



Latitude:34.93931, Longitude:-91.65518

Route:86 Section:00 Log:3.919

Arnold Road ID:59x86x0xA, Arnold Log mile:3.902

District 06, 117 - Prairie County

Owner: 1 - State Highway Agency

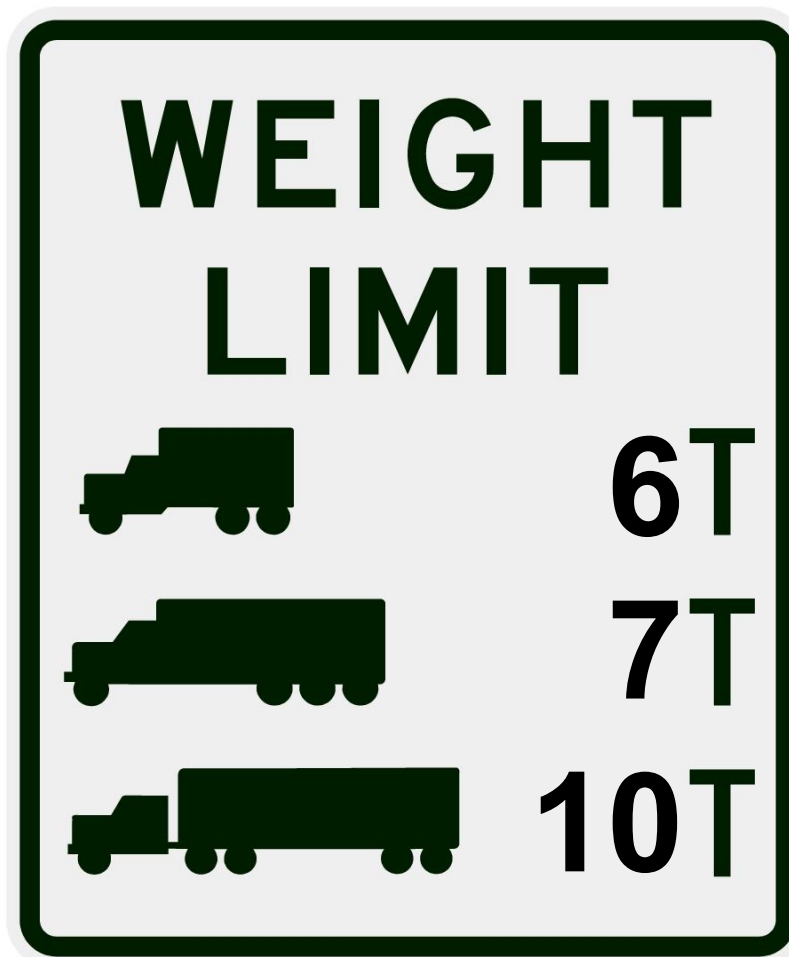
### Bridge Posting Information

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

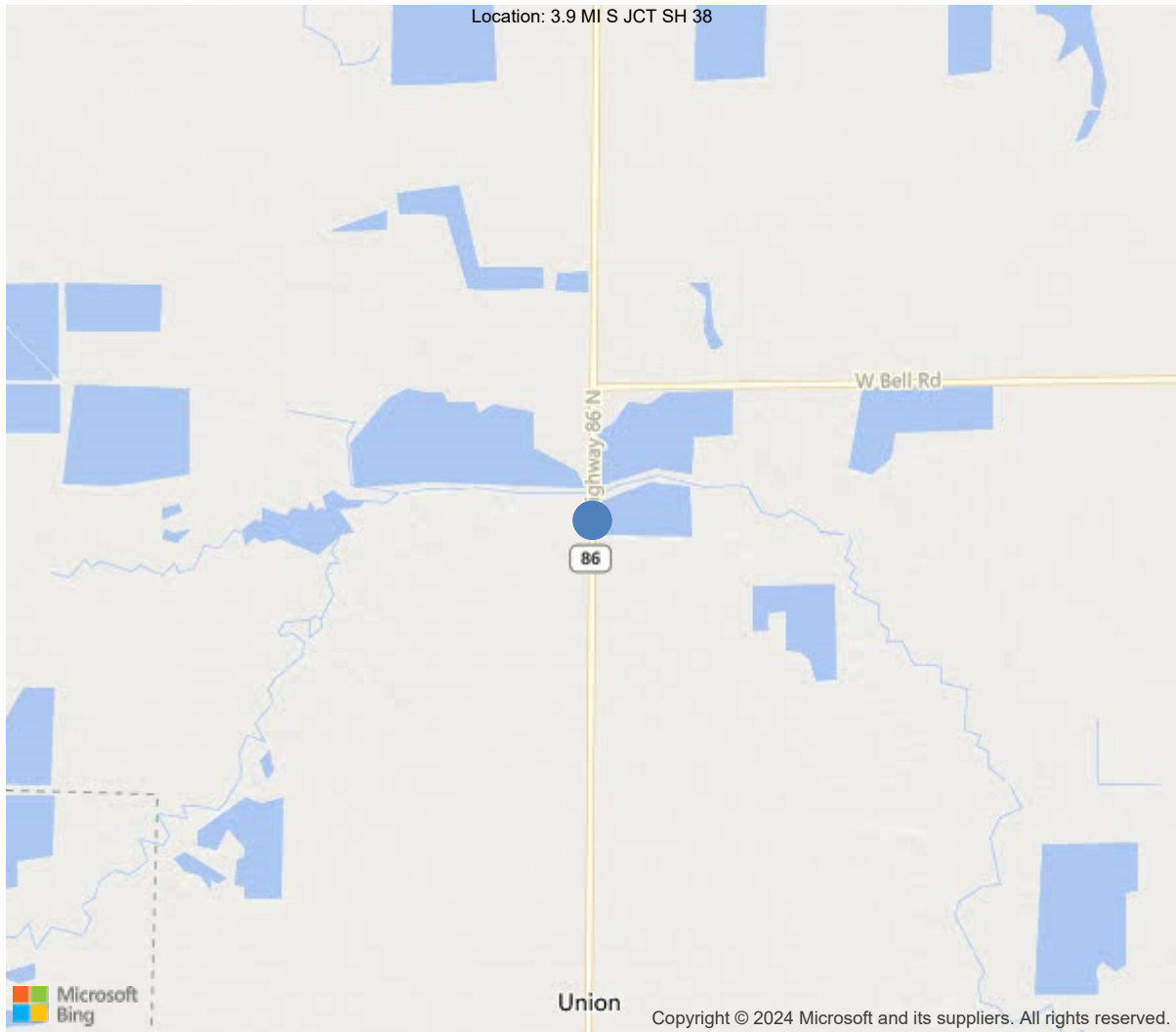
70 - Bridge Posting: 0 - > 39.9% below

Legal Load	Calculated Capacity	Beginning of Bridge Sign Current Value	End of Bridge Sign Current Value
Code 4 (22 Tons)	6	6	6
Code 9 (31 Tons)	7	7	7
Code 5 (40 Tons)	10	10	10

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



34.93931, -91.65518





**Asset #M1582(Routine)**  
**SH 86 Log 3.92 over WATTENSAW BAYOU REL**

**Location: 3.9 MI S JCT SH 38**

**Team Lead: Bryan Saunders, Inspection Date: 10/23/2023**

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	M1582
(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 REL
(7) Facility Carried	SH 86 Log 3.92
(9) Location	3.9 MI S JCT SH 38
(11) Mile Point	3.919 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	34.93931
(17) Longitude	-91.65518
(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	7
(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	1931
(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	105 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	23 ft
(52) Deck Width Out to Out	24 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	23.6 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	5 - Bridge is not eligible for
CONDITION	
(58) Deck	4
(59) Superstructure	5
(60) Substructure	4
(61) Channel & Channel Protection	8
(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	8
(65) Inventory Rating Method	2 - Allowable Stress(AS)
(66) Inventory Rating	
Type	
Rating	5
(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	4
(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	31 - Replacement of bridge or
(76) Length of Structure Improvement	131 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 109
(96) Total Project Cost	\$ 322
(97) Year of Improvement Cost Estimate	2003
(114) Future ADT	260
(115) Year of Future ADT	2034

INSPECTIONS *			
(90) Inspection Date	10/23/2023		
(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.			





### General Observation

Logged southbound

Channel profile added 10/2021

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#### 58 - Deck (4 - POOR CONDITION - advanced section loss, deterioration, spalling or scour)

concrete deck has large cracks, large spalls and heavy scaling

concrete patches have failed.

failed concrete patches have been repaired with asphalt

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#### 59 - Superstructure (5 - FAIR CONDITION - all primary structural elements are sound but may have minor section loss, cracking, spalling or scour.)

timber girders in span 7 at bent 7 and 8 are crushing

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#### 60 - Substructure (4 - POOR CONDITION - advanced section loss, deterioration, spalling or scour.)

Bent 8 pile 2 has crushed and is no longer supporting the timber cap

several pile are hollow and timber cribbing has decayed at bent 1 between pile 2 and 3

no water at 2022 inspection, no scour observed

pile where probed with range pole

---

#### 61 - Channel/Channel Protection (8 - Banks are protected or well vegetated. River control devices such as spur dikes and embankment protection are not required or are in a stable condition.)

no water at 2022 inspection, no scour observed

pile where probed with range pole

---



Asset #M1582(Routine)

SH 86 Log 3.92 over WATTENSAW BAYOU REL

Location: 3.9 MI S JCT SH 38

Team Lead: Bryan Saunders, Inspection Date: 10/23/2023

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	2704	0	285	2419	0
1080	Delamination/Spall/Patched Area	SF	434	0	279	155	0
1090	Exposed Rebar	SF	6	0	6	0	0
1190	Abrasion/Wear (PSC/RC)	SF	2264	0	0	2264	0
(12) All of the deck has moderate to heavy scaling. The cracks have been sealed in the past Spans 1,2,3 have concrete patches and all have spans a mixture of epoxy and coarse sand that has worn off and failed Spans 1,2,5,6 and 7 have spalls and spalls filled with asphalt and heavy scaling							
111	Timber Open Girder/Beam	LF	1560	1024	198	327	11
1140	Decay/Section Loss	LF	273	0	0	262	11
1160	Crack (Timber)	LF	263	0	198	65	0
(111) Span 1 girder 15 has been replaced by state forces. Span 1 girders 8,12,13 at bent 1 are hollow on the end at bent 1. Span 2 girder 7 is split girder 15 checked and decayed. Span 3 girder 2,4,7&14 have checks girder 8 has a split Span 6 girder 7 has a check full length on the right side. Span 7 girders 2,3,4,5,6,7,8 are decayed and crushing at bent 8. Girders 9 thru 14 are beginning to decay and have fungi on the sides. All of the exterior girders in all spans are weathered and have large checks							
216	Timber Abutment	LF	92	27	22	43	0
1140	Decay/Section Loss	LF	65	0	22	43	0
(216) The cribbing at bent 1 and 8 has areas of decay. bent 1 between pile 1 and 2 and 2 and 3 being worst case.							
228	Timber Pile	EA	32	0	24	7	1
1140	Decay/Section Loss	EA	14	0	8	5	1
1160	Crack (Timber)	EA	18	0	16	2	0
(228) Bent 1 all pile have small cracks. Pile 1 is hollow at top. And pile 4 is split whole length Bent 2 all pile have small to medium cracks. All piles have minor decay at ground line. Pile 2 is hollow at top.pile 4 is hollow in lower 3' Bent 3 all piles have cracks. Piles 2,3,& 4 have minor decay at ground line. Bent 4 pile 1 has small splits and is hollow at ground line and pile 2,3 & 4 have been replaced by state forces. See photos and update plain sketch for repairs. Update 2019: the newly placed pile 4 has a large split adjacent to the cap. Bent 5 piles 1 and 3 have been replaced by state forces pile 2 has cracks, pile 4 has cracks and decayed at ground line. Bent 6 piles 1,2,3,&4 have been replaced by state forces. The concrete collars around pile have large cracks in them. Bent 7 pile 1 is hollow,pile 2&3 are cracked, state forces have poured concrete collar around the base of pile 4. Bent 8 pile 1 has decay to outer shell at ground line, pile 2 is decayed and hollow and starting to crush pile 3&4 have small cracks.							
235	Timber Pier Cap	LF	156	0	134	22	0
1140	Decay/Section Loss	LF	22	0	0	22	0
1160	Crack (Timber)	LF	134	0	134	0	0





**Deck**

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	2704	0	285	2419	0
1080	Delamination/Spall/Patched Area	SF	434	0	279	155	0
1090	Exposed Rebar	SF	6	0	6	0	0
1190	Abrasion/Wear (PSC/RC)	SF	2264	0	0	2264	0
(12) All of the deck has moderate to heavy scaling. The cracks have been sealed in the past Spans 1,2,3 have concrete patches and all have spans a mixture of epoxy and coarse sand that has worn off and failed Spans 1,2,5,6 and 7 have spalls and spalls filled with asphalt and heavy scaling							

**58 - Deck (4 - POOR CONDITION - advanced section loss, deterioration, spalling or scour)**

Comment: concrete deck has large cracks, large spalls and heavy scaling

concrete patches have failed.

failed concrete patches have been repaired with asphalt

**Superstructure**

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
111	Timber Open Girder/Beam	LF	1560	1024	198	327	11
1140	Decay/Section Loss	LF	273	0	0	262	11
1160	Crack (Timber)	LF	263	0	198	65	0
(111) Span 1 girder 15 has been replaced by state forces. Span 1 girders 8,12,13 at bent 1 are hollow on the end at bent 1. Span 2 girder 7 is split girder 15 checked and decayed. Span 3 girder 2,4,7&14 have checks girder 8 has a split Span 6 girder 7 has a check full length on the right side. Span 7 girders 2,3,4,5,6,7,8 are decayed and crushing at bent 8. Girders 9 thru 14 are beginning to decay and have fungi on the sides. All of the exterior girders in all spans are weathered and have large checks							

**59 - Superstructure** (5 - FAIR CONDITION - all primary structural elements are sound but may have minor section loss, cracking, spalling or scour.)

Comment: timber girders in span 7 at bent 7 and 8 are crushing



## Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
216	Timber Abutment	LF	92	27	22	43	0
1140	Decay/Section Loss	LF	65	0	22	43	0
(216) The cribbing at bent 1 and 8 has areas of decay. bent 1 between pile 1 and 2 and 2 and 3 being worst case.							
228	Timber Pile	EA	32	0	24	7	1
1140	Decay/Section Loss	EA	14	0	8	5	1
1160	Crack (Timber)	EA	18	0	16	2	0
(228) Bent 1 all pile have small cracks. Pile 1 is hollow at top. And pile 4 is split whole length Bent 2 all pile have small to medium cracks. All piles have minor decay at ground line. Pile 2 is hollow at top.pile 4 is hollow in lower 3' Bent 3 all piles have cracks. Piles 2,3,& 4 have minor decay at ground line. Bent 4 pile 1 has small splits and is hollow at ground line and pile 2,3 & 4 have been replaced by state forces. See photos and update plain sketch for repairs. Update 2019: the newly placed pile 4 has a large split adjacent to the cap. Bent 5 piles 1 and 3 have been replaced by state forces pile 2 has cracks, pile 4 has cracks and decayed at ground line. Bent 6 piles 1,2,3,&4 have been replaced by state forces. The concrete collars around pile have large cracks in them. Bent 7 pile 1 is hollow,pile 2&3 are cracked, state forces have poured concrete collar around the base of pile 4. Bent 8 pile 1 has decay to outer shell at ground line, pile 2 is decayed and hollow and starting to crush pile 3&4 have small cracks.							
235	Timber Pier Cap	LF	156	0	134	22	0
1140	Decay/Section Loss	LF	22	0	0	22	0
1160	Crack (Timber)	LF	134	0	134	0	0
(235) The right end of the cap of bent 4 has been repaired by state forces. . See photo and update plan sketch for repairs. The right end of the cap of bent 5 is decayed. Common at bent 6. All of the caps have checks and cracks..							

### 60 - Substructure (4 - POOR CONDITION - advanced section loss, deterioration, spalling or scour.)

Comment: Bent 8 pile 2 has crushed and is no longer supporting the timber cap  
several pile are hollow and timber cribbing has decayed at bent 1 between pile 2 and 3

no water at 2022 inspection, no scour observed  
pile where probed with range pole

### 61 - Channel/Channel Protection (8 - Banks are protected or well vegetated. River control devices such as spur dikes and embankment protection are not required or are in a stable condition.)

Comment: no water at 2022 inspection, no scour observed  
pile where probed with range pole





Elevation



Bent 4 pile 1 is hollow at ground level



Span 2 girder 7



Bent 1 girder 13





Bent 1 pile 4 split whole length



Approach looking south



Patch in north bound lane has failed



Heavy scaling in north bound lanes





Large cracks and patch areas



Deck view



Large spall in the concrete at north end of the bridge



Load posting looking south





Load posting looking north



Span 2 girder 15 is hollow



Bent 8 pile 2 is hollow and split 2022 picture



Bent 8 pile 2 is hollow and split 2022 picture





Bent 8 pile 2 is hollow and split 2022 picture



Bent 8 girder ends 2,3,4,5,6,7 and 8 are decayed



Bent 5 pile 2 backside is hollow around bolts



Bent 8 g7. bent 8 girders are decayed on the end





Bent 4 pile 4



Bent 8 abutment pile 2 is split at the top and hollow



Span 6 girder 7



Concrete collars around the bottom of the pile at bent 6 have cracked and split



**Maintenance Needs**

**Date Reported:** 10/23/2023

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

**Status:** Open

**Type of Work:** Piling Repair/Replace

**Component:** Substructure

**Deficiency Description**

Bent 8 abutment timber pile 2 has crushed and failed and no longer supports the timber cap above the pile this is an interior pile in a 4 pile system

**Remarks**



Bent 8 pile 2 has failed and is crushed



Bent 8 pile 2 has failed and is crushed



Bent 8 pile 2 has failed and is crushed



Bent 8 pile 2 is hollow and split 2022 picture





Bent 8 pile 2 is hollow and split 2022 picture

#### Maintenance Needs

**Date Reported:** 10/01/2015

**Priority:** B - Pressing

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

**Status:** Monitor

**Component:** Superstructure

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#### Deficiency Description

Span 7, girders 2,3,4,5,6,7 and 8 are decayed at the ends and beginning to crush.

#### Remarks

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Girders at bent 8



Span 7 girder 4, crushing at bent 8





Span 7 girder 5 at bent 8, crushing.



Span 7, girder 7 at bent 8, crushing.



Span 7, girder 8 at bent 8, crushing.



Girder 7 is decayed and crushing



Girder 8 is decayed and crushing



Span 7 girder 8 at bent 8, decayed and crushing



**Maintenance Needs**

**Date Reported:** 10/15/2020

**Priority:** B - Pressing

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

**Status:** Monitor

**Component:**

---

**Deficiency Description**

Bent 1 pile 1 is hollow at top.

Bent 2 pile 4 is hollow at top.

Bent 4 pile 1 is hollow

Bent 7 pile 1 is hollow

Bent 8 pile 1 is hollow, pile 2 is hollow and decayed (worst case this bridge)

**Remarks**

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Bent 8 pile 2 hollow and decayed. Worst case this bridge.



Bent 8 pile pile 2 is hollow and decayed (worst case this bridge)





Asset #M1582(Routine)

SH 86 Log 3.92 over WATTENSAW BAYOU REL

Location: 3.9 MI S JCT SH 38

Team Lead: Bryan Saunders, Inspection Date: 10/23/2023

#### Maintenance Needs

Date Reported: 10/20/2022

Priority: B - Pressing

Type of Work: Repair (General)

Status: Forward State

Component: Deck

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#### Deficiency Description

Large spalls with rebar exposed in span 1

#### Remarks

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Large spalls with rebar exposed in span 1

**Maintenance Needs**

**Date Reported:** 10/06/2016

**Priority:** C - Important

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

**Status:** Monitor

**Component:** Superstructure

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**Deficiency Description**

Span 1 girder 1, span 2,3,4,5,6 & 7 girders 1 and 15 are split and decayed.

**Remarks**

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Span 2 girder 15 decayed and split.



Span 5 girder 1, Typical outside girder condition



### Maintenance Needs

Date Reported: 10/06/2016

Priority: C - Important

Type of Work: (Inactive) (Inactive) 9 - None

Status: Monitor

Component:

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### Deficiency Description

Bent 2 all piles have minor decay at ground line

Bent 3 all piles have minor decay at ground line

Bent 5 pile 2 is decayed and split

Bent 5 pile 4 is decayed at ground line and split.

### Remarks

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Bent 2 pile 4 minor decay at ground line.



Bent 2 pile 2 has minor decay at ground line



**Maintenance Needs**

**Date Reported:** 10/06/2016

**Priority:** C - Important

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

**Status:** Monitor

**Component:** Substructure

**Deficiency Description**

The end of caps at bents 1,2,3,4,5,6,7 & 8 are decay on the ends up to one foot.

**Remarks**



Bent 5 right end of cap decayed and hollow up to one foot.



Bent 5: right end of cap is hollow



Bent 3 left side of cap is decayed.



Bent 5 right end of cap is decayed and hollow up to 20"





Bent 6 left end of cap is decayed 1'



Bent 5 right end of cap is decayed up to 20"



### Maintenance Needs

Date Reported: 10/30/2019

Priority: D- Routine

Type of Work: Repair (General)

Status: Monitor

Component: Substructure

### Deficiency Description

Bent 4, pile 4: this is a newly placed wooden spliced pile that has a large split adjacent to the cap

### Remarks



Bent 4, pile 4: this is a newly placed wooden spliced pile that has a large split adjacent to the cap



Bent 4, pile 4: this is a newly placed wooden spliced pile that has a large split adjacent to the cap



Bent 4, pile 4: wooden spliced pile that has a large split adjacent to the cap



**Maintenance Needs**

**Date Reported:** 10/30/2019

**Priority:** D- Routine

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

**Status:** Monitor

**Component:** Substructure

---

**Deficiency Description**

Bent 6, all concrete collars have large cracks.

**Remarks**

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Bent 6, pile 2: concrete collar with large crack. Similar condition at pile 1 at this bent



Bent 6, all concrete collars have large cracks.



Bent 6, all concrete collars have large cracks.

**Maintenance Needs**

**Date Reported:** 10/15/2020

**Priority:** D- Routine

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

**Status:** Monitor

**Component:** Substructure

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**Deficiency Description**

Timber cribbing at bents 1 & 8 have scattered areas of decay.

**Remarks**

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Timber cribbing at bent 1 is decayed.



Timber cribbing at bent 1 is decayed.





## 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	No

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

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

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



**Asset #M1582(Routine)**

**SH 86 Log 3.92 over WATTENSAW BAYOU REL**

**Location: 3.9 MI S JCT SH 38**

**Team Lead: Bryan Saunders, Inspection Date: 10/23/2023**

**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 (No)**





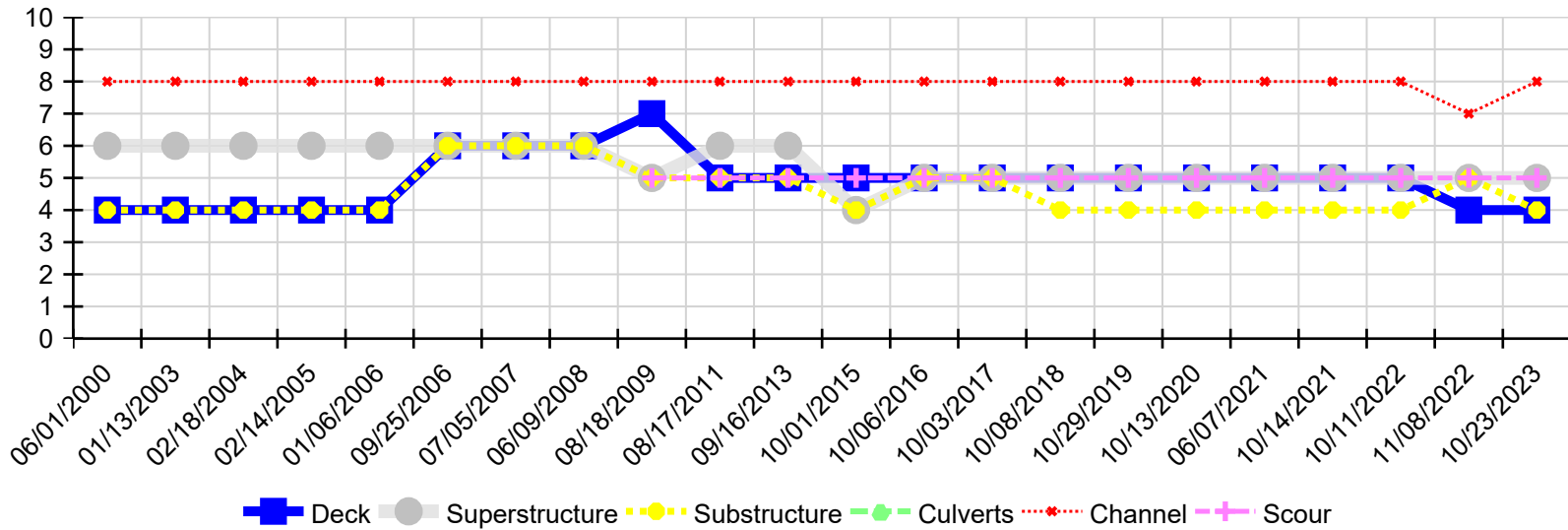
Asset #M1582(Routine)

SH 86 Log 3.92 over WATTENSAW BAYOU REL

Location: 3.9 MI S JCT SH 38

Team Lead: Bryan Saunders, Inspection Date: 10/23/2023

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
10/23/2023	4	5	4	N	8	5
11/08/2022	4	5	5	N	7	5
10/11/2022	5	5	4	N	8	5
10/14/2021	5	5	4	N	8	5
06/07/2021	5	5	4	N	8	5
10/13/2020	5	5	4	N	8	5
10/29/2019	5	5	4	N	8	5
10/08/2018	5	5	4	N	8	5
10/03/2017	5	5	5	N	8	5
10/06/2016	5	5	5	N	8	5
10/01/2015	5	4	4	N	8	5
09/16/2013	5	6	5	N	8	5
08/17/2011	5	6	5	N	8	5
08/18/2009	7	5	5	N	8	5
06/09/2008	6	6	6	N	8	N
07/05/2007	6	6	6	N	8	N
09/25/2006	6	6	6	N	8	N
01/06/2006	4	6	4	N	8	N
02/14/2005	4	6	4	N	8	N
02/18/2004	4	6	4	N	8	N
01/13/2003	4	6	4	N	8	N
06/01/2000	4	6	4	N	8	N