



Latitude:36.07602, Longitude:-91.00232

Route:412 Section:06 Log:2.18

Arnold Road ID:38x412x6BxA, Arnold Log mile:2.193

District 10, 75 - Lawrence County

Owner: 1 - State Highway Agency

Inspection Direction: 4 - W to E

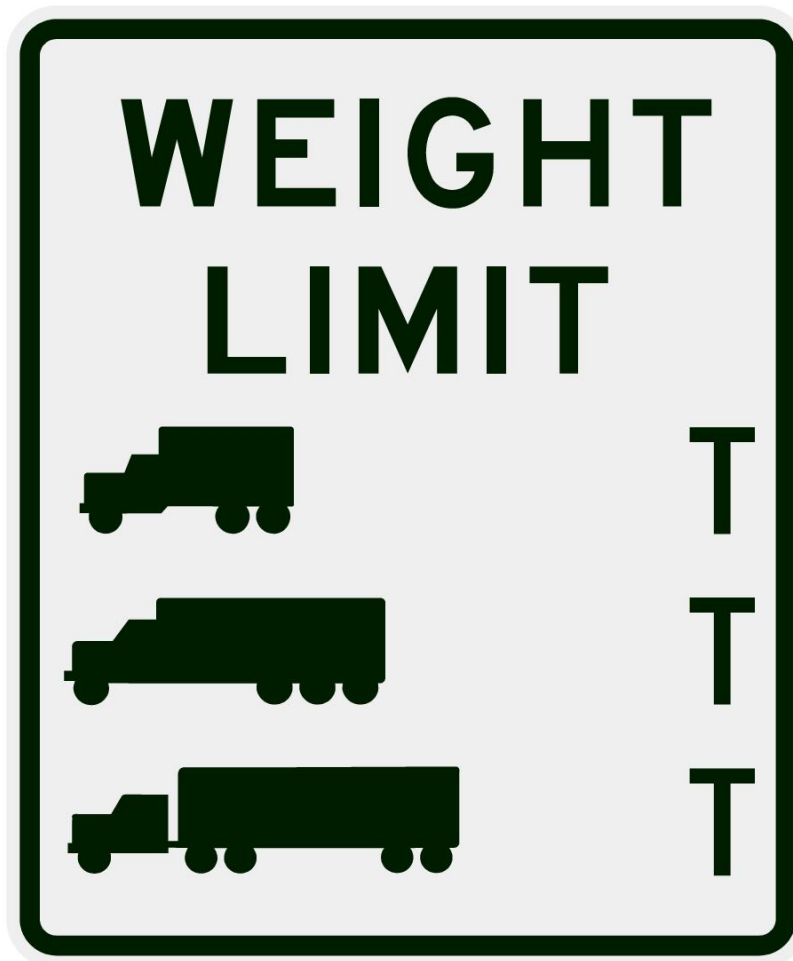
### Bridge Posting Information

41 - Structure Open/Posted/Closed: A - Open, no restriction

70 - Bridge Posting: 5 - Equal to or above legal loads

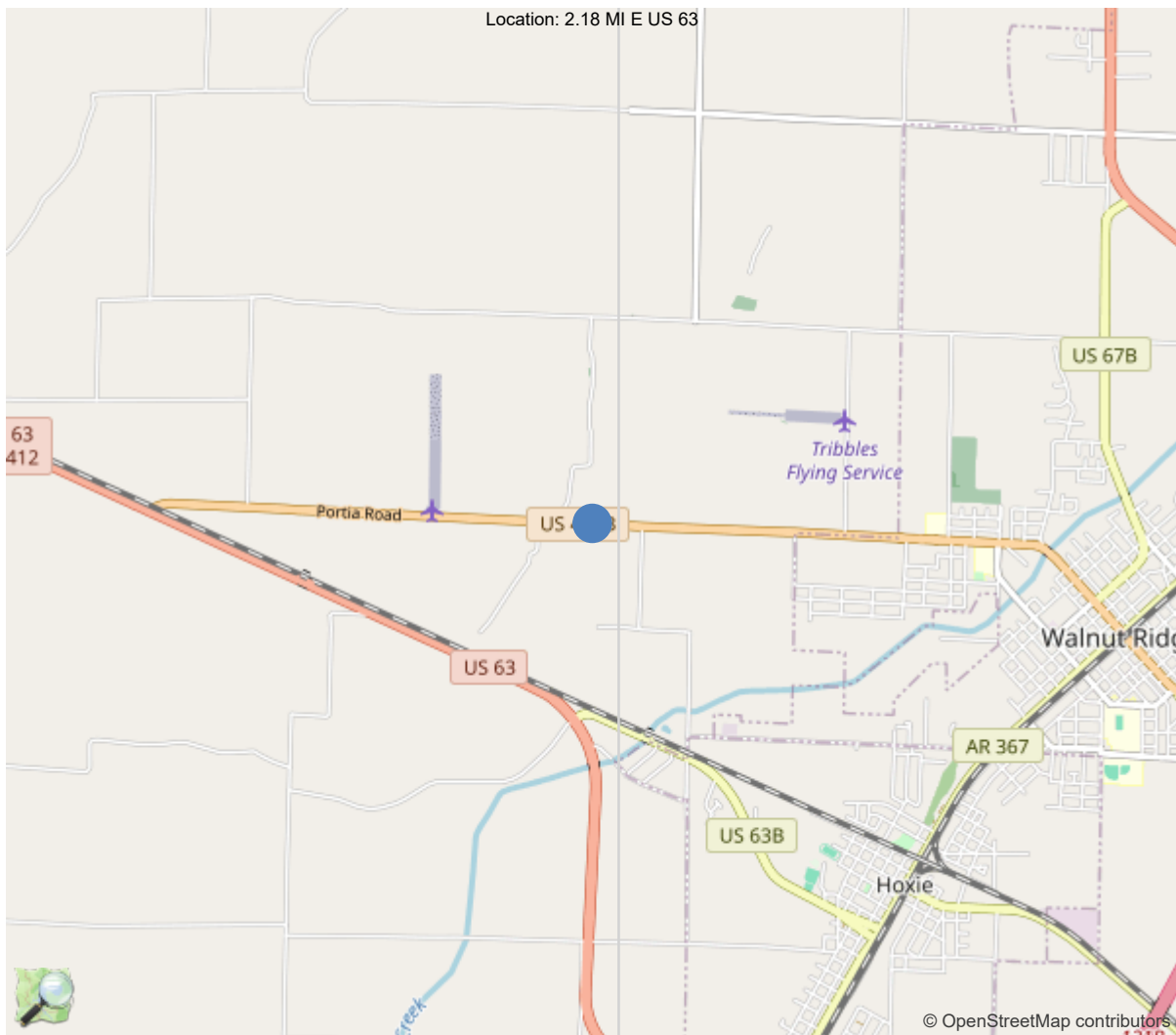
Legal Load	Calculated Capacity	Beginning of Bridge Sign Current Value	End of Bridge Sign Current Value
Code 4 (22 Tons)	38		
Code 9 (31 Tons)	45		
Code 5 (40 Tons)	59		

If calculated Capacity is less than the Legal Load Listed, the Bridge Legally Requires Posting Signs to be installed by the Bridge Owner



30"x36" AR





36.07602, -91.00232

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	05726
(5) Inventory Route	1
(2) Highway Agency District	10 - District 10
(3) County Code	75 - Lawrence County
(4) Place Code	0
(6) Features Intersected	SWAN POND DITCH
(7) Facility Carried	US 412-06B-LM 2.18
(9) Location	2.18 MI E US 63
(11) Mile Point	2.18 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000412060
(16) Latitude	36.0760163116304
(17) Longitude	-91.0023238078753
(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	0 - None (no additional concrete thickne
Type of Membrane	0 - None
Type of Deck Protection	0 - None
AGE AND SERVICE	
(27) Year Built	1978
(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	3900
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	3 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	25 ft
(49) Structure Length	75 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	42.7 ft
(32) Approach Roadway Width (W/Shoulders)	44 ft
(33) Bridge Median	0 - No median
(34) Skew	20 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	40 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	0 ft
Ref:	
(55) Min Lat Underclear RT	0 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 exis
(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	7
(60) Substructure	7
(61) Channel & Channel Protection	7
(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	
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	1 - Inspected feature meets current
(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	5 - 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	4373
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	07/05/2023		
(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>			





**Asset #05726**(Routine, Underwater type 2)

**US 412-06B-LM 2.18 over SWAN POND DITCH**

**Location: 2.18 MI E US 63**

**Team Lead: Richard Jones Inspection Date: 07/05/2023**

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**58 - Deck** (7 - GOOD CONDITION - some minor problems.)

Slabs have minor deterioration. See elements

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**59 - Superstructure** (7 - GOOD CONDITION - some minor problems.)

Slab soffit has minor deterioration. See elements

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**60 - Substructure** (7 - GOOD CONDITION - some minor problems.)

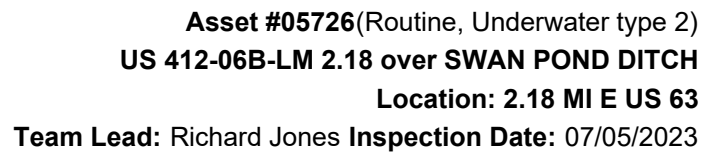
Few minor problems. See elements

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**61 - Channel/Channel Protection** (7 - Bank protection is in need of minor repairs. River control devices and embankment protection have a little minor damage. Banks and/or channel have minor amounts of drift.)

Dense vegetation growing in channel and along banks.

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ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
38	RC Slab	SF	3200	1437	1622	141	0
1080	Delamination/Spall/Patched Area	SF	25	0	24	1	0
1090	Exposed Rebar	SF	9	0	5	4	0
1120	Efflorescence/Rust Staining	SF	82	0	82	0	0
1130	Cracking (RC and Other)	SF	591	0	455	136	0
1190	Abrasion/Wear (PSC/RC)	SF	1056	0	1056	0	0
(38) Top of slabs have several unsealed longitudinal cracks. Slabs have widespread abrasion, especially in wheel paths.							
Soffit portion of slabs has several delaminated areas or spalls with rebar exposed along edges. Slabs have a few longitudinal cracks with efflorescence or rust stains.							
215	Reinforced Concrete Abutment	LF	104	11	0	93	0
6000	Scour	LF	93	0	0	93	0
(215) End bents have some minor undermining under bridge. Rip rap was placed near abutment ends sometime in the past.							
227	Reinforced Concrete Pile	EA	12	9	1	2	0
1080	Delamination/Spall/Patched Area	EA	3	0	1	2	0
(227) A few piles have chips/edge spalls.							
234	Reinforced Concrete Pier Cap	LF	93	83	4	6	0
1130	Cracking (RC and Other)	LF	10	0	4	6	0
(234) Caps have a few minor cracks.							
301	Pourable Joint Seal	LF	182	10	172	0	0
2320	Seal Adhesion	LF	172	0	172	0	0
(301) Poured joint material has loss of adhesion. Slabs have a few small spalled areas along joints.							
321	Reinforced Concrete Approach Slab	SF	1080	903	125	52	0
1080	Delamination/Spall/Patched Area	SF	1	0	0	1	0
1130	Cracking (RC and Other)	SF	111	0	60	51	0
1190	Abrasion/Wear (PSC/RC)	SF	65	0	65	0	0
(321) Approach slabs have few unsealed longitudinal cracks and areas of abrasion.							
331	Reinforced Concrete Bridge Railing	LF	150	150	0	0	0
(331) overall good condition							



Side



Roadway



Deck



Span 2





Span 1 Lt



Bent 1



Bent 2 piles 1 and 2



Bent 4



Span 1



Bent 3 joint



### Maintenance Needs

**Date Reported:** 07/08/2019

**Priority:** C - Important

**Type of Work:** Channel Work/Drift Removal

**Status:** Repair Documented

**Component:** Channel

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### Deficiency Description

Large drift upstream side backed up about 30' and beaver damn upstream of brush pile restricting flow. Brush and debris under Bridge Spans 1&2.

### Remarks

To Lawrence Co crew for removal this fall KAW 7/30/19

Drift and pipe have been removed. observed during routine inspection. RRJ

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Span 2 pipe LT SIDE



drift



drift



**Maintenance Needs**

**Date Reported:** 07/08/2019

**Priority:** D- Routine

**Type of Work:** Repair (General)

**Status:** Monitor

**Component:** Approach

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**Deficiency Description**

Approach slabs have few unsealed longitudinal cracks and areas of abrasion.

**Remarks**

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Bent 1 approach slab

## Routine Maintenance

### Check Box Maintenance Items

Type of Maintenance	Is recommended?
A-54 - Sealable Deck Cracks	Yes
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	Yes
A-60 - Full Beam Painting Needed	
A-61 - Polymer Overlay Advised	Yes
A-62 - Hydro and LMC Advised	
A-63 - Missing/Incorrect Log Mile Signage	
A-64 - Vegetation Removal Requested	

### A-54 - Sealable Deck Cracks (Yes)



Span 1

**A-55 - Deck Washing Needed**

**A-56 - Joint Cleaning/Flushing Needed**

**A-57 - Girder End and Bearing Painting Needed**

**A-58 - Cap Cleaning/Flushing Needed**

**A-59 - Joint Repair Needed (Yes)**



Bent 3 joint

**A-60 - Full Girder Painting Needed**

**A-61 - Polymer Overlay Advised (Yes)**





**Asset #05726**(Routine, Underwater type 2)  
**US 412-06B-LM 2.18 over SWAN POND DITCH**  
**Location: 2.18 MI E US 63**  
**Team Lead: Richard Jones Inspection Date: 07/05/2023**

**A-62 - Hydro and LMC Advised**

**A-63 - Missing/Incorrect Log Mile Signage**

**A-64 - Vegetation Removal Requested**

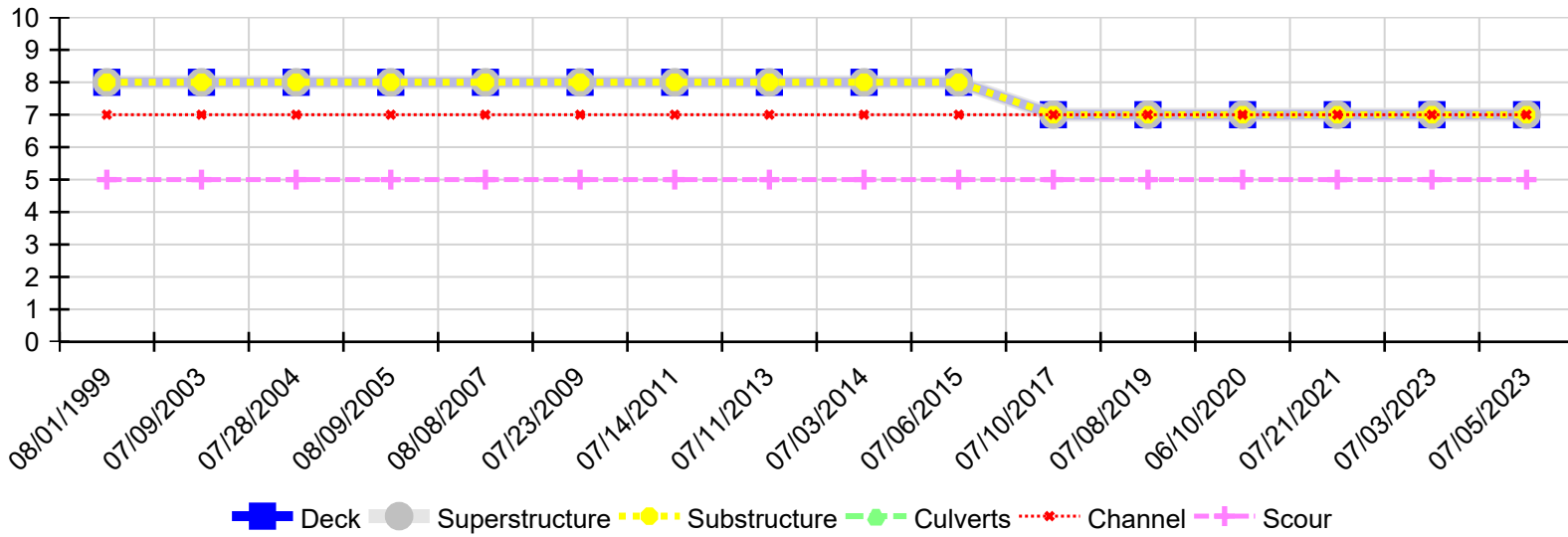


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**US 412-06B-LM 2.18 over SWAN POND DITCH**

**Location: 2.18 MI E US 63**

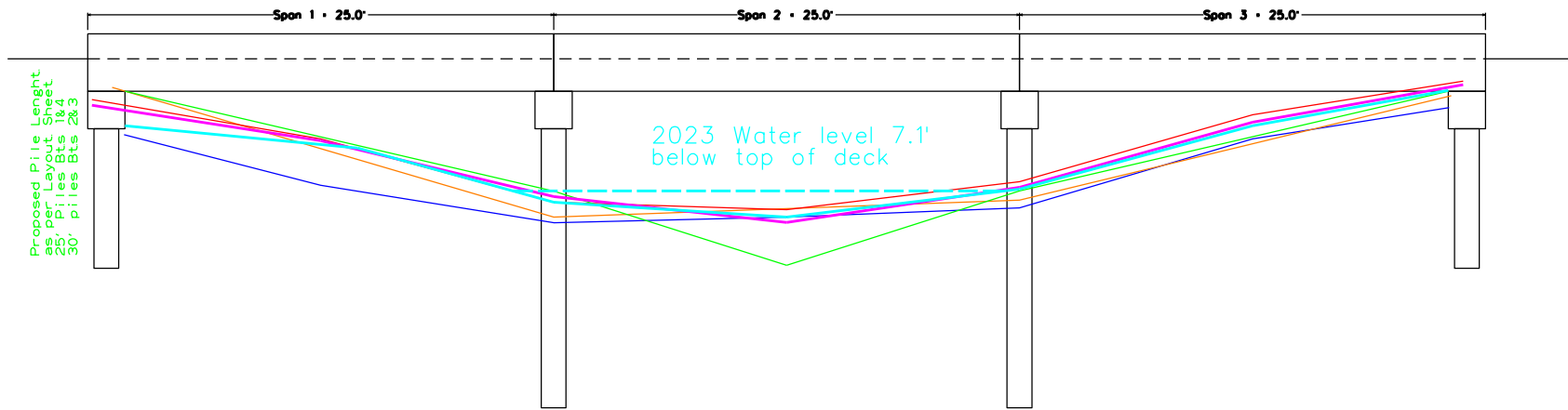
**Team Lead: Richard Jones Inspection Date: 07/05/2023**

Condition History



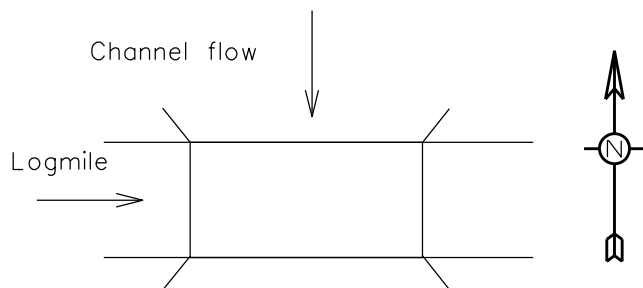
Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
07/05/2023	7	7	7	N	7	5
07/03/2023	7	7	7	N	7	5
07/21/2021	7	7	7	N	7	5
06/10/2020	7	7	7	N	7	5
07/08/2019	7	7	7	N	7	5
07/10/2017	7	7	7	N	7	5
07/06/2015	8	8	8	N	7	5
07/03/2014	8	8	8	N	7	5
07/11/2013	8	8	8	N	7	5
07/14/2011	8	8	8	N	7	5
07/23/2009	8	8	8	N	7	5
08/08/2007	8	8	8	N	7	5
08/09/2005	8	8	8	N	7	5
07/28/2004	8	8	8	N	7	5
07/09/2003	8	8	8	N	7	5
08/01/1999	8	8	8	N	7	5

05726 Overall Length=75.0'



Bent. 1	+12.5'	Bent. 2	+12.5'	Bent. 3	+12.5'	Bent. 4
1.7'		7.1'	11.1'	7.1'		1.7'
4.1'	6.8'	8.8'	8.5'	8.0'	4.3'	2.6'
1.5'		8.5'		7.6'		2.0'
2.2'	4.3'	7.7'	8.1'	6.6'	3.0'	1.2'
2.5'	4.4'	7.4'	8.8'	6.9'	3.4'	1.4'
3.5'	4.8'	7.7'	8.5'	7'	3.6'	1.7'

Channel Sounded From Top of Deck, UPSTREAM, LEFT SIDE  
 Green Sounding Readings are From Lay Out Sheet  
 Blue Sounding Readings are From 8-20-1990 (First Time)  
 Gold Sounding Readings are From 7-23-2009  
 Red Sounding Readings are From 7-03-2014  
 Purple Sounding Readings are From 7-8-2019  
 Light Blue Sounding taken 7-5-2023



\*Not to Scale

Bridge No. 05726	Dist. 10	Co. Lawrence - 38
Logmile 2.18	Rt. 00412	Sect/Zone - 06
Date Drawn 7/5/23	Insp. / Assist. RRJ / NSR	