



Latitude:34.28800, Longitude:-91.32550

Route:1 Section:04 Log:1.57

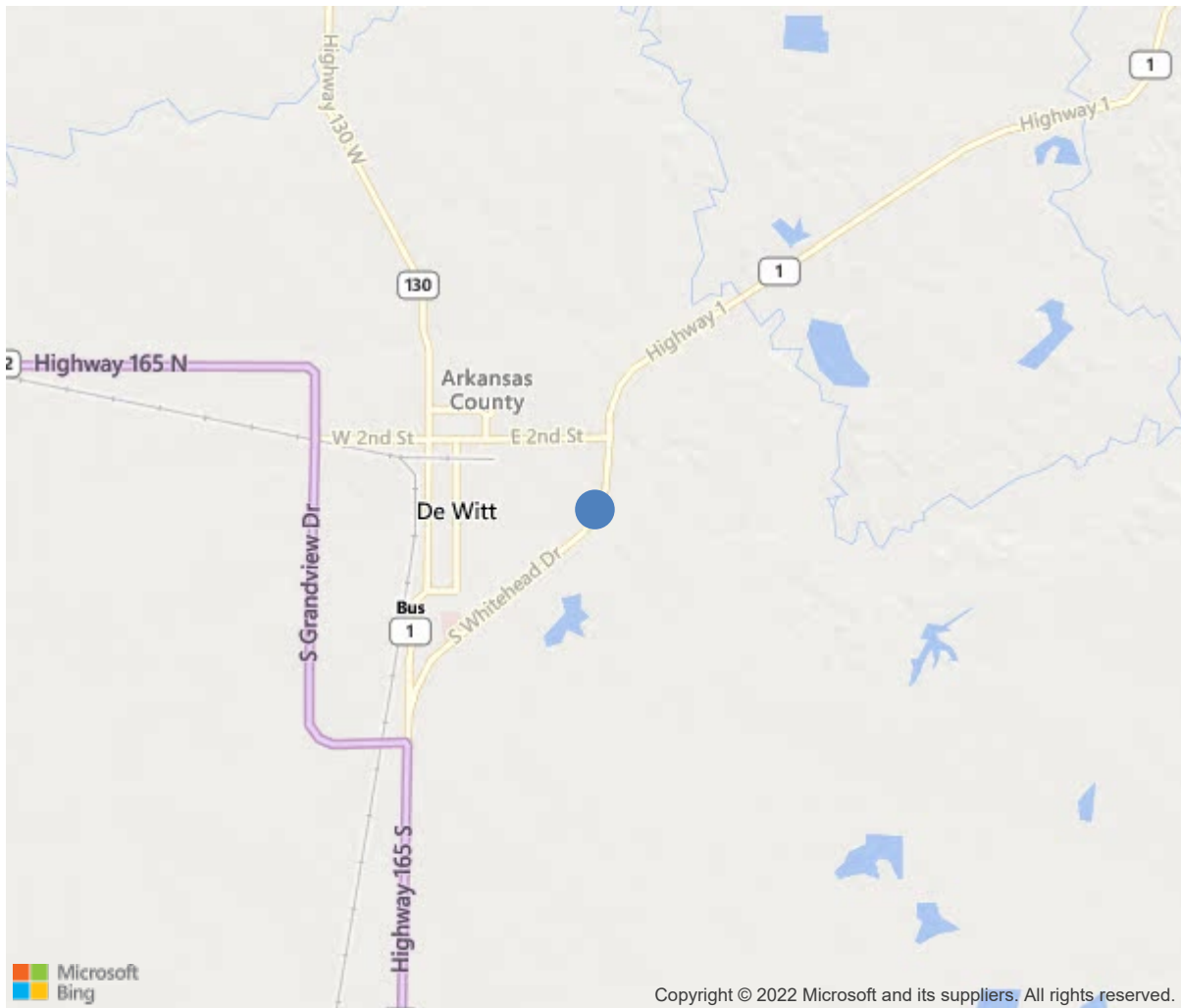
Arnold Road ID:1x1x4xA, Arnold Log mile:1.551

District 02, Arkansas County

Owner: 1-State Highway Agency

Place Code: 18790 - DeWitt

1.57 Mi NE US 165-DeWitt



34.28800, -91.32550

Inspection Direction : S to N



**Bridge #03384**(Routine, Underwater type 2)

**SH 1-04 LM 1.57 over Prices Branch**

**Location: 1.57 Mi NE US 165-DeWitt**

**Team Lead: Greg Loomis Inspection Date: July 21, 2021**

IDENTIFICATION	
(1) State Names	Arkansas
(8) Structure Number	03384
(5) Inventory Route	1
(2) Highway Agency District	02
(3) County Code	1-Arkansas County, Arkansas
(4) Place Code	18790
(6) Features Intersected	Prices Branch
(7) Facility Carried	SH 1-04 LM 1.57
(9) Location	1.57 Mi NE US 165-DeWitt
(11) Mile Point	1.57 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000001040
(16) Latitude	34.2880020293152
(17) Longitude	-91.3255015730858
(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	1-Monolithic Concrete (concurrently placed
Type of Membrane	0-None
Type of Deck Protection	0-None
AGE AND SERVICE	
(27) Year Built	1961
(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	3700
(30) Year of ADT	2013
(109) Truck ADT	1 %
(19) Bypass, Detour Length	2 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	30 ft
(49) Structure Length	90 ft
(50) Curb or Sidewalk Width	
Left	1.5 ft
Right	1.5 ft
(51) Bridge Roadway Width Curb to Curb	28 ft
(52) Deck Width Out to Out	33.5 ft
(32) Approach Roadway Width (W/Shoulders)	29.9 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	27.9 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	1
(26) Functional Class	2-Rural Principal Arterial - Oth
(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	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	6
(59) Superstructure	7
(60) Substructure	7
(61) Channel & Channel Protection	6
(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	3
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	7
(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	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	5-Bridge foundations determined to be
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	5718
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date			07/2021
(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.			

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
38	RC Slab	SF	2700	540	2008	144	8
1080	Delamination/Spall/Patched Area	SF	135	0	135	0	0
1120	Efflorescence/Rust Staining	SF	9	0	0	9	0
1130	Cracking (RC and Other)	SF	683	0	540	135	8
1190	Abrasion/Wear (PSC/RC)	SF	1333	0	1333	0	0
(38)							
Deck (sonovoid-tube construction): 30' wide (1'-9" STEP-UP each side) x 90' long = 2700 sqft. Unsealed, minor- to large-sized longitudinal and diagonal cracks in various locations throughout deck (CS2 20%, CS3 5%, CS4 8 sqft). Bents 3 & 4 left sides: Some significant spalling along joints (most of spalls have been filled/patched with asphalt material) (CS2 5%). Minor- to moderate- abrasive wear in travel lanes.							
Sides of slabs: Vertical cracking at bents/joints.							
Soffit – Span 3 left: Several moderate-sized longitudinal cracks with rust staining. Some cracking around drains on left side.							
215	Reinforced Concrete Abutment	LF	88	88	0	0	0
(215)							
Abutments: 36' each (skewed + 4' wings each corner) / Bents 1 & 4.							
227	Reinforced Concrete Pile	EA	13	8	5	0	0
1190	Abrasion/Wear (PSC/RC)	EA	5	0	5	0	0
(227)							
Piling: 5 per bent / Bents 2 & 3, 3 per bent / Bent 4 (exposed due to settlement /erosion) Bent 3: Piling in waterway have light abrasive wear.							
234	Reinforced Concrete Pier Cap	LF	72	61	8	3	0
1080	Delamination/Spall/Patched Area	LF	9	0	6	3	0
1130	Cracking (RC and Other)	LF	2	0	2	0	0
(234)							
Caps: 36' each (skewed) / Bents 2 & 3. NOTE: Some spalls have been repaired/patched over by state forces prior to 2013 inspection. Bent 2: Some delamination/spalling on ahead face @ keyways with a couple of small vertical cracks near right end.							
301	Pourable Joint Seal	LF	68	0	0	68	0
2350	Debris Impaction	LF	68	0	0	68	0
(301)							
Joints: 33.5' = 34' each / Spans 2-3. Bents 2 & 3: Poured joint material missing from joints. Joints filled with dirt and debris.							



ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
330	Metal Bridge Railing	LF	180	180	0	0	0
515	Steel Protective Coating	SF	450	450	0	0	0
(330)							
Railing: 90' each side.							
Coating: 2.5 square feet \ linear feet of railing.							
Metal railing with concrete posts.							



Roadway view



Deck - Spans 1-3: Typical





Soffit - Span 2: Typical



Soffit - Span 3: Cracking/rust-staining

## Maintenance Needs

**Date Reported:** 07/14/2011  
**Priority:** G - General/ Preventive maintenance  
**Type of Work:** Repair  
**Status:** Monitor  
**Inspection Direction** S to N  
**Component:** 38 - RC Slab

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### Deficiency Description

Deck - all spans: Unsealed, minor- to large-sized longitudinal and diagonal cracks in various locations throughout deck.

Sides of slabs: Vertical cracking at bents/joints.

Soffit –

Span 3 left: Several moderate-sized longitudinal cracks with rust staining.  
Some cracking around drains on left side.

### Remarks

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Deck - Span 1



Span 1 near bent 1 right side has large unsealed longitudinal crack.





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**SH 1-04 LM 1.57 over Prices Branch**

**Location: 1.57 Mi NE US 165-DeWitt**

**Team Lead:** Greg Loomis **Inspection Date:** July 21, 2021

**Date Reported:** 07/14/2011  
**Priority:** D- Routine  
**Type of Work:** Repair  
**Status:** Assigned  
**Inspection Direction** S to N  
**Component:** 301 - Pourable Joint Seal

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#### Deficiency Description

Joints – Bents 2 & 3: Poured joint material missing from joints. Joints filled with dirt and debris.

#### Remarks

Clean joints out, and re-pour material into joints

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Bent 3 joint seal filled with dirt and debris. Common all bents.



Joint - Bent 2



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**Team Lead:** Greg Loomis **Inspection Date:** July 21, 2021



Joint - Bent 2: Material missing/debris filled

**Date Reported:** 07/14/2011  
**Priority:** G - General/ Preventive maintenance  
**Type of Work:** Repair  
**Status:** Monitor  
**Inspection Direction** S to N  
**Component:** Channel

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**Deficiency Description**

End slope – Bent 1: Small areas of erosion beginning near keyways, especially on right side.

**Remarks**

No action at this time. Continue to monitor and advise if erosion worsens.

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End slope -Bent 1



**Date Reported:** 06/28/2017

**Priority:** D- Routine

**Type of Work:** Repair

**Status:** Assigned

**Inspection Direction** S to N

**Component:** Channel

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**Deficiency Description**

End-slope - Span 3: Moderate erosion exposing bottom of cap with some undermining and exposing utilities line(water).

07-25-2019 GGL-KLR: Changed priority from "C" to "D".

**Remarks**

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End Slope erosion area under bottom of cap on bent 4 .



End-slope - Bent 4: Settlement/piling exposed

**Date Reported:** 06/28/2017  
**Priority:** D- Routine  
**Type of Work:** Repair  
**Status:** Assigned  
**Inspection Direction** S to N  
**Component:** 330 - Metal Bridge Railing

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**Deficiency Description**

Railing - Bents 1 & 4 left & right (all 4 corners): Concrete transition post/railing is deteriorating with spalling/scaling of the surface of the post.

**Remarks**

David: Fit into your schedule as time permits

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Southeast corner of bridge , guard rail end post has spalls with chloride contamination.



Southeast corner of bridge, guard rail end post has spalling with heavy chloride contamination..





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**SH 1-04 LM 1.57 over Prices Branch**

**Location: 1.57 Mi NE US 165-DeWitt**

**Team Lead:** Greg Loomis **Inspection Date:** July 21, 2021

**Date Reported:** 07/25/2019

**Priority:** D- Routine

**Type of Work:** Clean

**Status:** Open

**Inspection Direction** S to N

**Component:** Channel

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### Deficiency Description

Channel - Bent 2: Small tree/bush and other vegetation growing up along side and under bridge.

### Remarks

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Channel - Bent 2 left: Vegetation



Channel - Bent 2 left: Vegetation





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**Location: 1.57 Mi NE US 165-DeWitt**

**Team Lead:** Greg Loomis **Inspection Date:** July 21, 2021

**Date Reported:** 07/21/2021  
**Priority:** D- Routine  
**Type of Work:** Repair  
**Status:** Open  
**Inspection Direction** S to N  
**Component:** 38 - RC Slab

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### Deficiency Description

Deck - Bents 3 & 4 left sides: Some significant spalling along joints (most of spalls have been filled/patched with asphalt material).

### Remarks

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Deck @ Bents 3-4: Spalling/patches



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**Location: 1.57 Mi NE US 165-DeWitt**

**Team Lead:** Greg Loomis **Inspection Date:** July 21, 2021

### **Inspection Comments**

Bridge is logged from south to north (southwest to northeast).