

| GIRDER, DIAPHRAGM, & DECK REPAIR TABLES |          |                       |                     |                    |                 |        |
|---|----------|-----------------------|---------------------|--------------------|-----------------|--------|
| SPAN                                    | MEMBER   | LENGTH FROM BENT (FT) | APPROX. REPAIR SIZE | ACTUAL REPAIR SIZE | LOCATION        | BAY    |
| 116                                     | DECK     | 12' FROM BENT 115     | 2' X 0.7'           |                    | BOTTOM OF DECK  | RT EXT |
| 116                                     | END DIA. | @ BENT 116            | 2' X 0.7'           |                    | DIAPHRAGM       | LT EXT |
| 117                                     | DECK     | @ BENT 116            | 1' X 2'             |                    | BOTTOM OF DECK  | RT EXT |
| 117                                     | END DIA. | @ BENT 116            | 1.5' X 1.5'         |                    | DIAPHRAGM       | 2      |
| 117                                     | END DIA. | @ BENT 116            | 1.5' X 1'           |                    | DIAPHRAGM       | 2      |
| 117                                     | G-1      | @ BENT 117            | 0.7' X 1'           |                    | * BOTTOM FLANGE | 1      |
| 117                                     | G-1      | @ BENT 117            | 0.7' X 1'           |                    | * BOTTOM FLANGE | 2      |
| 117                                     | G-2      | @ BENT 117            | 0.7' X 1'           |                    | * BOTTOM FLANGE | 3      |
| 118                                     | G-1      | @ BENT 118            | 0.5' X 0.5'         |                    | * BOTTOM FLANGE | 1      |
| 118                                     | G-1      | @ BENT 118            | 0.5' X 0.5'         |                    | * BOTTOM FLANGE | 2      |
| 118                                     | G-1      | @ BENT 118            | 0.5' X 0.5'         |                    | * BOTTOM FLANGE | 2      |
| 118                                     | G-3      | 3' FROM BENT 117      | 0.7' X 0.7'         |                    | WEB             | 2      |
| 119                                     | END DIA. | @ BENT 119            | 1' X 3'             |                    | DIAPHRAGM       | 3      |
| 119                                     | G-1      | @ BENT 119            | 0.5' X 0.5'         |                    | * BOTTOM FLANGE | 1      |
| 119                                     | G-2      | @ BENT 119            | 0.5' X 0.5'         |                    | * BOTTOM FLANGE | 1      |
| 119                                     | G-2      | @ BENT 119            | 0.7' X 0.7'         |                    | * BOTTOM FLANGE | 2      |
| 119                                     | G-3      | @ BENT 119            | 0.7' X 0.7'         |                    | * BOTTOM FLANGE | 3      |
| 120                                     | END DIA. | @ BENT 119            | 2' X 0.5'           |                    | DIAPHRAGM       | 3      |
| 120                                     | END DIA. | @ BENT 119            | 4' X 0.7'           |                    | DIAPHRAGM       | 2      |
| 120                                     | G-1      | @ BENT 119            | 0.5' X 0.5'         |                    | * BOTTOM FLANGE | LT EXT |
| 120                                     | G-2      | @ BENT 119            | 1' X 0.7'           |                    | * BOTTOM FLANGE | 3      |
| 120                                     | G-2      | @ BENT 120            | 0.5' X 1'           |                    | * BOTTOM FLANGE | 2      |
| 120                                     | G-4      | 12' FROM BENT 119     | 4' X 0.5'           |                    | * BOTTOM FLANGE | 3      |
| 120                                     | G-4      | @ BENT 119            | 0.7' X 0.7'         |                    | * BOTTOM FLANGE | 3      |
| 121                                     | END DIA. | @ BENT 121            | 1' X 0.8'           |                    | DIAPHRAGM       | 3      |
| 121                                     | G-1      | @ BENT 121            | 0.7' X 0.7'         |                    | * BOTTOM FLANGE | 1      |
| 121                                     | G-2      | @ BENT 121            | 1.5' X 0.5'         |                    | * BOTTOM FLANGE | 1      |
| 121                                     | G-3      | @ BENT 120            | 2.5' X 0.5'         |                    | * BOTTOM FLANGE | 2      |
| 121                                     | G-3      | @ BENT 121            | 0.7' X 0.7'         |                    | * BOTTOM FLANGE | 3      |
| 121                                     | G-4      | @ BENT 121            | 0.5' X 0.6'         |                    | * BOTTOM FLANGE | 3      |
| 122                                     | END DIA. | @ BENT 121            | 2.5' X 0.5'         |                    | DIAPHRAGM       | 1      |
| 122                                     | END DIA. | @ BENT 122            | 4' X 0.3'           |                    | DIAPHRAGM       | 1      |
| 122                                     | END DIA. | @ BENT 122            | 2.5' X 1'           |                    | DIAPHRAGM       | 2      |
| 122                                     | G-1      | @ BENT 121            | 1' X 1'             |                    | * BOTTOM FLANGE | LT EXT |
| 123                                     | END DIA. | @ BENT 122            | 1' X 4'             |                    | DIAPHRAGM       | 1      |
| 123                                     | END DIA. | @ BENT 123            | 1.5' X 0.8'         |                    | DIAPHRAGM       | 3      |
| 123                                     | G-2      | 3' FROM BENT 123      | 0.5' X 0.5'         |                    | WEB             | 1      |
| 123                                     | G-3      | 3' FROM BENT 123      | 0.5' X 0.5'         |                    | WEB             | 2      |
| 123                                     | G-3      | @ BENT 123            | 0.5' X 0.5'         |                    | * BOTTOM FLANGE | 3      |
| 124                                     | G-2      | @ BENT 124            | 0.7' X 0.7'         |                    | * BOTTOM FLANGE | 1      |
| 124                                     | G-2      | @ BENT 124            | 0.7' X 0.7'         |                    | * BOTTOM FLANGE | 2      |
| 124                                     | G-3      | @ BENT 123            | 0.5' X 0.5'         |                    | * BOTTOM FLANGE | 3      |
| 125                                     | DECK     | 20' FROM BENT 124     | 1' X 1'             |                    | BOTTOM OF DECK  | RT EXT |
| 125                                     | G-2      | @ BENT 124            | 0.7' X 0.7'         |                    | * BOTTOM FLANGE | 2      |
| 125                                     | G-4      | @ BENT 125            | 0.7' X 0.7'         |                    | * BOTTOM FLANGE | 3      |

| GIRDER, DIAPHRAGM, & DECK REPAIR TABLES |          |                       |                     |                    |                       |        |
|---|----------|-----------------------|---------------------|--------------------|-----------------------|--------|
| SPAN                                    | MEMBER   | LENGTH FROM BENT (FT) | APPROX. REPAIR SIZE | ACTUAL REPAIR SIZE | LOCATION              | BAY    |
| 126                                     | G-1      | @ BENT 125            | 0.7' X 0.7'         |                    | * BOTTOM FLANGE       | 1      |
| 127                                     | G-1      | @ BENT 126            | 0.7' X 1'           |                    | * BOTTOM FLANGE       | RT EXT |
| 127                                     | G-2      | 3' FROM BENT 127      | 0.3' X 0.3'         |                    | WEB                   | 1      |
| 127                                     | G-2      | @ BENT 126            | 0.7' X 1.5'         |                    | * BOTTOM FLANGE       | 1      |
| 127                                     | G-3      | @ BENT 126            | 0.7' X 0.8'         |                    | * BOTTOM FLANGE       | 2      |
| 127                                     | G-4      | @ BENT 126            | 0.8' X 0.8'         |                    | * BOTTOM FLANGE       | 3      |
| 127                                     | G-4      | @ BENT 127            | 0.8' X 1'           |                    | * BOTTOM FLANGE       | 3      |
| 127                                     | G-4      | @ BENT 127            | 1' X 1'             |                    | * BOTTOM FLANGE       | 2      |
| 127                                     | G-4      | @ BENT 127            | 0.7' X 1.5'         |                    | * BOTTOM FLANGE       | 3      |
| 127                                     | G-4      | @ BENT 127            | 1' X 0.8'           |                    | * BOTTOM FLANGE       | 3      |
| 127                                     | G-4      | @ BENT 127            | 2.5' X 0.6'         |                    | * BOTTOM FLANGE       | 2      |
| 127                                     | G-4      | @ BENT 127            | 1.5' X 0.6'         |                    | * BOTTOM FLANGE       | 1      |
| 127                                     | G-4      | @ BENT 127            | 1.5' X 0.6'         |                    | * BOTTOM FLANGE       | 1      |
| 127                                     | G-4      | @ BENT 127            | 0.6' X 1.5'         |                    | * BOTTOM FLANGE       | 1      |
| 127                                     | G-4      | @ BENT 127            | 1' X 1'             |                    | * BOTTOM FLANGE       | RT EXT |
| 128                                     | END DIA. | @ BENT 128            | 1.5' X 0.7'         |                    | DIAPHRAGM             | 2      |
| 128                                     | G-1      | @ BENT 128            | 0.5' X 0.3'         |                    | WEB                   | RT EXT |
| 128                                     | G-2      | @ BENT 128            | 0.7' X 0.6'         |                    | * BOTTOM FLANGE       | 2      |
| 128                                     | G-2      | @ BENT 128            | 0.7' X 1'           |                    | * BOTTOM FLANGE       | 1      |
| 128                                     | G-3      | 3' FROM BENT 128      | 0.5' X 0.5'         |                    | WEB                   | 2      |
| 128                                     | G-3      | @ BENT 128            | 0.7' X 0.7'         |                    | * BOTTOM FLANGE       | 3      |
| 128                                     | G-4      | @ BENT 128            | 1.5' X 0.8'         |                    | * BOTTOM FLANGE       | 3      |
| 129                                     | G-2      | @ BENT 129            | 1' X 1'             |                    | * BOTTOM FLANGE & WEB | 1      |
| 129                                     | G-3      | @ BENT 128            | 0.7' X 0.8'         |                    | * BOTTOM FLANGE       | 3      |
| 129                                     | G-3      | @ BENT 129            | 1' X 1.5'           |                    | * BOTTOM FLANGE       | 2      |
| 129                                     | G-4      | @ BENT 128            | 0.7' X 0.6'         |                    | * BOTTOM FLANGE       | 3      |
| 129                                     | G-4      | @ BENT 129            | 0.5' X 0.8'         |                    | * BOTTOM FLANGE       | LT EXT |
| 130                                     | END DIA. | @ BENT 129            | 0.7' X 1.5'         |                    | DIAPHRAGM             | 1      |
| 130                                     | END DIA. | @ BENT 130            | 3.5' X 0.5'         |                    | DIAPHRAGM             | 2      |
| 130                                     | END DIA. | @ BENT 130            | 1' X 0.8'           |                    | DIAPHRAGM             | 1      |
| 130                                     | END DIA. | @ BENT 131            | 4' X 1'             |                    | DIAPHRAGM             | 1      |
| 130                                     | G-1      | @ BENT 131            | 1' X 0.8'           |                    | * BOTTOM FLANGE       | 1      |
| 130                                     | G-2      | @ BENT 129            | 0.6' X 1'           |                    | * BOTTOM FLANGE       | 2      |
| 130                                     | G-2      | @ BENT 129            | 1' X 1.5'           |                    | * BOTTOM FLANGE       | 1      |
| 130                                     | G-2      | @ BENT 131            | 0.8' X 0.8'         |                    | * BOTTOM FLANGE       | 1      |
| 130                                     | G-2      | @ BENT 131            | 0.5' X 0.6'         |                    | * BOTTOM FLANGE       | 2      |
| 130                                     | G-3      | @ BENT 129            | 0.3' X 3'           |                    | * BOTTOM FLANGE       | 2      |
| 130                                     | G-3      | @ BENT 131            | 0.6' X 0.8'         |                    | * BOTTOM FLANGE       | 2      |
| 130                                     | G-3      | @ BENT 131            | 1' X 0.8'           |                    | * BOTTOM FLANGE       | 3      |
| 130                                     | G-4      | @ BENT 129            | 0.3' X 1'           |                    | * BOTTOM FLANGE       | 3      |
| 130                                     | G-4      | @ BENT 130            | 1' X 0.8'           |                    | * BOTTOM FLANGE       | 3      |
| 132                                     | G-1      | @ BENT 132            | 1.5' X 0.8'         |                    | * BOTTOM FLANGE       | 1      |
| 132                                     | G-3      | @ BENT 131            | 0.5' X 0.8'         |                    | * BOTTOM FLANGE       | 3      |
| 133                                     | END DIA. | @ BENT 132            | 2.5' X 0.7'         |                    | DIAPHRAGM             | 2      |
| 133                                     | G-1      | 5' FROM BENT 132      | 4' X 0.5'           |                    | * BOTTOM FLANGE       | 1      |
| 133                                     | G-2      | @ BENT 132            | 0.7' X 0.8'         |                    | * BOTTOM FLANGE       | 1      |
| 133                                     | G-3      | 3' FROM BENT 133      | 0.5' X 0.5'         |                    | WEB                   | 2      |

| REPAIR QUANTITY TABLE |              |            |           |         |          |           |
|-----------------------|--------------|------------|-----------|---------|----------|-----------|
| SPAN                  | MEMBER       | QUANTITIES |           |         |          |           |
|                       |              | ESTIMATE   |           | ACTUAL  |          |           |
|                       |              | AREA SF    | VOLUME CF | AREA SF | DEPTH FT | VOLUME CF |
| 116-133               | SHOTCRETE    |            |           |         |          |           |
|                       | GIRDERS      | 1.73       | 0.50      |         |          |           |
|                       | DIAPHRAGMS   | 33.30      | 16.65     |         |          |           |
|                       | DECK         | 4.40       | 2.20      |         |          |           |
|                       | EPOXY MORTAR |            |           |         |          |           |
|                       | GIRDERS      | 45.27      | 13.20     |         |          |           |

VALUES IN CHART REPRESENT ESTIMATED REPAIR TOTALS AFTER REMOVAL OF UNSOUND CONCRETE, MIN. OF 1" BEHIND REBAR AND MIN. 1" CL TO SAWCUT. SEE REPAIR DETAILS.

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.  
FOR EPOXY MORTAR REPAIRS, SEE SPECIAL PROVISIONS.  
CONTRACTOR MAY ELECT TO USE EPOXY MORTAR IN LIEU OF SHOTCRETE.

\* ALL REPAIRS IN GIRDER FLANGE OR INCLUDING GIRDER FLANGE IN REPAIR SHALL BE EPOXY MORTAR.

PROJECT NO. B-5936  
TYRRELL COUNTY  
BRIDGE NO. 7  
SHEET 12 OF 22

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH

**GIRDER, DIAPHRAGM & UNDERDECK REPAIRS**

| REVISIONS |     |       |     |     |       | SHEET NO.    |
|-----------|-----|-------|-----|-----|-------|--------------|
| NO.       | BY: | DATE: | NO. | BY: | DATE: | 5-27         |
| 1         |     |       | 3   |     |       | TOTAL SHEETS |
| 2         |     |       | 4   |     |       | 394          |

DocuSigned by:  
T. SHERRELL  
AD9B1D9784CC  
18565  
ENGINEER  
TIMOTHY M. SHERRELL  
10/18/2016

DRAWN BY : M.A.LEE DATE : 6/2016  
CHECKED BY : T.SHERRELL DATE : 6/2016  
DESIGN ENGINEER OF RECORD: T.SHERRELL DATE : 6/2016