



Latitude:36.24337, Longitude:-94.23887

Route:112 Section:02 Log:2.29

Arnold Road ID:4x112x2xA, Arnold Log mile:2.258

District 09, 7 - Benton County

Owner: 1 - State Highway Agency

Inspection Direction: 2 - S to N

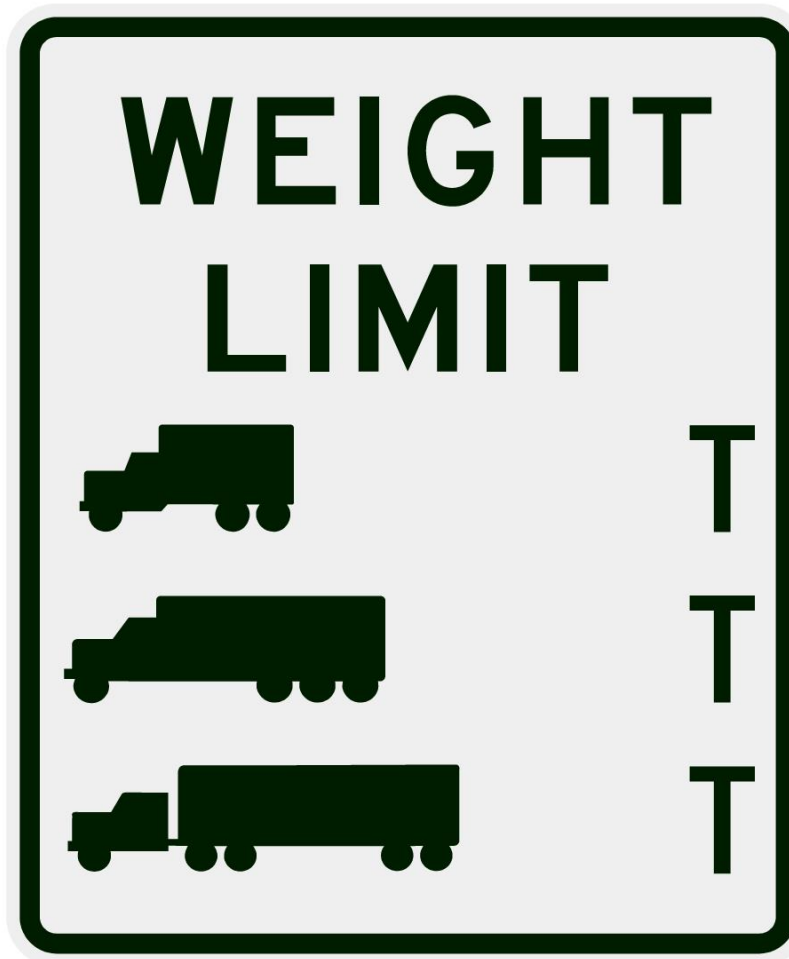
Bridge Posting Information

41 - Structure Open/Posted/Closed: A - Open, no restriction

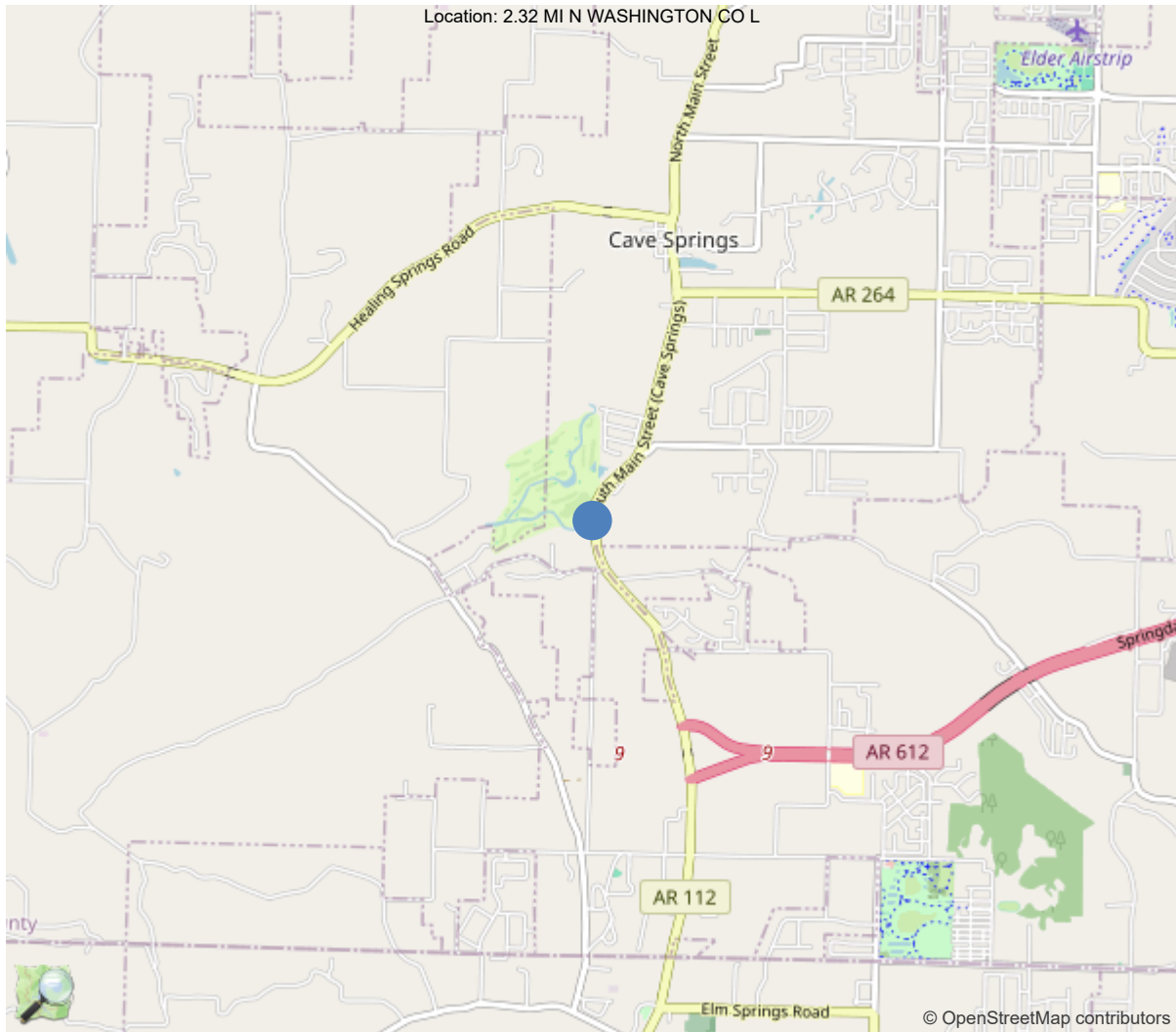
70 - Bridge Posting: 5 - Equal to or above legal loads

Legal Load	Calculated Capacity	Beginning of Bridge Sign Current Value	End of Bridge Sign Current Value
Code 4 (22 Tons)	40		
Code 9 (31 Tons)	47		
Code 5 (40 Tons)	56		

If calculated Capacity is less than the Legal Load Listed, the Bridge Legally Requires Posting Signs to be installed by the Bridge Owner



30"x36" AR



36.24337, -94.23887



Asset #05910(Routine, Underwater type 2)

SH 112 Benton 2 over SPRING CREEK

Location: 2.32 MI N WASHINGTON CO L

Team Lead: Nathan Rowland Inspection Date: 05/02/2024

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	05910
(5) Inventory Route	1
(2) Highway Agency District	09 - District 09
(3) County Code	7 - Benton County
(4) Place Code	12340
(6) Features Intersected	SPRING CREEK
(7) Facility Carried	SH 112 Benton 2
(9) Location	2.32 MI N WASHINGTON CO L
(11) Mile Point	2.29 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	36.24337
(17) Longitude	-94.23887
(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	9
(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 pl
Type of Membrane	0 - None
Type of Deck Protection	0 - None
AGE AND SERVICE	
(27) Year Built	1982
(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	10000
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	12 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	35 ft
(49) Structure Length	315 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	32.2 ft
(52) Deck Width Out to Out	34.8 ft
(32) Approach Roadway Width (W/Shoulders)	22 ft
(33) Bridge Median	0 - No median
(34) Skew	30 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	33.1 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 w
(111) Pier Protection	1 - Navigation protection not
(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	16 - Urban Minor Arterial
(100) Defense Highway	0 - The inventory route is not
(101) Parallel Structure	N - No parallel structure exis
(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
(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	5
(59) Superstructure	6
(60) Substructure	6
(61) Channel & Channel Protection	7
(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	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	
(68) Deck Geometry	4
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	7
(72) Approach Roadway Alignment	8
(36A) Bridge Railings	1 - Inspected feature meets current
(36B) Transitions	0 - Inspected feature does not meet
(36C) Approach Guardrail	0 - Inspected feature does not meet
(36D) Approach Guardrail Ends	1 - Inspected feature meets current
(113) Scour Critical Bridges	8 - Bridge foundations determined t
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	6064
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	05/02/2024		
(91) Frequency	24		
(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.			



Asset #05910(Routine, Underwater type 2)

SH 112 Benton 2 over SPRING CREEK

Location: 2.32 MI N WASHINGTON CO L

Team Lead: Nathan Rowland **Inspection Date:** 05/02/2024

General Observation

Routine and Underwater type II inspections conducted this date see Element notes for documentation.

Logged South to North.

[illegible]



Elevation looking west



Inventory looking north



View of abutment #1



General view of intermediate bents



Span #5 right lane spalling with steel exposed



Upstream view



Downstream view



Span #3 spalling with steel exposed



Beginning of bridge log miles sign is missing



Elevation looking west



Inventory looking north



Typical of caps



View of abutment #2



Upstream view



Downstream view



General view of deck



05/27/2020

Upstream view



05/27/2020

Downstream view



05/27/2020

Inventory looking North



01/01/2020

Abutment #2 right approach railing has vehicle damage.



Typical view of right side undersurface of deck with cracking spalling and delaminations.



Span #6 railing right has spalling with steel exposed at the base of parapet.



Span #5 right lane spalling with steel exposed.



General view of deck.



Span #3 left lane large spalls with steel exposed.



General view of bent #2.



Bent #3 cap underneath spalling with steel exposed.



Bent #3 column #1 has spalling ahead side.



Bent #5 right spalling adjacent to construction joints.



Span #1 deck cracking typical in wheel paths.



Horizontal cracking at bent #2 behind side.



Typical spalling of deck over bent caps on the right side.



01/01/2020

General view of bents leakage.



01/01/2020

Deck span #2 right soffit has approximately 22' of spalling with steel exposed.



01/01/2020

Abutment #2 right approach gutter has approximately 3" lip.



01/01/2020

Inventory 1 looking North.



Abutment #1 general view of joint.



Bent #8 right deck and parapet - has area of map cracking.



General View of span #2 and #3.



Parapet left railing has section that is not flush with rest of railing.



General view of abutment #1.



Deck bent #2 construction joint - joint material is missing.



Bent #4 cap over column #1 behind side - spalling at keyway typical.



Abutment #2 has leveling at the approach roadway.



Elevation looking East.



Spalling at key way bent 1 ahead side above column #1.



Span #7 right adjacent bent #7 spalling with steel exposed.



Spalling in side of deck above bent caps typical.



Cracking and delaminated areas typical to the right side of deck undersurface.



Deck railing left at bent #5 has large spall with steel exposed.



Bent #2 joint material missing.



Drift



Elevation looking East



General view of deck.



Spalling with steel exposed deck surface span #5.



Span #3 spalling with steel exposed



05/27/2020

Span #3 spalling with steel exposed Loose steel has the potential to project into roadway.



05/27/2020

View of bents ahead side.

Maintenance Needs

Date Reported: 06/27/2012

Priority: C - Important

Type of Work: Repair (General)

Status: Assigned

Component:

Deficiency Description

Deck pourable joint seal has lost adhesion and is displaced in some location allowing water to accumulate in joints and on top of caps.

Remarks



Abutment #1 general view of joint.



Bent #5 right spalling adjacent to construction joints.



Bent #2 joint material missing.



Deck bent #2 construction joint - joint material is missing.



Joint seal condition over bent #1. Typical of all locations.

Maintenance Needs

Date Reported: 06/27/2012

Priority: C - Important

Type of Work: Repair (General)

Status: Assigned

Component:

Deficiency Description

Spalling:

- The vertical face of caps at keyways for all bent caps have small to large spalls.
- The right vertical face of the bridge deck over bents #1,2,3,5,6, and 8 has spalls with steel exposed in some locations.

Remarks



Typical spalling of deck over bent caps on the right side.



Spalling in side of deck above bent caps typical.



Spall with rebar exposed at top of cap at left side of bent 8.



Spalling at key way bent #1 ahead side above column #1.



Exposed rebar at bent #3

Maintenance Needs

Date Reported: 05/27/2020

Priority: C - Important

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

Status: Repair Documented

Component: Channel

Deficiency Description

Drift accumulation:

Bent #2 ,#5,#6 has large trees wedge against columns causing localized scour.

Remarks

Benton 2

Maintenance forces have removed drift since last inspection



Span #5 channel has large trees causing localized scour.



Large drift has wedge against substructure causing localized scour.



Large drift has wedge against substructure causing localized scour.

Maintenance Needs

Date Reported: 05/10/2022

Priority: C - Important

Type of Work: Repair (General)

Status: Monitor

Component: Element

Deficiency Description

Spalling with steel exposed:

Deck surface span #3 left lane has multiple areas of spalling with steel exposed.

Span #5 spalling with steel exposed in the right lane.

Remarks



05/09/2022

Span #3 spalling with steel exposed in the left lane.



05/09/2022

Span #5 spalling with steel exposed in the right lane.

Maintenance Needs

Date Reported: 06/27/2012

Priority: D- Routine

Type of Work: Repair (General)

Status: Assigned

Component:

Deficiency Description

Steel exposed with section loss:

-Deck span #2 right has approximately 22' of spalling with steel exposed.

-Span #7 right has spalling with 8' of steel exposed adjacent Bent #7.

Remarks



Span #7 right adjacent bent #7 spalling with steel exposed.



Deck span #2 right soffit has approximately 22' of spalling with steel exposed.



Typical view of right side undersurface of deck with cracking spalling and delaminations.

Maintenance Needs

Date Reported: 06/27/2012

Priority: D- Routine

Type of Work: Repair (General)

Status: Assigned

Component:

Deficiency Description

Railing Vehicle damage:

- Deck railing left at bent #5 has large spall with steel exposed.
- The North West approach railing has vehicle damage.

Remarks



05/28/2020

Deck railing left at bent #5 has large spall with steel exposed.



05/28/2020

Bridge rail damage at left side over bent #5.



05/28/2020

Abutment #2 right approach railing has vehicle damage.

Maintenance Needs

Date Reported: 05/12/2022

Priority: D- Routine

Type of Work: Replace (General)

Status: Monitor

Component:

Deficiency Description

Missing log mile sign southeast side of bridge .

Remarks

Benton II



Missing log mile sign southeast side of bridge .



Asset #05910(Routine, Underwater type 2)

SH 112 Benton 2 over SPRING CREEK

Location: 2.32 MI N WASHINGTON CO L

Team Lead: Nathan Rowland Inspection Date: 05/02/2024

Routine Maintenance

Check Box Maintenance Items

Type of Maintenance	Is recommended?
A-54 - Sealable Deck Cracks	No
A-55 - Deck Washing Needed	No
A-56 - Joint Cleaning/Flushing Needed	No
A-57 - Beam End and Bearing Paint Needed	No
A-58 - Cap Cleaning/Flushing Needed	No
A-59 - Joint Repair Needed	No
A-60 - Full Beam Painting Needed	No
A-61 - Polymer Overlay Advised	No
A-62 - Hydro and LMC Advised	No
A-63 - Missing/Incorrect Log Mile Signage	No
A-64 - Vegetation Removal Requested	No

A-54 - Sealable Deck Cracks (No)

A-55 - Deck Washing Needed (No)

A-56 - Joint Cleaning/Flushing Needed (No)



Asset #05910(Routine, Underwater type 2)

SH 112 Benton 2 over SPRING CREEK

Location: 2.32 MI N WASHINGTON CO L

Team Lead: Nathan Rowland Inspection Date: 05/02/2024

A-57 - Girder End and Bearing Painting Needed (No)

A-58 - Cap Cleaning/Flushing Needed (No)

A-59 - Joint Repair Needed (No)

A-60 - Full Girder Painting Needed (No)

A-61 - Polymer Overlay Advised (No)

A-62 - Hydro and LMC Advised (No)

A-63 - Missing/Incorrect Log Mile Signage (No)

A-64 - Vegetation Removal Requested (No)



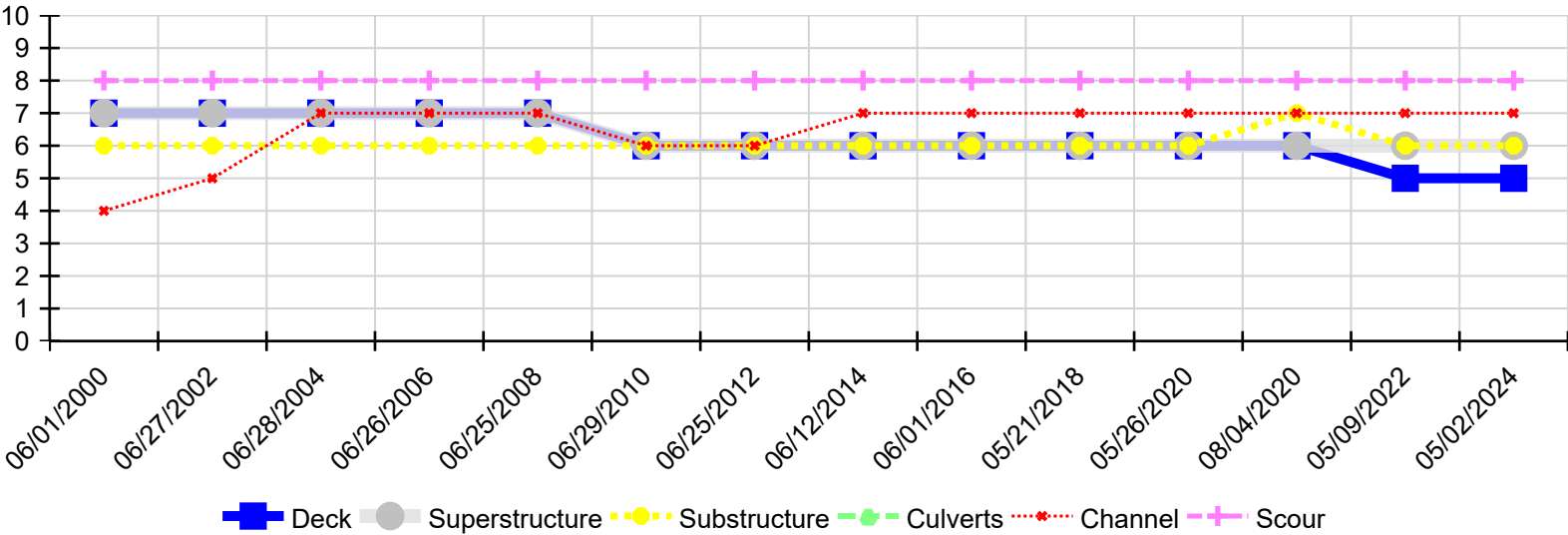
Asset #05910(Routine, Underwater type 2)

SH 112 Benton 2 over SPRING CREEK

Location: 2.32 MI N WASHINGTON CO L

Team Lead: Nathan Rowland Inspection Date: 05/02/2024

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
05/02/2024	5	6	6	N	7	8
05/09/2022	5	6	6	N	7	8
08/04/2020	6	6	7	N	7	8
05/26/2020	6	6	6	N	7	8
05/21/2018	6	6	6	N	7	8
06/01/2016	6	6	6	N	7	8
06/12/2014	6	6	6	N	7	8
06/25/2012	6	6	6	N	6	8
06/29/2010	6	6	6	N	6	8
06/25/2008	7	7	6	N	7	8
06/26/2006	7	7	6	N	7	8
06/28/2004	7	7	6	N	7	8
06/27/2002	7	7	6	N	5	8
06/01/2000	7	7	6	N	4	8