



Bridge Inspection Report

US 80

over

TURKEY CREEK

NEWTON County

- INSPECTION DATE
02/14/2023
- STRUCTURE NUMBER
210008005111170
- BRIDGE ID
13534



Sufficiency Rating:
52.4

Health Index:
100.00

Status:
OK

Inspected By: Team Leader Jeff McGee

Taylor Coker, Jeff McGee, Bryan Nutt,

Inspection Type(s): Routine

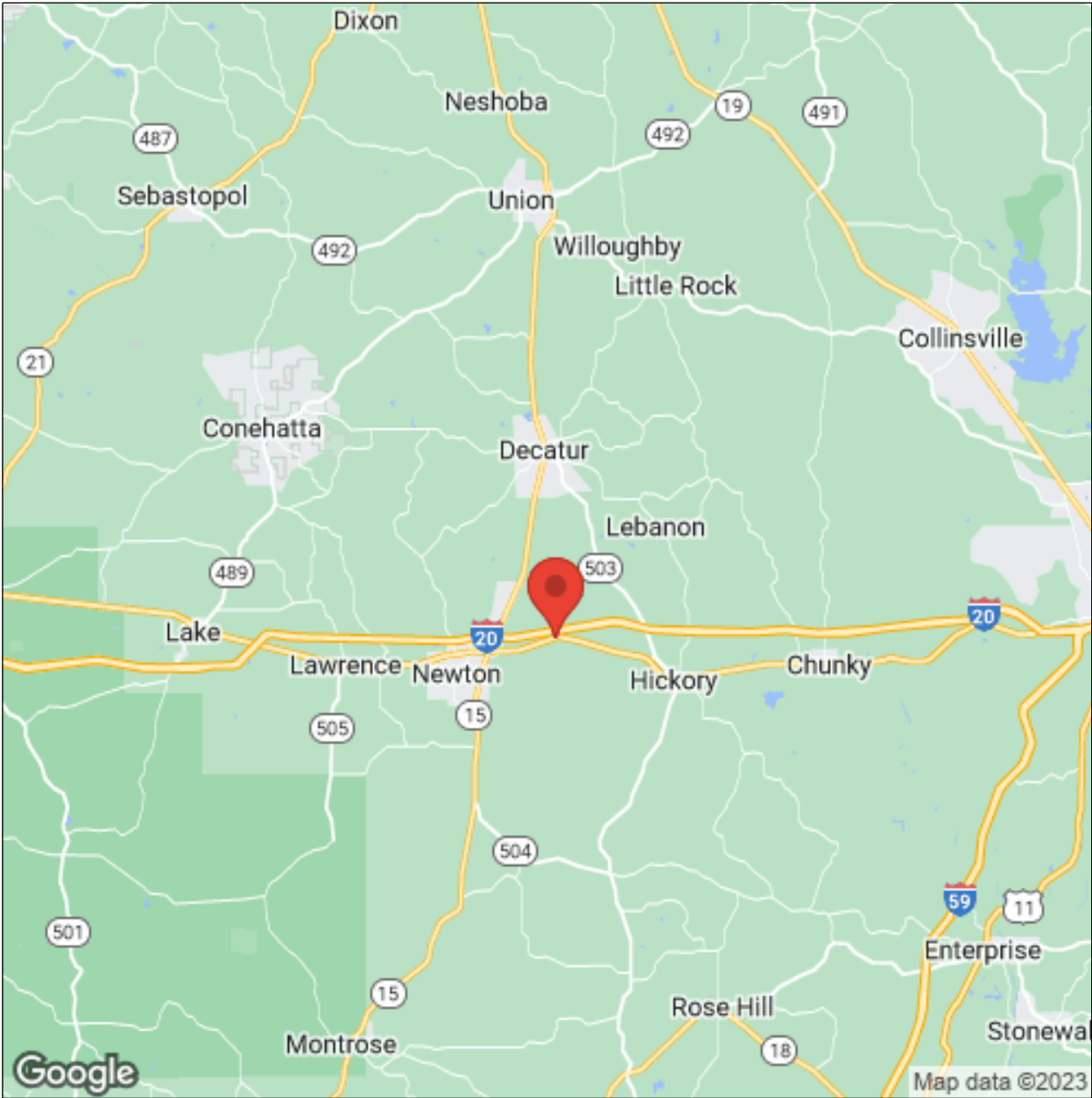
Inspection Performed By: State

TABLE OF CONTENTS

	PAGE NUMBER
LOCATION MAP BRIDGE	1
EXECUTIVE SUMMARY	2
NATIONAL BRIDGE INVENTORY	4
ELEMENTS	5
ADMINISTRATION	6
APPROACH	7
DECK	8
SUPERSTRUCTURE	9
SUBSTRUCTURE	10
HYDRAULICS	11
PICTURES	12

County:	NEWTON	Structure Number:	210008005111170	Facility Carried:	US 80
Inspection Date:	02/14/2023	Bridge ID:	13534	Feature Intersected:	TURKEY CREEK

Location Map



Latitude: 32.339816

Longitude: -89.100779

County:	NEWTON	Structure Number:	210008005111170	Facility Carried:	US 80
Inspection Date:	02/14/2023	Bridge ID:	13534	Feature Intersected:	TURKEY CREEK

Executive Summary

2023 Inspection:

DECK: Fair Condition

- 1.LIGHT DECK SCALING AND CRACKING
- 2.ASPHALT OVERLAY AT SPAN 7,1"FAILING PATCHED AREAS.
- 3.REPAIR FAILING AT BRIDGE RAIL AT B-3,SOUTH SIDE.
- 4.DECK REPAIR FAILED AT SPAN 3 18'X6" 24'X20' TOTAL.
- 5 BRIDGERAIL DAMAGE AT SPAN 6 NORTH SIDE 15'
- 6.BRIDGERAIL DAMAGE SPAN 1 NORTH SIDE 10' PATCHED WITH GUARDRAIL

SUPER: Fair Condition

- 1.VC'S AT R/C BEAMS LIGHT
- 2.SPAN 1 BENT 2 BEAM 1 AND 3 VC AT THE BACK END OF BEAM,
- 3.SPAN 2 BENT 3 BEAM 1
- 4.SPAN 3 BENT 4 BEAM 1AND 2
- 5.SPAN 4 BENT 5 BEAM1 AND 2
- 6.SPAN 5 BENT 5 BEAM 1 AND 3
- 7.SPAN 6 BENT 7 BEAM 1
- 8.SPAN 6 BENT 6 BEAM 3
- 9SPAN 7 BENT 7 BEAM 3
- 19.B-7 SPAN 7 AT BEAM 1 2'X4" EXP REINF.

CHANNEL: Fair Condition

- 1.MOD SCOUR AT BENTS 2 AND 3
- 2.MOD SCOUR AT BOTH BANKS

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Inspection Date:	02/14/2023	Bridge ID:	13534	Feature Intersected:	TURKEY CREEK

SUB: Fair Condition

- 1 SPALL AT FACE OF CAP AT SPAN 6 BENT 7 UNDER BEAM 3 3'X2'
- 2 SPALL AT FACE OF CAP AT SPAN 3 BENT 4 UNDER BEAM 3 2'X6"
- 3 SPALL AT FACE OF CAP AT SPAN 2 BENT 3 UNDER BEAM 2,1'X1'
- 4 SPALL IN FACE OF CAP BENT 5 SPAN 6 1'X1'

Recommendations:

- 1. Monitor and measure beams ends for any bearing loss.
- 2. Clean and patch Concrete Spalls

County:	NEWTON	Structure Number:	210008005111170	Facility Carried:	US 80
Inspection Date:	02/14/2023	Bridge ID:	13534	Feature Intersected:	TURKEY CREEK

National Bridge Inventory

IDENTIFICATION						INSPECTIONS	
(1) STATE CODE	284 - Mississippi					(90) INSPECTION DATE	02/14/2023
(8) STRUCTURE NUMBER	210008005111170					(91) DESIGNATED INSPECTION FREQUENCY	12
(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	TURKEY CREEK					C. OTHER SPECIAL	N
(7) FACILITY CARRIED	US 80					CONDITION	
(9) LOCATION	2.5 MI E SR 15					(58) DECK	5
(11) MILEPOINT	13.313	(12) BASE HIGHWAY NETWORK	0			(59) SUPERSTRUCTURE	5
(13A) LRS INVENTORY ROUTE	000000080P	(13B) SUBROUTE NUMBER	1			(60) SUBSTRUCTURE	5
(16) LATITUDE	32.339816	(17) LONGITUDE	-89.100779			(61) CHANNEL & CHANNEL PROTECTION	6
(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:	1 - Concrete					(64) OPERATING RATING	39.2
B) TYPE OF DESIGN/CONSTR:	04 - Tee Beam					(65) METHOD USED TO DETERMINE INVENTORY RATING	1
(44) STRUCTURE TYPE, APPROACH SPANS						(66) INVENTORY RATING	23.6
A) KIND OF MATERIAL/DESIGN:						(70) BRIDGE POSTING	2
B) TYPE OF DESIGN/CONSTR:						(41) STRUCTURE OPEN/POSTED/CLOSED	P
(45) NUMBER OF SPANS IN MAIN	7	(46) NUMBER OF APPROACH	0			APPRAISAL	
(107) DECK STRUCTURE TYPE	1	(108A) WEARING SURFACE	6			(67) STRUCTURAL EVALUATION	5
(108B) DECK MEMBRANE	0	(108C) DECK PROTECTION	0			(68) DECK GEOMETRY	2
AGE OF SERVICE						(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL	N
(27) YEAR BUILT	1930	(106) YEAR RECONSTRUCTED				(71) WATERWAY ADEQUACY	4
(42) TYPE OF SERVICE	ON 1	UNDER 5				(72) APPROACH ROADWAY ALIGNMENT	6
(28) LANES	ON 02	UNDER 00				(36) TRAFFIC SAFETY FEATURE	
(29) AVERAGE DAILY TRAFFIC	1100	(19) BYPASS DETOUR LENGTH	10			36A) BRIDGE RAILINGS:	0
(30) YEAR OF AVERAGE DAILY TRAFFIC	2020					36B) TRANSITIONS:	0
(109) AVERAGE DAILY TRUCK TRAFFIC	11					36C) APPROACH GUARDRAIL:	1
GEOMETRIC DATA						36D) APPROACH GUARDRAIL ENDS:	1
(48) LENGTH OF MAX SPAN (ft.)	29.9	(49) STRUCTURE LENGTH (ft.)	228			(113) SCOUR CRITICAL BRIDGES	5
(50) CURB/SIDEWALK WIDTHS (ft.)	LEFT 1	RIGHT 1				SUFFICIENCY RATING	52.4
(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.)	292.7					(21) MAINTENANCE RESPONSIBILITY	01
(94) BRIDGE IMPROVEMENT COST (\$)	823000					(22) OWNER	01
(95) ROADWAY IMPROVEMENT COST (\$)	82000					(37) HISTORICAL	5
(96) TOTAL PROJECT COST	2340000					NAVIGATION DATA	
(97) YEAR OF IMPROVEMENT COST ESTIMATE	2011					(38) NAVIGATION CONTROL	0
(114) FUTURE ADT	1100	(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

County:	NEWTON	Structure Number:	210008005111170	Facility Carried:	US 80
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Element Inspection

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
16 - Reinforced Concrete Top Flange	Ben.	5385	sq. ft.	228	5157	0	0
1080 - Delamination/Spall/Patched Area		480		0	480	0	0
1190 - Abrasion/Wear (PSC/RC)		4677		0	4677	0	0
510 - Wearing Surfaces		708	sq. ft.	0	0	708	0
110 - Reinforced Concrete Open Girder/Beam	Ben.	670	ft.	629	0	41	0
1080 - Delamination/Spall/Patched Area		1		0	0	1	0
1130 - Cracking (RC and Other)		40		0	0	40	0
205 - Reinforced Concrete Column	Ben.	14	each	14	0	0	0
215 - Reinforced Concrete Abutment	Ben.	60	ft.	60	0	0	0
234 - Reinforced Concrete Pier Cap	Ben.	144	ft.	139	0	5	0
1080 - Delamination/Spall/Patched Area		5		0	0	5	0
301 - Pourable Joint Seal	Ben.	161	ft.	161	0	0	0
331 - Reinforced Concrete Bridge Railing	Ben.	456	ft.	424	0	7	25
7000 - Damage		32		0	0	7	25

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ADMINISTRATION

Structure Assessment

Structural/Functional Classification:	OK	Health Index:	100.00
Sufficiency Rating:	52.4	Replacement Index:	50.3

Proposed Improvements

75A Type of Work Proposed:	31 - Replacement -	94 Bridge Improvement Cost:	823000	\$
75B Work Done By:	1 - Work to be done by contract	95 Roadway Improvement Cost:	82000	\$
76 Length Of Structure Improvement:	292.7	Ft.	96 Total Project Cost:	2340000
Project Notes:	2340053.9173101247	97 Year Of Improvement Cost Estimate:	2011	

Original Construction

Project Number:	FAP-6 REOP	Plans Available:	Unknown
Station:	1172+80		

Site Conditions

Snooper Required:	No	Site Vegetation:	None
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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	1 - Meets acceptable standards
(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	Good
Posting Sign - Forward	Good
Posting Values Correct	Yes
Valid Posting Limits	HS SHORT LIMIT - 40 TONS

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Inspection Date:	02/14/2023	Bridge ID:	13534	Feature Intersected:	TURKEY CREEK

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	6 - Bituminous	
LEFT SHOULDER WIDTH	.5	FT.
RIGHT SHOULDER WIDTH	.5	FT.
ASBESTOS DRAINS	U	
DECK AREA	5381	SQ FT.
Full Bridge		

	<u>Condition</u>	<u>Notes</u>
Structure:	Fair	
Wearing Surface:	Fair	
Curbs:	NA	
Median:	NA	
Sidewalk:	NA	
Joints:	NA	
Railing:	Good	
Drainage:	Good	
Lighting:	NA	
Utilities:	NA	
Overlay Thickness:	1	in

County:	NEWTON	Structure Number:	210008005111170	Facility Carried:	US 80
Inspection Date:	02/14/2023	Bridge ID:	13534	Feature Intersected:	TURKEY CREEK

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	
Floor Beams:	NA	
Stringers:	NA	
Steel Risers:	NA	
Bearings:	NA	
Hinge Pins/Hangers:	NA	
Diaphragms/Cross Frames:	NA	
Paint:	NA	
Collision Damage:	NA	
Deflection/Vibration:	Good	
Cap/Girder Debris:	Good	
Navigation Lighting:	NA	

County:	NEWTON	Structure Number:	210008005111170	Facility Carried:	US 80
Inspection Date:	02/14/2023	Bridge ID:	13534	Feature Intersected:	TURKEY CREEK

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:	Good	
Footings:	NA	
Piles:	NA	
Embankment:	Good	
Slope Paving:	NA	

Full Bridge

	<u>Condition</u>	<u>Notes</u>
Cap:	Fair	
Risers:	NA	
Columns/Piles:	Good	
Footings:	NA	
Web Walls:	NA	
Bracing:	NA	
Pier Protection-Navigation:	NA	
Pier Protection Lighting:	NA	

County:	NEWTON	Structure Number:	210008005111170	Facility Carried:	US 80
Inspection Date:	02/14/2023	Bridge ID:	13534	Feature Intersected:	TURKEY CREEK

Hydraulics Report

NBI Info

(61) CHANNEL & CHANNEL PROTECTION 6 - Bank slump. widespread minor damage
 (113) SCOUR CRITICAL BRIDGES 5 - Scour within limits of footing or piles
 (71) WATERWAY ADEQUACY 4 - Occasional Overtopping of Deck and Approaches - Significant Delays

Hydraulics

DESIGN MAIN CHANNEL SPAN	6	CURRENT MAIN CHANNEL SPAN	6
BANK CONDITION-UPSTREAM	Fair		
BANK CONDITION-SITE	Fair		
BANK CONDITION-DOWNSTREAM	Fair		
SCOUR COUNTERMEASURES	NA		

<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 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 checked="" type="checkbox"/> SAND	<input checked="" type="checkbox"/> SILT	<input type="checkbox"/> SILT-CLAY
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UNKNOWN FOUNDATION

SCOUR EVALUATION DONE	S
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	NA
INDICATIONS THAT FLOODWATERS OVERTOP BRIDGE	No
INDICATIONS THAT FLOODWATERS OVERTOP APPROACHES	No
SCOUR NOTES	MOD. SCOUR TO BOTH BANKS

County:	NEWTON	Structure Number:	210008005111170	Facility Carried:	US 80
Inspection Date:	02/14/2023	Bridge ID:	13534	Feature Intersected:	TURKEY CREEK

Pictures



PHOTO 1 General, Superstructure
Description ELEVS

Pictures



PHOTO 2 General
Description CLE

County:	NEWTON	Structure Number:	210008005111170	Facility Carried:	US 80
Inspection Date:	02/14/2023	Bridge ID:	13534	Feature Intersected:	TURKEY CREEK

Pictures



PHOTO 3 General, Superstructure

Description ELEVN

Pictures



PHOTO 4 Superstructure

Description SPAN 1 BENT VC AT THE BACK END OF BEAM.

County:	NEWTON	Structure Number:	210008005111170	Facility Carried:	US 80
Inspection Date:	02/14/2023	Bridge ID:	13534	Feature Intersected:	TURKEY CREEK

Pictures



PHOTO 5 Deck

Description BRIDGERAIL DAMAGE SPAN 1 NORTH SIDE PATCHED WITH GUARDRAIL

Pictures



PHOTO 6 Superstructure

Description SPAN 2 BENT 2 BEAM 1.

County:	NEWTON	Structure Number:	210008005111170	Facility Carried:	US 80
Inspection Date:	02/14/2023	Bridge ID:	13534	Feature Intersected:	TURKEY CREEK

Pictures



PHOTO 7 Superstructure
Description SPAN 3 BENT 4 BEAM 1 AND 2.

Pictures



PHOTO 8 Superstructure
Description SPAN 5 BENT 5 BEAM 1 AND 2.

County:	NEWTON	Structure Number:	210008005111170	Facility Carried:	US 80
Inspection Date:	02/14/2023	Bridge ID:	13534	Feature Intersected:	TURKEY CREEK

Pictures



PHOTO 9 General, Substructure, Channel

Description DS

Pictures



PHOTO 10 General, Substructure, Channel

Description US

County:	NEWTON	Structure Number:	210008005111170	Facility Carried:	US 80
Inspection Date:	02/14/2023	Bridge ID:	13534	Feature Intersected:	TURKEY CREEK

Pictures



PHOTO 11 Substructure

Description SPAL AT FACE OF CAP AT SPAN 6 BENT 7

Pictures



PHOTO 12 Substructure

Description SPALL AT GACE OF CAP AT SPAN 3 BENT 4 UNDER BEAM 3.

County:	NEWTON	Structure Number:	210008005111170	Facility Carried:	US 80
Inspection Date:	02/14/2023	Bridge ID:	13534	Feature Intersected:	TURKEY CREEK

Pictures

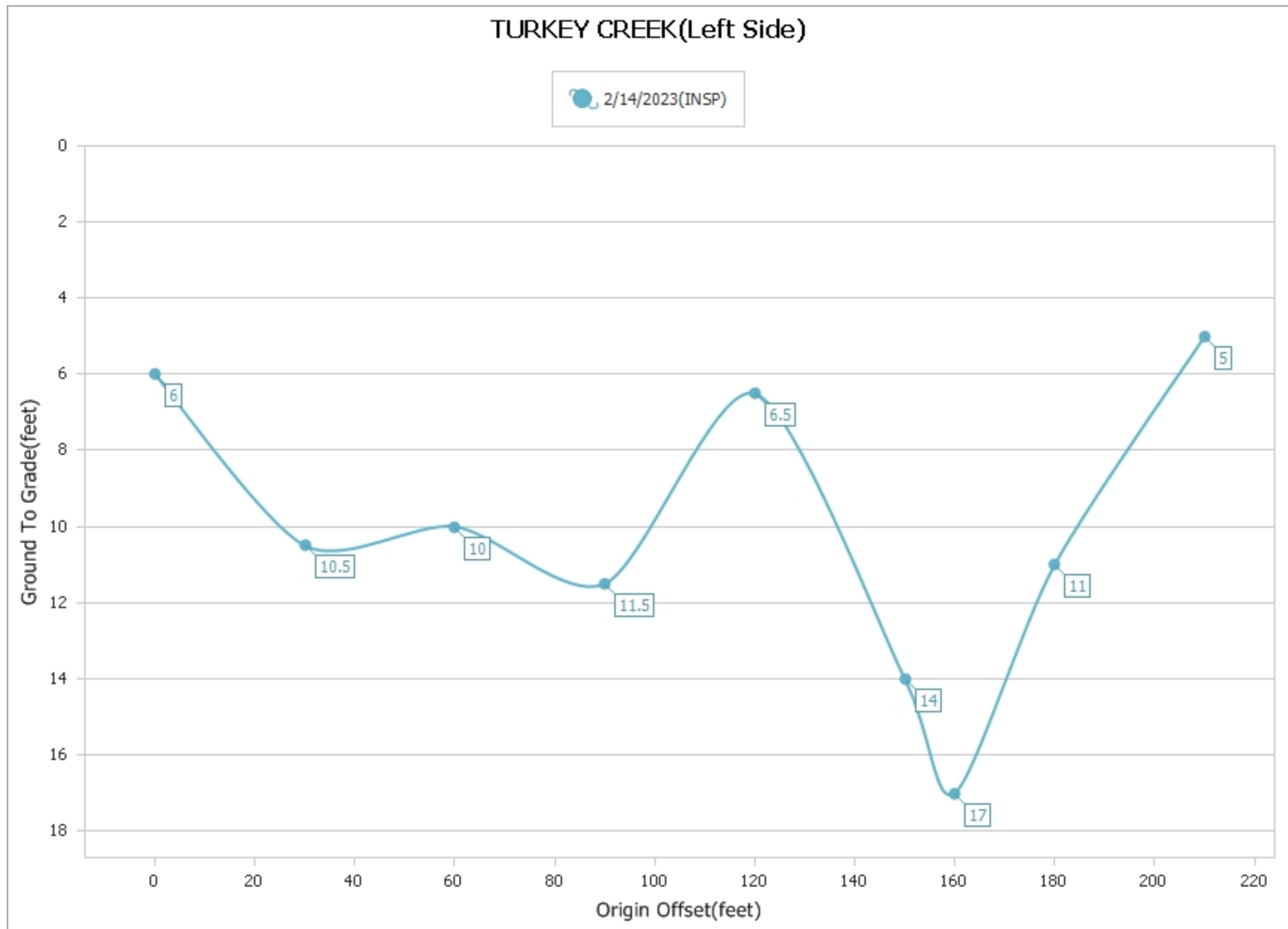


PHOTO 13 Deck
Description BRIDGERAIL DAMAGE AT SPAN 6 NORTH SIDE.

Structure#: 210008005111170
Bridge ID: 13534

County: Newton
Facility: US 80

Feature Intersected: TURKEY CREEK
Location: 2.5 MI E SR 15

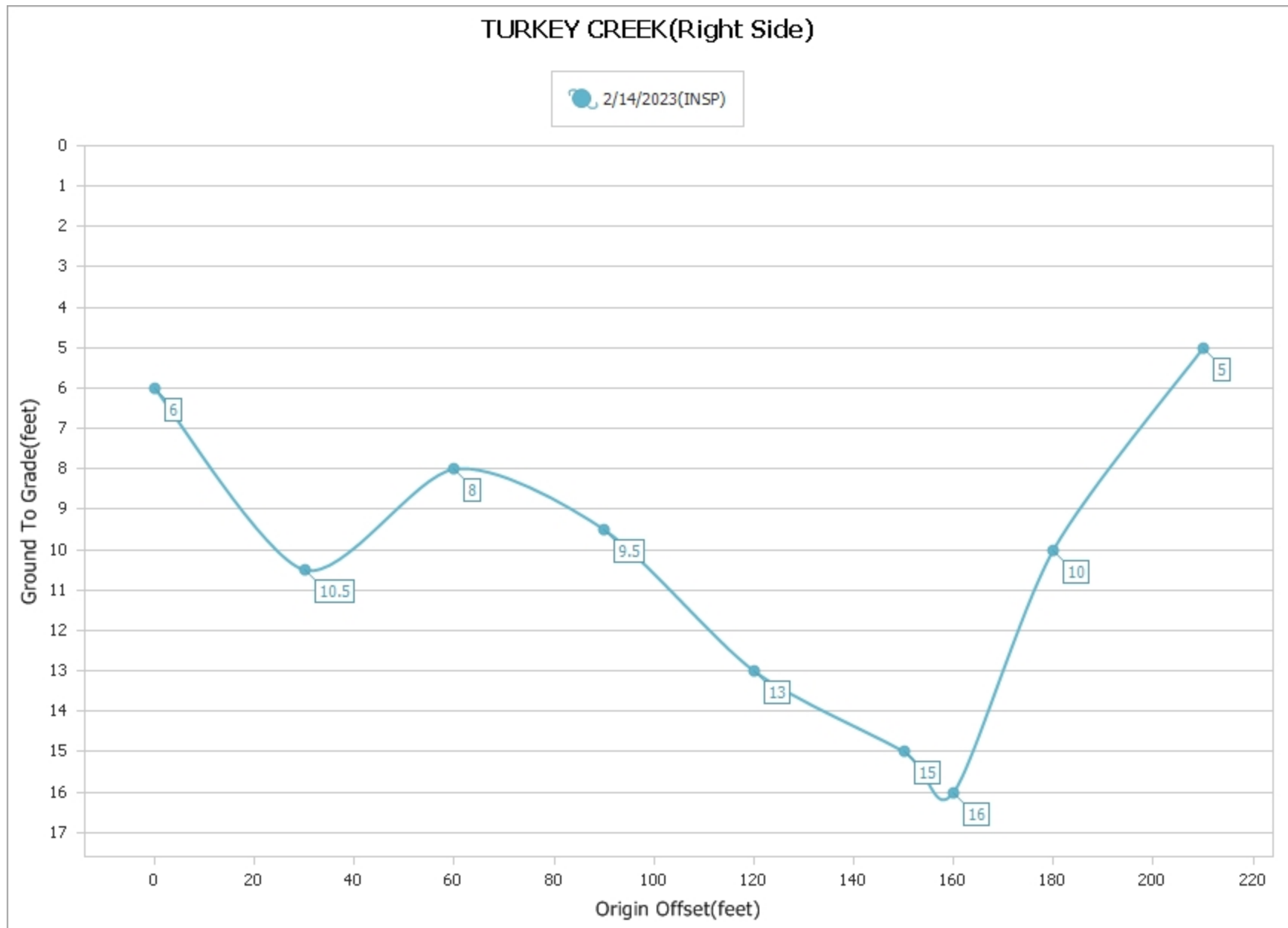


Print Date: 2/14/2023

Structure#: 210008005111170
Bridge ID: 13534

County: Newton
Facility: US 80

Feature Intersected: TURKEY CREEK
Location: 2.5 MI E SR 15



Print Date: 2/14/2023