



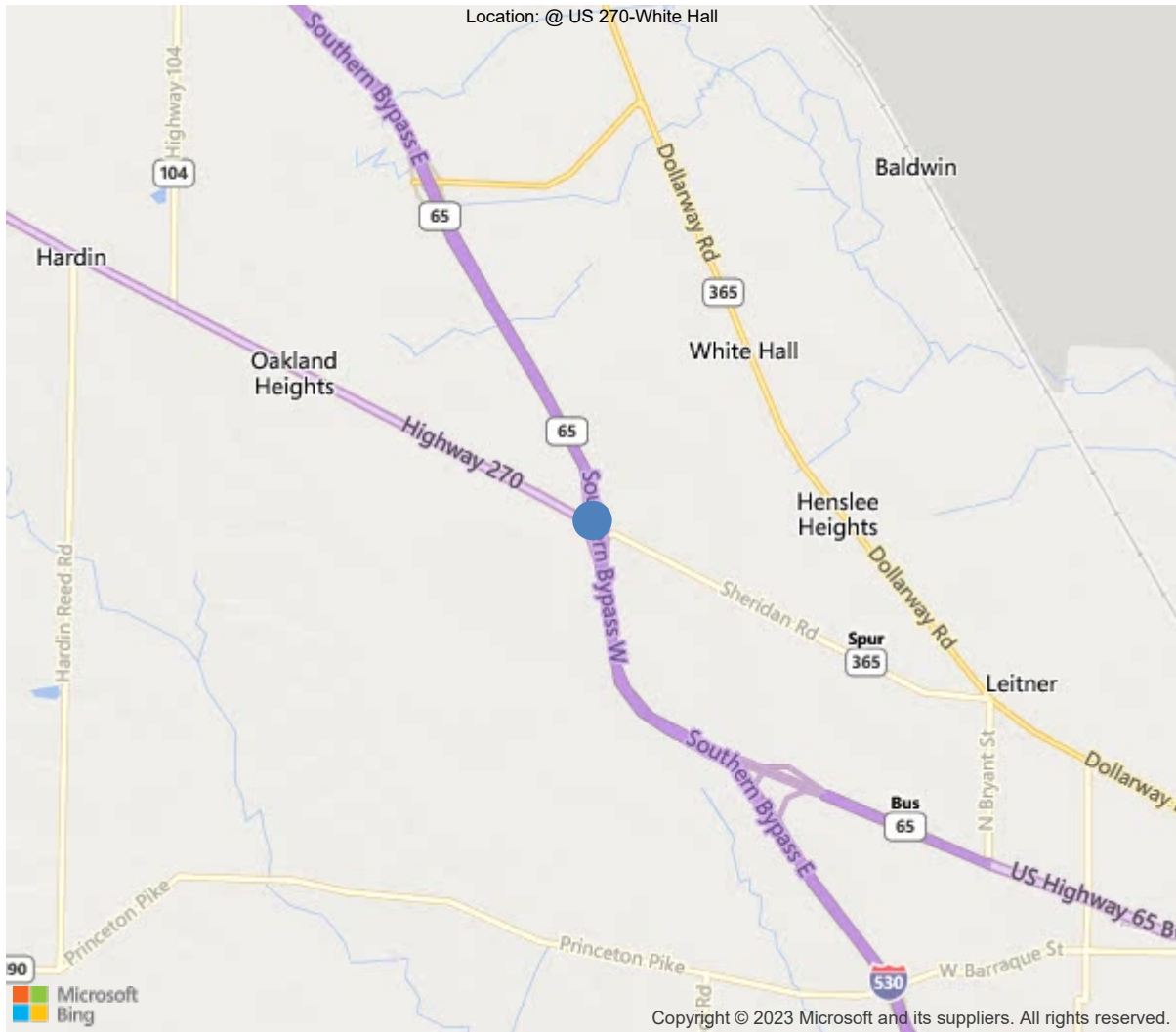
Latitude:34.26180, Longitude:-92.10447

Route:530 Section:05 Log:33.77

Arnold Road ID:35x530x5xA, Arnold Log mile:33.733

District 02, 69 - Jefferson County

Owner: 1 - State Highway Agency



34.26180, -92.10447



Asset #A5500(Routine)

I-530 SB LM 33.77 over US 270

Location: @ US 270-White Hall

Team Lead: Sharon Hooks, Inspection Date: 10/10/2022

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	A5500
(5) Inventory Route	1
(2) Highway Agency District	02 - District 02
(3) County Code	69 - Jefferson County
(4) Place Code	75170
(6) Features Intersected	US 270
(7) Facility Carried	I-530 SB LM 33.77
(9) Location	@ US 270-White Hall
(11) Mile Point	33.77 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000530050
(16) Latitude	34.2618002724076
(17) Longitude	-92.1044659788343
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	42
Material	4 - Steel continuous
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	3
(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	1975
(106) Year Reconstructed	0
(42) Type of Service	11
On	1 - Highway
Under	1 - Highway, with or without pedestrian
(28) Lane	
On	2
Under	2
(29) Average Daily Traffic	14500
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	8 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	106 ft
(49) Structure Length	228.6 ft
(50) Curb or Sidewalk Width	
Left	0.5 ft
Right	0.5 ft
(51) Bridge Roadway Width Curb to Curb	39 ft
(52) Deck Width Out to Out	42 ft
(32) Approach Roadway Width (W/Shoulders)	40 ft
(33) Bridge Median	0 - No median
(34) Skew	35 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	40 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	16.08 ft
Ref:	
(55) Min Lat Underclear RT	23.8 ft
Ref:	
(56) Min Lat Underclear LT	23.2 ft
NAVIGATION DATA	
(38) Navigation Control	N - Not applicable, no waterwa
(111) Pier Protection	5 - None present but re-evalua
(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	1
(26) Functional Class	11 - Urban Principal Arterial
(100) Defense Highway	1 - The inventory route is on
(101) Parallel Structure	R - The right structure of par
(102) Direction of Traffic	1 - way traffic
(103) Temporary Structure	
(105) Federal Lands Highways	0 - N/A
(110) Designated National Network	1 - The inventory route is par
(20) Toll	3 - On free road. The structu
(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	7
(60) Substructure	7
(61) Channel & Channel Protection	N
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	5 - MS 18 / HS 20
(63) Operating Rating Method	1
(64) Operating Rating	
Type	1 - Load Factor(LF)
Rating	60
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	36
(70) Bridge Posting	5 - Equal to or above legal loads
(41) Structure Open/Posted/Closed	A - Open, no restriction
APPRAISAL	
(67) Structural Evaluation	7
(68) Deck Geometry	6
(69) Clearances, Vertical/Horizontal	7
(71) Waterway Adequacy	N
(72) Approach Roadway Alignment	8
(36A) Bridge Railings	1 - Inspected feature meets current
(36B) Transitions	1 - Inspected feature meets current
(36C) Approach Guardrail	1 - Inspected feature meets current
(36D) Approach Guardrail Ends	1 - Inspected feature meets current
(113) Scour Critical Bridges	N - Bridge not over waterway.
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	18367
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	10/10/2022		
(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 #A5500(Routine)

District: 02, County: 69 - Jefferson County

Team Lead: Sharon Hooks, Inspection Date: 10/10/2022

General Observation

Bridge (I-530) is logged from north to south and is the right bridge of two parallel structures.
US 270 (underroute) is logged from west to east.

08-24-2022 PRD-JRB: Accident inspection performed this date.

As reported by AHP Sgt Joe Harris, oversize load bumped into Span 2 Girder 5 over center turn lane while trying to navigate under bridge on 08-23-2022.

Damage from this impact is a small scratch to the paint on the bottom of the bottom flange with some scratching along left edge of flange.

No bending of the girder or other damage was noted from this or previous impacts.

A-46 - Asset Files

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[illegible]



Asset #A5500(Routine)

I-530 SB LM 33.77 over US 270

Location: @ US 270-White Hall

Team Lead: Sharon Hooks, Inspection Date: 10/10/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
205	Reinforced Concrete Column	EA	6	5	1	0	0
1130	Cracking (RC and Other)	EA	1	0	1	0	0
(205) Columns: 3 per bent / Bents 2 & 3. Bent 2 column 2 has small horizontal cracks.							
215	Reinforced Concrete Abutment	LF	116	88	10	14	4
1080	Delamination/Spall/Patched Area	LF	20	0	10	6	4
1130	Cracking (RC and Other)	LF	8	0	0	8	0
(215) Abutments: 44'-6" = 45" each (skewed - with approximately 13' wings each bent) / Bents 1 & 4. Bent 1: Some deterioration, spalling, and patching (some of approach-side road-iron has been removed) on top of backwall of right (outer) lane - 4' CS2 spall, 6' CS3 spall, 4' CS4 spall. Bent 4: Some deterioration and spalling on top of backwall of right (outer) lane - 6' CS2 spall. Left wing-wall: 1 vertical crack - 1' CS3 crack. Right wing-wall: Map cracking with efflorescence - 7' CS3 crack.							
234	Reinforced Concrete Pier Cap	LF	96	89	7	0	0
1130	Cracking (RC and Other)	LF	7	0	7	0	0
(234) Caps: 44'-6" = 45' each (skewed) / Bents 2 & 3. Bent 2: Hairline vertical cracks							
302	Compression Joint Seal	LF	96	61	15	8	12
2310	Leakage	LF	15	0	15	0	0
2320	Seal Adhesion	LF	8	0	0	8	0
2360	Adjacent Deck or Header	LF	12	0	0	0	12
(302) Joints: 48' each (skewed) / Bents 1 & 4. Bent 1: Joint material is beginning to lose adhesion and sag in various locations and is allowing stormwater to leak through at times. Road-iron has been cut away and repairs made in right (outside) lane. Bent 4: Joint material missing from middle of right (outside) lane onto right shoulder, allowing stormwater to leak through onto ends of girders, bearings and top of cap. (8')							
311	Movable Bearing	EA	15	10	0	5	0
1000	Corrosion	EA	5	0	0	5	0
515	Steel Protective Coating	SF	30	10	10	10	0
3440	Effectiveness (Steel Protective Coatings)	EA	20	0	10	10	0
(311) Moveable bearings: 5 per bent / Bents 1, 2, & 4. Coating: 2.0 square feet each. Bent 1: Bearings are leaned back almost to limits. Bents 1 & 4: Paint peeling with some rust beginning - heaviest at Bent 4 - with some pack rust under rockers, somewhat restricting movement.							
313	Fixed Bearing	EA	5	5	0	0	0
515	Steel Protective Coating	SF	10	10	0	0	0

Team Lead: Sharon Hooks, **Inspection Date:** 10/10/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
(313) Fixed bearings: 5 per bent / Bent 3. Coating: 2.0 square feet each.							
321	Reinforced Concrete Approach Slab	SF	1680	1648	32	0	0
1130	Cracking (RC and Other)	SF	32	0	32	0	0
(321) Approach slabs: (24' wide x 35' long) 840 square feet each / Bents 1 & 4. Bent 1 left: Transverse crack - 24 sqft CS2 crack. Bent 4 left: Diagonal cracking - 8 sqft CS2 crack.							
330	Metal Bridge Railing	LF	458	458	0	0	0
515	Steel Protective Coating	SF	1099	1099	0	0	0
(330) Railing: 229' each side. Coating: 2.4 square feet per linear feet of railing. Concrete curb topped with metal railing.							
331	Reinforced Concrete Bridge Railing	LF	458	458	0	0	0
(331) Railing: 229' each side. Concrete curb topped with metal railing.							

Deck

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	9492	7851	1191	450	0
1080	Delamination/Spall/Patched Area	SF	450	0	0	450	0
1090	Exposed Rebar	SF	8	0	8	0	0
1120	Efflorescence/Rust Staining	SF	80	0	80	0	0
1130	Cracking (RC and Other)	SF	289	0	289	0	0
1190	Abrasion/Wear (PSC/RC)	SF	814	0	814	0	0

(12) Deck: 42' wide x 226' long = 9492 sqft.
 Few unsealed minor- to moderate-sized transverse cracks in various locations - a couple with reflective efflorescence on soffit.
 Unsealed minor- to moderate-sized longitudinal cracks, mainly over Girder 4 in right (outside) lane.
 Some scattered areas of very light abrasive wear (loss of mortar) in travel lanes (15% travel lanes).

Spans 1 & 2 @ Bent 2: Some cracking, spalling, and patches with little or no efflorescence. (15' wide x 30' long)
 One or two pieces of rebar exposed in deepest spalls.
 Active spall (currently patched with asphalt) in left (inner) lane close to center-line.

Soffit – all spans: Some scattered cracking with efflorescence on overhangs (80 sqft CS2).
 Two small (2' x 2') spalls with steel exposed in Bay 2 over Bent 2.
 Bent 4 right: Small (1.5' square) area of delamination on outside overhang, right at bridge end (deck has become pinched into retaining wall and caused concrete to "pop off").

Superstructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
107	Steel Open Girder/Beam	LF	1130	1128	0	2	0
1000	Corrosion	LF	2	0	0	2	0
515	Steel Protective Coating	SF	12055	0	12035	0	20
3410	Chalking (Steel Protective Coatings)	LF	12034	0	12034	0	0
3440	Effectiveness (Steel Protective Coatings)	LF	20	0	0	0	20
7000	Damage	LF	1	0	1	0	0
<p>(107) Girders: 5 (continuous) per span / Spans 1-3 (60' - 106' - 60' = 226' total span).</p> <p>Coating: 10.0 square feet per linear feet of girder x 45'-6" = 455 sqft, 10.6 square feet per linear feet of girder x 32'-6" = 344.5 sqft, 11.6 square feet per linear feet of girder x 70' = 812 sqft, 10.6 square feet per linear feet of girder x 32'-6" = 344.5 sqft, 10.0 square feet per linear feet of girder x 45'-6" = 455 sqft, = 2411 sqft x 5 girders = 12,055 sqft total.</p> <p>A couple spots of rust, mainly around splices or at haunches near abutments, especially Span 2 Girder 2 - second splice plate ahead of Bent 2: Heavy flaking rust on splice plate at lower web and lower flange with pack rust forming. All paint is beginning to look chalky, especially on outsides of outer girders.</p> <p>08-24-2022 PRD-JRB: Accident inspection performed this date. As reported by AHP Sgt Joe Harris, oversize load bumped into Span 2 Girder 5 over center turn lane while trying to navigate under bridge on 08-23-2022. Damage from this impact is a small scratch to the paint on the bottom of the bottom flange with some scratching along left edge of flange. No bending of the girder or other damage was noted from this or previous impacts.</p>							

Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
205	Reinforced Concrete Column	EA	6	5	1	0	0
1130	Cracking (RC and Other)	EA	1	0	1	0	0
(205) Columns: 3 per bent / Bents 2 & 3. Bent 2 column 2 has small horizontal cracks.							
215	Reinforced Concrete Abutment	LF	116	88	10	14	4
1080	Delamination/Spall/Patched Area	LF	20	0	10	6	4
1130	Cracking (RC and Other)	LF	8	0	0	8	0
(215) Abutments: 44'-6" = 45" each (skewed - with approximately 13' wings each bent) / Bents 1 & 4. Bent 1: Some deterioration, spalling, and patching (some of approach-side road-iron has been removed) on top of backwall of right (outer) lane - 4' CS2 spall, 6' CS3 spall, 4' CS4 spall. Bent 4: Some deterioration and spalling on top of backwall of right (outer) lane - 6' CS2 spall. Left wing-wall: 1 vertical crack - 1' CS3 crack. Right wing-wall: Map cracking with efflorescence - 7' CS3 crack.							
234	Reinforced Concrete Pier Cap	LF	96	89	7	0	0
1130	Cracking (RC and Other)	LF	7	0	7	0	0
(234) Caps: 44'-6" = 45' each (skewed) / Bents 2 & 3. Bent 2: Hairline vertical cracks							



Asset #A5500(Routine)

I-530 SB LM 33.77 over US 270

Location: @ US 270-White Hall

Team Lead: Sharon Hooks, Inspection Date: 10/10/2022

Culvert

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4



Elevation.



Bent 4 Bearing 3 has heavy flaking rust to masonry plate.



Approach.



Deck over view



Span 1 at Bent 2 has spall with exposed rebar on under side of deck between girders 2&3.



Under view of span 1.



Span 2 girder 2 left at second splice plate ahead of Bent 2 has heavy rust and corrosion to lower web and flange.



Span 2 girder 2 right at second splice plate ahead of Bent 2 has heavy rust and corrosion to lower web and flange. Pack rust forming between girders and built up members.



Span 2 girder 2 right at second splice plate ahead of Bent 2 has heavy rust and corrosion to lower web and flange.



Bent 3 cap back has hairline vertical cracks.

Maintenance Needs

Date Reported: 12/08/2011

Priority: D- Routine

Type of Work: Repair (General)

Status: Monitor

Component: Element

Deficiency Description

Joints -

Bent 1: Joint material is beginning to lose adhesion and sag in various locations and is allowing stormwater to leak through at times.

Bent 4: Joint material missing from middle of right (outside) lane onto right shoulder, allowing stormwater to leak through onto ends of girders, bearings and top of cap.

Remarks



Bent 4 joints seal is missing.



Joint - Bent 1 (leaking)



Joint - Bent 4 (loss of adhesion)

Maintenance Needs

Date Reported: 12/08/2011

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

Status: Monitor

Type of Work: Repair (General)

Component: Element

Deficiency Description

Bearings – Bents 1 & 4: Paint peeling with some rust beginning – heaviest at Bent 4 – with some pack rust under rockers, somewhat restricting movement.

Remarks



Bent 4 Bearing 3 (corrosion)

Maintenance Needs

Date Reported: 09/25/2014

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

Status: Monitor

Type of Work: Repair (General)

Component: Element

Deficiency Description

Deck - all spans:

Few unsealed minor- to moderate-sized transverse cracks in various locations - a couple with reflective efflorescence on soffit.

Unsealed minor- to moderate-sized longitudinal cracks, mainly over Girder 4 in right (outside) lane.

Remarks



Deck - Span 2 right (cracking)



Deck - Span 2 @ midspan: Cracking

Maintenance Needs

Date Reported: 09/24/2018

Priority: C - Important

Type of Work: Repair (General)

Status: Monitor

Component: Element

Deficiency Description

Deck - Spans 1 & 2 @ Bent 2:

Some cracking, spalling, and patches with little or no efflorescence.

One or two pieces of rebar exposed in deepest spalls.

Active spall (currently patched with asphalt) in left (inner) lane close to center-line.

09-14-2020 GGL-PRD: Changed priority from "D" to "C".

Remarks



Span 2 has large unsealed cracks .



Span 2 left lane has spalls with exposed rebar and patched area.



Spans 1&2 have spalls and repaired areas.



Span 2 soffit at bent 2 between girders 2-3 has spalling with exposed rebar.



Deck - Span 2 @ Bent 2: Spalling/patches



Deck - Span 2 @ Bent 2: Spalling/patches

Maintenance Needs

Date Reported: 09/24/2018

Priority: B - Pressing

Type of Work: Repair (General)

Status: Assigned

Component: Element

Deficiency Description

Abutment - Bent 1: Some deterioration, spalling, and patching (some of approach-side road-iron has been removed) on top of backwall of right (outer) lane.

Large spall and missing patches are making area between approach slab and bridge end very rough to the traveling public - these defects are in the outer (high-traffic) lane.

09-14-2020 GGL-PRD: Changed priority from "D" to "B".

Remarks



Bent 1 joint armor is missing. (with pot holes at the header).



Abutment Bent 1 right: Spalling on top of backwall

Maintenance Needs

Date Reported: 09/24/2018

Priority: C - Important

Type of Work: Repair (General)

Status: Monitor

Component: Element

Deficiency Description

Span 2 Girder 2 - second splice plate ahead of Bent 2: Heavy flaking rust to splice plate at lower web and lower flange with pack rust forming.

Remarks



Span 2 girder 2 second splice plate ahead of bent 2 left has heavy rust with some flaking from moisture seepage.



Span 2 Girder 2 @ Splice 2 (corrosion)



Span 2 second splice plate ahead of bent 2 girder 2 has moisture from deck.



Span 2 second splice plate ahead of bent 2 girder 2 has moisture and rusting at splice plate with water running back down top of bottom flange.



Span 2 Girder 2 @ Splice 2: Corrosion

Maintenance Needs

Date Reported: 09/23/2020

Priority: C - Important

Type of Work: Replace (General)

Status: Assigned

Component: Approach

Deficiency Description

Sign - Bent 1 right: No log mile sign in place - object marker and post are in place.
Sign should read: 530-5

+
33.77

NOTE: Opposite corner of parallel Bridge B5500 needs sign without "+" installed.

Remarks



Sign - Bent 1 right: No log mile sign

Maintenance Needs

Date Reported: 09/23/2020

Priority: D- Routine

Type of Work: Repair (General)

Status: Monitor

Component: Approach

Deficiency Description

End-slope - Bent 1 right: An area of erosion at bottom of end-slope just outside of concrete slope paving - at end of cross-drain under US 270 on right (west) side of bridge.

Remarks



End-slope - Bent 1 right: Erosion



Asset #A5500(Routine)

I-530 SB LM 33.77 over US 270

Location: @ US 270-White Hall

Team Lead: Sharon Hooks, Inspection Date: 10/10/2022

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	



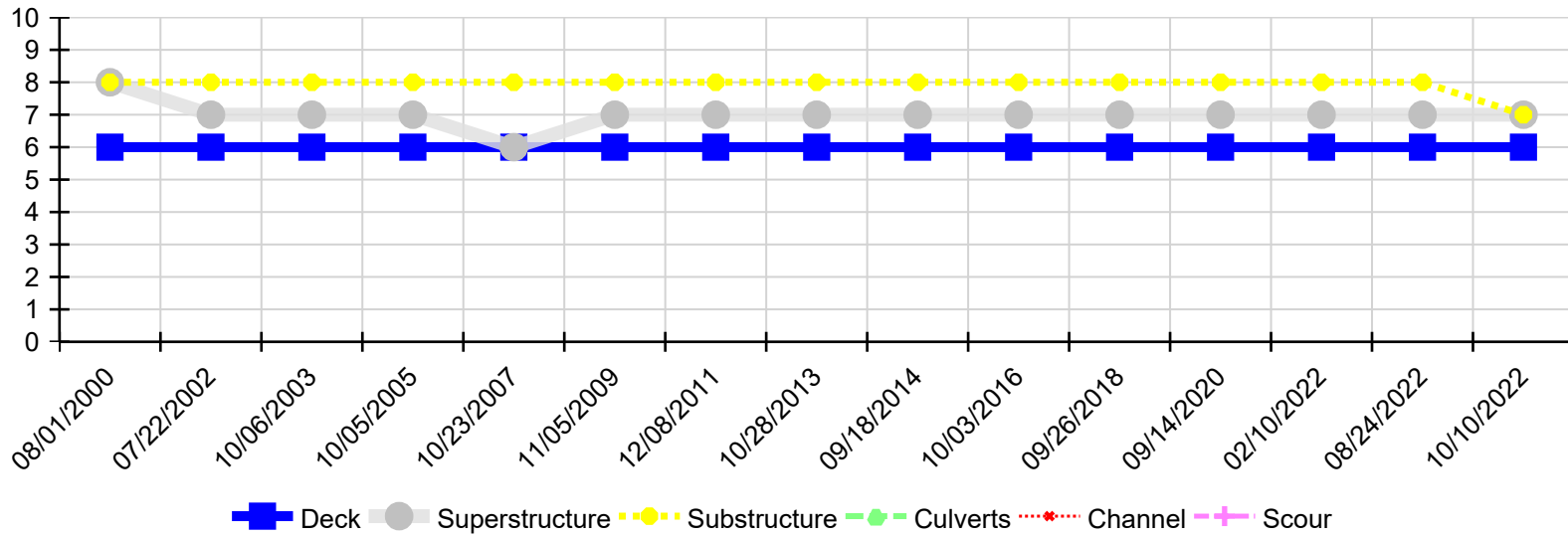
Asset #A5500(Routine)

I-530 SB LM 33.77 over US 270

Location: @ US 270-White Hall

Team Lead: Sharon Hooks, Inspection Date: 10/10/2022

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
10/10/2022	6	7	7	N	N	N
08/24/2022	6	7	8	N	N	N
02/10/2022	6	7	8	N	N	N
09/14/2020	6	7	8	N	N	N
09/26/2018	6	7	8	N	N	N
10/03/2016	6	7	8	N	N	N
09/18/2014	6	7	8	N	N	N
10/28/2013	6	7	8	N	N	N
12/08/2011	6	7	8	N	N	N
11/05/2009	6	7	8	N	N	N
10/23/2007	6	6	8	N	N	N
10/05/2005	6	7	8	N	N	N
10/06/2003	6	7	8	N	N	N
07/22/2002	6	7	8	N	N	N
08/01/2000	6	8	8	N	N	N