



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION

(PMN) ISSUED FOR BEAMS...

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY YADKIN

BRIDGE NUMBER 980092

INSPECTION CYCLE 2 YRS

ROUTE SR1599

ACROSS FORBUSH CREEK

M.P. 0

LOCATION .7 MI.W.JCT.SR1600

SUPERSTRUCTURE TIMBER FLOOR ON I-BEAMS

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

SPANS 1 @ 35'-6

LONGITUDE 80° 34' 13.7"

LATITUDE 36° 9' 4.9"

PRESENT CONDITION POOR

INVENTORY RATING

INSPECTION DATE 05/24/2011

OPERATING RATING

PRESENT POSTING SV 21 TTST 27

PROPOSED POSTING

COMPUTER UPDATE

ANALYSIS DATE

POSTING LETTER DATE

SUFFICIENCY RATING

OTHER SIGNS PRESENT 4 DELINEATORS



WEST TO EAST

SIGN NOTICE
ISSUED FOR

NUMBERED
REQUIRED

No WEIGHT LIMIT

No DELINEATORS

No NARROW BRIDGE

No ONE LANE BRIDGE

No LOW CLEARANCE

NATIONAL BRIDGE INVENTORY—— STRUCTURE INVENTORY AND APPRAISAL

Update Date: 02/10/2012

IDENTIFICATION			
(1) STATE NAME - NORTH CAROLINA	BRIDGE	980092	SUFFICIENCY RATING = 21.88
(8) STRUCTURE NUMBER(FEDERAL)		000000001970092	STATUS = Structurally Deficient
(5) INVENTORY ROUTE (ON/UNDER) - ON		31015990	
(2) STATE HIGHWAY DEPARTMENT DISTRICT		1	
(3) COUNTY CODE 197	(4) PLACE CODE	00000	
(6) FEATURE INTERSECTED - FORBUSH CREEK			
(7) FACILITY CARRIED SR1599			
(9) LOCATION .7 MI.W.JCT.SR1600			
(11)MILEPOINT		0	
(16)LAT 36° 9' 4.9"	(17)LONG	80° 34' 13.7"	
(98)BORDER BRIDGE STATE CODE	PCT SHARE		
(99)BORDER BRIDGE STRUCTURE NO			

STRUCTURE TYPE AND MATERIAL		CLASSIFICATION		CODE
(43) STRUCTURE TYPE MAIN: Steel		(112)NBIS BRIDGE SYSTEM -		YES
TYPE - Stringer Multibeam or Girder	CODE 302	(104)HIGHWAY SYSTEM Is not on NHS		0
(44) STRUCTURE TYPE APPR :		(26) FUNCTIONAL CLASS - Local		09
TYPE -	CODE 000	(100)STRAHNET HIGHWAY - Not a STRAHNET Route		0
(45) NUMBER OF SPANS IN MAIN UNIT	1	(101)PARALLEL STRUCTURE - No Parallel Structure		N
(46) NUMBER OF APPROACH SPANS		(102)DIRECTION OF TRAFFIC - 2-way Traffic		2
(107)DECK STRUCTURE TYPE - 8	CODE	(103)TEMPORARY STRUCTURE - Temporary Structure/Conditions		T
(108)WEARING SURFACE / PROTECTIVE SYSTEM :		(110)DESIGNATED NATIONAL NETWORK - Not on the National Network		0
(A) TYPE OF WEARING SURFACE -	CODE	(20) TOLL On Free Road		3
(B) TYPE OF MEMBRANE -	CODE	(31) MAINTAIN - State Highway Agency		01
(C) TYPE OF DECK PROTECTION -	CODE	(22) OWNER - State Highway Agency		01
		(37) HISTORICAL SIGNIFICANCE - Not Eligible		5

AGE AND SERVICE		CONDITION		CODE
(27) YEAR BUILT	1961	(58) DECK		7
(106)YEAR RECONSTRUCTED		(59) SUPERSTRUCTURE		4
(42) TYPE OF SERVICE : ON - Highway		(60) SUBSTRUCTURE		5
UNDER - Waterway	CODE 15	(61) CHANNEL & CHANNEL PROTECTION		5
(28) LANES: ON STRUCTURE 2 UNDER STRUCTURE		(62) CULVERTS		N
(29) AVERAGE DAILY TRAFFIC	300			
(30) YEAR OF ADT 2009	(109) TRUCK ADT PCT 6%			
(19) BYPASS OR DETOUR LENGTH	6 MI			

GEOMETRIC DATA		LOAD RATING AND POSTING		CODE
(48) LENGTH OF MAXIMUM SPAN	35 FT	(31) DESIGN LOAD Other or Unknown		0
(49) STRUCTURE LENGTH	36 FT	(63) OPERATING RATING METHOD - Load Factor		
(50)CURB OR SIDEWALK: LEFT .3 FT RIGHT .3 FT		(64) OPERATING RATING - HS-1		101
(51) BRIDGE ROADWAY WIDTH CURB TO CURB	19.3 FT	(65) INVENTORY RATING METHOD - Load Factor		
(52) DECK WIDTH OUT TO OUT	20.1 FT	(66) INVENTORY RATING - HS-1		101
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS)	16 FT	(70) BRIDGE POSTING - Posting Required		0
(33) BRIDGE MEDIAN - No Median	CODE 0	(41) STRUCTURE OPEN, POSTED ,OR CLOSED		P
(34) SKEW 0°	(35) STRUCTURE FLARED 0	DESCRIPTION - Posted for Load		
(10) INVENTORY ROUTE MIN VERT CLEAR	999.9 FT			
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR	19.3 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			

APPRAISAL		CODE
(67) STRUCTURAL EVALUATION		4
(68) DECK GEOMETRY		3
(69) UNDERCLEARANCES,VERTI & HORIZ		N
(71) WATERWAY ADEQUACY		5
(72) APPROACH ROADWAY ALIGNMENT		7
(36) TRAFFIC SAFETY FEATURES		0000
(113)SCOUR CRITICAL BRIDGES		U

PROPOSED IMPROVEMENTS		CODE
(75) TYPE OF WORK -		
(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 600	(115) YEAR FUTURE ADT 2025	

INSPECTIONS		
(90) INSPECTION DATE		05/24/2011
(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 INSPECTION RECORD AND SUMMARY

INSPECTION TYPE Routine Inspection

BRIDGE NO. 980092 COUNTY YADKIN

ROUTE SR1599

OVER FORBUSH CREEK

STRUCTURE TYPE TIMBER FLOOR ON I-BEAMS

ROUTE ORIENTATION W - E

SPANS 1 @ 35'-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	ITEM 61			
1. WEARING SURFACE			G	45. CHANNEL & CHANNEL PROT.	a. WATERWAY		F
2. DECK NO. OF EA TYPE SPN GRADE RATES SI & A ITEM 58	a. CONCRETE			50. APPROACH ROADWAY CONDITION	b. ALIGNMENT		F
	b. TIMBER	1	G		c. SCOUR		F
	c. STEEL PLANK				d. SLOPE PROT., RIP-RAP, DIKES, ETC.		
	d. OPEN GRID				51. APPROACH SLABS		G
3. RAILING	a. CONCRETE			52. PAINT SYSTEM	CODE	A	P
	b. TIMBER		G	53. UTILITIES			
	c. ALUMINUM			54. RESPONSE TO LIVE LOAD			G
	d. STEEL			55. ESTIMATED REMAINING LIFE			12
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)			6
	d. STANDARD JOINTS			64. TOTAL SNOOPER INSP. TIME (HRS)			0
	e. OPEN JOINTS			65. TOTAL TRAFFIC CONTROL TIME (MAN HRS)			0
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		7
10. LONGITUDINAL BEAMS OR GIRDERS				b. SUPERSTRUCTURE	ITEM 59		5
11. LONGITUDINAL JOIST OR STRINGERS				c. SUBSTRUCTURE	ITEM 60		5
12. INT. DIAP'S, X-FRAMES, BRACING & CONN'S			G	d. CHANNEL & CHANNEL PROT.	ITEM 61		5
13. END DIAP'S, CURTAIN WALLS, & CONN'S							
14. FLOOR BEAMS AND CONNECTIONS				71. SI&A FIELD APPRAISAL RATINGS			
15. BEARING ASSEMBLIES (INCLUDING MISALIGN)			F	a. WATERWAY ADAQUACY			5
16. DRAINAGE SYSTEM (ON STRUCTURE)			G	b. APPR. RDWY. ALIGNMENT			7
17. MOVABLE SPAN MACHINERY							
				72. FIELD SCOUR EVALUATION			L
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:	[Signature]		
41. DRIFT			F	81. REVIEWED BY:			

TSB
4/8/12

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 MAX FORD			
Assisted By RAP			
Item No.	Grade		
10	P	RUST, SCALE AND LOSS OF SECTION TO BEAM FLANGES AND LOWER +/- 4 INCHES OF WEB AT ALL BEAM ENDS AT ABUT. (A)... RUST SCALE AND LOSS OF SECTION FULL LENGTH OF ALL BEAM TOP FLANGES... SEE SKETCH FOR THIS ITEM... (PMN) ISSUED FOR THIS ITEM...	
15	F	RUST AND SCALE WITH +/- 1/16 INCH PITTING OF ABUT. (A) BEARING PLATES WHERE VISIBLE...	
52	P	RUST, SCALE AND LOSS OF SECTION TO BEAMS AT ABUT. (A)... SURFACE RUST THROUGHOUT REMAINING SUPERSTRUCTURE.	
35a	F	CAPS ARE WEATHERED AND CHECKING. SOFT ALONG FACE UP TO 1/8 INCH DEEP...	
35b	F	POSTS ARE WEATHERED AND CHECKING...	
35c	F	(3) BULKHEAD BOARDS DECAYE AT (SW) CORNER...	
41	F	DRIFT IN BEAMS AND AT (NW) CORNER OF STRUCTURE...	
45a	F	DRIFT AT (NW) CORNER, AND IN BEAMS...	
45b	F	CREEK FAVORS ABUT. (A) AT THIS TIME...	
45c	F	SILL EXPOSURE...	
71a	5	Structure is subject to frequent over topping.	

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 980092

County YADKIN

Date: 05/24/2011

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	~~60~~ <i>TSE</i> <i>2/8/12</i>	RUST, SCALE AND LOSS OF SECTION TO BEAM FLANGES AND LOWER +/- 4 INCHES OF WEB AT ALL BEAM ENDS AT ABUT. (A), SEE SKETCH...	
3314	Maintain Steel Superstructure Components	LF	100	SKETCH FOR SECTION LOSS AT BEAM ENDS, ABUT. (A)... RUST, SCALE AND LOSS OF SECTION FULL LENGTH ALONG ALL BEAM TOP FLANGES... SEE SKETCH	
3346	Repair / Maintain Timber Wings & Blkhds	SF	15	(3) BULKHEAD BOARDS DECAY AT (SW) CORNER...	
3366	Drift and Debris Removal	HR	20	DRIFT IN BEAMS AND AT (NW) CORNER OF STRUCTURE...	

Key



Priority Maintenance Item



Critical Finding Item



Priority Maintenance Level Not Determined

BRIDGE INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 980092

County YADKIN

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

MMS Code	MMS Description	Quantity
3314	Maintain Steel Superstructure Components	60 LF
Location:		
Beams and Girders	Bent/Span No. 1	ALL BEAM ENDS AT ABUT. (A)... SEE SKETCH
Priority Level	Status	
Priority Maintenance	Division Maintenance Work In Process	
Submitted Date:	Submitted By:	Assisted By:
05/25/2011	MAX FORD	ROBERT PIERCE
Details		
RUST, SCALE AND LOSS OF SECTION TO BEAM FLANGES AND LOWER +/- 4 INCHES OF WEB AT ALL BEAM ENDS AT ABUT. (A), SEE SKETCH...		
SKETCH FOR SECTION LOSS AT BEAM ENDS, ABUT. (A)...		



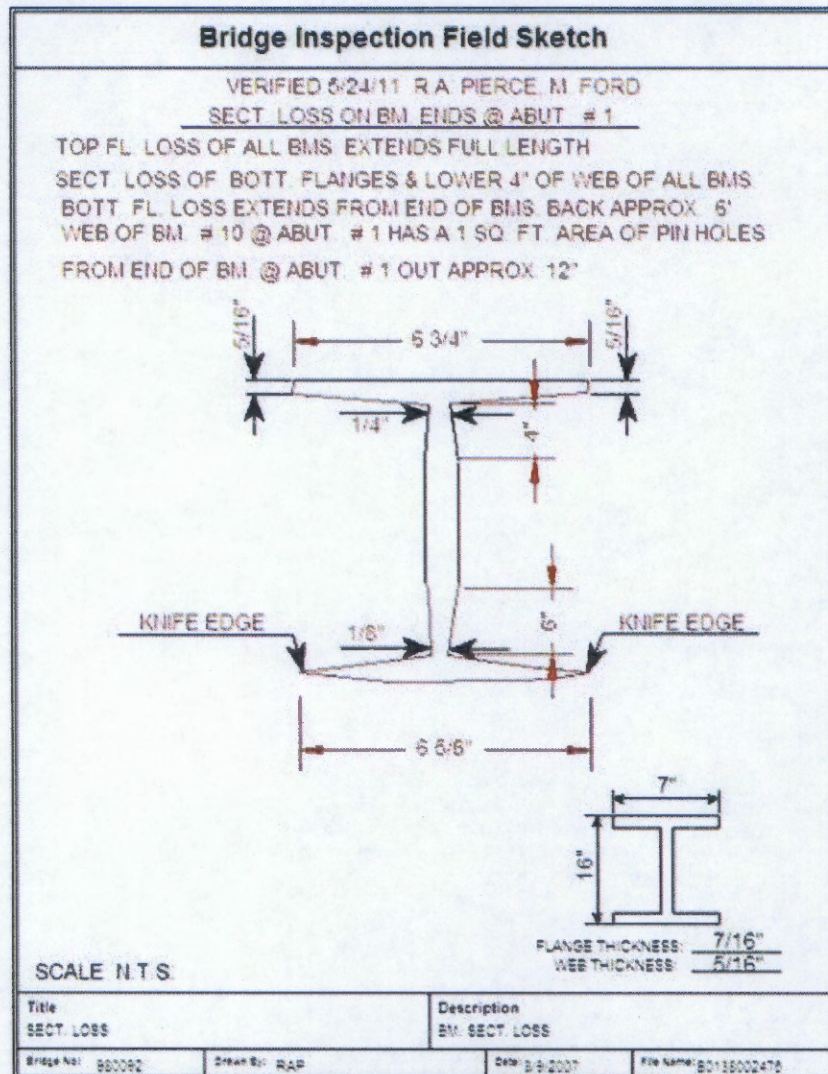
DRIFT IN BEAMS AND AT (NW) CORNER OF STRUCTURE...



RUST, SCALE AND LOSS OF SECTION TO BEAM FLANGES AND LOWER +/- 4 INCHES OF WEB AT ALL BEAM ENDS AT ABUT. (A), SEE SKETCH...



(3) BULKHEAD BOARDS DECAYE AT (SW) CORNER...



SKETCH FOR SECTION LOSS AT BEAM ENDS, ABUT. (A)...

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Update Date: 02/10/2012

COUNTY : YADKIN	DIVISION : 11	DISTRICT : 1	STRUCTURE NUMBER : 980092	LENGTH : 36 FEET
ROUTE CARRIED : SR1599		FEATURE INTERSECTED : FORBUSH CREEK		
LOCATED : .7 MI.W.JCT.SR1600		BRIDGE NAME :		CITY :
FUNC. CLASS : 09	SYST.ON : NFA	SYST.UNDER : NFA	ADT & YR : 300 2009	RAIL TYPE : LT 227 RT 227
BUILT : 1961	BY : BMU	PROJ :	FED.AID PROJ :	DESIGN LOAD : Other or Unknown
REHAB :	BY : BMU	PROJ :	ALIGNMENT : TAN	SKEW : 90
LANES : ON 2 UNDER				
NAVIGATION : VC 0 FT	HC 0 FT	HT. CRN. TO BED : 8 FT	WATER DEPTH : 1 FT	
SUPERSTRUCTURE : TIMBER FLOOR ON I-BEAMS				
SUBSTRUCTURE : E.BTS:TIM.CAPS/TIMBER POST&SILLS @ 6'CENTERS				
SPANS : 1 @ 35'-6				
BEAMS OR GIRDERS : 10 LINES 16 I-BEAMS @ 2' CENTERS				
FLOOR : PM work completed: welded steel plates to beams bottom flanges and webs	ENCROACHMENT :		DECK (OUT TO OUT) : 20.1 FT	
CLEAR ROADWAY : 19.3 FT	BETWEEN RAILS : 20 FT		SIDEWALK OR CURB : LT .3 FT RT .3 FT	
VERT.CL.OVER : 999.9 FT				
INV.RTG. : HS-1	OPE.RTG. : HS-1	CONTR.MEMBER : Int.bms	POSTED : SV 17 TTST 22	DATE 06/09/2011
SYSTEM : Secondary S.R. Route		GREEN LINE ROUTE : N		
UNDER ROUTES AND CLEARANCES				
REMARKS :				

Structure Data Worksheet

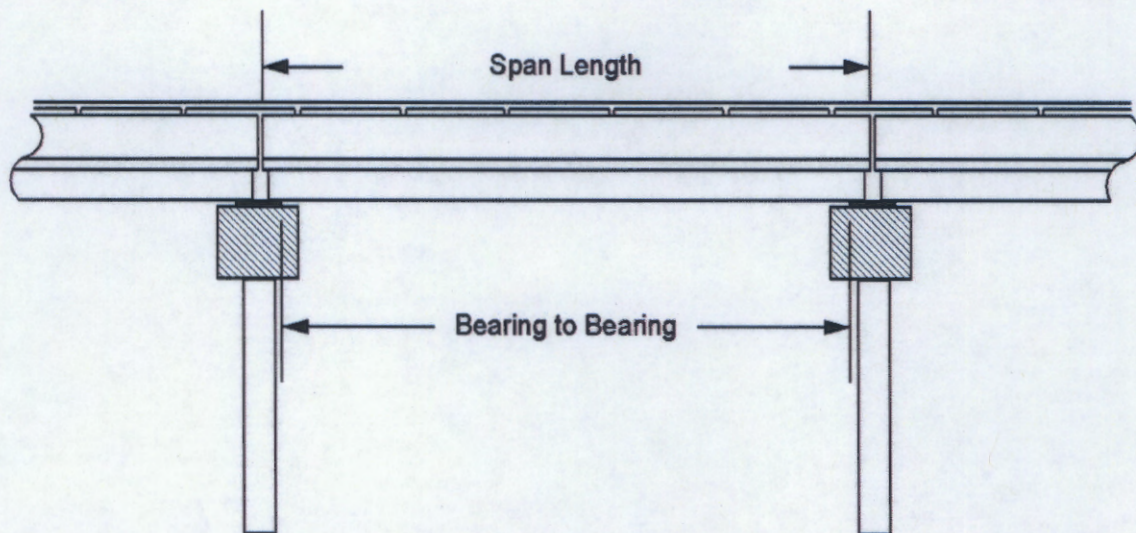
Spans

County: YADKIN

Structure No: 980092

Date: 05/24/2011

Inspected By: MF



Span No	Span Length	Bearing to Bearing	Comments
1	35.5 ft.	34.5 ft.	

Stream Bed Soundings

(See next sheet for profile sketch)

Bridge No: 980092 County: YADKIN Date: 05/24/2011 By: MF

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	3	TOP OF FILLFACE			
0.28	3	TOP OF FILLFACE			
0.29	5	TOP OF CAP			
0.3	8.8	FACE OF ABUTMENT	0.3	8	FACE OF ABUTMENT
4	9.8	WSWE			
11	11.2	BED			
19	9.8	WSWE			
35.2	7.7	FACE OF ABUTMENT	35.2	11	FACE OF ABUTMENT
35.21	5	TOP OF CAP			
35.22	3	TOP OF FILLFACE			
35.5	3	TOP OF FILLFACE			

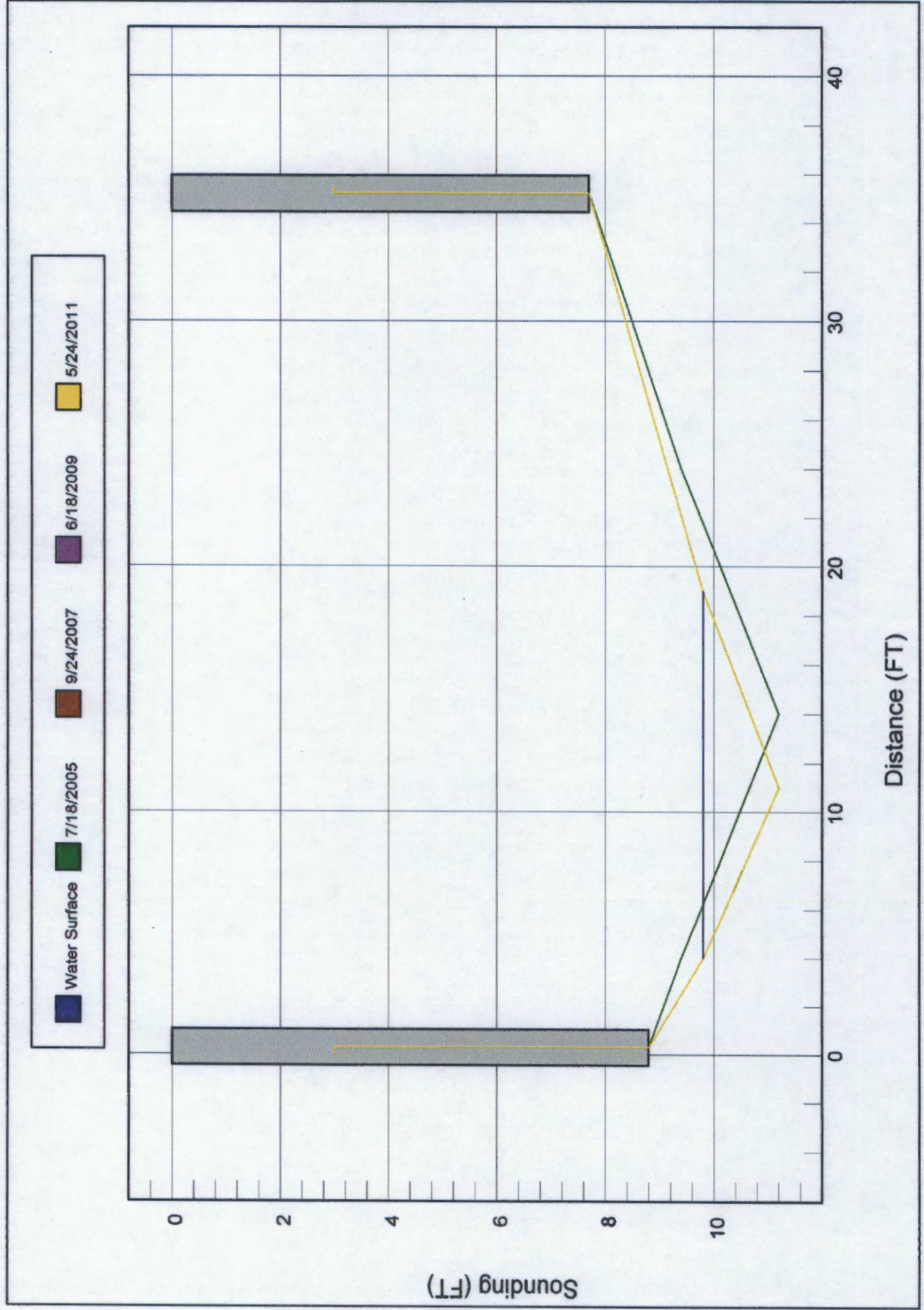
Bridge: 980092

County YADKIN

Date: 05/24/2011

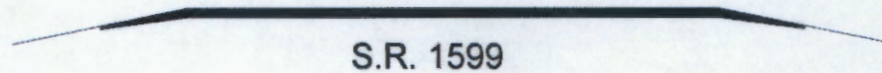
STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)



Bridge Inspection Field Sketch

VERIFIED 5/24/11 R.A. PIERCE, M. FORD



LOOKING EAST

Roadway	16ft Wide	2 Paved Lanes	Looking East
Left Shoulder	5ft Wide		5ft Unpaved
Right Shoulder	5ft Wide		5ft Unpaved
Left Guardrail			
Right Guardrail			

Title

APPR. RDWY.

Description

APPR. RDWY.

Bridge No: 980092

Drawn By: RAP

Date: 07/14/2005

File Name: S0138000279

Bridge Inspection Field Sketch

VERIFIED 5/24/11 R.A. PIERCE, M. FORD

SECT. LOSS ON BM. ENDS @ ABUT. # 1

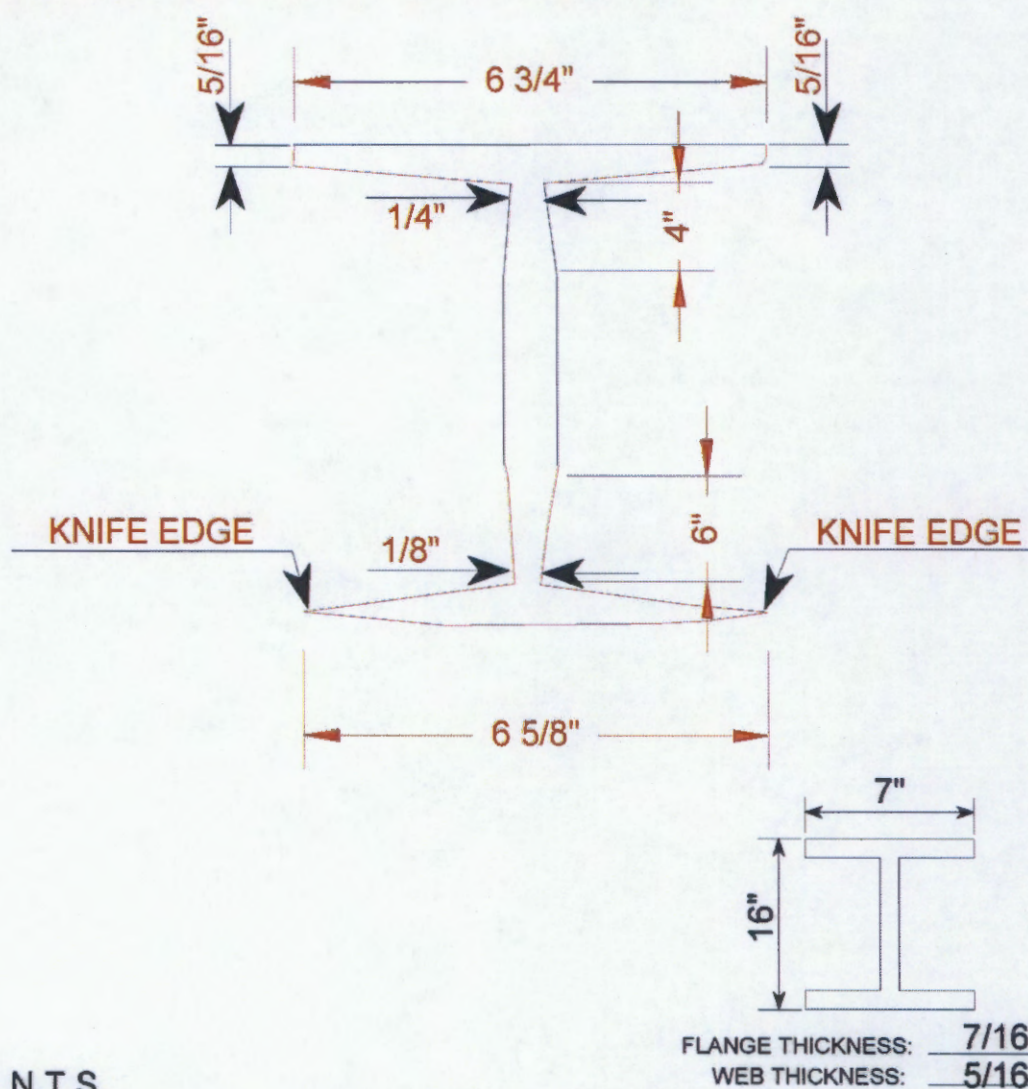
TOP FL. LOSS OF ALL BMS. EXTENDS FULL LENGTH

SECT. LOSS OF BOTT. FLANGES & LOWER 4" OF WEB OF ALL BMS.

BOTT. FL. LOSS EXTENDS FROM END OF BMS. BACK APPROX. 6'

WEB OF BM. # 10 @ ABUT. # 1 HAS A 1 SQ. FT. AREA OF PIN HOLES

FROM END OF BM. @ ABUT. # 1 OUT APPROX. 12"

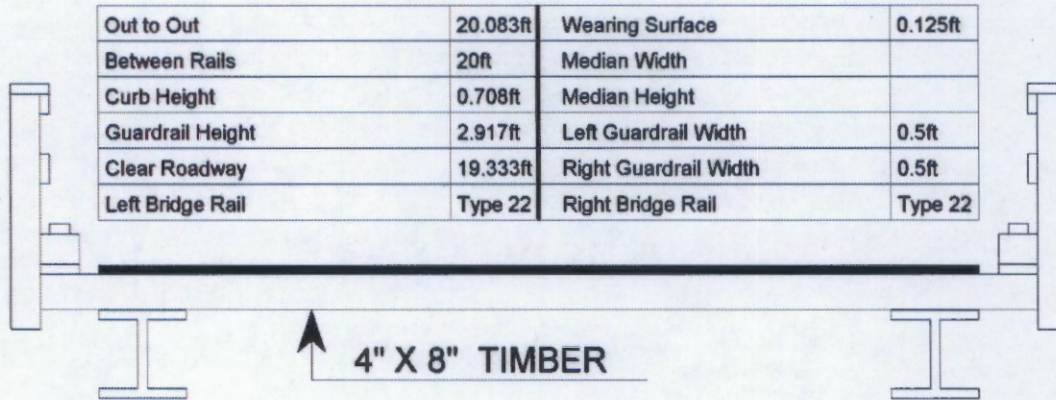


SCALE N.T.S.

Title		Description	
SECT. LOSS		BM. SECT. LOSS	
Bridge No: 980092	Drawn By: RAP	Date: 8/9/2007	File Name: S0138002476

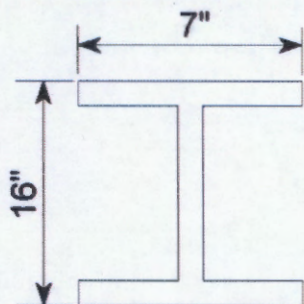
Bridge Inspection Field Sketch

VERIFIED 5/24/11 R.A. PIERCE, M. FORD



Measurements for Span #	1		
Deck Thickness	0.333	Left Overhang	1
Top of Rail to Bottom of Beam	4.917	Right Overhang	1

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



FLANGE THICKNESS: 7/16"
WEB THICKNESS: 5/16"

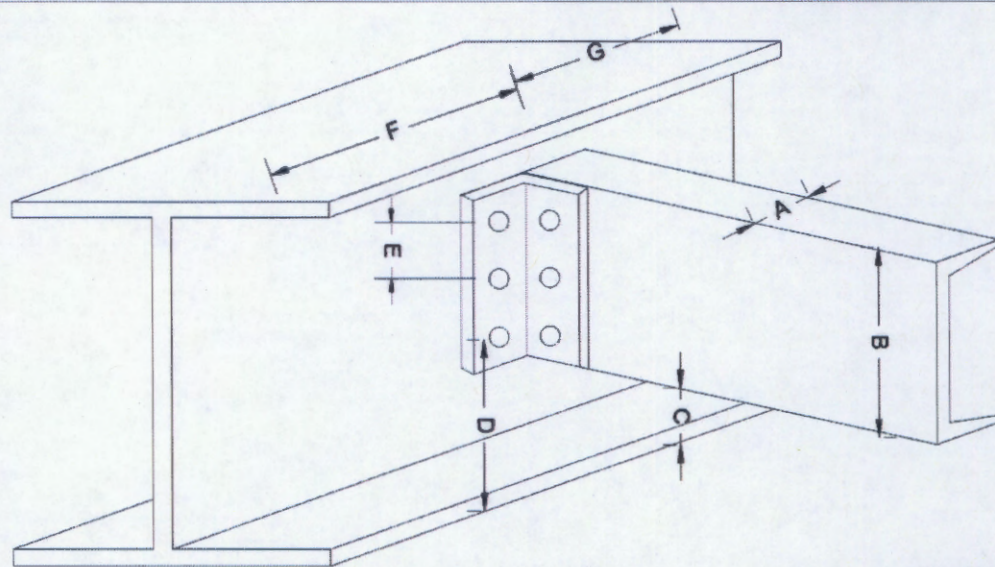
Title		Description	
SUPER		DECK SECTION	
Bridge No: 980092	Drawn By: RAP	Date: 07/14/2005	File Name: S0138000280

Bridge Inspection Field Sketch

VERIFIED 5/24/11 R.A. PIERCE, M. FORD

SPAN: 1

LOCATION: 1/3 POINTS



3 BOLTS

SPAN	DIM. A	DIM. B	DIM. C	DIM. D	DIM. E	DIM. F	DIM. G	BOLT SIZE
1	2 5/8"	10"	3"	5 1/2"	2 1/2"	11' - 8"	11' - 8"	3/4"

Title

DIAPH.

Description

DIAPH.

Bridge No: 980092

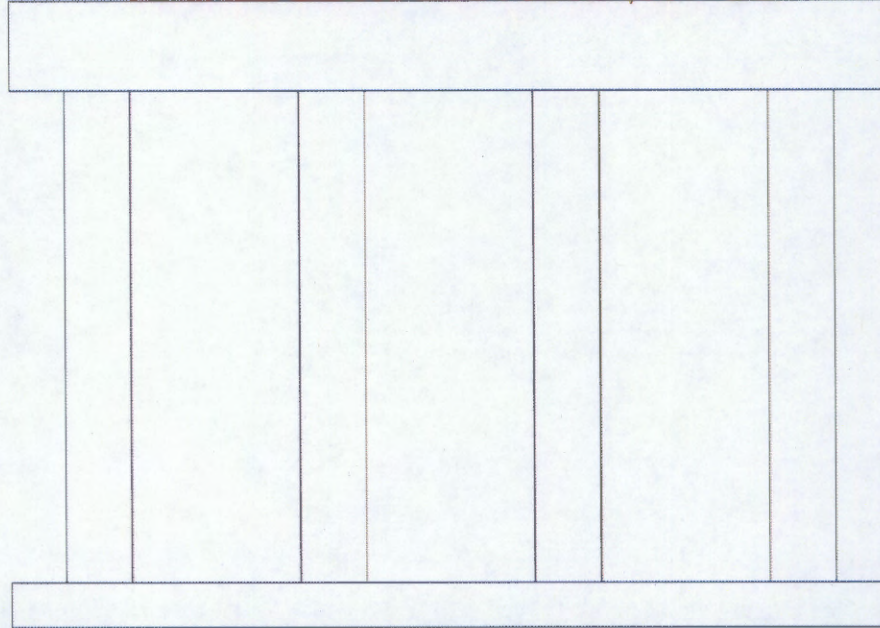
Drawn By: RAP

Date: 07/14/2005

File Name: S0138000281

Bridge Inspection Field Sketch

VERIFIED 5/24/11 R.A. PIERCE, M. FORD



Abutment #	1	Abutment 2 similar	
Cap - Beam Type (Wood or Steel)			
Cap Size	20ft Long	0.833ft Wide	0.979ft High
Left Overhang	1ft	Lt Cap/Beam Overhang	1ft
Right Overhang	1ft	Rt Cap/Beam Overhang	1ft
Sill - Sill			
Sill Size	20ft Long	10ft Wide	10ft High

Pile #	Material	Pile Type	Spacing	Length	Width/Diam.	Height	Orientation
1	Wood or Timber	Post and Sills	6		0.813	0.813	Vertical
2	Wood or Timber	Post and Sills	6		0.813	0.813	Vertical
3	Wood or Timber	Post and Sills	6		0.813	0.813	Vertical
4	Wood or Timber	Post and Sills			0.813	0.813	Vertical

BM. OUT ABUT. 2: LT.: 8"; RT.: 13"

Title		Description	
SUBST.		ABUTS.	
Bridge No:	980092	Drawn By:	RAP
		Date:	07/14/2005
		File Name:	S0138000282



WEST TO EAST



UPSTREAM



DOWNSTREAM



LOOKING WEST



ABUT. (A)



ABUT. (B)



SOUTH PROFILE



NORTH PROFILE