



Latitude:35.67917, Longitude:-94.44207

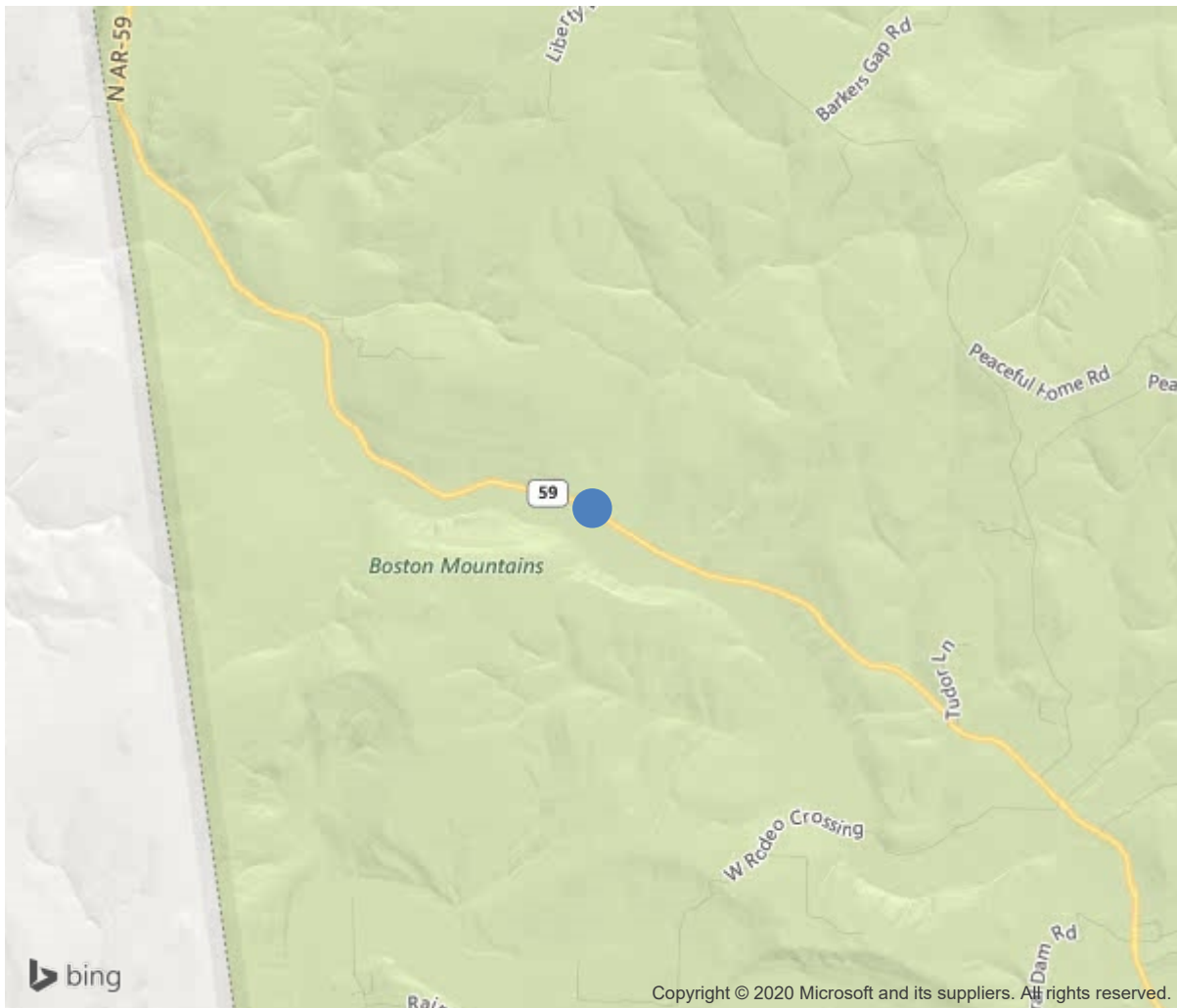
Route:59 Section:05 Log:7.05

Arnold Road ID:17x59x5xA, Arnold Log mile:7.074

District 04, Crawford County

Owner: 1-State Highway Agency

18.25 N JCT I 40



35.67917, -94.44207



Bridge #02621 (Routine)
State Highway 59 over Huey Creek - Crawford Co

Location: 18.25 N JCT I 40

Team Lead: Jeff Jones Inspection Date: April 30, 2020

IDENTIFICATION	
(1) State Names	Arkansas
(8) Structure Number	02621
(5) Inventory Route	59
(2) Highway Agency District	04
(3) County Code	33-Crawford County, Arkansas
(4) Place Code	0
(6) Features Intersected	Huey Creek - Crawford Co
(7) Facility Carried	State Highway 59
(9) Location	18.25 N JCT I 40
(11) Mile Point	7.05 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000059050
(16) Latitude	35.67917
(17) Longitude	-94.44207
(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	4
(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	1950
(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	1000
(30) Year of ADT	2018
(109) Truck ADT	17 %
(19) Bypass, Detour Length	40 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	16 ft
(49) Structure Length	63 ft
(50) Curb or Sidewalk Width	
Left	1 ft
Right	1 ft
(51) Bridge Roadway Width Curb to Curb	24 ft
(52) Deck Width Out to Out	26 ft
(32) Approach Roadway Width (W/Shoulders)	30.8 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	25.9 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 water
(111) Pier Protection	1-Navigation protection not requ
(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 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	0-The inventory route is not part of
(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	5
(59) Superstructure	3
(60) Substructure	4
(61) Channel & Channel Protection	6
(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	11
(65) Inventory Rating Method	1-Load Factor(LF)
(66) Inventory Rating	
Type	4
Rating	6
(70) Bridge Posting	0-> 39.9% below
(41) Structure Open/Posted/Closed	P-Posted for load (may include o
APPRAISAL	
(67) Structural Evaluation	3
(68) Deck Geometry	4
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	7
(72) Approach Roadway Alignment	7
(36) Traffic Safety Features	0000
A) Bridge Railings	0-Inspected feature does not meet cur
B) Transitions	0-Inspected feature does not meet cur
C) Approach Guardrail	0-Inspected feature does not meet cur
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	1423
(115) Year of Future ADT	2028
INSPECTIONS	
(90) Inspection Date	202004
(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	Yes 0 201910

SUFFICIENCY RATING	8
STATUS (SD/FO/None)	Structurally Deficient

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	1780	1520	207	53	0
1080	Delamination/Spall/Patched Area	SF	14	0	0	14	0
1090	Exposed Rebar	SF	6	0	0	6	0
1120	Efflorescence/Rust Staining	SF	160	0	127	33	0
1130	Cracking (RC and Other)	SF	80	0	80	0	0
510	Wearing Surfaces	SF	1507	681	626	200	0
3210	Delam/Spall/Patched Area/Pothole	SF	48	0	48	0	0
3220	Crack (Wearing Surface)	SF	778	0	578	200	0
(12)							
-Asphalt driving surface of the deck has transverse cracks over the deck joints with map cracking in areas. -Maintenance forces have placed asphalt patches in areas. -Areas in the throat of the deck drains have exposed reinforcing steel. Exposed reinforcing steel has no apparent section loss during this inspection. -Numerous areas of map cracking with efflorescence along the edges and in the overhangs. No apparent significant changes since the last inspection. -The exterior edge of the deck overhang has a few shallow spalls with exposed reinforcing steel. -The curbs have areas with map cracking and soft deteriorated concrete.							
107	Steel Open Girder/Beam	LF	561	360	57	90	54
1000	Corrosion	LF	201	0	57	90	54
515	Steel Protective Coating	SF	1683	0	1122	171	390
3440	Effectiveness (Steel Protective Coatings)	SF	1683	0	1122	171	390
(107)							
04/30/2020 - JCJ & TJL - Routine Inspection conducted this date. Visual / Hands-On Method of Inspection was conducted with active corrosion hammered off the superstructure in order to provide rough measurements of the section loss to the Superstructure this date. See additional superstructure sketches for additional information. The condition of the Superstructure continues to worsen with numerous holes and additional section loss in numerous beams. Last documented repairs to the superstructure for this structure was 04/11/2013. NBIS Rating for Item 59 is left at a 3 based upon 09/21/2017 email chain from Mike Hill. Not all beams have holes in them. See History files, section loss field sketch showing progression, photos, Element notes, and Maintenance Needs Report for additional information concerning the condition of the superstructure. The majority of the beam webs have active corrosion with section loss located at the concrete substructure interface. Section loss ranges from initial up to large holes / perforations with the most extreme locations noted in the description narrative, field sketches, and photographs. Superstructure is audible during live load impacts. The interior beams have no areas with obvious crushing or deformation apparent during this inspection. There was not significant deflection of the beams apparent during live load impacts during this inspection. There are no fractured beams apparent during this inspection.							
Span 1- Bent 1- Beams 2 - 7 have section loss in the webs that range from initial up to 1/8" Bent 1, Beam 1 web has up to approximately 25% section loss.							
Span 1 - Bent 2 - The majority of the beam webs have active corrosion with section loss located at the concrete substructure interface. Section loss ranges from initial up to large holes / perforations with the most extreme locations noted in the description narrative, field sketches,							



Bridge #02621 (Routine)
State Highway 59 over Huey Creek - Crawford Co

Location: 18.25 N JCT I 40

Team Lead: Jeff Jones, Inspection Date: April 30, 2020

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
	and photographs. Beam 1 Bent 2 face- Large holes in the base of the web with significant section loss to the bottom flange. See field sketch and photos. Beam 2 Bent 2 face- bottom flange has knife edge section loss. Beam 3 Bent 2 face- bottom flange has knife edge section loss and is reduced to 5.25" in width. Beam 4 Bent 2 face- bottom flange has knife edge section loss with a 1" hole rusted through the bottom flange. Beam 5 Bent 2 face- 1/4" hole rusted through the bottom flange. Beam 6 Bent 2 face- bottom flange has knife edge section loss and is reduced to 5.25" in width. Beam 7 Bent 2 face- bottom flange has knife edge section loss and is reduced to 5.25" in width. Beam 8 Bent 2 face- bottom flange has knife edge section loss and is reduced to 5.25" in width. Beam 8 at mid-span bottom flange reduced to 1/8" thick, web has 3/16" section loss. Beam 9 Bent 2 face- web is paper thin with multiple holes and perforations in a 1' area. Beam 9 Top and Bottom flanges are paper thin and reduced in width to 5".						
	Span 2- Bent 2 - The majority of the beam webs have active corrosion with section loss located at the concrete substructure interface. Section loss ranges from initial up to large holes / perforations with the most extreme locations noted in the description narrative, field sketches, and photographs. Beam 9 Bent 2 face- bottom flange has knife edge section loss and is reduced to 5.25" in width. Beam 8 Bent 2 face- bottom flange is paper thin and easily deformed when hit with a hammer. Beam 8 - bottom flange is paper thin with a 1" hole rusted through the bottom flange. The web is approximately 1/16" thick in a 3" tall by 3' long area located 7' from Bent 2. Beam 7 Bent 2 face- bottom flange has knife edge section loss. Beam 6 Bent 2 face- bottom flange has knife edge section loss and is reduced to 5.5" in width. Beam 5 Bent 2 face- bottom flange has knife edge section loss. Beam 4 Bent 2 face- bottom flange reduced to 1/8" thickness. Beam 3 Bent 2 face- bottom flange has knife edge section loss and is reduced to 5.5" in width. Beam 2 Bent 2 face- bottom flange has knife edge section loss and is reduced to 4.75" in width. Beam 1 Bent 2 face- 1" hole rusted through base of the web located 7" from face of cap. Active corrosion with knife edge section loss to both flanges.						
	Span 2- Bent 3 - The majority of the beam webs have active corrosion with section loss located at the concrete substructure interface. Section loss ranges from initial up to large holes / perforations with the most extreme locations noted in the description narrative, field sketches, and photographs. Beam 1 Bent 3 face- bottom flange has knife edge section loss. Beam 2 Bent 3 face- bottom flange has knife edge section loss. Beam 3 Bent 3 face- bottom flange has knife edge section loss. Beam 4 Bent 3 face- bottom flange has knife edge section loss. Beam 5 Bent 3 face- bottom flange has knife edge section loss. Beam 6 Bent 3 face- bottom flange has knife edge section loss. Beam 7 Bent 3 face- bottom flange has knife edge section loss. Beam 8 Bent 3 face- bottom flange has knife edge section loss and is reduced to 4.75" in width. Beam 9 Bent 3 face- bottom flange is paper thin with a 1" hole rusted through the bottom flange.						
	Span 3 - Bent 3 - The majority of the beam webs have active corrosion with section loss located at the concrete substructure interface. Section loss ranges from initial up to large holes / perforations with the most extreme locations noted in the description narrative, field sketches, and photographs. Beam 9 Bent 3 face- 3' long hole in top of web with 1/2" space between the top of the beam and the undersurface of the deck. Please refer to field sketch and pictures associated with this inspection. Beam 8 Bent 3 face- bottom flange has knife edge section loss and is reduced to 4.5" in width. Web has 1/8" section loss. Beam 7 Bent 3 face- bottom flange has knife edge section loss and is reduced to 4 3/4" in width. Beam 6 Bent 3 face - Bottom flange has knife edge section loss. Beam 5 Bent 3 face - Bottom flange is knife edge section loss. Web has 3/16" section loss. Beam 4 Bent 3 face - Bottom flange has knife edge section loss. Bottom flange is reduced to 5" in width. Beam 3 Bent 3 Face - Bottom flange has knife edge section loss. Beam 2 Bent 3 face - Bottom flange has knife edge section loss. There is a 4" hole rusted through the base of the web at the substructure interface.						

[illegible]



Bridge #02621 (Routine)
State Highway 59 over Huey Creek - Crawford Co

Location: 18.25 N JCT I 40

Team Lead: Jeff Jones, Inspection Date: April 30, 2020

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
210	Reinforced Concrete Pier Wall	LF	77	20	57	0	0
1120	Efflorescence/Rust Staining	LF	45	0	45	0	0
1190	Abrasion/Wear (PSC/RC)	LF	12	0	12	0	0
(210)							
-Exterior ends of Bents # 2, 3, and 4 have map cracking, concrete deterioration with efflorescence and exposed reinforcing steel at the top of Bent # 4. Exposed reinforcing steel has initial section loss. -No apparent loss of bearing area at this inspection. -Bent # 2 has two vertical cracks with efflorescence near centerline. -Bents # 2, 3 & 4 have diagonal cracking near the ends of the bents with medium / heavy efflorescence build up. -Bent # 3 has a vertical crack under Beam # 5. -Bents # 3, 4, & 5 have medium abrasion along the bottom of the walls.							
215	Reinforced Concrete Abutment	LF	100	56	42	2	0
1080	Delamination/Spall/Patched Area	LF	13	0	13	0	0
1090	Exposed Rebar	LF	2	0	0	2	0
1120	Efflorescence/Rust Staining	LF	20	0	20	0	0
1130	Cracking (RC and Other)	LF	9	0	9	0	0
(215)							
-Bent # 1 cap has map cracking with light efflorescence at the ends and vertical cracking under the beams. -Bent # 1 has multiple vertical cracks in the abutment stem. -Bent # 1 Lt & Rt wing walls have a wide horizontal crack, areas of map cracking, concrete deterioration and section loss with light efflorescence. These areas appear to be at construction joints where the structure was reconstructed. -No apparent significant changes in the amount of rotation at Bent # 5. See documentation of measurements associated with this inspection. -Cracks at Bent 5 are still 3/8" wide at this inspection and run the full width of the wings and abutment stem. -No apparent changes in the deteriorated area on the Lt side of Bent # 5. -No repairs to the spalling and concrete deterioration at Bent # 5 since the last inspection. Spalling exposes reinforcing steel with active corrosion with 1/8" section loss.							
220	Reinforced Concrete Pile Cap/Footing	LF	177	167	0	10	0
6000	Scour	LF	10	0	0	10	0
(220)							
-Bents # 1 - 3 footings have cover and are not visible. -Bent # 4 Span # 4 RT. side top of the footing is partially exposed but not undermined. -Bent # 5 footing has one crack located at the Lt edge of the footing that corresponds with the diagonal crack in the abutment stem. Maintenance forces have placed concrete cover over the footing and the repair appears to be holding. -Bent # 5 repairs for the exposed footing and scour are still holding with no apparent scour problems during this inspection.							
234	Reinforced Concrete Pier Cap	LF	78	32	40	6	0
1090	Exposed Rebar	LF	2	0	0	2	0
1120	Efflorescence/Rust Staining	LF	44	0	40	4	0
(234)							
-The bent caps have map cracking with heavy efflorescence. -No apparent loss of bearing area at this inspection. -Bent # 2 has longitudinal and map cracking with heavy efflorescence buildup. -Bent # 3 has longitudinal and map cracking with heavy efflorescence buildup. -Bent # 4 has longitudinal and map cracking with heavy efflorescence buildup with concrete deterioration in the ends of the caps with exposed reinforcing steel. Exposed reinforcing steel has initial section loss.							
301	Pourable Joint Seal	LF	85	0	0	85	0

Bridge #02621(Routine)
State Highway 59 over Huey Creek - Crawford Co

Location: 18.25 N JCT I 40

Team Lead: Jeff Jones, **Inspection Date:** April 30, 2020

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
2350	Debris Impaction	LF	85	0	0	85	0
(301)							
-Liquid asphalt joint seal is not visible due to an asphalt overlay.							
330	Metal Bridge Railing	LF	126	0	126	0	0
1000	Corrosion	LF	126	0	126	0	0
515	Steel Protective Coating	SF	378	38	0	250	90
3440	Effectiveness (Steel Protective Coatings)	SF	340	0	0	250	90
(330)							
-Map cracking in the base of the concrete portions of the rail posts in areas and along the tops of the curbs. No apparent significant changes since the last inspection.							
-The metal portion of the bridge railing has a failing paint system with a light coat of rust.							



Approach roadway facing North.



Approach roadway facing South.



Approach roadway facing North.



Span 3 Beam 1 active corrosion.



Elevation



Span 3 Beam 1 Numerous holes in the web.



Span 2 Beams 8 & 9 active corrosion.



Span 1 typical superstructure.



Roadway



Span 4 Bent 5 Beam 1 holes in the web.



Span 1 Bent 2 holes rusted through the web.



Span 4 Bent 4 Beam 1 large hole through the web.



Span 3 Beam 9 @ Bent 3 holes in the web.



Roadway 2



Span 3 Beam 9 Numerous holes in the web.



South abutment horizontal cracking.



Span 3 Bent 4 active corrosion with holes through the web.



Bent 4 Span 4 Beams 2 & 3 holes in the bottom flanges.



Span 4 typical active corrosion in the superstructure.



Bent 5 cracking.



Span 1 Beams 8 & 9 active corrosion.



Bent 4 Span 4 Beam 9 holes through the web.



Span 3 typical superstructure.



Span 2 typical superstructure.



Span 4 Bent 4 Beam 9 hole in the bottom flange.



Span # 1, Beam # 1 at the Bent # 2 juncture.



Span # 1. Beam # 9 at Bent # 2. 12" area that is paper thin with multiple holes rusted through the web. Top and Bottom flanges are paper thin and reduced in width to 5".



Span # 2, Beam # 8 located near mid-span- bottom flange is paper thin with perforations. Web is reduced to approximately 1/16". 3" tall x 3' long area.



Span # 3, Beam # 9. 3' section of web missing.



Span # 3. Beam # 9 section loss with 1/2" space between the top of the beam and the undersurface of the deck.



Span # 3- Beam # 1 Bent # 3 face- multiple holes rusted through base of web.



Span # 3. Beam # 1. Active corrosion with multiple holes rusted in the web.



Span # 3 superstructure at Bent # 3. Typical of Beam corrosion.



Span # 3 Beam # 1 Bent # 3- multiple holes within 4' of Bent # 3.



Span # 3 Beam # 2 Bent # 3 - 4" hole in the web at Bent # 3 face.



Span # 3 mid-span Beam # 1 - multiple holes in web near mid-span.



Span # 3 at Bent # 4. Beams # 1 thru # 4



Span # 4 - Beam # 9 Bent # 4 face - Bottom flange has knife edge section loss and is reduced to 2 3/4" in width. The base of web has a 2" hole. Top flange is reduced to 3" in width.



Span # 4 beams # 1 thru # 5 at Bent # 4.



Span # 4 Beams # 6 thru # 9 at Bent # 4.



Span # 4 at Bent # 4. Bottom flanges of Beams # 2 & 3.



Span 4- Beam 3 Bent 4 face- 4" hole and 1.75" hole, bottom flange is reduced to 2" in width.



Span # 4- Beam # 1 Bent # 4- 10" x 3" hole adjacent to fish plate repair.



Span # 4 Beam # 2 Bent # 4 face- 2" hole, bottom flange reduced to 2" in width.



Span # 4- Beam # 1, Bent # 5 face- 2" x 5" area that is paper thin with multiple holes and perforations.



Deck. Typical.



Left curb. Span # 4. Map cracking.



Deck. Span # 1. Typical.



Deck. Span # 1. Typical.



Undersurface of Span # 1. Efflorescence.



Undersurface of Span # 1. Efflorescence.



Bent # 4. Typical.



Bent # 1. Typical.



Left end of Bent # 1.



Span # 1 side of Bent # 2.



Bridge railing. Typical.



Left exterior of bridge railing. Typical.

Maintenance Needs

Date Reported: 07/07/2011
Priority: C - Important
Type of Work: Repair
Status: Open
Component: 215 - Reinforced Concrete Abutment

Deficiency Description

Substructure

The south abutment breast wall has wide horizontal and diagonal cracking the full width of the breast wall due to apparent rotation. Actual field measurements taken in the field indicate that there is no significant additional rotation of the south abutment or changes to the horizontal or diagonal cracks in the breast wall since the 07-07-2011 inspection. The spalled area in the Left side of breast wall with exposed reinforcing steel has no apparent noteworthy changes since last inspection. The top of abutment appears to be supported by the superstructure. See documentation and history files for field measurements and sketch of rotation.

Remarks

Bent # 5 cracking in the abutment stem.



Bent # 5 cracking and concrete deterioration.



Bent # 5. Typical.

Date Reported: 03/12/2012
Priority: D- Routine
Type of Work: None
Status: Open
Component: 234 - Reinforced Concrete Pier Cap

Deficiency Description

Substructure

The left and right ends of Bent # 4 cap have soft and deteriorated concrete that has caused the ends of the cap to spall exposing the reinforcing steel. The northeast and southeast wing walls have horizontal fractures approximately 2' from the top of the wing walls that extend the full width of the wing wall and are beginning to spall along the fractured areas.

Remarks



Bent # 5 cracking and concrete deterioration.



Bent # 1 Lt wing wall deterioration.



Typical concrete deterioration in the cap of Bent # 4.



Bent # 4 Rt concrete deterioration and section loss with exposed reinforcing steel.



Right end of Bent # 4 cap.

Date Reported: 04/03/2014
Priority: C - Important
Type of Work: Repair
Status: Open
Component: 107 - Steel Open Girder/Beam

Deficiency Description

Superstructure

The superstructure has numerous areas of active corrosion, section loss, and holes rusted through in the beams. The section loss ranges from initial up to areas of complete section loss with holes in the webs and top and bottom flanges.

Remarks

04/30/2020 - JCJ & TJL - Visual / Hands-On Method of Inspection was conducted with active corrosion hammered off the superstructure in order to provide rough measurements and field sketches of the section loss to the Superstructure for load analysis. The condition of the Superstructure continues to worsen with numerous holes and additional section loss in numerous beams. The superstructure will have a visual inspection on a 6 month frequency to monitor for obvious crushing and fractures.

This deficiency was reviewed by District 4 and Heavy Bridge Forces, Chad Davis, D4 DME, Jeb Baldwin, D4 BJS, Mike Hill, HBME, and Stewart Linz, SHBME. This bridge is scheduled for replacement under job #040622 in the year of 2020. It was determined that due to location the deficiencies, (outside beams), that special inspections should be scheduled through the District Bridge Inspection Program to monitor the deficiencies until the construction job begins. The repairs could be put on hold if the deficiencies remain the same until the construction replacement job begins.

07/25/2016 B-priority reduced to C-priority based upon discussions/advice of HB. Repairs will be scheduled should future inspections indicate a worsening condition (CD).

09/21/2017 JPB & SPC-Special Recurring Inspection for superstructure section loss and to monitor repairs. See pictures, notes and Microstation drawings for details. Changed Item 59 rating from "2" to "3" based on conversations with Mike Hill on the redundancy of the superstructure and the location of the questionable beams on the exterior sides of the bridge (See attached email chain in Other Files).



Bent # 5 Beam # 1 with holes rusted through the web adjacent to the bent cap.



Span # 1 Beam # 1 @ Bent # 2 with a hole rusted through the base of the web.



Bridge #02621 (Routine)

State Highway 59 over Huey Creek - Crawford Co

Location: 18.25 N JCT I 40

Team Lead: Jeff Jones **Inspection Date:** April 30, 2020



Span # 4, Bent # 4, Beam # 2 has significant section loss to the bottom flange.



Span # 4, Bent # 4, Beam # 3 has significant section loss to the bottom flange.



Span # 4, Bent # 4, Beam # 1 has a 3" x 8" hole in the web.



Span # 4, Bent # 4, Beam # 9 has significant section loss to the bottom flange.



Span # 1. Beam # 9 at Bent # 2. 12" area that is paper thin with multiple holes rusted through the web. Top and Bottom flanges are paper thin and reduced in width to 5".



Span # 3. Beam # 9 section loss with 1/2" space between the top of the beam and the undersurface of the deck.



Span # 3 Beam # 1 Bent # 3- multiple holes within 4' of Bent # 3.



Span # 3 Beam # 2 Bent # 3 - a 4" hole in the web at Bent # 3 face.

Date Reported: 04/03/2014
Priority: D- Routine
Type of Work: Repair
Status: Open
Component: 210 - Reinforced Concrete Pier Wall

Deficiency Description

Substructure

The exterior edges of the intermediate bents have vertical and map cracking with efflorescence.

Remarks



Bent # 2 cracking with efflorescence buildup.



The exterior edges of the intermediate bents have vertical and map cracking with efflorescence.



The exterior edges of the intermediate bents have vertical and map cracking with efflorescence.



Bent # 4 Rt concrete deterioration and section loss with exposed reinforcing steel.



Right side of Bent # 4.

Date Reported: 04/10/2019
Priority: C - Important
Type of Work: Repair
Status: Open
Component: 12 - Reinforced Concrete Deck

Deficiency Description

Deck

The concrete curbs are deteriorating and have map cracking with efflorescence. The curbs are beginning to lose section due to soft and crumbling concrete in areas. The undersurface of the deck has cracking visible with areas of heavy efflorescence build up.

Remarks



Span # 1 Rt active corrosion in the Beams with soft deteriorated concrete with heavy efflorescence buildup.



Span # 1 cracking with efflorescence on the undersurface of the deck.



Cracking in the curbs.



Span # 2 active corrosion with soft deteriorating concrete and efflorescence buildup.



Span # 4 Left side of deck soffit.



Inspection Comments

04/30/2020 - JCJ & TJL - Schedule this structure for a Special Recurring Inspection on a 6 month frequency for superstructure to monitor for crushing / deformation.

04/30/2020 - JCJ & TJL - Routine Inspection conducted this date.

Visual / Hands-On Method of Inspection was conducted with areas of active corrosion hammered off the superstructure in order to provide rough measurements and field sketches of the section loss to the Superstructure for load analysis.

The condition of the Superstructure continues to worsen with numerous additional holes and section loss progression in numerous beams. Last documented repairs to the superstructure for this structure was 04/11/2013. NBIS Rating for Item 59 is left at a 3 based upon 09/21/2017 email chain from Mike Hill, not all beams have holes in them. See History files, section loss field sketch, photos, Element notes, and Maintenance Needs Report for additional information concerning the condition of the superstructure.

10/09/2019 - EJW & JPW - Recurring Special Inspection conducted on this date. Superstructure rated a "3" and monitoring of the abutment at Bent # 5. No apparent significant changes or repairs to the superstructure or Bent # 5 since the last inspection. Measurements were field verified at Bent # 5 with no significant changes since the last inspection. Numerous holes rusted through the beams in all spans with no recent repairs.

Superstructure Notes

04/30/2020 - JCJ & TJL - Schedule this structure for a Special Recurring Inspection on a 6 month frequency for superstructure to monitor for crushing / deformation.

04/30/2020 - JCJ & TJL - Routine Inspection conducted this date.

Visual / Hands-On Method of Inspection was conducted with areas of active corrosion hammered off the superstructure in areas in order to provide isolated measurements of the section loss to the Superstructure this date. The condition of the Superstructure continues to worsen with numerous additional holes and section loss progression in numerous beams. Last documented repairs to the superstructure for this structure was 04/11/2013. NBIS Rating for Item 59 is left at a 3 based upon 09/21/2017 email chain from Mike Hill, not all beams have holes in them. See History files, section loss field sketch, photos, Element notes, and Maintenance Needs Report for additional information concerning the condition of the superstructure.
