



NC DEPARTMENT OF TRANSPORTATION ATTENTION
 DIVISION OF HIGHWAYS
 BRIDGE MANAGEMENT UNIT

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY JOHNSTON BRIDGE NUMBER 500050 INSPECTION CYCLE 2 YRS
 ROUTE NC210 ACROSS MIDDLE CREEK M.P. 0

LOCATION 0.2MI E.JCT SR1341

SUPERSTRUCTURE REINFORCED CONCRETE FLOOR ON I-BEAMS

SUBSTRUCTURE RC ABUT1;E.BT2:RCP&B;INT.BTS:RCP&B WIDENED W/PPC PILES

SPANS 1@34';2@33.917';1@34'

LONGITUDE 78° 24' 4.6" LATITUDE 35° 30' 29.1"

PRESENT CONDITION FAIR INVENTORY RATING _____

INSPECTION DATE 11/15/2011 OPERATING RATING _____

PRESENT POSTING Not Posted **NOT POSTED** PROPOSED POSTING _____

COMPUTER UPDATE _____ ANALYSIS DATE _____

POSTING LETTER DATE _____ SUFFICIENCY RATING _____

OTHER SIGNS PRESENT 4 DELINEATORS



LOOKING EAST

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: 02/14/2012

IDENTIFICATION

(1) STATE NAME -NORTH CAROLINA BRIDGE **500050**
 (8) STRUCTURE NUMBER(FEDERAL) 000000001010050
 (5) INVENTORY ROUTE (ON/UNDER) - ON 31002100
 (2) STATE HIGHWAY DEPARTMENT DISTRICT 3
 (3) COUNTY CODE 101 (4) PLACE CODE 00000
 (6) FEATURE INTERSECTED - MIDDLE CREEK
 (7) FACILITY CARRIED NC210
 (9) LOCATION 0.2MI E.JCT SR1341
 (11)MILEPOINT 0
 (16)LAT 35° 30' 27.9" (17)LONG 78° 24' 5.4"
 (98)BORDER BRIDGE STATE CODE PCT SHARE
 (99)BORDER BRIDGE STRUCTURE NO

SUFFICIENCY RATING = 54.61
 STATUS = Functionally Obsolete

CLASSIFICATION **CODE**

(112)NBIS BRIDGE SYSTEM - YES
 (104)HIGHWAY SYSTEM Is not on NHS 0
 (26) FUNCTIONAL CLASS - Major Collector 07
 (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 -
 (110)DESIGNATED NATIONAL NETWORK - Not on the National Network 0
 (20) TOLL On Free Road 3
 (31) MAINTAIN - State Highway Agency 01
 (22) OWNER - State Highway Agency 01
 (37) HISTORICAL SIGNIFICANCE - Not Eligible 5

STRUCTURE TYPE AND MATERIAL

(43) STRUCTURE TYPE MAIN: Steel
 TYPE - Stringer Multibeam or Girder CODE 302
 (44) STRUCTURE TYPE APPR :
 TYPE - CODE 000
 (45) NUMBER OF SPANS IN MAIN UNIT 4
 (46) NUMBER OF APPROACH SPANS
 (107)DECK STRUCTURE TYPE - 1 CODE
 (108)WEARING SURFACE / PROTECTIVE SYSTEM :
 (A) TYPE OF WEARING SURFACE - CODE
 (B) TYPE OF MEMBRANE - CODE
 (C) TYPE OF DECK PROTECTION - CODE

CONDITION **CODE**

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

LOAD RATING AND POSTING **CODE**

(31) DESIGN LOAD H 15 2
 (63) OPERATING RATING METHOD - Load Factor
 (64) OPERATING RATING - HS-28 151
 (65) INVENTORY RATING METHOD - Load Factor
 (66) INVENTORY RATING - HS-17 130
 (70) BRIDGE POSTING - No Posting Required 5
 (41) STRUCTURE OPEN, POSTED ,OR CLOSED A
 DESCRIPTION - Open, No Restriction

AGE AND SERVICE

(27) YEAR BUILT 1934
 (106)YEAR RECONSTRUCTED 1961
 (42) TYPE OF SERVICE : ON - Highway
 UNDER - Waterway CODE 15
 (28) LANES: ON STRUCTURE 2 UNDER STRUCTURE
 (29) AVERAGE DAILY TRAFFIC 5200
 (30) YEAR OF ADT 2010 (109) TRUCK ADT PCT 7%
 (19) BYPASS OR DETOUR LENGTH 11 MI

APPRAISAL **CODE**

(67) STRUCTURAL EVALUATION 5
 (68) DECK GEOMETRY 2
 (69) UNDERCLEARANCES,VERTI & HORIZ N
 (71) WATERWAY ADEQUACY 8
 (72) APPROACH ROADWAY ALIGNMENT 8
 (36) TRAFFIC SAFETY FEATURES 0000
 (113)SCOUR CRITICAL BRIDGES 8

GEOMETRIC DATA

(48) LENGTH OF MAXIMUM SPAN 34 FT
 (49) STRUCTURE LENGTH 136 FT
 (50)CURB OR SIDEWALK: LEFT .8 FT RIGHT .8 FT
 (51) BRIDGE ROADWAY WIDTH CURB TO CURB 28 FT
 (52) DECK WIDTH OUT TO OUT 29.3 FT
 (32) APPROACH ROADWAY WIDTH (W/SHOULDERS) 23 FT
 (33) BRIDGE MEDIAN - No Median CODE 0
 (34) SKEW 0° (35) STRUCTURE FLARED 0
 (10) INVENTORY ROUTE MIN VERT CLEAR 999.9 FT
 (47) INVENTORY ROUTE TOTAL HORIZ CLEAR 28 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

PROPOSED IMPROVEMENTS **CODE**

(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 10400 (115) YEAR FUTURE ADT 2025

INSPECTIONS

(90) INSPECTION DATE 11/21/2007
 (92) CRITICAL FEATURE INSPECTION : (93) CFI DATE
 A) FRACTURE CRIT DETAIL - NO A)
 B) UNDERWATER INSP - YES 48Mo B) 07/01/2007
 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: 02/14/2012

COUNTY : JOHNSTON DIVISION : 4 DISTRICT : 3 STRUCTURE NUMBER : 500050 LENGTH : 136 FEET

ROUTE CARRIED : NC210 FEATURE INTERSECTED : MIDDLE CREEK

LOCATED : 0.2MI E.JCT SR1341 BRIDGE NAME : CITY :

FUNC. CLASS : 07 SYST.ON : FA SYST.UNDER : NFA ADT & YR : 5200 2010 RAIL TYPE : LT 241 RT 241

BUILT : 1934 BY : SHPWC PROJ : 2390 FED.AID PROJ : N.R.S.414-A DESIGN LOAD : H 15

REHAB : 1961 BY : DBM PROJ : ALIGNMENT : TAN. SKEW : 90 LANES : ON 2 UNDER

NAVIGATION : VC 0 FT HC 0 FT HT. CRN. TO BED : 21 FT WATER DEPTH : 3 FT

SUPERSTRUCTURE : REINFORCED CONCRETE FLOOR ON I-BEAMS

SUBSTRUCTURE : RC ABUT1;E.BT2:RCP&B;INT.BTS:RCP&B WIDENED W/PPC PILES

SPANS : 1@34';2@33.917';1@34'

BEAMS OR GIRDERS : 13 LINES W18X47 I-BEAMS @ 2'4 CENTERS

FLOOR : ENCROACHMENT : DECK (OUT TO OUT) : 29.3 FT

CLEAR ROADWAY : 28 FT BETWEEN RAILS : 29.6 FT SIDEWALK OR CURB : LT .8 FT RT .8 FT

VERT.CL.OVER : 999.9 FT

INV.RTG. : HS-17 OPE.RTG. : HS-28 CONTR.MEMBER : BEAM INT. POSTED : SV TTST DATE 03/23/2009

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

UNDER ROUTES AND CLEARANCES

REMARKS :

BRIDGE INSPECTION RECORD AND SUMMARY

INSPECTION TYPE Routine Inspection
 BRIDGE NO. 500050 COUNTY JOHNSTON ROUTE NC210 OVER MIDDLE CREEK
 STRUCTURE TYPE REINFORCED CONCRETE FLOOR ON I-BEAMS
 ROUTE ORIENTATION W - E SPANS 1@34';2@33.917';1@34'

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			F	45. CHANNEL & CHANNEL PROT.	a. WATERWAY	G
					b. ALIGNMENT	G
2. DECK NO. OF EA TYPE SPN GRADE RATES SI & A ITEM 58					c. SCOUR	G
					d. SLOPE PROT., RIP-RAP, DIKES, ETC.	
3. RAILING			F	50. APPROACH ROADWAY CONDITION		
a. CONCRETE				51. APPROACH SLABS		
b. TIMBER				52. PAINT SYSTEM		
c. ALUMINUM				CODE	A	G
d. STEEL				53. UTILITIES		
4. CURBS, WHEELGUARDS, PARAPETS, MEDIANS			F	54. RESPONSE TO LIVE LOAD		
5. WALKWAYS (ON OR ATTACHED TO STRUCTURE)				55. ESTIMATED REMAINING LIFE		
6. DECK EXP JTS. OR DEVICES. NO. OF EACH				60. REGULATORY SIGN NOTICE ISSUED		
a. STEEL PL OR FINGER				61. PROMPT-ACTION NOTICE ISSUED		
b. MISC PREFAB				62. PRESENTLY POSTED		
c. COMPRESSION SEAL				63. TOT. FIELD INSP TIME (INCLUDE WRITE UP)(MAN HR)		
d. STANDARD JOINTS			3	G	64. TOTAL SNOOPER INSP. TIME (HRS)	
e. OPEN JOINTS					65. TOTAL TRAFFIC CONTROL TIME (MAN HRS)	
7. DECK DEBRIS (INCLUDES EXCESS SAND/GRAVEL)			F	70. SI&A GENERAL CONDITION RATINGS		
SUPER STR. (FM. 1 (90)B TRUSS) ITEM 59				a. DECK	ITEM 58	7
10. LONGITUDINAL BEAMS OR GIRDERS			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			G	d. CHANNEL & CHANNEL PROT.	ITEM 61	7
13. END DIAP'S, CURTAIN WALLS, & CONN'S			F	71. SI&A FIELD APPRAISAL RATINGS		
14. FLOOR BEAMS AND CONNECTIONS				a. WATERWAY ADAQUACY		7
15. BEARING ASSEMBLIES (INCLUDING MISALIGN)			F	b. APPR. RDWY. ALIGNMENT		7
16. DRAINAGE SYSTEM (ON STRUCTURE)			F			
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
b. PILES, POST, SILLS, & BRACING						NO
c. BULKHEADS, WING'S, & TIE BACKS				LADDER		YES
36. CONC SUB STR.				BUCKET TRUCK		NO
a. ABUT. & INT. BENT CAPS			F	BOAT		NO
b. ABUT. & BENT COL'S BREASTWALLS			F	OTHER		NO
c. ABUT. & INT. BENT PILES			F			
d. BACKWALLS, WING'S, RETAIN. WALLS			G			
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)			F			
40. FENDER SYSTEMS				80. INSPECTED BY:		
41. DRIFT			G	81. REVIEWED BY: <i>W. C. M.</i>		

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 WILLIS C MAY			
Assisted By WTW			
Item No.	Grade		
3a	F	CONCRETE RAILS SCALING WITH EXPOSED COARSE AGGREGATE IN FACES.	
4	F	CURBS SCALING WITH EXPOSED COARSE AGGREGATE IN FACES.	
6d	G	STANDARD JOINTS JOINTS HAVE BEEN RESEALED.	
7	F	DECK DEBRIS RANDOM PILES OF DIRT AND VEGETATION 6 IN. HIGH OUT 24 IN. ALONG CURBLINES.	

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State of North Carolina Dept. of Transportation Division of Highways			
Team Leader WILLIS C MAY			
Assisted By WTW			
Item No.	Grade		
10	F	<p>LONGITUDINAL BEAMS ENDS OF BEAMS AND RUSTY SPOTS HAVE BEEN CLEANED AND PAINTED. BEAM NO. 3 AND 11 IN EACH SPAN HAVE TWO 3/4 INCH HOLES IN WEB SPACED AT 6 FT . 5/8 INCH STAGGERED HOLES IN TOP FLANGE SPACED AT 5.5 FT IN BEAM NO. 3 THRU NO. 11 ALL SPANS . BEAMS HAVE 1/2 IN. FLANGE AND 3/8 IN. WEBS.</p> <p>SPAN 1 SECTION LOSS WITH 3/8 IN. REMAINING OUT 2 IN. ON BEAM NO. 1 BOTTOM FLANGE AT ABUTMENT NO. 1. UP TO 1/16 IN. SECTION LOSS WITH 7/16 IN. REMAINING IN EDGES OF BOTTOM FLANGES OF EXTERIOR BEAMS OVER BENT 1 . BEAM 1 SPAN 1 AT BENT 1 HAS 1/2 IN. STEEL PLATES ADDED TO WEB AND BOTTOM FLANGE 5 FT. LONG AT BENT 1 END. BEAMS 2,3, & 4 SPAN 1 AT BENT 1 BOTTOM OF WEB HAS BEEN REPLACED AND 1/2 IN. STEEL PLATE ADDED TO BOTTOM FLANGE 5 FT. LONG.</p> <p>SPAN 2 BEAM 1 AND 3 SPAN 2 AT BENT 1 HAS BEEN REPAIRED WITH 1/2 IN. STEEL PLATES ADDED TO WEB AND BOTTOM FLANGE 5 FT. LONG. BEAM 13 SPAN 2 AT BENT 1 BOTTOM OF WEB REPLACED AND 1/2 IN. STEEL PLATE ADDED TO BOTTOM FLANGE 2 FT. LONG. BEAM 1 SPAN 2 AT BENT 2 RIGHT BOTTOM FLANGE HAS AREA OF 100 % SECTION LOSS 5 IN. FROM BEARING 1 1/2 IN. X 1 IN. SEE SKETCH</p> <p>SPAN 3 BEAM 1 SPAN 3 AT BENT 3 HAS BEEN REPAIRED WITH 1/2 IN. STEEL PLATES ADDED TO WEB AND BOTTOM FLANGE 5.5 FT. LONG. BEAM 2 SPAN 3 AT BENT 3 BOTTOM OF WEB HAS BEEN REPLACED AND 1/2 STEEL PLATE ADDED TO BOTTOM FLANGE 5 FT. LONG. BEAM 7 SPAN 3 AT BENT 3 HAS BEEN REPAIRED WITH 1/2 IN. STEEL PLATES ADDED TO WEB AND BOTTOM FLANGE 3 FT. LONG. BEAMS 9,10,11 OF SPAN 3 AT BENT 3 HAVE HAD 3 IN. OF THE WEB AND THE BOTTOM FLANGE REPLACED 4 FT. LONG. A 1/2 IN. X 10 IN. WIDE X 4 FT. LONG COVER PLATE HAS BEEN PLACED OVER JOINT. SEE PHOTO AND SKETCH BEAM 12 RIGHT BOTTOM FLANGE HAS 1/4 IN. SECTION LOSS WITH 1/4 IN. REMAINING 12 IN. LONG IN END OVER BENT 3 AND 1/8 SECTION LOSS WITH 1/4 IN. REMAINING IN WEB 1 1/2 IN. HIGH X 18 IN. LONG. BEAM 13 LEFT BOTTOM FLANGE EDGE HAS 3/8 IN. SECTION LOSS WITH 1/8 IN. REMAINING 12 IN. LONG IN END OVER BENT 3 . BEAM 12 SPAN 3 AT BENT 3 BOTTOM OF WEB HAS BEEN REPLACED AND 1/2 STEEL PLATE ADDED TO BOTTOM FLANGE 6 FT. LONG. BEAM 13 SPAN 3 AT BENT 3 HAS BEEN REPAIRED WITH 1/2 IN. STEEL PLATES ADDED TO WEB AND BOTTOM FLANGE 2 FT. LONG.</p> <p>SPAN 4 BEAMS 1,2,3,4,7, AND 9,10,11,12,13, HAVE SECTION LOSS WITH 7/16 IN. REMAINING IN BOTTOM FLANGE AND WEB WITH 5/16 IN. REMAINING UP TO 3 IN. HIGH . BEAM 1 SPAN 4 AT BENT 3 HAS BEEN REPAIRED WITH A 1/2 IN. PLATE ADDED TO BOTTOM FLANGE 11 FT. LONG. BEAM 3,8, & 10 SPAN 4 AT BENT 3 HAS BEE REPAIRED WITH A 1/2 IN. PLATE ADDED TO BOTTOM FLANGE 3 FT. LONG.</p>	

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State of North Carolina Dept. of Transportation Division of Highways			
Team Leader WILLIS C MAY			
Assisted By WTW			
Item No.	Grade		
10A	NO	BEAM 7 RIGHT BOTTOM FLANGE HAS SECTION LOSS WITH 3/8 IN. REMAINING 24 IN. LONG IN END OVER BENT 3 . BEAM 8 RIGHT BOTTOM FLANGE HAS SECTION LOSS WITH 3/8 IN. REMAINING 24 IN. LONG IN END OVER BENT 3 . BEAM NO. 13 AT END BENT 2 HAS SECTION LOSS WITH 3/16 INCH REMAINING , RANDOM SPOTS OF 1/16 IN. SECTION LOSS THE FULL LENGTH OF BOTTOM FLANGE, AND 1/8 IN. SECTION LOSS IN BOTTOM FLANGE 18 IN LONG AT 2/3 POINT. NO CURVED GIRDERS.	
13	F	END DIAPHRAGMS BENT NO. 1 BAY 10 DIAPHRAGM CRACKED IN SPAN 1 AT BENT 1. DIAPHRAGM SPALLED WITH REBAR EXPOSED IN BAY 3,7,8 AND 9 IN SPAN NO. 1 AT BENT 1. BENT 3 DIAPHRAGM AT BENT NO. 3 SPALLED IN BAY 6 AND 7 IN SPAN NO. 3 .	
15	F	BEARING ASSEMBLIES BEARING ASSEMBLIES HAVE BEEN CLEANED AND PAINTED. BEARINGS AT BENT 3 HAVE 1/16 IN. SECTION LOSS IN FACES . MISSING ANCHOR BOLT NUTS AT RIGHT SIDE OF BEAM 12 SPAN 3 BENT 3 AND LEFT SIDE OF BEAM 13 SPAN 4 AT END BENT 2.	
16	F	DRAINAGE SYSTEM 50 PERCENT OF THE DECK DRAINS ARE CLOGGED.	
36a	F	CONCRETE CAPS ABUTMENT 1 RANDOM HAIRLINE VERTICAL CRACKS IN FACES . 7 INCH LONG CRACK WITH DELAMINATION AND EFFLORESCENCE UNDER BEAM NO. 12 AT ABUTMENT NO. 1 . BENT 1 SPAN 1 SIDE OF CAP AT BENT NO. 1 SPALLED 6 IN. X 6 IN. X 1 IN. DEEP WITH REBAR EXPOSED UNDER BAY 6 . 1/8 IN. WIDE LONGITUDINAL CRACK 18 IN. LONG IN SPAN 1 SIDE FACE OF CAP BAY 3 AT BOTTOM CORNER. BENT 2 1/16 IN. WIDE LONGITUDINAL CRACK 3 FT. LONG IN FACE OF CAP SPAN 3 SIDE OF BENT 2 CAP UNDER BEAM 12 BENT 3 SPAN 3 SIDE FACE OF BENT 3 CAP UNDER BEAM 9 IS SPALL HAS BEEN REPAIRED. HAIRLINE X 2 FT. LONGITUDINAL CRACK IN SPAN 3 SIDE BAY 3. HAIRLINE MAP CRACKING ON BOTTOM OF BENT NO. 3 CAP OTHERS SIMILAR . END BENT 2 1/32 IN WIDE VERTICAL CRACKS IN FACE OF CAP .	

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Team Leader WILLIS C MAY			
Assisted By WTW			
Item No.	Grade		
36b	F	CONCRETE COLUMNS ABRASION WITH EXPOSED COARSE AGGREGATE ALONG FLOWLINE. RANDOM HAIRLINE VERTICAL CRACKS IN COLUMNS. BENT 3 SPALL WITH REBAR EXPOSED 17 INCHES LONG IN FILLET ON LEFT SIDE OF COLUMN NO. 1 BENT NO. 3 . VERTICAL 1/32 INCH CRACKS IN LEFT SIDE OF COLOMNN NO. 2 BENT 3.	
36c	F	CONCRETE PILES ABRASION WITH EXPOSED COARSE AGGREGATE ALONG FLOWLINE OF BENT 1 AND BENT 2. BENT 1 SPALL WITH REBAR EXPOSED 7 INCHES LONG ON SPAN 1 SIDE FACE OF PILE 2 AT BENT NO. 1 .	
50	F	APPROACH ROADWAY CONDITION TRANSVERSE AND MAP CRACKS IN BOTH APPROACHES WITH 1/2 IN. SETTLEMENT AT END BENTS.	

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 500050

County JOHNSTON

Date: 11/15/2011

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

MMS Code	Description of Function	Unit	Quantity	Remarks	Est. Cost
2816	Asphalt Surface Repair or Replacement	SY	140	APPROACHES ARE CRACKED AND SETTLED.	
3376	Clean/Wash Bridge Decks	SF	560	DIRT, VEGETATION, AND DEBRIS ALONG CURBS.	

Key



Priority Maintenance Item



Critical Finding Item



Priority Maintenance Level Not Determined



TRANSVERSE CRACK IN WEARING SURFACE OVER END BENT 1



DRAINS CLOGGED ALONG THE RIGHT SIDE CURBLINE- LEFT SIDE SIMILAR



TRANSVERSE CRACK IN WEARING SURFACE OVER END BENT 2 AND IN APPROACH 2



SPALL WITH EXPOSED REBAR IN FACE OF CAP AT BENT 1 SPAN 1 UNDER BAY 6



WATER ABRASION WITH EXPOSED AGGREGATE IN THE FLOWZONE OF BENT COLUMNS

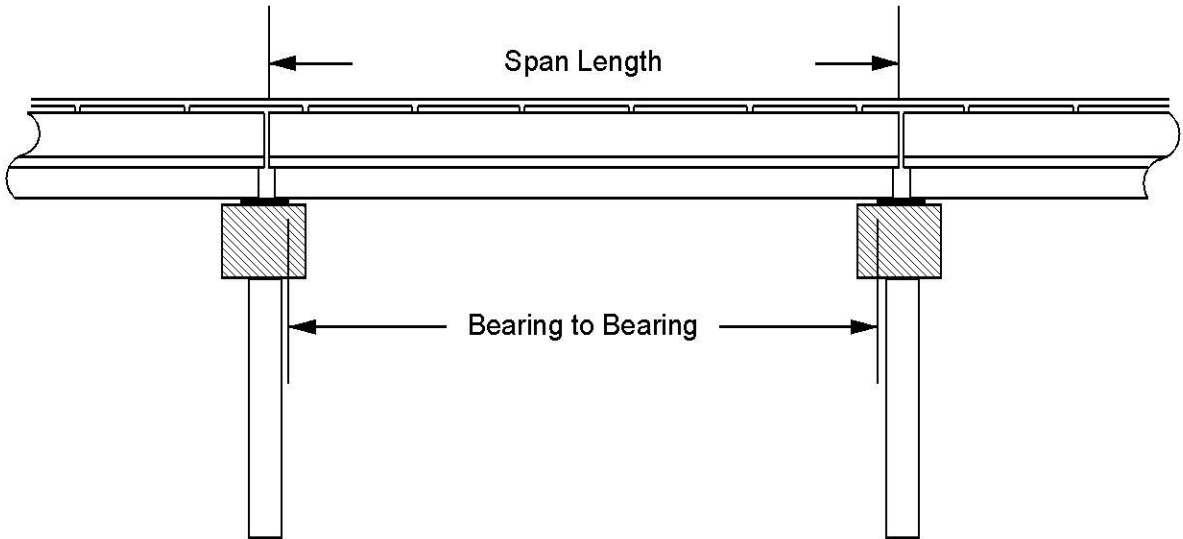


SECTION LOSS IN THE RIGHT SIDE BOTTOM FLANGE OF BEAM 1 IN SPAN 2 OVER BENT 1

Structure Data Worksheet

Spans

County: JOHNSTON Structure No: 500050 Date: 11/15/2011 Inspected By: WCM



Span No	Span Length	Bearing to Bearing	Comments
1	34	31.75	
2	33.917	33.25	
3	33.917	33.25	
4	34	31.75	

Stream Bed Soundings

(See next sheet for profile sketch)

Bridge No: 500050 County: JOHNSTON Date: 11/15/2011 By: WCM

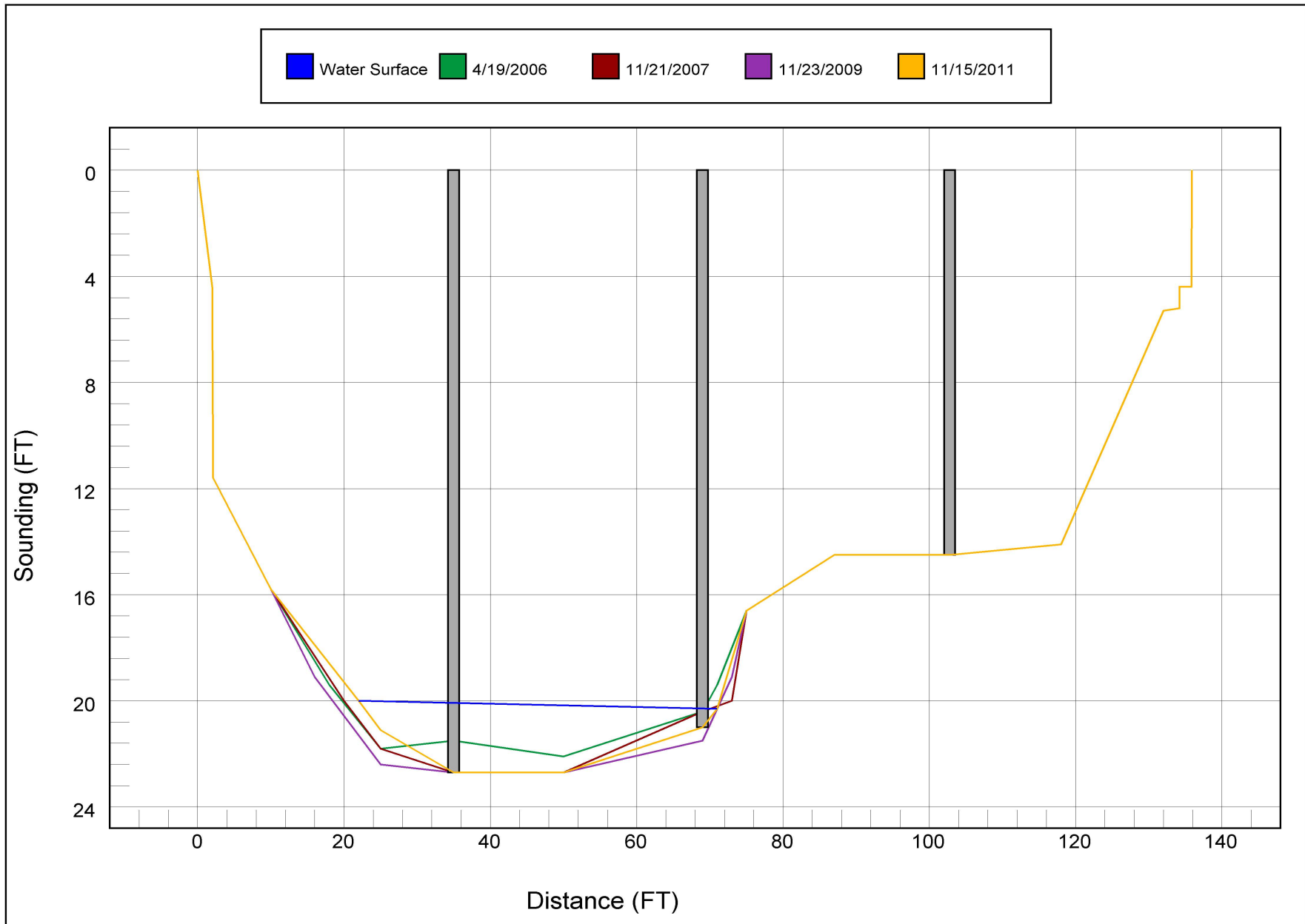
Record sounding from top of rail. Other location if needed: _____

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

DOWNSTREAM			UPSTREAM		
Distance (Station) (ft)	Sounding (ft)	Description	Distance (Station) (ft)	Sounding (ft)	Description
0	0	TOP OF RAIL			
2	4.4	TOC			
2.1	11.6	GAC	2.1	13.1	GAC
10	15.8				
22	20	Water Surface/Water Edge (WSWE)			
25	21.1				
35	22.7	BENT 1	35	23.9	BENT 1
50	22.7				
69	21	BENT 2	69	18	BENT 2
71	20.3	Water Surface/Water Edge (WSWE)			
75	16.6				
87	14.5				
102.8	14.5	BENT 3	102.8	14.8	BENT 3
118	14.1				
132	5.3	CONCRETE SLOPE	132	5.6	CONCRETE SLOPE
134.2	5.2	CONCRETE SLOPE			
134.21	4.4	TOC			
135.8	4.4	TOC			
135.9	0	TOP OF RAIL			

STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)



Bridge Inspection Field Sketch



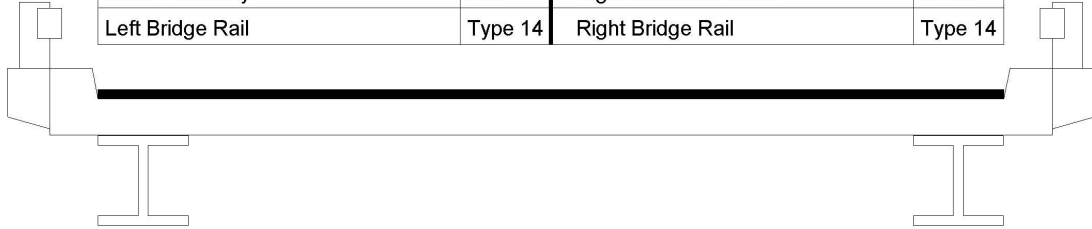
Roadway	22.5ft Wide	2 Paved Lanes	Looking East
Left Shoulder	7ft Wide		7ft Unpaved
Right Shoulder	7ft Wide		7ft Unpaved
Left Guardrail			
Right Guardrail			

CHECKED: 11/15/11 WTW

Title		Description	
APPROACH ROADWAY		LOOKING EAST	
Bridge No: 500050	Drawn By: GGW	Date: 03/31/2006	File Name: S0214000180

Bridge Inspection Field Sketch

Deck Width/Out to Out	29.333ft	Wearing Surface	.208ft
Between Rails	29.583ft	Median Width	
Curb Height	.617ft	Median Height	
Top Rail to Deck/Wearing Surface	2.333ft	Left Guardrail Width	.875ft
Clear Roadway	28ft	Right Guardrail Width	.875ft
Left Bridge Rail	Type 14	Right Bridge Rail	Type 14



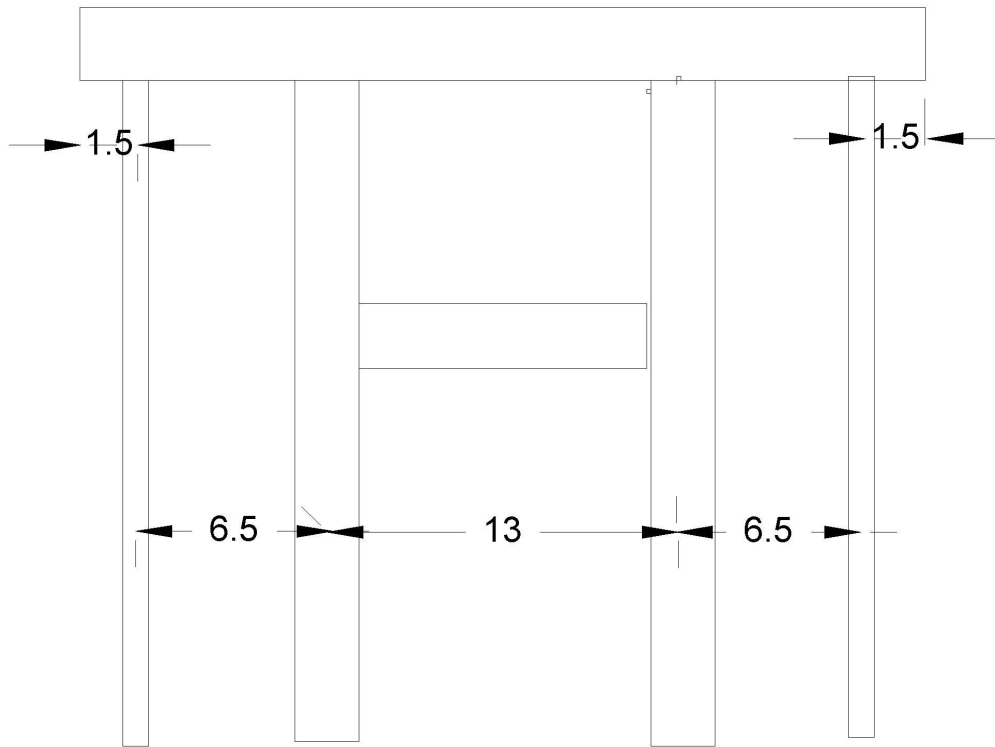
Measurements for Span #	1		
Deck Thickness	.5	Left Overhang	.617
Top of Rail to Bottom of Beam	4.333	Right Overhang	.617

Beam No	Beam Type	Spacing	Comments
1	Steel I Beam	2.333ft	
2	Steel I Beam	2.333ft	
3	Steel I Beam	2.333ft	
4	Steel I Beam	2.333ft	
5	Steel I Beam	2.333ft	
6	Steel I Beam	2.333ft	
7	Steel I Beam	2.333ft	
8	Steel I Beam	2.333ft	
9	Steel I Beam	2.333ft	
10	Steel I Beam	2.333ft	
11	Steel I Beam	2.333ft	
12	Steel I Beam	2.333ft	
13	Steel I Beam		

CHECKED: 11/15/11 WTW

Title TYPICAL SECTION		Description LOOKING EAST	
Bridge No: 500050	Drawn By: GGW	Date: 03/31/2006	File Name: S0214000181

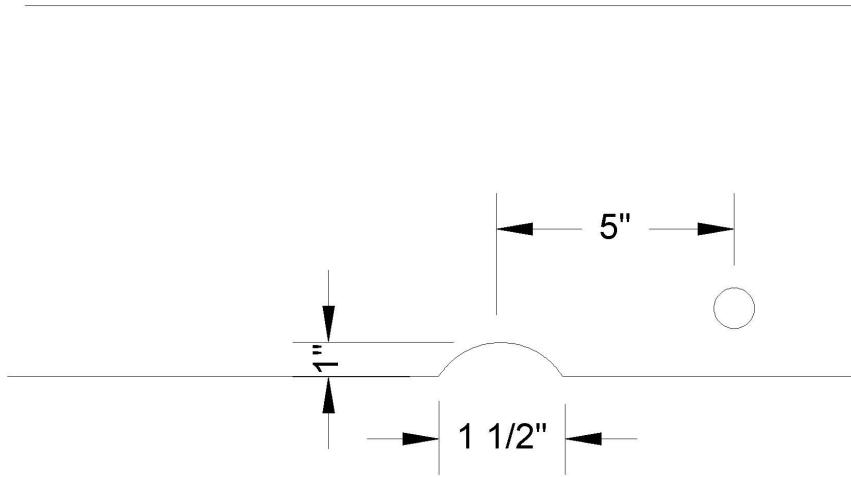
Bridge Inspection Field Sketch



CHECKED: 11/15/11 WTW

Title BENT DIAGRAM		Description LOOKING EAST	
Bridge No: 500050	Drawn By: GGW	Date: 03/31/2006	File Name: S0214000183

Bridge Inspection Field Sketch



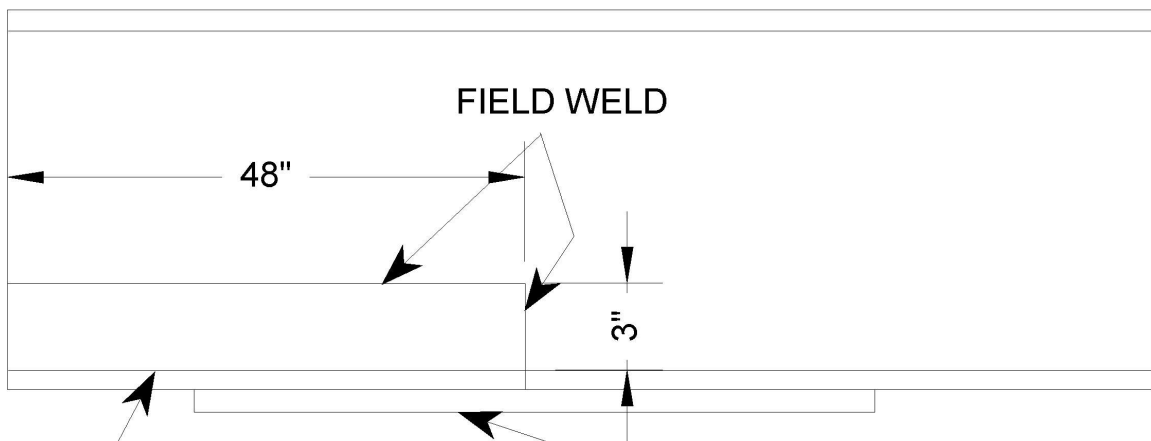
RT BOTTOM FLANGE OF BEAM 1 SPAN 2 AT BENT 2

CHECKED 11/15/11 WTW

Title CONDITION 2		Description CONDITION 2	
Bridge No: 500050	Drawn By: WCM	Date: 11/20/2009	File Name: S0014003801

Bridge Inspection Field Sketch

BEAMS 9,10,11 OF SPAN 3 BENT 3 END



1/2" x 10" x 48" COVER PLATE ADDED OVER JOINT

WEB AND BOTTOM FLANGE HAVE BEEN REPLACED

CHECKED 11/15/11 WTW

Title REPAIR		Description REPAIR TO BEAMS 9,10,11 SPAN 3	
Bridge No: 500050	Drawn By: WCM	Date: 11/20/2009	File Name: S0014003799

Bridge Inspection Field Sketch

DELETED DRAWING

Title DELETED DRAWING		Description DELETED DRAWING	
Bridge No: 500050	Drawn By: WCM	Date: 11/20/2009	File Name: S0014003800

Bridge Inspection Field Sketch



END BENT 2

BT 3

BT 2

3' BT 1 2'



END BENT 1

BOTTOM COMP. = BEDROCK, SAND AND COBBLE W/ 6" PROBE
WATER SURFACE = 20.7' AT N. SIDE OF BT. 1

Title		Description	
PLAN VIEW		WATERWAY	
Bridge No: 500050	Drawn By: BZC	Date: 7/18/2007	File Name: S0158000430



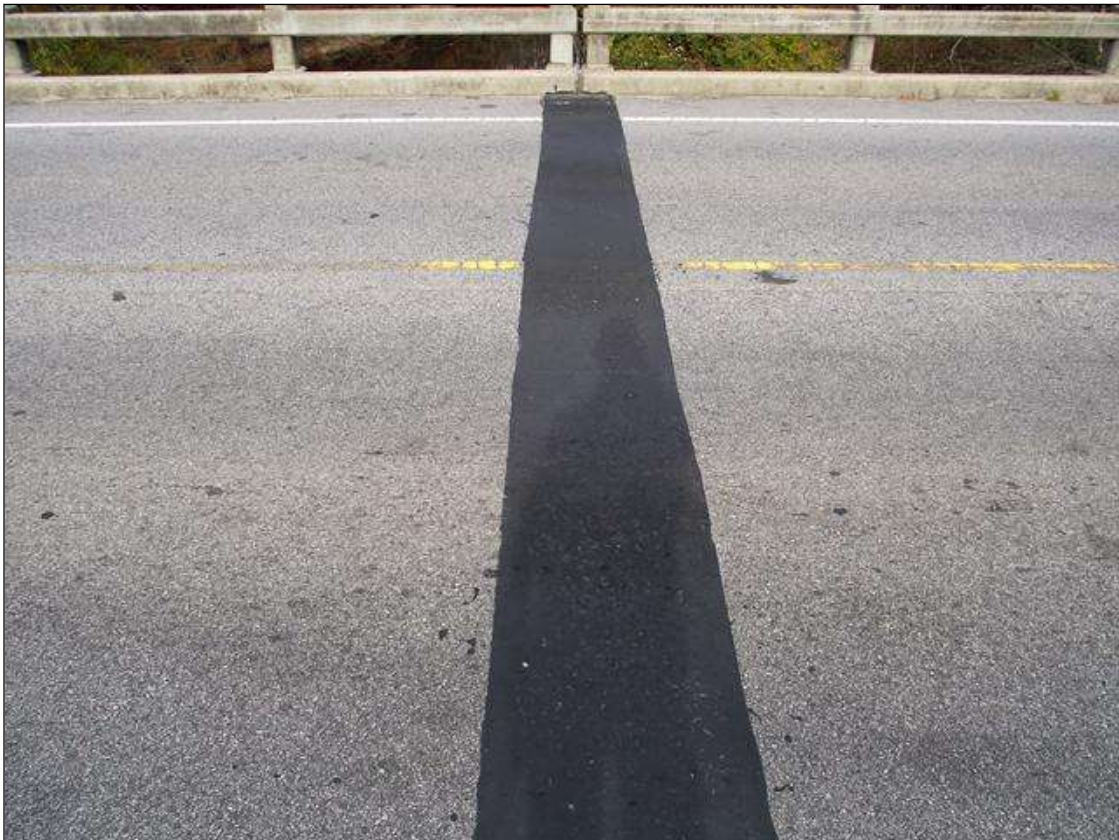
LOOKING EAST



APPROACH 1



SPAN 1 OVERVIEW



JOINT AT BENT 1



SPAN 2 OVERVIEW



LOOKING SOUTH DOWNSTREAM



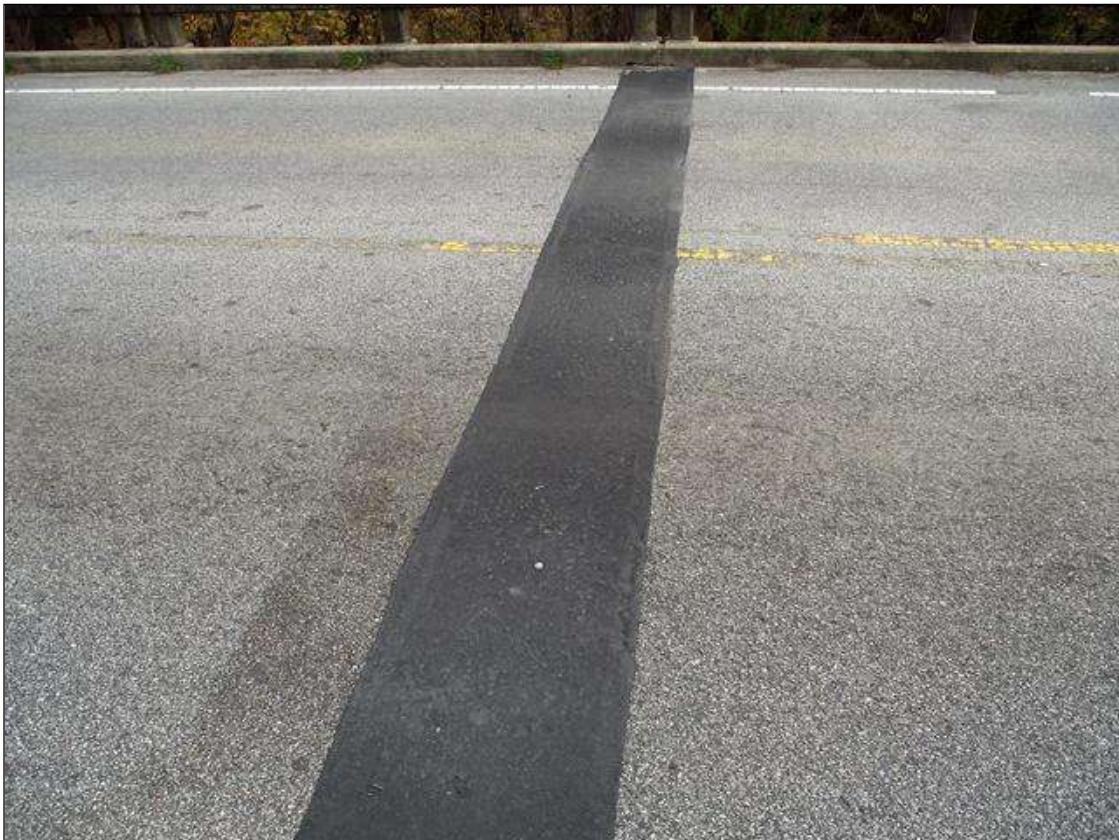
LOOKING NORTH UPSTREAM



JOINT AT BENT 2



SPAN 3 OVERVIEW



JOINT AT BENT 3



SPAN 4 OVERVIEW



APPROACH 2



LOOKING WEST



END BENT 2 OVERVIEW



BENT 1 SPAN 2 SIDE - OTHER BENTS SIMILAR



SUPERSTRUCTURE OVER BENT 2 END OF CAP - OTHER BENTS SIMILAR



PLATE REPAIR AT THE END OF BEAM 13 OVER BENT 3 SPAN 3 SIDE - OTHER REPAIRS SIMILAR THROUGHOUT STRUCTURE



SPALL WITH EXPOSED REBAR IN FACE OF CAP AT BENT 3 SPAN 3 SIDE UNDER BAY 9 REPAIRED



SOUTH PROFILE



SUPERSTRUCTURE OVERVIEW - ALL SPANS SIMILAR



PLATE REPAIRS AT THE ENDS OF BEAMS 1-4 IN SPAN 1 OVER BENT 1



PLATE REPAIR DETAIL FOR BEAM 7 OVER BENT 3 SPAN 3 SIDE - OTHER REPAIRS SIMILAR AT THIS BENT



ABUTMENT 1 OVERVIEW



NORTH PROFILE



TYPICAL BEARING ASSEMBLY THROUGHOUT STRUCTURE