



North Carolina Department of Natural and Cultural Resources
State Historic Preservation Office

Ramona M. Bartos, Administrator

Governor Pat McCrory
Secretary Susan Kluttz

Office of Archives and History
Deputy Secretary Kevin Cherry

May 6, 2016

MEMORANDUM

TO: Kate Husband
Office of Human Environment
NCDOT Division of Highways

FROM: Renee Gledhill-Earley *Renee Gledhill-Earley*
Environmental Review Coordinator

SUBJECT: Replace Bridge 110 on SR 1363 (Walsh Road) over North Prong Lewis Fork Creek,
B-5842, PA 16-02-0028, Wilkes County, ER 16-0761

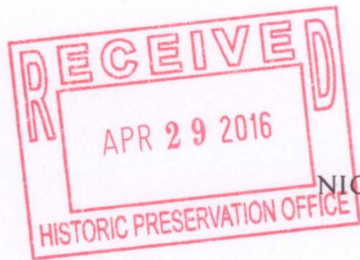
Thank you for your memorandum of April 28, 2016, transmitting the Historic Structures Survey Report for the above-referenced undertaking. We have reviewed the report and concur that Wilkes County Bridge 110 (WK0392) is eligible for listing in the National Register of Historic Places under Criterion C.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, contact Renee Gledhill-Earley, environmental review coordinator, at 919-807-6579 or environmental.review@ncdcr.gov. In all future communication concerning this project, please cite the above referenced tracking number.

cc: Mary Pope Furr, NCDOT

mfurr@ncdot.gov



PAT McCRORY
Governor

NICHOLAS J. TENNYSON
Secretary

EQ 16 - 0761

April 28, 2016

MEMORANDUM

TO: Renee Gledhill-Earley
Environmental Review Coordinator
State Historic Preservation Office

H
Annie
Due 5/20

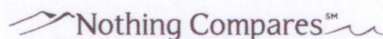
FROM: Kate Husband
Office of Human Environment
NCDOT Division of Highways

Due 5/23/16
yes
Catherine C

(WK 392)

SUBJECT: B-5842, Pa No. 16-02-0028, Replace Bridge No. 110 on SR 1363
(Walsh Road) in Wilkes County

Attached is the Historic Architectural Resources Survey Report, and survey site forms and photographs, for the above-referenced project. Please review and provide comments, and I thank you for your continued assistance. If you have any questions, I can be reached at (919) 707-6075 or at klhusband@ncdot.gov.



Historic Architectural Resources Survey Report

Replace Bridge No. 110 on SR 1363 (Walsh Road)
over North Prong Lewis Fork Creek

Wilkes County, North Carolina

TIP No. B-5842
WBS No. 45795.1.1



Historic Architecture

Kate Husband
Architectural Historian
North Carolina Department of Transportation

April 2016

Historic Architectural Resources Survey Report

**Replace Bridge No. 110 on SR 1363 (Walsh Road)
over North Prong Lewis Fork Creek
Wilkes County, North Carolina
TIP No. B-5842
WBS No. 45795.1.1**



North Carolina Department of Transportation
Report Prepared by Kate Husband

April 2016

Kate Husband, Principal Investigator
Historic Architecture Group
North Carolina Department of Transportation

Date

Mary Pope Furr, Supervisor
Historic Architecture Group
North Carolina Department of Transportation

Date

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Management Summary

The North Carolina Department of Transportation (NCDOT) proposes to replace Bridge No. 110 over North Prong Lewis Fork Creek on SR 1363 (Walsh Road) in Wilkes County under TIP Project No. B-5842. This project is federally funded (F.A. No. BRZ-1363(007)) and requires federal permits. In February 2016, NCDOT architectural historians identified Bridge No. 110, a Pratt Pony Truss within the Area of Potential Effects (APE). The APE extends approximately 630 feet north of existing Bridge No. 62 along SR 1363 (Walsh Road), 630 feet north and south of the east end of the bridge along SR 1362 (Big Ivy Road) and 100 feet to either side of the existing SR 1363 (Walsh Road) and SR1362 (Big Ivy Road) centerline. A site visit to record and evaluate the bridge was conducted in March 2016. After intensive evaluation, this report recommends that Bridge No. 110 is eligible for listing in the National Register of Historic Places (NRHP).

Methodology

NCDOT conducted the survey and prepared this report in accordance with the provisions of the Federal Highway Administration (FHWA) Technical Advisory T 6640.8A (Guidance for Preparing and Processing Environmental and Section 4(f) Documents); the Secretary of the Interior's Standards and Guidelines for Archaeological and Historic Preservation (48 FR 44716); 36 CFR Part 60; 36 CFR Part 800; and the NCDOT document entitled *Historic Architectural Resources: Survey Procedures and Report Guidelines* (2003). This property evaluation meets the guidelines of NCDOT and the National Park Service.

Architectural Historians with NCDOT visited the site on March 30, 2016. Field documentation included notes and digital photography. Background research was conducted in the NCDOT bridge survey files and North Carolina State Historic Preservation Office (NC-HPO) survey site files. The NCDOT Historic Bridge Inventory (January 2005) was also referenced in preparing this report.

Summary of Results

After an intensive evaluation, this report recommends that the Bridge No. 110 is eligible for listing in the NRHP under Criterion C for design.

| Resource | Survey Site Number | Eligibility Recommendation |
|----------------|--------------------|----------------------------|
| Bridge No. 110 | WK329 | Eligible, Criterion C |

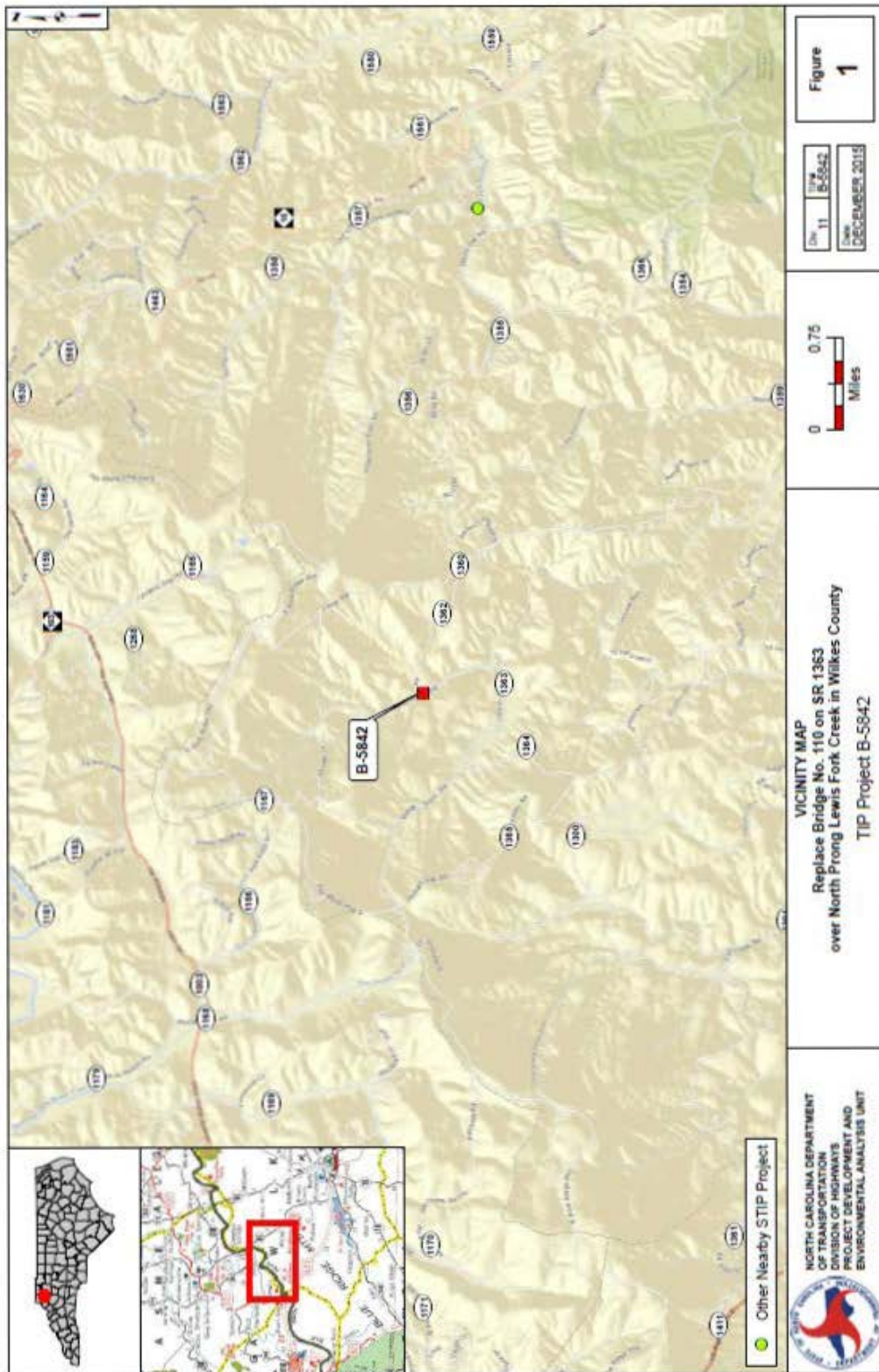


Figure 1: Vicinity Map.



Figure 2: Area of Potential Effects.

| | |
|---------------------------|---|
| Resource Name | Bridge No. 110 |
| Survey Site Number | WK 329 |
| Location | Walsh Road, directly northwest of intersection with Big Ivy Road, over North Prong Lewis Fork Creek |
| Parcel ID | N/A |
| Construction Date | 1926 |
| Recommendation | Eligible, Criterion C |



Figure 3: Bridge No. 110, looking southwest.

Setting

Bridge No. 110, spanning North Prong Lewis Fork Creek, is located approximately 10 feet northwest of the intersection of Walsh Road with Ivy Creek Road. The bridge is located in a heavily forested area within a narrow gorge, approximately 1.5 miles southeast of the Wilkes County and Ashe County border. North Prong Lewis Fork Creek is a swift stream flowing southwest.

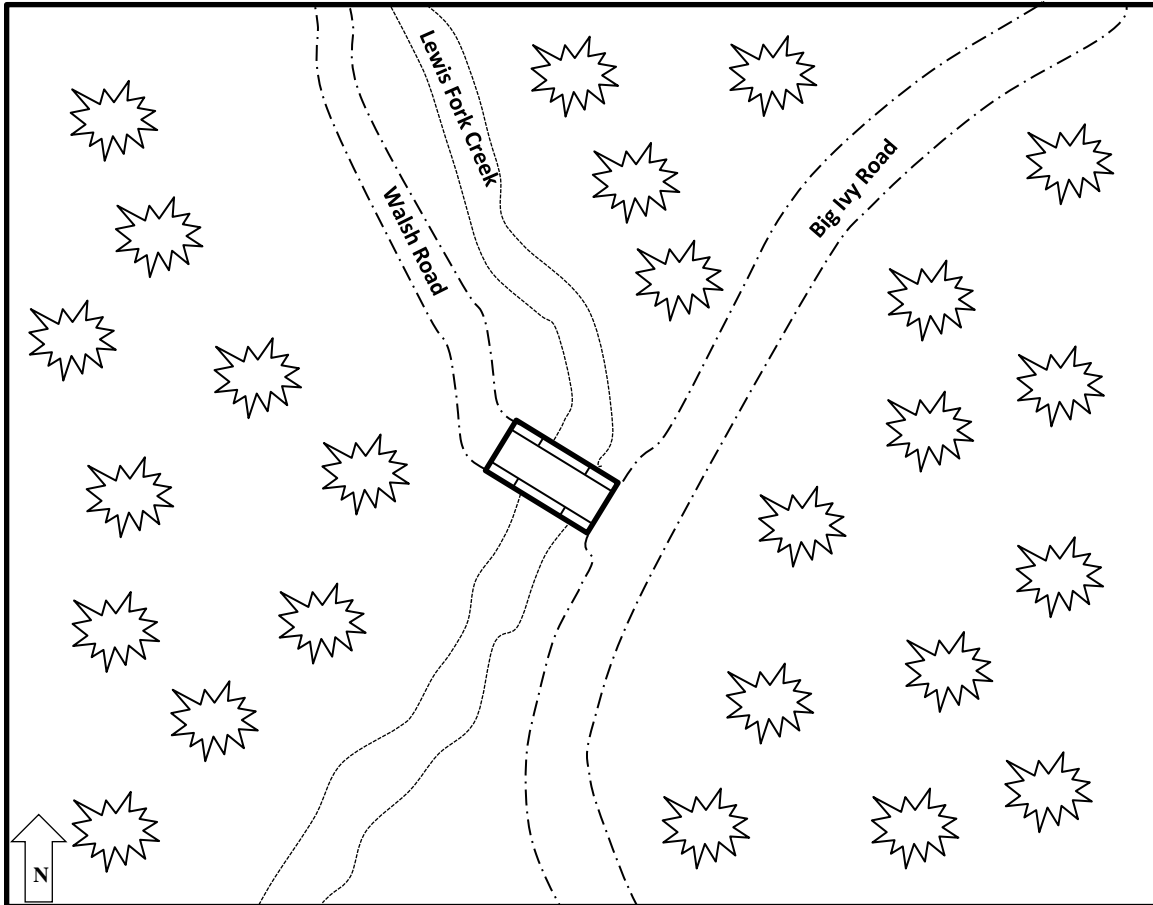


Figure 4: Site Plan, Bridge No. 110



Figure 5: Bridge No. 110, looking southeast towards SR 1362 (Big Ivy Road).

Description

Bridge No. 110, a Pratt pony truss bridge constructed 1926, consists of a metal span that is approximately 61 feet long and is supported on timber abutments. The end posts and upper chords of the bridge have built-up laced channels, and the bottom chords consist of 2 L-angles with stay plates. All joints are bolt connected. Rolled floorbeams are bolt connected below the lower chords and support steel stringers and asphalt on timber flooring. Two-rail high pipe railings run inside of the truss. The truss appears original except for regular replacement of decking.



Figure 6: Bridge No. 110, looking northwest on SR 1363 (Walsh Road).



Figure 7: South elevation looking northwest.



Figure 8: South elevation looking north.



Figure 9: View of substructure of Bridge No. 110.

History

Bridge No. 110 was built 1926 based on the NCDOT Bridge Maintenance Unit's North Carolina Steel Truss Bridge Inventory. Bridge No. 110 remains in its original location, and was repaired in July of 1960. It does not appear that any alterations to the bridge have occurred since then.

Architectural Context

The North Carolina State Highway Commission made limited use of steel trusses, however the most common truss design built in North Carolina, and the country, was the Pratt or similar variations due to its simple design and cheap fabrication. Pony truss bridges were utilized for span lengths of 45 feet to 100 feet, while thru truss bridges were utilized for 90 feet and up. The Pratt is identifiable by diagonals in tension, with verticals in compression. Originally designed in 1844 by Thomas and Caleb Pratt, the bridges were made with composite timber and iron truss. An all-metal design was widely used in the late 19th and early 20th century, and assembly of truss bridges shifted from pinning to riveting with advancements in technology. Truss bridges faded from use and were widely replaced as they became too narrow and unsafe for cars and trucks through the 1950s.¹

An NCDOT survey of bridges in North Carolina, completed in 2005, identified 34 Pratt truss bridges dating from 1891 to 1954, including 20 pony trusses. Six pony truss bridges were identified that have been determined eligible for National Register listing; four of them are Pratt pony trusses, and only one is a bolt connected Pratt pony truss similar to Bridge No. 110 (other Pratt pony truss bridges determined eligible are pinned).² Three Pratt pony trusses were identified in Wilkes County in 1995; Bridge No. 110 is the only remaining Pratt pony truss bridge in the county.³

¹ NCDOT Historic Bridge Inventory, 2005, 11-13.

² Ibid.

³ Bridge Maintenance Unit, "North Carolina Steel Struss Bridge Inventory," 1995.

National Register Criteria Evaluation

Bridge No. 110 retains a high level of integrity. The bridge remains in its original location in a rural setting, and retains integrity of feeling and association. Design, workmanship, and materials are all well preserved.

Criterion A

Properties can be eligible for the National Register if they are associated with events that have made a significant contribution to the broad patterns of our history.

Bridge No. 110 is not recommended eligible for the National Register under Criterion A. It is not associated with an event or pattern of events that have made a significant contribution to the broad patterns of our history.

Criterion B

Properties may be eligible for the National Register under Criterion B if they are associated with the lives of persons significant in our past.

Bridge No. 110 is not associated with the life or lives of persons significant to our past and is not recommended eligible under Criterion B.

Criterion C

Properties may be eligible for the National Register under Criterion C if they embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

Bridge No. 110 is a significant, complete example of its type/design, and is therefore **eligible** for National Register listing under Criterion C. It is one of the few remaining intact Pratt pony truss bridges left in the state, and the only extant Pratt pony truss in Wilkes County. Although the NCDOT Bridge Inventory published in 2005 determined Bridge No. 110 not eligible for National Register listing, since that time many Pratt pony trusses have been lost. For example, in nearby Stokes County, the Stokes County Survey of 1989 identified several truss bridges. Since the survey, four of those bridges identified are no longer standing. Neatman Creek Bridge in Stokes County, an identical bolt connected Pratt pony truss built c. 1930, was determined eligible in 2015.

Criterion D

Properties may be eligible for the National Register under Criterion D if they have yielded, or may be likely to yield, information important in prehistory or history.

The bridge is not likely to yield any new information pertaining to prehistory or history and is therefore not recommended eligible under Criterion D.

National Register Boundary

The National Register Boundary for Bridge No. 110 includes the footprint of the bridge and its timber abutments. This boundary includes the historic truss, its deck, and abutments.

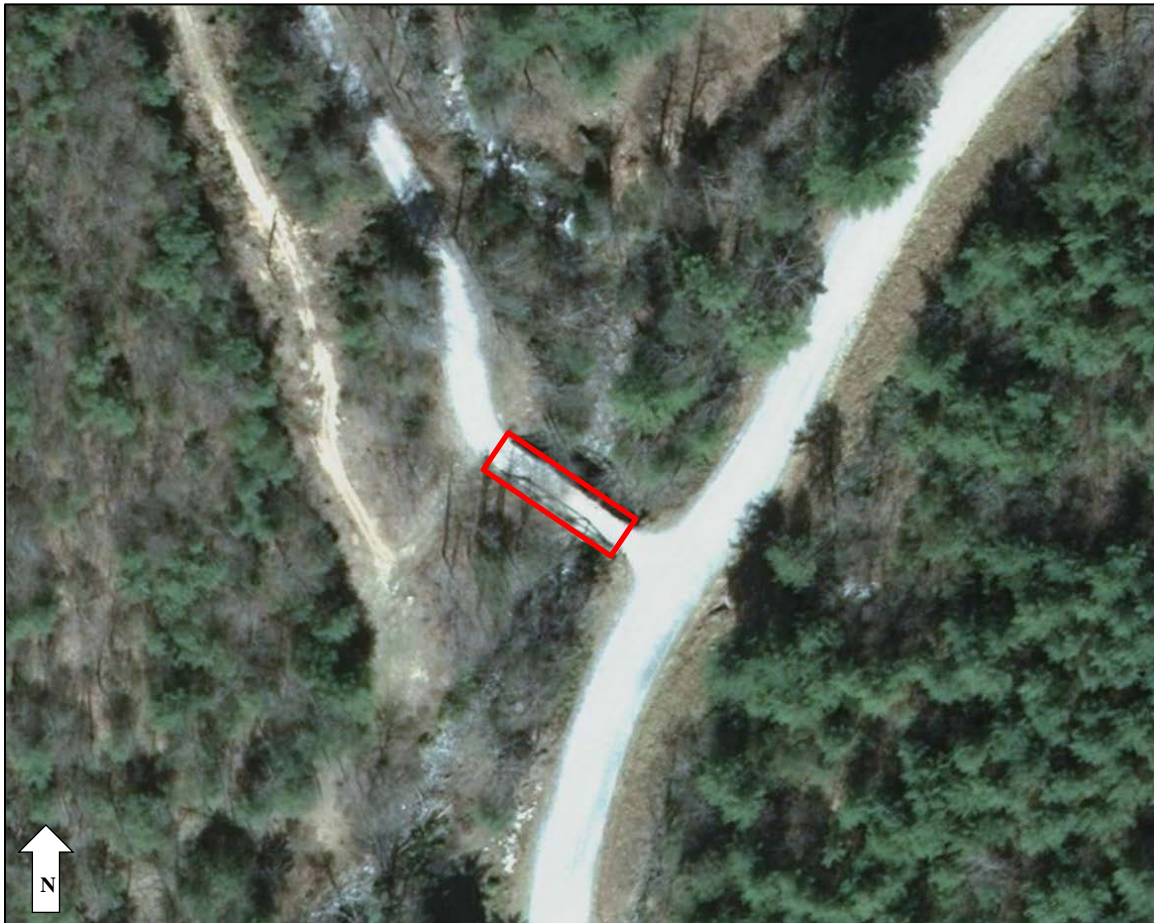


Figure 12: Proposed National Register Boundary.

Bibliography

“Bridge Basics,” <http://pghbridges.com/basics.htm>, accessed April 6, 2016.

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