



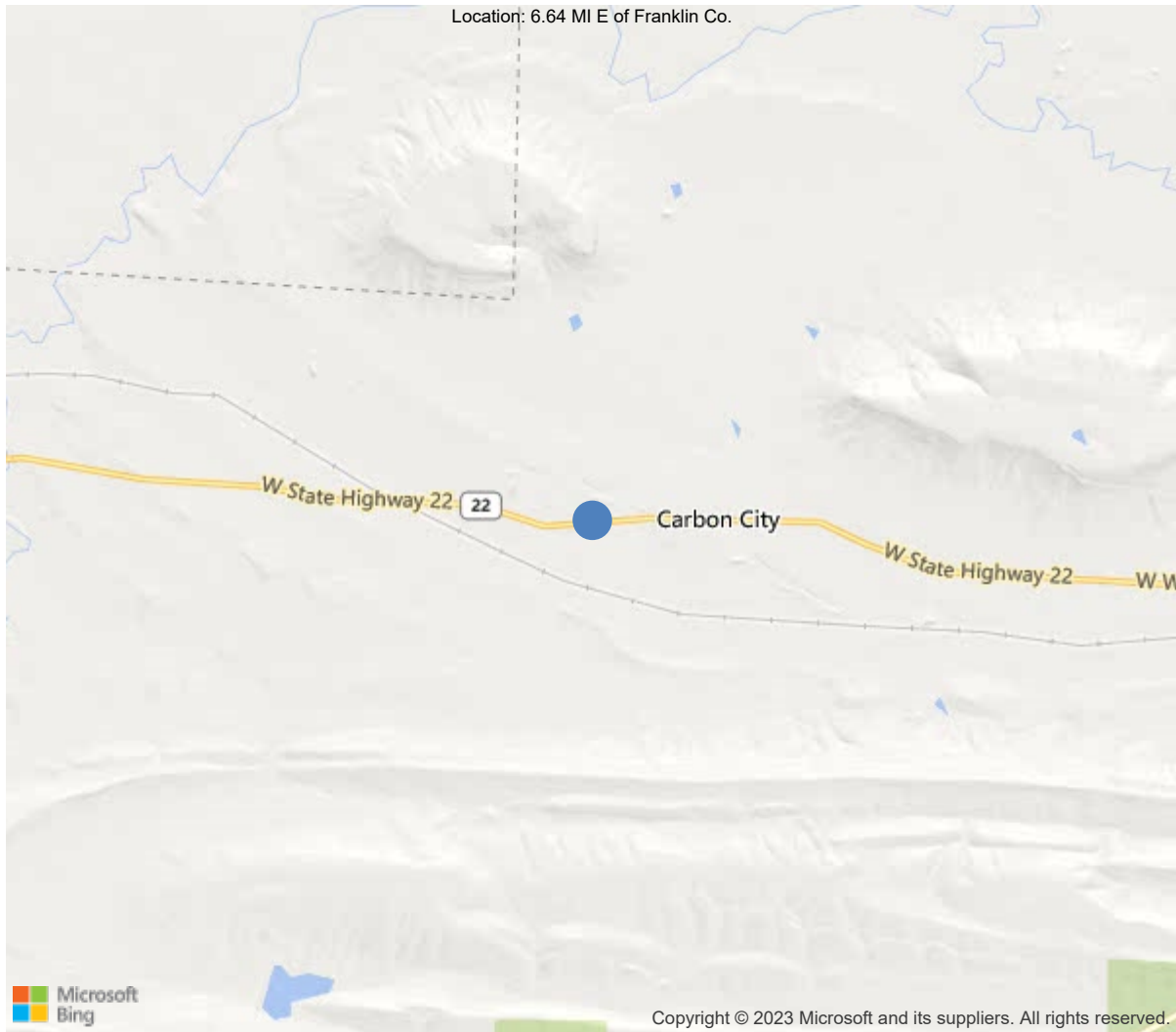
Latitude:35.29716, Longitude:-93.80308

Route:22 Section:03 Log:6.639

Arnold Road ID:42x22x3xA, Arnold Log mile:6.636

District 04, 83 - Logan County

Owner: 1 - State Highway Agency



35.29716, -93.80308



Asset #00378(Routine)

State Highway 22 over Gack Creek-Logan Co.

Location: 6.64 MI E of Franklin Co.

Team Lead: Bob McEntyre, Inspection Date: 06/15/2022

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	00378
(5) Inventory Route	1
(2) Highway Agency District	04 - District 04
(3) County Code	83 - Logan County
(4) Place Code	0
(6) Features Intersected	Gack Creek-Logan Co.
(7) Facility Carried	State Highway 22
(9) Location	6.64 MI E of Franklin Co.
(11) Mile Point	6.639 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000022030
(16) Latitude	35.29716
(17) Longitude	-93.80308
(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	1957
(42) Type of Service	15
On	1 - Highway
Under	5 - Waterway
(28) Lane	
On	2
Under	0
(29) Average Daily Traffic	4800
(30) Year of ADT	2018
(109) Truck ADT	7 %
(19) Bypass, Detour Length	10 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	30 ft
(49) Structure Length	30 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	40 ft
(52) Deck Width Out to Out	42 ft
(32) Approach Roadway Width (W/Shoulders)	40 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	99.9 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 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	6 - Rural Minor Arterial
(100) Defense Highway	0 - The inventory route is not
(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 par
(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	7
(59) Superstructure	6
(60) Substructure	6
(61) Channel & Channel Protection	6
(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	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	6
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	8
(72) Approach Roadway Alignment	8
(36A) Bridge Railings	0 - Inspected feature does not meet
(36B) Transitions	0 - Inspected feature does not meet
(36C) Approach Guardrail	0 - Inspected feature does not meet
(36D) Approach Guardrail Ends	0 - Inspected feature does not meet
(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	6309
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	06/15/2022		
(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		
<p>* 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.</p>			



General Observation

06/15/2022 - RSM & SPC: Routine Inspection conducted this date. See element notes for documentation.

05/06/2020 - JCJ & TJL - Routine Inspection and Type 2 Underwater Inspection conducted this date.

60 - Substructure (6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.)

05/06/2020 - JCJ & TJL - Type 2 Underwater Inspection conducted this date.

ArDOT Drawing # 981 & 982 indicate that the abutment footings are founded on shale. ArDOT Plan footing thickness is 1'-6".

Wading and probing during during low and turbid water conditions indicate that the top of Bent # 2 footing is exposed in the widened portions of the structure.

The top of Bent # 2 footing is 1'-3" above the solid shale channel that is exposed in areas with no apparent scour problems during this inspection.

Bent # 1 footing has cover during this inspection.

Soundings were taken along both sides of the structure this date. See sounding documentation associated with this inspection for additional information.

A-15 - Late Reason (N/A)

06/15/2022 - RSM - Inspection 1 month late due to heavy workload.

A-46 - Asset Files

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State Highway 22 over Gack Creek-Logan Co.

Location: 6.64 MI E of Franklin Co.

Team Lead: Bob McEntyre, **Inspection Date:** 06/15/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
16	Reinforced Concrete Top Flange	SF	1260	1211	49	0	0
1120	Efflorescence/Rust Staining	SF	42	0	42	0	0
1130	Cracking (RC and Other)	SF	7	0	7	0	0
510	Wearing Surfaces	SF	1200	560	0	640	0
3220	Crack (Wearing Surface)	SF	640	0	0	640	0
(16) -Concrete Tee Beam with an asphalt wearing surface. Wearing surface has mapcracking throughout. -Transverse cracking with light efflorescence visible from the undersurface of the deck.							
110	Reinforced Concrete Open Girder/Beam	LF	210	169	41	0	0
1090	Exposed Rebar	LF	4	0	4	0	0
1130	Cracking (RC and Other)	LF	37	0	37	0	0
(110) -Vertical hairline flexure cracking at variable spacing typical. -Girder # 3 has 4 small diameter spalled areas with exposed reinforcing steel in the left vertical face of girder.. Exposed reinforcing steel has no apparent noteworthy section loss during this inspection. -A few areas of shallow honeycombing in the base of girders # 3, 4, and 5 from the construction process.							
215	Reinforced Concrete Abutment	LF	100	35	65	0	0
1080	Delamination/Spall/Patched Area	LF	2	0	2	0	0
1120	Efflorescence/Rust Staining	LF	13	0	13	0	0
1190	Abrasion/Wear (PSC/RC)	LF	50	0	50	0	0
(215) -Both abutments have light abrasion at the water elevation. -Abutment # 1 has a few vertical and diagonal cracks in the stem wall. -There is some staining under the bearing area of several girders. -Vertical and map cracking with efflorescence in the bearing area of girders # 3 and # 5 of both abutments. -Abutment # 2, right wing wall has a moderate width diagonal crack and map cracking with efflorescence at the abutment juncture. -Abutment # 2 stem wall has diagonal and mapcracking on the right side at the wing wall juncture. There is a delaminated area in the concrete placed on top of the abutment adjacent to girder # 7 on the exterior side.							
220	Reinforced Concrete Pile Cap/Footing	LF	100	44	56	0	0
1190	Abrasion/Wear (PSC/RC)	LF	56	0	56	0	0
(220) -Footings are exposed where substructure was widened at abutment # 2. -Footings appear to be cast on solid shale channel. -Abutment # 1 footings have cover during this inspection.							

State Highway 22 over Gack Creek-Logan Co.

Location: 6.64 MI E of Franklin Co.

Team Lead: Bob McEntyre, **Inspection Date:** 06/15/2022

Deck

ELEMENTS		DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
16	Reinforced Concrete Top Flange	SF	1260	1211	49	0	0	
1120	Efflorescence/Rust Staining	SF	42	0	42	0	0	
1130	Cracking (RC and Other)	SF	7	0	7	0	0	
510	Wearing Surfaces	SF	1200	560	0	640	0	
3220	Crack (Wearing Surface)	SF	640	0	0	640	0	
(16) -Concrete Tee Beam with an asphalt wearing surface. Wearing surface has mapcracking throughout. -Transverse cracking with light efflorescence visible from the undersurface of the deck.								

State Highway 22 over Gack Creek-Logan Co.

Location: 6.64 MI E of Franklin Co.

Team Lead: Bob McEntyre, **Inspection Date:** 06/15/2022

Superstructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
110	Reinforced Concrete Open Girder/Beam	LF	210	169	41	0	0
1090	Exposed Rebar	LF	4	0	4	0	0
1130	Cracking (RC and Other)	LF	37	0	37	0	0
<p>(110) -Vertical hairline flexure cracking at variable spacing typical.</p> <p>-Girder # 3 has 4 small diameter spalled areas with exposed reinforcing steel in the left vertical face of girder.. Exposed reinforcing steel has no apparent noteworthy section loss during this inspection.</p> <p>-A few areas of shallow honeycombing in the base of girders # 3, 4, and 5 from the construction process.</p>							

**Substructure**

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
215	Reinforced Concrete Abutment	LF	100	35	65	0	0
1080	Delamination/Spall/Patched Area	LF	2	0	2	0	0
1120	Efflorescence/Rust Staining	LF	13	0	13	0	0
1190	Abrasion/Wear (PSC/RC)	LF	50	0	50	0	0
(215) -Both abutments have light abrasion at the water elevation. -Abutment # 1 has a few vertical and diagonal cracks in the stem wall. -There is some staining under the bearing area of several girders. -Vertical and map cracking with efflorescence in the bearing area of girders # 3 and # 5 of both abutments. -Abutment # 2, right wing wall has a moderate width diagonal crack and map cracking with efflorescence at the abutment juncture. -Abutment # 2 stem wall has diagonal and mapcracking on the right side at the wing wall juncture. There is a delaminated area in the concrete placed on top of the abutment adjacent to girder # 7 on the exterior side.							
220	Reinforced Concrete Pile Cap/Footing	LF	100	44	56	0	0
1190	Abrasion/Wear (PSC/RC)	LF	56	0	56	0	0
(220) -Footings are exposed where substructure was widened at abutment # 2. -Footings appear to be cast on solid shale channel. -Abutment # 1 footings have cover during this inspection.							

60 - Substructure (6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.)

Comment: 05/06/2020 - JCJ & TJL - Type 2 Underwater Inspection conducted this date.

ArDOT Drawing # 981 & 982 indicate that the abutment footings are founded on shale. ArDOT Plan footing thickness is 1'-6".

Wading and probing during low and turbid water conditions indicate that the top of Bent # 2 footing is exposed in the widened portions of the structure.

The top of Bent # 2 footing is 1'-3" above the solid shale channel that is exposed in areas with no apparent scour problems during this inspection.

Bent # 1 footing has cover during this inspection.

Soundings were taken along both sides of the structure this date. See sounding documentation associated with this inspection for additional information.



Elevation North from right side



Inventory 1 looking East



Undersurface



Abutment 2-Light abrasion



Girder 3-Hairline vertical flexure cracks



Girder 3, left vertical face-Shallow spalls with exposed reinforcing steel



Undersurface



Deck undersurface, bay 5-Diagonal cracking with efflorescence



Abutment 1



Abutment 2 footing exposed



Abutment 2, right side-Cracking with efflorescence



Probing abutment 2



Abutment 2



Abutment 1, right side-Diagonal cracking



Vegetation and streambed material accumulation restricting channel



Driving surface-Mapcracking

Maintenance Needs

Date Reported: 06/29/2012

Priority: D- Routine

Type of Work: Repair (General)

Status: Monitor

Component: Element

Deficiency Description

Superstructure -

Girder # 3 has 4 small diameter shallow spalls with exposed reinforcing steel in the left vertical face of girder. Exposed reinforcing steel has no apparent noteworthy section loss during this inspection.

Remarks



Girder # 3 has 4 small diameter shallow spalls with exposed reinforcing steel in the left vertical face of girder. Exposed reinforcing steel has no apparent noteworthy section loss during this inspection.



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Girder # 3 has 4 small diameter shallow spalls with exposed reinforcing steel in the left vertical face of girder. Exposed reinforcing steel has no apparent noteworthy section loss during this inspection.

Maintenance Needs

Date Reported: 05/17/2016

Priority: D- Routine

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

Status: Monitor

Component: Channel

Deficiency Description

Channel -

Inlet end of the channel has silt and vegetation accumulation that is causing the channel to migrate to the East directing stream flow into the East abutment and causing erosion to the Southeast embankment.

Remarks



Inlet end of the channel has silt and vegetation accumulation that is causing the channel to migrate to the East directing stream flow into the East abutment and causing erosion to the Southeast embankment.



Inlet end of the channel has silt and vegetation accumulation that is causing the channel to migrate to the East.



Channel restricted.



Inlet end of structure.



Asset #00378(Routine)

State Highway 22 over Gack Creek-Logan Co.

Location: 6.64 MI E of Franklin Co.

Team Lead: Bob McEntyre, Inspection Date: 06/15/2022

Routine Maintenance

Check Box Maintenance Items

Type of Maintenance	Is recommended?
A-54 - Sealable Deck Cracks	
A-55 - Deck Washing Needed	
A-56 - Joint Cleaning/Flushing Needed	
A-57 - Beam End and Bearing Paint Needed	
A-58 - Cap Cleaning/Flushing Needed	
A-59 - Joint Repair Needed	
A-60 - Full Beam Painting Needed	
A-61 - Polymer Overlay Advised	
A-62 - Hydro and LMC Advised	
A-63 Missing/Incorrect Log Mile Signage	
A-64 - Vegetation Removal Requested	



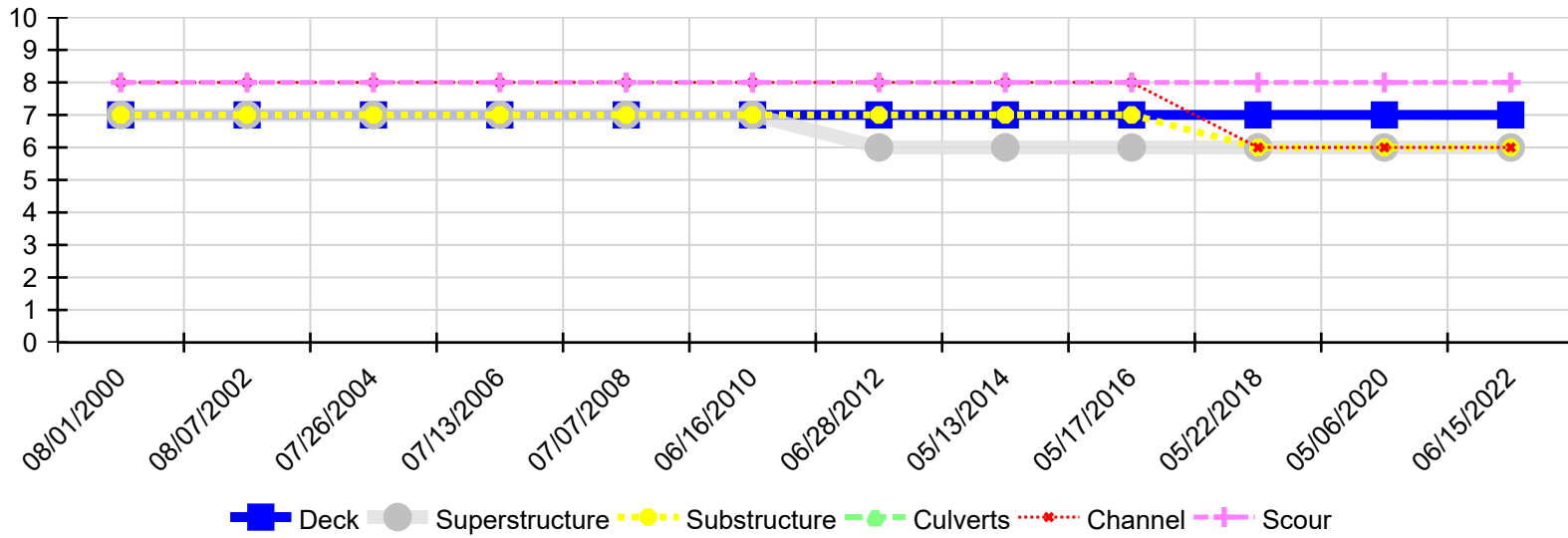
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State Highway 22 over Gack Creek-Logan Co.

Location: 6.64 MI E of Franklin Co.

Team Lead: Bob McEntyre, Inspection Date: 06/15/2022

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
06/15/2022	7	6	6	N	6	8
05/06/2020	7	6	6	N	6	8
05/22/2018	7	6	6	N	6	8
05/17/2016	7	6	7	N	8	8
05/13/2014	7	6	7	N	8	8
06/28/2012	7	6	7	N	8	8
06/16/2010	7	7	7	N	8	8
07/07/2008	7	7	7	N	8	8
07/13/2006	7	7	7	N	8	8
07/26/2004	7	7	7	N	8	8
08/07/2002	7	7	7	N	8	8
08/01/2000	7	7	7	N	8	8