



# Bridge Inspection Report

US 80

over

SLOUGH

LAUDERDALE County

- INSPECTION DATE  
04/20/2023
- STRUCTURE NUMBER  
210008003812310
- BRIDGE ID  
12376



Sufficiency Rating:  
56.4

Health Index:  
0

Status:  
OK

Inspected By: Team Leader Jeff McGee

Taylor Coker, Jeff McGee, Bryan Nutt,

Inspection Type(s): Routine

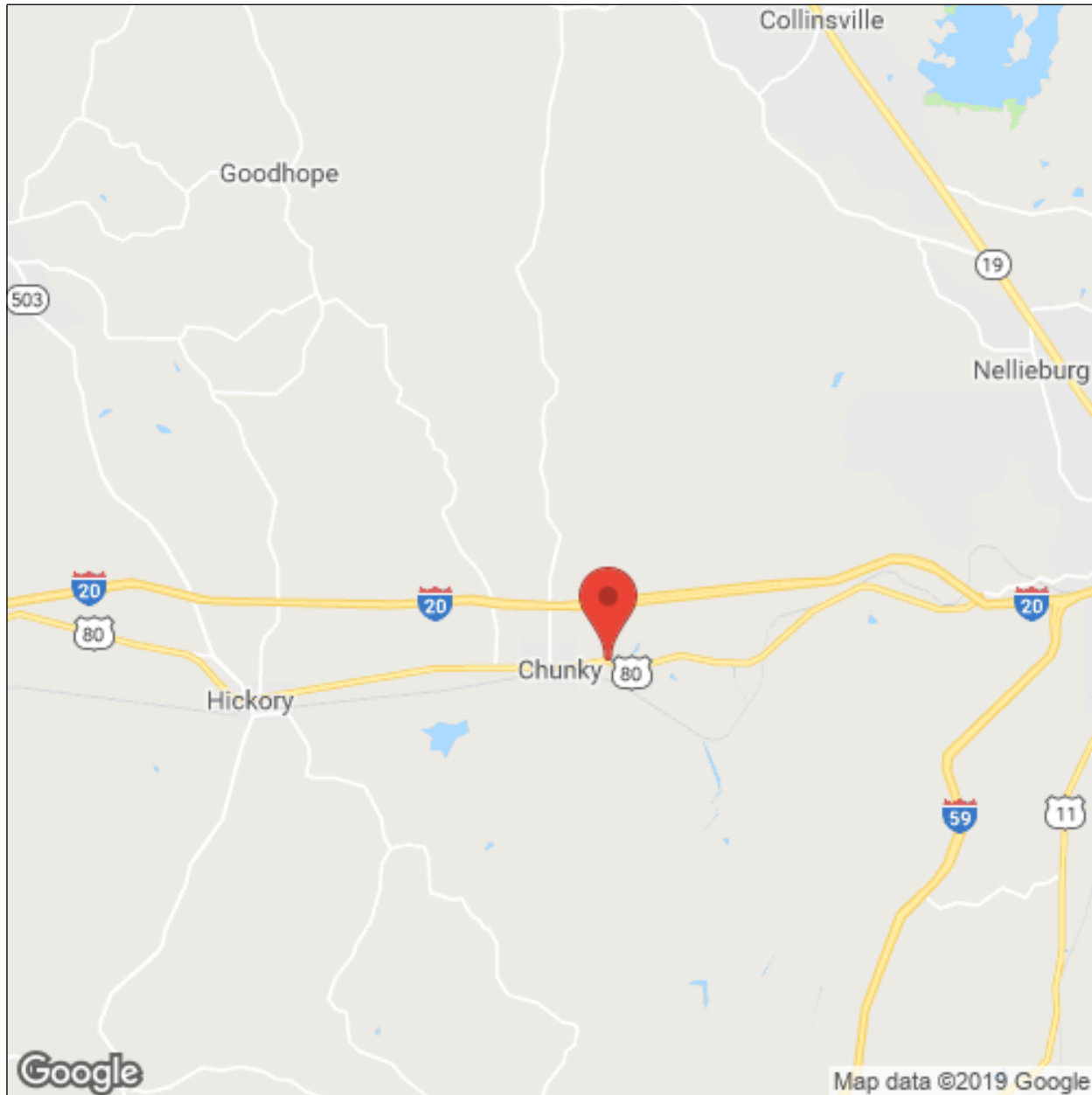
Inspection Performed By: State

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## Location Map



Latitude: 32.327597

Longitude: -88.912442

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## Executive Summary

### 2023 ROUTINE INSPECTION

DECK IS IN FAIR CONDITION,RATED 5, WITH MOD. DECK SCALING AND DECK SPALLS.

SUPERSTRUCTURE IS IN FAIR CONDITION,RATED 5,WITH VERTICAL CRACKS AT BEAM ENDS AT SPANS 2,3,AND 4.

SUBSTRUCTURE IS IN FAIR CONDITION,RATED 5 WITH DELAMS,SPALLS AND EXPOSED REBAR IN THE CAPS.

CHANNEL IS IN GOOD CONDITION,RATED 8.

### RECOMMENDATIONS:

1. REPAIR BEAM ENDS.
2. REPAIR CAP SPALLING.



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## National Bridge Inventory

IDENTIFICATION						INSPECTIONS				
(1) STATE CODE	284 - Mississippi					(90) INSPECTION DATE	04/20/2023			
(8) STRUCTURE NUMBER	210008003812310					(91) DESIGNATED INSPECTION FREQUENCY	24			
(5) INV. ROUTE (ON/UNDER)	1	2	1	00080	0	(92) CRITICAL FEATURE INSPECTION	(93) CFI DATE			
(2) HIGHWAY AGENCY	05	(3) COUNTY CODE 075					A. FRACTURE CRITICAL DETAIL	N		
(4) PLACE CODE	92556							B. UNDERWATER INSPECTION	N	
(6) FEATURES INTERSECTED	SLOUGH							C. OTHER SPECIAL	N	
(7) FACILITY CARRIED	US 80							CONDITION		
(9) LOCATION	0.1 MI E NEWTON CL							(58) DECK	5	
(11) MILEPOINT	0.135	(12) BASE HIGHWAY NETWORK					0	(59) SUPERSTRUCTURE	5	
(13A) LRS INVENTORY ROUTE	000000080P		(13B) SUBROUTE NUMBER					1	(60) SUBSTRUCTURE	5
(16) LATITUDE	32.327597		(17) LONGITUDE					-88.912442	(61) CHANNEL & CHANNEL PROTECTION	8
(98A) BORDER BRIDGE CODE								(62) CULVERT	N	
PERCENT RESPONSIBILITY	(99) BORDER BRIDGE STRUCT							LOAD RATING AND POSTING		
STRUCTURE TYPE AND MATERIAL										
(43) STRUCTURE TYPE, MAIN										
A) KIND OF MATERIAL/DESIGN: 1 - Concrete										
B) TYPE OF DESIGN/CONSTR: 04 - Tee Beam										
(44) STRUCTURE TYPE, APPROACH SPANS										
A) KIND OF MATERIAL/DESIGN:										
B) TYPE OF DESIGN/CONSTR:										
(45) NUMBER OF SPANS IN MAIN	5	(46) NUMBER OF APPROACH					0	(63) METHOD USED TO DETERMINE OPERATING RATING	1	
(107) DECK STRUCTURE TYPE	1	(108A) WEARING SURFACE					0	(64) OPERATING RATING	43.9	
(108B) DECK MEMBRANE	0	(108C) DECK PROTECTION					0	(65) METHOD USED TO DETERMINE INVENTORY RATING	1	
AGE OF SERVICE										
(27) YEAR BUILT	1928	(106) YEAR RECONSTRUCTED								
(42) TYPE OF SERVICE	ON 1	UNDER 9								
(28) LANES	ON 02	UNDER 00								
(29) AVERAGE DAILY TRAFFIC	1200	(19) BYPASS DETOUR LENGTH								15
(30) YEAR OF AVERAGE DAILY TRAFFIC	2020									
(109) AVERAGE DAILY TRUCK TRAFFIC	12									
GEOMETRIC DATA										
(48) LENGTH OF MAX SPAN (ft.)	25.9	(49) STRUCTURE LENGTH (ft.)								143
(50) CURB/SIDEWALK WIDTHS (ft.)	LEFT 1	RIGHT 1								
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.)	18.4									
(52) DECK WIDTH, OUT-TO-OUT (ft.)	22.3									
(32) APPROACH ROADWAY WIDTH (ft.)	29.9									
(33) BRIDGE MEDIAN	0	(34) SKEW (DEG.)								0
(35) STRUCTURE FLARED	0	(10) INV RTE, MIN VERT CLEAR (ft.)								99.99
(47) TOTAL HORIZONTAL CLEARANCE (ft.)	18.4									
(53) VERTICAL CLEARANCE OVER BRIDGE ROADWAY (ft.)	99.99									
(54) VERTICAL UNDER CLEARANCE (ft.)	N								0	
(55) LATERAL UNDER CLEARANCE RIGHT (ft.)	N								0	
(56) MIN LATERAL UNDER CLEARANCE (ft.)	0									
PROPOSED IMPROVEMENTS										
(75A) TYPE OF WORK PROPOSED	31	(75B) WORK DONE BY								1
(76) LENGTH OF STRUCTURE IMPROVEMENT (ft.)	185									
(94) BRIDGE IMPROVEMENT COST (\$)	499000									
(95) ROADWAY IMPROVEMENT COST (\$)	50000									
(96) TOTAL PROJECT COST	1438000									
(97) YEAR OF IMPROVEMENT COST ESTIMATE	2011									
(114) FUTURE ADT	1200	(115) YEAR OF FUTURE ADT								2041
NAVIGATION DATA										
(38) NAVIGATION CONTROL	0									
(111) PIER OR ABUTMENT PROTECTION										
(39) NAV VERT CLEARANCE (ft.)	0									
(116) MIN NAVIGATION VERT CLEARANCE, VERT LIFT BRIDGE (ft.)										
(40) NAV HORIZONTAL CLEARANCE (ft.)	0									

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## Element Inspection

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
<b>16 - Reinforced Concrete Top Flange</b>	Ben.	2637	sq. ft.	0	2637	0	0
1080 - Delamination/Spall/Patched Area		2		0	2	0	0
1190 - Abrasion/Wear (PSC/RC)		2635		0	2635	0	0
<b>110 - Reinforced Concrete Open Girder/Beam</b>	Ben.	390	ft.	380	0	10	0
1130 - Cracking (RC and Other)		10		0	0	10	0
<b>205 - Reinforced Concrete Column</b>	Ben.	8	each	7	1	0	0
1080 - Delamination/Spall/Patched Area		1		0	1	0	0
<b>215 - Reinforced Concrete Abutment</b>	Ben.	50	ft.	50	0	0	0
<b>234 - Reinforced Concrete Pier Cap</b>	Ben.	200	ft.	192	8	0	0
1080 - Delamination/Spall/Patched Area		6		0	6	0	0
1090 - Exposed Rebar		2		0	2	0	0
<b>304 - Open Expansion Joint</b>	Ben.	74	ft.	74	0	0	0
<b>331 - Reinforced Concrete Bridge Railing</b>	Ben.	285	ft.	239	25	21	0
1080 - Delamination/Spall/Patched Area		46		0	25	21	0

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## ADMINISTRATION

### Structure Assessment

Structural/Functional Classification:	OK	Health Index:	0
Sufficiency Rating:	56.4	Replacement Index:	52.5

### Proposed Improvements

75A Type of Work Proposed:	31 - Replacement -	94 Bridge Improvement Cost:	499000	\$
75B Work Done By:	1 - Work to be done by contract	95 Roadway Improvement Cost:	50000	\$
76 Length Of Structure Improvement:	185	Ft.	96 Total Project Cost:	1438000
Project Notes:	1437805.5921495208	97 Year Of Improvement Cost Estimate:	2011	

### Original Construction

Project Number:	FAP-185(B)	Plans Available:	Unknown
Station:	543+20.5		

### Site Conditions

Snooper Required:	No	Site Vegetation:	Moderate
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Traffic control required: None

Utility Attachments:

<input type="checkbox"/> Water	<input type="checkbox"/> Sewer	<input type="checkbox"/> Telecom
<input type="checkbox"/> Gas	<input type="checkbox"/> Electric	<input type="checkbox"/> Other

Overhead Appurtenances:

<input type="checkbox"/> Sign Truss	<input type="checkbox"/> Signal	<input type="checkbox"/> Lighting
<input type="checkbox"/> Utility Line		<input type="checkbox"/> Other

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## Approach Report

### NBI Info

(36B) TRANSITIONS	0 - Does not meet acceptable standards/safety feature is required
(36C) APPROACH GUARDRAIL	0 - Does not meet acceptable standards/safety feature is required
(36D) APPROACH GUARDRAIL ENDS	1 - Meets acceptable standards
(72) APPROACH ROADWAY ALIGNMENT	6 - Equal to present minimum criteria

### Approach

Appr Guardrail-rear Left Position	Good	S
Appr Guardrail-rear Right Position	Good	S
Appr Guardrail-forward Left Position	Good	S
Appr Guardrail-forward Right Position	Good	S
Appr Roadway Condition	Good	
Appr Roadway Transitions	Good	

### Signage

End Of Bridge Markers	Good
Vertical Clearance Signing	NA
Posting Sign - Rear	NA
Posting Sign - Forward	NA
Posting Values Correct	NA
Valid Posting Limits	H TRUCK LIMIT - 29 TONS HS SHORT LIMIT - 40 TONS

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## DECK

### NBI Info

(58) DECK	5 - Fair Condition (minor section loss)
(036A) BRIDGE RAIL	0 - Does not meet acceptable standards/safety feature is required
(108A) WEARING SURFACE	0 - None
LEFT SHOULDER WIDTH	1.5 FT.
RIGHT SHOULDER WIDTH	1.5 FT.
ASBESTOS DRAINS	U
DECK AREA	3189 SQ FT.

### Full Bridge

	<u>Condition</u>	<u>Notes</u>
Structure:	Fair	MOD. DECK SCALING, DECK SPALL, SPAN 5, WEST BOUND LANE 2'X2.
Wearing Surface:	Poor	
Curbs:	NA	
Median:	NA	
Sidewalk:	NA	
Joints:	Poor	
Railing:	Fair	SPALL AND EXPOSED REBAR IN BRIDGERAIL, SPAN 3 NORTH SIDE 21.5'.
Drainage:	Good	
Lighting:	NA	
Utilities:	NA	
Overlay Thickness:	in	

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## SUPERSTRUCTURE

### NBI Info

(59) SUPERSTRUCTURE      5 - Fair Condition (minor section loss)

NUMBER OF BRIDGE PINS

FRACTURE CRITICAL DETAILS

### Full Bridge

#### CONDITION

	<u>Condition</u>	<u>Notes</u>
Girders:	Fair	VERTICAL CRACKS AT BEAM ENDS AT B-2 SPAN 2 BEAMS 1 AND 3, B-3 SPAN 3 BEAM 3, B-4 SPAN 4 BEAMS 1 AND 3.
Floor Beams:	NA	
Stringers:	NA	
Steel Risers:	NA	
Bearings:	NA	
Hinge Pins/Hangers:	NA	
Diaphragms/Cross Frames:	Good	
Paint:	NA	
Collision Damage:	NA	
Deflection/Vibration:	Good	
Cap/Girder Debris:	Good	
Navigation Lighting:		



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## SUBSTRUCTURE

### NBI Info

(60) SUBSTRUCTURE      5 - Fair Condition (minor section loss)

(111) PIER PROTECTION

### Abutments

	<u>Condition</u>	<u>Notes</u>
Backwall:	Good	
Bulkhead:	NA	
Wing Walls:	Good	
Cap:	Fair	DELAM AT FACE OF CAP AT BENT 2, UNDER BEAM 2, 2' X 3'. REBAR EXP. AT BOTTOM OF CAP AT BENT 4, 2'X2'. 3' X 6" SPALL/DELAM BOTTOM OF CAP BENT 2. LIGHT SPALL FACE OF CAP BENT 2 SPAN 2 BEAM 2, 1'X6".
Footings:	NA	
Piles:	NA	
Embankment:	Good	
Slope Paving:	NA	

### Full Bridge

	<u>Condition</u>	<u>Notes</u>
Cap:	Fair	
Risers:	NA	
Columns/Piles:	Fair	COL 2 BENT 2 SPALL WITH EXPOSED REBAR.
Footings:	NA	
Web Walls:	NA	
Bracing:	NA	
Pier Protection-Navigation:	NA	
Pier Protection Lighting:	NA	

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## Hydraulics Report

### NBI Info

(61) CHANNEL & CHANNEL PROTECTION	8 - Banks are protected
(113) SCOUR CRITICAL BRIDGES	5 - Scour within limits of footing or piles
(71) WATERWAY ADEQUACY	6 - Occasional Overtopping of Approaches - Insignificant Delays

### Hydraulics

DESIGN MAIN CHANNEL SPAN		CURRENT MAIN CHANNEL SPAN	
BANK CONDITION-UPSTREAM	Good		
BANK CONDITION-SITE	Good		
BANK CONDITION-DOWNSTREAM	Good		
SCOUR COUNTERMEASURES	Good		
<input type="checkbox"/> SPURS	<input type="checkbox"/> BENDWAY WEIRS	<input type="checkbox"/> DROP STRUCTURES	<input type="checkbox"/> HARDPOINTS
<input type="checkbox"/> JACKS	<input type="checkbox"/> LONGITUDINAL DIKES	<input type="checkbox"/> GUIDE BANKS	<input checked="" type="checkbox"/> RIPRAP
<input type="checkbox"/> GABIONS	<input type="checkbox"/> CRUTCH BENTS/UNDERPINNING	<input type="checkbox"/> CROSS BRACING	<input type="checkbox"/> SHEET PILE/COFFERDAM
<input type="checkbox"/> DEBRIS DEFLECTORS	<input type="checkbox"/> VISUAL SCOUR MONITORING	<input type="checkbox"/> FIXED SCOUR MONITORING INSTRUMENTATION	
STREAMBED MATERIAL			
<input type="checkbox"/> COBBLE/BOULDER	<input type="checkbox"/> GRAVEL	<input type="checkbox"/> SAND	<input type="checkbox"/> SILT
			<input checked="" type="checkbox"/> SILT-CLAY
UNKNOWN FOUNDATION			
SCOUR EVALUATION DONE		S	
USGS GAGING STATION		None	
OBSERVED STREAM VELOCITY		Low	
STREAMBED AGGRADATION EVIDENT		None	
STREAMBED DEGRADATION EVIDENT		Minor	
ABUTMENTS ENCROACH INTO CHANNEL		No	
INDICATIONS OF SCOUR		No	
EVIDENCE OF ABUTMENT UNDERMINING		No	
EVIDENCE OF PIER UNDERMINING		NA	
INDICATIONS THAT FLOODWATERS OVERTOP BRIDGE		No	
INDICATIONS THAT FLOODWATERS OVERTOP APPROACHES		No	
SCOUR NOTES			

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## Pictures



PHOTO 1    General  
Description    CLE

## Pictures



PHOTO 2    General, Superstructure  
Description    ELEVS



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## Pictures



PHOTO 2 General, Superstructure

Description ELEVN

## Pictures



PHOTO 3 Deck

Description DECK SCALINNG



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## Pictures



PHOTO 4 Deck

Description SPALL AND EXPOSED REBAR IN BRIDGERAIL SPAN 3.

## Pictures



PHOTO 5 Deck

Description DECK SPALL, SPAN 5, WEST BOUND LANE 2'X2.



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Pictures



PHOTO 6    General  
Description    CLW

Pictures



PHOTO 7    Substructure  
Description    REBAR EXP. AT BOTTOMOF CAP AT BENT 4, 2' X 2'.



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## Pictures



PHOTO 8      General, Substructure, Channel

Description      DS

## Pictures



PHOTO 9      General, Substructure, Channel

Description      US



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## Pictures



PHOTO 10 Substructure

Description SPALL BOTOM OF CAP BENT 2.

## Pictures



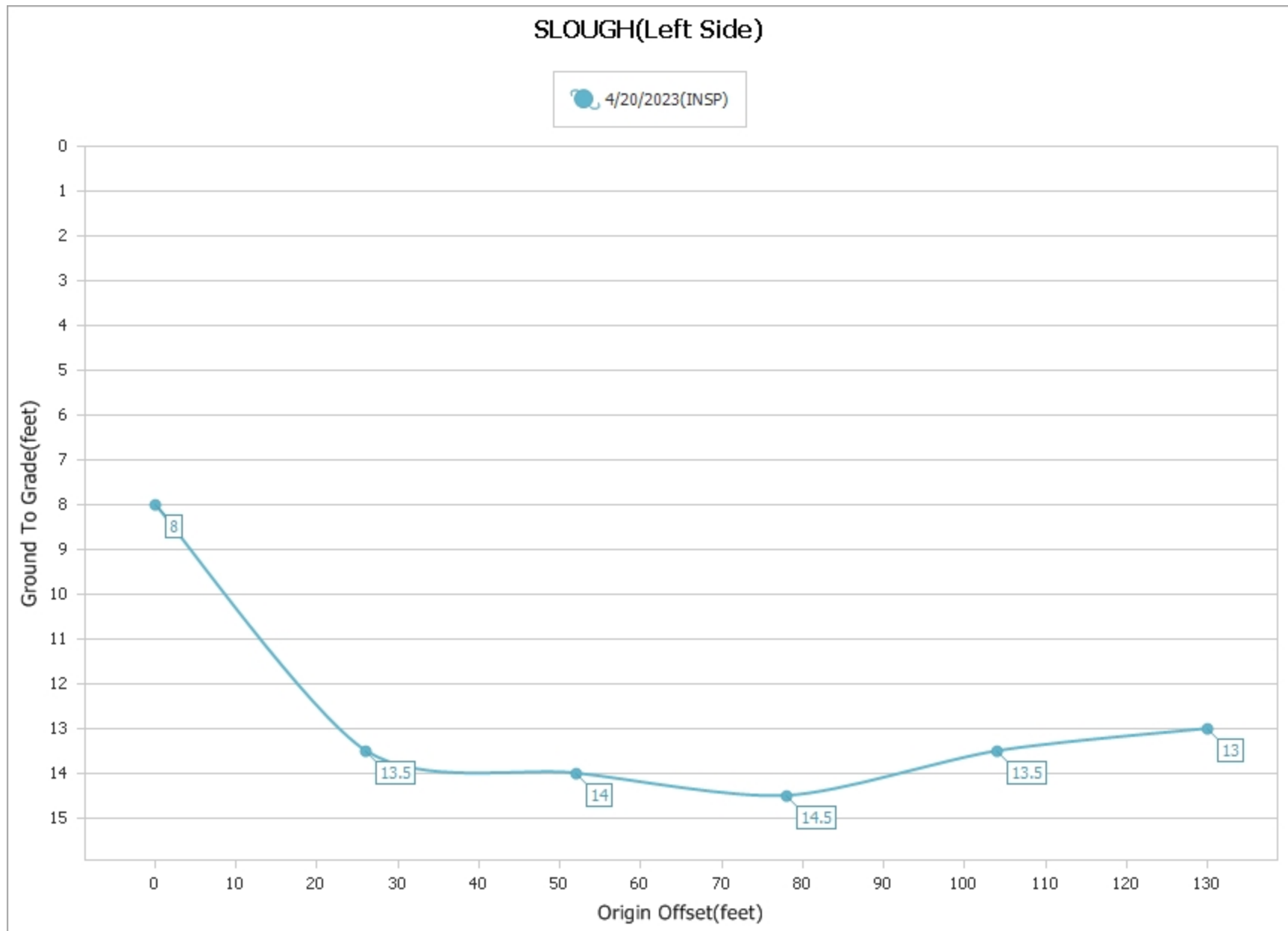
PHOTO 11 Substructure

Description DELAM AT FACE OF CAP AT BENT 2.

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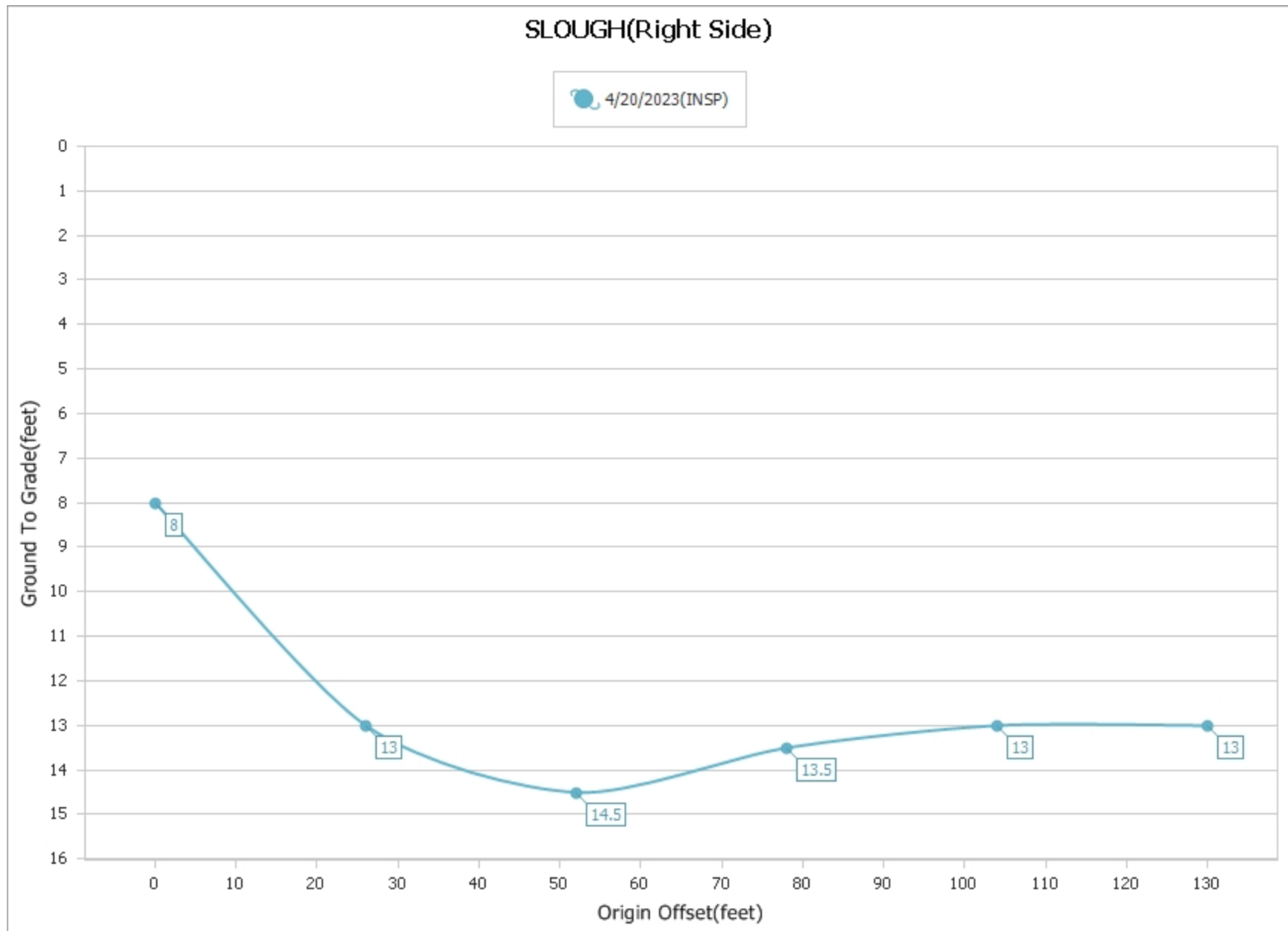


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