



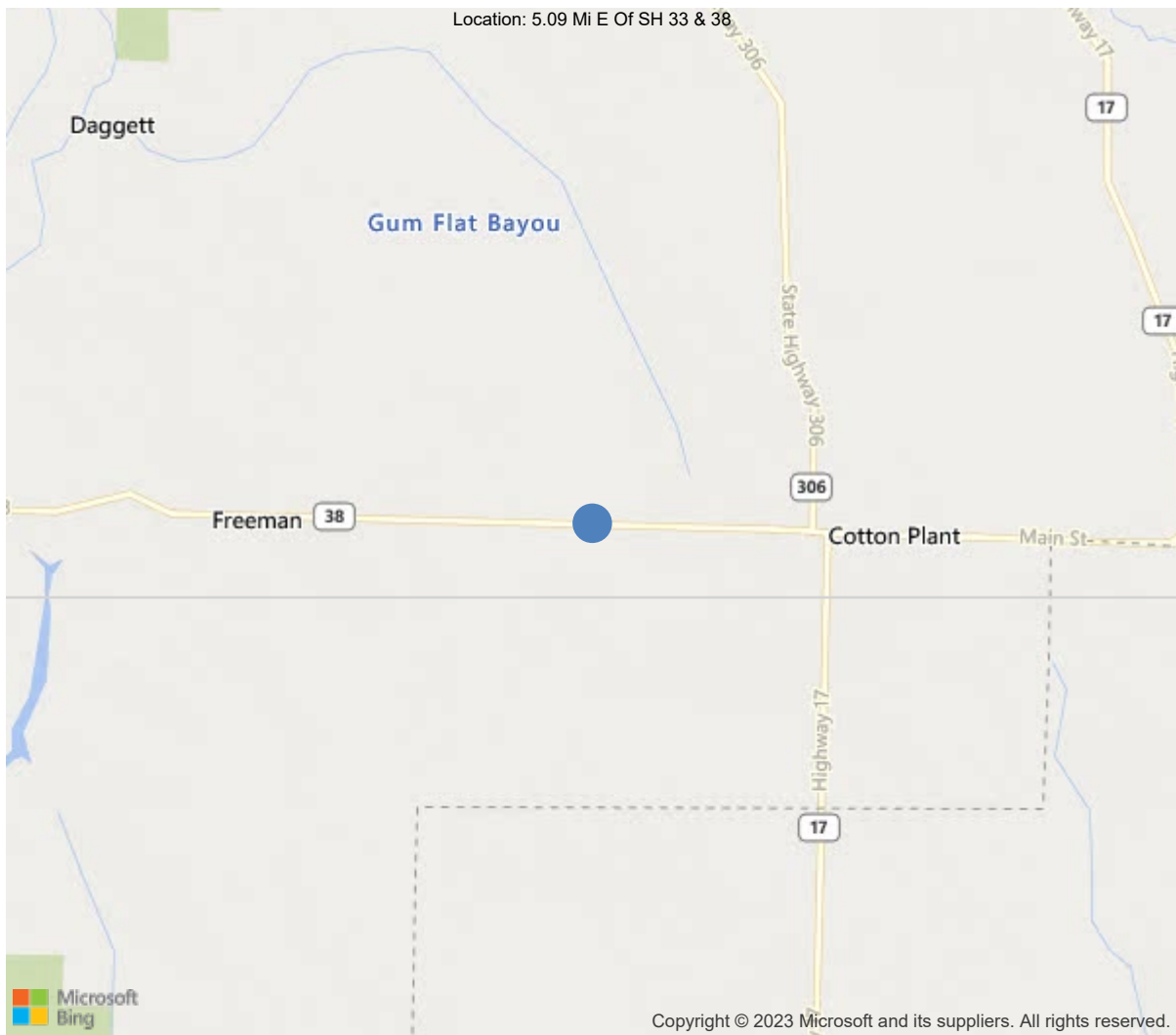
Latitude:35.00534, Longitude:-91.27764

Route:38 Section:02 Log:5.09

Arnold Road ID:74x38x2xA, Arnold Log mile:5.09

District 01, 147 - Woodruff County

Owner: 1 - State Highway Agency



35.00534, -91.27764



**Asset #M3140**(Routine, Underwater type 2)

**Sh-38/Sec-2/L-5.09 over Slough**

**Location: 5.09 Mi E Of SH 33 & 38**

**Team Lead: Drew Melton, Inspection Date: 08/11/2022**

| IDENTIFICATION                            |                                |
|---|--------------------------------|
| (1) State Names                           | 5 - Arkansas                   |
| (8) Structure Number                      | M3140                          |
| (5) Inventory Route                       | 1                              |
| (2) Highway Agency District               | 01 - District 01               |
| (3) County Code                           | 147 - Woodruff County          |
| (4) Place Code                            | 0                              |
| (6) Features Intersected                  | Slough                         |
| (7) Facility Carried                      | Sh-38/Sec-2/L-5.09             |
| (9) Location                              | 5.09 Mi E Of SH 33 & 38        |
| (11) Mile Point                           | 5.09 mi                        |
| (12) Base Highway Network                 | Yes                            |
| (13) LRS Inventory Rte & Subrte           | 0000038020                     |
| (16) Latitude                             | 35.005341                      |
| (17) Longitude                            | -91.277641                     |
| (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            | 4                              |
| (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                           | 1968                           |
| (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                | 740                            |
| (30) Year of ADT                          | 2018                           |
| (109) Truck ADT                           | 9 %                            |
| (19) Bypass, Detour Length                | 30 mi                          |
| GEOMETRIC DATA                            |                                |
| (48) Length of Maximum Span               | 19 ft                          |
| (49) Structure Length                     | 76 ft                          |
| (50) Curb or Sidewalk Width               |                                |
| Left                                      | 0.4 ft                         |
| Right                                     | 0.4 ft                         |
| (51) Bridge Roadway Width Curb to Curb    | 27.7 ft                        |
| (52) Deck Width Out to Out                | 28.7 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    | 27.7 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 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                              | 6                                    |
| (59) Superstructure                    | 5                                    |
| (60) Substructure                      | 6                                    |
| (61) Channel & Channel Protection      | 8                                    |
| (62) Culverts                          | N                                    |
| LOAD RATING AND POSTING                |                                      |
| (31) Design Load                       | 2 - M 13.5 / H 15                    |
| (63) Operating Rating Method           | 1                                    |
| (64) Operating Rating                  |                                      |
| Type                                   | 1 - Load Factor(LF)                  |
| Rating                                 | 41                                   |
| (65) Inventory Rating Method           | 1 - Load Factor(LF)                  |
| (66) Inventory Rating                  |                                      |
| Type                                   |                                      |
| Rating                                 | 25                                   |
| (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                     | 5                                    |
| (69) Clearances, Vertical/Horizontal   | N                                    |
| (71) Waterway Adequacy                 | 7                                    |
| (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                      |                                      |
| (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                       | 855                                  |
| (115) Year of Future ADT               | 2028                                 |

| INSPECTIONS *  |            |             |      |
|--|------------|-------------|------|
| (90) Inspection Date   | 08/11/2022 |             |      |
| (91) Frequency   | 24         |             |      |
| (92) Critical Feature Inspection   | Done       | Freq. (Mon) | Date |
| A: Fracture Critical Detail  | No         |             |      |
| B: Underwater Inspection   | No         |             |      |
| C: Other Special Inspection  |            |             |      |
| * 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 #M3140(Routine, Underwater type 2)

District: 01, County: 147 - Woodruff County

Team Lead: Drew Melton, Inspection Date: 08/11/2022

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**59 - Superstructure (5)**

08/09/2018 lowered superstructure from 6 to 5 due to rebar being exposed.

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**60 - Substructure (6)**

08/09/2018 lowered substructure from 7 to 6 due to spalls being at bearing area.

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**A-46 - Asset Files**

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**General Observation (False)**

Abutment #2 approach roadway has settled up to 3/4"

Dirt and vegetation in gutters with vegetation growing.

Abutment #2 left approach shoulder is eroded at bridge end.

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Asset #M3140(Routine, Underwater type 2)

Sh-38/Sec-2/L-5.09 over Slough

Location: 5.09 Mi E Of SH 33 & 38

Team Lead: Drew Melton, Inspection Date: 08/11/2022

| ELEMENTS   | DESCRIPTION                          | UNITS | TOTAL | CS1  | CS2 | CS3 | CS4 |
|--|--------------------------------------|-------|-------|------|-----|-----|-----|
| 16   | Reinforced Concrete Top Flange       | SF    | 2185  | 2185 | 0   | 0   | 0   |
| 510  | Wearing Surfaces                     | SF    | 2105  | 1965 | 100 | 40  | 0   |
| 3220   | Crack (Wearing Surface)              | SF    | 140   | 0    | 100 | 40  | 0   |
| (16) Asphalt overlay is cracked at all bents full width.<br>Abutment #1 left curb cracked for 2'.  |                                      |       |       |      |     |     |     |
| 110  | Reinforced Concrete Open Girder/Beam | LF    | 608   | 512  | 0   | 96  | 0   |
| 1090   | Exposed Rebar                        | LF    | 10    | 0    | 0   | 10  | 0   |
| 1120   | Efflorescence/Rust Staining          | LF    | 26    | 0    | 0   | 26  | 0   |
| 1130   | Cracking (RC and Other)              | LF    | 60    | 0    | 0   | 60  | 0   |
| (110) All units have various spalls no rebar exposed six inches or less.<br>Several diaphragms are spalled with exposed rebar.<br><br>Span #1 unit #1 right leg is cracked and delaminated for ten feet with a one foot spall with exposed rebar with moderate section loss.<br><br>Span #2 unit #1 left leg has a one foot spall at 3/4 span with exposed rebar with moderate section loss.<br>Span #2 unit #1 right leg has 1' delamination at 3/4 span.<br><br>Span #3 unit #1 right leg has an eight foot spall with exposed rebar with large section loss ahead of bent with ten foot crack with delamination.<br>Span #3 unit #8 left leg cracked for 10' with rust staining.<br><br>Span #4 unit #4 left leg has longitudinal crack on side for fifteen feet.<br>Span #4 unit #4 right leg cracked for 10'.<br>Span #4 unit #6 left leg has longitudinal crack on side for fifteen feet.<br>Span #4 unit #6 right leg is cracked and delaminated on bottom full length.<br>Span #4 unit #8 left leg cracked for 2'. |                                      |       |       |      |     |     |     |
| 215  | Reinforced Concrete Abutment         | LF    | 63    | 63   | 0   | 0   | 0   |
| 228  | Timber Pile                          | EA    | 25    | 25   | 0   | 0   | 0   |
| 234  | Reinforced Concrete Pier Cap         | LF    | 88    | 66   | 3   | 19  | 0   |
| 1080   | Delamination/Spall/Patched Area      | LF    | 22    | 0    | 3   | 19  | 0   |
| (234) Bent #2 cap left end is spalled off.<br>Bent #2 cap back face has four one foot spall no rebar and two one foot delaminations all at top.<br>Bent #2 cap ahead face has one spall one foot with no rebar exposed.<br>Bent #3 cap back face has nine feet of one foot spalls at top no rebar exposed.<br>Bent #3 cap ahead face has two one foot spalls no rebar and one delamination one foot at top.<br>Bent #4 ahead face has two one foot spalls at top no rebar exposed.   |                                      |       |       |      |     |     |     |
| 301  | Pourable Joint Seal                  | LF    | 86    | 0    | 0   | 86  | 0   |
| 2350   | Debris Impaction                     | LF    | 86    | 0    | 0   | 86  | 0   |
| (301) Joints have been overlaid limiting movement.   |                                      |       |       |      |     |     |     |
| 330  | Metal Bridge Railing                 | LF    | 152   | 148  | 2   | 2   | 0   |

| ELEMENTS   | DESCRIPTION              | UNITS | TOTAL | CS1 | CS2 | CS3 | CS4 |
|--|--------------------------|-------|-------|-----|-----|-----|-----|
| 1020   | Connection               | LF    | 4     | 0   | 2   | 2   | 0   |
| 515  | Steel Protective Coating | SF    | 456   | 456 | 0   | 0   | 0   |
| (330) Rails are oxidized full length.<br>Span #1 left side 3rd post is cracked.<br>Span #2 bridge rail left side 1st post is spalled at bottom no rebar.<br>Span #3 bridge rail left side 1st post is spalled at bottom.<br>Span #4 left rail 2nd post is missing connecting bolt to post. |                          |       |       |     |     |     |     |

| ELEMENTS  | DESCRIPTION                    | UNITS | TOTAL | CS1  | CS2 | CS3 | CS4 |
|---|--------------------------------|-------|-------|------|-----|-----|-----|
| 16  | Reinforced Concrete Top Flange | SF    | 2185  | 2185 | 0   | 0   | 0   |
| 510   | Wearing Surfaces               | SF    | 2105  | 1965 | 100 | 40  | 0   |
| 3220  | Crack (Wearing Surface)        | SF    | 140   | 0    | 100 | 40  | 0   |
| (16) Asphalt overlay is cracked at all bents full width.<br>Abutment #1 left curb cracked for 2'. |                                |       |       |      |     |     |     |



Asset #M3140(Routine, Underwater type 2)

Sh-38/Sec-2/L-5.09 over Slough

Location: 5.09 Mi E Of SH 33 & 38

Team Lead: Drew Melton, Inspection Date: 08/11/2022

## Superstructure

| ELEMENTS   | DESCRIPTION                          | UNITS | TOTAL | CS1 | CS2 | CS3 | CS4 |
|--|--------------------------------------|-------|-------|-----|-----|-----|-----|
| 110  | Reinforced Concrete Open Girder/Beam | LF    | 608   | 512 | 0   | 96  | 0   |
| 1090   | Exposed Rebar                        | LF    | 10    | 0   | 0   | 10  | 0   |
| 1120   | Efflorescence/Rust Staining          | LF    | 26    | 0   | 0   | 26  | 0   |
| 1130   | Cracking (RC and Other)              | LF    | 60    | 0   | 0   | 60  | 0   |
| <p>(110) All units have various spalls no rebar exposed six inches or less.<br/>Several diaphragms are spalled with exposed rebar.</p> <p>Span #1 unit #1 right leg is cracked and delaminated for ten feet with a one foot spall with exposed rebar with moderate section loss.</p> <p>Span #2 unit #1 left leg has a one foot spall at 3/4 span with exposed rebar with moderate section loss.<br/>Span #2 unit #1 right leg has 1' delamination at 3/4 span.</p> <p>Span #3 unit #1 right leg has an eight foot spall with exposed rebar with large section loss ahead of bent with ten foot crack with delamination.<br/>Span #3 unit #8 left leg cracked for 10' with rust staining.</p> <p>Span #4 unit #4 left leg has longitudinal crack on side for fifteen feet.<br/>Span #4 unit #4 right leg cracked for 10'.<br/>Span #4 unit #6 left leg has longitudinal crack on side for fifteen feet.<br/>Span #4 unit #6 right leg is cracked and delaminated on bottom full length.<br/>Span #4 unit #8 left leg cracked for 2'.</p> |                                      |       |       |     |     |     |     |

### 59 - Superstructure (5)

Comment: 08/09/2018 lowered superstructure from 6 to 5 due to rebar being exposed.





Asset #M3140(Routine, Underwater type 2)

Sh-38/Sec-2/L-5.09 over Slough

Location: 5.09 Mi E Of SH 33 & 38

Team Lead: Drew Melton, Inspection Date: 08/11/2022

## Substructure

| ELEMENTS   | DESCRIPTION                     | UNITS | TOTAL | CS1 | CS2 | CS3 | CS4 |
|--|---------------------------------|-------|-------|-----|-----|-----|-----|
| 215  | Reinforced Concrete Abutment    | LF    | 63    | 63  | 0   | 0   | 0   |
| 228  | Timber Pile                     | EA    | 25    | 25  | 0   | 0   | 0   |
| 234  | Reinforced Concrete Pier Cap    | LF    | 88    | 66  | 3   | 19  | 0   |
| 1080   | Delamination/Spall/Patched Area | LF    | 22    | 0   | 3   | 19  | 0   |
| (234) Bent #2 cap left end is spalled off.<br>Bent #2 cap back face has four one foot spall no rebar and two one foot delaminations all at top.<br>Bent #2 cap ahead face has one spall one foot with no rebar exposed.<br>Bent #3 cap back face has nine feet of one foot spalls at top no rebar exposed.<br>Bent #3 cap ahead face has two one foot spalls no rebar and one delamination one foot at top.<br>Bent #4 ahead face has two one foot spalls at top no rebar exposed. |                                 |       |       |     |     |     |     |

### 60 - Substructure (6)

Comment: 08/09/2018 lowered substructure from 7 to 6 due to spalls being at bearing area.



Asset #M3140(Routine, Underwater type 2)

Sh-38/Sec-2/L-5.09 over Slough

Location: 5.09 Mi E Of SH 33 & 38

Team Lead: Drew Melton, Inspection Date: 08/11/2022

### Culvert

| ELEMENTS | DESCRIPTION | UNITS | TOTAL |     |     |     |     |
|----------|-------------|-------|-------|-----|-----|-----|-----|
|          |             |       |       | CS1 | CS2 | CS3 | CS4 |



Side view-elevation

**Maintenance Needs**

**Date Reported:** 08/09/2018  
**Priority:** C - Important  
**Type of Work:** Repair (General)  
**Status:** Monitor  
**Component:** Element

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**Deficiency Description**

Span #1 unit #1 right leg is cracked and delaminated for ten feet with a one foot spall with exposed rebar with moderate section loss.

Span #2 unit #1 left leg has a one foot spall at 3/4 span with exposed rebar with moderate section loss.  
Span #2 unit #1 right leg has 1' delamination at 3/4 span.

Span #3 unit #1 right leg has an eight foot spall with exposed rebar with large section loss ahead of bent with ten foot crack with delamination.  
Span #3 unit #8 left leg cracked for 10' with rust staining.

Span #4 unit #4 left leg has longitudinal crack on side for fifteen feet.  
Span #4 unit #4 right leg cracked for 10'.  
Span #4 unit #6 left leg has longitudinal crack on side for fifteen feet.  
Span #4 unit #6 right leg is cracked and delaminated on bottom full length.  
Span #4 unit #8 left leg cracked for 2'.

**Remarks**

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Span #4 unit #6 right leg.



Span #1 unit #1 right leg.



Span #3 unit #1 right leg.



Span #4 unit #4 left leg.





Span #3 unit #1 right leg spalled.



Span #4 unit #6 left leg.



Span #2 unit #1 left leg.

**Date Reported:** 08/09/2018  
**Priority:** D- Routine  
**Type of Work:** Repair (General)  
**Status:** Monitor  
**Component:** Element

---

**Deficiency Description**

Bent #2 cap left end is spalled off.  
Bent #2 cap back face has four one foot spall no rebar and two one foot delaminations all at top.  
Bent #2 cap ahead face has one spall one foot with no rebar exposed.  
Bent #3 cap back face has nine feet of one foot spalls at top no rebar exposed.  
Bent #3 cap ahead face has two one foot spalls no rebar and one delamination one foot at top.  
Bent #4 ahead face has two one foot spalls at top no rebar exposed.

**Remarks**

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Bent #2 cap left end.

**Date Reported:** 08/18/2020  
**Priority:** D- Routine  
**Type of Work:** Repair (General)  
**Status:** Monitor  
**Component:** Approach

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**Deficiency Description**

Abutment #2 approach roadway has settled up to 3/4"

**Remarks**

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Abutment #2 approach roadway.



**Date Reported:** 08/11/2022  
**Priority:** D- Routine  
**Type of Work:** Repair (General)  
**Status:** Open  
**Component:** Approach

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**Deficiency Description**

Abutment #2 left approach shoulder is eroded at bridge end.

**Remarks**

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Abutment #2 left approach shoulder is eroded at bridge end.



**Date Reported:** 08/11/2022  
**Priority:** C - Important  
**Type of Work:** (Inactive) (Inactive) 1 - Clean  
**Status:** Open  
**Component:** Element

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**Deficiency Description**

Dirt and vegetation in gutters with vegetation growing.

**Remarks**

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Typical gutter



**Asset #M3140**(Routine, Underwater type 2)

**Sh-38/Sec-2/L-5.09 over Slough**

**Location: 5.09 Mi E Of SH 33 & 38**

**Team Lead:** Drew Melton, **Inspection Date:** 08/11/2022

## **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            |              |



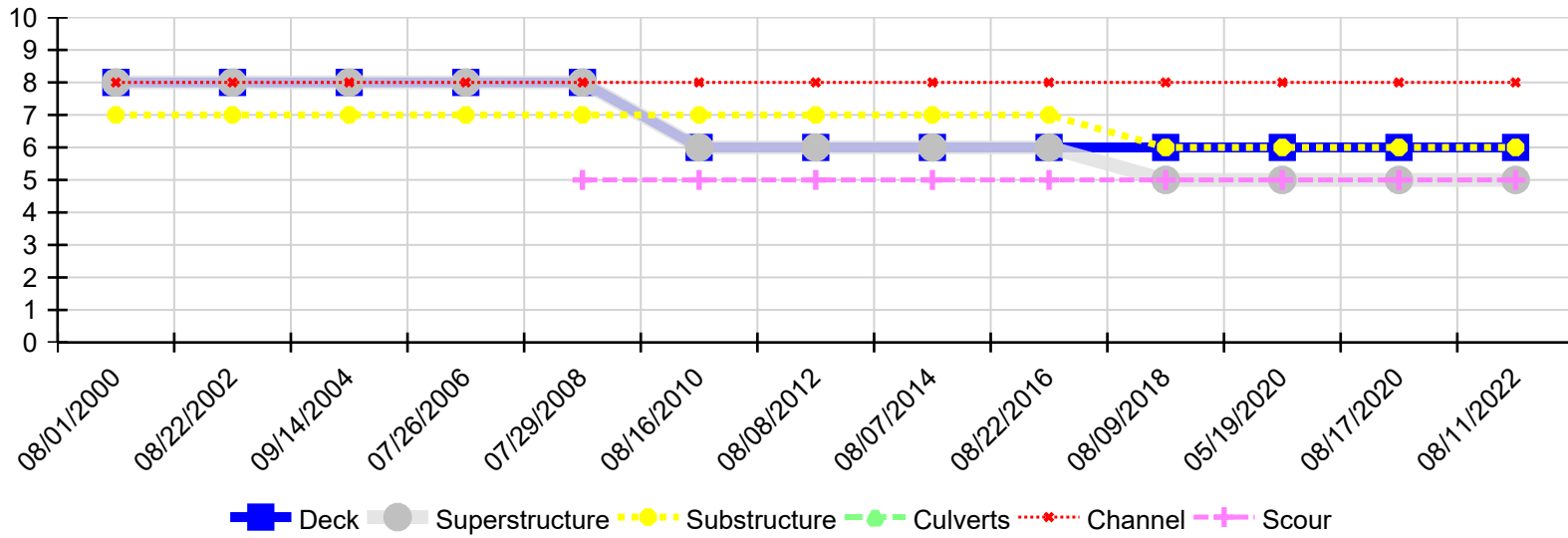
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Sh-38/Sec-2/L-5.09 over Slough

Location: 5.09 Mi E Of SH 33 & 38

Team Lead: Drew Melton, Inspection Date: 08/11/2022

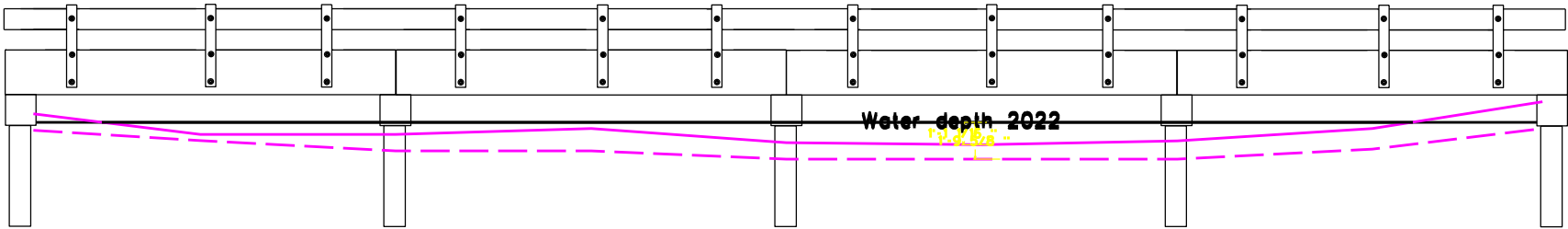
Condition History



| Inspection Date | Deck | Superstructure | Substructure | Culverts | Channel | Scour |
|-----------------|------|----------------|--------------|----------|---------|-------|
| 08/11/2022      | 6    | 5              | 6            | N        | 8       | 5     |
| 08/17/2020      | 6    | 5              | 6            | N        | 8       | 5     |
| 05/19/2020      | 6    | 5              | 6            | N        | 8       | 5     |
| 08/09/2018      | 6    | 5              | 6            | N        | 8       | 5     |
| 08/22/2016      | 6    | 6              | 7            | N        | 8       | 5     |
| 08/07/2014      | 6    | 6              | 7            | N        | 8       | 5     |
| 08/08/2012      | 6    | 6              | 7            | N        | 8       | 5     |
| 08/16/2010      | 6    | 6              | 7            | N        | 8       | 5     |
| 07/29/2008      | 8    | 8              | 7            | N        | 8       | 5     |
| 07/26/2006      | 8    | 8              | 7            | N        | 8       | N     |
| 09/14/2004      | 8    | 8              | 7            | N        | 8       | N     |
| 08/22/2002      | 8    | 8              | 7            | N        | 8       | N     |
| 08/01/2000      | 8    | 8              | 7            | N        | 8       | N     |

# BRIDGE #M3140

Measurments taken top of rail



BENT #1    1/2    BENT #2    1/2    BENT #3    1/2    BENT #4    1/2    BENT #5

Left 08/11/2022    5.9'    6.4'    6.9'    6.9'    7.3'    7.3    7.3    6.8'    5.8'   

Right 08/11/2022    5.1'    6.1'    6.1'    5.8'    6.5'    6.6'    6.4'    5.8'    4.5'