



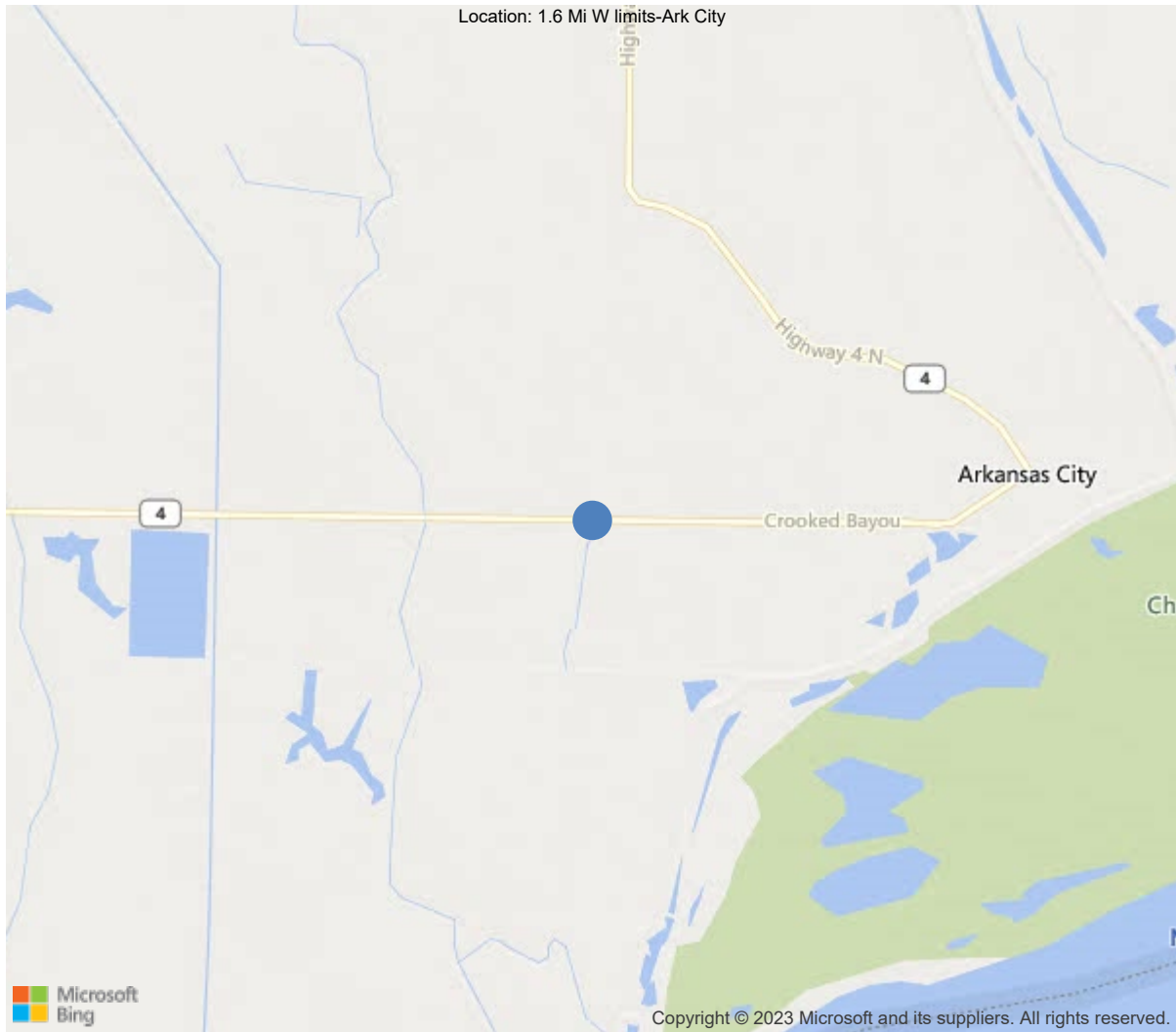
Latitude:33.60534, Longitude:-91.24526

Route:4 Section:17 Log:8.32

Arnold Road ID:21x4x17xA, Arnold Log mile:8.298

District 02, 41 - Desha County

Owner: 1 - State Highway Agency



33.60534, -91.24526





**Asset #03594**(Routine, Underwater type 2)

**SH 4-17 LM 8.32 over Little Boggy Bayou**

**Location: 1.6 Mi W limits-Ark City**

**Team Lead: Greg Loomis, Inspection Date: 02/16/2022**

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	03594
(5) Inventory Route	1
(2) Highway Agency District	02 - District 02
(3) County Code	41 - Desha County
(4) Place Code	0
(6) Features Intersected	Little Boggy Bayou
(7) Facility Carried	SH 4-17 LM 8.32
(9) Location	1.6 Mi W limits-Ark City
(11) Mile Point	8.32 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	33.6053369769588
(17) Longitude	-91.2452574920654
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	11
Material	1 - Concrete
Type	1 - Slab
(44) Approach Structure Type	00
Material	0 - Other
Type	0 - Other
(45) No. of Spans in Main Unit	3
(46) No. of Approach Spans	0
(107) Deck Structure Type	1 - Concrete Cast-in-Place
(108) Wearing Surface/Protective System	
Type of Wearing Surface	5 - Epoxy Overlay
Type of Membrane	0 - None
Type of Deck Protection	0 - None
AGE AND SERVICE	
(27) Year Built	1963
(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	874
(30) Year of ADT	2018
(109) Truck ADT	5 %
(19) Bypass, Detour Length	15 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	25 ft
(49) Structure Length	75 ft
(50) Curb or Sidewalk Width	
Left	1 ft
Right	1 ft
(51) Bridge Roadway Width Curb to Curb	24 ft
(52) Deck Width Out to Out	28.5 ft
(32) Approach Roadway Width (W/Shoulders)	34.1 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	25.9 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	5 - None present but re-evalua
(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	7 - Rural Major 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	1 - State Highway Agency
(22) Owner	1 - State Highway Agency
(37) Historical Significance	5 - Bridge is not eligible for
CONDITION	
(58) Deck	7
(59) Superstructure	7
(60) Substructure	7
(61) Channel & Channel Protection	7
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	2 - M 13.5 / H 15
(63) Operating Rating Method	1
(64) Operating Rating	
Type	1 - Load Factor(LF)
Rating	41
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
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	4
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	8
(72) Approach Roadway Alignment	8
(36A) Bridge Railings	0 - Inspected feature does not meet
(36B) Transitions	1 - Inspected feature meets current
(36C) Approach Guardrail	1 - Inspected feature meets current
(36D) Approach Guardrail Ends	1 - Inspected feature meets current
(113) Scour Critical Bridges	5 - Bridge foundations determined t
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	1200
(115) Year of Future ADT	2037

INSPECTIONS *			
(90) Inspection Date	02/16/2022		
(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 **#03594**(Routine, Underwater type 2)

**District:** 02, **County:** 41 - Desha County

**Team Lead:** Greg Loomis, **Inspection Date:** 02/16/2022

#### A-46 - Asset Files

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#### General Observation (False)

Bridge is logged from west to east.  
Beginning of structure toward US 65, McGehee, West End.

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ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
38	RC Slab	SF	1950	1935	14	1	0
1130	Cracking (RC and Other)	SF	15	0	14	1	0
510	Wearing Surfaces	SF	1800	1800	0	0	0
(38) Deck (sonovoid tubes in deck): 26' wide (1'-3" STEP-UP each side) x 75' long = 1950 sqft. Wearing surface (polymer overlay added prior to 2020 inspection): 24' wide x 75' long = 1800 sqft.  Sides of slab - Span 2 left & Span 3 left @ Bent 3: Vertical cracking over cap - 2 sqft CS2 cracking, Span 3 right @ Bent 3: Vertical cracking over cap - 1 sqft CS3 cracking.  Soffit: Some small cracks in various locations, especially along center-line.  *OLD NOTE (prior to polymer overlay): Wearing surface: Moderate-sized transverse cracks at bents and bridge ends (96 sqft). Some minor cracking in wheel ruts, mainly on Spans 2-3 (84 sqft).							
215	Reinforced Concrete Abutment	LF	66	66	0	0	0
(215) Abutments: 26'-6" = 27' each (with 3' wings each corner) / Bents 1 & 4. Some staining due to joint seals leaking.							
227	Reinforced Concrete Pile	EA	6	6	0	0	0
(227) Piling: 3 per bent / Bents 2-3.							
234	Reinforced Concrete Pier Cap	LF	48	34	8	6	0
1090	Exposed Rebar	LF	4	0	0	4	0
1120	Efflorescence/Rust Staining	LF	2	0	0	2	0
1130	Cracking (RC and Other)	LF	8	0	8	0	0
(234) Cap: 26'-6" = 27' each / Bents 2-3. Bent 2 right: Some cracking/delamination with exposed rebar - 3' CS3 exposed rebar Bent 3 right: Some cracking/efflorescence on ends and ahead face with one small piece of exposed rebar - 1' CS3 exposed rebar; 8' CS2 cracking; 2' CS3 efflorescence. Some signs of leakage and efflorescence build-up at keyways.							
301	Pourable Joint Seal	LF	58	0	0	58	0
2350	Debris Impaction	LF	58	0	0	58	0
(301) Joints: 28'-6" = 29' each / Bents 2 & 3. Polymer overlay is left "gapped" at joints; however, joints were previously filled/impacted with asphalt overlay material - 58' CS3 debris impacted.							
330	Metal Bridge Railing	LF	150	150	0	0	0
515	Steel Protective Coating	SF	375	375	0	0	0
(330) Railing: 75' each side. Coating: 2.5 square feet per linear feet of railing. Various posts: Some minor cracking on the top 6". Span 3 left at abutment has spalls from previous traffic impact.							

## Deck

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
38	RC Slab	SF	1950	1935	14	1	0
1130	Cracking (RC and Other)	SF	15	0	14	1	0
510	Wearing Surfaces	SF	1800	1800	0	0	0
<p>(38) Deck (sonovoid tubes in deck): 26' wide (1'-3" STEP-UP each side) x 75' long = 1950 sqft.  Wearing surface (polymer overlay added prior to 2020 inspection): 24' wide x 75' long = 1800 sqft.</p> <p>Sides of slab -  Span 2 left &amp; Span 3 left @ Bent 3: Vertical cracking over cap - 2 sqft CS2 cracking,  Span 3 right @ Bent 3: Vertical cracking over cap - 1 sqft CS3 cracking.</p> <p>Soffit: Some small cracks in various locations, especially along center-line.</p> <p>*OLD NOTE (prior to polymer overlay):  Wearing surface: Moderate-sized transverse cracks at bents and bridge ends (96 sqft).  Some minor cracking in wheel ruts, mainly on Spans 2-3 (84 sqft).</p>							



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## Superstructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4

## Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
215	Reinforced Concrete Abutment	LF	66	66	0	0	0
(215) Abutments: 26'-6" = 27' each (with 3' wings each corner) / Bents 1 & 4. Some staining due to joint seals leaking.							
227	Reinforced Concrete Pile	EA	6	6	0	0	0
(227) Piling: 3 per bent / Bents 2-3.							
234	Reinforced Concrete Pier Cap	LF	48	34	8	6	0
1090	Exposed Rebar	LF	4	0	0	4	0
1120	Efflorescence/Rust Staining	LF	2	0	0	2	0
1130	Cracking (RC and Other)	LF	8	0	8	0	0
(234) Cap: 26'-6" = 27' each / Bents 2-3. Bent 2 right: Some cracking/delamination with exposed rebar - 3' CS3 exposed rebar Bent 3 right: Some cracking/efflorescence on ends and ahead face with one small piece of exposed rebar - 1' CS3 exposed rebar; 8' CS2 cracking; 2' CS3 efflorescence. Some signs of leakage and efflorescence build-up at keyways.							





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## Culvert

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4



Right side view



Roadway view



Deck - Spans 1-3: Typical



Soffit - Span 2: Typical



Deck - side of slab - Span 3 right @ Bent 3: Cracking



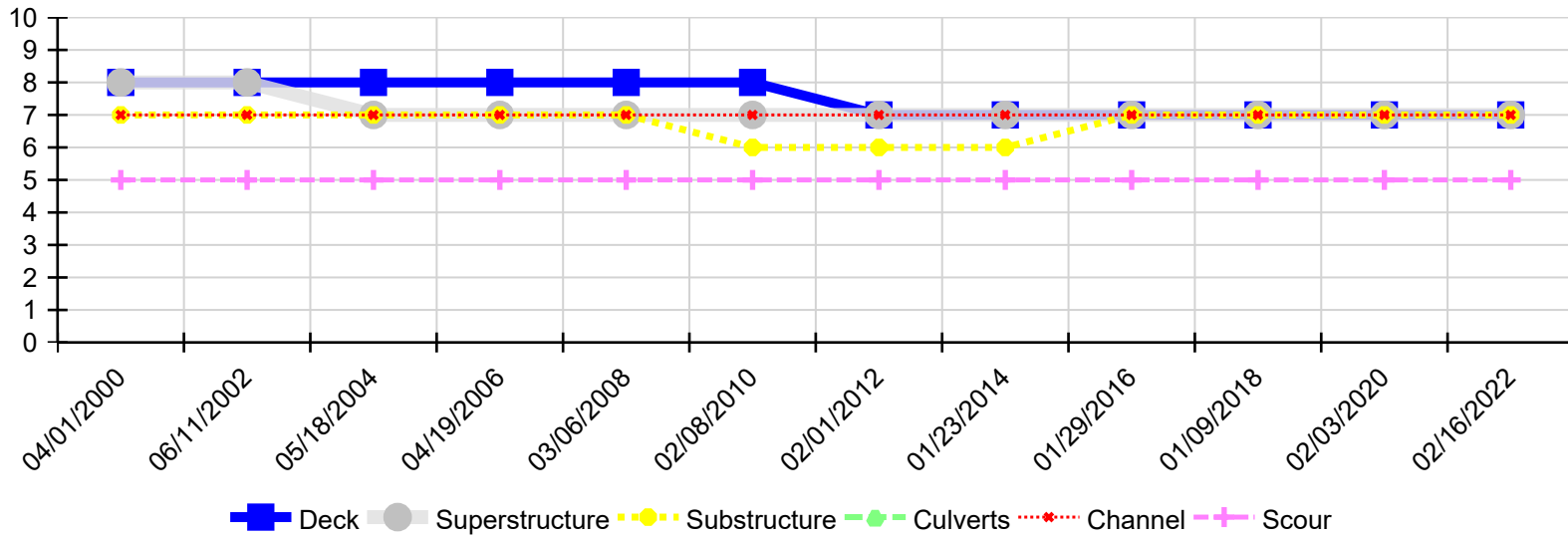
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Team Lead: Greg Loomis, Inspection Date: 02/16/2022

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
02/16/2022	7	7	7	N	7	5
02/03/2020	7	7	7	N	7	5
01/09/2018	7	7	7	N	7	5
01/29/2016	7	7	7	N	7	5
01/23/2014	7	7	6	N	7	5
02/01/2012	7	7	6	N	7	5
02/08/2010	8	7	6	N	7	5
03/06/2008	8	7	7	N	7	5
04/19/2006	8	7	7	N	7	5
05/18/2004	8	7	7	N	7	5
06/11/2002	8	8	7	N	7	5
04/01/2000	8	8	7	N	7	5