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| 500I        |                            |   |   | STATE OF NORT<br>DIVISION OF<br>NASH C  | TH CAROLINA<br>HIGHWAYS  | -<br>-   | STATE         STATE PROJECT REPERENCE NO.         SHEET<br>NO.           N.C.         BP-55001         1           STATE         PROJECT REPERENCE NO.         DESCRIPTION           STATE         PROJECT REPERENCE NO.         DESCRIPTION | TOTAL<br>SHEETT<br>NON<br> |
|-------------|----------------------------|---|---|---|--|--|--|----------------------------|
| T: BP-5     |                            |   | LOCATION: 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1 | NASH COUNTY:<br>BRIDGE #189 ON US64 BUS-<br>BRIDGE #195 ON US64 BUS-<br>BRIDGE PRESERVATION WI<br>REPLACEMENT, SUBSTRUCUI<br>EXISTING BEARINGS. | -EB OVER STONEY<br>-WB OVER STONE<br>TH LATEX MODII<br>RE REPAIR AND | Z CREEK.<br>Y CREEK.<br>FIED CONCRETE, JOINT<br>CLEANING AND PAINTING OF   |  |                            |
| PROJEC      |                            |   |   | N<br>S<br>1615  |  |  |  |                            |
| 2 J         |                            |   |   | 189<br>189<br>BUS<br>64<br>195<br>189<br>5TONEY<br>189<br>BUS<br>64   |  |  |  |                            |
| DD00150     |                            |   |   |   |  | THE  |  |                            |
| 1CT:        |                            |   |   | VICINITY MA   | P – NASH CO.   | RWET   |  |                            |
| <b>ONTR</b> | OV<br>NORTH CAROLINASENOIL | DE<br>NASH COUNTY<br>#189 ADT 2013 =<br>#195 ADT 2013 = | <i>SIGN DATA</i><br>4,000<br>4,000  | PROJECT LEN<br>NASH COUNTY<br># 189 = 0.057 MILE<br># 195 = 0.057 MILE  | IGTH   | Prepared in the Office of:<br><b>DEPARTMENT OF TRANSPORTA</b><br><b>DIVISION OF HIGHWAYS</b><br>STRUCTURES MANAGEMENT UNIT - PRESERVATION & REPAIR<br>1000 BIRCH RIDGE DR. RALEIGH, N.C. 27610<br><u>TIMOTHY M. SHERRILL, P.E.</u><br>PROJECT ENGINEER | ATION<br>GROUP<br>BEB20097EASHEAL<br>40257<br>8/15/7010CINES   |                            |
| S           | OF TRANSPORT               |   |   |   |  | 2012 STANDARD SPECIFICATIONS<br>LETTING DATE:<br>SEPTEMBER 22, 2015  | <u>W. MATTHEW</u> CLARK<br>PROJECT DESIGN ENGINE   | <u>'E, P.E.</u><br>IEER    |

| STATE | STAT        | B PROJECT REFERENCE NO. | SHEET<br>NO. | TOTAL<br>SHEETS |
|-------|-------------|-------------------------|--------------|-----------------|
| N.C.  | B           | P-5500I                 | 1            |                 |
| STAT  | E PROJ. NO. | F. A. PROJ. NO.         | DESCRIPT     | ION             |
| 50    | 070.1.1     | BRNHS-000S(747)         | P.E          |                 |
|       |             |                         | CON          | ST.             |
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STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

# NASH COUNTY

LOCATION: NASH COUNTY: BRIDGE #189 ON US64 BUS-EB OVER STONEY CREEK. BRIDGE #195 ON US64 BUS-WB OVER STONEY CREEK.

TYPE OF WORK: BRIDGE PRESERVATION WITH LATEX MODIFIED CONCRETE, JOINT REPLACEMENT, SUBSTRUCURE REPAIR AND CLEANING AND PAINTING OF EXISTING BEARINGS.

# **INDEX OF SHEETS**

| 1                | TITLE SHEET            |
|------------------|------------------------|
| 14               | INDEX OF SHEETS        |
| S–1              | TOTAL BILL OF MATERIAL |
| S–2 THRU S–17    | STRUCTURAL PLANS – NAS |
| S–18 THRU S–33   | STRUCTURAL PLANS – NAS |
| SN               | STANDARD NOTES         |
| TMP-1 THRU TMP-5 | TRAFFIC MANAGEMENT PL  |

**DD00156** CONTRACT

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PROJEC

| STATE | 8TA1      | B PROJECT REFERENCE NO. | SHEET<br>NO. | TOTAL<br>SHEETS |  |  |  |
|-------|-----------|-------------------------|--------------|-----------------|--|--|--|
| N.C.  | B         | P-5500I                 | 1A           |                 |  |  |  |
| STAT  | B PROLNO. | F. A. PROJ. NO.         | DESCRIPT     | NON             |  |  |  |
| 50    | 070.1.1   | BRNHS-000S(747)         | P.E          | P.E.<br>CONST.  |  |  |  |
|       |           |                         | CON          | ST.             |  |  |  |
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|       |           |                         |              |                 |  |  |  |

SH #189

SH #195

ANS

|              |              |                       |   |   |                                       |                              |                                    | Т                                   | OTAL E                                   | BILL OF N  | MATERI               | AL                          |                        |                     |                                |                               |                  |   |                              |   |
|--------------|--------------|-----------------------|---|---|---------------------------------------|------------------------------|------------------------------------|-------------------------------------|--|--|----------------------|-----------------------------|------------------------|---------------------|--------------------------------|-------------------------------|------------------|---|------------------------------|---|
| BRIDGE       | MOBILIZATION | INCIDENTAL<br>MILLING | ASPHALT<br>CONCRETE<br>BASE<br>COURSE,<br>TYPE B25.0B | ASPHALT<br>CONCRETE<br>SURFACE<br>COURSE,<br>TYPE S9.5B | ASPHALT<br>BINDER<br>FOR PLANT<br>MIX | GROOVING<br>BRIDGE<br>FLOORS | CLASS II<br>SURFACE<br>PREPARATION | CLASS III<br>SURFACE<br>PREPARATION | LATEX<br>MODIFIED<br>CONCRETE<br>OVERLAY | PLACING &<br>FINISHING<br>LATEX MODIFIED<br>CONCRETE | SHOTCRETE<br>REPAIRS | EPOXY<br>RESIN<br>INJECTION | FOAM<br>JOINT<br>SEALS | VOLUMETRIC<br>MIXER | CONCRETE<br>FOR DECK<br>REPAIR | BRIDGE<br>JOINT<br>DEMOLITION | EPOXY<br>COATING | HYDRO-<br>DEMOLITION<br>OF BRIDGE<br>DECK | SCARIFYING<br>BRIDGE<br>DECK | CLEANING &<br>PAINTING<br>EXISTING<br>BEARING<br>ASSEMBLY |
|              | LUMP SUM     | SQ. YDS.              | TONS  | TONS  | TONS                                  | SQ.FT.                       | SQ.YDS.                            | SQ.YDS.                             | CU. YDS.                                 | SQ.YDS.  | CU.FT.               | LIN.FT.                     | LUMP SUM               | LUMP SUM            | CU.FT.                         | SQ.FT.                        | SQ.FT.           | SQ.YDS.                                   | SQ. YDS.                     | EA.   |
| NASH<br>#189 | LUMP SUM     | 311                   | 20  | 26  | 2.5                                   | 4,857                        | 61                                 | 2.5*                                | 26 <b>.</b> 5                            | 612.4  | 25.4                 | 100.3                       | LUMP SUM               | LUMP SUM *          | 1*                             | 118.4                         | 433              | 612.4                                     | 612.4                        | 40  |
| NASH<br>#195 | LUMP SUM     | 311                   | 20  | 26  | 2.5                                   | 4,857                        | 140                                | 2.5*                                | 26 <b>.</b> 5                            | 612.4  | 38.1                 | 62.3                        | LUMP SUM               | LUMP SUM *          | 1 *                            | 118.4                         | 433              | 612.4                                     | 612.4                        | 40  |
| TOTAL        | LUMP SUM     | 622                   | 40  | 52  | 5                                     | 9,714                        | 201                                | 5 *                                 | 53                                       | 1224.8   | 63.5                 | 162.6                       | LUMP SUM               | LUMP SUM            | 2*                             | 236.8                         | 866              | 1224.8                                    | 1224.8                       | 80  |

\* CLASS III SURFACE PREPARATION, VOLUMETRIC MIXER, AND CONCRETE FOR DECK REPAIR ARE NOT ANTICIPATED. TOKEN PAY ITEMS ARE INDICATED FOR PRICING PURPOSES, IN CASE UNANTICIPATED REPAIR AREAS ARE ENCOUNTERED.



8/19/2015

| DRAWN BY :   | S. T. SANDOR | DATE : 05/2015 |
|--------------|--------------|----------------|
| CHECKED BY : | R.WEISZ      | DATE : 06/2015 |

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# GENERAL NOTES FOR CONCRETE FOR DECK REPAIR, SEE SPECIAL PROVISIONS FOR VOLUMETRIC MIXER, SEE SPECIAL PROVISIONS. FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS. FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS. FOR CRANE SAFETY, SEE SPECIAL PROVISIONS. FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS. FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL STATE AND FEDERAL SAFETY REQUIREMENTS. FOR CONTROL OF TRAFFIC AND LIMITS ON PHASING OF CONSTRUCTION, SEE TRANSPORTATION MANAGEMENT PLANS. LONGITUDINAL CONSTRUCTION JOINTS OF OVERLAYS SHALL BE LOCATED ALONG THE CENTERLINE OR EDGE OF TRAVEL LANES. DURING CONSTRUCTION, BERMS OR APPROPRIATE MEASURES SHALL BE USED TO ENSURE HYDRO-DEMOLITION WATER DOES NOT FLOW OR MIGRATE INTO ACTIVE TRAVEL LANES. PROJECT NO. BP-5500I NASH COUNTY 189 BRIDGE NO. SHEET 2 OF 2 STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH

GENERAL DRAWING

BRIDGE #189 ON US 64 BUS.EBL OVER STONEY CREEK

|     |     | REV   | ISION | S   |       | SHEET NO.       |
|-----|-----|-------|-------|-----|-------|-----------------|
| NO. | BY: | DATE: | N0.   | BY: | DATE: | S-3             |
| 1   |     |       | 3     |     |       | TOTAL<br>SHEETS |
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| SUMMARY OF QUANTITIES FOR SPAN "A" <ul> <li></li></ul>  | -   |  |   |  |                                |                      |
|---|---|--|---|--|--------------------------------|----------------------|
| CARIFYING BRIDGE DECK     ESTIMATE ACTUAL     SCARIFYING BRIDGE DECK     124.4 SY     CLASS II SURFACE PREPARATION     0.8 SY     CLASS II SURFACE PREPARATION     0.8 SY     CLASS III SURFACE PREPARATION     14.8 SF  PAYMENT FOR CLASS II AND CLASS III SURFACE PREP. BASED     FOLLOWING HYDRO-DENULTION OF BUIDGE DECK     SURFACE PREPARATION'SHECTAL PROVISION.     CLASS LII SURFACE PREPARATION     SURFACE PREPARATION SHECTAL PROVISION.     SURFACE PREPARATION     SURFACE PREPARATION     SURFACE PREPARATION     SURFACE PREPARATION     SURFACE PREPARATION     BRIDGE JOINT DEMOLITION     BRIDGE DOINT DEMOLITION     BRIDGE NO.     189     SHEET 1 OF 5     SURFACE PREPARATION     SURFACE     SURF   | SUMMA   | RY OF  | QUANTITIE   | S FOR                                  | SPAN                           | I ``A''              |
| EVALUATE ACTION     EVISIONS     EVISIO   |   |  |   | FCTTV                                  | A.T.C.                         | ACT.141              |
| SLATTING BRIDGE DECK       124.4 ST         HYDRO-DEWOLITION 0 BRIDGE DECK       124.4 ST         CLASS III SURFACE PREPARATION       0.8 SY         CLASS CLASS STATE       0.6 SY         CLASS CLASS STATE       0.6 SY         DYNEWS FOR CLASS STATE       0.6 SY         SUFFACE PREPARATION       14.8 SF         DYNEWS FOR CLASS STATE       0.6 SY         SUFFACE PREPARATION       10.8 NOT ANTICIPATED         CLASS STATE       0.6 SY         SUFFACE PREPARATION       10.8 NOT ANTICIPATED         CLASS STATE       0.6 SY         SUFFACE PREPARATION       10.8 NOT ANTICIPATED         CLASS ARE ENCOUNTERED       SUFFACE PREPARATION         SUFFACE PREPARATION       SUFFACE PREPARATION         BRIDGE JOINT DEMOLITION       BRIDGE DECK         MARKS ARE ENCOUNTERED       SUFFACE PREPARATION         BRIDGE JOINT DEMOLITION       BRIDGE DECK         MARKS ARE ENCOUNTERED       BRIDGE D  | SCADIEVIN   |  |   | 124 A                                  | AIE<br>sv                      | ACTUAL               |
| CLASS III SURFACE PREPARATION O.8 SY CLASS III SURFACE PREPARATION O.5 SY UTIT DEMOLITION UTI DEMOLITION O.5 SY UTIT DEMOLITION O.5 SY U   |   | DITTION OF   | F BRIDGE DECK   | 124.4                                  | SY                             |                      |
| CLASS III SURFACE PREPARATION       0.5 SY         JOINT DEMOLITION       14.8 SF         PAYMENT FOR CLASS II AND CLASS III SURFACE PREP. BASED<br>FOLLOWING HYDRO-DEMOLITION OF BRIDGE DECK, SEE OVERLAY<br>SURFACE PREPARATION'S NOT ANTICIPATED.<br>A SEE WANTICIPATED CLASS III SURFACE PREPARATION<br>A SEE WANTICIPATED CLASS III SURFACE PREPARATION<br>BRIDGE JOINT DEMOLITION         PROJECT NO.       BP-55001<br>NASH<br>COUNTY<br>BRIDGE NO.         BRIDGE NO.       189<br>SHEET 1 OF 5         SHEET 1 OF 5       SURFACE PREPARATION<br>SURFACE PREPARATION<br>SURFACE PREPARATION<br>SURFACE PREPARATION<br>SURFACE PREPARATION<br>SURFACE PREPARATION   | CLASS II S  | SURFACE PF   | REPARATION  | 0.8 S                                  | Y                              |                      |
| JOINT DEMOLITION       14.8 SF         PAYMENT FOR CLASS II AND CLASS III SURFACE PREP. BASED<br>FOLLOWING HYDRO-DEMOLITION OF BRIDGE DECK. SEE OVERLAY<br>SURFACE PREPARATION SPECIAL PROVISION.         CLASS III SURFACE PREPARATION IS NOT ANTICIPATED.<br>A TOKEN AMOUNT IS INDICATED FOR PRICING PURPOSES. IN<br>AREAS ARE ENCOUNTERED.         SCARIFYING BRIDGE DECK         Image: Scarifying Bridge Joint Demolition         BRIDGE JOINT DEMOLITION         BRIDGE NO.       B89         Image: Scarifying Bridge Deck         Image: Scarifying Bridge Deck <td< td=""><td>CLASS III</td><td>SURFACE F</td><td>PREPARATION</td><td>0.5 S</td><td>Y</td><td></td></td<>  | CLASS III   | SURFACE F  | PREPARATION   | 0.5 S                                  | Y                              |                      |
| PROJECT NO. BP-55001<br>MASH CHORN AREA CLASS II SURFACE PREPARATION<br>SLASS III SURFACE PREPARATION IS NOT ANTICIPATED.<br>ACCESS UNANTICIPATED CLASS III SURFACE PREPARATION<br>SCARIFYING BRIDGE DECK<br>DECEMBER<br>APPROX. AREA CLASS II<br>SURFACE PREPARATION<br>BRIDGE JOINT DEMOLITION<br>BRIDGE JOINT DEMOLITION<br>PROJECT NO. BP-55001<br>NASH COUNTY<br>BRIDGE NO. 189<br>SHEET 1 OF 5<br>STATE OF MORTH CAMOUNTY<br>BRIDGE NO. 189<br>SHEET 1 OF 5<br>SURFACE PREPARATION<br>SURFACE PREPARATION<br>SURFACE PREPARATION<br>SURFACE PREPARATION<br>SURFACE PREPARATION<br>SURFACE PREPARATION<br>SHEET 1 OF 5<br>STATE OF MORTH CAMOUNTY<br>BRIDGE NO. 189<br>SHEET 1 OF 5<br>STATE OF MORTH CAMOUNTY<br>BRIDGE NO. 189<br>SHEET 1 OF 5<br>STATE OF MORTH CAMOUNTY<br>BRIDGE NO. 189<br>SHEET 1 OF 5<br>STATE OF MORTH CAMOUNTY<br>SURFACE PREPARATION<br>SURFACE PREPARATION<br>SURFACE PREPARATION<br>SURFACE PREPARATION<br>SURFACE PREPARATION<br>SURFACE PREPARATION<br>SURFACE PREPARATION  | JOINT DEMO  | DLITION  |   | 14.8 5                                 | F                              |                      |
| CLASS IT SUBMARE PREPARATION IS NOT AN ICLEASE. IN<br>CASE UNANTICIPATED CLASS IT SUBPACE PREPARATION<br>CASE UNANTICIPATED CLASS IT SUBPACE PREPARATION<br>COMPARE STARE ENCOUNTERED.<br>SUBPROX. AREA CLASS IT<br>SUBPROX. AREA CLASS   | PAYMENT FOR<br>UPON SOUARE<br>FOLLOWING H<br>SURFACE PREF | CLASS II<br>FEET OF J<br>YDRO-DEMO<br>PARATION"    | AND CLASS III<br>ADDITIONAL DEM<br>LITION OF BRID<br>SPECIAL PROVIS | SURFACE<br>OLITION<br>GE DECK,<br>ION. | E PREP.I<br>REQUIRI<br>SEE "OV | BASED<br>ED<br>ERLAY |
| SCARIFYING BRIDGE DECK  SCARIFYING BRIDGE DECK  APPROX, AREA CLASS II  SURFACE PREPARATION  BRIDGE JOINT DEMOLITION  PROJECT NO. BP-55001 NASH COUNTY BRIDGE NO. 189  SHEET 1 OF 5  SHE   | CLASS III S<br>A TOKEN AMO<br>CASE UNANTI<br>AREAS ARE EN | URFACE PRI<br>UNT IS IN<br>CIPATED C<br>NCOUNTERFI | EPARATION IS N<br>DICATED FOR PF<br>LASS III SURFA<br>).            | OT ANTIO<br>NICING PU<br>CE PREPA      | CIPATED<br>JRPOSES<br>RATION   | IN                   |
| SCARIFYING BRIDGE DECK  APPROX, AREA CLASS II SURFACE PREPARATION  BRIDGE JOINT DEMOLITION  PROJECT NO. BP-55001 NASH COUNTY BRIDGE NO. 189  SHEET 1 OF 5  STATE OF MONTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIO  SURFACE PREPARATION  SURFACE  SU   | AREAS ARE EI  | NCOUNTEREL   |   |  |                                |                      |
|   |   |  |   |  |                                |                      |
| SCARIFYING BRIDGE DECK  APPROX, AREA CLASS II SURFACE PREPARATION  BRIDGE JOINT DEMOLITION  PROJECT NO. BP-55001 NASH COUNTY BRIDGE NO. 189  SHEET 1 OF 5  STATE OF MONTH CAROLINA BRIDGE NO. 189  SHEET NO. 189  SHEET 1 OF 5  STATE OF MONTH CAROLINA BRIDGE NO. 189  SHEET NO. 1   |   |  |   |  |                                |                      |
| SCARIFYING BRIDGE DECK  APPROX. AREA CLASS II SURFACE PREPARATION  BRIDGE JOINT DEMOLITION  PROJECT NO. <u>BP-55001</u> NASH COUNTY BRIDGE NO. <u>189</u> SHEET 1 OF 5  RELET 1 OF 5  SURFACE PREPARATION RELETING SURFACE PREPARATION RELETING SURFACE PREPARATION SURFACE PREPARA   |   |  |   |  |                                |                      |
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| SCARIFYING BRIDGE DECK  APPROX. APEA CLASS II SURFACE PREPARATION  BRIDGE JOINT DEMOLITION  PROJECT NO. <u>BP-55001</u> <u>NASH</u> county BRIDGE NO. <u>189</u> SHEET 1 OF 5  STATE OF MORTH CAROLINA  DEPARTMENT OF TRANSPORTATION RALEIOH  SURFACE PREPARATION  SURFACE SURFACE PREPARATION  SURFACE PREPARATION  SURFACE PREPARATION  SURFACE SURFACE PREPARATION  SURFACE PREPARATION  SURFACE PREPARATION  SURFACE SURFACE SURFACE  SURFACE SURFACE SURFACE  SURFACE SURFACE  SURFACE SURFACE  SURFACE SURFACE  SUR   |   |  |   |  |                                |                      |
|   |   |  | SCARIFYING BR   | IDGE DEC                               | K                              |                      |
| BRIDGE JOINT DEMOLITION<br>BRIDGE JOINT DEMOLITION<br>PROJECT NO. <u>BP-55001</u><br><u>NASH</u> COUNTY<br>BRIDGE NO. <u>189</u><br>SHEET 1 OF 5<br>STATE OF NORTH CAROLINA<br>DEPARTMENT OF NORTH CAROLINA<br>SHEET 1 OF 5<br>STATE OF NORTH CAROLINA<br>DEPARTMENT OF NORTH CAROLINA<br>DEPARTMENT OF NORTH CAROLINA<br>DEPARTMENT OF NORTH CAROLINA<br>SHEET 1 OF 5<br>STATE OF NORTH CAROLINA<br>DEPARTMENT OF NORTH CAROLINA<br>DEPARTMENT OF NORTH CAROLINA<br>DEPARTMENT OF NORTH CAROLINA<br>SHEET 1 OF 5<br>STATE OF NORTH CAROLINA<br>DEPARTMENT OF NORTH CAROLINA<br>SHEET 1 OF 5<br>STATE OF NORTH CAROLINA<br>DEPARTMENT OF NORTH CAROLINA<br>SHEET 1 OF 5<br>STATE OF NORTH CAROLINA<br>SHEET 1 OF 5<br>STATE OF NORTH CAROLINA<br>DEPARTMENT OF NORTH CAROLINA<br>SHEET 1 OF 5<br>STATE OF NORTH CAROLINA<br>SHEET 1 OF 5<br>STATE OF NORTH CAROLINA<br>DEPARTMENT OF NORTH CAROLINA<br>SHEET 1 OF 5<br>STATE OF NORTH CAROLINA<br>SHEET 1 OF 5<br>ST   | 177   | ///]   |   | Δςς ττ                                 |                                |                      |
|   |   | ////   | SURFACE PREPAR  | ATION                                  |                                |                      |
|   | RXX   | ~~~~   |   |  |                                |                      |
| PROJECT NO. <u>BP-55001</u><br><u>NASH</u> COUNTY<br>BRIDGE NO. <u>189</u><br>SHEET 1 OF 5<br>STATE OF NORTH CAROLINA<br>DEPARTMENT OF TRANSPORTATION<br>RALEION<br>SURFACE PREPARATION<br>SURFACE PREPARATION<br>SURFACE PREPARATION<br>SPAN 'A''  | $\otimes$   | $\times$   | BRIDGE JOINT [  | DEMOLITI                               | ON                             |                      |
| PROJECT NO. <u>BP-55001</u><br><u>NASH</u> COUNTY<br>BRIDGE NO. <u>189</u><br>SHEET 1 OF 5<br>STATE OF NORTH CAROLINA<br>DEPARTMENT OF TRANSPORTATION<br>RALEICH<br>SURFACE PREPARATION<br>SURFACE PREPARATION<br>SPAN 'A''   |   |  |   |  |                                |                      |
| PROJECT NO. <u>BP-55001</u><br><u>NASH</u> COUNTY<br>BRIDGE NO. <u>189</u><br>SHEET 1 OF 5<br>STATE OF NORTH CAROLINA<br>DEPARTMENT OF TRANSPORTATION<br>RALEICH<br>SURFACE PREPARATION<br>SURFACE PREPARATION<br>SPAN 'A''   |   |  |   |  |                                |                      |
| PROJECT NO. <u>BP-55001</u><br><u>NASH</u> COUNTY<br>BRIDGE NO. <u>189</u><br>SHEET 1 OF 5<br>STATE OF NORTH CAROLINA<br>DEPARTMENT OF TRANSPORTATION<br>RALEIGH<br>SURFACE PREPARATION<br>SURFACE PREPARATION<br>SURFACE STATES NO. <u>SHEET N</u><br>SHEET I<br><u>NASH</u> SHEET N<br><u>SHEET I OF 5</u><br><u>STATE OF NORTH CAROLINA</u><br><u>SHEET 1 OF 5</u><br><u>STATE OF NORTH CAROLINA</u><br><u>STATE OF </u>  |   |  |   |  |                                |                      |
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| PROJECT NO. <u>BP-55001</u><br><u>NASH</u> COUNTY<br>BRIDGE NO. <u>189</u><br>SHEET 1 OF 5<br>SHEET 1 OF 5<br>SHEET 1 OF TRANSPORTATION<br>RALEIGH<br>SURFACE PREPARATION<br>SURFACE PREPARATION<br>SPAN 'A''   |   |  |   |  |                                |                      |
| PROJECT NO. <u>BP-55001</u><br><u>NASH</u> COUNTY<br>BRIDGE NO. <u>189</u><br>SHEET 1 OF 5<br>STATE OF NORTH CAPOLINA<br>DEPARTMENT OF TRANSPORTATION<br>RALEIGH<br>SURFACE PREPARATION<br>SURFACE PREPARATION<br>SURFACE STATES NO. <u>189</u><br><u>NASH</u><br><u>NASH</u><br><u>NASH</u><br><u>SHEET 1 OF 5</u><br><u>STATE OF NORTH CAPOLINA</u><br><u>SHEET 1 OF 5</u><br><u>STATE OF NORTH CAPOLINA</u><br><u>STATE OF NORTH CAPOLINA<br/><u>STATE OF NORTH CAPOLINA</u><br/><u>STATE OF NORT</u></u>  |   |  |   |  |                                |                      |
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| PROJECT NO. <u>BP-55001</u><br><u>NASH</u> COUNTY<br>BRIDGE NO. <u>189</u><br>SHEET 1 OF 5<br>SHEET 1 OF 5<br>SHEET 1 OF TRANSPORTATION<br>RALEICH<br>SURFACE PREPARATION<br>SEAL<br>NO. BY: DATE: NO. BY: DATE: SHEET N<br>SHEET NO. BY: SHEET N<br>SHEET  |   |  |   |  |                                |                      |
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| PROJECT NO. <u>BP-55001</u><br><u>NASH</u> COUNTY<br>BRIDGE NO. <u>189</u><br>SHEET 1 OF 5<br>SHEET 1 OF 5<br>SHEET 1 OF 5<br>SHEET 1 OF TRANSPORTATION<br>RALEICH<br>SURFACE PREPARATION<br>SEAL<br>SURFACE PREPARATION<br>SPAN ``A''  |   |  |   |  |                                |                      |
| PROJECT NO. <u>BP-55001</u><br><u>NASH</u> COUNTY<br>BRIDGE NO. <u>189</u><br>SHEET 1 OF 5<br>STATE OF NORTH CAROLINA<br>DEPARTMENT OF TRANSPORTATION<br>RALEIGH<br>SURFACE PREPARATION<br>SEAL<br>40257<br>NO. <u>BY: DATE: NO. BY: DATE: SHEET N</u><br>SHEET NO. <u>SPAN</u> 'A''  |   |  |   |  |                                |                      |
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| CLASS II S  | SURFACE PR                                    | REPARATION  | 0.3   | SY                           |                      |
| CLASS III   | SURFACE                                       | PREPARATION   | 0.5   | SY                           |                      |
| JOINT DEMO  | DLITION                                       |   | 29.6  | SF                           |                      |
| PAYMENT FOR<br>UPON SQUARE<br>FOLLOWING H<br>SURFACE PREI | CLASS II<br>FEET OF<br>YDRO-DEMO<br>PARATION" | AND CLASS<br>ADDITIONAL I<br>LITION OF B<br>SPECIAL PRO | III SURFAC<br>DEMOLITION<br>RIDGE DECK<br>VISION. | E PREP.<br>REQUIR<br>SEE "OV | BASED<br>ED<br>ERLAY |
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|   | ///>  | APPROX. AREA  | CLASS II  |                              |                      |
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|   | BRID  | GE NO   | 18  | 9                            |                      |
|   | SHEET 2                                       | OF 5  |   |                              |                      |
|   |   | STATE   | OF NORTH CAROL                                    | NA                           |                      |
|   | DEF   | PARTMENT  | OF TRANS  | PORTA                        | TION                 |
|   |   |   | RALEIGH   |                              |                      |
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|   | SU  | RFACE   | PREP  | ARA                          | TION                 |
| RTH CAROLINE  | 1   | SP  | 'AN ``[   | 3''                          |                      |
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| 40257   |   |   | LONG  |                              | CULLET NO.           |
| AT THEW CLANNER   | NO. BY:                                       | DATE: 1   | NO. BY:   | DATE:                        | S-6                  |
| A MILLION CONTRACTOR                                      | 1   |   | 3   |                              | TOTAL<br>SHEETS      |
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| SCARIFYINC<br>HYDRO-DEMC<br>CLASS II S<br>CLASS III<br>JOINT DEMC<br>PAYMENT FOR<br>UPON SOUARE<br>FOLLOWING HY<br>SURFACE PREF<br>CLASS III SI<br>A TOKEN AMOU<br>CASE UNANTIC<br>AREAS ARE EN | BRIDGE DE     LITION OF     SURFACE PRE     SURFACE PRE     SURFACE PRE     DLITION     CLASS II     FEET OF AL     VDRO-DEMOLI     CASS II     SARATION" SF     JUT IS IND     TIS IND     TIS IND     TIS IND     TIS IND     TIS IND     S     S     S     S     S     S     S     S     S  | CK<br>BRIDGE DE<br>PARATION<br>REPARATION<br>AND CLASS<br>DDITIONAL<br>ITION OF<br>PECIAL PR<br>PARATION<br>CATED FC<br>ASS III S<br>SCARIFYING<br>PPROX. ARE<br>URFACE PF<br>RIDGE JOI | III SUF<br>DEMOLIT<br>BRIDGE D<br>OVISION.<br>IS NOT A<br>R PRICIN<br>URFACE P   | STIMATE<br>121.2 SY<br>121.2 SY<br>49.4 SY<br>0.5 SY<br>29.6 SF<br>REACE PREP<br>ION REOUI<br>ECK, SEE "CO<br>INTICIPATE<br>NG PURPOSE<br>REPARATION<br>DECK<br>II<br>DN | ACTUAL<br>2. BASED<br>RED<br>OVERLAY<br>ED.<br>IN<br>N |
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| SCARIFYINC<br>HYDRO-DEMC<br>CLASS II S<br>CLASS III<br>JOINT DEMC<br>PAYMENT FOR<br>UPON SOUARE<br>FOLLOWING H'<br>SURFACE PREF<br>CLASS III SI<br>A TOKEN AMOI<br>CASE UNANTIC<br>AREAS ARE EN | BRIDGE DE<br>LITION OF<br>SURFACE PRE<br>SURFACE PRE<br>SURFACE PRE<br>DITION<br>CLASS II ,<br>FEET OF AE<br>ORATION'SF<br>JARATION'SF<br>JARATON'SF<br>JARATON'SF<br>ARATION'SF<br>SARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION'SF<br>ARATION | CK<br>BRIDGE DE<br>PARATION<br>EPARATION<br>AND CLASS<br>DDITIONAL<br>ITION OF<br>PECIAL PR<br>PARATION<br>ICATED FC<br>ASS III S<br>CARIFYIN<br>PPROX. ARE<br>URFACE PF                | CK 2<br>CK 2<br>CK 2<br>III SUF<br>DEMOLIT<br>BRIDGE D<br>OVISION.<br>IS NOT A<br>R PRICIN<br>URFACE P<br>C BRIDGE<br>C BRIDGE | DECK   | 2. BASED<br>RED<br>VERLAY<br>ED.<br>ES, IN<br>N        |
| HYDRO-DEMC<br>CLASS III<br>CLASS III<br>JOINT DEMC<br>PAYMENT FOR<br>UPON SOUARE<br>FOLLOWING HY<br>SURFACE PREF<br>CLASS III SI<br>A TOKEN AMOU<br>CASE UNANTIC<br>AREAS ARE EN                | SURFACE PRE<br>SURFACE PRE<br>SURFACE PRE<br>SURFACE PRE<br>CLASS II A<br>FEET OF ALE<br>OPRO-DEMOLI<br>PARATION" SF<br>JRFACE PREF<br>JUNT IS IND<br>CLASS II A<br>SURFACE PREF<br>JUNT IS IND<br>CLASS II A<br>SURFACE PREF<br>JUNT IS IND<br>COUNTERED.   | BRIDGE DE<br>PARATION<br>REPARATION<br>AND CLASS<br>DOITIONAL<br>TION OF<br>PECIAL PR<br>PARATION<br>ICATED FC<br>ASS III S<br>SCARIFYING<br>PPROX. ARE<br>URFACE PR<br>RIDGE JOI       | III SUF<br>DEMOLIT<br>BRIDGE DO<br>OVISION.<br>IS NOT A<br>R PRICI<br>URFACE P   | L21.2 SY<br>49.4 SY<br>0.5 SY<br>29.6 SF<br>29.6 SF<br>ION REQUI<br>ECK, SEE "C<br>ANTICIPATE<br>NG PURPOSE<br>REPARATIC   | 2. BASED<br>RED<br>VVERLAY<br>ED.<br>ES, IN<br>N       |
| CLASS II S<br>CLASS III<br>JOINT DEMC<br>UPON SOUARE<br>FOLLOWING H'<br>SURFACE PREF<br>CLASS III SI<br>A TOKEN AMOU<br>CASE UNANTIC<br>AREAS ARE EN  | SURFACE PRE<br>SURFACE PRE<br>DLITION<br>CLASS II .<br>FEET OF A<br>FORO-DEMOLI<br>ARATION" SF<br>JRFACE PREF<br>JRFACE PREF<br>INT IS IND<br>COUNTERED.<br>S<br>S<br>S<br>S<br>S<br>S<br>S<br>S<br>S<br>S<br>S<br>S<br>S<br>S<br>S<br>S<br>S<br>S<br>S  | PARATION<br>EPARATION<br>AND CLASS<br>DDTIONAL<br>ITION OF<br>PECIAL PR<br>PARATION<br>ICATED FC<br>ASS III S<br>CARIFYING<br>PPROX. ARE<br>URFACE PF<br>IRIDGE J01                     | N (<br>III SUF<br>DEMOLIT<br>BRIDGE D<br>OVISION.<br>IS NOT A<br>R PRICI<br>URFACE P<br>G BRIDGE<br>CA CLASS<br>EPARATIO       | 49.4 SY<br>0.5 SY<br>29.6 SF<br>RFACE PREF<br>ION REQUI<br>ECK, SEE "C<br>NTICIPATE<br>NG PURPOSE<br>REPARATIC<br>DECK<br>II<br>DN                                       | P. BASED<br>RED<br>VERLAY<br>ED.<br>S, IN<br>IN        |
| CLASS III<br>JOINT DEMC<br>PAYMENT FOR<br>UPON SOUARE<br>FOLLOWING H'<br>SURFACE PREF<br>CLASS III SI<br>A TOKEN AMOI<br>CASE UNANTIC<br>AREAS ARE EN   | SURFACE PR<br>DLITION<br>CLASS II J<br>FEET OF AL<br>VDRO-DEMOLI<br>20 ARATION" SF<br>UNT IS IND<br>CIPATED CLA<br>COUNTERED.<br>S<br>S<br>S<br>S<br>S<br>B<br>S<br>B<br>B   | AND CLASS<br>DDITIONAL<br>ITION OF<br>PECIAL PR<br>PARATION<br>ICATED FO<br>ASS III S<br>SCARIFYING<br>PPROX. ARE<br>URFACE PR<br>IRIDGE J01  | N (<br>III SUF<br>DEMOLIT<br>BRIDGE D<br>OVISION.<br>IS NOT A<br>R PRICIN<br>URFACE P<br>C BRIDGE<br>CA CLASS<br>EPARATIO      | D.5 SY<br>29.6 SF<br>RFACE PREFISION REQUI<br>ECK, SEE "CO<br>INTICIPATE<br>NG PURPOSE<br>REPARATIC  | 2. BASED<br>RED<br>DVERLAY<br>ED.<br>ES. IN<br>N       |
| DUINT DEMC  | CLASS II A<br>FEET OF AG<br>YARATION" SF<br>JRFACE PREF<br>JNT IS IND<br>IPATED CLA<br>ICOUNTERED.   | AND CLASS<br>DDITIONAL<br>TION OF<br>PECIAL PR<br>PARATION<br>ICATED FC<br>ASS III S<br>SCARIFYIN<br>PPROX. ARE<br>URFACE PR<br>IRIDGE JO1  | III SUF<br>DEMOLIT<br>BRIDGE D<br>OVISION.<br>IS NOT A<br>R PRICIN<br>URFACE P<br>G BRIDGE                                     | ZY.6 SF<br>RFACE PREF<br>ION REQUI<br>ECK, SEE "C<br>NTICIPATE<br>NG PURPOSE<br>REPARATIC<br>DECK  | 2. BASED<br>RED<br>OVERLAY<br>ED.<br>ES, IN<br>N       |
| PAYMENT FOR<br>UPON SOUARE<br>FOLLOWING H'<br>SURFACE PREF<br>CLASS III SI<br>A TOKEN AMOI<br>CASE UNANTI<br>AREAS ARE EN   | CLASS II .<br>FEET OF AC<br>(DRO-DEMOL J<br>ARATION" SF<br>JRFACE PREF<br>JINT IS IND<br>ITPATED CLA<br>ICOUNTERED.<br>S<br>A<br>S<br>B  | AND CLASS<br>DDITIONAL<br>TITON OF<br>PECIAL PR<br>PARATION<br>ICATED FC<br>ASS III S<br>SCARIFYIN<br>PPROX. ARE<br>URFACE PF<br>RIDGE JOJ  | III SUF<br>DEMOLIT<br>BRIDGE D<br>OVISION.<br>IS NOT A<br>R PRICI<br>URFACE P<br>G BRIDGE<br>CA CLASS<br>EPARATIO              | RFACE PREF<br>ION REOUI<br>ECK. SEE "C<br>INTICIPATE<br>NG PURPOSE<br>REPARATIC<br>DECK  | P. BASED<br>RED<br>VERLAY<br>ED.<br>ES, IN<br>N        |
| CLASS III SI<br>A TOKEN AMO<br>CASE UNANTIC<br>AREAS ARE EN   | JRFACE PREF<br>UNT IS IND<br>CIPATED CLA<br>COUNTERED.   | PARATION<br>ICATED FC<br>ASS III S<br>SCARIFYIN<br>PPROX. ARE<br>URFACE PF<br>RIDGE JOJ   | IS NOT A<br>R PRICIN<br>URFACE P<br>B BRIDGE<br>CA CLASS<br>EPARATIO   | INTICIPATE<br>G PURPOSE<br>REPARATIC<br>DECK<br>II<br>DN   | D.<br>ES, IN<br>N                                      |
|   | S  | SCARIFYIN<br>PPROX.ARE<br>URFACE PR<br>RIDGE JOJ  | G BRIDGE<br>CA CLASS<br>EPARATIC   | DECK<br>II<br>N  |  |
|   | S<br>S<br>S<br>B   | PPROX.ARE<br>URFACE PF<br>WRIDGE JOJ  | G BRIDGE<br>EA CLASS<br>EPARATIC   | DECK<br>II<br>DN   |  |
|   | А<br>S<br>B  | PPROX.ARE<br>URFACE PF  | EA CLASS<br>EPARATIO   | II<br>N  |  |
|   | A S  | PPROX.ARE<br>URFACE PF  | A CLASS<br>EPARATIO  | II<br>N  |  |
|   | в  | RIDGE JOI   |  |  |  |
|   | в  | RIDGE JOI   |  |  |  |
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|                             |   | ESTIMATE                         |                 |
| SCARIFYING                  | G BRIDGE DECK                                     | 121.2 SY                         | ACTUAL          |
| HYDRO-DEMC                  | DLITION OF BRIDGE DECK                            | 121.2 SY                         |                 |
| CLASS II S                  | SURFACE PREPARATION                               | 0.8 SY                           |                 |
| LIOTNT DEMO                 | SURFACE PREPARATION                               | 0.5 SY                           |                 |
|                             |   |                                  | DACED           |
| UPON SQUARE                 | FEET OF ADDITIONAL DEM<br>YDRO-DEMOLITION OF BRID | MOLITION REQUI                   | RED             |
| SURFACE PREF                | ARATION" SPECIAL PROVIS                           | SION.                            |                 |
| CLASS III SU<br>A TOKEN AMO | JRFACE PREPARATION IS I<br>UNT IS INDICATED FOR P | NOT ANTICIPATE<br>RICING PURPOSE | D.<br>IS, IN    |
| AREAS ARE EN                | COUNTERED.  | AUE FREFARATIU                   | IN              |
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|                             | SCARIFYING BF                                     | RIDGE DECK                       |                 |
|                             | ]   |                                  |                 |
| 77/                         | APPROX. AREA C                                    | LASS II                          |                 |
|                             | SURFACE PREPA                                     | RATION                           |                 |
| $\boxtimes$                 |   |                                  |                 |
|                             | BRIDGE JOINT                                      | DEMOLITION                       |                 |
|                             |   |                                  |                 |
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|                             | BRIDGE NO   | 189                              |                 |
|                             | SHEET 4 OF 5                                      |                                  |                 |
|                             | STATE OF  | NORTH CAROLINA                   |                 |
|                             | DEPARTMENT OF                                     |                                  | ATION           |
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|   |   |  | FOTTH  | • 7 5                        |                      |
| SCARTEYTN   |   |  | 124-4  | SY                           | ACTUAL               |
| HYDRO-DEMO  | DLITION OF  | BRIDGE DECK  | 124.4  | SY                           |                      |
| CLASS II S  | SURFACE PR  | REPARATION   | 9.7 S  | Y                            |                      |
| CLASS III   | SURFACE F   | PREPARATION  | 0.5 S  | Y                            |                      |
| JOINT DEMO  | DLITION   |  | 14.8 5   | SF                           |                      |
| PAYMENT FOR<br>UPON SQUARE<br>FOLLOWING H<br>SURFACE PREI | CLASS II<br>FEET OF A<br>YDRO-DEMOU<br>PARATION"S   | AND CLASS I<br>ADDITIONAL DE<br>LITION OF BRI<br>SPECIAL PROVI | II SURFACE<br>MOLITION<br>IDGE DECK,<br>ISION, | E PREP.<br>REQUIR<br>SEE "OV | BASED<br>ED<br>ERLAY |
| CLASS III S<br>A TOKEN AMO<br>CASE UNANTI<br>AREAS ARE EI | URFACE PRE<br>UNT IS IN<br>CIPATED CI<br>NCOUNTEREE | EPARATION IS<br>DICATED FOR  <br>LASS III SURF<br>).           | NOT ANTIO<br>PRICING PU<br>FACE PREPA          | CIPATED<br>JRPOSES<br>RATION | , IN                 |
|   |   |  |  |                              |                      |
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|   |   | SCARTEXTNC R   |  | V                            |                      |
|   |   | JUANIFIING B   | INTE DEC                                       | n.                           |                      |
|   | ////  | APPROX. AREA<br>SURFACE PREP                                   | CLASS II<br>ARATION                            |                              |                      |
| $\bigotimes$  |   | BRIDGE JOINT   | DEMOLITI                                       | ON                           |                      |
|   |   |  |  |                              |                      |
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NOTES REPAIR WITH TH NOT SHO INSPECT DRAWING REPAIRS REPAIR

FOR CAP REPAIR

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| REPAIR Q  | UANTI                      | TΥ         | ΤA           | BLE            |           |               |
|---|----------------------------|------------|--------------|----------------|-----------|---------------|
| REPAIRS END BENT 1  | ЕСТТ                       | QU         | ANT ]<br>    | ITIES          | ACTUA     |               |
| SHOTCRETE REPATRS   | AREA                       | VOLUN      | 1E           | AREA           | DEPTH     | VOLUME        |
| CAP (VERTICAL FACE)   | 4.3                        | <br>2.0    | -            | 51             |           | CF            |
| CAP (HORIZONTAL, CORNER)  | 0.0                        | 0.0        |              |                |           |               |
| EPOXY RESIN INJECT  | ION                        | LN.        | FT           |                | LN.FT     |               |
| САР   |                            | 46         | .5           |                |           |               |
| REPAIRS END BENT 2  | ECTT                       |            | ANT ]<br>    | ITIES          | ACTU4     | 1             |
| SHATCRETE REDATES   | AREA                       | VOLUN      | 1E           | AREA           | DEPTH     | VOLUME        |
| CAP (VERTICAL EACE)   | SF<br>85                   | CF<br>3 0  |              | SF             | FT        | CF            |
| CAP (HORIZONTAL, CORNER)  | 0.0                        | 0.0        |              |                |           |               |
| EPOXY RESIN INJECT  | ION                        | LN.        | FT           |                | LN.FT     |               |
| CAP   |                            | 19.        | .5           |                |           |               |
| VALUES IN CHART REPRESENT EST                                     | IMATED REP                 | AIR TO     | TALS         | AFTER          | ۶         |               |
| REMOVAL OF UNSCOND CONCRETE, N<br>MIN. 2″CL TO SAWCUT. SEE REPAID | AIN.OF 1"BEI<br>R DETAILS. | HIND RE    | .BAR         | and            |           |               |
| NOTES:  |                            |            |              |                |           |               |
| REPAIR LOCATIONS AND ESTIMAT                                      | E OF QUANTI<br>AILABLE, TF | TIES A     | RE G<br>ONAI | IVEN<br>REPA   | IRS       |               |
| NOT SHOWN ON THE DRAWINGS AR<br>INSPECTOR OR ENGINEER THE CON     | E DEEMED NE                | CESSAR     | BY E ON      | THE<br>N THE   | 0         |               |
| DRAWINGS THE APPROXIMATE LOC<br>REPAIRS AND ADJUST THE ACTUAL     | ATION AND D<br>QUANTITIE   | S ENTER    | TION         | I OF T<br>INTO | НЕ<br>ГНЕ |               |
| REPAIR QUANTITY TABLE.  |                            |            | <u> </u>     |                |           |               |
| OR CAP AND COLUMN REPAIR DE<br>REPAIR DETAILS SHEET.              | IAILS,SEE T                | YPICAL     | CAP          | AND (          | COULMN    |               |
| EPOXY COATING SHALL BE APPLIE                                     | D TO THE TO                | OP FACE    |              | THE C          | AP. THE   |               |
| WASONRY PLATES, FOR EPOXY COA<br>SPECIAL PROVISIONS               | TING AND DE                | BRIS R     | EMOV         | AL, SE         | E         |               |
| STECIAL TROVISIONS.   |                            |            |              |                |           |               |
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| - SHOTCRE   | TE REPAIR                  |            |              |                |           |               |
|   |                            |            |              |                |           |               |
| ERI - EPOXY RE  | SIN INJECTI                | ON         |              |                |           |               |
|   |                            |            |              |                |           |               |
|   |                            |            |              |                |           |               |
|   |                            |            |              |                |           |               |
|   |                            |            |              |                |           |               |
|   |                            |            |              |                |           |               |
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| PR  | OJECT N                    | 0          | Вŀ           | 55             | 500.      | L             |
|   | NA                         | <u>ASH</u> |              |                | . COU     | NTY           |
| RD  |                            |            |              | 189            |           |               |
|   |                            | •          |              |                |           |               |
| SHEE  | <u>1 I U⊦ 5</u>            |            |              |                |           |               |
|   | DEPARTME                   | STATE OF N | ORTH C       | AROLINA        | RTATI     | ON            |
|   | _                          | RA         | LEIGH        | -              | _         |               |
|   |                            |            |              |                |           |               |
| (larke  | F                          | ND         | RF           |                |           |               |
| 37  | L                          |            |              |                |           |               |
| SEAL  |                            |            |              |                |           |               |
| 40257   | R                          | EVISIONS   |              |                | s         | HEET NO.      |
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CHECKED BY :

R.N. WEISZ

#### NOTES:

REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE INSPECTOR OR ENGINEER THE CONTRACTOR SHALL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATION AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED INTO THE REPAIR QUANTITY TABLE.

FOR CAP AND COLUMN REPAIR DETAILS, SEE TYPICAL CAP AND COULMN REPAIR DETAILS SHEET.

EPOXY COATING SHALL BE APPLIED TO THE TOP FACE OF THE CAP.THE CONTRACTOR SHALL NOT COAT THE AREA OF THE CAP BENEATH THE MASONRY PLATES.FOR EPOXY COATING AND DEBRIS REMOVAL,SEE SPECIAL PROVISIONS.











8/19/2015

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| REPAIR                   | QL          | JANTI         | ΤΥ ΤΑ                       | BLE                  |                  |  |
|--------------------------|-------------|---------------|-----------------------------|----------------------|------------------|--|
| REPATRS BENT 2           |             |               | QUANT                       | ITIES                |                  |  |
|                          |             | ESTI          | MATE                        | ACTUAL               |                  |  |
| SHOTCRETE REPAIR         | S           | AREA<br>SF    | VOLUME<br>CF                | AREA<br>SF           | VOLUME<br>CF     |  |
| CAP (VERTICAL FACE)      |             | 3.2           | 1.5                         |                      |                  |  |
| CAP (HORIZONTAL, CORNER) |             | 0.0           | 0.0                         |                      |                  |  |
| COLUMN                   |             | 0.0           | 0.0                         |                      |                  |  |
| STRUT                    |             | 1.5           | 0.7                         |                      |                  |  |
|                          |             |               |                             |                      |                  |  |
| POXY RESIN INJE          | СТІ         | ON            | LN.FT                       |                      | LN.FT            |  |
| AP                       |             |               | 17.6                        |                      |                  |  |
| OLUMN                    |             |               | 0.0                         |                      |                  |  |
| STRUT                    |             |               | 2.0                         |                      |                  |  |
| Ļ                        |             |               |                             |                      |                  |  |
| EL                       | EVA<br>west | ATION<br>SIDE |                             |                      |                  |  |
|                          | PRC         | JECT N        | <b>ю.</b> <u>В</u> І<br>Асн | P-5500               |                  |  |
|                          | BRI         | DGE NO        | )                           | (t<br>189            |                  |  |
|                          | SHEF        | T 3 0F 5      |                             |                      |                  |  |
|                          |             | DEPARTME      | STATE OF NORTH              | CAROLINA<br>ANSPORTA | TION             |  |
| ined by:<br>n. M. Clarke |             |               | RALEIGH                     |                      |                  |  |
| D7EAAF437                |             |               | BENT                        | 2                    |                  |  |
| SEAL<br>40257            |             |               |                             |                      |                  |  |
| 15 MONE CAL              | N0.         | BY: DAT       | REVISIONS                   | DATE:                | SHEET NO<br>S-13 |  |

TOTAL SHEETS 33

#### NOTES:

EAST SIDE

REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE INSPECTOR OR ENGINEER THE CONTRACTOR SHALL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATION AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED INTO THE REPAIR QUANTITY TABLE.

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CAP COLUMN STRUT



ELEVATION NORTH SIDE

6.1 SF — .8 SF -Ŀ —.3 SF ELEVATION ELEVATION

> - SHOTCRETE REPAIR ERI - EPOXY RESIN INJECTION

SOUTH SIDE

DocuSigned by: William M. Clarke 1EB20097EAAF437..

| AWN BY :   | H.F. YEUNG | DATE :5/15         |
|------------|------------|--------------------|
| ECKED BY : | R.N. WEISZ | DATE : <u>6/15</u> |

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![](_page_16_Figure_15.jpeg)

![](_page_17_Figure_0.jpeg)

![](_page_17_Figure_1.jpeg)

![](_page_17_Figure_3.jpeg)

- SHOTCRETE REPAIR - 1EB20097EAAF437.

ERI - EPOXY RESIN INJECTION

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H.F. YEUNG

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| NOTES: CONTRACTOR SHALL SAW CUT TO A NOMINAL DEPTH OF $\frac{1}{2}$ "BUT REINFORCING STEEL SHALL NOT BE DAMAGED.       |
|--|
| CONTRACTOR SHALL REMOVE SURFACE CONCRETE TO VERIFY<br>THAT SAWCUT DEPTH WILL NOT DAMAGE EXISTING<br>REINFORCING STEEL. |
| CONTRACTOR SHALL SAW CUT THE REPAIR AREAS SO THAT<br>THE CORNERS ARE SOUARE AS INDICATED ON THE DETAILS.               |
| CONCRETE REPAIRS MAY BE SUBSTITUTED IN LIEU OF<br>SHOTCRETE REPAIRS WITH THE APPROVAL OF THE ENGINEER.                 |
| FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.   |
| FOR EPOXY RESIN INJECTION, SEE SPECIAL PROVISIONS.   |
| - SHOTCRETE REPAIR   |
| ERI - EPOXY RESIN INJECTION  |
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|  | PROJEC  | T NO.<br>NAS<br>NO. | <u>BP</u><br>H<br>1 | <u>-550(</u><br>co<br>89 | <u>) I</u><br>PUNTY |  |  |  |
|--|---|---------------------|---------------------|--------------------------|---------------------|--|--|--|
| CL<br>CAROLAN<br>CAROLAN<br>CESSOLAN<br>(SEAL<br>40257 | STATE OF NORTH CAROLINA<br>DEPARTMENT OF TRANSPORTATION<br>RALEIGH<br>TYPICAL<br>CAP AND COLUMN<br>REPAIR DETAILS |                     |                     |                          |                     |  |  |  |
| NONEL ST   |   | REVIS               | IONS                |                          | SHEET NO.           |  |  |  |
| HANNAN THEW CLIMMENT                                   | NO. BY:   | DATE:               | NO. BY:             | DATE:                    | 5-16                |  |  |  |
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![](_page_20_Figure_0.jpeg)

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![](_page_21_Figure_0.jpeg)

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| ERAL         | NOTES  |   |
|--------------|--|---|
| FROM         | FOR CONCRE                                       | TE FOR DECK REPAIR, SEE SPECIAL PROVISIONS.   |
| NS           | FOR VOLUME                                       | TRIC MIXER, SEE SPECIAL PROVISIONS.   |
| ANU          | FOR SUBMIT                                       | TAL OF WORKING DRAWINGS, SEE SPECIAL  |
| ED<br>DGE    | FOR FALSEW                                       | VORK AND FORMWORK, SEE SPECIAL PROVISIONS.  |
|              | FOR CRANE  | SAFETY, SEE SPECIAL PROVISIONS.   |
| IH<br>AS     | FOR GROUT  | FOR STRUCTURES, SEE SPECIAL PROVISIONS.   |
| HE           | FOR BRIDGE<br>PROVISIONS                         | JOINT DEMOLITION, SEE SPECIAL   |
| LING         | IT IS THE<br>ALL STATE                           | CONTRACTOR'S RESPONSIBILITY TO FOLLOW<br>AND FEDERAL SAFETY REQUIREMENTS.   |
| F<br>ON,     | FOR CONTRO<br>CONSTRUCTI                         | DE OF TRAFFIC AND LIMITS ON PHASING OF CON, SEE TRANSPORTATION MANAGEMENT PLANS.                                      |
| SION.        | LONGITUDIN<br>SHALL BE L<br>TRAVEL LAN           | IAL CONSTRUCTION JOINTS OF OVERLAYS<br>OCATED ALONG THE CENTERLINE OR EDGE OF<br>IES.                                 |
| 4L           | DURING CON<br>MEASURES S<br>WATER DOES<br>LANES. | ISTRUCTION, BERMS OR APPROPRIATE<br>HALL BE USED TO ENSURE HYDRO-DEMOLITION<br>NOT FLOW OR MIGRATE INTO ACTIVE TRAVEL |
| NS.          |  |   |
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|              |  | PROJECT NO. <u>BP-55001</u>   |
|              |  | NASH COUNTY   |
|              |  | BRIDGE NO. 195  |
|              |  | SHEET 2 OF 2  |
|              |  | STATE OF NORTH CAROLINA<br>DEPARTMENT OF TRANSPORTATION<br>RALEICH  |
| irke         |  | GENERAL DRAWING   |
| STREET OR TH | CAROLINA CAROLINA                                | BRIDGE #195 ON  |
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| SUMMAR  | Y OF                                     | QUANTIT  | IES                           | FOR                                   | SPAN                       | N ``A''               |
|---|--|--|-------------------------------|---------------------------------------|----------------------------|-----------------------|
|   |  |  |                               |                                       |                            |                       |
|   |  |  |                               | ESTIM                                 | ATE                        | ACTUAL                |
| SCARIFYING  | BRIDGE                                   | DECK   |                               | 124.4                                 | SY                         |                       |
| HYDRO-DEMOL   | ITION (                                  | OF BRIDGE DE   | СК                            | 124.4                                 | SY                         |                       |
| CLASS II SU   | JRFACE F                                 | PREPARATION  |                               | 27.8 5                                | γ<br>,                     |                       |
|   |  | PREPARATIO   | ١                             | 14.8 5                                | F                          |                       |
| JOINT DEMO  |  |  |                               | 14.0 5                                |                            |                       |
| PAYMENT FOR<br>UPON SQUARE<br>FOLLOWING HY<br>SURFACE PREP. | CLASS I<br>FEET OF<br>DRO-DEM<br>ARATION | I AND CLASS<br>ADDITIONAL<br>OLITION OF<br>"SPECIAL PR | III<br>DEMO<br>BRIDG<br>DVISI | SURFACE<br>LITION<br>E DECK, 1<br>ON. | PREP.<br>REQUIF<br>SEE "O\ | BASED<br>ED<br>(ERLAY |
| CLASS TIT SU  | REACE P                                  | REPARATION   | TS NO                         | Τ ΔΝΤΤΟ                               | τράτει                     | ).                    |
| A TOKEN AMOU  | NT IS I                                  | NDICATED FC  | R PRI                         | ICING PL                              | RPOSES                     | , IN                  |
| AREAS ARE EN  | COUNTER                                  | ED.  |                               |                                       | AT 101                     |                       |
|   |  |  |                               |                                       |                            |                       |
|   |  |  |                               |                                       |                            |                       |
|   |  |  |                               |                                       |                            |                       |
|   |  |  |                               |                                       |                            |                       |
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|   |  |  |                               |                                       |                            |                       |
|   |  |  |                               |                                       |                            |                       |
|   |  |  |                               |                                       |                            |                       |
|   |  | SCARIFYIN  | 5 BRI                         | DGE DECK                              |                            |                       |
| L   |  |  |                               |                                       |                            |                       |
| <b>[</b> 777  | 7771                                     |  |                               | νος ττ                                |                            |                       |
|   | '///                                     | SURFACE PR   | EPARA                         | ATION                                 |                            |                       |
|   |  |  |                               |                                       |                            |                       |
| $\boxtimes$   | $\overline{\mathbb{X}}$                  | BRIDGE JOT   | NT DE                         | EMOLITI                               | N                          |                       |
|   | $\times$                                 | 51502 001  | 01                            |                                       |                            |                       |
|   |  | APPROXIMA  | E DE                          | CK EVALL                              | ATION                      |                       |
|   | •  | SAMPLE LOC   | NOITA                         | N                                     |                            |                       |
|   |  |  |                               |                                       |                            |                       |
|   |  |  |                               |                                       |                            |                       |
|   |  |  |                               |                                       |                            |                       |
|   |  |  |                               |                                       |                            |                       |
|   |  |  |                               |                                       |                            |                       |
|   | RIDGE                                    | L DECK<br>N SAMPLE                                     | -                             |                                       |                            |                       |
|   |  |  |                               |                                       |                            |                       |
| TES<br>LOCAT  | T<br>ION                                 | RESULT   |                               |                                       |                            |                       |
| #1  |  | (PSI)<br>3660  | _                             |                                       |                            |                       |
| #2  |  | 3640   |                               |                                       |                            |                       |
|   |  | 5510   |                               |                                       |                            |                       |
| NOTE: BRT   | DGE DEC                                  | κ εναιιμάττοι  | N SAM                         | IPLE                                  |                            |                       |
| DAT   | A PROVI                                  | IDED BY NCDO   | T                             |                                       |                            |                       |
| NEF   | UAT                                      |  |                               |                                       |                            |                       |
|   |  |  |                               |                                       |                            |                       |
|   |  |  |                               | י חם                                  |                            | ът                    |
|   | PROJ                                     | ECT NO.  |                               | BH-2                                  | 500                        | )1                    |
|   |  | NAS  | Н                             |                                       | cr                         |                       |
|   |  |  |                               | 101                                   |                            |                       |
|   | BRID                                     | GE NO.   |                               | 195                                   | )                          |                       |
|   | SHEET                                    | 1 OF 5   |                               |                                       |                            |                       |
|   |  |  | F 65 ···                      |                                       |                            |                       |
|   | DE                                       |  |                               | TRANSF                                | ORTA                       | TTON                  |
|   | 1  |  | RAL                           | EIGH                                  | J                          |                       |
|   |  |  |                               |                                       |                            |                       |
| l   |  |  |                               |                                       | - A -                      | TTON                  |
|   | I SL                                     |  |                               |                                       | ŅКА                        | ITON                  |
| NOR TH CAROL MAN  |  | 21   | - AN                          | N A                                   |                            |                       |
| SEAL  |  |  |                               |                                       |                            |                       |
| 40257   | ┣—                                       | DEVE   | TONC                          |                                       |                            | SHEET NO              |
| MATTHEW CLARK   | NO. BY:                                  | DATE:  | NO.                           | BY:                                   | DATE:                      | S-21                  |
| Anna C W  | 1  |  | 3                             |                                       |                            | TOTAL<br>SHEETS       |
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|  | SUMMAR   | Y OF                                  | QUANTITIES  | FOR SPA   | N ``B''                    |
|--|--|---------------------------------------|---|---|----------------------------|
|  |  |                                       |   |   |                            |
|  |  |                                       |   | ESTIMATE  | ACTUAL                     |
|  | SCARIFYING   | BRIDGE                                | DECK  | 121.2 SY  |                            |
|  | HYDRO-DEMOL  | ITION                                 | OF BRIDGE DECK  | 121.2 SY  |                            |
|  | CLASS II SU  | RFACE I                               | PREPARATION   | 39.2 SY   |                            |
|  | ULASS III S  |                                       | PREPARATION   | 0.5 SY  |                            |
|  | JOINT DEMOL  | TITON                                 |   | 23.0 51   |                            |
|  | PAYMENT FOR C<br>UPON SQUARE F<br>FOLLOWING HYD<br>SURFACE PREPA | CLASS I<br>EET OF<br>RO-DEM<br>RATION | I AND CLASS III<br>ADDITIONAL DEMO<br>OLITION OF BRIDG<br>"SPECIAL PROVISI              | SURFACE PREF<br>LITION REQUI<br>E DECK,SEE "<br>ON. | P.BASED<br>IRED<br>OVERLAY |
|  | CLASS III SUR<br>A TOKEN AMOUN<br>CASE UNANTICI<br>AREAS ARE ENC | RFACE P<br>NT IS I<br>PATED<br>OUNTER | REPARATION IS NO<br>NDICATED FOR PRI<br>CLASS III SURFAC<br>ED.                         | T ANTICIPAT<br>CING PURPOS<br>E PREPARATIC          | ED.<br>ES, IN<br>DN        |
|  |  |                                       |   |   |                            |
|  |  |                                       | SCARIFYING BRID   | DGE DECK  |                            |
|  |  |                                       | APPROX.AREA CLA<br>Surface prepara  | SS II<br>TION                                       |                            |
|  |  |                                       | BRIDGE JOINT DE   | MOLITION  |                            |
|  | •  | )                                     | APPROXIMATE DEC<br>SAMPLE LOCATION  | K EVALUATIO   | N                          |
|  | EVALU<br>TEST<br>LOCATI<br>#3<br>#4<br>NOTE: BRIC                | RIDGE<br>ATIO<br>ON                   | E DECK<br>N SAMPLES<br>AVG, TEST<br>RESULT<br>(PSI)<br>3560<br>5000<br>K EVALUATION SAM | PLE   |                            |
|  | REPC   | PROJ                                  | ECT NO.   | <u>BP-550</u>                                       | 00I                        |
|  |  |                                       | NASH  | ~   |                            |
|  |  |                                       | 114.511   |   |                            |
|  | l  | BRID                                  | GE NO   | 195   |                            |
|  |  | SHEET                                 | 2 OF 5  |   |                            |
|  |  | DE                                    | STATE OF NOF  | TRANSPORT   | ATION                      |
| — Docusigned by:<br>William M. Clarke<br>— 1EB20097EAAF437 | CAROL AND SEAL   | SL                                    | JRFACE PI<br>SPAN   | REPARA<br>I ``B''                                   | TION                       |
| 8/19/2015  | 0257   |                                       | REVISIONS   |   | SHEET NO.                  |
| 0/19/2013 MAN  | HEW CLASSING   | NO. BY                                | DATE: NO. E   | BY: DATE:   | S-22                       |
|  | 1/111111111 <sup>111</sup>                                       | 1                                     | 3   |   | TOTAL                      |

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|   | SUMMARY   | ′ OF                                 | QUANTITIES   | FOR SPA  | N ``C''                  |
|---|---|--------------------------------------|--|--|--------------------------|
|   |   |                                      |  |  |                          |
|   |   |                                      |  | ESTIMATE   | ACTUAL                   |
|   | SCARIFYING E  | BRIDGE                               | DECK   | 121.2 SY   |                          |
|   | HYDRO-DEMOLI  | TION                                 | OF BRIDGE DECK   | 121.2 SY   |                          |
|   | CLASS II SUF  | RFACE                                | PREPARATION  | 35.4 SY  |                          |
|   | CLASS III SU  | JRFACE                               | PREPARATION  | 0.5 SY   |                          |
|   | JOINT DEMOLI  | . 1101                               |  | 29.0 SF  |                          |
| F                                       | PAYMENT FOR CI<br>JPON SQUARE FE<br>FOLLOWING HYDF<br>SURFACE PREPAF        | LASS I<br>EET OF<br>RO-DEM<br>RATION | I AND CLASS III<br>ADDITIONAL DEMO<br>OLITION OF BRIDG<br>"SPECIAL PROVISI | SURFACE PREP.<br>LITION REQUIE<br>E DECK,SEE "O<br>ON. | . BASED<br>RED<br>VERLAY |
|   | CLASS III SURF<br>A TOKEN AMOUN<br>CASE UNANTICIF<br>AREAS ARE ENCO         | FACE P<br>T IS I<br>PATED<br>DUNTER  | REPARATION IS NO<br>INDICATED FOR PRI<br>CLASS III SURFAC<br>ED.           | T ANTICIPATE<br>CING PURPOSE<br>E PREPARATION          | D.<br>S, IN<br>N         |
|   |   |                                      |  |  |                          |
|   |   |                                      | SCARIFYING BRI   | DGE DECK   |                          |
|   |   | $\square$                            | APPROX. AREA CLA<br>SURFACE PREPARA  | SS II<br>TION  |                          |
|   |   | $\bigotimes$                         | BRIDGE JOINT DE  | MOLITION   |                          |
|   | •   |                                      | APPROXIMATE DEC  | K EVALUATION   |                          |
|   | BR<br>EVALUA<br>TEST<br>LOCATIO<br>*5<br>*6<br>NOTE: BRIDO<br>DATA<br>REPOI | GE DEC<br>PROVERT, DAT               | K EVALUATION SAM   | PLE  |                          |
|   | F   | PROJ                                 | ECT NO.  | BP-550   | 01                       |
|   | -   |                                      | NAJII  |  |                          |
|   | E   | BRIC                                 | GE NO  | 195  |                          |
|   | _   | -                                    | 3 05 5   |  |                          |
|   | ſ   |                                      | JUFD   |  |                          |
| Desugarant                              |   | DE                                   | STATE OF NOF   | TRANSPORTA   | TION                     |
| Uccusigned by:                          |   |                                      |  |  |                          |
| William M. Clarke                       | /   | CI                                   |  |  | TTON                     |
| 1EB20097EAAF437                         |   | SL                                   |  |  | I TON                    |
| AND | ESSION NA MA  |                                      | SLAN   | i C  |                          |
| 180                                     | SEAL  |                                      |  |  |                          |
| 4                                       | 0257  |                                      | DEVICIOUS  |  |                          |
| 8/19/2015                               | GINET DE AN   | NO. BY                               | : DATE: NO. 1  | BY: DATE:  | S-23                     |
| *********                               | Winnen and  | 1                                    | 3  |  | TOTAL<br>SHEETS          |
|   |   | 2                                    | 4  |  | 33                       |

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![](_page_26_Figure_0.jpeg)

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| S  | UMMAR  | Y OI  | = QI   | JANTIT  | IES   | S FO  | r spa   | N ``D''  |
|--|--|---|--|---|---|---|---|--|
|  |  |   |  |   |   |   |   |  |
|  |  | DDTDC   |  | 214   |   | ESI   | IMAIE   | ACTUAL   |
|  |  | TTTON   |  | SRIDGE DE   | СK  | 121   | .2 SY   |  |
| CLA  | ASS II SU  | IRFACE  | PREF   | PARATION  | CK  |   | 5.8 SY  |  |
| CL4  | ASS III S  | URFAC   | E PRI  | EPARATION   | 1   | c   | .5 SY   |  |
| JOI  | INT DEMOL  | ITION   | 1  |   |   | 29  | .6 SF   |  |
| PAYM<br>UPON<br>FOLL<br>SURF<br>CLAS:<br>A TO<br>CASE<br>AREA: | ENT FOR (<br>SQUARE F<br>OWING HYE<br>ACE PREPA<br>S III SUF<br>KEN AMOUN<br>UNANTICI<br>S ARE ENC   | CLASS<br>TEET C<br>DRO-DE<br>NRATIC<br>RFACE<br>NT IS<br>IPATEI<br>COUNTE | II A<br>DF AD<br>MOLI<br>DN"SP<br>PREP<br>INDJ<br>D CLA<br>ERED. | ND CLASS<br>DITIONAL<br>TION OF I<br>ECIAL PRO<br>ARATION<br>CATED FO<br>SS III S                 | III<br>DEM<br>BRID<br>DVIS<br>VIS<br>IS N<br>R PR<br>JRFA | SURF<br>OLITIC<br>GE DEC<br>ION.<br>OT AN<br>CE PRE | ACE PREF<br>DN REQUI<br>K, SEE "(<br>IICIPATI<br>PURPOSI<br>PARATIC | P. BASED<br>IRED<br>DVERLAY<br>ED.<br>ES, IN<br>DN |
|  |  |   | SI<br>AF<br>SL   | CARIFYING<br>PPROX. ARE   | 5 BR]<br>A CL<br>EPAR                                     | IDGE D<br>ASS I                                     | ECK   |  |
|  |  | <b>***</b>  | BF   | RIDGE JOI   | NT D  | DEMOLI  | TION  |  |
|  | _  |   | AF   | PROXIMA   | E DE  | ECK EV  | ALUATIO   | N  |
|  | EV<br>LC<br>NOTE:  | BRIDO<br>BRIDO  | CIDC<br>ATIC<br>PROV   | E DECH<br>DN SAM<br>AVG.<br>RES<br>(PS<br>42<br>35<br>42<br>35<br>CK EVALU/<br>TED BY<br>TED 03/3 | X<br>IPLE<br>TEST<br>SI)<br>00<br>40<br>40                | ES  | PLE   |  |
|  |  | PRO<br>BRI  | DGE  | T NO.<br>NAS<br>NO.   | <br>H   | BP-   | <u>-550</u><br>c<br>95  | 001<br>OUNTY                                       |
| WITH CARR<br>CESSION<br>SEAL<br>40257                          | A State Stat | S   | UR   | rtment<br>F A C E<br>S F  |   | ORTH CARG   | PARA<br>D'1   | ATION  |
| A NGINEE   |  |   |  | REVIS   | SIONS   |   |   | SHEET NO.  |
| THEW   | annun .  | NO.   | BY:  | DATE:   | NO.<br>ବ୍ୟୁ   | BY:   | DATE:   | S-24   |
|  |  | 2   |  |   | 4   |   |   | SHEETS<br>33                                       |

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| SUMMA                      | RY OF                | QUANTIT       | IES FO      | R SPA        | N ``E''       |
|----------------------------|----------------------|---------------|-------------|--------------|---------------|
|                            |                      |               |             |              |               |
|                            |                      |               | EST         | IMATE        | ACTUAL        |
| SCARIFYING                 | BRIDGE               | DECK          | 124         | 1.4 SY       |               |
| HYDRO-DEMO                 |                      | OF BRIDGE DE  | CK 124      | 5 SY         |               |
|                            |                      | PREPARATION   | 0.5         | 5 SY         |               |
| JOINT DEMO                 | DLITION              |               | 14.         | 8 SF         |               |
|                            |                      |               |             |              |               |
| UPON SQUARE<br>FOLLOWING H | FEET OF              | ADDITIONAL    | DEMOLITIO   | ON REQUI     | RED           |
| SURFACE FREF               |                      | DEDADATION I  | VISION.     |              |               |
| A TOKEN AMOU               | UNT IS :             | INDICATED FOR | R PRICING   |              | S, IN         |
| AREAS ARE EN               | NCOUNTER             | ED.           | IRFACE PRE  | PARATIO      | N             |
|                            |                      |               |             |              |               |
|                            |                      |               |             |              |               |
|                            |                      |               |             |              |               |
|                            |                      |               |             |              |               |
|                            |                      |               |             |              |               |
|                            |                      |               |             |              |               |
|                            |                      |               |             |              |               |
|                            |                      |               |             |              |               |
|                            |                      | SCARIFYING    | BRIDGE D    | ECK          |               |
| L                          |                      |               |             |              |               |
| 777                        | 777                  | APPROX. ARE   | A CLASS I   | I            |               |
|                            |                      | SURFACE PRE   | PARATION    |              |               |
|                            |                      |               |             |              |               |
|                            |                      | BRIDGE JOIN   | NT DEMOLI   | TION         |               |
|                            | ~~~~                 |               |             |              |               |
|                            | •                    | APPROXIMAT    | E DECK EV   | ALUATION     | N             |
|                            |                      | SAMFLE LUCA   | AT LON      |              |               |
|                            |                      |               |             |              |               |
|                            |                      |               |             |              |               |
|                            |                      |               |             |              |               |
|                            |                      |               |             |              |               |
| E                          | BRIDG                | E DECK        |             |              |               |
| EVAL                       | UATIO                | N SAMPLE      | S           |              |               |
| TES                        | ST                   | AVG. TEST     |             |              |               |
| LOCAT                      | ION                  | (PSI)         |             |              |               |
| # <u>9</u>                 | 9                    | 3960          |             |              |               |
| #1                         | 0                    | 4280          |             |              |               |
|                            |                      |               |             |              |               |
| NOTE: BRI<br>DA            | IDGE DEC<br>TA PROVI | K EVALUATION  | SAMPLE<br>T |              |               |
| REI                        | PORT, DA             | TED 03/31/15. |             |              |               |
|                            |                      |               |             |              |               |
|                            |                      |               |             |              |               |
|                            | PRO.                 | ECT NO.       | BP          | <u>-5</u> 50 | OI            |
|                            |                      |               |             | -            | <b>0.11.7</b> |
|                            |                      | INA S         | 11          | C            | UUNIY         |
|                            | BRIC                 | GE NO.        | 1           | <u>95</u>    |               |
|                            | <b>-</b>             |               |             |              |               |
|                            | SHEET                | 5 UF 5        |             |              |               |
|                            |                      |               |             |              |               |
|                            |                      | L'AR IMÈN'    | RALEIGH     | 130'0R11     | AT LON        |
|                            |                      |               |             |              |               |
| -                          |                      |               | חחרי        |              | TTAN          |
|                            | 1 SL                 | IKL ACE       |             | ~ AKA        | TTON          |
| WHOR TH CAROL MAN          |                      | 25            | AN          | E            |               |
| SEAL                       | 1                    |               |             |              |               |
| 40257                      | <b>—</b>             | DEVIC         | TONS        |              | SHEET NO      |
| MAN CINES STAT             |                      | REVIS         | TOURS       |              | JULLI NU.     |
| HEW CAN                    | NO. BY               | DATE:         | NO. BY:     | DATE:        | S-25          |

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![](_page_28_Figure_0.jpeg)

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| REPAIF   | R QL   | JAN   | ITI  | T١   | ή ΤΔ  | BLE   |  |                         |
|--|--|---|--|--|---|---|--|-------------------------|
| AIRS END BEN   | IT 1   |   | ECTT   |  | QUANT   | I⊺IES   | ACT:::   | 1                       |
| TORETE DEDAT   | BC   | AF  | ESI1   | V NA   | OLUME   | AREA  | DEPTH  | VOLUME                  |
| VERTICAL EACES   |  | 0   | SF 0   |  | CF  | SF  | FT   | CF                      |
| HORIZONTAL. CORNER)  | 1  | 0   | .0   | -  | 0.0   |   |  |                         |
| XY RESTN TN  | IFCTT  | ОИ<br>-   |  | 1  | LN. FT  |   |  | -                       |
| AT NESTR INC   |  |   |  |  | 27 5  |   | LIN. FI  |                         |
|  | <b></b> -  |   |  |  | QUANT   | II<br>ITIES   |  |                         |
| AIRS END BEN   | 17 2   |   | ESTI   | MA   | E   |   | ACTUA  | L                       |
| TCRETE REPAI   | RS   | AF  | EA   | V  | OLUME   | AREA  | DEPTH  | VOLUME                  |
| VERTICAL FACE)   | -  | 21  | .0   | -  | 9.6   | 51  |  |                         |
| HORIZONTAL, CORNER)  | 1  | 2   | .7   |  | 1.2   |   |  |                         |
| XY RESIN INJ   | IECTI  | ON  |  |  | LN.FT   |   | LN.FT  |                         |
|  |  |   |  |  | 0.0   |   |  |                         |
| IN CHART REPRESEN  | IT ESTI  | [MATF   | D RFP  | AIF  | 10TAL   | S AFTFI   | ٦  |                         |
| HE BEST INFORMATI<br>OWN ON THE DRAWING<br>TOR OR ENGINEER TH<br>GS THE APPROXIMATI<br>S AND ADJUST THE A<br>OUANTITY TABLE.<br>P AND COLUMN REPAI<br>DETAILS SHEET.<br>COATING SHALL BE A<br>CTOR SHALL BE A<br>CTOR SHALL NOT COA<br>Y PLATES.FOR EPOXY<br>IONS. | JN AVA<br>SS ARE<br>TE CONT<br>E LOCA<br>CTUAL<br>IR DET/<br>IR DET/<br>IR DET/<br>PPLIED<br>AT THE<br>Y COAT: | DEEM<br>TRACT<br>TION<br>QUAN<br>AILS,<br>AREA<br>ING A | E. IF<br>ED NE<br>OR SHAD [<br>TITTE<br>SEE T<br>OF T<br>ND DE | ADL<br>CESS<br>ALL<br>DESC<br>S E<br>TYPI<br>OP<br>HE<br>EBR | SARY BY<br>NOTE C<br>RIPTIO<br>NTERED<br>CAL CAF<br>FACE OF<br>CAP BEN<br>IS REMO | INTO<br>Y THE<br>N OF T<br>INTO<br>P AND (<br>THE C<br>IEATH I<br>VAL, SE | HE<br>THE<br>COULMN<br>AP. THE<br>HE<br>E SPEC | IAL                     |
| KCL<br>MEN CARO<br>SEAL<br>SEAL<br>SEAL  | PRO<br>BRI<br>SHEET  | JEC<br>DGE  | t Ν<br>ΝΛ<br>Να<br>κτμε  | 10.<br><u>A</u> S<br>D<br>NT                                 | BI<br>H<br>OF NORTH H<br>OF TR<br>RALEIGH   | 2-5<br>195<br>ANSPO   | 500<br>COL                                     | <u>I</u><br>INTY<br>ION |
| A MOINES   |  |   | F  | EVI  | SIONS   |   |  | SHEET NO.               |
| HANNING THEW CLIMAN  | NO.  | BY:   | DATE   |  | NO. BY:   | DA  | TE:  | S-27                    |
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![](_page_30_Figure_0.jpeg)

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| REPAIR                      | QL   | JANTI         | ΤΥ ΤΑ                                 | BLE                 |                       |
|-----------------------------|------|---------------|---------------------------------------|---------------------|-----------------------|
| REPATRS BENT 1              |      |               | QUANT                                 | ITIES               |                       |
|                             |      | ESTI          |                                       | AC.                 |                       |
| SHOTCRETE REPAIRS           | 5    | SF            | CF                                    | SF                  | CF                    |
| CAP (VERTICAL FACE)         |      | 8.2           | 3.4                                   |                     |                       |
| CAP (HORIZONTAL, CORNER)    |      | 0.0           | 0.0                                   |                     |                       |
| COLUMN                      |      | 0.0           | 0.0                                   |                     |                       |
| SIRUI                       |      | 5.8           | 1.6                                   |                     |                       |
| EPOXY RESIN INJEC           | TI   | ON            | LN.FT                                 |                     | LN. FT                |
| CAP                         |      |               | 17.0                                  |                     |                       |
| COLUMN                      |      |               | 0.0                                   |                     |                       |
| STRUT                       |      |               | 0.0                                   |                     |                       |
| 2.0 ERI<br>6.8 SF<br>3.8 SF |      |               |                                       |                     |                       |
| ELE<br>we                   | EV A | ATION<br>SIDE |                                       |                     |                       |
| P                           | RC   | JECT N        | ю. <u>В</u>                           | P-550               | OI                    |
|                             |      | NA            | 4SH                                   | r                   | ΟΠΝΤΥ                 |
| -                           |      |               |                                       | 105<br>0            |                       |
| B                           | SR1  | DGE NO        | )                                     | 130                 |                       |
| S                           | HEE  | T 2 OF 5      |                                       |                     |                       |
| igned by:<br>M. M. Clarke   |      | DEPARTME      | STATE OF NORTH<br>NT OF TR<br>RALEIGH | CAROLINA<br>ANSPORT | ATION                 |
| 097EAAF437                  |      |               | BENT                                  | 1                   |                       |
| 5                           | 40.  | F<br>BY: DATE | EVISIONS<br>: NO. BY:                 | DATE:               | SHEET NO.             |
| ""Antoninana"               | 1    |               | 3<br>4                                |                     | TOTAL<br>SHEETS<br>33 |

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![](_page_31_Figure_5.jpeg)

| DRAWN BY :   | H.F. YEUNG | _ DATE : _ | 5/15 |
|--------------|------------|------------|------|
| CHECKED BY : | R.N. WEISZ | _ DATE : _ | 6/15 |
|              |            |            |      |

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#### NOTES:

REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE INSPECTOR OR ENGINEER THE CONTRACTOR SHALL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATION AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED INTO THE REPAIR QUANTITY TABLE.

FOR CAP AND COLUMN REPAIR DETAILS, SEE TYPICAL CAP AND COULMN REPAIR DETAILS SHEET.

EPOXY COATING SHALL BE APPLIED TO THE TOP FACE OF THE CAP.THE CONTRACTOR SHALL NOT COAT THE AREA OF THE CAP BENEATH THE MASONRY PLATES.FOR EPOXY COATING AND DEBRIS REMOVAL,SEE SPECIAL PROVISIONS.

Ø

.3 SF —

EP0> CAP COLUM STRUT

VALUES REMOVAL MIN.2″C

![](_page_32_Figure_6.jpeg)

 DocuSigned by William M - 1EB20097EAAF

ERI - EPOXY RESIN INJECTION

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DATE : \_\_\_\_\_\_

DATE : \_\_\_\_\_6/15\_\_\_

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DRAWN BY : \_

CHECKED BY :\_

H.F. YEUNG

R.N. WEISZ

| REPATR OI                | JANTT         | τη τα       | BI F     |              |  |  |  |
|--------------------------|---------------|-------------|----------|--------------|--|--|--|
|                          |               |             |          |              |  |  |  |
| REPAIRS BENT 3           |               |             | LIIES    |              |  |  |  |
|                          | LSI1          |             |          | VOLUNE       |  |  |  |
| SHOICRETE REPAIRS        | SF            | CF          | SF       |              |  |  |  |
| CAP (VERTICAL FACE)      | 13.1          | 6.0         |          |              |  |  |  |
| CAP (HORIZONTAL, CORNER) | 0.0           | 0.0         |          |              |  |  |  |
| COLUMN                   | 2.6           | 1.2         |          |              |  |  |  |
| STRUT                    | 1.2           | 0.6         |          |              |  |  |  |
|                          |               |             |          |              |  |  |  |
| EPOXY RESIN INJECTI      | ON            | LN.FT       |          | LN.FT        |  |  |  |
| CAP                      |               | 20          |          |              |  |  |  |
|                          |               | 2.0         |          |              |  |  |  |
|                          |               | 0.0         |          |              |  |  |  |
| JUNI                     |               | 0.0         |          |              |  |  |  |
| .3 SF                    |               |             |          |              |  |  |  |
| ELEVA<br>West            | ATION<br>SIDE |             |          |              |  |  |  |
|                          |               |             |          | ОT           |  |  |  |
| PRO                      | JJECIN        | NODI        | 550      | 01           |  |  |  |
|                          | N.            | <u>AS</u> H |          | OUNTY        |  |  |  |
|                          |               | _           |          |              |  |  |  |
| BRI                      | IDGE NO       | )           | 122      |              |  |  |  |
| CUEE                     | T 4 OF 5      |             |          |              |  |  |  |
|                          | UL D          |             |          |              |  |  |  |
|                          |               |             |          |              |  |  |  |
| igned by:                | UCFARIME      | RALEIGH     | ANSPUR I | AT LON       |  |  |  |
| m M (laide               |               |             |          |              |  |  |  |
| m m. marec               |               |             |          |              |  |  |  |
| 097EAAF437               |               | RENT        | ٦        |              |  |  |  |
| ATH CAROL MAN            |               | DENI        | J        |              |  |  |  |
| W AN OFESSION A M        |               |             |          |              |  |  |  |
| SEAL 40257               |               |             |          |              |  |  |  |
|                          |               | REVISIONS   |          | SHEET NO.    |  |  |  |
| AND HEW CHANNEL          | BY: DAT       | E: NO. BY:  | DATE:    | S-30         |  |  |  |
| 2                        |               | <u>র</u>    |          | SHEETS<br>33 |  |  |  |

#### NOTES:

REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE INSPECTOR OR ENGINEER THE CONTRACTOR SHALL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATION AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED INTO THE REPAIR QUANTITY TABLE.

FOR CAP AND COLUMN REPAIR DETAILS, SEE TYPICAL CAP AND COULMN REPAIR DETAILS SHEET.

EPOXY COATING SHALL BE APPLIED TO THE TOP FACE OF THE CAP.THE CONTRACTOR SHALL NOT COAT THE AREA OF THE CAP BENEATH THE MASONRY PLATES.FOR EPOXY COATING AND DEBRIS REMOVAL,SEE SPECIAL PROVISIONS.

![](_page_33_Figure_4.jpeg)

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![](_page_33_Figure_6.jpeg)

![](_page_34_Figure_0.jpeg)

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| NOTES:  |
|---|
| CONTRACTOR SHALL SAW CUT TO A NOMINAL DEPTH OF $\frac{1}{2^{\prime\prime}}$ BUT REINFORCING STEEL SHALL NOT BE DAMAGED. |
| CONTRACTOR SHALL REMOVE SURFACE CONCRETE TO VERIFY<br>THAT SAWCUT DEPTH WILL NOT DAMAGE EXISTING<br>REINFORCING STEEL.  |
| CONTRACTOR SHALL SAW CUT THE REPAIR AREAS SO THAT THE CORNERS ARE SQUARE AS INDICATED ON THE DETAILS.                   |
| CONCRETE REPAIRS MAY BE SUBSTITUTED IN LIEU OF SHOTCRETE REPAIRS WITH THE APPROVAL OF THE ENGINEER.                     |
| FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.  |
| FOR EPOXY RESIN INJECTION, SEE SPECIAL PROVISIONS.  |
|   |
|   |
|   |
| W///////  |

- SHOTCRETE REPAIR

ERI - EPOXY RESIN INJECTION

|                     | PROJE(<br><br>BRIDG | CT NO.<br>NAS<br>E NO.        | H             | BP<br>1   | <u>-550(</u><br>co<br>95 | DI<br>UNTY     |
|---------------------|---------------------|-------------------------------|---------------|-----------|--------------------------|----------------|
| 437                 | depa<br>C<br>F      | RTMENT<br>T<br>CAP A<br>REPAI | YP<br>NE<br>R | ICTH CARG | NSPORTA<br>OLUM<br>TAIL  | tion<br>N<br>S |
| MUNCINEE ST         |                     | REVIS                         | SIONS         | 5         |                          | SHEET NO.      |
| HARRAN HEW CLIMMENT | NO. BY:             | DATE:                         | N0.           | BY:       | DATE:                    | S-32           |
|                     | า                   |                               | ৰ্জ<br>ব      |           |                          | SHEETS         |

![](_page_35_Figure_0.jpeg)

#### DESIGN DATA:

| SPECIFICATIONS                                  | A.A.S.H.T.O. (CURRENT)  |
|---|-------------------------|
| LIVE LOAD                                       | SEE PLANS               |
| IMPACT ALLOWANCE                                | SEE A.A.S.H.T.O.        |
| STRESS IN EXTREME FIBER OF                      |                         |
| STRUCTURAL STEEL - AASHTO M270 GRADE 36 -       | 20,000 LBS. PER SQ. IN. |
| - AASHTO M270 GRADE 50W -                       | 27,000 LBS.PER SQ.IN.   |
| - AASHTO M270 GRADE 50 -                        | 27,000 LBS.PER SO.IN.   |
| REINFORCING STEEL IN TENSION                    |                         |
| GRADE 60  | 24,000 LBS.PER SQ.IN.   |
| CONCRETE IN COMPRESSION                         | 1,200 LBS.PER SQ.IN.    |
| CONCRETE IN SHEAR                               | SEE A.A.S.H.T.O.        |
| STRUCTURAL TIMBER - TREATED OR                  |                         |
| UNTREATED - EXTREME FIBER STRESS                | 1,800 LBS.PER SO.IN.    |
| COMPRESSION PERPENDICULAR TO GRAIN<br>OF TIMBER | 375 LBS.PER SQ.IN.      |
| EQUIVALENT FLUID PRESSURE OF EARTH              | 30 LBS.PER CU.FT.       |
|   |                         |

#### MATERIAL AND WORKMANSHIP:

EXCEPT AS MAY OTHERWISE BE SPECIFIED ON PLANS OR IN THE SPECIAL PROVISIONS, ALL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE 2012 "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES" OF THE N.C. DEPARTMENT OF TRANSPORTATION.

(MINIMUM)

STEEL SHEET PILING FOR PERMANENT OR TEMPORARY APPLICATIONS SHALL BE HOT ROLLED.

#### CONCRETE:

UNLESS OTHERWISE REQUIRED ON PLANS, CLASS A CONCRETE SHALL BE USED FOR ALL PORTIONS OF ALL STRUCTURES WITH THE EXCEPTION THAT: CLASS AA CONCRETE SHALL BE USED IN BRIDGE SUPERSTRUCTURES, ABUTMENT BACKWALLS, AND APPROACH SLABS; AND CLASS B CONCRETE SHALL BE USED FOR SLOPE PROTECTION AND RIP RAP.

#### CONCRETE CHAMFERS:

UNLESS OTHERWISE NOTED ON THE PLANS, ALL EXPOSED CORNERS ON STRUCTURES SHALL BE CHAMFERED 3/4"WITH THE FOLLOWING EXCEPTIONS: TOP CORNERS OF CURBS MAY BE ROUNDED TO 1-/2"RADIUS WHICH IS BUILT INTO CURB FORMS: CORNERS OF TRANSVERSE FLOOR EXPANSION JOINTS SHALL BE ROUNDED WITH A 1/4"FINISHING TOOL UNLESS OTHERWISE REOUIRED ON PLANS; AND CORNERS OF EXPANSION JOINTS IN THE ROADWAY FACES AND TOPS OF CURBS AND SIDEWALKS SHALL BE ROUNDED TO A 1/4"RADIUS WITH A FINISHING STONE OR TOOL UNLESS OTHERWISE REOUIRED ON PLANS.

#### DOWELS:

DOWELS WHEN INDICATED ON PLANS AS FOR CULVERT EXTENSIONS, SHALL BE EMBEDDED AT LEAST 12'INTO THE OLD CONCRETE AND GROUTED INTO PLACE WITH 1:2 CEMENT MORTAR.

#### STANDARD NOTES

#### ALLOWANCE FOR DEAD LOAD DEFLECTION. SETTLEMENT. ETC. IN CASTING SUPERSTRUCTURES:

BRIDGES SHALL BE BUILT ON THE GRADE OR VERTICAL CURVE SHOWN ON PLANS. SLABS, CURBS AND PARAPETS SHALL CONFORM TO THE GRADE OR CURVE. ALL DIMENSIONS WHICH ARE GIVEN IN SECTION AND ARE AFFECTED BY DEAD LOAD DEFLECTIONS ARE DIMENSIONS AT CENTER LINE OF BEARING UNLESS OTHERWISE NOTED ON PLANS. IN SETTING FORMS FOR STEEL BEAM BRIDGES AND PRESTRESSED CONCRETE GIRDER BRIDGES, ADJUSTMENTS SHALL BE MADE DUE TO THE DEAD LOAD DEFLECTIONS FOR THE LEVATIONS SHOWN. WHERE BLOCKS ARE SHOWN OVER BEAMS FOR BUILDING UP TO THE SLAB, THE VERTICAL DIMENSIONS OF THE BLOCKS SHALL BE ADJUSTED BETWEEN BEARINGS TO COMPENSATE FOR DEAD LOAD DEFLECTIONS, VERTICAL CURVE ORDINATE, AND ACTUAL BEAM CRUDOR OF SLAB IS IN LINE WITH BOTTOM OF TOP FLANGES, DEPTH OF SLAB BETWEEN BEARINGS SHALL BE ADJUSTED TO COMPENSATE FOR DEAD LOAD DEFLECTION, VERTICAL CURVE ACTUAL BEAM CAMBER.

TO COMPENSATE FOR DEAD LOAD DEFLECTION, VERTICAL CURVE ORDINATE, AND ACTUAL BEAM CAMBER. IN SETTING FALSEWORK AND FORMS FOR REINFORCED CONCRETE SPANS, AN ALLOWANCE SHALL BE MADE FOR DEAD LOAD DEFLECTIONS, SETTLEMENT OF FALSEWORK, AND PERMANENT CAMBER WHICH SHALL BE PROVIDED FOR IN ADDITION TO THE ELEVATIONS SHOWN. AFTER REMOVAL OF THE FALSEWORK, THE FINISHED STRUCTURES SHALL CONFORM TO THE PROFILE AND ELEVATIONS SHOWN ON THE PLANS AND CONSTRUCTION ELEVATIONS FURNISHED BY THE ENGINEER. DETAILED DRAWINGS FOR FALSEWORK OR FORMS FOR BRIDGE SUPERSTRUCTURE AND ANY STRUCTURE OR PARTS OF A STRUCTURE AS NOTED ON THE PLANS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL BEFORE CONSTRUCTION OF THE FALSEWORK OR FORMS IS STARTED.

#### REINFORCING STEEL:

ALL REINFORCING STEEL SHALL BE DEFORMED. DIMENSIONS RELATIVE TO PLACEMENT OF REINFORCING ARE TO CENTERS OF BARS UNLESS OTHERWISE INDICATED IN THE PLANS. DIMENSIONS ON BAR DETAILS ARE TO CENTERS OF BARS OR ARE OUT

IN THE PLANS. DIMENSIONS ON BAR DETAILS ARE TO CENTERS OF BARS OR ARE OUT TO OUT AS INDICATED ON PLANS. WIRE BAR SUPPORTS SHALL BE PROVIDED FOR REINFORCING STEEL WHERE INDICATED ON THE PLANS. WHEN BAR SUPPORT PIECES ARE PLACED IN CONTINUOUS LINES, THEY SHALL BE SO PLACED THAT THE ENDS OF THE SUPPORTING WIRES SHALL BE LAPPED TO LOCK LEGS ON ADJOINING PIECES.

#### STRUCTURAL STEEL:

AT THE CONTRACTOR'S OPTION, HE MAY SUBSTITUTE 7/8" Ø SHEAR STUDS FOR THE <sup>7</sup>/<sub>4</sub>" Ø STUDS SPECIFIED ON THE PLANS. THIS SUBSTITUTION SHALL BE MADE AT THE RATE OF 3 - 7/8" Ø STUDS FOR 4 - 3/4" Ø STUDS, AND STUD SPACING CHANGES SHALL BE MADE AS NECESSARY TO PROVIDE THE SAME EQUIVALENT NUMBER OF 7/8" Ø STUDS ALONG THE BEAM AS SHOWN FOR 3/4" Ø STUDS BASED ON THE RATIO OF 3 - 7/8" Ø STUDS FOR 4 - 3/4" Ø STUDS. STUDS OF THE LENGTH SPECIFIED ON THE PLANS MUST BE PROVIDED. THE MAXIMUM SPACING SHALL BE 2'-O". EXCEPT AT THE INTERIOR SUPPORTS OF CONTINUOUS BEAMS WHERE THE COVER PLATE IS IN CONTACT WITH BEARING PLATE, THE CONTRACTOR MAY, AT HIS OPTION, SUBSTITUTE FOR THE COVER PLATES DESIGNATED ON THE PLANS COVER PLATES OF THE EQUIVALENT AREA PROVIDED THES PLATES ARE AT LEAST 5/16"IN THICKNESS AND DO NOT EXCEED A WIDTH EQUAL TO THE FLANGE WIDTH LESS 2" OR A THICKNESS EQUAL TO 2 TIMES THE FLANGE THICKNESS. THE SIZE OF FILLET WELDS SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT ANSI/AASHTO/AWS "BRIDGE WELDING CODE". ELECTROSLAG WELDING WILL NOT BE PERMITTED. WITH THE SOLE EXCEPTION OF EDGES AND PLATES SHALL BE SLIGHTLY ROUNDED BY SUITABLE MEANS TO A RADIUS OF APPROXIMATELY 1/16 INCH OR EQUIVALENT FLAT SURFACE AT A SUITABLE ANGLE PRIOR TO PAINTING, GALVANIZING, OR METALLIZING.

OR METALLIZING.

#### HANDRAILS AND POSTS:

#### SPECIAL NOTES:

SPECIFICATIONS ARTICLE 105-4.

+

METAL STANDARDS AND FACES OF THE CONCRETE END POSTS FOR THE METAL RAIL SHALL BE SET NORMAL TO THE GRADE OF THE CURB, UNLESS OTHERWISE SHOWN ON PLANS. THE METAL RAIL AND TOPS OF CONCRETE POSTS USED WITH THE ALUMINUM RAIL SHALL BE BUILT PARALLEL TO THE GRADE OF THE CURB. METAL HANDRAILS SHALL BE IN ACCORDANCE WITH THE PLANS. RAILS SHALL BE AS MANUFACTURED FOR BRIDGE RAILING. CASTINGS SHALL BE OF A UNIFORM APPEARANCE. FINS AND OTHER DEFORMATIONS RESULTING FROM CASTING OR OTHERWISE SHALL BE REMOVED IN A MANNER SO THAT A UNIFORM COLORING OF THE COMPLETED CASTING SHALL BE OBTAINED, CASTINGS WITH DISCOLORATIONS OR OF NON-UNIFORM COLORING WILL NOT BE ACCEPTED CERTIFED MIL REPORTS ARE REQUIRED FOR METAL RAILS AND POSTS NOT BE ACCEPTED. CERTIFIED MILL REPORTS ARE REQUIRED FOR METAL RAILS AND POSTS.

GENERALLY, IN CASE OF DISCREPANCY, THIS STANDARD SHEET OF NOTES SHALL GOVERN OVER THE SPECIFICATIONS, BUT THE REMAINDER OF THE PLANS SHALL GOVERN OVER NOTES HEREON, AND SPECIAL PROVISIONS SHALL GOVERN OVER ALL. SEE

### ENGLISH JANUARY. 1990

STD. NO. SN

![](_page_37_Picture_0.jpeg)

| INDEX OF SHEETS   | <u>sheet no.</u><br>ТМР-1 |  |
|---|---------------------------|--|
| D. <u>TITLE</u>   |                           |  |
| TITLE SHEET, VICINITY MAP AND INDEX OF SHEETS                               |                           |  |
| LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS,<br>AND LEGEND AND SIGN DESIGN |                           |  |

TRANSPORTATION OPERATIONS PLAN: (MANAGEMENT

NB BUCK LEONARD BLVD BRIDGE CLOSURE

SB BUCK LEONARD BLVD BRIDGE CLOSURE

| 2-5500I |   |   |
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# **ROADWAY STANDARD DRAWINGS**

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" -PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2012 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

| STD. NO. | TITLE                         |
|----------|-------------------------------|
|          |                               |
| 1101.01  | WORK ZONE WARNING SIGNS       |
| 1101.02  | TEMPORARY LANE CLOSURES       |
| 1101.03  | TEMPORARY ROAD CLOSURES       |
| 1101.04  | TEMPORARY SHOULDER CLOSURES   |
| 1101.05  | WORK ZONE VEHICLE ACCESSES    |
| 1101.11  | TRAFFIC CONTROL DESIGN TABLES |
| 1110.01  | STATIONARY WORK ZONE SIGNS    |
| 1110.02  | PORTABLE WORK ZONE SIGNS      |
| 1115.01  | FLASHING ARROW BOARDS         |
| 1130.01  | DRUMS                         |
| 1135.01  | CONES                         |
| 1145.01  | BARRICADES                    |
| 1150.01  | FLAGGING DEVICES              |
|          |                               |

| TVP                          | E:                   | D                    |                      |                      | COPV               | C01 0    | R:       | BLAC            | iE<br>K                  |                          | DESI             | GN BY                   | :                     |                                      |          |
|------------------------------|----------------------|----------------------|----------------------|----------------------|--------------------|----------|----------|-----------------|--------------------------|--------------------------|------------------|-------------------------|-----------------------|--------------------------------------|----------|
| QUANTIT                      | <br>Y:               | 0                    |                      | SYMBO                | L                  |          | x        | Y               | WID                      | нт                       | PROJI            | ECT II                  | ):                    |                                      |          |
| SIGN WIDT                    | H: 3'                | -0″                  |                      |                      |                    |          |          |                 |                          |                          |                  |                         |                       |                                      |          |
| HEIGH                        | T: 1'                | '-6"                 |                      |                      |                    |          |          |                 |                          |                          |                  |                         |                       |                                      |          |
| FOTAL AREA:                  | 4.5                  | Sq.Ft                | •  -                 |                      |                    |          | _        |                 |                          |                          |                  |                         |                       |                                      | <b>L</b> |
| BORDER TYP                   | E: FLI               | JSH                  |                      |                      |                    |          | _        |                 |                          |                          |                  |                         |                       | 7                                    |          |
| WIDT                         | 5: U.<br>H: O.       | .63″                 |                      |                      |                    |          |          |                 |                          |                          |                  |                         |                       |                                      |          |
| RADI                         | I: 1                 | .5″                  |                      |                      |                    |          |          |                 |                          |                          |                  |                         |                       |                                      |          |
| NO. Z BARS<br>Lengti         | S:<br>1:             |                      | N                    | MAT'L:               | 0.12               | 5″ (3    | .2 mr    | n) ALl          | JMINUM                   |                          |                  |                         |                       | 1'-6"                                |          |
| <u>NOTES:</u><br>1. Legend a | and be               | order                | shal                 | l be (               | direc <sup>.</sup> | t app:   | lied     |                 |                          |                          |                  |                         |                       |                                      |          |
| non-ref                      | lecti                | ve sh                | eetin                | g .                  |                    |          |          |                 |                          |                          |                  |                         |                       |                                      |          |
| 2. Backgro                   | und s                | hall                 | be Gr                | ade C                | refl               | ectiv    | e sho    | eting           | ].                       |                          |                  |                         | BO                    | RDER                                 | 1 9"     |
| -                            |                      |                      |                      |                      |                    |          |          |                 |                          |                          |                  |                         | DC                    | 1 5"                                 | 1.0      |
| -                            |                      |                      |                      |                      |                    |          |          |                 |                          |                          |                  |                         | <b>π</b> -            | 1.0                                  |          |
| -                            |                      |                      |                      |                      |                    |          |          |                 |                          |                          |                  |                         | TH                    | =0.63"                               |          |
|                              |                      |                      |                      |                      |                    |          |          |                 |                          |                          |                  |                         | R=<br>TH<br>IN=       | =0.63"<br>=0.38"                     |          |
|                              |                      |                      |                      |                      |                    |          |          |                 |                          |                          |                  |                         | R=<br>TH<br>IN=       | =0.63"<br>=0.38"                     |          |
|                              |                      |                      |                      |                      |                    |          |          |                 |                          |                          |                  |                         | R-<br>TH<br>IN=       | =0.63"<br>=0.38"                     |          |
| LETTER PO                    |                      | INS                  |                      |                      |                    |          |          |                 |                          |                          |                  |                         | R=<br>TH<br>IN=       | =0.63"<br>=0.38"                     |          |
| LETTER PO                    | SITIC                | DNS                  |                      |                      |                    |          |          | Let             | ter                      | spa                      | cing             | s ar                    | TH<br>IN=             | 5<br>=0.63"<br>=0.38"<br><b>0 st</b> | art      |
|                              | OSITIC<br>B          | U                    | C                    | K                    |                    |          | E        | Let             | :ter                     | spac                     | cing<br>R        | s ar                    | r-<br>TH<br>IN=       | =0.63"<br>=0.38"<br><b>o st</b>      | art      |
| LETTER PO                    | B<br>2.7             | U<br>2.8             | C<br>2.8             | K<br>2.2             | 3.3                | L<br>2.4 | E<br>2.4 | Let<br>0<br>2.9 | ter<br>N<br>2.6          | <b>spa</b> (<br>A<br>2.9 | R<br>2.7         | <b>s ar</b><br>D<br>2.2 | r<br>TH<br>IN=<br>2.1 | =0.63"<br>=0.38"<br>0 st             | art      |
| LETTER PO                    | B<br>2.7<br>B        | U<br>2.8<br>L        | C<br>2.8<br>V        | K<br>2.2<br>D        | 3.3                | L<br>2.4 | E<br>2.4 | Let<br>0<br>2.9 | : <b>ter</b><br>N<br>2.6 | <b>Spa</b><br>A<br>2.9   | R<br>2.7         | <b>s ar</b><br>D<br>2.2 | rH<br>IN=<br>2.1      | =0.63"<br>=0.38"<br><b>o st</b>      |          |
| LETTER P0                    | B<br>2.7<br>B<br>2.8 | U<br>2.8<br>L<br>2.2 | C<br>2.8<br>V<br>2.9 | K<br>2.2<br>D<br>2.2 | 3.3                | L<br>2.4 | E<br>2.4 | Let<br>0<br>2.9 | : <b>ter</b><br>N<br>2.6 | <b>Spa</b><br>A<br>2.9   | R<br>2.7         | <b>s ar</b><br>D<br>2.2 | rH<br>IN=             | =0.63"<br>=0.38"<br>■                | art      |
| LETTER PO                    | B<br>2.7<br>B<br>2.8 | U<br>2.8<br>L<br>2.2 | C<br>2.8<br>V<br>2.9 | K<br>2.2<br>D<br>2.2 | 3.3                | L<br>2.4 | E<br>2.4 | Let<br>0<br>2.9 | : <b>ter</b>             | <b>Spa</b><br>A<br>2.9   | R<br>2.7         | <b>s ar</b><br>D<br>2.2 | rH<br>IN=             | ■<br>=0.63"<br>=0.38"<br><b>0 st</b> | art      |
| LETTER PO                    | B<br>2.7<br>B<br>2.8 | U<br>2.8<br>L<br>2.2 | C<br>2.8<br>V<br>2.9 | K<br>2.2<br>D<br>2.2 | 3.3                | L<br>2.4 | E<br>2.4 | Let<br>0<br>2.9 | :ter                     | Spa<br>A<br>2.9          | R<br>2.7         | <b>s ar</b><br>D<br>2.2 | re t<br>2.1           | ■<br>=0.63"<br>=0.38"<br><b>0 st</b> |          |
| LETTER PO                    | B<br>2.7<br>B<br>2.8 | U<br>2.8<br>L<br>2.2 | C<br>2.8<br>V<br>2.9 | K<br>2.2<br>D<br>2.2 | 3.3                | L<br>2.4 | E<br>2.4 | Let<br>0<br>2.9 | :ter                     | Spa<br>A<br>2.9          | R<br>2.7         | s ar<br>D<br>2.2        | re t<br>2.1           | ost                                  |          |
| LETTER PO                    | B<br>2.7<br>B<br>2.8 | U<br>2.8<br>L<br>2.2 | C<br>2.8<br>V<br>2.9 | K<br>2.2<br>D<br>2.2 | 3.3                | L<br>2.4 | E<br>2.4 | Let<br>0<br>2.9 | :ter                     | Spa<br>A<br>2.9          | R<br>2.7         | s ar<br>D<br>2.2        | re t<br>2.1 2.1       | ost                                  |          |
| LETTER PO                    | B<br>2.7<br>B<br>2.8 | U<br>2.8<br>L<br>2.2 | C<br>2.8<br>V<br>2.9 | K<br>2.2<br>D<br>2.2 | 3.3                | L<br>2.4 | E<br>2.4 | Let<br>0<br>2.9 | :ter                     | Spa<br>A<br>2.9          | R<br>2.7         | s ar<br>D<br>2.2        | re t<br>2.1 2.1       | 0 St                                 |          |
| LETTER P0                    | B<br>2.7<br>B<br>2.8 | U<br>2.8<br>L<br>2.2 | C<br>2.8<br>V<br>2.9 | K<br>2.2<br>D<br>2.2 | 3.3                | L<br>2.4 | E<br>2.4 | Let<br>0<br>2.9 | :ter                     | Spa<br>A<br>2.9          | Cing<br>R<br>2.7 | s ar<br>D<br>2.2        | re t<br>2.1           | 0 st                                 |          |
| LETTER PO                    | B<br>2.7<br>B<br>2.8 | U<br>2.8<br>L<br>2.2 | C<br>2.8<br>V<br>2.9 | K<br>2.2<br>D<br>2.2 | 3.3                |          | E<br>2.4 | Let<br>0<br>2.9 | :ter                     | Spa<br>A<br>2.9          | Cing<br>R<br>2.7 | s ar<br>D<br>2.2        | Ye t<br>2.1           | o st                                 |          |

# **LEGEND**

### <u>GENERAL</u>

- DIRECTION OF TRAFFIC FLOW
- DIRECTION OF PEDESTRIAN TRAFFIC FLOW
- ----- EXIST. PVMT.
- NORTH ARROW
  - PROPOSED PVMT.
- TEMP. SHORING (LOCATION PURPOSES ONLY)

![](_page_38_Picture_12.jpeg)

WORK AREA

![](_page_38_Picture_14.jpeg)

REMOVAL

![](_page_38_Picture_16.jpeg)

TEMPORARY PAVEMENT

![](_page_38_Picture_18.jpeg)

ON-GOING CONSTRUCTION

![](_page_38_Picture_20.jpeg)

Spacing Factor is 1 unless specified otherwise

| Teri | tter Series |  |  |  | Text Length |  |   |
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![](_page_38_Figure_23.jpeg)

| PROJ. REFERENCE NO. | SHEET NO. |
|---------------------|-----------|
| BP-5500I            | TMP-1A    |

# TRAFFIC CONTROL DEVICES

|               | BARRICADE (TYPE III)                |
|---------------|-------------------------------------|
|               | CONE                                |
|               | DRUM 🔘 SKINNY DRUM 🛛 TUBULAR MARKER |
| -~~           | TEMPORARY CRASH CUSHION             |
| $\rightarrow$ | FLASHING ARROW BOARD                |
| , I           | FLAGGER                             |
|               | LAW ENFORCEMENT                     |
|               | TRUCK MOUNTED ATTENUATOR (TMA)      |
|               | CHANGEABLE MESSAGE SIGN             |
| TEMPO         |                                     |

# TEMPORARY SIGNING

- DORTABLE SIGN
- STATIONARY SIGN
- **b** STATIONARY OR PORTABLE SIGN

### PAVEMENT MARKERS

- CRYSTAL/CRYSTAL
- CRYSTAL/RED
- YELLOW/YELLOW

### PAVEMENT MARKING SYMBOLS

PAVEMENT MARKING SYMBOLS

## PAVEMENT MARKINGS

### ROADWAY STANDARD DRAWINGS, LEGEND AND SIGN DESIGN

# MANAGEMENT STRATEGIES

THIS PROJECT INVOLVES BRIDGE DECK WORK FOR THE BUCK LEONARD BLVD BRIDGES OVER THE TAR RIVER. A SEPARATE DIRECTIONAL OFF SITE DETOUR WILL BE UTILIZED FOR EACH DIRECTION OF BUCK LEONARD BLVD. THIS ALLOWS THE BRIDGE DECK OPERATIONS TO BE COMPLETED AWAY FROM TRAFFIC. LANE CLOSURES MAY BE PERMITTED FOR MISCELLANEOUS ITEMS AS DIRECTED BY THE ENGINEER.

# **GENERAL NOTES**

CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS AND ROADWAY DETAILS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS, OR RESULT IN DUPLICATE, OR UNDESIRED OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING OR REMOVAL OF DEVICES, AS DIRECTED BY THE ENGINEER.

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT, EXCEPT WHEN OTHERWISE NOTED IN THE PLAN, OR DIRECTED BY THE ENGINEER.

### LANE AND SHOULDER CLOSURE REQUIREMENTS

- A) LONGER NEEDED, OR AS DIRECTED BY THE ENGINEER.
- WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER B) ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN BARRIER OR GUARDRAIL. WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER OR GUARDRAIL.
- WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF C) TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL

### TRAFFIC PATTERN ALTERATIONS

D) NOTIFY THE ENGINEER TWENTY ONE (21) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO

OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY

ADJACENT TO A DIVIDED FACILITY AND WITHIN 10 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER

ACCORDING TO THE TRAFFIC CONTROL PLANS, ROADWAY STANDARD DRAWINGS PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.

SIGNING

- TO THE BEGINNING OF CONSTRUCTION.
- F) TRAFFIC PATTERN.

TRAFFIC CONTROL DEVICES

- G) SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER THAN TWICE IN THE PLANS.
- OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.

### PAVEMENT MARKINGS AND MARKERS

LINES.

![](_page_39_Picture_24.jpeg)

| DJ. REFERENCE NO. SHEET NO. |
|-----------------------------|
| BP-5500I TMP-2              |

E) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 40 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR

ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY

THE POSTED SPEED LIMIT (MPH), EXCEPT 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY, WHEN LANE CLOSURES ARE NOT IN EFFECT. WHEN SKINNY DRUMS ARE ALLOWED, REFER TO SECTION 1180 OF STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES OR AS SHOWN

H) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED,

I) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING

\_\_ DATE: 8/28/20

![](_page_39_Picture_32.jpeg)

TRANSPORTATION MANAGEMENT PLAN GENERAL NOTES

### PHASE I

### (NORTHBOUND BUCK LEONARD BRIDGE DECK WORK)

STEP 1: INSTALL WORK ZONE ADVANCE WARNING SIGNS ALONG BUCK LEONARD BLVD ACCORDING TO ROADWAY STANDARD DRAWING NO. 1101.03, SHEET 1 OF 3.

> PLACE AND ACTIVATE THE CHANGABLE MESSAGE SIGN SHOWN ON SHEET TMP-5.

> INSTALL AND COVER THE STATIONARY SIGNS SHOWN ON SHEETS TMP-4 THRU TMP-6 AND PLACE ONE ADDITIONAL CHANGEABLE MESSAGE SIGN AT ONE OF THE LOCATIONS SHOWN ON SHEET TMP-6.

STEP 2: UNCOVER THE STATIONARY SIGNS INSTALLED IN PHASE I, STEP 1 AND CLOSE THE RIGHT TURN SLIP LANE FROM SUNSET AVENUE TO BUCK LEONARD BLVD AS SHOWN ON SHEET TMP-6.

> RELOCATE THE CHANGABLE MESSAGE SIGN SHOWN ON SHEET TMP-5 TO ONE OF THE LOCATIONS SHOWN ON SHEET TMP-6.

SIMULTANEOUSLY COMPLETE THE FOLLOWING:

- CLOSE THE RIGHT TURN LANE FROM COUNTRY CLUB ROAD TO BUCK LEONARD BLVD AS SHOWN ON SHEET TMP-4.
- CLOSE THE LEFT TURN LANE FROM ZEBULON ROAD TO BUCK LEONARD BLVD AS SHOWN ON SHEET TMP-4.
- CLOSE THE TWO NORTHBOUND THRU LANES ON BUCK LEONARD BLVD. ON THE SOUTHERN LEG OF THE BUCK LEONARD BLVD/ZEBULON ROAD INTERSECTION USING DRUMS AS SHOWN ON SHEET TMP-5 AND TMP-6. INSTALL THE TYPE III BARRICADE SHOWN ON SHEET TMP-5 AND THE REMAINING DRUMS REQUIRED TO CLOSE BUCK LEONARD BLVD. AS SHOWN ON SHEET TMP-5.
- STEP 3: COMPLETE THE BRIDGE DECK REHAB REQUIREMENTS FOR THE EXISTING NORTHBOUND BUCK LEONARD BRIDGE. AND INSTALL FINAL PAVEMENT MARKINGS ON THE BRIDGE DECK.
- STEP 4: REMOVE TRAFFIC CONTROL DEVICES FOR THE CLOSURE OF THE EXISTING NORTHBOUND BUCK LEONARD BRIDGE AND REOPEN NORTHBOUND BUCK LEONARD BLVD TO THE ORIGINAL PATTERN.

# **PHASING**

### PHASE II (SOUTHBOUND BUCK LEONARD BR

STEP 1: PLACE THE CHANGABLE MESSAGE SIGNS SHO IN ADVANCE OF THE SOUTHBOUND BUCK LEC AS DIRECTED BY THE ENGINEER, PLACE A CHANGABLE MESSAGE SIGNS SIMILAR TO TH ON THE CHANGABLE MESSAGE SIGN SHOWN C

INSTALL AND COVER THE STATIONARY SIGN

STEP 2: UNCOVER THE STATIONARY SIGNS INSTALLE CLOSE THE US 64 BYPASS OFF RAMP TO SC USING DRUMS AS DESCRIBED IN NOTE 3. S EXISTING GUIDE SIGNS FOR THE BUCK LEC EASTBOUND US 64 BYPASS AS SHOWN ON SH WEEK ADVANCE NOTICE MESSAGE ON THE CH MESSAGE SHOWN ON SHEET TMP-7.

> CLOSE THE US 64 BYPASS OFF LOOP TO SC USING DRUMS AS DESCRIBED IN NOTE 2, S EXISTING GUIDE SIGNS FOR THE BUCK LEC WESTBOUND US 64 BYPASS AS SHOWN ON SH WEEK ADVANCE NOTICE MESSAGE ON THE CH MESSAGE SHOWN ON SHEET TMP-7.

STEP 3: COMPLETE THE BRIDGE DECK REHAB REQUIR SOUTHBOUND BUCK LEONARD BRIDGE AND IN MARKINGS ON THE BRIDGE DECK.

STEP 4: REMOVE TRAFFIC CONTROL DEVICES FOR TH SOUTHBOUND BUCK LEONARD BRIDGE AND RE ROAD TO THE ORIGINAL PATTERN.

![](_page_40_Picture_28.jpeg)

|   | PROJ. REFERENCE NO. | SHEET NO. |
|---|---------------------|-----------|
|   | BP-55001            | IMP-3     |
|   |                     |           |
|   |                     |           |
|   |                     |           |
| IDGE DECK WORK)   |                     |           |
| OWN ON SHEET TMP-7 TWO WEEKS<br>ONARD BLVD CLOSURE.<br>MESSAGE ON THESE TWO<br>HE MESSAGE THAT WAS PLACED<br>ON SHEET TMP-4.  |                     |           |
| IS SHOWN ON SHEET TMP-7.  |                     |           |
| ED IN PHASE II, STEP 1 AND<br>OUTHBOUND BUCK LEONARD BLVD<br>SHEET TMP-7. COVER THE TWO<br>ONARD BLVD EXIT ALONG<br>HEET TMP-7. CHANGE THE TWO<br>HANGEABLE MESSAGE SIGN TO THE |                     |           |
| OUTHBOUND BUCK LEONARD BLVD<br>SHEET TMP-7. COVER THE TWO<br>ONARD BLVD EXIT ALONG<br>HEET TMP-7. CHANGE THE TWO<br>HANGEABLE MESSAGE SIGN TO THE                               |                     |           |
| REMENTS FOR THE EXISTING<br>ISTALL FINAL PAVEMENT   |                     |           |
| E CLOSURE OF THE EXISTING<br>OPEN SOUTHBOUND BUCK LEONARD   |                     |           |
|   |                     |           |
|   |                     |           |
|   |                     |           |
|   |                     |           |
|   |                     |           |
|   |                     |           |
|   |                     |           |

TRANSPORTATION MANAGEMENT PLAN TRAFFIC CONTROL PHASING

![](_page_41_Figure_0.jpeg)

![](_page_42_Picture_0.jpeg)

![](_page_43_Picture_0.jpeg)

![](_page_44_Figure_0.jpeg)