NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION PRIORITY MAINTENANCE SIGN NOTICE

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection - Contract

COUNTY WATAUGA BRIDGE NUMBER 940149 INSPECTION CYCLE 0 YRS

SR1351 (CASTLE FORD ROAD)

ROUTE SR1351 ACROSS CREEK M.P. 0

.3 MILES SOUTHWEST OF JUNCTION WITH SR1352 (RIVER ROAD)

LOCATION .3 MI.SW.JCT.SR1352

SUPERSTRUCTURE TIMBER FLOOR ON I-BEAMS

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

1 @ 25'-3"

SPANS 1 @ 25'-9

LONGITUDE 81° 35' 39.24" LATITUDE 36° 16' 10.79"

INSPECTION DATE 10/10/2013 PRESENT CONDITION FAIR

PRESENT POSTING SV 16 TTST 21 SV 14 TTST 21 PROPOSED POSTING

OTHER SIGNS PRESENT 4 DELINEATORS

LOOKING EAST

Fracture Critical	No
Temporary Shoring	No
Scour Critical	No
Scour POA	No

SIGN NOTICE ISSUED FOR		NUMBERED REQUIRED
Yes	WEIGHT LIMIT	1
Yes	DELINEATORS	1
No	NARROW BRIDGE	
No	ONE LANE BRIDGE	
No	LOW CLEARANCE	

BRIDGE I & A FORM 1(97) AA SHEET 1 AA

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

11/19/09

BRIDGE: 940149 COUNTY: Watauga. DATE: 5/19/08

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 :

	CODE	BY
S I & A ITEM 103 - TEMPORARY STRUCTURE DESIGNATION	T	TSE
S I & A ITEM 59 - SUPERSTRUCTURE		
S I & A ITEM 60 - SUBSTRUCTURE	4	TSE 5/28/08

S I & A ITEM 64 OPERATING RATING HS ~~0.0~~ 1 BY: AK

S I & A ITEM 66 - INVENTORY RATING HS ~~0.0~~ 1 BY: AK

COMMENTS

Ext. posts @ abut. 2 supplemented.

IDENTIFICATION

(1) STATE NAME -NORTH CAROLINA BRIDGE 940149
(8) STRUCTURE NUMBER(FEDERAL) 000000001890149
(5) INVENTORY ROUTE (ON/UNDER) - ON 31013510
(2) STATE HIGHWAY DEPARTMENT DISTRICT 2
(3) COUNTY CODE 189 (4) PLACE CODE 0
(6) FEATURE INTERSECTED - GRASSY CREEK
(7) FACILITY CARRIED SR1351
(9) LOCATION .3 MI.SW.JCT.SR1352
(11)MILEPOINT 0
(16)LAT 36° 16' 10.79" (17)LONG 81° 35' 39.24"
(98)BORDER BRIDGE STATE CODE PCT SHARE
(99)BORDER BRIDGE STRUCTURE NO

STRUCTURE TYPE AND MATERIAL

(43) STRUCTURE TYPE MAIN: Steel
TYPE - Stringer Mutlibeam or Girder CODE 302
(44) STRUCTURE TYPE APPR :
TYPE - CODE 000
(45) NUMBER OF SPANS IN MAIN UNIT 1
(46) NUMBER OF APPROACH SPANS
(107)DECK STRUCTURE TYPE - 8 CODE
(108)WEARING SURFACE / PROTECTIVE SYSTEM :
(A) TYPE OF WEARING SURFACE - CODE
(B) TYPE OF MEMBRANE - CODE
(C) TYPE OF DECK PROTECTION - CODE

AGE AND SERVICE

(27) YEAR BUILT 1963
(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 120
(30) YEAR OF ADT 2000 (109) TRUCK ADT PCT 6%
(19) BYPASS OR DETOUR LENGTH 6 MI

GEOMETRIC DATA

(48) LENGTH OF MAXIMUM SPAN 24 FT
(49) STRUCTURE LENGTH 25 FT
(50)CURB OR SIDEWALK: LEFT .3 FT RIGHT .3 FT
(51) BRIDGE ROADWAY WIDTH CURB TO CURB 19.25 FT
(52) DECK WIDTH OUT TO OUT 20 FT
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS) 18 FT
(33) BRIDGE MEDIAN - No Median CODE 0
(34) SKEW 45° (35) STRUCTURE FLARED 0
(10) INVENTORY ROUTE MIN VERT CLEAR 999.9 FT
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR 19.25 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

(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

SUFFICIENCY RATING = 21.34
STATUS = Structurally Deficient

CLASSIFICATION CODE

(112)NBIS BRIDGE SYSTEM - YES
(104)HIGHWAY SYSTEM Is not on NHS 0
(26) FUNCTIONAL CLASS - Local 09
(100)STRAHNET HIGHWAY - Not a STRAHNET Route 0
(101)PARALLEL STRUCTURE - No Parallel Structure N
(102)DIRECTION OF TRAFFIC - 2-way Traffic 2
(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

CONDITION CODE

(58) DECK 7
(59) SUPERSTRUCTURE 5
(60) SUBSTRUCTURE 4
(61) CHANNEL & CHANNEL PROTECTION 5
(62) CULVERTS N

LOAD RATING AND POSTING CODE

(31) DESIGN LOAD Unknown 0
(63) OPERATING RATING METHOD - Load Factor 1
(64) OPERATING RATING - HS-1 1
(65) INVENTORY RATING METHOD - Load Factor 1
(66) INVENTORY RATING - HS-1 1
(70) BRIDGE POSTING - Posting Required 0
(41) STRUCTURE OPEN, POSTED ,OR CLOSED P
DESCRIPTION - Posted for Load

APPRAISAL CODE

(67) STRUCTURAL EVALUATION 3
(68) DECK GEOMETRY 3
(69) UNDERCLEARANCES,VERTI & HORIZ N
(71) WATERWAY ADEQUACY 8
(72) APPROACH ROADWAY ALIGNMENT 6
(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 240 (115) YEAR FUTURE ADT 2025

INSPECTIONS

(90) INSPECTION DATE 10/10/2013
(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

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE Run Date: 01/13/2014

COUNTY :	DIVISION :	DISTRICT:	STRUCTURE NUMBER :	LENGTH :
WATAUGA	11	2	940149	25 FEET

ROUTE CARRIED : SR1351

FEATURE INTERSECTED : GRASSY CREEK

LOCATED : .3 MI.SW.JCT.SR1352

BRIDGE NAME :

CITY :

FUNC. CLASS :	SYST.ON :	SYST.UNDER :	ADT & YR :	RAIL TYPE :
09	NFA	NFA	120 2000	LT 227 RT 227

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

REHAB :	BY :	PROJ :	ALIGNMENT :	SKEW :	LANES :
			TAN	135	ON 2 UNDER 0

NAVIGATION :	HT. CRN. TO BED :	WATER DEPTH :
VC 0 FT HC 0 FT	6 FT	1 FT

SUPERSTRUCTURE : TIMBER FLOOR ON I-BEAMS

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

SPANS : 1 @ 25'-3

BEAMS OR GIRDERS : 9 LINES 12 I-BEAMS @ 2'-3.875 CENTERS

FLOOR :	ENCROACHMENT :	DECK (OUT TO OUT) :
4X8 TIM/2.5AWS		20 FT

CLEAR ROADWAY :	BETWEEN RAILS :	SIDEWALK OR CURB :
19.25 FT	20 FT	LT .3 FT RT .3 FT

VERT.CL.OVER : 999.9 FT

INV.RTG. :	OPE.RTG. :	CONTR.MEMBER :	POSTED :
HS-1	HS-1	Int Beam	SV 16 TTST 21 DATE 11/03/2011

SYSTEM : Secondary S.R. Route

GREEN LINE ROUTE : N

UNDER ROUTES AND CLEARANCES

REMARKS :

BRIDGE I & A FORM1 (90)A

BRIDGE INSPECTION RECORD AND SUMMARY

INSPECTION TYPE Routine Inspection - Contract
BRIDGE NO. 940149 COUNTY WATAUGA ROUTE SR1351 OVER CREEK
STRUCTURE TYPE TIMBER FLOOR ON I-BEAMS
ROUTE ORIENTATION W - E SPANS 1 @ 25'-9

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

INSPECTION ITEM			
DECK ITEMS			GRADES
1. WEARING SURFACE			G
2. DECK NO. OF EA TYPE SPN GRADE RATES SI & A ITEM 58	a. CONCRETE		
	b. TIMBER	1	G
	c. STEEL PLANK		
	d. OPEN GRID		
3. RAILING	a. CONCRETE		
	b. TIMBER		G
	c. ALUMINUM		
	d. STEEL		
4. CURBS, WHEELGUARDS, PARAPETS, MEDIANS			G
5. WALKWAYS (ON OR ATTACHED TO STRUCTURE)			
6. DECK EXP JTS. OR DEVICES. NO. OF EACH	a. STEEL PL OR FINGER		
	b. MISC PREFAB		
	c. COMPRESSION SEAL		
	d. STANDARD JOINTS		
	e. OPEN JOINTS		
7. DECK DEBRIS (INCLUDES EXCESS SAND/GRAVEL)			G
SUPER STR. (FM. 1 (90)B TRUSS) ITEM 59			
10. LONGITUDINAL BEAMS OR GIRDERS			F
11. LONGITUDINAL JOIST OR STRINGERS			
12. INT. DIAP'S, X-FRAMES, BRACING & CONN'S			
13. END DIAP'S, CURTAIN WALLS, & CONN'S			
14. FLOOR BEAMS AND CONNECTIONS			
15. BEARING ASSEMBLIES (INCLUDING MISALIGN)			
16. DRAINAGE SYSTEM (ON STRUCTURE)			G
17. MOVABLE SPAN MACHINERY			
SUB STR. ITEMS. ITEM 60 (INCLUDE SCOUR)			
35. TIM SUB STR.	a. ABUT. & INT. BENT CAPS & RISERS		F
	b. PILES, POST, SILLS, & BRACING		F
	c. BULKHEADS, WING'S, & TIE BACKS		F
36. CONC SUB STR.	a. ABUT. & INT. BENT CAPS		
	b. ABUT. & BENT COL'S BREASTWALLS		
	c. ABUT. & INT. BENT PILES		
	d. BACKWALLS, WING'S, RETAIN. WALLS		
	e. ABUT. & BENT FOOTINGS & SILLS		G
37. STEEL SUB STR.	a. ABUT. & INT. BENT CAPS & RISERS		
	b. PILES, BRACING, AND BULKHEADS		
38. FOUNDATION PILES TYPE MATERIAL			
39. SLOPE PROT., RIP-RAP (INCLUDE DRAINAGE)			
40. FENDER SYSTEMS			
41. DRIFT			G

ITEM 61		
45. CHANNEL & CHANNEL PROT.	a. WATERWAY	G
	b. ALIGNMENT	P
	c. SCOUR	G
	d. SLOPE PROT., RIP-RAP, DIKES, ETC.	
50. APPROACH ROADWAY CONDITION		G
51. APPROACH SLABS		
52. PAINT SYSTEM CODE A		P
53. UTILITIES		
54. RESPONSE TO LIVE LOAD		G
55. ESTIMATED REMAINING LIFE		18
60. REGULATORY SIGN NOTICE ISSUED		YES
61. PROMPT-ACTION NOTICE ISSUED		YES
62. PRESENTLY POSTED		YES
63. TOT. FIELD INSP TIME (INCLUDE WRITE UP)(MAN HR)		5
64. TOTAL SNOOPER INSP. TIME (HRS)		0
65. TOTAL TRAFFIC CONTROL TIME (MAN HRS)		0
70. SI&A GENERAL CONDITION RATINGS		
a. DECK	ITEM 58	7
b. SUPERSTRUCTURE	ITEM 59	5
c. SUBSTRUCTURE	ITEM 60	5
d. CHANNEL & CHANNEL PROT.	ITEM 61	5
71. SI&A FIELD APPRAISAL RATINGS		
a. WATERWAY ADAQUACY		8
b. APPR. RDWY. ALIGNMENT		6
72. FIELD SCOUR EVALUATION		B
USE OF INSP. ACCESSIBILITY EQUIPMENT		
SNOOPER (CODE S, 4, OR N)	0 HRS	NO
LADDER		NO
BUCKET TRUCK		NO
BOAT		NO
OTHER		NO
SPECIAL INSPECTION REQUESTED FOR		
NOTE		
80. INSPECTED BY:	[signature]	
81. REVIEWED BY:		

Bridge I&A Form 1(82)H

State of North Carolina
Dept. of Transportation
Division of Highways

FIELD INSPECTION REPORT

Bridge Inspecion & Analysis

Team Leader MICHAEL W CRAIG

Assisted By CJH

Item No.	Grade	
7	G	[DECK DEBRIS] NORTHEAST CORNER OF BRIDGE, VEGETATION GROWTH (1 CF)
10	F	[LONGITUDINAL BEAMS] (PM) BEAM 1 AT END BENT 1, FLAKING STEEL WITH 10% SECTION LOSS (PM) BEAM 2 AT END BENT 1, FLAKING STEEL WITH 5% SECTION LOSS ON END 3FT OF TOP AND BOTTOM FLANGES BEAM 3 AT END BENT 1, HEAVY PITTING (BEAMS 5,6, AND 7 SIMILAR) (PM) BEAM 6 AT END BENT 1, FLAKING STEEL WITH 5% SECTION LOSS ON BOTTOM FLANGE (PM) BEAM 8 AT END BENT 1 END 5FT, FLAKING STEEL WITH 5% SECTION LOSS ON BTTON FLANGE (PM) BEAM 9 AT END BENT 1 END 10FT, FLAKING STEEL WITH 10% SECTION LOSS ON TOP AND BOTTOM FLANGES (PM) BEAM 1 AT END BENT 1 END 20FT, FLAKING STEEL WITH 10% SECTION LOSS ON TOP AND BOTTOM FLANGES (PM) BEAM 7 AT END BENT 2, FLAKING STEEL WITH 5% SECTION LOSS ON BOTTOM FLANGE (PM) BEAM 3 AT END BENT 2 END 15FT, FLAKING STEEL WITH 5% SECTION LOSS ON BOTTOM FLANGE (PM) BEAM 2 AT END BENT 2, FLAKING STEEL WITH 5% SECTION LOSS ON BOTTOM FLANGE BEAM 6 AT MIDSPAN, FLAKING STEEL ON BOTTOM FLANGE (NO SECTION LOSS)
10A	NO	NO CURVED GIRDERS
35a	F	[TIMBER ABUTS, BENTS, CAPS] END BENT 1, BENT ROTATED 3IN IN 2FT, BEAMS TIGHT AGAINST BACKWALL
35b	F	[TIMBER POSTS, PILES, SILLS] PILE 5 AT END BENT 1, SISTER PILE OPEN AT TOP FROM ROTATION FROM END BENT PILE 4 AT END BENT 1, OPEN AT TOP DUE TO END BENT ROTATION PILE 3 AT END BENT 1, OPEN AT TOP DUE TO END BENT ROTATION PILE 2 AT END BENT 2 AND SILL, SOFT TIMBER END BENT 1 LEANING 3IN IN 2FT END BENT 2 BRACE, DECAY (4FT)
35c	F	[TIMBER BULKHEADS] NORTHEAST WINGWALL, 10% BOARDS DECAYED NORTHEAST WINGWALL, PILE DECAYED AND FALLING APART
41	G	[DRIFT] END BENT 2 BAY 4, DRIFT ACCUMULATION (3CY) (BAY 5 AND 6 SIMILAR)
45b	P	[CHANNEL ALIGNMENT] STREAM FLOW ENTERS ALONG SOUTHWEST WINGWALL AND EXITS ALONG NORTH EDGE OF END BENT 2

Bridge I&A Form 1(82)H State of North Carolina Dept. of Transportation Division of Highways	FIELD INSPECTION REPORT Bridge Inspecion & Analysis	

Team Leader	MICHAEL W CRAIG
Assisted By	CJH

Item No.	Grade	
60	YES	[SIGN NOTICE ISSUED] MISSING POSTING SOUTHWEST DELINEATOR BENT

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 940149 County WATAUGA Date: 10/10/2013

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

MMS Code	Description of Function	Unit	Quantity	Remarks	Est. Cost
3312	Maint/Replace/Repair Modular Bridge Joints	LF	65	BEAM 1 AT END BENT 1 BOTTOM FLANGE, FLAKING STEEL WITH 10% SECTION LOSS END 3 FT BEAM 2 AT END BENT 1, FLAKING STEEL WITH 5% SECTION LOSS ON END 3FT OF TOP AND BOTTOM FLANGES BEAM 6 AT END BENT 1 BOTTOM FLANGE, FLAKING STEEL WITH 5% SECTION LOSS END 3FT BEAM 8 AT END BENT 1 END 5FT BOTTOM FLANGE, FLAKING STEEL WITH 5% SECTION LOSS BEAM 9 AT END BENT 1 END 10FT, FLAKING STEEL WITH 10% SECTION LOSS ON TOP AND BOTTOM FLANGES BEAM 1 AT END BENT 1 END 20FT, FLAKING STEEL WITH 10% SECTION LOSS ON TOP AND BOTTOM FLANGES BEAM 3 AT END BENT 2 END 15FT BOTTOM FLANGE, FLAKING STEEL WITH 5% SECTION LOSS BEAM 7 AT END BENT 2 BOTTOM FLANGE, FLAKING STEEL WITH 5% SECTION LOSS END 3 FT BEAM 2 AT END BENT 2, FLAKING STEEL WITH 5% SECTION LOSS ON BOTTOM FLANGE END 3 FT	
3342	Clean and Paint Structural Steel	SF	25	FLAKING STEEL ON BEAM ENDS	
3346	Repair / Maintain Timber Wings & Blkhds	SF	300	REPAIR LEANING END BENTS	
3366	Drift and Debris Removal	HR	5	DRIFT ACCUMULATION UNDER BAYS 4, 5, AND 6 AT END BENT 2	

Key

Priority Maintenance Item Critical Finding Item Priority Maintenance Level Not Determined

BRIDGE INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 940149 County WATAUGA

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

MMS Code	MMS Description	Quantity
3312	Maint/Replace/Repair Modular Bridge Joints	65 LF

Location:		
Beams and Girders	Bent/Span No. 1	BEAMS

Priority Level	Status
Priority Maintenance	Division Bridge Maintenance Notification Received

Submitted Date:	Submitted By:	Assisted By:
10/11/2013	Michael W. Craig	Casey Howard

Details

BEAM 1 AT END BENT 1 BOTTOM FLANGE, FLAKING STEEL WITH 10% SECTION LOSS END 3 FT

BEAM 2 AT END BENT 1, FLAKING STEEL WITH 5% SECTION LOSS ON END 3FT OF TOP AND BOTTOM FLANGES

BEAM 6 AT END BENT 1 BOTTOM FLANGE, FLAKING STEEL WITH 5% SECTION LOSS END 3FT

BEAM 8 AT END BENT 1 END 5FT BOTTOM FLANGE, FLAKING STEEL WITH 5% SECTION LOSS

BEAM 9 AT END BENT 1 END 10FT, FLAKING STEEL WITH 10% SECTION LOSS ON TOP AND BOTTOM FLANGES

BEAM 1 AT END BENT 1 END 20FT, FLAKING STEEL WITH 10% SECTION LOSS ON TOP AND BOTTOM FLANGES

BEAM 3 AT END BENT 2 END 15FT BOTTOM FLANGE, FLAKING STEEL WITH 5% SECTION LOSS

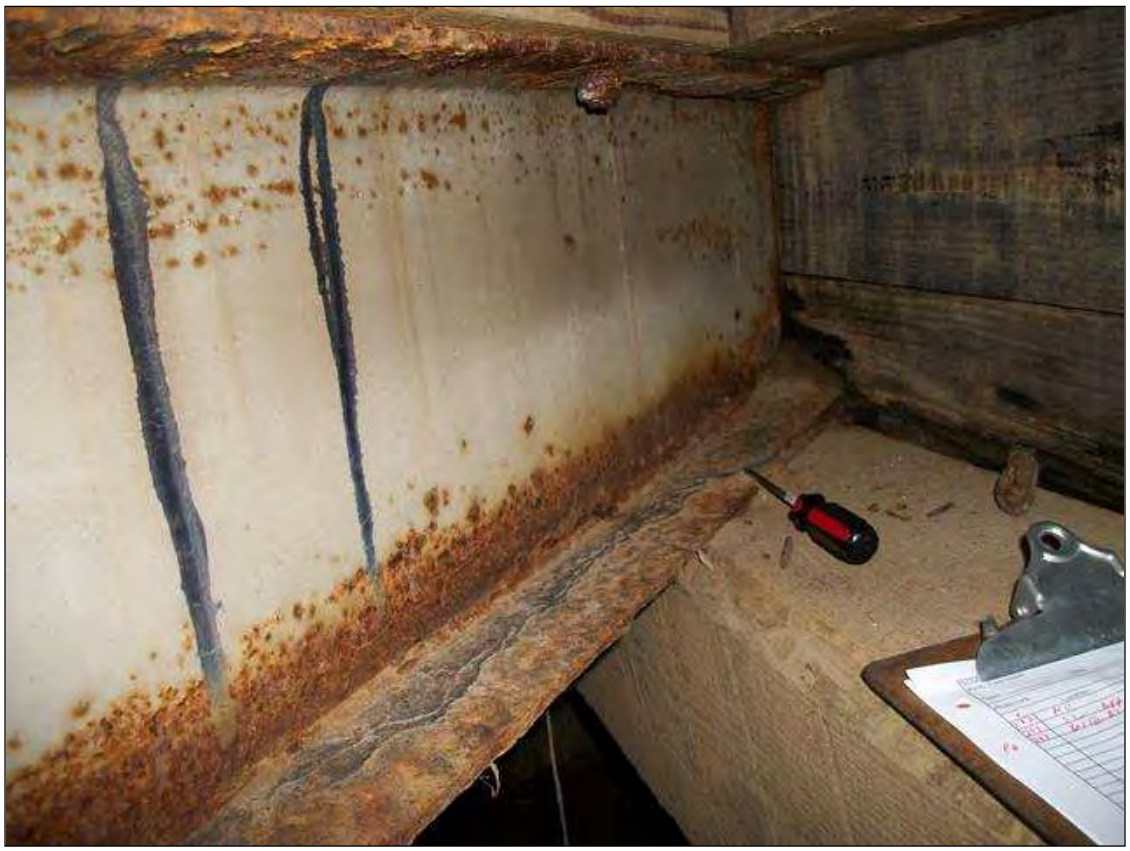
BEAM 7 AT END BENT 2 BOTTOM FLANGE, FLAKING STEEL WITH 5% SECTION LOSS END 3 FT

BEAM 2 AT END BENT 2, FLAKING STEEL WITH 5% SECTION LOSS ON BOTTOM FLANGE END 3 FT

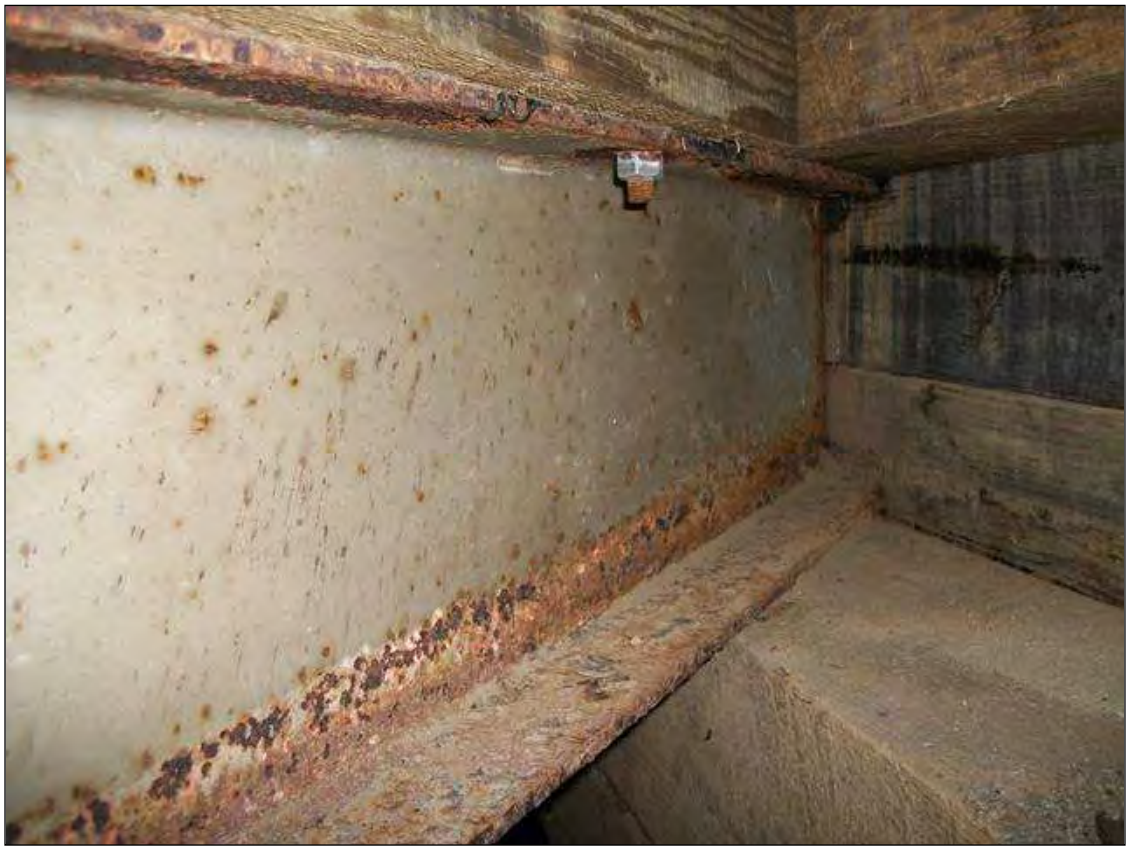
NORTHEAST CORNER OF BRIDGE, VEGETATION GROWTH (1 CF)

SOUTH APPROACH AT WEST SHOULDER, 2FT FROM SHOULDER TO DROP OFF

(PM) BEAM 1 AT END BENT 1, FLAKING STEEL WITH 10% SECTION LOSS



(PM) BEAM 2 AT END BENT 1, FLAKING STEEL WITH 5% SECTION LOSS ON END 3FT OF TOP AND BOTTOM FLANGES



BEAM 3 AT END BENT 1, HEAVY PITTING (BEAMS 5,6, AND 7 SIMILAR)

(PM) BEAM 6 AT END BENT 1, FLAKING STEEL WITH 5% SECTION LOSS

(PM) BEAM 8 AT END BENT 1 END 5FT, FLAKING STEEL WITH 5% SECTION LOSS

(PM) BEAM 9 AT END BENT 1 END 10FT, FLAKING STEEL WITH 10% SECTION LOSS ON TOP AND BOTTOM FLANGES

END BENT 1, BENT ROTATED 3IN IN 2FT, BEAMS TIGHT AGAINST BACKWALL

PILE 5 AT END BENT 1, SISTER PILE OPEN AT TOP FROM ROTATION FROM END BENT

PILE 4 AT END BENT 1, OPEN AT TOP DUE TO END BENT ROTATION

PILE 3 AT END BENT 1, OPEN AT TOP DUE TO END BENT ROTATION

NORTHEAST WINGWALL, 10% BOARDS DECAYED

END BENT 2 BRACE, DECAY (4FT)

(PM) BEAM 1 AT END BENT 1 END 20FT, FLAKING STEEL WITH 10% SECTION LOSS ON TOP AND BOTTOM FLANGES

PILE 2 AT END BENT 2 AND SILL, SOFT TIMBER

(PM) BEAM 3 AT END BENT 2 END 15FT, FLAKING STEEL WITH 5% SECTION LOSS

END BENT 2 BAY 4, DRIFT ACCUMULATION (3CY) (BAY 5 AND 6 SIMILAR)

(PM) BEAM 7 AT END BENT 2, FLAKING STEEL WITH 5% SECTION LOSS

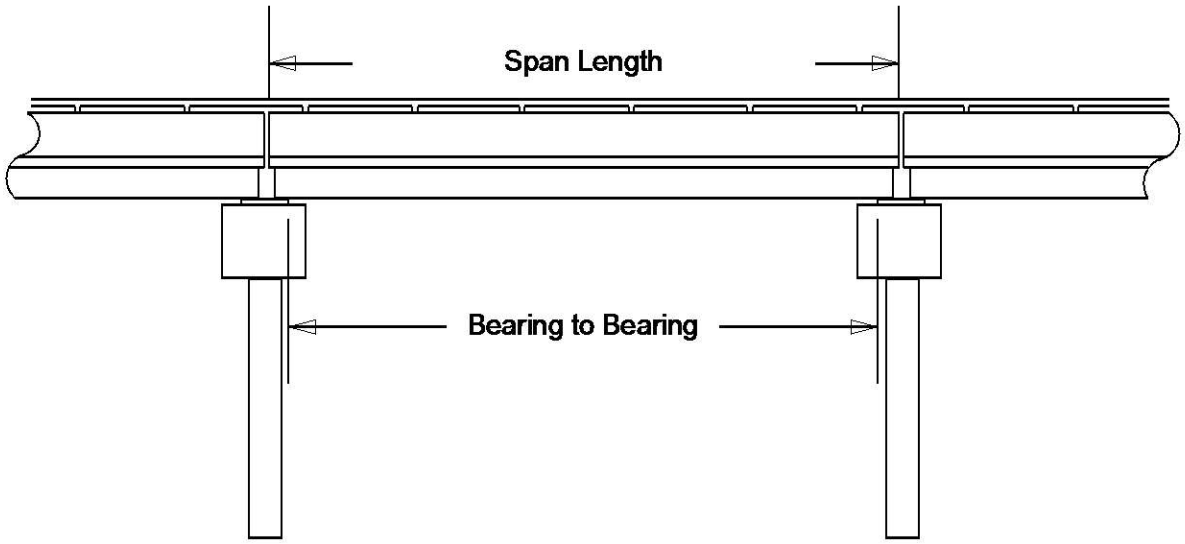
(PM) BEAM 2 AT END BENT 2, FLAKING STEEL WITH 5% SECTION LOSS ON BOTTOM FLANGE

NORTHEAST WINGWALL, PILE DECAYED AND FALLING APART

BEAM 6 AT MIDSPAN, FLAKING STEEL ON BOTTOM FLANGE (NO SECTION LOSS)

Structure Data Worksheet

County: WATAUGA Structure No: 940149 Date: 10/10/2013 Inspected By: MWC



Span No	Span Length	Bearing to Bearing	Comments
1	25' 3"	24' 5"	NBIS LENGTH = 23' 7"

Stream Bed Soundings

(See next sheet for profile sketch)

Bridge No: 940149 County: WATAUGA Date: 10/10/2013 By: MWC

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

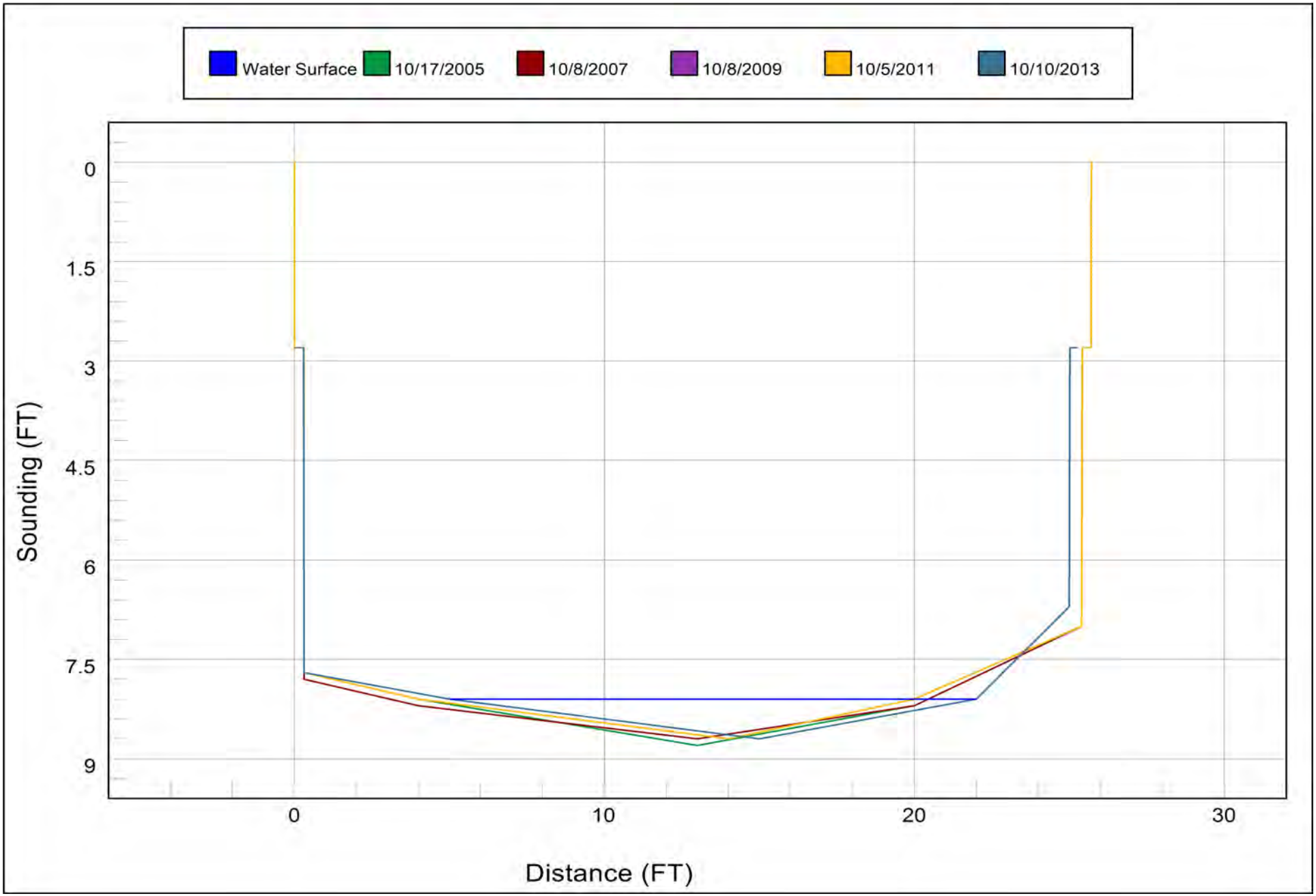
Distance from Highwater Mark to top of rail: 4.5 Location of Highwater Mark: DEBRIS ON CAP

DOWNSTREAM			UPSTREAM		
Distance (Station) (ft)	Sounding (ft)	Description	Distance (Station) (ft)	Sounding (ft)	Description
0	2.8	FILL FACE			
0.29	2.8	TOP OF BULKHEAD			
0.3	4.5	Top of Cap			
0.31	7.7	FACE OF BULKHEAD	0.31	8.7	FACE OF BULKHEAD
5	8.1	Water Surface/Water Edge (WSWE)			
15	8.7	STREAMBED			
22	8.1	Water Surface/Water Edge (WSWE)			
25	6.7	FACE OF BULKHEAD	25	7.2	FACE OF BULKHEAD
25.01	4.5	Top of Cap			
25.02	2.8	TOP OF BULKHEAD			
25.25	2.8	FILL FACE			

Bridge: 940149 County WATAUGA Date: 10/10/2013

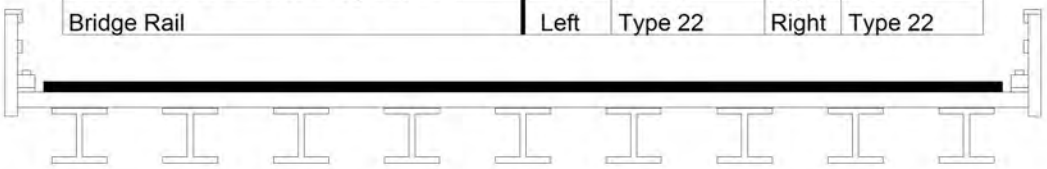
STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)



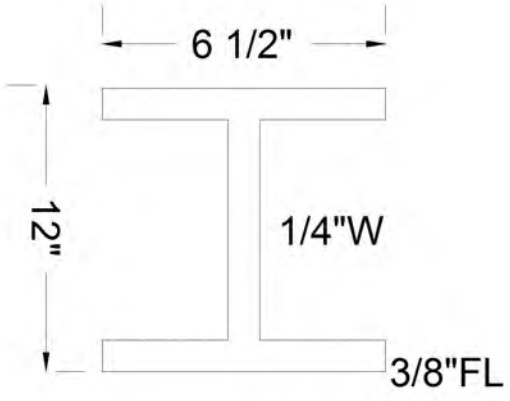
Bridge Inspection Field Sketch

Deck Width/Out to Out	20.083ft	Between Rails				20ft
Clear Roadway	19.25ft	Wearing Surface				0.209ft
Median Width		Median Height				
Curb Height		Left	0.583ft	Right	0.583ft	
Sidewalk Width		Left		Right		
Clear Roadway (Rail to Median)		Left		Right		
Guardrail Width		Left	0.333ft	Right	0.333ft	
Top of Rail to Deck/Wearing Surface		Left	2.583ft	Right	2.583ft	
Bridge Rail		Left	Type 22	Right	Type 22	



Measurements for Span #	1		
Deck Thickness	0.312	Left Overhang	0.75
Top of Rail to Bottom of Beam	4.5	Right Overhang	0.75

Beam Number	Beam Type	Spacing	Comments
1	Steel I Beam	2.323ft	
2	Steel I Beam	2.323ft	
3	Steel I Beam	2.323ft	
4	Steel I Beam	2.323ft	
5	Steel I Beam	2.323ft	
6	Steel I Beam	2.323ft	
7	Steel I Beam	2.323ft	
8	Steel I Beam	2.323ft	
9	Steel I Beam	ft	

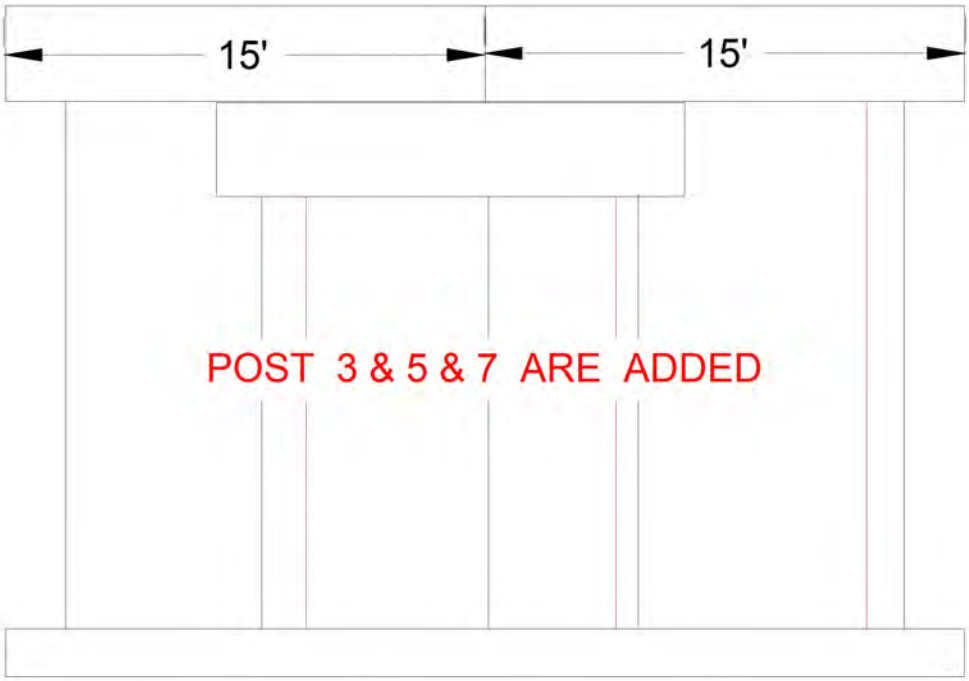


VERIFIED 10/10/13 M. CRAIG

Title	Description
TS	TYPICAL SECTION

Bridge No:	Drawn By:	Date:	File Name:
940149	DCW	10/08/2007	S0126000332

Bridge Inspection Field Sketch



Abutment #	1		
Cap - Beam Type (Timber)			
Cap Size	29.667ft Long	0.833ft Wide	0.833ft High
Left Overhang	2.25ft	Lt Cap/Beam Overhang	1.833ft
Right Overhang	2.75ft	Rt Cap/Beam Overhang	2ft
Timber Sub Cap			
Size	13.333ft Long	0.833ft Wide	0.833ft High
Left pile to splice	6.833ft		
Left Overhang	0.417ft		
Right Overhang	.417ft		
Sill - Sill			
Sill Size			

Pile #	Material	Pile Type	Spacing	Length	Width/Diam.	Height	Orientation
1	Wood or Timber	Post and Sills	6' 3"		10"	10"	Vertical
2	Wood or Timber	Post and Sills	12"		10"	10"	Vertical
3	Wood or Timber	Post and Sills	5' 6"		10"	10"	Vertical
4	Wood or Timber	Post and Sills	12"		10"	10"	Vertical
5	Wood or Timber	Post and Sills	4' 10"		10"	10"	Vertical
6	Wood or Timber	Post and Sills	5' 3"		10"	10"	Vertical
7	Wood or Timber	Post and Sills	12"		10"	10"	Vertical
8	Wood or Timber	Post and Sills			10"	10"	Vertical

Title
SUB 1

Description
END BENT 1

VERIFIED 10/10/13 M. CRAIG

Bridge No: 940149 **Drawn By:** G.R.R. **Date:** 10/08/2007 **File Name:** S0130000354

Bridge Inspection Field Sketch

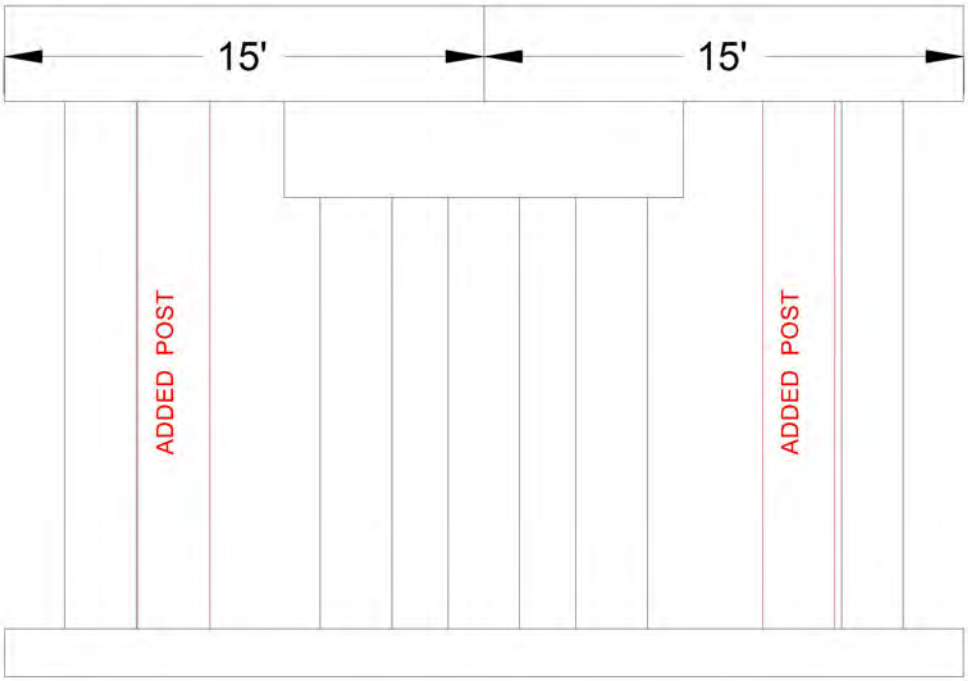
Roadway	18ft Wide	2 Paved Lanes	Looking East
Left Shoulder	4ft Wide		4ft Unpaved
Right Shoulder	4ft Wide		4ft Unpaved
Left Guardrail			
Right Guardrail			

VERIFIED 10/10/13 M. CRAIG

Title	Description
APP.	APPROACH ROADWAY.

Bridge No:	Drawn By:	Date:	File Name:
940149	G.R.R.	10/08/2007	S0126000333

Bridge Inspection Field Sketch



Abutment #	2		
Cap - Beam Type (Timber)			
Cap Size	30ft Long	.833ft Wide	.833ft High
Left Overhang	2.667ft	Lt Cap/Beam Overhang	2.083ft
Right Overhang	2.333ft	Rt Cap/Beam Overhang	1.75ft
Timber Sub Cap			
Size	13.4ft Long	0.833ft Wide	0.833ft High
Left pile to splice	6.417ft		
Left Overhang	0.417ft		
Right Overhang	0.417ft		
Sill - Sill			
Sill Size			

Pile #	Material	Pile Type	Spacing	Length	Width/Diam.	Height	Orientation
1	Wood or Timber	Post and Sills	12"		10"	10"	Vertical
2	Wood or Timber	Post and Sills	5' 3"		10"	10"	Vertical
3	Wood or Timber	Post and Sills	5' 10"		10"	10"	Vertical
4	Wood or Timber	Post and Sills	6' 9"		10"	10"	Vertical
5	Wood or Timber	Post and Sills	5' 2"		10"	10"	Vertical
6	Wood or Timber	Post and Sills	12"		10"	10"	Vertical
7	Wood or Timber	Post and Sills			10"	10"	Vertical

VERIFIED 10/10/13 M. CRAIG

Title

SUB 2

Description

END BENT 2

Bridge No: 940149 **Drawn By:** G.R.R. **Date:** 10/08/2007 **File Name:** S0130000355

LOOKING EAST

BRIDGE POSTING

WEST APPROACH LOOKING EAST

EAST APPROACH LOOKING WEST

UPSTREAM VIEW FROM BRIDGE DECK

DOWNSTREAM VIEW FROM BRIDGE DECK

NORTH BRIDGE RAILING

SOUTH BRIDGE RAILING

ASPHALT WEARING SURFACE

UPSTREAM PROFILE

DOWNSTREAM PROFILE

SUPERSTRUCTURE UNDERSIDE

ASPHALT WEARING SURFACE OVER END BENT 1

ASPHALT WEARING SURFACE OVER END BENT 2

END BENT 1

END BENT 2

NORTHEAST WINGWALL

SOUTHWEST WINGWALL

Structure 940149 County WATAUGA Date: 10/10/2013 Structure Photos

NORTHEAST STREAMBANK

NORTHWEST STREAMBANK

SOUTHWEST STREAMBANK

SOUTHEAST STREAMBANK