BRIDGE INSPECTION REPORT

| INSPECTION TYPE: | Routine inspection | | | | | | |
|------------------------------------|--------------------|--------------------|------------------|---|------|-------|--|
| COUNTY JOHNSTON | BRIDGE NUMBER | 500100 | INSPECTION CYCLE | 2 | YRS | | |
| ROUTE 195 | ACROSS NEUSE | RIVER | | | M.P. | 91500 | |
| | | | | | | | |
| LOCATION 1.8MI.N.JCT.I95,US301&701 | | | | | | | |
| SUPERSTRUCTURE RC FLOOR ON I-BEA | MS | | | | | | |
| SUBSTRUCTURE EBTS&IBTS:RC CAPS | ON CONC.ENCASE | D H-PILES | | | | | |
| SPANS 1@50'3;6@50';1@50'3 | | | | | | | |
| LONGITUDE 78° 22' 5.4" | | LATITUDE | 35° 28' 3.9" | | | | |
| 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 DELINEATOR | RS SOUTH END | | | | | | |



| SIGN NOTI | ~ — | NUMBERE REQUIRED |
|-----------|-----------------|---------------------|
| No | WEIGHT LIMIT | |
| No | DELINEATORS | |
| No | NARROW BRIDGE | |
| No | ONE LANE BRIDGE | |
| No | LOW CLEARANCE | |

APPROACH 1

NATIONAL BRIDGE INVENTORY------ STRUCTURE INVENTORY AND APPRAISAL Run Date: 06/08/2011

| IDENTIFICATION — | | | |
|---|-------------------------------------|---|--------------------------|
| (1) STATE NAME -NORTH CAROLINA BRIDG | | SUFFICIENCY RATING = | 50 |
| (8) STRUCTURE NUMBER(FEDERAL) | 000000001010100 | STATUS = Not Deficient | |
| INVENTORY ROUTE (ON/UNDER) - ON | 111000950 | 01.4001510.4510.1 | |
| (2) STATE HIGHWAY DEPARTMENT DISTRICT | 4 | | CODE |
| (3) COUNTY CODE 101 (4) PLACE CODE | 00000 | (112)NBIS BRIDGE SYSTEM - | YES |
| (6) FEATURE INTERSECTED - NEUSE RIVER | | (104)HIGHWAY SYSTEM NHS Route | 1. |
| (7) FACILITY CARRIED 195 | | (26) FUNCTIONAL CLASS - Arterial - Interstate | |
| (9) LOCATION 1.8MI.N.JCT.I95,US301&701 | | (100)STRAHNET HIGHWAY - Interstate STRAHNET Route | |
| (11)MILEPOINT | 91500 | (101)PARALLEL STRUCTURE - Right Parallel Structure | F |
| | 22' 5.4" | (102)DIRECTION OF TRAFFIC - 1-way Traffic | |
| () | SHARE | (103)TEMPORARY STRUCTURE - Not Temporary | |
| (99)BORDER BRIDGE STRUCTURE NO | | (110)DESIGNATED NATIONAL NETWORK - Is Part of | |
| | | (20) TOLL On Free Road | ; |
| STRUCTURE TYPE AND MATERIA | | (31) MAINTAIN - State Highway Agency | 0. |
| (43) STRUCTURE TYPE MAIN: Steel TYPE - Stringer Mutlibeam or Girder | CODE 302 | (22) OWNER - State Highway Agency | 0. |
| • | CODE 302 | (37) HISTORICAL SIGNIFICANCE - Not Eligible | ; |
| (44) STRUCTURE TYPE APPR : | 0005 | CONDITION | |
| | CODE | | ODE |
| (45) NUMBER OF SPANS IN MAIN UNIT | 8 | (58) DECK | |
| (46) NUMBER OF APPROACH SPANS | CODE 4 | (59) SUPERSTRUCTURE | - |
| (107)DECK STRUCTURE TYPE - Concrete cast-in-place | CODE 1 | (60) SUBSTRUCTURE | |
| (108)WEARING SURFACE / PROTECTIVE SYSTEM: | 0005 | (61) CHANNEL & CHANNEL PROTECTION | |
| (A) TYPE OF WEARING SURFACE - Bituminous | CODE 6 | (62) CULVERTS | ١ |
| (B) TYPE OF MEMBRANE - None | CODE 0 | LOAD DATING AND DOCTING | |
| (C) TYPE OF DECK PROTECTION - None | CODE 0 | | ODE |
| ACE AND SERVICE | | (31) DESIGN LOAD HS 20+MOD (64) OPERATING RATING - HS-45 | 18 [.] |
| (27) YEAR BUILT | 1957 | (66) INVENTORY RATING - HS-27 | 148 |
| (106)YEAR RECONSTRUCTED | 1937 | (70) BRIDGE POSTING - No Posting Required | 140 |
| (42) TYPE OF SERVICE : ON - Highway | | (41) STRUCTURE OPEN, POSTED ,OR CLOSED | , |
| | CODE 15 | DESCRIPTION - Open, No Restriction | , |
| UNDER - Waterway (28) LANES: ON STRUCTURE 2 UNDER STRUC | | DECOMM HON Open, No Resultation | |
| (29) AVERAGE DAILY TRAFFIC | 19500 | | ODE |
| (30) YEAR OF ADT 2009 (109) TRUCK ADT PCT | 16 % | (67) STRUCTURAL EVALUATION | المال |
| (19) BYPASS OR DETOUR LENGTH | 8 MI | (68) DECK GEOMETRY | Ì |
| GEOMETRIC DATA | | (69) UNDERCLEARANCES, VERTI & HORIZ | ١ |
| (48) LENGTH OF MAXIMUM SPAN | 50 FT | (71) WATERWAY ADEQUACY | |
| (49) STRUCTURE LENGTH | 401 FT | (72) APPROACH ROADWAY ALIGNMENT | |
| (50)CURB OR SIDEWALK: LEFT 0.0 FT RIGHT | | (36) TRAFFIC SAFETY FEATURES | 111 |
| (51) BRIDGE ROADWAY WIDTH CURB TO CURB | 28.2 FT | (113)SCOUR CRITICAL BRIDGES | |
| (52) DECK WIDTH OUT TO OUT | 31.6 FT | SCOUR PLAN OF ACTION | |
| (32) APPROACH ROADWAY WIDTH (W/SHOULDERS) | 38.0 FT | SCOUR FLAN OF ACTION | |
| (33) BRIDGE MEDIAN - Open Median | CODE 1 | PROPOSED IMPROVEMENTS | |
| (34) SKEW 30° (35) STRUCTURE FLARED | NO NO | (75) TYPE OF WORK - CODE | 24 |
| (10) INVENTORY ROUTE MIN VERT CLEAR | 99 FT 99 IN | | 31 [.] 441 F |
| (47) INVENTORY ROUTE TOTAL HORIZ CLEAR | 28.2 FT | | 30,000 |
| (53) MIN VERT CLEAR OVER BRIDGE RDWY | | | 58,000 |
| | 99 FT 99 IN | (2) 70711 700 1707 2007 | 45,000 |
| | 99 FT 99 IN | (96) TOTAL PROJECT COST \$2,1 | , |
| (54) MIN VERT UNDERCLEAR REF Not a Highway or Railroad | I | (96) TOTAL PROJECT COST \$2,1 (97) YEAR OF IMPROVEMENT COST ESTIMATE | 200 |
| | I | | |
| (54) MIN VERT UNDERCLEAR REF Not a Highway or Railroad (55) MIN LAT UNDERCLEAR RT REF Not a Highway or Railroad (56) MIN LAT UNDERCLEAR LT REF - | 99.9 FT | (97) YEAR OF IMPROVEMENT COST ESTIMATE (114)FUTURE ADT 39000 (115) YEAR FUTURE ADT | 200 |
| (54) MIN VERT UNDERCLEAR REF Not a Highway or Railroad (55) MIN LAT UNDERCLEAR RT REF Not a Highway or Railroad (56) MIN LAT UNDERCLEAR LT REF - | 99.9 FT 0.0 FT | (97) YEAR OF IMPROVEMENT COST ESTIMATE (114)FUTURE ADT 39000 (115) YEAR FUTURE ADT INSPECTIONS | 2007 |
| (54) MIN VERT UNDERCLEAR REF Not a Highway or Railroad (55) MIN LAT UNDERCLEAR RT REF Not a Highway or Railroad (56) MIN LAT UNDERCLEAR LT REF - NAVIGATION DATA (38) NAVIGATION CONTROL - No Navigational Control | 99.9 FT 0.0 FT CODE 0 | (97) YEAR OF IMPROVEMENT COST ESTIMATE (114)FUTURE ADT 39000 (115) YEAR FUTURE ADT INSPECTIONS (90) INSPECTION DATE 05/1 | 200 |
| (54) MIN VERT UNDERCLEAR REF Not a Highway or Railroad (55) MIN LAT UNDERCLEAR RT REF Not a Highway or Railroad (56) MIN LAT UNDERCLEAR LT REF - NAVIGATION DATA (38) NAVIGATION CONTROL - No Navigational Control (111) PIER PROTECTION - Not Applicable | 99.9 FT 0.0 FT CODE 0 CODE | (97) YEAR OF IMPROVEMENT COST ESTIMATE (114)FUTURE ADT 39000 (115) YEAR FUTURE ADT INSPECTIONS (90) INSPECTION DATE 05/1 (92) CRITICAL FEATURE INSPECTION: (93) CFI DATE | 2007 |
| (54) MIN VERT UNDERCLEAR REF Not a Highway or Railroad (55) MIN LAT UNDERCLEAR RT REF Not a Highway or Railroad (56) MIN LAT UNDERCLEAR LT REF - NAVIGATION DATA (38) NAVIGATION CONTROL - No Navigational Control | 99.9 FT 0.0 FT CODE 0 | (97) YEAR OF IMPROVEMENT COST ESTIMATE (114) FUTURE ADT 39000 (115) YEAR FUTURE ADT INSPECTIONS (90) INSPECTION DATE 05/1 (92) CRITICAL FEATURE INSPECTION: (93) CFI DATE A) FRACTURE CRIT DETAIL - NO A) | 2007 |

BRIDGE I & A FORM1 (90)A

BRIDGE INSPECTION RECORD AND SUMMARY

INSPECTION TYPE Routine Inspection

BRIDGE NO. 500100 COUNTY JOHNSTON

STRUCTURE TYPE RC FLOOR ON I-BEAMS

ROUTE 195

OVER NEUSE RIVER

ROUTE ORIENTATION S - N

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

| | F\/A+++ATION CODE | ODITIC: | 1 (0 0 0) | , DOOD (D. 4). 5 | TAID (F. F. O) O: | 000 (0. 7 | 0) | |
|--|---------------------------------|------------|--------------|------------------------------------|-------------------|------------|-----------------|-----|
| | EVALUATION CODES | s: CRITICA | L (C, 0 - 3) | ; POOK (P, 4); F | AIK (F, 5, 6); G | | 9) | |
| | INSPECTION ITEM | | 004050 | 45 0114515151 | 14/4 75 514/41 | ITEM 61 | | |
| DECK ITEMS GRADES 1. WEARING SURFACE G | | | | 45. CHANNEL a. WATERWAY | | | | G |
| | | | G | PROT. | PROT. | | | G |
| 2. DECK NO. OF EA TYPE | a. CONCRETE | 8 | F | c. SCOUR | | | | G |
| SPN GRADE | b. TIMBER | | | | P, DIKES, ETC. | G | | |
| RATES SI & A | c. STEEL PLANK | | | | H ROADWAY C | ONDITION | | G |
| ITEM 58 | d. OPEN GRID | | | 51. APPROAC | | | | |
| 3. RAILING | a. CONCRETE | | F | 52. PAINT SYS | STEM | CODE | A | F |
| | b. TIMBER | | | 53. UTILITIES | | | | |
| | c. ALUMINUM | | | | E TO LIVE LOAI | | | G |
| | d. STEEL | | F | 55. ESTIMATE | D REMAINING L | LIFE | | 10 |
| | HEELGUARDS, PARAPETS, MEDIA | | F | | | | | |
| | S (ON OR ATTACHED TO STRUCT | URE) | | | DRY SIGN NOTI | |) | NO |
| 6. DECK EXP | a. STEEL PL OR FINGER | | | | ACTION NOTICE | ISSUED | | NO |
| JTS. OR DEVICES. | b. MISC PREFAB | | | 62. PRESENTI | Y POSTED | | | NO |
| NO. OF EACH | c. COMPRESSION SEAL | | | | <u>-</u> | | ITE UP)(MAN HR) | 8 |
| | d. STANDARD JOINTS | 7 | G | | OOPER INSP. T | . , | | 0 |
| | e. OPEN JOINTS | | | 65. TOTAL TR | AFFIC CONTRO | L TIME (MA | N HRS) | 0 |
| 7. DECK DEBI | RIS (INCLUDES EXCESS SAND/GF | RAVEL) | G | | | | | |
| | | | | 70. SI&A GENERAL CONDITION RATINGS | | | | |
| , | SUPER STR. (FM. 1 (90)B TRUSS) | ITEM 59 | | a. DECK ITEM 58 | | | ITEM 58 | 5 |
| 10. LONGITUI | DINAL BEAMS OR GIRDERS | | G | b. SUPERSTRUCTURE ITEM 59 | | | ITEM 59 | 7 |
| 11. LONGITUDINAL JOIST OR STRINGERS | | | | c. SUBSTRUC | TURE | | ITEM 60 | 5 |
| 12. INT. DIAP' | S, X-FRAMES, BRACING & CONN'S | S | G | d. CHANNEL & CHANNEL PROT. ITEM 61 | | | 7 | |
| 13. END DIAP | 'S, CURTAIN WALLS, & CONN'S | | F | | | | | |
| 14. FLOOR BE | EAMS AND CONNECTIONS | | | 71. SI&A FIELD APPRAISAL RATINGS | | | | |
| 15. BEARING | ASSEMBLIES (INCLUDING MISALI | GN) | F | a. WATERWAY ADAQUACY | | | | 7 |
| 16. DRAINAGI | E SYSTEM (ON STRUCTURE) | | F | b. APPR. RDWY. ALIGNMENT | | | | 7 |
| 17. MOVABLE | SPAN MACHINERY | | | | | | | |
| | | | | 72. FIELD SCOUR EVALUATION | | | G | |
| SI | JB STR. ITEMS. ITEM 60 (INCLUDE | SCOUR) | | | | | | |
| 35. TIM SUB | a. ABUT. & INT. BENT CAPS & RIS | SERS | | l | JSE OF INSP. A | CCESSIBILI | TY EQUIPMENT | |
| STR. | b. PILES, POST, SILLS, & BRACIN | 1G | | SNOOPER (C | ODE S, 4, OR N |) | HRS | NO |
| | c. BULKHEADS, WING'S, & TIE BA | ACKS | | LADDER | | | | YES |
| 36. CONC | a. ABUT. & INT. BENT CAPS | | F | BUCKET TRU | CK | | | NO |
| SUB STR. | b. ABUT. & BENT COL'S BREAST | WALLS | | BOAT | | | | NO |
| | c. ABUT. & INT. BENT PILES | | F | OTHER | | | | NO |
| | d. BACKWALLS, WING'S, RETAIN | I. WALLS | G | | | | | |
| | e. ABUT. & BENT FOOTINGS & SI | ILLS | | | | | | |
| 37. STEEL a. ABUT. & INT. BENT CAPS & RISERS | | | | SPECIAL INSI | PECTION REQU | JESTED FO | R | |
| SUB STR. | b. PILES, BRACING, AND BULKHI | EADS | F | | | | | |
| 38. FOUNDAT | ION PILES TYPE MATERIAL | | | NOTE | | | | |
| 39. SLOPE PF | ROT., RIP-RAP (INCLUDE DRAINAC | GE) | G | | | | | |
| 40. FENDER S | SYSTEMS | | | 80. INSPECTE | D BY: | | WM Chy | |
| 41. DRIFT | | | G | 81. REVIEWE | BY: | | | |
| | | | • | - | <u>'</u> | | | |

Bridge I&A Form 1(82)H

State of North Carolina Dept. of Transportation Division of Highways

FIELD INSPECTION REPORT

Bridge Inspecion & Analysis

Team Leader WILLIS C MAY

Assisted By WTW

| Assisted By | WTW | | | | | |
|-------------|-------|--|--|--|--|--|
| Item No. | Grade | | | | | |
| 2a | F | CONCRETE DECK BOTTOM OF DECK IN ALL SPANS HAS NUMEROUS HAIRLINE CRACKS. SPAN 1- BAY 3 AT END BENT 1 BOTTOM OF DECK HAS TWO DIAGONAL HAIRLINE CRACK WITH EFFLORESCENCE. | | | | |
| | | SPAN 2- BOTTOM OF DECK IN BAY 1 HAS TWO HAIRLINE DIAGONAL CRACKS WITH RUST STAINS. SPAN 2 RIGHT OVERHANG HAS NUMEROUS HAIRLINE CRACKS WITH EFFLORESCENCE. | | | | |
| | | SPAN 3- BAY 3 BOTTOM OF DECK HAS TRANSVERSE HAIRLINE CRACK WITH EFFLORESCENCE. FEW OTHERS SIMILAR THROUGHOUT BRIDGE. | | | | |
| 3 a | F | CONCRETE RAILING SCALING WITH EXPOSED COARSE AGGREGATE IN FACES. MOST RAIL POSTS ARE HAIRLINE MAP CRACKED IN TOP OF POSTS. SPAN 1- LEFT RAIL POST # 2 SPALLED. LEFT RAIL POST # 8 AT BENT 1 SPALLED. SPAN 4- | | | | |
| 3d | F | TOP OF RIGHT RAIL POST # 4 IS CRACKED. STEEL RAILS SCRAPE AND COLLISION DAMAGE IN SPOTS THROUGHOUT. 20 FT. OF GUARDRAIL DAMAGE AT LEFT SIDE OF SPANS 2, 3, & 4 60 FT. OF GUARDRAIL DAMAGE AT LEFT SIDE OF SPAN 5 40 FT. OF GUARDRAIL DAMAGE AT RIGHT SIDE OF SPAN 5 | | | | |
| 6d | G | STANDARD JOINTS RESEALED SINCE LAST INSPECTION. | | | | |
| 10 | G | LONGITUDINAL BEAMS PEELING PAINT AND SURFACE RUST WITH NO MEASUREABLE SECTION LOSS THROUGHOUT. MOST BEAMS HAVE RUST AND UP TO 1/8 IN. SECTION LOSS 1/2 IN. WIDE IN THE WEB AROUND THE END DIAPHRAGMS. SPAN 1- SECTION LOSS THE LEFT BOTTOM FLANGE OF BEAM 3 SPAN 1 OVER BENT 1, 4 IN. | | | | |
| 13 | F | LONG WITH 1/2 IN. REMAINING. END DIAPHRAGMS BENT 1- SPAN 2 BAY 2 DIAPHRAGM HAS VERTICAL HAIRLINE CRACK IN FACE AND CONTINUES ACROSS BOTTOM. BENT 2- SPAN 2 BAY 2 DIAPHRAGM HAS VERTICAL HAIRLINE CRACK IN FACE AND CONTINUES ACROSS BOTTOM. SIMILAR ON SPAN 3 SIDE. SIMILAR AT BENT 4 SPAN 4 BAY 1. BENT 4 WOOD SHORING LEFT IN PLACE UNDER BAY 2 & 3 END DIAPHRAGMS AT BENT 4 ADJACENT TO BM 3 WHICH HAS A CAP REPAIR UNDERNEATH BEAM. PHOTO | | | | |

Bridge I&A Form 1(82)H

State of North Carolina Dept. of Transportation Division of Highways

FIELD INSPECTION REPORT

Bridge Inspecion & Analysis

Team Leader WILLIS C MAY

Assisted By WTW

| Assisted By | WTW | |
|-------------|-------|--|
| Item No. | Grade | |
| 15 | F | BEARING ASSEMBLIES END BENT 1- BEARINGS RUSTED AND FLAKING AT BEAM 3. MOST BEARINGS SIMILAR THROUGHOUT BRIDGE. ANCHOR BOLTS HAVE BEEN REPAIRED BY WELDING A PLATE TO THE MASONRY |
| 36a | F | PLATE AND STUDDED TO CAP. CONCRETE CAPS END BENT 1- |
| | | DIAGONAL HAIRLINE CRACK WITH EFFLORESCENCE IN FACE OF CAP AT BAY 2, LEFT END AND RIGHT END. BENT 3- |
| | | SPAN 3 FACE OF CAP HAS VERTICAL HAIRLINE CRACK WITH EFFLORESCENCE UNDER BEAM 3. BENT 4- |
| | | VERTICAL CRACK IN REPAIR FOR SPALL IN FACE OF CAP SPAN 4 SIDE UNDER BEAM 3. SPALL WITH EXPOSED ANCHOR BOLT IN SPAN 4 SIDE OF CAP AT RIGHT END HAS BEEN REPAIRED SINCE LAST INSPECTION. END BENT 2- |
| | | HORIZONTAL CRACK UP TO 1/16 IN UNDER BAY 1. DIAGONAL HAIRLINE CRACK IN FACE UNDER BEAM 2. |
| 36c | F | CONCRETE ENCASED PILES H-PILES ENCASED IN CONCRETE UP TO 1/8 IN. DEEP WATER ABRASION WITH COARSE AGGREGATE IN FLOWZONE OF PILES IN WATERWAY. |
| 37b | F | STEEL PILES BENT 7- STEEL H-PILES ARE EXPOSED UNDER THE BOTTOM OF CONCRETE ENCASEMENTS WITH UP TO 1/16 IN. SECTION LOSS IN FLANGES IN EXPOSED AREAS. |
| 39 | G | SLOPE PROTECTION VEGETATION AND SMALL TREES ON END SLOPES. |
| 50 | G | APPROACH ROADWAY CONDITION TRANSVERSE CRACKS IN APPROACH ASPHALT. |

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 500100 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 AT BOTH END BENTS AND ALONG BENT 3 JOINT. | |
| 2910 | Manual Brush and Tree Control | LF | 200 | VEGETATION AROUND ENDS OF BRIDGE. | |
| 3318 | Maint to Concrete Handrail | LF | 5 | SPALLS IN TOPS OF CONCRETE RAILS. | |
| 3322 | Maint to Steel Handrail | LF | 120 | GUARDRAIL DAMAGE ALONG LEFT AND RIGHT SIDE OF BRIDGE. | |
| 3342 | Clean and Paint Structural Steel | SF | 200 | BERINGS ARE RUSTY, RUST AND SECTION LOSS 1/2 IN. WIDE AROUND END DIAPHRAGMS, HIGH-PILES EXPOSED AND RUSTY AT BENT 7. | |





TRANSVERSE CRACKING IN WEARING SURFACE OVER END BENT 2



TRANSVERSE CRACK IN WEARING SURFACE OVER END BENT 1



SECTION LOSS IN THE BOTTOM FLANGE OF BEAM 3 IN SPAN 1 OVER BENT 1



SECTION LOSS IN THE WEB OF BEAM 3 AT JUCTION OF DIAPHRAGM SPAN 1 OVER BENT 1



HAIRLINE DIAGONAL CRACKS IN BOTTOM OF DECK OF SPAN 2 BAY 1 AT BENT 2



BOTTOM OF PILE 7 CONCRETE ENCASEMENT UNDERMINED WITH SECTION LOSS TO EXPOSED STEEL H-PILE



PILES IN WATERWAY HAVE WATER ABRASION WITHE EXPOSED AGGREGATE IN FLOWZONE.

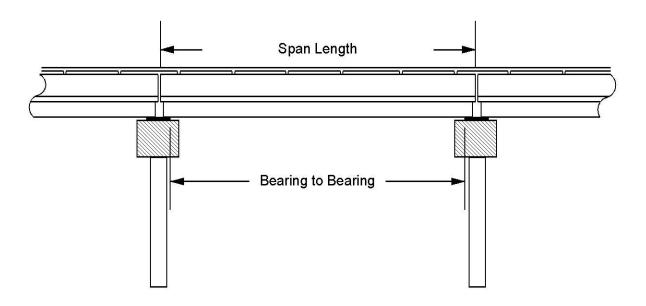
BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE Run Date: 06/08/2011

| COUNTY: JOHNSTON | DIV | : DIS | T: 3 | STRUCTUR | E NUMBER : 500 | | GTH : 401 | FEET |
|---------------------|----------------|--------------|--------------|-------------|----------------|--------------|--------------|------------|
| ROUTE CARRIED : | | FI | EATURE INT | ERSECTED | | | | |
| LOCATED : | | В | RIDGE NAM | E : | | CITY: | | |
| 1.8MI.N. | JCT.I95,US3018 | 701 | _ | | | _ | | |
| FUNC. CLASS: | SYST.ON: | SYST.UNDE | R : | ADT & Y | ₹: | RAIL 1 | YPE: | |
| 11 | FA | | NFA | 19 | 500 2009 | LT | 333 RT | 333 |
| BUILT : | BY: | PROJ: | | FED.AI | D PROJ : | DESIGN L | CAD : | |
| 1957 | SHC | | 8.12339 | | | | | S 0+MOD |
| REHAB: E | BY: PR | OJ: | ALIGNMEN | NT: | SKEW: | LANES: | | |
| | | | | TAN. | 120 | ON 2 | UND | ER |
| NAVIGATION : | | | HT. CRN | I. TO BED : | | WATER DE | PTH: | |
| VC 0.0 | FT HC | 0.0 FT | | 38 | FT | | 4 | FT |
| SUPERSTRUCTURE | RC FLOOF | R ON I-BEAMS | 3 | | | | | |
| | | | | | | | | |
| SUBSTRUCTURE: | EBTS&IB | TS:RC CAPS | ON CONC. | ENCASED I | H-PILES | | | |
| SPANS: | 1@50'3;6 | @50';1@50'3 | | | | | | |
| BEAMS OR GIRDERS | | 33 I-BEAMS @ | 8'CENTER | RS | | | | |
| FLOOR : | EN | CROACHMENT | -: | DE | CK (OUT TO | OUT) : | | |
| 6.75RC/4 AWS | | | | | | 31.6 FT | | |
| CLEAR ROADWAY: | BET | WEEN RAILS : | | S | IDEWALK OR | CURB: | | |
| 28.2 | 2 FT | | 31.4 FT | | L | T 0.0 FT | RT | 0.0 FT |
| VERT.CL.OVER: | VER | T.CL.UNDER : | | HOR.CL. | UNDER : | | | |
| 99 FT 99 IN | | 00 FT 00 IN | | | 0.0 | FT | | |
| INV.RTG. : | OPE.RTG. : | CONTR.M | EMBER : | POS | TED : | | | |
| HS-27 | HS-45 | 5 | BEAM INT. | SV | TTS | T DA | TE 01/0 | 01/0001 |
| SYSTEM: | | | | | GREE | N LINE ROUTE | : | |
| Primary Interstate | | | | | | | Υ | |
| 2ND OPENING : | 3RD | OPENING: | | 4TH OPENI | NG : | 5TH OF | PENING : | |
| REMARKS: | | | | | | | | |

Structure Data Worksheet

County: JOHNSTON Structure No: 500100 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)

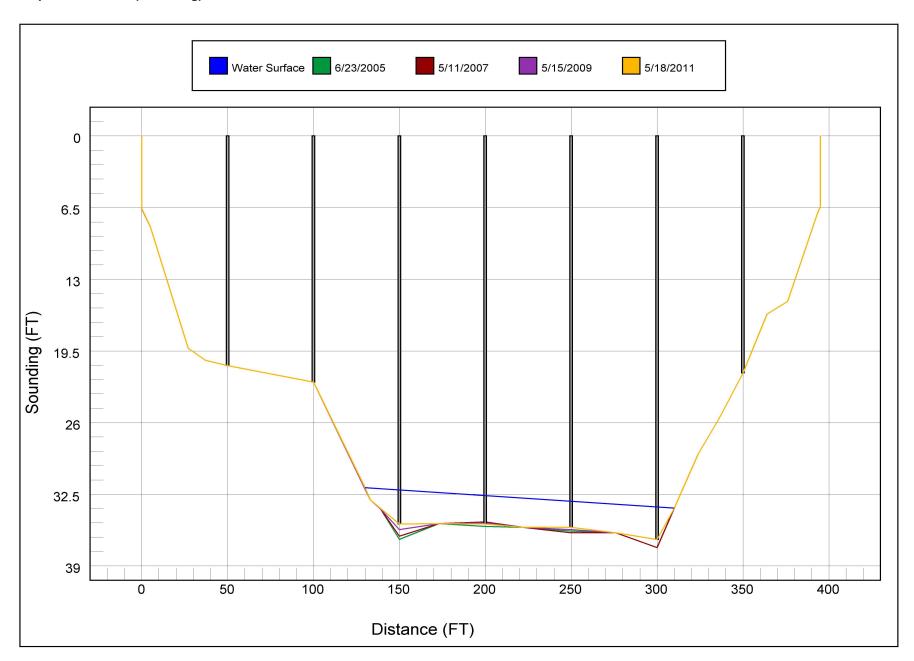
| Bridge No: | 500100 | County: | JOHNSTON | Date: | 05/18/2011 | Ву: | WCM |
|---------------|--------------------|-------------|-----------------------|------------------|-------------|-----|-----|
| Record sou | inding from top of | rail. Othe | r location if needed: | | | | |
| Distance from | om Highwater Mar | k to top of | rail: | Location of High | water Mark: | | |

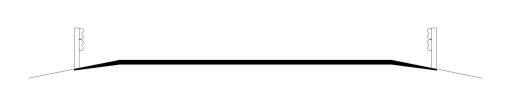
| | D | OWNSTREAM | UPSTREAM | | | | | |
|----------------------------|---------------|---------------------------------|----------------------------|---------------|-------------|--|--|--|
| Distance (Station) (ft) | Sounding (ft) | Description | Distance (Station) (ft) | Sounding (ft) | Description | | | |
| 0 | 0 | TOP OF RAIL | | | | | | |
| 0.1 | 6.6 | TOP OF CAP | | | | | | |
| 5 | 8.25 | GAC | 5 | 8.083 | TOC | | | |
| 27 | 19.25 | TOS | | | | | | |
| 37 | 20.333 | | | | | | | |
| 50 | 20.833 | BENT 1 | 50 | 20.833 | BENT 1 | | | |
| 100 | 22.333 | BENT 2 | 100 | 22.75 | BENT 2 | | | |
| 130 | 31.9 | Water Surface/Water Edge (WSWE) | | | | | | |
| 133 | 33 | | | | | | | |
| 150 | 35.2 | BENT 3 | 150 | 35.3 | BENT 3 | | | |
| 173 | 35.167 | | | | | | | |
| 200 | 35.2 | BENT 4 | 200 | 36.1 | BENT 4 | | | |
| 222 | 35.5 | | | | | | | |
| 250 | 35.5 | BENT 5 | 250 | 36.4 | BENT 5 | | | |
| 276 | 36 | | | | | | | |
| 300 | 36.6 | BENT 6 | 300 | 38.5 | BENT 6 | | | |
| 310 | 33.75 | Water Surface/Water Edge (WSWE) | | | | | | |
| 324 | 28.833 | | | | | | | |
| 336 | 25.667 | | | | | | | |
| 350 | 21.5 | BENT 7 | 350 | 17.75 | BENT 7 | | | |
| 364 | 16.167 | | | | | | | |
| 376 | 15 | TOS | | | | | | |
| 393 | 7.167 | GAC | 393 | 7.5 | GAC | | | |
| 395 | 6.417 | TOC | | | | | | |
| 395.1 | 0 | TOP OF RAIL | | | | | | |

Bridge: 500100 County JOHNSTON Date: 05/18/2011

STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)

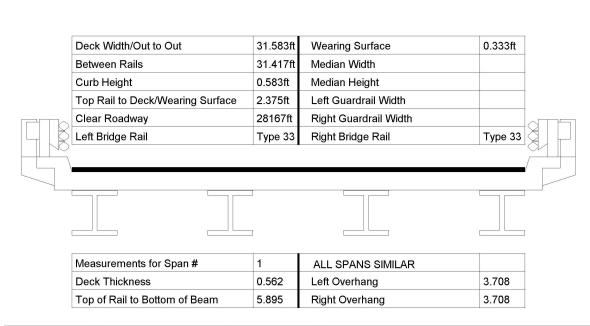




| Roadway | 24ft Wide | 2 Paved Lanes | Looking North |
|-----------------|----------------|---------------|---------------|
| Left Shoulder | 10ft Wide | 4ft Paved | 6ft Unpaved |
| Right Shoulder | 10ft Wide | 10ft Paved | |
| Left Guardrail | 10ft from road | | |
| Right Guardrail | 10ft from road | | |

| Checked By: WTW | 5/18/11 |
|---------------------|---------|
| Checked by, vv i vv | 3/10/11 |

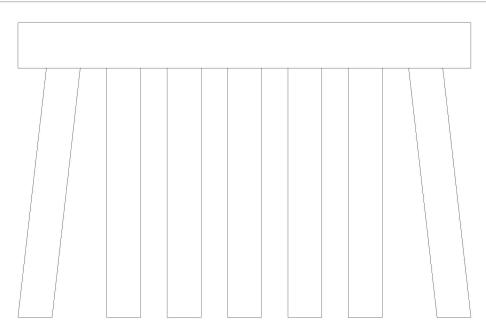
| Title | | | Description | | | |
|------------------------|-------------------------|---------------|------------------|------------------------|--|--|
| APPROACH ROADWAY - NBL | | LOOKING NORTH | | | | |
| Bridge No: 500100 | Drawn By: A. D. OSBORNE | | Date: 06/21/2005 | File Name: S0154000024 | | |



| Beam No | Beam Type | Spacing | Comments |
|---------|--------------|---------|-----------|
| 1 | Steel I Beam | 8.0ft | 33" IBEAM |
| 2 | Steel I Beam | 8.0ft | 33" IBEAM |
| 3 | Steel I Beam | 8.0ft | 33" IBEAM |
| 4 | Steel I Beam | | 33" IBEAM |

1 1/2" ASPHALT OVERLAY ADDED STARTING 6" FROM CURBLINES

| Checked By: WTW 5/18/1 | 11 | | | | | |
|------------------------|-------------------------|-------------------------|------------------|------------------------|--|--|
| Title Description | | | | | | |
| TYPICAL SECTION | | 4 LINES STEEL I - BEAMS | | | | |
| Bridge No: 500100 | Drawn By: A. D. OSBORNE | <u>;</u> | Date: 06/21/2005 | File Name: S0154000025 | | |



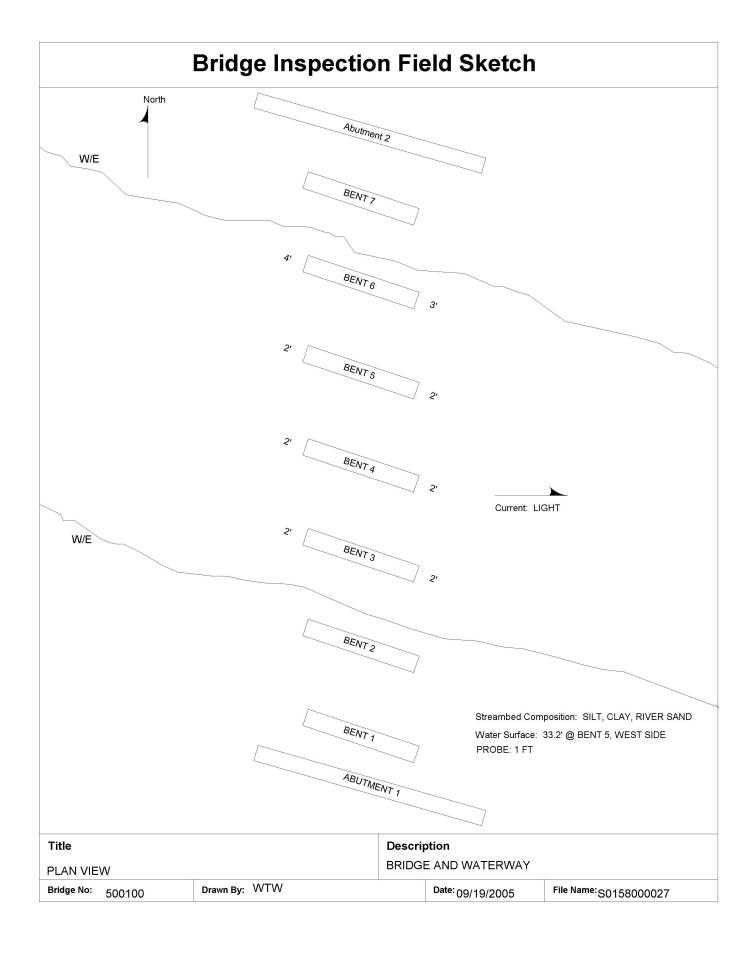
* NOTE: PILES ARE CONCRETE-ENCASED STEEL H-PILES

| Bent # | 7 | | Bents 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 Ler | ngth | Width/Diam. | Height | Orientation |
|--------|-----------|-----------|-------------|------|-------------|--------|-------------|
| 1 | Steel | Pile Bent | 4.667 FT | | 22x22 INCHE | s | Batter Pile |
| 2 | Steel | Pile Bent | 4.667 FT | | 22x22 INCHE | s | Vertical |
| 3 | Steel | Pile Bent | 4.667 FT | | 22x22 INCHE | s | Vertical |
| 4 | Steel | Pile Bent | 4.667 FT | | 22x22 INCHE | s | Vertical |
| 5 | Steel | Pile Bent | 4.667 FT | | 22x22 INCHE | s | Vertical |
| 6 | Steel | Pile Bent | 4.667 FT | | 22x22 INCHE | s | Vertical |
| 7 | Steel | Pile Bent | | | 22x22 INCHE | s | Batter Pile |

| ı | | |
|---|-----------------|---------|
| | Checked By: WTW | 5/18/11 |

| Title | | | Description | | | | |
|-------------------|-----------|---------------|------------------|------------------------|--|--|--|
| SUBSTRUCTURE | | LOOKING SOUTH | | | | | |
| Bridge No: 500100 | Drawn By: | | Date: 06/22/2005 | File Name: S0018000413 | | | |



6/21/05

| P1 | P2 | Р3 | P4 | P5 | P6 | P7 |
|----|----|----|---------|---------|---------|---------|
| 0" | 0" | 6" | 8" @ | 15" @ | 26" @ | 32" @ |
| | | | F-1,2,4 | F-1,2,4 | F-1,2,4 | F-1,2,4 |
| | | | | | | |

STEEL PILES NOT EXPOSED 2009 INSPECTION

| Title | | | Description | | | |
|-----------------------------|--|--------------------------|------------------|------------------------|--|--|
| VERTICAL EXPOSURE SHEET | | BT.#7 VERTICAL EXPOSURE. | | | | |
| Bridge No: 500100 Drawn By: | | | Date: 09/19/2005 | File Name: S0158000028 | | |



WEST PROFILE



APPROACH 2



LOOKING SOUTH



JOINT AT BENT 7



JOINT AT BENT 6



JOINT AT BENT 5



JOINT AT BENT 4



JOINT AT BENT 3



JOINT AT BENT 1



SPAN 1 OVERVIEW - ALL SPANS SIMILAR



APPROACH 1



LOOKING NORTH



END BENT 1 OVERVIEW



BENT 1 SPAN 2 SIDE, OTHER BENTS SIMILAR



SUPERSTRUCTURE OVERVIEW



ANCHOR BOLT REPAIR AT BEAM 4 OVER BENT 2 - OTHER REPAIRS SIMILAR AT THIS BENT



SPALL REPAIR IN RIGHT END OF CAP AT BENT 4



SPALL REPAIR IN FACE OF CAP AT BENT 4 BAY 3 SPAN 4 SIDE



SHORING ADDED AT BENT 4 BAY 2



SHORING ADDED AT BENT 4 BAY 3



END BENT 2 OVERVIEW



DELETE



LOOKING WEST UPSTREAM UNDER THE SOUTHBOUND STRUCTURE



SUPERSTRUCTURE OVER END OF CAP



LOOKING EAST DOWNSTREAM