



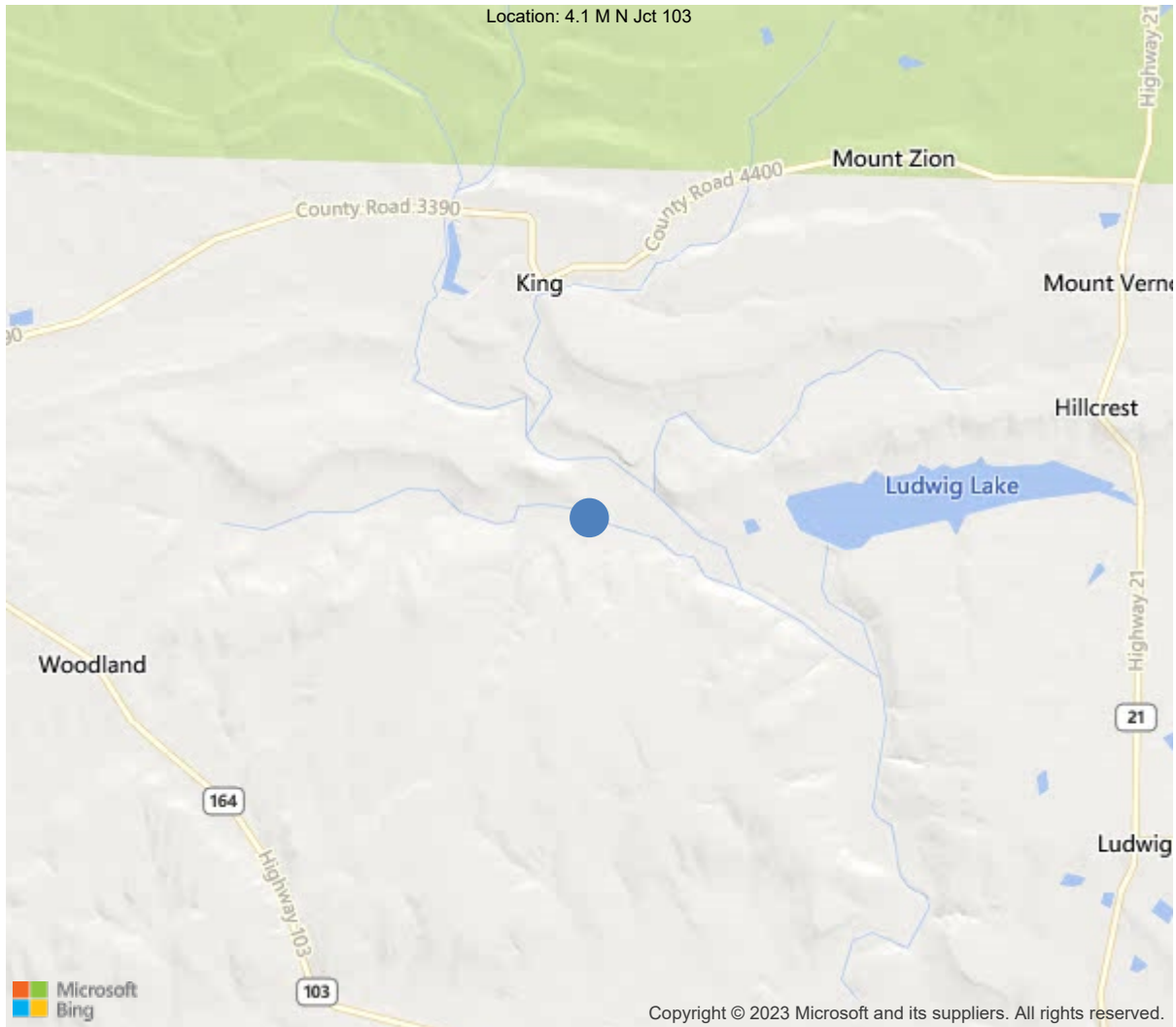
Latitude:35.53450, Longitude:-93.47694

Route:77 Section:00 Log:4.109

Arnold Road ID:36xCOUNTY3451RDx2xA, Arnold Log mile:2.698

District 08, 71 - Johnson County

Owner: 2 - County Highway Agency



35.53450, -93.47694





**Asset #14369(Routine)**  
**CR 3451 over Curtis Creek**  
**Location: 4.1 M N Jct 103**

**Team Lead: Kevin Milligan, Inspection Date: 02/13/2023**

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	14369
(5) Inventory Route	1
(2) Highway Agency District	08 - District 08
(3) County Code	71 - Johnson County
(4) Place Code	0
(6) Features Intersected	Curtis Creek
(7) Facility Carried	CR 3451
(9) Location	4.1 M N Jct 103
(11) Mile Point	4.109 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	35.5345
(17) Longitude	-93.47694
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	122
Material	1 - Concrete
Type	22 - Channel beam
(44) Approach Structure Type	00
Material	0 - Other
Type	0 - Other
(45) No. of Spans in Main Unit	2
(46) No. of Approach Spans	0
(107) Deck Structure Type	2 - Concrete Precast Panels
(108) Wearing Surface/Protective System	
Type of Wearing Surface	1 - Monolithic Concrete (concurrently pl
Type of Membrane	0 - None
Type of Deck Protection	0 - None
AGE AND SERVICE	
(27) Year Built	1978
(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	904
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	5 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	15 ft
(49) Structure Length	30 ft
(50) Curb or Sidewalk Width	
Left	0.5 ft
Right	0.5 ft
(51) Bridge Roadway Width Curb to Curb	20.7 ft
(52) Deck Width Out to Out	21.7 ft
(32) Approach Roadway Width (W/Shoulders)	24 ft
(33) Bridge Median	0 - No median
(34) Skew	10 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	99.9 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	0 ft
Ref:	
(55) Min Lat Underclear RT	0 ft
Ref:	
(56) Min Lat Underclear LT	0 ft
NAVIGATION DATA	
(38) Navigation Control	0 - No navigation control on w
(111) Pier Protection	1 - Navigation protection not
(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
(101) Parallel Structure	N - No parallel structure exis
(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
(20) Toll	3 - On free road. The structu
(21) Maintain	2 - County Highway Agency
(22) Owner	2 - County Highway Agency
(37) Historical Significance	4 - Historical significance is
CONDITION	
(58) Deck	7
(59) Superstructure	7
(60) Substructure	5
(61) Channel & Channel Protection	7
(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	39
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	24
(70) Bridge Posting	5 - Equal to or above legal loads
(41) Structure Open/Posted/Closed	A - Open, no restriction
APPRAISAL	
(67) Structural Evaluation	5
(68) Deck Geometry	4
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	7
(72) Approach Roadway Alignment	4
(36A) Bridge Railings	0 - Inspected feature does not meet
(36B) Transitions	0 - Inspected feature does not meet
(36C) Approach Guardrail	0 - Inspected feature does not meet
(36D) Approach Guardrail Ends	0 - Inspected feature does not meet
(113) Scour Critical Bridges	7 - Countermeasures have been insta
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	182
(115) Year of Future ADT	2007

INSPECTIONS *			
(90) Inspection Date	02/13/2023		
(91) Frequency	24		
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	No		
C: Other Special Inspection			
* The inspection date and frequency information in this box contains the current NBI date and frequency information. Please refer to the report header for the date this inspection was conducted.			



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**58 - Deck** (7 - GOOD CONDITION - some minor problems.)

Wearing surface has a few minor cracks.

Beginning of the bridge left side curb has moderate spalling with exposed rebar.

End of bridge on the right (east) side curb has approximately 8 ft. of moderate spalling with exposed rebar that is bent outward.

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**59 - Superstructure** (7 - GOOD CONDITION - some minor problems.)

Channel units are not transverse bolted but are long bolted.

Span #1 channel unit #1 has a couple very minor spalls, this is typical in a few areas of channel units throughout both spans.

Span #1, channel unit #6 has some minor efflorescence in the soffit area.

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**60 - Substructure** (5 - FAIR CONDITION - all primary structural elements are sound but may have minor section loss, cracking, spalling or scour.)

Abutment #1 has some minor to moderate cracks in the mortar joints.

Pier #2 back side is missing grout in all the lower section of the pier wall, this is typical on the ahead side.

Abutment #3 has cracks in the mortar joints, also it has missing mortar in some joints and missing masonry stones in a few areas.

Abutment #3 right end has a wide crack in the mortar joints.

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**61 - Channel/Channel Protection** (7 - Bank protection is in need of minor repairs. River control devices and embankment protection have a little minor damage. Banks and/or channel have minor amounts of drift.)

GRAVEL & ROCK - NO SCOUR.

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**A-46 - Asset Files**

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**A-B.C.11 - B.C.11 Scour Condition Rating (New NBIS)** (8 - Insignificant scour.)

Insignificant scour in span #1, no undermining.

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Team Lead: Kevin Milligan, Inspection Date: 02/13/2023

## Deck

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4

**58 - Deck** (7 - GOOD CONDITION - some minor problems.)

Comment: Wearing surface has a few minor cracks.

Beginning of the bridge left side curb has moderate spalling with exposed rebar.

End of bridge on the right (east) side curb has approximately 8 ft. of moderate spalling with exposed rebar that is bent outward.



Team Lead: Kevin Milligan, Inspection Date: 02/13/2023

## Superstructure

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## Substructure

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Comment: Abutment #1 has some minor to moderate cracks in the mortar joints.

Pier #2 back side is missing grout in all the lower section of the pier wall, this is typical on the ahead side.

Abutment #3 has cracks in the mortar joints, also it has missing mortar in some joints and missing masonry stones in a few areas.

Abutment #3 right end has a wide crack in the mortar joints.

**61 - Channel/Channel Protection** (7 - Bank protection is in need of minor repairs. River control devices and embankment protection have a little minor damage. Banks and/or channel have minor amounts of drift.)

Comment: GRAVEL & ROCK - NO SCOUR.





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Location: 4.1 M N Jct 103

Team Lead: Kevin Milligan, Inspection Date: 02/13/2023

Culvert

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4



Elevation



Inventory



Wearing surface has a few minor cracks in places.



End of bridge on the right (east) side curb has approximately 8 ft. of moderate spalling with exposed rebar that is bent outward.





Beginning of the bridge left side curb has moderate spalling with exposed rebar.



Span #1 channel unit #1 has a couple very minor spalls, this is typical in a few areas of channel units throughout both spans.



Span #1, channel unit #6 has some minor efflorescence in the soffit area.



Abutment #3 right end has a large crack in the mortar joints.





Abutment #1 has some minor to moderate cracks in the mortar joints in a few places.



Abutment #3 has cracks in the mortar joints, has missing mortar in some joints and missing masonry stones in a few areas.



Pier #2 back side is missing grout in all the lower section of the pier wall, this is typical on the ahead side.



Insignificant scour in span #1, no undermining.



**Maintenance Needs**

**Date Reported:** 02/13/2023

**Priority:** D- Routine

**Status:** Open

**Type of Work:** Approach Leveling/Maintenance

**Component:**

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**Deficiency Description**

Beginning of the bridge (south end) has some moderate erosion that has created a hole approximately 2 ft. deep by 2 ft. across on the west side.

There is also approximately 2-3" of settlement on the south/east side.

**Remarks**

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Beginning of the bridge (south end) has some moderate erosion that has created a hole approximately 2 ft. deep by 2 ft. across on the west side.



There is approximately 2-3" of settlement on the south/east side at the beginning of the bridge.

**Maintenance Needs**

**Date Reported:** 02/13/2023

**Priority:** D- Routine

**Type of Work:** Miscellaneous

**Status:** Open

**Component:** Miscellaneous

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**Deficiency Description**

End of bridge on the right (east) side curb has approximately 8 ft. of moderate spalling with exposed rebar that is bent up and outwards.

**Remarks**

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End of bridge on the right (east) side curb has approximately 8 ft. of moderate spalling with exposed rebar that is bent outward.



**Maintenance Needs**

**Date Reported:** 02/13/2023

**Priority:** C - Important

**Type of Work:** Substructure Repair

**Status:** Open

**Component:** Substructure

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**Deficiency Description**

Pier #2 back side is missing grout in all the lower section of the pier wall, this is typical on the ahead side.

**Remarks**

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Pier #2 back side is missing grout in all the lower section of the pier wall, this is typical on the ahead side.



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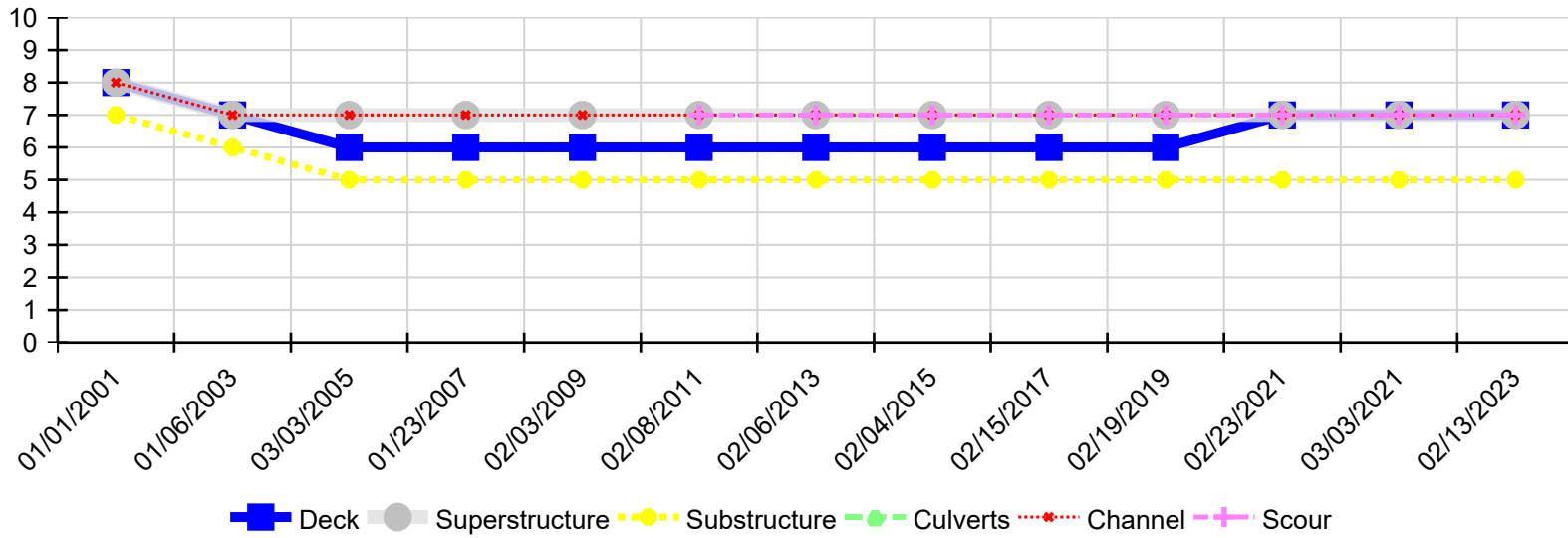
**Team Lead:** Kevin Milligan, **Inspection Date:** 02/13/2023

## **Routine Maintenance**

Check Box Maintenance Items

Type of Maintenance	Is recommended?
A-54 - Sealable Deck Cracks	
A-55 - Deck Washing Needed	
A-56 - Joint Cleaning/Flushing Needed	
A-57 - Beam End and Bearing Paint Needed	
A-58 - Cap Cleaning/Flushing Needed	
A-59 - Joint Repair Needed	
A-60 - Full Beam Painting Needed	
A-61 - Polymer Overlay Advised	
A-62 - Hydro and LMC Advised	

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
02/13/2023	7	7	5	N	7	7
03/03/2021	7	7	5	N	7	7
02/23/2021	7	7	5	N	7	7
02/19/2019	6	7	5	N	7	7
02/15/2017	6	7	5	N	7	7
02/04/2015	6	7	5	N	7	7
02/06/2013	6	7	5	N	7	7
02/08/2011	6	7	5	N	7	7
02/03/2009	6	7	5	N	7	N
01/23/2007	6	7	5	N	7	N
03/03/2005	6	7	5	N	7	N
01/06/2003	7	7	6	N	7	N
01/01/2001	8	8	7	N	8	N