



NC DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 STRUCTURE MANAGEMENT UNIT

ATTENTION: **PROMPT ACTION REQUEST, NEW REPAIR, CHANGE TO STRUCTURE DATA**

# Structure Safety Report

## Routine Element Inspection - Contract

STRUCTURE NUMBER: 100203      SAP STRUCTURE NO: 0110203      FHWA STRUCTURE NO: 00000000210203

DIVISION: 13      COUNTY: BUNCOMBE      INSPECTION DATE: 02/28/2023      FREQUENCY: 24 MONTHS

FACILITY CARRIED: SR2416      MILE POST: \_\_\_\_\_

LOCATION: .2 MI.W.JCT.SR2427

FEATURE INTERSECTED: BEETREE CREEK

LATITUDE: 35° 36' 45.46"      LONGITUDE: 82° 25' 37.23"

SUPERSTRUCTURE: REINFORCED CONCRETE DECK GIRDERS

SUBSTRUCTURE: ABUTS&PIER: REINFORCED CONCRETE

SPANS: 2 SPANS. SEE SPAN PROFILE SHEET FOR SPAN DETAILS

FRACTURE CRITICAL     TEMPORARY SHORING     SCOUR CRITICAL     SCOUR PLAN OF ACTION

GRADES: (Inspector/NBI Coding)    DECK 5/5    SUPERSTRUCTURE 5/5    SUBSTRUCTURE 4/4    CULVERT N/N

POSTED SV: Not Posted      POSTED TTST: Not Posted

OTHER SIGNS PRESENT: (4) DELINEATORS (2) NARROW BRIDGE



Sign noticed issued for	Number Required
<u>NO</u> WEIGHT LIMIT	<u>0</u>
<u>NO</u> DELINEATORS	<u>0</u>
<u>NO</u> NARROW BRIDGE	<u>0</u>
<u>NO</u> ONE LANE BRIDGE	<u>0</u>
<u>NO</u> LOW CLEARANCE	<u>0</u>

DIRECTION OF INSPECTION      W-E

DIRECTION MATCHES PLANS      \_\_\_\_\_

LOOKING EAST

INSPECTED BY MATTHEW MOYER	SIGNATURE <i>Matthew Moyer</i>	ASSISTED BY    DANA SHAUT
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IDENTIFICATION

(1) STATE NAME	NORTH CAROLINA	BRIDGE	100203
(8) STRUCTURE NUMBER (FEDERAL)			0210203
(5) INVENTORY ROUTE (ON/UNDER) ON			31024160
(2) STATE HIGHWAY DEPARTMENT DISTRICT			13
(3) COUNTY CODE (FEDERAL)	21	(4) PLACE CODE	66280
(6) FEATURE INTERSECTED	BEETREE CREEK		
(7) FACILITY CARRIED	SR2416		
(9) LOCATION	.2 MI.W.JCT.SR2427		
(11) MILEPOINT			0.0
(12) BASE HIGHWAY NETWORK			0
(13) LRS INVENTORY ROUTE & SUBROUTE			0
(16) LATITUDE	35° 36' 45.46"	(17) LONGITUDE	82° 25' 37.23"
(98) BORDER BRIDGE STATE CODE		PERCENT SHARED	
(99) BORDER BRIDGE STRUCTURE NUMBER			

SUFFICIENCY RATING	46.36
STATUS =	Structurally Deficient

CLASSIFICATION CODE

(112) NBIS BRIDGE SYSTEM		Y
(104) HIGHWAY SYSTEM	Inventory Route not on NHS	0
(26) FUNCTIONAL CLASS	Urban Local	19
(100) STRAHNET HIGHWAY	Not a STRAHNET Route	0
(101) PARALLEL STRUCTURE		0
(102) DIRECTION OF TRAFFIC	2-way traffic	2
(103) TEMPORARY STRUCTURE		
(110) DESIGNATED NATIONAL NETWORK - on national network for trucks		0
(20) TOLL	On Free Road	3
(21) MAINT -		01
(22) OWNER -		01
(37) HISTORICAL SIGNIFICANCE -		5

STRUCTURE TYPE AND MATERIAL

(43) STRUCTURE TYPE MAIN		Concrete
TYPE	Tee Beam	CODE 104
(44) STRUCTURE TYPE APPROACH		
TYPE		CODE
(45) NUMBER OF SPANS IN MAIN UNIT		2
(46) NUMBER OF SPANS IN APPROACH		0
(107) DECK STRUCTURE TYPE		CODE 1
(108) WEARING SURFACE/PROTECTIVE SYSTEM		
(A) TYPE OF WEARING SURFACE		CODE 6
(B) TYPE OF MEMBRANE		CODE 0
(C) TYPE OF DECK PROTECTION		CODE 0

CONDITION CODE

(58) DECK		5
(59) SUPERSTRUCTURE		5
(60) SUBSTRUCTURE		4
(61) CHANNEL & CHANNEL PROTECTION		4
(62) CULVERTS		N

LOAD RATING AND POSTING CODE

(31) DESIGN LOAD	H 15	2
(63) OPERATING RATING METHOD -	Load Factor	1
(64) OPERATING RATING -	HS-19	35
(65) INVENTORY RATING METHOD -		1
(66) INVENTORY RATING	HS-15	27
(70) BRIDGE POSTING	No Posting Required	5
(41) STRUCTURE OPEN, POSTED, OR CLOSED		A
DESCRIPTION	Open, no restriction	

APPRAISAL CODE

(67) STRUCTURAL EVALUATION		4
(68) DECK GEOMETRY		N
(69) UNDERCLEARANCES, VERT & HORIZ		N
(71) WATERWAY ADEQUACY		7
(72) APPROACH ROADWAY ALIGNMENT		8
(36) TRAFFIC SAFETY FEATURES		0000
(113) SCOUR CRITICAL BRIDGES		3

PROPOSED IMPROVEMENTS CODE

(75) TYPE OF WORK		CODE
(76) LENGTH OF STRUCTURE IMPROVEMENT		
(94) BRIDGE IMPROVEMENT COST		
(95) ROADWAY IMPROVEMENT COST		
(96) TOTAL PROJECT COST		
(97) YEAR OF IMPROVEMENT COST ESTIMATE		
(114) FUTURE ADT	6,600	YEAR OF FUTURE ADT 2040

NAVIGATION DATA

(38) NAVIGATION CONTROL -		CODE 0
(111) PIER PROTECTION		CODE
(39) NAVIGATION VERTICAL CLEARANCE		0.0
(116) VERT - LIFT BRIDGE NAV MIN VERT CLEAR		0.0
(40) NAVIGATION HORIZONTAL CLEARANCE		0.0

INSPECTION

(90) INSPECTION DATE	02/23	(91) FREQUENCY	24
(92) CRITICAL FEATURE INSPECTION		(93) CFI DATE	
A) FRACTURE CRIT DETAIL		A)	
B) UNDERWATER INSP	24	B)	04/23
C) OTHER SPECIAL INSP		C)	

SCOUR

## Superstructure Build Details

Span Number 1

Span Length 42.333

Skew 90.000

Number of Items	Type of Component	Element Name	Quantity	Protective System Applied	Quantity (Sq Ft)
1	Asphalt Wearing Surface	Wearing Surface	844 Square Feet		
1	Narrow Bridge	Warning Signs	1 Each		
2	Concrete Railing	Reinforced Concrete Bridge Railing	86 Feet		
2	Delineator	Warning Signs	2 Each		
3	Reinforced Concrete Girder	Reinforced Concrete Open Girder/Beam	126 Feet		
1	Reinforced Concrete Deck	Reinforced Concrete Deck	974 Square Feet		
2	Fixed Bearing	Fixed Bearing	2 Each	Unknown	2

Span Number 2

Span Length 42.333

Skew 90.000

Number of Items	Type of Component	Element Name	Quantity	Protective System Applied	Quantity (Sq Ft)
1	Narrow Bridge	Warning Signs	1 Each		
2	Fixed Bearing	Fixed Bearing	2 Each	Unknown	2
3	Reinforced Concrete Girder	Reinforced Concrete Open Girder/Beam	126 Feet		
1	Reinforced Concrete Deck	Reinforced Concrete Deck	974 Square Feet		
2	Concrete Railing	Reinforced Concrete Bridge Railing	86 Feet		
2	Delineator	Warning Signs	2 Each		
1	Asphalt Wearing Surface	Wearing Surface	844 Square Feet		

# Structure Element Scoring

Structure Number: 100203

Inspection Date 2/28/2023

Element Number	Parent Number	Element Name	Location	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity
12		Reinforced Concrete Deck	Deck	1,948	1,882	50	16	0
110		Reinforced Concrete Open Girder/Beam	Beam	252	62	181	9	0
210		Reinforced Concrete Pier Wall	Piles and Columns	20	19	1	0	0
215		Reinforced Concrete Abutment	Abutments	120	50	48	22	0
234		Reinforced Concrete Pier Cap	Caps	21	16	2	3	0
313		Fixed Bearing	Bearing Device	4	0	4	0	0
331		Reinforced Concrete Bridge Railing	Bridge Rail	172	2	120	50	0
510		Wearing Surface	Wearing Surfaces	1,688	1,430	0	258	0
515	313	Steel Protective Coating	Bearing Device	4	0	0	0	4

# Summary of Maintenance Needs

## Maintenance By Defect

Structure Number: 100203

Inspection Date: 02/28/2023

MMS Code	Element Name	Defect Name	Recommended Quantity
3326	Reinforced Concrete Deck	Efflorescence/Rust Staining	1 Square Feet
3326	Reinforced Concrete Deck	Delamination/Spall	25 Square Feet
3306	Reinforced Concrete Open Girder/Beam	Patched Area	2 Feet
3306	Reinforced Concrete Open Girder/Beam	Cracking (RC and Other)	51 Feet
3306	Reinforced Concrete Open Girder/Beam	Delamination/Spall	18 Feet
3348	Reinforced Concrete Pier Wall	Delamination/Spall	2 Feet
3348	Reinforced Concrete Pier Wall	Cracking (RC and Other)	4 Feet
3350	Reinforced Concrete Abutment	Scour	54 Feet
3350	Reinforced Concrete Abutment	Delamination/Spall	32 Feet
3348	Reinforced Concrete Pier Cap	Delamination/Spall	2 Feet
3348	Reinforced Concrete Pier Cap	Cracking (RC and Other)	1 Feet
3318	Reinforced Concrete Bridge Railing	Patched Area	1 Square Feet
3318	Reinforced Concrete Bridge Railing	Cracking (RC and Other)	40 Feet
3318	Reinforced Concrete Bridge Railing	Delamination/Spall	129 Feet
2816	Wearing Surface	Crack (Wearing Surface)	258 Square Feet
3342	Steel Protective Coating	Effectiveness (Steel Protective Coatings)	4 Square Feet

## Element Structure Maintenance Quantities

Structure Number: 100203

Inspection Date 02/28/2023

Location	MMS Code	Description	Maint Quantity	Total Quantity	Severe Quantity	Poor Quantity	Fair Quantity	Good Quantity
Beam	3306	Maintenance Concrete Superstructure Components	71	252	0.000	9.000	181.000	62.000
Bearing Device	3334	Bridge Bearing	0	4	0.000	0.000	4.000	0.000
Bearing Device	3342	Clean and Paint Steel	4	4	4.000	0.000	0.000	0.000
Bridge Rail	3318	Maintenance of Concrete Bridge Rail	170	172	0.000	50.000	120.000	2.000
Deck	3326	Maintenance of Concrete Deck	26	1948	0.000	16.000	50.000	1882.000
Wearing Surfaces	2816	Asphalt Surface Repair	258	1688	0.000	258.000	0.000	1430.000
Abutments	3350	Maintenance of Concrete Wings and Wall	76	120	0.000	22.000	48.000	50.000
Caps	3348	Maintenance of Concrete Substructure	3	21	0.000	3.000	2.000	16.000
Piles and Columns	3348	Maintenance of Concrete Substructure	6	20	0.000	0.000	1.000	19.000

# Priority Actions Request

Structure Number 100203

Span2

3306      Beam 3      Reinforced Concrete Girder

Priority Level	Defect Type	Quantity	Defect Description
2	Delamination/Spall	3	Span 2 Beam 3: (PROMPT ACTION REQUEST) 23 FEET FROM BENT 1, BOTTOM RIGHT CORNER OF BEAM, SPALL WITH EXPOSED MAIN REINFORCING 3 FEET LONG BY 9 INCHES WIDE BY 2 INCHES DEEP



**Span 1** **Beam 2**  
**Reinforced Concrete Girder**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
110	Reinforced Concrete Open Girder/Beam	42	10	32	0	0 Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
<input checked="" type="checkbox"/> 110	Cracking (RC and Other)	TRANSVERSE AND HORIZONTAL CRACKING (UP TO 1/64 INCH) IN BOTTOM OF BEAM EXTENDING UP SIDES (6 INCHES TO FULL HEIGHT). 12 INCHES TO 16 INCHES ON CENTER	2	32	Feet

General Comments

**Span 1** **Beam 3**  
**Reinforced Concrete Girder**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
110	Reinforced Concrete Open Girder/Beam	42	0	42	0	0 Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
<input checked="" type="checkbox"/> 110	Cracking (RC and Other)	TRANSVERSE AND HORIZONTAL CRACKING (UP TO 1/64 INCH) IN BOTTOM OF BEAM EXTENDING UP SIDES (6 INCHES TO FULL HEIGHT). 6 INCHES TO 12 INCHES ON CENTER	2	41	Feet
<input checked="" type="checkbox"/> 110	Delamination/Spall	BOTTOM OF BEAM AT PIER 1, DELAMINATION 18 INCHES LONG BY 6 INCHES WIDE	2	1	1 Feet

General Comments

**Span 1** **Wearing Surface**  
**Asphalt Wearing Surface**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
510	Wearing Surface	844	646	0	198	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
<input checked="" type="checkbox"/> 510	Crack (Wearing Surface)	5 SQUARE FEET OF MAP CRACKING (UP TO 1/4 INCH) IN ASPHALT WEARING SURFACE AT NEAR LEFT SIDE. 3 SQUARE FEET OF MAP CRACKING (UP TO 1/4 INCH) IN ASPHALT WEARING SURFACE AT NEAR RIGHT SIDE.	3	8	8 Square Feet
<input checked="" type="checkbox"/> 510	Crack (Wearing Surface)	FULL WIDTH TRANSVERSE OPEN CRACKING (UP TO 1 INCH) AT BENT 1.	3	20	20 Square Feet
<input checked="" type="checkbox"/> 510	Crack (Wearing Surface)	FULL WIDTH TRANSVERSE OPEN CRACKING (UP TO 1/2 INCH) AT END BENT 1.	3	20	20 Square Feet
<input checked="" type="checkbox"/> 510	Crack (Wearing Surface)	INTERMITTENT TRANSVERSE OPEN CRACKING (UP TO 1/4 INCH) AND SOME LONGITUDINAL CRACKING THROUGHOUT ASPHALT WEARING SURFACE.	3	150	150 Square Feet

General Comments

**Span 1 Left Bridge Rail**  
**Concrete Railing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
331	Reinforced Concrete Bridge Railing	43	1	42	0	0 Feet

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Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
<input checked="" type="checkbox"/> 331	Delamination/Spall	WEATHERING WITH EXPOSED AGGREGATE FULL LENGTH IN TOP OF RAIL.	2	42	42 Feet

General Comments

**Span 1 Right Bridge Rail**  
**Concrete Railing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
331	Reinforced Concrete Bridge Railing	43	0	41	2	0 Feet

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Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
<input checked="" type="checkbox"/> 331	Delamination/Spall	10 INCHES LONG X 6 INCHES HIGH X 1 INCH DEEP SPALL IN TOP OF RAIL AT ABUTMENT 1	3	1	1 Feet
<input checked="" type="checkbox"/> 331	Patched Area	AT WEST END, 3 SQUARE FEET OF UNSOUND PATH WITH EFFLORESCENCE	3	1	1 Square Feet
<input checked="" type="checkbox"/> 331	Delamination/Spall	WEATHERING WITH EXPOSED AGGREGATE FULL LENGTH IN TOP OF RAIL.	2	41	41 Feet

General Comments

**Span 1 Far Bearing 1**  
**Fixed Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
313	Fixed Bearing	1	0	1	0	0 Each
515	Steel Protective Coating	1	0	0	0	1 Square Feet

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Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
<input checked="" type="checkbox"/> 313	Corrosion	SURFACE CORROSION	2	1	Each
<input checked="" type="checkbox"/> 515	Effectiveness (Steel Protective Coatings)	PROTECTIVE COATING HAS FAILED.	4	1	1 Square Feet

General Comments

**Span 1 Far Bearing 3**  
**Fixed Bearing**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
313	Fixed Bearing	1	0	1	0	0 Each
515	Steel Protective Coating	1	0	0	0	1 Square Feet

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Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
<input checked="" type="checkbox"/> 313	Corrosion	SURFACE CORROSION	2	1	Each
<input checked="" type="checkbox"/> 515	Effectiveness (Steel Protective Coatings)	PROTECTIVE COATING HAS FAILED.	4	1	1 Square Feet

## General Comments

## Span 2 Deck

## Reinforced Concrete Deck

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
12	Reinforced Concrete Deck	974	920	40	14	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
<input checked="" type="checkbox"/> 12	Delamination/Spall	INTERMITTENT SPALLING (UP TO 4 INCHES X 4 INCHES X 1/2 INCH) IN BOTTOM OF DECK AT VARIOUS DECK DRAINS WITH EFFLORESCENCE BUILDUP, RIGHT AND LEFT OVERHANGS	3	11	11	Square Feet
<input checked="" type="checkbox"/> 12	Delamination/Spall	RIGHT OVERHANG AT BENT 1, SPALL WITH EXPOSED REBAR 8 INCH DIAMETER BY 1 INCH DEEP	3	1	1	Square Feet
<input checked="" type="checkbox"/> 12	Delamination/Spall	SPALL (10 INCHES X 6 INCHES X 3/4 INCH) WITH EFFLORESCENCE AT LEFT DECK OVERHANG, 11 FEET FROM END BENT 2	3	1	1	Square Feet
<input checked="" type="checkbox"/> 12	Delamination/Spall	SPALL (10 INCHES X 8 INCHES X 3 INCHES) AT LEFT DECK OVERHANG, 10 FEET FROM END BENT 2	3	1	1	Square Feet
<input checked="" type="checkbox"/> 12	Efflorescence/Rust Staining	SPOTS OF MINOR EFFLORESCENCE THROUGHOUT BOTTOM OF DECK	2	40		Square Feet

## General Comments

## Span 2 Beam 1

## Reinforced Concrete Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
110	Reinforced Concrete Open Girder/Beam	42	4	34	4	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
<input checked="" type="checkbox"/> 110	Cracking (RC and Other)	3 FEET LONGITUDINAL 1/16 INCH CRACKING TO BOTTOM, 16 FEET FROM BENT 1	3	3	3	Feet
<input checked="" type="checkbox"/> 110	Delamination/Spall	21 FEET FROM BENT 1, BOTTOM OF BEAM, 9 INCH DIAMETER BY 1/2 INCH DEEP SPALL	3	1	1	Feet
<input checked="" type="checkbox"/> 110	Cracking (RC and Other)	TRANSVERSE AND HORIZONTAL CRACKING (UP TO 1/64 INCH) IN BOTTOM OF BEAM EXTENDING UP SIDES (6 INCHES TO FULL HEIGHT). 6 INCHES TO 12 INCHES ON CENTER	2	25		Feet
<input checked="" type="checkbox"/> 110	Delamination/Spall	3 SQUARE FEET WATER SCALING WITH EXPOSED AGGREGATE TO LEFT SIDE AT NEAR END.	2	2	2	Feet
<input checked="" type="checkbox"/> 110	Delamination/Spall	9 FEET FROM END BENT 2, ON BOTTOM AND SOUTH FACE OF BEAM, DELAMINATION 56 INCHES LONG BY 18 INCHES WIDE ON BOTTOM AND 10 INCHES HIGH ON SOUTH FACE	2	4		Feet
<input checked="" type="checkbox"/> 110	Patched Area	8 INCH DIAMETER SOUND PATCH NEAR MIDSPAN	2	2		Feet
<input checked="" type="checkbox"/> 110	Patched Area	SOUND PATCH AT MIDSPAN, BOTTOM LEFT OF BEAM 12 INCHES BY 6 INCHES	2	1		Feet

## General Comments

**Span 2** **Beam 2**  
**Reinforced Concrete Girder**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
110	Reinforced Concrete Open Girder/Beam	42	22	20	0	0 Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
<input checked="" type="checkbox"/> 110	Cracking (RC and Other)	TRANSVERSE AND HORIZONTAL CRACKING (UP TO 1/64 INCH) IN BOTTOM OF BEAM EXTENDING UP SIDES (6 INCHES TO FULL HEIGHT). 12 INCHES TO 36 INCHES ON CENTER	2	20	20 Feet

General Comments

**Span 2** **Beam 3**  
**Reinforced Concrete Girder**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
110	Reinforced Concrete Open Girder/Beam	42	8	29	5	0 Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
<input checked="" type="checkbox"/> 110	Delamination/Spall	(PROMPT ACTION REQUEST) 23 FEET FROM BENT 1, BOTTOM RIGHT CORNER OF BEAM, SPALL WITH EXPOSED MAIN REINFORCING 3 FEET LONG BY 9 INCHES WIDE BY 2 INCHES DEEP	3	3	3 Feet
<input checked="" type="checkbox"/> 110	Patched Area	17 FEET FROM BENT 1, UNSOUND PATCH ON BOTTOM OF BEAM, 2 FEET LONG BY 1 FOOT WIDE	3	2	2 Feet
<input checked="" type="checkbox"/> 110	Cracking (RC and Other)	TRANSVERSE AND HORIZONTAL CRACKING (UP TO 1/64 INCH) IN BOTTOM OF BEAM EXTENDING UP SIDES (6 INCHES TO FULL HEIGHT). 12 INCHES TO 24 INCHES ON CENTER	2	16	28 Feet
<input checked="" type="checkbox"/> 110	Delamination/Spall	18 FEET FROM BENT 1, DELAMINATION ON RIGHT FACE OF BEAM 18 INCHES LONG BY 18 INCHES HIGH	2	2	2 Feet
<input checked="" type="checkbox"/> 110	Delamination/Spall	2.5 FEET OF DELAMINATION IN BOTTOM RIGHT CORNER OF BEAM, 12 FEET FROM BENT 1	2	3	3 Feet
<input checked="" type="checkbox"/> 110	Delamination/Spall	SEVERAL SMALL SPALLS UP TO 2 INCH DIAMETER X 1/2 INCH DEEP WITH EXPOSED TIE WIRE ON UNDERSIDE OF BEAM AT VARIOUS LOCATIONS.	2	5	5 Feet
<input checked="" type="checkbox"/> 110	Patched Area	14 FEET FROM BENT 1, SOUND PATCH ON BOTTOM RIGHT CORNER OF BEAM 18 INCHES LONG BY 12 INCHES HIGH	2	3	Feet
<input checked="" type="checkbox"/> 110	Cracking (RC and Other)	LONGITUDINAL HAIRLINE CRACKING IN BOTTOM OF BEAM. 2 FEET AT 8 FEET FROM BENT 1. 6 FEET NEAR FAR END OF BEAM	1	8	Feet

General Comments

## Span 2 Wearing Surface

## Asphalt Wearing Surface

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
510	Wearing Surface	844	784	0	60	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
<input checked="" type="checkbox"/> 510	Crack (Wearing Surface)	FULL WIDTH TRANSVERSE OPEN CRACKING (UP TO 1/2 INCH) AT END BENT 2.	3	20	20 Square Feet
<input checked="" type="checkbox"/> 510	Crack (Wearing Surface)	INTERMITTENT TRANSVERSE, LONGITUDINAL AND MAP CRACKING (UP TO 1/2 INCH) THROUGHOUT ASPHALT WEARING SURFACE.	3	40	40 Square Feet

General Comments

## Span 2 Left Bridge Rail

## Concrete Railing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
331	Reinforced Concrete Bridge Railing	43	1	1	41	0 Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
<input checked="" type="checkbox"/> 331	Cracking (RC and Other)	LONGITUDINAL CRACKING TO FULL LENGTH OF TOP OF RAIL	3	40	40 Feet
<input checked="" type="checkbox"/> 331	Delamination/Spall	SPALL WITH EXPOSED REBAR (2 FEET X 3 INCHES X 1/2 INCH) 10 FEET FROM BENT 1	3	1	1 Feet
<input checked="" type="checkbox"/> 331	Delamination/Spall	6 INCHES HIGH X 1/2 INCH WIDE SPALL IN FRONT FACE 5 FEET FROM PIER 1 AND 1 FEET FROM DECK.	2	1	1 Feet
<input checked="" type="checkbox"/> 331	Delamination/Spall	WEATHERING WITH EXPOSED AGGREGATE FULL LENGTH TO TOP OF RAIL.	2		Feet

General Comments

## Span 2 Right Bridge Rail

## Concrete Railing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
331	Reinforced Concrete Bridge Railing	43	0	36	7	0 Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
<input checked="" type="checkbox"/> 331	Delamination/Spall	(6) SPALLING WITH EXPOSED REBAR THROUGHOUT INSIDE SIDE OF PARAPET (UP TO 10 INCHES X 6 INCHES X 3/4 INCH)	3	6	6 Feet
<input checked="" type="checkbox"/> 331	Delamination/Spall	AT END OF RAIL, (2) SPALLS UP TO 7 INCH DIAMETER BY 1/2 INCH DEEP	3	1	1 Feet
<input checked="" type="checkbox"/> 331	Delamination/Spall	A FEW AREAS OF DELAMINATION UP TO 5 INCH DIAMETER ON FRONT FACE MID HEIGHT AT VARIOUS LOCATIONS.	2	3	3 Feet
<input checked="" type="checkbox"/> 331	Delamination/Spall	WEATHERING WITH EXPOSED AGGREGATE FULL LENGTH TO TOP OF RAIL.	2	33	33 Feet

General Comments

## Span 2

## Near Bearing 1

## Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	1	0	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
<input checked="" type="checkbox"/> 313	Corrosion	SURFACE CORROSION	2	1		Each
<input checked="" type="checkbox"/> 515	Effectiveness (Steel Protective Coatings)	PROTECTIVE COATING HAS FAILED.	4	1	1	Square Feet

General Comments

## Span 2

## Near Bearing 3

## Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	1	0	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
<input checked="" type="checkbox"/> 313	Corrosion	SURFACE CORROSION	2	1		Each
<input checked="" type="checkbox"/> 515	Effectiveness (Steel Protective Coatings)	PROTECTIVE COATING HAS FAILED.	4	1	1	Square Feet

General Comments

## End Bent 1

## Abutment

## Reinforced Concrete Abutment

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
215	Reinforced Concrete Abutment	60	48	12	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
<input checked="" type="checkbox"/> 215	Cracking (RC and Other)	VERTICAL HAIRLINE AND MAP CRACKING IN FACE OF ABUTMENT. RIGHT OF BEAM 3 AND LEFT OF BEAM 1	2	5		Feet
<input checked="" type="checkbox"/> 215	Delamination/Spall	SHALLOW SPALLS THROUGH TOP CORNER OF ABUTMENT, MOSLTY IN BAY 1	2	7	7	Feet

General Comments

## Bent 1

## Cap 1

## Reinforced Concrete Pier Cap

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
234	Reinforced Concrete Pier Cap	21	16	2	3	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
<input checked="" type="checkbox"/> 234	Cracking (RC and Other)	SPALL (6 INCHES X 6 INCHES X 3 INCHES) IN NEAR TOP CORNER OF CAP, LEFT OF BEAM 3	3	1	1	Feet

Structure Number: 100203Inspection Date: 02/28/2023

<input checked="" type="checkbox"/>	234	Delamination/Spall	SPALL (8 INCHES X 6 INCHES X 1 INCH) IN NEAR TOP CORNER OF CAP, RIGHT OF BEAM 2	3	1	1	Feet
<input checked="" type="checkbox"/>	234	Delamination/Spall	SPALL (8 INCHES X 6 INCHES X 3 INCHES) IN NEAR TOP CORNER OF CAP, LEFT OF BEAM 2	3	1	1	Feet
<input checked="" type="checkbox"/>	234	Cracking (RC and Other)	MAP AND VERTICAL HAIRLINE CRACKING TO RIGHT END OF CAP	2	2		Feet

General Comments

**Bent 1****Pile 1****Reinforced Concrete Pier Wall**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
210	Reinforced Concrete Pier Wall	20	19	1	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty		
<input checked="" type="checkbox"/>	210	Abrasion/Wear (PSC/RC)	HEAVY SCALING WITH EXPOSED AGGREGATE IN BOTTOM UPSTREAM END	2			Feet
<input checked="" type="checkbox"/>	210	Cracking (RC and Other)	3 FEET TO 4 FEET LONG VERTICAL HAIRLINE CRACKING TO FACE PIERWALL. (2) IN NEAR SIDE AND (1) IN FAR SIDE	2			Feet
<input checked="" type="checkbox"/>	210	Cracking (RC and Other)	MAP AND VERTICAL CRACKING TO RIGHT SIDE OF PIER WALL	2			4 Feet
<input checked="" type="checkbox"/>	210	Delamination/Spall	(2) SHALLOW SPALLS (2 INCHES X 2 INCHES) WITH EXPOSED TIE WIRE TO NEAR FACE RIGHT SIDE	2	1		2 Feet

General Comments

**End Bent 2****Abutment****Reinforced Concrete Abutment**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
215	Reinforced Concrete Abutment	60	2	36	22	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty		
<input type="checkbox"/>	215	Scour	(PROMPT ACTION REQUEST) 4-26-2021 UNDERWATER: ABUTMENT 100 PERCENT UNDERMINED ALONG BREASTWALL. UP TO 38 INCHES VERTICAL X 7.5 FEET HORIZONTAL PROBE. FOOTING HAS UP TO A 3/8 INCH CRACK BELOW BEAM 3 AREA.	4			24 Feet
<input type="checkbox"/>	215	Scour	(PROMPT ACTION REQUEST) 4-26-2021 UNDERWATER: NORTHEAST WING IS 90 PERCENT UNDERMINED 38 INCHES VERTICAL X 67 INCHES HORIZONTAL PROBE.	4			10 Feet
<input type="checkbox"/>	215	Scour	(PROMPT ACTION REQUEST) 4-26-2021 UNDERWATER: SOUTHEAST WING UNDERMINED 90 PERCENT 24 INCHES VERTICAL X 30 INCHES HORIZONTAL PROBE.	4			10 Feet
<input checked="" type="checkbox"/>	215	Delamination/Spall	HEAVY SCALING/SPALLING (22 FEET X 1 FEET X 4 INCHES) IN FOOTING APRON AT DOWNSTREAM END	3	22		22 Feet
<input checked="" type="checkbox"/>	215	Cracking (RC and Other)	(5) DIAGONAL CRACKS 1/32 INCH WIDE UP TO 10 FEET LONG UNDER BEAM 3	2	9		Feet
<input checked="" type="checkbox"/>	215	Delamination/Spall	(2) SPALLS UP TO 5 INCHES LONG BY 2 INCHES HIGH BY 1/2 INCH DEEP UNDER BEAM 3	2	1		1 Feet
<input type="checkbox"/>	215	Delamination/Spall	HORIZONTAL CRACKING AND DELAMINATION (16 INCHES X 1 INCH) UNDER BEAM 1	2	2		2 Feet

Structure Number: 100203

Inspection Date: 02/28/2023

<input checked="" type="checkbox"/> 215	Patched Area	NEW REPAIR : 58 FOOT LONG BY 2 FOOT WIDE CONCRETE REPAIR ON STREAM FACE OF FOOTING, PREVIOUSLY: SCOUR FULL LENGTH OF ABUTMENT WITH UP TO 2 FEET DEEP UNDERMINING (MEASURED 8 FEET FROM UPSTREAM TURNBACK) STARTING AT UPSTREAM TURNBACK. SCOUR HEIGHT FROM TOP OF FOOTING TO STREAMBED IS UP TO 8 FEET WITH WATER DEPTH OF 7 FEET. (MEASURED AT DOWN STREAM TURNBACK). EXTENT OF UNDERMING IF ANY COULD NOT BE DETERMINED AT DOWNSTREAM END DUE TO WATER DEPTH. SUPPLEMENTAL UNDERWATER INSPECTION REQUESTED.	2	24	Feet
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General Comments

RECOMMEND SUPPLEMENTAL UNDERWATER INSPECTION FOR SCOUR/UNDERMINING AT DOWNSTREAM END AMUTMENT 2 DUE TO WATER DEPTH

## Elements Verified

Location	Name	Component	Element Name	Amount
Span 1	Deck	Reinforced Concrete Deck	Reinforced Concrete Deck	974
Span 1	Beam 1	Reinforced Concrete Girder	Reinforced Concrete Open Girder/Beam	42
Span 1	Beam 2	Reinforced Concrete Girder	Reinforced Concrete Open Girder/Beam	42
Span 1	Beam 3	Reinforced Concrete Girder	Reinforced Concrete Open Girder/Beam	42
Span 1	Left Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	43
Span 1	Right Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	43
Span 1	Wearing Surface	Asphalt Wearing Surface	Wearing Surface	844
Span 1	Far Bearing 1	Fixed Bearing	Fixed Bearing	1
Span 1	Far Bearing 3	Fixed Bearing	Fixed Bearing	1
Span 2	Deck	Reinforced Concrete Deck	Reinforced Concrete Deck	974
Span 2	Beam 1	Reinforced Concrete Girder	Reinforced Concrete Open Girder/Beam	42
Span 2	Beam 2	Reinforced Concrete Girder	Reinforced Concrete Open Girder/Beam	42
Span 2	Beam 3	Reinforced Concrete Girder	Reinforced Concrete Open Girder/Beam	42
Span 2	Left Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	43
Span 2	Right Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	43
Span 2	Wearing Surface	Asphalt Wearing Surface	Wearing Surface	844
Span 2	Near Bearing 1	Fixed Bearing	Fixed Bearing	1
Span 2	Near Bearing 3	Fixed Bearing	Fixed Bearing	1
Bent 1	Cap 1	Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	21
Bent 1	Pile 1	Reinforced Concrete Pier Wall	Reinforced Concrete Pier Wall	20
End Bent 1	Abutment	Reinforced Concrete Abutment	Reinforced Concrete Abutment	60
End Bent 2	Abutment	Reinforced Concrete Abutment	Reinforced Concrete Abutment	60

# General Inspection Notes

# National Bridge and NC Inspection Items

Structure Number: 100203

Inspection Date: 02/28/2023

## National Bridge Inventory Items

Item	Grade Scale	Grade
Item 58: Deck	0 - 9 , N	5
Item 59: Superstructure	0 - 9 , N	5
Item 60: Substructure	0 - 9 , N	4
Item 61: Channel and Channel Protection	0 - 9 , N	4
Item 62: Culvert	0 - 9 , N	N
Item 71: Waterway Adequacy	0 - 9 , N	7
Item 72: Approach Roadway Alignment	0 - 9 , N	8

**Note:**  
Items 58,59,60,62 reflect this inspection only.  
  
For overall NBI coding grade, see cover sheet.

*Note: If NBI Inspection Item is not present, code NBI item with "N"*

## NC SMU Inspection Items

Item	Grade Scale	Grade	Maint. Qty.	Maint. Code
Deck Debris	G, F, P, or C	F	1948	3376
Drainage System	G, F, P, or C	F	168	3332
Utilities	G, F, P, or C			
Slope Protection	G, F, P, or C		0	3352
Scour	G, F, P, or C	G		
Wingwall	G, F, P, or C	F	16	3350
Field Scour Evaluation		R		
Drift	G, F, P, or C	G	0	3366
Fender System	G, F, P, or C			
Movable Span Machinery	G, F, P, or C			
Response to Live Load	G, F, P, or C	G		
Superstructure Paint Code				

*Note: If NC SMU Inspection Item is not present, leave NC SMU item blank*

## Inspection Information

Item	Grade Scale	Grade
Sign Noticed Issued	YES/NO	N
Priority Maintenance Request Submitted	YES/NO	Y
Inspection Time	Hours	5
Traffic Control Time	Hours	
Snooper Time	Hours	
Ladder Used	YES/NO	Y
Bucket Truck Used	YES/NO	N
Boat Used	YES/NO	N
Other Equipment Used	YES/NO	N
Portion of Structure in > 3' of water	YES/NO	N

# National Bridge and NC SMU Inspection Item Details

Structure Number: 100203

Inspection Date: 02/28/2023

Item	Deck - Item 58	Grade	5	Maint Code	Qty.	0
Details	GRADING MAINTAINED.					
Item	Superstructure - Item 59	Grade	5	Maint Code	Qty.	0
Details	GRADING MAINTAINED.					
Item	Substructure - Item 60	Grade	4	Maint Code	Qty.	0
Details	GRADING MAINTAINED.					
	LARGE CRACK IN FOOTING AT ABUTMENT 2.					
	THE EXTENT OF THE UNDERMINING REPAIR AT ABUTMENT 2 IS UNKNOWN AND THERE ARE NO REPAIR PLANS.					
Item	Channel and Channel Protection - Item 61	Grade	4	Maint Code	Qty.	0
Details	GRADING MAINTAINED.					
	THE STREAM FLOWS INTO ABUTMENT 2.					
	THE EXTENT OF THE PREVIOUS SCOUR REPAIR IS UNKNOWN AND THERE ARE NO REPAIR PLANS.					
Item	Deck Debris	Grade	F	Maint Code	3376	Qty. 1948
Details	DIRT DEBRIS ALONG CURB.					
Item	Drainage System	Grade	F	Maint Code	3332	Qty. 168
Details	DRAINAGE BLOCKED BY DEBRIS ALONG CURB.					
Item	Scour	Grade	G	Maint Code		Qty. 0
Details	PREVIOUS SCOUR HAS BEEN REPAIRED.					
Item	Wingwalls	Grade	F	Maint Code	3350	Qty. 16
Details	CONCRETE WINGWALL AT SOUTHEAST CORNER IS ROTATED TOWARD THE STREAM.					
Item	General Comments and Misc Items	Grade		Maint Code		Qty. 0
Details	AT EAST APPROACH 1 INCH OF SETTLEMENT AT FIIL FACE OF ABUTMENT 2.					
Item	Portion of structure in > 3' of water (Y or N)	Grade	N	Maint Code		Qty. 0
Details	PREVIOUS SCOUR AT ABUTMENT 2 HAS BEEN REPAIRED AND IS NO LONGER IN MORE THAN 3 FEET OF WATER.					



DIRT AND DEBRIS ALONG CURB



End Bent 2 Abutment: NEW REPAIR : 58 FOOT LONG BY 2 FOOT WIDE CONCRETE REPAIR ON STREAM FACE OF FOOTING, PREVIOUSLY: SCOUR FULL LENGTH OF ABUTMENT WITH UP TO 2 FEET DEEP UNDERMINING (MEASURED 8 FEET FROM UPSTREAM TURNBACK) STARTING AT UPSTREAM TURNBACK. SCOUR HEIGHT FROM TOP OF FOOTING TO STREAMBED IS UP TO 8 FEET WITH WATER DEPTH OF 7 FEET. (MEASURED AT DOWN STREAM TURNBACK). EXTENT OF UNDERMINING IF ANY COULD NOT BE DETERMINED AT DOWNSTREAM END DUE TO WATER DEPTH. SUPPLEMENTAL UNDERWATER INSPECTION REQUESTED.



End Bent 2 Abutment: NEW REPAIR : 58 FOOT LONG BY 2 FOOT WIDE CONCRETE REPAIR ON STREAM FACE OF FOOTING, PREVIOUSLY: SCOUR FULL LENGTH OF ABUTMENT WITH UP TO 2 FEET DEEP UNDERMINING (MEASURED 8 FEET FROM UPSTREAM TURNBACK) STARTING AT UPSTREAM TURNBACK. SCOUR HEIGHT FROM TOP OF FOOTING TO STREAMBED IS UP TO 8 FEET WITH WATER DEPTH OF 7 FEET. (MEASURED AT DOWN STREAM TURNBACK). EXTENT OF UNDERMINING IF ANY COULD NOT BE DETERMINED AT DOWNSTREAM END DUE TO WATER DEPTH. SUPPLEMENTAL UNDERWATER INSPECTION REQUESTED.



End Bent 2 Abutment: NEW REPAIR : 58 FOOT LONG BY 2 FOOT WIDE CONCRETE REPAIR ON STREAM FACE OF FOOTING, PREVIOUSLY: SCOUR FULL LENGTH OF ABUTMENT WITH UP TO 2 FEET DEEP UNDERMINING (MEASURED 8 FEET FROM UPSTREAM TURNBACK) STARTING AT UPSTREAM TURNBACK. SCOUR HEIGHT FROM TOP OF FOOTING TO STREAMBED IS UP TO 8 FEET WITH WATER DEPTH OF 7 FEET. (MEASURED AT DOWN STREAM TURNBACK). EXTENT OF UNDERMINING IF ANY COULD NOT BE DETERMINED AT DOWNSTREAM END DUE TO WATER DEPTH. SUPPLEMENTAL UNDERWATER INSPECTION REQUESTED.



End Bent 2 Abutment: HEAVY SCALING/SPALLING (22 FEET X 1 FEET X 4 INCHES) IN FOOTING APRON AT DOWNSTREAM END



End Bent 2 Abutment: (5) DIAGONAL CRACKS 1/32 INCH WIDE UP TO 10 FEET LONG UNDER BEAM 3



Span 2 Wearing Surface: INTERMITTENT TRANSVERSE, LONGITUDINAL AND MAP CRACKING (UP TO 1/2 INCH) THROUGHOUT ASPHALT WEARING SURFACE.



Span 2 Right Bridge Rail: (6) SPALLING WITH EXPOSED REBAR THROUGHOUT INSIDE SIDE OF PARAPET (UP TO 10 INCHES X 6 INCHES X 3/4 INCH)



Span 2 Right Bridge Rail: AT END OF RAIL, (2) SPALLS UP TO 7 INCH DIAMETER BY 1/2 INCH DEEP



Span 2 Left Bridge Rail: LONGITUDINAL CRACKING TO FULL LENGTH OF TOP OF RAIL



Span 1 Wearing Surface: 5 SQUARE FEET OF MAP CRACKING (UP TO 1/4 INCH) IN ASPHALT WEARING SURFACE AT NEAR LEFT SIDE. 3 SQUARE FEET OF MAP CRACKING (UP TO 1/4 INCH) IN ASPHALT WEARING SURFACE AT NEAR RIGHT SIDE.



Span 1 Right Bridge Rail: 10 INCHES LONG X 6 INCHES HIGH X 1 INCH DEEP SPALL IN TOP OF RAIL AT ABUTMENT 1



Span 1 Right Bridge Rail: AT WEST END, 3 SQUARE FEET OF UNSOUND PATH WITH EFFLORESCENCE



Span 1 Deck: 12 INCHES OF EFFLORESCENCE BUILDUP IN BOTTOM OF DECK, MIDSPAN BAY 1



Span 1 Deck: SPALL (10 INCHES X 6 INCHES X 1 INCH) WITH EXPOSED REBAR WITH SECTION LOSS AT FAR RIGHT DECK OVERHANG 2 FEET FROM PIER 1



Span 1 Beam 3: BOTTOM OF BEAM AT PIER 1, DELAMINATION 18 INCHES LONG BY 6 INCHES WIDE



Bent 1 Cap 1: MAP AND VERTICAL HAIRLINE CRACKING TO RIGHT END OF CAP



Span 2 Beam 3: 17 FEET FROM BENT 1, UNSOUND PATCH ON BOTTOM OF BEAM, 2 FEET LONG BY 1 FOOT WIDE



Span 2 Beam 3: 18 FEET FROM BENT 1, DELAMINATION ON RIGHT FACE OF BEAM 18 INCHES LONG BY 18 INCHES HIGH



Span 2 Beam 3: (PROMPT ACTION REQUEST) 23 FEET FROM BENT 1, BOTTOM RIGHT CORNER OF BEAM, SPALL WITH EXPOSED MAIN REINFORCING 3 FEET LONG BY 9 INCHES WIDE BY 2 INCHES DEEP



Span 2 Beam 1: 9 FEET FROM END BENT 2, ON BOTTOM AND SOUTH FACE OF BEAM, DELAMINATION 56 INCHES LONG BY 12 INCHES WIDE ON BOTTOM AND 10 INCHES HIGH ON SOUTH FACE



Span 2 Beam 1: 9 FEET FROM END BENT 2, ON BOTTOM AND SOUTH FACE OF BEAM, DELAMINATION 56 INCHES LONG BY 12 INCHES WIDE ON BOTTOM AND 10 INCHES HIGH ON SOUTH FACE



Span 2 Beam 1: SOUND PATCH AT MIDSPAN, BOTTOM LEFT OF BEAM 12 INCHES BY 6 INCHES



Span 2 Beam 1: 21 FEET FROM BENT 1, BOTTOM OF BEAM, 9 INCH DIAMETER BY 1/2 INCH DEEP SPALL



Span 2 Beam 1: 9 FEET FROM END BENT 2, ON BOTTOM AND SOUTH FACE OF BEAM, DELAMINATION 56 INCHES LONG BY 18 INCHES WIDE ON BOTTOM AND 10 INCHES HIGH ON SOUTH FACE



CONCRETE WINGWALL AT SOUTHEAST CORNER IS ROTATED TOWARD THE STREAM.



Span 2 Beam 1 - Near Bearing 1: SURFACE CORROSION

# Stream Bed Soundings

(Profile diagram on following sheet)

County BUNCOMBE

Structure Number: 100203

Sounding Date 02/08/2023

Sounding recorded from: Top of Bridge Rail

Highwater Mark Distance

Location of Highwater Mark NONE NOTED

Distance (Station) ft.	Downstream Sounding ft.	Upstream Sounding ft.	Description
0.000	3.500	0.000	FILL FACE
1.000	3.500	0.000	TOP OF ABUTMENT
1.010	12.900	13.900	STREAM FACE
15.000	14.500	0.000	GROUND
30.000	15.000	0.000	GROUND
42.000	14.600	16.200	BENT 1
52.000	15.200	0.000	GROUND
60.000	16.800	0.000	WSWE
65.000	17.200	0.000	STREAMBED
72.000	17.800	0.000	STREAMBED
78.000	18.200	16.900	FACE OF FOOTING
78.010	16.600	0.000	WSWE
78.020	16.300	0.000	TOP OF SILL
80.000	16.300	0.000	TOP OF SILL
80.010	15.400	0.000	TOP OF FOOTING
83.000	15.400	0.000	TOP OF FOOTING
83.010	3.500	0.000	TOP OF ABUTMENT
84.000	3.500	0.000	FILL FACE

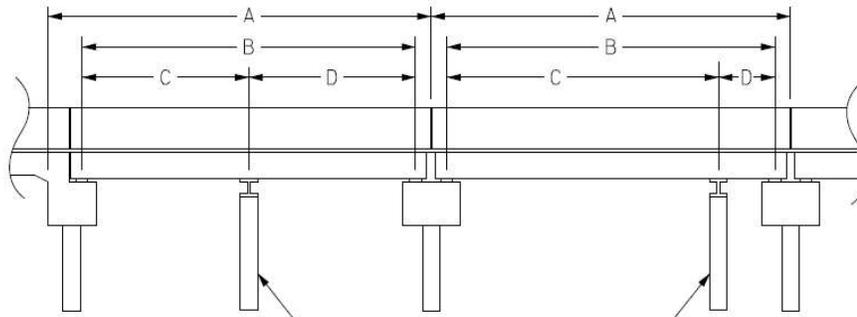


# Structure Data Worksheet

## Span Profile

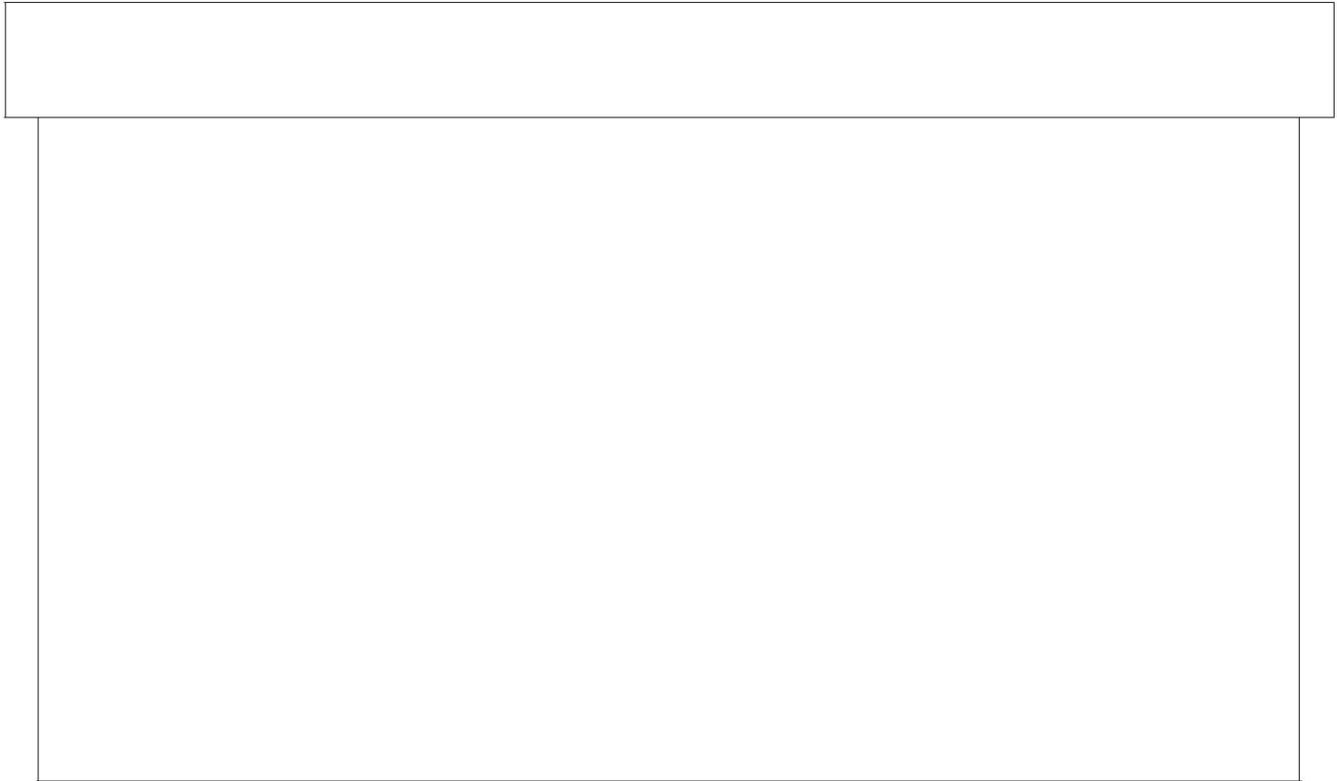
County: BUNCOMBE

Structure Number: 100203

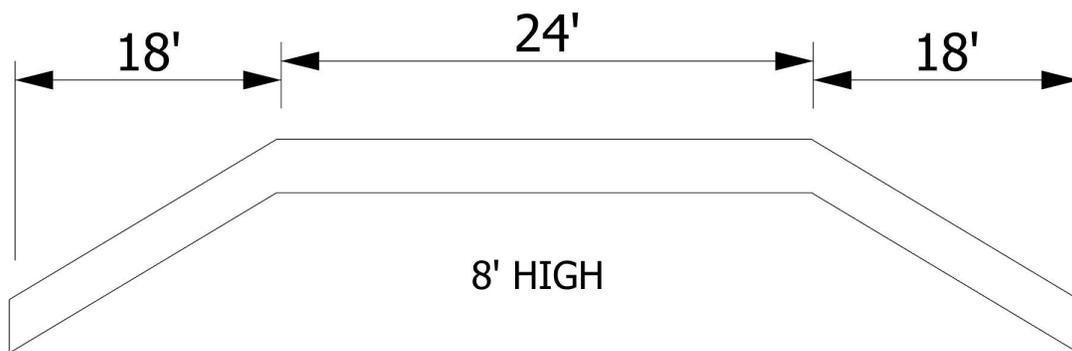


A: SPAN LENGTH  
 B: BEARING TO BEARING  
 C: DISTANCE FROM NEAR BEARING  
 D: DISTANCE TO FAR BEARING

Span Number	Span Length	Bearing to Bearing	Crutch/ Helper Bent	Distance to Near Bearing	Distance to Far Bearing
1	42.333	41.000			
2	42.333	41.000			



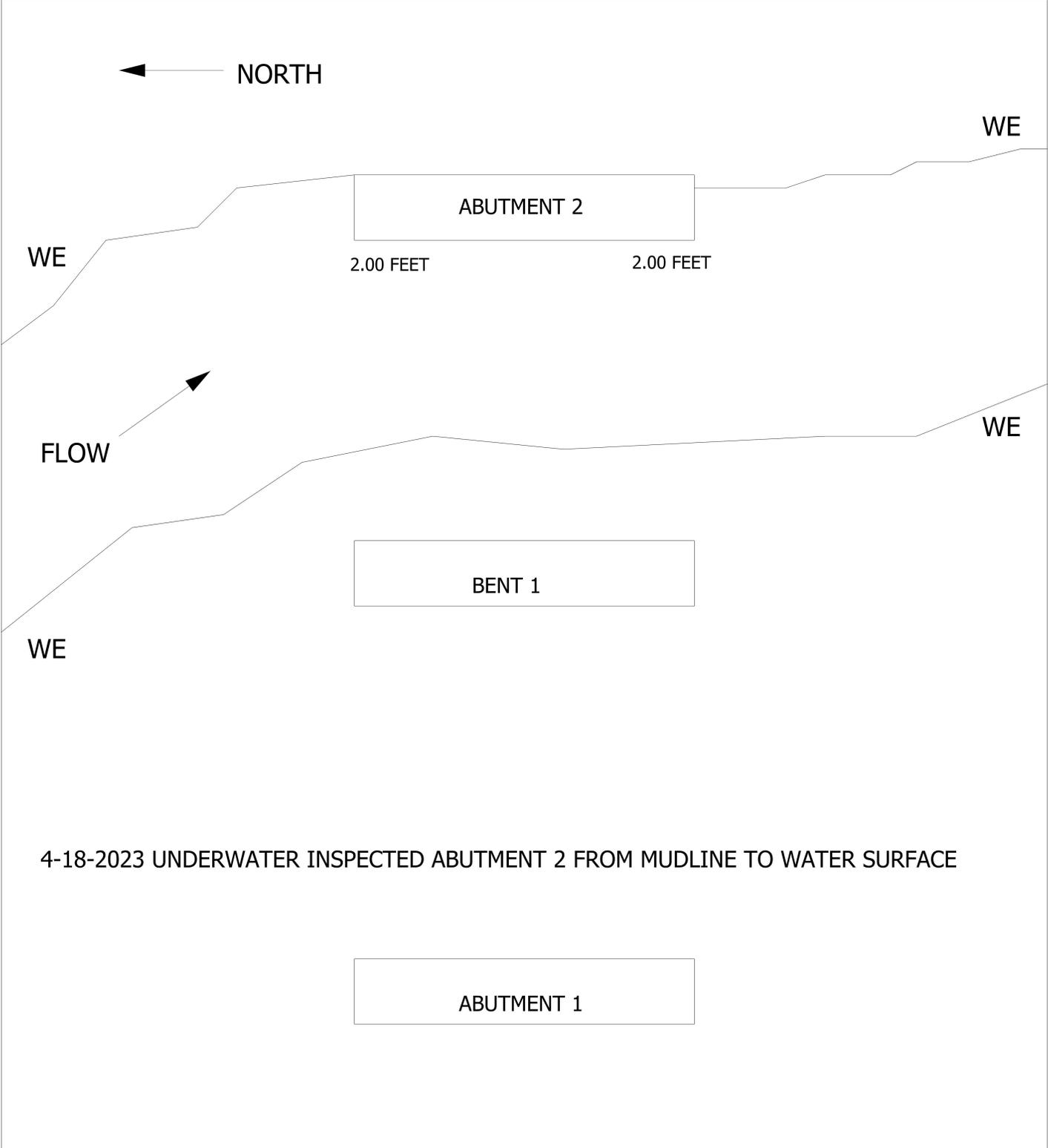
Caps							
#	Name	Type	Length	Width	Height	Left Beam to End of Cap	Right Beam to End of Cap
1	Cap 1	Reinforced Concrete Pier Cap	20.5ft	36in	36in	1.75ft	1.75ft
Piles							
#	Name	Type	Spacing	From	Height/Diam.	Width	Length
1	Pile 1	Reinforced Concrete Pier Wall	10.25ft	Left End of Bent	8ft	19.5ft	2ft



4-18-2023 UNDERWATER INSPECTED ABUTMENT 2 FROM MUDLINE TO WATER SURFACE

File		Description	
BENT 1		BENT 1	
Structure No: 100203	Drawn By: MMB, WCK	Date: 4/13/2023	Filename: S000000010367.wes

# Bridge Inspection Field Sketch



4-18-2023 UNDERWATER INSPECTED ABUTMENT 2 FROM MUDLINE TO WATER SURFACE

Title PLAN VIEW		Description PLAN VIEW	
Structure No: 100203	Drawn By: MMB, WCK	Date: 4/13/2023	Filename: S000000010370.wes

# Bridge Inspection Field Sketch



Roadway	18ft Wide	2 Paved Lanes	Looking East
Left Shoulder	1.5ft Wide	0.5ft Paved	1ft Unpaved
Right Shoulder	1.5ft Wide	0.5ft Paved	1ft Unpaved
Left Guardrail			
Right Guardrail			

MEASUREMENTS TAKEN 10 FEET EAST OF ABUTMENT 2

Title  
APPROACH ROADWAY

Description  
LOOKING EAST

Structure No: 100203

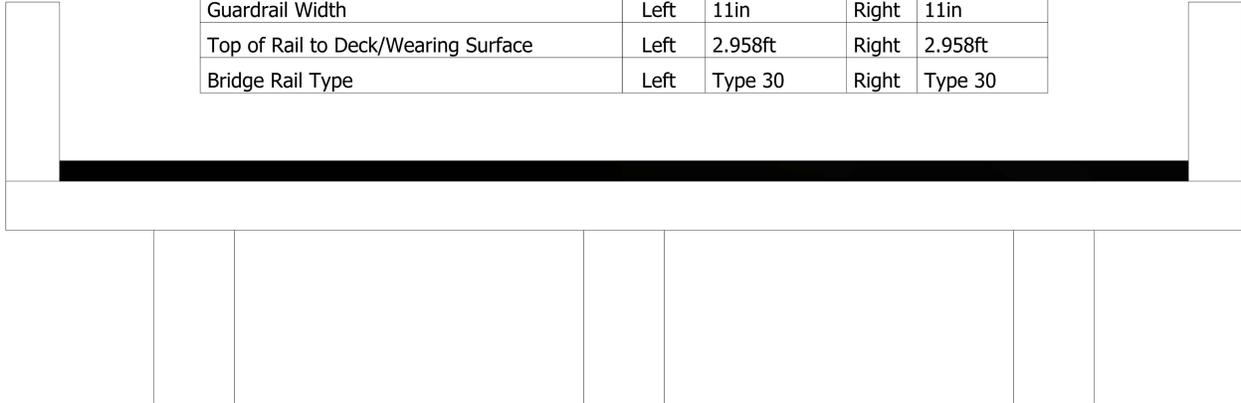
Drawn By: MATTHEW MOYER

Date: 2/2/2023

Filename: S001050000086.wes

# Bridge Inspection Field Sketch

Deck Width/Out to Out	23.00ft	Between Rails	20.75ft	
Clear Roadway	19.917ft	Wearing Surface	4.5in	
Median Width		Median Height		
Curb Height		Left	4in	Right 4in
Sidewalk Width		Left		Right
Clear Roadway (Rail to Median)		Left		Right
Guardrail Width		Left	11in	Right 11in
Top of Rail to Deck/Wearing Surface		Left	2.958ft	Right 2.958ft
Bridge Rail Type		Left	Type 30	Right Type 30



Measurements for Span #	1	Span 2 Similar	
Deck Thickness	11in	Left Overhang	3.5ft
Top of Rail to Bottom of Beam (Avg)	7.5ft	Right Overhang	3.5ft

Beam #	Beam Type	Width	Height	Spacing	From
1	Reinforced Concrete Girder	18in	39in	3.5ft	Left Edge of Deck
2	Reinforced Concrete Girder	18in	39in	8ft	Beam 1
3	Reinforced Concrete Girder	18in	39in	8ft	Beam 2

Title  
SUPERSTRUCTURE

Description  
TYPICAL SECTION

Structure No: 100203

Drawn By: MATTHEW MOYER

Date: 2/2/2023

Filename: S001050000087.wes



WEST APPROACH, LOOKING EAST



LOOKING EAST



NORTH BRIDGE RAIL, SOUTH BRIDGE RAIL SIMILAR



UPSTREAM VIEW FROM BRIDGE DECK, LOOKING NORTH



DOWNSTREAM VIEW FROM BRIDGE DECK, LOOKING SOUTH



EAST APPROACH, LOOKING WEST



UPSTREAM PROFILE, LOOKING SOUTH



ABUTMENT 2 ELEVATION, LOOKING EAST



SUPERSTRUCTURE UNDERSIDE SPAN 2



DOWNSTREAM PROFILE, LOOKING NORTH



ABUTMENT 1, LOOKING WEST



PIER 1, LOOKING EAST



LADDER USED DURING INSPECTION



BEARINGS BEAM 1 AT BENT 1, BEAM 3 AT BENT 1 SIMILAR



NORTH PROFILE, LOOKING SOUTH



SOUTH PROFILE, LOOKING NORTH



NARROW BRIDGE SIGN AT EAST APPROACH



NARROW BRIDGE SIGN AT WEST APPROACH