VIRGINIA
HISTORIC LANDMARKS COMMISSION

SURVEY FORM

File no. 76-249
Negative no(s). 5176

Historic name Roanoke Truss Bridge across Broad Run
Common name
County/Town/City Prince William County
Street address or route number vic. 11500 Lucasville Rd. (S.R. 692) Bristow, VA 22013

USGS Quad Independent Hill
Date or period 1930
Original owner Va. Dept. Hwy & Transportation
Architect/builder/craftsmen Roanoke Iron & Bridge Co.
Original use Highway bridge
Present owner Va. Dept. of Hwy. & Transp.
Source of name Bridge survey, date plate
Present owner address 1223 E. Broad St. Richmond, VA 23219
Source of date N/A
Stories
Present use Highway bridge
Foundation and wall const'n N/A
Acreage N/A
Roof type N/A

State condition of structure and environs Bridge appears to be in good condition. Not scheduled for replacement.
State potential threats to structure
Note any archaeological interest

Should be investigated for possible register potential? yes ___ no ___

Architectural description (Note significant features of plan, structural system and interior and exterior decoration, taking care to point out aspects not visible or clear from photographs. Explain nature and period of all alterations and additions. List any outbuildings and their approximate ages, cemeteries, etc.)

This is a single-span, high/through camelback Pratt truss vehicular bridge. It is located on State Route 692, a short distance north of Brentsville, spanning Broad Run. The span measures 150'9", from end post to end post. The bridge is 14'7" wide and has a 12'3" - clear roadway. The vertical clearance is 13'7". The wooden deck is constructed of 4"x10" treated pine flooring. The bridge has a 12-ton capacity. The truss rests on concrete abutments. The guard rails are simple, 2-pipe railings.

The camelback truss became a popular design, prevalent in the United States from the late 19th to the early 20th century. The camelback truss is a type of Pratt truss in which the arched top chord is formed with five slopes. The camelback was economical to erect because its design permitted greater standardization of its members. The design also provided better stress distribution.

Interior inspected? N/A

Historical significance (Chain of title; individuals, families, events, etc., associated with the property.)

According to the Virginia Highway and Transportation Research Council's publication Metal Truss Bridges in Virginia: 1865 - 1932, conducted in 1974-75 by Dan G. Deibler, this Roanoke steel truss bridge is one of the few "camelback" truss bridges in the Culpeper Construction District.*

A name and date plate on this vehicular bridge reveals the builder as the Roanoke Iron & Bridge Works, Inc.; and 1930 as the year of erection.

Though there are no indications that the bridge had been relocated to this site, the Research Council's survey form on this bridge asserts that its "size and massive structural members clearly suggest that it was intended for much heavier traffic, possible on a primary route."

* The Culpeper Construction District is comprised of 13 Northern Virginia and Piedmont Counties.

Sources and bibliography

Published sources (Books, articles, etc., with bibliographic data.) Dan Deibler for Va. Highway & Transportation Research Council, Metal Truss Bridges in Virginia: 1865-1932, Vol. 3, Culpeper District (1975), p.44; T.A. Comp and D. Jackson, "Bridge Truss Types: A Guide for Dating & Identifying"

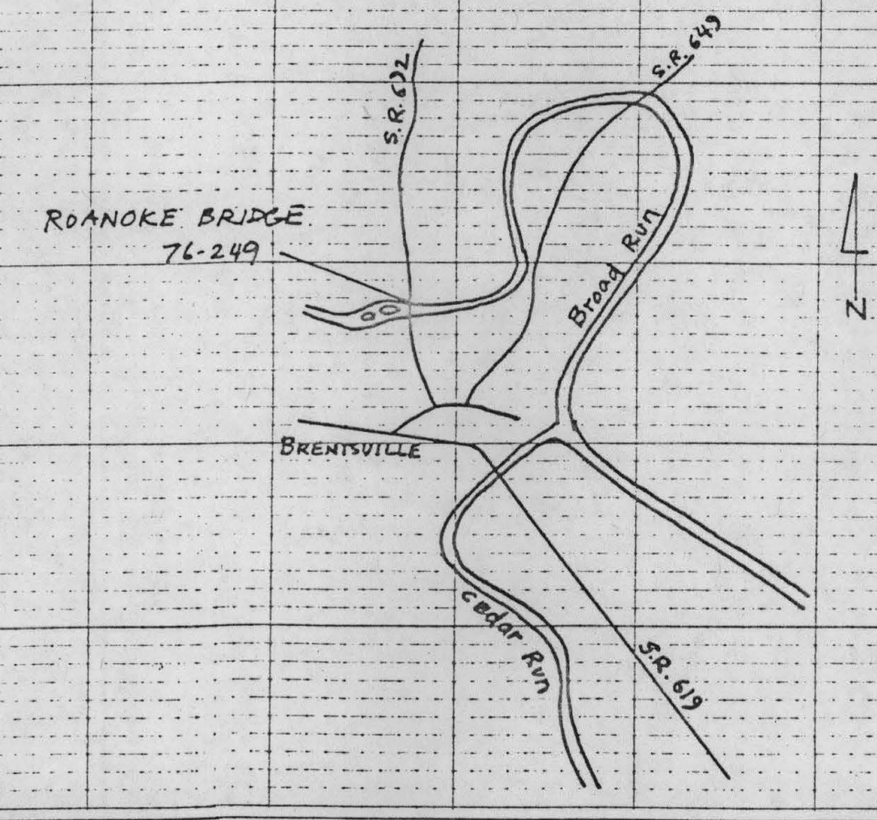
Primary sources (Manuscript documentary or graphic materials; give location.)

Culpeper District Bridge files

Names and addresses of persons interviewed Will Cumming, Residency Offic, Va. DOT, Manassas, Va.

Plan (Indicate locations of rooms, doorways, windows, alterations, etc.)

Site plan (Locate and identify outbuildings, dependencies and significant topographical features.)



Name, address and title of recorder: Frances [illegible], Architectural Historian - Surveyor, [illegible]

Date: APR 1981

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ridge
76 - 249

Photo Numbers: 07-76-12
- A
- B
- C

12336-21: 0-13

TRUSS BRIDGE SURVEY AND INVENTORY FORM

Geographic Information

State: Virginia
Va. Dept. of Highways District: Culpeper ; No. 07 .
County: Prince William ; No. 76 .
[redacted]/Town: Bristoe .
Street/Road: state route 602, Lucasville Road .
[redacted]/Stream/[redacted] (crossing): Broad Run .
UTM/KGS Coordinates: .

Historical Information

Formal designation: 1745 (Structure Tabulation No).
Local designation: 0041 (District Structure No) .
Designer: .
Builder: Roanoke Iron & Bridge Works, Inc, Roanoke, Virginia .
Date: 1930 ; basis for: name/date plate .
Original owner: ; use: vehicular bridge .
Present owner: Virginia Dept. of Highways ; use: vehicular bridge .

Historical or Technological Significance

____ Unique/Unusual in its time: .

✓ Rare survivor though of standard design: one of few Camelback truss spans in the District.

____ Typical example of its time and a common survivor: .

____ Other Remarks/Explanation: There are no bolts at top chord panel points to indicate that this truss bridge has been relocated to this site, however, the size and massive structural members clearly suggest that it was intended for much heavier traffic, possibly on a primary route.

Nature/Degree of any destructive threats: .

Reference materials and contemporary photos/illustrations with their respective locations:
Culpeper District Bridge Files

Recorder: DAN DEIBLER .
Date: 1 August 1974 .
Affiliation: Research Council, Concrete Section .

Design Information

Compass orientation of axis: N/S.

No. of spans: one (1); length; overall: 152'4".
Span types:
(1) truss; length: 150'9".
(2) _____; length: _____.
(3) _____; length: _____.
(4) _____; length: _____.
(5) _____; length: _____.
(6) _____; length: _____.

No. of lanes: one (1); width: 14'7" c to c.

Architectural or decorative features:

Simple 2-pipe railings

Lateral & sway struts are angles connected w/ lacing bars for sway bracing.

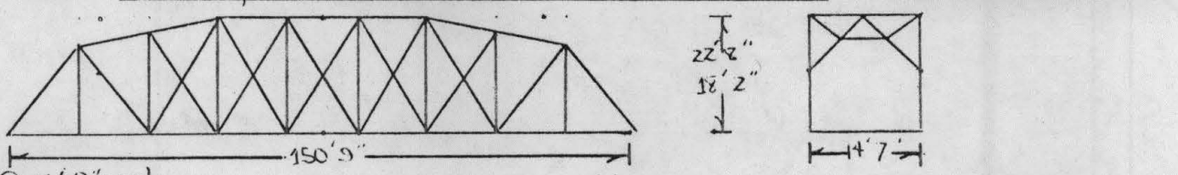
Structural Information

Substructure:
Material: concrete.
Foundations: _____.
Piers: _____.
Abutments: concrete.
Wings: concrete.
Seats: concrete.

Superstructure:
Material: steel sources _____.
Characteristics, details and members:
Connections: _____ pin.
↙ rigid.
Top Chords: 2 up-right channels connected w/cover plates & lacing bars.
End Posts: 2 up-right channels connected w/cover plates & lacing bars.
Bottom chords: 2 angles connected w/stay plates.
Posts: 2 vertical channels connected w/ lacing bars paralleling roadway
Diagonals: double angles connected w/stay plates.
Counters: double angles connected w/stay plates.

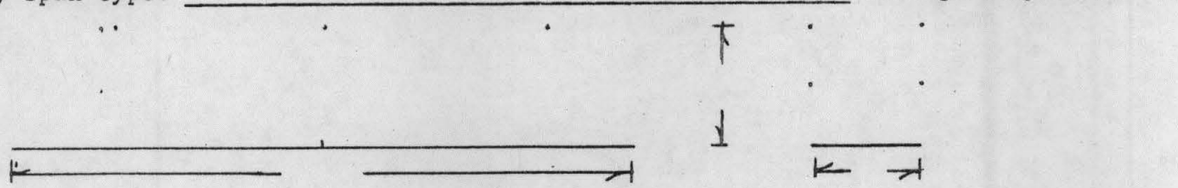
Truss Configuration

Main span type: Pratt, camelback Through/[redacted]



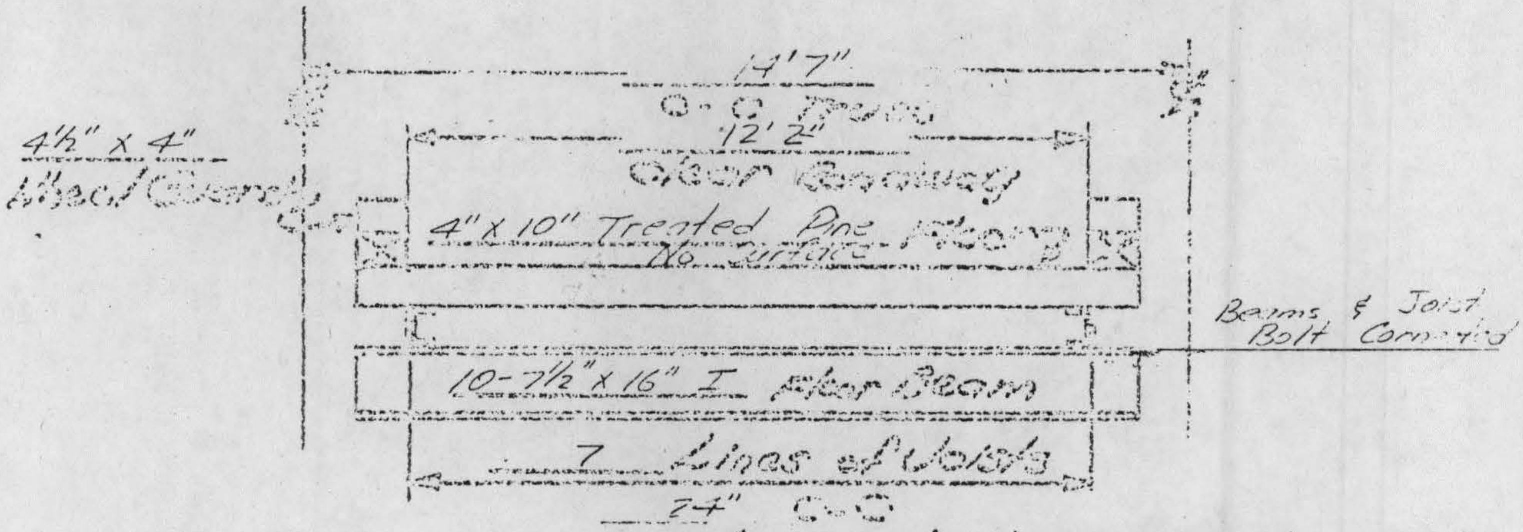
9 panels @ 16'9" each.

Secondary span type: _____ Through/Pony/Deck, Skew



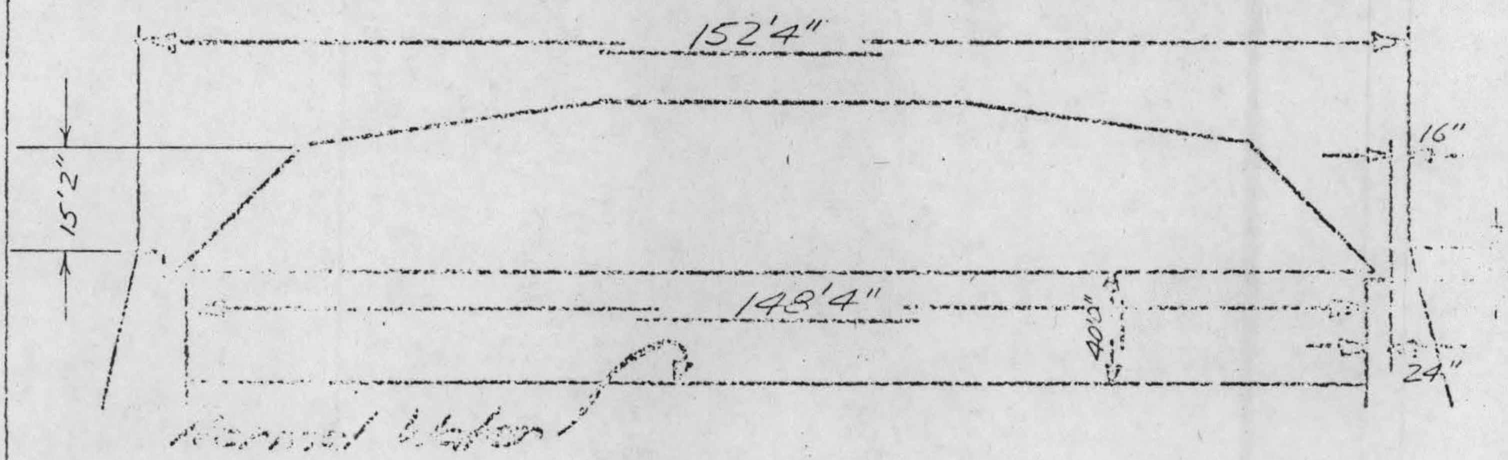
County Prince William Bridge No. 6041
Route No. 692 Over Broad Run
Capacity 12 Tons
Skew ____

TRUSS SPAN



Interior Joists 7-10"x5" I's
Exterior Joists ____

0.20 mi. to Rte. 649 1.50 mi. to Rte. 723



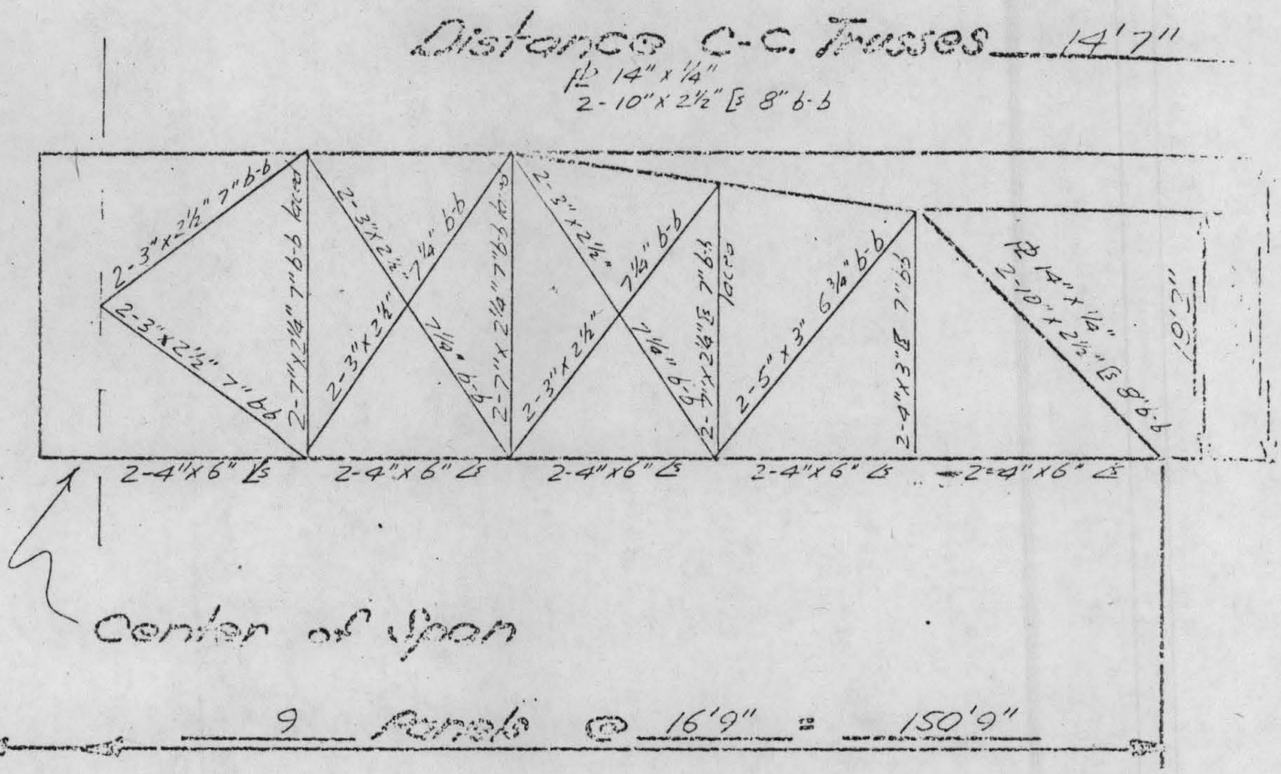
Abutments
Type: Conc. ✓
Masonry ____
Other ____

Wings
Length ____
Skew ____

Length Between Wings ____

County Prince William Bridge No. 6041

Distance C-C. Trusses 14'7"



Center of Span

9 Panels @ 16'9" = 150'9"

Truss
Arc Connected
Riveted ✓

Size Pins

To be used together with Form CDB-6