



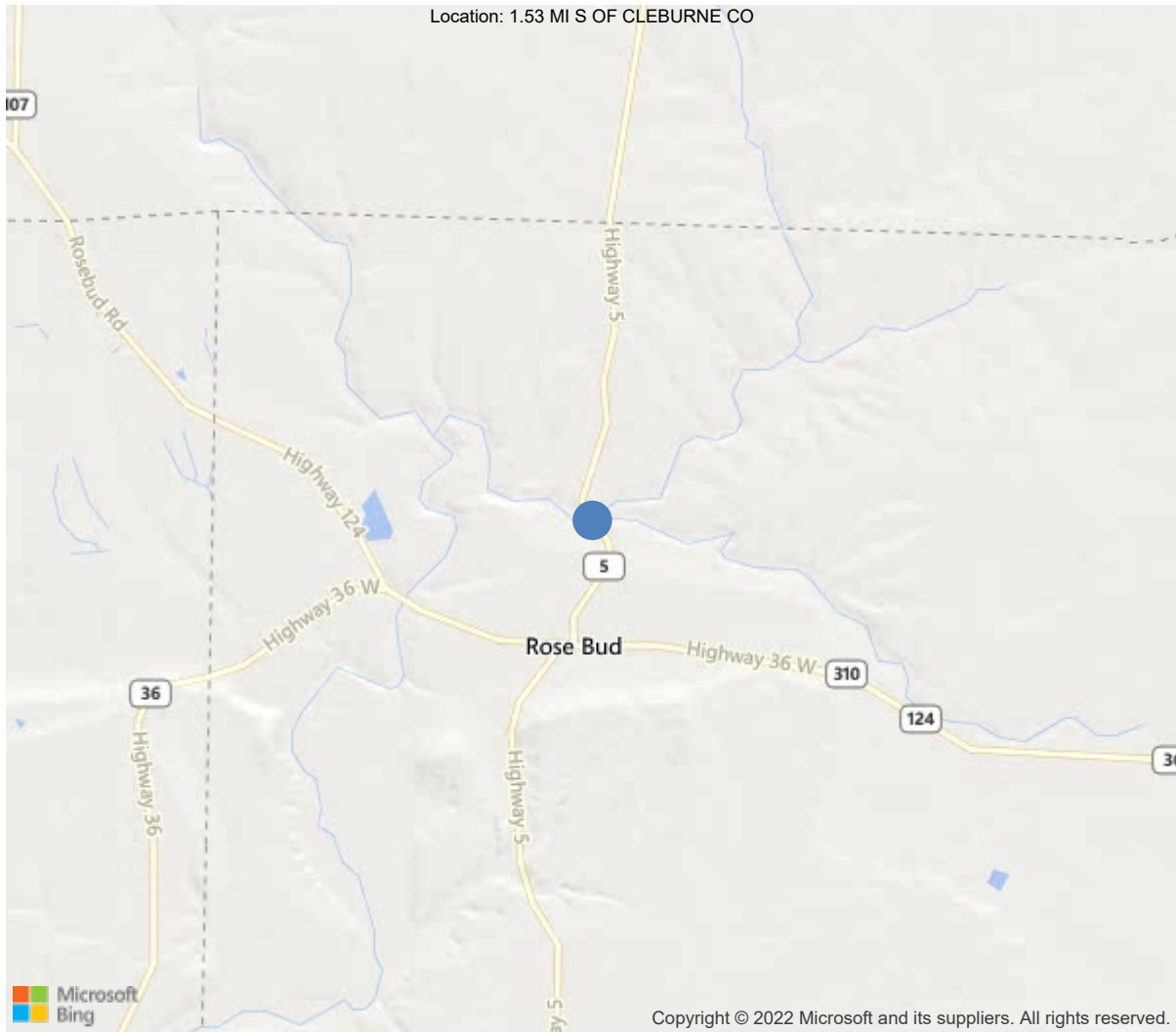
Latitude:35.34043, Longitude:-92.07852

Route:5 Section:14 Log:17.42

Arnold Road ID:73x5x14xA, Arnold Log mile:17.281

District 05, 145 - White County

Owner: 1 - State Highway Agency



35.34043, -92.07852



Asset #01895(NSTM, Routine)

SH 5 White County over EAST CADRON CREEK

Location: 1.53 MI S OF CLEBURNE CO

Team Lead: Nathan Edwards, Inspection Date: 08/11/2022

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	01895
(5) Inventory Route	1
(2) Highway Agency District	05 - District 05
(3) County Code	145 - White County
(4) Place Code	0
(6) Features Intersected	EAST CADRON CREEK
(7) Facility Carried	SH 5 White County
(9) Location	1.53 MI S OF CLEBURNE CO
(11) Mile Point	17.42 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000005140
(16) Latitude	35.34043
(17) Longitude	-92.07852
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	43
Material	4 - Steel continuous
Type	3 - Girder and floorbeam system
(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	1935
(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	3937
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	2 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	50 ft
(49) Structure Length	152 ft
(50) Curb or Sidewalk Width	
Left	0.5 ft
Right	0.5 ft
(51) Bridge Roadway Width Curb to Curb	22 ft
(52) Deck Width Out to Out	23.7 ft
(32) Approach Roadway Width (W/Shoulders)	22 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	23.3 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	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	5
(59) Superstructure	5
(60) Substructure	6
(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	53
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	32
(70) Bridge Posting	5 - Equal to or above legal loads
(41) Structure Open/Posted/Closed	A - Open, no restriction
APPRAISAL	
(67) Structural Evaluation	5
(68) Deck Geometry	2
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	8
(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	0 - Inspected feature does not meet
(36D) Approach Guardrail Ends	1 - Inspected feature meets current
(113) Scour Critical Bridges	8 - Bridge foundations determined t
PROPOSED IMPROVEMENTS	
(75) Type of Work	31 - Replacement of bridge or
(76) Length of Structure Improvement	182 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 156
(96) Total Project Cost	\$ 561
(97) Year of Improvement Cost Estimate	2003
(114) Future ADT	5014
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	08/11/2022		
(91) Frequency	24		
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	Yes	24	08/11/2022
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 #01895(NSTM, Routine)

District: 05, County: 145

Team Lead: Nathan Edwards, Inspection Date: 08/11/2022

A-46 - Asset Files

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A-51 - Inspection Direction (2)

Roadway with Log Mile running Southeast to Northwest.

General Observation (False)

Elevation with Log Mile running to the Right.

Job Number: 6168.



Asset #01895(NSTM, Routine)

SH 5 White County over EAST CADRON CREEK

Location: 1.53 MI S OF CLEBURNE CO

Team Lead: Nathan Edwards, Inspection Date: 08/11/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	3496	2359	500	637	0
1080	Delamination/Spall/Patched Area	SF	38	0	0	38	0
1090	Exposed Rebar	SF	49	0	0	49	0
1120	Efflorescence/Rust Staining	SF	1050	0	500	550	0
510	Wearing Surfaces	SF	3344	3322	0	22	0
3220	Crack (Wearing Surface)	SF	22	0	0	22	0
(12) Heavy efflorescent cracking to overhangs & soffit at Spans 1, 2, & 3. Span 1 - Spalls with 14' rebar exposed to soffit. Bent 1 - Spalls with 32' rebar exposed to diaphragm. Span 2 - Spalls with 15' rebar exposed to soffit. Bent 2 - Spalls with 25' rebar exposed to diaphragm. Span 3 - Spalls with 23' rebar exposed to soffit. Delaminated areas to soffit @ Spans 2 & 3. Minor cracking to asphalt overlay. Bolts connecting top flange & road iron have sheared at Abutment 2 allowing deck to float under traffic. (510-12) Minor cracking to asphalt overlay.							
107	Steel Open Girder/Beam	LF	300	135	90	75	0
1000	Corrosion	LF	165	0	90	75	0
515	Steel Protective Coating	SF	2675	2407	50	0	218
3440	Effectiveness (Steel Protective Coatings)	LF	268	0	50	0	218
(107) Rust & corrosion to top & bottom flanges & diaphragms at all Spans. Rust with section loss, with some holes to all diaphragms.							
205	Reinforced Concrete Column	EA	4	1	1	2	0
1090	Exposed Rebar	EA	2	0	0	2	0
1190	Abrasion/Wear (PSC/RC)	EA	1	0	1	0	0
(205) Spalls with rebar exposed to Column 2 @ Bent 1 & Column 1 @ Bent 2. Abrasion to bottom of Columns 1 & 2 @ Bent 2.							
210	Reinforced Concrete Pier Wall	LF	24	9	12	3	0
1090	Exposed Rebar	LF	3	0	0	3	0
1190	Abrasion/Wear (PSC/RC)	LF	12	0	12	0	0
(210) Abrasion to bottom of web wall @ Bent 2. Spall with rebar exposed to web wall @ Bent 1.							
215	Reinforced Concrete Abutment	LF	106	94	0	12	0
1080	Delamination/Spall/Patched Area	LF	8	0	0	8	0
1090	Exposed Rebar	LF	4	0	0	4	0

SH 5 White County over EAST CADRON CREEK

Location: 1.53 MI S OF CLEBURNE CO

Team Lead: Nathan Edwards, **Inspection Date:** 08/11/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
(215) Abutment 1 - Large spall to Right end. Spalls with rebar exposed with s/l to Right ends of Abutments 1 & 2. Abutment 2 - Spall to abutment under Girder 2. Abutments 1 & 2 have rotated closing joints.							
234	Reinforced Concrete Pier Cap	LF	34	31	0	3	0
1090	Exposed Rebar	LF	2	0	0	2	0
1130	Cracking (RC and Other)	LF	1	0	0	1	0
(234) Spall with 2' rebar exposed to Cap at Bent 1. Cracking to Left end of Cap @ Bent 1.							
303	Assembly Joint with Seal	LF	44	0	0	44	0
2350	Debris Impaction	LF	44	0	0	44	0
(303) All joints are closed & not visible due to asphalt overlay.							
311	Movable Bearing	EA	6	0	5	1	0
1000	Corrosion	EA	2	0	2	0	0
1020	Connection	EA	4	0	3	1	0
515	Steel Protective Coating	SF	12	0	4	0	8
3440	Effectiveness (Steel Protective Coatings)	EA	12	0	4	0	8
(311) Abutments 1 & 2: Bearings are rusting, flaking & some with section loss. Abutment 1: Moveable Bearing 1 has anchor bolt missing & Moveable Bearing 2 has both anchor bolt nuts missing. Abutment 2 : Moveable Bearings 1 & 2 have section loss to anchor bolts with nuts missing. Moveable Bearings @ Bent 1 have Light rust.							
313	Fixed Bearing	EA	2	0	2	0	0
1000	Corrosion	EA	2	0	2	0	0
515	Steel Protective Coating	SF	4	4	0	0	0
(313) Minor rust to Masonry plate @ Fixed Bearings @ Bent 2.							
331	Reinforced Concrete Bridge Railing	LF	304	112	15	177	0
1080	Delamination/Spall/Patched Area	LF	150	0	0	150	0
1090	Exposed Rebar	LF	10	0	7	3	0
1130	Cracking (RC and Other)	LF	16	0	8	8	0
7000	Damage	LF	16	0	0	16	0
(331) Abutments 1 & 2: Large spalls to end posts with rebar exposed at both Abutments. Abutment 1: Top half of concrete Post 1 on Right, is missing w/t rebar exposed. Span 3: Concrete posts 1, 3, 5 - 8 on Right have cracks & spalls. Cracking to Left & Right curbs. 150' of spalls to concrete curb on Left & Right, with some rebar exposed. Several concrete posts are spalled/cracked with rebar exposed.							

SH 5 White County over EAST CADRON CREEK

Location: 1.53 MI S OF CLEBURNE CO

Team Lead: Nathan Edwards, **Inspection Date:** 08/11/2022

Deck

[illegible]

Asset #01895(NSTM, Routine)

SH 5 White County over EAST CADRON CREEK

Location: 1.53 MI S OF CLEBURNE CO

Team Lead: Nathan Edwards, **Inspection Date:** 08/11/2022

Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
205	Reinforced Concrete Column	EA	4	1	1	2	0
1090	Exposed Rebar	EA	2	0	0	2	0
1190	Abrasion/Wear (PSC/RC)	EA	1	0	1	0	0
(205) Spalls with rebar exposed to Column 2 @ Bent 1 & Column 1 @ Bent 2. Abrasion to bottom of Columns 1 & 2 @ Bent 2.							
210	Reinforced Concrete Pier Wall	LF	24	9	12	3	0
1090	Exposed Rebar	LF	3	0	0	3	0
1190	Abrasion/Wear (PSC/RC)	LF	12	0	12	0	0
(210) Abrasion to bottom of web wall @ Bent 2. Spall with rebar exposed to web wall @ Bent 1.							
215	Reinforced Concrete Abutment	LF	106	94	0	12	0
1080	Delamination/Spall/Patched Area	LF	8	0	0	8	0
1090	Exposed Rebar	LF	4	0	0	4	0
(215) Abutment 1 - Large spall to Right end. Spalls with rebar exposed with s/l to Right ends of Abutments 1 & 2. Abutment 2 - Spall to abutment under Girder 2. Abutments 1 & 2 have rotated closing joints.							
234	Reinforced Concrete Pier Cap	LF	34	31	0	3	0
1090	Exposed Rebar	LF	2	0	0	2	0
1130	Cracking (RC and Other)	LF	1	0	0	1	0
(234) Spall with 2' rebar exposed to Cap at Bent 1. Cracking to Left end of Cap @ Bent 1.							



Asset #01895(NSTM, Routine)

SH 5 White County over EAST CADRON CREEK

Location: 1.53 MI S OF CLEBURNE CO

Team Lead: Nathan Edwards, Inspection Date: 08/11/2022

Culvert

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4



Elevation with Log Mile running to the Right.



Roadway with Log Mile running Southeast to Northwest.

Maintenance Needs

Date Reported: 08/03/2015
Priority: D- Routine
Type of Work: Replace (General)
Status: Monitor
Component:

Deficiency Description

Bolts connecting top flange & road iron have sheared at Abutment 2 allowing deck to float under traffic.

Remarks



Bolts connecting top flange & road iron have sheared at Girder 1 & 2 at Abutment 2 allowing deck to float under traffic.



Bolts connecting top flange & road iron have sheared at Abutment 2 allowing deck to float under traffic.



Asset #01895(NSTM, Routine)

SH 5 White County over EAST CADRON CREEK

Location: 1.53 MI S OF CLEBURNE CO

Team Lead: Nathan Edwards, **Inspection Date:** 08/11/2022

Date Reported: 08/03/2015

Priority: D- Routine

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

Status: Monitor

Component:

Deficiency Description

Large spalls to end posts some with rebar exposed at Abutments 1 & 2.

Remarks



Abutment 2 typical of : Large spalls to end posts,
some with rebar exposed at
Abutments 1 & 2.



Abutment 2. Large spalls to end posts, some with
rebar exposed at
Abutments 1 & 2.



Large spalls to end posts some with rebar exposed at Abutments 1 & 2.



Asset #01895(NSTM, Routine)

SH 5 White County over EAST CADRON CREEK

Location: 1.53 MI S OF CLEBURNE CO

Team Lead: Nathan Edwards, **Inspection Date:** 08/11/2022

Date Reported: 08/09/2011

Priority: C - Important

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

Status: Monitor

Component:

Deficiency Description

Several concrete posts are spalled and/or cracked at all spans.

Remarks



Abutment 1, right side: Several concrete posts are spalled and/or cracked at all spans.



Several concrete posts are spalled and/or cracked at all spans.



Several concrete posts are spalled and/or cracked at all spans.



Asset #01895(NSTM, Routine)

SH 5 White County over EAST CADRON CREEK

Location: 1.53 MI S OF CLEBURNE CO

Team Lead: Nathan Edwards, **Inspection Date:** 08/11/2022

Date Reported: 08/03/2015
Priority: C - Important
Type of Work: Repair (General)
Status: Monitor
Component:

Deficiency Description

Rust with section loss to lower web & bottom flanges &/or diaphragm connections at all spans. Heavy section loss to flange of Diaphragm's 1 and 3 at Span 1.

Remarks



Rust with section loss to lower web and bottom flanges and/or diaphragm connections at all spans.
Heavy loss to flange of Diaphragm 1, at Span 1.



Rust with section loss to lower web & bottom flanges &/or diaphragm connections at all spans.
Heavy section loss to flange of Diaphragm's 1 & 3 at Span 1.



Rust with section loss to lower web & bottom flanges &/or diaphragm connections at all spans. Heavy section loss to flange of Diaphragm's 1 and 3 at Span 1.

Date Reported: 08/09/2011
Priority: C - Important
Type of Work: (Inactive) (Inactive) 9 - None
Status: Monitor
Component:

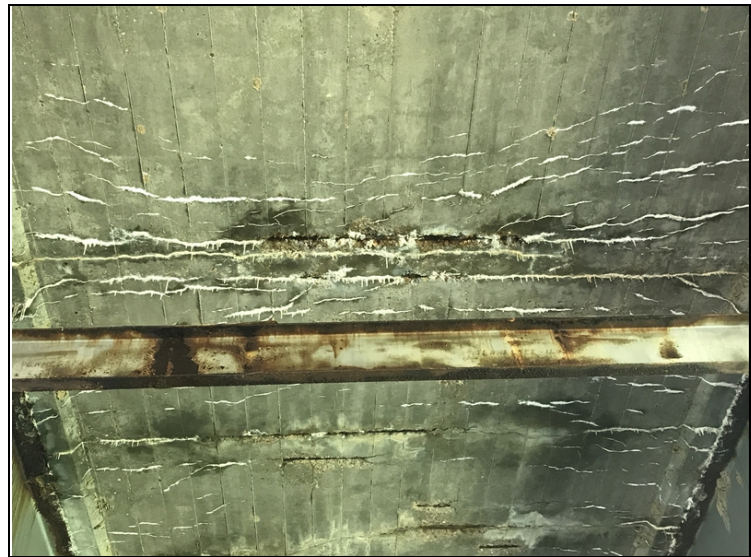
Deficiency Description

Spalls with rebar exposed & transverse efflorescent cracks to soffit & overhangs at all spans.

Remarks



Span 1, typical of all spans. Spalls with rebar exposed & transverse efflorescent cracks to soffit & overhangs at all spans.



Spalls with rebar exposed & transverse efflorescent cracks to soffit & overhangs at all spans.

Date Reported: 08/09/2011
Priority: C - Important
Type of Work: Repair (General)
Status: Monitor
Component:

Deficiency Description

Rust with section loss to bearing assemblies at Abutments 1 & 2 with one anchor bolt missing on Bearing 1 & two anchor bolt nuts missing at Bearing 2 at Abutment 1 and on Bearings 1 & 2 at Abutment 2.

Remarks



Abutment 1. Typical of section loss to bearing assemblies & missing anchor bolt nuts at Abutments 1 & 2.



Rust with section loss to bearing assemblies at Abutments 1 & 2 with anchor bolt nuts missing on Bearing 1 at Abutment 1 and on Bearings 1 & 2 at Abutment 2.



Asset #01895(NSTM, Routine)

SH 5 White County over EAST CADRON CREEK

Location: 1.53 MI S OF CLEBURNE CO

Team Lead: Nathan Edwards, Inspection Date: 08/11/2022

Routine Maintenance

Check Box Maintenance Items

Data Field	Value
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	



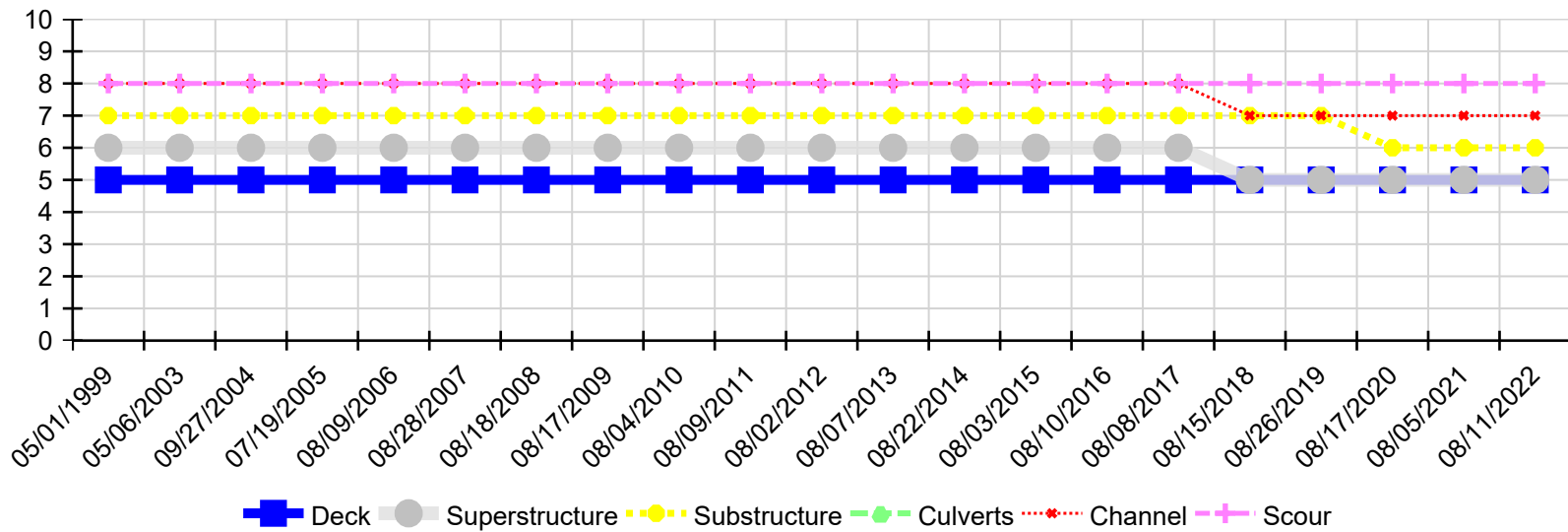
Asset #01895(NSTM, Routine)

SH 5 White County over EAST CADRON CREEK

Location: 1.53 MI S OF CLEBURNE CO

Team Lead: Nathan Edwards, Inspection Date: 08/11/2022

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
08/11/2022	5	5	6	N	7	8
08/05/2021	5	5	6	N	7	8
08/17/2020	5	5	6	N	7	8
08/26/2019	5	5	7	N	7	8
08/15/2018	5	5	7	N	7	8
08/08/2017	5	6	7	N	8	8
08/10/2016	5	6	7	N	8	8
08/03/2015	5	6	7	N	8	8
08/22/2014	5	6	7	N	8	8
08/07/2013	5	6	7	N	8	8
08/02/2012	5	6	7	N	8	8
08/09/2011	5	6	7	N	8	8
08/04/2010	5	6	7	N	8	8
08/17/2009	5	6	7	N	8	8
08/18/2008	5	6	7	N	8	8
08/28/2007	5	6	7	N	8	8
08/09/2006	5	6	7	N	8	8
07/19/2005	5	6	7	N	8	8
09/27/2004	5	6	7	N	8	8
05/06/2003	5	6	7	N	8	8
05/01/1999	5	6	7	N	8	8

FRACTURE CRITICAL BRIDGE MEMBER INSPECTION

<u>MEMBER or ELEMENT</u>	<u>TYPE of INSPECTION</u>	<u>CONDTION RATING</u>
Painted Steel Open Girders	Visual, Hands On	5
		

**BRIDGE INSPECTION REPORT
NBIS-FORM III FC**

Inspected by: NSE/FEH
Date 08/11/2022
Dist. 5 Co. 73/White

Rte. 5 Sect. 14 Log. 17.42 Bridge 01895

State System

FRACTURE CRITICAL INSPECTION PROCEDURE
BRIDGE # 01895

DISTRICT 5 – White COUNTY (73)
ROUTE 5
SECT. 14
LOG MILE 17.42

Bridge # 01895 is made of three 50' continuous spans of a steel I Beam 2 girder system.

Fracture critical tension members are girders #1 and #2.

Girders will be a hands-on visual inspection for any evidence of rusting with section loss, cracking or other deterioration. Dye penetrant will be used to determine extent of cracking & the Ultra Sonic gauge (Model NDT 705) will be used to measure section loss.

Special attention should be paid to the diaphragm connections on Girder #1 & #2 @ each span.

Members will be accessed by the snoopers.