



Latitude:34.94146, Longitude:-91.65520

Route:86 Section:00 Log:3.789

Arnold Road ID:59x86x0xA, Arnold Log mile:3.754

District 06, 117 - Prairie County

Owner: 1 - State Highway Agency

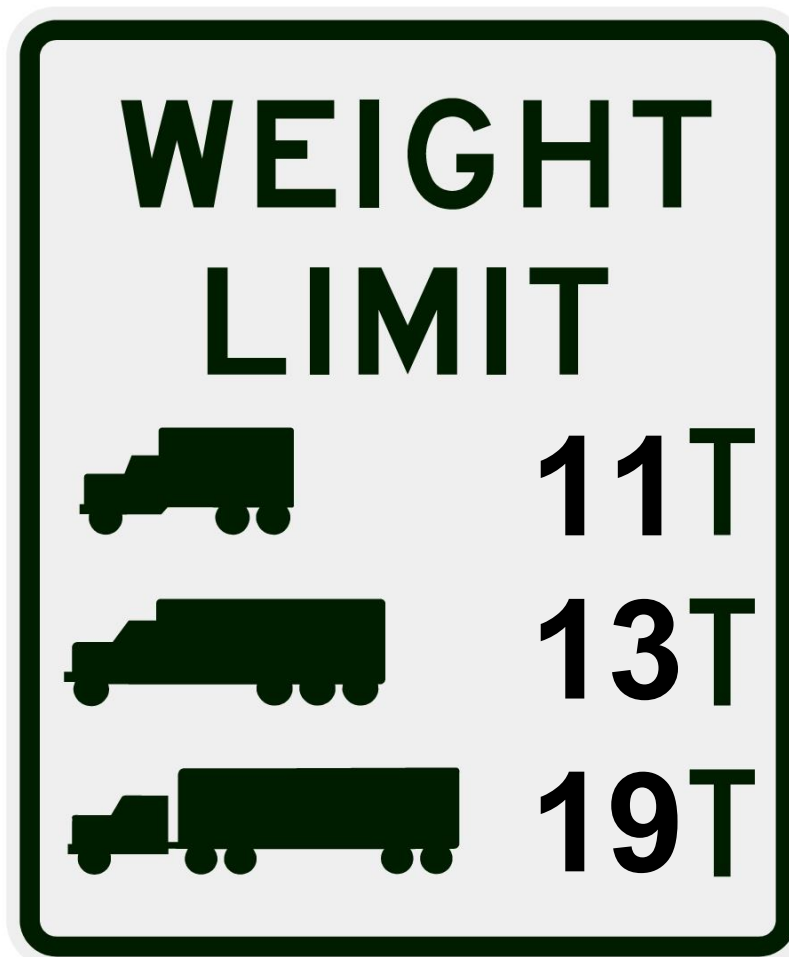
### Bridge Posting Information

41 - Structure Open/Posted/Closed: P - Posted for load (may include other restrictions such as temporary bridges which are load posted)

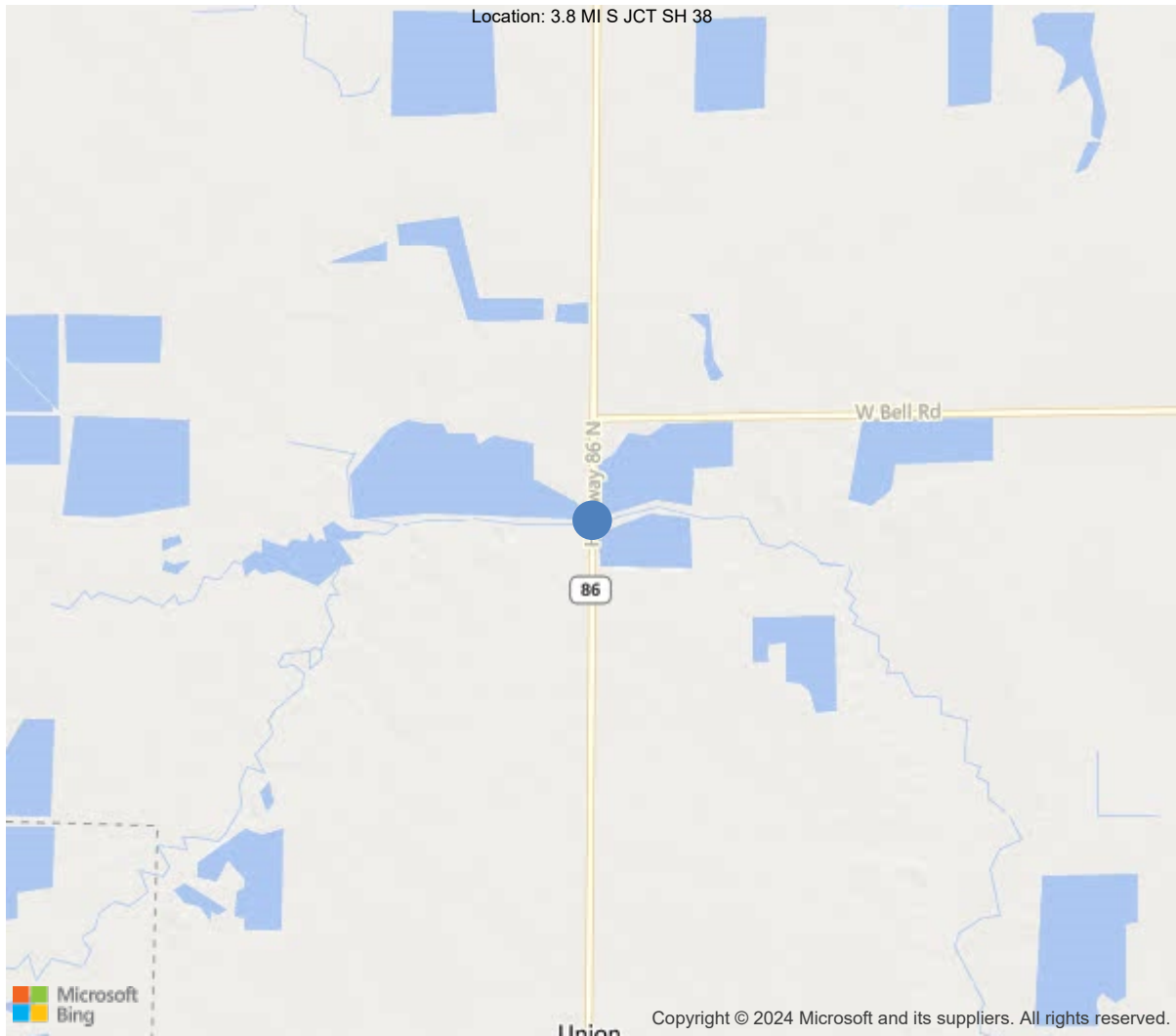
70 - Bridge Posting: 0 - > 39.9% below

Legal Load	Calculated Capacity	Beginning of Bridge Sign Current Value	End of Bridge Sign Current Value
Code 4 (22 Tons)	11	11	11
Code 9 (31 Tons)	13	13	13
Code 5 (40 Tons)	19	19	19

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



34.94146, -91.65520





Asset #M1581 (Routine)

SH 86 Log 3.79 over WATTENSAW BAYOU

Location: 3.8 MI S JCT SH 38

Team Lead: Bryan Saunders, Inspection Date: 07/31/2023

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	M1581
(5) Inventory Route	1
(2) Highway Agency District	06 - District 06
(3) County Code	117 - Prairie County
(4) Place Code	0
(6) Features Intersected	WATTENSAW BAYOU
(7) Facility Carried	SH 86 Log 3.79
(9) Location	3.8 MI S JCT SH 38
(11) Mile Point	3.789 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	34.94146
(17) Longitude	-91.655197
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	72
Material	7 - Wood or timber
Type	2 - Stringer/Multi-beam or girder
(44) Approach Structure Type	00
Material	0 - Other
Type	0 - Other
(45) No. of Spans in Main Unit	16
(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 pl
Type of Membrane	0 - None
Type of Deck Protection	0 - None
AGE AND SERVICE	
(27) Year Built	1945
(106) Year Reconstructed	1967
(42) Type of Service	15
On	1 - Highway
Under	5 - Waterway
(28) Lane	
On	2
Under	0
(29) Average Daily Traffic	190
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	9 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	15 ft
(49) Structure Length	237 ft
(50) Curb or Sidewalk Width	
Left	0.5 ft
Right	0.5 ft
(51) Bridge Roadway Width Curb to Curb	24.8 ft
(52) Deck Width Out to Out	25.1 ft
(32) Approach Roadway Width (W/Shoulders)	27.9 ft
(33) Bridge Median	0 - No median
(34) Skew	0 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	24.9 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	7 - Rural Major Collector
(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	0 - The inventory route is not
(20) Toll	3 - On free road. The structure
(21) Maintain	1 - State Highway Agency
(22) Owner	1 - State Highway Agency
(37) Historical Significance	2 - Bridge is eligible for the
CONDITION	
(58) Deck	5
(59) Superstructure	4
(60) Substructure	4
(61) Channel & Channel Protection	5
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	0 - Other or Unknown
(63) Operating Rating Method	2
(64) Operating Rating	
Type	2 - Allowable Stress(AS)
Rating	14
(65) Inventory Rating Method	2 - Allowable Stress(AS)
(66) Inventory Rating	
Type	
Rating	10
(70) Bridge Posting	0 - > 39.9% below
(41) Structure Open/Posted/Closed	P - Posted for load (may include
APPRAISAL	
(67) Structural Evaluation	
(68) Deck Geometry	5
(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	5 - Bridge foundations determined to
PROPOSED IMPROVEMENTS	
(75) Type of Work	35 - Bridge rehabilitation bec
(76) Length of Structure Improvement	237 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 0
(96) Total Project Cost	\$ 265
(97) Year of Improvement Cost Estimate	2003
(114) Future ADT	212
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	07/31/2023		
(91) Frequency	12		
(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.			





Asset **#M1581**(Routine)

**District:** 06, **County:** 117 - Prairie County

**Team Lead:** Bryan Saunders, **Inspection Date:** 07/31/2023

**General Observation**

Approach looking south

---



Asset #M1581 (Routine)

SH 86 Log 3.79 over WATTENSAW BAYOU

Location: 3.8 MI S JCT SH 38

Team Lead: Bryan Saunders, Inspection Date: 07/31/2023

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	6636	2	2496	4138	0
1080	Delamination/Spall/Patched Area	SF	1300	0	622	678	0
1190	Abrasion/Wear (PSC/RC)	SF	5334	0	1874	3460	0
(12) All of the deck surface has abrasion and pop outs with aggregate loss. State forces have patched spalled areas and sealed cracks. Some of the older patches have cracks that have been sealed by state forces. Span 16: Patched areas cracking and beginning to spall.							
111	Timber Open Girder/Beam	LF	4503	3690	300	498	15
1140	Decay/Section Loss	LF	476	0	0	461	15
1150	Check/Shake	LF	13	0	3	10	0
1160	Crack (Timber)	LF	167	0	152	15	0
1170	Split/Delamination (Timber)	LF	157	0	145	12	0
(111) Span 1 at bent 1, girders 5,6, 12,13 & 15. Are decayed over the cap. Girders 8, 12 are cracked, girder 13 has a shake at a knot. Girder 1,5,9 have splits. Span 2, girder 15 is cracked Span 4, girders 8 & 10 are cracked. Span 5, girders 7 & 8 are cracked. Span 6, girder 4 decayed at end of girder. Span 7, girder 1,5,9 with splits Span 8 girder 17 and 18 are hollow Span 9, girder 1 and 10 have splits Span 10, girder 18 is decayed and hollow Span 11, girder 1 with checking to the bottom Span 12, girder 19 has a split. Span 13, girder 9 is cracked 12 feet long. Span 15, girders 11, 12 are cracked. and 19 has a 4' split Span 16, girders 6, 7 and 17 are cracked. Girder 8 has a shake near mid spans. All of the two outside girders are decayed and girder 1, span 16 is hollow.							
216	Timber Abutment	LF	92	29	27	36	0
1140	Decay/Section Loss	LF	63	0	27	36	0
(216) Sections of the cribbing at bent 1 and 17 are decayed. Most planks have horizontal cracks.							
228	Timber Pile	EA	68	0	58	10	0
1140	Decay/Section Loss	EA	10	0	4	6	0
1160	Crack (Timber)	EA	58	0	54	4	0

**Team Lead:** Bryan Saunders, **Inspection Date:** 07/31/2023

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
(228) Four pile at bent 1 have been replaced with square timbers and they are cracked. Bent 2, pile 4 split. Bent 5, piles 1&4 are cracked. The X-braces at bents 5,6&7 are decayed at the pile. Bent6 pile 3 is hollow Bent 7, pile 1, large cracks. Bent 8 pile 2 is hollow Bent 9 pile 2 is hollow Bent 10, pile 4 is cracked. Bent 11, pile 4 is hollow. Bent 13, pile 1, hollow and cracked. Pile 2- bottom of pile beginning to decay Bent 14, pile 4, the bottom 2' is decayed. Bent 16, pile 1, the pile is hollow. Bent 17 pile 2 is cracked. Bent 17 pile 3 is hollow at top Bent 8 pile 1 and bent 17 pile 1 have been repaired by state forces.							
235	Timber Pier Cap	LF	435	305	29	85	16
1140	Decay/Section Loss	LF	101	0	0	85	16
1150	Check/Shake	LF	4	0	4	0	0
1160	Crack (Timber)	LF	25	0	25	0	0
(235) The left end of the cap of bent 1 is decayed and hollow. Added 7/2021-7 foot of the left end of bent 1 cap is split and hollow over 1. The left end of bent 2 is cracked. The ahead side has a shake at girders 5&6. Bent 3, left end is decayed and hollow past pile 1. Bents 4,5,6,7 & 8, both ends of the caps are decayed with vegetation growing in them. Added 2021- bent 8 right end of cap is decayed and hollow 42" over pile 4 Bent 15 over pile 4, approx. 6 feet are decayed. The ends of all of the caps are decayed and have vegetation (weeds and grass) growing in them.							
330	Metal Bridge Railing	LF	474	334	80	60	0
1020	Connection	LF	80	0	80	0	0
7000	Damage	LF	60	0	0	60	0
515	Steel Protective Coating	SF	948	0	323	625	0
3430	Oxide Film Degradation Color/Texture Adherence(Steel Protective Coatings)	LF	948	0	323	625	0
(330) All of the metal railing is rusty all of the wooden posts are decayed. 60' of right bridge rail is damaged from traffic impact on the west side							



**Asset #M1581(Routine)**

## Superstructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
111	Timber Open Girder/Beam	LF	4503	3690	300	498	15
1140	Decay/Section Loss	LF	476	0	0	461	15
1150	Check/Shake	LF	13	0	3	10	0
1160	Crack (Timber)	LF	167	0	152	15	0
1170	Split/Delamination (Timber)	LF	157	0	145	12	0
<p>(111) Span 1 at bent 1, girders 5,6, 12,13 &amp; 15. Are decayed over the cap. Girders 8, 12 are cracked, girder 13 has a shake at a knot.  Girder 1,5,9 have splits.  Span 2, girder 15 is cracked  Span 4, girders 8 &amp;10 are cracked.  Span 5, girders 7 &amp; 8 are cracked.  Span 6, girder 4 decayed at end of girder.  Span 7, girder 1,5,9 with splits  Span 8 girder 17 and 18 are hollow  Span 9, girder 1 and 10 have splits  Span 10, girder 18 is decayed and hollow  Span 11, girder 1 with checking to the bottom  Span 12, girder 19 has a split.  Span 13, girder 9 is cracked 12 feet long.  Span 15, girders 11, 12 are cracked. and 19 has a 4' split  Span 16, girders 6, 7 and 17 are cracked. Girder 8 has a shake near mid spans.  All of the two outside girders are decayed and girder 1, span 16 is hollow.</p>							

## Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
216	Timber Abutment	LF	92	29	27	36	0
1140	Decay/Section Loss	LF	63	0	27	36	0
(216) Sections of the cribbing at bent 1 and 17 are decayed. Most planks have horizontal cracks.							
228	Timber Pile	EA	68	0	58	10	0
1140	Decay/Section Loss	EA	10	0	4	6	0
1160	Crack (Timber)	EA	58	0	54	4	0
(228) Four pile at bent 1 have been replaced with square timbers and they are cracked. Bent 2, pile 4 split. Bent 5, piles 1&4 are cracked. The X-braces at bents 5,6&7 are decayed at the pile. Bent6 pile 3 is hollow Bent 7, pile 1, large cracks. Bent 8 pile 2 is hollow Bent 9 pile 2 is hollow Bent 10, pile 4 is cracked. Bent 11, pile 4 is hollow. Bent 13, pile 1, hollow and cracked. Pile 2- bottom of pile beginning to decay Bent 14, pile 4, the bottom 2' is decayed. Bent 16, pile 1, the pile is hollow. Bent 17 pile 2 is cracked. Bent 17 pile 3 is hollow at top Bent 8 pile 1 and bent 17 pile 1 have been repaired by state forces.							
235	Timber Pier Cap	LF	435	305	29	85	16
1140	Decay/Section Loss	LF	101	0	0	85	16
1150	Check/Shake	LF	4	0	4	0	0
1160	Crack (Timber)	LF	25	0	25	0	0
(235) The left end of the cap of bent 1 is decayed and hollow. Added 7/2021-7 foot of the left end of bent 1 cap is split and hollow over 1. The left end of bent 2 is cracked. The ahead side has a shake at girders 5&6. Bent 3, left end is decayed and hollow past pile 1. Bents 4,5,6,7 & 8, both ends of the caps are decayed with vegetation growing in them. Added 2021- bent 8 right end of cap is decayed and hollow 42" over pile 4 Bent 15 over pile 4, approx. 6 feet are decayed. The ends of all of the caps are decayed and have vegetation (weeds and grass) growing in them.							





Elevation



Approach looking south



Load posting looking north



Load posting looking south





Spalls and abrasion in the deck in multiple locations some cracks have been sealed



Deck view



Span 10 soffit



Concrete patches filled with asphalt





Span 15 girder 10 has split mid span



Upstream



Downstream



X brace at bent 5 has broken loose from pile 4 at bottom





Logs and drift bents 3,4,5



Soffit view



Bent 3 cap decayed and split at left end



Span 2 girder 15 split at bent 2





Bent 2 column 4 split



Bent 2 column 4 split



Bent 2 cap under girder 5 has a split where spike has been nailed



Bent 1 abutment



Bent 1 timber girders decayed at ends



## Maintenance Needs

**Date Reported:** 07/21/2015

**Priority:** A - Safety deficiency; requires prompt action

**Status:** Monitor

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

**Component:** Superstructure

## Deficiency Description

bent 17 the cap splice connection is decayed and crushing over pile 3  
The left end of the cap of bent 1 is decayed and hollow.  
-7 foot of the left end of bent 1 cap is split and hollow over 1.  
The left end of bent 2 is cracked. The ahead side has a shake at girders 5&6.  
Bent 3, left end is decayed and hollow past pile 1.  
Bents 4,5,6,7 & 8, both ends of the caps are decayed with vegetation growing in them.  
bent 8 right end of cap is decayed and hollow the 3 1/2' over pile 4  
Bent 15 over pile 4, approx. 6 feet are decayed.  
The ends of all of the caps are decayed and have vegetation (weeds and grass) growing in them.

## Remarks



Bent 8 above pile 4 the timber cap has decayed and is hollow 5' deep



Bent 17 the splice on the cap above pile 3 is crushing and hollow allowing the cap to sag 1 1/2"





Bent 17 abutment the timber cap has settled 1 1/2 due to decay at the cap splice over pile 3



Bent 3 cap decayed and split at left end



Bent 3, left end of the cap, decayed and hollow.



Bent 3: left end of cap hollow. It's hollow 3' from the end of the cap past pile 1.



Bent 1: left end of cap hollow up to 2'



Bent 1, left end of cap, decayed and hollow 1 1/2 feet.





Bent 7, pile 1, large cracks.



Bent 1: left end of cap hollow up to 2'-6"



Bent 3 left end of cap is hollow past pile 1.



7 foot of the left end of bent 1 cap is split and hollow over pile 1.



Bent 1 left end of cap is split and hollow over pile 1



Bent 3, left end is decayed and hollow past pile 1.





Vegetation growing out of caps



bent 8 right end of cap is decayed and hollow the 3 1/2' over pile 4



bent 17 the cap splice connection is decayed and crushing over pile 3

#### Maintenance Needs

**Date Reported:** 07/21/2015

**Priority:** B - Pressing

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

**Status:** Monitor

**Component:**

#### Deficiency Description

Span 1 at bent 1, girders 5,6, 12,13 & 15 are decayed over the cap. Girders 8 & 12 are cracked. Girder 13 has a shake at a knot.

Span 2, girder 15 is cracked

Added 7/2021 span 3 girder 1 is rotted the whole length

Span 4, girders 8&10 are cracked.

Span 5, girders 7& 8 are cracked.

Span 9, girder 10 is cracked.

Span 13, girder 8 is cracked 6 foot long, 9 is cracked 10 foot long.

Span 15, girders 11 & 12 are cracked.

Span 16, girders 6, 7 and 17 are cracked. Girder 8 has a shake near mid spans.  
All of the two outside girders are decayed.

Added 7/19/18

Span 7, girder 1,5,9 with splits  
Span 6, girder 4 is decayed and hollowed at its end  
Span 4, girder 8 with a split.  
Span 9, girder 1 is split  
Span 10, girder 18 decayed and hollow  
Span 11, girder 1 has checking to the bottom of the girder  
Span 12, girder 19 is split  
Span 15, girder 19 has a split.  
Span 16 girder 12 is rotten on the end. Girders 8,11&14 are cracked

### Remarks



Span 16 girder 1 hollow and crushing the entire length.



Spain 2, girder 15, cracked.





Span 13 girder 9 is cracked along 10' of bottom.



Span 2 girder 15



span 3 girder 1 is rotted the whole length



Span 4 girders 8&10 have splits and checks



**Maintenance Needs**

**Date Reported:** 07/09/2020

**Priority:** B - Pressing

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

**Status:** Assigned

**Component:** Element

**Deficiency Description**

60' of bridge rail is damaged from traffic impact on right side of bridge

**Remarks**

Assigned to Bridge Crew 7/17/2020



Guardrail damage on west side



Outside girders on west side are no longer supporting the guardrail post allowing free movement



Span 7 outside girder 18 is decayed and split



60' of bridge rail is damaged from traffic impact on right side of bridge





60' of bridge rail is damaged from traffic impact on right side of bridge



Right side bridge rail damage



Right bridge rail damage



**Maintenance Needs**

Date Reported: 07/13/2021

Priority: B - Pressing

Type of Work: Deck Repair

Status: Forward State

Component: Deck

---

**Deficiency Description**

Numerous spalls, spalls filled with asphalt and spalls with exposed rebar on deck.

**Remarks**

---



Span 16 spalls and spall filled with asphalt



Span 12 spall



Span 14 spalls with exposed rebar



**Maintenance Needs**

**Date Reported:** 07/21/2015

**Priority:** C - Important

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

**Status:** Monitor

**Component:**

---

**Deficiency Description**

Bent 11, pile 4 is hollow.  
Bent 15, pile 1, hollow at the top.

Added 2019:

Bent 14, pile 4, the bottom 2' is decayed.  
Bent 16, pile 1, the pile is hollow.

Added 2020

Bent 17 pile 3 is hollow at top

Added 7/2021

Bent 10 pile 1 is hollow at the top

**Remarks**

---



Bent 16, pile 3 with a large shake



Bent 14 pile 4 is decayed on bottom 2'



Bent 17 pile 3 is hollow at the top



## Routine Maintenance

### Check Box Maintenance Items

Type of Maintenance	Is recommended?
A-54 - Sealable Deck Cracks	Yes
A-55 - Deck Washing Needed	Yes
A-56 - Joint Cleaning/Flushing Needed	No
A-57 - Beam End and Bearing Paint Needed	No
A-58 - Cap Cleaning/Flushing Needed	No
A-59 - Joint Repair Needed	No
A-60 - Full Beam Painting Needed	No
A-61 - Polymer Overlay Advised	No
A-62 - Hydro and LMC Advised	No
A-63 Missing/Incorrect Log Mile Signage	No
A-64 - Vegetation Removal Requested	Yes

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

**A-55 - Deck Washing Needed (Yes)**

**A-56 - Joint Cleaning/Flushing Needed (No)**





**Asset #M1581(Routine)**

**SH 86 Log 3.79 over WATTENSAW BAYOU**

**Location: 3.8 MI S JCT SH 38**

**Team Lead: Bryan Saunders, Inspection Date: 07/31/2023**

**A-57 - Beam End and Bearing Painting Needed (No)**

**A-58 - Cap Cleaning/Flushing Needed (No)**

**A-59 - Joint Repair Needed (No)**

**A-60 - Full Beam Painting Needed (No)**

**A-61 - Polymer Overlay Advised (No)**

**A-62 - Hydro and LMC Advised (No)**

**A-63 - Missing/Incorrect Log Mile Signage (No)**

**A-64 - Vegetation Removal Requested (Yes)**



Logs and drift bents 3,4,5



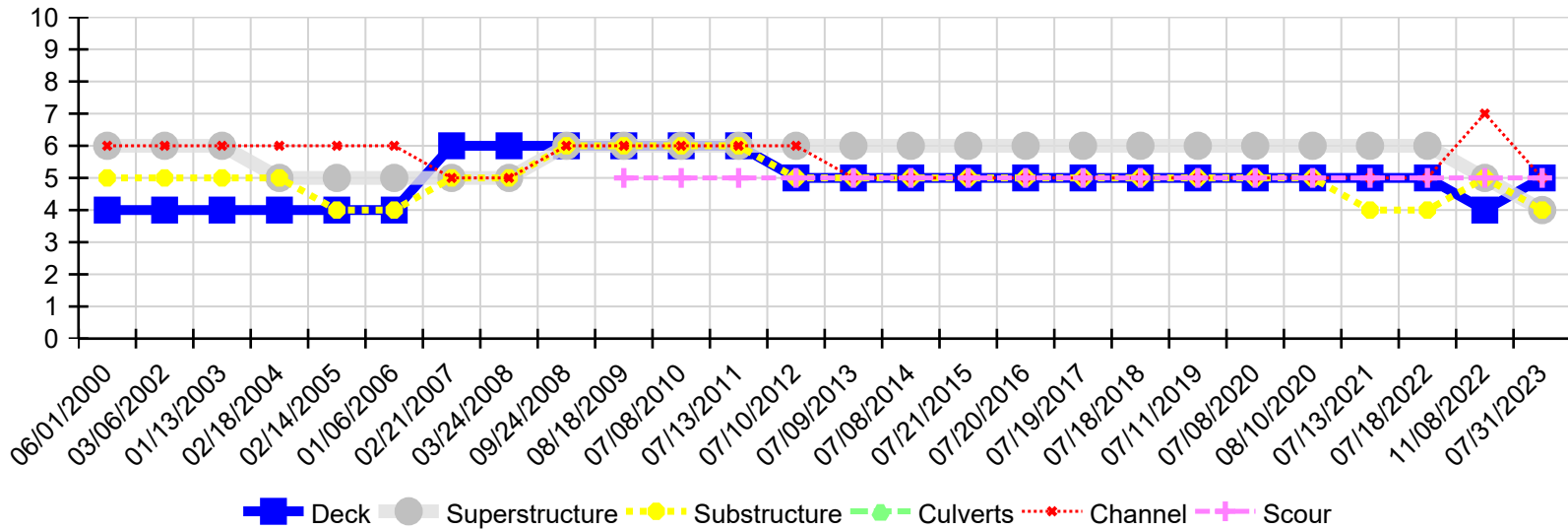
Asset #M1581 (Routine)

SH 86 Log 3.79 over WATTENSAW BAYOU

Location: 3.8 MI S JCT SH 38

Team Lead: Bryan Saunders, Inspection Date: 07/31/2023

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
07/31/2023	5	4	4	N	5	5
11/08/2022	4	5	5	N	7	5
07/18/2022	5	6	4	N	5	5
07/13/2021	5	6	4	N	5	5
08/10/2020	5	6	5	N	5	5
07/08/2020	5	6	5	N	5	5
07/11/2019	5	6	5	N	5	5
07/18/2018	5	6	5	N	5	5
07/19/2017	5	6	5	N	5	5
07/20/2016	5	6	5	N	5	5
07/21/2015	5	6	5	N	5	5
07/08/2014	5	6	5	N	5	5
07/09/2013	5	6	5	N	5	5
07/10/2012	5	6	5	N	6	5
07/13/2011	6	6	6	N	6	5
07/08/2010	6	6	6	N	6	5
08/18/2009	6	6	6	N	6	5
09/24/2008	6	6	6	N	6	N
03/24/2008	6	5	5	N	5	N
02/21/2007	6	5	5	N	5	N
01/06/2006	4	5	4	N	6	N
02/14/2005	4	5	4	N	6	N
02/18/2004	4	5	5	N	6	N
01/13/2003	4	6	5	N	6	N
03/06/2002	4	6	5	N	6	N
06/01/2000	4	6	5	N	6	N