



Latitude:34.01953, Longitude:-91.81490

Route:425 Section:06 Log:5.83

Arnold Road ID:40x425x6xB, Arnold Log mile:6.618

District 02, 79 - Lincoln County

Owner: 1 - State Highway Agency

Bridge Posting Information

41 - Structure Open/Posted/Closed: A - Open, no restriction

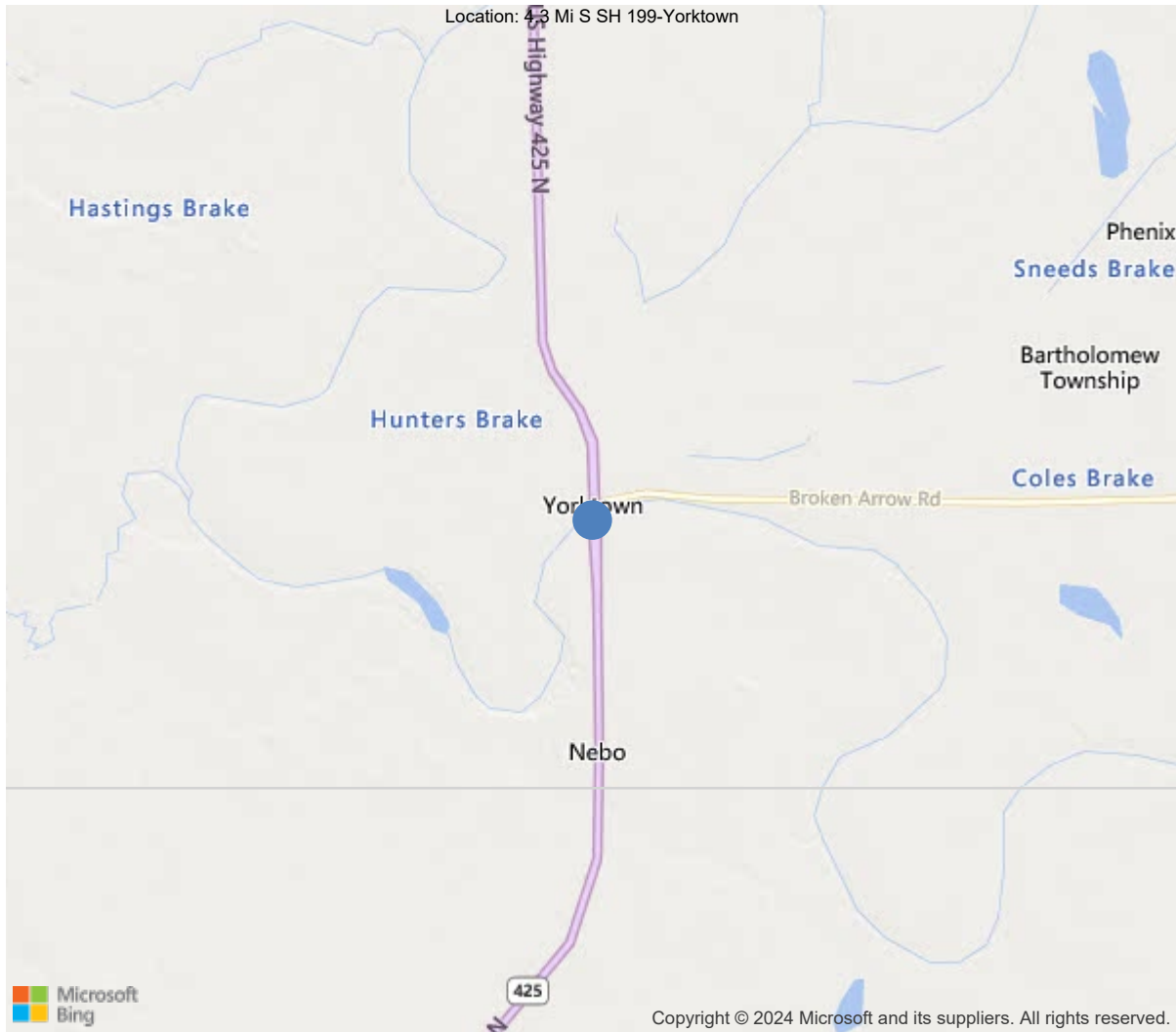
70 - Bridge Posting: 5 - Equal to or above legal loads

Legal Load	Calculated Capacity	Beginning of Bridge Sign Current Value	End of Bridge Sign Current Value
Code 4 (22 Tons)	40		
Code 9 (31 Tons)	50		
Code 5 (40 Tons)	59		

If calculated Capacity is less than the Legal Load Listed, the Bridge Legally Requires Posting Signs to be installed by the Bridge Owner



30"x36" AR



34.01953, -91.81490



Asset #A6681 (Routine)

US 425 SB LM 5.83 over Bayou Bartholomew

Location: 4.3 Mi S SH 199-Yorktown

Team Lead: Greg Loomis, Inspection Date: 10/27/2022

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	A6681
(5) Inventory Route	1
(2) Highway Agency District	02 - District 02
(3) County Code	79 - Lincoln County
(4) Place Code	0
(6) Features Intersected	Bayou Bartholomew
(7) Facility Carried	US 425 SB LM 5.83
(9) Location	4.3 Mi S SH 199-Yorktown
(11) Mile Point	5.83 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000425060
(16) Latitude	34.01953
(17) Longitude	-91.8149
(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	6
(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	1 - Epoxy Coated Reinforcing
AGE AND SERVICE	
(27) Year Built	1998
(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	15000
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	29 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	55 ft
(49) Structure Length	332 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	38 ft
(52) Deck Width Out to Out	40.8 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	39 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	1
(26) Functional Class	2 - Rural Principal Arterial -
(100) Defense Highway	0 - The inventory route is not
(101) Parallel Structure	L - The left structure of para
(102) Direction of Traffic	1 - 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	7
(59) Superstructure	8
(60) Substructure	7
(61) Channel & Channel Protection	6
(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	
(68) Deck Geometry	6
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	8
(72) Approach Roadway Alignment	8
(36A) Bridge Railings	1 - Inspected feature meets current
(36B) Transitions	0 - Inspected feature does not meet
(36C) Approach Guardrail	0 - Inspected feature does not meet
(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	2733
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	10/27/2022		
(91) Frequency	24		
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	No		
C: Other Special Inspection	No		
* 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 #A6681(Routine)

District: 02, County: 79 - Lincoln County

Team Lead: Greg Loomis, Inspection Date: 10/27/2022

General Observation

Bridge logged south to north

Beginning of structure toward SH 11, Star City, South End.

Updated LM from 5.84 to 5.83 per Str Ln from TS dated 12/09. DRB, 12/11/09



Asset #A6681 (Routine)

US 425 SB LM 5.83 over Bayou Bartholomew

Location: 4.3 Mi S SH 199-Yorktown

Team Lead: Greg Loomis, Inspection Date: 10/27/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	13475	13400	75	0	0
1130	Cracking (RC and Other)	SF	75	0	75	0	0
(12) Deck: 40'-10" wide x 330' long = 13, 475 sqft. Very light abrasive wear with very light map cracking in scattered areas, especially in wheel ruts. A few small longitudinal cracks per span.							
107	Steel Open Girder/Beam	LF	1650	1650	0	0	0
515	Steel Protective Coating	SF	12276	12276	0	0	0
(107) Girders: 5 per span / Spans 1-6 (55' each = 330' total). Coating/weathering steel (W30x116): 7.44 square feet per linear foot. Uniformed color, brown, on all steel members with granular texture.							
215	Reinforced Concrete Abutment	LF	120	80	30	10	0
1130	Cracking (RC and Other)	LF	30	0	30	0	0
6000	Scour	LF	10	0	0	10	0
(215) Abutments: 40' each (with 10' wings each corner) / Bent 1 & 7. Bent 1: Minor horizontal cracking with scattered map cracking - 30' CS2 cracking. End-slope - Bent 1: Some erosion/scour with undermining under and behind abutment cap and settlement of roadway - 10' CS3 scour.							
227	Reinforced Concrete Pile	EA	28	28	0	0	0
(227) Piling: 3 per bent / Bent 1 (exposed due to erosion); 5 per bent / Bents 2-6.							
234	Reinforced Concrete Pier Cap	LF	200	0	100	100	0
1130	Cracking (RC and Other)	LF	200	0	100	100	0
(234) Caps: 40' each / Bents 2-6. Bents 2-6: Map-cracking across front, back, and end faces of caps.							
302	Compression Joint Seal	LF	264	198	66	0	0
2320	Seal Adhesion	LF	7	0	7	0	0
2330	Seal Damage	LF	49	0	49	0	0
2340	Seal Cracking	LF	10	0	10	0	0
(302) Joints: 38' each / Bents 1-7. Bents 1 and 4-7: Joint material is damaged, heaviest on Bent 7. Bents 2-5: Various locations have adhesive failing and cracking on one side or the other with some leakage.							
311	Movable Bearing	EA	30	15	15	0	0
1000	Corrosion	EA	15	0	15	0	0
515	Steel Protective Coating	SF	30	15	15	0	0
3430	Oxide Film Degradation Color/Texture Adherence(Steel Protective Coatings)	EA	15	0	15	0	0

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US 425 SB LM 5.83 over Bayou Bartholomew

Location: 4.3 Mi S SH 199-Yorktown

Team Lead: Greg Loomis, **Inspection Date:** 10/27/2022

Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
215	Reinforced Concrete Abutment	LF	120	80	30	10	0
1130	Cracking (RC and Other)	LF	30	0	30	0	0
6000	Scour	LF	10	0	0	10	0
(215) Abutments: 40' each (with 10' wings each corner) / Bent 1 & 7. Bent 1: Minor horizontal cracking with scattered map cracking - 30' CS2 cracking. End-slope - Bent 1: Some erosion/scour with undermining under and behind abutment cap and settlement of roadway - 10' CS3 scour.							
227	Reinforced Concrete Pile	EA	28	28	0	0	0
(227) Piling: 3 per bent / Bent 1 (exposed due to erosion); 5 per bent / Bents 2-6.							
234	Reinforced Concrete Pier Cap	LF	200	0	100	100	0
1130	Cracking (RC and Other)	LF	200	0	100	100	0
(234) Caps: 40' each / Bents 2-6. Bents 2-6: Map-cracking across front, back, and end faces of caps.							



Right side view



Roadway view



Deck - Spans 1-3: Typical



Soffit - Span 4: Typical

Maintenance Needs

Date Reported: 10/23/2018

Priority: B - Pressing

Type of Work: Repair (General)

Status: Open

Component: Approach

Deficiency Description

Approach roadway - Bent 1 left: Significant settlement of roadway - right at bridge end.

End-slope - Bent 1: Some erosion/scour with undermining under and behind abutment cap and settlement of roadway.

10/27/2022 GGL-PRD: Changed priority from "C" to "B".

Remarks



Approach roadway - Bent 1 left: Settlement



Right lane south bound, approach road way has settlement due to erosion under cap at abutment at bent 1.



End slope - Bent 1 (settlement/scour)



Bent 1 abutment has erosion on left side under cap.



Bent 1 abutment has erosion exposing bottom of cap and pile.

Maintenance Needs

Date Reported: 10/23/2018

Priority: D- Routine

Type of Work: (Inactive) (Inactive) 1 - Clean

Status: Assigned

Component: Channel

Deficiency Description

Channel - Spans 1-3 & Span 6: Numerous small trees, bushes, and other vegetation growing up under bridge.

Remarks



Span 7 trees and vegetation growing under bridge.



Trees and vegetation growing under bridge.



Channel - Span 6 (vegetation)



Span 2 trees under bridge.

Maintenance Needs

Date Reported: 11/02/2022

Priority: D- Routine

Type of Work: Repair (General)

Status: Open

Component: Channel

Deficiency Description

End-slope - Bent 7: Some erosion/scour with undermining under and behind abutment cap.

Remarks



Bent 7 left side has erosion under approaching towards roadway.

Maintenance Needs

Date Reported: 10/31/2012

Priority: (Inactive) (Inactive) G - General/
Preventive maintenance

Status: Monitor

Type of Work: Repair (General)

Component: Element

Deficiency Description

Railing - all spans: Numerous map cracks.

Remarks



Railing - all spans (map cracking)



Bridge railing has moderate to heavy map cracking on all spans.

Maintenance Needs

Date Reported: 10/23/2018

Priority: (Inactive) (Inactive) G - General/
Preventive maintenance

Status: Monitor

Type of Work: Repair (General)

Component: Element

Deficiency Description

Joints - all bents: Preformed joint material is beginning to deteriorate and crack with a few areas of wear/tattering.

Remarks



Joint - Bent 1 (damage)



Bent 5 expansion is torn and tattered.



Bent 2 joint seal is torn and leaking.



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	

A-54 - Sealable Deck Cracks

A-55 - Deck Washing Needed

A-56 - Joint Cleaning/Flushing Needed



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A-57 - Beam End and Bearing Painting 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



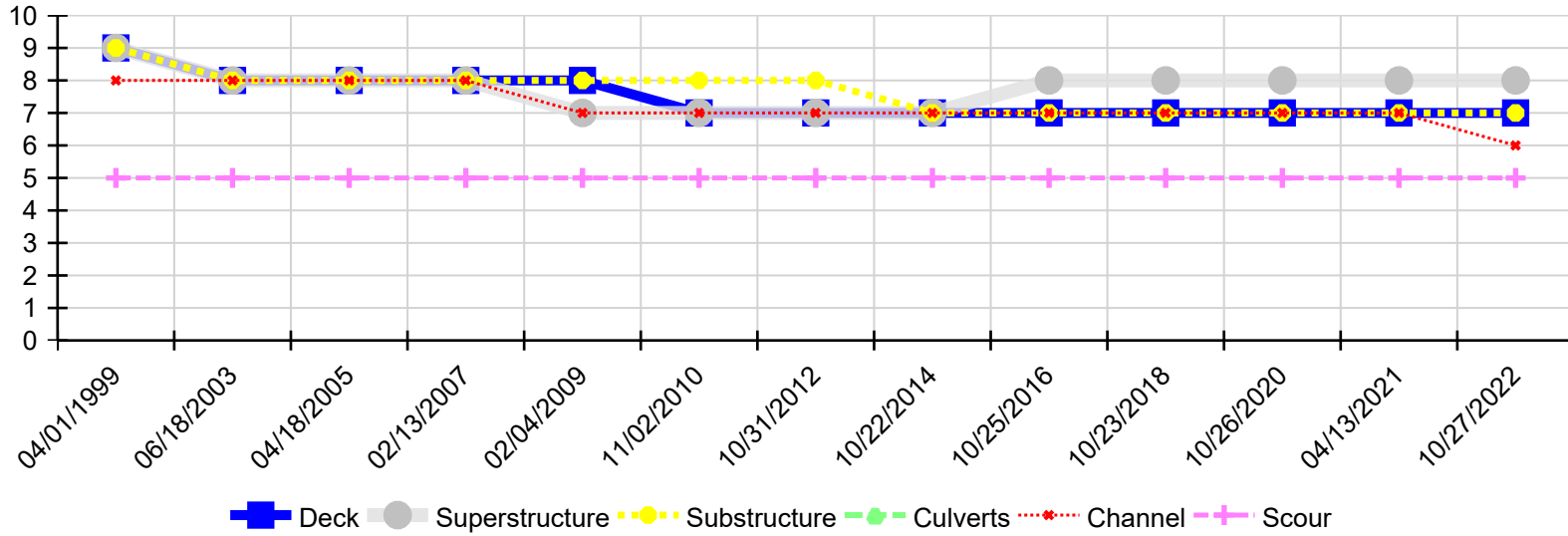
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Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
10/27/2022	7	8	7	N	6	5
04/13/2021	7	8	7	N	7	5
10/26/2020	7	8	7	N	7	5
10/23/2018	7	8	7	N	7	5
10/25/2016	7	8	7	N	7	5
10/22/2014	7	7	7	N	7	5
10/31/2012	7	7	8	N	7	5
11/02/2010	7	7	8	N	7	5
02/04/2009	8	7	8	N	7	5
02/13/2007	8	8	8	N	8	5
04/18/2005	8	8	8	N	8	5
06/18/2003	8	8	8	N	8	5
04/01/1999	9	9	9	N	8	5