersburg Branch of the B&O Railroad) was incorporated in 1851 after the Virginia legislature approved the charter for a railroad to run from the B&O mainline to Parkersburg with passage through Clarksburg after an increase in supporters pushed for a connection to their city. The Northwestern Virginia Railroad's stipulations for being financed almost entirely by B&O interests meant the line was not to be operated until one year after the completion of the original line to Wheeling to protect the original mainline. While the railroad was another important transportation route that brought further development to Clarksburg, residents whose livelihoods relied on the old turnpike were less enthusiastic about the construction. Despite these negative opinions, the railroad prospered, and Clarksburg became an important stop along the route, particularly during the Civil War as Clarksburg functioned as a Union supply base (Stafford 2019).

During the Civil War, in June of 1863, West Virginia officially separated from Virginia, becoming the 35<sup>th</sup> state in the Union. However, the tensions between eastern and western Virginia began with the early settlement of the state. As early as 1829, western Virginia wanted to succeed from eastern Virginia when a new state constitution was adopted and delegates from western Virginia still felt underrepresented. To quell tensions, more counties were formed in western Virginia to boost representation in the state, and various improvements were undertaken, including to the Northwestern Turnpike, which aided in the continued development of the western region of Virginia. In 1850, another constitutional convention attempted to address the tensions once again in the state by amending the state's voting laws to allow all white males over the age of 25 to vote regardless of whether they owned land. Additionally, the state continued its internal improvements in western Virginia which seemed to calm down regional strains but also led to less of a reliance on the eastern markets in Richmond and Tidewater Virginia (WVDACH 2019).

At the end of the 1850s, a national depression flattened the economy in western Virginia resulting in farmers losing money from mills and factories forced to close. It wasn't until 1861 that the turmoil in Virginia boiled over when the state submitted a bill to secede from the Union after the seizure of Fort Sumter, South Carolina, effectively starting the Civil War. Delegates from western Virginia marched out of the Secession Convention delegates from western Virginia marched out and another convention was organized in Wheeling. The latter convention established the Restored Government of Virginia in order for western Virginia to remain in the Union. Because Virginia had seceded from the Union, it had no authority to prevent the formation of a new state in western Virginia. West Virginia officially gained statehood in 1863 after adding in a gradual emancipation into its constitution due to the fact that the Union government would not accept another slave state (WVDACH 2019).

Following the close of the Civil War and leading into the late 19th century, coal mining became a primary economic activity in Clarksburg and the surrounding area due to its location along the B&O, resulting in a more efficient transport of the product to urban markets. At the end of the nineteenth-century and into the early twentieth-century, numerous mining settlements sprung up around the vicinity of Clarksburg. Other industries that were located in Clarksburg included chemical plants, brick works, potteries, foundries, machine shops, hardwood and casket companies, glass factories (which produced glass marbles), and the Jackson Sheet and Tin Plate Company, a predecessor to Weirton Steel (Stafford 2019). The influx of workers and their families during this period helped support an increase in infrastructure and local institutions.

## **2.0 DESCRIPTION OF BRIDGE**

The Haymond Highway Bridge is located in the City of Clarksburg in Harrison County, West Virginia and carries Haymond Highway over Elk Creek. The bridge provides vehicular access to the neighborhood of Broad Oaks, located southeast of downtown Clarksburg. A pedestrian walkway is located on the east and west sides of the bridge.

### **2.1 Setting**

The city of Clarksburg thrived in the late-nineteenth and early-twentieth century due to its location along the B&O and to the abundant natural resources in the area. The majority of the extant structures in the area are late-nineteenth and early-twentieth century frame residential dwellings that frame Haymond Highway and the adjacent streets. According to historic-era photographs, two large commercial buildings that are no longer extant were located at the corner of Monticello Avenue and Haymond Highway (ice plant) and Harrison Street and Haymond Highway (electric motor shop), likely having been demolished for the construction of the road system.

### **2.2 Historical Analysis**

The Haymond Highway Arch Bridge was constructed by the Luten Bridge Company in 1917 as a single span concrete deck arch bridge. The span length is 106.5-feet from centerline to centerline with a total length of 112-feet. The structure abutments are full height concrete crib walls. The roadway width of the bridge is 20-feet. The bridge consists of an elliptical arch concrete rib and spandrel columns which support the deck slab. A new deck and railing, designed by John C. Giese, was constructed in 1971.

A plaque on the interior of the bridge's west parapet indicates the bridge's association with the county road system and road transportation development in West Virginia. The bridge was constructed by the Luten Bridge Company of York, Pennsylvania under the request of the Harrison County Count as a part of the West Virginia County Road system. The Luten Bridge Company built numerous bridges throughout the United States designed by Daniel B. Luten, especially in the southeast. The patented Luten Arch Bridge was an innovative design that used reinforcements to alleviate tension and load, which created a significantly lighter bridge. The bridge is an example of an open spandrel-support arch bridge, an unusual bridge associated with both Daniel B. Luten and the Luten Bridge Company. Additionally, it signifies the transportation development pattern prior to the passage of the Good Roads Amendment in 1928, which incorporated the county road system into what is now the West Virginia Division of Highways (WVDOH).

### **2.3 Current Condition**

According to the latest available inspection report in 2017 from the National Bridge Inventory, the Haymond Highway Bridge was given an overall condition rating of poor and sufficiency rating of 28.9 (out of 100). The deck was assessed as fair, while the superstructure and substructure were rated poor. From 2015 to 2017, the average daily traffic increased by approximately 40 percent, while the sufficiency rating decreased by a similar margin of 35 percent. The 2017 report recommended replacement of the bride due to a substandard load carrying capacity (weight limit 15 ton) or substandard bridge/roadway geometry.

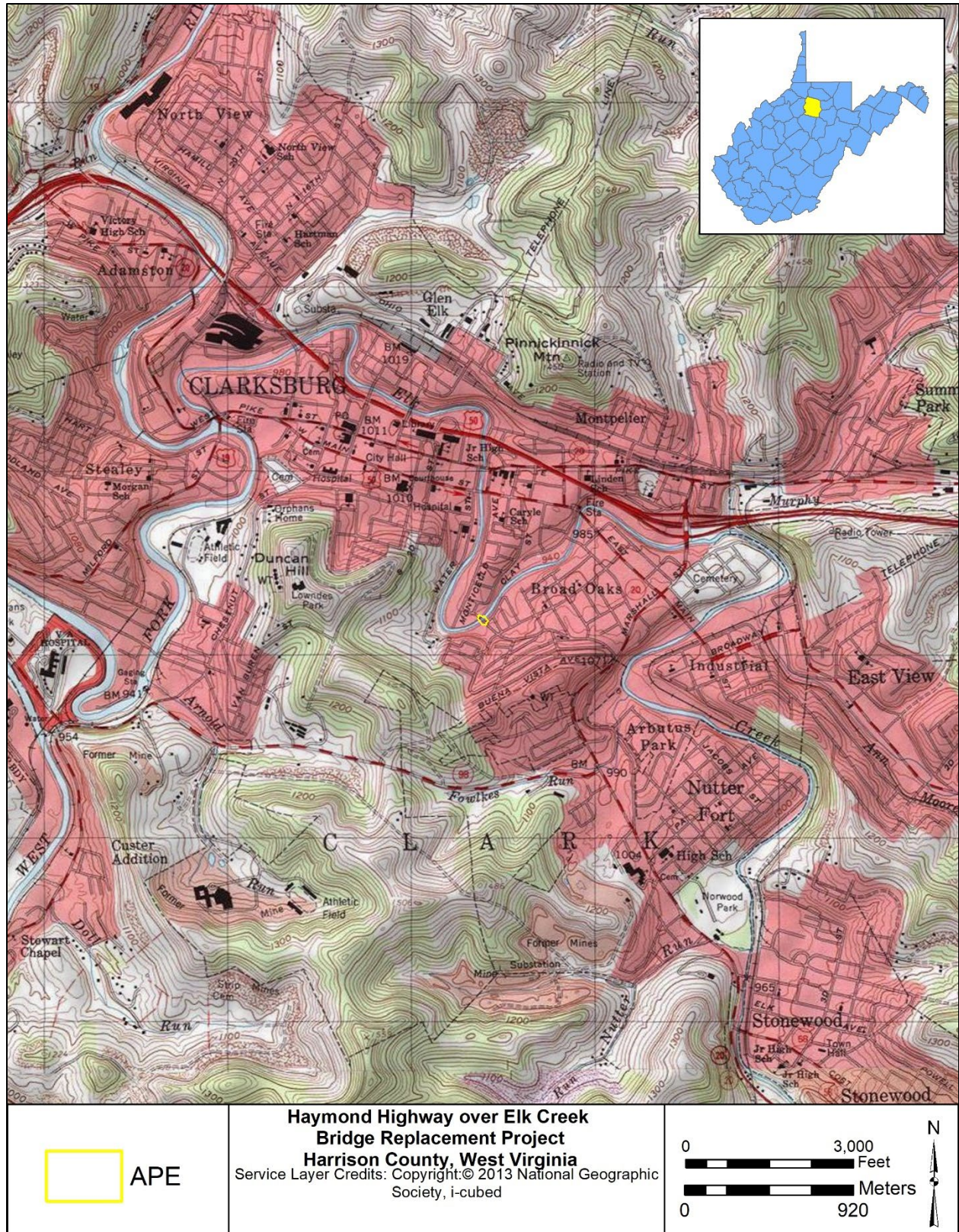


Figure 1: Project area depicted on USGS 7.5-minute topographic quadrangle.



Figure 2: Project area depicted on street map.





Figure 3: Project area depicted on modern aerial imagery.



Photo 1: North (Upstream) Elevation. View South



Photo 2: North (Upstream) Elevation. View South



Photo 3: South (Downstream) Elevation. View Southeast



Photo 4: South (Downstream) Elevation. View Southeast



Photo 5: East Approach. View Northwest



Photo 6: West Approach. View Southeast



Photo 7: Metal Plaque at West End of North Railing. View Northeast



Photo 8: Missing Plaque at West End of South Railing. View Southwest



Photo 9: Hole in South Sidewalk Middle of Bridge. View Northwest



Photo 10: Cracks in North Sidewalk at West Approach. View Southeast.

## **3.0 ELIGIBILITY**

### **3.1 Criterion A**

The bridge is significant due to its affiliation with the county road system and road transportation development in West Virginia. The 1920 Good Roads Amendment to the state constitution authorized the legislature to pass a law providing for designation, construction, and maintenance of a state road system. Although having no control over the County-District roads, the three members of the State Road Commission (SRC) were required to inform the county court of information pertaining to alterations and maintenance of the roads, highways, streets, and bridges when requested. However, in 1932, legislature transferred all responsibilities to the SRC, now a four-man advisory board under a commissioner and provided control to every public road, including bridges, in West Virginia. The bridge is eligible for the National Register under Criterion A for its contribution to transportation patterns in the county.

### **3.2 Criterion B**

Daniel B. Luten, who was born in Grand Rapids, Michigan, and based in Indianapolis, Indiana, claimed to have designed approximately 17,000 arches by 1919, with examples of the design being found in all but three states. Luten graduated from the University of Michigan in 1894 with a degree in civil engineering, and his Luten Bridge Company maintained offices in York, Pennsylvania; Clarksburg, West Virginia; Huntington, West Virginia; Atlanta, Georgia; and Palatka, Florida. His pioneering designs are significant as they are still adapted and in use today. The bridge is eligible for the National Register under Criterion B for its association with Daniel B. Luten.

### **3.3 Criterion C**

The development of the Luten Arch was an important advancement in the design and engineering of bridges, providing significance to the Haymond Highway Bridge. The bridge is unique in that it is an open spandrel-supported arch bridge, a design choice not common to Luten's bridges throughout the country. Luten's use of the transverse and reinforced concrete allowed his bridges to be lighter, and he obtained more than 30 patents in his lifetime. The bridge is eligible for the National Register under Criterion C for its association with the Luten Bridge Company and its arch design.

### **3.4 Criterion D**

The bridge is not likely to possess any important information that will contribute to our understanding of early human history or prehistory. The potential for information is minimal. This structure is not eligible under Criterion D.

## REFERENCES CITED

Haymond, Henry

1910 *History of Harrison County, West Virginia*. Acme Publishing Company, Morgantown, West Virginia.

Past & Present Consultants

1998 *Historic American Engineering Record – Back Run Bridge (Ruin)*. HAER No. WV67. On file, Library of Congress, Washington, D.C.

Pauley, Michael J.

1982 “Clarksburg Downtown Historic District.” National Register of Historic Places Inventory/Nomination Form. West Virginia Dept. of Culture and History, Charleston, February 17, 1982.

Stafford, Margo

2019 “Clarksburg.” e-WV: The West Virginia Encyclopedia.  
<http://www.wvencyclopedia.org/articles/1204>. Accessed July 7, 2022.

West Virginia Department of Arts, Culture and History (WVDACH)

2019 “*West Virginia Statehood*.” <http://wvculture.org/history/archives/statehood.html>. Accessed July 11, 2022.



**MEMORANDUM OF AGREEMENT**

**BY AND AMONG THE  
THE CITY OF CLARKSBURG,  
THE WEST VIRGINIA STATE HISTORIC PRESERVATION OFFICE,  
AND THE UNITED STATES ARMY CORPS OF ENGINEERS**

**REGARDING THE  
HAYMOND HIGHWAY OVER ELK CREEK BRIDGE REPLACEMENT PROJECT  
CLARKSBURG, HARRISON COUNTY, WEST VIRGINIA**

**AUGUST 2022**

**WHEREAS**, the City of Clarksburg, in cooperation with the United States Army Corps of Engineers (USACE), proposes to replace the Haymond Highway Bridge, which spans Elk Creek in Clarksburg, Harrison County, hereinafter referred to as the Project. The Project will involve the removal of the existing bridge and the construction of a new bridge; and

**WHEREAS**, the City of Clarksburg, has determined that the Project will have an adverse effect on the Haymond Highway Bridge, a property eligible for the National Register of Historic Places (NRHP); and

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

**WHEREAS**, the City of Clarksburg has determined that the Project will not affect archaeological properties; and

**WHEREAS**, the City of Clarksburg has contacted the Preservation Alliance of West Virginia, Harrison County Historical Society, and the public. None of these groups chose to respond and/or establish ability in relation to reuse of the existing Haymond Highway Bridge; and

**WHEREAS**, in accordance with 36 CFR 800.6 (a) (1), the City of Clarksburg 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);

**NOW, THEREFORE**, the City of Clarksburg, the WVSHPO, and the USACE 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 City of Clarksburg shall ensure that the following stipulations are carried out:

### **I. Haymond Highway Bridge**

- a. The Haymond Highway 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 May 2013. The documentation package will include hard 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 in the aforementioned documentation package, along with a fully completed West Virginia Historic Property Inventory (HPI) form and copies of any available plan sheets and/or drawings of the bridge from the WVDOH bridge files. The history will address the bridge's background in relation to its location and surroundings and, as well, its design type and representation in the state, and the history of the bridge's builder, if such information is available.
- c. The City of Clarksburg staff will provide the Harrison County Public Library and Harrison County Historical Society a copy of the Haymond Highway Bridge State Level Historic Documentation for references and educational purposes.
- d. Color brochures of the Haymond Highway Bridge will be developed and distributed to the Harrison County Public Library and Harrison County Historical Society. A digital copy will be provided to the library and historical society for future distribution. The WVSHPO will be given the opportunity to review all educational materials developed for this stipulation.
- e. Haymond Highway Bridge will be documented on the West Virginia Division of Highways' (WVDOH) *Highway through History* website.
- f. The City of Clarksburg will offer to donate the Haymond Highway Bridge's builder's plaque to the Harrison County Historical Society.

### **II. 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 City of Clarksburg 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, the City of Clarksburg may consult with other signatories to reconsider the terms of the MOA and amend it in accordance with Stipulation VI below. The City of Clarksburg 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 City of Clarksburg 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, the City of Clarksburg shall provide all parties to this MOA a summary report detailing work carried out pursuant to its terms. Such a report shall include any scheduling changes proposed, any problems encountered, and any disputes and objections received in the City of Clarksburg'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, the City of Clarksburg shall consult with such party to resolve the objection. If the City of Clarksburg determines that such objection cannot be resolved, the City of Clarksburg will:

- a. Forward all documentation relevant to the dispute, including the City of Clarksburg's proposed resolution, to the ACHP. The ACHP shall provide the City of Clarksburg 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, the City of Clarksburg 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. The City of Clarksburg 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, the City of Clarksburg may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, the City of Clarksburg 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. The City of Clarksburg'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, the City of Clarksburg 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. City of Clarksburg shall notify the signatories as to the course of action it will pursue.

**EXECUTION** of the Memorandum of Agreement by the City of Clarksburg, WVSHPO, the USACE, and the ACHP, and implementation of its terms evidence that the City of Clarksburg has afforded the ACHP an opportunity to comment on the Haymond Highway Bridge Project and its effects on historic properties, and that the City of Clarksburg has taken into account the effects of the undertaking on the historic properties.

**Signatories Page**

*M. A. Kiley* *Interim City Manager* *11/16/22*  
City of Clarksburg Date

*Susan M. Pierce* *9/14/2022*  
West Virginia Deputy State Historic Preservation Officer Date

*Scott A. Hans* *31 OCT 2022*  
United States Army Corps of Engineers Date