



NC DEPARTMENT OF TRANSPORTATION ATTENTION
 DIVISION OF HIGHWAYS
 BRIDGE MANAGEMENT UNIT

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY JOHNSTON BRIDGE NUMBER 500101 INSPECTION CYCLE 2 YRS
 ROUTE 195 SB
195 SBL ACROSS NEUSE RIVER M.P. 91500

LOCATION 1.8 MI N. JCT 301/US

SUPERSTRUCTURE RC FLOOR/I-BEAMS

SUBSTRUCTURE EBT:RC CAP/STL.PILES;IBTS:RC CAP/ENCASED STL.PILES

SPANS 1@50'3;6@50';1@50'3

LONGITUDE 78° 22' 53.8"

LATITUDE 35° 28' 39.2"

PRESENT CONDITION FAIR

INVENTORY RATING _____

INSPECTION DATE 05/18/2011

OPERATING RATING _____

PRESENT POSTING Not Posted **NOT POSTED**

PROPOSED POSTING _____

COMPUTER UPDATE _____

ANALYSIS DATE _____

POSTING LETTER DATE _____

SUFFICIENCY RATING _____

OTHER SIGNS PRESENT 2 DELINEATORS NORTH END ONLY



LOOKING NORTH

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: 06/08/2011

IDENTIFICATION

(1) STATE NAME -NORTH CAROLINA BRIDGE 500101
 (8) STRUCTURE NUMBER(FEDERAL) 000000001010101
 INVENTORY ROUTE (ON/UNDER) - ON 111000950
 (2) STATE HIGHWAY DEPARTMENT DISTRICT 4
 (3) COUNTY CODE 101 (4) PLACE CODE 00000
 (6) FEATURE INTERSECTED - NEUSE RIVER
 (7) FACILITY CARRIED I95 SBL
 (9) LOCATION 1.8 MI N. JCT 301/US
 (11)MILEPOINT 91500
 (16)LAT 35° 28' 39.2" (17)LONG 78° 22' 53.8"
 (98)BORDER BRIDGE STATE CODE PCT SHARE
 (99)BORDER BRIDGE STRUCTURE NO

SUFFICIENCY RATING = 66.8
 STATUS = Not Deficient

CLASSIFICATION CODE

(112)NBIS BRIDGE SYSTEM - YES
 (104)HIGHWAY SYSTEM NHS Route 1
 (26) FUNCTIONAL CLASS - Arterial - Interstate 01
 (100)STRAHNET HIGHWAY - Interstate STRAHNET Route 1
 (101)PARALLEL STRUCTURE - Left Parallel Structure L
 (102)DIRECTION OF TRAFFIC - 1-way Traffic 1
 (103)TEMPORARY STRUCTURE - Not Temporary
 (110)DESIGNATED NATIONAL NETWORK - Is Part of 1
 (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 Mutlibeam or Girder CODE 302
 (44) STRUCTURE TYPE APPR :
 TYPE - CODE
 (45) NUMBER OF SPANS IN MAIN UNIT 8
 (46) NUMBER OF APPROACH SPANS
 (107)DECK STRUCTURE TYPE - Concrete cast-in-place CODE 1
 (108)WEARING SURFACE / PROTECTIVE SYSTEM :
 (A) TYPE OF WEARING SURFACE - Bituminous CODE 6
 (B) TYPE OF MEMBRANE - None CODE 0
 (C) TYPE OF DECK PROTECTION - None CODE 0

CONDITION CODE

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

LOAD RATING AND POSTING CODE

(31) DESIGN LOAD HS 20+MOD 6
 (64) OPERATING RATING - HS-44 179
 (66) INVENTORY RATING - HS-26 147
 (70) BRIDGE POSTING - No Posting Required 5
 (41) STRUCTURE OPEN, POSTED ,OR CLOSED A
 DESCRIPTION - Open, No Restriction

AGE AND SERVICE

(27) YEAR BUILT 1955
 (106)YEAR RECONSTRUCTED
 (42) TYPE OF SERVICE : ON - Highway
 UNDER - Waterway CODE 15
 (28) LANES: ON STRUCTURE 2 UNDER STRUCTURE
 (29) AVERAGE DAILY TRAFFIC 19500
 (30) YEAR OF ADT 2009 (109) TRUCK ADT PCT 23 %
 (19) BYPASS OR DETOUR LENGTH 1 MI

APPRAISAL CODE

(67) STRUCTURAL EVALUATION 5
 (68) DECK GEOMETRY 4
 (69) UNDERCLEARANCES,VERTI & HORIZ N
 (71) WATERWAY ADEQUACY 7
 (72) APPROACH ROADWAY ALIGNMENT 7
 (36) TRAFFIC SAFETY FEATURES 1111
 (113)SCOUR CRITICAL BRIDGES 8
 SCOUR PLAN OF ACTION

GEOMETRIC DATA

(48) LENGTH OF MAXIMUM SPAN 50 FT
 (49) STRUCTURE LENGTH 401 FT
 (50)CURB OR SIDEWALK: LEFT 1.6 FT RIGHT 1.6 FT
 (51) BRIDGE ROADWAY WIDTH CURB TO CURB 28.2 FT
 (52) DECK WIDTH OUT TO OUT 31.6 FT
 (32) APPROACH ROADWAY WIDTH (W/SHOULDERS) 37.0 FT
 (33) BRIDGE MEDIAN - Open Median CODE 1
 (34) SKEW 30° (35) STRUCTURE FLARED NO
 (10) INVENTORY ROUTE MIN VERT CLEAR 99 FT 99 IN
 (47) INVENTORY ROUTE TOTAL HORIZ CLEAR 28.2 FT
 (53) MIN VERT CLEAR OVER BRIDGE RDWY 99 FT 99 IN
 (54) MIN VERT UNDERCLEAR REF Not a Highway or Railroad
 (55) MIN LAT UNDERCLEAR RT REF Not a Highway or Railroad 99.9 FT
 (56) MIN LAT UNDERCLEAR LT REF - 0.0 FT

PROPOSED IMPROVEMENTS

(75) TYPE OF WORK - CODE 311
 (76) LENGTH OF STRUCTURE IMPROVEMENT 441 FT
 (94) BRIDGE IMPROVEMENT COST \$1,430,000
 (95) ROADWAY IMPROVEMENT COST \$358,000
 (96) TOTAL PROJECT COST \$2,145,000
 (97) YEAR OF IMPROVEMENT COST ESTIMATE 2007
 (114)FUTURE ADT 39000 (115) YEAR FUTURE ADT 2025

NAVIGATION DATA

(38) NAVIGATION CONTROL - No Navigational Control CODE 0
 (111)PIER PROTECTION - Not Applicable CODE
 (39) NAVIGATION VERTICAL CLEARANCE 0
 (116)VERT - LIFT BRIDGE NAV MIN VERT CLEAR
 (40) NAVIGATION HORIZONTAL CLEARANCE 0

INSPECTIONS

(90) INSPECTION DATE 05/18/2011
 (92) CRITICAL FEATURE INSPECTION : (93) CFI DATE
 A) FRACTURE CRIT DETAIL - NO A)
 B) UNDERWATER INSP - YES 48Mo B) 09/01/2009
 C) OTHER SPECIAL INSP NO C)
 SCOUR

BRIDGE INSPECTION RECORD AND SUMMARY

INSPECTION TYPE Routine Inspection
 BRIDGE NO. 500101 COUNTY JOHNSTON ROUTE I95 SBL OVER NEUSE RIVER
 STRUCTURE TYPE RC FLOOR/I-BEAMS
 ROUTE ORIENTATION S - N SPANS 1@50'3;6@50';1@50'3

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
2. DECK NO. OF EA TYPE SPN GRADE RATES SI & A ITEM 58			8		c. SCOUR		G
			F		d. SLOPE PROT., RIP-RAP, DIKES, ETC.		
3. RAILING				50. APPROACH ROADWAY CONDITION			G
a. CONCRETE			F	51. APPROACH SLABS			
b. TIMBER				52. PAINT SYSTEM			CODE A F
c. ALUMINUM				53. UTILITIES			
d. STEEL			F	54. RESPONSE TO LIVE LOAD			G
4. CURBS, WHEELGUARDS, PARAPETS, MEDIANS			F	55. ESTIMATED REMAINING LIFE			10
5. WALKWAYS (ON OR ATTACHED TO STRUCTURE)				60. REGULATORY SIGN NOTICE ISSUED			NO
6. DECK EXP JTS. OR DEVICES. NO. OF EACH				61. PROMPT-ACTION NOTICE ISSUED			NO
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			9	65. TOTAL TRAFFIC CONTROL TIME (MAN HRS)			
e. OPEN JOINTS							
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			G	b. SUPERSTRUCTURE		ITEM 59	7
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			G
SUB STR. ITEMS. ITEM 60 (INCLUDE SCOUR)				USE OF INSP. ACCESSIBILITY EQUIPMENT			
35. TIM SUB STR.				SNOOPER (CODE S, 4, OR N)		HRS	NO
a. ABUT. & INT. BENT CAPS & RISERS				LADDER			YES
b. PILES, POST, SILLS, & BRACING				BUCKET TRUCK			NO
c. BULKHEADS, WING'S, & TIE BACKS				BOAT			NO
36. CONC SUB STR.				OTHER			NO
a. ABUT. & INT. BENT CAPS			G				
b. ABUT. & BENT COL'S BREASTWALLS							
c. ABUT. & INT. BENT PILES			F				
d. BACKWALLS, WING'S, RETAIN. WALLS			F				
e. ABUT. & BENT FOOTINGS & SILLS							
37. STEEL SUB STR.				SPECIAL INSPECTION REQUESTED FOR			
a. ABUT. & INT. BENT CAPS & RISERS							
b. PILES, BRACING, AND BULKHEADS			F				
38. FOUNDATION PILES TYPE MATERIAL				NOTE			
39. SLOPE PROT., RIP-RAP (INCLUDE DRAINAGE)			F				
40. FENDER SYSTEMS				80. INSPECTED BY:		<i>Walter C. May</i>	
41. DRIFT			G	81. REVIEWED BY:			

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

BRIDGE: **500101** COUNTY: **Johnston** DATE: **3/12/2012**

THE FOLLOWING S. I. & A ITEMS ARE TO BE CODED TO REFLECT THE FACT THAT THE STRUCTURE IS SHORED OR HAS HAD TEMPORARY REPAIRS MADE TO KEEP THE BRIDGE OPEN :

	<u>CODE</u>	<u>BY</u>
S I & A ITEM 103 - TEMPORARY STRUCTURE DESIGNATION	T	TSE
S I & A ITEM 59 - SUPERSTRUCTURE	5	TSE
S I & A ITEM 60 - SUBSTRUCTURE		
S I & A ITEM 64 OPERATING RATING		
HS <input type="text"/>		BY: <input type="text"/>
S I & A ITEM 66 - INVENTORY RATING		
HS <input type="text"/>		BY: <input type="text"/>

3/12/12

COMMENTS

Plate welded to the web of beam 1 span 6 @ bent 5.

Temporary Repairs

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

05-18-11

Bridge: 500101

County JOHNSTON

Date: ~~12/08/2011~~

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

MMS Code	Description of Function	Unit	Quantity	Remarks	Est. Cost
3306	Maintain Concrete Superstructure Components	SF	10	CRACKS AND SPALLS IN END DIAPHRAGMS.	
3314	Maintain Steel Superstructure Components	LF	<i>X TSC 3/12/12</i>	BEAM 1 SPAN 6 AT BENT 5 HAS SECTION LOSS IN THE WEB 1 IN. WIDE BELOW THE END DIAPHRAGM 8 IN. LONG WITH 1/4 IN. REMAINING AND DOWN TO 100 % LOSS WITH A 1/4 IN. HOLE 6 IN. FROM END UP 7 IN. FROM BOTTOM FLANGE.	
3314	Maintain Steel Superstructure Components	LF	60	SECTION LOSS IN WEBS AT BOTTOM OF END DIAPHRAGMS OVER INTERIOR BENTS.	
3322	Maint to Steel Handrail	LF	240	GUARDRAIL DAMAGE.	
3342	Clean and Paint Structural Steel	SF	400	SPOTS OF MISSING PAINT WITH RUST SCALE AND SECTION LOSS. BEARINGS RUSTY.	

Key



Priority Maintenance Item



Critical Finding Item



Priority Maintenance Level Not Determined

Bridge I&A Form 1(82)H		FIELD INSPECTION REPORT <u>Bridge Inspection & Analysis</u>	
State of North Carolina Dept. of Transportation Division of Highways			
Team Leader WILLIS C MAY			
Assisted By WTW			
Item No.	Grade		
2a	F	<p>CONCRETE DECK 5</p> <p>SPAN 1</p> <p>BOTTOM OF DECK HAS 2 DIAGONAL CRACKS WITH EFFLORESCENCE AND WATER LEAKAGE IN BAY 3 AT END BENT 1.</p> <p>BOTTOM OF DECK HAS DIAGONAL HAIRLINE CRACK WITH WATER LEAKAGE LEFT OF BEAM 2 AT BENT 1.</p> <p>SPAN 3</p> <p>BOTTOM OF DECK BAY 3 AT BENT 2 HAS DIAGONAL CRACK TO 1/16 IN.</p> <p>SPAN 5</p> <p>BAY 1 HAS DIAGONAL AND TRANSVERSE HAIRLINE CRACKS WITH EFFLORESCENCE IN BOTTOM OF DECK .</p> <p>SPAN 6</p> <p>TRANSVERSE AND DIAGONAL HAIRLINE CRACK CRACKS WITH EFFLORESCENCE IN BOTTOM OF DECK IN ALL BAYS.</p> <p>SPAN 7</p> <p>BOTTOM OF DECK IN ALL BAYS HAS BEEN PATCHED.</p> <p>PATCH IN BAY 2 AT MIDSPAN IS CRACKED AND HAS WATER AND EFFLO LEAKAGE.</p> <p>RIGHT OVERHANG OF SPAN 7 IS CRACKED, DELAMINATED, HONEYCOMBED, AND SPALLED 2 IN. DEEP X 24 IN. DIAMETER WITH EXPOSED RUSTY REBAR.</p>	
3a	F	<p>CONCRETE RAILS</p> <p>SURFACE SPALLS AND SCALING IN FACES WITH EXPOSED COARSE AGGREGATE.</p> <p>SPAN 8</p> <p>RIGHT SIDE RAIL POST # 2 HAS 2 SPALLS 8 IN. DIAMETER X 1 1/2 IN. DEEP WITH EXPOSED REBAR .</p>	
3d	F	<p>STEEL RAILS</p> <p>SCRAPE AND COLLISION DAMAGE IN SPOTS THROUGHOUT.</p> <p>GUARDRAIL DAMAGE AT THE LEFT SIDE OF SPANS 1,2,5,7, & 8, RIGHT SIDE OF SPANS 1 AND 3 TOTALING 240 FT.</p>	
4	F	<p>CURBS</p> <p>SCALING WITH EXPOSED COARSE AGGREGATE IN FACES.</p> <p>RANDOM HAIRLINE TRANSVERSE CRACKS IN TOPS OF CURBS.</p>	
10	G	<p>LONGITUDINAL BEAMS</p> <p>PEELING PAINT AND SURFACE RUST THROUGHOUT.</p> <p>RUST SCALE WITH UP TO 1/8 IN. SECTION LOSS 1/2 IN. WIDE IN THE WEBS OF MOST BEAMS AROUND THE END DIAPHRAGMS.</p> <p>SPAN 3</p> <p>BEAM 1 RIGHT BOTTOM FLANGE IS RUSTED WITH UP TO 1/16 IN. SECTION LOSS FROM BENT 3 OUT 3 FT.</p>	

Bridge I&A Form 1(82)H		FIELD INSPECTION REPORT <u>Bridge Inspection & Analysis</u>	
State of North Carolina Dept. of Transportation Division of Highways			
Team Leader WILLIS C MAY			
Assisted By WTW			
Item No.	Grade		
13	F	<p>END DIAPHRAGMS SPAN 1 BAY 2 & BAY 3 SPAN 1 DIAPHRAGM AT BENT 1 HAS BEEN PATCHED SURFACE SPALL WITH EXPOSED REBAR IN LEFT OVERHANG DIAPHRAGM AT BENT 1.</p> <p>SPAN 2 LEFT OVERHANG DIAPHRAGM AT BENT 1 SPALL HAS BEEN REPAIRED. BAYS 1,2, & 3 END DIAPHRAGM OVER BENT 1 HAVE BEEN REPAIRED. BAY 2 & 3 SPAN 2 DIAPHRAGM OVER BENT 2 SPALLS HAVE BEEN REPAIRED.</p> <p>SPAN 3 BAY 1 SPAN 3 DIAPHRAGM OVER BENT 2 SPALL HAS BEEN REPAIRED. BAY 3 SPAN 3 DIAPHRAGM OVER BENT 3 SPALL HAS BEEN REPAIRED AND REPAIR HAS A HAIRLINE CRACK IN BOTTOM EDGE. RIGHT OVERHANG DIAPHRAGM AT BENT 2 SPALL HAS BEEN REPAIRED.</p> <p>SPAN 4 BAY 1 SPAN 4 DIAPHRAGM OVER BENT 4 SPALL HAS BEEN REPAIRED.</p> <p>SPAN 7 BAY 2 SPAN 7 DIAPHRAGM OVER BENT 6 SPALL HAS BEEN REPAIRED. BAY 3 SPAN 7 DIAPHRAGM OVER BENT 7 SPALL HAS BEEN REPAIRED. RIGHT OVERHANG DIAPHRAGM OF SPAN 7 OVER BENT 7 IS CRACKED AND SPALLED WITH EXPOSED REBAR.</p> <p>SPAN 8 BAY 2 SPAN 8 DIAPHRAGM OVER BENT 7 SPALL HAS BEEN REPAIRED.</p>	
15	F	<p>BEARING ASSEMBLIES EXTERIOR BEARINGS AT END BENTS ARE RUSTY WITH UP TO 1/16 IN. SECTION LOSS IN FACES. OTHER BEARINGS ARE RUSTY AND FLAKING. ANCHOR BOLTS HAVE BEEN REPAIRED WITH AT STEEL PLATE WELDED TO MASONRY PLATE WHICH IS STUDED TO TOP OF CAP. SEE PHOTO.</p>	
52	F	<p>PAINT SYSTEM SPOTS OF MISSING PAINT THROUGH OUT.</p>	
36a	G	<p>CONCRETE CAPS HAIRLINE MAP CRACKS IN FACES. BENT 6 SPAN 6 SIDE OF BENT 6 CAP UNDER BEAM 3 HAS BEEN REPAIRED.</p>	

Bridge I&A Form 1(82)H		FIELD INSPECTION REPORT <u>Bridge Inspeccion & Analysis</u>	
State of North Carolina Dept. of Transportation Division of Highways			
Team Leader WILLIS C MAY			
Assisted By WTW			
Item No.	Grade		
36c	F	<p>CONCRETE ENCASEMENTS HIGH-PILES ENCASED IN CONCRETE. WATER ABRASION 1/8 IN. DEEP WITH COARSE AGGREGATE EXPOSED . BENT 3 PILE 7 BENT 3 CONCRETE PILE ENCASEMENT HAS BEEN PATCHED IN THE RIGHT SIDE. BENT 4 PILE 4 HAS UP TO 1/8 IN. LONGITUDINAL CRACK AT CONSTRUCTION JOINT AT 6 FT. ABOVE WATERLINE. UP TO 1/16 IN. CRACK IN OTHER PILES AT CONSTRUCTION JOINT.</p>	
39	F	<p>SLOPE PROTECTION CONCRETE SLOPE PROTECTION CRACKED AND SETTLED 3 INCHES AT END BENT 1. VEGETATION AND SMALL TREES GROWING ON SLOPES AT END BENTS. 8 FT. DEEP EROSION AT THE RIGHT SIDE OF SPAN 7 AND 8 AROUND PILE 6 AND 7 .</p>	

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 500101

County JOHNSTON

Date: 05/18/2011


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	10	TRANSVERSE CRACK IN ASPHALT AT END BENTS.	
2910	Manual Brush and Tree Control	LF	200	VEGETATION AROUND ENDS OF BRIDGE.	
3318	Maint to Concrete Handrail	LF	5	SPALLS IN CONCRETE RAIL POSTS.	
3322	Maint to Steel Handrail	LF	240	GUARDRAIL DAMAGE ON LEFT AND RIGHT SIDE OF BRIDGE.	
3326	Maintain Concrete Deck	SF	300	SPAN 7-BOTTOM OF OVERHANG SPALLED, CRACKS IN BOTTOM OF DECK, PATCHES CRACKED AND LEAKING WATER AND EFFLO.	
3342	Clean and Paint Structural Steel	SF	200	BEARING ARE RUSTY, RUST AND SECTION LOSS IN WEBS 1/2 IN. WIDE AROUND END DIAPHRAGMS.	

Key

 Priority Maintenance Item

 Critical Finding Item

 Priority Maintenance Level Not Determined



TRANSVERSE CRACK IN WEARING SURFACE OVER END BENT 1



IMPACT DAMAGE TO THE RIGHT SIDE GUARDRAIL IN SPAN 1



RANDOM AREAS OF PEELING PAINT & SURFACE RUST IN BEAM WEBS THROUGHOUT STRUCTURE



EXTERIOR BEARING ASSEMBLIES AT END BENT 2 ARE RUSTY AND FLAKING



HAIRLINE DIAGONAL CRACK WITH EFFLORESCENCE IN BOTTOM OF DECK OF SPAN 8 BAY 3 NEAR BENT 7



CRACKED AND SPALLED AREA WITH EXPOSED REBAR THE RIGHT EXTERIOR DIAPHRAGM OF SPAN 7 AT BENT 7



SPALLED AREA WITH SECTION LOSS TO EXPOSED REBAR IN THE RIGHT SIDE OVERHANG OF SPAN 7 AT 1/3 POINT FROM BENT 6



CRACKED AND DELAMINATED AREA IN THE RIGHT SIDE OVERHANG OF SPAN 7 AT MID-SPAN



ABRASION WITH EXPOSED COARSE AGGREGATE IN FACES OF PILES IN WATERWAY



AREA OF MAP CRACKING WITH EFFLORESCENCE IN BOTTOM OF DECK OF SPAN 7 BAY 2 BETWEEN INTERIOR DIAPHRAGMS

BRIDGE MANAGEMENT UNIT
DATA ON EXISTING STRUCTURE Run Date: 06/08/2011

COUNTY :	DIV :	DIST :	STRUCTURE NUMBER :	LENGTH :
JOHNSTON	4	3	500101	401 FEET

ROUTE CARRIED :	FEATURE INTERSECTED :
I95 SBL	NEUSE RIVER

LOCATED :	BRIDGE NAME :	CITY :
1.8 MI N. JCT 301/US		

FUNC. CLASS :	SYST.ON :	SYST.UNDER :	ADT & YR :	RAIL TYPE :
01	FA	NFA	1950 2009	LT 333 RT 333

BUILT :	BY :	PROJ :	FED.AID PROJ :	DESIGN LOAD :
1955	SHPWC	2336		HS 20+MOD

REHAB :	BY :	PROJ :	ALIGNMENT :	SKEW :	LANES :
			TAN.	120	ON 2 UNDER

NAVIGATION :	HT. CRN. TO BED :	WATER DEPTH :
VC 0.0 FT HC 0.0 FT	37 FT	4 FT

SUPERSTRUCTURE : RC FLOOR/I-BEAMS

SUBSTRUCTURE : EBT:RC CAP/STL.PILES;IBTS:RC CAP/ENCASED STL.PILES

SPANS : 1@50'3;6@50';1@50'3

BEAMS OR GIRDERS : 4 LINES W33X130 I-BEAMS @ 8'CENTERS

FLOOR :	ENCROACHMENT :	DECK (OUT TO OUT) :
6.75RC/5 AWS		31.6 FT

CLEAR ROADWAY :	BETWEEN RAILS :	SIDEWALK OR CURB :
28.2 FT	31.4 FT	LT 1.6 FT RT 1.6 FT

VERT.CL.OVER :	VERT.CL.UNDER :	HOR.CL.UNDER :
99 FT 99 IN	00 FT 00 IN	0.0 FT

INV.RTG. :	OPE.RTG. :	CONTR.MEMBER :	POSTED :	DATE
HS-26	HS-44	BEAM INT.	SV TTST	01/01/0001

SYSTEM :	GREEN LINE ROUTE :
Primary Interstate	Y

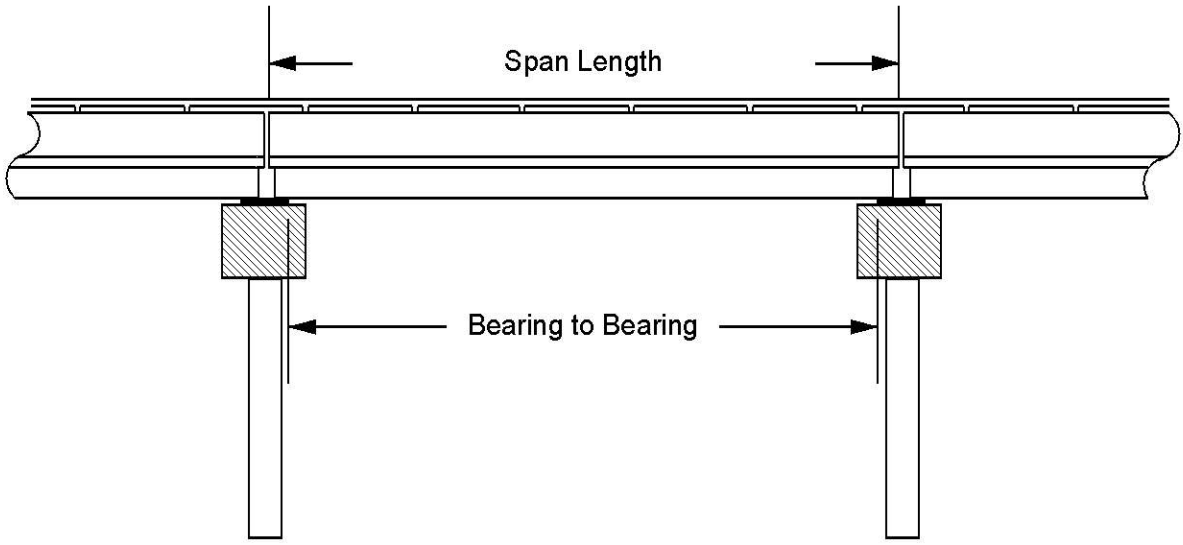
2ND OPENING :	3RD OPENING :	4TH OPENING :	5TH OPENING :

REMARKS :

Structure Data Worksheet

Spans

County: JOHNSTON Structure No: 500101 Date: 05/18/2011 Inspected By: WCM



Span No	Span Length	Bearing to Bearing	Comments
1	50.250		
2	50.0		
3	50.0		
4	50.0		
5	50.0		
6	50.0		
7	50.0		
8	50.250		

Stream Bed Soundings

(See next sheet for profile sketch)

Bridge No: 500101 County: JOHNSTON Date: 05/18/2011 By: WCM

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

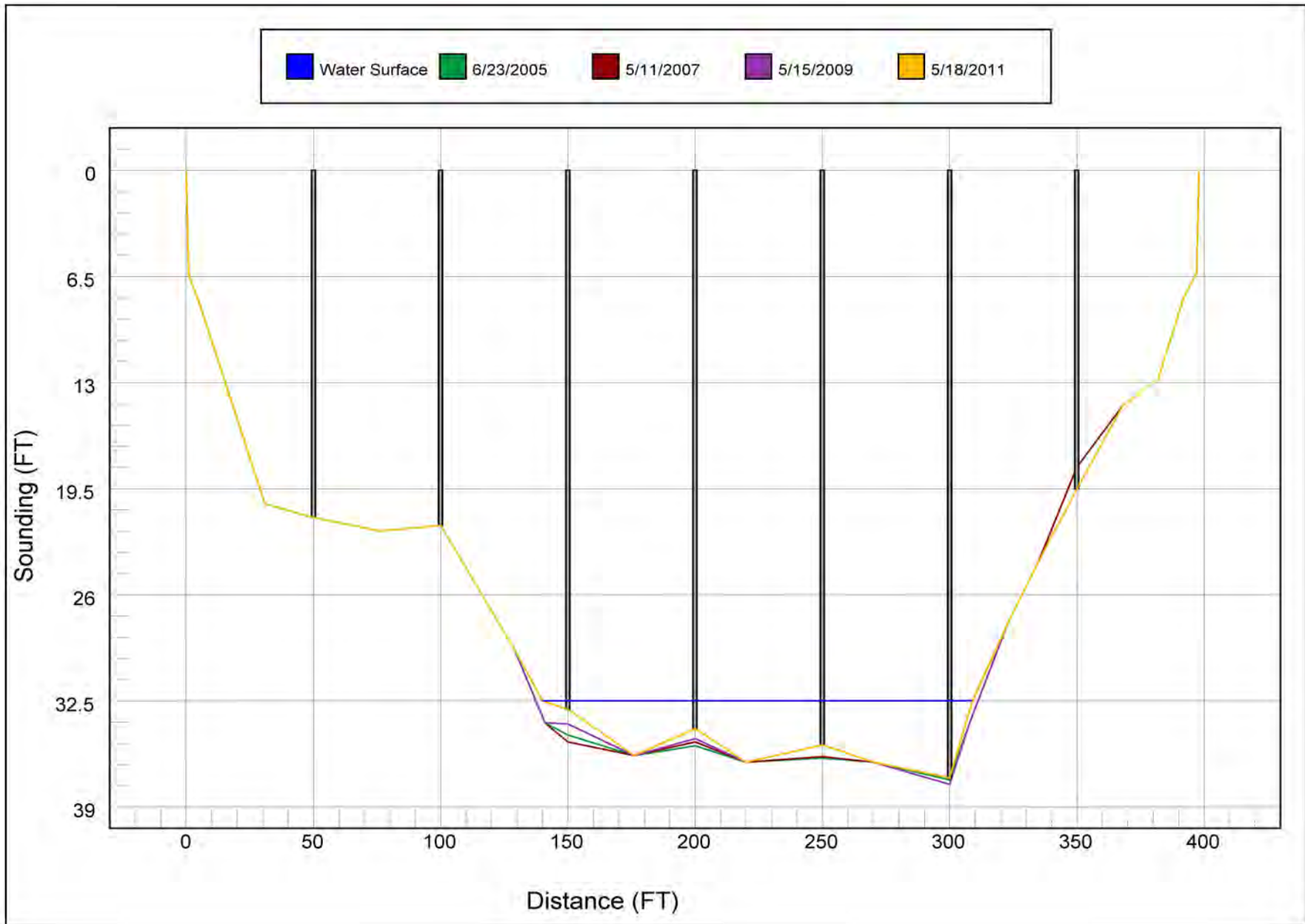
Distance from Highwater Mark to top of rail: _____ Location of Highwater Mark: _____

DOWNSTREAM			UPSTREAM		
Distance (Station) (ft)	Sounding (ft)	Description	Distance (Station) (ft)	Sounding (ft)	Description
0	0	TOP OF RAIL			
1	6.417	TOP OF CAP			
5	8.083	GAC	5	8.083	GAC
31	20.417	TOS			
44	21				
50	21.25	BENT 1	50	22.583	BENT 1
76	22.083				
100	21.75	BENT 2	100	22.833	BENT 2
129	29.333				
140	32.5	Water Surface/Water Edge (WSWE)			
150	33	BENT 3	150	33.9	BENT 3
176	35.833				
200	34.2	BENT 4	200	36.1	BENT 4
220	36.25				
250	35.2	BENT 5	250	37.4	BENT 5
270	36.25				
300	37.2	BENT 6	300	35.4	BENT 6
309	32.5	Water Surface/Water Edge (WSWE)			
323	27.667				
335	23.917				
350	19.5	BENT 7	350	17.333	BENT 7
368	14.417				
382	12.75	TOS			
392	7.75	GAC	392	7.75	GAC
397	6.333	TOP OF CAP			

DOWNSTREAM			UPSTREAM		
Distance (Station) (ft)	Sounding (ft)	Description	Distance (Station) (ft)	Sounding (ft)	Description
398	0	TOP OF RAIL			

STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)



Bridge Inspection Field Sketch



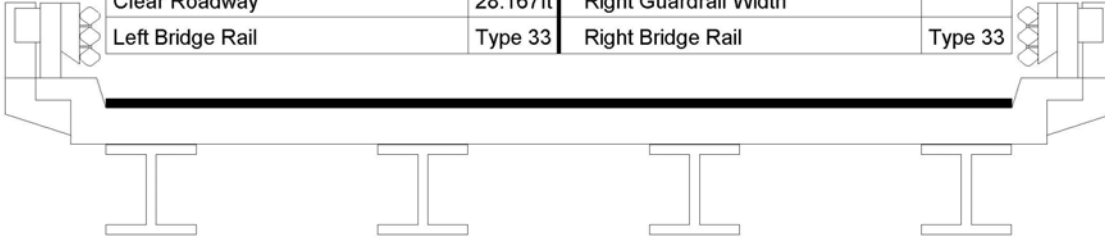
Roadway	24ft Wide	2 Paved Lanes	Looking South
Left Shoulder	9.999ft Wide	3.333ft Paved	6.666ft Unpaved
Right Shoulder	10ft Wide	10ft Paved	0ft Unpaved
Left Guardrail	10ft from road		
Right Guardrail	10ft from road		

CHECKED: 5/18/11 WCM

Title		Description	
APPROACH ROADWAY - SBL		LOOKING SOUTH	
Bridge No: 500101	Drawn By: A. D. OSBORNE	Date: 06/21/2005	File Name: S0154000026

Bridge Inspection Field Sketch

Deck Width/Out to Out	31.583ft	Wearing Surface	0.417ft
Between Rails	31.417ft	Median Width	
Curb Height	0.583ft	Median Height	
Top Rail to Deck/Wearing Surface	2.458ft	Left Guardrail Width	
Clear Roadway	28.167ft	Right Guardrail Width	
Left Bridge Rail	Type 33	Right Bridge Rail	Type 33



Measurements for Span #	1	ALL SPANS SIMILAR	
Deck Thickness	0.562	Left Overhang	3.708
Top of Rail to Bottom of Beam	5.875	Right Overhang	3.708

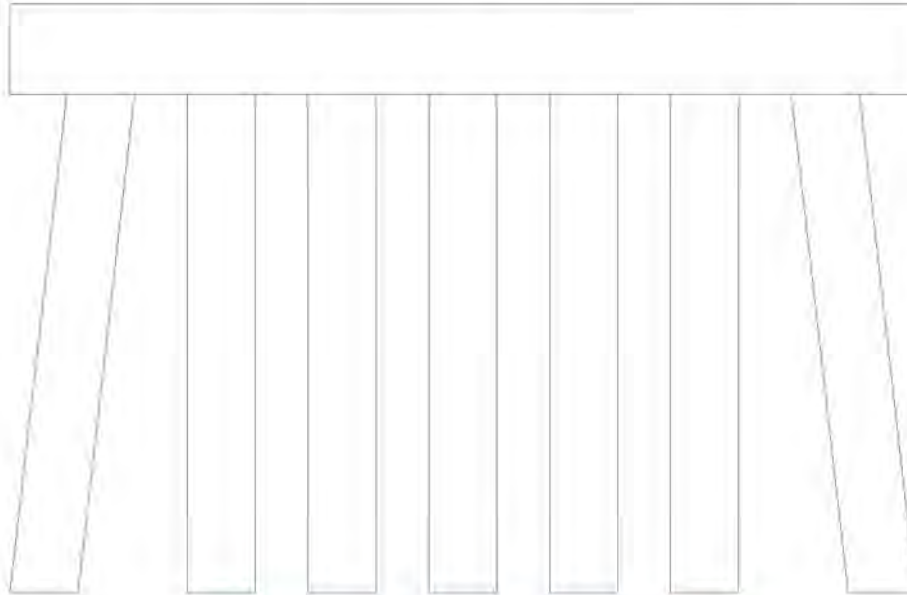
Beam No	Beam Type	Spacing	Comments
1	Steel I Beam	8.0ft	W 33 X 130 IBEAM
2	Steel I Beam	8.0ft	W 33 X 130 IBEAM
3	Steel I Beam	8.0ft	W 33 X 130 IBEAM
4	Steel I Beam		W 33 X 130 IBEAM

1 1/2 " AWS ADDED STARTING 6 IN. OVER FROM CURBS

CHECKED: 5/18/11 WCM

Title TYPICAL SECTION		Description 4 - LINES STEEL I - BEAMS	
Bridge No: 500101	Drawn By: A. D. OSBORNE	Date: 06/21/2005	File Name: S0154000027

Bridge Inspection Field Sketch



*** NOTE: PILES ARE CONCRETE-ENCASED STEEL H-PILES**

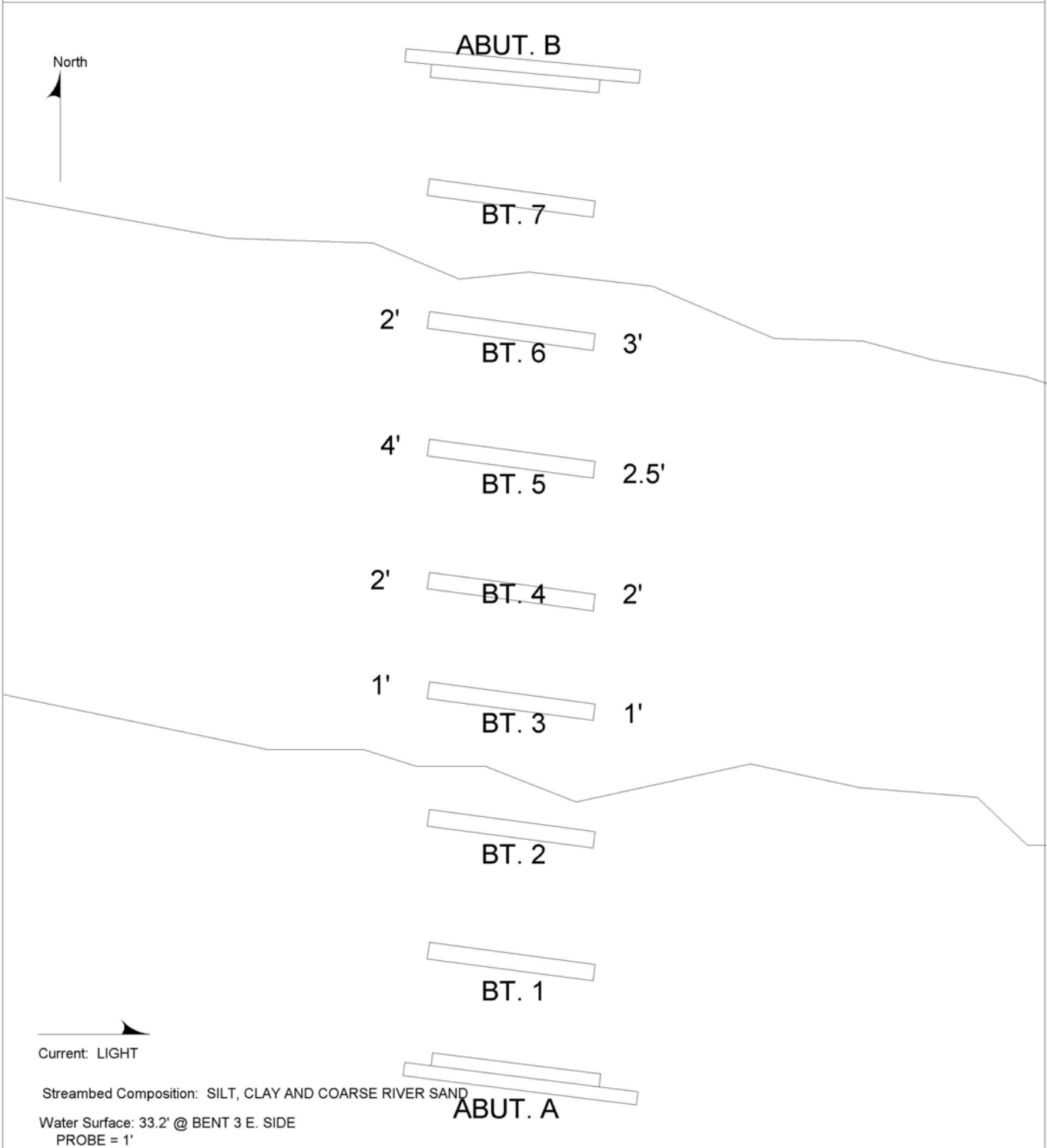
Bent #	7	Bents 1,2,3,4,5,6 similar	
Cap - Cast In Place			
Cap Size	31.167ft Long	2.667ft Wide	2.583ft High
Left Overhang	1.583ft	Lt Cap/Beam Overhang	
Right Overhang	1.583ft	Rt Cap/Beam Overhang	

Pile #	Material	Pile Type	Spacing	Length	Width/Diam.	Height	Orientation
1	Steel	Pile Bent	4.667 FT		22x22 INCHES		Batter Pile
2	Steel	Pile Bent	4.667 FT		22x22 INCHES		Vertical
3	Steel	Pile Bent	4.667 FT		22x22 INCHES		Vertical
4	Steel	Pile Bent	4.667 FT		22x22 INCHES		Vertical
5	Steel	Pile Bent	4.667 FT		22x22 INCHES		Vertical
6	Steel	Pile Bent	4.667 FT		22x22 INCHES		Vertical
7	Steel	Pile Bent			22x22 INCHES		Batter Pile

CHECKED: 5/18/11 WCM

Title	Description		
SUBSTRUCTURE	LOOKING NORTH		
Bridge No: 500101	Drawn By:	Date: 06/22/2005	File Name: S0018000412

Bridge Inspection Field Sketch



Title		Description	
PLAN VIEW		BRIDGE AND WATERWAY	
Bridge No: 500101	Drawn By: WTW	Date: 09/19/2005	File Name: S0158000026



EAST PROFILE



LOOKING NORTH



JOINT AT BENT 1 - ALL OTHER BENT JOINTS SIMILAR



SPAN 2 OVERVIEW - ALL SPANS SIMILAR



LOOKING WEST UPSTREAM



JOINT AT END BENT 2



APPROACH 2



LOOKING SOUTH



WEST PROFILE



END BENT 2 OVERVIEW



SPALL REPAIR IN SPAN 8 END DIAPHRAGM AT BENT 7 BAY 2



SPALL REPAIR IN SPAN 7 END DIAPHRAGM AT BENT 7 BAY 3



REPAIR PATCHES IN BOTTOM OF DECK OF SPAN 7 BAY 3 AT 1/3 POINT - SIMILAR PATCHES THROUGHOUT SPAN



SPALL REPAIR IN SPAN 2 END DIAPHRAGM AT BENT 2 BAY 2 - BAY 3 SIMILAR



ANCHOR BOLT REPAIR FOR BEAM 1 AT BENT 1 (PLATES ADDED ADJACENT TO BEARING ASSEMBLIES) - OTHER REPAIRS SIMILAR THROUGHOUT STRUCTURE



SPAN 1 END DIAPHRAGMS PATCHED AT BENT 1 BAYS 2 & 3



END BENT 1 OVERVIEW



REPAIR PATCH IN THE RIGHT SIDE FACE OF PILE 7 AT BENT 3



BENT 1 SPAN 2 SIDE - ALL BENTS SIMILAR



SUPERSTRUCTURE OVER END OF CAP



SUPERSTRUCTURE OVERVIEW - ALL SPANS SIMILAR



LOOKING EAST DOWNSTREAM TOWARDS THE NORTHBOUND STRUCTURE