



Latitude:35.21558, Longitude:-94.26762

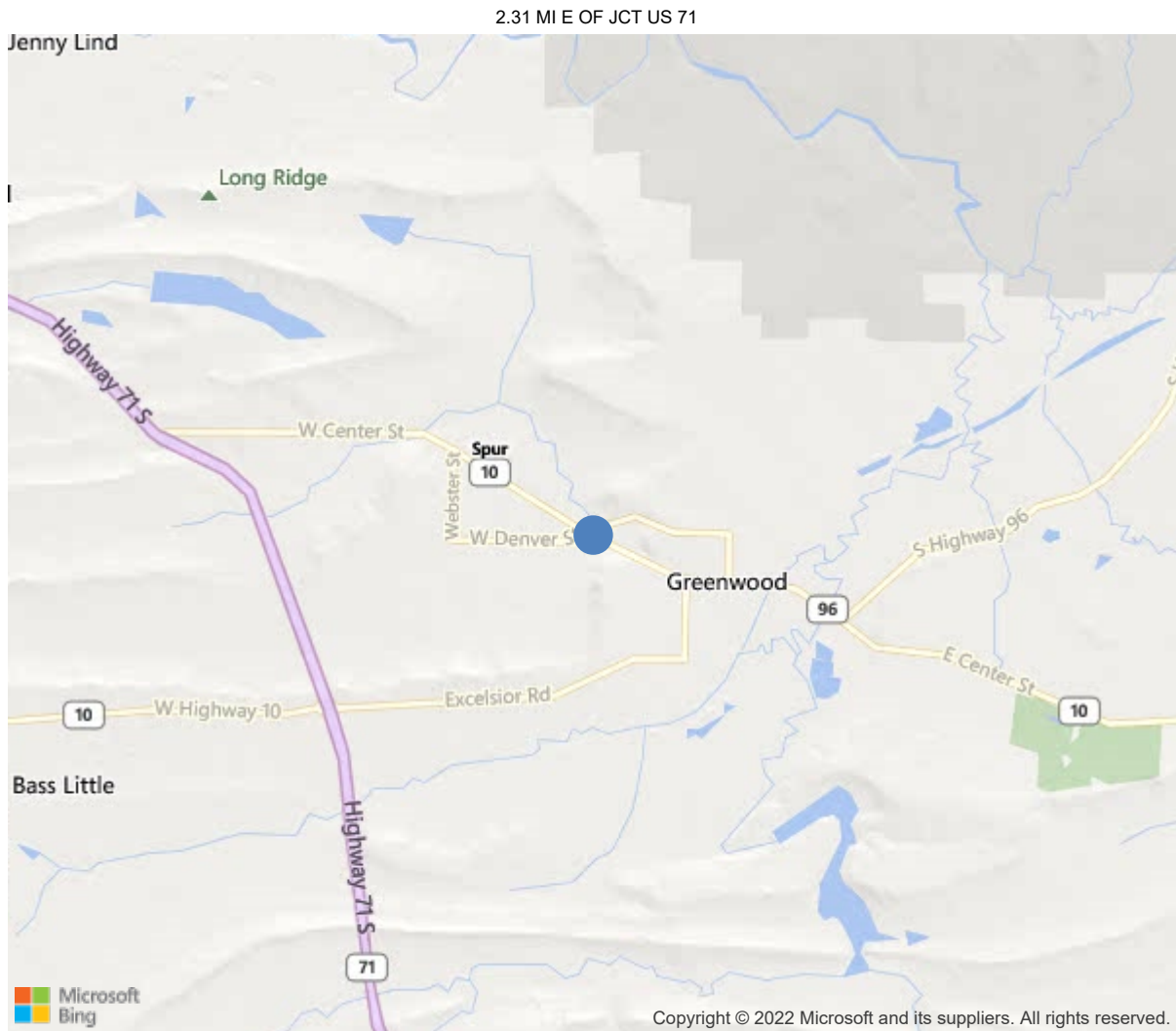
Route:10 Section:00 Log:2.31

Arnold Road ID:65x10x0SxA, Arnold Log mile:2.298

District 04, Sebastian County

Owner: 1-State Highway Agency

Place Code: 28780 - Greenwood



35.21558, -94.26762

Inspection Direction : W to E



Bridge #00331(Routine)

SH 10 Spur over Hester Creek-Seb. Co.

Location: 2.31 MI E OF JCT US 71

Team Lead: Eric West Inspection Date: December 20, 2021

IDENTIFICATION	
(1) State Names	Arkansas
(8) Structure Number	00331
(5) Inventory Route	10
(2) Highway Agency District	04
(3) County Code	131-Sebastian County, Arkansas
(4) Place Code	28780
(6) Features Intersected	Hester Creek-Seb. Co.
(7) Facility Carried	SH 10 Spur
(9) Location	2.31 MI E OF JCT US 71
(11) Mile Point	2.31 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	35.21558
(17) Longitude	-94.26762
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	14
Material	1-Concrete
Type	4-Tee beam
(44) Approach Structure Type	00
Material	0-Other
Type	0-Other
(45) No. of Spans in Main Unit	1
(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	1928
(106) Year Reconstructed	1963
(42) Type of Service	15
On	1-Highway
Under	5-Waterway
(28) Lane	
On	2
Under	0
(29) Average Daily Traffic	15000
(30) Year of ADT	2014
(109) Truck ADT	2 %
(19) Bypass, Detour Length	4 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	40 ft
(49) Structure Length	42 ft
(50) Curb or Sidewalk Width	
Left	1 ft
Right	1 ft
(51) Bridge Roadway Width Curb to Curb	36.1 ft
(52) Deck Width Out to Out	38 ft
(32) Approach Roadway Width (W/Shoulders)	36.1 ft
(33) Bridge Median	0-No median
(34) Skew	30 Deg
(35) Structure Flared	No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	37.4 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	7
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	4-M 18 / H 20
(63) Operating Rating Method	1
(64) Operating Rating	
Type	1-Load Factor(LF)
Rating	54
(65) Inventory Rating Method	1-Load Factor(LF)
(66) Inventory Rating	
Type	1
Rating	33
(70) Bridge Posting	5-Equal to or above legal loads
(41) Structure Open/Posted/Closed	A-Open, no restriction
APPRAISAL	
(67) Structural Evaluation	7
(68) Deck Geometry	4
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	8
(72) Approach Roadway Alignment	7
(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	1-Inspected feature meets currently a
(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	66 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 148
(96) Total Project Cost	\$ 319
(97) Year of Improvement Cost Estimate	2002
(114) Future ADT	21086
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date			12/2021
(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.			



**Bridge #00331 (Routine)**  
**SH 10 Spur over Hester Creek-Seb. Co.**  
**Location: 2.31 MI E OF JCT US 71**

**Team Lead: Eric West, Inspection Date: December 20, 2021**

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
16	Reinforced Concrete Top Flange	SF	1520	1473	47	0	0
1120	Efflorescence/Rust Staining	SF	31	0	31	0	0
1130	Cracking (RC and Other)	SF	16	0	16	0	0
510	Wearing Surfaces	SF	1444	1331	0	113	0
3220	Crack (Wearing Surface)	SF	113	0	0	113	0
(16) -The asphalt driving surface of the deck has isolated cracks with transverse cracks at the bridge ends. The asphalt driving surface has a full length longitudinal crack at centerline that has been partially sealed in the past. -There are transverse cracks (Perpendicular to the centerline of roadway) between deck girders near the abutments visible from the undersurface of deck. -Longitudinal construction joints where the deck was widened has minor efflorescence. Approach roadways: -The West approach roadway has approximately 2" of settlement at roadway centerline.							
(16-510) -Minor cracking on the asphalt wearing surface.							
110	Reinforced Concrete Open Girder/Beam	LF	294	222	71	1	0
1120	Efflorescence/Rust Staining	LF	1	0	0	1	0
1130	Cracking (RC and Other)	LF	71	0	71	0	0
(110) -The concrete Tee beams have vertical hairline cracks at approximately 18" centers near mid-span of structure. The majority of the cracks are in the girders of the widened portion of structure. Some of the cracks are moderate width. The most notable area is the cracking in girder # 6 near mid-span. -Abutment #2 Girder #1 has a vertical crack with efflorescence adjacent to abutment #2. -No visible shear cracks in the ends of the girders.							
215	Reinforced Concrete Abutment	LF	170	39	124	7	0
1080	Delamination/Spall/Patched Area	LF	2	0	2	0	0
1120	Efflorescence/Rust Staining	LF	10	0	9	1	0
1130	Cracking (RC and Other)	LF	26	0	24	2	0
1190	Abrasion/Wear (PSC/RC)	LF	93	0	89	4	0
(215) -Abutment # 1 Rt. has a full height moderate width crack at the juncture of the monolithic wing wall. -Abutment # 1 footing is exposed with no apparent undermining at this inspection. -Abutment # 2 stem wall has a full height moderate width crack under girder # 2. The stem wall has a horizontal crack located approximately 4' below the girders under bays # 2 & 5. -There are a few isolated vertical cracks in each abutment. -The abutment stem walls have vertical and diagonal cracking adjacent to the exterior girders. -The base of the abutments have light to medium abrasion.							
220	Reinforced Concrete Pile Cap/Footing	LF	45	0	0	45	0

**Team Lead:** Eric West, **Inspection Date:** December 20, 2021

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
1190 (220)	Abrasion/Wear (PSC/RC)	LF	45	0	0	45	0
-The footing at abutment # 1 is exposed. Probing indicated no apparent undermining or scour problems at this inspection. -The exposed footing has medium / heavy abrasion along the edge and below the water elevation.							
330	Metal Bridge Railing	LF	84	0	84	0	0
1000	Corrosion	LF	84	0	84	0	0
515	Steel Protective Coating	SF	444	0	0	393	51
3440	Effectiveness (Steel Protective Coatings)	SF	444	0	0	393	51
(330) -The bridge railing protective coating is failing in several locations with rust forming on the railing. Approach railing: -Northeast approach bridge rail has recently been replaced.							
(330-515)							
-Bridge rails have a failing paint system.							





Roadway



Typical driving surface of the deck.





Typical undersurface of the deck.



Abutment #1 typical.





Abutment #2 Lt moderate width vertical cracking and cracking with efflorescence buildup.



Abutment #2 typical.





Northeast approach guardrail replaced.



Rt bridge rail.



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## **Maintenance Needs**



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### **Inspection Comments**

12032019 SPC- Element quantities field verified.

12/19/2017 JPB & SPC-Routine Inspection conducted on this date.

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### **Substructure Notes**

01/30/2020 - EJW, JPW & TJL - Type 2 Underwater Inspection - Wading and probing during low water conditions indicate that Bent # 1 footing is exposed with no apparent scour problems at this inspection.