



Latitude:33.98056, Longitude:-91.56691

Route:114 Section:02 Log:8.46

Arnold Road ID:40x114x2xA, Arnold Log mile:8.454

District 02, Lincoln County

Owner: 1-State Highway Agency

Place Code: 27030 - GOULD



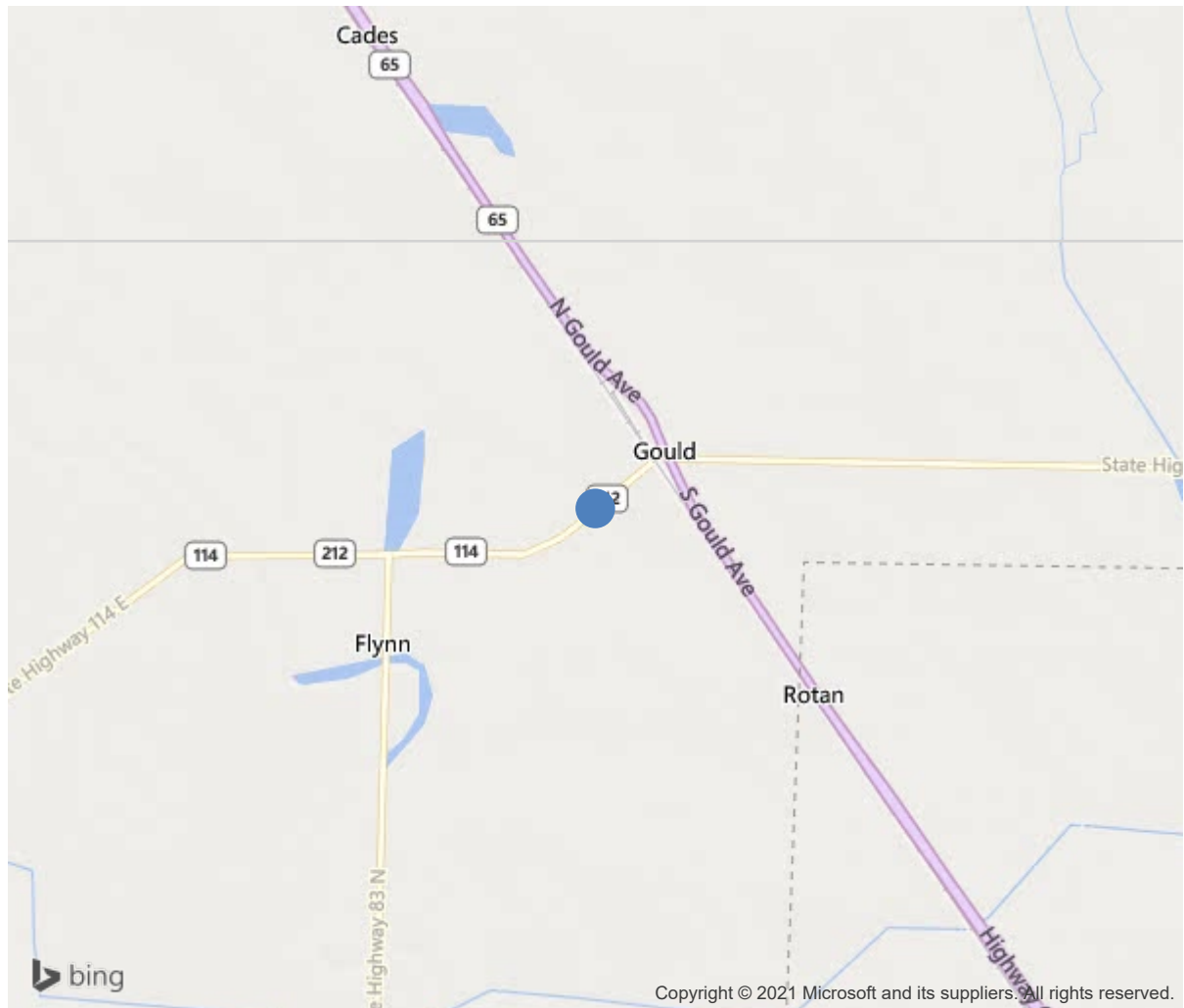
Bridge #02896(Routine, Underwater type 2)

SH 114-02 LM 8.46 over Gould Ditch

Location: 0.5 Mi W US 65-Gould

Team Lead: Greg Loomis Inspection Date: September 01, 2020

0.5 Mi W US 65-Gould



33.98056, -91.56691



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Location: 0.5 Mi W US 65-Gould

Team Lead: Greg Loomis Inspection Date: September 01, 2020

IDENTIFICATION	
(1) State Names	Arkansas
(8) Structure Number	02896
(5) Inventory Route	114
(2) Highway Agency District	02
(3) County Code	79-Lincoln County, Arkansas
(4) Place Code	27030
(6) Features Intersected	Gould Ditch
(7) Facility Carried	SH 114-02 LM 8.46
(9) Location	0.5 Mi W US 65-Gould
(11) Mile Point	8.46 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	33.98056
(17) Longitude	-91.56691
(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	1954
(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	1400
(30) Year of ADT	2014
(109) Truck ADT	1 %
(19) Bypass, Detour Length	13 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	28 ft
(49) Structure Length	84 ft
(50) Curb or Sidewalk Width	
Left	1.3 ft
Right	1.3 ft
(51) Bridge Roadway Width Curb to Curb	24 ft
(52) Deck Width Out to Out	26 ft
(32) Approach Roadway Width (W/Shoulders)	22 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	24 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	6
(59) Superstructure	6
(60) Substructure	6
(61) Channel & Channel Protection	7
(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	46
(65) Inventory Rating Method	1-Load Factor(LF)
(66) Inventory Rating	
Type	3
Rating	28
(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	4
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	8
(72) Approach Roadway Alignment	8
(36) Traffic Safety Features	0000
A) Bridge Railings	0-Inspected feature does not meet cur
B) Transitions	0-Inspected feature does not meet cur
C) Approach Guardrail	0-Inspected feature does not meet cur
D) 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	
(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	1366
(115) Year of Future ADT	2028
INSPECTIONS	
(90) Inspection Date	
(91) Frequency	24 Months
(92) Critical Feature Inspection	Done Freq. (Mon) Date
A: Fracture Critical Detail	No 24
B: Underwater Inspection	No 0
C: Other Special Inspection	No 0

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
38	RC Slab	SF	2184	2175	5	4	0
1080	Delamination/Spall/Patched Area	SF	2	0	2	0	0
1090	Exposed Rebar	SF	7	0	3	4	0
510	Wearing Surfaces	SF	2016	1772	178	62	4
3210	Delam/Spall/Patched Area/Pothole	SF	20	0	10	6	4
3220	Crack (Wearing Surface)	SF	224	0	168	56	0
(38) Deck: 26' wide x 84' long = 2184 sqft. Wearing surface: 24' wide x 84' long = 2016 sqft. Asphalt wearing surface - all spans: Some longitudinal cracking with a few transverse crack close to bents - heaviest cracking on Spans 2 & 3. A couple areas with gouges from farming equipment - and some spalling up/patching at Bent 3. Soffit: Some deterioration, delamination, and minor spalling (some steel exposed with minor section loss) around drains and along gutterlines.							
215	Reinforced Concrete Abutment	LF	76	76	0	0	0
(215) Abutments: 27'-6" = 28' each (with approximately 5' wings each corner) / Bents 1 & 4.							
227	Reinforced Concrete Pile	EA	8	0	8	0	0
1190	Abrasion/Wear (PSC/RC)	EA	8	0	8	0	0
(227) Piling: 4 per bent / Bents 2 & 3. Some minor abrasive wear - heavier on Bent 3.							
234	Reinforced Concrete Pier Cap	LF	54	35	19	0	0
1080	Delamination/Spall/Patched Area	LF	3	0	3	0	0
1120	Efflorescence/Rust Staining	LF	16	0	16	0	0
(234) Caps: 27'-6" = 28' each / Bents 2 & 3. Bent 2 back: Area of delamination with minor spalling around edges over Pile 4 (3') Some hairline-sized horizontal cracks with minor efflorescence on remaining caps.							
330	Metal Bridge Railing	LF	168	148	20	0	0
1000	Corrosion	LF	20	0	20	0	0
515	Steel Protective Coating	SF	420	0	420	0	0
3420	Peeling/Bubbling/Cracking	SF	420	0	420	0	0
(330)							

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
	Railing: 84' each side. Coating: 2.5 square feet per linear feet of railing. Metal railing on concrete posts. Paint deteriorating with some primer showing through and freckled rust starting to form on metal railing.						



Roadway view



Deck - Spans 1-3: Typical



Soffit - Span 3: Typical



Railing - Spans 2-3 left: Paint peeling



Wearing surface - Span 2: Cracking



Wearing surface - Span 3: Cracking



Wearing surface @ Bent 3: Cracking/spalling



Soffit - Span 2 right: Exposed Rebar @ drain



Cap - Bent 2 back right: Spalling/delamination



Cap - Bent 2 ahead: Efflorescence

Maintenance Needs

Date Reported: 09/10/2012
Priority: D- Routine
Type of Work: Repair
Status: Monitor
Component: 510 - 38 - RC Slab

Deficiency Description

Asphalt wearing surface - all spans: Some longitudinal cracking with a few transverse crack close to bents - heaviest cracking on Spans 2 & 3.
A couple areas with gouges from farming equipment - and some spalling up/patching at Bent 3.

Remarks



Wearing surface - Span 2: Cracking



Wearing surface - Span 3: Cracking



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Wearing surface @ Bent 3: Cracking/spalling

Date Reported: 08/29/2016
Priority: G - General/ Preventive maintenance
Type of Work: Repair
Status: Monitor
Component: 38 - RC Slab

Deficiency Description

Soffit: Some deterioration, delamination, and minor spalling (some steel exposed with minor section loss) around drains and along gutterlines.

Remarks



Delams with exposed steel around drains



Soffit - Span 2 right: Exposed Rebar @ drain



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Date Reported: 09/10/2012
Priority: C - Important
Type of Work: Clean
Status: Repair Documented
Component: Channel

Deficiency Description

Approach roadway – both ends: Heavy vegetation growing up around approach roadway railing and bridge ends – growth is beginning to obscure object markers and curbs of bridge railing.
See photo.

Remarks

Repaired by State Forces.

Date Reported: 08/29/2016
Priority: G - General/ Preventive maintenance

Type of Work: Repair
Status: Monitor
Component: 234 - Reinforced Concrete Pier Cap

Deficiency Description

Caps:

Bent 2 back: Area of delamination with minor spalling around edges over Pile 4 (3')
Some hairline-sized horizontal cracks with minor efflorescence on remaining caps.

Remarks



Bent 2 back near mid span has delam.



Large Delam on bent 2 cap .



Large cracks with efflorescence on bent 2 cap ahead.



Cap - Bent 2 back right: Spalling/delamination



Cap - Bent 2 ahead: Efflorescence



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Inspection Comments

End of structure toward US 65, Gould,
Bridge is logged from west to east.