



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION

PM ISSUED / SHORED STRUCTURE / TEMP REPAIRS /
STRUCTURE DATA CHANGES

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY ROBESON BRIDGE NUMBER 770059 INSPECTION CYCLE 2 YRS
ROUTE SR1924 ACROSS BIG MARSH SWAMP M.P. 0

LOCATION 1.2 MI.S.JCT.NC20

SUPERSTRUCTURE REINFORCED CONCRETE FLOOR ON CONT I-BEAMS

SUBSTRUCTURE EBTS&IBTS:RC CAPS/TIM.PILES,TIM.CRUTCH BTS&CROSS CAPS

SPANS 20 SPANS VAR.CTS.SEE WORK SHEET

LONGITUDE 78° 55' 21.76" LATITUDE 34° 46' 55.61"

INSPECTION DATE 05/13/2014 PRESENT CONDITION FAIR

PRESENT POSTING N **NOT POSTED** PROPOSED POSTING _____

OTHER SIGNS PRESENT 4 DELINEATORS



LOOKING NORTH (BARKER TEN MILE ROAD)

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

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

Run Date: 06/17/2014

IDENTIFICATION					
(1) STATE NAME -NORTH CAROLINA	BRIDGE	770059	SUFFICIENCY RATING =	6	
(8) STRUCTURE NUMBER(FEDERAL)	000000001550059		STATUS =	Structurally Deficient	
(5) INVENTORY ROUTE (ON/UNDER) - ON	31019240				
(2) STATE HIGHWAY DEPARTMENT DISTRICT	1		CLASSIFICATION	CODE	
(3) COUNTY CODE 155 (4) PLACE CODE	0		(112)NBIS BRIDGE SYSTEM -	YES	
(6) FEATURE INTERSECTED - BIG MARSH SWAMP			(104)HIGHWAY SYSTEM Is not on NHS	0	
(7) FACILITY CARRIED SR1924			(26) FUNCTIONAL CLASS - Local	09	
(9) LOCATION 1.2 MI.S.JCT.NC20			(100)STRAHNET HIGHWAY - Not a STRAHNET Route	0	
(11)MILEPOINT	0		(101)PARALLEL STRUCTURE - No Parallel Structure	N	
(16)LAT 34° 46' 55.61" (17)LONG 78° 55' 21.76"			(102)DIRECTION OF TRAFFIC - 2-way Traffic	2	
(98)BORDER BRIDGE STATE CODE	PCT SHARE		(103)TEMPORARY STRUCTURE - Temporary Structure/Conditions	T	
(99)BORDER BRIDGE STRUCTURE NO			(110)DESIGNATED NATIONAL NETWORK - Not on the National Network	0	
STRUCTURE TYPE AND MATERIAL			(20) TOLL On Free Road	3	
(43) STRUCTURE TYPE MAIN: Steel Continuous			(31) MAINTAIN - State Highway Agency	01	
TYPE - Stringer Mutlibeam or Girder	CODE 402		(22) OWNER - State Highway Agency	01	
(44) STRUCTURE TYPE APPR :			(37) HISTORICAL SIGNIFICANCE - Not Eligible	5	
TYPE -	CODE 000		CONDITION	CODE	
(45) NUMBER OF SPANS IN MAIN UNIT	20		(58) DECK	5	
(46) NUMBER OF APPROACH SPANS			(59) SUPERSTRUCTURE	5	
(107)DECK STRUCTURE TYPE - 1	CODE		(60) SUBSTRUCTURE	4	
(108)WEARING SURFACE / PROTECTIVE SYSTEM :			(61) CHANNEL & CHANNEL PROTECTION	5	
(A) TYPE OF WEARING SURFACE -	CODE		(62) CULVERTS	N	
(B) TYPE OF MEMBRANE -	CODE		LOAD RATING AND POSTING	CODE	
(C) TYPE OF DECK PROTECTION -	CODE		(31) DESIGN LOAD Unknown	0	
AGE AND SERVICE			(63) OPERATING RATING METHOD - Load Factor	1	
(27) YEAR BUILT	1955		(64) OPERATING RATING - HS-1	1	
(106)YEAR RECONSTRUCTED			(65) INVENTORY RATING METHOD - Load Factor	1	
(42) TYPE OF SERVICE : ON - Highway			(66) INVENTORY RATING - HS-1	1	
UNDER - Waterway	CODE 15		(70) BRIDGE POSTING - Posting Required	1	
(28) LANES: ON STRUCTURE 2 UNDER STRUCTURE	0		(41) STRUCTURE OPEN, POSTED ,OR CLOSED	P	
(29) AVERAGE DAILY TRAFFIC	2700		DESCRIPTION - Posted for Load		
(30) YEAR OF ADT 2011 (109) TRUCK ADT PCT	6%		APPRAISAL	CODE	
(19) BYPASS OR DETOUR LENGTH	9 MI		(67) STRUCTURAL EVALUATION	3	
GEOMETRIC DATA			(68) DECK GEOMETRY	2	
(48) LENGTH OF MAXIMUM SPAN	12 FT		(69) UNDERCLEARANCES,VERTI & HORIZ	N	
(49) STRUCTURE LENGTH	155 FT		(71) WATERWAY ADEQUACY	7	
(50)CURB OR SIDEWALK: LEFT .75 FT RIGHT .75 FT			(72) APPROACH ROADWAY ALIGNMENT	8	
(51) BRIDGE ROADWAY WIDTH CURB TO CURB	24 FT		(36) TRAFFIC SAFETY FEATURES	0000	
(52) DECK WIDTH OUT TO OUT	25.33 FT		(113)SCOUR CRITICAL BRIDGES	5	
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS)	25 FT		PROPOSED IMPROVEMENTS		
(33) BRIDGE MEDIAN - No Median	CODE 0		(75) TYPE OF WORK -	CODE	
(34) SKEW 0° (35) STRUCTURE FLARED	0		(76) LENGTH OF STRUCTURE IMPROVEMENT		
(10) INVENTORY ROUTE MIN VERT CLEAR	999.9 FT		(94) BRIDGE IMPROVEMENT COST		
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR	24 FT		(95) ROADWAY IMPROVEMENT COST		
(53) MIN VERT CLEAR OVER BRIDGE RDWY	999.9 FT		(96) TOTAL PROJECT COST		
(54) MIN VERT UNDERCLEAR REF Not a Highway or Railroad	0 FT		(97) YEAR OF IMPROVEMENT COST ESTIMATE		
(55) MIN LAT UNDERCLEAR RT REF Not a Highway or Railroad	000 FT		(114)FUTURE ADT 5400 (115) YEAR FUTURE ADT	2025	
(56) MIN LAT UNDERCLEAR LT REF -	000 FT		INSPECTIONS		
NAVIGATION DATA			(90) INSPECTION DATE	05/13/2014	
(38) NAVIGATION CONTROL - No Navigational Control	CODE 0		(92) CRITICAL FEATURE INSPECTION :	(93) CFI DATE	
(111)PIER PROTECTION -	CODE		A) FRACTURE CRIT DETAIL - NO	A)	
(39) NAVIGATION VERTICAL CLEARANCE	0		B) UNDERWATER INSP - YES 48Mo	B) 01/02/2013	
(116)VERT - LIFT BRIDGE NAV MIN VERT CLEAR	FT		C) OTHER SPECIAL INSP NO	C)	
(40) NAVIGATION HORIZONTAL CLEARANCE	0 FT		SCOUR		

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Run Date: 06/17/2014

COUNTY :	DIVISION :	DISTRICT :	STRUCTURE NUMBER :	LENGTH :
ROBESON	6	1	770059	155 FEET

ROUTE CARRIED :	FEATURE INTERSECTED :
SR1924	BIG MARSH SWAMP

LOCATED :	BRIDGE NAME :	CITY :
1.2 MI.S.JCT.NC20		

FUNC. CLASS :	SYST.ON :	SYST.UNDER :	ADT & YR :	RAIL TYPE :
09	NFA	NFA	2700 2011	LT 241 RT 241

BUILT :	BY :	PROJ :	FED.AID PROJ :	DESIGN LOAD :
1955	BMU			Unknown

REHAB :	BY :	PROJ :	ALIGNMENT :	SKEW :	LANES :	UNDER :
	DBM		TAN	90	ON 2	0

NAVIGATION :	HT. CRN. TO BED :	WATER DEPTH :
VC 0 FT HC 0 FT 12 FT 5 FT		

SUPERSTRUCTURE :	REINFORCED CONCRETE FLOOR ON CONT I-BEAMS
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SUBSTRUCTURE :	EBTS&IBTS:RC CAPS/TIM.PILES,TIM.CRUTCH BTS&CROSS CAPS
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SPANS :	20 SPANS VAR.CTS.SEE WORK SHEET CONT.
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BEAMS OR GIRDERS :	12 LINES 4X12 CONT.I-BEAMS @ 2'2.75 CENTERS
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FLOOR :	ENCROACHMENT :	DECK (OUT TO OUT) :
5 RC/4 AWS		25.33 FT

CLEAR ROADWAY :	BETWEEN RAILS :	SIDEWALK OR CURB :
24 FT	25.5 FT	LT .75 FT RT .75 FT

VERT.CL.OVER :
999.9 FT

INV.RTG. :	OPE.RTG. :	CONTR.MEMBER :	POSTED :	TTST	DATE
HS-1	HS-1	I-Bm@1 ft	SV 19	28	06/16/2014

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. 770059 COUNTY ROBESON ROUTE SR1924 OVER BIG MARSH SWAMP
 STRUCTURE TYPE REINFORCED CONCRETE FLOOR ON CONT I-BEAMS
 ROUTE ORIENTATION S - N SPANS 20 SPANS VAR.CTS.SEE WORK SHEET

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

INSPECTION ITEM				ITEM 61			
DECK ITEMS			GRADES				
1. WEARING SURFACE			F	45. CHANNEL & CHANNEL PROT.	a. WATERWAY	F	
					b. ALIGNMENT	F	
					c. SCOUR	G	
					d. SLOPE PROT., RIP-RAP, DIKES, ETC.		
2. DECK NO. OF EA TYPE SPN GRADE RATES SI & A ITEM 58	a. CONCRETE	20	F	50. APPROACH ROADWAY CONDITION			G
	b. TIMBER			51. APPROACH SLABS			
	c. STEEL PLANK			52. PAINT SYSTEM CODE A			F
	d. OPEN GRID			53. UTILITIES			
3. RAILING	a. CONCRETE		F	54. RESPONSE TO LIVE LOAD			G
	b. TIMBER			55. ESTIMATED REMAINING LIFE			8
	c. ALUMINUM						
	d. STEEL						
4. CURBS, WHEELGUARDS, PARAPETS, MEDIANS			F				
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			NO
	c. COMPRESSION SEAL			63. TOT. FIELD INSP TIME (INCLUDE WRITE UP)(MAN HR)			12
	d. STANDARD JOINTS	9	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			F	b. SUPERSTRUCTURE	ITEM 59	5	
11. LONGITUDINAL JOIST OR STRINGERS				c. SUBSTRUCTURE	ITEM 60	5	
12. INT. DIAP'S, X-FRAMES, BRACING & CONN'S				d. CHANNEL & CHANNEL PROT.	ITEM 61	5	
13. END DIAP'S, CURTAIN WALLS, & CONN'S			F				
14. FLOOR BEAMS AND CONNECTIONS				71. SI&A FIELD APPRAISAL RATINGS			
15. BEARING ASSEMBLIES (INCLUDING MISALIGN)			F	a. WATERWAY ADAQUACY		7	
16. DRAINAGE SYSTEM (ON STRUCTURE)			F	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		G	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:	R.D. Hesth		
41. DRIFT			G	81. REVIEWED BY:			

BRIDGE INSPECTION RECORD AND SUMMARY FOR SHORED STRUCTURES

BRIDGE # 59 COUNTY Robeson DATE 7-21-97

THE FOLLOWING SI & A ITEMS ARE TO BE CODED TO REFLECT THE
FACT THAT THE STRUCTURE IS SHORED UP:

		CODE	BY
SI & A ITEM 103 - TEMPORARY STRUCTURE DESIGNATION		<u>T</u>	<u>VWW</u> ✓
SI & A ITEM 59 - SUPERSTRUCTURE		<u> </u>	<u> </u>
SI & A ITEM 60 - SUBSTRUCTURE		<u>4</u>	<u>VWW</u> ✓
SI & A ITEM 64 - OPERATING RATING	HS <u>15.7</u> BY <u>OR</u>	<u>127</u>	<u>BLH</u>
SI & A ITEM 66 - INVENTORY RATING	HS <u>9.4</u> BY <u>OR</u>	<u>116</u>	<u>BLH</u>

JRJ
6-24-99

COMMENTS:

SUBSTRUCTURE CROSS CAPPED ALSO CRUTCH BTS @ BT. 11 & 14.

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		
1	F	(ASPHALT WEARING SURFACE) THERE ARE SEALED TRANSVERSE CRACKS OVER ORIGINAL BENTS. (PHOTO)	
2a	F	THERE ARE SEALED LONGITUDINAL CRACKS IN ALL SPANS. (PHOTO) (RC DECK) THERE IS A REPAIRED AREA THAT IS SPALLING IN THE BOTTOM OF DECK OF BAY 11 AT BENT 12 SPAN 13. THERE IS A LONGITUDINAL HAIRLINE CRACK WITH EFFLORESCENCE RIGHT EDGE OF DECK AT BENT 15. THERE IS A REPAIRED AREA IN BOTTOM OF DECK FOR DRIVING OF TIMBER PILES. THE DECK UNDERSIDE AT SPAN 6 HAS HAIRLINE TRANSVERSE CRACKS WITH EFFLORESCENCE AT BAY 10. THERE IS A HAIRLINE HORIZONTAL CRACK WITH EFFLORESCENCE IN LEFT DECK OVERHANG AT BENT 19. (PHOTO) THERE IS EFFLORESCENCE LEAKAGE IN DECK OVER BENT 19 PILE 4 PATCH. (PHOTO)	
3a	F	(RC RAILS) THE RIGHT RAIL IN SPANS 1 AND 12 HAS BEEN REPAIRED. THERE IS A LEFT RAIL REPAIR NOTED IN SPANS 17 THRU 20.	
4	F	(CURBS) THE RIGHT CURB IN SPANS 13 AND 14 IS DELAMINATED, SURFACE SPALLED 10' LONG X 8" WIDE X UP TO 2" DEEP. (PHOTO) THE LEFT CURB IN SPAN 15 IS SURFACE SPALLED 16" LONG X 8" WIDE X 1" DEEP. (PHOTO)	
6d	G	(STANDARD JOINTS) THE JOINTS ARE SIMILAR OVER ALL ORIGINAL BENTS 2, 4, 6, 8, 10, 12, 14, 16, AND 18. THE BENT 4 JOINT MATERIAL FALLING OUT.	

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Team Leader R.D. HEATH			
Assisted By R.L. KISNER			
Item No.	Grade		
10	F	(STEEL BEAMS) BEAM 12 BAY 11 SIDE AT SPAN 19 RUST , SECTION LOSS 6" L X 1 1/2" W AT 12" FROM BEAM END IN FLANGE, 1/8" LOSS IN WEB 12" L X UP TO 3" H. (PHOTO) PM ISSUED. BEAM 12 IN SPAN 7 BAY 11 SIDE HAS PAINT PEELING AND RUST WITH 1/16" SECTION LOSS IN TOP AND BOTTOM FLANGE AT DECK DRAIN. (PHOTO) BEAM 1 AT BENT 14 HAS RUST WITH SECTION LOSS 2' LONG WITH 1/16" REMAINING ON BOTTOM FLANGE. (PHOTO) BEAM 1 TOP FLANGE AT BENT 14 HAS RUST AND UP TO 1/8" SECTION LOSS 3' LONG WITH 1/8" REMAINING. (PHOTO) BEAM 1 AT BENT 17 TEMP REPAIR. (PHOTO) THE BOTTOM FLANGE RIGHT SIDE BEAM 12 AT BENT 16 HAS UP TO 1/8" SECTION LOSS 18" LONG. THE BOTTOM AND TOP FLANGE BEAM 11 BENT 5 RUSTING WITH 1/8" SECTION LOSS 20" LONG. BEAM 11 AT BENT 16, IN SPAN 17 SECTION LOSS IN BOTTOM FLANGE 2" LONG X 1" WIDE AT BEARING AREA. BEAM 12 AT BENT 16 IN SPAN 17 BAY 12 SIDE HAS UP TO 1/16" SECTION LOSS IN WEB, AND 1/8" BOTTOM FLANGE SECTION LOSS 18" LONG. BEAM 12 IN SPAN 8 AT BENT 9 RUST WITH SECTION LOSS IN BOTTOM FLANGE 6" FROM BEAM END OUT 2" LONG X 1" WIDE. BEAM 11 AT BENT 5 BOTH FLANGES RUSTED WITH 1/16" SECTION LOSS IN WEB, 1/8" LOSS IN FLANGES UP TO 18" LONG. BEAM 1 IN SPAN 13, AT BENT 13 BOTTOM FLANGE WITH SECTION LOSS UP TO KNIFES EDGE 20" LONG AT 3' FROM BENT 13. BEAM 12 SPAN 18 AT THE BOTTOM FLANGE IS DEFORMED IN 3 PLACES UP TO 3/4" HIGH X 2" LONG. BEAM 12 IN SPAN 14 HAS BEEN REPLACED. BEAM 1 AT BENT 18, SPAN 18 IS REPAIRED.	
10A	NO	(CURVED GIRDERS) NO CURVED GIRDERS.	

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Assisted By R.L. KISNER			
Item No.	Grade		
13	F	(END DIAPHRAGMS) THERE IS A DIAGONAL CRACK AND SPALL IN DIAPHRAGM BENT 8 SPAN 8 BAY 11 OPEN UP TO 1/4". THERE IS A DIAPHRAGM BROKEN IN BAY 11 BENT 8 SPAN 9. THERE IS A DIAGONAL CRACK IN DIAPHRAGM BAY 11 BENT 14 SPAN 14. THERE IS A DIAGONAL CRACK IN DIAPHRAGM BAY 11 BENT 14 SPAN 15. THE BENT 16 SPAN 17 BAY 1 END DIAPHRAGM IS SPALLED. THERE IS A SPALLED END DIAPHRAGM AT BENT 18 SPAN 18 BAY 11. SPAN 19 BAY 11 END DIAPHRAGM HAS CRACKING WITH EFFLORESCENCE. (PHOTO) THE BENT 16 OF SPAN 16 A SPALL NOTED IN DIAPHRAGM LEFT SIDE BEAM 3 FULL HEIGHT X 2" WIDE X 1" DEEP. THE END BENT 1 BAY 12 CURTAIN WALL ADJACENT TO BEAM 12 IS DIAGONAL CRACK. THE BENT 2 DIAPHRAGM BAY I DIAGONAL CRACK WITH EFFLORESCENCE. THERE IS A SPALL IN BAY 5 DIAPHRAGM BAY 5 SIDE BEAM 6. SIMILAR AT BAY 6 SIDE OF BEAM 7, LEFT BEAM 7, RIGHT BEAM 11, LEFT BEAM 12. THE BENT 2 SPAN 3 DIAPHRAGM SPALLED BAY 6 3" DIAMETER X 1/2" DEEP. THE BENT 2 SPAN 3 BAY 11 DIAGONAL CRACKS IN DIAPHRAGM. THERE IS A DIAPHRAGM SPALL IN BAY 6 BEAM 7 SPAN 3 BENT 4 1 1/2" DIAMETER X 1/2" DEEP. THERE IS A DIAGONAL CRACK WITH EFFLORESCENCE BAY 11 BENT 4 DIAPHRAGM. THE BAY 4 SIDE BEAM 5 DIAPHRAGM SPALLED 2" DIAMETER X 1/2" DEEP AT BENT 4 SPAN 5. THE BAY 4 SIDE BEAM 5 DIAPHRAGM SPALLED 1/2" DEEP X 5" HIGH X 8 WIDE BENT 4 SPAN 5. THE BENT 4 SPAN 5 BAY 11 HAS A DIAGONAL CRACK WITH EFFLORESCENCE IN DIAPHRAGM. THERE IS A SPALLED END DIAPHRAGM AT BENT 6, SPAN 7 AT BAY 4. MANY OTHERS ARE SIMILAR. THE BENT 6 DIAPHRAGM SPALLED BAY 10 SIDE BEAM 10. THE BENT 6 SPAN 6 BAY 11 DIAGONAL CRACK OPEN UP TO 1/4".	

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15	F	THE BENT 7 SPAN 7 DIAPHRAGM IS SPALLED 4" WIDE X 1.5" DEEP X 8" HIGH BAY 4 ADJACENT TO BEAM 5. (BEARING ASSEMBLIES) THERE IS SOME SURFACE RUST ON BEARING PLATES RANDOM LOCATIONS WITH NO SECTION LOSS.	
16	F	(DRAINAGE SYSTEM) THE DRAIN OVER BENT 13 CAP IS CAUSING RUST ON BEAM.	
52	F	NOTED AT SPAN 16 NEAR BENT 16 IN BAY 1 A PIPE DRAIN HAS RUSTED AWAY. (PAINT SYSTEM) PAINT CODE IS (A)	
35a	F	THERE IS PAINT PEELING AND SURFACE RUST IN SPAN 7 BEAMS. ALL SPANS ARE SIMILAR. (PHOTO)	
		BEAM 12 IN SPAN 7 BAY 11 SIDE HAS PAINT PEELING AND RUST WITH 1/16" SECTION LOSS IN TOP AND BOTTOM FLANGE AT DECK DRAIN. (PHOTO)	
		PAINT PEELING AND RUST IN SPAN 19 BEAMS. ALL SPANS ARE SIMILAR. (PHOTO) (TIMBER CAPS) THERE ARE 3/16" CHECKS IN BENT 3 CAP ON SPAN 4 FACE. (PHOTO)	
		THE BENT 5 TIMBER CAP IS TWISTED 6" OUT OF PLUMB AT WEST END , WITH 1" CLEARANCE AT PILE 1 IN SPAN 6 FACE. (PHOTO)	
		BENT 7 TIMBER CAP WEST END IS DECAYED 3" WIDE X 2" HIGH X UP TO 4" DEEP. (PHOTO)	
		THERE ARE 1/2" WIDE CHECKS IN BENT 7 CAP, SPAN 8 FACE.	
		THE BENT 13 TIMBER CAP IS DECAYED RIGHT END, SPAN 13 FACE 24" LONG X 9 1/2" HIGH X UP TO 8" WIDE. (PHOTO) ALSO SEE SKETCH.	
		THE BENT 13 CAP AT LEFT END ON SPAN 13 FACE IS DECAYED 24" LONG X 8" HIGH X 1 1/2" DEEP.	
		BENT 13 CAP, SPAN 14 FACE LEFT END IS DECAYED 5" HIGH X 22" LONG X 1 1/2" DEEP.	
		THE BENT 13 CAP AT SOUTH END IS DECAYED.	
BENT 14 TIMBER CAP IS DECAYED 2' LONG X 8" HIGH X 1" DEEP. (PHOTO)			
BENT 18 PILE 1 CRUTCH CAP IS SPLIT 1/2" WIDE X 10" DEEP ON SOUTH END. (PHOTO)			

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35b	F	(TIMBER PILES) THERE IS A SUPPORT POST BETWEEN BENT 1 AND BENT 2 IN SPAN 1. PILE 2 AT BENT 6 HAS BEEN REPAIRED WITH CONCRETE COLLAR. (PHOTO) PILE 4 AT BENT 9 IS DELAMINATED 10" HIGH X 6" WIDE X 1/2" DEEP SPAN 10 SIDE. PILE 1 IS REPAIRED AT BENT 13 WITH SADDLE CAP. PILE 3 BENT 13 VEGETATION GROWING OUT OF PILE. PILE 1 AT BENT 14 IS REPLACED WITH CRUTCHBENT. PILE 2 AT BENT 14 HAS A DECAYED AREA 2 1/2" DEEP X 4" DIAMETER SPAN 14 SIDE. PILE 1 AT BENT 2 HAS A STRIP MISSING 1" WIDE X 3/8" DEEP X 18" HIGH ON THE SOUTH FACE. PILE 4 AT BENT 2 HAS A DECAYED AREA 1" WIDE X 3" HIGH X 1/4" DEEP. PILE 3 AT BENT 4 IS REPAIRED WITH A CONCRETE COLLAR. (PHOTO) PILE 1 AT BENT 6 HAS A DELAMINATED AREA 1" WIDE X 4" HIGH X 1/2" DEEP. PILE 2 AT BENT 4 IS DELAMINATED 1" WIDE X 10" HIGH X 1/2" DEEP. PILE 3 AT BENT 5 IS DELAMINATED 1/2" WIDE X 1/4" DEEP X FULL HEIGHT. PILES 1 AND 3 AT BENT 17 ARE ENCASED AND CRUTCHBENT NOTED AT PILE 2. (PHOTOS) PILES 2 AND 4 AT BENT 18 ARE ENCASED. (PHOTO) BENT 18 PILE 1 HAS TIMBER CROSSCAP CRUTCHBENT RIGHT OF ORIGINAL PILE, TEMP REPAIR. (PHOTO) SEE DIVERS UNDERWATER INSPECTION REPORT DATED 1/2/2013.	

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Item No.	Grade		
35c	F	(TIMBER BULKHEAD AND WINGWALLS) END BENT 1 BULKHEAD IS DECAYED WITH FILL LEAKAGE BETWEEN PILES 2 AND 3. (PHOTO) PM ISSUED. DECAYED EXTERIOR BULKHEAD BOARDS WITH EXPOSED FILL AT SOUTHWEST CORNER. (PHOTO) PM ISSUED. THE TOP WINGWALL BOARDS ARE SURFACE DECAYED AT SOUTHEAST CORNER. (PHOTO) THERE IS A 1/4" WIDE VERTICAL CHECK IN TURNPILE AT SOUTHEAST CORNER. (PHOTO) END BENT 1 BULKHEAD BOARD DECAYED BETWEEN PILES 3 AND 4, WITH NO FILL LEAKAGE. (PHOTO) NORTHWEST CORNER WINGWALL BOARD IS DECAYED. (PHOTO)	
41	G	THERE ARE VERTICAL SCAB BOARDS AT END BENT 2 BULKHEAD. (PHOTO) (DRIFT) SEE DIVERS UNDERWATER INSPECTION REPORT DATED 1/2/2013.	
45a	F	(WATERWAY) SEE DIVERS UNDERWATER INSPECTION REPORT DATED 1/2/2013.	
45b	F	(CHANNEL ALIGNMENT) SEE DIVERS UNDERWATER INSPECTION REPORT DATED 1/2/2013.	
45c	G	(SCOUR) SEE SCOUR REPORT DATED 6/27/2005.	
50	G	(APPROACH ROADWAY) THE APPROACHES HAVE BEEN REPAIRED. THERE HAS BEEN GUARDRAIL ADDED AT ALL CORNERS SINCE LAST INSPECTION. THERE ARE SEALED TRANSVERSE CRACKS IN SOUTH APPROACH ASPHALT WEARING SURFACE. (PHOTO) THE NORTH APPROACH ASPHALT WEARING SURFACE CRACKS ARE SEALED, THE ASPHALT WEARING SURFACE IS ROUGH AND UNEVEN. (PHOTO)	
54	G	(RESPONSE TO LIVE LOAD) THERE IS VIBRATION NOTED IN SPANS 1 AND 20 DUE TO POINT OF IMPACT IN THESE SPANS CAUSED BY UNEVEN APPROACHES.	
61	YES	(PM ISSUED) FOR DECAYED BULKHEAD AT END BENT 1 WITH FILL LEAKAGE, AND BEAM 12 IN SPAN 19 WITH SECTION LOSS.	

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: 770059

County ROBESON

Date: 05/13/2014

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

MMS Code	Description of Function	Unit	Quantity	Remarks	Est. Cost
 3314	Maintain Steel Superstructure Components	LF	2 TSE	BEAM 12 BAY 11 SIDE AT SPAN 19 RUST, SECTION LOSS 6" L X 1 1/2" W AT 12" FROM BEAM END IN FLANGE, 1/8" LOSS IN WEB 12" L X UP TO 3" H	
 3346	Repair / Maintain Timber Wings & Blkhds	SF	8 8/19/14	END BENT 1 BULKHEAD IS DECAYED WITH FILL LEAKAGE BETWEEN PILES 2 AND 3	
 3346	Repair / Maintain Timber Wings & Blkhds	SF	8 TSE	DECAYED EXTERIOR BULKHEAD BOARDS WITH EXPOSED FILL AT SOUTHWEST CORNER	
2816	Asphalt Surface Repair or Replacement	SY	3	NORTH APPROACH ASPHALT WEARING SURFACE CRACKS ARE SEALED, ASPHALT WEARING SURFACE IS ROUGH AND UNEVEN	
3314	Maintain Steel Superstructure Components	LF	3	BEAM 1 TOP FLANGE AT BENT 14 HAS RUST AND UP TO 1/8" SECTION LOSS 3' LONG WITH 1/8" REMAINING	
3314	Maintain Steel Superstructure Components	LF	2	BEAM 1 AT BENT 14 HAS RUST WITH SECTION LOSS 2' LONG WITH 1/16" REMAINING ON BOTTOM FLANGE	
3326	Maintain Concrete Deck	SF	1	LEFT CURB IN SPAN 15 IS SURFACE SPALLED 16" LONG X 8" WIDE X 1" DEEP	
3326	Maintain Concrete Deck	SF	10	RIGHT CURB IN SPANS 13 AND 14 IS DELAMINATED, SURFACE SPALLED 10' LONG X 8" WIDE X UP TO 2" DEEP	
3344	Repair / Replace Timber Substructure Components	LF	26	BENT 5 TIMBER CAP IS TWISTED 6" OUT OF PLUMB AT WEST END, WITH 1" CLEARANCE AT PILE 1 IN SPAN 6 FACE	
3344	Repair / Replace Timber Substructure Components	LF	6	BENT 18 PILE 1 CRUTCH CAP IS SPLIT 1/2" WIDE X 10" DEEP ON SOUTH END	
3344	Repair / Replace Timber Substructure Components	LF	2	BENT 14 TIMBER CAP IS DECAYED 2' LONG X 8" HIGH X 1" DEEP	
3344	Repair / Replace Timber Substructure Components	LF	1	BENT 7 TIMBER CAP WEST END IS DECAYED 3" WIDE X 2" HIGH X UP TO 4" DEEP	

Key



Priority Maintenance Item



Critical Finding Item



Priority Maintenance Level Not Determined

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 770059

County ROBESON

Date: 05/13/2014

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

MMS Code	Description of Function	Unit	Quantity	Remarks	Est. Cost
3344	Repair / Replace Timber Substructure Components	LF	2	BENT 13 PILE 4 TIMBER CAP IS DECAYED 14" WIDE X 12" HIGH X 2" DEEP	
3346	Repair / Maintain Timber Wings & Blkhds	SF	3	NORTHWEST CORNER WINGWALL BOARD IS DECAYED	
3346	Repair / Maintain Timber Wings & Blkhds	SF	6	END BENT 1 BULKHEAD BOARD DECAYED BETWEEN PILES 3 AND 4, WITH NO FILL LEAKAGE	
3346	Repair / Maintain Timber Wings & Blkhds	SF	2	TOP WINGWALL BOARDS ARE SURFACE DECAYED AT SOUTHEAST CORNER	

Key



Priority Maintenance Item



Critical Finding Item



Priority Maintenance Level Not Determined

BRIDGE INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 770059

County ROBESON

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

MMS Code	MMS Description	Quantity
3314	Maintain Steel Superstructure Components	2 LF
Location:		
Beams and Girders	Bent/Span No. 19	BEAM 12 SECTION LOSS
Priority Level	Status	
Priority Maintenance	Division Bridge Maintenance Notification Received	
Submitted Date:	Submitted By:	Assisted By:
05/13/2014	R.D.HEATH	R.L.KISNER
Details		
BEAM 12 BAY 11 SIDE AT SPAN 19 RUST , SECTION LOSS 6" L X 1 1/2" W AT 12" FROM BEAM END IN FLANGE, 1/8" LOSS IN WEB 12" L X UP TO 3" H		

MMS Code	MMS Description	Quantity
3346	Repair / Maintain Timber Wings & Blkhdrs	8 SF
Location:		
Abutment Substructure	Bent/Span No. 1	TIMBER BULKHEAD
Priority Level	Status	
Priority Maintenance	Division Maintenance Work In Process	
Submitted Date:	Submitted By:	Assisted By:
05/13/2014	R.D.HEATH	R.L.KISNER
Details		
END BENT 1 BULKHEAD IS DECAYED WITH FILL LEAKAGE BETWEEN PILES 2 AND 3		

BRIDGE INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 770059

County ROBESON

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

MMS Code	MMS Description	Quantity
3346	Repair / Maintain Timber Wings & Blkhds	3 SF
Location:		
Abutment Substructure	Bent/Span No. 1	TIMBER EXT BULKHEAD
Priority Level	Status	
Priority Maintenance	Division Maintenance Work In Process	
Submitted Date:	Submitted By:	Assisted By:
05/13/2014	R.D.HEATH	R.L.KISNER
Details		
DECAYED EXTERIOR BULKHEAD BOARDS WITH EXPOSED FILL AT SOUTHWEST CORNER		



TOP WINGWALL BOARDS ARE SURFACE DECAYED AT SOUTHEAST CORNER



1/4" WIDE VERTICAL CHECK IN TURNPILE AT SOUTHEAST CORNER



END BENT 1 BULKHEAD IS DECAYED WITH FILL LEAKAGE BETWEEN PILES 2 AND 3 PM ISSUED.



END BENT 1 BULKHEAD BOARD DECAYED BETWEEN PILES 3 AND 4, WITH NO FILL LEAKAGE



DECAYED EXTERIOR BULKHEAD BOARDS WITH EXPOSED FILL AT SOUTHWEST CORNER



3/16" CHECKS ON BENT 3 TIMBER CAP, SPAN 4 FACE (SIMILAR IN ALL TIMBER CAPS)



PILE 3 AT BENT 4 ENCASED, TEMP REPAIR



BENT 5 TIMBER CAP IS TWISTED 6" OUT OF PLUMB AT WEST END, WITH 1" CLEARANCE AT PILE 1 IN SPAN 6 FACE



PILE 2 AT BENT 6 ENCASED, TEMP REPAIR



BENT 7 TIMBER CAP WEST END IS DECAYED 3" WIDE X 2" HIGH X UP TO 4" DEEP



THERE IS PAINT PEELING AND SURFACE RUST IN SPAN 7 BEAMS, ALL SPANS ARE SIMILAR



BEAM 12 IN SPAN 7 BAY 11 SIDE HAS PAINT PEELING AND RUST WITH 1/16" SECTION LOSS IN TOP AND BOTTOM FLANGE AT DECK DRAIN



BENT 13 PILE 4 TIMBER CAP IS DECAYED 14" WIDE X 12" HIGH X 2" DEEP (ALSO SEE BENT 13 CAP DECAY SKETCH)



SEALED TRANSVERSE CRACKS IN SOUTH APPROACH ASPHALT WEARING SURFACE



SEALED TRANSVERSE CRACKS OVER ORIGINAL BENTS



SEALED LONGITUDINAL CRACKS IN ALL SPANS



RIGHT CURB IN SPANS 13 AND 14 IS DELAMINATED, SURFACE SPALLED 10' LONG X 8" WIDE X UP TO 2" DEEP



LEFT CURB IN SPAN 15 IS SURFACE SPALLED 16" LONG X 8" WIDE X 1" DEEP



NORTH APPROACH ASPHALT WEARING SURFACE CRACKS ARE SEALED, ASPHALT WEARING SURFACE IS ROUGH AND UNEVEN



NORTHWEST CORNER WINGWALL BOARD IS DECAYED



BENT 14 TIMBER CAP IS DECAYED 2' LONG X 8" HIGH X 1" DEEP



BEAM 1 AT BENT 14 HAS RUST WITH SECTION LOSS 2' LONG WITH 1/16" REMAINING ON BOTTOM FLANGE



BEAM 1 TOP FLANGE AT BENT 14 HAS RUST AND UP TO 1/8" SECTION LOSS 3' LONG WITH 1/8" REMAINING



BENT 17 PILES 1 AND 3 ENCASED, TEMP REPAIRS



BENT 17 PILE 2 HAS TIMBER CROSSCAP CRUTCHBENT LEFT OF ORIGINAL PILE, TEMP REPAIR



BEAM 1 AT BENT 17 TEMP REPAIR



BENT 18 PILES 2 AND 4 ENCASED, TEMP REPAIR



BENT 18 PILE 1 HAS TIMBER CROSSCAP CRUTCHBENT RIGHT OF ORIGINAL PILE, TEMP REPAIR



BENT 18 PILE 1 CRUTCHBENT CAP IS SPLIT 1/2" WIDE X 10" DEEP ON SOUTH END



HAIRLINE HORIZONTAL CRACK WITH EFFLORESCENCE IN LEFT DECK OVERHANG AT BENT 19



PAINT PEELING AND RUST IN SPAN 19 BEAMS, ALL SPANS ARE SIMILAR



SPAN 19 BAY 11 END DIAPHRAGM HAS CRACKING WITH EFFLORESCENCE



BEAM 12 BAY 11 SIDE AT SPAN 19 RUST , SECTION LOSS 6" L X 1 1/2" W AT 12" FROM BEAM END IN FLANGE,
1/8" LOSS IN WEB 12" L X UP TO 3" H



EFFLORESCENCE LEAKAGE IN DECK OVER BENT 19 PILE 4 PATCH



THERE ARE VERTICAL SCAB BOARDS AT END BENT 2 BULKHEAD

Structure Data Worksheet

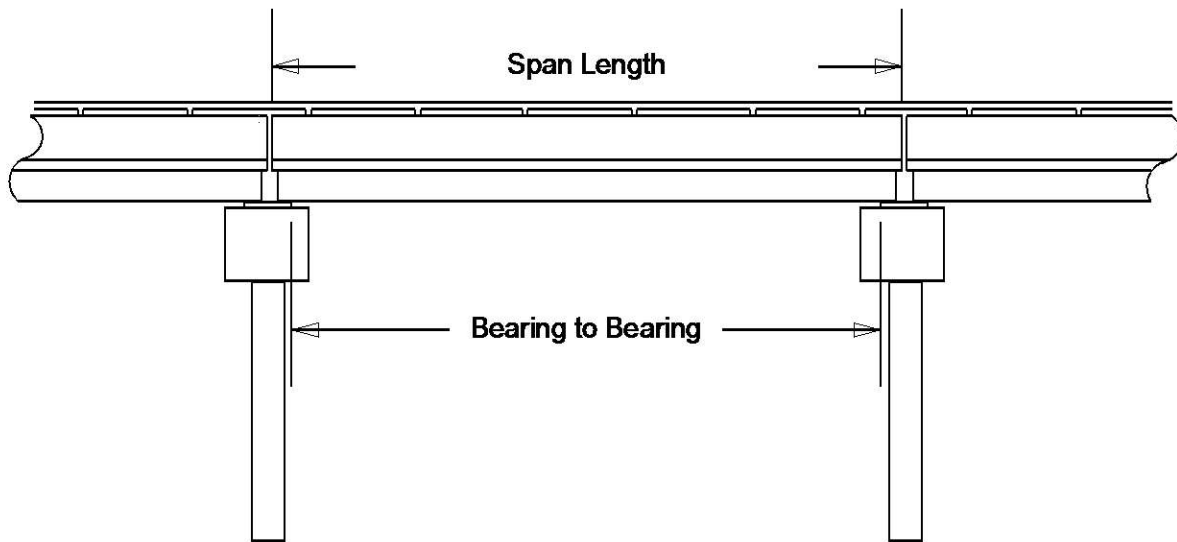
Spans

County: ROBESON

Structure No: 770059

Date: 05/13/2014

Inspected By: RDH



Span No	Span Length	Bearing to Bearing	Comments
1	9.0 FT.	7.917 FT.	CONTINUOUS OVER BENT 1 NBIS 153.083 FT.
2	8.583	8.083	CONTINUOUS OVER BENT 1
3	8.50	8.00	CONTINUOUS OVER BENT 3
4	8.583	8.083	CONTINUOUS OVER BENT 3
5	8.667	8.167	CONTINUOUS OVER BENT 5
6	8.00	7.50	CONTINUOUS OVER BENT 5
7	8.50	8.00	CONTINUOUS OVER BENT 7
8	8.50	8.00	CONTINUOUS OVER BENT 7
9	2.50	2.00	CONTINUOUS OVER BENT 9
10	12.50	12.50	CONTINUOUS OVER BENTS 9 and 10
11	2.167	1.667	CONTINUOUS OVER BENT 10
12	2.50	2.00	CONTINUOUS OVER BENT 12
13	12.333	12.333	CONTINUOUS OVER BENTS 12 AND 13
14	2.417	1.917	CONTINUOUS OVER BENT 13
15	8.833	8.333	CONTINUOUS OVER BENT 15
16	8.167	7.667	CONTINUOUS OVER BENT 15
17	8.833	8.333	CONTINUOUS OVER BENT 17
18	8.333	8.00	CONTINUOUS OVER BENT 17
19	8.50	8.00	CONTINUOUS OVER BENT 19
20	9.667	8.50	CONTINUOUS OVER BENT 19

Span No	Span Length	Bearing to Bearing	Comments
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Stream Bed Soundings

(See next sheet for profile sketch)

Bridge No: 770059 County: ROBESON Date: 05/13/2014 By: RDH

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

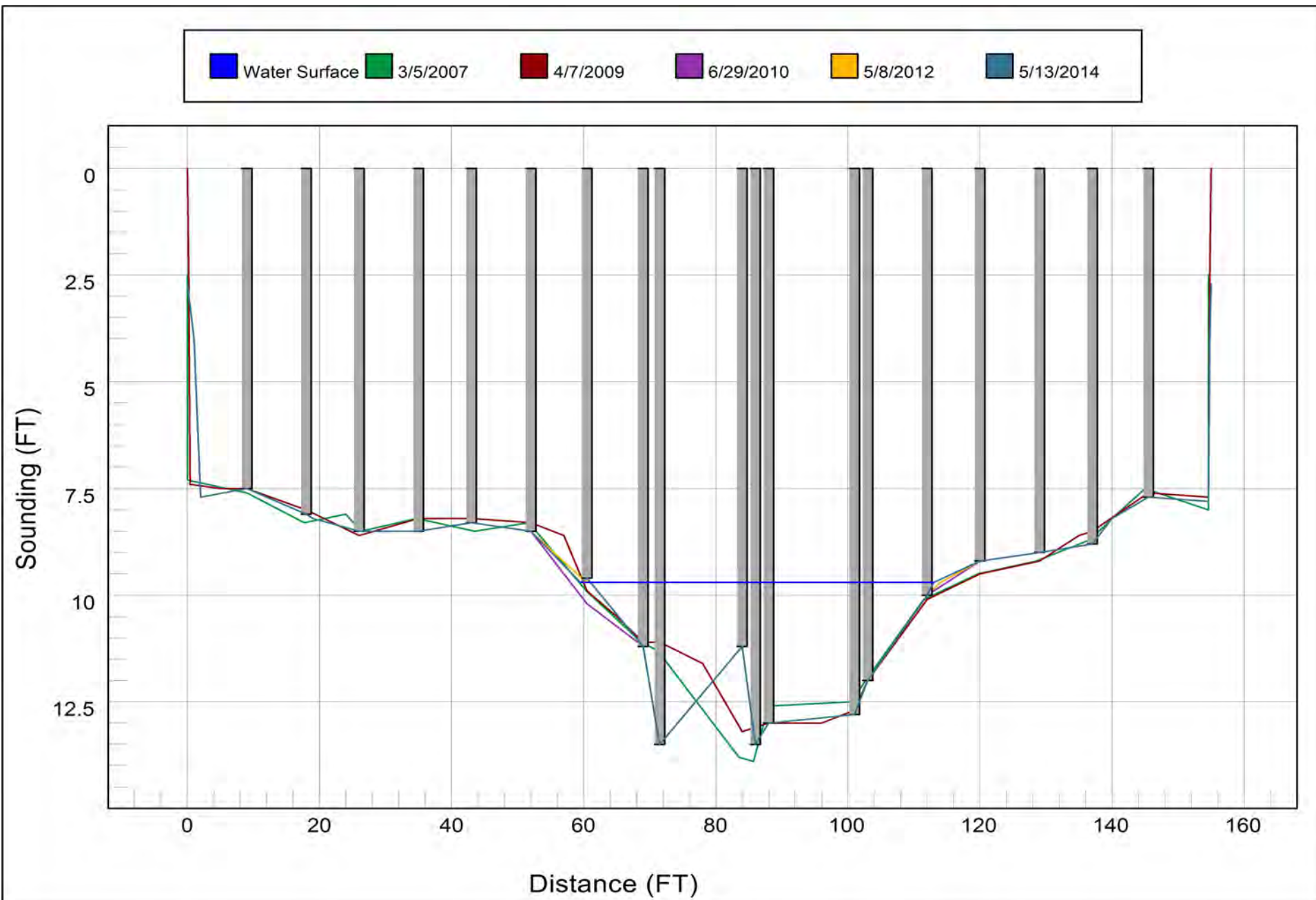
Distance from Highwater Mark to top of rail: 6.5 Location of Highwater Mark: ON PILES

DOWNSTREAM			UPSTREAM		
Distance (Station) (ft)	Sounding (ft)	Description	Distance (Station) (ft)	Sounding (ft)	Description
0	2.7	TOP OF BULKHEAD			
1	4	Top of Cap			
2	7.7	GROUND AT CAP	2	8.5	BED AT CAP
9	7.5	BENT 1	9	9.4	BENT 1
18	8.1	BENT 2	18	8.5	BENT 2
19	8.2				
26	8.5	BENT 3	26	8	BENT 3
35	8.5	BENT 4	35	8.4	BENT 4
43	8.3	BENT 5	43	8	BENT 5
52	8.5	BENT 6	52	7.7	BENT 6
59.5	9.7	WSWE (EAST)			
60.5	9.6	BENT 7	60.5	7.7	BENT 7
69	11.2	BENT 8	69	11	BENT 8
71.5	13.5	BENT 9	71.5	11.5	BENT 9
84	11.2	BENT 10	84	13.3	BENT 10
86	13.5	BENT 11	86	13.8	BENT 11
88	13	BENT 12	88	13.5	BENT 12
101	12.8	BENT 13	101	14.4	BENT 13
103	12	BENT 14	103	9.2	BENT 14
112	10	BENT 15	112	9.3	BENT 15
113	9.7	WSWE			
120	9.2	BENT 16	120	9.5	BENT 16
129	9	BENT 17	129	9.2	BENT 17
137	8.8	BENT 18	137	9	BENT 18
140	8.2				

DOWNSTREAM			UPSTREAM		
Distance (Station) (ft)	Sounding (ft)	Description	Distance (Station) (ft)	Sounding (ft)	Description
145.5	7.7	BENT 19	145.5	9	BENT 19
154.6	7.8	GROUND AT CAP	154.6	8.3	BED AT CAP
154.8	4	Top of Cap			
155	2.7	TOP OF BULKHEAD			

STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)



Bridge Inspection Field Sketch

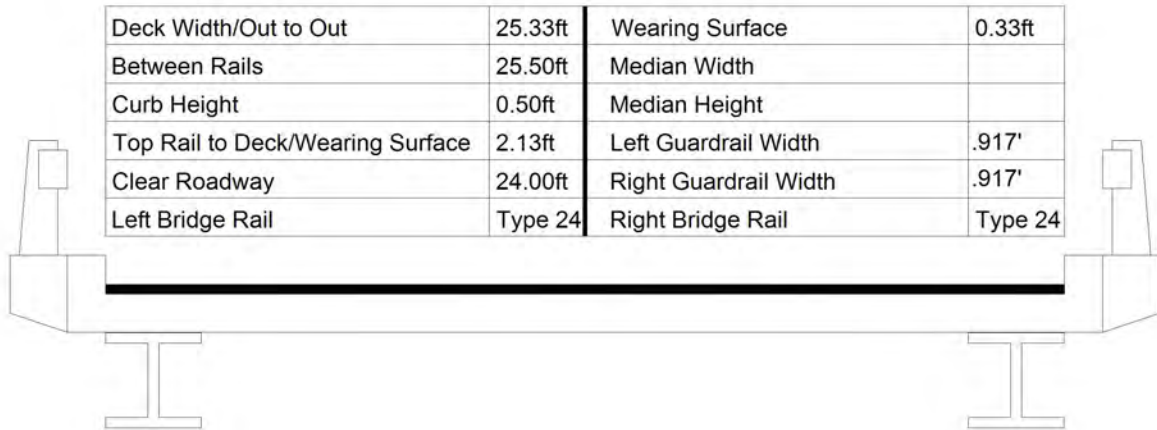


Roadway	22.0ft Wide	2 Paved Lanes	Looking North
Left Shoulder	1.5ft Wide	1.5ft Paved	
Right Shoulder	1.5ft Wide	1.5ft Paved	
Left Guardrail	1.5ft from road		
Right Guardrail	1.5ft from road		

MEASUREMENTS VERIFIED BY RLK 5/13/14

Title APPROACH ROADWAY		Description LOOKING NORTH	
Bridge No: 770059	Drawn By: RLK	Date: 5/08/2012	File Name: S0302000306

Bridge Inspection Field Sketch



Measurements for Span #	1	SPANS 2 TO 20 SIMILAR	
Deck Thickness	0.42	Left Overhang	0.52
Top of Rail to Bottom of Beam	3.88	Right Overhang	0.52

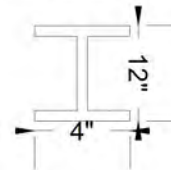
Beam No	Beam Type	Spacing	Comments
1	Steel I Beam	2.21ft	
2	Steel I Beam	2.21ft	
3	Steel I Beam	2.21ft	
4	Steel I Beam	2.21ft	
5	Steel I Beam	2.21ft	
6	Steel I Beam	2.21ft	
7	Steel I Beam	2.21ft	
8	Steel I Beam	2.21ft	
9	Steel I Beam	2.21ft	
10	Steel I Beam	2.21ft	
11	Steel I Beam	2.21ft	
12	Steel I Beam		

MEASUREMENTS VERIFIED BY RLK 6/29/10

MEASUREMENTS VERIFIED BY RLK 5/8/12

MEASUREMENTS REVISED BY RLK 5/13/14

SIMILAR BEAM



FLANGE THICKNESS = 1/4"

WEB THICKNESS = 1/4"

BETHLEHEM USA

Title

SUPERSTRUCTURE

Description

SIMILAR SECTION

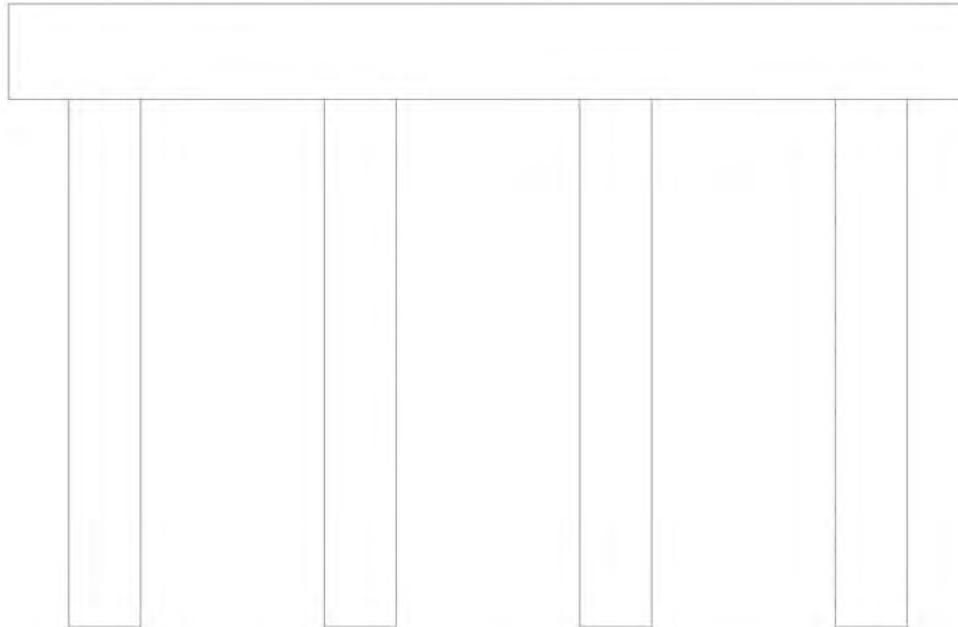
Bridge No: 770059

Drawn By: SJP

Date: 01/29/2007

File Name: S0302000307

Bridge Inspection Field Sketch



Abutment #	1	Abutment 2 similar	
Cap - Cast In Place			
Cap Size	27.83ft Long	2.00ft Wide	2.00ft High
Left Overhang	2.67ft	Lt Cap/Beam Overhang	1.76ft
Right Overhang	2.67ft	Rt Cap/Beam Overhang	1.76ft

Pile #	Material	Pile Type	Spacing	Length	Width/Diam.	Height	Orientation
1	Wood or Timber	Pile Bent	7.50		1.00		Vertical
2	Wood or Timber	Pile Bent	7.50		1.00		Vertical
3	Wood or Timber	Pile Bent	7.50		1.00		Vertical
4	Wood or Timber	Pile Bent			1.00		Vertical

MEASUREMENTS VERIFIED BY RLK 6/29/10

MEASUREMENTS VERIFIED BY RLK 5/8/12

MEASUREMENTS VERIFIED BY RLK 5/13/14

Title

SUBSTRUCTURE

Description

END BENTS 1 AND 2

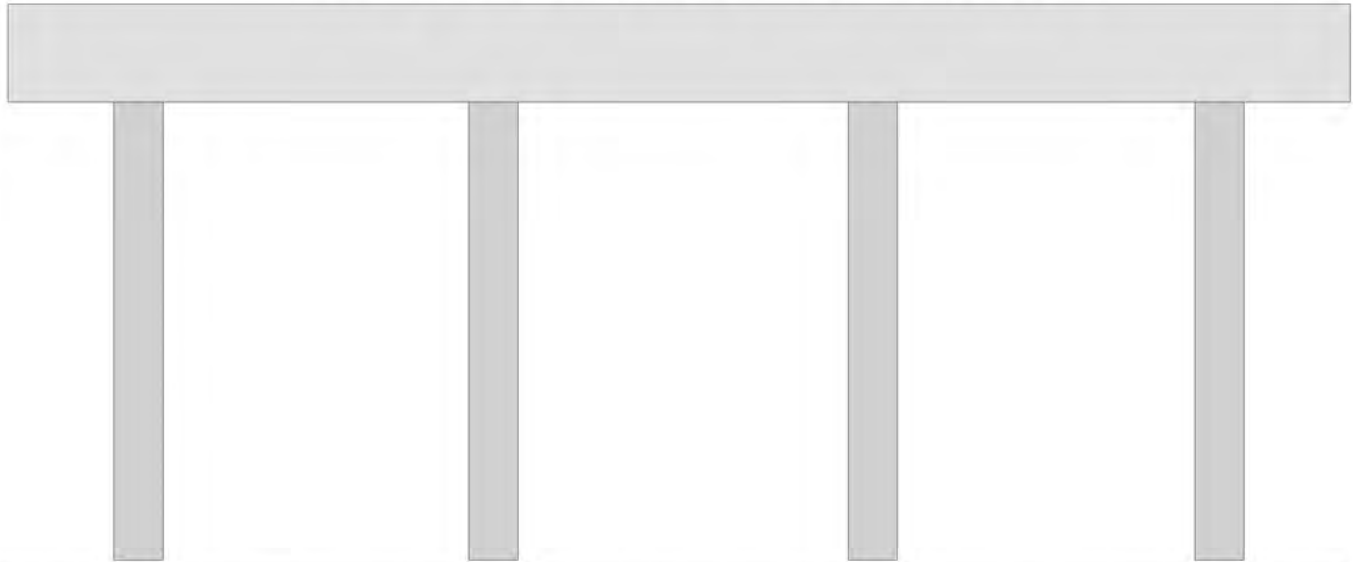
Bridge No: 770059

Drawn By: SJP

Date: 01/29/2007

File Name: S0302000308

Bridge Inspection Field Sketch



Cap Information			Material Cast-in-Place Concrete																															
Length	Width	Height	Left Overhang	Right Overhang	Left Beam to End of Cap.	Right Beam to End of Cap.																												
27.417 ft.	2.000 ft.	2.000 ft.	2.667 ft.	2.667 ft.	1.500 ft.	1.500 ft.																												
Subcap Information			Material																															
Length	Width	Height	Left Overhang	Right Overhang	Left Pile to Splice.																													
Sill Information			Material																															
Length	Width	Height																																
Pile #	Material	Spacing	Width/Dia.	Height	Length	Orientation	Driven?	Replacement?	Removed?	Collar?																								
1	Timber	7.25 ft.	1.00 ft.			Vertical	Yes	No	No	No																								
2	Timber	7.75 ft.	1.00 ft.			Vertical	Yes	No	No	No																								
3	Timber	7.083 ft.	1.00 ft.			Vertical	Yes	No	No	No																								
4	Timber		1.00 ft.			Vertical	Yes	No	No	No																								
CONCRETE JACKET PILE REPAIRS 1' - 10" DIAMETER						(NO CROSSBRACING) TIMBER CRUTCH SUPPORTS																												
<table border="1"> <tr> <th>PILE</th> <th>BENT</th> </tr> <tr> <td>3</td> <td>4</td> </tr> <tr> <td>2</td> <td>6</td> </tr> <tr> <td>1</td> <td>16</td> </tr> <tr> <td>3</td> <td>16</td> </tr> <tr> <td>2</td> <td>18</td> </tr> <tr> <td>4</td> <td>18</td> </tr> </table>		PILE	BENT	3	4	2	6	1	16	3	16	2	18	4	18	<table border="1"> <tr> <th>PILE</th> <th>BENT</th> </tr> <tr> <td>1</td> <td>14</td> </tr> <tr> <td>4</td> <td>14</td> </tr> <tr> <td>2</td> <td>16</td> </tr> <tr> <td>1</td> <td>18</td> </tr> </table>									PILE	BENT	1	14	4	14	2	16	1	18
PILE	BENT																																	
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4	18																																	
PILE	BENT																																	
1	14																																	
4	14																																	
2	16																																	
1	18																																	
Bent/Abutment #: 1 Similar Bents: BENTS 4,6,8,11,14,16,18																																		

Title

SUBSTRUCTURE 1

Description

ORIGINAL INTERIOR BENT

Bridge No: 770059

Drawn By: RLK

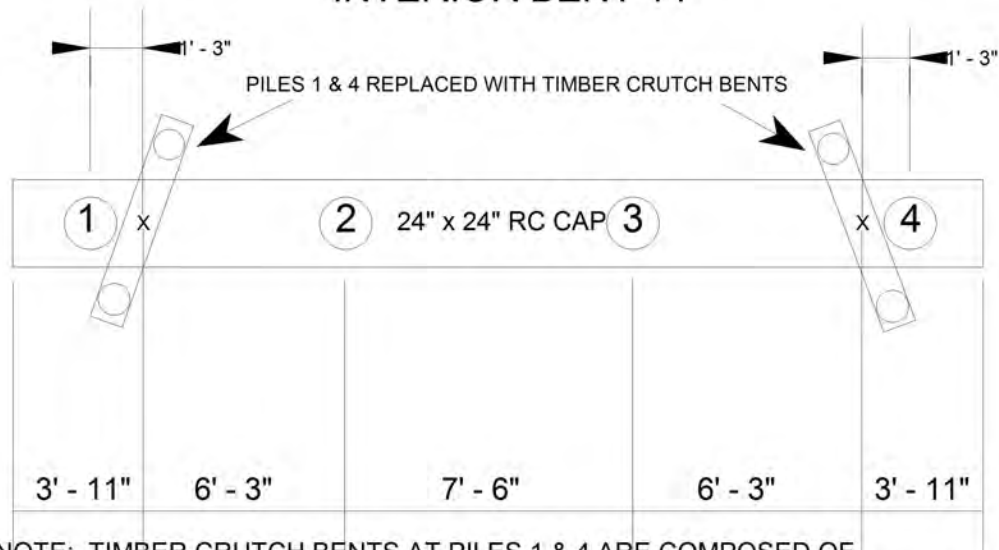
Date: 5/13/2014

File Name: S0302000309

Bridge Inspection Field Sketch										
(NO CROSSBRACING)										
Cap Information			Material Timber							
Length	Width	Height	Left Overhang	Right Overhang	Left Beam to End of Cap.	Right Beam to End of Cap.				
26.083 ft.	0.96 ft.	0.96 ft.	1.750 ft.	1.750 ft.	.833 ft.	.833 ft.				
Subcap Information			Material							
Length	Width	Height	Left Overhang	Right Overhang	Left Pile to Splice.					
Sill Information			Material							
Length	Width	Height								
Pile #	Material	Spacing	Width/Dia.	Height	Length	Orientation	Driven?	Replacement?	Removed?	Collar?
1	Timber	7.167 ft.	1.00 ft.			Vertical	Yes	No	No	No
2	Timber	8.25 ft.	1.00 ft.			Vertical	Yes	No	No	No
3	Timber	7.167 ft.	1.00 ft.			Vertical	Yes	No	No	No
4	Timber		1.00 ft.			Vertical	Yes	No	No	No
NOTE: CAP HAS TIMBER CROWN STRIP 26' LONG X 11.5" WIDE X 3" HIGH										
Bent/Abutment #: 1			Similar Bents: BENTS 3,5,7,9,10,12,13,15,17,19							
Title						Description				
SUBSTRUCTURE 2						TIMBER INTERIOR BENTS				
Bridge No: 770059		Drawn By: RLK			Date: 5/13/2014		File Name: S0302000310			

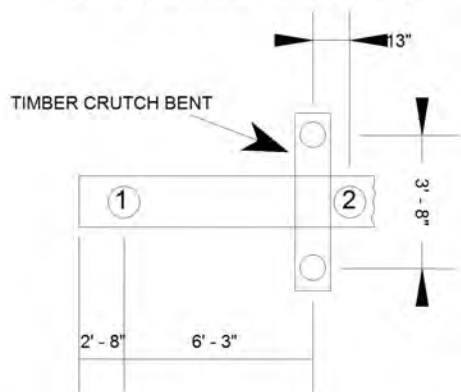
Bridge Inspection Field Sketch

INTERIOR BENT 14

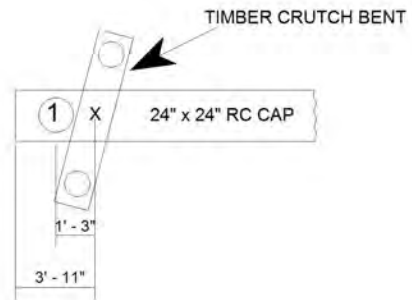


NOTE: TIMBER CRUTCH BENTS AT PILES 1 & 4 ARE COMPOSED OF 11.75" W x 12" H TIMBER CAP ON TWO 12" DIAMETER TIMBER PILES AT 3' - 8" SPACING

INTERIOR BENT 16



INTERIOR BENT 18



MEASUREMENTS VERIFIED BY RLK 6/29/10
 MEASUREMENTS VERIFIED BY RLK 5/8/12
 MEASUREMENTS VERIFIED BY RLK 5/13/14

Title

SUBSTRUCTURE 3

Description

INTERIOR BENT CRUTCH REPAIRS

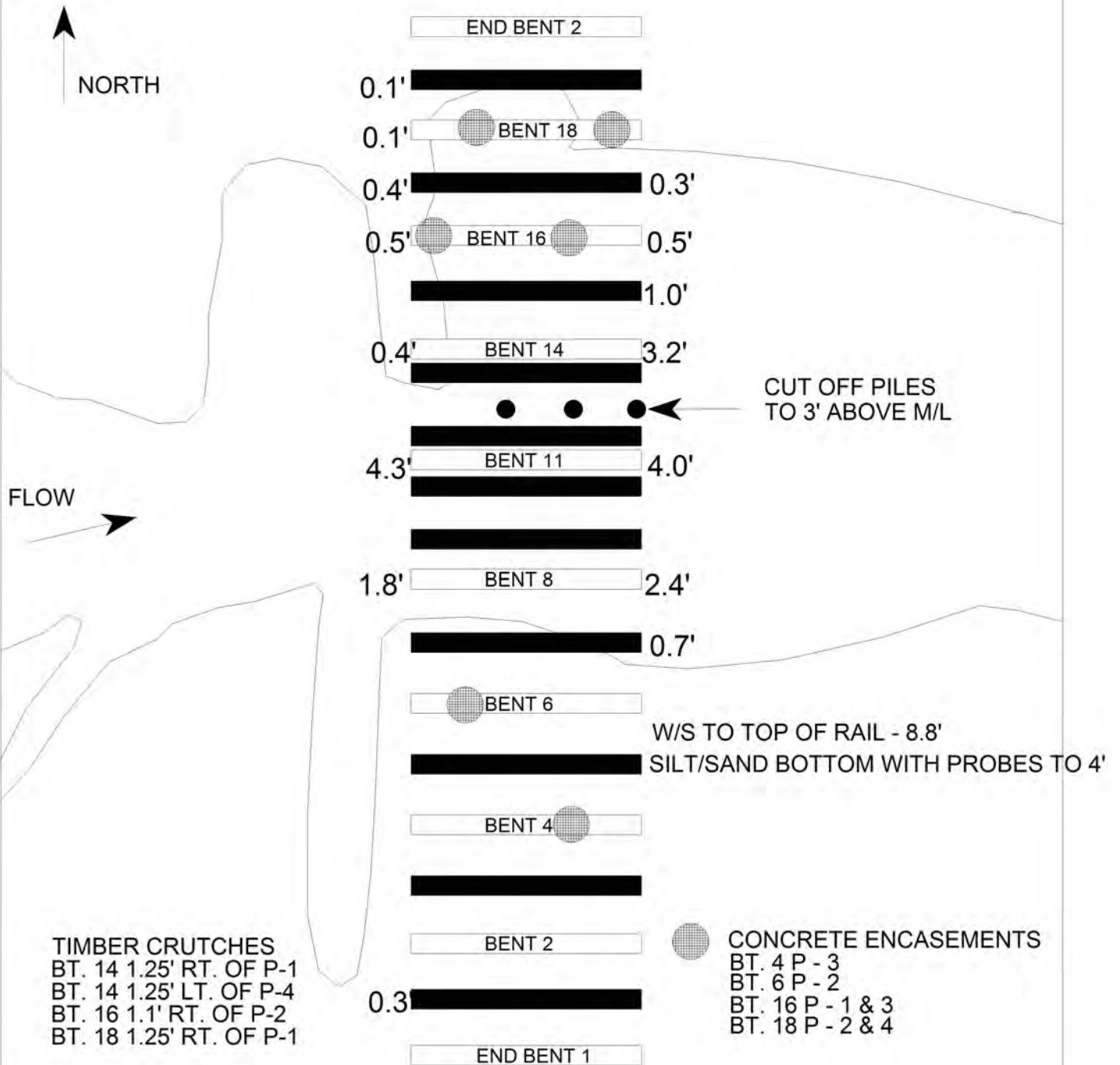
Bridge No: 770059

Drawn By: SJP

Date: 03/02/2007

File Name: S0302000376

Bridge Inspection Field Sketch



Title
PLAN VIEW

Description
CHANNEL OVERVIEW

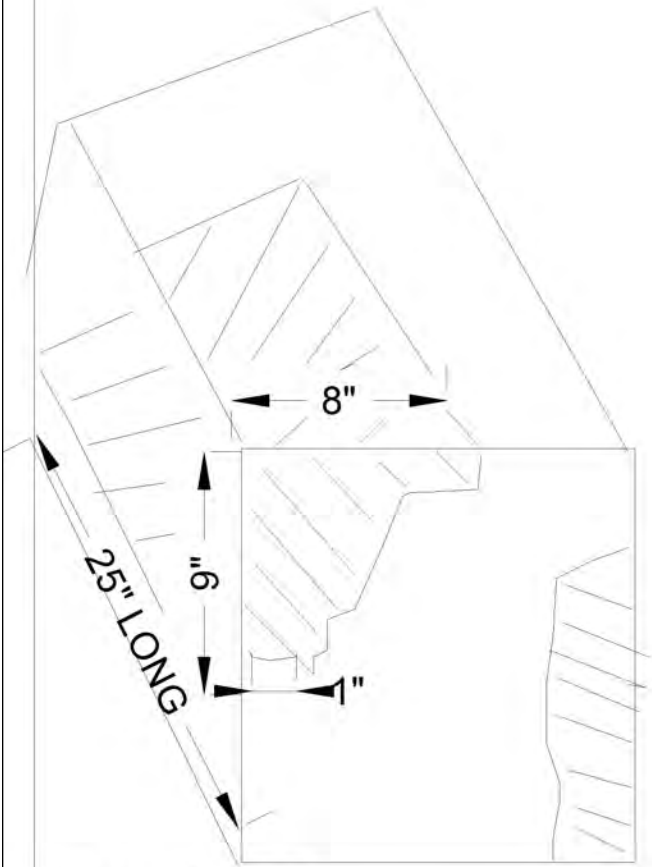
Bridge No: 770059

Drawn By: WRM

Date: 1/20/2009

File Name: S0174012475

Bridge Inspection Field Sketch

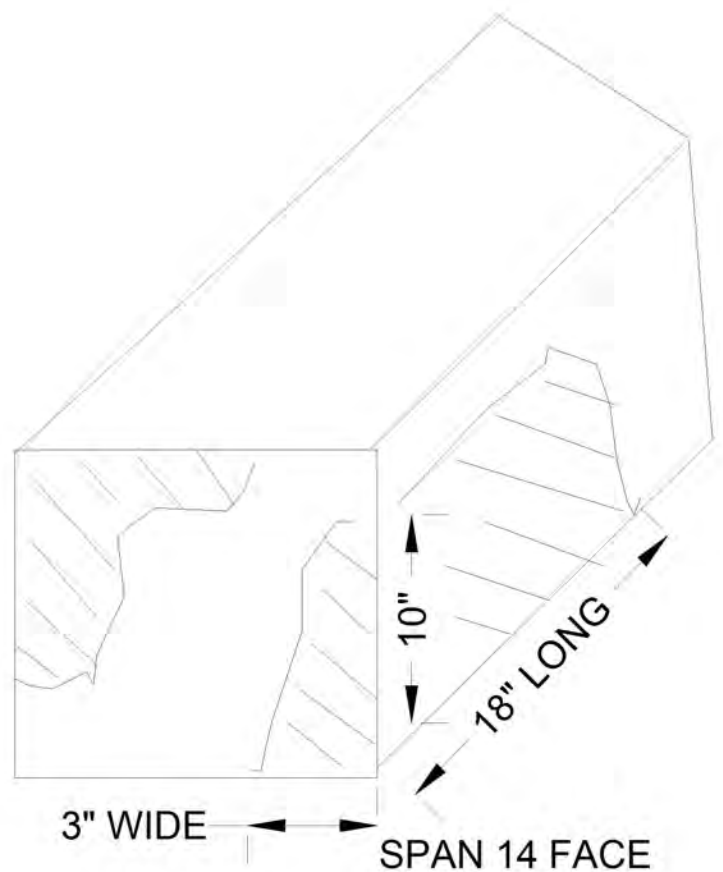


SPAN 13 FACE

NOTE: SEE PHOTO # 6630

MEASUREMENTS VERIFIED BY RLK 5/8/12

MEASUREMENTS VERIFIED BY RLK 5/13/14



Title		Description	
BENT 13 CAP DECAY EAST END		DECAYED SECTION	
Bridge No:	770059	Drawn By:	R.D. HEATH
		Date:	6/30/2010
		File Name:	T0094000014



GUARDRAIL END TERMINAL AT SOUTHEAST CORNER, ALL CORNERS ARE SIMILAR



GUARDRAIL POST SPACINGS AT MID PORTION IN SOUTHEAST CORNER, ALL CORNERS ARE SIMILAR



LOOKING NORTH (BARKER TEN MILE ROAD)



GUARDRAIL POST SPACINGS AT BRIDGE IN SOUTHEAST CORNER, ALL CORNERS ARE SIMILAR



GUARDRAIL CONNECTION AT SOUTHEAST CORNER, ALL CORNERS ARE SIMILAR



EAST PROFILE



END BENT 1



BENT 1, ALL ODD NUMBERED BENTS ARE SIMILAR



EAST END OF BENT 1



BENT 2, ALL EVEN NUMBERED BENTS ARE SIMILAR



EAST END OF BENT 2



WEST PROFILE



BENT 3 BEARING AT BEAM 1, ALL ODD NUMBERED BENTS ARE SIMILAR



BENT 4 BEARINGS AT BEAM 1, ALL EVEN NUMBERED BENTS ARE SIMILAR



DOWNSTREAM EAST, THRU SPAN 8



UPSTREAM WEST, THRU SPAN 8



LOOKING SOUTH, OFF BRIDGE



LOOKING NORTH, OFF BRIDGE



UPSTREAM WEST



DOWNSTREAM EAST



LOOKING SOUTH



DOWNSTREAM EAST, THRU SPAN 13



UPSTREAM WEST, THRU SPAN 13



SPAN 13 UNDERSIDE, ALL SPANS ARE SIMILAR



END BENT 2