



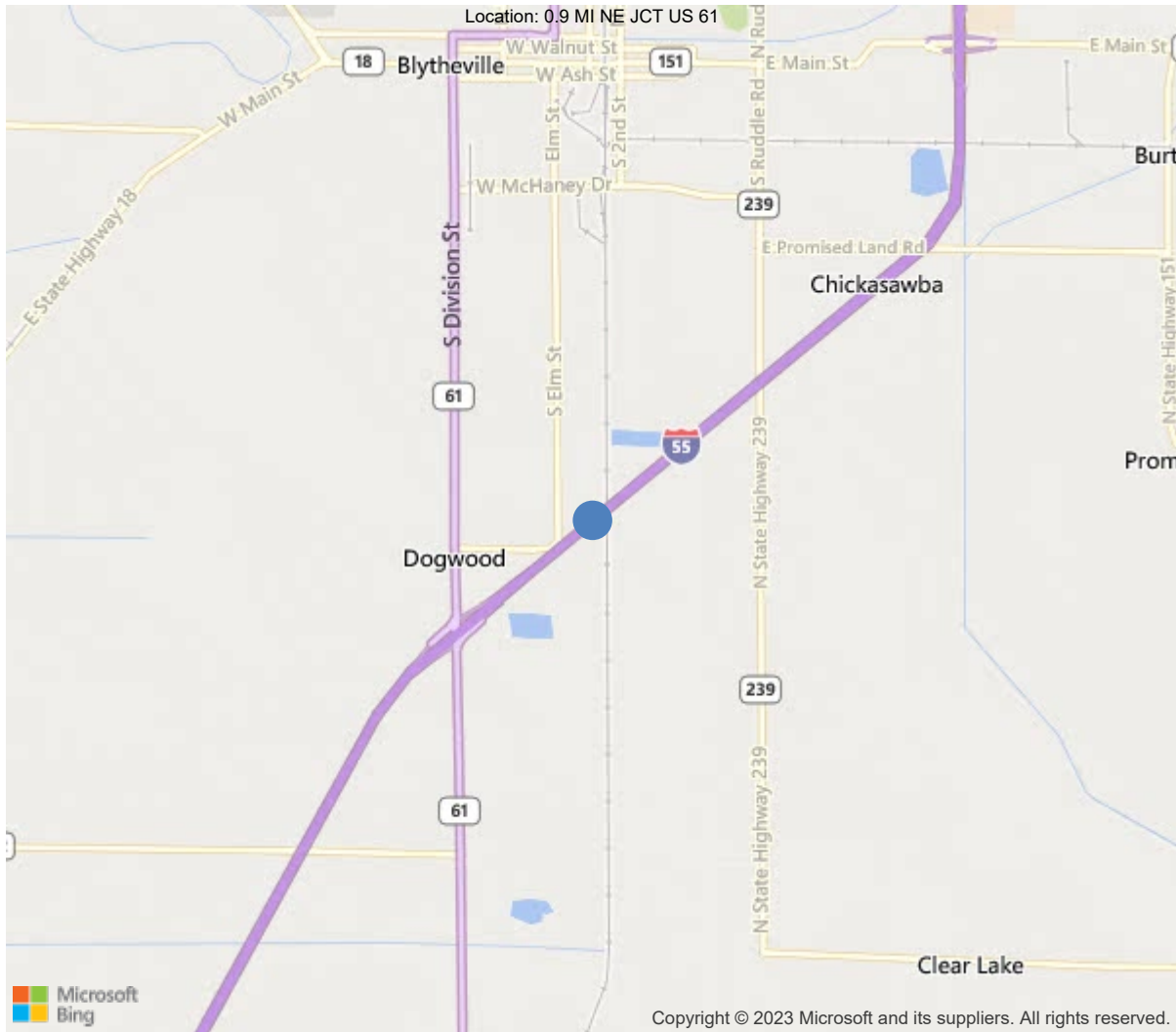
Latitude:35.89488, Longitude:-89.90646

Route:55 Section:12 Log:64.17

Arnold Road ID:47x55x12xA, Arnold Log mile:64.207

District 10, 93 - Mississippi County

Owner: 1 - State Highway Agency



35.89488, -89.90646



Asset #B3163(Routine)

I-55-NB-12- 64.17 over BURLINGTON NORTH RR

Location: 0.9 MI NE JCT US 61

Team Lead: Richard Jones, Inspection Date: 11/02/2022

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	B3163
(5) Inventory Route	1
(2) Highway Agency District	10 - District 10
(3) County Code	93 - Mississippi County
(4) Place Code	0
(6) Features Intersected	BURLINGTON NORTH RR
(7) Facility Carried	I-55-NB-12- 64.17
(9) Location	0.9 MI NE JCT US 61
(11) Mile Point	64.17 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000055120
(16) Latitude	35.89488
(17) Longitude	-89.90646
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	11
Material	1 - Concrete
Type	1 - Slab
(44) Approach Structure Type	32
Material	3 - Steel
Type	2 - Stringer/Multi-beam or girder
(45) No. of Spans in Main Unit	1
(46) No. of Approach Spans	13
(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	0 - None
AGE AND SERVICE	
(27) Year Built	1960
(106) Year Reconstructed	1988
(42) Type of Service	12
On	1 - Highway
Under	2 - Railroad
(28) Lane	
On	2
Under	0
(29) Average Daily Traffic	11500
(30) Year of ADT	2018
(109) Truck ADT	52 %
(19) Bypass, Detour Length	1 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	67.7 ft
(49) Structure Length	885.4 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	42.8 ft
(32) Approach Roadway Width (W/Shoulders)	40 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	40 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	22.46 ft
Ref:	
(55) Min Lat Underclear RT	12.2 ft
Ref:	
(56) Min Lat Underclear LT	0 ft
NAVIGATION DATA	
(38) Navigation Control	N - Not applicable, no waterwa
(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	11 - Urban Principal Arterial
(100) Defense Highway	1 - The inventory route is on
(101) Parallel Structure	R - The right structure of par
(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	6
(59) Superstructure	6
(60) Substructure	7
(61) Channel & Channel Protection	N
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	6 - MS 18+Mod / HS 20+Mod
(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	6
(68) Deck Geometry	7
(69) Clearances, Vertical/Horizontal	5
(71) Waterway Adequacy	N
(72) Approach Roadway Alignment	8
(36A) Bridge Railings	1 - Inspected feature meets current
(36B) Transitions	1 - Inspected feature meets current
(36C) Approach Guardrail	1 - Inspected feature meets current
(36D) Approach Guardrail Ends	1 - Inspected feature meets current
(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	12812
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	11/02/2022		
(91) Frequency	24		
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	No		
C: Other Special Inspection			
* 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.			

58 - Deck (6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.)

Approach slabs have numerous unsealed cracks and a few spalled areas.

Bridge rails have several cracks and a few patched areas.

Compression seals have cracks, and tears with some sections missing. Road irons have a few areas loose. Road iron has been partially removed at bent 4.

Deck has numerous unsealed cracks. Deck has minor abrasion in wheel paths.

Main slab span 7 has unsealed longitudinal cracks. Slab soffit has some efflorescence.

Soffit has several transverse cracks with efflorescence.

59 - Superstructure (6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.)

Girders have scattered areas of surface rust throughout. Ends of girders have flaking rust with some section loss at web below haunch. A few have holes rusted through.

Girders have some minor flaking rust or pack rust and ends of cover plates.

Bearings have some pack rust.

Span 1 bent 1 bearing 4 has an 1/8" gap between masonry and sole plates.

Span 2 bent 2 bearing 4 has a cracked sole plate bracket at cap screw connection.

Span 3 bent 4 girder 5 hole in web below haunch.

Span 4 bent 5 girder 4 has a hole in web below haunch.

Span 5 bent 5 bearing 2 has a loose cap screw.

Span 6 bent 6 bearing 3 has a loose bolt between sole plate and bottom flange.

Span 6 bent 7 bearing 1 has a nut missing from 1 bolt between sole plate and bottom flange.

Span 6 bent 7 bearing 4 has one anchor nut missing. Sole plate has a crack in weld at cap screw connection.

Span 8 bent 9 bearings 2 and 3 have an 1/8" gap between masonry and sole plates.

Span 10 bent 11 bearing 3 is missing 1 cap screw.

Span 11 bent 12 girder 5 has a 3" x 1" hole in web below haunch.

Span 14 bent 14 bearing 1 is missing one anchor bolt.

Span 14 bent 15 bearings 2 and 4 has an 1/8" gap between masonry and sole plates.

60 - Substructure (7 - GOOD CONDITION - some minor problems.)

Caps have a few cracks on Lt and Rt ends, some with light efflorescence. Caps have a few cracks or delaminated areas near construction joints.

Bent 1 cap and bearings have dirt and debris build up.

Bent 2 column 4 has some spalls with exposed rebar due to lack of coverage.

Bent 4 cap has some exposed rebar from lack of coverage.

Bent 4 column 2 has some delamination.

Bent 4 column 4 has spalls with exposed rebar from lack of coverage.

Bent 5 cap has some rebar exposed on back face from lack of coverage.

Bents 7 and 8 risers have several small patched/delaminated areas and a few spalls.

Bent 7 column 2 has cracks and a 1' diameter delaminated area.

Bent 8 column 3 has some rebar exposed from lack of coverage.

Bent 9 columns 1 and 4 have small delaminated areas.

Bent 10 column 2 has some spalls with exposed rebar due to lack of coverage.

Bent 11 column 4 has some spalls with exposed rebar due to lack of coverage.

Bent 13 column 4 has some rebar exposed from lack of coverage.

Trees and dense vegetation are growing around interior bents and restricting inspection.

A-27 - Job Number (10616)

Bridge was widened under job 100133

A-46 - Asset Files

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Asset #B3163(Routine)

I-55-NB-12- 64.17 over BURLINGTON NORTH RR

Location: 0.9 MI NE JCT US 61

Team Lead: Richard Jones, Inspection Date: 11/02/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	36314	19525	13046	3743	0
1120	Efflorescence/Rust Staining	SF	1718	0	0	1718	0
1130	Cracking (RC and Other)	SF	2351	0	326	2025	0
1190	Abrasion/Wear (PSC/RC)	SF	12720	0	12720	0	0
38	RC Slab	SF	1523	1348	79	96	0
1120	Efflorescence/Rust Staining	SF	68	0	68	0	0
1130	Cracking (RC and Other)	SF	107	0	11	96	0
107	Steel Open Girder/Beam	LF	5087	3576	1370	141	0
1000	Corrosion	LF	1511	0	1370	141	0
515	Steel Protective Coating	SF	50222	32645	5022	7533	5022
3440	Effectiveness (Steel Protective Coatings)	LF	17577	0	5022	7533	5022
205	Reinforced Concrete Column	EA	52	37	4	11	0
1080	Delamination/Spall/Patched Area	EA	6	0	4	2	0
1090	Exposed Rebar	EA	6	0	0	6	0
1130	Cracking (RC and Other)	EA	3	0	0	3	0
215	Reinforced Concrete Abutment	LF	130	118	0	12	0
1130	Cracking (RC and Other)	LF	12	0	0	12	0
234	Reinforced Concrete Pier Cap	LF	580	502	42	36	0
1080	Delamination/Spall/Patched Area	LF	20	0	17	3	0
1090	Exposed Rebar	LF	5	0	0	5	0
1120	Efflorescence/Rust Staining	LF	37	0	14	23	0
1130	Cracking (RC and Other)	LF	16	0	11	5	0
301	Pourable Joint Seal	LF	43	31	12	0	0
2320	Seal Adhesion	LF	12	0	12	0	0
302	Compression Joint Seal	LF	608	0	190	230	188
2330	Seal Damage	LF	418	0	0	230	188
2340	Seal Cracking	LF	190	0	190	0	0
311	Movable Bearing	EA	78	0	44	34	0
1000	Corrosion	EA	74	0	44	30	0
1020	Connection	EA	4	0	0	4	0



Asset #B3163(Routine)

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Location: 0.9 MI NE JCT US 61

Team Lead: Richard Jones, Inspection Date: 11/02/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
313	Fixed Bearing	EA	78	0	76	2	0
1000	Corrosion	EA	76	0	76	0	0
1020	Connection	EA	2	0	0	2	0
321	Reinforced Concrete Approach Slab	SF	1752	1351	190	211	0
1080	Delamination/Spall/Patched Area	SF	11	0	0	11	0
1130	Cracking (RC and Other)	SF	390	0	190	200	0
331	Reinforced Concrete Bridge Railing	LF	1767	1536	23	208	0
1080	Delamination/Spall/Patched Area	LF	23	0	23	0	0
1130	Cracking (RC and Other)	LF	208	0	0	208	0

**Deck**

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	36314	19525	13046	3743	0
1120	Efflorescence/Rust Staining	SF	1718	0	0	1718	0
1130	Cracking (RC and Other)	SF	2351	0	326	2025	0
1190	Abrasion/Wear (PSC/RC)	SF	12720	0	12720	0	0
38	RC Slab	SF	1523	1348	79	96	0
1120	Efflorescence/Rust Staining	SF	68	0	68	0	0
1130	Cracking (RC and Other)	SF	107	0	11	96	0

58 - Deck (6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.)

Comment: Approach slabs have numerous unsealed cracks and a few spalled areas.

Bridge rails have several cracks and a few patched areas.

Compression seals have cracks, and tears with some sections missing. Road irons have a few areas loose. Road iron has been partially removed at bent 4.

Deck has numerous unsealed cracks. Deck has minor abrasion in wheel paths.

Main slab span 7 has unsealed longitudinal cracks. Slab soffit has some efflorescence.

Soffit has several transverse cracks with efflorescence.

**Superstructure**

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
107	Steel Open Girder/Beam	LF	5087	3576	1370	141	0
1000	Corrosion	LF	1511	0	1370	141	0
515	Steel Protective Coating	SF	50222	32645	5022	7533	5022
3440	Effectiveness (Steel Protective Coatings)	LF	17577	0	5022	7533	5022

59 - Superstructure (6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.)

Comment: Girders have scattered areas of surface rust throughout. Ends of girders have flaking rust with some section loss at web below haunch. A few have holes rusted through.

Girders have some minor flaking rust or pack rust and ends of cover plates.

Bearings have some pack rust.

Span 1 bent 1 bearing 4 has an 1/8" gap between masonry and sole plates.

Span 2 bent 2 bearing 4 has a cracked sole plate bracket at cap screw connection.

Span 3 bent 4 girder 5 hole in web below haunch.

Span 4 bent 5 girder 4 has a hole in web below haunch.

Span 5 bent 5 bearing 2 has a loose cap screw.

Span 6 bent 6 bearing 3 has a loose bolt between sole plate and bottom flange.

Span 6 bent 7 bearing 1 has a nut missing from 1 bolt between sole plate and bottom flange.

Span 6 bent 7 bearing 4 has one anchor nut missing. Sole plate has a crack in weld at cap screw connection.

Span 8 bent 9 bearings 2 and 3 have an 1/8" gap between masonry and sole plates.

Span 10 bent 11 bearing 3 is missing 1 cap screw.

Span 11 bent 12 girder 5 has a 3" x 1" hole in web below haunch.

Span 14 bent 14 bearing 1 is missing one anchor bolt.

Span 14 bent 15 bearings 2 and 4 has an 1/8" gap between masonry and sole plates.



Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
205	Reinforced Concrete Column	EA	52	37	4	11	0
1080	Delamination/Spall/Patched Area	EA	6	0	4	2	0
1090	Exposed Rebar	EA	6	0	0	6	0
1130	Cracking (RC and Other)	EA	3	0	0	3	0
215	Reinforced Concrete Abutment	LF	130	118	0	12	0
1130	Cracking (RC and Other)	LF	12	0	0	12	0
234	Reinforced Concrete Pier Cap	LF	580	502	42	36	0
1080	Delamination/Spall/Patched Area	LF	20	0	17	3	0
1090	Exposed Rebar	LF	5	0	0	5	0
1120	Efflorescence/Rust Staining	LF	37	0	14	23	0
1130	Cracking (RC and Other)	LF	16	0	11	5	0

60 - Substructure (7 - GOOD CONDITION - some minor problems.)

Comment: Caps have a few cracks on Lt and Rt ends, some with light efflorescence. Caps have a few cracks or delaminated areas near construction joints.

Bent 1 cap and bearings have dirt and debris build up.

Bent 2 column 4 has some spalls with exposed rebar due to lack of coverage.

Bent 4 cap has some exposed rebar from lack of coverage.

Bent 4 column 2 has some delamination.

Bent 4 column 4 has spalls with exposed rebar from lack of coverage.

Bent 5 cap has some rebar exposed on back face from lack of coverage.

Bents 7 and 8 risers have several small patched/delaminated areas and a few spalls.

Bent 7 column 2 has cracks and a 1' diameter delaminated area.

Bent 8 column 3 has some rebar exposed from lack of coverage.

Bent 9 columns 1 and 4 have small delaminated areas.

Bent 10 column 2 has some spalls with exposed rebar due to lack of coverage.

Bent 11 column 4 has some spalls with exposed rebar due to lack of coverage.

Bent 13 column 4 has some rebar exposed from lack of coverage.

Trees and dense vegetation are growing around interior bents and restricting inspection.



Culvert

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4



Maintenance Needs

Date Reported: 10/22/2012

Priority: C - Important

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

Status: Monitor

Component: Superstructure

Deficiency Description

Girders have scattered areas of surface rust throughout. Ends of girders have flaking rust with some section loss at web below haunch. A few have holes rusted through.

Remarks



Maintenance Needs

Date Reported: 10/22/2012

Priority: C - Important

Type of Work: Replace (General)

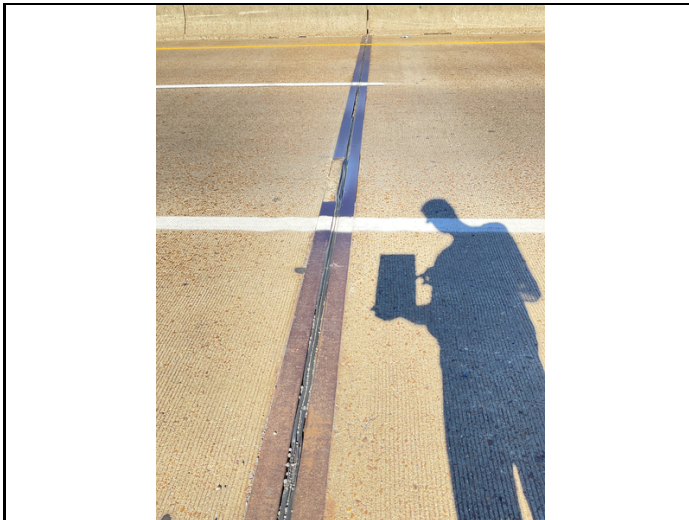
Status: Monitor

Component: Element

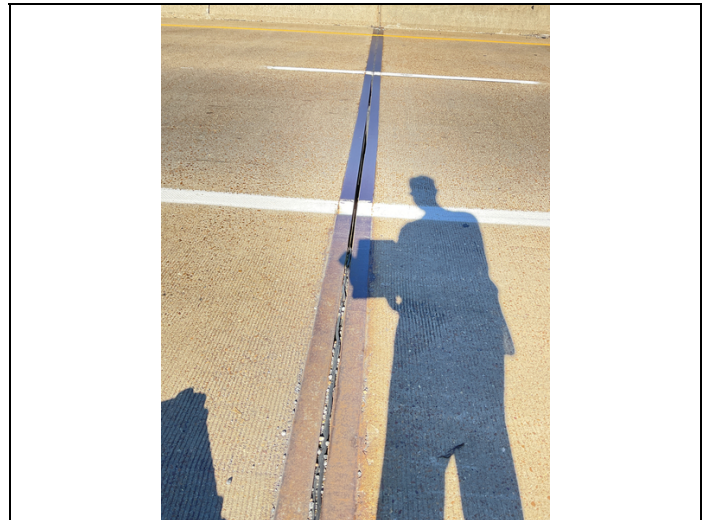
Deficiency Description

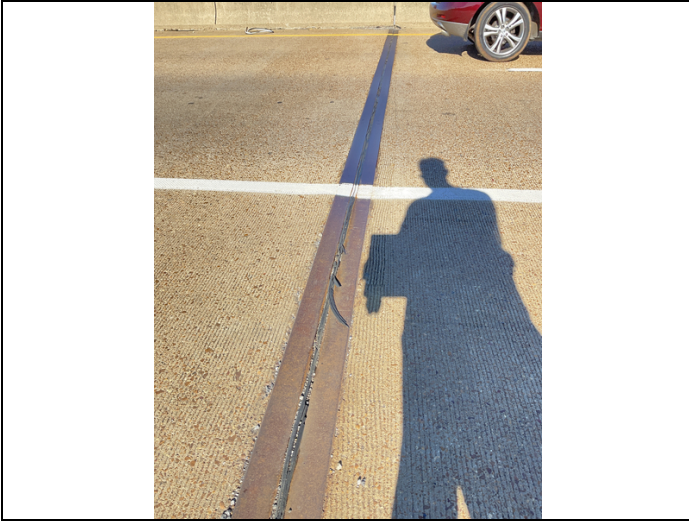
Compression seals have cracks, and tears with some sections missing. Road irons have a few areas loose. Road iron has been partially removed at bent 4.

Remarks



Bent 4





Typ compression seals

Maintenance Needs

Date Reported: 10/22/2012

Priority: C - Important

Type of Work: Repair (General)

Status: Monitor

Component: Deck

Deficiency Description

Deck has numerous unsealed cracks. Deck has minor abrasion in wheel paths.
Main slab span 7 has unsealed longitudinal cracks.

Remarks



typ cracks



Typical deck cracking



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Location: 0.9 MI NE JCT US 61

Team Lead: Richard Jones, Inspection Date: 11/02/2022





Asset #B3163(Routine)

I-55-NB-12- 64.17 over BURLINGTON NORTH RR

Location: 0.9 MI NE JCT US 61

Team Lead: Richard Jones, **Inspection Date:** 11/02/2022

Maintenance Needs

Date Reported: 11/21/2014

Priority: C - Important

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

Status: Monitor

Component: Channel

Deficiency Description

Trees and dense vegetation are growing around interior bents and restricting inspection.

Remarks

Maintenance Needs

Date Reported: 10/17/2016

Priority: C - Important

Type of Work: Repair (General)

Status: Monitor

Component: Superstructure

Deficiency Description

Bearings have some pack rust.

Span 1 bent 1 bearing 4 has an 1/8" gap between masonry and sole plates.

Span 2 bent 2 bearing 4 has a cracked sole plate bracket at cap screw connection.

Span 5 bent 5 bearing 2 has a loose cap screw.

Span 6 bent 6 bearing 3 has a loose bolt between sole plate and bottom flange.

Span 6 bent 7 bearing 1 has a nut missing from 1 bolt between sole plate and bottom flange.

Span 6 bent 7 bearing 4 has one anchor nut missing. Sole plate has a crack in weld at cap screw connection.

Span 8 bent 9 bearings 2 and 3 have an 1/8" gap between masonry and sole plates.

Span 10 bent 11 bearing 3 is missing 1 cap screw.

Span 14 bent 14 bearing 1 is missing one anchor bolt.

Span 14 bent 15 bearings 2 and 4 has an 1/8" gap between masonry and sole plates.

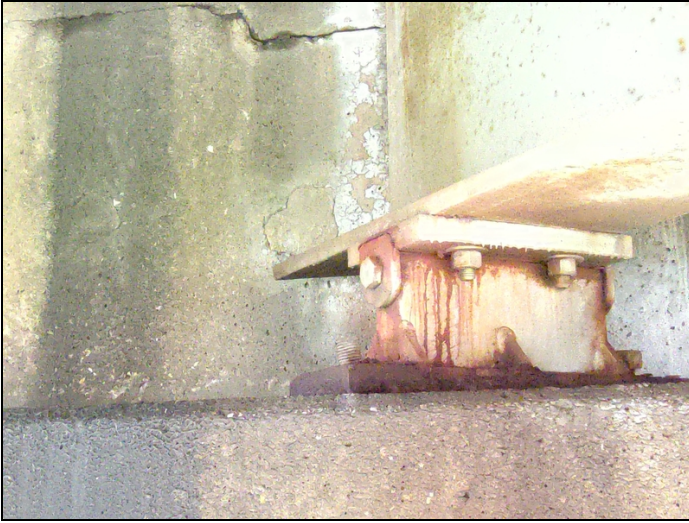
Remarks



Span 2 bent 2 bearing 5



Span 2 bent 2 bearing 4



Span 6 bent 7 bearing 4



span 10 bent 11 girder 3



Span 2 bent 2 bearing 4



Asset #B3163(Routine)

I-55-NB-12- 64.17 over BURLINGTON NORTH RR

Location: 0.9 MI NE JCT US 61

Team Lead: Richard Jones, **Inspection Date:** 11/02/2022

Maintenance Needs

Date Reported: 10/17/2016

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

Status: Monitor

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

Component: Substructure

Deficiency Description

Caps have a few cracks on Lt and Rt ends, some with light efflorescence. Caps have a few cracks or delaminated areas near construction joints.

Remarks



Asset #B3163(Routine)

I-55-NB-12- 64.17 over BURLINGTON NORTH RR

Location: 0.9 MI NE JCT US 61

Team Lead: Richard Jones, **Inspection Date:** 11/02/2022

Maintenance Needs

Date Reported: 10/17/2016

Priority: D- Routine

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

Status: Monitor

Component: Substructure

Deficiency Description

Columns have a few minor cracks and delaminated areas. Columns have some rebar exposed from lack of coverage.

Remarks



Asset #B3163(Routine)

I-55-NB-12- 64.17 over BURLINGTON NORTH RR

Location: 0.9 MI NE JCT US 61

Team Lead: Richard Jones, **Inspection Date:** 11/02/2022

Maintenance Needs

Date Reported: 10/17/2016

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

Status: Monitor

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

Component: Element

Deficiency Description

Bridge rails have several cracks and a few patched areas.

Remarks



Asset #B3163(Routine)

I-55-NB-12- 64.17 over BURLINGTON NORTH RR

Location: 0.9 MI NE JCT US 61

Team Lead: Richard Jones, Inspection Date: 11/02/2022

Maintenance Needs

Date Reported: 11/16/2022

Priority: D- Routine

Type of Work: Repair (General)

Status: Open

Component: Approach

Deficiency Description

Approach slabs have numerous unsealed cracks and a few spalled areas.

Remarks



Approach slab at end



Asset #B3163(Routine)

I-55-NB-12- 64.17 over BURLINGTON NORTH RR

Location: 0.9 MI NE JCT US 61

Team Lead: Richard Jones, Inspection Date: 11/02/2022

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	



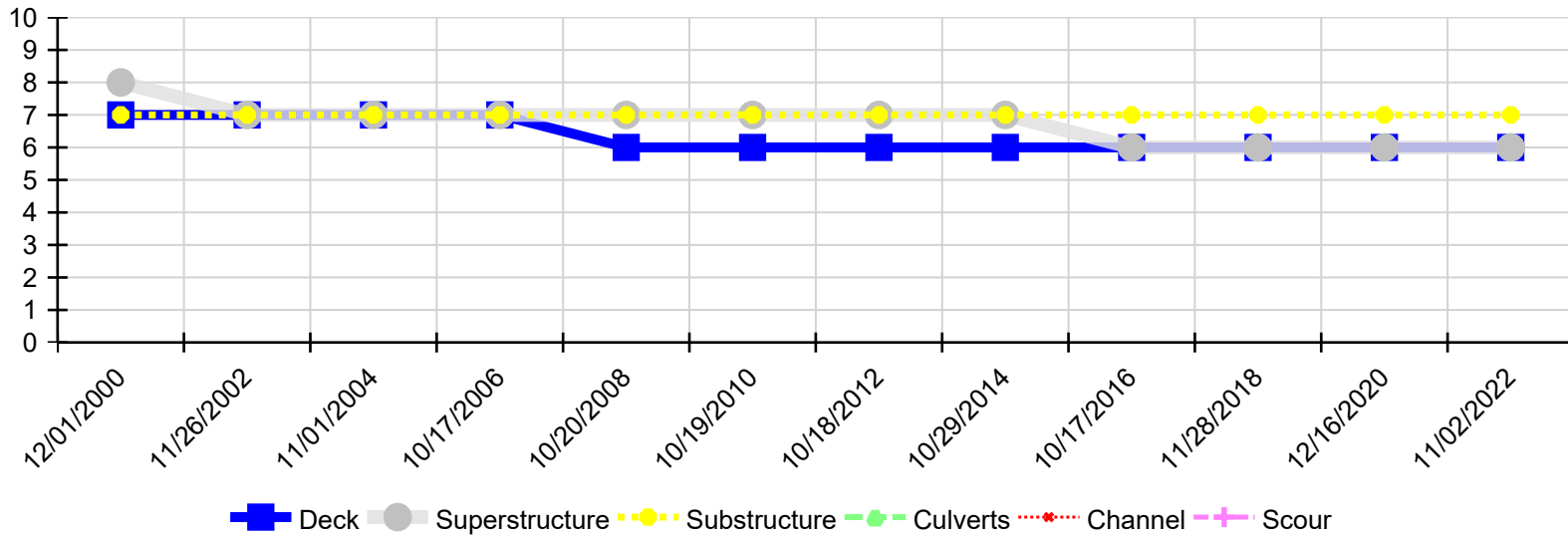
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I-55-NB-12- 64.17 over BURLINGTON NORTH RR

Location: 0.9 MI NE JCT US 61

Team Lead: Richard Jones, Inspection Date: 11/02/2022

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
11/02/2022	6	6	7	N	N	N
12/16/2020	6	6	7	N	N	N
11/28/2018	6	6	7	N	N	N
10/17/2016	6	6	7	N	N	N
10/29/2014	6	7	7	N	N	N
10/18/2012	6	7	7	N	N	N
10/19/2010	6	7	7	N	N	N
10/20/2008	6	7	7	N	N	N
10/17/2006	7	7	7	N	N	N
11/01/2004	7	7	7	N	N	N
11/26/2002	7	7	7	N	N	N
12/01/2000	7	8	7	N	N	N