



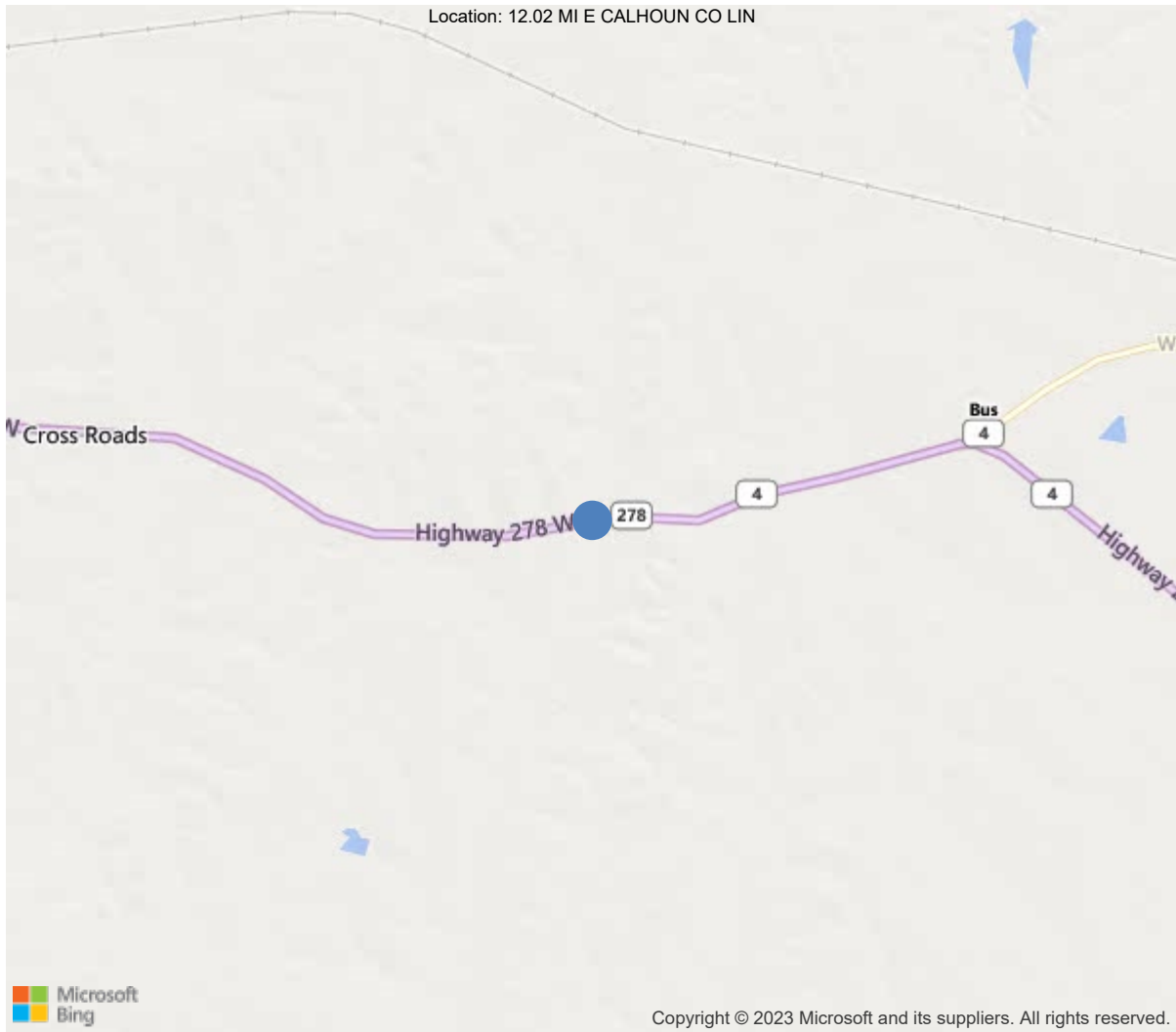
Latitude:33.59681, Longitude:-92.14142

Route:278 Section:12 Log:12.017

Arnold Road ID:6x278x12xA, Arnold Log mile:11.95

District 07, 11 - Bradley County

Owner: 1 - State Highway Agency



33.59681, -92.14142



Asset #A0818(Routine)

US 278 S-12LM12.01 over BEECH CREEK

Location: 12.02 MI E CALHOUN CO LIN

Team Lead: Rickie Bratton, Inspection Date: 06/07/2022

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	A0818
(5) Inventory Route	1
(2) Highway Agency District	07 - District 07
(3) County Code	11 - Bradley County
(4) Place Code	0
(6) Features Intersected	BEECH CREEK
(7) Facility Carried	US 278 S-12LM12.01
(9) Location	12.02 MI E CALHOUN CO LIN
(11) Mile Point	12.017 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000278120
(16) Latitude	33.596806
(17) Longitude	-92.141418
(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	6 - Bituminous
Type of Membrane	0 - None
Type of Deck Protection	0 - None
AGE AND SERVICE	
(27) Year Built	1954
(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	1500
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	12 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	25 ft
(49) Structure Length	75 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	26 ft
(52) Deck Width Out to Out	29.6 ft
(32) Approach Roadway Width (W/Shoulders)	36.1 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	0
(26) Functional Class	6 - Rural Minor 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	0 - The inventory route is not
(20) Toll	3 - On free road. The structure
(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	6
(61) Channel & Channel Protection	6
(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	49
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	30
(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	6
(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	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	2044
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	06/07/2022		
(91) Frequency	24		
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	No		
C: Other Special Inspection			
<p>* 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.</p>			





Asset #A0818(Routine)

District: 07, County: 11 - Bradley County

Team Lead: Rickie Bratton, Inspection Date: 06/07/2022

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**51 - Bridge Roadway Width Curb-To-Curb (26)**

06/23/2020 JPR -- Per plans, clear roadway on the BR is 26' 0".

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**A-46 - Asset Files**

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**General Observation (False)**

Logged west to east.

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US 278 S-12LM12.01 over BEECH CREEK

Location: 12.02 MI E CALHOUN CO LIN

Team Lead: Rickie Bratton, Inspection Date: 06/07/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
38	RC Slab	SF	2213	2154	59	0	0
1080	Delamination/Spall/Patched Area	SF	2	0	2	0	0
1120	Efflorescence/Rust Staining	SF	42	0	42	0	0
1130	Cracking (RC and Other)	SF	15	0	15	0	0
510	Wearing Surfaces	SF	1950	568	1382	0	0
3210	Delam/Spall/Patched Area/Pothole	SF	53	0	53	0	0
3220	Crack (Wearing Surface)	SF	1329	0	1329	0	0
(38) Spans 1-3 have patches in wearing surface.							
Soffit- All spans with cracks and light efflorescence.							
06/23/2020 JPR -- Per plans deck area = L x W = (75' 0" x 29' 6") = 2212.5 sq.ft. = 2213 sq.ft.)							
(510-38) 06/23/2020 JPR -- per plans, curb to curb = 26'0" and ACHM overlay goes from curb to curb, therefore (75' 0' x 26'0" = 1950 sq.ft.)							
215	Reinforced Concrete Abutment	LF	76	76	0	0	0
227	Reinforced Concrete Pile	EA	8	0	8	0	0
1190	Abrasion/Wear (PSC/RC)	EA	8	0	8	0	0
(227) Bents 2 and 3, have abrasion to piles.							
234	Reinforced Concrete Pier Cap	LF	119	110	0	9	0
1080	Delamination/Spall/Patched Area	LF	6	0	0	6	0
1090	Exposed Rebar	LF	3	0	0	3	0
(234) 06/23/2020 JPR -- Per plans (29.75' x 4 caps = 119 LF.)							
(1080-234) 06/23/2020 JPR -- Changed ratings from a 2 - 3 due to guidelines in manual.							
(1090-234) 06/23/2020 JPR -- Changed rating from a 2 - 3 per guidelines in the manual.							
301	Pourable Joint Seal	LF	59	7	0	0	52
2350	Debris Impaction	LF	52	0	0	0	52
(301) Joints have asphalt overlay.							
330	Metal Bridge Railing	LF	150	150	0	0	0

**US 278 S-12LM12.01 over BEECH CREEK**

**Location: 12.02 MI E CALHOUN CO LIN**

**Team Lead:** Rickie Bratton, **Inspection Date:** 06/07/2022

## Deck

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
38	RC Slab	SF	2213	2154	59	0	0
1080	Delamination/Spall/Patched Area	SF	2	0	2	0	0
1120	Efflorescence/Rust Staining	SF	42	0	42	0	0
1130	Cracking (RC and Other)	SF	15	0	15	0	0
510	Wearing Surfaces	SF	1950	568	1382	0	0
3210	Delam/Spall/Patched Area/Pothole	SF	53	0	53	0	0
3220	Crack (Wearing Surface)	SF	1329	0	1329	0	0
(38) Spans 1-3 have patches in wearing surface.							
Soffit- All spans with cracks and light efflorescence.							
06/23/2020 JPR -- Per plans deck area = L x W = (75' 0" x 29' 6") = 2212.5 sq.ft. = 2213 sq.ft.)							
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## Superstructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4



**US 278 S-12LM12.01 over BEECH CREEK**

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**Team Lead:** Rickie Bratton, **Inspection Date:** 06/07/2022

## Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
215	Reinforced Concrete Abutment	LF	76	76	0	0	0
227	Reinforced Concrete Pile	EA	8	0	8	0	0
1190	Abrasion/Wear (PSC/RC)	EA	8	0	8	0	0
(227) Bents 2 and 3, have abrasion to piles.							
234	Reinforced Concrete Pier Cap	LF	119	110	0	9	0
1080	Delamination/Spall/Patched Area	LF	6	0	0	6	0
1090	Exposed Rebar	LF	3	0	0	3	0
(234) 06/23/2020 JPR -- Per plans (29.75' x 4 caps = 119 LF.)							
(1080-234) 06/23/2020 JPR -- Changed ratings from a 2 - 3 due to guidelines in manual.							
(1090-234) 06/23/2020 JPR -- Changed rating from a 2 - 3 per guidelines in the manual.							



Elevation.



Underside



Deck



Deck overview.





Span 2 soffit overview.



Roadway



Approach roadway Eastbound.



Approach roadway.





Span 1, cracks with efflorescences and staining.



Deck overview.



Elevation.



Profile





Span 1 soffit cracks with efflorescence.



Bent 3 cap right end spalled with exposed rebar, common bent 2 cap.



Bent 3 cap back large delam.



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**US 278 S-12LM12.01 over BEECH CREEK**

**Location: 12.02 MI E CALHOUN CO LIN**

**Team Lead: Rickie Bratton, Inspection Date: 06/07/2022**

#### **Maintenance Needs**

**Date Reported:** 06/12/2012  
**Priority:** D- Routine  
**Type of Work:** (Inactive) (Inactive) 9 - None  
**Status:** Monitor  
**Component:**

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#### **Deficiency Description**

Bents 2 and 3 caps are cracked and spalled especially near ends and center of back side of bent 3 cap. With some exposed steel with section loss on bent 3 right end.

#### **Remarks**

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Bent 3 cap spalled



Bt.'s 2 and 3 caps are cracked and spalled especially near the ends on rt. side.



Bent 3 cap right end spalled with exposed rebar,  
common bent 2 cap.

**Date Reported:** 12/22/2020  
**Priority:** C - Important  
**Type of Work:** Repair (General)  
**Status:** Monitor  
**Component:** Channel

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**Deficiency Description**

Scour abutment 1

**Remarks**

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Scour abutment 1



Underside looking at scour @ C/L of bridge.





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**Location: 12.02 MI E CALHOUN CO LIN**

**Team Lead: Rickie Bratton, Inspection Date: 06/07/2022**

## **Routine Maintenance**

Check Box Maintenance Items

<b>Data Field</b>	<b>Value</b>
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 - Hydo and LMC Advised	



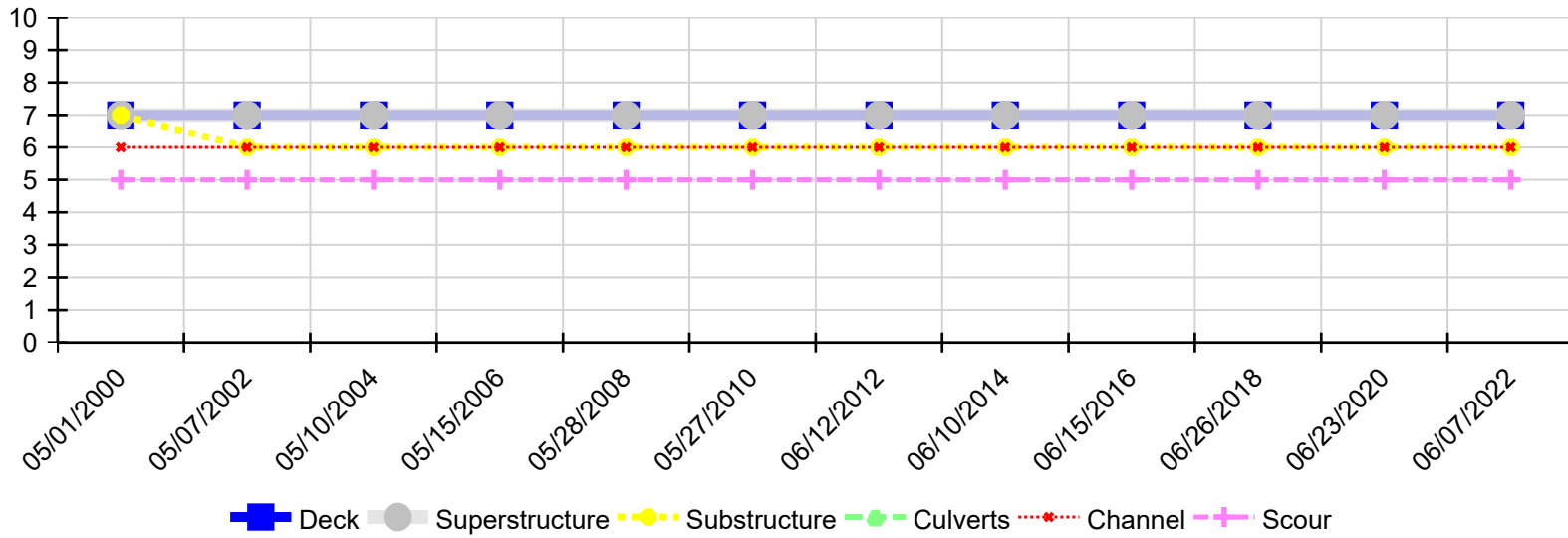
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### Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
06/07/2022	7	7	6	N	6	5
06/23/2020	7	7	6	N	6	5
06/26/2018	7	7	6	N	6	5
06/15/2016	7	7	6	N	6	5
06/10/2014	7	7	6	N	6	5
06/12/2012	7	7	6	N	6	5
05/27/2010	7	7	6	N	6	5
05/28/2008	7	7	6	N	6	5
05/15/2006	7	7	6	N	6	5
05/10/2004	7	7	6	N	6	5
05/07/2002	7	7	6	N	6	5
05/01/2000	7	7	7	N	6	5