



Bridge #05423(Routine, Fracture Critical, Under Record Clearance)

US 65-14B LM 6.46 over Nebraska St, SLSW/UNPAC

Location: 1.31 Mi E 63B & 79B-PB

Team Lead: Greg Loomis **Inspection Date:** October 06, 2020



Latitude:34.22825, Longitude:-91.98944

Route:65 Section:14 Log:6.46

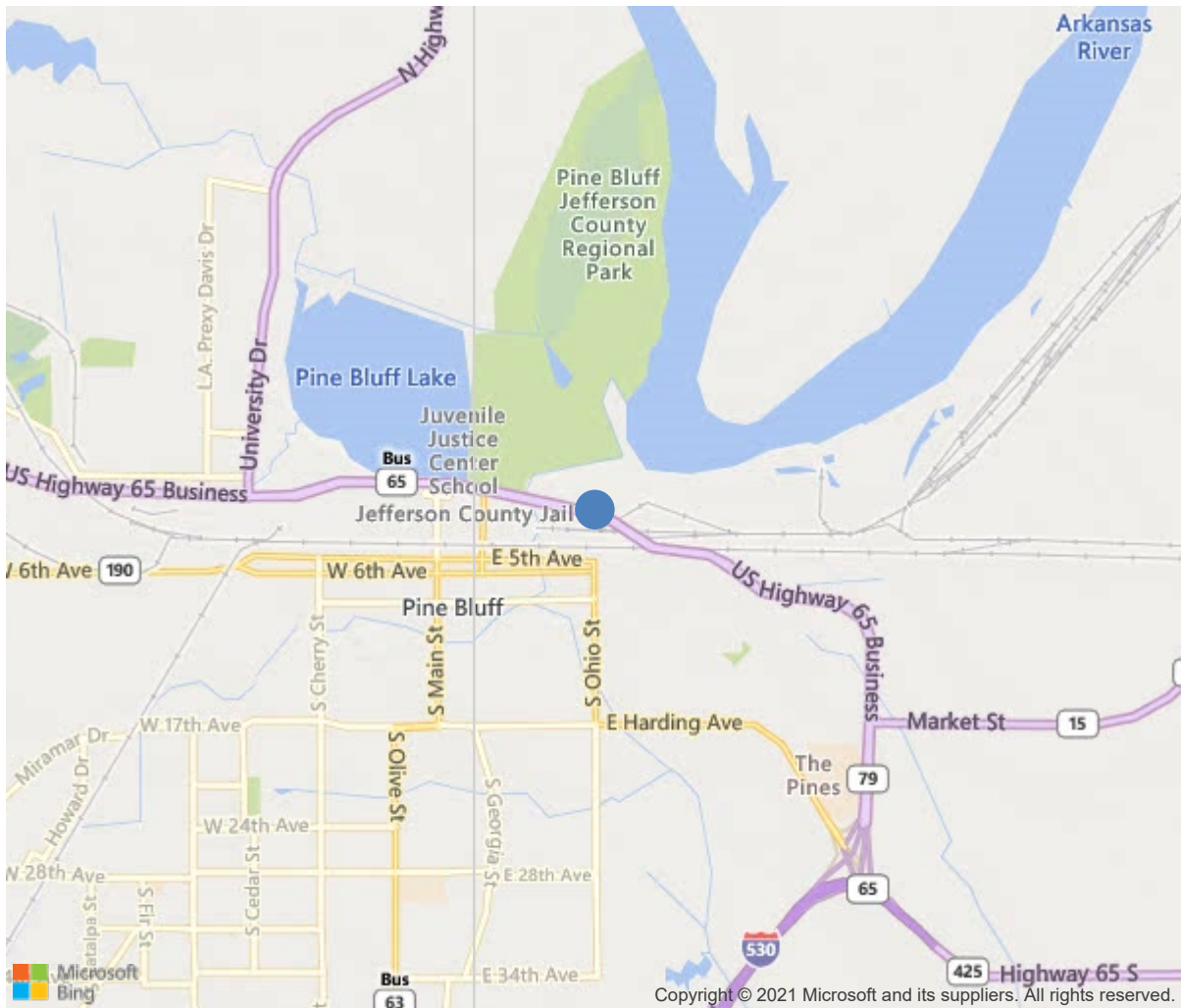
Arnold Road ID:35x65x14BxA, Arnold Log mile:6.445

District 02, Jefferson County

Owner: 1-State Highway Agency

Place Code: 55310 - Pine Bluff

1.31 Mi E 63B & 79B-PB



34.22825, -91.98944



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Team Lead: Greg Loomis Inspection Date: October 06, 2020

IDENTIFICATION	
(1) State Names	Arkansas
(8) Structure Number	05423
(5) Inventory Route	65
(2) Highway Agency District	02
(3) County Code	69-Jefferson County, Arkansas
(4) Place Code	55310
(6) Features Intersected	Nebraska St, SLSW/UNPAC
(7) Facility Carried	US 65-14B LM 6.46
(9) Location	1.31 Mi E 63B & 79B-PB
(11) Mile Point	6.46 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	000006514B
(16) Latitude	34.22825
(17) Longitude	-91.98944
(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	32
Material	3-Steel
Type	2-Stringer/Multi-beam or girder
(45) No. of Spans in Main Unit	9
(46) No. of Approach Spans	22
(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	0-None
AGE AND SERVICE	
(27) Year Built	1972
(106) Year Reconstructed	0
(42) Type of Service	14
On	1-Highway
Under	4-Highway-railroad
(28) Lane	
On	4
Under	3
(29) Average Daily Traffic	6900
(30) Year of ADT	2018
(109) Truck ADT	8 %
(19) Bypass, Detour Length	1 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	146 ft
(49) Structure Length	2342 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	74 ft
(52) Deck Width Out to Out	79.8 ft
(32) Approach Roadway Width (W/Shoulders)	84 ft
(33) Bridge Median	3-Closed median with no
(34) Skew	0 Deg
(35) Structure Flared	No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	37.1 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	13.42 ft
Ref:	
(55) Min Lat Underclear RT	3 ft
Ref:	
(56) Min Lat Underclear LT	6 ft
NAVIGATION DATA	
(38) Navigation Control	N-Not applicable, no waterway.
(111) Pier Protection	5-None present but re-evaluation
(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	14-Urban Other Principal 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	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	6
(59) Superstructure	7
(60) Substructure	7
(61) Channel & Channel Protection	N
(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	44
(65) Inventory Rating Method	1-Load Factor(LF)
(66) Inventory Rating	
Type	9
Rating	26
(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	9
(69) Clearances, Vertical/Horizontal	3
(71) Waterway Adequacy	N
(72) Approach Roadway Alignment	8
(36A) Bridge Railings	1-Inspected feature meets currently a
(36B) Transitions	0-Inspected feature does not meet cur
(36C) Approach Guardrail	0-Inspected feature does not meet cur
(36D) Approach Guardrail Ends	1-Inspected feature meets currently a
(113) Scour Critical Bridges	N-Bridge not over waterway.
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	8994
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date			10/2020
(91) Frequency			24 Months
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	Yes	12	10/2021
B: Underwater Inspection	No	0	
C: Other Special Inspection	No	0	
* 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.			

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	187067	94998	73167	18902	0
1080	Delamination/Spall/Patched Area	SF	512	0	20	492	0
1090	Exposed Rebar	SF	72	0	24	48	0
1120	Efflorescence/Rust Staining	SF	1	0	1	0	0
1130	Cracking (RC and Other)	SF	13416	0	5366	8050	0
1190	Abrasion/Wear (PSC/RC)	SF	26832	0	26832	0	0
(12)							
Deck - main spans (Spans 4-5, 12-15 & 21-23): 39'-10 3/4" wide each side (x 2) x 1032' long = 82,345 sqft.							
All spans: Unsealed, minor map-cracking & scattered minor- to moderate-sized transverse cracks with some reflective efflorescence on soffit, especially in outside lanes – 52' wide x 1032' long x 10% = 5366 sqft CS2 cracking; 52' wide x 1032' long x 15% = 8050 sqft CS3 cracking.							
Minor abrasive wear (loss of mortar) in travel lanes – 52' wide x 1032' long x 50% = 26,832 sqft CS2 abrasive wear.							
Span 14 left lane: Large area (18' wide x 30' long) of spalls/patching with steel exposed – 4' x 12' = 48 sqft CS3 rebar exposed; 492 sqft CS3 spalling.							
Bent 14: Small spalls over tops of shear connectors to cap with some transverse cracking along edges of integral cap.							
A few scattered small spalls (some with rebar exposed) in various locations.							
Drains – Span 4 left @ Bent 4, Span 13 right @ Bent 13, & Span 23 right @ Bent 24: Drains along centerline or curb filled with dirt and debris, with vegetation growing up.							
107	Steel Open Girder/Beam	LF	26250	24762	1056	432	0
1000	Corrosion	LF	911	0	651	260	0
1020	Connection	LF	12	0	0	12	0
515	Steel Protective Coating	SF	225428	0	187690	34178	3560
3440	Effectiveness (Steel Protective Coatings)	SF	8742	0	0	6244	2498
3410	Chalking (Steel Protective Coatings)	SF	114208	0	101720	12488	0
3420	Peeling/Bubbling/Cracking	SF	1930	0	0	1873	57
(107)							
Girders – main spans: 10 per span / Spans 4-5, 12-15, & 21-23 (101' - 101', 113' - 121' - 129' - 113', 108' – 146' – 108' = 1302' total span).							
Coating – Spans 4-5 (15" wide-average x 48" tall): 11.75 sqft per linear feet of girder x 202' = 23,735 sqft; Spans 12-15 (15" wide-average x 48" tall): 11.75 sqft per linear feet of girder x 468' = 54,990 sqft; Spans 21-23 (15" wide-average x 54" tall): 12.75 sqft per linear feet of girder x 362' = 46,155 sqft; = 124,880 sqft total.							
Corrosion: Some light surface corrosion on webs & flanges of girders in various locations, mainly at bents with open joints – 5% = 651' CS2.							

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
<p>Scattered small areas of pitting corrosion with very small areas of very light flaking – 2% = 260' CS3.</p> <p>Connection (various loose bolts): Span 5 Girder 3 @ Splice 1, Girder 10 @ Splice 1, Span 15, Span 12 Girder 5, Span 14 Girder 5 @ Splice 1 (bottom plate), Span 14 Girder 10 left near mid-span, Span 21 Girder 1 @ Splice 1, Span 22 Girder 9 @ Diaphragm 4, & Bent 22 back @ Girder 7 right = 12' CS3.</p> <p>Coating - Effectiveness (corrosion): 5% = 6244 sqft CS3; 2% = 2498 sqft CS4. Peeling: Various scattered locations – 1.5% = 1873 sqft CS2; 57 sqft CS3. Chalking: Remaining paint is dull and has no luster, especially on outside of outer girders – 101, 720 sqft CS2; 10% = 12,488 sqft CS3.</p>							
205	Reinforced Concrete Column	EA	44	28	16	0	0
1120	Efflorescence/Rust Staining	EA	8	0	8	0	0
1130	Cracking (RC and Other)	EA	8	0	8	0	0
(205)							
<p>Columns - main spans: 2 per bent / Bents 4-6, 12-16, & 21-24. Bents 14, 15, 22, & 23: Hairline-sized, unsealed vertical cracks with some efflorescence in top of columns.</p>							
215	Reinforced Concrete Abutment	LF	174	172	2	0	0
1130	Cracking (RC and Other)	LF	2	0	2	0	0
(215)							
<p>Abutments - approach spans: 82'-4 1/4" = 83' each (with 3'-6" wings each corner) / Bent 1; 76'-10" = 77' each (with 3'-6" wings each corner) / Bent 32. Bent 1: Small vertical crack in the back-wall.</p>							
227	Reinforced Concrete Pile	EA	91	91	0	0	0
(227)							
Piling - approach spans: 14 per bent / Bents 2 & 3; 13 per bent / Bent 26; 10 per bent / Bents 27-31.							
231	Steel Pier Cap	LF	318	310	8	0	0
1000	Corrosion	LF	8	0	8	0	0
515	Steel Protective Coating	SF	7450	0	6884	566	0
3410	Chalking (Steel Protective Coatings)	SF	7434	0	6884	550	0
3440	Effectiveness (Steel Protective Coatings)	SF	16	0	0	16	0
(231)							
<p>Integral caps - main spans: 96' each / Bent 14; 73'-6" = 74' each / Bent 15; 74' each / Bents 22, & 23. Coating: Bent 14 (30" wide-average x 120" tall): 27.5 sqft per linear feet of cap x 96' = 2640 sqft; Bent 15 (25" wide x 96" tall): 22.25 sqft per linear feet of cap x 74' = 1646 sqft; Bent 22 (22.2" wide-average x 96" tall): 21.55 sqft per linear feet of cap x 74' = 1595 sqft; Bent 23 (22.2" wide-average x 96" tall): 21.55 sqft per linear feet of cap x 74' = 1595 sqft – 26 sqft (knotch-out @ Column 1) = 1569 sqft; = 7450 sqft total.</p> <p>Some light corrosion with pitting on lower flanges at diaphragm/stiffener connections – 8' CS2 corrosion.</p>							

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
Coating – Effectiveness (corrosion): 16 sqft CS3. Chalking: Remaining paint is dull and has no luster, especially on left and right ends of Bent 14 – 6884 sqft CS2; 10% = 550 sqft CS3.							
234	Reinforced Concrete Pier Cap	LF	1954	755	710	489	0
1080	Delamination/Spall/Patched Area	LF	240	0	140	100	0
1090	Exposed Rebar	LF	38	0	18	20	0
1130	Cracking (RC and Other)	LF	90	0	60	30	0
(234)							
Caps - main spans: 74'-6" each / Bents 4-6, 12, 13, 16, 21, & 24. Various bents/locations: Scattered unsealed cracks along face and on corners of caps with some delaminations, spalls, and rebar exposed.							
302	Compression Joint Seal	LF	2011	0	1246	284	481
2320	Seal Adhesion	LF	222	0	37	37	148
2360	Adjacent Deck or Header	LF	222	0	222	0	0
(302)							
Joints - main spans: 74' each / Bents 4, 6, 12, 16, 21, & 24. Bents 4 & 24: Joint material has fallen out – 148' CS4 adhesion. Remaining joint material has varying degrees of loss of adhesion. Scattered minor spalling of deck along joint armor with some minor- to moderate-sized cracking in various locations.							
311	Movable Bearing	EA	273	209	42	22	0
1000	Corrosion	EA	15	0	8	7	0
515	Steel Protective Coating	SF	879	79	0	700	100
3440	Effectiveness (Steel Protective Coatings)	SF	240	0	0	200	40
(311)							
Moveable bearings - main spans: 10 per bent / Bents 4 ahead, 6 back, 12 ahead, 16 back, 21 ahead, & 24 back. Coating: 4 square feet each.							
Bent 4 Bearing 5 ahead: Some pack rust around pin of bearing. Various locations: Some surface rust with light flaking on masonry plates and bearings, mainly at bents with open joints.							
Bent 15 Bearing 3 back: Nut missing on anchor bolt - left side.							
*Corrected by state forces prior to 2018 inspection: *Bent 21 Bearings 9 & 10 ahead: Pins backing out - 1-2". *Bent 24 Bearing 1 back: Cotter pin & washer missing.							
313	Fixed Bearing	EA	243	208	25	10	0
515	Steel Protective Coating	SF	749	174	0	500	75
(313)							
Fixed bearings - main spans: 10 per bent / Bents 5 & 13. Coating: 4 square feet each.							

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
321 (321) Approach slabs: 34' + 24' wide x 36' long = 2088 sqft / Bent 1; 24' + 24' wide x 36' long = 1728 sqft / Bent 32.	Reinforced Concrete Approach Slab	SF	3816	3816	0	0	0
330 1020 515 (330) Railing - main spans: 1302' each side. Coating: 2 square feet per linear feet of railing. Concrete curb topped with metal railing. Span 4 left & 14 left: Minor damage to rail, post, or concrete curb. (4' each location) (Repaired by state forces but connection post are missing.)	Metal Bridge Railing Connection Steel Protective Coating	LF LF SF	5224 2 10448	5210 0 10448	14 2 0	0 0 0	0 0 0
331 (331) Railing - main spans: 1302' center-line x 2 - back-to-back railing + 1302' each side (under metal railing). Various areas: Some reinforcing steel lightly showing through wall.	Reinforced Concrete Bridge Railing	LF	10448	10248	200	0	0



Roadway view



Deck - Span 4 left: Typical



Deck - Span 15 right: Typical



Deck - Span 24 left: Typical



Deck - Spans 26-30: Typical



Soffit - Span 6: Typical



Soffit - Span 13: Typical



FC - Cap - Bent 14 back



FC - Cap - Bent 14 ahead



FC - Cap - Bent 15 back right



FC - Cap - Bent 22 back left



FC - Cap - Bent 22 ahead left



FC - Cap - Bent 23 back left



FC - Cap - Bent 23 ahead right



Under-clearance signs - Bent 5 back



Joint - Bent 1 right: Damage



Joint - Bent 4 left: Material missing



Joint - Bent 7 right: Loss of adhesion/spalling of adjacent deck



Joint - Bent 7 left: Loss of adhesion/adjacent deck Spalling (deck Cracking)



Joint - Bent 8 left: Adjacent deck spalling



Joint - Bent 26 left: Adjacent deck spalling



Deck - Span 25 right: Cracking/spalling



Soffit - Span 4 Bay 2: Efflorescence



Soffit - Span 22 left: Efflorescence on center overhang



Cap - Bent 4 ahead: Cracking on top



Cap - Bent 5 back: Cracking



Cap - Bent 6 back left: Cracking



Cap - Bent 6 back right: Rebar exposed/efflorescence



Cap - Bent 7 ahead left: Cracking



Cap - Bent 9 back right: Rebar exposed/efflorescence



Cap - Bent 16 back left: Efflorescence/rebar exposed



Cap - Bent 16 bottom face: Rebar exposed



Cap - Bent 20 top face @ Bearings 1: Abrasive wear



Cap - Bent 21 back left: Cracking



Bent 22 Column 2 right: Cracking



Cap - Bent 15 back @ Girder 6: Stiffener twisted to right at bottom

Maintenance Needs

Date Reported: 10/03/2012
Priority: C - Important
Type of Work: Repair
Status: Open
Component: 330 - Metal Bridge Railing

Deficiency Description

Railing – Span 18 left side: Post missing.
Concrete curb has been repaired, but post for railing is still missing.

Remarks



Railing – Span 18 left side: Post missing

Date Reported: 10/11/2012
Priority: G - General/ Preventive maintenance
Type of Work: Repair
Status: Monitor
Component: 313 - Fixed Bearing

Deficiency Description

Nuts missing on anchor bolts -

Bent 1 Bearings 6 left & right, 7 left, & 11 left, Bent 15 Bearing 3 back (left), Bent 16 Bearing 4 ahead (right), Bent 16 Bearing 9 ahead (right), Bent 17 Bearing 2 ahead (left), Bent 17 Bearing 4 ahead (right), Bent 17 Girder 9 back (right), Bent 18 Bearing 5, 6, 7, & 9 ahead (right), Bent 24 Bearing 8 back (right), Bent 18 Bearing 3 ahead, Bent 21 Bearing 4 back, Bent 31 Bearing 6 back & ahead (left).

Remarks



05423 09-27-2012 Bent 1 girder 11 - missing nut left side



05423 09-27-2012 Bent 16 Girder 3 Bearing 3 - nut missing

Date Reported: 10/11/2012
Priority: G - General/ Preventive maintenance
Type of Work: Repair
Status: Monitor
Component: 313 - Fixed Bearing

Deficiency Description

Anchor bolts broke off – no nuts -
Bent 32 Bearing 8 left & right.

Remarks



05423 09-27-2012 Bent 32 - Girder 8 anchor bolts
missing

Date Reported: 10/11/2012
Priority: G - General/ Preventive maintenance
Type of Work: Repair
Status: Monitor
Component: 107 - Steel Open Girder/Beam

Deficiency Description

Girders & bearings – various locations: Some light surface rust on webs & flanges of girders and masonry plates of bearings, mainly at bents with open joints.

Remarks



Bent 4 Bearing 8 ahead: Corrosion



Span 5 Girder 10 right @ Splice: Corrosion



Span 5 Girder 5 @ splice: Corrosion



Span 5 Girder 10 left: Corrosion on bottom of web



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Span 31 Girder 7 right @ Bent 31: Corrosion

Date Reported: 10/11/2012
Priority: C - Important
Type of Work: Clean
Status: Open
Component: 234 - Reinforced Concrete Pier Cap

Deficiency Description

Bents 14, 15, 22, & 23 - center-line: Build-up of dirt and debris between center walls on top of integral cap. Small vine/bush growing up at Bent 15.

Remarks



05423 09-27-2012 Bent 15 - center walls - debris
on top of Bent 15 Cap

Date Reported: 10/11/2012
Priority: D- Routine
Type of Work: Repair
Status: Repair Documented
Component: 311 - Movable Bearing

Deficiency Description

CORRECTED - Bent 24 Bearings 1, 8, & 10 back: Cotter pins missing and pin may be beginning to work out.

Remarks

Repaired by State Forces.



CORRECTED - Bent 24 Bearing 8 back: New
cotter pin



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Date Reported: 10/11/2012
Priority: C - Important
Type of Work: Repair
Status: Repair Documented
Component: 330 - Metal Bridge Railing

Deficiency Description

CORRECTED - Railing – Span 2 right, 4 left, 14 left, & 31 right: Minor damage to rail, post, or concrete curb.
See photos.

Remarks

Repaired by State Forces.

Date Reported: 10/03/2012
Priority: C - Important
Type of Work: Repair
Status: Open
Component: 12 - Reinforced Concrete Deck

Deficiency Description

Deck – Span 14 left lane: Large area (18' wide x 30' long) of spalls with steel exposed.

Remarks



Span 14 north bound lanes have many small spalls with exposed rebar.



Deck - Span 14 left: Rebar exposed

Date Reported: 10/03/2012
Priority: C - Important
Type of Work: Repair
Status: Repair Documented
Component: 12 - Reinforced Concrete Deck

Deficiency Description

CORRECTED - Deck – Spans 17, 19, 22, 23, 25, 27, & 28 left lane & Spans 7, 9, 14, 15, & 19 right lane: Small spalls.
(some with steel exposed with minor section loss).

Remarks

Patched spalls with rapid set cement.

Some area have been patched by State Forces.



Span 14 north bound left lane spalls with exposed rebar.



Span 9 spall with exposed rebar.



Span 9 deck has large spalls with some rebar exposed, asphalt patches and concrete patched areas. Approx 72'

Date Reported: 10/03/2012
Priority: C - Important
Type of Work: Clean
Status: Open
Component: Deck

Deficiency Description

Span 4 left @ Bent 4, Span 13 right @ Bent 13, & Span 23 right @ Bent 24 and various other locations: Drains along center-line or curb filled with dirt and debris, with vegetation growing up.

10-06-2020 GGL-PRD: Changed priority from "D" to "C".

Remarks



Span 10 south bound lanes drain opening completely stopped up with debris. Common several drains this bridge.



Drain opening near bent 4 right side completely full of debris with no drainage ability.



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Drain - Span 4 left (inner gutterline): Stopped up



Drain - Span 24 right (inner gutterline): Stopped up

Date Reported: 10/11/2012
Priority: G - General/ Preventive maintenance
Type of Work: Repair
Status: Monitor
Component: 107 - Steel Open Girder/Beam

Deficiency Description

Various loose or missing bolts -

Span 4 Girders 3 & 9, Span 5 Girders 3 & 10, Span 7 Girder 7 right, Span 15, Span 12 Girder 5, Span 14 Girder 5 @ Splice 1 (bottom plate), Span 14 Girder 10 left near mid-span, Span 21 Girder 1 @ Splice 1, Span 22 Girder 9 @ Diaphragm 4, & Bent 22 back @ Girder 7 right.

Remarks



Span 4 girder 3 first splice plate near midspan has loose bolt.



05423 09-27-2012 Bent 22 Cap - loose bolt at connection plate

Date Reported: 10/11/2012
Priority: G - General/ Preventive maintenance
Type of Work: Repair
Status: Monitor
Component: 107 - Steel Open Girder/Beam

Deficiency Description

Some rust on side of web @ haunch with 20-30% section loss -
Span 3 Girder 3 right @ Bent 3, Span 9 Girder 6 right @ Bent 10, Span 11 Girders 3 & 8 right @ Bent 11, Span 16 Girder 8 left @ Bent 17, & Span 26 Girder 7 right @ Bent 26 and various other locations.

Remarks



Typical haunch area with rust forming. Common throughout bridge.



Span 16 Girder 2 left @ Bent 17: Corrosion @ haunch



05423 09-27-2012 Bent 3 Girder 3 right side -
some sec loss at the haunch area 10-15%

Date Reported: 10/11/2012
Priority: D- Routine
Type of Work: Repair
Status: Repair Documented
Component: 234 - Reinforced Concrete Pier Cap

Deficiency Description

COMBINED - Caps – various bents: Scattered unsealed cracks along face and on top corners of caps with some delaminations and shallow spalls.
See photos.

Remarks

10-06-2020 GGL-PRD: Combined with similar MN.



Bent 6 cap back has horizontal Crack under bearing 2. common bent 6 ahead at bearing 5,8 & 9.



Bent 11 cap left side has large cracks from girder 1 -3.



Bent 12 cap ahead Delams. under beam 2 and
beams 8,9 , ends of cap



Bent 21 ahead ,
under beam 2 crack with efflorescence about 3 ft
long



Bent 24 ahead has cracks with some light efflorescence. Common bent 25 back.



Bent 12 back crack in cap under beams 2-3

Date Reported: 10/11/2012
Priority: D- Routine
Type of Work: Repair
Status: Assigned
Component: 234 - Reinforced Concrete Pier Cap

Deficiency Description

Caps – Various bents/locations: Scattered unsealed cracks along face and on corners of caps with some delaminations, spalls, and rebar exposed.

Remarks



Bent 6 cap back has spalls with exposed rebar.



Bent 20 ahead about 5 ft of exposed rebar on cap



Bent 6 ahead has spalls with exposed rebar, cracking and cracking with efflorescence.



Large spall with exposed rebar on right side of cap 9 . Common on bents 4,5&6 all on the right sides .



Bent 9 cap right side has spall with exposed rebar.



Bent 4 cap right side has spall with exposed rebar.

Date Reported: 10/11/2012
Priority: C - Important
Type of Work: Repair
Status: Monitor
Component: 12 - Reinforced Concrete Deck

Deficiency Description

Deck – Bents 14, 15, & 22: Small spalls over tops of shear connectors to cap with some transverse cracking along edges of integral cap..

Remarks



Deck bent 14 south bound small spalls at shear connectors of cap. Common bent 14 north bound.



Deck overview spans 14-15. Common bent 15 south bound, bent 22 north bound.



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Deck @ Bent 23 right: Cracking along integral cap

Date Reported: 10/11/2012
Priority: C - Important
Type of Work: Repair
Status: Open
Component: 302 - Compression Joint Seal

Deficiency Description

Joints - Various bents/locations:

Joint material has completely fallen out or is loose and sagging in numerous locations..

Remaining joint material has varying degrees of loss of adhesion.

Scattered minor spalling of deck along joint armor with some minor- to moderate-sized cracking in various locations.

NOTE: Missing joint material is allow dirt and other debris to build up on caps, bearings, and ends of girders in these locations, retaining moisture and contributing to damage and decay.

10-06-2020 GGL-PRD: Changed priority from "D" to "C".

Remarks



Bent 1 south bound joint seals are cracked torn and leaking. Typical bent 2,3,6,8,9,10,12,18,20,21,25,26,27,28,29,30,31 & 32 south bound. North bound lanes 1,2,3,7,8,9,11,12,19,20,21, 25,26,27,28,29,30,31 & 32.,



Bent 4 joint seal missing south bound lanes. Common at bent 11,16,17,19 & 24 south bound. North bound lanes 4,16,18 & 24.



Bent 19 has some of the joint material missing, laying on cap from center line right. Common bent 18 left of center line.



Bent 24 joint seal has fallen completely out and is laying on cap/ bearings.



Bridge #05423(Routine, Fracture Critical, Under Record Clearance)

US 65-14B LM 6.46 over Nebraska St, SLSW/UNPAC

Location: 1.31 Mi E 63B & 79B-PB

Team Lead: Greg Loomis **Inspection Date:** October 06, 2020



Bent 7 south bound lanes have some joint seal missing and some torn and cracking. Common north bound bent 6, 10,17.

Date Reported: 10/12/2020
Priority: C - Important
Type of Work: Repair
Status: Open
Component: 12 - Reinforced Concrete Deck

Deficiency Description

Deck - various locations: A few scattered small spalls (some with rebar exposed), especially Spans 7 & 9 right.

Remarks



Deck - Span 6 left: Spall



Deck - Span 14 right: Cracking/patch/rebar exposed



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Deck - Span 9 right: Spalling/patches/rebar exposed



Deck - Span 7 right: Spalling/patches



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Location: 1.31 Mi E 63B & 79B-PB

Team Lead: Greg Loomis **Inspection Date:** October 06, 2020

Date Reported: 10/12/2020
Priority: C - Important
Type of Work: Repair
Status: Open
Component: 330 - Metal Bridge Railing

Deficiency Description

Railing - Spans 26 right: Minor impact damage to railing and posts (bolts with loose nuts/cracked concrete).

Remarks



Railing - Span 26 right: Damage



Railing - Span 26 right: Damage

Date Reported: 10/13/2020
Priority: D- Routine
Type of Work: Clean
Status: Open
Component: 234 - Reinforced Concrete Pier Cap

Deficiency Description

Caps - various bents/locations: Dirt & debris build-up on caps, around bearings, and on end of girders in many locations.

Remarks



Cap - Bent 7 @ centerline: Debris build-up



Cap - Bent 16 @ centerline: Debris build-up

Date Reported: 10/14/2020
Priority: G - General/ Preventive maintenance
Type of Work: Repair
Status: Open
Component: 12 - Reinforced Concrete Deck

Deficiency Description

Deck - all spans:

Unsealed, minor map-cracking & scattered minor- to moderate-sized transverse cracks with some reflective efflorescence on soffit, especially in outside lanes.

Minor abrasive wear (loss of mortar) in travel lanes.

Remarks



Deck - Span 2 left: Cracking



Deck - Span 5 left: Cracking/spalling



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Deck - Span 5 right: Cracking



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US 65-14B LM 6.46 over Nebraska St, SLSW/UNPAC

Location: 1.31 Mi E 63B & 79B-PB

Team Lead: Greg Loomis **Inspection Date:** October 06, 2020

Inspection Comments

Bridge is logged from west to east.

Fracture critical inspection required for Bents 14, 15, 22, & 23 caps.
Special inspection required for under-clearance < 15'.

Fracture Critical Inspection Procedure approved by MAH - 08/15/12

Sufficiency Rating Calculation Accepted by tehe576 at 2014-04-17 09:18:51

Contact information:

UPRR Glenn Kadel - (903) 452-7144 - contacted 10/2017

UPRR Mike Falls - (870) 329-6833 - contacted 10/2017

UPRR Greg - (870) 920-6957

UPRR Jimmy Smith - (870) 541-1656 - retired