



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION

PRIORITY MAINTENANCE X 6 (THREE RAIL POSTS;
BEARING AT BEAM #4 / END BENT 1; BEARINGS AT
BEAMS #1, #4 / END BENT 2)

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY TRANSYLVANIA BRIDGE NUMBER 870046 INSPECTION CYCLE 2 YRS

ROUTE NC215 ACROSS NORTH FORK FR. BROAD RVR M.P. 0

1.2 MI. N. JCT. SR1321

LOCATION **1.2 MI.N.JCT.SR1321**

SUPERSTRUCTURE REINFORCED CONCRETE FLOOR ON I-BEAMS

SUBSTRUCTURE ABUTMENTS: REINFORCED CONCRETE

1 @ 51'-2"

SPANS **1 @ 51'-2"**

LONGITUDE 82° 53' 18.07"

LATITUDE 35° 14' 52.23"

INSPECTION DATE 07/15/2014

PRESENT CONDITION FAIR

PRESENT POSTING Not Posted

PROPOSED POSTING

OTHER SIGNS PRESENT DELINEATORS (4) & NARROW BRIDGE (2)



NORTH

Fracture Critical	<u>No</u>
Temporary Shoring	<u>No</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	

NATIONAL BRIDGE INVENTORY----- STRUCTURE INVENTORY AND APPRAISAL

Run Date: 11/13/2014

IDENTIFICATION				CLASSIFICATION			
(1) STATE NAME -NORTH CAROLINA	BRIDGE	870046		SUFFICIENCY RATING =		74.63	
(8) STRUCTURE NUMBER(FEDERAL)		000000001750046		STATUS =	Not Deficient		
(5) INVENTORY ROUTE (ON/UNDER) - ON		31002150					
(2) STATE HIGHWAY DEPARTMENT DISTRICT		1					
(3) COUNTY CODE	175	(4) PLACE CODE	0	(112)NBIS BRIDGE SYSTEM -		YES	
(6) FEATURE INTERSECTED -	NORTH FORK FR. BROAD RVR			(104)HIGHWAY SYSTEM	Is not on NHS	0	
(7) FACILITY CARRIED	NC215			(26) FUNCTIONAL CLASS -	Major Collector	07	
(9) LOCATION	1.2 MI.N.JCT.SR1321			(100)STRAHNET HIGHWAY -	Not a STRAHNET Route	0	
(11)MILEPOINT		0		(101)PARALLEL STRUCTURE -	No Parallel Structure	N	
(16)LAT	35° 14' 52.23"	(17)LONG	82° 53' 18.07"	(102)DIRECTION OF TRAFFIC -	2-way Traffic	2	
(98)BORDER BRIDGE STATE CODE		PCT SHARE		(103)TEMPORARY STRUCTURE -			
(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				CONDITION			
(43) STRUCTURE TYPE MAIN:	Steel			(58) DECK		5	
TYPE -	Stringer Mutlibeam or Girder	CODE	302	(59) SUPERSTRUCTURE		5	
(44) STRUCTURE TYPE APPR :				(60) SUBSTRUCTURE		5	
TYPE -		CODE	000	(61) CHANNEL & CHANNEL PROTECTION		7	
(45) NUMBER OF SPANS IN MAIN UNIT			1	(62) CULVERTS		N	
(46) NUMBER OF APPROACH SPANS							
(107)DECK STRUCTURE TYPE -	1	CODE		LOAD RATING AND POSTING			
(108)WEARING SURFACE / PROTECTIVE SYSTEM :				(31) DESIGN LOAD	Unknown	0	
(A) TYPE OF WEARING SURFACE -		CODE		(63) OPERATING RATING METHOD -	Load Factor	1	
(B) TYPE OF MEMBRANE -		CODE		(64) OPERATING RATING -	HS-23	42	
(C) TYPE OF DECK PROTECTION -		CODE		(65) INVENTORY RATING METHOD -	Load Factor	1	
				(66) INVENTORY RATING -	HS-14	25	
				(70) BRIDGE POSTING -	Posting Required	3	
				(41) STRUCTURE OPEN, POSTED ,OR CLOSED		P	
				DESCRIPTION -	Posted for Load		
AGE AND SERVICE				APPRAISAL			
(27) YEAR BUILT			1936	(67) STRUCTURAL EVALUATION		5	
(106)YEAR RECONSTRUCTED				(68) DECK GEOMETRY		4	
(42) TYPE OF SERVICE : ON -	Highway			(69) UNDERCLEARANCES,VERTI & HORIZ		N	
UNDER -	Waterway	CODE	15	(71) WATERWAY ADEQUACY		7	
(28) LANES: ON STRUCTURE	2 UNDER STRUCTURE		0	(72) APPROACH ROADWAY ALIGNMENT		6	
(29) AVERAGE DAILY TRAFFIC			100	(36) TRAFFIC SAFETY FEATURES		0110	
(30) YEAR OF ADT	2013	(109) TRUCK ADT PCT	7%	(113)SCOUR CRITICAL BRIDGES		U	
(19) BYPASS OR DETOUR LENGTH			21 MI				
GEOMETRIC DATA				PROPOSED IMPROVEMENTS			
(48) LENGTH OF MAXIMUM SPAN			50 FT	(75) TYPE OF WORK -		CODE	
(49) STRUCTURE LENGTH			51 FT	(76) LENGTH OF STRUCTURE IMPROVEMENT			
(50)CURB OR SIDEWALK: LEFT	.6 FT RIGHT		.6 FT	(94) BRIDGE IMPROVEMENT COST			
(51) BRIDGE ROADWAY WIDTH CURB TO CURB			18.75 FT	(95) ROADWAY IMPROVEMENT COST			
(52) DECK WIDTH OUT TO OUT			20 FT	(96) TOTAL PROJECT COST			
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS)			19 FT	(97) YEAR OF IMPROVEMENT COST ESTIMATE			
(33) BRIDGE MEDIAN -	No Median	CODE	0	(114)FUTURE ADT	200	(115) YEAR FUTURE ADT	2025
(34) SKEW	0°	(35) STRUCTURE FLARED	0				
(10) INVENTORY ROUTE MIN VERT CLEAR			999.9 FT	INSPECTIONS			
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR			18.75 FT	(90) INSPECTION DATE		07/15/2014	
(53) MIN VERT CLEAR OVER BRIDGE RDWY			999.9 FT	(92) CRITICAL FEATURE INSPECTION :		(93) CFI DATE	
(54) MIN VERT UNDERCLEAR REF	Not a Highway or Railroad		0 FT	A) FRACTURE CRIT DETAIL -	NO	A)	
(55) MIN LAT UNDERCLEAR RT REF	Not a Highway or Railroad		000 FT	B) UNDERWATER INSP -	NO	B)	
(56) MIN LAT UNDERCLEAR LT REF -			000 FT	C) OTHER SPECIAL INSP	NO	C)	
				SCOUR			
NAVIGATION DATA							
(38) NAVIGATION CONTROL -	No Navigational Control	CODE	0				
(111)PIER PROTECTION -		CODE					
(39) NAVIGATION VERTICAL CLEARANCE			0				
(116)VERT - LIFT BRIDGE NAV MIN VERT CLEAR			FT				
(40) NAVIGATION HORIZONTAL CLEARANCE			0 FT				

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Run Date: 11/13/2014

COUNTY :	DIVISION :	DISTRICT :	STRUCTURE NUMBER :	LENGTH :	
TRANSYLVANIA	14	1	870046	51	FEET

ROUTE CARRIED :	FEATURE INTERSECTED :
NC215	NORTH FORK FR. BROAD RVR

LOCATED :	BRIDGE NAME :	CITY :
1.2 MI.N.JCT.SR1321		

FUNC. CLASS :	SYST.ON :	SYST.UNDER :	ADT & YR :	RAIL TYPE :
07	FA	NFA	100 2013	LT 991 RT 991

BUILT :	BY :	PROJ :	FED.AID PROJ :	DESIGN LOAD :
1936	FS			Unknown

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

NAVIGATION :			HT. CRN. TO BED :		WATER DEPTH :		
VC 0 FT	HC 0 FT		15 FT		1		FT

SUPERSTRUCTURE :	REINFORCED CONCRETE FLOOR ON I-BEAMS
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SUBSTRUCTURE :	ABUTMENTS: REINFORCED CONCRETE
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SPANS :	1 @ 51'-2
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BEAMS OR GIRDERS :	4 LINES 33 I-BEAMS @ 5'-2 CENTERS
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FLOOR :	ENCROACHMENT :	DECK (OUT TO OUT) :
9 RC/4.5 AWS		20 FT

CLEAR ROADWAY :	BETWEEN RAILS :	SIDEWALK OR CURB :
18.75 FT	20 FT	LT .6 FT RT .6 FT

VERT.CL.OVER :
999.9 FT

INV.RTG. :	OPE.RTG. :	CONTR.MEMBER :	POSTED :	TTST	DATE
HS-14	HS-23	IntBeam	SV 38	40	11/12/2014

SYSTEM :	GREEN LINE ROUTE :
Primary N.C. Route	N

UNDER ROUTES AND CLEARANCES

REMARKS :

BRIDGE INSPECTION RECORD AND SUMMARY

INSPECTION TYPE Routine Inspection
 BRIDGE NO. 870046 COUNTY TRANSYLVANIA ROUTE NC215 OVER NORTH FORK FR. BROAD RVR
 STRUCTURE TYPE REINFORCED CONCRETE FLOOR ON I-BEAMS
 ROUTE ORIENTATION S - N SPANS 1 @ 51'-2

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	1	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		P	54. RESPONSE TO LIVE LOAD			G
	b. TIMBER			55. ESTIMATED REMAINING LIFE			8
	c. ALUMINUM						
	d. STEEL		G				
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)			6
	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			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			F	d. CHANNEL & CHANNEL PROT.	ITEM 61	7	
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)			G	b. APPR. RDWY. ALIGNMENT		6	
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			USE OF INSP. ACCESSIBILITY EQUIPMENT			
	b. PILES, POST, SILLS, & BRACING			SNOOPER (CODE S, 4, OR N)		HRS	NO
	c. BULKHEADS, WING'S, & TIE BACKS			LADDER			NO
36. CONC SUB STR.	a. ABUT. & INT. BENT CAPS		G	BUCKET TRUCK			NO
	b. ABUT. & BENT COL'S BREASTWALLS		F	BOAT			NO
	c. ABUT. & INT. BENT PILES			OTHER			NO
	d. BACKWALLS, WING'S, RETAIN. WALLS						
	e. ABUT. & BENT FOOTINGS & SILLS		F				
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)			G				
40. FENDER SYSTEMS				80. INSPECTED BY:	M. A. A.		
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 Inspection & Analysis</u>	
Team Leader MJE.RENFRO			
Assisted By BGH			
Item No.	Grade		
2a	F	OUTSIDE 1 FT. OF CONCRETE DECK OVERHANG HAS HAIRLINE MAP CRACKING WITH EFFLORESCENCE AT DOWNSTREAM END NEAR ABUTMENT 2. 6 FT. X 2 FT. X 1 IN. DEEP SPALL WITH REBAR EXPOSURE TO DOWNSTREAM OVERHANG AT MID-SPAN.	
3a	P	TOP 3" OF RAIL POST #4 AT DOWNSTREAM END HAS BROKEN OFF. WEATHERING AND SCALING OF UPSTREAM RAIL, TYPICAL THROUGHOUT. POST #4, #5 OF RIGHT RAIL AND POST #4 OF LEFT RAIL - THE CONCRETE BASE HAS DETERIORATED AWAY (SEE PHOTOS). A PRIORITY MAINTENANCE HAS BEEN REQUESTED FOR THESE CONDITIONS.	
4	F	5 FT. LONG AREA OF HEAVILY WEATHERED CONCRETE TO DOWNSTREAM CURB AT ABUTMENT 2. 5 FT. X 8 IN. X 8 IN. SPALL WITH EXPOSED REINFORCING IN UPSTREAM CURB AT MID-SPAN; SIMILAR AT ABUTMENT 2 AND 12 FEET FROM ABUTMENT 2.	
10	F	RUST SCALE WITH UP TO 3/16 IN. SECTION LOSS IN TOP AND BOTTOM FLANGE OF BEAM #1 AT MIDSPAN. RUST SCALE WITH UP TO 1/8 IN. SECTION LOSS TOP AND BOTTOM FLANGE OF BEAM #4 AT MIDSPAN. SCATTERED AREAS OF RUST ALONG ALL BEAMS. RUST SCALE 1/16 IN. TO 1/8 IN. DEEP SECTION LOSS IN THE WEB AND FLANGES OF ALL BEAMS ADJACENT TO THEIR ENCASEMENT IN THE END CURTAIN WALLS AT THE ABUTMENTS. RUST SCALE IN FLANGES OF BEAMS #2, #3 IN RANDOM LOCATIONS THROUGHOUT THE BRIDGE.	
10A	NO	NO CURVED GIRDERS.	
12	F	CRACK AND SEPARATION OF INTERMEDIATE DIAPHRAGM BELOW BEAM #1, 20 FEET FROM ABUTMENT 2. (2) INTERMEDIATE DIAPHRAGMS BROKEN OFF AND SEPARATED FROM BEAM #4. HAIRLINE CRACKING IN ALL DIAPHRAGMS. CRACKING AND SPALLING IN RANDOM DIAPHRAGMS IN THE AREA BENEATH BEAMS #1, #4 WITH RUSTED AND DETERIORATED REINFORCING BARS EXPOSED.	
13	F	2 FT. X 6 IN. X 3 IN. SPALL IN ABUTMENT 2 CURTAIN WALL OUTSIDE OF BEAM #4.	
15	F	DETERIORATION BENEATH BEAM #4 AT ABUTMENT 1 WITH A 10 TO 15 PERCENT BEARING AREA LOSS. DETERIORATION BENEATH BEAMS #1, #4 AT END BENT 2, BUT NO BEARING AREA LOSS (SEE PHOTOS). A PRIORITY MAINTENANCE HAS BEEN REQUESTED FOR THESE CONDITIONS.	
52	F	PAINT PEELING ON BEAMS THROUGHOUT.	
36b	F	2 FULL HEIGHT VERTICAL HAIRLINE CRACKS IN ABUTMENT 2 BREASTWALL UNDER BEAM #1. FULL HEIGHT VERTICAL CRACK IN ABUTMENT 1 BREASTWALL BELOW BEAM #2. HAIRLINE CRACKING. SCALING, WATER FLOW ABRASION, AND/OR SCATTERED DETERIORATION ALONG THE BASE OF BREASTWALLS AT BOTH ABUTMENTS.	

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 MJE.RENFRO			
Assisted By BGH			
Item No.	Grade		
36e	F	SCALING, WATER FLOW ABRASION, AND/OR SCATTERED 1 IN. TO 2 IN. DEEP DETERIORATION.	
45c	F	STREAM BED DEGRADATION AND UP TO 1 FT. 2 IN. VERTICAL EXPOSURE ALONG PORTIONS OF THE FOOTING AT BOTH ABUTMENTS, BUT NO UNDERMINING.	
61	YES	PRIORITY MAINTENANCE X 6 (THREE RAIL POSTS; BEARING AT BEAM #4 / END BENT 1; BEARING AT BEAMS #1, #4 / END BENT 2)	

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 870046

County TRANSYLVANIA

Date: 07/15/2014

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

MMS Code	Description of Function	Unit	Quantity	Remarks	Est. Cost
 3318	Maint to Concrete Handrail	LF	2	THE CONCRETE BASE HAS DETERIORATED AWAY POST 4 OF RIGHT RAIL	
 3318	Maint to Concrete Handrail	LF	2	THE CONCRETE BASE HAS DETERIORATED AWAY POST 4 LEFT RAIL	
 3334	Bridge Bearings	EA	1	DETERIORATION BENEATH BEAM 4 AT ABUTMENT 1 WITH A 10 TO 15 PERCENT BEARING AREA LOSS	
 3334	Bridge Bearings	EA	1	DETERIORATION BENEATH BEAM 1 AT END BENT 2 , BUT NO BEARING AREA LOSS	
 3334	Bridge Bearings	EA	1	DETERIORATION BENEATH BEAM 4 AT END BENT 2 , BUT NO BEARING AREA LOSS	
3318	Maint to Concrete Handrail	LF	2	THE CONCRETE BASE HAS DETERIORATED AWAY POST 5 OF RIGHT RAIL	
3306	Maintain Concrete Superstructure Components	SF	50	CRACKING AND SPALLING IN INERIOR DIAPHRAGMS. DETERIORATION IN THE END CURTAIN WALLS AT ABUTMENT 2.	
3314	Maintain Steel Superstructure Components	LF	100	RUST AND LOSS TO THE BEARING ASSEMBLIES. CRACKING AND SPALLING IN INTERIOR DIAPHRAGMS. DETERIORATION IN THE END CURTAIN WALLS AT ABUTMENT 2.	
3318	Maint to Concrete Handrail	LF	102	DAMAGE TO POST #4 OF THE LEFT RAIL. DETERIORATION IN THE CURBS.	
3326	Maintain Concrete Deck	SF	98	DETERIORATION IN THE OVERHANGS.	
5603	Partial Cleaning and Painting of Structural Steel	SF	1700	RUST AND LOSS TO BEAMS AND BEARINGS.	

Key

 Priority Maintenance Item

 Critical Finding Item

 Priority Maintenance Level Not Determined

BRIDGE INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 870046

County TRANSYLVANIA

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

MMS Code	MMS Description	Quantity
3318	Maint to Concrete Handrail	2 LF
Location:		
Right Rail	Bent/Span No. 1	POST 4
Priority Level	Status	
Priority Maintenance	Division Bridge Maintenance Notification	
Submitted Date:	Submitted By:	Assisted By:
07/23/2014	ME.RENFRO	BG.HEATH
Details		
THE CONCRETE BASE HAS DETERIORATED AWAY POST 4 OF RIGHT RAIL		

MMS Code	MMS Description	Quantity
3318	Maint to Concrete Handrail	2 LF
Location:		
Left Rail	Bent/Span No. 1	POST 4
Priority Level	Status	
Priority Maintenance	Division Bridge Maintenance Notification	
Submitted Date:	Submitted By:	Assisted By:
07/23/2014	ME.RENFRO	BG.HEATH
Details		
THE CONCRETE BASE HAS DETERIORATED AWAY POST 4 LEFT RAIL		

BRIDGE INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 870046

County TRANSYLVANIA

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

MMS Code	MMS Description	Quantity
3334	Bridge Bearings	1 EA
Location:		
Beams and Girders	Bent/Span No. 1	BEARING AT BEAM 4
Priority Level	Status	
Priority Maintenance	Division Bridge Maintenance Notification	
Submitted Date:	Submitted By:	Assisted By:
07/23/2014	ME.RENFRO	BG.HEATH
Details		
DETERIORATION BENEATH BEAM 4 AT ABUTMENT 1 WITH A 10 TO 15 PERCENT BEARING AREA LOSS		

MMS Code	MMS Description	Quantity
3334	Bridge Bearings	1 EA
Location:		
Beams and Girders	Bent/Span No. 1	BEARING AT END BENT 2
Priority Level	Status	
Priority Maintenance	Division Bridge Maintenance Notification	
Submitted Date:	Submitted By:	Assisted By:
07/23/2014	ME.RENFRO	BG.HEATH
Details		
DETERIORATION BENEATH BEAM 1 AT END BENT 2 , BUT NO BEARING AREA LOSS		

BRIDGE INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 870046

County TRANSYLVANIA

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

MMS Code	MMS Description	Quantity
3334	Bridge Bearings	1 EA
Location:		
Beams and Girders	Bent/Span No. 2	BEARING BENEATH BEAM 4
Priority Level	Status	
Priority Maintenance	Division Bridge Maintenance Notification	
Submitted Date:	Submitted By:	Assisted By:
07/23/2014	ME.RENFRO	BG.HEATH
Details		
DETERIORATION BENEATH BEAM 4 AT END BENT 2 , BUT NO BEARING AREA LOSS		

MMS Code	MMS Description	Quantity
3318	Maint to Concrete Handrail	2 LF
Location:		
Right Rail	Bent/Span No. 1	POST 5
Priority Level	Status	
Recommended	Routine Maintenance	
Submitted Date:	Submitted By:	Assisted By:
09/15/2014	ME.RENFRO	BG.HEATH
Details		
THE CONCRETE BASE HAS DETERIORATED AWAY POST 5 OF RIGHT RAIL		



CRACKING, SPALLING, SEPERATION WITH REBAR EXPOSURE AT INTERIOR DIAPHRAGM #4 / BEAM #1



SPALL WITH REBAR EXPOSURE AT INTERIOR DIAPHRAGM #4 / BEAM #4



SPALL WITH REBAR EXPOSURE AT INTERIOR DIAPHRAGM #5 / BEAM #4



CONDITIONS FOUND TO BEARING ASSEMBLY AT BEAM #4 / END BENT 1



CONDITIONS FOUND TO BEARING ASSEMBLY AT BEAM #1 / END BENT 2



CONDITIONS FOUND TO BEARING ASSEMBLY AT BEAM #4 / END BENT 2



SPALLING / DETERIORATION THROUGHOUT CONCRETE CURB AT BASE OF LEFT BRIDGE RAIL



SPALLING / DETERIORATION WITH REBAR EXPOSURE THROUGHOUT CONCRETE CURB AT BASE OF RIGHT BRIDGE RAIL



REP OF WEATHERING / SCALING OF CONCRETE BRIDGE RAILS (LEFT BRIDGE RAIL)



CONDITIONS FOUND AT LEFT RAIL POST #4



SPALLING / CRACKING AT END BENT 2 CURTAIN WALL / OUTSIDE OF BEAM #4



CRACKING WITH EFFLORESCENCE TO DOWNSTREAM OVERHANG / END BENT 2



SPALLING / CRACKING AT END BENT 1 CURTAIN WALL / OUTSIDE OF BEAM #1



REP OF RUST AND LOSS TO BEAMS (BEAM #1)



SPALLING WITH REBAR EXPOSURE TO DOWNSTREAM OVERHANG AT DECK DRAIN / MID-SPAN



DETERIORATION AT BASE OF END BENT 2 / NORTH EAST WINGWALL

Structure Data Worksheet

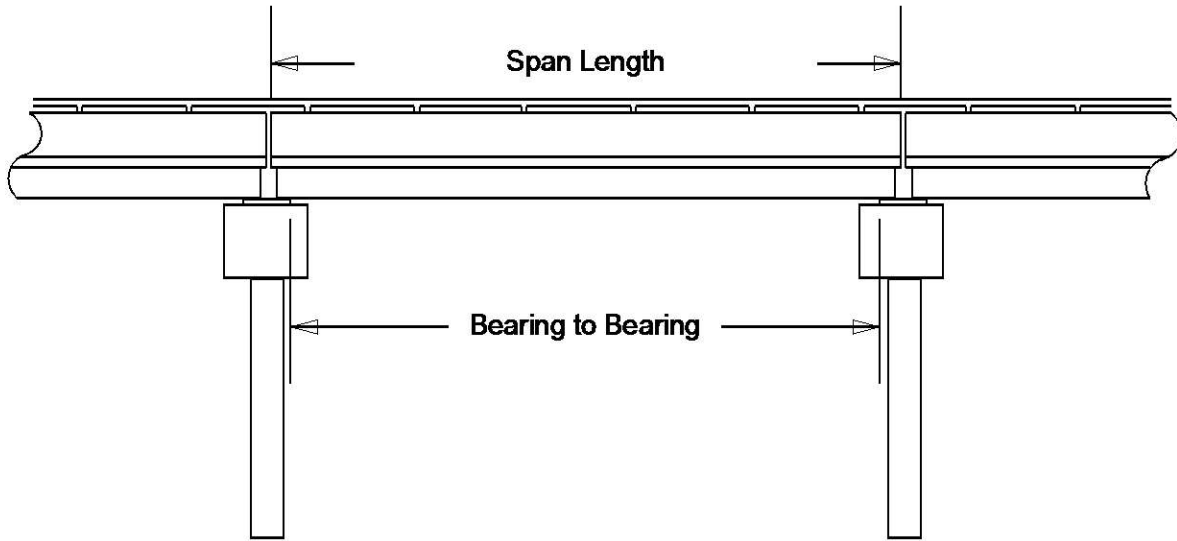
Spans

County: TRANSYLVANIA

Structure No: 870046

Date: 07/15/2014

Inspected By: MER



Span No	Span Length	Bearing to Bearing	Comments
1	51.167	50.000	N.B.I.S. LENGTH = 48.875

Stream Bed Soundings

(See next sheet for profile sketch)

Bridge No: 870046 County: TRANSYLVANIA Date: 07/15/2014 By: MER

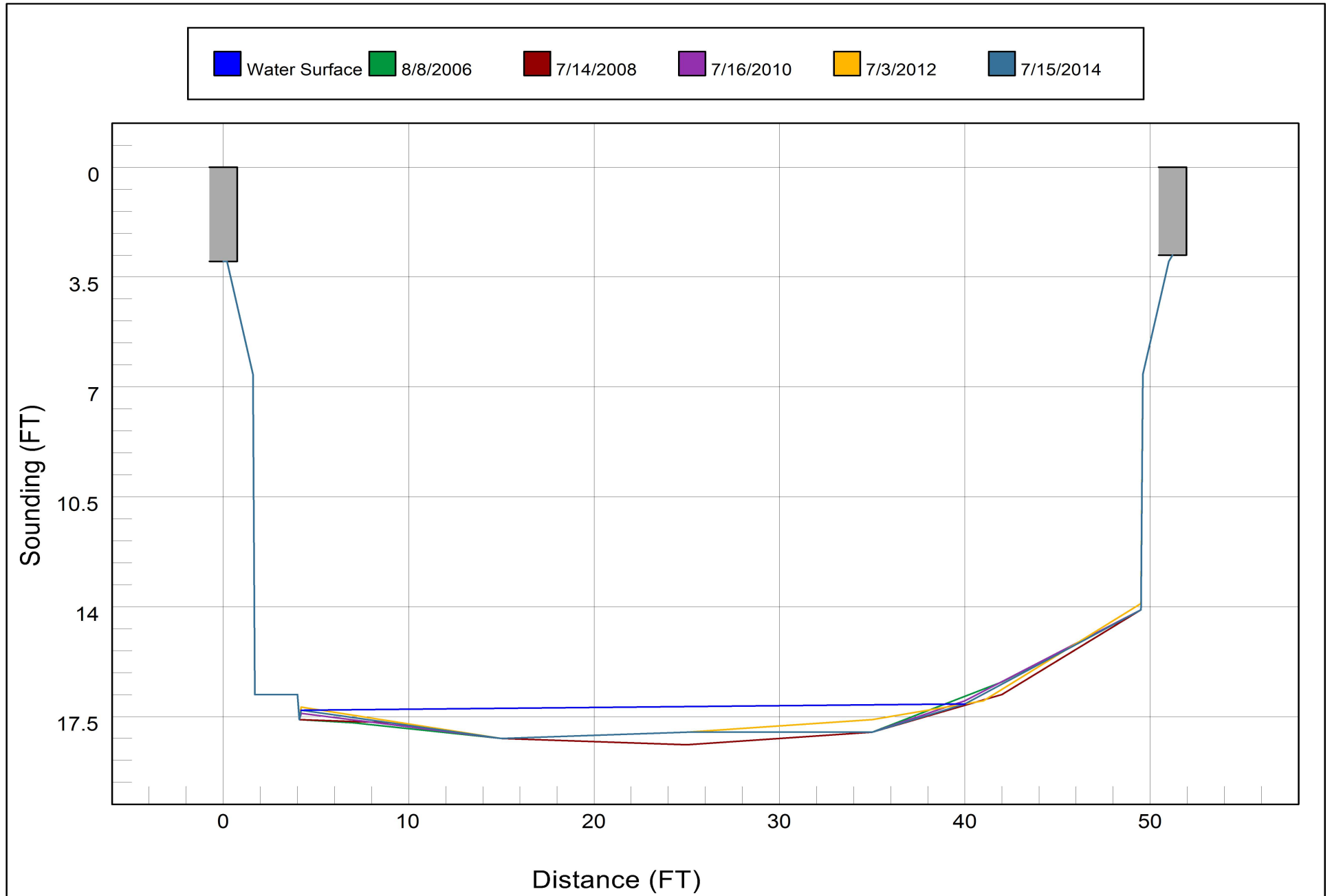
Record sounding from top of rail. Other location if needed: _____

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	FF.END BENT 1			
0.2	3				
1.6	6.6	RAIL TO CAP			
1.7	16.8		1.7	15.7	
4	16.8				
4.1	17.6	FACE OF FOOTING			
4.2	17.3	WS/WE			
15	18.2				
25	18				
35	18				
40	17.1	WS/WE			
49.5	14.1		49.5	16.8	
49.6	6.6	RAIL TO CAP			
51	3				
51.2	2.8	FF. END BENT 2			

STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)



Bridge Inspection Field Sketch

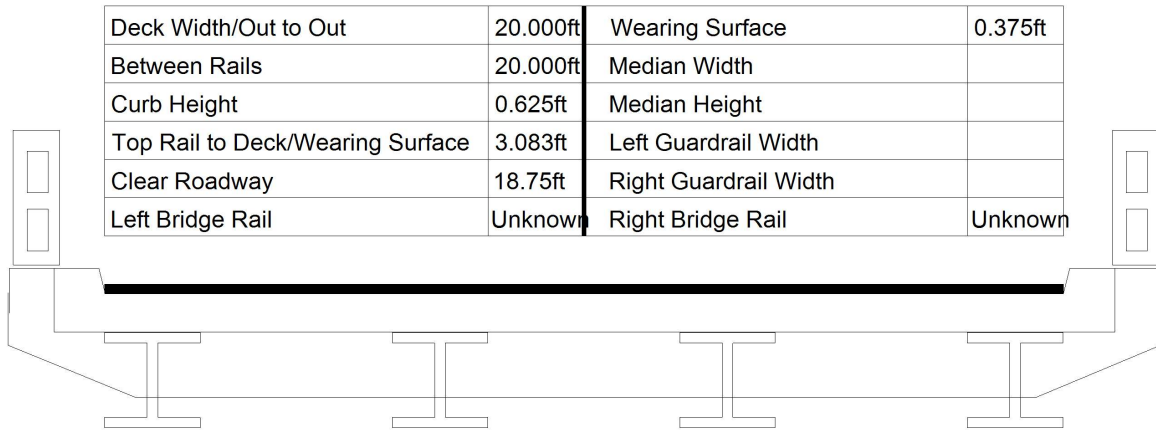


Roadway	18.5ft Wide	2 Paved Lanes	Looking North
Left Shoulder	5ft Wide		5.000ft Unpaved
Right Shoulder	5ft Wide		5.000ft Unpaved
Left Guardrail			
Right Guardrail			

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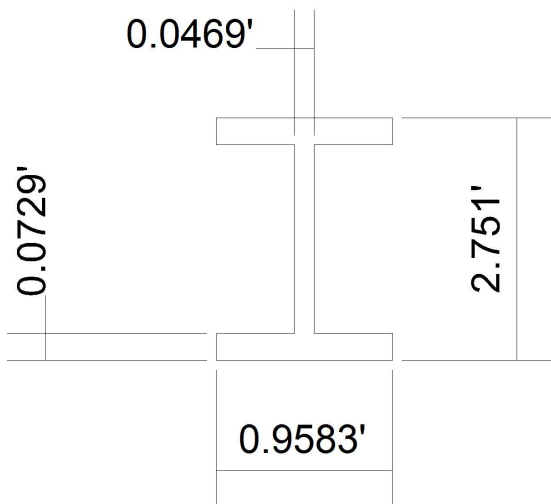
Title APPROACH ROADWAY		Description LOOKING NORTH	
Bridge No: 870046	Drawn By: MER	Date: 07/14/2008	File Name: S0114000715

Bridge Inspection Field Sketch



Measurements for Span #	1		
Deck Thickness	0.75	Left Overhang	2.25
Top of Rail to Bottom of Beam	6.75	Right Overhang	2.25

Beam No	Beam Type	Spacing	Comments
1	Steel I Beam	5.167ft	
2	Steel I Beam	5.167ft	
3	Steel I Beam	5.167ft	
4	Steel I Beam		



BEAM

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Title

TYPICAL SECTION

Description

LOOKING NORTH

Bridge No: 870046

Drawn By: MER

Date: 07/14/2008

File Name: S0114000716



NORTH



SOUTH



UPSTREAM (EAST)



DOWNSTREAM (WEST)



LOOKING UPSTREAM (EAST)



LOOKING DOWNSTREAM (WEST)



APPROACH GUARDRAIL LOOKING NORTH



APPROACH GUARDRAIL LOOKING SOUTH



REP OF APPROACH GUARDRAIL ATTACHMENT (NORTH WEST)



REP OF APPROACH GUARDRAIL POST SPACING AT BRIDGE (NORTH WEST)



REP OF APPROACH GUARDRAIL POST SPACING OUT FROM BRIDGE (NORTH WEST)



REP OF APPROACH GUARDRAIL TERMINAL END AT SOUTH EAST, SOUTH WEST (SOUTH WEST)



APPROACH GUARDRAIL TERMINAL END AT NORTH WEST



REP OF NARROW BRIDGE SIGN (NORTH APPROACH)



UNDERSIDE OF BRIDGE DECK



REP OF END BENTS (END BENT 2)