



Latitude:36.04158, Longitude:-93.70422

Route:23 Section:08 Log:23.79

Arnold Road ID:44x23x8xA, Arnold Log mile:23.687

District 09, Madison County

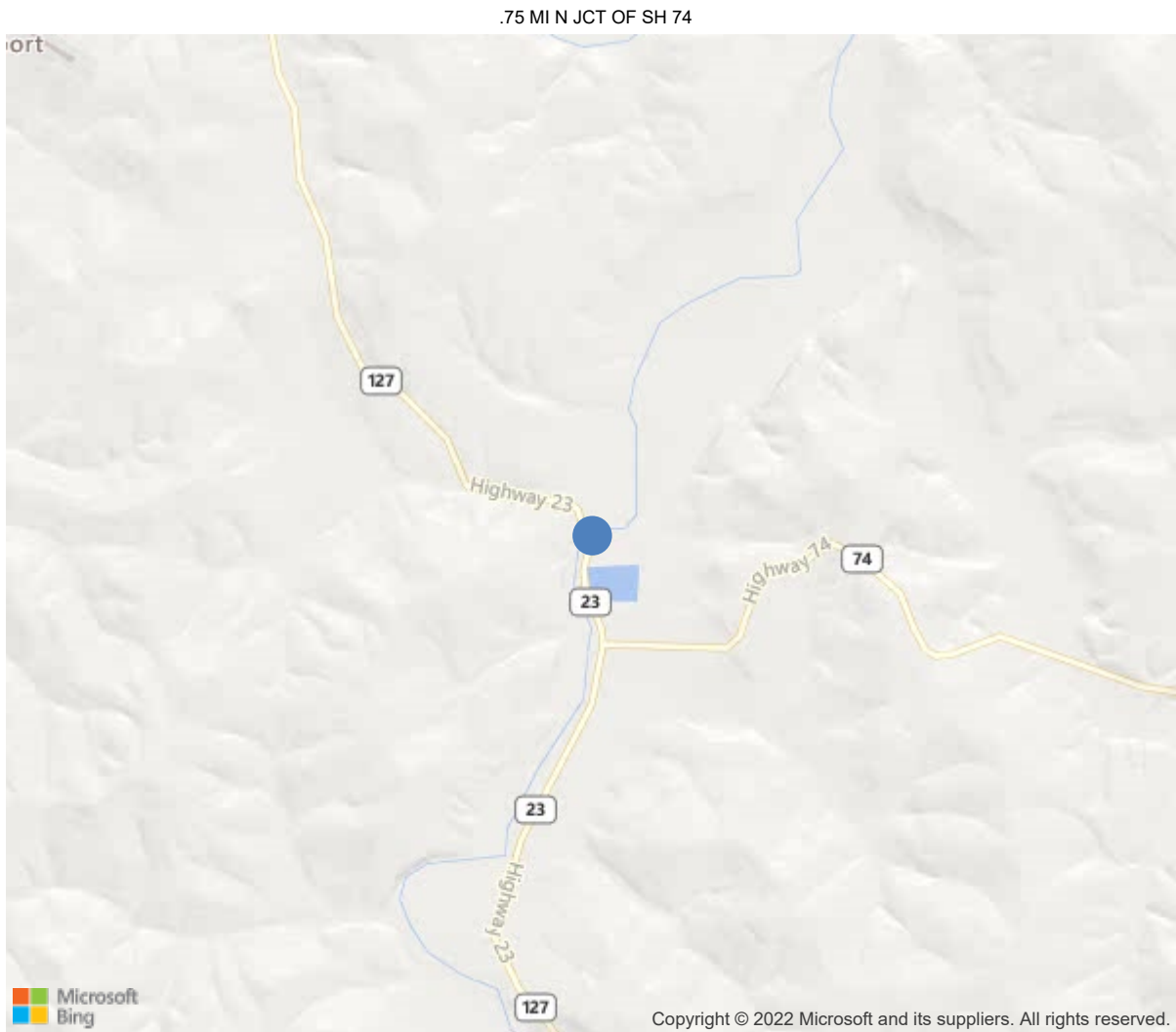
Owner: 1-State Highway Agency



Bridge #07346(Routine, Underwater type 2)
SH 23 - Madison Co over WAR EAGLE CREEK

Location: .75 MI N JCT OF SH 74

Team Lead: Nathan Rowland **Inspection Date:** August 16, 2021



36.04158, -93.70422

Inspection Direction : S to N



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Location: .75 MI N JCT OF SH 74

Team Lead: Nathan Rowland Inspection Date: August 16, 2021

IDENTIFICATION	
(1) State Names	Arkansas
(8) Structure Number	07346
(5) Inventory Route	23
(2) Highway Agency District	09
(3) County Code	87-Madison County, Arkansas
(4) Place Code	0
(6) Features Intersected	WAR EAGLE CREEK
(7) Facility Carried	SH 23 - Madison Co
(9) Location	.75 MI N JCT OF SH 74
(11) Mile Point	23.79 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000023080
(16) Latitude	36.04158
(17) Longitude	-93.70422
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	42
Material	4-Steel continuous
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	6
(46) No. of Approach Spans	0
(107) Deck Structure Type	1-Concrete Cast-in-Place
(108) Wearing Surface/Protective System	
Type of Wearing Surface	0-None (no additional concrete thickness o
Type of Membrane	0-None
Type of Deck Protection	1-Epoxy Coated Reinforcing
AGE AND SERVICE	
(27) Year Built	2017
(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	3700
(30) Year of ADT	2015
(109) Truck ADT	14 %
(19) Bypass, Detour Length	13 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	80 ft
(49) Structure Length	452 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	38.8 ft
(52) Deck Width Out to Out	43.2 ft
(32) Approach Roadway Width (W/Shoulders)	40 ft
(33) Bridge Median	0-No median
(34) Skew	0 Deg
(35) Structure Flared	No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	40 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	1-Navigation protection not requ
(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	6-Rural Minor Arterial
(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	1-State Highway Agency
(22) Owner	1-State Highway Agency
(37) Historical Significance	5-Bridge is not eligible for the NRHP
CONDITION	
(58) Deck	9
(59) Superstructure	8
(60) Substructure	9
(61) Channel & Channel Protection	7
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	A-HL93
(63) Operating Rating Method	3
(64) Operating Rating	
Type	3-Load and Resistance Factor(LRFR)
Rating	60
(65) Inventory Rating Method	3-Load and Resistance Factor(LRF
(66) Inventory Rating	
Type	6
Rating	36
(70) Bridge Posting	5-Equal to or above legal loads
(41) Structure Open/Posted/Closed	A-Open, no restriction
APPRAISAL	
(67) Structural Evaluation	8
(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	8-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	0
(114) Future ADT	4500
(115) Year of Future ADT	2035

INSPECTIONS *			
(90) Inspection Date	08/2021		
(91) Frequency	24 Months		
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	No		
C: Other Special Inspection	No		
* 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.			

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	19428	18130	1298	0	0
1120	Efflorescence/Rust Staining	SF	204	0	204	0	0
1130	Cracking (RC and Other)	SF	1094	0	1094	0	0
(12)							
08/16/2021 WNR & DBM: -The left and right lane have a full length longitudinal crack adjacent to the white line. -The deck has numerous short duration transverse cracks in the right and left gutters. The cracks propagate vertically into the concrete bridge railing in locations. -The left and right overhangs have efflorescence and cracking the entire length of structure.							
107	Steel Open Girder/Beam	LF	2250	2249	1	0	0
1020	Connection	LF	1	0	1	0	0
515	Steel Protective Coating	SF	27298	27298	0	0	0
(107)							
08/16/2021 WNR & DBM: - The exterior sides of Girder #5 web has insignificant scrape marks on approximately 5" spacing in all spans that appear to be from the kick jacks during the construction process.. -The protective weathering patina is not fully developed on the diaphragms in several locations. -Span #4, Girder #5 has one loose bolt in the splice connection in vertical splice plate.							
205	Reinforced Concrete Column	EA	5	4	1	0	0
1080	Delamination/Spall/Patched Area	EA	1	0	1	0	0
(205)							
08/16/2021 WNR & DBM: -Bent #5 column has apparent collision damage that has created minor concrete section loss in an area approximately 1' long, 2" wide and 1/2" deep located approximately 4' up from the base of column on the ahead side. -The columns have localized scour holes at the bases of columns #3 and #4. Scour holes are approximately 1' deep at this inspection.							
215	Reinforced Concrete Abutment	LF	84	68	16	0	0
1080	Delamination/Spall/Patched Area	LF	1	0	1	0	0
1130	Cracking (RC and Other)	LF	15	0	15	0	0
(215)							
08/16/2021 WNR & DBM: -The top of abutment backwalls have hairline transverse cracks visible from the driving surface on approximately 4' spacing. -The backwall of abutment #1 has a vertical crack with efflorescence in bay #2 visible from under structure. -The back wall of abutment #2 has a spall due to traffic approximately 1'x1'.							
234	Reinforced Concrete Pier Cap	LF	205	205	0	0	0
(234)							
08/16/2021 WNR & DBM: -No noteworthy deficiencies at this inspection.							

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ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
301 (301)	Pourable Joint Seal	LF	86	86	0	0	0
08/16/2021 WNR & DBM: - No noteworthy deficiencies at this inspection.							
310 (310)	Elastomeric Bearing	EA	35	35	0	0	0
08/16/2021 WNR & DBM: -The moveable bearings are in the neutral position at time of inspection. Ambient temperature is approximately 85 degrees.							
331	Reinforced Concrete Bridge Railing	LF	900	783	117	0	0
1130 (331)	Cracking (RC and Other)	LF	117	0	117	0	0
08/16/2021 WNR & DBM: - The concrete bridge railing has vertical cracks that correspond with the sawn joints and at the corners of the deck drains and at other random locations.							



Abutment #1 general view.



Span #3 typical view of superstructure.



View of span #4 superstructure.



Behind side of bent #5.



View of abutment #2.



The back wall of abutment #2 has a spall due to traffic approximately 1'x1'.



General view of deck of abutment #2 joint.



Typical full length longitudinal cracking.



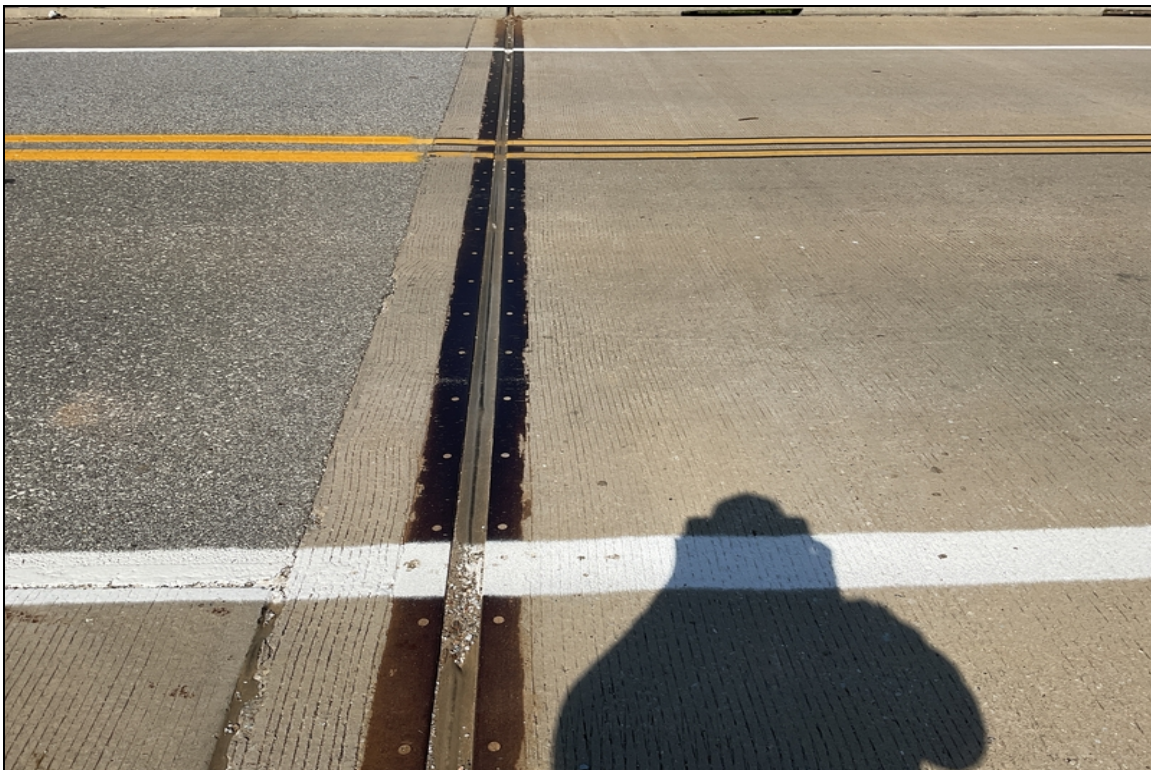
Upstream view



Downstream view



Inventory looking north



View of joint at abutment #1.



General view of deck



Inventory Looking North



The left and right overhangs have efflorescence and cracking throughout the structure.



View of bridge-mounted directional signs.



Contractor forces have placed a type of sealant as a repair to the cracking in the gutter line.



Typical scour hole around bents



Drift accumulation against bent #4.



General view of the channel



General view of deck



General view of abutment #1



Elevation looking East

Maintenance Needs

Date Reported: 09/11/2017
Priority: D- Routine
Type of Work: None
Status: Repair Documented
Inspection Direction S to N
Component:

Deficiency Description

Substructure - The channel has localized scour at bents #3 and #4. The scour holes are approximately 4' deep at this inspection.

Remarks

Under contract. Job 090343. Maintenance Needs will be forwarded to RE #92, Stacy Burge, for handling by the Contractor.

10/13/17 WNR: Contractor placed natural fill into scoured hole.

10/13/17 WNR: Contractor placed natural fill into scoured hole.



Bent #4 - localized scouring approximately 4'.
photo #2.



Bent #4 - localized scouring approximately 4'.
photo #1.



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Team Lead: Nathan Rowland **Inspection Date:** August 16, 2021

Date Reported: 08/16/2021
Priority: D- Routine
Type of Work: Replace
Status: Open
Inspection Direction S to N
Component: Miscellaneous

Deficiency Description

Log mile marker missing at beginning of bridge (south end). Log mile should read + 23.79

Remarks



Log mile signs missing.



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Inspection Comments

08/16/2021 WNR & DBM: Routine and Underwater Type II inspection conducted this date. See element notes for documentation.

Logged South to North.