



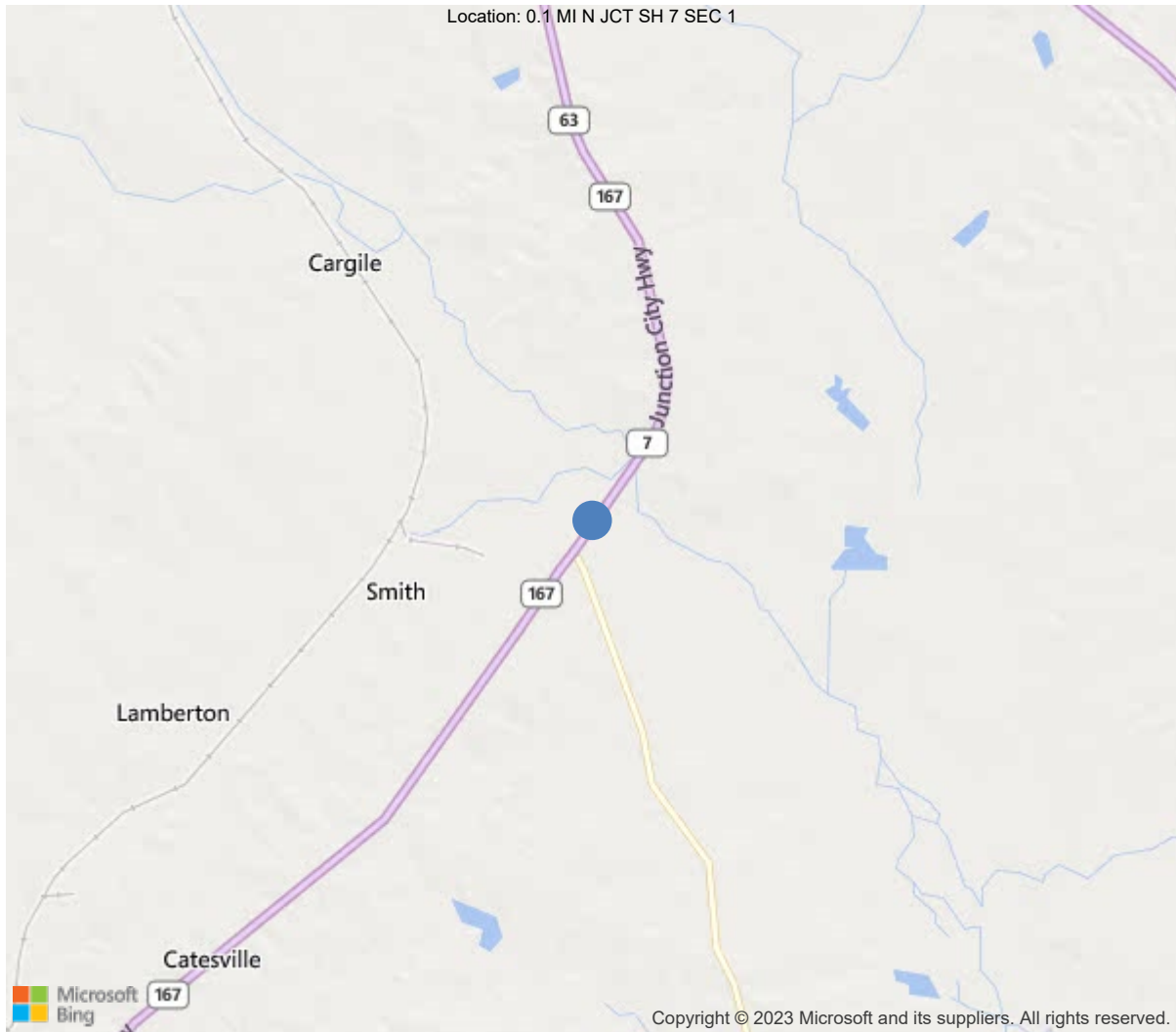
Latitude:33.13823, Longitude:-92.63006

Route:167 Section:01 Log:10.498

Arnold Road ID:70x167x1xA, Arnold Log mile:10.508

District 07, 139 - Union County

Owner: 1 - State Highway Agency



33.13823, -92.63006





Asset #06491(Routine)

UnionUS167S1LM10.4 over GUM CREEK

Location: 0.1 MI N JCT SH 7 SEC 1

Team Lead: Rickie Bratton, Inspection Date: 11/09/2021

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	06491
(5) Inventory Route	1
(2) Highway Agency District	07 - District 07
(3) County Code	139 - Union County
(4) Place Code	0
(6) Features Intersected	GUM CREEK
(7) Facility Carried	UnionUS167S1LM10.4
(9) Location	0.1 MI N JCT SH 7 SEC 1
(11) Mile Point	10.498 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000167010
(16) Latitude	33.13823
(17) Longitude	-92.63006
(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	7
(46) No. of Approach Spans	0
(107) Deck Structure Type	1 - Concrete Cast-in-Place
(108) Wearing Surface/Protective System	
Type of Wearing Surface	1 - Monolithic Concrete (concurrently pl
Type of Membrane	0 - None
Type of Deck Protection	9 - Other
AGE AND SERVICE	
(27) Year Built	1997
(106) Year Reconstructed	0
(42) Type of Service	15
On	1 - Highway
Under	5 - Waterway
(28) Lane	
On	5
Under	0
(29) Average Daily Traffic	8600
(30) Year of ADT	2014
(109) Truck ADT	20 %
(19) Bypass, Detour Length	10 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	30 ft
(49) Structure Length	210 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	69.9 ft
(52) Deck Width Out to Out	72.8 ft
(32) Approach Roadway Width (W/Shoulders)	69.9 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	70.9 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	8
(59) Superstructure	7
(60) Substructure	8
(61) Channel & Channel Protection	7
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	5 - MS 18 / HS 20
(63) Operating Rating Method	1
(64) Operating Rating	
Type	1 - Load Factor(LF)
Rating	60
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
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	6
(68) Deck Geometry	5
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	8
(72) Approach Roadway Alignment	8
(36A) Bridge Railings	1 - Inspected feature meets current
(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	9549
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	11/09/2021		
(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 #06491(Routine)

District: 07, County: 139 - Union County

Team Lead: Rickie Bratton, Inspection Date: 11/09/2021

### General Observation

-

---

#### 58 - Deck (8 - VERY GOOD CONDITION - no problems noted.)

Numerous longitudinal cracks all spans, exposed aggregates , chips etc. Joint material is failing. Soffit has efflorescent crack @ center line.

---

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

Normal wear

---

#### 60 - Substructure (8 - VERY GOOD CONDITION - no problems noted.)

Normal wear

---

#### A-46 - Asset Files

-

---





Asset #06491 (Routine)

UnionUS167S1LM10.4 over GUM CREEK

Location: 0.1 MI N JCT SH 7 SEC 1

Team Lead: Rickie Bratton, Inspection Date: 11/09/2021

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
38	RC Slab	SF	15294	14710	502	82	0
1090	Exposed Rebar	SF	1	0	1	0	0
1120	Efflorescence/Rust Staining	SF	583	0	501	82	0
510	Wearing Surfaces	SF	14679	14679	0	0	0
(38) There is 630' of deck cracking, 210' or full length of bridge on NB lanes next to white line. There is 210' of deck cracking next to white line & 210' of deck cracking in center of outside travel lane of SB lanes. 11/20/2019 JPR -- added 2 more 210' x 2 for total of 5 x 210 = 1050' of full length cracking + another 150' of diagonal cracking for total of 1200' of cracking. Also added defect of abrasion and wear (210' x 3' x 8 = 5040 sq. ft.) 11-9-21,RHB, Inspection revealed bridge has been overlayed with polymer overlay.							
215	Reinforced Concrete Abutment	LF	179	179	0	0	0
227	Reinforced Concrete Pile	EA	48	48	0	0	0
234	Reinforced Concrete Pier Cap	LF	441	435	6	0	0
1010	Cracking	LF	6	0	6	0	0
301	Pourable Joint Seal	LF	437	437	0	0	0
(301) All joints, full width are worn and tattered and are losing their bond with the concrete deck, with leakage and loss of seal adhesion.							
331	Reinforced Concrete Bridge Railing	LF	420	420	0	0	0



Asset #06491(Routine)

UnionUS167S1LM10.4 over GUM CREEK

Location: 0.1 MI N JCT SH 7 SEC 1

Team Lead: Rickie Bratton, Inspection Date: 11/09/2021

**Deck**

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
38	RC Slab	SF	15294	14710	502	82	0
1090	Exposed Rebar	SF	1	0	1	0	0
1120	Efflorescence/Rust Staining	SF	583	0	501	82	0
510	Wearing Surfaces	SF	14679	14679	0	0	0
(38) There is 630' of deck cracking, 210' or full length of bridge on NB lanes next to white line. There is 210' of deck cracking next to white line & 210' of deck cracking in center of outside travel lane of SB lanes. 11/20/2019 JPR -- added 2 more 210' x 2 for total of 5 x 210 = 1050' of full length cracking + another 150' of diagonal cracking for total of 1200' of cracking. Also added defect of abrasion and wear (210' x 3' x 8 = 5040 sq. ft.) 11-9-21,RHB, Inspection revealed bridge has been overlayed with polymer overlay.							

**58 - Deck** (8 - VERY GOOD CONDITION - no problems noted.)

Comment: Numerous longitudinal cracks all spans, exposed aggregates , chips etc. Joint material is failing. Soffit has efflorescent crack @ center line.



Asset #06491(Routine)

UnionUS167S1LM10.4 over GUM CREEK

Location: 0.1 MI N JCT SH 7 SEC 1

Team Lead: Rickie Bratton, Inspection Date: 11/09/2021

## Superstructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4

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

Comment: Normal wear





Asset #06491(Routine)

UnionUS167S1LM10.4 over GUM CREEK

Location: 0.1 MI N JCT SH 7 SEC 1

Team Lead: Rickie Bratton, Inspection Date: 11/09/2021

## Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4
215	Reinforced Concrete Abutment	LF	179	179	0	0	0
227	Reinforced Concrete Pile	EA	48	48	0	0	0
234	Reinforced Concrete Pier Cap	LF	441	435	6	0	0
1010	Cracking	LF	6	0	6	0	0

**60 - Substructure** (8 - VERY GOOD CONDITION - no problems noted.)

Comment: Normal wear



Asset #06491(Routine)

UnionUS167S1LM10.4 over GUM CREEK

Location: 0.1 MI N JCT SH 7 SEC 1

Team Lead: Rickie Bratton, Inspection Date: 11/09/2021

## Culvert

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4



Elevation



Approach roadway



Deck overview



Span 7 at centerline spall with exposed rebar





Bent 4 cap, ahead, between piles 7 and 8



Bent 4 cap, back crack



Span 2 soffit overview



Span 1 efflorescence





New overlay



Profile



Deck span 7



Span 1 longitudinal deck crack, this crack goes full length of the bridge.





Span 7 Rt. Shoulder diagonal shear crack in deck.



Span 5 Rt. Main Lanes looking ahead @ deck.



Span 1 looking across & ahead from Rt. to Lt. @ deck soffit.



Underside span 7





Rt. Side lookingback from abutment 2 @ vegetation growing back under & up beside the bridge.



Deck cracks



Roadway



Span 1 Rt. Main Lane deck.





Joint between Spans 1 & 2, joint material is losing bond with the concrete.



Bent 2 pile 8 appears to have a patch on the back side of the pile from bottom of the cap down about 5';, this was likely a build up on this pile.

**Maintenance Needs**

**Date Reported:** 11/29/2017

**Priority:** C - Important

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

**Status:** Monitor

**Component:**

---

**Deficiency Description**

Numerous sealable cracks all spans.

**Remarks**

Overlay has sealed all cracks.

---



Span 7 Rt. Shoulder diagonal shear crack in deck.



Span 1 longitudinal deck crack, this crack goes full length of the bridge.





Deck cracks

#### Maintenance Needs

**Date Reported:** 11/01/2011

**Priority:** D- Routine

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

**Status:** Monitor

**Component:**

---

#### Deficiency Description

Joint material, all joints.

Joint material is tattered and losing bond with concrete.

11/03/2015 JPR All joints are leaking some and allowing water and road salts to get to ends of slabs and caps.

#### Remarks

Overlay has sealed all joints.

---



Joint between Spans 1 & 2, joint material is losing bond with the concrete.



Bent 4 joint material, worn & tattered and losing the bond with the concrete, typical of all joints.

**Maintenance Needs**

**Date Reported:** 11/20/2019

**Priority:** D- Routine

**Status:** Monitor

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

**Component:**

---

**Deficiency Description**

Rt. Side lookingback from abutment 2 @ vegetation growing back under & up beside the bridge.

**Remarks**

---



Rt. Side lookingback from abutment 2 @ vegetation growing back under & up beside the bridge.



**Asset #06491**(Routine)

**UnionUS167S1LM10.4 over GUM CREEK**

**Location: 0.1 MI N JCT SH 7 SEC 1**

**Team Lead:** Rickie Bratton, **Inspection Date:** 11/09/2021

## **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	
A-63 Missing/Incorrect Log Mile Signage	
A-64 - Vegetation Removal Requested	





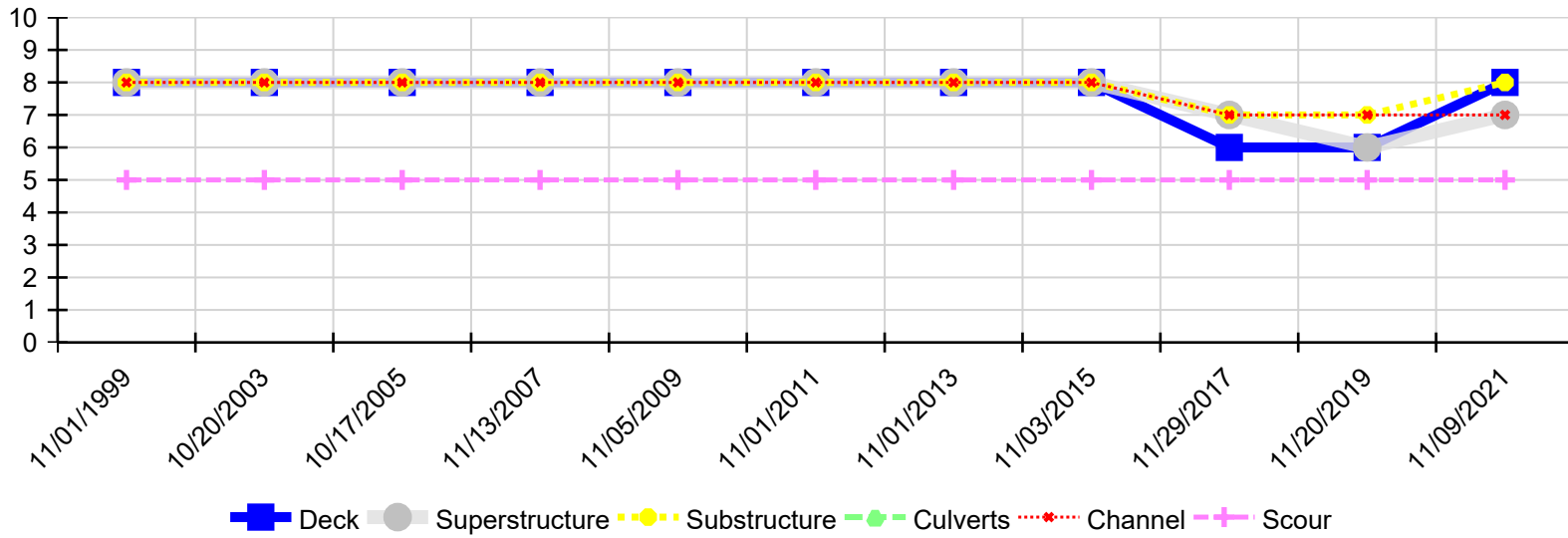
Asset #06491 (Routine)

UnionUS167S1LM10.4 over GUM CREEK

Location: 0.1 MI N JCT SH 7 SEC 1

Team Lead: Rickie Bratton, Inspection Date: 11/09/2021

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
11/09/2021	8	7	8	N	7	5
11/20/2019	6	6	7	N	7	5
11/29/2017	6	7	7	N	7	5
11/03/2015	8	8	8	N	8	5
11/01/2013	8	8	8	N	8	5
11/01/2011	8	8	8	N	8	5
11/05/2009	8	8	8	N	8	5
11/13/2007	8	8	8	N	8	5
10/17/2005	8	8	8	N	8	5
10/20/2003	8	8	8	N	8	5
11/01/1999	8	8	8	N	8	5