



Latitude:35.21151, Longitude:-90.20643

Route:55 Section:11 Log:10.15

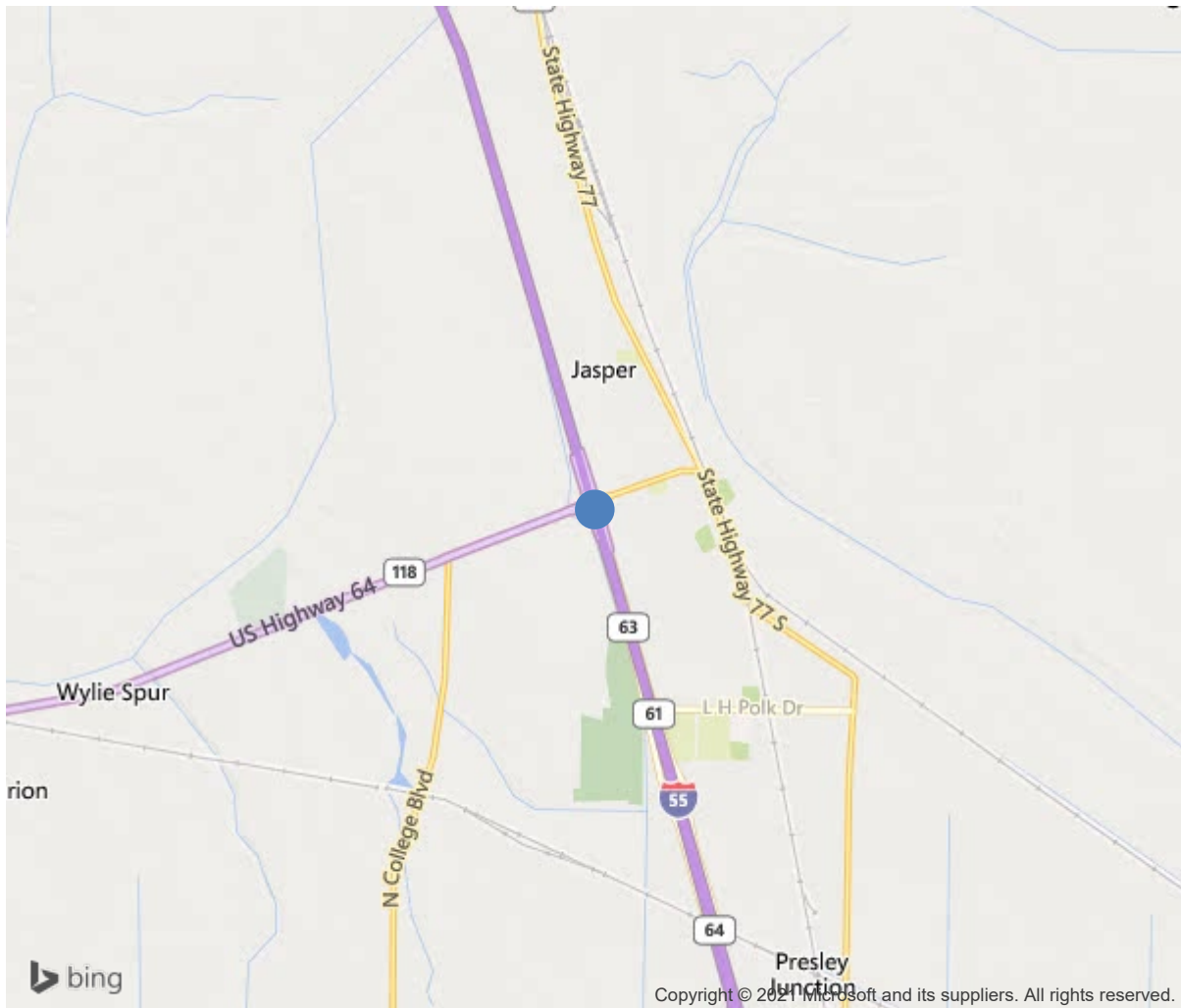
Arnold Road ID:18x55x11xA, Arnold Log mile:10.103

District 01, Crittenden County

Owner: 1-State Highway Agency

Place Code: 41380 - MARION

Jct Us 64 & I-55 @ Marion



35.21151, -90.20643



Bridge #B3131 (Record Change)

I-55NB/Se11/L10.15 over Us-64/Sec-17/L-19.11

Location: Jct Us 64 & I-55 @ Marion

Team Lead: Drew Melton Inspection Date: September 14, 2020

IDENTIFICATION	
(1) State Names	Arkansas
(8) Structure Number	B3131
(5) Inventory Route	55
(2) Highway Agency District	01
(3) County Code	35-Crittenden County, Arkansas
(4) Place Code	41380
(6) Features Intersected	Us-64/Sec-17/L-19.11
(7) Facility Carried	I-55NB/Se11/L10.15
(9) Location	Jct Us 64 & I-55 @ Marion
(11) Mile Point	10.15 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000055110
(16) Latitude	35.21151
(17) Longitude	-90.206429
(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	7
(46) No. of Approach Spans	0
(107) Deck Structure Type	1-Concrete Cast-in-Place
(108) Wearing Surface/Protective System	
Type of Wearing Surface	3-Latex Concrete or similar additive
Type of Membrane	0-None
Type of Deck Protection	0-None
AGE AND SERVICE	
(27) Year Built	1960
(106) Year Reconstructed	2014
(42) Type of Service	61
On	6-Overpass structure at an interchange or secon
Under	1-Highway, with or without pedestrian
(28) Lane	
On	2
Under	4
(29) Average Daily Traffic	14938
(30) Year of ADT	2018
(109) Truck ADT	34 %
(19) Bypass, Detour Length	3 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	70 ft
(49) Structure Length	492.2 ft
(50) Curb or Sidewalk Width	
Left	1.5 ft
Right	1.5 ft
(51) Bridge Roadway Width Curb to Curb	39 ft
(52) Deck Width Out to Out	42 ft
(32) Approach Roadway Width (W/Shoulders)	38.1 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	39 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	15.06 ft
Ref:	
(55) Min Lat Underclear RT	6.9 ft
Ref:	
(56) Min Lat Underclear LT	8 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	11-Urban Principal Arterial - Int
(100) Defense Highway	1-The inventory route is on a In
(101) Parallel Structure	L-The left structure of parallel
(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 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	7
(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	7
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	6
(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	1-Inspected feature meets currently a
(36C) Approach Guardrail	1-Inspected feature meets currently a
(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	17922
(115) Year of Future ADT	2028
INSPECTIONS	
(90) Inspection Date	04/2020
(91) Frequency	24 Months
(92) Critical Feature Inspection	Done Freq. (Mon) Date
A: Fracture Critical Detail	No
B: Underwater Inspection	No
C: Other Special Inspection	No



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Location: Jct Us 64 & I-55 @ Marion

Team Lead: Drew Melton, Inspection Date: September 14, 2020

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	20580	17422	3158	0	0
1120	Efflorescence/Rust Staining	SF	2066	0	2066	0	0
1130	Cracking (RC and Other)	SF	1092	0	1092	0	0
(12)	Soffit in all spans have open transverse cracks spaced 10+- with areas of light to moderate efflorescence. Spans #5 at bent #5 right lane has a two foot spall with half poached with asphalt. Deck has been hydro blasted and replaced						
107	Steel Open Girder/Beam	LF	3430	0	3416	14	0
1000	Corrosion	LF	3416	0	3416	0	0
1020	Connection	LF	14	0	0	14	0
515	Steel Protective Coating	SF	30090	0	14645	14645	800
3440	Effectiveness (Steel Protective Coatings)	SF	30090	0	14645	14645	800
(107)	Girders have areas of surface rust on webs and lower flanges for full length rest of paint has limited effectiveness. Span #1 girder #3 4th diaphragm connection bottom 2 bolts are broken. Span #2 girder #6 diaphragm connection #2 & 3 top bolt is broken & 2nd bolt is missing. Span # 4 girder # 7 has moderate traffic damage. Span #5 girder #3 diaphragm connection has 2 lower bolts missing from 2nd & 3rd diaphragm. Span #6 diaphragm connection between girder #2 & 3 right side has 2 lower bolts missing. All girders over travel lanes have minor scrapes & bends.						
205	Reinforced Concrete Column	EA	24	24	0	0	0
215	Reinforced Concrete Abutment	LF	98	88	10	0	0
1120	Efflorescence/Rust Staining	LF	10	0	10	0	0
(215)	Abutment back walls have vertical cracks some with light efflorescence.						
234	Reinforced Concrete Pier Cap	LF	236	235	0	1	0
1080	Delamination/Spall/Patched Area	LF	1	0	0	1	0
(234)	Bent #6 ahead face has 1' pop off left side due to poor concrete coverage towards left end. All caps have vertical hairlines cracks beneath bearings.						
301	Pourable Joint Seal	LF	336	336	0	0	0
(301)	Joint steel is corroded with laminations & minor section loss.						
311	Movable Bearing	EA	49	47	0	2	0

Team Lead: Drew Melton, **Inspection Date:** September 14, 2020

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
1020	Connection	EA	2	0	0	2	0
515	Steel Protective Coating	SF	98	8	0	45	45
3440	Effectiveness (Steel Protective Coatings)	SF	90	0	0	45	45
(311)							
Span #1 girder #7 left side bolt from bearing to girder is broken. Span #6 girder #1 right side bolt from bearing to girder is broken. paint has surface rust.							
313	Fixed Bearing	EA	49	47	0	2	0
1020	Connection	EA	2	0	0	2	0
515	Steel Protective Coating	SF	98	8	0	45	45
3440	Effectiveness (Steel Protective Coatings)	SF	90	0	0	45	45
(313)							
Abutment #1 girders #2&7 have anchor nuts missing. Paint has surface rust.							
321	Reinforced Concrete Approach Slab	SF	960	0	920	40	0
1080	Delamination/Spall/Patched Area	SF	30	0	30	0	0
1190	Abrasion/Wear (PSC/RC)	SF	930	0	890	40	0
(321)							
Abutment #1 left & right approach slabs have heavy scaling. Abutment #2 approach slab has thirty square feet of sound patches.							
330	Metal Bridge Railing	LF	980	900	80	0	0
7000	Damage	LF	80	0	80	0	0
515	Steel Protective Coating	SF	3938	3938	0	0	0
(330)							
Right aluminum bridge rail has collision damage in spans #4,5,6.							
331	Reinforced Concrete Bridge Railing	LF	980	978	2	0	0
1090	Exposed Rebar	LF	2	0	2	0	0
(331)							
Span 4 right side has 2' spall exposed rebar due to collision damage.							



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Team Lead: Drew Melton **Inspection Date:** September 14, 2020

Maintenance Needs

Date Reported: 04/09/2012

Priority: D- Routine

Type of Work: N/A

Status: Monitor

Component:

Deficiency Description

BENT #8 GRD #2 & 7
GIRDERS HAVE NUTS MISSING FROM ANCHOR BOLTS.

Remarks



Typical bearing nut missing.

Date Reported: 04/09/2012
Priority: D- Routine
Type of Work: Repair
Status: Monitor
Component: Superstructure

Deficiency Description

Span #1 girder #3 4th diaphragm connection bottom 2 bolts are broken.
Span #2 girder #6 diaphragm connection #2 & 3 top bolt is broken & 2nd bolt is missing.
Span #5 girder #3 diaphragm connection has 2 lower bolts missing from 2nd & 3rd diaphragm.
Span #6 diaphragm connection between girder #2 & 3 right side has 2 lower bolts missing.

Remarks



Typical diaphragm nuts missing



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Location: Jct Us 64 & I-55 @ Marion

Team Lead: Drew Melton **Inspection Date:** September 14, 2020

Date Reported: 04/09/2012
Priority: D- Routine
Type of Work: Repair
Status: Monitor
Component: Approach

Deficiency Description

Abutment #1 left & right approach slabs have heavy scaling.

Remarks



Abutment #1 approach slab

Date Reported: 04/09/2012
Priority: C - Important
Type of Work: Repair
Status: Monitor
Component: 330 - Metal Bridge Railing

Deficiency Description

Right aluminum bridge rail has collision damage in spans #4,5,6.
Span #44 right side concrete bridge rail has 2' spall exposed rebar due to collision damage.

Remarks



Right aluminum bridge rail has collision damage in spans #4,5,6.



Span #4 right side concrete bridge rail has 2' spall exposed rebar due to collision damage.

Date Reported: 04/14/2014
Priority: C - Important
Type of Work: Repair
Status: Monitor
Component: Approach

Deficiency Description

Abutment #2 right approach rail has collision damage.

Remarks



Abutment #2 right approach rail has collision damage.

Date Reported: 04/14/2014
Priority: C - Important
Type of Work: Repair
Status: Monitor
Component: Approach

Deficiency Description

Abutment #1 right side slope is sliding 50' back from abutment.

Remarks



Abutment #1 right side slope

Date Reported: 04/14/2014
Priority: D- Routine
Type of Work: Repair
Status: Monitor
Component: 311 - Movable Bearing

Deficiency Description

Abutment #1 girders #2&7 have anchor nuts missing.
Span #1 girder #7 left side bolt from bearing to girder is broken.
Span #6 girder #1 right side bolt from bearing to girder is broken.

Remarks



Typical bearing to girder bolt missing.



Typical abutment bearing nut missing.



Typical missing girder to bearing bolt.



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Location: Jct Us 64 & I-55 @ Marion

Team Lead: Drew Melton **Inspection Date:** September 14, 2020

Date Reported: 04/12/2018

Priority: D- Routine

Type of Work: N/A

Status: Assigned

Component:

Deficiency Description

Abutment #1 right transition wall is starting to undermine

Remarks



Abutment #1 right transition wall

Date Reported: 04/21/2020
Priority: C - Important
Type of Work: Repair
Status: Monitor
Component: Deck

Deficiency Description

Spans #5 at bent #5 right lane has a two-foot spall with half patched with asphalt.

Remarks



Spans #5 at bent #5 right lane has a two foot spall
with half poached with asphalt.

Date Reported: 04/21/2020
Priority: D- Routine
Type of Work: Clean
Status: Monitor
Component: Superstructure

Deficiency Description

Girders have areas of surface rust on webs and lower flanges for full length rest of paint has limited effectiveness.

Remarks



Typical girder ends



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Team Lead: Drew Melton **Inspection Date:** September 14, 2020

Inspection Comments

Drawing numbers: 18748, 18752

Abutment #1 right side slope is sliding 50' back from abutment.

Abutment #2 right approach rail has collision damage.

Deck Notes

4/20/2020 lowered deck from 8 to 7 due to soffit having cracks with efflorescence.

Superstructure Notes

-

Substructure Notes

-