



Latitude:34.79430, Longitude:-91.45075

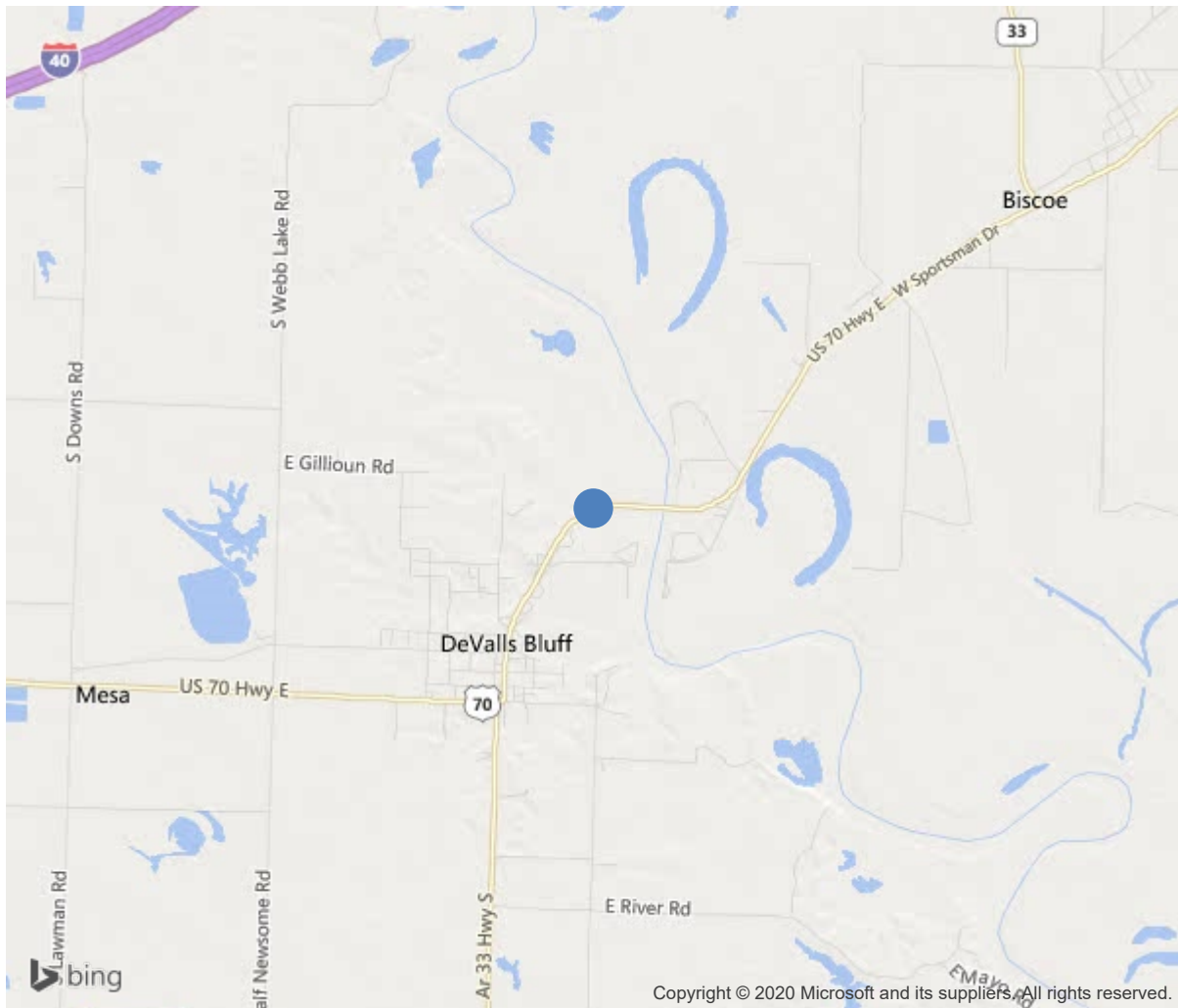
Route:70 Section:16 Log:14.76

Arnold Road ID:59x70x16xA, Arnold Log mile:14.725

District 06, Prairie County

Owner: 1-State Highway Agency

1.1 M N JCT SH 33



34.79430, -91.45075



Bridge #06675(Routine)

US 70-District 6 over White River-Prairie Co.

Location: 1.1 M N JCT SH 33

Team Lead: Monty Frazier Inspection Date: January 14, 2020

IDENTIFICATION	
(1) State Names	Arkansas
(8) Structure Number	06675
(5) Inventory Route	70
(2) Highway Agency District	06
(3) County Code	117-Prairie County, Arkansas
(4) Place Code	0
(6) Features Intersected	White River-Prairie Co.
(7) Facility Carried	US 70-District 6
(9) Location	1.1 M N JCT SH 33
(11) Mile Point	14.76 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	34.7943
(17) Longitude	-91.45075
(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	42
Material	4-Steel continuous
Type	2-Stringer/Multi-beam or girder
(45) No. of Spans in Main Unit	3
(46) No. of Approach Spans	20
(107) Deck Structure Type	1-Concrete Cast-in-Place
(108) Wearing Surface/Protective System	
Type of Wearing Surface	1-Monolithic Concrete (concurrently placed
Type of Membrane	0-None
Type of Deck Protection	1-Epoxy Coated Reinforcing
AGE AND SERVICE	
(27) Year Built	2002
(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	1600
(30) Year of ADT	2014
(109) Truck ADT	9 %
(19) Bypass, Detour Length	22 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	350 ft
(49) Structure Length	3302.2 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	40 ft
(52) Deck Width Out to Out	43.3 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	41.7 ft
(53) Min Vert Clear Over Bridge Rdwy	99.9 ft
(54) Min Vert Underclear	0 ft
Ref:	
(55) Min Lat Underclear RT	0 ft
Ref:	
(56) Min Lat Underclear LT	0 ft
NAVIGATION DATA	
(38) Navigation Control	1-Navigation control on waterway
(111) Pier Protection	5-None present but re-evaluation
(39) Navigation Vertical Clearance	52 ft
(116) Vert-Lift Bridge Nav Min Vert Clear	0 ft
(40) Navigation Horizontal Clearance	340 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 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	1-The inventory route is part of the
(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	7
(59) Superstructure	7
(60) Substructure	7
(61) Channel & Channel Protection	8
(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	3
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	7
(68) Deck Geometry	7
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	9
(72) Approach Roadway Alignment	8
(36) Traffic Safety Features	1110
A) Bridge Railings	1-Inspected feature meets currently a
B) Transitions	1-Inspected feature meets currently a
C) Approach Guardrail	1-Inspected feature meets currently a
D) Approach Guardrail Ends	0-Inspected feature does not meet cur
(113) Scour Critical Bridges	5-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	
(114) Future ADT	2244
(115) Year of Future ADT	2028
INSPECTIONS	
(90) Inspection Date	
(91) Frequency	24 Months
(92) Critical Feature Inspection	Done Freq. (Mon) Date
A: Fracture Critical Detail	No 24
B: Underwater Inspection	No 0
C: Other Special Inspection	No 0



Bridge #06675(Routine)
US 70-District 6 over White River-Prairie Co.

Location: 1.1 M N JCT SH 33

Team Lead: Monty Frazier, **Inspection Date:** January 14, 2020

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	142447	132275	7881	2291	0
1120	Efflorescence/Rust Staining	SF	1080	0	1062	18	0
1130	Cracking (RC and Other)	SF	9092	0	6819	2273	0
(12)	1/21/2020 - MFF & JRT						
	-Driving surface has transverse cracking at various spacing throughout the driving surface along with some longitudinal cracking at random locations. Spans 12 thru 14 have seal-able map cracking. (No spalls or delaminated areas at this inspection)						
	1/23/2017 - RWF & KRM - Isolated areas of light/medium sealable longitudinal and transverse cracking typical. Minor areas of diamond grinding in the driving surface. The overhangs have transverse cracks with efflorescence throughout the bridge.						
107	Steel Open Girder/Beam	LF	16500	15407	93	1000	0
1000	Corrosion	LF	1083	0	83	1000	0
1020	Connection	LF	10	0	10	0	0
515	Steel Protective Coating	SF	258711	257462	0	1249	0
3430	Oxide Film Degradation Color/Texture Adherence(Steel Protective Coatings)	SF	83	0	0	83	0
3440	Effectiveness (Steel Protective Coatings)	SF	1166	0	0	1166	0
(107)	01/21/2020 - MFF & JRT						
	The bottom flanges have active corrosion with minor flaking rust typically along the exterior girders.						
	1/23/2017 - RWF & KRM - Isolated areas of loose bolted connections in the splice plates. Minor areas of small flaking rust visible in the bottom flanges and splice plate.						
205	Reinforced Concrete Column	EA	40	29	11	0	0
1120	Efflorescence/Rust Staining	EA	3	0	3	0	0
1130	Cracking (RC and Other)	EA	8	0	8	0	0
(205)	01/21/2020 - MFF & JRT (No apparent noteworthy changes since the last inspection)						
	1/23/2017 - RWF & KRM - Isolated areas of minor vertical cracking and with staining at the water elevation. No apparent noteworthy changes since last inspection.						
	Columns with vertical cracking, some with efflorescence staining. Bents 4,5,6,7,8,9,10,11, and 12.						
210	Reinforced Concrete Pier Wall	LF	48	37	3	8	0
1080	Delamination/Spall/Patched Area	LF	1	0	1	0	0

Team Lead: Monty Frazier, **Inspection Date:** January 14, 2020

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
1120	Efflorescence/Rust Staining	LF	2	0	2	0	0
1130	Cracking (RC and Other)	LF	8	0	0	8	0
(210)							
01/21/2020 - MFF & JRT (No apparent noteworthy changes since the last inspection)							
1/23/2017 - RWF & KRM - Bent 14 has large vertical cracking at the water elevation.							
215	Reinforced Concrete Abutment	LF	150	144	6	0	0
1120	Efflorescence/Rust Staining	LF	1	0	1	0	0
1130	Cracking (RC and Other)	LF	5	0	5	0	0
(215)							
01/21/2020 -MFF & JRT							
-Bent 1 (West Abutment) has 3 hairline vertical cracks and 1 diagonal crack. Bent 1 also has one vertical crack with efflorescence leaching through.							
1/23/2017 - RWF & KRM - Minor vertical cracking in the back walls with light efflorescence. Isolated areas of cracking in the driving surface.							
Bent 1: vertical cracks in the back wall. Bent 24: vertical cracks in the back wall.							
234	Reinforced Concrete Pier Cap	LF	880	828	52	0	0
1120	Efflorescence/Rust Staining	LF	24	0	24	0	0
1130	Cracking (RC and Other)	LF	28	0	28	0	0
(234)							
01/21/2020 - MFF & JRT (No apparent noteworthy changes since the last inspection)							
1/23/2017 - RWF & KRM - Isolated areas of vertical/diagonal cracking with efflorescence staining.							
Bt. 2, Lt: Vertical efflorescence crack on end of cap. Bt. 4, Rt: Minor horizontal crack on end of cap. Bt. 5, Lt. & Rt: Minor map cracking on end of cap. Bt. 7, Lt. & Rt: Vertical crack on end of cap. Bt. 8, Rt: Map cracking on end of cap. Bt. 12, Bk: Five efflorescence cracks in the cap. Horizontal crack on right end of cap. Bt. 12, Lt: Minor efflorescence cracking at the cold joint on end of cap. Bt. 15, Lt: Minor efflorescence cracking at the cold joint on end of cap. Bt. 15: Two short vertical hairline cracks in cap on the ahead face.							
303	Assembly Joint with Seal	LF	258	258	0	0	0
(303)							
01/22/2020 - MFF & JRT (No apparent noteworthy deficiencies at this inspection)							
1/23/2017 - RWF & KRM - Minor areas of debris impaction in the sliding plates and dirt and debris accumulation in the joint troughs.							
Some debris in the finger joints.							

Location: 1.1 M N JCT SH 33

Team Lead: Monty Frazier, **Inspection Date:** January 14, 2020

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
305 (305) 01/22/2020 - MFF & JRT (No apparent noteworthy deficiencies at this inspection)	Assembly Joint without Seal	LF	80	80	0	0	0
310 (310) 1/21/2020 - MFF & JRT West Abutment has no apparent noteworthy deficiencies at this inspection 1/23/2017 - RWF & KRM - No apparent noteworthy problems at this inspection.	Elastomeric Bearing	EA	150	150	0	0	0
331 1130 (331) 01/22/2020 - MFF & JRT -Bridge railing has vertical and horizontal cracking throughout the structure -Bent 1 (RT) has one spall on the top of the bridge railing (No exposed steel at this inspection) 1/23/2017 - RWF & KRM - Minor areas of vertical and horizontal cracking throughout the bridge railing.	Reinforced Concrete Bridge Railing Cracking (RC and Other)	LF LF	6604 829	5775 0	826 826	3 3	0 0



Bent 6 right end of cap map cracking.



Elevation



Inventory



Inventory



Typical driving surface



Typical under surface



Various saw joints throughout the driving surface has deteriorated and is causing water to leak through and corrode the SIP forms



Typical transverse cracking with efflorescence along the overhang throughout the structure (visible from the under surface of the deck)



West Abutment has 3 hairline vertical cracks and 1 diagonal crack



West Abutment has one vertical crack with efflorescence



Bent 1 (West Abutment) has 3 epoxy crack in bays 2 thru 4 and are functioning as intended



Bent 24 (East Abutment) has one shallow spill along the bridge seat between bay 4



Typical condition of the bearings at the West Abutment



Typical condition of the assembly joints



Typical transverse cracking at various spacing throughout the driving surface



Typical crack width throughout the driving surface



Typical map cracking in random locations throughout the driving surface



Typical map cracking in random locations throughout the driving surface

Maintenance Needs

Date Reported: 01/29/2018
Priority: D- Routine
Type of Work: Repair
Status: Open
Component: Superstructure

Deficiency Description

01-21-2020 - Maintenance items still exist. Added New Exterior girders have active corrosion with flaking rust located in bottom flange.this is typical with main river channel girders.

Girders with loose bolted connections.

Span 12 Girder 2 Loose bolt at first splice plate connection.
Span 12 Girder 5 Loose bolt at second splice plate connection.
Span 13 Girder 2 Loose bolt at lateral bracing between the third and fourth splice plate.
Span 14 Girder 4 Loose bolt at second splice plate connection.
Span 16 Girder 2 Loose bolt at first splice plate connection.

Remarks





Span 12 first splice plate ahead bent 12 girder 5
loose bolt.



Span 13 girders 1 and 5 active corrosion with flaking rust to bottom flange typical throughout main spans.

Date Reported: 01/25/2018
Priority: D- Routine
Type of Work: Repair
Status: Open
Component: Deck

Deficiency Description

Sawn Joint Seals

010-21-2020 - joint has failed water has started corrosion to SIP forms located at Span 10 at girders 3'4 ,5 and Span 16 between girders 3 and 4.

Large areas of missing and leaking joint seals at the following locations.

Span 3	Missing for 3'	Span 13	Missing for 8'
Span 5	Missing for 5'	Span 14	Missing for 14'
Span 7	Missing for 9'	Span 15	Missing for 12'
Span 12	Missing for 9'	Span 16	Missing for 2'

Remarks





Typical missing and deteriorated saw joints in various locations throughout the structure.



Span 10 at girders 3'4 and 5 active corrosion to sip forms.



Span 16 between girders 3 and 4 active corrosion to sip forms.

Date Reported: 01/23/2018

Priority: D- Routine

Type of Work: None

Status: Open

Component:

Deficiency Description

1/21/2020 - MFF & JRT

-Warning sign at Bent 13 (RT) has been repaired since the last inspection

Warning Sign

* Span 13 Right has broke sign post brackets with the sign hanging over the side not visible to the traveling public.

Remarks

Notified District 6 DME Jonathan Mormon of needs and assigned to him. Also noted to check navigation lighting in back ground of photo which appears to be rotated out of position 7/12/2018 CSL

* Indicates this maintenance item can be removed.



Span 13 right side sign damage.



Warning sign has been repaired since the last inspection

Date Reported: 02/13/2012
Priority: D- Routine
Type of Work: Repair
Status: Monitor
Component: Substructure

Deficiency Description

CAPS
MFF & JRT - 01-21-2020 - Maintenance items still exist.

Bt. 2, Lt: Vertical efflorescence crack on end of cap.
Bt. 4, Rt: Minor horizontal crack on end of cap.
Bt. 5, Lt. & Rt: Minor map cracking on end of cap.
Bt. 7, Lt. & Rt: Vertical crack on end of cap.
Bt. 8, Rt: Map cracking on end of cap.
Bt. 12, Bk: Five efflorescence cracks in the cap. Horizontal crack on right end of cap.
Bt. 12, Lt: Minor efflorescence cracking at the cold joint on end of cap.
Bt. 15, Lt: Minor efflorescence cracking at the cold joint on end of cap.
Bt. 15: Two short vertical hairline cracks in cap on the ahead face.
Bt. 12&15: Minor debris on cap.

Remarks



Bent 7 rt. End of cap: small vertical cracking in the ends of the caps



Bent 8 right end of cap epoxy repair that has failed.



Bent 14 vertical cracking in face of cap typical with all caps.

Date Reported: 02/13/2012
Priority: D- Routine
Type of Work: None
Status: Monitor
Component:

Deficiency Description

01/21/2020 - MFF & JRT

-Joints appear to be clear of debris at this inspection

JOINT ASSEMBLIES:

Bt. 4, Bt. 8, Bt.12, Bt.15, Bt. 18& Bt. 21: Debris in metal trough at expansion joint at the gutter line.

Remarks



Bent 18 joint partially full.



Bridge #06675(Routine)
US 70-District 6 over White River-Prairie Co.
Location: 1.1 M N JCT SH 33

Team Lead: Monty Frazier Inspection Date: January 14, 2020

Date Reported: 02/03/2010
Priority: D- Routine
Type of Work: None
Status: Monitor
Component:

Deficiency Description

1/21/2020 - MFF & JRT - Maintenance items still exist at this inspection

Concrete Bridge Rail:

Abutment 1, Rt: Shallow spall on top of bridge rail.
Bent 17, Lt: Vertical open crack in bridge rail.

Remarks



Bent 1 small spall on top of approach bridge rail.



Typical vertical cracking in various locations throughout the structure



Approach railing at Bent 1 (RT) has one spall on top of the bridge railing

Date Reported: 02/03/2010

Priority: D- Routine

Type of Work: None

Status: Monitor

Component:

Deficiency Description

1/21/2020 - MFF & JRT

-Map cracking and transverse cracking still present at this inspection

Deck:

Span 12: Map cracking in the deck.

Span 13 and 14: Numerous transverse cracks.

Added on 03/07/2014, TJB

Moderate debris in the gutter lines from snow and ice removal.

Remarks





Typical transverse cracking at various spacing throughout the driving surface.



Typical map cracking in spans 12 thru 13



Typical size of cracking measures at approximately 0.030 inches at this inspection.



Bridge #06675(Routine)
US 70-District 6 over White River-Prairie Co.

Location: 1.1 M N JCT SH 33

Team Lead: Monty Frazier **Inspection Date:** January 14, 2020

Inspection Comments

Channel profile needs to be done every 10 years or after a major flooding event. Inspection notes should be documented in notes under substructure. Channel profile was conducted on 07/25/2019 using a weighted tape measure. Measurements were taken at bents and mid span. Next scheduled profile is 7/25/2029. Inspected this structure using Aspen 9025. Contacted Terry Trotter from the Hazen maintenance yard to supply personnel for flagger operation. When inspected with 9233 Start at Bent 8 Westbound to avoid the alarms on the super elevated curve, change lanes and inspect from Bent 8 Eastbound to complete the inspection.

Substructure Notes

KRM & ADC 7/25/2019 Channel Profile and underwater type 2 was conducted using a weighted tape measure and a Humminbird Helix 7 Depth Finder. Measurements were taken at bents and mid span. No defects were noted at this inspection.