



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION

TEMP REPAIRS: ENCASED PILES
PRIORITY MAINTENANCE ISSUED

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY ROBESON BRIDGE NUMBER 770433 INSPECTION CYCLE 2 YRS
ROUTE SR1160 ACROSS BACK SWAMP M.P. 0

LOCATION 0.3 MI. SW. JCT. SR1159

SUPERSTRUCTURE REINFORCED CONCRETE FLOOR ON TIMBER JOISTS; BMD-10 MR

SUBSTRUCTURE E.BTS&INT.BTS:TIMBER CAP/5 TIMBER PILES@VAR.CTS.

SPANS 1@17'10";1@17'1";1@16'11";1@18'

LONGITUDE 79° 9' 58.23"

LATITUDE 34° 36' 48.34"

INSPECTION DATE 04/08/2014

PRESENT CONDITION FAIR

PRESENT POSTING SV 20 TTST 29

SV 20 TTST 29

PROPOSED POSTING

OTHER SIGNS PRESENT 4 DELINEATORS



LOOKING NORTH (ADDISON TRAM ROAD)

Fracture Critical	<u>No</u>
Temporary Shoring	<u>No</u>
Scour Critical	<u>No</u>
Scour POA	<u>Yes</u>

SIGN NOTICE ISSUED FOR	NUMBERED REQUIRED
<u>No</u> WEIGHT LIMIT	<u></u>
<u>No</u> DELINEATORS	<u></u>
<u>No</u> NARROW BRIDGE	<u></u>
<u>No</u> ONE LANE BRIDGE	<u></u>
<u>No</u> LOW CLEARANCE	<u></u>

NATIONAL BRIDGE INVENTORY----- STRUCTURE INVENTORY AND APPRAISAL Run Date: 05/19/2014

IDENTIFICATION					
(1) STATE NAME -NORTH CAROLINA	BRIDGE	770433	SUFFICIENCY RATING =	30.29	
(8) STRUCTURE NUMBER(FEDERAL)		000000001560433	STATUS =	Structurally Deficient	
(5) INVENTORY ROUTE (ON/UNDER) - ON		31011600			
(2) STATE HIGHWAY DEPARTMENT DISTRICT		1			
(3) COUNTY CODE	155	(4) PLACE CODE	0		
(6) FEATURE INTERSECTED -	BACK SWAMP		(112)NBIS BRIDGE SYSTEM -	YES	
(7) FACILITY CARRIED	SR1160		(104)HIGHWAY SYSTEM	Is not on NHS 0	
(9) LOCATION	.3 MI. SW. OF JCT. SR1159		(26) FUNCTIONAL CLASS -	Local 09	
(11)MILEPOINT			(100)STRAHNET HIGHWAY -	Not a STRAHNET Route 0	
(16)LAT	34° 36' 48.34"	(17)LONG	79° 9' 58.23"	(101)PARALLEL STRUCTURE -	No Parallel Structure N
(98)BORDER BRIDGE STATE CODE		PCT SHARE		(102)DIRECTION OF TRAFFIC -	2-way Traffic 2
(99)BORDER BRIDGE STRUCTURE NO			(103)TEMPORARY STRUCTURE -	Temporary Structure/Conditions T	
			(110)DESIGNATED NATIONAL NETWORK -	Not on the National Network 0	
			(20) TOLL	On Free Road 3	
			(31) MAINTAIN -	State Highway Agency 01	
			(22) OWNER -	State Highway Agency 01	
			(37) HISTORICAL SIGNIFICANCE -	Not Eligible 5	
STRUCTURE TYPE AND MATERIAL					
(43) STRUCTURE TYPE MAIN:	Wood or Timber				
TYPE -	Stringer Multibeam or Girder	CODE	702		
(44) STRUCTURE TYPE APPR ;					
TYPE -		CODE	000		
(45) NUMBER OF SPANS IN MAIN UNIT			4	(58) DECK	5
(46) NUMBER OF APPROACH SPANS				(59) SUPERSTRUCTURE	7
(107)DECK STRUCTURE TYPE -	1		CODE	(60) SUBSTRUCTURE	4
(108)WEARING SURFACE / PROTECTIVE SYSTEM :				(61) CHANNEL & CHANNEL PROTECTION	4
(A) TYPE OF WEARING SURFACE -			CODE	(62) CULVERTS	N
(B) TYPE OF MEMBRANE -			CODE		
(C) TYPE OF DECK PROTECTION -			CODE		
AGE AND SERVICE					
(27) YEAR BUILT			1970		
(106)YEAR RECONSTRUCTED					
(42) TYPE OF SERVICE : ON -	Highway				
UNDER -	Waterway		CODE	15	
(28) LANES: ON STRUCTURE	2	UNDER STRUCTURE	0		
(29) AVERAGE DAILY TRAFFIC			760		
(30) YEAR OF ADT	2005	(109) TRUCK ADT PCT	6%		
(19) BYPASS OR DETOUR LENGTH			3 MI		
GEOMETRIC DATA					
(48) LENGTH OF MAXIMUM SPAN			17 FT		
(49) STRUCTURE LENGTH			70 FT		
(50)CURB OR SIDEWALK: LEFT	.417 FT	RIGHT	.417 FT		
(51) BRIDGE ROADWAY WIDTH CURB TO CURB			27.833 FT		
(52) DECK WIDTH OUT TO OUT			29.25 FT		
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS)			18 FT		
(33) BRIDGE MEDIAN -	No Median		CODE	0	
(34) SKEW	31°	(35) STRUCTURE FLARED	0		
(10) INVENTORY ROUTE MIN VERT CLEAR			999.9 FT		
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR			27.833 FT		
(53) MIN VERT CLEAR OVER BRIDGE ROWY			999.9 FT		
(54) MIN VERT UNDERCLEAR REF	Not a Highway or Railroad		0 FT		
(55) MIN LAT UNDERCLEAR RT REF	Not a Highway or Railroad		000 FT		
(56) MIN LAT UNDERCLEAR LT REF -			000 FT		
CLASSIFICATION					
CONDITION					
LOAD RATING AND POSTING					
			(31) DESIGN LOAD	Unknown 0	
			(63) OPERATING RATING METHOD -	Allowable Stress 2	
			(64) OPERATING RATING -	HS-1 1	
			(65) INVENTORY RATING METHOD -	Allowable Stress 2	
			(68) INVENTORY RATING -	HS-1 1	
			(70) BRIDGE POSTING -	Posting Required 1	
			(41) STRUCTURE OPEN, POSTED ,OR CLOSED	P	
			DESCRIPTION -	Posted for Load	
APPRAISAL					
			(67) STRUCTURAL EVALUATION	3	
			(68) DECK GEOMETRY	5	
			(69) UNDERCLEARANCES,VERTI & HORIZ	N	
			(71) WATERWAY ADEQUACY	7	
			(72) APPROACH ROADWAY ALIGNMENT	8	
			(36) TRAFFIC SAFETY FEATURES	0000	
			(113)SCOUR CRITICAL BRIDGES	U	
PROPOSED IMPROVEMENTS					
			(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	1520	(115) YEAR FUTURE ADT 2025
INSPECTIONS					
			(90) INSPECTION DATE	04/08/2014	
			(92) CRITICAL FEATURE INSPECTION :	(93) CFI DATE	
			A) FRACTURE CRIT DETAIL -	NO	A)
			B) UNDERWATER INSP -	NO	B)
			C) OTHER SPECIAL INSP	NO	C)
			SCOUR		
NAVIGATION DATA					
(38) NAVIGATION CONTROL -	No Navigational Control		CODE	0	
(111)PIER PROTECTION -			CODE		
(39) NAVIGATION VERTICAL CLEARANCE			0		
(116)VERT - LIFT BRIDGE NAV MIN VERT CLEAR			FT		
(40) NAVIGATION HORIZONTAL CLEARANCE			0 FT		

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Run Date: 05/19/2014

COUNTY :	DIVISION :	DISTRICT :	STRUCTURE NUMBER :	LENGTH :	
ROBESON	6	1	770433	70	FEET
ROUTE CARRIED :		FEATURE INTERSECTED :			
SR1160		BACK SWAMP			
LOCATED :		BRIDGE NAME :		CITY :	
.3 MI. SW. OF JCT. SR1159					
FUNC. CLASS :	SYST.ON :	SYST.UNDER :	ADT & YR :	RAIL TYPE :	
09	NFA	NFA	760 2005	LT 233 RT 233	
BUILT :	BY :	PROJ :	FED.AID PROJ :	DESIGN LOAD :	
1970	BMU			Unknown	
REHAB :	BY :	PROJ :	ALIGNMENT :	SKEW :	LANES :
	DBM		TAN	121	ON 2 UNDER 0
NAVIGATION :	VC	0	FT	HC	0
			FT	HT. CRN. TO BED :	13
				FT	FT
WATER DEPTH :		4			
FT					
SUPERSTRUCTURE :		REINFORCED CONCRETE FLOOR ON TIMBER JOISTS; BMD-10 MR			
SUBSTRUCTURE :		E.BTS&INT.BTS;TIMBER CAP/5 TIMBER PILES@VAR.CTS.			
SPANS :		1@17'10;1@17'1;1@16'11;1@18'			
BEAMS OR GIRDERS :		22 LINES 6X12 TIMBER JOISTS @ VAR.CENTERS			
FLOOR :		ENCROACHMENT :		DECK (OUT TO OUT) :	
5RC/NO AWS				29.25 FT	
CLEAR ROADWAY :		BETWEEN RAILS :		SIDEWALK OR CURB :	
27.833 FT		28.667 FT		LT .417 FT RT .417 FT	
VERT.CL.OVER :		999.9 FT			
INV.RTG. :	OPE.RTG. :	CONTR.MEMBER :	POSTED :	TTST	DATE
HS-1	HS-1	Joist	SV 20	29	06/23/2010
SYSTEM :		GREEN LINE ROUTE :			
Secondary S.R. Route		N			
UNDER ROUTES AND CLEARANCES					

REMARKS :

BRIDGE INSPECTION RECORD AND SUMMARY

INSPECTION TYPE Routine Inspection
 BRIDGE NO. 770433 COUNTY ROBESON ROUTE SR1160 OVER BACK SWAMP
 STRUCTURE TYPE REINFORCED CONCRETE FLOOR ON TIMBER JOISTS; BMD-10 MR
 ROUTE ORIENTATION S - N SPANS 1@17'10"; 1@17'1"; 1@16'11"; 1@18'

EVALUATION CODES: CRITICAL (C, 0 - 3); POOR (P, 4); FAIR (F, 5, 6); GOOD (G, 7 - 9)

INSPECTION ITEM				ITEM 61			
DECK ITEMS			GRADES	45. CHANNEL & CHANNEL PROT.			a. WATERWAY
1. WEARING SURFACE							G
2. DECK NO. OF EA TYPE SPN GRADE RATES SI & A ITEM 58	a. CONCRETE	4	F				G
	b. TIMBER						G
	c. STEEL PLANK						G
	d. OPEN GRID						G
3. RAILING				50. APPROACH ROADWAY CONDITION			F
				51. APPROACH SLABS			
				52. PAINT SYSTEM CODE			
				53. UTILITIES			
				54. RESPONSE TO LIVE LOAD			G
				55. ESTIMATED REMAINING LIFE			10
4. CURBS, WHEELGUARDS, PARAPETS, MEDIANS			G				
5. WALKWAYS (ON OR ATTACHED TO STRUCTURE)				60. REGULATORY SIGN NOTICE ISSUED			NO
6. DECK EXP JTS. OR DEVICES. NO. OF EACH	a. STEEL PL OR FINGER			61. PROMPT-ACTION NOTICE ISSUED			YES
	b. MISC PREFAB			62. PRESENTLY POSTED			YES
	c. COMPRESSION SEAL			63. TOT. FIELD INSP TIME (INCLUDE WRITE UP)(MAN HR)			10
	d. STANDARD JOINTS	3	G	64. TOTAL SNOOPER INSP. TIME (HRS)			
	e. OPEN JOINTS			65. TOTAL TRAFFIC CONTROL TIME (MAN HRS)			
7. DECK DEBRIS (INCLUDES EXCESS SAND/GRAVEL)			G				
				70. SI&A GENERAL CONDITION RATINGS			
SUPER STR. (FM. 1 (90)B TRUSS) ITEM 59				a. DECK ITEM 58			5
10. LONGITUDINAL BEAMS OR GIRDERS				b. SUPERSTRUCTURE ITEM 59			7
11. LONGITUDINAL JOIST OR STRINGERS			G	c. SUBSTRUCTURE ITEM 60			5
12. INT. DIAP'S, X-FRAMES, BRACING & CONN'S				d. CHANNEL & CHANNEL PROT. ITEM 61			A5
13. END DIAP'S, CURTAIN WALLS, & CONN'S			G				
14. FLOOR BEAMS AND CONNECTIONS				71. SI&A FIELD APPRAISAL RATINGS			
15. BEARING ASSEMBLIES (INCLUDING MISALIGN)			G	a. WATERWAY ADAQUACY			7
16. DRAINAGE SYSTEM (ON STRUCTURE)			G	b. APPR. RDWY. ALIGNMENT			8
17. MOVABLE SPAN MACHINERY							
				72. FIELD SCOUR EVALUATION			O
SUB STR. ITEMS. ITEM 60 (INCLUDE SCOUR)							
35. TIM SUB STR.	a. ABUT. & INT. BENT CAPS & RISERS		F	USE OF INSP. ACCESSIBILITY EQUIPMENT			
	b. PILES, POST, SILLS, & BRACING		F	SNOOPER (CODE S, 4, OR N)			HRS NO
	c. BULKHEADS, WING'S, & TIE BACKS		F	LADDER			NO
36. CONC SUB STR.	a. ABUT. & INT. BENT CAPS			BUCKET TRUCK			NO
	b. ABUT. & BENT COL'S BREASTWALLS			BOAT			NO
	c. ABUT. & INT. BENT PILES			OTHER			YES
	d. BACKWALLS, WING'S, RETAIN. WALLS						
	e. ABUT. & BENT FOOTINGS & SILLS						
37. STEEL SUB STR.	a. ABUT. & INT. BENT CAPS & RISERS			SPECIAL INSPECTION REQUESTED FOR			
	b. PILES, BRACING, AND BULKHEADS						
38. FOUNDATION PILES TYPE MATERIAL				NOTE			
39. SLOPE PROT., RIP-RAP (INCLUDE DRAINAGE)							
40. FENDER SYSTEMS				80. INSPECTED BY: <i>RD Heatt</i>			
41. DRIFT				81. REVIEWED BY:			

TSB
9/25/14

A5
9/25/14

TSB
9/25/14 PG

BRIDGE INSPECTION RECORD AND SUMMARY FOR SHORED STRUCTURES OR STRUCTURES WITH TEMPORARY REPAIRS MADE TO KEEP A BRIDGE OPEN

BRIDGE: 770433

COUNTY: ROBESON

DATE:

5/4/12

THE FOLLOWING S. I. & A ITEMS ARE TO BE CODED TO REFLECT THE FACT
THAT THE STRUCTURE IS SHORED OR HAS HAD TEMPORARY REPAIRS MADE
TO KEEP THE BRIDGE OPEN :

	<u>CODE</u>	<u>BY</u>
S I & A ITEM 103 - TEMPORARY STRUCTURE DESIGNATION	T	DRJ
S I & A ITEM 59 - SUPERSTRUCTURE		
S I & A ITEM 60 - SUBSTRUCTURE	4	DRJ
S I & A ITEM 64 OPERATING RATING		
HS 1		BY: DRJ
S I & A ITEM 66 - INVENTORY RATING		
HS 1		BY: DRJ

COMMENTS

Piles 2 & 5 @ Bt. 2 encased in concrete.
Piles 2 & 3 @ Bt. 3 encased in concrete.
Piles 1 & 3 @ End Bt. 2 encased in concrete.

State of North Carolina
Dept. of Transportation
Division of Highways

FIELD INSPECTION REPORTBridge Inspection & AnalysisTeam Leader **R.D. HEATH**Assisted By **R.L. KISNER**

Item No.	Grade	
2a	F	(RC DECK) THERE IS A 1/16" TRANSVERSE CRACK IN SPAN 1 OVER THE END BENT 1 CURTAIN WALL. (PHOTO) THERE IS A 1/16" LONGITUDINAL CRACK IN SPAN 1 AT BENT 1 JOINT. (PHOTO) THE TOP OF THE DECK IN SPAN 1 MAP CRACKING AND CRACKS APPEAR TO HAVE BEEN SEALED OVER. (PHOTO) THE TOP OF THE DECK HAS LONGITUDINAL AND MAP CRACKED AREAS THAT HAVE BEEN SEALED OVER SPANS 2, 3, AND 4. SIMILAR THROUGHOUT. (PHOTOS) THERE IS A HAIRLINE TRANSVERSE CRACK IN SPAN 4 DECK OVER END BENT 2 CURTAIN WALL. (PHOTO)
3d	G	(STEEL RAILS) POST 3 AT RIGHT RAIL HAS A BOLT MISSING IN SPAN 2. THE LEFT RAIL POSTS 2 AND 3 IN SPAN 3 EXHIBITS SURFACE RUST. OTHERS ARE SIMILAR. (PHOTO)
6d	G	(STANDARD JOINTS) THE JOINT AT BENT 1 IS SEALED ALONG TOP. BENT 2 AND BENT 3 ARE SIMILAR.
7	G	(DECK DEBRIS) SCATTERED DEBRIS ALONG THE LEFT CURB. (PHOTO)
10A	NO	(CURVED GIRDERS) NO CURVED GIRDERS.
11	G	(TIMBER JOISTS) JOIST 13 IN SPAN 1 HAS A 2' LONG X 0" TO 1/2" HIGH X 0" TO 1/2" WIDE SHAKE. (PHOTO) JOIST 1 EXTERIOR AT SPAN 1 HAS 3/16" WIDE CHECKS. A FEW OTHER JOISTS ARE SIMILAR. (PHOTO)
35a	F	(TIMBER CAPS) THE END BENT 1 HAS NEW SUBCAP OVER PILE 4 AND PILE 5. BENT 1 SUB CAP EAST END HAS 1/4" WIDE VERTICAL CHECK 2" DEEP. (PHOTO) A NEW CAP HAD BEEN ADDED AT BENT 1 OVER PILE 1 AND PILE 2 PREVIOUS TO LAST INSPECTION.

Bridge I&A Form 1(82)H State of North Carolina Dept. of Transportation Division of Highways		FIELD INSPECTION REPORT <u>Bridge Inspection & Analysis</u>	
Team Leader R.D. HEATH			
Assisted By R.L. KISNER			
Item No.	Grade		
35b	F	(TIMBER PILES) THERE IS LOCAL SCOUR UP TO 2' DEEP AROUND PILE 1 AT BENTS 2 AND 3 DUE TO DRIFT. PM ISSUED ON DRIFT. PILE 4 AT BENT 1 SPAN 2 SIDE SURFACE DECAY UP TO 1" DEEP AT THE WATERLINE. (PHOTO) PILE 1 AT BENT 3 HAS SPOT DECAYED. THERE ARE ENCASED PILES NOTED AT: (PHOTOS) PILES 2, AND 5 AT BENT 2. PILES 2, AND 3 AT BENT 3 PILES 1, AND 3 AT END BENT 2.	
35c	F	(TIMBER BULKHEAD AND WINGWALLS) THERE ARE REPAIRED EXTERIOR BULKHEAD BOARDS AT NORTHWEST CORNER. (PHOTO) END BENT 2 BULKHEAD REPAIR BETWEEN PILES 3 AND 4. (PHOTO) DECAYED BOTTOM BULKHEAD BOARD AT END BENT 2 BETWEEN PILES 4 AND 5. (PHOTO) DECAYED BOTTOM EXTERIOR BULKHEAD BOARD AT NORTHEAST CORNER WITH FILL LEAKAGE. (PHOTO)	
41	P	(DRIFT) THERE IS DRIFT UP TO 4' HIGH AT WEST END OF BENTS 2 AND 3 CAUSING LOCAL SCOUR AT PILES. (PHOTO) PM ISSUED THERE IS DRIFT AND DEBRIS UP TO 4' HIGH AGAINST WEST END OF PILES 1 AND 2 AT BENT3. (PHOTO)	
45c	P	THERE IS DRIFT IN SPAN 3 AT BENT 2. (PHOTO) (SCOUR) THERE IS LATERAL BANK EROSION 5' DEEP X 4' WIDE X 20' LONG IN SPAN 4 AT END BENT 2 EXPOSING PILES 3, 4, AND 5. (PHOTO) PM ISSUED. THERE IS LOCAL SCOUR AT BENTS 2 AND 3 UPSTREAM PILES DUE TO DRIFT. SEE SCOUR REPORT DATED 6/24/2010.	
50	F	(APPROACH ROADWAY) THE SOUTH APPROACH PATCH IS UNEVEN. (PHOTO) NORTH APPROACH ASPHALT WEARING SURFACE HAS BEEN PATCHED. (PHOTO)	
61	YES	(PRIORITY MAINTENANCE ISSUED) ON DRIFT AT BENTS 2 AND 3 CAUSING LOCAL SCOUR AT PILES. AND LATERAL BANK EROSION IN SPAN 4 AT END BENT 2 EXPOSING PILES 3, 4, AND 4.	
62	YES	(PRESENTLY POSTED) SV - 20 TONS, TTST - 29 TONS	

Bridge I&A Form 1(82)H State of North Carolina Dept. of Transportation Division of Highways		FIELD INSPECTION REPORT <u>Bridge Inspeccion & Analysis</u>	
Team Leader R.D. HEATH			
Assisted By R.L. KISNER			
Item No.	Grade		
73f	YES	(OTHER EQUIPMENT) BOOTS	

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 770433

County ROBESON

Date: 04/08/2014

These Repairs Should Be Made Within Twelve Months From Date Of This Inspection

MMS Code	Description of Function	Unit	Quantity	Remarks	Est. Cost
 3352	Maint Slope Protection	SF	400 TSE 9/25/14	THERE IS LATERAL BANK EROSION 5' DEEP X 4' WIDE X 20' LONG IN SPAN 4 AT END BENT 2 EXPOSING PILES 3, 4, AND 5	
 3366	Drift and Debris Removal	HR	28 TSE	DRIFT UP TO 4' HIGH AT WEST END OF BENTS 2 AND 3	
3346	Repair / Maintain Timber Wings & Blkhds	SF	3	DECAYED BOTTOM EXTERIOR BULKHEAD BOARD AT NORTHEAST CORNER WITH FILL LEAKAGE	
3346	Repair / Maintain Timber Wings & Blkhds	SF	5	DECAYED BOTTOM BULKHEAD BOARD AT END BENT 2 BETWEEN PILES 4 AND 5	

Key



Priority Maintenance Item



Critical Finding Item



Priority Maintenance Level Not Determined

BRIDGE INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 770433 County ROBESON

THE FOLLOWING MAINTENANCE ITEMS HAVE BEEN SUBMITTED IN CONJUNCTION WITH A PRIORITY MAINTENANCE REQUEST

MMS Code	MMS Description	Quantity
3352	Maint Slope Protection	400 SF
Location:		
Abutment Footing Bent/Span No. 4 END BENT 2 PILES 3, 4, AND 5 EXPOSED		
Priority Level	Status	
Priority Maintenance	Division Maintenance Work In Process	
Submitted Date:	Submitted By:	Assisted By:
04/09/2014	R.D.HEATH	R.L.KISNER
Details		
THERE IS LATERAL BANK EROSION 5' DEEP X 4' WIDE X 20' LONG IN SPAN 4 AT END BENT 2 EXPOSING PILES 3, 4, AND 5		

MMS Code	MMS Description	Quantity
3366	Drift and Debris Removal	25 HR
Location:		
Pier Approach Footing Bent/Span No. 2 BENTS 2 AND 3 PILES		
Priority Level	Status	
Priority Maintenance	Division Maintenance Work In Process	
Submitted Date:	Submitted By:	Assisted By:
04/09/2014	R.D.HEATH	R.L.KISNER
Details		
DRIFT UP TO 4' HIGH AT WEST END OF BENTS 2 AND 3		



SOUTH APPROACH PATCH IS UNEVEN



JOIST 13 IN SPAN 1 HAS A 2' LONG X 0" TO 1/2" HIGH X 0" TO 1/2" WIDE SHAKE



PILE 4 AT BENT 1, SPAN 2 SIDE IS SURFACE DECAYED UP TO 1" DEEP



BENT 1 SUB CAP EAST END HAS 1/4" WIDE VERTICAL CHECK 2" DEEP



JOIST 1 EXTERIOR AT SPAN 1 HAS 3/16" WIDE CHECKS, OTHER JOISTS ARE SIMILAR



DRIFT UP TO 4' HIGH AT WEST END OF BENTS 2 AND 3 CAUSING LOCAL SCOUR AT PILES. PM ISSUED



PILES 2 AND 5 ARE ENCASED AT BENT 2



PILES 2 AND 3 ARE ENCASED AT BENT 3



THERE IS DRIFT AND DEBRIS UP TO 4' HIGH AGAINST WEST END OF PILES 1 AND 2 AT BENT3



THERE IS DRIFT IN SPAN 3 AT BENT 2



THERE ARE REPAIRED EXTERIOR BULKHEAD BOARDS AT NORTHWEST CORNER



LEFT RAIL POSTS 2 AND 3 HAS SURFACE RUST



1/16" TRANSVERSE CRACK IN SPAN 1 DECK OVER END BENT 1 CURTAIN WALL



1/16" LONGITUDINAL CRACK IN SPAN 1 AT BENT 1 JOINT IN NORTH BOUND LANE



SEALED CRACKING IN SPAN 1 DECK



1/16" LONGITUDINAL CRACK IN SPAN 1 DECK IN THE SOUTH BOUND LANE



SEALED CRACKING IN SPAN 2 DECK



SCATTERED DEBRIS ALONG LEFT CURB



SEALED CRACKING IN SPAN 4 DECK



HAIRLINE TRANSVERSE CRACK IN SPAN 4 DECK OVER END BENT 2 CURTAIN WALL



NORTH APPROACH ASPHALT WEARING SURFACE HAS BEEN PATCHED



THERE IS LATERAL BANK EROSION 5' DEEP X 4' WIDE X 20' LONG IN SPAN 4 AT END BENT 2 EXPOSING PILES 3, 4, AND 5 PM ISSUED.



PILE 1 AT END BENT 2 IS ENCASED



PILE 3 AT END BENT 2 IS ENCASED



END BENT 2 BULKHEAD REPAIR BETWEEN PILES 3 AND 4



DECAYED BOTTOM BULKHEAD BOARD AT END BENT 2 BETWEEN PILES 4 AND 5



DECAYED BOTTOM EXTERIOR BULKHEAD BOARD AT NORTHEAST CORNER WITH FILL LEAKAGE

Structure Data Worksheet

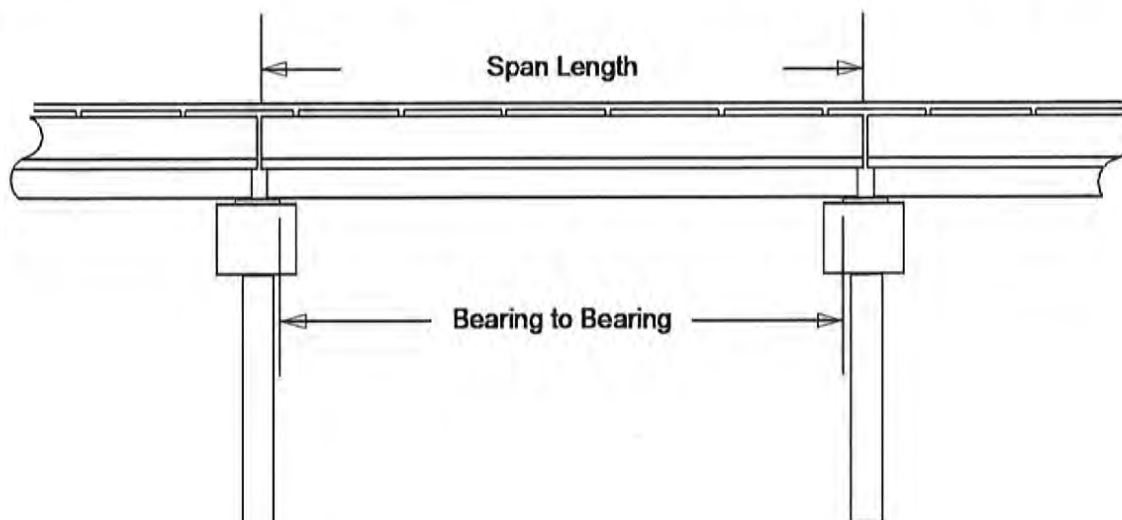
Spans

County: ROBESON

Structure No: 770433

Date: 04/08/2014

Inspected By: RDH



Span No	Span Length	Bearing to Bearing	Comments
1	17.833	16.75	NBIS 67.333 FT.
2	17.083	17.083	
3	16.917	16.917	
4	18.0	17.083	

Stream Bed Soundings

(See next sheet for profile sketch)

Bridge No: 770433 County: ROBESON Date: 04/08/2014 By: RDH

Record sounding from top of rail. Other location if needed: TOP OF RAIL

Distance from Highwater Mark to top of rail: 3.7 Location of Highwater Mark: ON JOISTS

DOWNSTREAM			UPSTREAM		
Distance (Station) (ft)	Sounding (ft)	Description	Distance (Station) (ft)	Sounding (ft)	Description
0	2.8	TOP OF BULKHEAD			
1	4	Top of Cap			
1.1	6.3	GROUND AT CAP	1.1	6.6	GROUND AT CAP
17	8.8				
17.5	9.5	BENT 1	17.5	10	BENT 1
23.5	11.2	WSWE (EAST)			
34.5	13	BENT 2	34.5	11.3	BENT 2
45	15.4				
52.3	14.2	BENT 3	52.3	11.6	BENT 3
62.3	11.2	WSWE			
65	6.8				
67	6.5	GROUND AT CAP	67	6.5	GROUND AT CAP
68	4	Top of Cap			
69	2.8	TOP OF BULKHEAD			

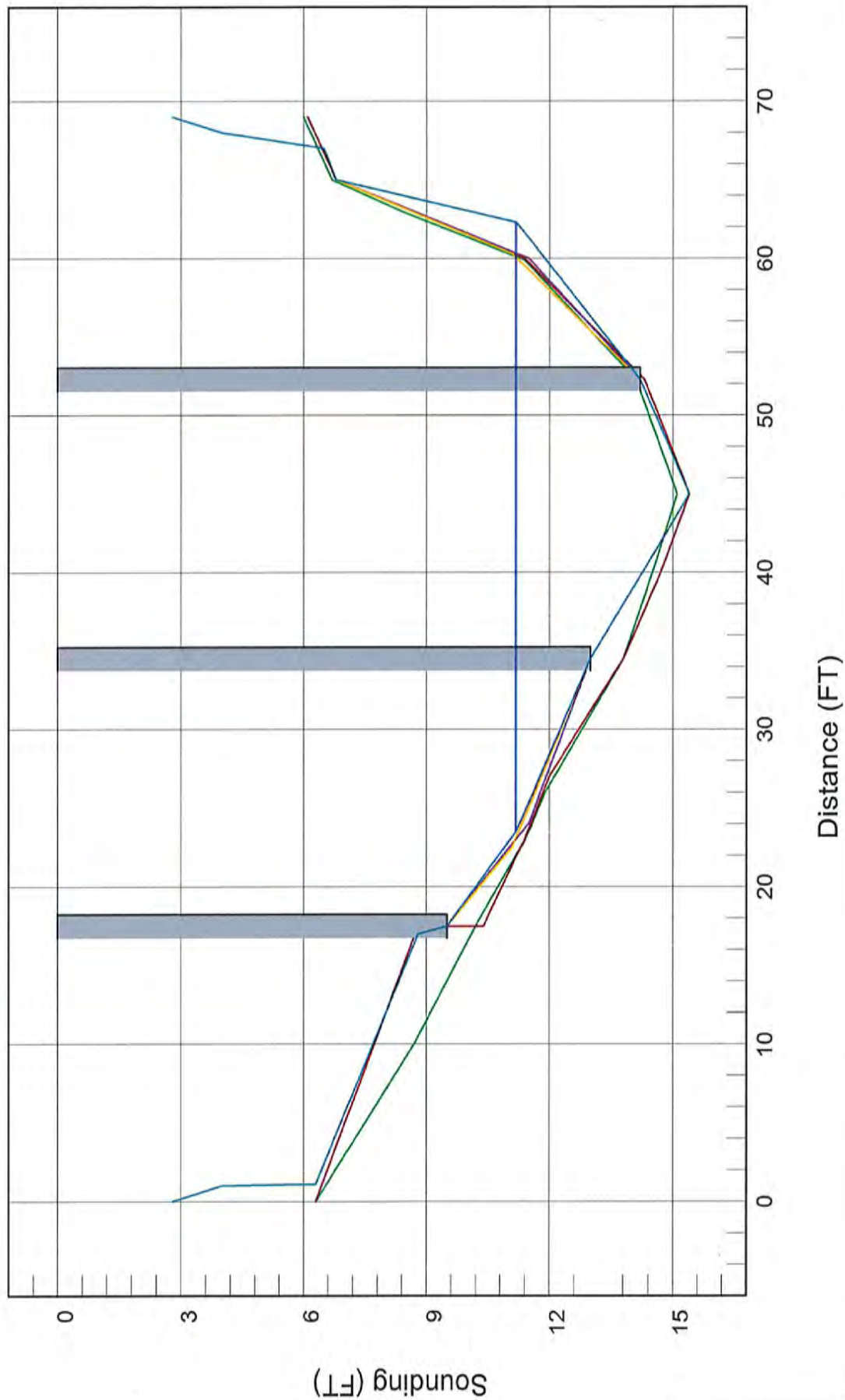
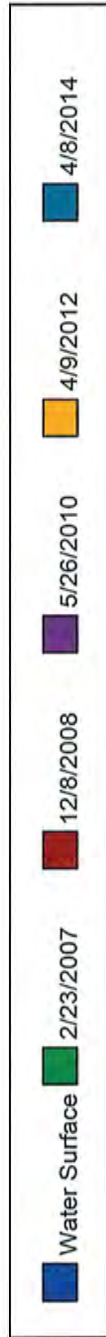
Bridge: 770433

County ROBESON

Date: 04/08/2014

STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)



Bridge Inspection Field Sketch



SR-1160 (ADDISON TRAM ROAD)

Roadway	18ft Wide	2 Paved Lanes	Looking North
Left Shoulder	4ft Wide		4ft Unpaved
Right Shoulder	4ft Wide		4ft Unpaved
Left Guardrail			
Right Guardrail			

MEASUREMENTS VERIFIED BY RLK 5/26/10
 MEASUREMENTS VERIFIED BY RLK 4/9/12
 MEASUREMENTS VERIFIED BY RLK 4/8/14

Title

APPROACH ROADWAY

Description

LOOKING NORTH

Bridge No: 770433

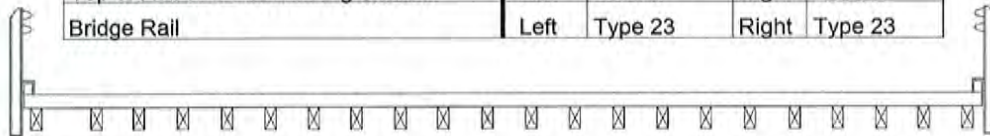
Drawn By: JWL

Date: 12/08/2008

File Name: S0334000163

Bridge Inspection Field Sketch

Deck Width/Out to Out	29.25ft	Between Rails	28.667ft
Clear Roadway	27.833ft	Wearing Surface	0ft
Median Width		Median Height	
Curb Height		Left .75ft	Right .75ft
Sidewalk Width		Left	Right
Clear Roadway (Rail to Median)		Left	Right
Guardrail Width		Left 1ft	Right 1ft
Top of Rail to Deck/Wearing Surface		Left 2.667ft	Right 2.667ft
Bridge Rail		Left Type 23	Right Type 23



Measurements for Span #	1	ALL SPANS ARE SIMILAR	
Deck Thickness	.417	Left Overhang	.375
Top of Rail to Bottom of Beam	4.042	Right Overhang	.375

Beam Number	Beam Type	Spacing	Comments
1	Timber (Rectangular)	1.833ft	JOIST SIZE .49 W X .959 H
2	Timber (Rectangular)	1.30ft	
3	Timber (Rectangular)	1.34ft	
4	Timber (Rectangular)	1.35ft	
5	Timber (Rectangular)	1.333ft	
6	Timber (Rectangular)	1.31ft	
7	Timber (Rectangular)	1.31ft	
8	Timber (Rectangular)	1.34ft	
9	Timber (Rectangular)	1.32ft	
10	Timber (Rectangular)	1.35ft	
11	Timber (Rectangular)	1.333ft	
12	Timber (Rectangular)	1.34ft	
13	Timber (Rectangular)	1.333ft	
14	Timber (Rectangular)	1.35ft	
15	Timber (Rectangular)	1.333ft	
16	Timber (Rectangular)	1.34ft	
17	Timber (Rectangular)	1.36ft	
18	Timber (Rectangular)	1.30ft	
19	Timber (Rectangular)	1.333ft	
20	Timber (Rectangular)	1.28ft	
21	Timber (Rectangular)	1.333ft	
22	Timber (Rectangular)	ft	

Title

SUPERSTRUCTURE

Description

SIMILAR SECTION

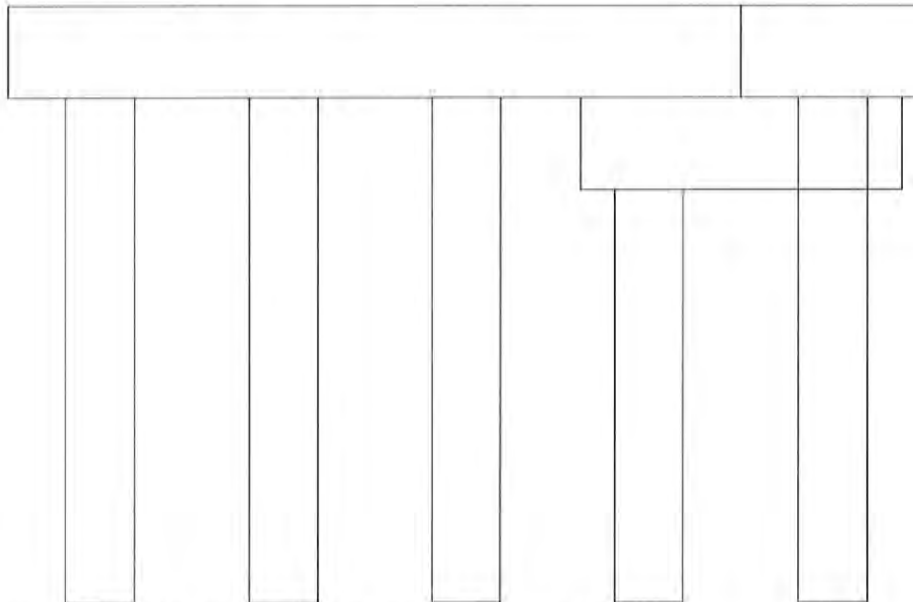
Bridge No: 770433

Drawn By: RLK

Date: 4/8/2014

File Name: S0334000164

Bridge Inspection Field Sketch



NOTE: ENCASED PILES 1 AND 3 AT EBT 2, AND PILES 2 AND 5 AT BT 2

Abutment #	1	Abutment 2 similar	
Cap - Beam Type (Wood or Steel)			
Cap Size	34.68ft Long	1.0ft Wide	.959ft High
Left Overhang	1.23ft	Lt Cap/Beam Overhang	
Right Overhang	1.0ft	Rt Cap/Beam Overhang	
Timber Sub Cap			
Size	9.90ft Long	1.0ft Wide	.959ft High
Left pile to splice	8.63ft		
Left Overhang	.80ft		
Right Overhang	1.0ft		

Pile #	Material	Pile Type	Spacing	Length	Width/Diam.	Height	Orientation
1	Wood or Timber	Pile Bent	8.15		1.0		Vertical
2	Wood or Timber	Pile Bent	8.25		1.0		Vertical
3	Wood or Timber	Pile Bent	8.0		1.0		Vertical
4	Wood or Timber	Pile Bent	8.05		1.0		Vertical
5	Wood or Timber	Pile Bent			1.0		Vertical

MEASUREMENTS VERIFIED BY RLK 5/26/10

MEASUREMENTS VERIFIED BY RLK 4/9/12

MEASUREMENTS VERIFIED BY RLK 4/8/14

Title

SUBSTRUCTURE

Description

END BENTS AND BENT 2

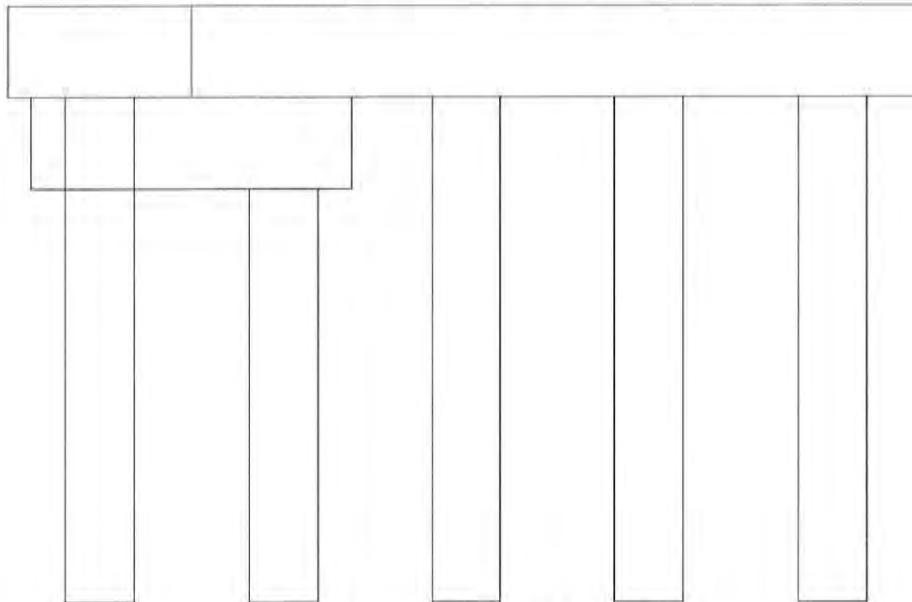
Bridge No: 770433

Drawn By: JWL

Date: 12/08/2008

File Name: S0334000165

Bridge Inspection Field Sketch



NOTE: ENCASED PILES 2 AND 3 AT BENT 3

Bent #	1	Bents 3 similar	
Cap - Beam Type (Wood or Steel)			
Cap Size	34.45ft Long	1.0ft Wide	.959ft High
Left Overhang	.95ft	Lt Cap/Beam Overhang	
Right Overhang	1.20ft	Rt Cap/Beam Overhang	
Timber Sub Cap			
Size	9.90ft Long	1.0ft Wide	.959ft High
Left pile to splice	7.68ft		
Left Overhang	.95ft		
Right Overhang	.80ft		

Pile #	Material	Pile Type	Spacing	Length	Width/Diam.	Height	Orientation
1	Wood or Timber	Pile Bent	8.15		1.0		Vertical
2	Wood or Timber	Pile Bent	8.0		1.0		Vertical
3	Wood or Timber	Pile Bent	8.0		1.0		Vertical
4	Wood or Timber	Pile Bent	8.15		1.0		Vertical
5	Wood or Timber	Pile Bent			1.0		Vertical

MEASUREMENTS VERIFIED BY RLK 5/26/10

MEASUREMENTS VERIFIED BY RLK 4/9/12

MEASUREMENTS VERIFIED BY RLK 4/8/14

Title

SUBSTRUCTURE 1

Description

INTERIOR BENTS 1 AND 3

Bridge No: 770433

Drawn By: JWJ

Date: 12/08/2008

File Name: S0334000166



LOOKING NORTH (ADDISON TRAM ROAD)



LOOKING NORTH



EAST PROFILE



EAST END OF BENT 1



END BENT 1



SPAN 1 UNDERSIDE, ALL SPANS ARE SIMILAR



BENT 1



BENT 2



WEST PROFILE



BENT 1 STANDARD JOINT, ALL JOINTS ARE SIMILAR



LOOKING SOUTH, OFF BRIDGE



LOOKING NORTH, OFF BRIDGE



UPSTREAM WEST



DOWNSTREAM EAST



LOOKING SOUTH



LOOKING SOUTH



END BENT 2



BENT 3



UPSTREAM WEST, THRU SPAN 4



DOWNSTREAM EAST, THRU SPAN 4