



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION

TEMP REPAIR

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY ASHE BRIDGE NUMBER 040350 INSPECTION CYCLE 2 YRS
ROUTE SR1617 ACROSS PEAK CREEK M.P. 0

LOCATION 100 FT.W.JCT.SR1616

SUPERSTRUCTURE TIMBER FLOOR ON TIMBER JOISTS

SUBSTRUCTURE E.BTS:TIMBER CAPS/TIMBER POST&SILLS @ 6' CENTERS

SPANS 1 @ 18'-6

LONGITUDE 81° 17' 17.2"

LATITUDE 36° 22' 39.9"

PRESENT CONDITION FAIR

INVENTORY RATING

INSPECTION DATE 12/08/2011

OPERATING RATING

PRESENT POSTING SV 13 TTST 21

PROPOSED POSTING

COMPUTER UPDATE

ANALYSIS DATE

POSTING LETTER DATE

SUFFICIENCY RATING

OTHER SIGNS PRESENT 4 DELIN.



LOOKING EAST

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: 01/20/2012

IDENTIFICATION					
(1) STATE NAME -NORTH CAROLINA	BRIDGE	040350	SUFFICIENCY RATING =		4
(8) STRUCTURE NUMBER(FEDERAL)	000000000090350	STATUS =		Structurally Deficient	
(5) INVENTORY ROUTE (ON/UNDER) - ON	31016170				
(2) STATE HIGHWAY DEPARTMENT DISTRICT	3	CLASSIFICATION		CODE	
(3) COUNTY CODE 9 (4) PLACE CODE	00000	(112)NBIS BRIDGE SYSTEM -		NO	
(6) FEATURE INTERSECTED - PEAK CREEK		(104)HIGHWAY SYSTEM Is not on NHS		0	
(7) FACILITY CARRIED SR1617		(26) FUNCTIONAL CLASS - Local		09	
(9) LOCATION 100 FT.W.JCT.SR1616		(100)STRAHNET HIGHWAY - Not a STRAHNET Route		0	
(11)MILEPOINT	0	(101)PARALLEL STRUCTURE - No Parallel Structure		N	
(16)LAT 36° 22' 50.6" (17)LONG 81° 17' 58.7"		(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	
		(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 Mutlibeam or Girder	CODE	702			
(44) STRUCTURE TYPE APPR :					
TYPE -	CODE	000	CONDITION		CODE
(45) NUMBER OF SPANS IN MAIN UNIT		1	(58) DECK		5
(46) NUMBER OF APPROACH SPANS			(59) SUPERSTRUCTURE		4
(107)DECK STRUCTURE TYPE - 8	CODE		(60) SUBSTRUCTURE		5
(108)WEARING SURFACE / PROTECTIVE SYSTEM :			(61) CHANNEL & CHANNEL PROTECTION		7
(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 Other or Unknown		0
			(63) OPERATING RATING METHOD - Allowable Stress		
			(64) OPERATING RATING - HS-4		207
			(65) INVENTORY RATING METHOD - Allowable Stress		
			(66) INVENTORY RATING - HS-3		205
			(70) BRIDGE POSTING - Posting Required		0
			(41) STRUCTURE OPEN, POSTED ,OR CLOSED		P
			DESCRIPTION - Posted for Load		
AGE AND SERVICE				APPRAISAL	
(27) YEAR BUILT 1963				(67) STRUCTURAL EVALUATION	
(106)YEAR RECONSTRUCTED				(68) DECK GEOMETRY	
(42) TYPE OF SERVICE : ON - Highway				(69) UNDERCLEARANCES,VERTI & HORIZ	
UNDER - Waterway				(71) WATERWAY ADEQUACY	
CODE 15				(72) APPROACH ROADWAY ALIGNMENT	
(28) LANES: ON STRUCTURE 2 UNDER STRUCTURE				(36) TRAFFIC SAFETY FEATURES	
(29) AVERAGE DAILY TRAFFIC 150				(113)SCOUR CRITICAL BRIDGES	
(30) YEAR OF ADT 2006 (109) TRUCK ADT PCT %					
(19) BYPASS OR DETOUR LENGTH 99 MI					
GEOMETRIC DATA					
(48) LENGTH OF MAXIMUM SPAN 17 FT				(75) TYPE OF WORK -	
(49) STRUCTURE LENGTH 19 FT				CODE	
(50)CURB OR SIDEWALK: LEFT .3 FT RIGHT .3 FT				(76) LENGTH OF STRUCTURE IMPROVEMENT	
(51) BRIDGE ROADWAY WIDTH CURB TO CURB 19.2 FT				(94) BRIDGE IMPROVEMENT COST	
(52) DECK WIDTH OUT TO OUT 20.1 FT				(95) ROADWAY IMPROVEMENT COST	
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS) 12 FT				(96) TOTAL PROJECT COST	
(33) BRIDGE MEDIAN - No Median				(97) YEAR OF IMPROVEMENT COST ESTIMATE	
(34) SKEW 0° (35) STRUCTURE FLARED 0				(114)FUTURE ADT 300 (115) YEAR FUTURE ADT 2025	
(10) INVENTORY ROUTE MIN VERT CLEAR 999.9 FT					
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR 19.2 FT					
(53) MIN VERT CLEAR OVER BRIDGE RDWY 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					
NAVIGATION DATA				INSPECTIONS	
(38) NAVIGATION CONTROL - No Navigational Control				(90) INSPECTION DATE 12/07/2009	
(111)PIER PROTECTION -				(92) CRITICAL FEATURE INSPECTION :	
(39) NAVIGATION VERTICAL CLEARANCE 0				(93) CFI DATE	
(116)VERT - LIFT BRIDGE NAV MIN VERT CLEAR FT				A) FRACTURE CRIT DETAIL - NO	
(40) NAVIGATION HORIZONTAL CLEARANCE 0 FT				B) UNDERWATER INSP - NO	
				C) OTHER SPECIAL INSP NO	
				SCOUR	

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Run Date: 01/20/2012

COUNTY :	DIVISION :	DISTRICT :	STRUCTURE NUMBER :	LENGTH :	
ASHE	11	3	040350	19	FEET

ROUTE CARRIED :	FEATURE INTERSECTED :
SR1617	PEAK CREEK

LOCATED :	BRIDGE NAME :	CITY :
100 FT.W.JCT.SR1616		

FUNC. CLASS :	SYST.ON :	SYST.UNDER :	ADT & YR :	RAIL TYPE :
09	NFA	NFA	150 2006	LT 227 RT 227

BUILT :	BY :	PROJ :	FED.AID PROJ :	DESIGN LOAD :
1963	BMU			Other or Unknown

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

NAVIGATION :	HT. CRN. TO BED :	WATER DEPTH :
VC 0 FT HC 0 FT	8 FT	1 FT

SUPERSTRUCTURE : TIMBER FLOOR ON TIMBER JOISTS

SUBSTRUCTURE : E.BTS:TIMBER CAPS/TIMBER POST&SILLS @ 6' CENTERS

SPANS : 1 @ 18'-6

BEAMS OR GIRDERS : 11 LNS.6X12 TIM.JSTS.& 1 LN. DBL.6X12 TIM.JSTS.@ VAR.CTS.

FLOOR :	ENCROACHMENT :	DECK (OUT TO OUT) :
		20.1 FT

CLEAR ROADWAY :	BETWEEN RAILS :	SIDEWALK OR CURB :
19.2 FT	19.8 FT	LT .3 FT RT .3 FT

VERT.CL.OVER : 999.9 FT

INV.RTG. :	OPE.RTG. :	CONTR.MEMBER :	POSTED :	TTST	21	DATE	04/02/2008
HS-3	HS-4	Int Joist	SV 13				

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. 040350 COUNTY ASHE ROUTE SR1617 OVER PEAK CREEK
 STRUCTURE TYPE TIMBER FLOOR ON TIMBER JOISTS
 ROUTE ORIENTATION W - E SPANS 1 @ 18'-6

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			G	45. CHANNEL & CHANNEL PROT.	a. WATERWAY	G	
					b. ALIGNMENT	G	
					c. SCOUR	F	
					d. SLOPE PROT., RIP-RAP, DIKES, ETC.		
2. DECK NO. OF EA TYPE SPN GRADE RATES SI & A ITEM 58	a. CONCRETE			50. APPROACH ROADWAY CONDITION			F
	b. TIMBER	1	F	51. APPROACH SLABS			
	c. STEEL PLANK			52. PAINT SYSTEM			CODE
	d. OPEN GRID			53. UTILITIES			
3. RAILING	a. CONCRETE			54. RESPONSE TO LIVE LOAD			G
	b. TIMBER		G	55. ESTIMATED REMAINING LIFE			10
	c. ALUMINUM						
	d. STEEL						
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			NO
	b. MISC PREFAB			62. PRESENTLY POSTED			YES
	c. COMPRESSION SEAL			63. TOT. FIELD INSP TIME (INCLUDE WRITE UP)(MAN HR)			5
	d. STANDARD JOINTS			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	5	
11. LONGITUDINAL JOIST OR STRINGERS			F	c. SUBSTRUCTURE	ITEM 60	5	
12. INT. DIAP'S, X-FRAMES, BRACING & CONN'S				d. CHANNEL & CHANNEL PROT.	ITEM 61	7	
13. END DIAP'S, CURTAIN WALLS, & CONN'S							
14. FLOOR BEAMS AND CONNECTIONS				71. SI&A FIELD APPRAISAL RATINGS			
15. BEARING ASSEMBLIES (INCLUDING MISALIGN)				a. WATERWAY ADAQUACY		7	
16. DRAINAGE SYSTEM (ON STRUCTURE)			G	b. APPR. RDWY. ALIGNMENT		8	
17. MOVABLE SPAN MACHINERY							
				72. FIELD SCOUR EVALUATION			B
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			NO
	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:	Don Willson		
41. DRIFT			G	81. REVIEWED BY:			

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 DWELBORN			
Assisted By JSF			
Item No.	Grade		
2b	F	SOFT ON ENDS WITH SPOT DECAY. CRACKING, DISCOLORED AND SOFT ON BOTTOMS.	
11	F	DISCOLORED AND SOFT WITH SPOT DECAY AND FEW HOLLOW SOUNDING AREAS. 1/8 IN. TO 1/4 IN. LONGITUDINAL SPLITTING ON FEW JOISTS.	
35a	F	CAP 1 CRACKING AND SOFT ESPECIALLY ON ENDS AND ALONG TOP. SPLIT ON BOTTOM FROM POST 2 - 3. SLIGHT TILT AND SAG. CAP 2 SLID BACK.	
35b	F	CRACKING, SPLITTING, DISCOLORED AND SOFT WITH SHELL DECAY ALONG BOTTOM 2 FT.. FEW HOLLOW SOUNDING AREAS. BOTTOM 2 FT. POST 1 ABUTMENT 1 & POST 3 ABUTMENT 2 HAS 3 IN. DECAY. ABUTMENT 1 POSTS LEANING BACK SLIGHTLY. SILLS SOFT.	
35c	F	CRACKING, BULGING, DISCOLORED AND SOFT WITH SCATTERED DECAY.	
45b	G	FLOW FAVORS SOUTHEAST CORNER.	
45c	F	BANK EROSION ESPECIALLY UPSTREAM. SMALL SCOUR UNDER UPSTREAM END SILL 2.	
50	F	RUTTING. EROSION AT WINGS.	

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 040350

County ASHE

Date: 12/08/2011

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

MMS Code	Description of Function	Unit	Quantity	Remarks	Est. Cost
3304	Maintain/Replace Timber Superstructure Components	LF	215	SPLITTING WITH SPOT DECAY AND HOLLOW SOUNDING AREAS IN JOISTS	
3324	Maint / Repair / Replace Timber Deck Components	SF	360	DECAYING DECK	
3344	Repair / Replace Timber Substructure Components	LF	70	POSTS & ABUTMENT 1 CAP SPLITTING WITH SPOT DECAY.	

Key



Priority Maintenance Item



Critical Finding Item



Priority Maintenance Level Not Determined



JOIST 3 TEMP REPAIR



POST 1 ABUTMENT 1



JOIST 8



JOIST 10



POST 3 ABUTMENT 2

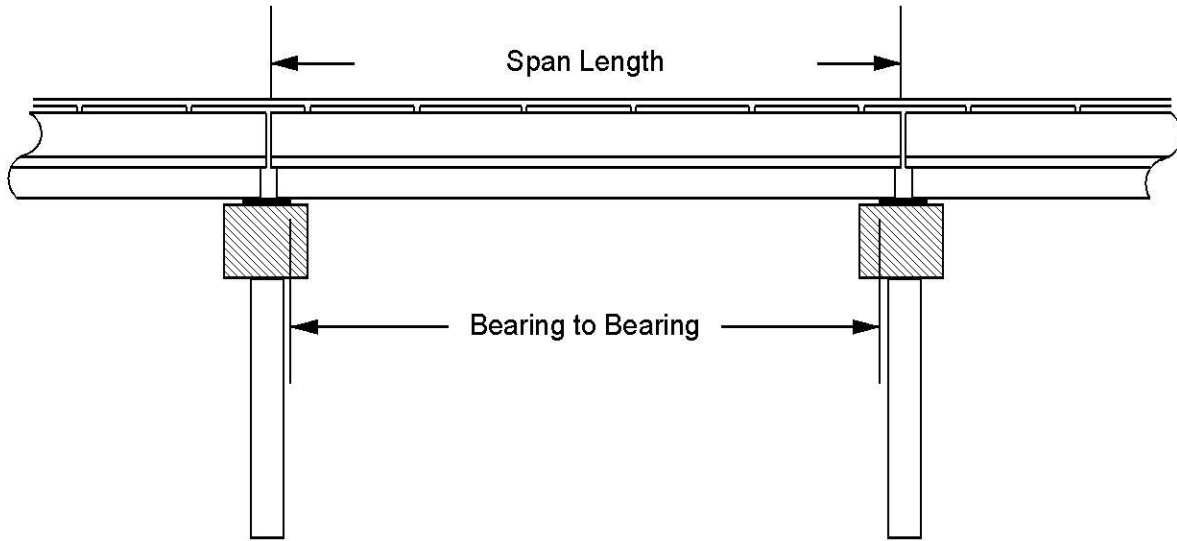


RIGHT END CAP 2 SLID

Structure Data Worksheet

Spans

County: ASHE Structure No: 040350 Date: 12/08/2011 Inspected By: DCW



Span No	Span Length	Bearing to Bearing	Comments
1	18 FT. 6 IN.	17 ft. 2 in.	NBIS 16.167'

Stream Bed Soundings

(See next sheet for profile sketch)

Bridge No: 040350 County: ASHE Date: 12/08/2011 By: DCW

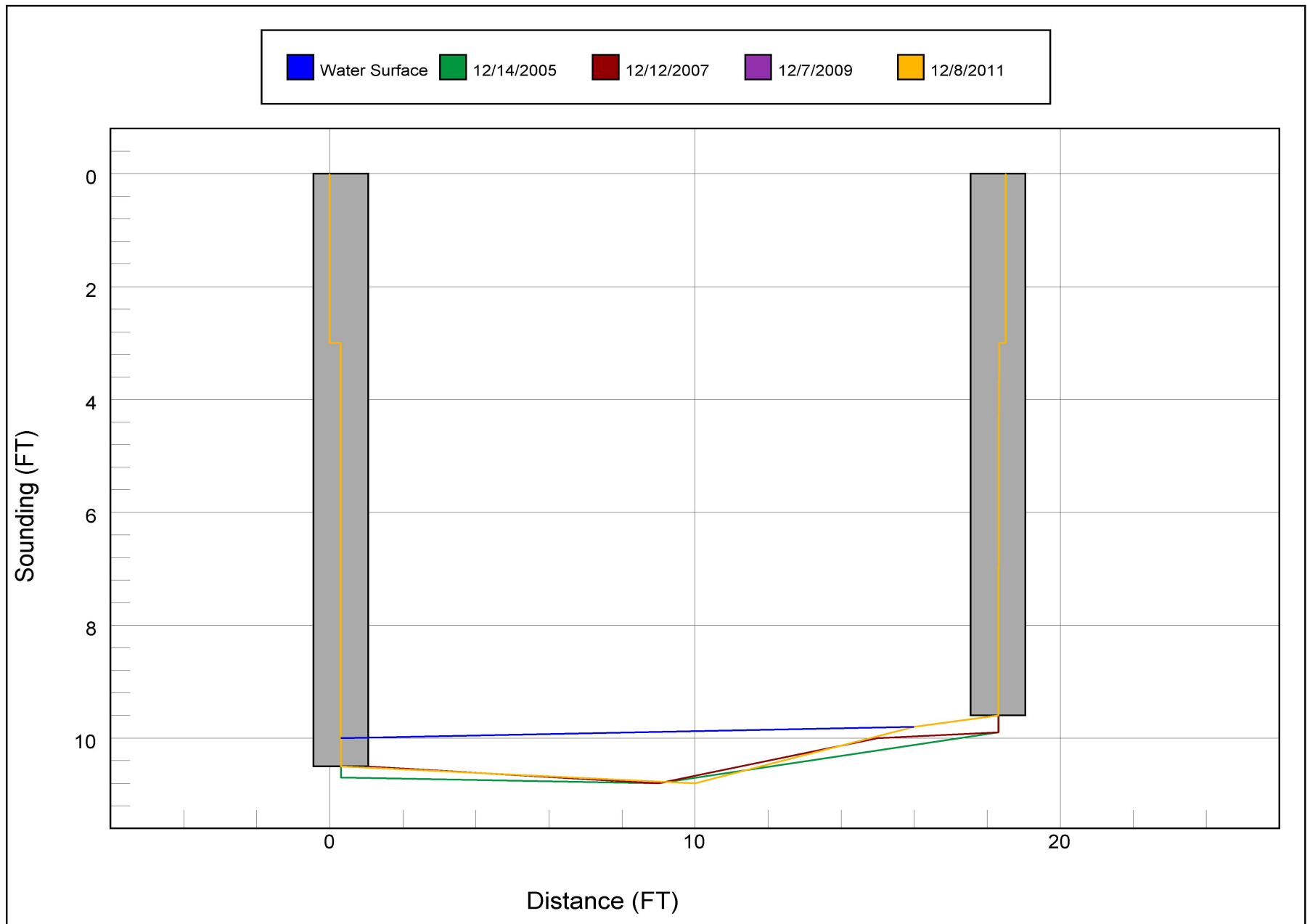
Record sounding from top of rail. Other location if needed: _____

Distance from Highwater Mark to top of rail: _____ Location of Highwater Mark: _____

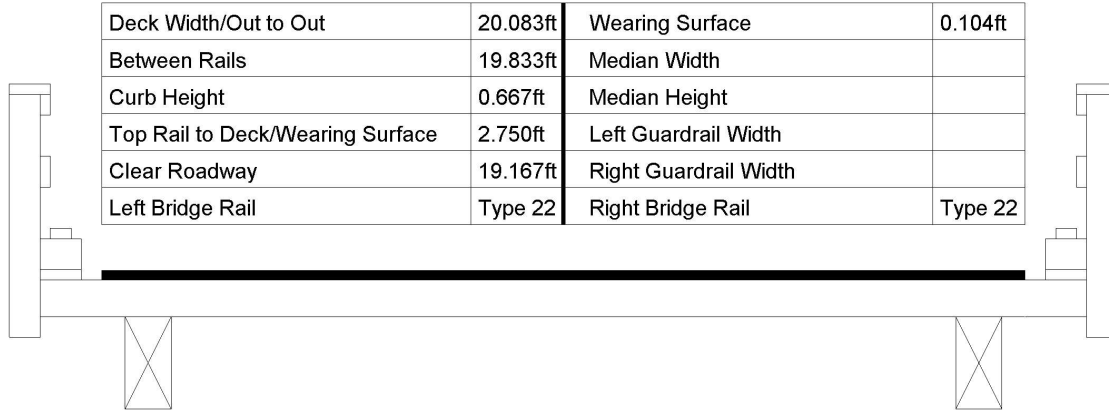
DOWNSTREAM			UPSTREAM		
Distance (Station) (ft)	Sounding (ft)	Description	Distance (Station) (ft)	Sounding (ft)	Description
0	0	TOP OF RAIL			
0	3	TOP OF FF			
0.3	3	TOP OF FF			
0.3	4.3	TOP OF CAP			
0.3	10	WS WE			
0.31	10.5	FACE OF ABUTMENT	0.31	9	FACE OF ABUTMENT
10	10.8	BED			
16	9.8	WS WE			
18.3	9.6	FACE OF ABUTMENT	18.3	11.3	FACE OF ABUTMENT
18.32	4.3	TOP OF CAP			
18.33	3	TOP OF FF			
18.5	3	TOP OF FF			
18.51	0	TOP OF RAIL			

STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)

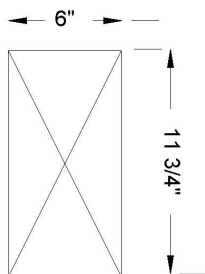


Bridge Inspection Field Sketch



Measurements for Span #	1		
Deck Thickness	0.312	Left Overhang	0.750
Top of Rail to Bottom of Beam	4.250	Right Overhang	0.750

Beam No	Beam Type	Spacing	Comments
1	Timber (Rectangular)	1.688ft	
2	Timber (Rectangular)	1.188ft	
3	Timber (Rectangular)	0.500ft	ADDED
4	Timber (Rectangular)	1.688ft	
5	Timber (Rectangular)	1.688ft	
6	Timber (Rectangular)	1.688ft	
7	Timber (Rectangular)	1.688ft	
8	Timber (Rectangular)	1.688ft	
9	Timber (Rectangular)	1.688ft	
10	Timber (Rectangular)	1.688ft	
11	Timber (Rectangular)	1.688ft	
12	Timber (Rectangular)	1.688ft	
13	Timber (Rectangular)		

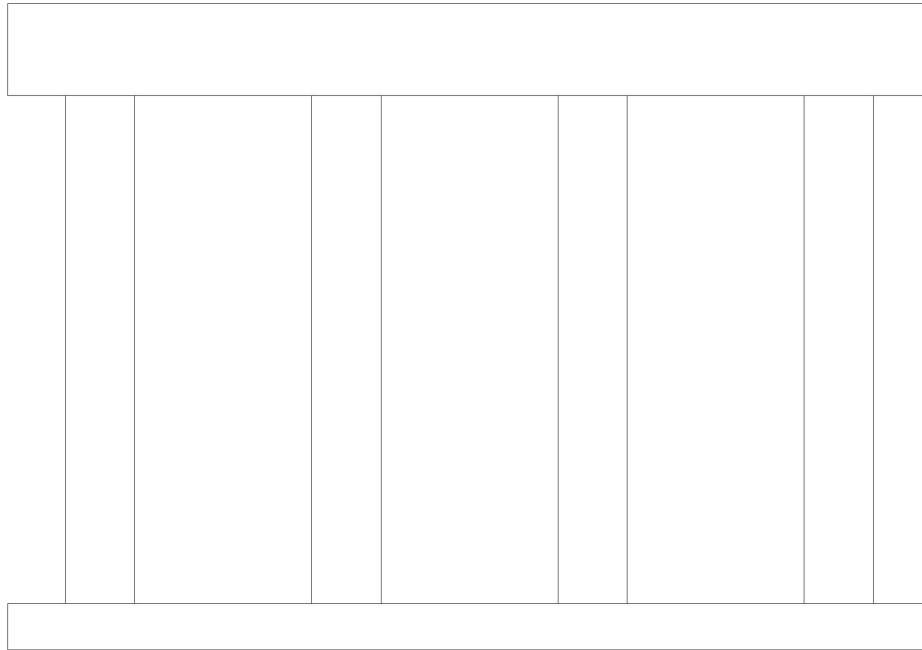


NBIS 16' 2"

VERIFIED 12/8/11 DWELBORN

Title		Description	
TS		SUPER	
Bridge No: 040350	Drawn By: DCW	Date: 12/12/2007	File Name: S0126000451

Bridge Inspection Field Sketch



Abutment #	1	Abutment 2 similar	
Cap - Beam Type (Wood or Steel)			
Cap Size	20ft Long	0.833ft Wide	0.98ft High
Left Overhang	1ft	Lt Cap/Beam Overhang	.750ft
Right Overhang	1ft	Rt Cap/Beam Overhang	.750ft
Sill - Sill			
Sill Size			

Pile #	Material	Pile Type	Spacing	Length	Width/Diam.	Height	Orientation
1	Wood or Timber	Post and Sills	6' 0"		10"	9 3/4"	Vertical
2	Wood or Timber	Post and Sills	6' 0"		10"	9 3/4"	Vertical
3	Wood or Timber	Post and Sills	6' 0"		10"	9 3/4"	Vertical
4	Wood or Timber	Post and Sills			10"	9 3/4"	Vertical

VERIFIED 12/08/11 J. FAULKNER

Title		Description	
SUB		SUB AB 1 & 2	
Bridge No: 040350	Drawn By: G.R.R.	Date: 12/12/2007	File Name: S0130000470

Bridge Inspection Field Sketch

EAST APPROACH IS PAVED



Roadway	12ft Wide	2 Unpaved Lanes	Looking East
Left Shoulder	2ft Wide		2ft Unpaved
Right Shoulder	2ft Wide		2ft Unpaved
Left Guardrail			
Right Guardrail			

VERIFIED 12/08/11 J. FAULKNER

Title		Description	
APRW		APPROACH ROADWAY	
Bridge No: 040350	Drawn By: G.R.R.	Date: 12/12/2007	File Name: S0130000471



LOOKING EAST



LOOKING UPSTREAM



LOOKING DOWNSTREAM



LOOKING WEST



LOOKING DOWNSTREAM



LOOKING UPSTREAM



BOTTOM VIEW LOOKING WEST