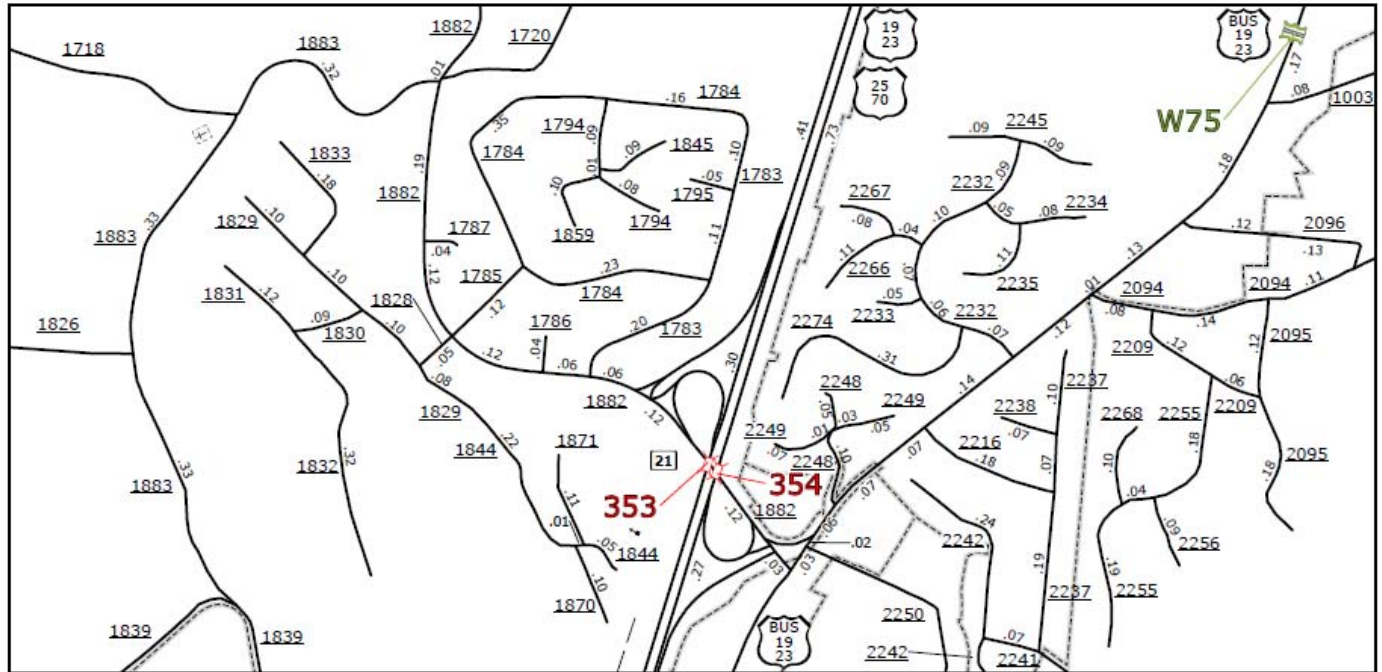


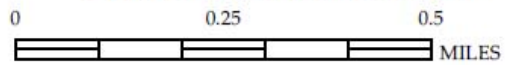
BRIDGE 68 – BUNCOMBE COUNTY



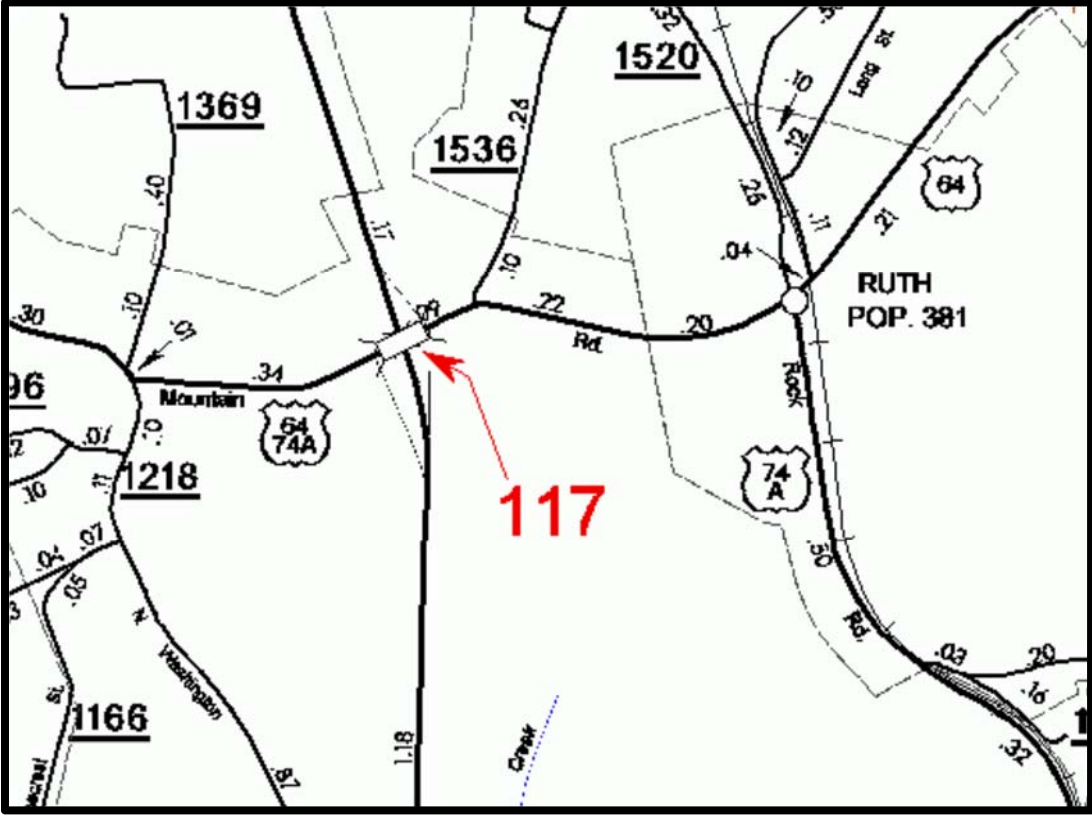
BRIDGE 353 – BUNCOMBE COUNTY



Lower Weaverville Area



BRIDGE 117-RUTHERFORD COUNTY



DAMAGE REPORTS

BUNCOMBE 68



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION

IMPACT DAMAGE REPORT ON SPAN 2
RATINGS FOR SPAN 2 ITEMS ONLY
PRIORITY MAINTENANCE REQUESTED

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Damage Inspection Report

COUNTY BUNCOMBE BRIDGE NUMBER 100068 INSPECTION CYCLE 0 YRS
ROUTE I-26 WBL ACROSS SR3495 M.P. 39.20

LOCATION 1.2 MI.N.JCT.SR3526

SUPERSTRUCTURE REINFORCED CONC.FLOOR ON I-BEAMS

SUBSTRUCTURE E.BTS:RC CAPS/H-PILES;BTS: RC P&B/PILE FTG.

SPANS 1 @ 42'-6, 1 @ 55', 1 @ 35'-4

LONGITUDE 82° 32' 32.42"

LATITUDE 35° 27' 25.43"

INSPECTION DATE 04/04/2013

PRESENT CONDITION POOR

PRESENT POSTING N

PROPOSED POSTING

OTHER SIGNS PRESENT LOW CLEARANCES



LOOKING 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></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: 04/19/2013

IDENTIFICATION							
(1) STATE NAME -NORTH CAROLINA	BRIDGE	100068		SUFFICIENCY RATING =		23.53	
(8) STRUCTURE NUMBER(FEDERAL)		00000000210068		STATUS =	Structurally Deficient		
(5) INVENTORY ROUTE (ON/UNDER) - ON		11000260					
(2) STATE HIGHWAY DEPARTMENT DISTRICT		2					
(3) COUNTY CODE	21	(4) PLACE CODE	5880				
(6) FEATURE INTERSECTED - SR3495							
(7) FACILITY CARRIED I-26 WBL							
(9) LOCATION 1.2 MI.N.JCT.SR3526							
(11)MILEPOINT		39.2					
(16)LAT 35° 27' 25.43"	(17)LONG	82° 32' 32.42"					
(98)BORDER BRIDGE STATE CODE	PCT SHARE						
(99)BORDER BRIDGE STRUCTURE NO							
STRUCTURE TYPE AND MATERIAL				CLASSIFICATION			
(43) STRUCTURE TYPE MAIN: Steel				(112)NBIS BRIDGE SYSTEM -		YES	
TYPE - Stringer Multibeam or Girder	CODE	302		(104)HIGHWAY SYSTEM Is on the NHS		1	
(44) STRUCTURE TYPE APPR :				(26) FUNCTIONAL CLASS - Arterial - Interstate		11	
TYPE -	CODE	000		(100)STRAHNET HIGHWAY - Interstate STRAHNET Route		1	
(45) NUMBER OF SPANS IN MAIN UNIT		3		(101)PARALLEL STRUCTURE - Left Parallel Structure		L	
(46) NUMBER OF APPROACH SPANS				(102)DIRECTION OF TRAFFIC - 1-way Traffic		1	
(107)DECK STRUCTURE TYPE - 1	CODE			(103)TEMPORARY STRUCTURE - Temporary Structure/Conditions		T	
(108)WEARING SURFACE / PROTECTIVE SYSTEM :				(110)DESIGNATED NATIONAL NETWORK - On the National Network		1	
(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			
(27) YEAR BUILT		1963		(58) DECK		7	
(106)YEAR RECONSTRUCTED		2012		(59) SUPERSTRUCTURE		4	
(42) TYPE OF SERVICE : ON - Highway				(60) SUBSTRUCTURE		5	
UNDER - Highway	CODE	11		(61) CHANNEL & CHANNEL PROTECTION		N	
(28) LANES: ON STRUCTURE 2 UNDER STRUCTURE		2		(62) CULVERTS		N	
(29) AVERAGE DAILY TRAFFIC		34500					
(30) YEAR OF ADT 2010	(109) TRUCK ADT PCT	16%		LOAD RATING AND POSTING			
(19) BYPASS OR DETOUR LENGTH		1 MI		(31) DESIGN LOAD HS 20 + MOD		6	
				(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 - No Posting Required		5	
				(41) STRUCTURE OPEN, POSTED ,OR CLOSED		D	
				DESCRIPTION - Open Temporary Shoring			
GEOMETRIC DATA				APPRAISAL			
(48) LENGTH OF MAXIMUM SPAN		54 FT		(67) STRUCTURAL EVALUATION		3	
(49) STRUCTURE LENGTH		133 FT		(68) DECK GEOMETRY		5	
(50)CURB OR SIDEWALK: LEFT 1.6 FT RIGHT		1.6 FT		(69) UNDERCLEARANCES,VERTI & HORIZ		3	
(51) BRIDGE ROADWAY WIDTH CURB TO CURB		38 FT		(71) WATERWAY ADEQUACY		N	
(52) DECK WIDTH OUT TO OUT		43.4167 FT		(72) APPROACH ROADWAY ALIGNMENT		7	
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS)		38 FT		(36) TRAFFIC SAFETY FEATURES		0111	
(33) BRIDGE MEDIAN - No Median	CODE	1		(113)SCOUR CRITICAL BRIDGES		N	
(34) SKEW 55°	(35) STRUCTURE FLARED	0					
(10) INVENTORY ROUTE MIN VERT CLEAR		999.9 FT		PROPOSED IMPROVEMENTS			
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR		38 FT		(75) TYPE OF WORK -		CODE	
(53) MIN VERT CLEAR OVER BRIDGE RDWY		999.9 FT		(76) LENGTH OF STRUCTURE IMPROVEMENT			
(54) MIN VERT UNDERCLEAR REF Highway		13.75 FT		(94) BRIDGE IMPROVEMENT COST			
(55) MIN LAT UNDERCLEAR RT REF Highway		5.5 FT		(95) ROADWAY IMPROVEMENT COST			
(56) MIN LAT UNDERCLEAR LT REF -		0 FT		(96) TOTAL PROJECT COST			
				(97) YEAR OF IMPROVEMENT COST ESTIMATE			
				(114)FUTURE ADT 69000	(115) YEAR FUTURE ADT	2025	
NAVIGATION DATA				INSPECTIONS			
(38) NAVIGATION CONTROL - Not Applicable	CODE	N		(90) INSPECTION DATE		12/08/2011	
(111)PIER PROTECTION -	CODE			(92) CRITICAL FEATURE INSPECTION :	(93) CFI DATE		
(39) NAVIGATION VERTICAL CLEARANCE		0		A) FRACTURE CRIT DETAIL - NO	A)		
(116)VERT - LIFT BRIDGE NAV MIN VERT CLEAR		FT		B) UNDERWATER INSP - NO	B)		
(40) NAVIGATION HORIZONTAL CLEARANCE		0 FT		C) OTHER SPECIAL INSP NO	C)		
				SCOUR			

Structure No: 100068

County: BUNCOMBE

Run Date:

Span Number	Feature Intersected	Inventory Route	Minimum Maximum Vertical Clearance	Milepoint	Base Highway Network	LRS Inventory Route	Toll	Functional Classification	Nuner of Lanes	Average Daily Traffic	Year of Average Daily Traffic	Total Horizontal Clearance	See Note 1							
													Reference Feature	Minimum Vertical Underclearance	Right Lateral Underclearance	Left Lateral Underclearance	Underclearance Appraisal Grade	STRAHNET Highway Designator	Direction of Traffic	Highway System of Route
2	SR3495	31034950	14	00		13	20	26	28	29	30	47	54A	54	55	56	69	100	102	104

Note 1: Items 54, 55, and 56 are not reported FHWA under route data points but are collected for each under route to determine the minimum value for Underclearance Appraisal Item 69. The under route that generates the lowest Underclearance Appraisal value will be reported on the Facility Carried record.

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Run Date: 04/19/2013

COUNTY : BUNCOMBE DIVISION : 13 DISTRICT : 2 STRUCTURE NUMBER : 100068 LENGTH : 133 FEET

ROUTE CARRIED : I-26 WBL FEATURE INTERSECTED : SR3495

LOCATED : 1.2 MI.N.JCT.SR3526 BRIDGE NAME : CITY : *BILTMORE FO

FUNC. CLASS : 11 SYST.ON : FA SYST.UNDER : NFA ADT & YR : 34500 2010 RAIL TYPE : LT 99 RT 99

BUILT : 1963 BY : SHC PROJ : 8.19002 FED.AID PROJ : I-26-1(10)6 DESIGN LOAD : HS 20 + MOD

REHAB : 2012 BY : DOH PROJ : 45066.3.ST3 ALIGNMENT : RT. SKEW : 35 LANES : ON 2 UNDER 2

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

SUPERSTRUCTURE : REINFORCED CONC.FLOOR ON I-BEAMS

SUBSTRUCTURE : E.BTS:RC CAPS/H-PILES;BTS: RC P&B/PILE FTG.

SPANS : 1 @ 42'-6, 1 @ 55', 1 @ 35'-4

BEAMS OR GIRDERS : SPNS.1&3:3LNS.33 &2LNS.36 I-BMS;SPN2:5LNS.36 I-BEAMS

FLOOR : 8.5 RC/NO AWS ENCROACHMENT : DECK (OUT TO OUT) : 43.4167 FT

CLEAR ROADWAY : 38 FT BETWEEN RAILS : 41.3 FT SIDEWALK OR CURB : LT 1.6 FT RT 1.6 FT

VERT.CL.OVER : 999.9 FT

INV.RTG. : HS-1 OPE.RTG. : HS-1 CONTR.MEMBER : EB(5B) Damaged POSTED : SV TTST DATE

SYSTEM : Primary Interstate GREEN LINE ROUTE : Y


UNDER ROUTES AND CLEARANCES

Span	Route Description	Vertical Clearances		Horizontal Clearances		
		MMVC	MVC	Total	Left	Right
2	SR3495	14	13.75	34.50	0	5.50

Note: All measurements are in feet.

REMARKS :

BRIDGE INSPECTION RECORD AND SUMMARY

INSPECTION TYPE Damage Inspection Report			
BRIDGE NO. 100068		COUNTY BUNCOMBE	ROUTE I-26 WBL
STRUCTURE TYPE REINFORCED CONC. FLOOR ON I-BEAMS		OVER SR3495	
ROUTE ORIENTATION		SPANS 1 @ 42'-6, 1 @ 55', 1 @ 35'-4	
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		45. CHANNEL & CHANNEL PROT.	
2. DECK NO. OF EA TYPE		a. WATERWAY	
SPN GRADE		b. ALIGNMENT	
RATES SI & A		c. SCOUR	
ITEM 58		d. SLOPE PROT., RIP-RAP, DIKES, ETC.	
3. RAILING		50. APPROACH ROADWAY CONDITION	
a. CONCRETE		51. APPROACH SLABS	
b. TIMBER		52. PAINT SYSTEM CODE	
c. STEEL PLANK		53. UTILITIES	
d. OPEN GRID		54. RESPONSE TO LIVE LOAD	
3. RAILING		55. ESTIMATED REMAINING LIFE	
a. CONCRETE		5	
b. TIMBER			
c. ALUMINUM			
d. STEEL			
4. CURBS, WHEELGUARDS, PARAPETS, MEDIANS			
5. WALKWAYS (ON OR ATTACHED TO STRUCTURE)		60. REGULATORY SIGN NOTICE ISSUED	
6. DECK EXP JTS. OR DEVICES. NO. OF EACH		61. PROMPT-ACTION NOTICE ISSUED	
a. STEEL PL OR FINGER		62. PRESENTLY POSTED	
b. MISC PREFAB		63. TOT. FIELD INSP TIME (INCLUDE WRITE UP)(MAN HR)	
c. COMPRESSION SEAL		64. TOTAL SNOOPER INSP. TIME (HRS)	
d. STANDARD JOINTS		65. TOTAL TRAFFIC CONTROL TIME (MAN HRS)	
e. OPEN JOINTS		5	
7. DECK DEBRIS (INCLUDES EXCESS SAND/GRAVEL)			
		70. SI&A GENERAL CONDITION RATINGS	
SUPER STR. (FM. 1 (90)B TRUSS) ITEM 59		a. DECK ITEM 58	
10. LONGITUDINAL BEAMS OR GIRDERS		b. SUPERSTRUCTURE ITEM 59	
11. LONGITUDINAL JOIST OR STRINGERS		c. SUBSTRUCTURE ITEM 60	
12. INT. DIAP'S, X-FRAMES, BRACING & CONN'S		d. CHANNEL & CHANNEL PROT. ITEM 61	
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	
16. DRAINAGE SYSTEM (ON STRUCTURE)		b. APPR. RDWY. ALIGNMENT	
17. MOVABLE SPAN MACHINERY			
		72. FIELD SCOUR EVALUATION	
SUB STR. ITEMS. ITEM 60 (INCLUDE SCOUR)			
35. TIM SUB STR.		USE OF INSP. ACCESSIBILITY EQUIPMENT	
a. ABUT. & INT. BENT CAPS & RISERS		SNOOPER (CODE S, 4, OR N) HRS NO	
b. PILES, POST, SILLS, & BRACING		LADDER NO	
c. BULKHEADS, WING'S, & TIE BACKS		BUCKET TRUCK YES	
36. CONC SUB STR.		BOAT NO	
a. ABUT. & INT. BENT CAPS		OTHER YES	
b. ABUT. & BENT COL'S BREASTWALLS			
c. ABUT. & INT. BENT PILES			
d. BACKWALLS, WING'S, RETAIN. WALLS			
e. ABUT. & BENT FOOTINGS & SILLS			
37. STEEL SUB STR.		SPECIAL INSPECTION REQUESTED FOR	
a. ABUT. & INT. BENT CAPS & RISERS			
b. PILES, BRACING, AND BULKHEADS			
38. FOUNDATION PILES TYPE MATERIAL		NOTE	
39. SLOPE PROT., RIP-RAP (INCLUDE DRAINAGE)			
40. FENDER SYSTEMS		80. INSPECTED BY: 	
41. DRIFT		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 MD OSBORNE			
Assisted By A KING			
Item No.	Grade		
10	P	IMPACT DAMAGE WAS REQUESTED BY DIVISION BRIDGE MAINTENANCE FOR SPAN 2 OVER SR3495 A IMPACT DAMAGE REPORT WAS DONE ON 3/12/12 BEAM 5: POINT OF IMPACT ON BEAM 5 WAS 17'-6" FROM FACE OF BENT 1 OVER NBL, BEAM 5 IS OUT OF PLUM 1 1/2" +/- AT 24'-9 FROM FACE OF BENT 1". SEE PHOTOS	
12	P	CONNECTION PLATE AND INTERMEDIATE DIAPHRAGMS: ON BEAM 5: A 8" LONG CRACK IN DIAPHRAGM WELD ON BEAM 5 AT 20'-0" FROM FACE OF BENT 2. AND A 23" +/- LONG CRACK IN DIAPHRAGM WELD AT 14'-2" FROM FACE OF BENT 1. (BEAM HAS EXCESSIVE MOVEMENT WHEN TRAFFIC CROSSES BRIDGE) SEE PHOTOS	
15	P	BEARINGS AND ANCHOR BOLTS IN SPAN 2 DID NOT SHOW ANY INDICATION OF DAMAGE DUE TO THE IMPACT.	
61	YES	CRACKS IN DIAPHRAGMS	
73f	YES	UT MACHINE	




BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 100068

County BUNCOMBE

Date: 04/04/2013

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	CRACK IN DIAPHRAGM A 23" CRACK IN DIAPHRAGM WELD AT DIAPHRAGM ON BEAM 5 AT 14'-2" FROM BENT 1	
 3314	Maintain Steel Superstructure Components	LF	1	CRACK IN DIAPHRAGM A 8" LONG CRACK IN DIAPHRAGM WELD AT DIAPHRAGM ON BEAM 5 AT 20'-00 FROM FACE OF BENT 2	
 3314	Maintain Steel Superstructure Components	LF	55	BEAM 5 BEAM 5 IS 1 1/2" OUT OF PLUM AT 24'-9" FROM FACE OF BENT 1	
3314	Maintain Steel Superstructure Components	LF	55	BEAM 5 IS 1 1/2" OUT OF PLUM AT 24'-9" FROM FACE OF BENT 1	
3314	Maintain Steel Superstructure Components	LF	1	A 8" LONG CRACK IN DIAPHRAGM WELD AT DIAPHRAGM ON BEAM 5 AT 20'-00 FROM FACE OF BENT 2	
3314	Maintain Steel Superstructure Components	LF	2	A 23" CRACK IN DIAPHRAGM WELD AT DIAPHRAGM ON BEAM 5 AT 14'-2" FROM BENT 1	

Key



Priority Maintenance Item



Critical Finding Item



Priority Maintenance Level Not Determined

BRIDGE INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 100068

County BUNCOMBE

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. 2	DIAPHRAGM
Priority Level	Status	
Priority Maintenance	Division Bridge Maintenance Notification Received	
Submitted Date:	Submitted By:	Assisted By:
04/04/2013	MD OSBORNE	A KING
Details		
CRACK IN DIAPHRAGM A 23" CRACK IN DIAPHRAGM WELD AT DIAPHRAGM ON BEAM 5 AT 14'-2" FROM BENT 1		

MMS Code	MMS Description	Quantity
3314	Maintain Steel Superstructure Components	1 LF
Location:		
Beams and Girders	Bent/Span No. 2	DIAPHRAGM
Priority Level	Status	
Priority Maintenance	Division Bridge Maintenance Notification Received	
Submitted Date:	Submitted By:	Assisted By:
04/04/2013	MD OSBORNE	A KING
Details		
CRACK IN DIAPHRAGM A 8" LONG CRACK IN DIAPHRAGM WELD AT DIAPHRAGM ON BEAM 5 AT 20'-00 FROM FACE OF BENT 2		

BRIDGE INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 100068 County BUNCOMBE

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

MMS Code	MMS Description	Quantity
3314	Maintain Steel Superstructure Components	55 LF
Location:		
Beams and Girders Bent/Span No. 2 BEAM		
Priority Level	Status	
Priority Maintenance	Division Bridge Maintenance Notification Received	
Submitted Date:	Submitted By:	Assisted By:
04/04/2013	MD OSBORNE	A KING
Details		
BEAM 5 BEAM 5 IS 1 1/2" OUT OF PLUM AT 24'-9" FROM FACE OF BENT 1		



SCRAPES ON BEAM 5 FROM 17'-8" FROM BENT 1 TO 24'-9" FROM FACE OF BENT 2



A 23" CRACK IN DIAPHRAGM WELD AT DIAPHRAGM ON BEAM 5 AT 14'-2" FROM BENT 1



A 8" LONG CRACK IN DIAPHRAGM WELD AT DIAPHRAGM ON BEAM 5 AT 20'-00" FROM FACE OF BENT 2



BEAM 5 IS 1 1/2" OUT OF PLUM AT 24'-9" FROM FACE OF BENT 1

Bridge Inspection Field Sketch

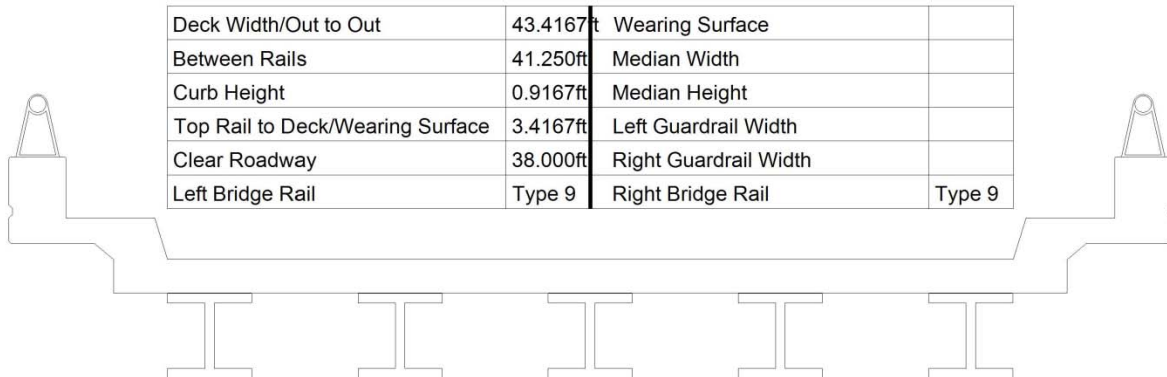


Roadway	24.000ft Wide	2 Paved Lanes	Looking West
Left Shoulder	10ft Wide	4.000ft Paved	6.000ft Unpaved
Right Shoulder	10ft Wide	10.000ft Paved	
Left Guardrail	10.000ft from road		
Right Guardrail			

APPROVED & VERIFIED 12/8/11 BY: BC

Title APPR. RDWY.		Description DATA FOR APPR. RDWY.	
Bridge No: 100068	Drawn By: T.J.G.	Date: 11/5/07	File Name: S0110000662

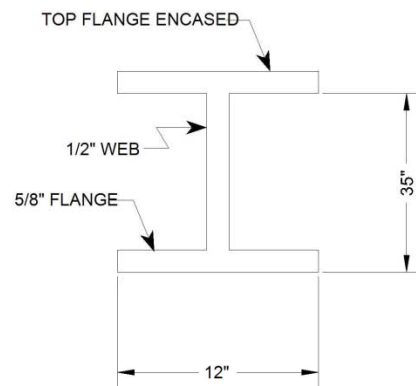
Bridge Inspection Field Sketch



Measurements for Span #	1		
Deck Thickness	0.6458	Left Overhang	4.7083
Top of Rail to Bottom of Beam	7.0625	Right Overhang	4.7083

Beam No	Beam Type	Spacing	Comments
1	Steel I Beam	8.500ft	
2	Steel I Beam	8.500ft	
3	Steel I Beam	8.500ft	
4	Steel I Beam	8.500ft	
5	Steel I Beam		

END BENTS ARE REINF. CONCRETE CAPS ON H-PILES
INT. BENTS ARE REINF. CONCRETE POST & BEAM TYPE
ON PILE FOOTINGS



TYPICAL STRINGER

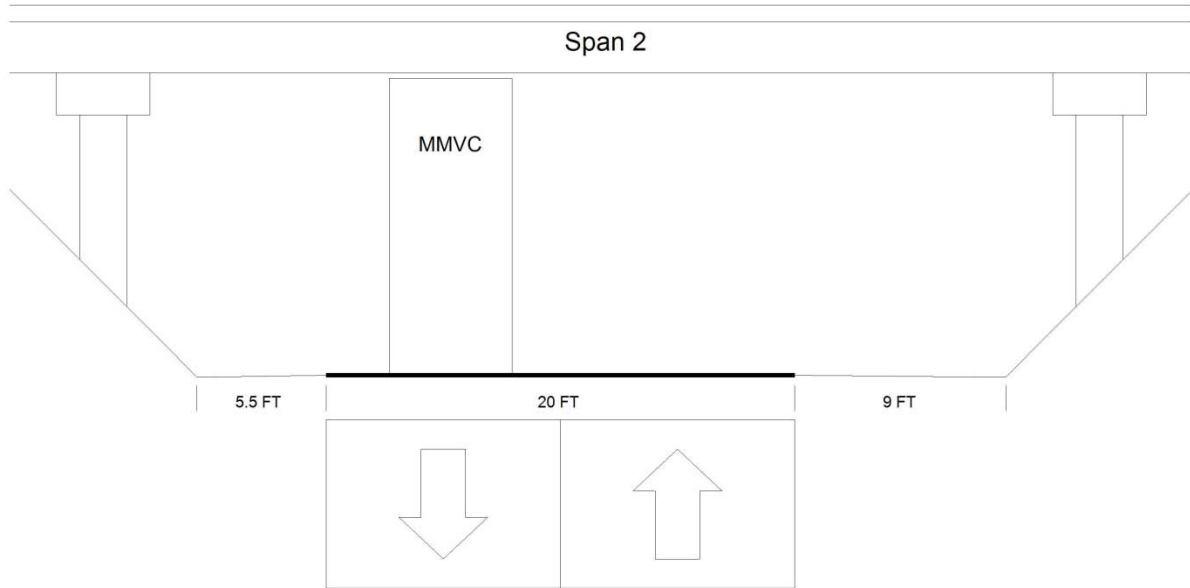
NOT TO SCALE

APPROVED & VERIFIED 12/8/11 BY: BC

Title		Description	
DECK SECTION		DATA FOR SUPERSTRUCTURE	
Bridge No: 100068	Drawn By: T.J.G.	Date: 11/5/07	File Name: S0110000663

Bridge Inspection Field Sketch

I-26



Roadway 1		Direction of Traffic	East West
Distance to Left Rail		Distance to Right Rail	
Distance to Left Toe of Slope	5.5FT	Distance to Left Bent	10.333FT
Distance to Right Toe of Slope	9FT	Distance to Right Bent	13FT
MMVC	14.000 Ft at Beam 5, 10 FT from EAST EDGE OF RDWY.		
MVC	13.750 Ft at Beam 5, 0 FT from WEST EDGE OF RDWY.		

APPROVED & VERIFIED 12/8/11 BY: BC

Title		Description	
UNCLEARANCES		UNCLR. DATA	
Bridge No: 100068	Drawn By: T.J.G.	Date: 11/5/07	File Name: S0110000664



LOOKING NORTH



LOOKING SOUTH



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION

IMPACT DAMAGE REPORT ON SPAN 2
RATINGS FOR SPAN 2 ITEMS ONLY
PRIORITY MAINTENANCE REQUESTED

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Damage Inspection Report

COUNTY BUNCOMBE BRIDGE NUMBER 100353 INSPECTION CYCLE 0 YRS
ROUTE US19,23BYP NBL ACROSS SR1882 M.P. 0

LOCATION .65 MI.S.JCT.SR1720

SUPERSTRUCTURE REINFORCED CONCRETE FLOOR ON I-BEAMS

SUBSTRUCTURE E.BTS:RC CAPS/H-PILES;INT.BTS:RC POST&BEAM/PILE FTGS.

SPANS 1 @ 58';1 @ 61';1 @ 64'-6

LONGITUDE 82° 35' 30.31"

LATITUDE 35° 40' 25.77"

INSPECTION DATE 04/04/2013

PRESENT CONDITION POOR

PRESENT POSTING N

PROPOSED POSTING

OTHER SIGNS PRESENT NONE



LOOKING 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

<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>

NUMBERED
REQUIRED

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

Update Date: 09/24/2013

IDENTIFICATION				CLASSIFICATION	
(1) STATE NAME - NORTH CAROLINA	BRIDGE	100353	SUFFICIENCY RATING =	63	
(8) STRUCTURE NUMBER(FEDERAL)		000000000210353	STATUS =	Structurally Deficient	
(5) INVENTORY ROUTE (ON/UNDER) - ON		11000260			
(2) STATE HIGHWAY DEPARTMENT DISTRICT		2			
(3) COUNTY CODE	21	(4) PLACE CODE	71560	(112)NBIS BRIDGE SYSTEM -	YES
(6) FEATURE INTERSECTED -	SR1882			(104)HIGHWAY SYSTEM	Is on the NHS 1
(7) FACILITY CARRIED	I-26W,US19N,US23N			(26) FUNCTIONAL CLASS -	Arterial - Interstate 11
(9) LOCATION	.65 MI.S.JCT.SR1720			(100)STRAHNET HIGHWAY -	Not a STRAHNET Route 0
(11)MILEPOINT		0		(101)PARALLEL STRUCTURE -	Right Parallel Structure R
(16)LAT	35° 40' 25.77"	(17)LONG	82° 35' 3.03"	(102)DIRECTION OF TRAFFIC -	1-way Traffic 1
(98)BORDER BRIDGE STATE CODE		PCT SHARE		(103)TEMPORARY STRUCTURE -	
(99)BORDER BRIDGE STRUCTURE NO				(110)DESIGNATED NATIONAL NETWORK -	On the National Network 1
STRUCTURE TYPE AND MATERIAL			(20) TOLL	On Free Road	3
(43) STRUCTURE TYPE MAIN:	Steel		(31) MAINTAIN -	State Highway Agency	01
TYPE -	Stringer Multibeam or Girder	CODE 302	(22) OWNER -	State Highway Agency	01
(44) STRUCTURE TYPE APPR :			(37) HISTORICAL SIGNIFICANCE -	Not Eligible	5
TYPE -		CODE 000	CONDITION		
(45) NUMBER OF SPANS IN MAIN UNIT		3	(58) DECK		3
(46) NUMBER OF APPROACH SPANS			(59) SUPERSTRUCTURE		5
(107)DECK STRUCTURE TYPE -	1	CODE	(60) SUBSTRUCTURE		5
(108)WEARING SURFACE / PROTECTIVE SYSTEM :			(61) CHANNEL & CHANNEL PROTECTION		N
(A) TYPE OF WEARING SURFACE -		CODE	(62) CULVERTS		N
(B) TYPE OF MEMBRANE -		CODE	LOAD RATING AND POSTING		
(C) TYPE OF DECK PROTECTION -		CODE	(31) DESIGN LOAD	HS 20 + MOD	6
AGE AND SERVICE			(63) OPERATING RATING METHOD -	Load Factor	1
(27) YEAR BUILT		1963	(64) OPERATING RATING -	HS-43	78
(106)YEAR RECONSTRUCTED			(65) INVENTORY RATING METHOD -	Load Factor	1
(42) TYPE OF SERVICE : ON -	Overpass - Interchange		(66) INVENTORY RATING -	HS-26	46
UNDER - Highway		CODE 61	(70) BRIDGE POSTING -	No Posting Required	5
(28) LANES: ON STRUCTURE	3 UNDER STRUCTURE	2	(41) STRUCTURE OPEN, POSTED, OR CLOSED		A
(29) AVERAGE DAILY TRAFFIC		21500	DESCRIPTION -	Open, No Restriction	
(30) YEAR OF ADT	2011	(109) TRUCK ADT PCT	16%		
(19) BYPASS OR DETOUR LENGTH		0 MI	APPRAISAL		
GEOMETRIC DATA			(67) STRUCTURAL EVALUATION		5
(48) LENGTH OF MAXIMUM SPAN		61 FT	(68) DECK GEOMETRY		2
(49) STRUCTURE LENGTH		184 FT	(69) UNDERCLEARANCES,VERTI & HORIZ		5
(50)CURB OR SIDEWALK: LEFT	1.6 FT RIGHT	1.6 FT	(71) WATERWAY ADEQUACY		N
(51) BRIDGE ROADWAY WIDTH CURB TO CURB		40 FT	(72) APPROACH ROADWAY ALIGNMENT		8
(52) DECK WIDTH OUT TO OUT		45.25 FT	(36) TRAFFIC SAFETY FEATURES		0011
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS)		38 FT	(113)SCOUR CRITICAL BRIDGES		N
(33) BRIDGE MEDIAN -	No Median	CODE 1	PROPOSED IMPROVEMENTS		
(34) SKEW	36°	(35) STRUCTURE FLARED	(75) TYPE OF WORK -		CODE
(10) INVENTORY ROUTE MIN VERT CLEAR		999.9 FT	(76) LENGTH OF STRUCTURE IMPROVEMENT		
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR		40 FT	(94) BRIDGE IMPROVEMENT COST		
(53) MIN VERT CLEAR OVER BRIDGE RDWY		999.9 FT	(95) ROADWAY IMPROVEMENT COST		
(54) MIN VERT UNDERCLEAR REF	Highway	14.25 FT	(96) TOTAL PROJECT COST		
(55) MIN LAT UNDERCLEAR RT REF	Highway	13 FT	(97) YEAR OF IMPROVEMENT COST ESTIMATE		
(56) MIN LAT UNDERCLEAR LT REF -		0 FT	(114)FUTURE ADT	43000	(115) YEAR FUTURE ADT 2025
NAVIGATION DATA			INSPECTIONS		
(38) NAVIGATION CONTROL -	Not Applicable	CODE N	(90) INSPECTION DATE		02/06/2013
(111)PIER PROTECTION -		CODE	(92) CRITICAL FEATURE INSPECTION :		(93) CFI DATE
(39) NAVIGATION VERTICAL CLEARANCE		0	A) FRACTURE CRIT DETAIL -	NO	A)
(116)VERT - LIFT BRIDGE NAV MIN VERT CLEAR		FT	B) UNDERWATER INSP -	NO	B)
(40) NAVIGATION HORIZONTAL CLEARANCE		0 FT	C) OTHER SPECIAL INSP	NO	C)
			SCOUR		

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Update Date: 09/24/2013

COUNTY : BUNCOMBE DIVISION : 13 DISTRICT : 2 STRUCTURE NUMBER : 100353 LENGTH : 184 FEET

ROUTE CARRIED : I-26W,US19N,US23N FEATURE INTERSECTED : SR1882

LOCATED : .65 MI.S.JCT.SR1720 BRIDGE NAME : CITY : *WEAVERVILLE

FUNC. CLASS : 11 SYST.ON : FA SYST.UNDER : NFA ADT & YR : 21500 2011 RAIL TYPE : LT 99 RT 99

BUILT : 1963 BY : SHC PROJ : 8.1906601 FED.AID PROJ : SF-13-1(101) DESIGN LOAD : HS 20 + MOD

REHAB : BY : PROJ : ALIGNMENT : TAN SKEW : 126 LANES : ON 3 UNDER 2

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

SUPERSTRUCTURE : REINFORCED CONCRETE FLOOR ON I-BEAMS

SUBSTRUCTURE : E.BTS:RC CAPS/H-PILES;INT.BTS:RC POST&BEAM/PILE FTGS.

SPANS : 1 @ 58';1 @ 61';1 @ 64'-6

BEAMS OR GIRDERS : 6 LINES 36 I-BEAMS @ 7'-6 CENTERS

FLOOR : 7.75RC/3.75AWS ENCROACHMENT : DECK (OUT TO OUT) : 45.25 FT

CLEAR ROADWAY : 40 FT BETWEEN RAILS : 43.25 FT SIDEWALK OR CURB : LT 1.6 FT RT 1.6 FT

VERT.CL.OVER : 999.9 FT

INV.RTG. : HS-26 OPE.RTG. : HS-43 CONTR.MEMBER : Int.bmsSpA POSTED : SV TTST DATE

SYSTEM : Primary Interstate GREEN LINE ROUTE : Y

UNDER ROUTES AND CLEARANCES

Span	Route Description	Vertical Clearances		Horizontal Clearances	
		MMVC	MVC	TotalLeft	Right
2	SR 1882	14.50	14.25	42.30	0 13

Note: All measurements are in feet.

REMARKS :

Structure No: 100353

County: BUNCOMBE

Run Date:

Span Number	Feature Intersected	Inventory Route	Minimum Maximum Vertical Clearance	Milepoint	Base Highway Network	LRS Inventory Route	Toll	Functional Classification	Number of Lanes	Average Daily Traffic	Year of Average Daily Traffic	Total Horizontal Clearance	See Note 1						STRAHNET Highway	Direction of Traffic	Highway System of Route
													Reference Feature	Minimum Vertical	Underclearance	Right Lateral	Underclearance	Left Lateral	Underclearance	Underclearance	Appraisal Grade
2	SR 1882	6	31018820	10	11	12	13	20	26	28	29	30	47	54A	54	55	56	69	100	102	104
				14.50	00			19	2	6200	2004	42.30H			14.25	13.00	.00	9	0	2	0

Note 1: Items 54, 55, and 56 are not reported FHWA under route data points but are collected for each under route to determine the minimum value for Underclearance Appraisal Item 69. The under route that generates the lowest Underclearance Appraisal value will be reported on the Facility Carried record.

BRIDGE INSPECTION RECORD AND SUMMARY

INSPECTION TYPE Damage Inspection Report
 BRIDGE NO. 100353 COUNTY BUNCOMBE ROUTE US19,23BYP NBL OVER SR1882
 STRUCTURE TYPE REINFORCED CONCRETE FLOOR ON I-BEAMS
 ROUTE ORIENTATION SPANS 1 @ 58'; 1 @ 61'; 1 @ 64'-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				45. CHANNEL & CHANNEL PROT.	a. WATERWAY		
					b. ALIGNMENT		
					c. SCOUR		
					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			
	b. TIMBER			51. APPROACH SLABS			
	c. STEEL PLANK			52. PAINT SYSTEM CODE			
	d. OPEN GRID			53. UTILITIES			
3. RAILING	a. CONCRETE			54. RESPONSE TO LIVE LOAD			
	b. TIMBER			55. ESTIMATED REMAINING LIFE			6
	c. ALUMINUM						
	d. STEEL						
4. CURBS, WHEELGUARDS, PARAPETS, MEDIANS				60. REGULATORY SIGN NOTICE ISSUED			NO
5. WALKWAYS (ON OR ATTACHED TO STRUCTURE)				61. PROMPT-ACTION NOTICE ISSUED			YES
6. DECK EXP JTS. OR DEVICES. NO. OF EACH	a. STEEL PL OR FINGER			62. PRESENTLY POSTED			NO
	b. MISC PREFAB			63. TOT. FIELD INSP TIME (INCLUDE WRITE UP)(MAN HR)			8
	c. COMPRESSION SEAL			64. TOTAL SNOOPER INSP. TIME (HRS)			0
	d. STANDARD JOINTS			65. TOTAL TRAFFIC CONTROL TIME (MAN HRS)			8
e. OPEN JOINTS							
7. DECK DEBRIS (INCLUDES EXCESS SAND/GRAVEL)							
				70. SI&A GENERAL CONDITION RATINGS			
SUPER STR. (FM. 1 (90)B TRUSS) ITEM 59				a. DECK		ITEM 58	
10. LONGITUDINAL BEAMS OR GIRDERS				b. SUPERSTRUCTURE		ITEM 59	
11. LONGITUDINAL JOIST OR STRINGERS				c. SUBSTRUCTURE		ITEM 60	
12. INT. DIAP'S, X-FRAMES, BRACING & CONN'S				d. CHANNEL & CHANNEL PROT.		ITEM 61	
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			
16. DRAINAGE SYSTEM (ON STRUCTURE)				b. APPR. RDWY. ALIGNMENT			
17. MOVABLE SPAN MACHINERY							
				72. FIELD SCOUR EVALUATION			
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			BUCKET TRUCK			YES
	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:			
41. DRIFT				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 MD OSBORNE			
Assisted By A KING			
Item No.	Grade		
10	F	IMPACT DAMAGE INSPECTION WAS REQUESTED BY DIVISION BRIDGE MAINTENANCE FOR SPAN 2 OVER SR 1882 BEAM 1: INITIAL POINT OF IMPACT ON BEAM 1 IN SBL WAS 26'-3" FROM FACE OF BENT 1, INDENTION IN FLANGE 5" X 1/8" AND IN COVER PLATE 5" X 1/4" THE FLANGE IS BENT UPWARD 1/2" AT POINT OF IMPACT. BEAM 1 IS OUT OF PLUM 1/2" TO THE SOUTH AT 26'-3" FROM FACE OF BENT 1. INDENTION IN FLANGE COVER PLATE 3" X 1/4" AT 24'-2" FROM FACE OF BENT 1. GOUGES IN FLANGE COVER PLATE 4" X 2" X 1/16" AT 23'-0" FROM FACE OF BENT 1. SCRAPES ON BOTTOM OF BEAM 1 FROM 12'-4" FROM FACE OF BENT 1 TO 8'-10" FROM FACE OF BENT 2. POINT OF IMPACT ON BEAM 1 IN NBL WAS 18'-9" FROM FACE OF BENT 2, INDENTION IN FLANGE 2" X 1/2" AND IN COVER PLATE 2" X 1/16". INDENTIONS IN FLANGE COVER PLATE 10" X 1/8" AT 20'-7", A 2" X 1/4" AT 19'-8", A 2 1/2" X 1/16" AT 17'-7", ALL FROM FACE OF BENT 2. INDENTIONS IN FLANGE 10" X 1/8" AT 20'-7", A 2 1/2" X 1/16" AT 17'-7" ALL FROM FACE OF BENT 2. A 12" X 3/4" X 1/16" GOUGE IN FLANGE COVER PLATE AT 20'-7" FROM FACE OF BENT 2. BEAM IS OUT OF PLUM 5/8" TO THE NORTH AT 21'-4" FROM FACE OF BENT 2. A 3/8" BOW IN WEB OF BEAM 1 AT 21'-4" (SEE PHOTOS) BEAM 2 : BEAM 2 HAS SCRAPES ON THE BOTTOM ABOVE THE SOUTH AND NORTH BOUND LANES. (SEE PHOTO)	
12	P	CONNECTION PLATE OF INTERMEDIATE DIAPHRAGMS: DIAPHRAGM AT 21'-4" FROM BENT 2 IS MISSING ONE OF TWELVE DIAPHRAGM BOLTS, BOTTOM OF DIAPHRAGM HAS PULLED AWAY FROM WEB 1/16" AT 21'-4" FROM FACE OF BENT 2. (SEE PHOTOS)	
15	F	BEARINGS AND ANCHOR BOLTS IN SPAN 2 DID NOT SHOW ANY INDICATION OF DAMAGE DUE TO THE IMPACT.	
61	YES	DIAPHRAGM	
73f	YES	UT MACHINE	



BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 100353

County BUNCOMBE

Date: 04/04/2013

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	1	DIAPHRAGM ONE OF TWELVE DIAPHRAGM BOLTS IS MISSING ON BEAM 1 @ 21'-4" FROM THE FACE OF BENT 2. SPAN 2 BOTTOM OF DIAPHRAGM PLATE HAS PULLED AWAY FROM THE WEB (1/16" +/-) @ 21'-4" FROM THE FACE OF BENT 2. BEAM 1, SPAN 2	
 3314	Maintain Steel Superstructure Components	LF	58	BEAM 1 BEAM 1 IS OUT OF PLUMB (5/8" +/-) TO THE NORTH @ 21'-4" FROM THE FACE OF BENT 2. BEAM 1, SPAN 2 BOW IN BEAM 1 (3/8") @ 21'-4" FROM THE FACE OF BENT 2. BEAM 1, SPAN 2	
3314	Maintain Steel Superstructure Components	LF	61	BEAM 1 IS OUT OF PLUMB (1/2") TO THE SOUTH @ 26'-3" FROM THE FACE OF BENT 1. BEAM 1, SPAN 2	
3314	Maintain Steel Superstructure Components	LF	61	BEAM 1 IS OUT OF PLUMB (5/8" +/-) TO THE NORTH @ 21'-4" FROM THE FACE OF BENT 2. BEAM 1, SPAN 2	
3314	Maintain Steel Superstructure Components	LF	1	ONE OF TWELVE DIAPHRAGM BOLTS IS MISSING ON BEAM 1 @ 21'-4" FROM THE FACE OF BENT 2. SPAN 2	
3314	Maintain Steel Superstructure Components	LF	4	BOTTOM OF DIAPHRAGM PLATE HAS PULLED AWAY FROM THE WEB (1/16" +/-) @ 21'-4" FROM THE FACE OF BENT 2. BEAM 1, SPAN 2	

Key



Priority Maintenance Item



Critical Finding Item



Priority Maintenance Level Not Determined

BRIDGE INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 100353

County BUNCOMBE

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

MMS Code	MMS Description	Quantity
3314	Maintain Steel Superstructure Components	1 LF
Location:		
Beams and Girders	Bent/Span No. 2	DIAPHRAGM
Priority Level	Status	
Priority Maintenance	Division Bridge Maintenance Notification Received	
Submitted Date:	Submitted By:	Assisted By:
04/04/2013	MD OSBORNE	A KING
Details		
DIAPHRAGM ONE OF TWELVE DIAPHRAGM BOLTS IS MISSING ON BEAM 1 @ 21'-4" FROM THE FACE OF BENT 2. SPAN 2 BOTTOM OF DIAPHRAGM PLATE HAS PULLED AWAY FROM THE WEB (1/16" +/-) @ 21'-4" FROM THE FACE OF BENT 2. BEAM 1, SPAN 2		

MMS Code	MMS Description	Quantity
3314	Maintain Steel Superstructure Components	58 LF
Location:		
Beams and Girders	Bent/Span No. 2	BEAM
Priority Level	Status	
Priority Maintenance	Division Bridge Maintenance Notification Received	
Submitted Date:	Submitted By:	Assisted By:
04/04/2013	MD OSBORNE	A KING
Details		
BEAM 1 BEAM 1 IS OUT OF PLUMB (5/8" +/-) TO THE NORTH @ 21'-4" FROM THE FACE OF BENT 2. BEAM 1, SPAN 2 BOW IN BEAM 1 (3/8") @ 21'-4" FROM THE FACE OF BENT 2. BEAM 1, SPAN 2		



POINT OF IMPACT ON BEAM 1 IS 28'-3" FROM THE FACE OF BENT 1. INDENTION IN FLANGE (5" X 1/8") & COVER PLATE (5" X 1/4"). BEAM 1, SPAN 2



INDENTATION IN COVER PLATE (3" X 1/4") AND FLANGE (1" X 1/4") @ 24'-2" FROM THE FACE OF BENT 1.
BEAM 1, SPAN 2



BEAM 1 IS OUT OF PLUMB (1/2") TO THE SOUTH @ 26'-3" FROM THE FACE OF BENT 1. BEAM 1, SPAN 2



SCRAPES ON THE OUTSIDE OF BEAM 1, SPAN 2



SCRAPES ON THE BOTTOM OF BEAM 1 IN FLANGE & COVER PLATE. FROM 12'-4" OF BENT 1 TO 8'-10" OF BENT 2. BEAM 1, SPAN 2



SCRAPES ON BOTTOM OF COVER PLATE OF BEAM 2 IN SOUTH BOUND LANE. BEAM 2, SPAN 2. (SAME IN NORTH BOUND LANE)



POINT OF IMPACT ON BEAM 1 IS 18'-9" FROM THE FACE OF BENT 2. INDENTION IN FLANGE (2" X 1/2") & COVER PLATE (2" X 1/16"). BEAM 1, SPAN 2. NBL



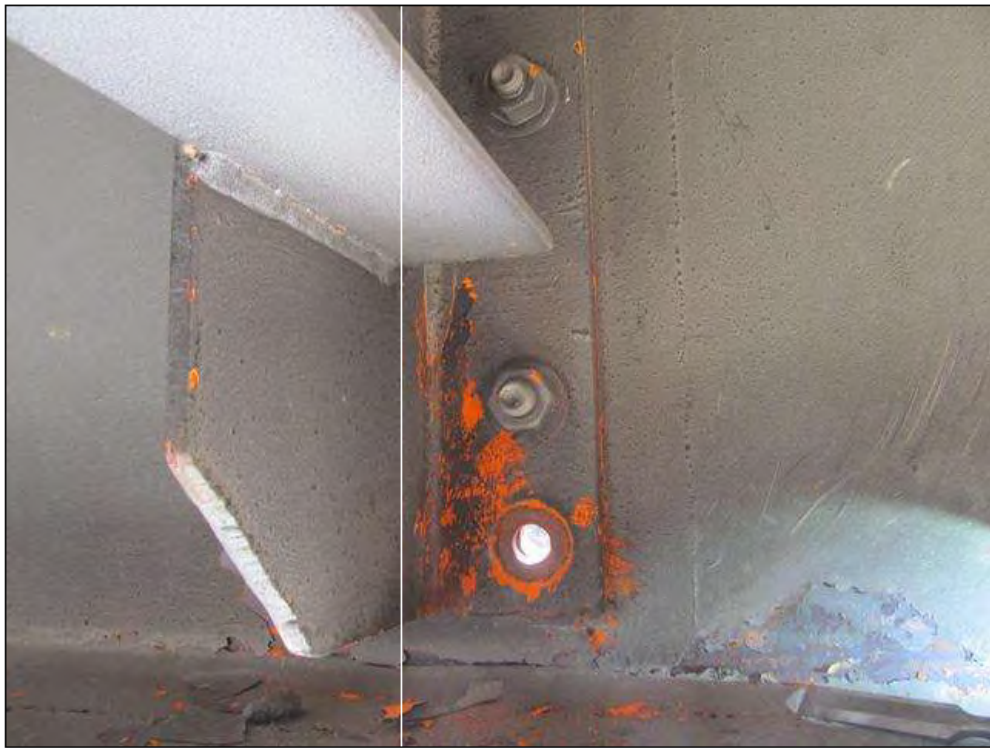
INDENTATION IN COVER PLATE (8" X 1/16") & FLANGE (10" X 1/8") AT 20'-7" FROM THE FACE OF BENT 2.
BEAM 1, SPAN 2. (NBL)



GOUGE IN COVER PLATE (12" X 3/4" X 1/16") @ 20'-7" FROM THE FACE OF BENT 2. BEAM 1, SPAN 2. (NBL)



SCRAPES ON INSIDE OF WEB ON BEAM 1, SPAN 2 ABOVE NBL



ONE OF TWELVE DIAPHRAGM BOLTS IS MISSING ON BEAM 1 @ 21'-4" FROM THE FACE OF BENT 2. SPAN 2



BEAM 1 IS OUT OF PLUMB ($5/8"$ +/-) TO THE NORTH @ $21'-4"$ FROM THE FACE OF BENT 2. BEAM 1, SPAN 2



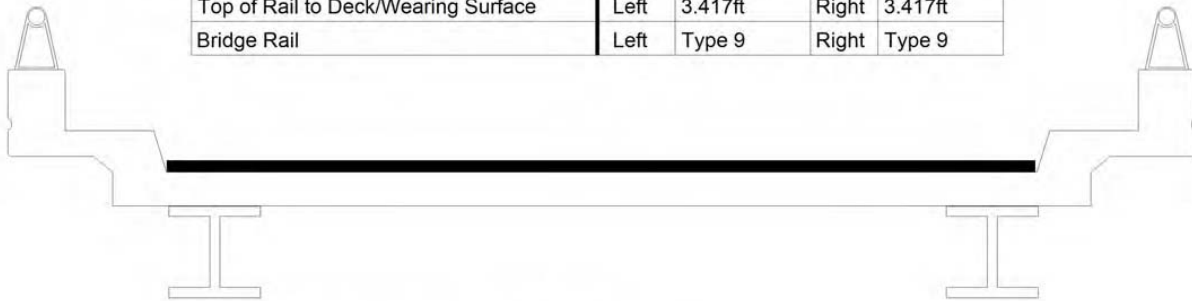
BOTTOM OF DIAPHRAGM PLATE HAS PULLED AWAY FROM THE WEB ($1/16"$ +/-) @ $21'-4"$ FROM THE FACE OF BENT 2. BEAM 1, SPAN 2



BOW IN BEAM 1 (3/8") @ 21'-4" FROM THE FACE OF BENT 2. BEAM 1, SPAN 2

Bridge Inspection Field Sketch

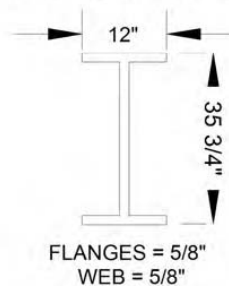
Deck Width/Out to Out	45.250ft	Between Rails				43.250ft
Clear Roadway	40.000ft	Wearing Surface				0.312ft
Median Width		Median Height				
Curb Height		Left	0.542ft	Right	0.542ft	
Sidewalk Width		Left		Right		
Clear Roadway (Rail to Median)		Left		Right		
Guardrail Width		Left		Right		
Top of Rail to Deck/Wearing Surface		Left	3.417ft	Right	3.417ft	
Bridge Rail		Left	Type 9	Right	Type 9	



Measurements for Span #	1		
Deck Thickness	0.646	Left Overhang	3.833
Top of Rail to Bottom of Beam	7.083	Right Overhang	3.833

Beam No	Beam Type	Spacing
1 thru 6	Steel I Beam	7.500ft

BEAMS (NON-TAPERED FLANGES)



VERIFIED 2-6-2013 BY DELVIN ADAMS

Title

Typical Section

Description

Data Worksheet

Bridge No: 100353

Drawn By: Roy W. Shook

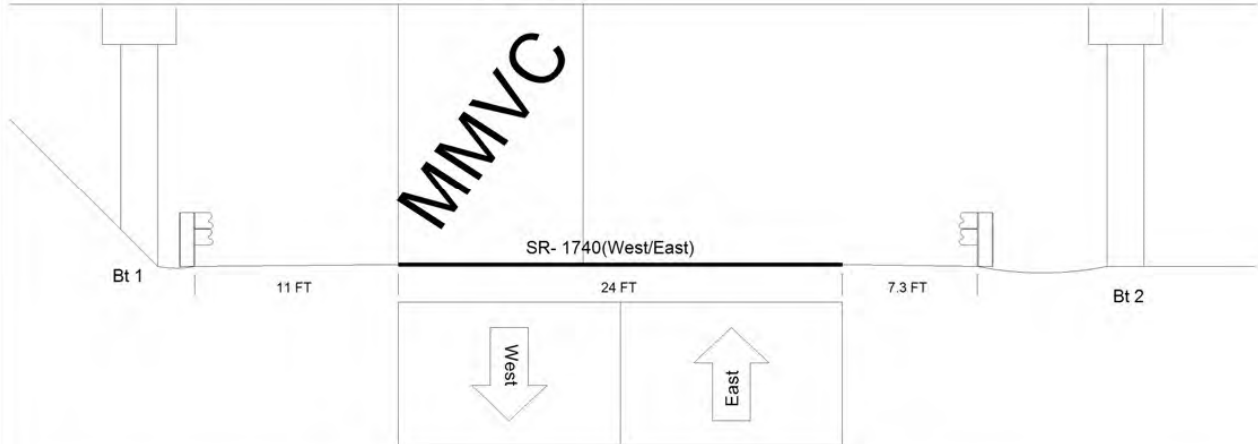
Date: 01/27/2009

File Name: S0102000997

Bridge Inspection Field Sketch

I- 26 Westbound

Span 2



Roadway 1		Direction of Traffic	East West
Distance to Left Rail	11FT	Distance to Right Rail	7.3FT
Distance to Left Toe of Slope		Distance to Left Bent	13FT
Distance to Right Toe of Slope		Distance to Right Bent	14.3FT
MMVC	14.5 Ft at Beam 1, 10 FT from Left Edge of Roadway		
MVC	14.25 Ft at Beam 1, 0 FT from Right Edge of Roadway		

VERIFIED 2-6-2013 BY DELVIN ADAMS

Title

Underclearance

Description

Data Worksheet

Bridge No: 100353

Drawn By: Roy W. Shook

Date: 01/27/2009

File Name: S0102000998

Bridge Inspection Field Sketch



Roadway	24ft Wide	2 Paved Lanes	Looking West
Left Shoulder	7.5ft Wide	4.0ft Paved	3.5ft Unpaved
Right Shoulder	14ft Wide	10.0ft Paved	4.0ft Unpaved
Left Guardrail	7.5ft from road		
Right Guardrail			

VERIFIED 2-6-2013 BY DELVIN ADAMS

Title

Approach Roadway

Description

Data Worksheet

Bridge No: 100353

Drawn By: Roy W. Shook

Date: 01/27/2009

File Name: S0102000996

BENT 2

COLUMN 1 HAS A
4' 6" X 4' 6"
CONCRETE COLLAR

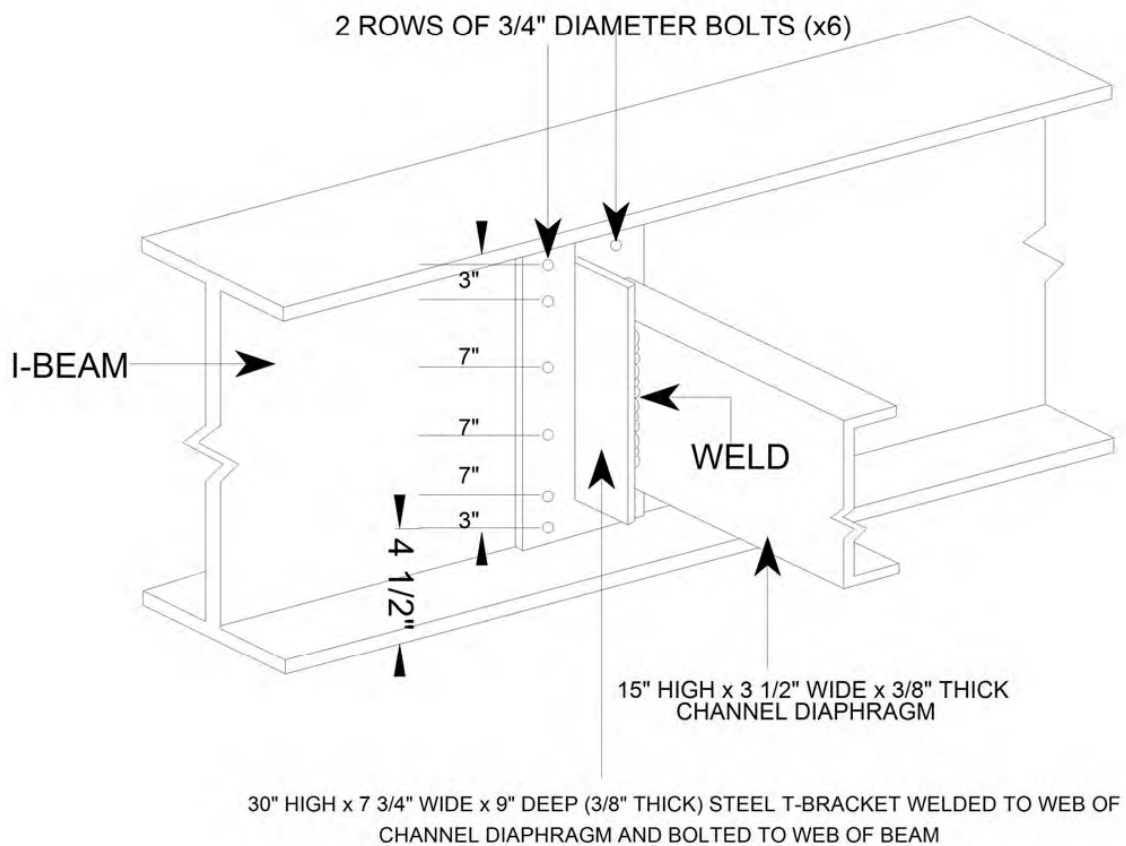
Cap Information			Material Cast-in-Place Concrete							
Length	Width	Height	Left Overhang	Right Overhang	Left Beam to End of Cap.	Right Beam to End of Cap.				
50.000 ft.	3.000 ft.	3.000 ft.	5.000 ft.	5.000 ft.	2.000 ft.	2.000 ft.				
Subcap Information			Material							
Length	Width	Height	Left Overhang	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	Concrete	20.000 ft.	3.000 ft.			Vertical	No	No	No	No
2	Concrete	20.000 ft.	3.000 ft.			Vertical	No	No	No	No
3	Concrete		3.000 ft.			Vertical	No	No	No	No
Bent/Abutment #:	1	Similar Bents: 2								

Title		Description	
INTERIOR BENTS		SUBSTRUCTURE DETAILS	
Bridge No:	100353	Drawn By:	DELVIN ADAMS
		Date:	2/7/2013
		File Name:	S0102001408

Bridge Inspection Field Sketch

DIAPHRAGM DETAILS

LOCATIONS : 1/3 POINTS OF SPANS



Title

INTERMEDIATE DIAPHRAGMS

Description

DIAPHRAGM DETAILS

Bridge No: 100353

Drawn By: DELVIN ADAMS

Date: 2/7/2013

File Name: S0102001409



LOOKING SOUTH



LOOKING NORTH

BRIDGE INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 110169 County BURKE

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

MMS Code	MMS Description	Quantity
3314	Maintain Steel Superstructure Components	12 LF
Location:		
Beams and Girders Bent/Span No. 3 BEAM 1		
Priority Level	Status	
Priority Maintenance	Division Bridge Maintenance Notification Received	
Submitted Date:	Submitted By:	Assisted By:
10/23/2015	MONTY HOBBS	RICARDO CORNEJO
Details		
<p>SPAN 3 BEAM 1 WEB AND BOTTOM FLANGE AT 20FT FROM BENT 3, IMPACT DAMAGE (12LF), OUT OF PLUMB (UP TO +/- 3IN)</p> <p>SPAN 3 BEAM 1 AT 20FT FROM BENT 3, TWO ROWS OF FIVE BOLTS SHEARED AND MISSING FROM IMPACT DAMAGE</p> <p>SPAN 3 BEAM 1 AT 20FT FROM BENT 3, BROKEN WELD BETWEEN COVER PLATE AND BOTTOM FLANGE (UP TO 4IN)</p>		



SPAN 3 BEAM 1 WEB AND BOTTOM FLANGE AT 20FT FROM BENT 3, IMPACT DAMAGE (12LF), OUT OF PLUMB
(UP TO +/- 3IN)



SPAN 3 BEAM 1 WEB AND BOTTOM FLANGE AT 20FT FROM BENT 3, IMPACT DAMAGE (12LF), OUT OF PLUMB
(UP TO +/- 3IN)



SPAN 3 BEAM 1 WEB AND BOTTOM FLANGE AT 20FT FROM BENT 3, IMPACT DAMAGE (12LF), OUT OF PLUMB
(UP TO +/- 3IN)



SPAN 3 BEAM 1 AT 20FT FROM BENT 3, TWO ROWS OF FIVE BOLTS SHEARED AND MISSING FROM IMPACT DAMAGE



SPAN 3 BEAM 1 WEB AND BOTTOM FLANGE AT 20FT FROM BENT 3, IMPACT DAMAGE (12LF), OUT OF PLUMB
(UP TO +/- 3IN)



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SPAN 3 BEAM 1 WEB AND BOTTOM FLANGE AT 20FT FROM BENT 3, IMPACT DAMAGE (12LF), OUT OF PLUMB
(UP TO +/- 3IN)



SPAN 3 BEAM 1 AT 20FT FROM BENT 3, BROKEN WELD BETWEEN COVER PLATE AND BOTTOM FLANGE (UP TO 4IN)

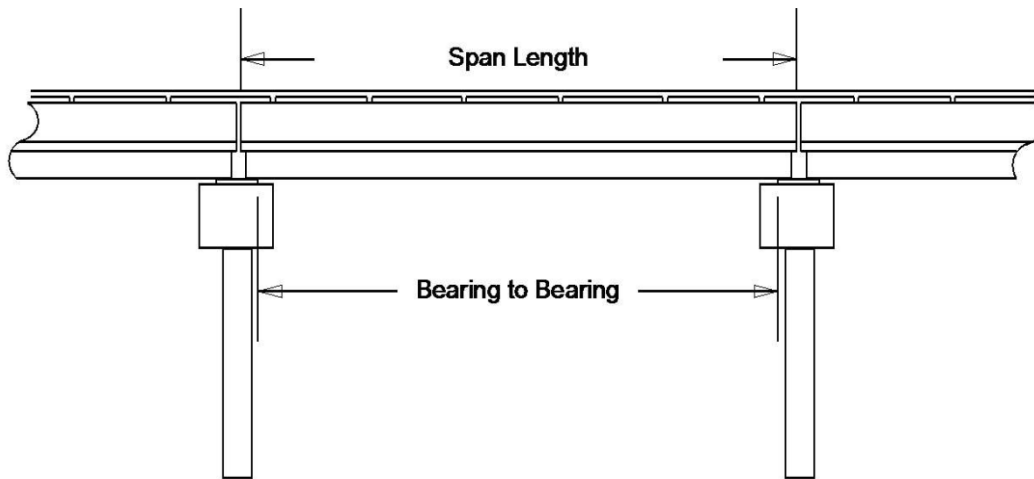


SPAN 3 BEAM 1 AT 20FT FROM BENT 3, BROKEN WELD BETWEEN COVER PLATE AND BOTTOM FLANGE (UP TO 4IN)

Structure Data Worksheet

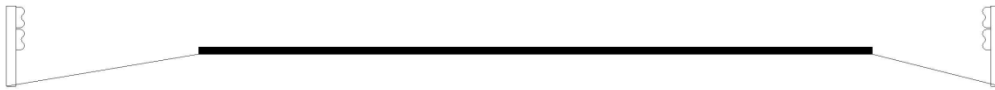
Spans

County: BURKE Structure No: 110169 Date: Inspected By: MAH



Span No	Span Length	Bearing to Bearing	Comments
1	42.0'	40.25'	NBIS LENGTH = 184.0'
2	52.5'	51.5'	
3	52.5'	51.5'	
4	42.0'	40.25'	

Bridge Inspection Field Sketch



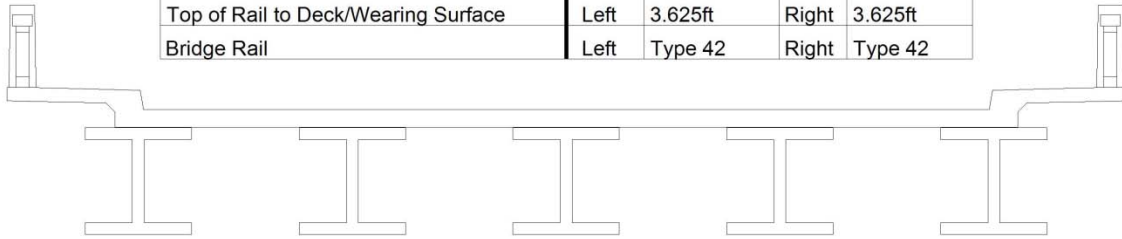
Roadway	21ft Wide	2 Paved Lanes	Looking North
Left Shoulder	6ft Wide	0ft Paved	6ft Unpaved
Right Shoulder	4ft Wide	0ft Paved	4ft Unpaved
Left Guardrail	6ft from road		
Right Guardrail	4ft from road		

NOTE: MEASUREMENTS TAKEN AT 35FT FROM END BENT 1

Title APPROACH ROADWAY		Description DATA WORKSHEET	
Bridge No: 110169	Drawn By: R. CORNEJO	Date: 10/23/2015	File Name: S0146007688

Bridge Inspection Field Sketch

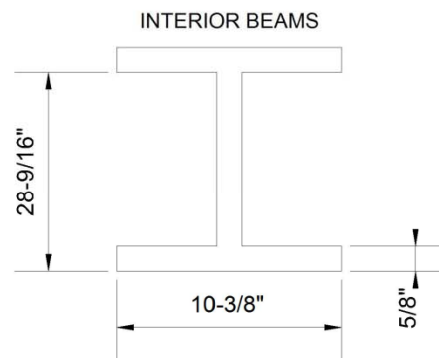
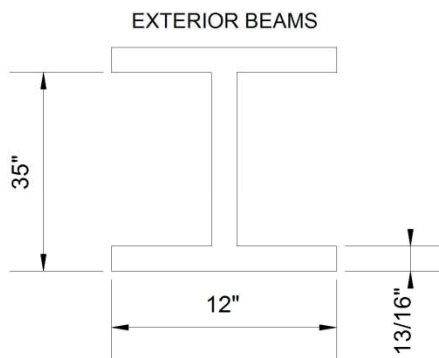
Deck Width/Out to Out	34ft	Between Rails	32.417ft
Clear Roadway	26ft	Wearing Surface	
Median Width		Median Height	
Curb Height		Left	0.833ft
		Right	0.833ft
Sidewalk Width		Left	3.25ft
		Right	3.25ft
Clear Roadway (Rail to Median)		Left	
		Right	
Guardrail Width		Left	0.75ft
		Right	0.75ft
Top of Rail to Deck/Wearing Surface		Left	3.625ft
		Right	3.625ft
Bridge Rail		Left	Type 42
		Right	Type 42



Measurements for Span #	1	SPAN 4 SIMILAR	
Deck Thickness	0.542	Left Overhang	4
Top of Rail to Bottom of Beam	7	Right Overhang	4

Beam Number	Beam Type	Spacing	Comments
1	Steel I Beam	6.500ft	
2	Steel I Beam	6.500ft	
3	Steel I Beam	6.500ft	
4	Steel I Beam	6.500ft	
5	Steel I Beam	ft	

BEAMS (NON-TAPERED FLANGES)

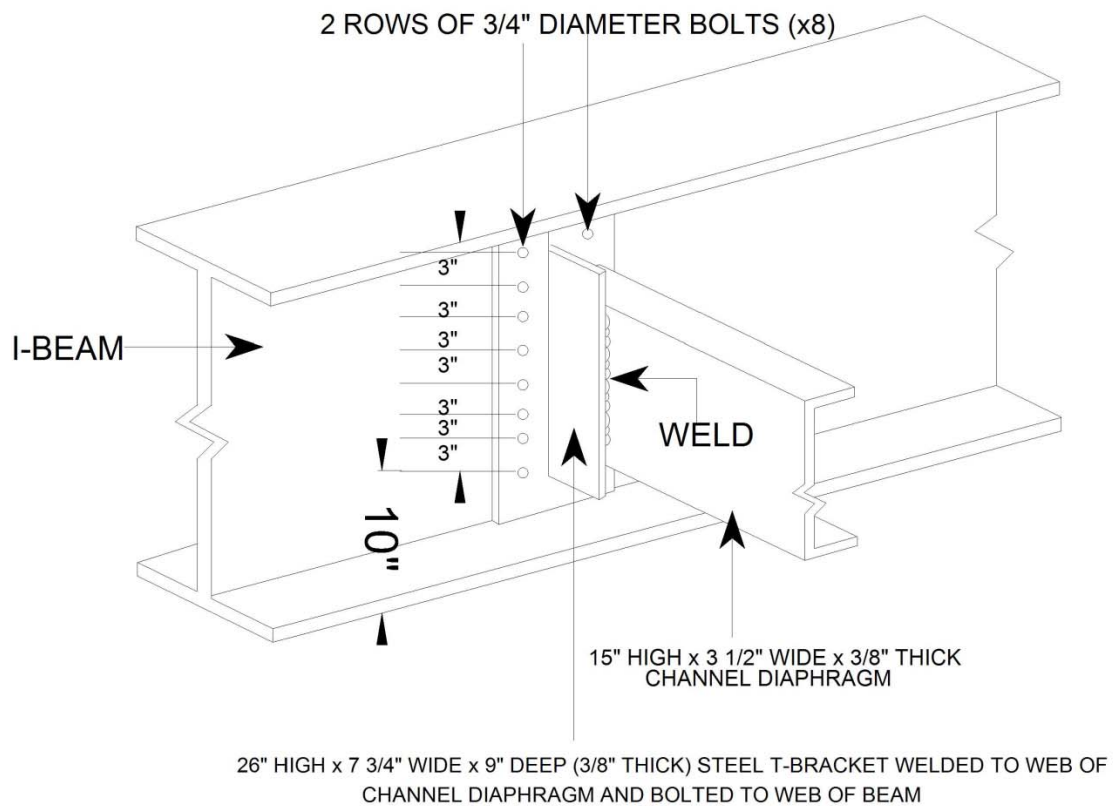


Title TYPICAL SECTION SKETCH, SPAN 1		Description DATA WORKSHEET	
Bridge No: 110169	Drawn By: R. CORNEJO	Date: 10/23/2015	File Name: S0146007689

Bridge Inspection Field Sketch

DIAPHRAGM DETAILS

LOCATIONS : MIDPOINT OF SPANS #1 & 4, 1/3 POINTS OF SPANS # 2 & 3

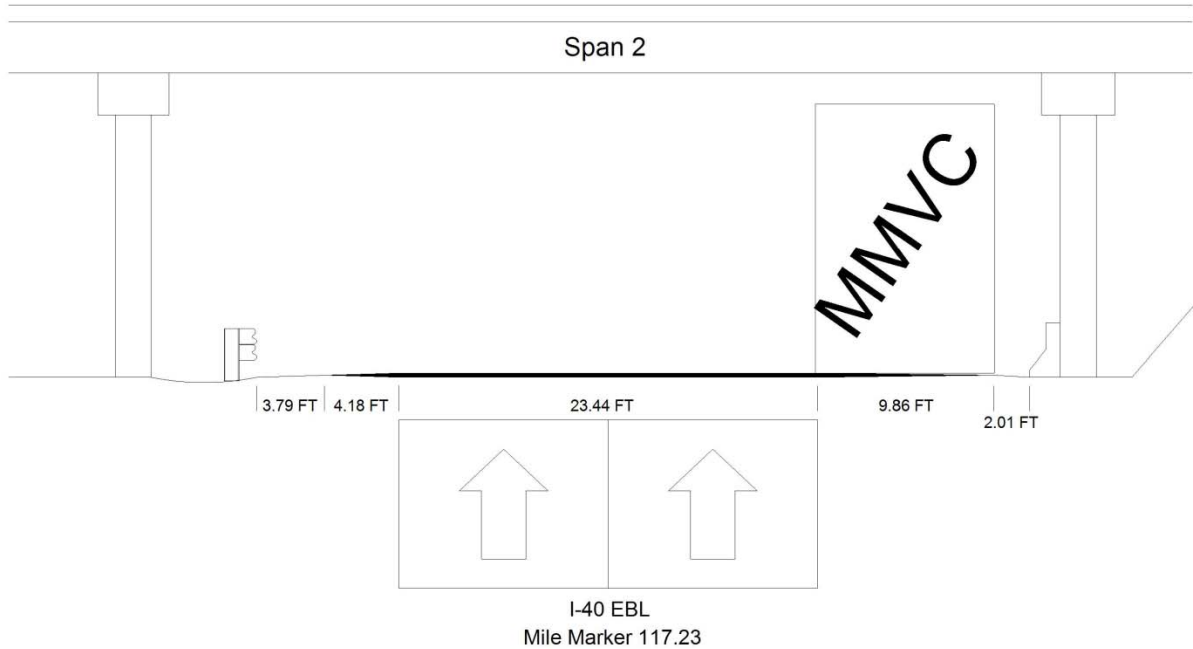


NOTE: DEEPER BEAMS HAVE TWO ROWS OF 10 BOLTS

VERIFIED BY: M. HOBBS 10/23/2015

Title		Description	
INTERMEDIATE DIAPHRAGMS		DATA WORKSHEET	
Bridge No: 110169	Drawn By: DELVIN ADAMS	Date: 10/24/2011	File Name: S0146031588

Bridge Inspection Field Sketch

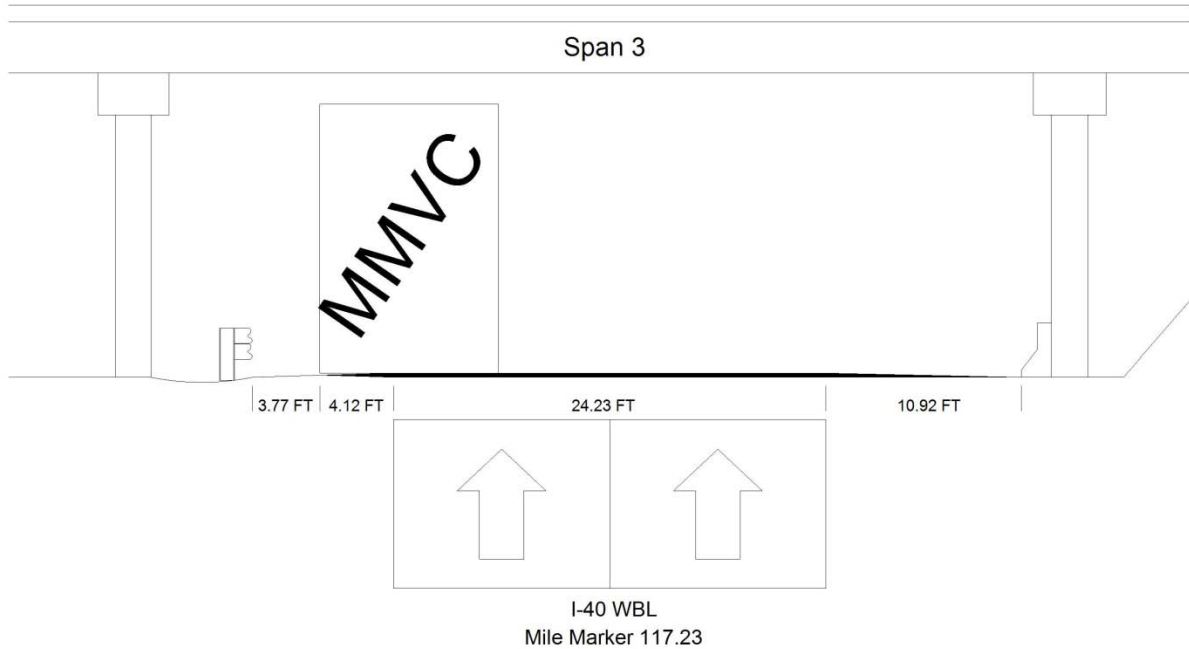


Roadway 1		Direction of Traffic	East
Distance to Left Rail	7.97FT	Distance to Right Rail	11.87FT
Distance to Left Toe of Slope		Distance to Left Bent	13.86FT
Distance to Right Toe of Slope		Distance to Right Bent	12.98FT
MMVC	15.45 Ft at Beam 1, 10 FT from EDGE OF RIGHT PAVED SHOULDER		
MVC	15.22 Ft at Beam 1, 6 FT from LEFT EDGE OF THRU LANES		

MEASUREMENTS RECORDED BY LIDAR ON 5.30.13

Title		Description	
UNDER CLEARANCE, EBL		SPAN 2, I-40 EBL	
Bridge No: 110169	Drawn By: DCR	Date: 9/27/07	File Name: S0146007690

Bridge Inspection Field Sketch



Roadway 1		Direction of Traffic	West
Distance to Left Rail	7.89FT	Distance to Right Rail	10.92FT
Distance to Left Toe of Slope		Distance to Left Bent	13.55FT
Distance to Right Toe of Slope		Distance to Right Bent	12.5FT
MMVC	14.77 Ft at Beam 1, 10 FT from EDGE OF LEFT PAVED SHOULDER		
MVC	14.66 Ft at Beam 1, 11.5 FT from RIGHT EDGE OF THRU LANES		

MEASUREMENTS RECORDED BY LIDAR ON 5.30.13

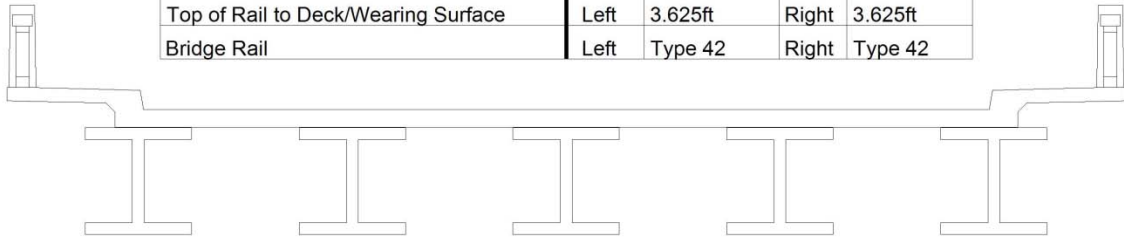
Title		Description	
UNDER CLEARANCE, WBL		SPAN 3, I-40 WBL	
Bridge No: 110169	Drawn By: DCR	Date: 9/27/07	File Name: S0146007691

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.			
29.000 ft.	2.500 ft.	2.500 ft.	4.000 ft.	4.000 ft.	1.333 ft.		1.333 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	Concrete	10.5 ft.	2.5 ft.	2.5 ft.		Vertical	No	No	No	No
2	Concrete	10.5 ft.	2.5 ft.	2.5 ft.		Vertical	No	No	No	No
3	Concrete		2.5 ft.	2.5 ft.		Vertical	No	No	No	No
Bent/Abutment #: 1 Similar Bents: 2,3										

Title BENT 1 SKETCH		Description DATA WORKSHEET	
Bridge No: 110169	Drawn By: R. CORNEJO	Date: 10/23/2015	File Name: S0146031927

Bridge Inspection Field Sketch

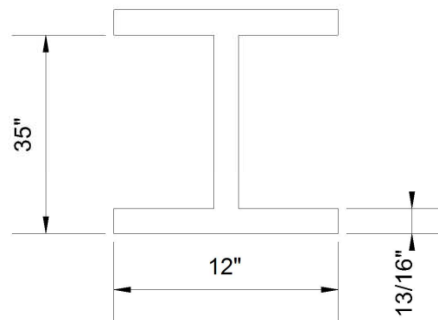
Deck Width/Out to Out	34ft	Between Rails	32.417ft
Clear Roadway	26ft	Wearing Surface	
Median Width		Median Height	
Curb Height		Left	0.833ft
		Right	0.833ft
Sidewalk Width		Left	3.25ft
		Right	3.25ft
Clear Roadway (Rail to Median)		Left	
		Right	
Guardrail Width		Left	0.75ft
		Right	0.75ft
Top of Rail to Deck/Wearing Surface		Left	3.625ft
		Right	3.625ft
Bridge Rail		Left	Type 42
		Right	Type 42



Measurements for Span #	2	SPAN 3 SIMILAR	
Deck Thickness	0.542	Left Overhang	4
Top of Rail to Bottom of Beam	7	Right Overhang	4

Beam Number	Beam Type	Spacing	Comments
1	Steel I Beam	6.500ft	
2	Steel I Beam	6.500ft	
3	Steel I Beam	6.500ft	
4	Steel I Beam	6.500ft	
5	Steel I Beam	ft	

BEAMS (NON-TAPERED FLANGES)



Title		Description	
TYPICAL SECTION SKETCH, SPAN 2		DATA WORKSHEET	
Bridge No: 110169	Drawn By: R. CORNEJO	Date: 10/23/2015	File Name: S0566000111



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION

IMPACT DAMAGE INSPECTION ONLY, NOTIFIED BY
DIVISION BRIDGE MANAGEMENT, GRADES ARE FOR
IMPACT DAMAGE IN SPAN 2 ONLY

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Damage Inspection Report

COUNTY RUTHERFORD BRIDGE NUMBER 800117 INSPECTION CYCLE 0 YRS
ROUTE US64 ACROSS US221 M.P. 0

LOCATION 0.09 MI.W.JCT.SR1536

SUPERSTRUCTURE REINFORCED CONCRETE FLOOR ON I-BEAMS

SUBSTRUCTURE E.BTS:RC CAPS/TIM.PILES;INT.BTS:RCP&B/PILE FOOTINGS

SPANS 1 @ 39'; 1 @ 47'-6; 1 @ 39'

LONGITUDE 81° 57' 23.95"

LATITUDE 35° 22' 57.10"

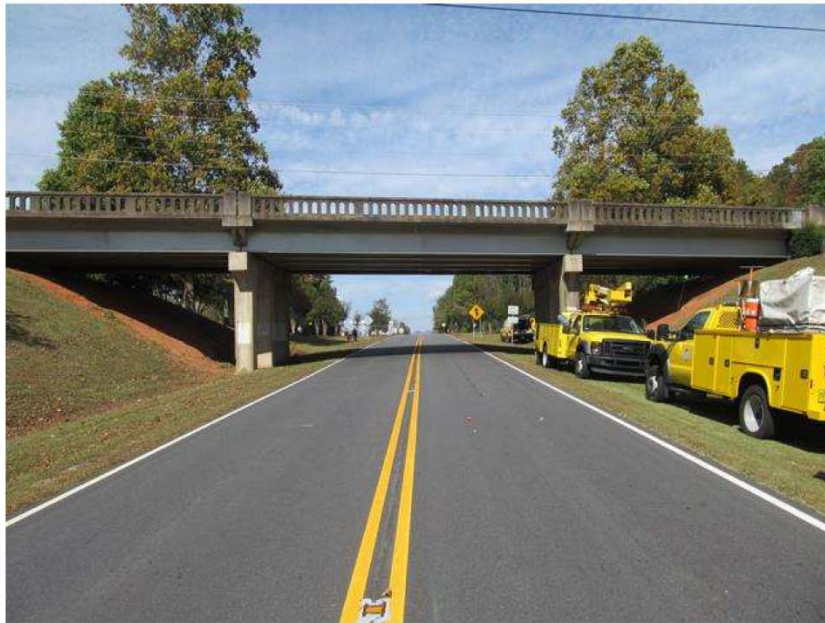
INSPECTION DATE 10/21/2014

PRESENT CONDITION FAIR

PRESENT POSTING N **NOT POSTED**

PROPOSED POSTING

OTHER SIGNS PRESENT



LOOKING 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></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: 12/09/2014

IDENTIFICATION					
(1) STATE NAME -NORTH CAROLINA	BRIDGE	800117	SUFFICIENCY RATING =	62.78	
(8) STRUCTURE NUMBER(FEDERAL)		000000001610117	STATUS =	Functionally Obsolete	
(5) INVENTORY ROUTE (ON/UNDER) - ON		21000640			
(2) STATE HIGHWAY DEPARTMENT DISTRICT		1			
(3) COUNTY CODE	161	(4) PLACE CODE	0		
(6) FEATURE INTERSECTED -	US221				
(7) FACILITY CARRIED	US64				
(9) LOCATION	0.09 MI.W.JCT.SR1536				
(11)MILEPOINT		0			
(16)LAT	35° 22' 57.10"	(17)LONG	81° 57' 23.95"		
(98)BORDER BRIDGE STATE CODE		PCT SHARE			
(99)BORDER BRIDGE STRUCTURE NO					
STRUCTURE TYPE AND MATERIAL				CLASSIFICATION	
(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 -	Minor Arterial	06
TYPE -	CODE	000	(100)STRAHNET HIGHWAY -	Not a STRAHNET Route	0
(45) NUMBER OF SPANS IN MAIN UNIT		3	(101)PARALLEL STRUCTURE -	No Parallel Structure	N
(46) NUMBER OF APPROACH SPANS			(102)DIRECTION OF TRAFFIC -	2-way Traffic	2
(107)DECK STRUCTURE TYPE -	CODE		(103)TEMPORARY STRUCTURE -		
(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
				CONDITION	
			(58) DECK		5
			(59) SUPERSTRUCTURE		6
			(60) SUBSTRUCTURE		5
			(61) CHANNEL & CHANNEL PROTECTION		N
			(62) CULVERTS		N
				LOAD RATING AND POSTING	
			(31) DESIGN LOAD	HS 20 + MOD	6
			(63) OPERATING RATING METHOD -	Load Factor	1
			(64) OPERATING RATING -	HS-30	54
			(65) INVENTORY RATING METHOD -	Load Factor	1
			(66) INVENTORY RATING -	HS-18	32
			(70) BRIDGE POSTING -	No Posting Required	5
			(41) STRUCTURE OPEN, POSTED ,OR CLOSED		A
			DESCRIPTION -	Open, No Restriction	
				APPRAISAL	
			(67) STRUCTURAL EVALUATION		5
			(68) DECK GEOMETRY		2
			(69) UNDERCLEARANCES,VERTI & HORIZ		3
			(71) WATERWAY ADEQUACY		N
			(72) APPROACH ROADWAY ALIGNMENT		8
			(36) TRAFFIC SAFETY FEATURES		0111
			(113)SCOUR CRITICAL BRIDGES		N
				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	11600	(115) YEAR FUTURE ADT
					2025
				INSPECTIONS	
			(90) INSPECTION DATE		07/29/2013
			(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		
NAVIGATION DATA					
(38) NAVIGATION CONTROL -	Not Applicable	CODE	N		
(111)PIER PROTECTION -		CODE			
(39) NAVIGATION VERTICAL CLEARANCE			0		
(116)VERT - LIFT BRIDGE NAV MIN VERT CLEAR		FT			
(40) NAVIGATION HORIZONTAL CLEARANCE		0 FT			

Structure No: 800117

County: RUTHERFORD

Run Date:

Span Number	Feature Intersected	Inventory Route	Minimum Maximum Vertical Clearance	Milepoint	Base Highway Network	LRS Inventory Route	Toll	Functional Classification	Nuner of Lanes	Average Daily Traffic	Year of Average Daily Traffic	Total Horizontal Clearance	See Note 1							
													Reference Feature	Minimum Vertical Underclearance	Right Lateral Underclearance	Left Lateral Underclearance	Underclearance Appraisal Grade	STRAHNET Highway Designator	Direction of Traffic	Highway System of Route
2	6	5	10	11	12	13	20	26	28	29	30	47	54A	54	55	56	69	100	102	104
2	US 221	21002210	13.9	01	20221		2	2	6100	2013	44.33	H	13.7	10		9	0	2	1	

Note 1: Items 54, 55, and 56 are not reported FHWA under route data points but are collected for each under route to determine the minimum value for Underclearance Appraisal Item 69. The under route that generates the lowest Underclearance Appraisal value will be reported on the Facility Carried record.

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Run Date: 12/09/2014

COUNTY : RUTHERFORD DIVISION : 13 DISTRICT : 1 STRUCTURE NUMBER : 800117 LENGTH : 126 FEET

ROUTE CARRIED : US64 FEATURE INTERSECTED : US221

LOCATED : 0.09 MI.W.JCT.SR1536 BRIDGE NAME : CITY :

FUNC. CLASS : 06 SYST.ON : FA SYST.UNDER : NFA ADT & YR : 5800 2013 RAIL TYPE : LT 311 RT 311

BUILT : 1956 BY : SHC PROJ : 8812 FED.AID PROJ : F-231(5) DESIGN LOAD : HS 20 + MOD

REHAB : BY : PROJ : ALIGNMENT : TAN SKEW : 97 LANES : ON 2 UNDER 2

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

SUPERSTRUCTURE : REINFORCED CONCRETE FLOOR ON I-BEAMS

SUBSTRUCTURE : E.BTS:RC CAPS/TIM.PILES;INT.BTS:RCP&B/PILE FOOTINGS

SPANS : 1 @ 39'; 1 @ 47'-6; 1 @ 39'

BEAMS OR GIRDERS : SPNS.1&3:3LNS.30 &2LNS.36 I-BMS;SPN2:5LNS.36 I-BMS @ 7' CTS

FLOOR : 6.5 RC/5.5 AWS ENCROACHMENT : 10 WATER MAIN DECK (OUT TO OUT) : 36 FT

CLEAR ROADWAY : 28 FT BETWEEN RAILS : 34.5 FT SIDEWALK OR CURB : LT 3.3 FT RT 3.3 FT

VERT.CL.OVER : 999.9 FT

INV.RTG. : HS-18 OPE.RTG. : HS-30 CONTR.MEMBER : EB(B1) Damaged POSTED : SV TTST DATE

SYSTEM : Primary U.S. Route GREEN LINE ROUTE : Y

UNDER ROUTES AND CLEARANCES

Span	Route Description	Vertical Clearances		Horizontal Clearances		
		MMVC	MVC	Total	Left	Right
2	US 221	13.90	13.70	44.33	0	10

Note: All measurements are in feet.

REMARKS :

BRIDGE INSPECTION RECORD AND SUMMARY

INSPECTION TYPE Damage Inspection Report			
BRIDGE NO. 800117		COUNTY RUTHERFORD	ROUTE US64
STRUCTURE TYPE REINFORCED CONCRETE FLOOR ON I-BEAMS		OVER US221	
ROUTE ORIENTATION W - E		SPANS 1 @ 39'; 1 @ 47'-6; 1 @ 39'	
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		45. CHANNEL & CHANNEL PROT.	
2. DECK NO. OF EA TYPE		a. WATERWAY	
SPN GRADE		b. ALIGNMENT	
RATES SI & A		c. SCOUR	
ITEM 58		d. SLOPE PROT., RIP-RAP, DIKES, ETC.	
3. RAILING		50. APPROACH ROADWAY CONDITION	
a. CONCRETE		51. APPROACH SLABS	
b. TIMBER		52. PAINT SYSTEM CODE	
c. ALUMINUM		53. UTILITIES	
d. STEEL		54. RESPONSE TO LIVE LOAD	
4. CURBS, WHEELGUARDS, PARAPETS, MEDIANS		55. ESTIMATED REMAINING LIFE	
5. WALKWAYS (ON OR ATTACHED TO STRUCTURE)		60. REGULATORY SIGN NOTICE ISSUED	
6. DECK EXP JTS. OR DEVICES. NO. OF EACH		61. PROMPT-ACTION NOTICE ISSUED	
a. STEEL PL OR FINGER		62. PRESENTLY POSTED	
b. MISC PREFAB		63. TOT. FIELD INSP TIME (INCLUDE WRITE UP)(MAN HR)	
c. COMPRESSION SEAL		64. TOTAL SNOOPER INSP. TIME (HRS)	
d. STANDARD JOINTS		65. TOTAL TRAFFIC CONTROL TIME (MAN HRS)	
e. OPEN JOINTS			
7. DECK DEBRIS (INCLUDES EXCESS SAND/GRAVEL)			
		70. SI&A GENERAL CONDITION RATINGS	
SUPER STR. (FM. 1 (90)B TRUSS) ITEM 59		a. DECK ITEM 58	
10. LONGITUDINAL BEAMS OR GIRDERS		b. SUPERSTRUCTURE ITEM 59	
11. LONGITUDINAL JOIST OR STRINGERS		c. SUBSTRUCTURE ITEM 60	
12. INT. DIAP'S, X-FRAMES, BRACING & CONN'S		d. CHANNEL & CHANNEL PROT. ITEM 61	
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	
16. DRAINAGE SYSTEM (ON STRUCTURE)		b. APPR. RDWY. ALIGNMENT	
17. MOVABLE SPAN MACHINERY			
		72. FIELD SCOUR EVALUATION	
SUB STR. ITEMS. ITEM 60 (INCLUDE SCOUR)			
35. TIM SUB STR.		USE OF INSP. ACCESSIBILITY EQUIPMENT	
a. ABUT. & INT. BENT CAPS & RISERS		SNOOPER (CODE S, 4, OR N) HRS NO	
b. PILES, POST, SILLS, & BRACING		LADDER NO	
c. BULKHEADS, WING'S, & TIE BACKS		BUCKET TRUCK YES	
36. CONC SUB STR.		BOAT NO	
a. ABUT. & INT. BENT CAPS		OTHER NO	
b. ABUT. & BENT COL'S BREASTWALLS			
c. ABUT. & INT. BENT PILES			
d. BACKWALLS, WING'S, RETAIN. WALLS			
e. ABUT. & BENT FOOTINGS & SILLS			
37. STEEL SUB STR.		SPECIAL INSPECTION REQUESTED FOR	
a. ABUT. & INT. BENT CAPS & RISERS			
b. PILES, BRACING, AND BULKHEADS			
38. FOUNDATION PILES TYPE MATERIAL		NOTE	
39. SLOPE PROT., RIP-RAP (INCLUDE DRAINAGE)			
40. FENDER SYSTEMS		80. INSPECTED BY: <i>Angela</i>	
41. DRIFT		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 TERRY MELTON			
Assisted By M.MCNEESE			
Item No.	Grade		
10	F	IMPACT DAMAGE INSPECTION WAS REQUESTED BY DIVISION BRIDGE MAINTENANCE FOR SPAN 2 OVER US 221 BEAM 1: POINT OF IMPACT ON BEAM 1 IN SPAN 2 WAS 20'-2" FROM BENT 2 BEARING WITH SCATTERED MARKS AND SCRAPES ON THE FLANGE AND WEB ALONG A 2' AREA WITH PAINT MISSING ALONG BOTTOM FLANGE AND WEB AREA. BOTTOM FLANGE BENT DOWNWARD UP TO A 1/4". BEAM 1 IS OUT OF PLUMB 1 1/2" +/- TO THE NORTH AT 20'-2" FROM BENT 2 BEARING. OLDER IMPACT AREA AT 16.417' OUT FROM BENT 2 BEARING HAS 1'W X 1/2"DEEP DIVOT IN BOTTOM FLANGE. AREA AT 13.083' OUT FROM BENT 2 BEARING HAS SCRAPE MARKS WITH 1/8" DEEP SCRAPE TO BOTTOM FLANGE, AREA IS 2' LONG WITH PAINT SCRAPED OFF ON BOTTOM FLANGE AND WEB AREA. BEAM 2: IMPACT ON BEAM 2 HAS SCRAPE MARKS ON BOTTOM FLANGE AT 13.583' AND 19.75' OUT FROM BEAM 2 BEARING.	
12	F	CRACK IN DIAPHRAGM CONNECTION FROM PREVIOUS IMPACT HAS NO CHANGE. CONNECTION PLATE OF INTERMEDIATE DIAPHRAGMS - DIAPHRAGM BRACKET ON BEAM 1 IN SPAN 2 AT 22'-0" FROM FACE OF BENT 2 HAS A 2 5/8" +/- CRACK IN THE LOWER PART.	
13	F	END DIAPHRAGMS AT BENT 2 HAVE CRACKING IN BAY1 AND EXTERIOR END DIAPHRAGM.	
15	F	BEARINGS & ANCHOR BOLTS ON BEAM 1 IN SPAN 2 DID NOT SHOW ANY INDICATION OF DAMAGE DUE TO THE IMPACT	

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 800117

County RUTHERFORD

Date: 10/21/2014

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

MMS Code	Description of Function	Unit	Quantity	Remarks	Est. Cost
5603	Partial Cleaning and Painting of Structural Steel	SF	20	IMPACT AREAS HAVE PAINT SCRAPED TO BARE METAL.	

Key



Priority Maintenance Item



Critical Finding Item



Priority Maintenance Level Not Determined



BEAM 1, BENT OUT OF PLUMB 1.5"



CRACK ON DIAPHRAGM CONNECTION BRACKET HAS NOT CHANGED FROM PREVIOUS HIT.



IMPACT AREA @ 20.167' OUT FROM BEARING AT BENT 2, AREA IS 2' LONG



BEAM 1, BOTTOM FLANGE BENT DOWNWARD, UP TO A 1/4"



ANOTHER VIEW OF IMPACT AREA



OLD IMPACT AREA @ 16.417' OUT FROM BENT 2 BEARING, DIVOT IS 1"WIDE X 1/2"DEEP IN BOTTOM FLANGE.



IMPACT ZONE 2, @ 13.083' OUT FROM BENT 2 BEARING, AREA IS 2' LONG



VIEW OF 1/8" DEEP OF SCRAPE TO BOTTOM FLANGE ON BEAM 1



END DIAPHRAGM IN BAY 1, AT BENT 2. CRACKED.



WATER LINE IN BAY 1



BEAM 2, @ 13.583' OUT FROM BENT 2 BEARING, SCRAPE MARKS.



BEAM 2, @ 19.75 FROM BENT 2 BEARING, SCRAPE MARKS



LOOKING UP AT BEAM 1 IMPACT AREA



LOOKING UP AT BEAM 2 IMPACT AREA



OVERVIEW OF IMPACT AREA

Bridge Inspection Field Sketch

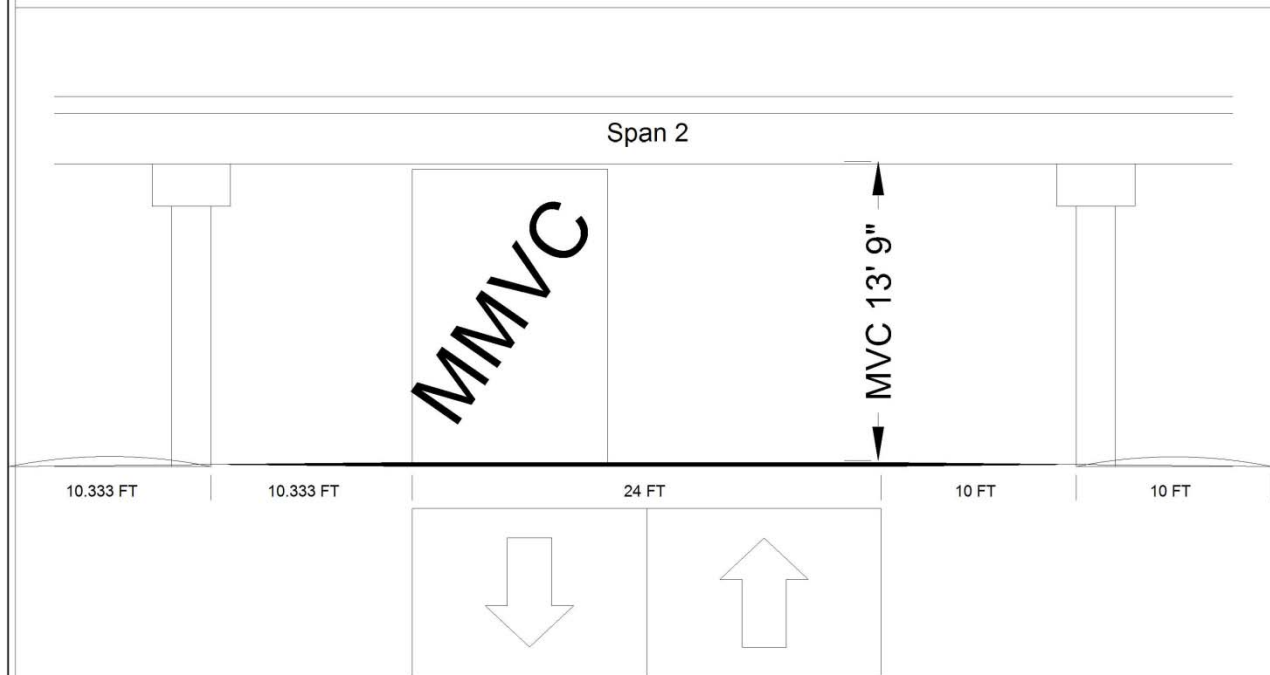


Roadway	24ft Wide	2 Paved Lanes	Looking East
Left Shoulder	6ft Wide		6ft Unpaved
Right Shoulder	6ft Wide		6ft Unpaved
Left Guardrail			
Right Guardrail			

VERIFIED BY DEREK RICKUS ON 7-29-2013

Title APPROACH		Description APPROACH RDWY.	
Bridge No: 800117	Drawn By: DCR	Date: 6/14/07	File Name: S0146007234

Bridge Inspection Field Sketch

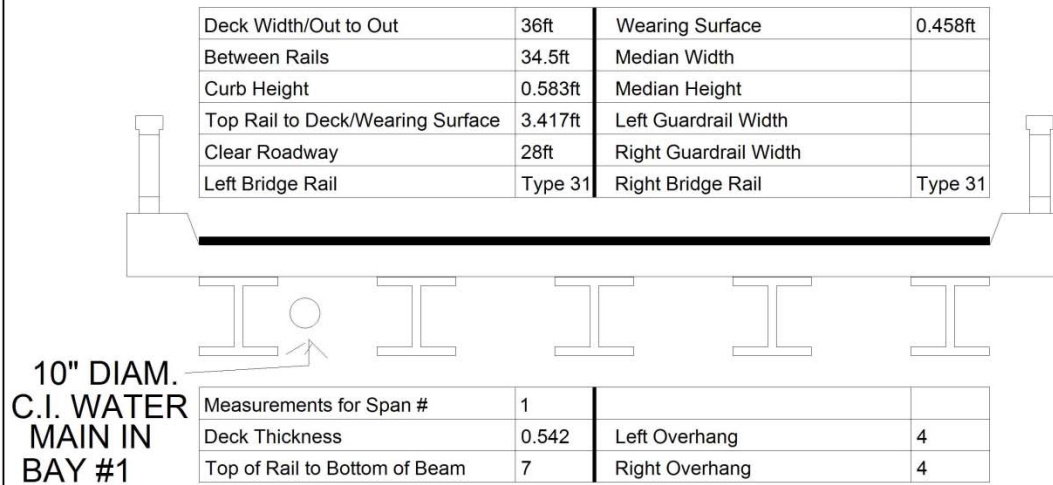


Roadway 1		Direction of Traffic	North South
Distance to Left Rail		Distance to Right Rail	
Distance to Left Toe of Slope		Distance to Left Bent	10.333FT
Distance to Right Toe of Slope		Distance to Right Bent	10FT
MMVC	13.9 Ft at Beam 1, 10 FT from LEFT EDGE OF ROADWAY (NORTHBOUND)		
MVC	13.7 Ft at Beam 1, 24 FT from LEFT EDGE OF ROADWAY (NORTHBOUND)		

VERIFIED BY DEREK RICKUS ON 7-29-2013

Title		Description	
UNDERCLEARANCES		VERT. & HORIZ. CLEARANCES	
Bridge No:	800117	Drawn By:	DELVIN ADAMS
		Date:	7/13/2011
		File Name:	S0146007235

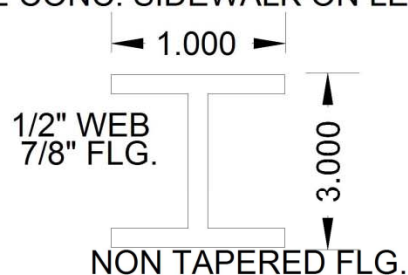
Bridge Inspection Field Sketch



Beam No	Beam Type	Spacing	Comments
1	Steel I Beam	7.00 FT.	
2	Steel I Beam	7.00 FT.	
3	Steel I Beam	7.00 FT.	
4	Steel I Beam	7.00 FT.	
5	Steel I Beam		

NOTES

BRIDGE HAS 3'-3" WIDE CONC. SIDEWALK ON LEFT & RIGHT SIDES OF DECK.



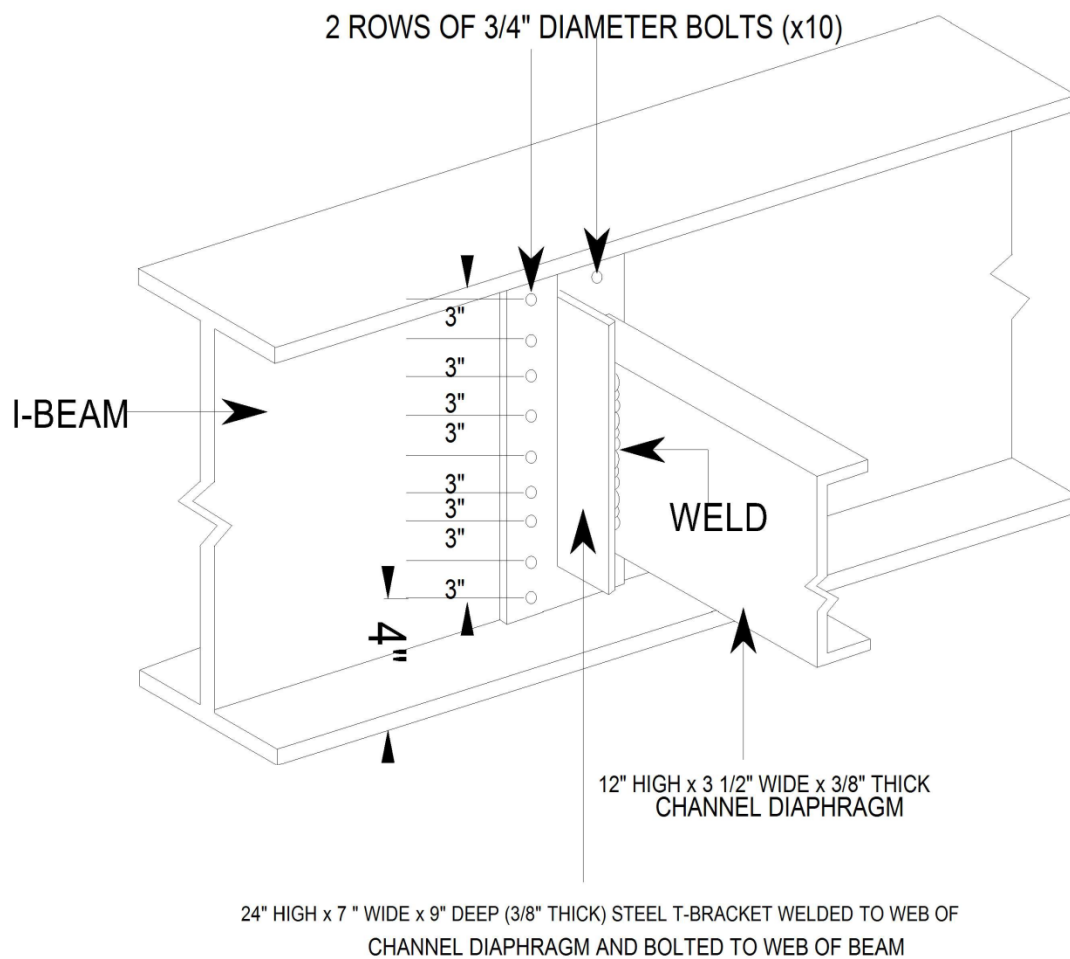
VERIFIED BY DEREK RICKUS ON 7-29-2013

Title		Description	
CROSS SECTION THRU DECK		SUPERSTR. DETAILS	
Bridge No: 800117	Drawn By: DCR	Date: 6/14/07	File Name: S0146007236

Bridge Inspection Field Sketch

DIAPHRAGM DETAILS

LOCATIONS : 1/3 POINTS OF SPANS



Title diaph		Description details	
Bridge No: 800117	Drawn By: derek rickus	Date: 7/29/2013	File Name: S0142002075

Cap Information			Material							
Length	Width	Height	Left Overhang	Right Overhang	Left Beam to End of Cap.		Right Beam to End of Cap.			
32.000 ft.	2.500 ft.	2.500 ft.	4.000 ft.	4.000 ft.	1.333 ft.		1.333 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	Concrete	12.0 ft.	2.5 ft.	2.5 ft.		Vertical	No	No	No	No
2	Concrete	12.0 ft.	2.5 ft.	2.5 ft.		Vertical	No	No	No	No
3	Concrete		2.5 ft.	2.5 ft.		Vertical	No	No	No	No
Bent/Abutment #: 1 Similar Bents: BENT 2										

Title		Description	
BENT		DETAILS	
Bridge No: 800117	Drawn By: DEREK RICKUS	Date: 7/29/2013	File Name: S0142002076



LOOKING NORTH