



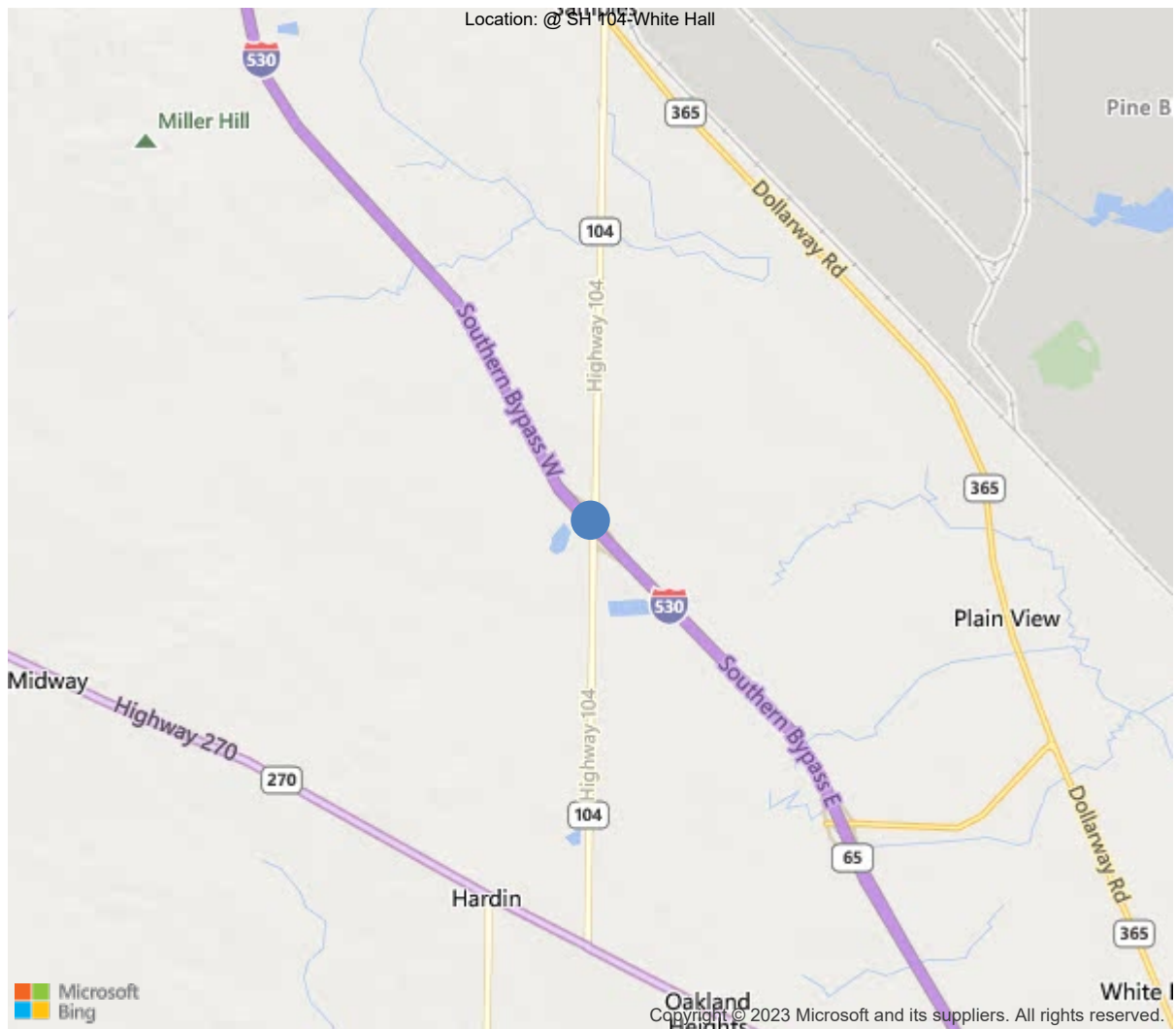
Latitude:34.30839, Longitude:-92.14108

Route:530 Section:05 Log:29.87

Arnold Road ID:35x530x5xB, Arnold Log mile:16.727

District 02, 69 - Jefferson County

Owner: 1 - State Highway Agency



34.30839, -92.14108



Asset #B5611 (Routine)

I-530 NB LM 29.87 over SH 104

Location: @ SH 104-White Hall

Team Lead: Sharon Hooks, Inspection Date: 09/14/2022

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	B5611
(5) Inventory Route	1
(2) Highway Agency District	02 - District 02
(3) County Code	69 - Jefferson County
(4) Place Code	0
(6) Features Intersected	SH 104
(7) Facility Carried	I-530 NB LM 29.87
(9) Location	@ SH 104-White Hall
(11) Mile Point	29.87 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000530050
(16) Latitude	34.30839
(17) Longitude	-92.14108
(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	3 - Latex Concrete or similar additive
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	10500
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	9 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	104 ft
(49) Structure Length	245 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	45 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	39 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	15.72 ft
Ref:	
(55) Min Lat Underclear RT	23.6 ft
Ref:	
(56) Min Lat Underclear LT	23.6 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	L - The left structure of para
(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	7
(59) Superstructure	6
(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	6
(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	35 - Bridge rehabilitation bec
(76) Length of Structure Improvement	245 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 0
(96) Total Project Cost	\$ 462
(97) Year of Improvement Cost Estimate	2003
(114) Future ADT	13301
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	09/14/2022		
(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 #B5611(Routine)

District: 02, County: 69 - Jefferson County

Team Lead: Sharon Hooks, Inspection Date: 09/14/2022

General Observation

Bridge (I-530) is logged from northwest to southeast and is on the left side of two parallel structures.
SH 104 is logged from south to north.

Additional diaphragms added to satisfy load rating analysis for SS-105-02 MAH 10/31/16

A-46 - Asset Files

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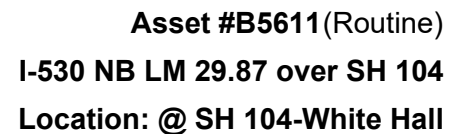
Asset #B5611 (Routine)

I-530 NB LM 29.87 over SH 104

Location: @ SH 104-White Hall

Team Lead: Sharon Hooks, Inspection Date: 09/14/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	10290	9985	305	0	0
1120	Efflorescence/Rust Staining	SF	160	0	160	0	0
1130	Cracking (RC and Other)	SF	145	0	145	0	0
<p>(12) Deck: 42' wide x 242' long = 10,164 sqft. Spans 1-2: Some hairline- to minor-sized longitudinal cracking over Girder 3 (120 sqft CS2). Soffit – all spans: Some transverse cracking with efflorescence (100 sqft CS2) with scattered cracking on overhang (60 sqft CS2).</p> <p>Deck was hydro-demo'ed and overlaid under contract prior to 2016 inspection. Deck Scattered unsealed transverse and longitudinal cracks upto.015"</p> <p>Old Notes PREVIOUS NOTES FOLLOW: Scattered unsealed moderate- to large-sized transverse cracks with some light efflorescence on soffit, mainly over Bents 2 & 3 and on Span 2. A few unsealed minor- to moderate-sized longitudinal cracks, especially over sides of girders in left (outside) lane. Span 2, back of Bent 3: Spalling over the top of shear connectors of Girders 2-4, especially in left (outside) lane. Soffit - Span 2 Bay 1: Small, shallow spall on left side about 4' back of Splice 2.</p>							
107	Steel Open Girder/Beam	LF	1210	1018	192	0	0
1000	Corrosion	LF	122	0	122	0	0
1010	Cracking	LF	50	0	50	0	0
7000	Damage	LF	20	0	20	0	0
515	Steel Protective Coating	SF	12342	8599	2499	1244	0
3410	Chalking (Steel Protective Coatings)	LF	2499	0	2499	0	0
3440	Effectiveness (Steel Protective Coatings)	LF	1244	0	0	1244	0
<p>(107) Girders: 5 per span / Spans 1-3 (69' - 104' - 69' = 242' total). Coating: (12" wide x 43" tall) 10.2 square feet per linear feet of girder.</p> <p>Some small, isolated spots of rust near Bents 1 & 4, mainly on stiffeners at the welds to the top flange (3-4' from the end of each girder). Span 2 Girder 4 @ Splice 1: Slight gapping in ahead edge of plate near mid-web on left & right sides of girder. Span 2 Girder 5 @ Splice 1: Some light surface rust on connection plates and bolts. Some minor surface rust beginning on top flanges, concentrated near cracks in soffit. The outside of both outer girders have fading and chalky paint.</p> <p>Traffic impact: Span 2 Girders 1 & 2: Traffic impact damage over westbound lane of SH 104. Slight bow in bottom of Girder 2 - stiffeners are buckled near top in same area with scrapes to bottom flange East Bound.</p> <p>NOTE: Span 2: Cracking in webs of girders was repaired in 2003.</p>							
205	Reinforced Concrete Column	EA	6	6	0	0	0
(205) Columns: 3 per bent / Bents 2 & 3.							
215	Reinforced Concrete Abutment	LF	136	96	20	20	0
1130	Cracking (RC and Other)	LF	40	0	20	20	0



ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
(215) Abutments: 55'-3" = 56' each (skewed - with approximately 12' wings on each bent) / Bents 1 & 4. Bent 1: Some deterioration, cracking, and minor spalling on top of backwall at left side of left (outer) lane. Bent 4: Some minor-sized cracking across top of backwall (20' CS2, 20' CS3). Some road-iron noise from left side. NOTE: Abutment backwall replaced/repared under contract prior to 2016 inspection.							
234	Reinforced Concrete Pier Cap	LF	102	88	14	0	0
1130	Cracking (RC and Other)	LF	14	0	14	0	0
(234) Caps: 51' each (skewed) / Bents 2 & 3. Some loss of grout on top of caps around anchor bolts. Bents 2 & 3: Some hairline vertical cracks forming at steps. Bent 3 cap right near girder 5 has cracking near end.							
301	Pourable Joint Seal	LF	114	102	12	0	0
2350	Debris Impaction	LF	12	0	12	0	0
(301) Joint : 57' each (skewed) / Bents 1 & 4. NOTE: Joints seals have been replaced under construction contract prior to 2016 inspection. All joints has some minor debris impaction due dirt and debris.							
311	Movable Bearing	EA	15	5	0	10	0
1000	Corrosion	EA	10	0	0	10	0
515	Steel Protective Coating	SF	30	10	0	20	0
3440	Effectiveness (Steel Protective Coatings)	EA	20	0	0	20	0
(311) Moveable bearings: 5 per bent / Bents 1, 3, & 4. Coating: 2.0 square feet each. Bents 1 & 4: Rust with some flaking and peeling of paint, especially at the masonry plate.							
313	Fixed Bearing	EA	5	5	0	0	0
515	Steel Protective Coating	SF	10	10	0	0	0
(313) Fixed bearings: 5 per bent / Bent 2. Coating: 2.0 square feet each.							
321	Reinforced Concrete Approach Slab	SF	1680	1670	2	8	0
1080	Delamination/Spall/Patched Area	SF	10	0	2	8	0
(321) Approach slabs: (24' wide x 35' long) 840 square feet each / Bents 1 & 4. Bent 1: Spalling along the edge of slab adjacent to the abutment backwall - largest spall is 3" long by 3" deep x 12" wide (10' total).							
330	Metal Bridge Railing	LF	490	490	0	0	0
515	Steel Protective Coating	SF	1176	1176	0	0	0
(330) Railing: 245' each side. Coating: 2.4 square feet per linear feet of railing. Concrete curb topped with metal railing.							
331	Reinforced Concrete Bridge Railing	LF	490	490	0	0	0
(331) Railing: 245' each side. Concrete curb topped with metal railing.							

Deck

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	10290	9985	305	0	0
1120	Efflorescence/Rust Staining	SF	160	0	160	0	0
1130	Cracking (RC and Other)	SF	145	0	145	0	0
<p>(12) Deck: 42' wide x 242' long = 10,164 sqft. Spans 1-2: Some hairline- to minor-sized longitudinal cracking over Girder 3 (120 sqft CS2). Soffit – all spans: Some transverse cracking with efflorescence (100 sqft CS2) with scattered cracking on overhang (60 sqft CS2).</p> <p>Deck was hydro-demo'ed and overlaid under contract prior to 2016 inspection. Deck Scrattered unsealed transverse and longitudinal cracks upto.015"</p> <p>Old Notes PREVIOUS NOTES FOLLOW: Scattered unsealed moderate- to large-sized transverse cracks with some light efflorescence on soffit, mainly over Bents 2 & 3 and on Span 2. A few unsealed minor- to moderate-sized longitudinal cracks, especially over sides of girders in left (outside) lane. Span 2, back of Bent 3: Spalling over the top of shear connectors of Girders 2-4, especially in left (outside) lane. Soffit - Span 2 Bay 1: Small, shallow spall on left side about 4' back of Splice 2.</p>							

Superstructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
107	Steel Open Girder/Beam	LF	1210	1018	192	0	0
1000	Corrosion	LF	122	0	122	0	0
1010	Cracking	LF	50	0	50	0	0
7000	Damage	LF	20	0	20	0	0
515	Steel Protective Coating	SF	12342	8599	2499	1244	0
3410	Chalking (Steel Protective Coatings)	LF	2499	0	2499	0	0
3440	Effectiveness (Steel Protective Coatings)	LF	1244	0	0	1244	0
<p>(107) Girders: 5 per span / Spans 1-3 (69' - 104' - 69' = 242' total). Coating: (12" wide x 43" tall) 10.2 square feet per linear feet of girder.</p> <p>Some small, isolated spots of rust near Bents 1 & 4, mainly on stiffeners at the welds to the top flange (3-4' from the end of each girder). Span 2 Girder 4 @ Splice 1: Slight gapping in ahead edge of plate near mid-web on left & right sides of girder. Span 2 Girder 5 @ Splice 1: Some light surface rust on connection plates and bolts. Some minor surface rust beginning on top flanges, concentrated near cracks in soffit. The outside of both outer girders have fading and chalky paint.</p> <p>Traffic impact: Span 2 Girders 1 & 2: Traffic impact damage over westbound lane of SH 104. Slight bow in bottom of Girder 2 - stiffeners are buckled near top in same area with scrapes to bottom flange East Bound.</p> <p>NOTE: Span 2: Cracking in webs of girders was repaired in 2003.</p>							

Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
205	Reinforced Concrete Column	EA	6	6	0	0	0
(205) Columns: 3 per bent / Bents 2 & 3.							
215	Reinforced Concrete Abutment	LF	136	96	20	20	0
1130	Cracking (RC and Other)	LF	40	0	20	20	0
(215) Abutments: 55'-3" = 56' each (skewed - with approximately 12' wings on each bent) / Bents 1 & 4. Bent 1: Some deterioration, cracking, and minor spalling on top of backwall at left side of left (outer) lane. Bent 4: Some minor-sized cracking across top of backwall (20' CS2, 20' CS3). Some road-iron noise from left side. NOTE: Abutment backwall replaced/repared under contract prior to 2016 inspection.							
234	Reinforced Concrete Pier Cap	LF	102	88	14	0	0
1130	Cracking (RC and Other)	LF	14	0	14	0	0
(234) Caps: 51' each (skewed) / Bents 2 & 3. Some loss of grout on top of caps around anchor bolts. Bents 2 & 3: Some hairline vertical cracks forming at steps. Bent 3 cap right near girder 5 has cracking near end.							



Asset #B5611(Routine)

I-530 NB LM 29.87 over SH 104

Location: @ SH 104-White Hall

Team Lead: Sharon Hooks, Inspection Date: 09/14/2022

Culvert

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4



Elevation.



Span 2 Previous damage on girder 1.



Approach.



Span 3 near centerline has deck cracking.



Bent 4 joint seals have some debris impaction.



Deck over view.



Bent 4 bearing 1 has heavy corrosion.



Bent 4 bearing 5 has moderate corrosion.



Bent 3 cap right near girder 5 has cracking.



Span 2 girder 1 has traffic impact to lower flange. Damage is old.



Span 2 bay 4 has cracking with efflorescence on soffit areas.



Underview of span 2.



Roadway view



Deck - Span 2 over Girder 3: Longitudinal cracking



Deck - Span 1 @ Bent 1: Longitudinal cracking



Span 2 Girder 1: Damage to bottom flange



Span 2 Bay 2 left: Damage to stiffeners

Maintenance Needs

Date Reported: 09/11/2018

Priority: D- Routine

Type of Work: Repair (General)

Status: Monitor

Component: Element

Deficiency Description

Bearings – Bents 1 & 4: Rusty with some flaking and peeling of paint, especially at the masonry plate.

Remarks



Bent 1 bearing 5 has pack rust under bearing. Common on all movable bearings.



Bent 1 bearing 5 has flaking rust .



Bent 4 Bearing 4 (corrosion)



Bent 1 bearing 1 flaking rust.



Bent 1 Bearing 2 (corrosion)

Maintenance Needs

Date Reported: 09/25/2014

Priority: D- Routine

Type of Work: Repair (General)

Status: Monitor

Component: Approach

Deficiency Description

Approach slab - Bent 4: No joint filler between abutment backwall and edge of approach slab and no joint filler in intermediate joint.

Remarks



Approach slab/joint - Bent 4 (joint repaired)

Maintenance Needs

Date Reported: 09/10/2020

Priority: C - Important

Type of Work: Repair (General)

Status: Assigned

Component: Approach

Deficiency Description

Approach railing - Bent 1 left: Impact damage to rail and spacer blocks

Remarks



Approach railing - Bent 1 left: Impact damage



COMPLETED :Repaired guardrail Bent 1 left.

Maintenance Needs

Date Reported: 09/10/2020

Priority: D- Routine

Type of Work: Repair (General)

Status: Monitor

Component: Approach

Deficiency Description

Abutment - Bent 1: Some deterioration, cracking, and minor spalling on top of backwall at left side of left (outer) lane.

Remarks



Bent 1 abutment at top of back wall has heavy cracking.



Approach slab/abutment - Bent 1 left: Cracking/spalling

Maintenance Needs

Date Reported: 09/14/2022

Priority: C - Important

Type of Work: Repair (General)

Status: Open

Component:

Deficiency Description

Potholes on South end of bridge approach at concrete approach slabs.

Remarks



Asphalt roadway at approach slabs has spalled and causing potholes in both lanes on South end of bridge.



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I-530 NB LM 29.87 over SH 104

Location: @ SH 104-White Hall

Team Lead: Sharon Hooks, Inspection Date: 09/14/2022

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	



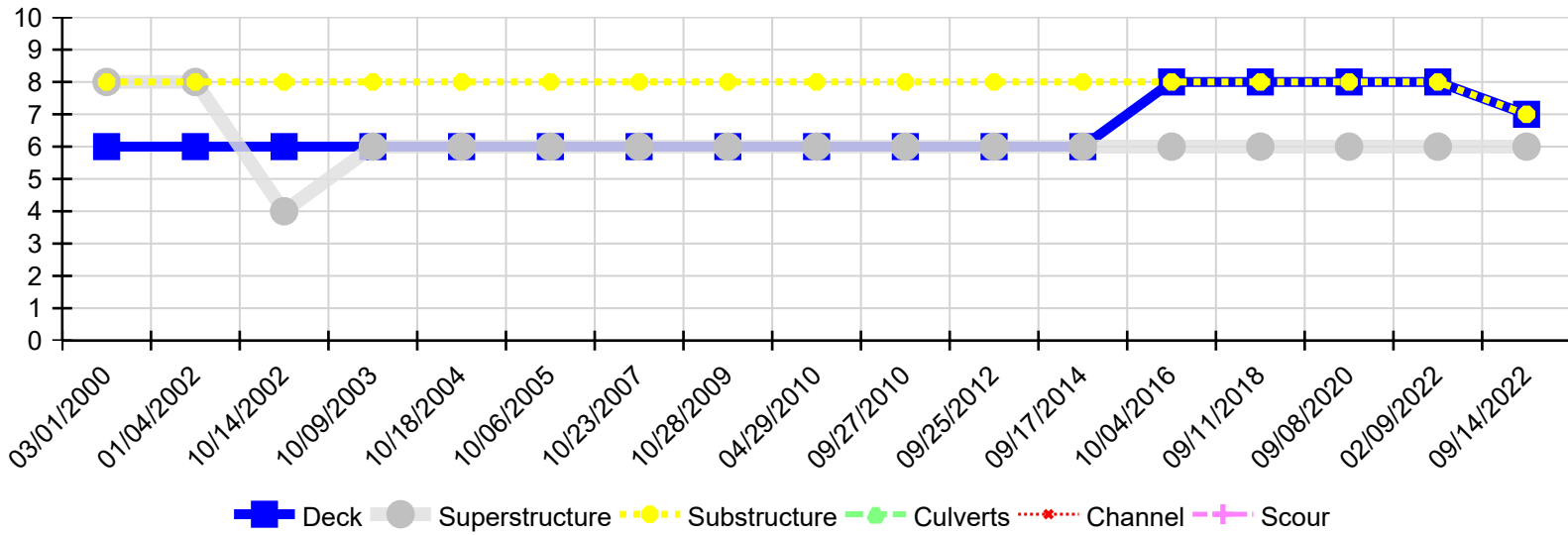
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I-530 NB LM 29.87 over SH 104

Location: @ SH 104-White Hall

Team Lead: Sharon Hooks, Inspection Date: 09/14/2022

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
09/14/2022	7	6	7	N	N	N
02/09/2022	8	6	8	N	N	N
09/08/2020	8	6	8	N	N	N
09/11/2018	8	6	8	N	N	N
10/04/2016	8	6	8	N	N	N
09/17/2014	6	6	8	N	N	N
09/25/2012	6	6	8	N	N	N
09/27/2010	6	6	8	N	N	N
04/29/2010	6	6	8	N	N	N
10/28/2009	6	6	8	N	N	N
10/23/2007	6	6	8	N	N	N
10/06/2005	6	6	8	N	N	N
10/18/2004	6	6	8	N	N	N
10/09/2003	6	6	8	N	N	N
10/14/2002	6	4	8	N	N	N
01/04/2002	6	8	8	N	N	N
03/01/2000	6	8	8	N	N	N