



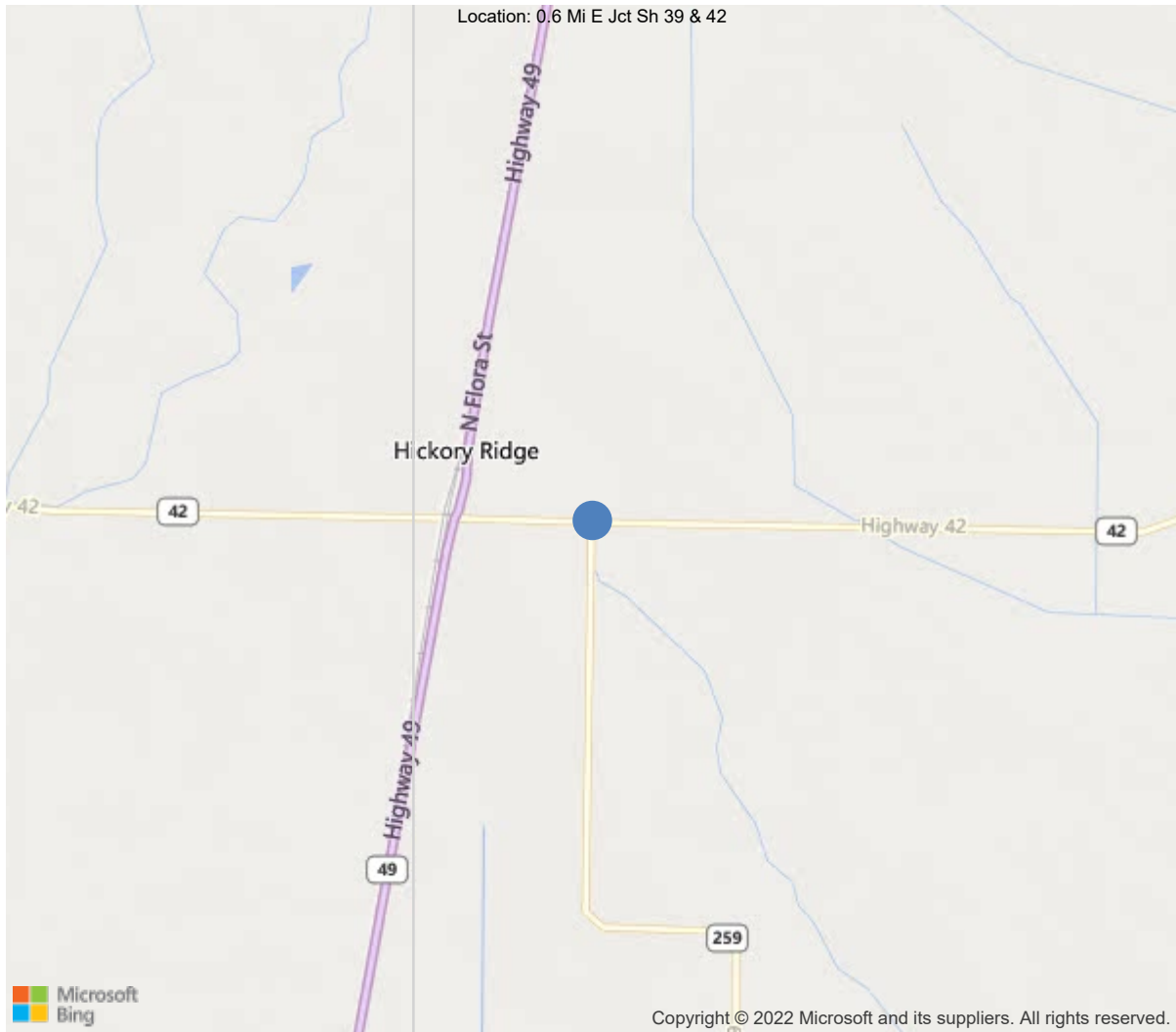
Latitude:35.39703, Longitude:-90.98428

Route:42 Section:02 Log:3.13

Arnold Road ID:19x42x2xA, Arnold Log mile:3.128

District 01, 37 - Cross County

Owner: 1 - State Highway Agency



35.39703, -90.98428



**Asset #M0886**(Routine, Underwater type 2)

**Sh-42/Sec-2/L-3.13 over Ditch**

**Location: 0.6 Mi E Jct Sh 39 & 42**

**Team Lead: Myron Futrell, Inspection Date: 10/13/2021**

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	M0886
(5) Inventory Route	1
(2) Highway Agency District	01 - District 01
(3) County Code	37 - Cross County
(4) Place Code	0
(6) Features Intersected	Ditch
(7) Facility Carried	Sh-42/Sec-2/L-3.13
(9) Location	0.6 Mi E Jct Sh 39 & 42
(11) Mile Point	3.13 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	35.39703
(17) Longitude	-90.98428
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	122
Material	1 - Concrete
Type	22 - Channel beam
(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	2 - Concrete Precast Panels
(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	1955
(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	609
(30) Year of ADT	2018
(109) Truck ADT	8 %
(19) Bypass, Detour Length	22 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	15 ft
(49) Structure Length	45 ft
(50) Curb or Sidewalk Width	
Left	0.5 ft
Right	0.5 ft
(51) Bridge Roadway Width Curb to Curb	24 ft
(52) Deck Width Out to Out	25.2 ft
(32) Approach Roadway Width (W/Shoulders)	20.5 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 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	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	7
(59) Superstructure	5
(60) Substructure	5
(61) Channel & Channel Protection	6
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	0 - Other or Unknown
(63) Operating Rating Method	1
(64) Operating Rating	
Type	1 - Load Factor(LF)
Rating	39
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	24
(70) Bridge Posting	5 - Equal to or above legal loads
(41) Structure Open/Posted/Closed	A - Open, no restriction
APPRAISAL	
(67) Structural Evaluation	5
(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	1 - Inspected feature meets current
(113) Scour Critical Bridges	5 - Bridge foundations determined to
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	602
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	10/13/2021		
(91) Frequency	24		
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	No		
C: Other Special Inspection			
* 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 #M0886(Routine, Underwater type 2)

District: 01, County: 37

Team Lead: Myron Futrell, Inspection Date: 10/13/2021

#### A-46 - Asset Files

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#### General Observation (False)

Abutment #1 left approach rail has 20' of collision damage.

Abutment #1 right approach rail has 5' of collision damage.

Abutment #2 left approach rail has minor collision damage for 25'.

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ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
16	Reinforced Concrete Top Flange	SF	1134	984	150	0	0
1130	Cracking (RC and Other)	SF	150	0	150	0	0
510	Wearing Surfaces	SF	1080	760	0	320	0
3220	Crack (Wearing Surface)	SF	320	0	0	320	0
(16) Asphalt overlay is cracked & spalled at bents & at girder unit joints in all spans. Soffit has transverse cracks some with efflorescence.							
110	Reinforced Concrete Open Girder/Beam	LF	315	29	160	126	0
1080	Delamination/Spall/Patched Area	LF	2	0	0	2	0
1090	Exposed Rebar	LF	47	0	0	47	0
1120	Efflorescence/Rust Staining	LF	77	0	0	77	0
1130	Cracking (RC and Other)	LF	160	0	160	0	0
(110) Girder stems have longitudinal & vertical cracks some with efflorescence. Multiple diaphragms are cracked, delamed and spalled at bents. Minor pop offs all units all stems with exposed rebar with up to five percent section loss. Thru bolts are rusted with laminations. Most diaphragms at bents are cracked and spalled with exposed rebar with up to 15% section loss. Span #1 right curb spalled at abutment #1 for one foot with exposed rebar. Span #1 unit #1 right leg 2' crack. Span #1 unit #4 left leg has 3' of cracking Span #1 unit #4 right leg has 8' cracking and shallow spalls with exposed rebar with 15% section loss on sides of girder spaced at six inches. Span #1 unit #5 left leg cracked for 8' two feet with rust staining. Span #1 unit #5 right leg cracked and delaminated full length with rust staining. Span #1 unit #6 left leg cracked and delaminated full length with rust staining. Span #1 unit #6 right leg cracked and delaminated with rust staining beginning of span for 7' Span #2 unit #1 has 4 transverse cracks in soffit with efflorescence Span #2 unit #2 left leg cracked 8' with rust staining, right leg cracked 6'. Span #2 unit #3 has several pop offs with exposed rebar. Span #2 unit #7 left leg is spalled with exposed rebar 2' near bent #3, with one foot of cracking near bent #2. Diaphragm is cracked full length. Span #3 unit #3 both legs cracked and delaminated full length with rust staining. Span #3 unit #4 left leg cracked and delaminated with rust staining first half of span with 1 foot spall and exposed rebar having 5 percent section loss. Right leg cracked first half of span. Span #3 unit #5 right leg cracked and delaminated for 3' at three quarter span, left leg has small spall at one quarter span with exposed rebar. Span #3 unit #6 both legs have pop off spalls with exposed rebar with 15% section loss. Span #3 joint between unit #6 & 7 is leeching with efflorescence. Span #3 unit #7 right and left leg is map cracked full length with moderate to heavy efflorescence. Span #3 unit #7 right outside of unit has multiple longitudinal cracks with efflorescence.							
215	Reinforced Concrete Abutment	LF	72	18	54	0	0
6000	Scour	LF	54	0	54	0	0
(215) Abutment #1 cap is undermined 6" - 1' deep for the left half of the cap. Abutment #2 cap is undermined 8" deep full length exposing pile #2 & 3.							

**Team Lead:** Myron Futrell, **Inspection Date:** 10/13/2021

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
228	Timber Pile	EA	13	4	0	7	2
1140	Decay/Section Loss	EA	9	0	0	7	2
(228) Bent 2 piles 2, 3 and 4 are spliced and encased in concrete. Bent #2 pile #3 has outer shell decay with up to 15% section loss above splice. Bent 2 pile 5 has outer shell decay hole in ahead face and 40% section loss. Bent 3 piles 1, 2 and 4 are spliced and encased in concrete. Pile 5 is spliced with no encasement. Pile 3 at ground line is weathered and cracked with minor outer shell decay. Abutment #2 piles #1,2,3 are exposed up to eight inches. Abutment #2 pile #3 has outer shell decay sounds hollow, with six inch deep hole in side.							
234	Reinforced Concrete Pier Cap	LF	52	50	0	2	0
1080	Delamination/Spall/Patched Area	LF	2	0	0	2	0
(234) Bent #3 right side has 2' spall on end with no rebar exposed.							
301	Pourable Joint Seal	LF	50	0	0	50	0
2350	Debris Impaction	LF	50	0	0	50	0
(301) Joints are covered in achm.							
330	Metal Bridge Railing	LF	90	35	34	21	0
7000	Damage	LF	55	0	34	21	0
515	Steel Protective Coating	SF	270	120	150	0	0
3410	Chalking (Steel Protective Coatings)	LF	150	0	150	0	0
(330) Rail posts are spalled at connection bolt to bridge deck, five on the right side and two on the left side. Second rail post, span #1 right side missing Bridge rail left side has collision damage full length of bridge. Span #3 right rail has six feet of minor collision damage.							

## Deck

ELEMENTS		DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
16		Reinforced Concrete Top Flange	SF	1134	984	150	0	0
1130		Cracking (RC and Other)	SF	150	0	150	0	0
510		Wearing Surfaces	SF	1080	760	0	320	0
3220		Crack (Wearing Surface)	SF	320	0	0	320	0
(16) Asphalt overlay is cracked & spalled at bents & at girder unit joints in all spans. Soffit has transverse cracks some with efflorescence.								





Asset #M0886(Routine, Underwater type 2)

Sh-42/Sec-2/L-3.13 over Ditch

Location: 0.6 Mi E Jct Sh 39 & 42

Team Lead: Myron Futrell, Inspection Date: 10/13/2021

## Superstructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
110	Reinforced Concrete Open Girder/Beam	LF	315	29	160	126	0
1080	Delamination/Spall/Patched Area	LF	2	0	0	2	0
1090	Exposed Rebar	LF	47	0	0	47	0
1120	Efflorescence/Rust Staining	LF	77	0	0	77	0
1130	Cracking (RC and Other)	LF	160	0	160	0	0

(110) Girder stems have longitudinal & vertical cracks some with efflorescence.  
Multiple diaphragms are cracked, delamed and spalled at bents.  
Minor pop offs all units all stems with exposed rebar with up to five percent section loss.  
Thru bolts are rusted with laminations.  
Most diaphragms at bents are cracked and spalled with exposed rebar with up to 15% section loss.  
Span #1 right curb spalled at abutment #1 for one foot with exposed rebar.  
Span #1 unit #1 right leg 2' crack.  
Span #1 unit #4 left leg has 3' of cracking  
Span #1 unit #4 right leg has 8' cracking and shallow spalls with exposed rebar with 15% section loss on sides of girder spaced at six inches.  
Span #1 unit #5 left leg cracked for 8' two feet with rust staining.  
Span #1 unit #5 right leg cracked and delaminated full length with rust staining.  
Span #1 unit #6 left leg cracked and delaminated full length with rust staining.  
Span #1 unit #6 right leg cracked and delaminated with rust staining beginning of span for 7'  
Span #2 unit #1 has 4 transverse cracks in soffit with efflorescence  
Span #2 unit #2 left leg cracked 8' with rust staining, right leg cracked 6'.  
Span #2 unit #3 has several pop offs with exposed rebar.  
Span #2 unit #7 left leg is spalled with exposed rebar 2' near bent #3, with one foot of cracking near bent #2. Diaphragm is cracked full length.  
Span #3 unit #3 both legs cracked and delaminated full length with rust staining.  
Span #3 unit #4 left leg cracked and delaminated with rust staining first half of span with 1 foot spall and exposed rebar having 5 percent section loss. Right leg cracked first half of span.  
Span #3 unit #5 right leg cracked and delaminated for 3' at three quarter span, left leg has small spall at one quarter span with exposed rebar.  
Span #3 unit #6 both legs have pop off spalls with exposed rebar with 15% section loss.  
Span #3 joint between unit #6 & 7 is leeching with efflorescence.  
Span #3 unit #7 right and left leg is map cracked full length with moderate to heavy efflorescence.  
Span #3 unit #7 right outside of unit has multiple longitudinal cracks with efflorescence.

**Asset #M0886**(Routine, Underwater type 2)



Asset #M0886(Routine, Underwater type 2)

Sh-42/Sec-2/L-3.13 over Ditch

Location: 0.6 Mi E Jct Sh 39 & 42

Team Lead: Myron Futrell, Inspection Date: 10/13/2021

## Culvert

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4





Side view / elevation

**Maintenance Needs**

**Date Reported:** 11/19/2013

**Priority:** C - Important

**Type of Work:** (Inactive) (Inactive) 0 - N/A

**Status:** Monitor

**Component:**

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**Deficiency Description**

Abutment #2 cap is undermined 8" deep full length exposing pile #2 & 3.

**Remarks**

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Abutment #2



Abutment two cap is undermined.



**Date Reported:** 10/03/2019

**Priority:** D- Routine

**Type of Work:** (Inactive) (Inactive) 0 - N/A

**Status:** Monitor

**Component:**

---

**Deficiency Description**

Abutment two approach roadway has settled two inches for two feet.

**Remarks**

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Abutment #2 approach roadway



Approach roadway at abutment two.





**Asset #M0886**(Routine, Underwater type 2)

**Sh-42/Sec-2/L-3.13 over Ditch**

**Location: 0.6 Mi E Jct Sh 39 & 42**

**Team Lead:** Myron Futrell, **Inspection Date:** 10/13/2021

**Date Reported:** 10/03/2019

**Priority:** C - Important

**Type of Work:** (Inactive) (Inactive) 0 - N/A

**Status:** Monitor

**Component:**

---

**Deficiency Description**

Vegetation is growing beside bridge.

**Remarks**

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Vegetation



Vegetation growing beside bridge and onto roadway.



Vegetation growing beside bridge and onto roadway.



**Date Reported:** 10/03/2019

**Priority:** D- Routine

**Type of Work:** (Inactive) (Inactive) 0 - N/A

**Status:** Monitor

**Component:**

---

**Deficiency Description**

Five rail posts on right side and two on the left are spalled at lower connection bolt.  
Second rail post, span #1 right side missing

**Remarks**

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Span #2 left side first rail post spalled.



Span #1 left side first rail post spalled



Span #2 right side second rail post spalled, span  
#3 right side, both rail posts spalled,



Span #2 right side first rail post spalled.





Second rail post, span #1 right side missing



Broken rail post and rail.



Image is not transferred  
to inspectX yet.

Thanks for your patience.

Typical spalled rail post .



Typical spalled rail post .



**Asset #M0886**(Routine, Underwater type 2)

**Sh-42/Sec-2/L-3.13 over Ditch**

**Location: 0.6 Mi E Jct Sh 39 & 42**

**Team Lead:** Myron Futrell, **Inspection Date:** 10/13/2021

**Date Reported:** 10/03/2019

**Priority:** C - Important

**Type of Work:** (Inactive) (Inactive) 0 - N/A

**Status:** Monitor

**Component:**

---

### Deficiency Description

Bridge rail on left side has collision damage full length of bridge including approach rail. Right rail at abutment one has collision damage for six feet and is loosened from rail post.

10/13/2021-right rail spans #1 and 2 have been replaced.

### Remarks

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Bridge rail on left side has collision damage full length of bridge.



Broken rail post and rail.





Image is not transferred  
to inspectX yet.

Thanks for your patience.





**Asset #M0886**(Routine, Underwater type 2)

**Sh-42/Sec-2/L-3.13 over Ditch**

**Location: 0.6 Mi E Jct Sh 39 & 42**

**Team Lead:** Myron Futrell, **Inspection Date:** 10/13/2021

**Date Reported:** 10/14/2021  
**Priority:** C - Important  
**Type of Work:** Repair (General)  
**Status:** Open  
**Component:** Approach

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**Deficiency Description**

Abutment #1 left approach rail has 20' of collision damage.  
Abutment #1 right approach rail has 5' of collision damage.  
Abutment #2 left approach rail has minor collision damage for 25'.

**Remarks**

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Abutment #1 left approach rail



Abutment #1 right approach rail



Abutment #2 left approach rail



**Date Reported:** 10/14/2021  
**Priority:** C - Important  
**Type of Work:** Repair (General)  
**Status:** Open  
**Component:** Element

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### Deficiency Description

Bent #2 pile #3 has outer shell decay with up to 15% section loss above splice.  
Abutment #2 pile #3 has outer shell decay sounds hollow, with six inch deep hole in side.

### Remarks

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Abutment #2 pile #3.



Bent #2 pile #3 has outer shell decay with up to 15% section loss above splice.

**Date Reported:** 10/14/2021  
**Priority:** B - Pressing  
**Type of Work:** Repair (General)  
**Status:** Open  
**Component:** Element

---

**Deficiency Description**

Bent #2 pile #5 has outer shell decay hole in ahead face and 40% section loss.

**Remarks**

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Bent 2 pile 5 has outer shell decay hole in ahead face and 40% section loss.



**Date Reported:** 10/13/2021  
**Priority:** C - Important  
**Type of Work:** Repair (General)  
**Status:** Open  
**Component:** Element

---

### Deficiency Description

Span #1 right curb spalled at abutment #1 for one foot with exposed rebar.  
Span #1 unit #4 right leg has shallow spalls with exposed rebar with 15% section loss on sides of girder spaced at six inches.  
Span #2 unit #3 has several pop offs with exposed rebar.  
Span #2 unit #7 left leg is spalled with exposed rebar 2' near bent #3.  
Span #3 unit #4 left leg has a 1 foot spall and exposed rebar having 5 percent section loss.  
Span #3 unit #5 left leg has small spall at one quarter span with exposed rebar.  
Span #3 unit #6 both legs have pop off spalls with exposed rebar with 15% section loss.

### Remarks

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Span #3 unit #4



Span #3 unit #5.



Span #3 unit #6.



Span #2 unit #7



Span #2 unit #3



Span #1 unit #4 soffit / underside of deck





Span #1 girder #4 right leg



Span #1 right curb spalled at abutment #1 for one foot with exposed rebar.



**Date Reported:** 11/19/2013  
**Priority:** D- Routine  
**Type of Work:** (Inactive) (Inactive) 0 - N/A  
**Status:** Assigned  
**Component:**

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**Deficiency Description**

Asphalt overlay is cracked & spalled at bents & at girder unit joints in all spans.

**Remarks**

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Typical cracks in asphalt on deck.

**Date Reported:** 11/19/2013

**Priority:** D- Routine

**Type of Work:** (Inactive) (Inactive) 0 - N/A

**Status:** Monitor

**Component:**

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**Deficiency Description**

Abutment #1 cap is undermined 6" - 1' deep for the left half of the cap.

**Remarks**

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Erosion at abutment #1 cap.



Abutment one cap.



**Date Reported:** 12/12/2011  
**Priority:** D- Routine  
**Type of Work:** (Inactive) (Inactive) 0 - N/A  
**Status:** Monitor  
**Component:**

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#### Deficiency Description

Span #1 unit #4 left leg has 3' of cracking  
Span #1 unit #4 right leg has 8' cracking  
Span #1 unit #5 left leg cracked for 8' two feet with rust staining.  
Span #1 unit #5 right leg cracked and delaminated full length with rust staining.  
Span #1 unit #6 left leg cracked and delaminated full length with rust staining.  
Span #1 unit #6 right leg cracked and delaminated with rust staining beginning of span for 7'  
Span #2 unit #2 left leg cracked 8' with rust staining, right leg cracked 6'.  
Span #3 unit #3 both legs cracked and delaminated full length with rust staining.  
Span #3 unit #4 left leg cracked and delaminated with rust staining first half of spans. Right leg cracked first half of span.  
Span #3 unit #7 right and left leg is map cracked full length with moderate to heavy efflorescence.  
Span #3 unit #7 right outside of unit has multiple longitudinal cracks with efflorescence.  
10/113/2021-Added several units to maintenance need.

#### Remarks

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Span #3 unit #3



Span #3 unit #4



Span #3 unit #7 left leg has map cracking full length with moderate to heavy efflorescence.



Span #3 unit #7 right leg has map cracking for 6' with moderate efflorescence.





Span #2 unit #6



Span #2 unit #2



Span #1 unit #5 soffit / underside of deck



Span #1 unit #4 soffit / underside of deck



Span three girder seven right and left legs have longitudinal cracks





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**Sh-42/Sec-2/L-3.13 over Ditch**

**Location: 0.6 Mi E Jct Sh 39 & 42**

**Team Lead:** Myron Futrell, **Inspection Date:** 10/13/2021

## **Routine Maintenance**

Check Box Maintenance Items

<b>Data Field</b>	<b>Value</b>
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 - Hydo and LMC Advised	



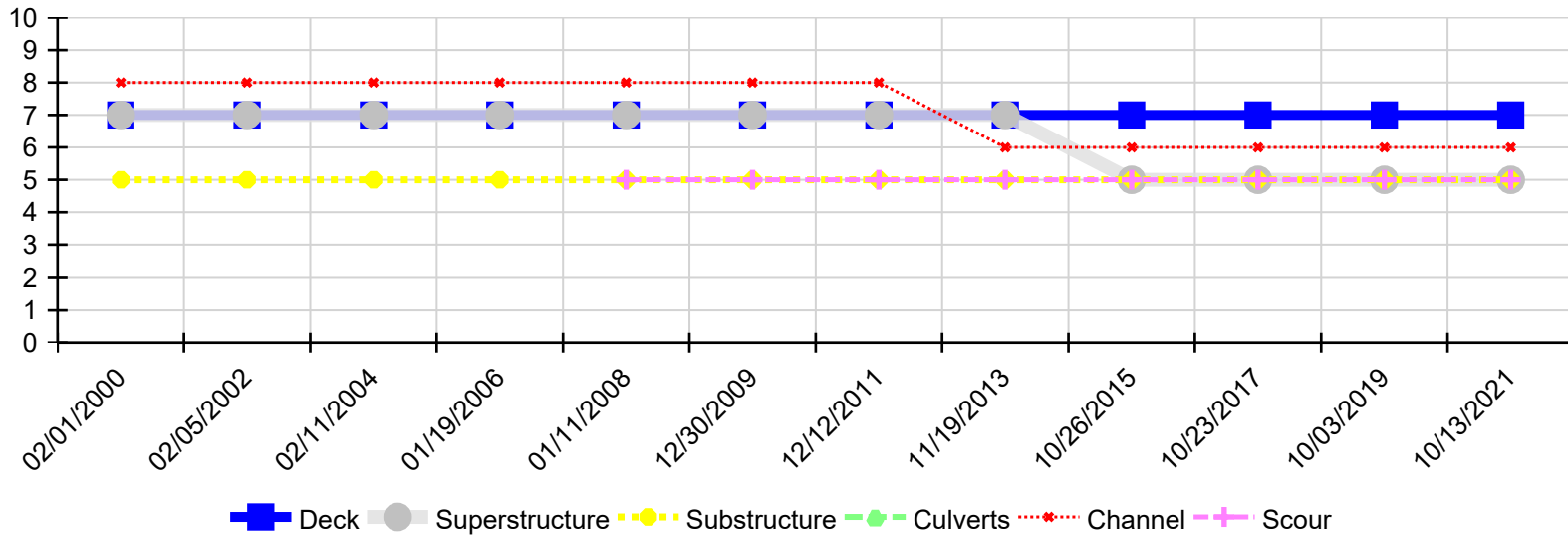
Asset #M0886(Routine, Underwater type 2)

Sh-42/Sec-2/L-3.13 over Ditch

Location: 0.6 Mi E Jct Sh 39 & 42

Team Lead: Myron Futrell, Inspection Date: 10/13/2021

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
10/13/2021	7	5	5	N	6	5
10/03/2019	7	5	5	N	6	5
10/23/2017	7	5	5	N	6	5
10/26/2015	7	5	5	N	6	5
11/19/2013	7	7	5	N	6	5
12/12/2011	7	7	5	N	8	5
12/30/2009	7	7	5	N	8	5
01/11/2008	7	7	5	N	8	5
01/19/2006	7	7	5	N	8	N
02/11/2004	7	7	5	N	8	N
02/05/2002	7	7	5	N	8	N
02/01/2000	7	7	5	N	8	N