

**NATIONAL REGISTER OF HISTORIC PLACES**

**Bynum Bridge**

Bynum, Chatham County, CH0658, Listed 4/23/2020

Nomination by Diane Swan, Debbie Tunnell, initial edit by Adriana DiFranco; edited by Michael Southern

Photographs by Royce Haley, June 2018



View of Bynum Bridge from US 15-501 bridge, looking south.



View from Haw River, looking northeast.

**United States Department of the Interior**  
National Park Service

# National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in National Register Bulletin, *How to Complete the National Register of Historic Places Registration Form*. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions.

## 1. Name of Property

Historic name: Bynum Bridge

Other names/site number: NCDOT Bridge #405

Name of related multiple property listing:  
N/A

(Enter "N/A" if property is not part of a multiple property listing)

## 2. Location

Street & number: Old Bynum Road, Connecting SR 1871 and SR 1713 over Haw River

City or town: Bynum State: N.C. County: Chatham

Not For Publication:  N/A Vicinity:  N/A

## 3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended,

I hereby certify that this  nomination  request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60.

In my opinion, the property  meets  does not meet the National Register Criteria. I recommend that this property be considered significant at the following level(s) of significance:

national  statewide  local

Applicable National Register Criteria:

A  B  C  D

<p><b>Signature of certifying official/Title:</b> <u>North Carolina Department of Natural and Cultural Resources</u> State or Federal agency/bureau or Tribal Government</p>	<p><b>Date</b></p>
<p>In my opinion, the property <input type="checkbox"/> meets <input type="checkbox"/> does not meet the National Register criteria.</p>	
<p><b>Signature of commenting official:</b></p>	<p><b>Date</b></p>
<p><b>Title :</b></p>	<p><b>State or Federal agency/bureau or Tribal Government</b></p>

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#### 4. National Park Service Certification

I hereby certify that this property is:

- entered in the National Register
- determined eligible for the National Register
- determined not eligible for the National Register
- removed from the National Register
- other (explain:) \_\_\_\_\_

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Signature of the Keeper

Date of Action

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#### 5. Classification

##### Ownership of Property

(Check as many boxes as apply.)

- Private:
- Public – Local
- Public – State
- Public – Federal

##### Category of Property

(Check only **one** box.)

- Building(s)
- District
- Site
- Structure
- Object

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**Number of Resources within Property**

(Do not include previously listed resources in the count)

Contributing	Noncontributing	
<u>0</u>	<u>0</u>	buildings
<u>0</u>	<u>0</u>	sites
<u>1</u>	<u>0</u>	structures
<u>0</u>	<u>0</u>	objects
<u>0</u>	<u>0</u>	Total

Number of contributing resources previously listed in the National Register 0

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**6. Function or Use**

**Historic Functions**

(Enter categories from instructions.)

Transportation – Road Related (Vehicular)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Current Functions**

(Enter categories from instructions.)

Transportation – Pedestrian Related

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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## 7. Description

### Architectural Classification

(Enter categories from instructions.)

Other: Reinforced concrete tee beam construction

**Materials:** (enter categories from instructions.)

Principal exterior materials of the property:

Reinforced Concrete and asphalt roadbed

### Narrative Description

(Describe the historic and current physical appearance and condition of the property. Describe contributing and noncontributing resources if applicable. Begin with a **summary paragraph** that briefly describes the general characteristics of the property, such as its location, type, style, method of construction, setting, size, and significant features. Indicate whether the property has historic integrity.)

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Constructed between 1922 and 1923, Bynum Bridge is the longest unaltered reinforced concrete tee beam bridge remaining in North Carolina. It spans the Haw River at Bynum, a small rural textile mill village established in the 1870s, and formerly carried Bynum Road, once the primary route between the Chatham County seat of Pittsboro and the university town of Chapel Hill in Orange County. In 1952 a new bridge was constructed 500 yards upstream for US 15-501, bypassing Bynum. The old bridge continued to serve local traffic until 1999, when for safety concerns it was blocked to automobile traffic and used solely as a pedestrian bridge. Bynum Road remains a secondary road on either side of the bridge, designated SR 1713 on the east and SR 1871 on the west. The heart of the old village of Bynum with houses, church, and stores lies along the hillsides above the East side of the bridge. The 1,000-acre Lower Haw River State Natural Area lines both sides of the river with public access and hiking trails on the East side. The county-owned Bynum Beach Access Area lies along the west side of the river near the approach to the bridge.

At its completion in May 1923, the bridge was considered state-of-the-art design and engineering. The reinforced concrete tee beam bridge has a length of 806.1 feet stretching across nineteen spans of about 43 feet each. Only one tee beam bridge in the state is known to have been longer, and it was built 30 years later and replaced in 2001, leaving Bynum Bridge the longest to remain. The deck has a width of 17 feet across three longitudinal beams, typical of the earliest tee beam bridges, and lies about 17 feet above the rocky riverbed below.

The bridge has high integrity, retaining all of the major original elements of its tee beam form. This type of bridge was introduced to the state highway system in 1919 and used extensively

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until the 1950s. Tee beam construction entailed the casting of concrete abutments on either bank of a crossing, with freestanding cast piers placed up to 50 feet apart between the abutments if more than one span was required. Wooden formwork encasing steel reinforcing rods was assembled for pouring the superstructure, which consists of three or more longitudinal beams, a deck, and usually solid parapets flanking the sides of the deck (figure 1). These were cast together as one integrated unit for each span, supported by the abutments and piers. After the concrete cured, the wooden formwork was removed and used to construct the next span.

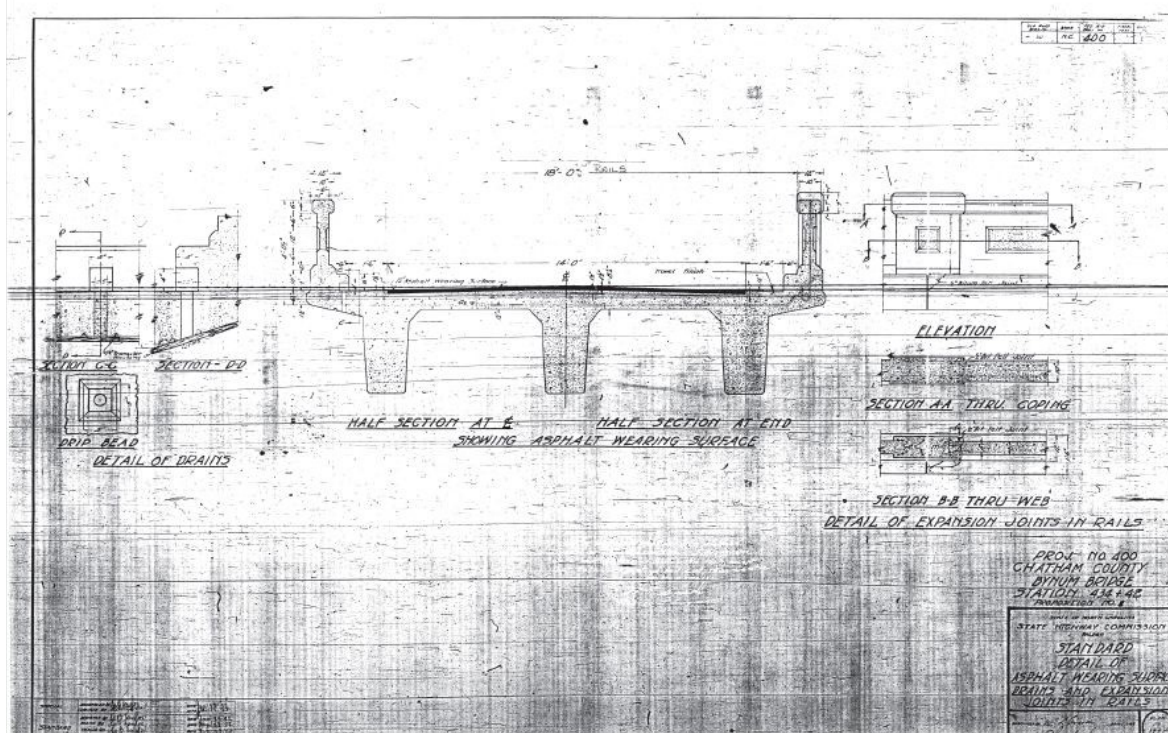


Figure 1 - Drawing in section of longitudinal beams and deck of Bynum Bridge, N.C. State Highway Commission, ca. 1922

Bynum Bridge retains the original piers, beams, deck, and parapets in all spans. Like most tee beam bridges built purely for strength, safety, and durability, Bynum Bridge has little architectural adornment, with the exception of the recessed panels in the parapets flanking the roadbed. The road surface is asphalt.

The only noticeable alteration to the bridge has been the installation of handrails atop the flanking parapets, added as a safety feature when the bridge was converted to pedestrian use in 1999. Rows of five vertical metal bollards were placed at the approaches on either end as barriers to automobile traffic. An eight-inch water pipe is suspended alongside the south beam under the deck, installed prior to 1980 to connect the Chatham County water system with the Town of Pittsboro water system.<sup>1</sup> This may be upgraded in the future to accommodate a large

<sup>1</sup> Telephone interview by Debbie Tunnell 1/29/2018, with Fred Royal, Town of Pittsboro Engineer. The town and NCDOT did not have installation date on record but believed it to be in early 1980s. The Town

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development planned south of the river, but will be done to respect the structural integrity of the historic bridge.<sup>2</sup>

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of Pittsboro and Chatham County did a study in 2017 using McGill Associates called The Water Interconnection Study to assess another water connection pipe in the future.

<sup>2</sup> Letter from McGill and Associates to Fred Royal, Town of Pittsboro Engineer, July 19, 2017. Copy in survey file.

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## 8. Statement of Significance

### Applicable National Register Criteria

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- A. Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B. Property is associated with the lives of persons significant in our past.
- C. Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- D. Property has yielded, or is likely to yield, information important in prehistory or history.

### Criteria Considerations

(Mark "x" in all the boxes that apply.)

- A. Owned by a religious institution or used for religious purposes
- B. Removed from its original location
- C. A birthplace or grave
- D. A cemetery
- E. A reconstructed building, object, or structure
- F. A commemorative property
- G. Less than 50 years old or achieving significance within the past 50 years



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**Areas of Significance**

(Enter categories from instructions.)

Engineering

Transportation

**Period of Significance**

1922-1923

**Significant Dates**

1922-1923

**Significant Person**

(Complete only if Criterion B is marked above.)

N/A

**Cultural Affiliation**

N/A

**Architect/Builder**

Craven, William L., Chief Bridge Engineer, N.C. State Highway Commission (NCDOT)

R.M. Walker and Company, Atlanta, Georgia, Contractor

**Statement of Significance Summary Paragraph** (Provide a summary paragraph that includes level of significance, applicable criteria, justification for the period of significance, and any applicable criteria considerations.)

Bynum Bridge was constructed 1922-1923 and extends 806.1 feet in nineteen spans across the scenic Haw River at the rural mill village of Bynum in Chatham County. It survives as the longest unaltered reinforced concrete tee beam bridge in the state. Tee beam construction was first employed by the State Highway Commission in 1920 and used in hundreds of bridges through the 1950s, though most were of four or fewer spans and under 250 feet in length. Many that remain show deterioration or otherwise do not meet modern traffic and safety standards, and most will be replaced or overbuilt over time. Now preserved as a pedestrian bridge and used by the community for nature activities and special events, Bynum Bridge remains North Carolina's most prominent example of a bridge form of high importance to early twentieth century highway engineering, and it is eligible under Criterion C at a state level of significance. Located where bridges have crossed the Haw since at least the mid-nineteen century, it is also eligible under Criterion A at a local level of significance for its associations with the development of the

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regional transportation network during the “Good Roads State” movement in the early twentieth century. The period of significance is 1922-1923, when it was constructed.

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**Narrative Statement of Significance** (Provide at least **one** paragraph for each area of significance.)

### Historical Background and Transportation Context

Named for the Saxapahaw (also called Sissipehaw) tribe of Native Americans who once lived along its banks, the Haw River rises in Guilford County, N.C., and flows southeast into Alamance County and then Chatham County where it joins the Deep River to form the Cape Fear River. The river has long been important to the history of the Piedmont region of North Carolina.<sup>3</sup>

About 1860 the Bynum family built a flour mill on the Haw about six miles northeast of the Chatham county seat of Pittsboro. An 1870 map of Chatham County shows a bridge crossing the Haw at “Bynum’s M.” (Bynum’s Mill) (figure 2).<sup>4</sup> In 1872 brothers Carney and Luther Bynum founded Bynum Manufacturing Company to produce textiles, and the site developed into one of the many nineteenth century rural textile mill villages that harnessed the fast-flowing waters of the Haw and Deep Rivers in the central Piedmont. The road through Bynum was the principal route between Pittsboro and Chapel Hill in Orange County, home to the University of North Carolina. As seen in old photographs, by 1879 a major covered bridge with a latticed timber truss was erected at Bynum adjacent to the site of the present bridge (figure 3).<sup>5</sup>

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<sup>3</sup> Anne Melyn Cassebaum, *Down Along the Haw: The History of a North Carolina River*, McFarland & Company, Inc., 2011.

<sup>4</sup> N.A. Ramsay, *Map of Chatham County, N.C.*, 1870. Accessed on Chatham County Historical Association website, [https://www.chathamhistory.org/images/old\\_map.jpg](https://www.chathamhistory.org/images/old_map.jpg)

<sup>5</sup> Photograph reproduced in *Down Along the Haw*, page 154 (Original photograph at NC Office of Archives and History, Raleigh, NC); also Chatham County—Bynum—Haw River Bridge, University of North Carolina at Chapel Hill Library Photographic Services copy negatives #P0086, Photo Image Box 1B-P0085/02, Chatham County, Bynum, Haw River Bridge, 2:68, in the North Carolina collection image reference cards #P0085 North Carolina Collection Photographic Archives, Wilson Special Collections Library, University of North Carolina at Chapel Hill.

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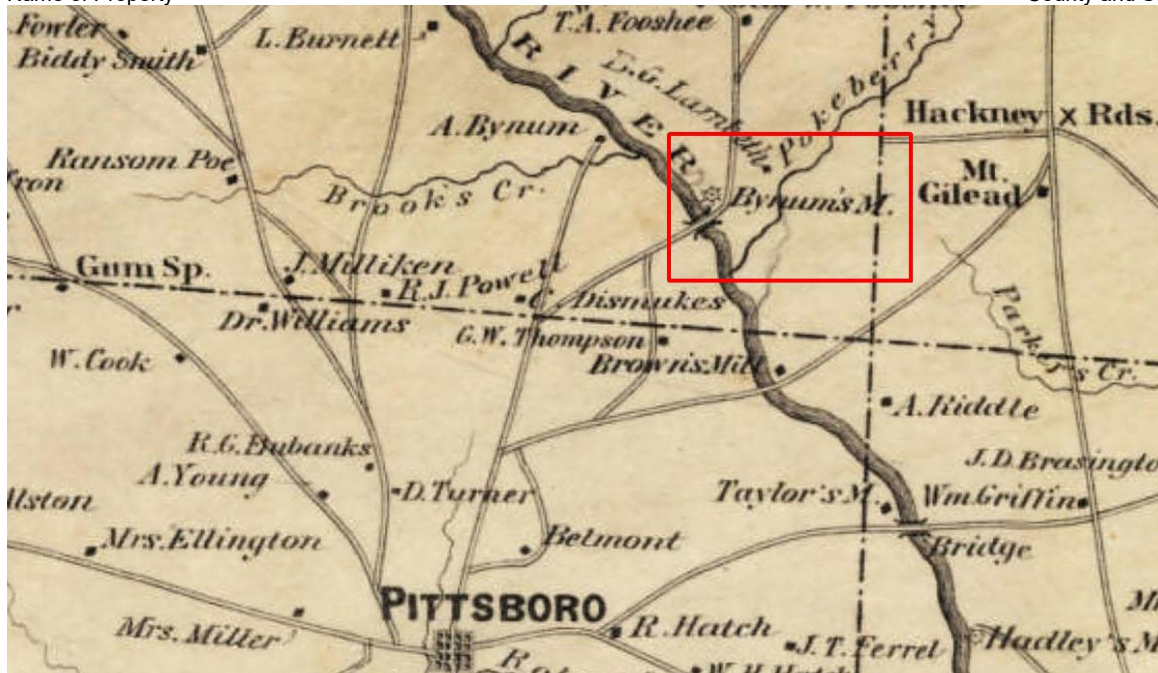


Figure 2 - Detail of N.A. Ramsay Map of Chatham County of 1870, showing "Bynum's M." northeast of Pittsboro.



Figure 3 - Late 19th c. photo of covered bridge and mill at Bynum, looking west from the east bank.

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Through the second decade of the twentieth century, counties were largely responsible for construction of most roads and bridges, with little coordination across county lines, and “the state became a haphazard patchwork of roads to nowhere.”<sup>6</sup> With the introduction and proliferation of automobiles in the first decades of the century, road conditions were dire. Most roads were dirt or clay, and narrow wooden bridges were unsuitable for motorized traffic. In this period the number of licensed cars doubled every two years. In 1909 there were 1600 licensed vehicles in North Carolina, but by 1919 the number had reached 109,000.<sup>7</sup>

The “Good Roads Era” of highway building in North Carolina began under Governor Locke Craig, elected in 1912, and in 1915 the state legislature established the State Highway Commission.<sup>8</sup> The Federal Roads Act of 1916 provided increased funding for roads and bridges and promoted the adoption of standardized road and bridge designs nationwide. In 1919, the Good Roads Association proposed a bill that would develop a network of hard-top roads to connect all the county seats and principal towns.<sup>9</sup> The Doughton-Conner-Bowie Act of 1921 approved state control of approximately 5,500 miles of hard-surfaced roads in North Carolina, and called for linking the state’s 100 county seats, principal towns, principal state institutions, and the highways of adjoining states. In that year Governor Cameron Morrison and state lawmakers issued \$50 million in bonds and a one cent gasoline tax to create a system of roads connecting counties, launching the first organized statewide road and bridge improvement campaign in North Carolina history. By 1927 \$100 million in bonds were approved, and North Carolina emerged as the “Good Roads State.”

State Highway Commission engineers worked closely with the engineers from the federal Bureau of Public Roads. The first North Carolina Chief Bridge Engineer was William L. Craven, who served from 1917 to 1944. Prior to taking the post, Craven had fifteen years of experience working with bridge companies in Pennsylvania, Virginia, and North Carolina.<sup>10</sup>

The construction of Bynum Bridge was made possible as a result of the 1921 bond issue. The bridge was part of North Carolina State Project No. 99, which created State Route 175, later to become US 15-501, connecting Pittsboro to Chapel Hill. The bridge itself was State Project No. 400. R.M. Walker and Company from Atlanta, Georgia was awarded the \$50,000 contract with Chatham County to construct the bridge. The project was designed and overseen by staff of chief bridge engineer William L. Craven of the NC State Highway Commission. The Chatham Record

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<sup>6</sup> Our State Magazine, North Carolina is the Good Road State, Bryan Mims, July 2014.

<sup>7</sup> *Automobiles*, Article by Robert E. Ireland, in NCPedia, <http://www.ncpedia.org/automobiles>, from *Encyclopedia of North Carolina*, edited by William S. Powell, University of North Carolina Press.

<sup>8</sup> Background history of North Carolina highways and bridges extracted from Clay Griffith, “Historic Architectural Resources Survey Report Phase II: Replace Bridge No. 39 on US 221 over South Fork New River, Ashe County, Tip No. 13-1037...”, April 12, 1996, and the NCDOT website, *North Carolina’s Historic Bridges*: <https://www.ncdot.gov/initiatives-policies/Transportation/bridges/historic-bridges/Pages/default.aspx>

<sup>9</sup> In 1902, a small group of civic leaders banded together to form the Good Roads Association. Bryan Mims, “North Carolina is the Good Road State,” *Our State Magazine*, July 2014.

<sup>10</sup> “William L. Craven, Bridge Engineer,” *North Carolina Highway Bulletin* 2, no. 11 (January 1922): 9; Capus Waynick, *North Carolina Roads and Their Builders*, Vol. 1 (Raleigh: Superior Stone Company, 1952): 100, as cited in Griffith.

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from March 10, 1922 recorded this contract: "Contract Let - The contract has been let by the county commissioners for the building of the Bynum Bridge over the Haw River on the state highway, which is to be concrete reinforced with steel. The contract was let to a bridge force of Atlanta, GA., and was let for \$50,000. Work will begin about the first of April."<sup>11</sup> The firm broke ground before June 16, 1922 and completed the bridge on May 18, 1923.<sup>12</sup> A photograph made during construction shows the west end of the bridge nearly abutted the 1879 covered bridge, which was removed soon after completion (figure 4).<sup>13</sup>

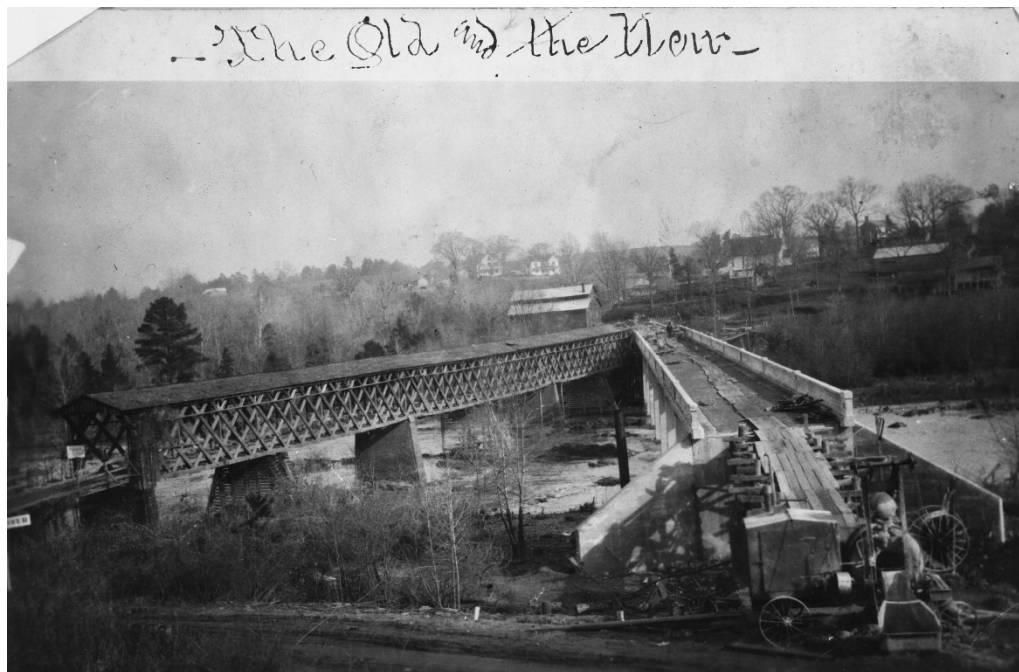


Figure 4- c. 1922 photo showing new bridge nearing completion, and the old bridge to its north.

The bridge was the primary crossing over the Haw River at Bynum for 30 years. By 1936 old State Route 175 was designated US Highway 15-501.<sup>14</sup> As traffic increased, the N.C. Department of Transportation made plans to reroute US 15-501 to a newer bridge over the Haw. By modern standards, Bynum Bridge was considered only one and half lanes wide. In 1952 a new bridge was erected 500 yards upstream for a rerouted US 15-501, within sight of Bynum Bridge. Local traffic continued to use Bynum Bridge until 1999, when NCDOT determined the bridge's concrete and steel reinforcement were eroding, and recommended the bridge be closed.

<sup>11</sup> *Chatham Record*, Pittsboro NC, March 10, 1922, page 3, Newspapers.com

<sup>12</sup> *Chatham Record*, June 16, 1922, page 1. The paper reported work was already started and "Progressing favorably."

<sup>13</sup> Chatham County—Bynum—Haw River Bridge, University of North Carolina at Chapel Hill Library Photographic Services copy negatives #P0086, Photo Image Box 1B-P0085/02, Chatham County, Bynum, Haw River Bridge, 2:68, in the North Carolina collection image reference cards #P0085 North Carolina Collection Photographic Archives, Wilson Special Collections Library, University of North Carolina at Chapel Hill.

<sup>14</sup> Road Survey of Chatham County, 1936, State Highway Commission. Map accessed in *North Carolina Maps* website, <https://dc.lib.unc.edu/cdm/singleitem/collection/ncmaps/id/3011/rec/11>

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The cost of a new bridge was considered unjustified because of the relatively low volume of traffic and the nearby alternative crossing on US 15-501.<sup>15</sup>

After much public debate regarding fate of the old bridge, ultimately NCDOT agreed to keep the bridge open for pedestrian use. The presence of the water pipe suspended from the bridge connecting the county and Pittsboro water systems, and the likely cost of its relocation, appears to have been a factor in the decision.<sup>16</sup> Vehicle barriers were added at either end, and a railing placed atop the flanking parapets as a safety feature. It remains under the ownership of NCDOT.

With its proximity to the Lower Haw River State Natural Area and the county-owned Bynum Beach Access Area, the bridge has since become a focal point for nature-related activities and special gatherings and events for people in Chatham County and beyond. It is much used and enjoyed by pedestrians, cyclists, wildlife observers, walking groups, families and stargazers. Many well-attended public events take place on Bynum Bridge. Several stargazing groups including the Chapel Hill Astronomical and Observational Society and the Bynum Astronomy Club use the bridge as an ideal gathering place to search and enjoy the dark skies. The National Audubon Society reports that of the many bird watching areas in the N.C. Piedmont, “few are better than the Bynum Bridge area in Chatham County.”<sup>17</sup> The Bynum Bridge Fest is an annual art show where local artists can sell their work on the bridge. “Pumpkins on the Bridge” in October is a much beloved annual event that features hundreds of carved and candle-lit Jack-O-Lanterns placed on the bridge from dusk until midnight. A community potluck meal is held on the bridge every 4th of July. Bynum Bridge is a favorite site for photographers, painters, musicians, writers and other artists (figure 5).<sup>18</sup>

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<sup>15</sup> “DOT to Close Bynum Bridge to All But Cyclists, Pedestrians.” *Chapel Hill Herald*, 5 September 1998.

<sup>16</sup> “Forces Conspiring to Spare Bynum Bridge.” (Raleigh) *News and Observer*, 14 May 1998.

<sup>17</sup> *A Birders Guide to Bynum Bridge Area*, NC Audubon.org, <https://mercury.postlight.com/amp?url=https://nc.audubon.org/news/birders-guide-bynum-bridge-area>, February 16, 2015.

<sup>18</sup> Information about current uses of the bridge compiled by Bynum residents Diane Swan, Debbie Tunnell, and Adriana DiFranco of the Bynum Bridge Committee, draft National Register nomination for Bynum Bridge, May 16, 2018. Copy in survey file.

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Figure 5 - Pop-Up Community Dinner catered by Snap Pea Catering (Durham NC), June 10, 2017, on Bynum Bridge. Photo by Tim Lytvinenko.

It is somewhat ironic that Bynum Bridge, which was built to serve communities with increased automobile traffic, has become a favorite spot for residents to get away from traffic and experience a connection to nature. Since it is handicap accessible, the bridge allows everyone this opportunity. Although Bynum Bridge no longer serves as a major transit point between county seats, it still connects communities and people, and helps connect all with the beauty of nature. Generations have stood on Bynum Bridge daydreaming, wishing, thinking, working out a problem, sharing a romantic moment or simply watching the Haw River roll on toward the sea. As one Bynum resident noted, “That river has heard lots of laughter and carried away many a tear.”<sup>19</sup>

### Engineering Context: Reinforced Concrete Tee Beam Bridges in North Carolina

With the exponential growth of motor vehicular traffic in the second and third decades of the twentieth century, transportation agencies at all levels of government sought methods, designs, and materials for roadway and bridge construction that would accommodate rapidly increasing volumes of traffic and provide safety, durability, economy, and relatively quick construction. Though concrete has been in use since Roman times, the late nineteenth century saw the introduction of reinforced concrete for many types of structures, with steel rods embedded in

<sup>19</sup> Cynthia Raxter, “About Bynum Bridge- Our Story,” Bynum Bridge, October 12, 2018, Retrieved from <http://m.facebook.com?notes/bynum-bridge/our-story/1643926705641229/>.

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concrete for additional strength and increased length of spans between supports. By the 1910s, advances in engineering led to a variety of standardized concrete bridge designs promoted by the federal Bureau of Public Roads (later the Federal Highway Administration) for federal-assisted highway projects. State agencies like the North Carolina State Highway Commission, founded in 1915, often copied or adapted federal designs for state projects as well as those receiving federal assistance.

One of the most popular designs for reinforced concrete bridges was the tee beam, which has cast-in-place, longitudinal concrete beams with integral concrete deck sections across the tops of the beams. The beams, deck, and parapets flanking the deck are poured together as a unit within wooden formwork assembled on site, which is removed when the concrete cures. The beam-and-deck superstructure rests atop vertical concrete abutments and piers that are cast separately in advance. In cross section the beams are deeper than their deck sections, which produces the T-shape that gives them their name (figure 1 in Section 7). The first designs consisted of three longitudinal beams (Bynum Bridge has three beams), but by the late 1920s the standards were updated for wider roadways, and later examples usually consisted of four or more beams. They were generally used for single spans 25 to 60 feet long, but multiple spans allowed for the construction of much longer bridges. The Federal Highway Administration classifies tee beams as type 104, with the "1" indicating reinforced concrete, and "04" the tee beam configuration.<sup>20</sup>

Tee beam bridges were first used in the North Carolina about 1910 by counties, cities, and railroads. The form became one of the most commonly used State Highway Commission designs, with standard plans first prepared in late 1919. Hundreds of tee beam bridges were built along highways across the state between 1920 and the 1950s. The great majority were of four or fewer spans of less than 250 feet in length. The tee beam was a popular design because it was more economical for lengths in excess of 25 feet than were concrete arch or slab bridges. But like all cast-in-place concrete bridges, tee beams were labor intensive owing to the requisite wooden form work and they had increasingly high labor costs, especially for multi-span bridges. By the early 1960s the N.C. Department of Transportation was phasing out the tee beam in favor of prestressed concrete beam bridges and other designs.

An inventory of historic bridges on the North Carolina highway system was completed in 2005.<sup>21</sup> Of 5,057 bridges included in the survey, 795 were identified as tee beam bridges constructed between 1920 and 1960. Of these, almost 200 were built by 1923. Other tee beam bridges may have existed that were removed before the inventory, and some included in the inventory have since been removed, but the project database provides a picture of the extent and variety of tee beam construction in the state. Bynum Bridge was not included in that inventory, apparently because it had been closed to vehicular traffic in 1999. But the inventory reveals the status of Bynum Bridge in the era of tee beam construction.

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<sup>20</sup> Background information on tee beam bridges from North Carolina Department of Transportation website, <https://www.ncdot.gov/initiatives-policies/Transportation/bridges/historic-bridges/bridge-types/Pages/reinforced-beam.aspx>, and Bridgehunter.com, <http://bridgehunter.com/>

<sup>21</sup> North Carolina Department of Transportation, *Historic Bridge Inventory: Final Report*. January 2005. Report prepared by Lichtenstein Engineers. Copy on file at North Carolina State Historic Preservation Office. An Access database with records of 5,057 was included with the report.



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At 806.1 feet, Bynum Bridge was by far the longest of the first generation of tee beam bridges built before 1924, of which only one other is known to remain that exceeds 500 feet. The inventory indicates it was the second longest ever constructed, surpassed only by a White Oak River Bridge (#660030) of 875 feet at Swansboro in Onslow County, constructed in 1952 at the end of the era of tee beam bridges. That bridge, and a sister tee beam bridge of 768 feet (#660025) constructed at the same time and connected by an island in the White Oak River, appear to have been replaced or heavily overbuilt in 2001.<sup>22</sup> The closest known competitor that still stands is the French Broad River Bridge at Hot Springs in Madison County, at 527 feet in length, built in 1951. For its age, length, and high integrity, Bynum Bridge is eligible at a state level of significance as North Carolina's most prominent example of an important early twentieth century bridge type.

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<sup>22</sup> List of North Carolina Bridges as of February 2019, NCDOT, <https://www.ncdot.gov/initiatives-policies/Transportation/bridges/Documents/StatewideBridges.pdf>.

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## 9. Major Bibliographical References

**Bibliography** (Cite the books, articles, and other sources used in preparing this form.)

*A Birders Guide to Bynum Bridge Area.* NC Aududon.org.

<https://mercury.postlight.com/amp?url=https://nc.audubon.org/news/birders-guide-bynum-bridge-area>. February 16, 2015.

Brinckerhoff, Parsons, and Engineering and Industrial Heritage. *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.

[http://onlinepubs.trb.org/onlinepubs/archive/NotesDocs/25-25\(15\)\\_FR.pdf](http://onlinepubs.trb.org/onlinepubs/archive/NotesDocs/25-25(15)_FR.pdf)

*BridgeHunter.com.* A crowdsourced website of historic and notable bridges maintained by Nathan Holth. Includes descriptions of 84 reinforced concrete tee beam bridges in North Carolina. A page on Bynum Bridge is posted at <http://bridgehunter.com/nc/chatham/bynum>.

Cassebaum, Anne Melyn. *Down Along the Haw: The History of a North Carolina River.* McFarland & Company, Inc., 2011.

*Chapel Hill Herald,* Chapel Hill, North Carolina: 5 September 1998.

Chatham County—Bynum—Haw River Bridge, University of North Carolina at Chapel Hill Library Photographic Services copy negatives #P0086, Photo Image Box 1B-P0085/02, Chatham County, Bynum, Haw River Bridge, 2:68, in the North Carolina collection image reference cards #P0085 North Carolina Collection Photographic Archives, Wilson Special Collections Library, University of North Carolina at Chapel Hill.

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Bynum Bridge  
Name of Property

Chatham County, N.C.  
County and State

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*North Carolina's Historic Bridges*, NCDOT-maintained website, is based on the Lichtenstein report. Site has information on: Evolution of Bridge Technology, Good Roads and Bridges Movement, Federal Aid Highway Program, NC State Highway Commission, State Bridge Engineers, Reinforced Concrete, and the Era of Standardization.

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[https://xfer.services.ncdot.gov/imgdot/DOTBridgeMaps/Chatham\\_BridgeMap\\_Sheet02\\_Final\\_web.pdf](https://xfer.services.ncdot.gov/imgdot/DOTBridgeMaps/Chatham_BridgeMap_Sheet02_Final_web.pdf)

NCDOT, *State Highway System of North Carolina, 1922*. Map shows road connections between Orange and Chatham County courthouses:

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Bynum Bridge  
Name of Property

Chatham County, N.C.  
County and State

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**Previous documentation on file (NPS):**

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

**Primary location of additional data:**

- State Historic Preservation Office
- Other State agency
- Federal agency
- Local government
- University
- Other

Name of repository: N.C. Department of Transportation

**Historic Resources Survey Number (if assigned):** CH0658

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**10. Geographical Data**

**Acreeage of Property** Approximately 0.94 acres

Use either the UTM system or latitude/longitude coordinates

Bynum Bridge  
Name of Property

Chatham County, N.C.  
County and State

**Latitude/Longitude Coordinates**

Datum if other than WGS84: \_\_\_\_\_  
(enter coordinates to 6 decimal places)

- |                        |                       |
|------------------------|-----------------------|
| 1. Latitude: 35.772125 | Longitude: -79.144397 |
| 2. Latitude:           | Longitude:            |
| 3. Latitude:           | Longitude:            |
| 4. Latitude:           | Longitude:            |

**Or**

**UTM References**

Datum (indicated on USGS map):

NAD 1927 or  NAD 1983

- |          |           |           |
|----------|-----------|-----------|
| 1. Zone: | Easting:  | Northing: |
| 2. Zone: | Easting:  | Northing: |
| 3. Zone: | Easting:  | Northing: |
| 4. Zone: | Easting : | Northing: |

**Verbal Boundary Description** (Describe the boundaries of the property.)

"The nominated property is the length of the bridge (806.1 feet) plus 5 feet at each end to encompass the approaches and the bollards serving as vehicle barriers, for a total of 816.1 feet, and 25 feet of NCDOT right-of-way on either side of the center line for a total width of 50 feet, or 40,805 square feet = approximately 0.94 acres.

**Boundary Justification** (Explain why the boundaries were selected.)

The boundary encompasses all the historic elements of the bridge and its context within the public right-of-way.

Bynum Bridge  
Name of Property

Chatham County, N.C.  
County and State

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### 11. Form Prepared By

name/title: Diane Swan, Debbie Tunnell, initial edit by Adriana DiFranco; edited by Michael Southern

organization: Bynum Bridge Committee

street & number: 59 Artisan Lane

city or town: Pittsboro state: NC zip code: 27312

e-mail diswanwoodgal@gmail.com

telephone: 919-548-3011 cell 919-542-6367 home

date: December 2, 2019

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### Additional Documentation

Submit the following items with the completed form:

- **Maps:** A USGS map or equivalent (7.5 or 15 minute series) indicating the property's location.
- **Sketch map** for historic districts and properties having large acreage or numerous resources. Key all photographs to this map.
- **Additional items:** (Check with the SHPO, TPO, or FPO for any additional items.)

### Photographs

Submit clear and descriptive photographs. The size of each image must be 1600x1200 pixels (minimum), 3000x2000 preferred, at 300 ppi (pixels per inch) or larger. Key all photographs to the sketch map. Each photograph must be numbered and that number must correspond to the photograph number on the photo log. For simplicity, the name of the photographer, photo date, etc. may be listed once on the photograph log and doesn't need to be labeled on every photograph.

### Photo Log

Name of Property: Bynum Bridge

City or Vicinity: Bynum

Bynum Bridge

Name of Property

County: Chatham State: North Carolina

Chatham County, N.C.

County and State

Photographer: Royce Haley

Date Photographed: June 2018

Description of Photograph(s) and number, include description of view indicating direction of camera:

1. View from Haw River, looking southeast
2. View from US 15-501 bridge, looking south
3. View from Haw River, looking east, showing ca. 1980 water pipe suspended from bridge
4. View from west approach, looking east
5. Detail of solid parapet and 1999 handrail at a joint between spans
6. Sample pier and superstructure, from north
7. View from beneath bridge, showing pier, beams, and underside of decking



1. View from Haw River, looking southeast

Bynum Bridge  
Name of Property

Chatham County, N.C.  
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2. View from US 15-501 bridge, looking south



3. View from Haw River, looking northeast, showing ca. 1980 water pipe suspended from bridge



Bynum Bridge  
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4. View from west approach, looking east



5. Detail of solid parapet and 1999 handrail at a joint between spans

Bynum Bridge  
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6. Sample pier and superstructure, from north

Bynum Bridge  
Name of Property

Chatham County, N.C.  
County and State



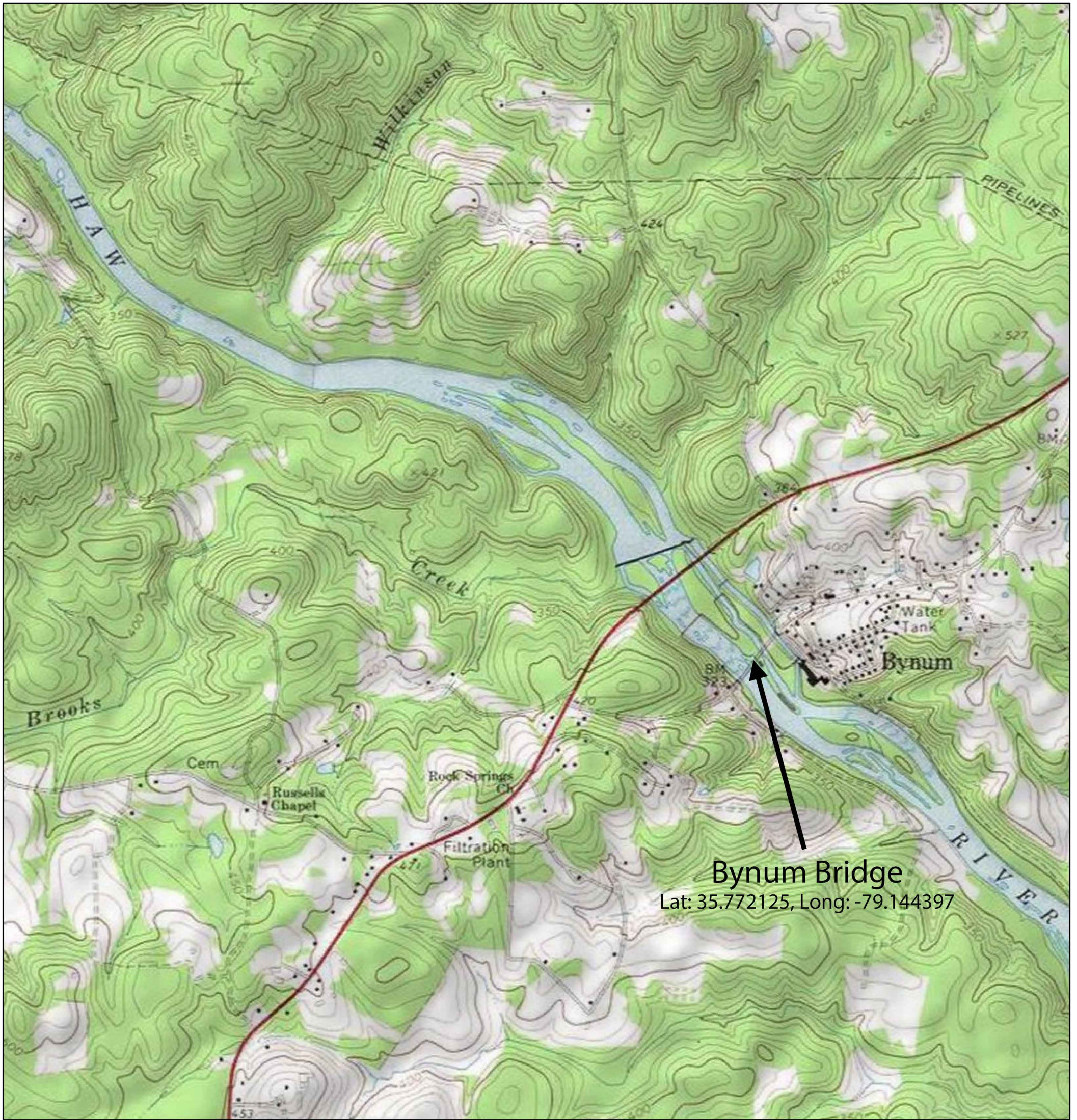
7. View from beneath bridge, showing pier, beams, and underside of decking

**Paperwork Reduction Act Statement:** This information is being collected for nominations to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C.460 et seq.). We may not conduct or sponsor and you are not required to respond to a collection of information unless it displays a currently valid OMB control number.

**Estimated Burden Statement:** Public reporting burden for each response using this form is estimated to be between the Tier 1 and Tier 4 levels with the estimate of the time for each tier as follows:

- Tier 1 – 60-100 hours
- Tier 2 – 120 hours
- Tier 3 – 230 hours
- Tier 4 – 280 hours

The above estimates include time for reviewing instructions, gathering and maintaining data, and preparing and transmitting nominations. Send comments regarding these estimates or any other aspect of the requirement(s) to the Service Information Collection Clearance Officer, National Park Service, 1201 Oakridge Drive Fort Collins, CO 80525.



National Register of Historic Places Nomination

# Bynum Bridge

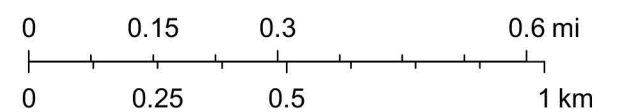
Old Bynum Road

Connecting SR 1871 and SR 1713 over Haw River

Bynum, Chatham County, North Carolina

**National Register Location Map**

1:18,056





National Register of Historic Places Nomination  
**BYNUM BRIDGE**  
 Old Bynum Road  
 Connecting SR 1871 and SR 1713 over Haw River  
 Bynum, Chatham County, North Carolina  
**National Register Boundary Map**

