



Bridge Inspection Report

US 80

over

CHUNKY RIVER
NEWTON County

- INSPECTION DATE
02/14/2023
- STRUCTURE NUMBER
210008005112250
- BRIDGE ID
13542



Sufficiency Rating:
62.1

Health Index:
100.00

Status:
OK

Inspected By: Team Leader Jeff McGee

Taylor Coker, Jeff McGee, Bryan Nutt,

Inspection Type(s): Routine

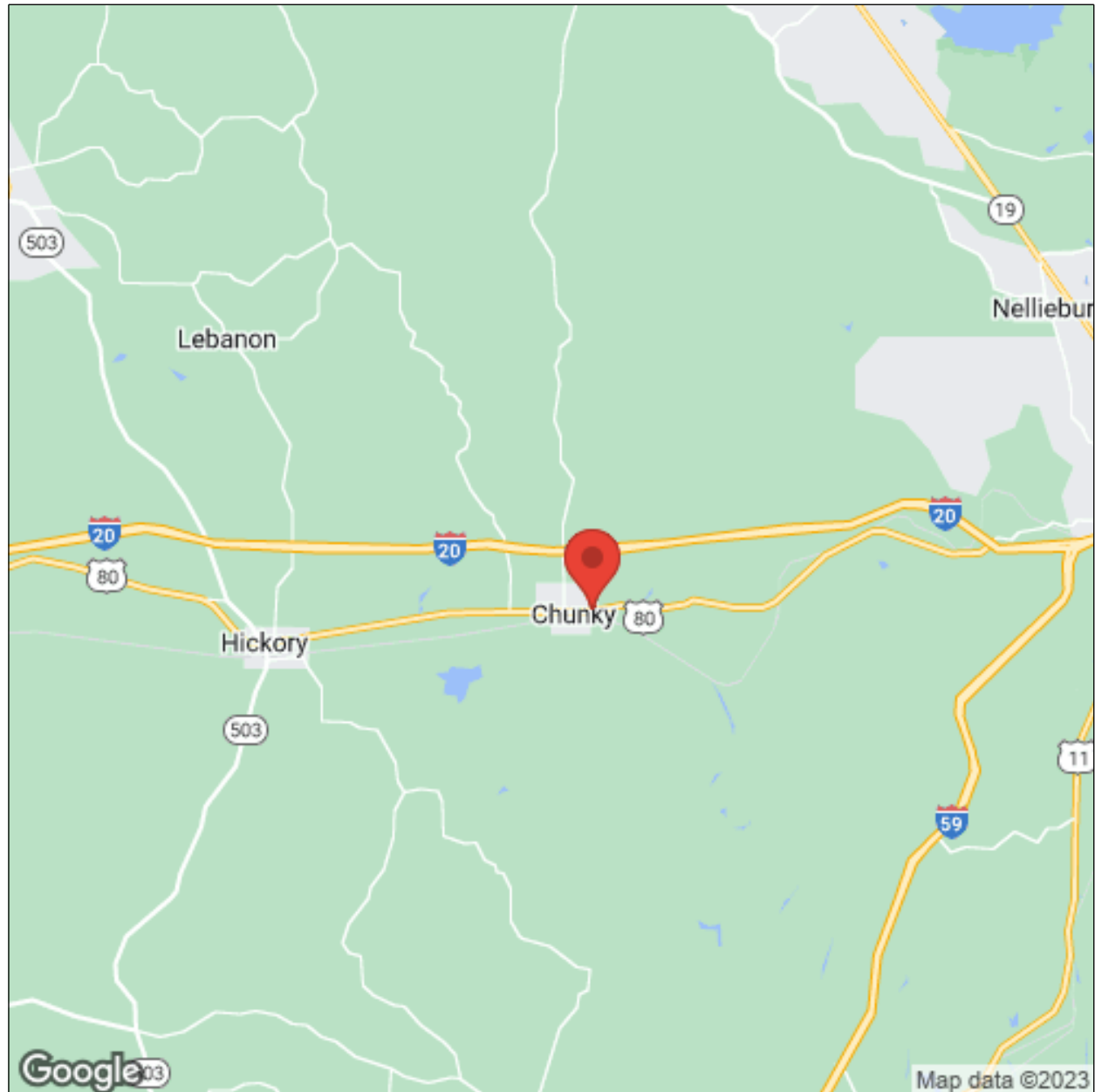
Inspection Performed By: State

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Location Map



Latitude: 32.326388

Longitude: -88.922033

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Executive Summary

2023:

DECK:

- 1.HEAVY DECK SCALING.
- 2.MOD. DECK CRACKING.
- 3.DEBRIS IN THE CURBLINE.
- 4.COMP. JOINTS FAILED AT **BENTS 9 AND 10.**
- 5.2 DELAMS AT BOTTOM OF **SPAN 11**, 3' X 2' EACH.
- 6.1 SPALL AT BOTTOM OF SPAN 12, BENT 13, 2' X 6".
- 7.NEW STRIP SEAL JOINTS 2023.

SUPER:

- 1.VC AT ABUTMENT AT **BENT 1**, EXTENDS UP THRU CAP ALSO.
- 2.EXPOSED REBAR IN DIA AT **BENT 6, SPAN 6, BAY 2**, 1'
- 3.BEAM 1 AT **BENT 9, SPAN 8** HAS 6' HORZ. CRACK, APPEARS TO GO ALL THE WAY THROUGH.
- 4.VC'S AT THE BACK ENDS OF BEAMS AT SUPERSTRUCTURE, AS LISTED:

- **SPAN 2, BENT 2, BEAMS 1 AND 3. REPAIRED**
- **SPAN 3, BENT 3, BEAM 1.REPAIRED 2023**
- **SPAN 4,BENT 4, BEAM 3.REPAIRED 2023**
- **SPAN 4, BENT 5, BEAM 1.REPAIRED 2023**
- **SPAN 5,BENT 5, BEAMS 1 AND 3.REPAIRED 2023**
- **SPAN 5,BENT 6, BEAM 1.**
- **SPAN 8, BENT 8, BEAMS 1 AND 3.**
- **SPAN 8, BENT 9, BEAMS 1 AND 3. 1 AND 2 REPAIRED AND BEAM 3 HAS SMALL CRACK! 2023**
- **SPAN 11, BENT 12, BEAM 1.**

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- **SPAN 12, BENT 13, BEAMS 1 AND 3**

6.BEAM 2 AT **BENT 10, SPAN 10** HAS 3' HORZ./SHEAR CRACK, APPEARS TO GO ALL THE WAY THROUGH.

7.SPALL IN DIA.2 AT **B-11,SPAN 11** 1'x2'.

8.BEAM 2 AT B-11 SPAN 11 HAS 2' HORZ. CRACK.

9. HOR. CRACK LENGTH OF BEAM 3 **SPAN 12**.

10. CHANGED SUPER TO A 3 DUE TO BENTS 9 AND 10.

SUB:

1.EXP. REBAR AT COL 1 AT **SPAN 1,BENT 2** , 3 LOC.

2.4' VC AT COL 2 AT **BENT 2, SPAN 1**.

3.EXP. REBAR AT COL 2 AT **BENT 4** , ALSO SMALL DELAM.

4.STEEL PLATES OK AT **BENT 9**.

5.SPALL AT FACE OF CAP AT **BENT 11, SPAN 11** , BEAM 1.

CHANNEL:

1.LOCAL SCOUR AT **BENTS 4-8** , BY COL 1 EACH.

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National Bridge Inventory

IDENTIFICATION						INSPECTIONS	
(1) STATE CODE	284 - Mississippi					(90) INSPECTION DATE	02/14/2023
(8) STRUCTURE NUMBER	210008005112250					(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	101			A. FRACTURE CRITICAL DETAIL	N
(4) PLACE CODE	93411					B. UNDERWATER INSPECTION	N
(6) FEATURES INTERSECTED	CHUNKY RIVER					C. OTHER SPECIAL	N
(7) FACILITY CARRIED	US 80					CONDITION	
(9) LOCATION	6.2 MI E SR 503					(58) DECK	5
(11) MILEPOINT	24.243	(12) BASE HIGHWAY NETWORK	0			(59) SUPERSTRUCTURE	6
(13A) LRS INVENTORY ROUTE	000000080P	(13B) SUBROUTE NUMBER	1			(60) SUBSTRUCTURE	6
(16) LATITUDE	32.326388	(17) LONGITUDE	-88.922033			(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						(31) DESIGN LOAD	2
(43) STRUCTURE TYPE, MAIN						(63) METHOD USED TO DETERMINE OPERATING RATING	1
A) KIND OF MATERIAL/DESIGN:	3 - Steel					(64) OPERATING RATING	40.1
B) TYPE OF DESIGN/CONSTR:	02 - Stringer/Multi-beam or Girder					(65) METHOD USED TO DETERMINE INVENTORY RATING	1
(44) STRUCTURE TYPE, APPROACH SPANS						(66) INVENTORY RATING	24.1
A) KIND OF MATERIAL/DESIGN:	1 - Concrete					(70) BRIDGE POSTING	3
B) TYPE OF DESIGN/CONSTR:	04 - Tee Beam					(41) STRUCTURE OPEN/POSTED/CLOSED	P
(45) NUMBER OF SPANS IN MAIN	1	(46) NUMBER OF APPROACH	13			APPRAISAL	
(107) DECK STRUCTURE TYPE	1	(108A) WEARING SURFACE	0			(67) STRUCTURAL EVALUATION	5
(108B) DECK MEMBRANE	0	(108C) DECK PROTECTION	0			(68) DECK GEOMETRY	3
AGE OF SERVICE						(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL	N
(27) YEAR BUILT	1929	(106) YEAR RECONSTRUCTED	1992			(71) WATERWAY ADEQUACY	7
(42) TYPE OF SERVICE	ON 1	UNDER	5			(72) APPROACH ROADWAY ALIGNMENT	4
(28) LANES	ON 02	UNDER	00			(36) TRAFFIC SAFETY FEATURE	
(29) AVERAGE DAILY TRAFFIC	980	(19) BYPASS DETOUR LENGTH	15			36A) BRIDGE RAILINGS:	0
(30) YEAR OF AVERAGE DAILY TRAFFIC	2020					36B) TRANSITIONS:	0
(109) AVERAGE DAILY TRUCK TRAFFIC	11					36C) APPROACH GUARDRAIL:	0
GEOMETRIC DATA						36D) APPROACH GUARDRAIL ENDS:	1
(48) LENGTH OF MAX SPAN (ft.)	120.1	(49) STRUCTURE LENGTH (ft.)	534.1			(113) SCOUR CRITICAL BRIDGES	5
(50) CURB/SIDEWALK WIDTHS (ft.)	LEFT .7	RIGHT	.7			SUFFICIENCY RATING	62.1
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.)			20			STATUS	2
(52) DECK WIDTH, OUT-TO-OUT (ft.)			23.6			CLASSIFICATION	
(32) APPROACH ROADWAY WIDTH (ft.)			29.9			(112) NBIS BRIDGE LENGTH	Y
(33) BRIDGE MEDIAN	0	(34) SKEW (DEG.)	0			(104) HIGHWAY SYSTEM OF THE INVENTORY ROUTE	0
(35) STRUCTURE FLARED	0	(10) INV RTE, MIN VERT CLEAR (ft.)	99.99			(26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE	07
(47) TOTAL HORIZONTAL CLEARANCE (ft.)			19.7			(100) STRAHNET HIGHWAY DESIGNATION	0
(53) VERTICAL CLEARANCE OVER BRIDGE ROADWAY (ft.)			99.99			(101) PARALLEL STRUCTURE DESIGNATION	N
(54) VERTICAL UNDER CLEARANCE (ft.)			N	0		(102) DIRECTION OF TRAFFIC	2
(55) LATERAL UNDER CLEARANCE RIGHT (ft.)			N	0		(103) TEMP STRUCTURE	
(56) MIN LATERAL UNDER CLEARANCE (ft.)			0			(105) FEDERAL LANDS HIGHWAYS	0
PROPOSED IMPROVEMENTS						(110) DESIGNATED NATIONAL NETWORK	0
(75A) TYPE OF WORK PROPOSED	31	(75B) WORK DONE BY	1			(20) TOLL	3
(76) LENGTH OF STRUCTURE IMPROVEMENT (ft.)	663.7					(21) MAINTENANCE RESPONSIBILITY	01
(94) BRIDGE IMPROVEMENT COST (\$)	1942000					(22) OWNER	01
(95) ROADWAY IMPROVEMENT COST (\$)	194000					(37) HISTORICAL	5
(96) TOTAL PROJECT COST	5422000					NAVIGATION DATA	
(97) YEAR OF IMPROVEMENT COST ESTIMATE	2011					(38) NAVIGATION CONTROL	0
(114) FUTURE ADT	990	(115) YEAR OF FUTURE ADT	2041			(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
12 - Reinforced Concrete Deck	Ben.	2895	sq. ft.	2895	0	0	0
16 - Reinforced Concrete Top Flange	Ben.	7793	sq. ft.	0	7793	0	0
1080 - Delamination/Spall/Patched Area		18		0	18	0	0
1190 - Abrasion/Wear (PSC/RC)		7775		0	7775	0	0
107 - Steel Open Girder/Beam	Ben.	486	ft.	486	0	0	0
110 - Reinforced Concrete Open Girder/Beam	Ben.	1217	ft.	1215	2	0	0
1130 - Cracking (RC and Other)		2		0	2	0	0
205 - Reinforced Concrete Column	Ben.	22	each	22	0	0	0
210 - Reinforced Concrete Pier Wall	Ben.	60	ft.	60	0	0	0
215 - Reinforced Concrete Abutment	Ben.	60	ft.	59	1	0	0
1130 - Cracking (RC and Other)		1		0	1	0	0
234 - Reinforced Concrete Pier Cap	Ben.	221	ft.	218	3	0	0
1080 - Delamination/Spall/Patched Area		3		0	3	0	0
300 - Strip Seal Expansion Joint	Ben.	260	ft.	260	0	0	0
311 - Movable Bearing	Ben.	8	each	8	0	0	0
515 - Steel Protective Coating		8	sq. ft.	8	0	0	0
330 - Metal Bridge Railing	Ben.	1070	ft.	1070	0	0	0
331 - Reinforced Concrete Bridge Railing	Ben.	1070	ft.	1070	0	0	0

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ADMINISTRATION

Structure Assessment

Structural/Functional Classification:	OK	Health Index:	100.00
Sufficiency Rating:	62.1	Replacement Index:	51.5

Proposed Improvements

75A Type of Work Proposed:	31 - Replacement -	94 Bridge Improvement Cost:	1942000	\$
75B Work Done By:	1 - Work to be done by contract	95 Roadway Improvement Cost:	194000	\$
76 Length Of Structure Improvement:	663.7	Ft.	96 Total Project Cost:	5422000
Project Notes:	5421613.0896647712	97 Year Of Improvement Cost Estimate:	2011	

Original Construction

Project Number:	FAP-6 REOP	Plans Available:	Unknown
Station:	569+26.5		

Site Conditions

Snooper Required:	Yes	Site Vegetation:	None
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Traffic control required:

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	4 - Meets minimum tolerable limits to be left in place as is

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	

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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	.5	FT.	
RIGHT SHOULDER WIDTH	.5	FT.	
ASBESTOS DRAINS	U		
DECK AREA	12605	SQ FT.	
Full Bridge			

	<u>Condition</u>	<u>Notes</u>
Structure:	Fair	
Wearing Surface:	Poor	
Curbs:	NA	
Median:	NA	
Sidewalk:	NA	
Joints:	Good	
Railing:	Good	
Drainage:	Good	
Lighting:	NA	
Utilities:	NA	
Overlay Thickness:	in	

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SUPERSTRUCTURE

NBI Info

(59) SUPERSTRUCTURE 6 - Satisfactory Condition (minor deterioration)

NUMBER OF BRIDGE PINS

FRACTURE CRITICAL DETAILS

Full Bridge

CONDITION

	<u>Condition</u>	<u>Notes</u>
Girders:	Fair	
Floor Beams:	NA	
Stringers:	NA	
Steel Risers:	NA	
Bearings:	Good	
Hinge Pins/Hangers:	NA	
Diaphragms/Cross Frames:	NA	
Paint:	NA	
Collision Damage:	NA	
Deflection/Vibration:	Good	
Cap/Girder Debris:	Fair	
Navigation Lighting:	NA	

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SUBSTRUCTURE

NBI Info

(60) SUBSTRUCTURE 6 - Satisfactory Condition (minor deterioration)

(111) PIER PROTECTION

Abutments

	<u>Condition</u>	<u>Notes</u>
Backwall:	Good	
Bulkhead:	NA	
Wing Walls:	Good	
Cap:	Good	
Footings:	NA	
Piles:	NA	
Embankment:	Good	
Slope Paving:	NA	

Full Bridge

	<u>Condition</u>	<u>Notes</u>
Cap:	Good	
Risers:	NA	
Columns/Piles:	Good	
Footings:	NA	
Web Walls:	Good	
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 7 - Slight Chance of Overtopping Bridge

Hydraulics

DESIGN MAIN CHANNEL SPAN	9	CURRENT MAIN CHANNEL SPAN	9
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 type="checkbox"/> SILT-CLAY
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UNKNOWN FOUNDATION

SCOUR EVALUATION DONE

USGS GAGING STATION	None
OBSERVED STREAM VELOCITY	Low
STREAMBED AGGRADATION EVIDENT	None
STREAMBED DEGRADATION EVIDENT	None
ABUTMENTS ENCROACH INTO CHANNEL	No
INDICATIONS OF SCOUR	Yes
EVIDENCE OF ABUTMENT UNDERMINING	No
EVIDENCE OF PIER UNDERMINING	No
INDICATIONS THAT FLOODWATERS OVERTOP BRIDGE	No
INDICATIONS THAT FLOODWATERS OVERTOP APPROACHES	No
SCOUR NOTES	LOCAL SCOUR AT BENT 5 AND 6

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Pictures



PHOTO 1 General, Superstructure
Description ELEVS

Pictures



PHOTO 2 General
Description CLE

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Pictures



PHOTO 3 General
Description ELEVN

Pictures



PHOTO 4 Superstructure
Description BEAM END REPAIR B-2

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Pictures



PHOTO 5 Superstructure

Description BEAM END REPAIR B-4

Pictures



PHOTO 6 Superstructure

Description B-8 SPAN 8 BEAM 1 AND 2 REPAIRED

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Pictures



PHOTO 7 Superstructure
Description B-8 SPAN 8 BEAM 3 NOT REPAIRED, CRACK.

Pictures



PHOTO 8 General, Substructure, Channel
Description DS

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Pictures



PHOTO 9 General, Substructure, Channel
Description US

Pictures



PHOTO 10 Deck
Description MOD. DECK CRACKING.

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Pictures



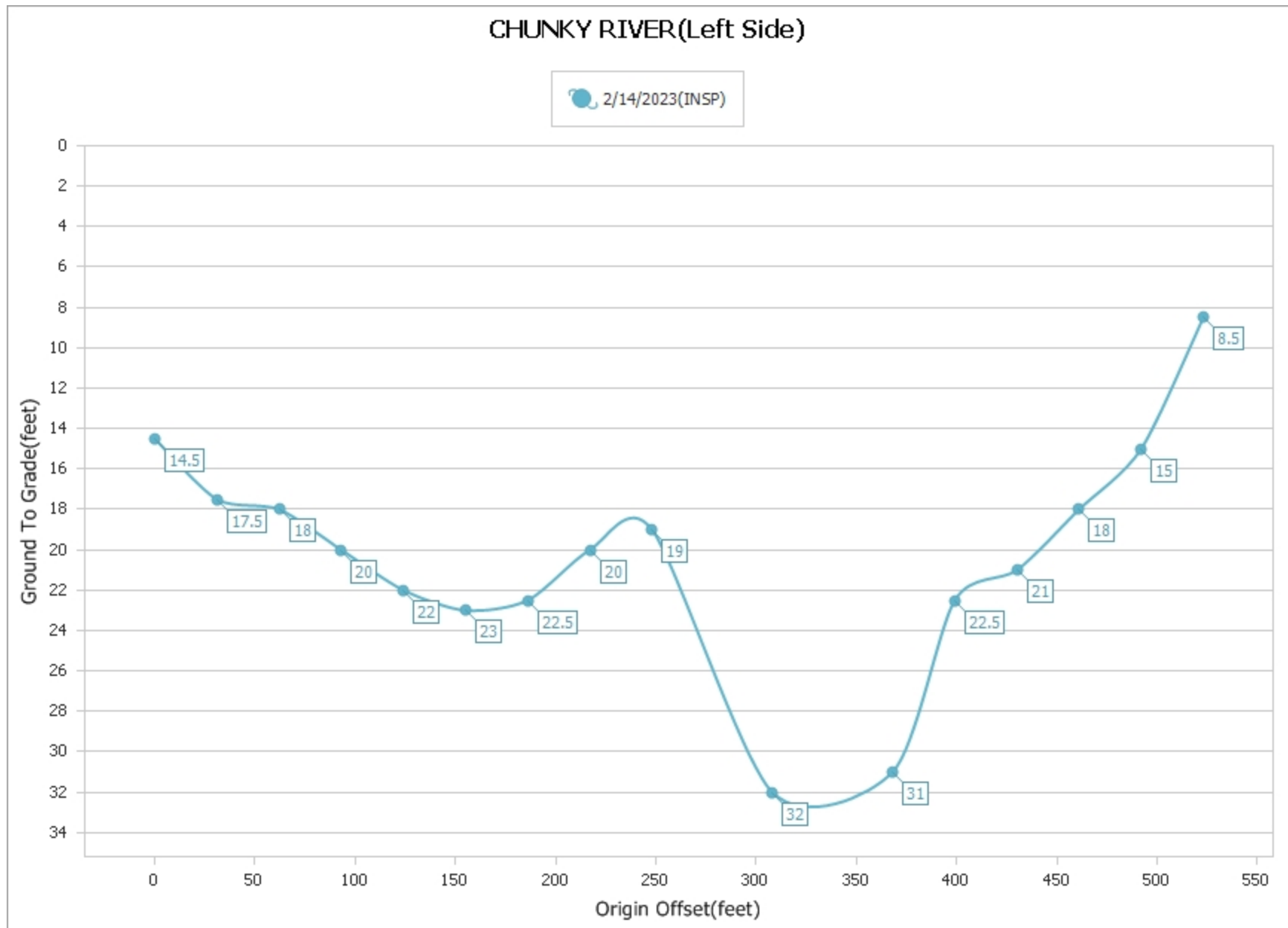
PHOTO 11 Superstructure

Description BEAM REPAIR. BENT 10

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Location: 6.2 MI E SR 503

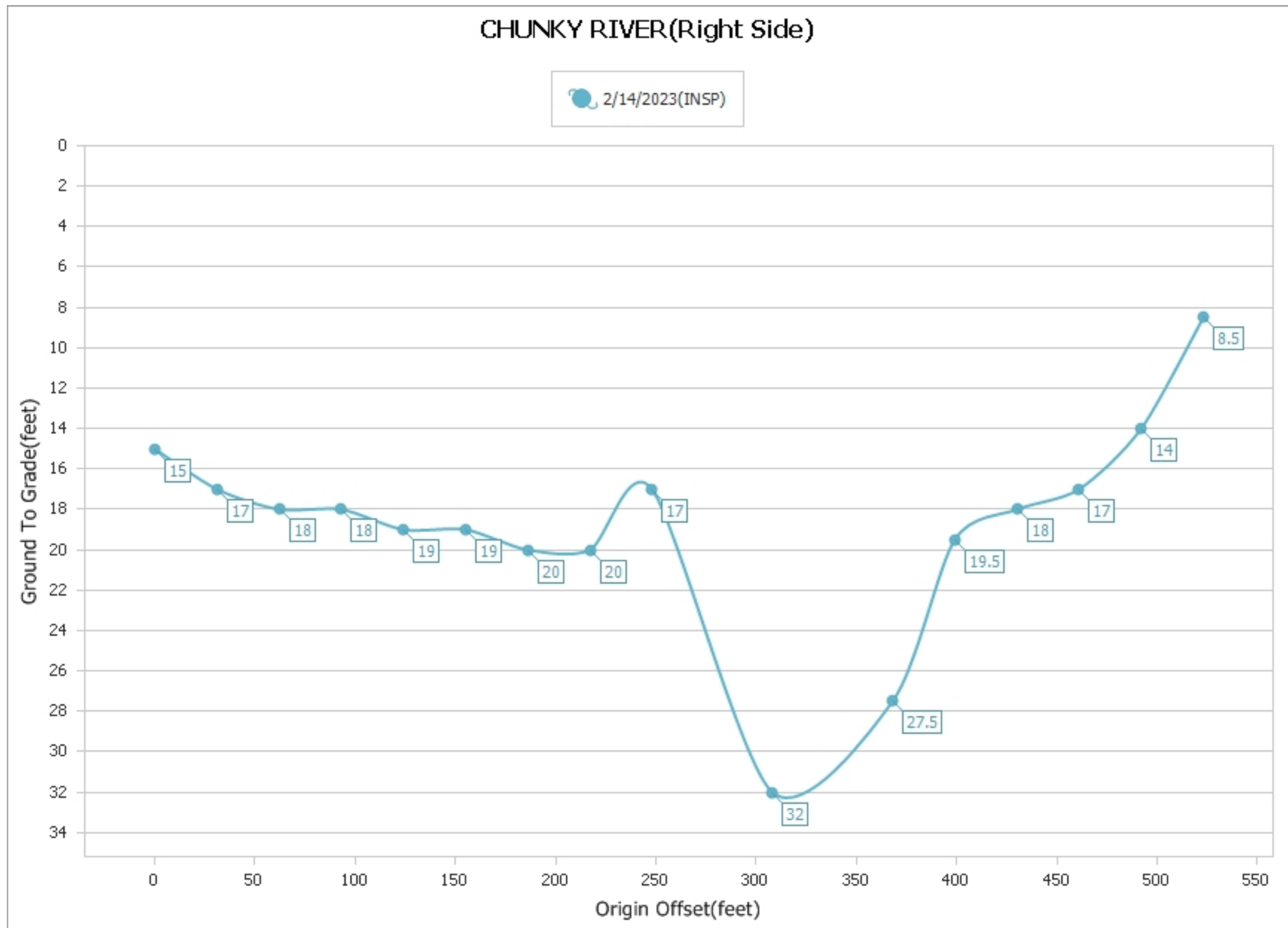


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Feature Intersected: CHUNKY RIVER
Location: 6.2 MI E SR 503



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