



Latitude:36.22544, Longitude:-92.67970

Route:14 Section:03 Log:0.02

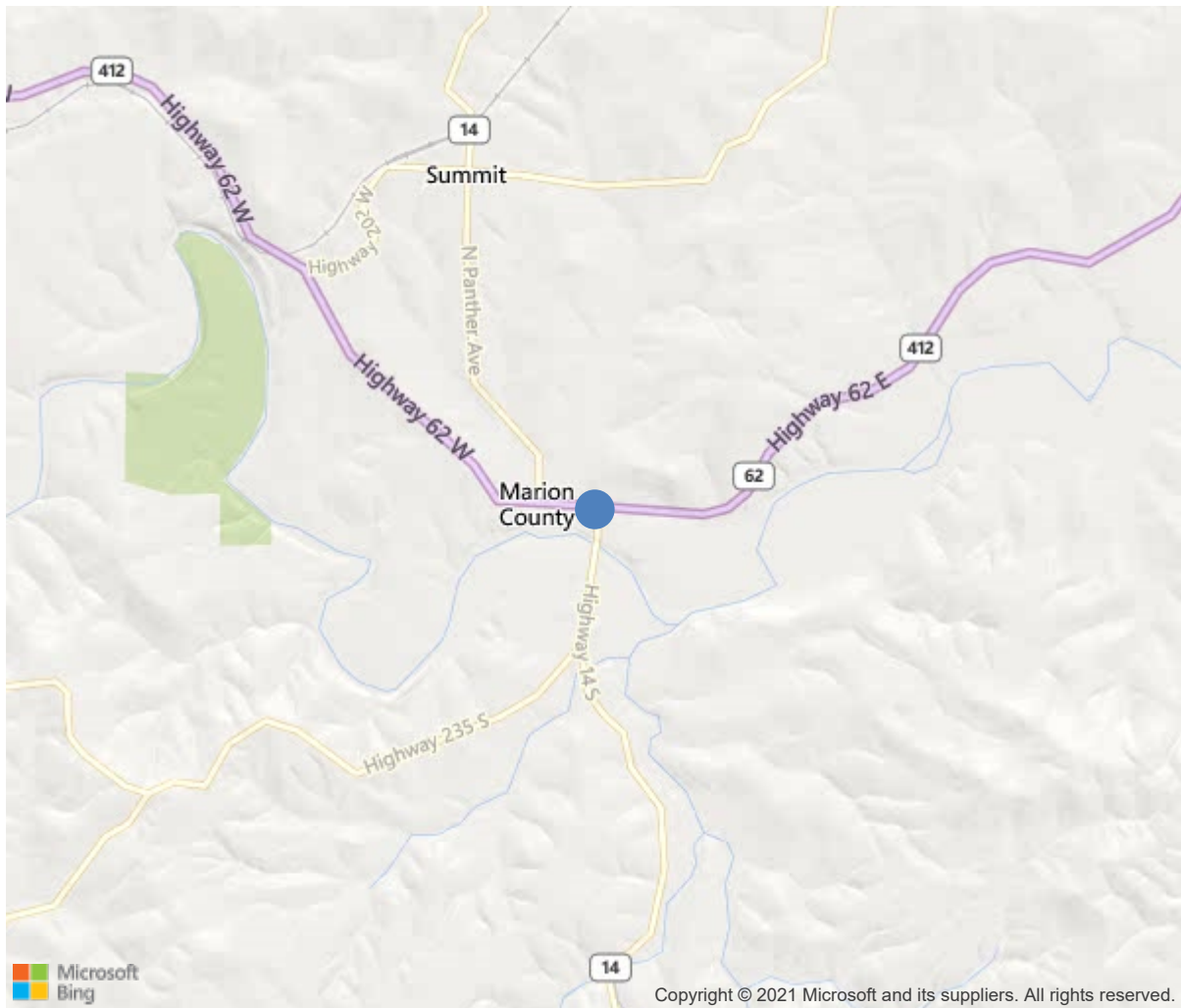
Arnold Road ID:45x14x3xA, Arnold Log mile:0.02

District 09, Marion County

Owner: 1-State Highway Agency

Place Code: 00000 - N/A

.02 MI S JCT SH 14- US 62



36.22544, -92.67970



Bridge #03144(Routine)

SH 14 Marion over TOWN BRANCH

Location: .02 MI S JCT SH 14- US 62

Team Lead: Benjamin Smith Inspection Date: March 13, 2020

IDENTIFICATION	
(1) State Names	Arkansas
(8) Structure Number	03144
(5) Inventory Route	14
(2) Highway Agency District	09
(3) County Code	89-Marion County, Arkansas
(4) Place Code	74720
(6) Features Intersected	TOWN BRANCH
(7) Facility Carried	SH 14 Marion
(9) Location	.02 MI S JCT SH 14- US 62
(11) Mile Point	0.02 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000014030
(16) Latitude	36.22544
(17) Longitude	-92.6797
(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	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	1-Monolithic Concrete (concurrently placed
Type of Membrane	0-None
Type of Deck Protection	0-None
AGE AND SERVICE	
(27) Year Built	1959
(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	5800
(30) Year of ADT	2014
(109) Truck ADT	1 %
(19) Bypass, Detour Length	1 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	28 ft
(49) Structure Length	112 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	28.6 ft
(32) Approach Roadway Width (W/Shoulders)	26 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	7
(59) Superstructure	7
(60) Substructure	7
(61) Channel & Channel Protection	8
(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	48
(65) Inventory Rating Method	1-Load Factor(LF)
(66) Inventory Rating	
Type	4
Rating	29
(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	2
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	8
(72) Approach Roadway Alignment	8
(36A) Bridge Railings	0-Inspected feature does not meet cur
(36B) Transitions	0-Inspected feature does not meet cur
(36C) Approach Guardrail	0-Inspected feature does not meet cur
(36D) Approach Guardrail Ends	0-Inspected feature does not meet cur
(113) Scour Critical Bridges	8-Bridge foundations determined to be
PROPOSED IMPROVEMENTS	
(75) Type of Work	Replacement of bridge or other
(76) Length of Structure Improvement	140 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 265
(96) Total Project Cost	\$ 812
(97) Year of Improvement Cost Estimate	2002
(114) Future ADT	7836
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	03/2020		
(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		
* 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.			

Team Lead: Benjamin Smith, **Inspection Date:** March 13, 2020

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
38	RC Slab	SF	3203	763	2401	39	0
1080	Delamination/Spall/Patched Area	SF	27	0	0	27	0
1090	Exposed Rebar	SF	12	0	0	12	0
1130	Cracking (RC and Other)	SF	49	0	49	0	0
1190	Abrasion/Wear (PSC/RC)	SF	2352	0	2352	0	0
(38)							
Driving surface- The driving surface of the deck has minor wear for the full width and length of the driving lanes. The beginning left and right corners of span #1 and ending left and right corners of span #3 have hairline cracking in the driving surface, these cracks do not extend through the deck. Span #1 has spalling with exposed rebar in the left lane near the white line. Span #4 has spalling with exposed rebar at the beginning of the span on the center line and at the right gutter line. The deck has several areas of shallow delamination at random locations throughout the deck. the interior face of the curb has several locations of shallow exposed rebar. No deficiencies were noted on the left or right exterior edge of the slab. Undersurface- Span #1- no deficiencies noted. The soffit has small areas of corroded shallow reinforcing wire. Span #2- no deficiencies noted. The soffit has small areas of corroded shallow reinforcing wire. Span #3- no deficiencies noted. The soffit has small areas of corroded shallow reinforcing wire. Span #4- no deficiencies noted. The soffit has small areas of corroded shallow reinforcing wire.							
205	Reinforced Concrete Column	EA	6	1	5	0	0
1130	Cracking (RC and Other)	EA	5	0	5	0	0
(205)							
Bent #1 columns- the left column has one vertical hairline crack in one face. No deficiencies noted in the right column. Bent #2 columns- the left column has short duration hairline vertical cracks at the top of the column on all 4 faces. The right column has short duration hairline vertical cracks at the top of the column on 2 of the 4 faces. The footings are exposed at both columns, but are cast in solid rock. Bent #3 columns- The left column has short duration vertical hairline cracks on 2 of the 4 faces. The right column has hairline horizontal cracking on 2 of the 4 faces with one vertical short duration hairline crack. The footings are exposed at both columns, but are cast in solid rock.							
215	Reinforced Concrete Abutment	LF	64	64	0	0	0
(215)							
Abutment #1- no deficiencies noted. The hand placed rip rap is in place and functioning as intended. Abutment #2- no deficiencies noted. The hand placed rip rap is in place and functioning as intended.							
234	Reinforced Concrete Pier Cap	LF	83	49	9	25	0
1080	Delamination/Spall/Patched Area	LF	10	0	0	10	0
1090	Exposed Rebar	LF	15	0	0	15	0
1130	Cracking (RC and Other)	LF	9	0	9	0	0
(234)							
Pier cap #1- has 4' total of cracking. 1' of hairline map cracking at each cap end with 2 vertical cracks in other locations in the cap. The cap has 2 small pop outs with exposed rebar ends.							

Team Lead: Benjamin Smith, **Inspection Date:** March 13, 2020

[illegible]



Span #4 has spalling with exposed rebar at the beginning of the span on the center line and at the right gutter line.



Spall near the left cap end of bent #2 cap on span #3 side.



Typical view of undersurface.



Exposed rebar in the left driving lane of span #1.



Typical view of driving surface.



Upstream channel view.



Downstream channel view.



Approach view in direction of log mile.



Short duration hairline cracks in the tops of the columns at bent #2.



Elevation view. Log mile from left to right.



Footings are exposed at all locations, but are cast in solid rock.



Approach view in direction of log mile.



5' long delamination on the bottom edge of pier cap #2 on the span #3 side.



Spall with rebar exposed in right driving lane of span #4.



Upstream channel view.



View of abutment #2. Typical.



Downstream channel view.



Typical undersurface view of all spans.



Exposed rebar on the vertical face of the curb.



Bridge plate.



Shallow exposed reinforcing wire in the bottom of the slab. Typical of several locations.



Spall with rebar exposed in left driving lane of span #1.



2' area of delamination on the span #3 side of pier cap #3.



Typical view of driving surface.



View of abutment #2.



Pop out with rebar exposed. Typical.



2' area of delamination on the span #4 side of pier cap #3

Maintenance Needs

Date Reported: 03/07/2018
Priority: D- Routine
Type of Work: None
Status: Monitor
Component:

Deficiency Description

Pier cap #2 has a 5' long delamination at the lower midsection of the span #3 side.

Pier cap #3 has a 2' delamination at the midsection of the span #3 side, and the near the left end on the span #4 side.

Remarks





Bridge #03144(Routine)

SH 14 Marion over TOWN BRANCH

Location: .02 MI S JCT SH 14- US 62

Team Lead: Benjamin Smith **Inspection Date:** March 13, 2020



Date Reported: 07/19/2016
Priority: D- Routine
Type of Work: None
Status: Monitor
Component:

Deficiency Description

The driving surface of the deck has spalls with exposed rebar at the left lane of span #1, and in span #4 at the beginning of the span at the centerline and at the right gutter line.

Remarks



Exposed rebar in span #1 right whiteline



Exposed rebar span #4 at left whiteline



Exposed rebar beginning of span #4 at centerline



Bridge #03144(Routine)

SH 14 Marion over TOWN BRANCH

Location: .02 MI S JCT SH 14- US 62

Team Lead: Benjamin Smith **Inspection Date:** March 13, 2020

Inspection Comments

Structure is logged from North to South and is accessible from the channel.

Sufficiency Rating Calculation Accepted by dlw at 2010-09-22 11:30:50