Covered Bridges of Rockbridge County

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Anthropology 377
Dr. McDaniel
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In the nineteenth century, covered bridges became very popular. There were close to one hundred covered bridges built in Virginia. Their location tended to be most popular in central Virginia, very few in the South and the West and none in the very eastern stretches of Virginia. This was true because of the surplus of timber that the Blue Ridge Mountains possessed. These covered bridges aided in and were made popular by the migration of people into the Ohio Valley. (Allen 1959, pg. 80) Reasoning would seem pretty self-evident for building a bridge with a cover over it. Maybe for the travelers' protection or even for the roads' sake. No, the cover was to protect the structural wooden beams that supported the bridge; therefore, prolonging the life of the bridge. The road did not need protection because the planks could easily be replaced; however, the structure of the bridge was an absolute necessity and could not be replaced. (Above information taken from Allen 1970, pg. 56)

There were two and possibly two more sites where covered bridges once stood. The first, and probably most popular, was the covered bridge at East Lexington. The second being the one over Buffalo Creek near Buffalo Forge. The other two, the probable ones, were over the same rivers, but at different locations.

The old covered bridge over the Maury River was located
in East Lexington one mile from Lexington corporate limits. The bridge was built to carry traffic over the Maury River which was at that time called the North River. (McLung, 1939, pg. 54-55). The first bridge to be erected was a two lane covered bridge in 1810. In 1835, a toll bridge was constructed by John Jordan and stood until 1864. Whether or not this one was covered is not divulged by any of the sources that I implemented (Above information taken from Lyle, 1966, pg. 23). The bridge built in 1810 must have been washed away by flood and high winds or maybe deterioration had taken its toll on the bridge. I say this because the bridge built in 1835 was erected on the same spot as the one in 1810. The bridge constructed in 1835 lasted until 1864 when the Confederate troops burned the bridge to slow down the Union forces that were to attack the town of Lexington (Ibid, pg. 13). Some time after 1864 a new bridge was erected at the same spot. On May 25th 1870 money was appropriated to fix the bridge over the North River because of damage to the bridge by high winds. The damage caused by the high winds was believed to be from poor construction (Supervisors Order Book #1, pg. 11). Some time after May, the bridge was completely destroyed by a flood that swept through most of Virginia (Ibid., pg. 15). After the flood of 1870 a building committee for a new bridge was established. This committee controlled all of the funds involved in the building of the new bridge and reported to the Board of Supervisors of Rockbridge county (Ibid., pg. 13). The Board of Supervisors called for the appropriation of six thousand dollars to build a two lane covered bridge similar
to the one burned in 1864. This bridge was to have a covered arch style and abutments were to be built on either side of the bridge. It was to be built three feet higher than the other one (above info., Ibid., pg. 16). In later months six hundred dollars was appropriated towards the completion of the new bridge (Ibid., pg. 45). The remains of the bridge that was washed away by the flood were auctioned off to the highest bidder, Mr. Edward Hiffron, for One hundred and twenty dollars (Ibid., pg. 27). In the early 1880's, approximately 1882, the board motioned for the East Lexington bridge to be insured for three thousand dollars (Ibid., pg. 390). In 1880, a committee was set up to refront the North River bridge at East Lexington. The committee reported that there would be repairs needed and that the county would pay for them (above info., Ibid., pp. 326 and 332). Then in 1882, the public roads approaching the North River bridge were to be repaired to prevent water from getting into the covered bridge (Ibid., pg. 405). The initial insurance policy must have terminated because another three thousand dollars was appropriated to insure the North River bridge a few years after the first one had been purchased (Supervisors Order Book #2, pg. 13). The bridge was once again refronted in 1886 to check on the conditions of the roof. A committee was appointed and they decided that a tin roof instead of a shingle roof would be very advantageous. The committee, therefore, was ordered by the board to purchase the tin for the roof for no more than
five dollars per square foot (Ibid., pg. 117-118 and 162-163).

It was also in 1886 that discussions began on refraining the bridge with partial stone and partial beam (Ibid., pg 165).

However, I have concluded that the bridge was not reinforced with stone and beam until 1931. This is evident because of the letter and sketch plans on pgs. 12 and 14 respectively. I received this information, plans and sketches, from the Highway Department in Staunton Virginia. On these two pages, one can see that there were tentative plans of ordering and constructing beams to support the bridge across the river. The note corresponds to the sketch in that the sketch states the necessity for thirty foot beams and the note calls for the ordering of thirty foot beams. I assume that it was in 1931 because the inspection took place in 1931 and some of the sketches are dated 1931. In addition to this, on pg. 12 there is a note by the asterisk stating, "Sketch Showing Bank (?) and I Beams for Strengthening Bridge on North River at Lexington on Rt. 33" (pg./2 of report). I might add also some of the differences of the pictures of the North River bridge. Some show the reinforcing beams and others do not depict the bridge as possessing reinforcement beams. The Bridge was then used until December of 1935 with the completion of the new cement bridge (Mclung, 1939, pg. 54-55).

Before the completion of the new bridge, the old covered bridge was very dangerous, and there was a five dollar fine to anyone who drove faster than that of the pace of a walk. (Tompkins Scrapbook, Vol. 5, pg. 149).
However, it was not closed completely. The bridge was sold by the Highway Department in 1936 to the Association for the Preservation of Virginia Antiquities (A.P.V.A.) for one dollar (Correspondence folder on North River bridge, 1936-1937). At a meeting on Friday, October 23, 1936 at the courthouse, the A.P.V.A. had announced that they had ownership and were going to do everything in their power to keep the edifice standing and in fine shape. This was due to the hard work of Mrs. F.D. Williams who founded the Rockbridge branch in 1935. Money was needed and asked for by the A.P.V.A. to restore various parts of the bridge to make it look as it once did years back. The Natural Bridge Garden Club helped out by donating and planting decorative plants around the entrances of the bridge (Above info. Tompkins Scrapbook Vol. 4, pg.34). Reasons for the purchase by the A.P.V.A. was maintenance of a historic and nostalgic object and this was backed by public interest, "Matters with regard to our newly organized Rockbridge branch of the A.P.V.A. are rather, quiet but we have aquired a few new members since I last wrote you, and there is now, as has been true for some time, a very lively interest in the preservation of the East Lex Bridge.

Speaking on behalf of the Rockbridge branch of A.P.V.A., I can assure you and Mr. Shirly that the bridge will be kept up and maintained. As a matter of fact, it was largely for this special purpose that the Branch of the A.P.V.A. was formed, and we are delighted that the bridge will come into possession of the A.P.V.A." (Correspondance folder on North river bridge, 1934-1935).
After the A.P.V.A. took over along with the new cement and steel bridge, the old bridge became a gathering spot for juveniles and used for calvary charges by the V.M.I. cadets. This was coupled by stolen boards and the rotting of wood which led to the destruction of the bridge by the A.P.V.A. (Allen, 1959, pg. 83).

Based on my studying of the engineers drawing on pgs. and the definition of a Wernwag bridge, it seems that the covered bridge at East Lexington was built according to the Wernwag style (See Drawings). The Wernwag style Possesses double arches which span across the bridge and support it. Allen, 1959, pg. 106).

The second of the two bridges in Rockbridge county is the covered bridge over Buffalo Creek at Buffalo Forge. It was located nine miles south of Lexington on a road leading to Natural Bridge. This bridge was built as a one lane bridge which is unlike that of the two lane bridge over the Maury River at East Lexington. The first bridge to be built at this site was in 1700, and it was labeled a "Sunken Bridge". This bridge was later replaced in 1750 by a "Short Crib Bridge". And in 1778, it was rebuilt because of damages due to fire. (Mclung, 1939, pg. 345). In 1870, one hundred and fifty dollars was appropriated to restrain the bridge at Buffalo Forge (Supervisors Order Book #1, pg. 11). It seems that the bridge was rebuilt in 1878 because the records kept by the board show that they paid for abutments and a super structure which was built by contractors (Ibid, pg. 283). In an 1880 board meeting, it was brought out by T. Mckee to cover the bridges over Buffalo Creek at Buffalo Forge and at Mckee's farm. The
board directed McKee to take further investigation into the matter. Finally, the board appropriated two hundred and fifty dollars to aid the Natural Bridge district to construct coverings over the two bridges (Ibid. pgs. 338 and 348).

Whether or not the one at McKee's farm was covered, I am not really sure of, because other records show that Buffalo Forge and East Lexington were the only two covered bridges in the county. Later in 1870 the board ordered that approaches be built on Buffalo Creek bridges (Ibid. pg. 339). In approximately 1912, the bridge was ordered to be examined. It was later noted that road boards were needed and the Natural Bridge district paid $1104.94 to have the damages corrected (Supervisors Order Book #4, pg. 158, 184, 207, 214).

Like the bridge at East Lexington the Buffalo Bridge was insured in 1913, but for $1500.00 (Ibid., pg. 214). In 1940, the bridge was taken over by the A.P.V.A.; however, due to lack of funds and attention because of the war the A.P.V.A. lost possession. Possession was taken over by the private land owner by the name of D.E. Brady. He had it torn down in 1946. The style of the bridge, however, was memorialized by the American Society of Civil Engineers in a postage stamp seven years after its destruction. (Allen, 1959, pg. 83).

By comparing pictures of the bridge to the styles of various covered bridges, I detected that the Buffalo Creek bridge was a long style bridge. This type of bridge possessed boxed X's across the bridge (Allen, pg. 106, 1959).

As I stated previously, there might have been two other covered bridges in Rockbridge county that no book has come to
discover. In a previous statement, I said that there was some
mentioning of covering the bridge over Buffalo Creek at
McKee's farm. In addition to this, money was appropriated,
$1400.00, to build a single lane covered arch bridge at the
mouth of Kerr's Creek (Supervisors Order Book #1, pg. 16).
Maybe Rockbridge county added to the history of covered
bridges more than we believed it did.
### 1. GENERAL REMARKS

Fill out all blanks carefully, giving information on all points and supplementary remarks on features not listed. On a sheet the same size as this, sketch a plan and elevation of the structure, giving layout, panel lengths, width of roadway, height of trusses, dimensions of principal members, size and spacing of joists and size of floor-beams. These sketches are not required where detailed plans are on file in main office.

### 2. CHANNEL

Is there evidence of recent erosion?
- No

Scour around piers or abutments?
- No


Elevation of High Water with respect to floor state whether above or below, and distance below.

### 3. APPROACH FILLS

State if there is evidence of settlement near bridge, whether the adjacent road has been overflowed, and if the approach fills are dangerously steep or narrow. No settlement not overflow.

Approaches very good.

### 4. MASONRY SUBSTRUCTURE

Examine each pier and abutment, and give sketch showing location and width of all cracks.

Is there evidence of undermining?
- No

Where?

Is there evidence of settlement?
- No

Where?

Are foundation piles exposed?
- Yes

Where?

### 5. CYLINDER PIERS

Is bracing between cylinders cracked?
- No

Where?

Are shells cracked?
- No

Rivets sprung?

If shells are cracked, determine if filled with concrete or other material.

Extent of corrosion.

### 6. BENTS

State whether wood, steel or concrete.

If wood or steel, examine near normal water line or column bases for decay or corrosion.

Condition of piers or columns?

Condition of caps or sills?

Are column bases buried or rusted?

Is bracing unsound or corroded?

### 7. CONCRETE SUPERSTRUCTURE

Are there any cracks?
- Yes

Where?

Is there steel exposed?
- Yes

Where?

Do expansion joints appear to be working?
- Yes

### 8. STEEL SUPERSTRUCTURE

Are bridge seats clean?
- Yes

Are beam flanges and bottom chord members clean!

Are shoes and roller nests clean?
- Yes

Do the rollers function properly?
- Yes

Are pins rusted or worn?
- No

Is there rust between shapes or plates of built up members?
- No

General condition of rivets and bolts?
- Good

Are lateral and other tight members badly rusted?
- No

Are end posts and shoes corroded?
- No

Locate and describe all broken or loose rivets and nuts.

### 9. WOODEN SUPERSTRUCTURE

State whether painted, unpainted or creosoted.

Unpainted

Examine all timbers, especially tops of caps, stringers, and contact surfaces for decay.


General condition of timbers?
- Fair

General condition of metal work?
- Good

General condition of floor planks?

### 10. GENERAL FEATURES

Bridge built by...

date...

Length over all: 171'-0"

Roadway: 11' -6"

Capacity joints: 5 ft.

Floor beams: 6 ft.

Hangers: 5 ft.

REMARKS AND RECOMMENDATIONS

Fill in remarks that have recently been put in.
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X &= \frac{103 \times 2}{3} = \frac{206 \times 2}{6} = \frac{500}{6} = 83.33 \\
\text{Sum} &= \frac{95 \times 18}{2} = 1026 \\
\text{Perm} &= \frac{95 \times 25}{2} = 1425 \\
\end{align*}
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\[
\begin{align*}
\frac{77}{8} &= \frac{250 \times 95}{8} = 23750 \\
\frac{3}{8} &= \frac{60 \times 23.5^2}{8} = 6100 \\
\frac{181.5^2}{2} &= \frac{181.5 \times 181.5 \times 2}{2} = 1592.5 \\
\end{align*}
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(1) 33C
(2) 59532
Shel Bemis & Beatty have been requisitioned.

Requisition for police cars among the should be placed.

I think it advisable to order the police 30 days and that this be done as quickly before sending them off.

These checks, & funds were used to pay for the local.

The best system will probably be shown than the other one, as being to cut a piece of the end. I came.

6-12-31