



Bridge #21483(Routine, Underwater type 2, Fracture Critical)

CR 89-D (911=127) over CACHE RIVER

Location: 0.8 MI W OF SH 135

Team Lead: James Adams **Inspection Date:** June 15, 2020



Latitude:36.24173, Longitude:-90.54988

Route:89 Section:00 Log:2.08

Arnold Road ID:28xGREENE127RDx1xA, Arnold Log mile:0.837

District 10, Greene County

Owner: 2-County Highway Agency



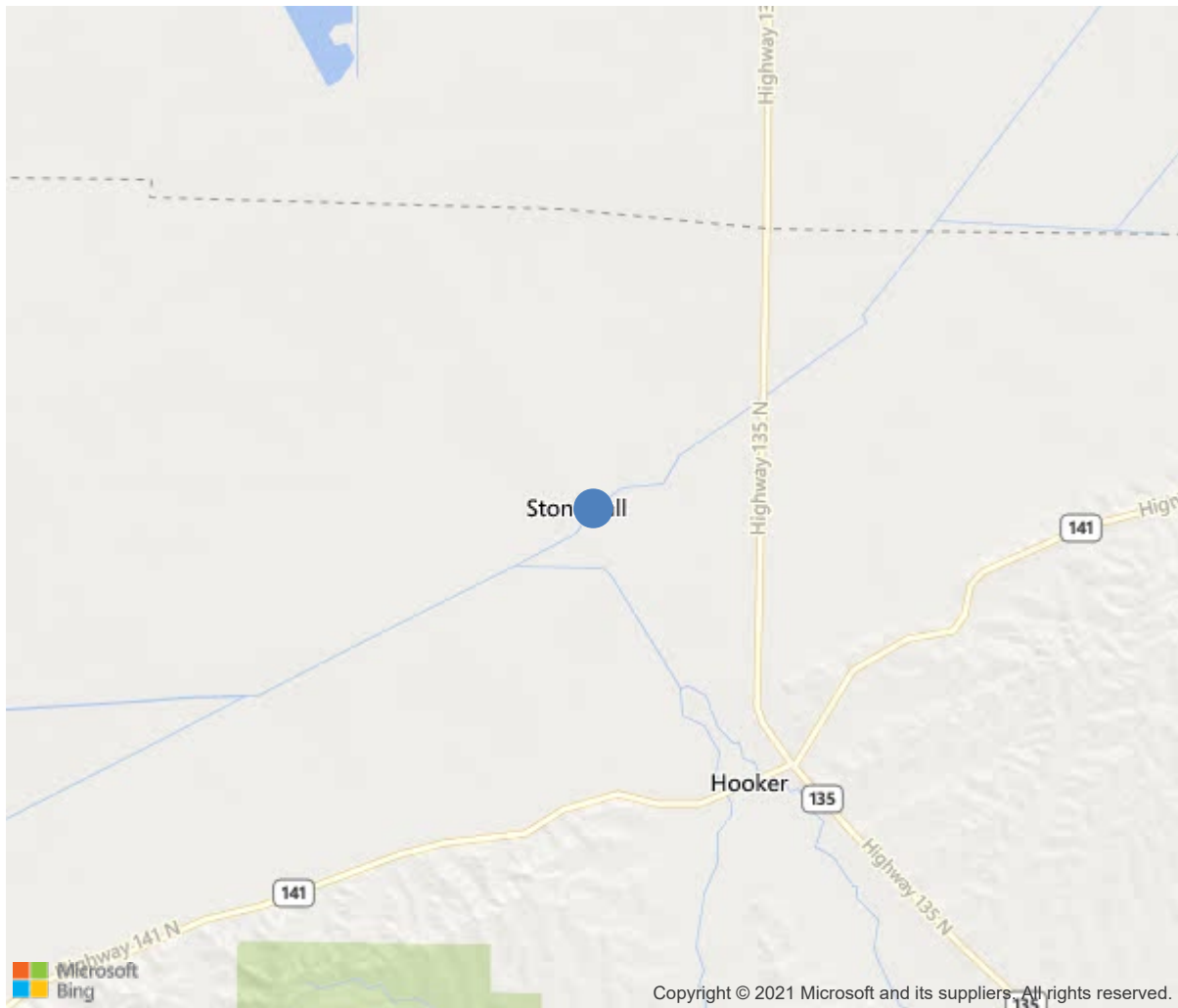
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IDENTIFICATION	
(1) State Names	Arkansas
(8) Structure Number	21483
(5) Inventory Route	89
(2) Highway Agency District	10
(3) County Code	55-Greene County, Arkansas
(4) Place Code	0
(6) Features Intersected	CACHE RIVER
(7) Facility Carried	CR 89-D (911=127)
(9) Location	0.8 MI W OF SH 135
(11) Mile Point	2.08 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	36.2417333333333
(17) Longitude	-90.5498833333333
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	32
Material	3-Steel
Type	2-Stringer/Multi-beam or girder
(44) Approach Structure Type	00
Material	0-Other
Type	0-Other
(45) No. of Spans in Main Unit	5
(46) No. of Approach Spans	0
(107) Deck Structure Type	1-Concrete Cast-in-Place
(108) Wearing Surface/Protective System	
Type of Wearing Surface	6-Bituminous
Type of Membrane	0-None
Type of Deck Protection	0-None
AGE AND SERVICE	
(27) Year Built	1994
(106) Year Reconstructed	0
(42) Type of Service	15
On	1-Highway
Under	5-Waterway
(28) Lane	
On	2
Under	0
(29) Average Daily Traffic	159
(30) Year of ADT	1987
(109) Truck ADT	1 %
(19) Bypass, Detour Length	2 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	39 ft
(49) Structure Length	148 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	27.6 ft
(52) Deck Width Out to Out	28 ft
(32) Approach Roadway Width (W/Shoulders)	24 ft
(33) Bridge Median	0-No median
(34) Skew	23 Deg
(35) Structure Flared	No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	27.6 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	0 ft
Ref:	
(55) Min Lat Underclear RT	99.9 ft
Ref:	
(56) Min Lat Underclear LT	0 ft
NAVIGATION DATA	
(38) Navigation Control	0-No navigation control on water
(111) Pier Protection	5-None present but re-evaluation
(39) Navigation Vertical Clearance	0 ft
(116) Vert-Lift Bridge Nav Min Vert Clear	0 ft
(40) Navigation Horizontal Clearance	0 ft

CLASSIFICATION	
(112) NBIS Bridge Length	Y
(104) Highway System	0
(26) Functional Class	8-Rural Minor Collector
(100) Defense Highway	0-The inventory route is not a S
(101) Parallel Structure	N-No parallel structure exists.
(102) Direction of Traffic	2 - way traffic
(103) Temporary Structure	
(105) Federal Lands Highways	0-N/A
(110) Designated National Network	0-The inventory route is not part of
(20) Toll	3-On free road. The structure is toll-
(21) Maintain	2-County Highway Agency
(22) Owner	2-County Highway Agency
(37) Historical Significance	4-Historical significance is not dete
CONDITION	
(58) Deck	6
(59) Superstructure	7
(60) Substructure	6
(61) Channel & Channel Protection	5
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	0-Other or Unknown
(63) Operating Rating Method	1
(64) Operating Rating	
Type	1-Load Factor(LF)
Rating	42
(65) Inventory Rating Method	1-Load Factor(LF)
(66) Inventory Rating	
Type	5
Rating	25
(70) Bridge Posting	5-Equal to or above legal loads
(41) Structure Open/Posted/Closed	A-Open, no restriction
APPRAISAL	
(67) Structural Evaluation	6
(68) Deck Geometry	5
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	8
(72) Approach Roadway Alignment	7
(36A) Bridge Railings	0-Inspected feature does not meet cur
(36B) Transitions	0-Inspected feature does not meet cur
(36C) Approach Guardrail	0-Inspected feature does not meet cur
(36D) Approach Guardrail Ends	0-Inspected feature does not meet cur
(113) Scour Critical Bridges	5-Bridge foundations determined to be
PROPOSED IMPROVEMENTS	
(75) Type of Work	
(76) Length of Structure Improvement	0 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 0
(96) Total Project Cost	\$ 0
(97) Year of Improvement Cost Estimate	
(114) Future ADT	213
(115) Year of Future ADT	2007
INSPECTIONS	
(90) Inspection Date	06/2020
(91) Frequency	24 Months
(92) Critical Feature Inspection	Done Freq. (Mon) Date
A: Fracture Critical Detail	Yes 24 06/2020
B: Underwater Inspection	Yes 0 /
C: Other Special Inspection	No 0



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Maintenance Needs

Date Reported: 07/05/2012
Priority: C - Important
Type of Work: None
Status: Monitor
Component:

Deficiency Description

Large drift buildup at bents 3, 4, and on embankment around 5 & across span 2. See 2019 photo.

Remarks



Bent 3 drift



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Date Reported: 07/01/2014
Priority: C - Important
Type of Work: None
Status: Monitor
Component:

Deficiency Description

Piling at bents 2 - 4 have 3' -5' of pitting and section loss near ground line.

Remarks



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Date Reported: 07/01/2014

Priority: G - General/ Preventive maintenance

Type of Work: None

Status: Monitor

Component:

Deficiency Description

Stay in place metal deck forms have areas of section loss over bents. Deck has some leakage with efflorescence buildup on girders.

Remarks



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Date Reported: 07/01/2014
Priority: C - Important
Type of Work: None
Status: Monitor
Component:

Deficiency Description

Some moderate channel scour with rip rap displacement has occurred since 2012 inspection under span 3 at toe of slope with 3 - 4 ft. loss of pile penetration on channel side of piles, see 2014 photo.

Remarks



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Inspection Comments

Deck Notes

Routine, underwater type 2 & fracture critical inspection.

Wearing surface has longitudinal and transverse cracks. Left and right edges of deck have map cracking, delaminated areas, and a few spalled areas.

Bridge rails are bowed at the top and have a few broken welds.

Stay in place metal deck forms have areas of section loss over bents. Deck has some leakage with efflorescence buildup on girders.

Superstructure Notes

Girders have surface rust with some initial section loss over bents. Span 3 girder 9 near mid span has a broken weld at utility connection.

Substructure Notes

Fracture critical inspection report due to steel caps.

Steel caps are rusted with some pitting.

large drift at bent 3.

Piling at bents 2 - 4 have 3 ft.-5 ft. of pitting and section loss near ground line.

High water has left debris on caps and in between girders.

Large drift buildup at bents 3, 4, and on embankment around 5 & across span 2.

Some moderate channel scour with riprap displacement has occurred since 2012 inspection.

Scour at bent 2 has caused loss of pile penetration (8'-9') since sounding of 07-07-2010 as previously reported.

Trees growing beside bridge.