



Latitude:35.86568, Longitude:-90.17754

Route:77 Section:02 Log:0.71

Arnold Road ID:47x77x2xA, Arnold Log mile:0.154

District 10, Mississippi County

Owner: 1-State Highway Agency

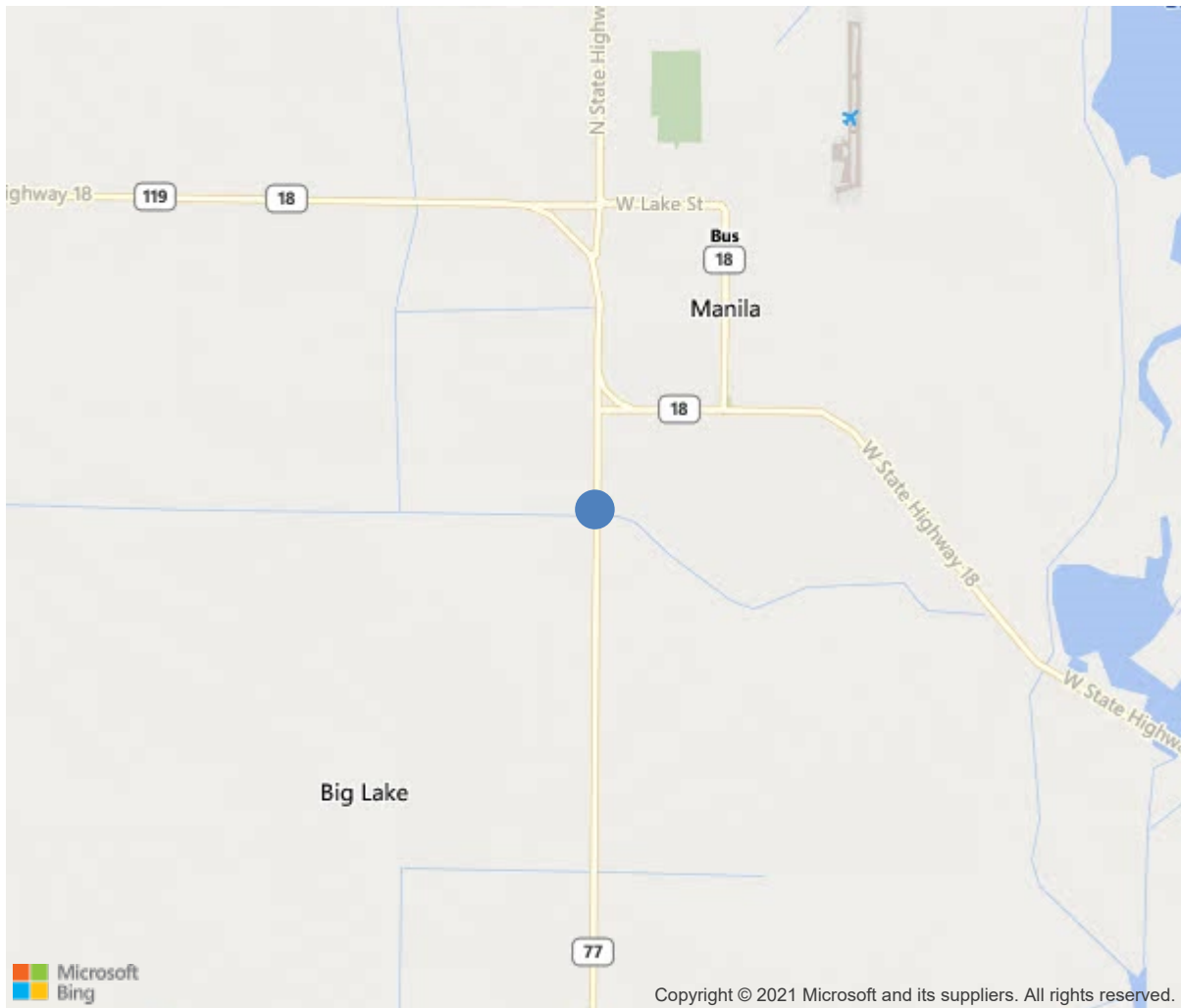


Bridge #02138(Routine)
SH 77-02- LM 0.71 over DITCH NO 13

Location: .70 MI S JCT SH 18

Team Lead: Tim Myrick Inspection Date: August 26, 2020

.70 MI S JCT SH 18



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IDENTIFICATION	
(1) State Names	Arkansas
(8) Structure Number	02138
(5) Inventory Route	77
(2) Highway Agency District	10
(3) County Code	93-Mississippi County, Arkansa
(4) Place Code	0
(6) Features Intersected	DITCH NO 13
(7) Facility Carried	SH 77-02- LM 0.71
(9) Location	.70 MI S JCT SH 18
(11) Mile Point	0.71 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	35.86568
(17) Longitude	-90.17754
(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	3
(46) No. of Approach Spans	0
(107) Deck Structure Type	1-Concrete Cast-in-Place
(108) Wearing Surface/Protective System	
Type of Wearing Surface	6-Bituminous
Type of Membrane	0-None
Type of Deck Protection	0-None
AGE AND SERVICE	
(27) Year Built	1952
(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	1500
(30) Year of ADT	2014
(109) Truck ADT	1 %
(19) Bypass, Detour Length	4 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	18 ft
(49) Structure Length	54 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	26.5 ft
(32) Approach Roadway Width (W/Shoulders)	25.9 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	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	0
(26) Functional Class	7-Rural Major Collector
(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	4
(61) Channel & Channel Protection	6
(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	37
(65) Inventory Rating Method	1-Load Factor(LF)
(66) Inventory Rating	
Type	3
Rating	22
(70) Bridge Posting	5-Equal to or above legal loads
(41) Structure Open/Posted/Closed	A-Open, no restriction
APPRAISAL	
(67) Structural Evaluation	4
(68) Deck Geometry	4
(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	5-Bridge foundations determined to be
PROPOSED IMPROVEMENTS	
(75) Type of Work	Replacement of bridge or other
(76) Length of Structure Improvement	78 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 117
(96) Total Project Cost	\$ 269
(97) Year of Improvement Cost Estimate	2002
(114) Future ADT	1586
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date			08/2020
(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	Yes		06/2021
* 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.			



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ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
38	RC Slab	SF	1431	1373	52	6	0
1090	Exposed Rebar	SF	6	0	0	6	0
1130	Cracking (RC and Other)	SF	52	0	52	0	0
510	Wearing Surfaces	SF	1296	1200	0	96	0
3220	Crack (Wearing Surface)	SF	96	0	0	96	0
228	Timber Pile	EA	11	0	4	5	2
1140	Decay/Section Loss	EA	10	0	4	4	2
6000	Scour	EA	1	0	0	1	0
234	Reinforced Concrete Pier Cap	LF	110	102	6	2	0
1080	Delamination/Spall/Patched Area	LF	4	0	4	0	0
1090	Exposed Rebar	LF	2	0	0	2	0
7000	Damage	LF	2	0	2	0	0
301	Pourable Joint Seal	LF	53	53	0	0	0
330	Metal Bridge Railing	LF	108	25	83	0	0
1000	Corrosion	LF	83	0	83	0	0





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Team Lead: Tim Myrick Inspection Date: August 26, 2020



Maintenance Needs

Date Reported: 07/27/2016
Priority: B - Pressing; 6 month completion goal
Type of Work: Repair
Status: Monitor
Component: Substructure

Deficiency Description

Bent 2 pile 4 & 5 has up to 1" of outside decay.

Bent 3 pile 1 & 2 has up to 2" of outside decay approximately 3' up from ground line and partially hollow.

Remarks





B3 p2



b2 p2



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SH 77-02- LM 0.71 over DITCH NO 13

Location: .70 MI S JCT SH 18

Team Lead: Tim Myrick **Inspection Date:** August 26, 2020

Date Reported: 07/28/2016

Priority: D- Routine

Type of Work: Repair

Status: Monitor

Component: Approach

Deficiency Description

Approach roadways have up to 1.5" of settlement at south end of bridge.

Remarks



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Location: .70 MI S JCT SH 18

Team Lead: Tim Myrick **Inspection Date:** August 26, 2020

Date Reported: 07/28/2016
Priority: G - General/ Preventive maintenance
Type of Work: Repair
Status: Monitor
Component: Substructure

Deficiency Description

Bent 2 cap has 2 small delaminated areas and 1' of rebar exposed.

Remarks

Date Reported: 08/08/2018
Priority: A - Safety deficiency; requires prompt action

Type of Work: Repair
Status: Assigned
Component: Substructure

Deficiency Description

Bent 3 pile 4 has 1" outside shell, decayed & hollow.
Bent 3 pile 5 bottom 4' has a 1" shell, hollow.

Remarks

to Dist Bridge Crew for repairs when they have time - KAW 8/30/18
Bridge Crew currently working on other priorities, will continue to monitor. KAW 6/28/19



B3 p5



b3 p4 & 5

Date Reported: 08/08/2018
Priority: C - Important
Type of Work: Repair
Status: Monitor
Component: Channel

Deficiency Description

Right end of bent 4 abutment has a 5ft. long area of erosion, 1 ft. below & 2 ft. back under cap, exposing pile 5.

Remarks





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Inspection Comments

-

Deck Notes

Flare boards are twisted & leaning

Metal guardrail has minor rust & pitting.

Approach roadway right lane south end has up to 1.5" of settlement at end of bridge. Beginning end has had recent overlay, repairing settlement.

Asphalt wearing surface has transverse cracks over bents.

Concrete curb has a few minor spalls with exposed rebar.

Superstructure Notes

Soffit has minor longitudinal cracks.

Substructure Notes

Bent 2 cap has 2 small delaminated areas and 1' of exposed rebar.

Timber piles have moderate outside decay.

Bent 2 pile 2 is decayed and partially hollow.

Bent 2 pile 4 & 5 have up to 1" of outside decay.

Bent 3 cap has 1' delaminated area on bottom of cap between piles 4 and 5 with 1' of abrasion on both ends.

Bent 3 pile 1 has up to 2" of outside decay, 4' high, approximately 3' up from ground line.

Bent 3 pile 2 has 1" outside decay and partially hollow.

Bent 3 pile 4 has 1" outside shell, decayed & hollow.

Bent 3 pile 5 bottom 4' has a 1" shell, hollow.

Bent 4 abutment has 1' delaminated area.

Right end of bent 4 abutment has a 5' long area of erosion, 1' below & 2' back under cap, exposing pile 5.

Heavy vegetation in channel.