



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STRUCTURE MANAGEMENT UNIT

ATTENTION: **TEMPORARY REPAIRS , ENCASED PILES**

Structure Safety Report

Routine Element Inspection

INSPECTION DATE: 04/17/2018

DIVISION: 6 COUNTY: ROBESON STRUCTURE NUMBER: 770108 FREQUENCY: 24 MONTHS

FACILITY CARRIED: SR2269 MILE POST:

LOCATION: 100 FT.E.JCT.SR2264

FEATURE INTERSECTED: INDIAN SWAMP

LATITUDE: 34° 26' 13.55" LONGITUDE: 79° 2' 17.94"

SUPERSTRUCTURE: PRESTRESSED CONCRETE CHANNELS

SUBSTRUCTURE: END BTS&INT.BTS:PRESTR.CONC.CAPS/TIMBER PILES@VAR.CTS.

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

☐ FRACTURE CRITICAL ☒ TEMPORARY SHORING ☐ SCOUR CRITICAL ☒ SCOUR PLAN OF ACTION

GRADES: DECK 5 SUPERSTRUCTURE 5 SUBSTRUCTURE 5 CULVERT N

POSTED SV: 25 POSTED TTST: 29

OTHER SIGNS PRESENT: 4 DELINEATORS



LOOKING WEST

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 NO PLANS

INSPECTED BY Ray L. Kisner	SIGNATURE <i>Ray L. Kisner</i>	ASSISTED BY Andrew C. Stone
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Structure Element Scoring

Structure Number: 770108

Inspection Date 4/17/2018

Element Number	Parent Number	Element Name	Location	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity
15	0	Prestressed Concrete Top Flange	Beam	1872	1872	0	0	0
109	0	Prestressed Concrete Open Girder/Beam	Beam	744	730	14	0	0
216	0	Timber Abutment	Abutments	76	73	3	0	0
228	0	Timber Pile	Piles and Columns	18	9	9	0	0
233	0	Prestressed Concrete Pier Cap	Caps	93	93	0	0	0
301	0	Pourable Joint Seal	Expansion Joints	31	0	0	31	0
330	0	Metal Bridge Railing	Bridge Rail	124	124	0	0	0
515	330	Steel Protective Coating	Bridge Rail	370	370	0	0	0
510	0	Wearing Surface	Wearing Surfaces	1779	1607	99	73	0

Summary of Maintenance Needs

Maintenance By Defect

Structure Number: 770108

Inspection Date: 04/17/2018

MMS Code	Element Name	Defect Name	Recommended Quantity
3306	Prestressed Concrete Open Girder/Bear	Delamination/Spall	10 Feet
3306	Prestressed Concrete Open Girder/Bear	Cracking (PSC)	1 Feet
2816	Wearing Surface	Crack (Wearing Surface)	102 Square Feet

Element Structure Maintenance Quantities

Structure Number: **770108**

Inspection Date **04/17/2018**

Location	MMS Code	Description	Maint Quantity	Total Quantity	Severe Quantity	Poor Quantity	Fair Quantity	Good Quantity
Abutments	3346	Maintenance of Timber Bulkheads or Wingwalls	0	76	0	0	3	73
Beam	3306	Maintenance Concrete Superstructure Components	11	744	0	0	14	730
Beam	3326	Maintenance of Concrete Deck	0	1872	0	0	0	1872
Bridge Rail	3322	Maintenance of Steel Bridge Rail	0	124	0	0	0	124
Bridge Rail	3342	Clean and Paint Steel	0	370	0	0	0	370
Caps	3348	Maintenance of Concrete Substructure	0	93	0	0	0	93
Expansion Joints	3310	Maintenance of Standard Bridge Expansion Joints	31	31	0	31	0	0
Piles and Columns	3344	Maintenance To Timber Substrcutre	44	18	0	0	9	9
Wearing Surfaces	2816	Asphalt Surface Repair	102	1779	0	73	99	1607

Element Condition and Maintenance Data

Structure Number: **770108**

Inspection Date: **04/17/2018**

Span 1

Wearing Surface

Asphalt Wearing Surface

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
510	Wearing Surface	887	759	70	58	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
510	Crack (Wearing Surface)	1/16" TO 1/8" WIDE TRANSVERSE CRACK OVER BENT 1	3	29	29 Square Feet
510	Crack (Wearing Surface)	1/16" TO 1/8" WIDE TRANSVERSE CRACK OVER END BENT 1	3	29	29 Square Feet
510	Patched Area/Pothole (Wearing Surface)	SEALED LONGITUDINAL CRACKS IN SPAN 1	2	70	Square Feet

General Comments

1/16IN. WIDE LONGITUDINAL CRACKS IN BOTH TRAVEL LANES SPACED 2-1/2FT. APART
60 Square Feet of Crack (Wearing Surface): Width of more than 0.05 in. or spacing of less than 1.0 ft.

Span 1

Slab 1

Prestressed Concrete Channel

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
15	Prestressed Concrete Top Flange	78	78	0	0	0 Square Feet
109	Prestressed Concrete Open Girder/Beam	31	29	2	0	0 Feet
515	Steel Protective Coating	78	78	0	0	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
109	Delamination/Spall	SPAN 1 CHANNEL 1 AT INT. BENT BOTH LEGS HAVE SPALLS WITH EXPOSED DIAGONAL REBAR: RT. LEG 8IN. LINE X 3IN. H X 1/2IN. DEEP, LT. LEG 4IN. LINE X 1/2IN. D X 2IN. HIGH.	2	2	Feet

General Comments

SPAN 1 CHANNEL 1 AT INT. BENT BOTH LEGS HAVE SPALLS WITH EXPOSED DIAGONAL REBAR: RT. LEG 8IN. LINE X 3IN. H X 1/2IN. DEEP, LT. LEG 4IN. LINE X 1/2IN. D X 2IN. HIGH.
1 Feet of Delamination/Spall: Delaminated. Spall 1 in. or less deep or 6 in. or less in diameter.

Span 1

Slab 2

Prestressed Concrete Channel

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
15	Prestressed Concrete Top Flange	78	78	0	0	0 Square Feet
109	Prestressed Concrete Open Girder/Beam	31	30	1	0	0 Feet
515	Steel Protective Coating	78	78	0	0	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
109	Delamination/Spall	LT. LEG AT INT. BENT SPALL WITH EXPOSED VERTICAL REBAR 1/2IN. D X 4IN. H X 2IN. LONG.	2	1	1 Feet

General Comments

LT. LEG AT INT. BENT SPALL WITH EXPOSED VERTICAL REBAR 1/2IN. D X 4IN. H X 2IN. LONG.
1 Feet of Delamination/Spall: Delaminated. Spall 1 in. or less deep or 6 in. or less in diameter.

Slab 8

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
15	Prestressed Concrete Top Flange	78	78	0	0	0	Square Feet
109	Prestressed Concrete Open Girder/Beam	31	30	1	0	0	Feet
515	Steel Protective Coating	78	78	0	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
109	Delamination/Spall	LT. LEG AT INT. BENT SPALL WITH EXPOSED DIAGONAL REBAR 1/2IN. D X 2IN. H X 4IN. LONG.	2	1	1 Feet

LT. LEG AT INT. BENT SPALL WITH EXPOSED DIAGONAL REBAR 1/2IN. D X 2IN. H X 4IN. LONG.
1 Feet of Delamination/Spall: Delaminated. Spall 1 in. or less deep or 6 in. or less in diameter.

Slab 10

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
15	Prestressed Concrete Top Flange	78	78	0	0	0	Square Feet
109	Prestressed Concrete Open Girder/Beam	31	30	1	0	0	Feet
515	Steel Protective Coating	78	78	0	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
109	Delamination/Spall	LT. LEG AT INT. BENT SPALL WITH EXPOSED DIAGONAL REBAR 1/2IN. D X 2IN. H X 4IN. LONG.	2	1	1 Feet

LT. LEG AT INT. BENT SPALL WITH EXPOSED DIAGONAL REBAR 1/2IN. D X 2IN. H X 4IN. LONG.
1 Feet of Delamination/Spall: Delaminated. Spall 1 in. or less deep or 6 in. or less in diameter.

Slab 11

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
15	Prestressed Concrete Top Flange	78	78	0	0	0	Square Feet
109	Prestressed Concrete Open Girder/Beam	31	31	0	0	0	Feet
515	Steel Protective Coating	78	78	0	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
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FORM BOARDS IN PLACE , BOTTOM OF TOP CHANNELS 11 AND 12 SPAN 1 NEAR BENT 1

Span 1**Slab 12****Prestressed Concrete Channel**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
15	Prestressed Concrete Top Flange	78	78	0	0	0 Square Feet
109	Prestressed Concrete Open Girder/Beam	31	31	0	0	0 Feet
515	Steel Protective Coating	78	78	0	0	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
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General Comments

FORM BOARDS IN PLACE , BOTTOM OF TOP CHANNELS 11 AND 12 SPAN 1 NEAR BENT 1

Span 2**Expansion Joint****Standard Joint**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
301	Pourable Joint Seal	31	0	0	31	0 Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
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General CommentsAWS ABOVE JOINT CRACKED, BENT CAP HAS MOISTURE STAINS VISIBLE.
31 Feet of Leakage: Moderate. More than a drip and less than free flow of water.**Span 2****Wearing Surface****Asphalt Wearing Surface**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
510	Wearing Surface	892	848	29	15	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
510	Crack (Wearing Surface)	1/16 TO 1/8" WIDE LONGITUDINAL CRACKS	3	15	15 Square Feet
510	Crack (Wearing Surface)	1/16" WIDE TRANSVERSE CRACK OVER END BENT 2	2	29	29 Square Feet

General Comments**Span 2****Slab 1****Prestressed Concrete Channel**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
15	Prestressed Concrete Top Flange	78	78	0	0	0 Square Feet
109	Prestressed Concrete Open Girder/Beam	31	30	1	0	0 Feet
515	Steel Protective Coating	78	78	0	0	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
109	Delamination/Spall	RT. LEG AT INT. BENT HAS SPALL WITH EXPOSED VERTICAL REBAR 2IN. DIA. X 1/2IN. DEEP.	2	1	1 Feet

General Comments

RT. LEG AT INT. BENT HAS SPALL WITH EXPOSED VERTICAL REBAR 2IN. DIA. X 1/2IN. DEEP.

1 Feet of Delamination/Spall: Delaminated. Spall 1 in. or less deep or 6 in. or less in diameter.

Span 2**Slab 3****Prestressed Concrete Channel**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
15	Prestressed Concrete Top Flange	78	78	0	0	0 Square Feet
109	Prestressed Concrete Open Girder/Beam	31	30	1	0	0 Feet
515	Steel Protective Coating	78	78	0	0	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
109	Delamination/Spall	LT. LEG HAS SPALL WITH EXPOSED VERTICAL REBAR 3IN. LINE X 2IN. H X 1/2IN. DEEP.	2	1	1 Feet

General Comments

SPAN 2 CHANNEL 3 AT INT. BENT LT. LEG HAS SPALL WITH EXPOSED VERTICAL REBAR 3IN. LINE X 2IN. H X 1/2IN. DEEP.

1 Feet of Delamination/Spall: Delaminated. Spall 1 in. or less deep or 6 in. or less in diameter.

Span 2**Slab 4****Prestressed Concrete Channel**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
15	Prestressed Concrete Top Flange	78	78	0	0	0 Square Feet
109	Prestressed Concrete Open Girder/Beam	31	30	1	0	0 Feet
515	Steel Protective Coating	78	78	0	0	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
109	Delamination/Spall	RT. LEG HAS SPALL WITH EXPOSED VERTICAL REBAR 3IN. H X 2IN. LINE X 1/2IN. DEEP.	2	1	1 Feet

General Comments

SPAN 2 CHANNEL 4 AT INT. BENT RT. LEG HAS SPALL WITH EXPOSED VERTICAL REBAR 3IN. H X 2IN. LINE X 1/2IN. DEEP.

1 Feet of Delamination/Spall: Delaminated. Spall 1 in. or less deep or 6 in. or less in diameter.

Span 2**Slab 6****Prestressed Concrete Channel**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
15	Prestressed Concrete Top Flange	78	78	0	0	0 Square Feet
109	Prestressed Concrete Open Girder/Beam	31	29	2	0	0 Feet
515	Steel Protective Coating	78	78	0	0	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
109	Cracking (PSC)	1/16" WIDE X 1 FT. LONG HORIZONTAL CRACK IN RIGHT LEG AT MID SPAN	2	1	1 Feet
109	Delamination/Spall	BOTTOM RT. LEG HAS CONC. PATCH 6IN. LINE X 4IN. H X 2IN. WIDE.	2	1	1 Feet

General Comments

SPAN 2 CHANNEL 6 AT INT. BENT BOTTOM RT. LEG HAS CONC. PATCH 6IN. LINE X 4IN. H X 2IN. WIDE.

1 Feet of Patched Area: Patched area that is sound

Span 2**Slab 7****Prestressed Concrete Channel**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
15	Prestressed Concrete Top Flange	78	78	0	0	0 Square Feet
109	Prestressed Concrete Open Girder/Beam	31	30	1	0	0 Feet
515	Steel Protective Coating	78	78	0	0	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
109	Delamination/Spall	LT. LEG INSIDE FACE HAS SPALL WITH EXPOSED DIAGONAL REBAR 4IN. LINE X 2IN. H X 1/2IN. DEEP AND HONEYCOMB 2IN. LINE ON UNDERSIDE OF LT. LEG. 1	2	1	1 Feet

General Comments

SPAN 2 CHANNEL 7 AT INT. BENT, LT. LEG INSIDE FACE HAS SPALL WITH EXPOSED DIAGONAL REBAR 4IN. LINE X 2IN. H X 1/2IN. DEEP AND HONEYCOMB 2IN. LINE ON UNDERSIDE OF LT. LEG. 1 Feet of Delamination/Spall: Delaminated. Spall 1 in. or less deep or 6 in. or less in diameter.

SPAN 2 CHANNEL 7 AT INT. BENT, BOTTOM RT. LEG HAS CONC. PATCHING 9IN. LINE X 2IN. H X 2IN. WIDE. 1 Feet of Patched Area: Patched area that is sound

Span 2**Slab 8****Prestressed Concrete Channel**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
15	Prestressed Concrete Top Flange	78	78	0	0	0 Square Feet
109	Prestressed Concrete Open Girder/Beam	31	29	2	0	0 Feet
515	Steel Protective Coating	78	78	0	0	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
109	Delamination/Spall	BOTTOM RT. LEG AT ABUTMENT 2 CAP HAS SPALL 3IN. LINE X 1IN. H X 1/2IN. DEEP	2	1	1 Feet
109	Patched Area	RT. LEG AT INT. BENT. HAS CONC. PATCH TO SPALL IN 9IN. LINE X UP TO 4IN. HIGH.	2	1	Feet

General Comments

BOTTOM RT. LEG AT ABUTMENT 2 CAP HAS SPALL 3IN. LINE X 1IN. H X 1/2IN. DEEP
1 Feet of Delamination/Spall: Delaminated. Spall 1 in. or less deep or 6 in. or less in diameter.

BOTTOM OF RT. LEG AT INT. BENT. HAS CONC. PATCH TO SPALL IN 9IN. LINE X UP TO 4IN. HIGH.
1 Feet of Patched Area: Patched area that is sound

BOTTOM OF LT. LEG AT INT. BENT HAS SPALL WITH EXPOSED VERTICAL REBAR 1/2IN. D X 2IN. LINE X 9IN. HIGH.
1 Feet of Delamination/Spall: Delaminated. Spall 1 in. or less deep or 6 in. or less in diameter.

Span 2**Slab 10****Prestressed Concrete Channel**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
15	Prestressed Concrete Top Flange	78	78	0	0	0 Square Feet
109	Prestressed Concrete Open Girder/Beam	31	30	1	0	0 Feet
515	Steel Protective Coating	78	78	0	0	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
109	Delamination/Spall	BOTTOM LT. LEG SPALL WITH EXPOSED STEEL 1/2IN. D X 3IN. DIA.	2	1	1 Feet

General Comments

SPAN 2 CHANNEL 10 AT INT. BENT CAP BOTTOM LT. LEG SPALL WITH EXPOSED STEEL 1/2IN. D X 3IN. DIA.
1 Feet of Delamination/Spall: Delaminated. Spall 1 in. or less deep or 6 in. or less in diameter.

Span 2**Slab 11****Prestressed Concrete Channel**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
15	Prestressed Concrete Top Flange	78	78	0	0	0 Square Feet
109	Prestressed Concrete Open Girder/Beam	31	31	0	0	0 Feet
515	Steel Protective Coating	78	78	0	0	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
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General Comments

BOTTOM RT. LEG AT INTERIOR BENT CAP HAS CONC. PATCH TO SPALL 1FT. LINE X 2-1/2IN. HIGH W/ 1/16IN. CRACK.
1 Feet of Patched Area: Patched area that is unsound or showing distress. Does not warrant structural review.

Span 2**Slab 12****Prestressed Concrete Channel**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
15	Prestressed Concrete Top Flange	78	78	0	0	0 Square Feet
109	Prestressed Concrete Open Girder/Beam	31	31	0	0	0 Feet
515	Steel Protective Coating	78	78	0	0	0 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
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General Comments

SPAN 2 CHANNEL 12 DECK SLAB UNDERSIDE POP-OFF 3IN. DIA. X 1/2IN. DEEP NEAR INT. BENT, AND SPALL WITH EXPOSED STEEL IN END DIAPH AT BENT UP TO 8IN. H X 2IN. W X 1/2IN. D.
1 Feet of Delamination/Spall: Delaminated. Spall 1 in. or less deep or 6 in. or less in diameter.

Bent 1**Cap 1****Prestressed Concrete Pier Cap**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
233	Prestressed Concrete Pier Cap	31	31	0	0	0 Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
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General Comments

INT. BENT PPC CAP ENDS OF LONGITUDINAL STRANDS EXPOSED ON BOTH ENDS OF CAP.
1 Feet of Exposed Prestressing: Present without section loss.

End Bent 1**Pile 1****Timber Pile**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
228	Timber Pile	1	1	0	0	0 Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
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General Comments

TEMPORARY REPAIR: PILE HAS BEEN ENCASED WITH CONCRETE.

End Bent 1**Pile 2****Timber Pile**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
228	Timber Pile	1	0	1	0	0 Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
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General Comments

PILE IS 1/8IN. SOFT.

End Bent 1**Pile 3****Timber Pile**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
228	Timber Pile	1	0	1	0	0 Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
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General Comments

PILE IS 1/8IN. SOFT.

End Bent 1**Pile 4****Timber Pile**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
228	Timber Pile	1	0	1	0	0 Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
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General Comments

PILE IS 1/8IN. SOFT.

End Bent 1**Pile 5****Timber Pile**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
228	Timber Pile	1	0	1	0	0 Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
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General Comments

PILE IS 1/8IN. SOFT.

End Bent 1 Pile 6**Timber Pile**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
228	Timber Pile	1	1	0	0	0 Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
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General Comments

TEMPORARY REPAIR: PILE HAS BEEN ENCASED WITH CONCRETE.

1 Each of Decay/Section Loss: Affects 10% or more of the member but does not warrant structural review.

Bent 1 Pile 1**Timber Pile**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
228	Timber Pile	1	0	1	0	0 Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
228	Check/Shake	1/16" TO 1/8" WIDE X 3 FT. HIGH X 1/2" DEEP VERTICAL CHECKS	2	1	Each

General Comments

PILE IS 1/8IN. SOFT.

Bent 1 Pile 2**Timber Pile**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
228	Timber Pile	1	0	1	0	0 Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
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General Comments

PILE IS 1/8IN. SOFT.

Bent 1 Pile 3**Timber Pile**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
228	Timber Pile	1	0	1	0	0 Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
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General Comments

INT. BENT PILE 3 WEST SIDE AT WATER SURFACE 1IN. DEEP DECAY 9IN. H X 3IN. WIDE.

PILE IS 1/8IN. SOFT.

1 Each of Decay/Section Loss: Affects less than 10% of the member section

1/16" TO 1/8" WIDE X 3 FT. HIGH X 1/2" DEEP VERTICAL CHECKS

Bent 1**Pile 4****Timber Pile**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
228	Timber Pile	1	0	1	0	0 Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
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General Comments

PILE IS 1/8IN. SOFT.

1/16" TO 1/8" WIDE X 3 FT. HIGH X 1/2" DEEP VERTICAL CHECKS

Bent 1**Pile 5****Timber Pile**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
228	Timber Pile	1	0	1	0	0 Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
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General Comments

PILE IS 1/8IN. SOFT.

Bent 1**Pile 6****Timber Pile**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
228	Timber Pile	1	1	0	0	0 Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
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General Comments

PILE 6 AT BENT 1 ENCASED IN CONCRETE, TEMPORARY REPAIR

End Bent 1**Abutment****Timber Abutment**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
216	Timber Abutment	38	37	1	0	0 Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
216	Check/Shake	1/8" WIDE VERTICAL CHECKS IN TURNPILE AT SOUTHWEST CORNER	2	1	Feet

General Comments

NEW BULKHEAD BOARDS AT END BENT 2, SIMILAR AT END BENT 1

End Bent 2**Pile 1****Timber Pile**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
228	Timber Pile	1	1	0	0	0 Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
----------------	-------------	--------------------	----	--------	-----------

General Comments

PILE IS 1/8IN. SOFT.

End Bent 2
Timber Pile
Pile 2

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
228	Timber Pile	1	1	0	0	0 Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
----------------	-------------	--------------------	----	--------	-----------

General Comments

PILE IS 1/8IN. SOFT.

End Bent 2
Timber Pile
Pile 3

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
228	Timber Pile	1	1	0	0	0 Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
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General Comments

PILE IS 1/8IN. SOFT.

End Bent 2
Timber Pile
Pile 4

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
228	Timber Pile	1	1	0	0	0 Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
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General Comments

PILE IS 1/8IN. SOFT.

End Bent 2
Timber Pile
Pile 5

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
228	Timber Pile	1	1	0	0	0 Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
----------------	-------------	--------------------	----	--------	-----------

General Comments

PILE IS 1/8IN. SOFT.

End Bent 2**Pile 6****Timber Pile**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
228	Timber Pile	1	1	0	0	0 Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
----------------	-------------	--------------------	----	--------	-----------

General Comments

PILE IS 1/8IN. SOFT.

End Bent 2**Abutment****Timber Abutment**

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
216	Timber Abutment	38	36	2	0	0 Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty
216	Check/Shake	1/8" WIDE VERTICAL CHECKS TURNPILE AT NORTHEAST CORNER	2	1	Feet
216	Decay/Section Loss	MOWER DAMAGE AND 1/16" WIDE VERTICAL CHECKS AT SOUTHEAST TURNPILE	2	1	Feet

General Comments

NEW BULKHEAD BOARDS AT END BENT 2, SIMILAR AT END BENT 1

Elements Verified

[illegible]

Elements Verified

Location	Name	Component	Element Name	Amount
Span 2	Slab 10	Prestressed Concrete Channel	Prestressed Concrete Top Flange	78
Span 2	Slab 10	Prestressed Concrete Channel	Prestressed Concrete Open Girder/Beam	31
Span 2	Slab 11	Prestressed Concrete Channel	Prestressed Concrete Open Girder/Beam	31
Span 2	Slab 11	Prestressed Concrete Channel	Prestressed Concrete Top Flange	78
Span 2	Slab 12	Prestressed Concrete Channel	Prestressed Concrete Top Flange	78
Span 2	Slab 12	Prestressed Concrete Channel	Prestressed Concrete Open Girder/Beam	31
Span 2	Left Bridge Rail	Steel Rail	Metal Bridge Railing	31
Span 2	Right Bridge Rail	Steel Rail	Metal Bridge Railing	31
Span 2	Wearing Surface	Asphalt Wearing Surface	Wearing Surface	892
Bent 1	Cap 1	Prestressed Concrete Pier Cap	Prestressed Concrete Pier Cap	31
Bent 1	Pile 1	Timber Pile	Timber Pile	1
Bent 1	Pile 2	Timber Pile	Timber Pile	1
Bent 1	Pile 3	Timber Pile	Timber Pile	1
Bent 1	Pile 4	Timber Pile	Timber Pile	1
Bent 1	Pile 5	Timber Pile	Timber Pile	1
Bent 1	Pile 6	Timber Pile	Timber Pile	1
End Bent 1	Cap 1	Prestressed Concrete Pier Cap	Prestressed Concrete Pier Cap	31
End Bent 1	Pile 1	Timber Pile	Timber Pile	1
End Bent 1	Pile 2	Timber Pile	Timber Pile	1
End Bent 1	Pile 3	Timber Pile	Timber Pile	1
End Bent 1	Pile 4	Timber Pile	Timber Pile	1
End Bent 1	Pile 5	Timber Pile	Timber Pile	1
End Bent 1	Pile 6	Timber Pile	Timber Pile	1
End Bent 1	Abutment	Timber Abutment	Timber Abutment	38
End Bent 2	Cap 1	Prestressed Concrete Pier Cap	Prestressed Concrete Pier Cap	31
End Bent 2	Pile 1	Timber Pile	Timber Pile	1
End Bent 2	Pile 2	Timber Pile	Timber Pile	1
End Bent 2	Pile 3	Timber Pile	Timber Pile	1
End Bent 2	Pile 4	Timber Pile	Timber Pile	1
End Bent 2	Pile 5	Timber Pile	Timber Pile	1
End Bent 2	Pile 6	Timber Pile	Timber Pile	1
End Bent 2	Abutment	Timber Abutment	Timber Abutment	38

General Inspection Notes

Bent 1	Cap 1	INT. BENT PPC CAP ENDS OF LONGITUDINAL STRANDS EXPOSED ON BOTH ENDS OF CAP. 1 Feet of Exposed Prestressing: Present without section loss.
Bent 1	Pile 1	TEMPORARY REPAIR: PILE HAS BEEN ENCASED WITH CONCRETE.
Bent 1	Pile 6	PILE 6 AT BENT 1 ENCASED IN CONCRETE, TEMPORARY REPAIR
Bent 1	Pile 6	TEMPORARY REPAIR: PILE HAS BEEN ENCASED WITH CONCRETE. 1 Each of Decay/Section Loss: Affects 10% or more of the member but does not warrant structural review.
Bent 2	Pile 1	PILE IS 1/8IN. SOFT.
Bent 2	Pile 2	PILE IS 1/8IN. SOFT.
Bent 2	Pile 3	PILE IS 1/8IN. SOFT.
Bent 2	Pile 4	PILE IS 1/8IN. SOFT.
Bent 2	Pile 5	PILE IS 1/8IN. SOFT.
Bent 2	Pile 6	PILE IS 1/8IN. SOFT.
Span 1	Slab 11	FORM BOARDS IN PLACE , BOTTOM OF TOP CHANNELS 11 AND 12 SPAN 1 NEAR BENT 1
Span 1	Slab 12	FORM BOARDS IN PLACE , BOTTOM OF TOP CHANNELS 11 AND 12 SPAN 1 NEAR BENT 1
Span 2	Slab 11	BOTTOM RT. LEG AT INTERIOR BENT CAP HAS CONC. PATCH TO SPALL 1FT. LINE X 2-1/2IN. HIGH W/ 1/16IN. CRACK. 1 Feet of Patched Area: Patched area that is unsound or showing distress. Does not warrant structural review.
Span 2	Slab 12	SPAN 2 CHANNEL 12 DECK SLAB UNDERSIDE POP-OFF 3IN. DIA. X 1/2IN. DEEP NEAR INT. BENT, AND SPALL WITH EXPOSED STEEL IN END DIAPH AT BENT UP TO 8IN. H X 2IN. W X 1/2IN. D. 1 Feet of Delamination/Spall: Delaminated. Spall 1 in. or less deep or 6 in. or less in diameter.

National Bridge and NC Inspection Items

Structure Number: 770108

Inspection Date: 04/17/2018

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	5
Item 61: Channel and Channel Protection	0 - 9 , N	7
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: 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	1779	3376
Drainage System	G, F, P, or C	G	0	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	1	3350
Field Scour Evaluation		O		
Drift	G, F, P, or C	G	0	3366
Fender System	G, F, P, or C		0	3364
Movable Span Machinery	G, F, P, or C			
Response to Live Load	G, F, P, or C	G		
Estimated Remaining Life	0 - 100 Years	10		
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	N
Inspection Time	Hours	4
Traffic Control Time	Hours	
Snooper Time	Hours	
Ladder Used	YES/NO	N
Bucket Truck Used	YES/NO	N
Boat Used	YES/NO	Y
Other Equipment Used	YES/NO	N

National Bridge and NC SMU Inspection Item Details

Structure Number: 770108

Inspection Date: 04/17/2018

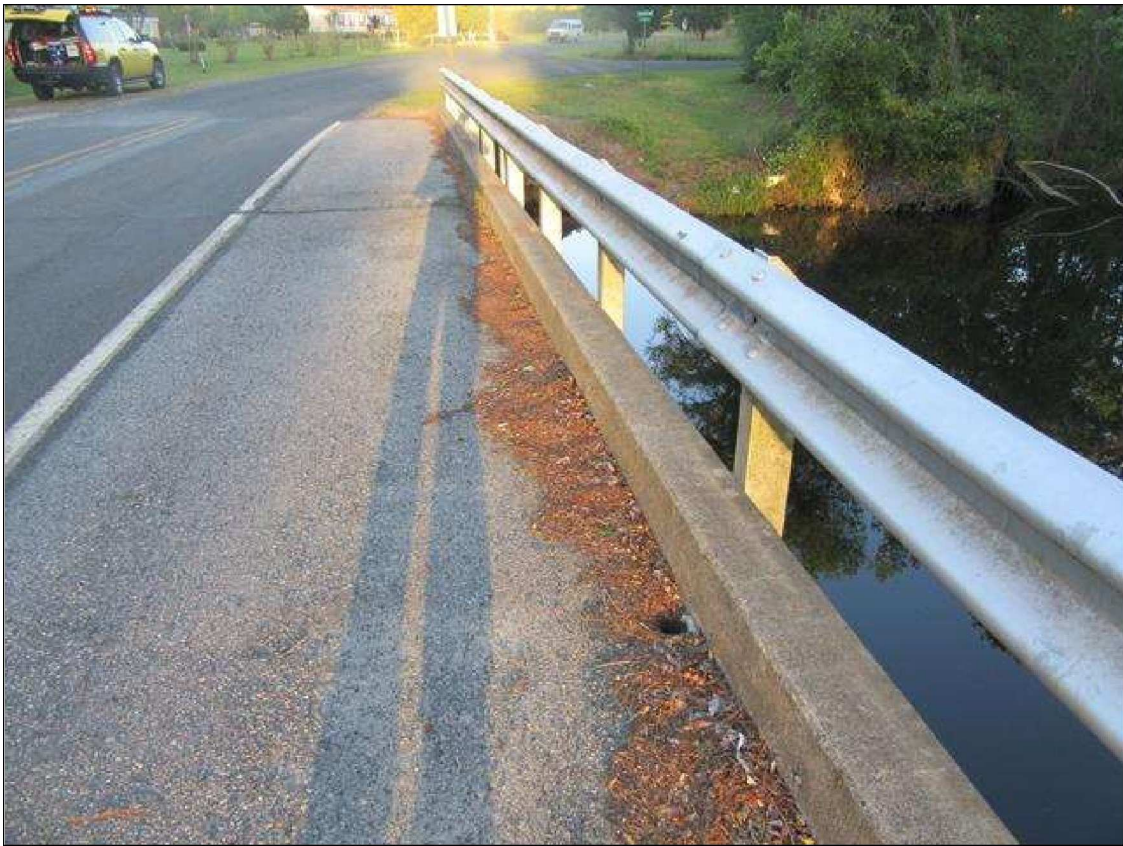
Item	Deck Debris	Grade	F	Maint Code	3376	Qty.	1779
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Details DEBRIS ALONG BOTH CURBS

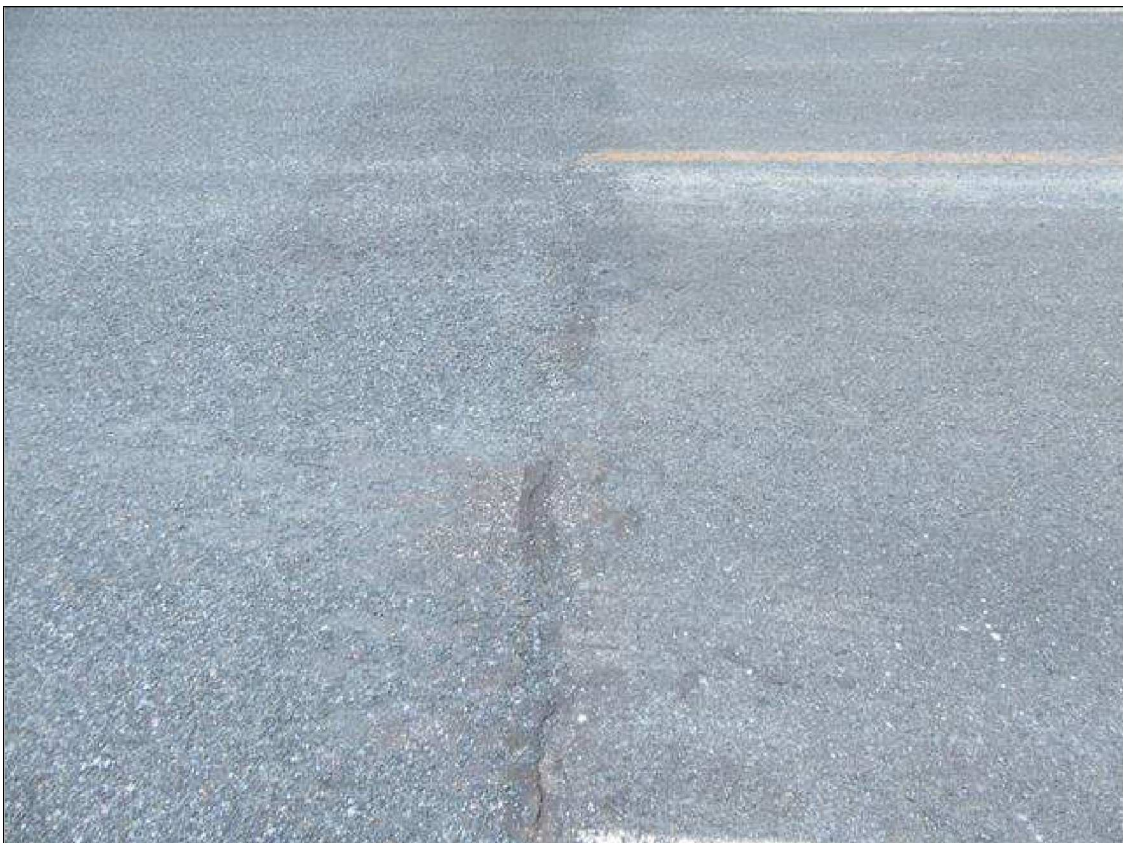
Item	Wingwalls	Grade	F	Maint Code	3350	Qty.	1
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Details NWC WINGWALL PILE 1/4" WIDE VERTICAL CHECKS , HOLLOW

SWC WINGWALL PILE 1/8" WIDE X 4' HIGH VERTICAL CHECKS



DEBRIS ALONG BOTH CURBS



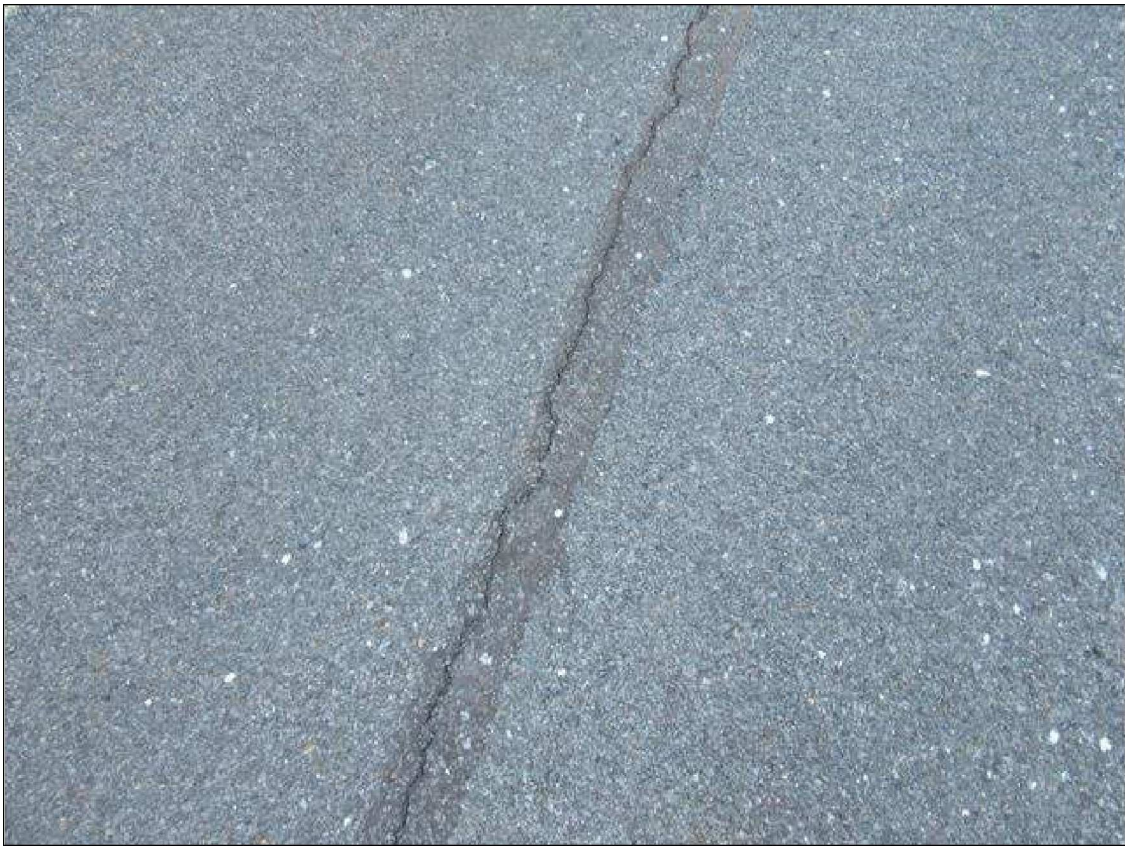
Span 2 Wearing Surface: 1/16" WIDE TRANSVERSE CRACK OVER END BENT 2



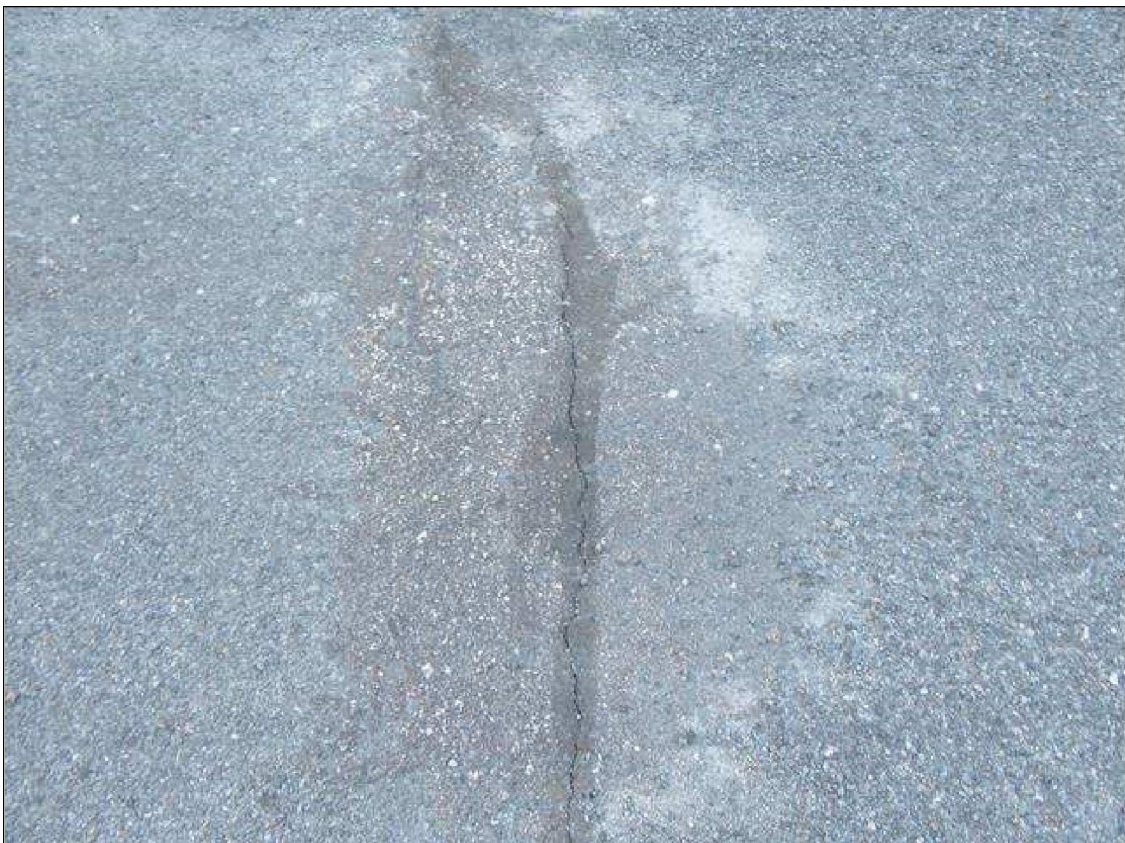
Span 2 Wearing Surface: 1/16 TO 1/8" WIDE LONGITUDINAL CRACKS



Span 1 Wearing Surface: 1/16" TO 1/8" WIDE TRANSVERSE CRACK OVER BENT 1



Span 1 Wearing Surface: SEALED LONGITUDINAL CRACKS IN SPAN 1



Span 1 Wearing Surface: 1/16" TO 1/8" WIDE TRANSVERSE CRACK OVER END BENT 1



NWC WINGWALL PILE 1/4" WIDE VERTICAL CHECKS , HOLLOW



END BENT 1 PILES 1 AND 6 ENCASED IN CONCRETE , TEMPORARY REPAIRS



PILE 6 AT BENT 1 ENCASED IN CONCRETE, TEMPORARY REPAIR



SWC WINGWALL PILE 1/8" WIDE X 4' HIGH VERTICAL CHECKS



End Bent 1 Abutment/Backwall : 1/8" WIDE VERTICAL CHECKS IN TURNPILE AT SOUTHWEST CORNER



Span 1 Slab 1: SPAN 1 CHANNEL 1 AT INT. BENT BOTH LEGS HAVE SPALLS WITH EXPOSED DIAGONAL REBAR: RT. LEG 8IN. LINE X 3IN. H X 1/2IN. DEEP, LT. LEG 4IN. LINE X 1/2IN. D X 2IN. HIGH.



Span 1 Slab 2: LT. LEG AT INT. BENT SPALL WITH EXPOSED VERTICAL REBAR 1/2IN. D X 4IN. H X 2IN. LONG.



Span 1 Slab 8: LT. LEG AT INT. BENT SPALL WITH EXPOSED DIAGONAL REBAR 1/2IN. D X 2IN. H X 4IN. LONG.



Span 1 Slab 10: LT. LEG AT INT. BENT SPALL WITH EXPOSED DIAGONAL REBAR 1/2IN. D X 2IN. H X 4IN. LONG.



FORM BOARDS IN PLACE , BOTTOM OF TOP CHANNELS 11 AND 12 SPAN 1 NEAR BENT 1



Span 2 Slab 1: RT. LEG AT INT. BENT HAS SPALL WITH EXPOSED VERTICAL REBAR 2IN. DIA. X 1/2IN. DEEP.



Span 2 Slab 3: LT. LEG HAS SPALL WITH EXPOSED VERTICAL REBAR 3IN. LINE X 2IN. H X 1/2IN. DEEP.



Span 2 Slab 4: RT. LEG HAS SPALL WITH EXPOSED VERTICAL REBAR 3IN. H X 2IN. LINE X 1/2IN. DEEP.



Span 2 Slab 6: BOTTOM RT. LEG HAS CONC. PATCH 6IN. LINE X 4IN. H X 2IN. WIDE.



Span 2 Slab 7: LT. LEG INSIDE FACE HAS SPALL WITH EXPOSED DIAGONAL REBAR 4IN. LINE X 2IN. H X 1/2IN. DEEP AND HONEYCOMB 2IN. LINE ON UNDERSIDE OF LT. LEG. 1



Span 2 Slab 8: RT. LEG AT INT. BENT. HAS CONC. PATCH TO SPALL IN 9IN. LINE X UP TO 4IN. HIGH.



Span 2 Slab 10: BOTTOM LT. LEG SPALL WITH EXPOSED STEEL 1/2IN. D X 3IN. DIA.



Span 2 Slab 6: 1/16" WIDE X 1 FT. LONG HORIZONTAL CRACK IN RIGHT LEG AT MID SPAN



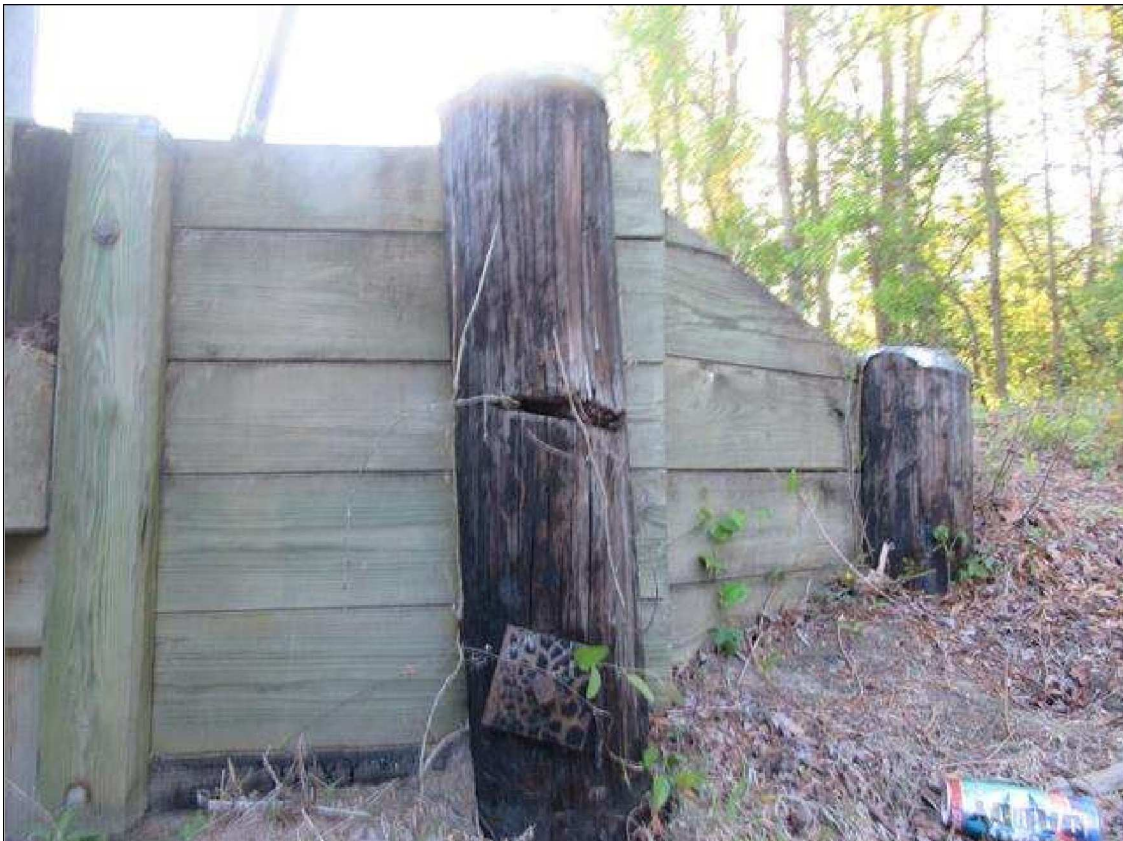
Bent 1 Pile 1: 1/16" TO 1/8" WIDE X 3 FT. HIGH X 1/2" DEEP VERTICAL CHECKS



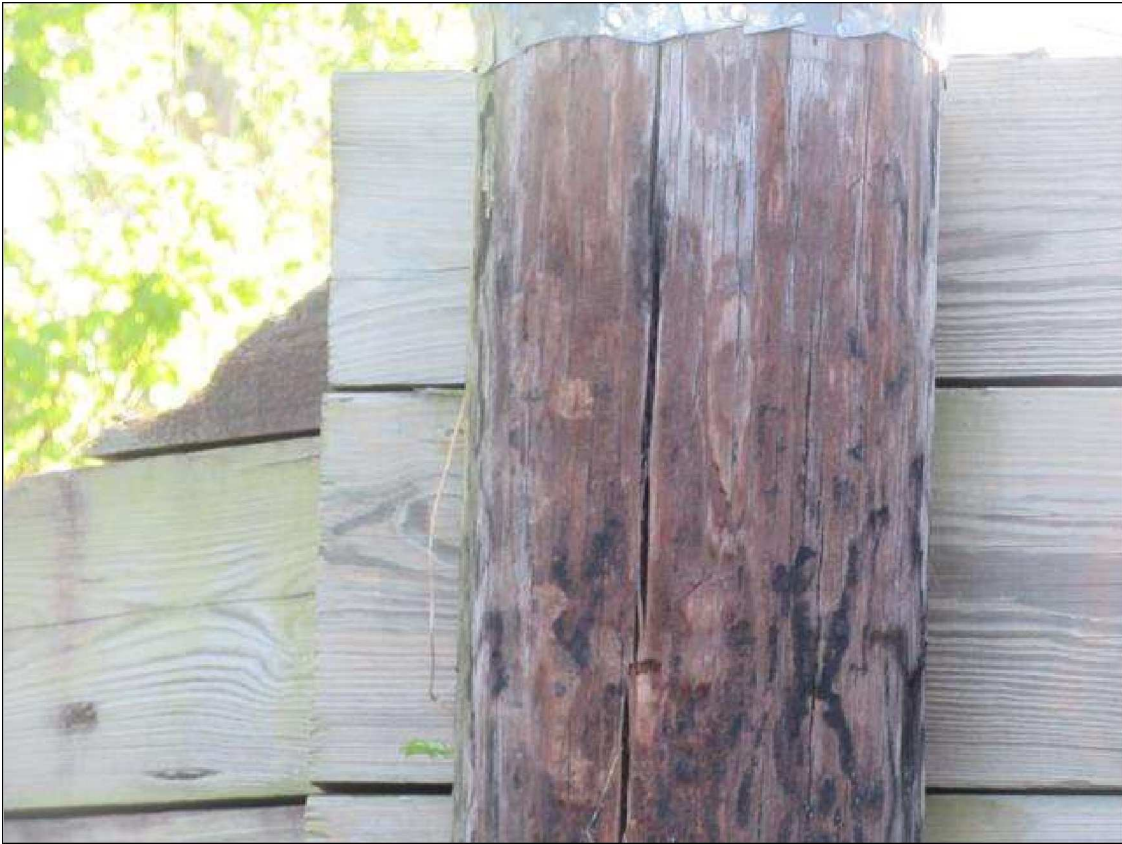
1/16" TO 1/8" WIDE X 3 FT. HIGH X 1/2" DEEP VERTICAL CHECKS



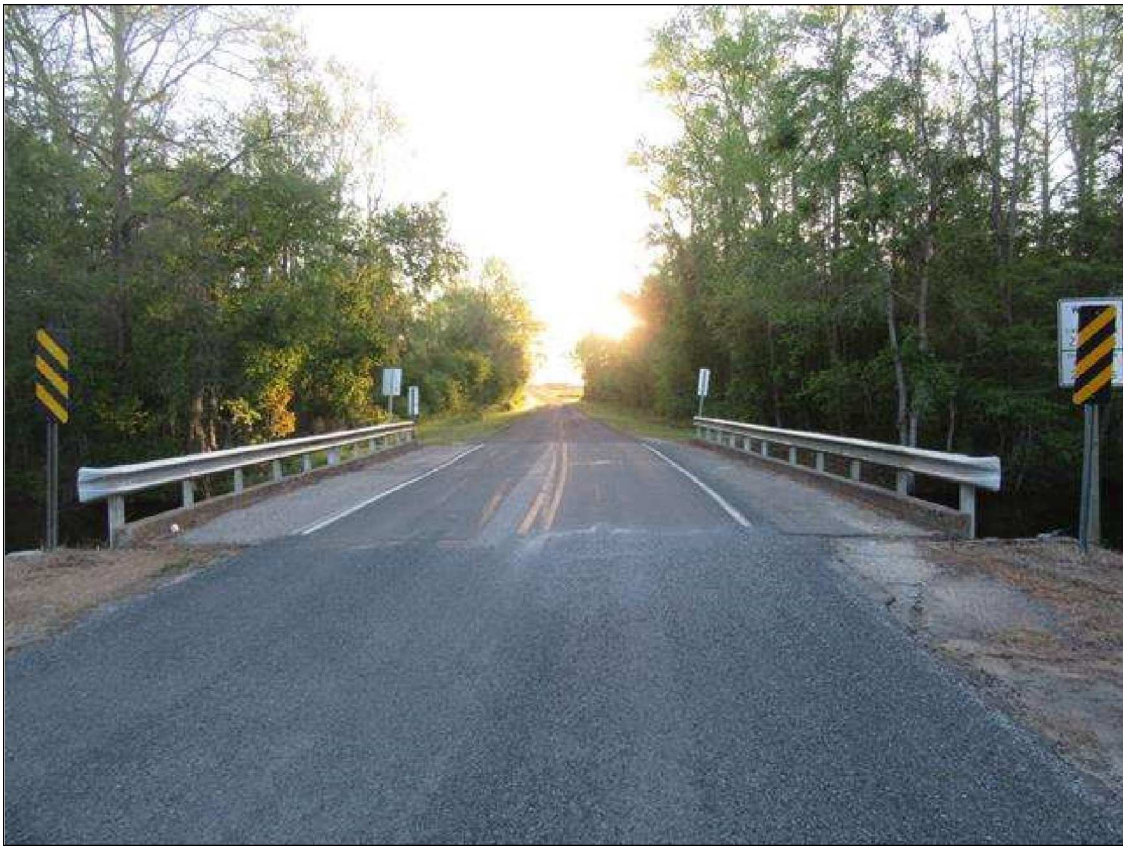
1/16" TO 1/8" WIDE X 3 FT. HIGH X 1/2" DEEP VERTICAL CHECKS



End Bent 2 Abutment/Backwall : MOWER DAMAGE AND 1/16" WIDE VERTICAL CHECKS AT SOUTHEAST TURNPILE



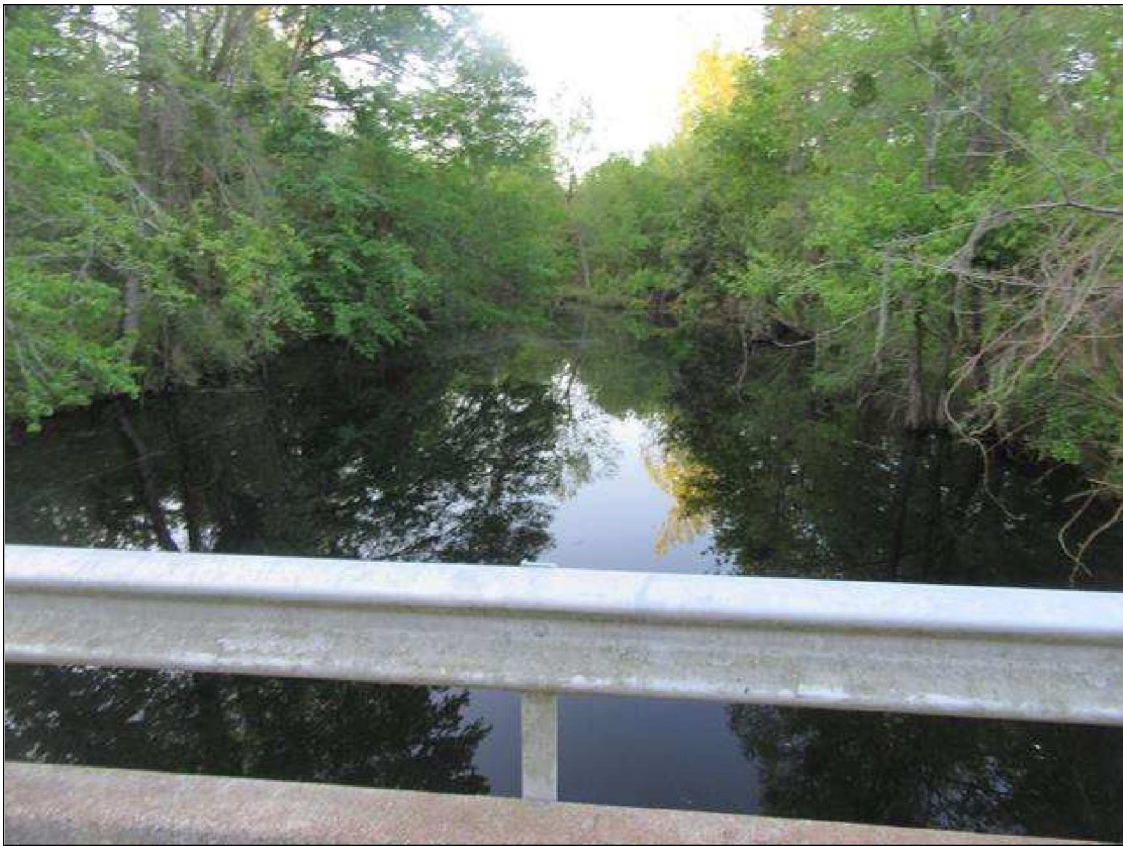
End Bent 2 Abutment/Backwall : 1/8" WIDE VERTICAL CHECKS TURNPILE AT NORTHEAST CORNER



LOOKING EAST



LOOKING EAST, POSTING



DOWNSTREAM SOUTH



UPSTREAM NORTH



LOOKING EAST, OFF BRIDGE



LOOKING WEST, OFF BRIDGE



LOOKING WEST



LOOKING WEST, POSTING



NORTH PROFILE



DOWNSTREAM SOUTH



END BENT 1



SUPERSTRUCTURE



SOUTH PROFILE



UPSTREAM NORTH



BENT 1



END BENT 2



NEW BULKHEAD BOARDS AT END BENT 2, SIMILAR AT END BENT 1



NORTH END OF BENT 1 CAP



SIMILAR BEARING PLATE

Stream Bed Soundings

(Profile diagram on following sheet)

County **ROBESON**

Structure Number: **770108**

Inspection Date **04/17/2018**

Sounding recorded from: **Top of Bridge Rail**

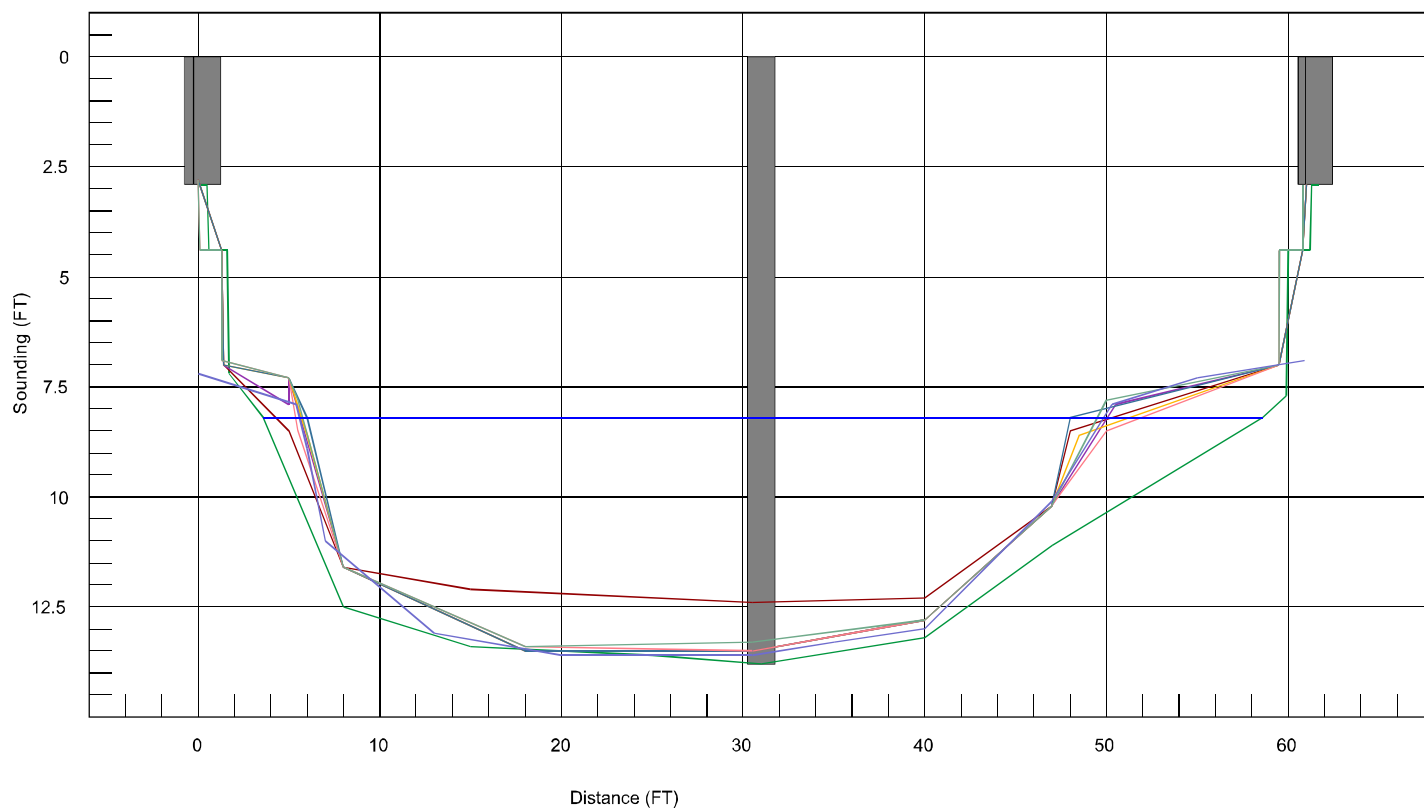
Highwater Mark Distance **5.3**

Location of Highwater Mark **ON CAPS**

Distance (Station) ft.	Downstream Sounding ft.	Upstream Sounding ft.	Description
0.000	2.900	0.000	TOP OF TIMBER ABUTMENT 1
0.500	2.900	0.000	TOP OF TIMBER ABUTMENT 1
0.600	4.400	0.000	TOP OF CAP
1.600	4.400	0.000	TOP OF CAP
1.700	7.200	10.500	GROUND AND BED AT CAP AT CAP
3.600	8.200	0.000	WSWE (SOUTH)
8.000	12.500	0.000	
15.000	13.400	0.000	
25.000	13.600	0.000	
31.000	13.800	14.600	BENT 1
40.000	13.200	0.000	
47.000	11.100	0.000	
58.600	8.200	0.000	WSWE
59.900	7.700	7.500	GROUND AT CAP
60.000	4.400	0.000	TOP OF CAP
61.200	4.400	0.000	TOP OF CAP
61.300	2.900	0.000	TOP OF TIMBER ABUTMENT 2
61.700	2.900	0.000	TOP OF TIMBER ABUTMENT 2

Date: 04/17/2018

Top of Rail = 0FT (Sounding)

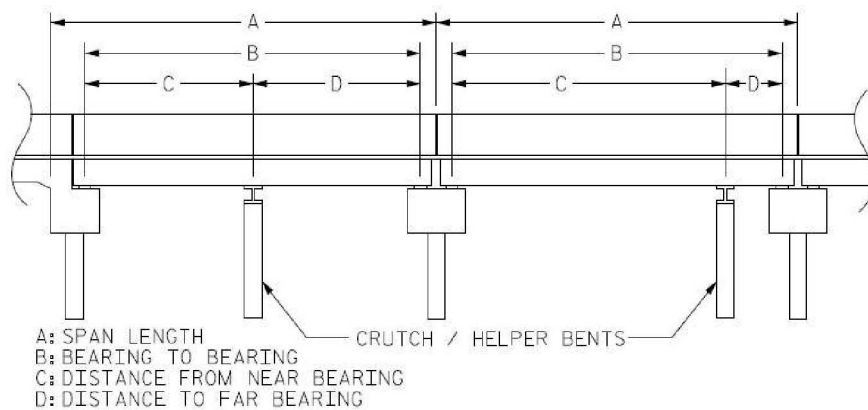


Structure Data Worksheet

Span Profile

County: **ROBESON**

Structure Number: **770108**



Span Number	Span Length	Bearing to Bearing	Crutch/ Helper Bent	Distance to Near Bearing	Distance to Far Bearing
1	30.583	30.000			
2	30.750	30.167			