



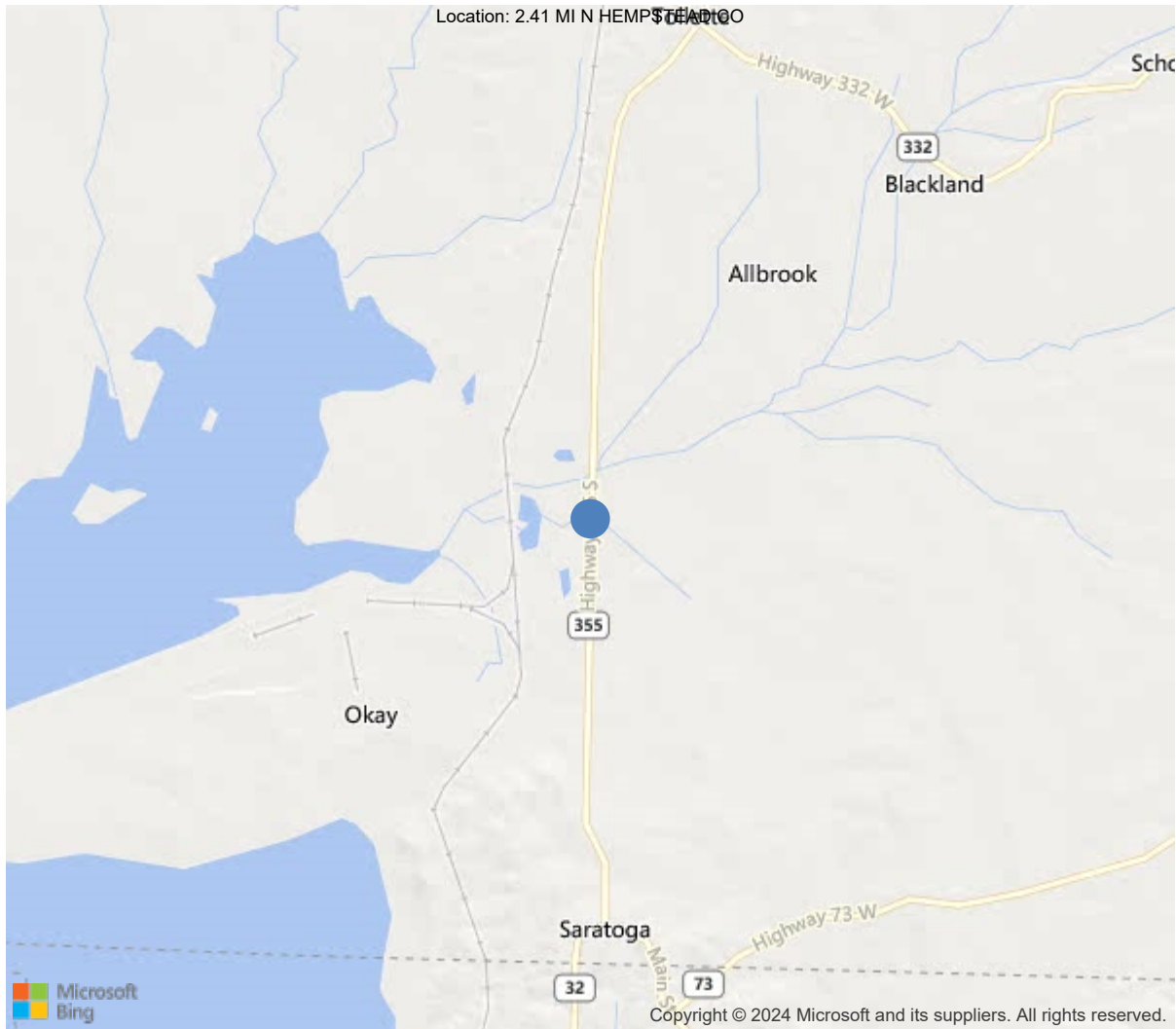
Latitude:33.78184, Longitude:-93.90478

Route:355 Section:01 Log:7.42

Arnold Road ID:31x355x1xA, Arnold Log mile:7.413

District 03, 61 - Howard County

Owner: 1 - State Highway Agency



33.78184, -93.90478



Asset #A2926(Routine, Underwater type 2)
SH 355 - 01- 7.42 over PLUM CREEK RELIEF
Location: 2.41 MI N HEMPSTEAD CO

Team Lead: John King, Inspection Date: 04/12/2022

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	A2926
(5) Inventory Route	1
(2) Highway Agency District	03 - District 03
(3) County Code	61 - Howard County
(4) Place Code	0
(6) Features Intersected	PLUM CREEK RELIEF
(7) Facility Carried	SH 355 - 01- 7.42
(9) Location	2.41 MI N HEMPSTEAD CO
(11) Mile Point	7.42 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	33.781841
(17) Longitude	-93.904778
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	11
Material	1 - Concrete
Type	1 - Slab
(44) Approach Structure Type	00
Material	0 - Other
Type	0 - Other
(45) No. of Spans in Main Unit	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	6 - Bituminous
Type of Membrane	0 - None
Type of Deck Protection	0 - None
AGE AND SERVICE	
(27) Year Built	1954
(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	2700
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	36 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	28 ft
(49) Structure Length	196 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	26.6 ft
(32) Approach Roadway Width (W/Shoulders)	29.9 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	25.9 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	7
(59) Superstructure	7
(60) Substructure	6
(61) Channel & Channel Protection	7
(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	42
(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	
(68) Deck Geometry	2
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	8
(72) Approach Roadway Alignment	7
(36A) Bridge Railings	1 - Inspected feature meets current
(36B) Transitions	0 - Inspected feature does not meet
(36C) Approach Guardrail	0 - Inspected feature does not meet
(36D) Approach Guardrail Ends	0 - Inspected feature does not meet
(113) Scour Critical Bridges	5 - Bridge foundations determined to
PROPOSED IMPROVEMENTS	
(75) Type of Work	31 - Replacement of bridge or
(76) Length of Structure Improvement	228 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 125
(96) Total Project Cost	\$ 535
(97) Year of Improvement Cost Estimate	2003
(114) Future ADT	2653
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	04/12/2022		
(91) Frequency	24		
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	No		
C: Other Special Inspection	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 #A2926(Routine, Underwater type 2)

District: 03, County: 61 - Howard County

Team Lead: John King, Inspection Date: 04/12/2022

General Observation

4/17/2018 AL,SS,DECK,DEF.PHOTOS TAKEN PER THIS INSPECTION....4/1/2020...AL, Elevation, Deck, Def. Photos taken...

4/12/2022... Alignment and Elevation photos taken, soundings taken per this inspection

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

Underside of Deck: Small spalls span 5 with rebar exposed

Wearing Surface: 4" ASPHALT

Railing: CONCRETE END POST BENT 1 RIGHT & LEFT SIDE HAS A POST THAT IS BROKEN AT THE BASE FROM COLLISION DAMAGE WITH REBAR EXPOSED. SPAN 2 POST # 4 ON THE LEFT SIDE HAS A POST BROKEN FROM COLLISION DAMAGE.....04/2022. Little to no change per this inspection, Asphalt overlay on deck is cracking and has impacted joints from moving properly

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

Girders/Beams: SLAB...04/2022. Little to no change per this inspection

60 - Substructure (6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.)

Piles: PILES UNDER FOOTINGS SEE PLANS JOB 03615

Pier Cap: Cracks in cap at bent 6

Footing: SEE PLANS FOR FOOTINGS JOB 03615

04/2022... cracks in cap and columns at bent 6. Bent 6 column 4 has spall with rebar exposed

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

04/2022... Soundings taken per this inspection

A-2 - Wearing Surface Thickness (4)

4 INCH ASPHALT WEARING SURFACE,



Asset #A2926(Routine, Underwater type 2)

SH 355 - 01- 7.42 over PLUM CREEK RELIEF

Location: 2.41 MI N HEMPSTEAD CO

Team Lead: John King, Inspection Date: 04/12/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
38	RC Slab	SF	5213	5193	0	20	0
1080	Delamination/Spall/Patched Area	SF	5	0	0	5	0
1090	Exposed Rebar	SF	15	0	0	15	0
510	Wearing Surfaces	SF	5194	3694	0	1500	0
3220	Crack (Wearing Surface)	SF	1500	0	0	1500	0
(38) 4 INCH ASPHALT WEARING SURFACE, Small spalls bottom deck rebar exposed span 5. (1080-38) 4/1/2020... Delam at drain span 4 LT side... (510-38) 04/22 bridge has a asphalt over concrete deck. asphalt is cracking in various locations... (3220-510-38) 04/2022... cracking in deck typical all spans4 INCH ASPHALT WEARING SURFACE,							
205	Reinforced Concrete Column	EA	24	20	2	2	0
1090	Exposed Rebar	EA	2	0	0	2	0
1130	Cracking (RC and Other)	EA	2	0	2	0	0
(205) 1090--CONCRETE COLUMN #4 AT BENT #6 MINOR SPALL WITH REBAR EXPOSED APPROX. 1'X1' NUMBER LT TO RT WITH LOG MILES.-----Bent 6 column 1 small crack at top of column. Cracking at bent 6 columns 1&2							
215	Reinforced Concrete Abutment	LF	62	62	0	0	0
220	Reinforced Concrete Pile Cap/Footing	LF	165	165	0	0	0
234	Reinforced Concrete Pier Cap	LF	165	156	9	0	0
1130	Cracking (RC and Other)	LF	9	0	9	0	0
(234) 1130---CAP AT BT 6 HAS NUMEROUS CRACKS IN BOTTOM OF CAP.							
301	Pourable Joint Seal	LF	133	0	0	133	0
2350	Debris Impaction	LF	133	0	0	133	0
(301) 04/22 all joints have asphalt over them and asphalt is cracking on all joints.							
330	Metal Bridge Railing	LF	392	0	196	196	0
1000	Corrosion	LF	196	0	196	0	0
7000	Damage	LF	196	0	0	196	0
(330) CONCRETE END POST BENT 1 RIGHT & LEFT SIDE HAS A POST THAT IS BROKEN AT THE BASE FROM COLLISION DAMAGE WITH REBAR EXPOSED. SPAN 2 POST # 4 ON THE LEFT SIDE HAS A POST BROKEN FROM COLLISION DAMAGE. . steel bridge rail need painted also... (7000-330) LT side metal bridge railing damage entire length of bridge							
331	Reinforced Concrete Bridge Railing	LF	392	364	28	0	0
7000	Damage	LF	28	0	28	0	0

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
(7000-331) 04/2022...	Damage to concrete bridge railing, entire last span on LT side						



Asset #A2926(Routine, Underwater type 2)
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Location: 2.41 MI N HEMPSTEAD CO

Team Lead: John King, Inspection Date: 04/12/2022

Deck

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
38	RC Slab	SF	5213	5193	0	20	0
1080	Delamination/Spall/Patched Area	SF	5	0	0	5	0
1090	Exposed Rebar	SF	15	0	0	15	0
510	Wearing Surfaces	SF	5194	3694	0	1500	0
3220	Crack (Wearing Surface)	SF	1500	0	0	1500	0
(38) 4 INCH ASPHALT WEARING SURFACE, Small spalls bottom deck rebar exposed span 5.							
(1080-38) 4/1/2020... Delam at drain span 4 LT side...							
(510-38) 04/22 bridge has a asphalt over concrete deck. asphalt is cracking in various locations...							
(3220-510-38) 04/2022... cracking in deck typical all spans4 INCH ASPHALT WEARING SURFACE,							

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

Comment: Underside of Deck: Small spalls span 5 with rebar exposed

Wearing Surface: 4" ASPHALT

Railing: CONCRETE END POST BENT 1 RIGHT & LEFT SIDE HAS A POST THAT IS BROKEN AT THE BASE FROM COLLISION DAMAGE WITH REBAR EXPOSED. SPAN 2 POST # 4 ON THE LEFT SIDE HAS A POST BROKEN FROM COLLISION DAMAGE.....04/2022. Little to no change per this inspection, Asphalt overlay on deck is cracking and has impacted joints from moving properly



Asset #A2926(Routine, Underwater type 2)
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Location: 2.41 MI N HEMPSTEAD CO

Team Lead: John King, Inspection Date: 04/12/2022

Superstructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4

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

Comment: Girders/Beams: SLAB...04/2022. Little to no change per this inspection



Asset #A2926(Routine, Underwater type 2)

SH 355 - 01- 7.42 over PLUM CREEK RELIEF

Location: 2.41 MI N HEMPSTEAD CO

Team Lead: John King, Inspection Date: 04/12/2022

Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
205	Reinforced Concrete Column	EA	24	20	2	2	0
1090	Exposed Rebar	EA	2	0	0	2	0
1130	Cracking (RC and Other)	EA	2	0	2	0	0
(205) 1090--CONCRETE COLUMN #4 AT BENT #6 MINOR SPALL WITH REBAR EXPOSED APPROX. 1'X1' NUMBER LT TO RT WITH LOG MILES.-----Bent 6 column 1 small crack at top of column. Cracking at bent 6 columns 1&2							
215	Reinforced Concrete Abutment	LF	62	62	0	0	0
220	Reinforced Concrete Pile Cap/Footing	LF	165	165	0	0	0
234	Reinforced Concrete Pier Cap	LF	165	156	9	0	0
1130	Cracking (RC and Other)	LF	9	0	9	0	0
(234) 1130---CAP AT BT 6 HAS NUMEROUS CRACKS IN BOTTOM OF CAP.							

60 - Substructure (6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.)

Comment: Piles: PILES UNDER FOOTINGS SEE PLANS JOB 03615

Pier Cap: Cracks in cap at bent 6

Footing: SEE PLANS FOR FOOTINGS JOB 03615

04/2022... cracks in cap and columns at bent 6. Bent 6 column 4 has spall with rebar exposed

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

Comment: 04/2022... Soundings taken per this inspection



04/2022... Elevation



04/2022... Elevation



04/2022... Alignment



04/2022... Alignment



Deck



Underside of deck typical all spans



Alignment



Elevation



Delam at drain span 4 LT side



04/2022... underside of deck typical of all spans



04/2022.. typical photo of deck all spans





LT side metal bridge railing damage entire length of bridge



LT side metal bridge railing damage entire length of bridge



LT side metal bridge railing damage entire length of bridge



Exposed rebar on bent 6 column 4



Exposed rebar on underside of deck various locations



04/2022... Damage to concrete bridge railing, entire last span on LT side



04/2022... Damage to concrete bridge railing, entire last span on LT side



04/2022... Damage to concrete bridge railing, entire last span on LT side



04/2022... Damage to concrete bridge railing, entire last span on LT side

Maintenance Needs

Date Reported: 04/12/2022

Priority: C - Important

Type of Work: Repair (General)

Status: Open

Component: Approach

Deficiency Description

Sediment at approach roadway causing impact both beginning and end of bridge

Remarks



Sediment at approach roadway causing impact to beginning of bridge



Sediment at approach roadway causing impact to bridge



Sediment at approach roadway causing impact to end of bridge



Sediment at approach roadway causing impact to end of bridge

Maintenance Needs

Date Reported: 04/12/2022

Priority: C - Important

Type of Work: Repair (General)

Status: Open

Component: Element

Deficiency Description

04/2022... damage to metal bridge railing and guardrail on LT side of bridge. Entire length

Remarks







Maintenance Needs

Date Reported: 06/15/2012

Priority: (Inactive) (Inactive) G - General/
Preventive maintenance

Status: Assigned

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

Component:

Deficiency Description

CONCRETE END POST

BENT 1 RIGHT & LEFT SIDE HAS A POST THAT IS BROKEN AT THE BASE
FROM COLLISION DAMAGE WITH REBAR EXPOSED.

SPAN 2 POST # 4 ON THE LEFT SIDE HAS A POST BROKEN FROM
COLLISION DAMAGE. And rail damaged

Remarks



Span 2 left side guard rail damaged



CONCRETE END POST
BENT 1 RIGHT & LEFT SIDE HAS A POST THAT IS
BROKEN AT THE BASE
FROM COLLISION DAMAGE WITH REBAR EXPOSED.

SPAN 2 POST # 4 ON THE LEFT SIDE HAS A POST
BROKEN FROM
COLLISION DAMAGE.



Span 2 left side post crack

Maintenance Needs

Date Reported: 06/15/2012

Priority: (Inactive) (Inactive) G - General/
Preventive maintenance

Status: Assigned

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

Component:

Deficiency Description

CONCRETE COLUMN #4 AT BENT #6
MINOR SPALL WITH REBAR EXPOSED APPROX. 1'X1'
NUMBER LT TO RT WITH LOG MILES. Column 1 at bent 6 has cracking

Remarks



Column 4 bent 6



Bent 6 column 1 small crack at top of column



CONCRETE COLUMN #4 AT BENT #6
MINOR SPALL WITH REBAR EXPOSED APPROX. 1'X1'
NUMBER LT TO RT WITH LOG MILES.



Column 1 at bent 6

Maintenance Needs

Date Reported: 04/22/2014

Priority: (Inactive) (Inactive) G - General/
Preventive maintenance

Status: Assigned

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

Component:

Deficiency Description

CAP @ BENT #6 HAS NUMEROUS CRACKS IN BOTTOM AREA OF CAP.

Remarks



Bent 6 cap and column 4. Cracking and spall with rebar exposed



CAP @ BENT #6 HAS NUMEROUS CRACKS IN
BOTTOM AREA OF CAP.



Asset #A2926(Routine, Underwater type 2)

SH 355 - 01- 7.42 over PLUM CREEK RELIEF

Location: 2.41 MI N HEMPSTEAD CO

Team Lead: John King, **Inspection Date:** 04/12/2022

Routine Maintenance

Check Box Maintenance Items

Type of Maintenance	Is recommended?
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 - Hydro and LMC Advised	
A-63 Missing/Incorrect Log Mile Signage	
A-64 - Vegetation Removal Requested	



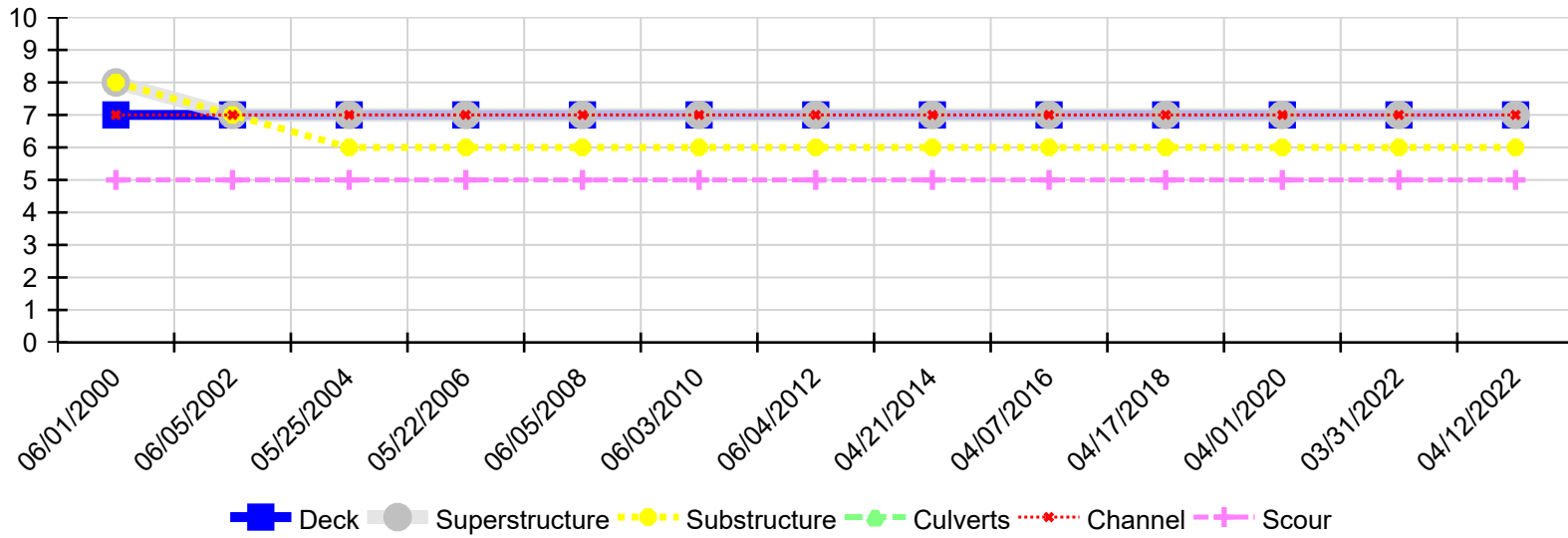
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Location: 2.41 MI N HEMPSTEAD CO

Team Lead: John King, Inspection Date: 04/12/2022

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
04/12/2022	7	7	6	N	7	5
03/31/2022	7	7	6	N	7	5
04/01/2020	7	7	6	N	7	5
04/17/2018	7	7	6	N	7	5
04/07/2016	7	7	6	N	7	5
04/21/2014	7	7	6	N	7	5
06/04/2012	7	7	6	N	7	5
06/03/2010	7	7	6	N	7	5
06/05/2008	7	7	6	N	7	5
05/22/2006	7	7	6	N	7	5
05/25/2004	7	7	6	N	7	5
06/05/2002	7	7	7	N	7	5
06/01/2000	7	8	8	N	7	5