



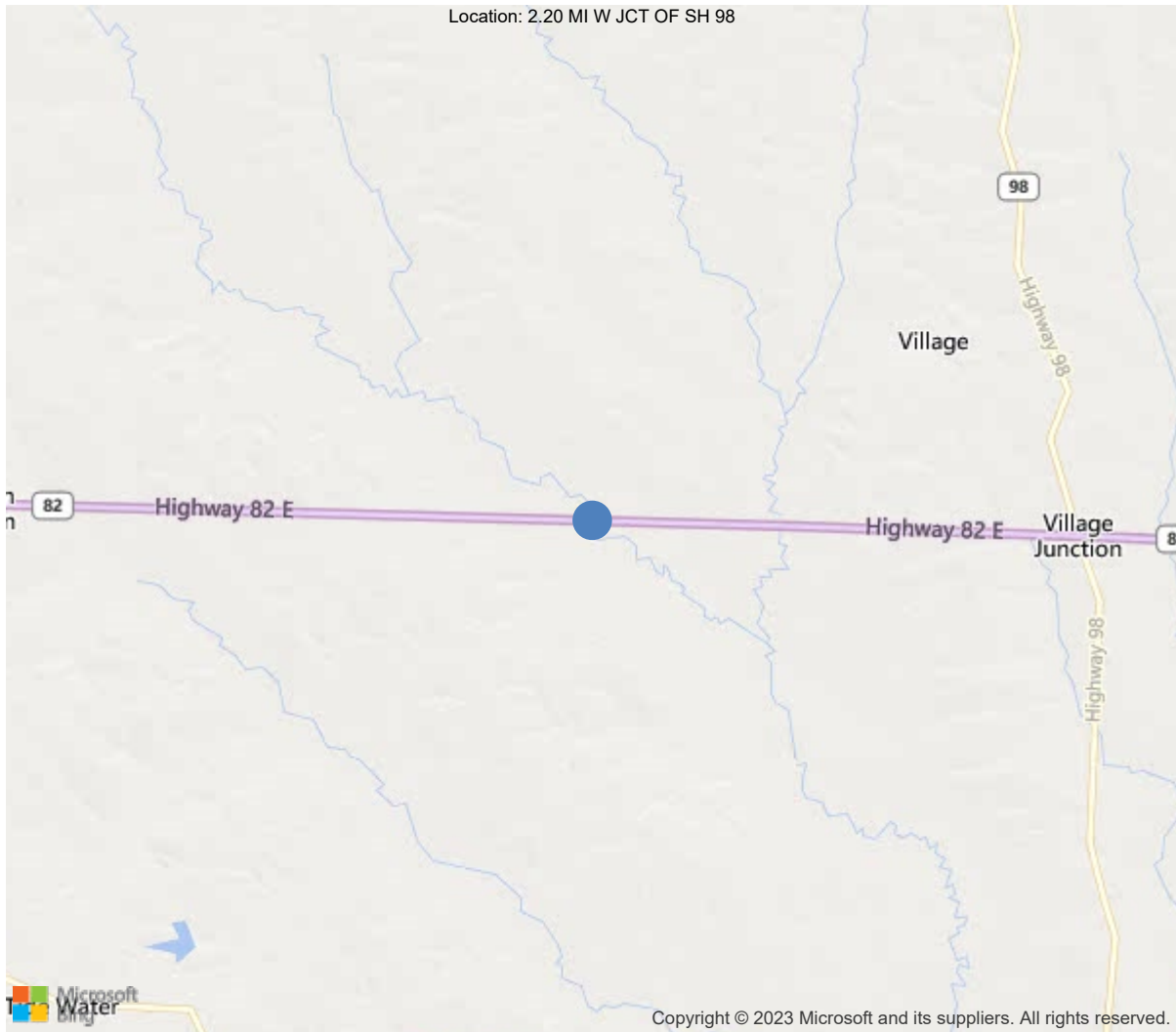
Latitude:33.25028, Longitude:-93.09370

Route:82 Section:04 Log:9.438

Arnold Road ID:14x82x4xA, Arnold Log mile:9.44

District 07, 27 - Columbia County

Owner: 1 - State Highway Agency



33.25028, -93.09370



Asset #02667 (Routine, Underwater type 2)
US 82 S-4 LM 9.43 over BIG CORNIE CREEK

Location: 2.20 MI W JCT OF SH 98

Team Lead: Rickie Bratton, Inspection Date: 02/23/2022

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	02667
(5) Inventory Route	1
(2) Highway Agency District	07 - District 07
(3) County Code	27 - Columbia County
(4) Place Code	0
(6) Features Intersected	BIG CORNIE CREEK
(7) Facility Carried	US 82 S-4 LM 9.43
(9) Location	2.20 MI W JCT OF SH 98
(11) Mile Point	9.438 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000082040
(16) Latitude	33.250275
(17) Longitude	-93.093704
(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	4
(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	1950
(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	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	12 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	32 ft
(49) Structure Length	130 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	25.9 ft
(52) Deck Width Out to Out	31.7 ft
(32) Approach Roadway Width (W/Shoulders)	38.1 ft
(33) Bridge Median	0 - No median
(34) Skew	0 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	28.9 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 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	1
(26) Functional Class	2 - Rural Principal Arterial -
(100) Defense Highway	0 - The inventory route is not
(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	1 - The inventory route is par
(20) Toll	3 - On free road. The structu
(21) Maintain	1 - State Highway Agency
(22) Owner	1 - State Highway Agency
(37) Historical Significance	5 - Bridge is not eligible for
CONDITION	
(58) Deck	6
(59) Superstructure	6
(60) Substructure	5
(61) Channel & Channel Protection	7
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	4 - M 18 / H 20
(63) Operating Rating Method	1
(64) Operating Rating	
Type	1 - Load Factor(LF)
Rating	47
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	28
(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	3
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	7
(72) Approach Roadway Alignment	7
(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	5 - Bridge foundations determined t
PROPOSED IMPROVEMENTS	
(75) Type of Work	31 - Replacement of bridge or
(76) Length of Structure Improvement	159 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 400
(96) Total Project Cost	\$ 1048
(97) Year of Improvement Cost Estimate	2002
(114) Future ADT	4925
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	02/23/2022		
(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.			



Asset #02667 (Routine, Underwater type 2)

District: 07, County: 27 - Columbia County

Team Lead: Rickie Bratton, Inspection Date: 02/23/2022

General Observation

Logged west to east.

58 - Deck (6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.)

Deck has a overlay

59 - Superstructure (6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.)

KRM & ADC 2/26/2020 Changed the NBI rating to a 6, due to the repairs to beam ends.

A-46 - Asset Files

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Asset #02667 (Routine, Underwater type 2)

US 82 S-4 LM 9.43 over BIG CORNIE CREEK

Location: 2.20 MI W JCT OF SH 98

Team Lead: Rickie Bratton, Inspection Date: 02/23/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	3510	3470	40	0	0
1080	Delamination/Spall/Patched Area	SF	2	0	2	0	0
1090	Exposed Rebar	SF	3	0	3	0	0
1120	Efflorescence/Rust Staining	SF	35	0	35	0	0
510	Wearing Surfaces	SF	3358	3133	225	0	0
3220	Crack (Wearing Surface)	SF	225	0	225	0	0
(12) KRM & ADC Deck has a wearing surface, wearing surface has large transverse cracks in all spans. Soffits have a few efflorescence cracks and spalls with exposed reinforcing steel. under side of curbs have areas of exposed reinforcing steel.							
107	Steel Open Girder/Beam	LF	650	517	120	13	0
1000	Corrosion	LF	133	0	120	13	0
515	Steel Protective Coating	SF	3959	1580	2299	80	0
3420	Peeling/Bubbling/Cracking	LF	3959	1580	2299	80	0
(107) KRM & ADC 2/26/2020 Beam ends have been repaired in the past, some areas of minor section loss at beam ends and light corrosion throughout webs and bottom flanges.							
Some of the beams have been tee spliced. Most of the beam ends have light rust with a few beginning to have flaking rust.							
215	Reinforced Concrete Abutment	LF	76	76	0	0	0
(215) KRM & ADC 2/26/2020 East abutment has erosion on right side under wing wall.							
227	Reinforced Concrete Pile	EA	12	8	4	0	0
1190	Abrasion/Wear (PSC/RC)	EA	4	0	4	0	0
(227) KRM & ADC 2/26/2020 Bent 3, all piles have abrasion.							
234	Reinforced Concrete Pier Cap	LF	81	52	20	9	0
1080	Delamination/Spall/Patched Area	LF	6	0	6	0	0
1090	Exposed Rebar	LF	3	0	0	3	0
1120	Efflorescence/Rust Staining	LF	9	0	9	0	0
1130	Cracking (RC and Other)	LF	11	0	5	6	0
(234) KRM & ADC 2/26/2020 Caps have efflorescence cracks, exposed reinforcing steel. Bents 2, 3 and 4 at girder 1, there are delaminated areas in and around the bearing.							
Bent 2 Cap cracked between Piling 1 & 2. Bent 3 cap, right end with spall and exposed rebar. Bent 4, bottom of cap spalls with exposed rebar.							
305	Assembly Joint without Seal	LF	159	0	0	159	0
2350	Debris Impaction	LF	159	0	0	159	0

Team Lead: Rickie Bratton, **Inspection Date:** 02/23/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
(305) KRM & ADC 2/26/2020 Joints are full of debris.							
There is an ACHM overlay on this bridge, that goes over the joints thus restricting the free movement some.							
311	Movable Bearing	EA	20	0	4	16	0
1000	Corrosion	EA	20	0	4	16	0
(311) KRM & ADC 2/26/2020 All bearings have corrosion some with section loss.							
313	Fixed Bearing	EA	20	0	13	7	0
1000	Corrosion	EA	20	0	13	7	0
(313) KRM & ADC 2/26/2020 All bearings have corrosion some with section loss.							
330	Metal Bridge Railing	LF	260	250	10	0	0
7000	Damage	LF	10	0	10	0	0
515	Steel Protective Coating	SF	650	250	400	0	0
3440	Effectiveness (Steel Protective Coatings)	LF	400	0	400	0	0
(330) KRM & ADC 2/26/2020 Metal guard rail has minor corrosion, left side has 2 areas of collision damage,							



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Deck

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	3510	3470	40	0	0
1080	Delamination/Spall/Patched Area	SF	2	0	2	0	0
1090	Exposed Rebar	SF	3	0	3	0	0
1120	Efflorescence/Rust Staining	SF	35	0	35	0	0
510	Wearing Surfaces	SF	3358	3133	225	0	0
3220	Crack (Wearing Surface)	SF	225	0	225	0	0
(12) KRM & ADC Deck has a wearing surface, wearing surface has large transverse cracks in all spans. Soffits have a few efflorescence cracks and spalls with exposed reinforcing steel. under side of curbs have areas of exposed reinforcing steel.							

58 - Deck (6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.)

Comment: Deck has a overlay



Team Lead: Rickie Bratton, Inspection Date: 02/23/2022

Superstructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
107	Steel Open Girder/Beam	LF	650	517	120	13	0
1000	Corrosion	LF	133	0	120	13	0
515	Steel Protective Coating	SF	3959	1580	2299	80	0
3420	Peeling/Bubbling/Cracking	LF	3959	1580	2299	80	0
(107) KRM & ADC 2/26/2020 Beam ends have been repaired in the past, some areas of minor section loss at beam ends and light corrosion throughout webs and bottom flanges.							
Some of the beams have been tee spliced. Most of the beam ends have light rust with a few beginning to have flaking rust.							

59 - Superstructure (6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.)

Comment: KRM & ADC 2/26/2020 Changed the NBI rating to a 6, due to the repairs to beam ends.

Location: 2.20 MI W JCT OF SH 98

Team Lead: Rickie Bratton, **Inspection Date:** 02/23/2022

Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
215	Reinforced Concrete Abutment	LF	76	76	0	0	0
(215) KRM & ADC 2/26/2020 East abutment has erosion on right side under wing wall.							
227	Reinforced Concrete Pile	EA	12	8	4	0	0
1190	Abrasion/Wear (PSC/RC)	EA	4	0	4	0	0
(227) KRM & ADC 2/26/2020 Bent 3, all piles have abrasion.							
234	Reinforced Concrete Pier Cap	LF	81	52	20	9	0
1080	Delamination/Spall/Patched Area	LF	6	0	6	0	0
1090	Exposed Rebar	LF	3	0	0	3	0
1120	Efflorescence/Rust Staining	LF	9	0	9	0	0
1130	Cracking (RC and Other)	LF	11	0	5	6	0
(234) KRM & ADC 2/26/2020 Caps have efflorescence cracks, exposed reinforcing steel. Bents 2, 3 and 4 at girder 1, there are delaminated areas in and around the bearing.							
Bent 2 Cap cracked between Piling 1 & 2.							
Bent 3 cap, right end with spall and exposed rebar.							
Bent 4, bottom of cap spalls with exposed rebar.							



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Culvert

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4



Elevation.



Typical deck



Typical view of under surface.



Deck overview.



Span 2 soffit overview.



Inventory



Approach roadway Eastbound.



Elevation



Typical cracking in wearing surface.



Large patched area at east approach.



Deck soffit span 4 right side has spalls with exposed rebar.



Deck span 3 right side soffit overhang has delams.



Bent girder5 has a tee splice repair.



Bent 4 girder 1 has been painted in past, this area has section in lower part of web.



Bent 2 span 3 beam 1 beam end has corrosion.



East abutment has erosion under wing wall on right side approximately 10' in length



Bent 3 columns have abrasion at waterline.



Back side bent 1 left side 2' delam this is typical on bents 3 and 4.



Bent 4 cap has spalls with exposed rebar on bottom of cap between columns 3&4.



Typical condition of joints.



Typical condition of bearings.



Collision damage to metal rail left side.

Maintenance Needs

Date Reported: 02/27/2012

Priority: D- Routine

Type of Work: (Inactive) (Inactive) 9 - None

Status: Monitor

Component:

Deficiency Description

Bent 2, and bent 5, Caps.
Efflorescent cracks to caps.

Remarks



Bent 2 cap is cracked.



Bent 2 cap cracked between columns 1&2.

Date Reported: 02/23/2022
Priority: C - Important
Type of Work: Repair (General)
Status: Open
Component: Miscellaneous

Deficiency Description

East end left guardrail posts impact damage.

Remarks



East end left guardrail posts impact damage.



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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	



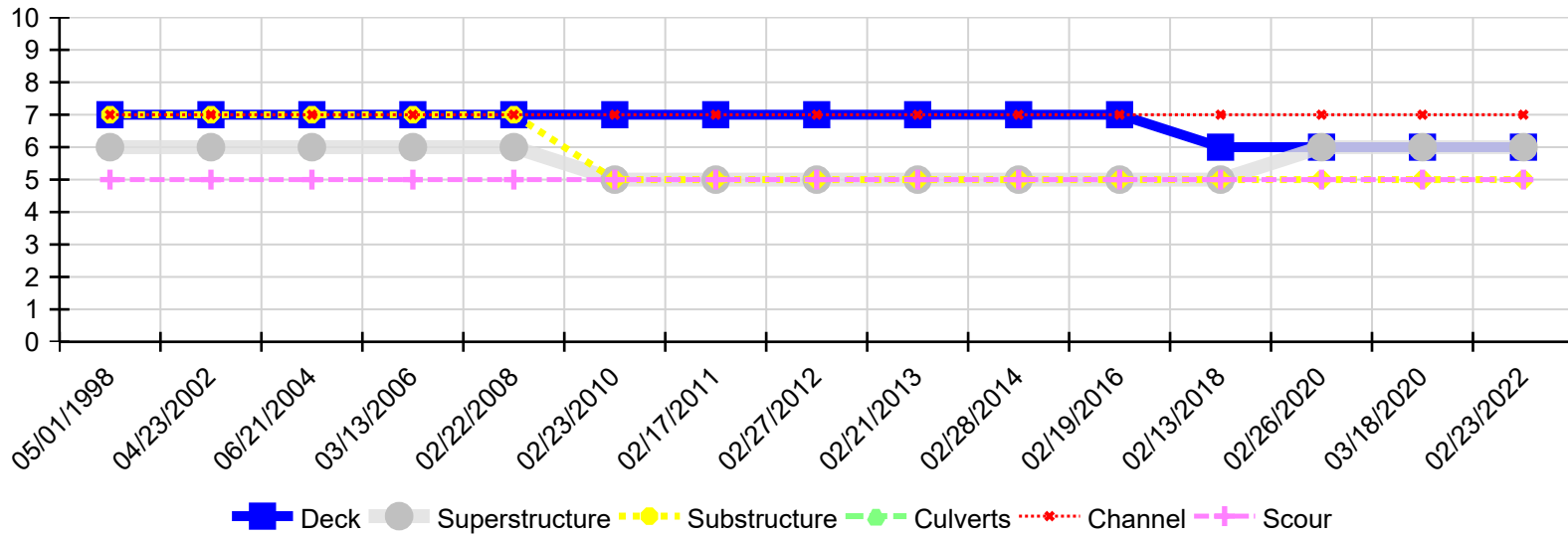
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Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
02/23/2022	6	6	5	N	7	5
03/18/2020	6	6	5	N	7	5
02/26/2020	6	6	5	N	7	5
02/13/2018	6	5	5	N	7	5
02/19/2016	7	5	5	N	7	5
02/28/2014	7	5	5	N	7	5
02/21/2013	7	5	5	N	7	5
02/27/2012	7	5	5	N	7	5
02/17/2011	7	5	5	N	7	5
02/23/2010	7	5	5	N	7	5
02/22/2008	7	6	7	N	7	5
03/13/2006	7	6	7	N	7	5
06/21/2004	7	6	7	N	7	5
04/23/2002	7	6	7	N	7	5
05/01/1998	7	6	7	N	7	5