

SECTION X-X

- DETERIORATED TOP FLANGE

-24CB68 STRINGER

L TRIM ANGLE LEG AS

REQUIRED TO CLEAR 21CB62 DIAPHRAGMS

- Ç ½" Ø H.S. BOLTS @ 4" MAX. CTS. (TYP.)

- AREA OF DETERIORATION AT

TOP OF BOTTOM FLANGE

- GRIND ANGLE AS REQUIRED TO FIT

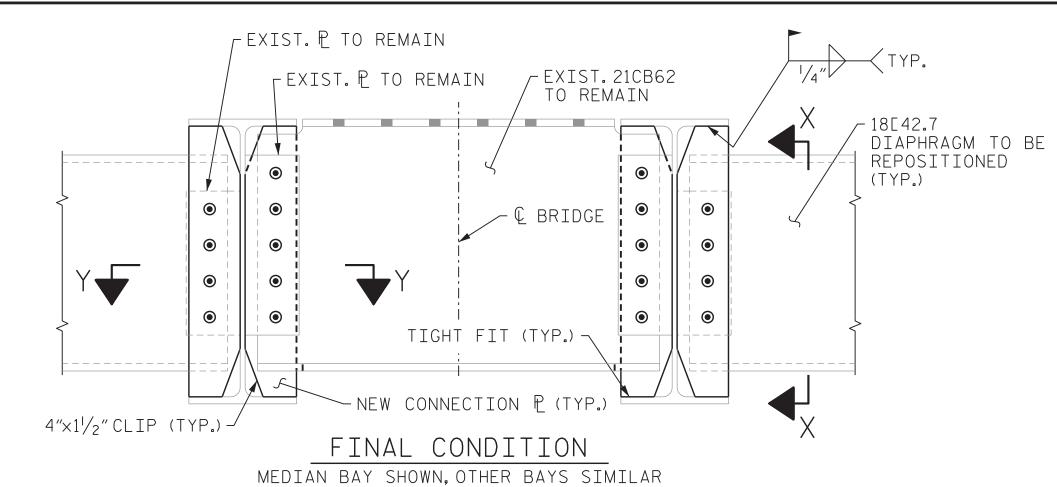
FILLET (TYP.)

- ₽ ½"×8½"

SECTION B-B

(CONTINUOUS)

LOWER PORTION OF WEB AND



EXIST. CONNECTION P TO REMAIN (TYP.) - \sim NEW CONNECTION \mathbb{P} $\frac{3}{8}$ " \times 4" \times 1'-10 $\frac{1}{2}$ " (TYP.) RELOCATED CHANNEL COPE BOTTOM FLANGE FLUSH WITH WEB TO ~ 1″ RAD. FACILITATE ATTACHMENT TO NEW CONNECTION $\mathbb P$

SECTION Y-Y

STRINGER WEB CRACK RETROFIT

168 LOCATIONS

IF LIVE LOAD IS PRESENT, ADJACENT BAYS SHALL NOT BE REPAIRED SIMULTANEOUSLY.

IF REPAIR ② OCCURS AT THE SAME LOCATION AS REPAIR ① ,INSTALL REPAIR ① FIRST AND ATTACH THE CONNECTION PLATE TO THE ANGLE INSTEAD OF THE EXISTING STRINGER TOP FLANGE.

PROCEDURE FOR CHANNEL DIAPHRAGMS

- 1. IF LOCATION HAS A CRACK IN STRINGER WEB, DRILL ARREST HOLE(S) SIMILAR TO REPAIR (5).
- 2. TEMPORARILY SUPPORT DIAPHRAGM.
- 3. REMOVE BOLTS AND MOVE DIAPHRAGM TO OTHER SIDE OF EXISTING \mathbb{R} .
- 4. INSTALL NEW CONNECTION P.
- 5. INSTALL NEW BOLTS AND REMOVE TEMPORARY SUPPORT.

15BPR.15 PROJECT NO._ NEW HANOVER COUNTY STATION:

SHEET 2 OF 3

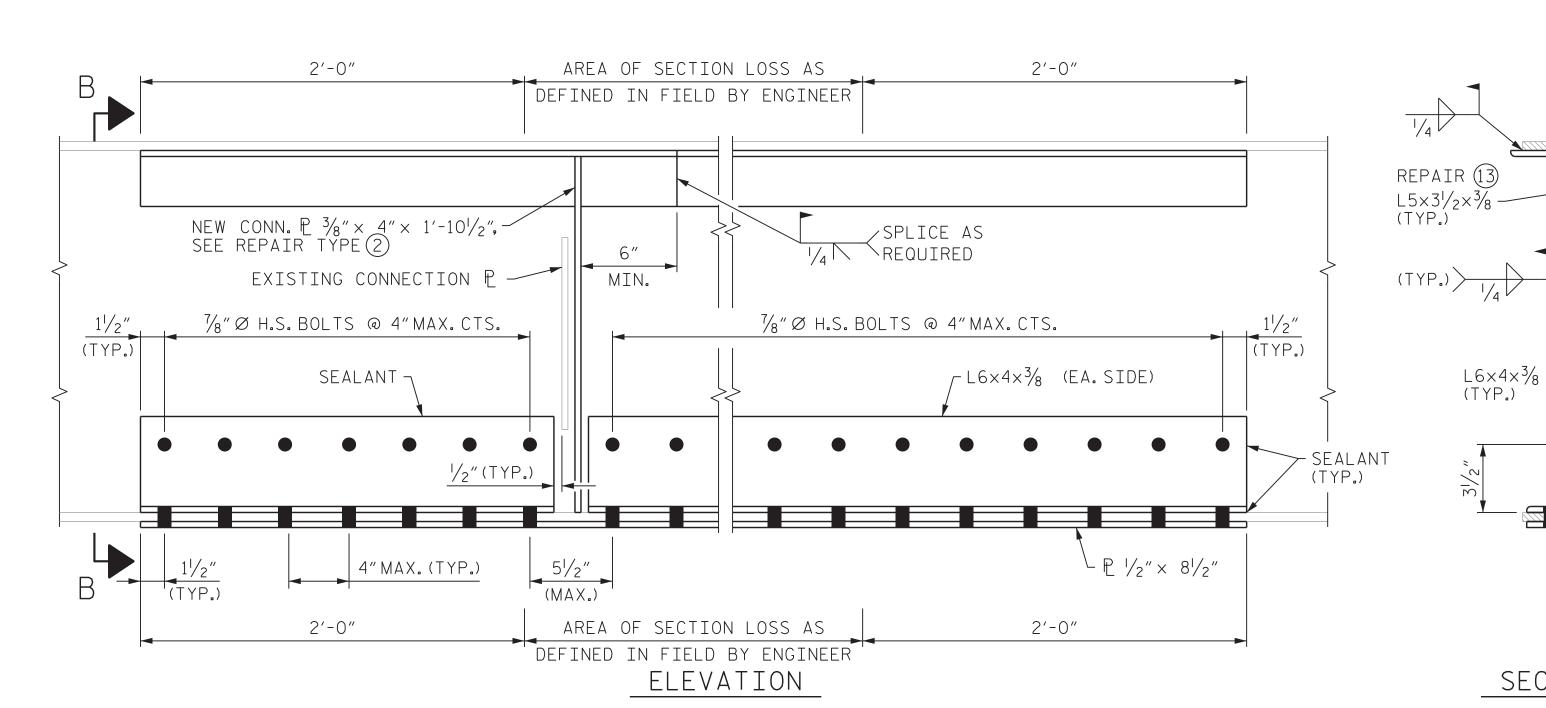
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

LIFT SPAN

STRUCTURAL STEEL REPAIRS

REVISIONS SHEET NO. S-27 NO. BY: DATE: BY: DATE: Jason R Doughty TOTAL SHEETS ----5F73FA2DEA974E8.

STRINGER END DETAILS



STRINGER WEB REPAIR

REPAIR(3) 15 LOCATIONS (BOTTOM)

5 LOCATIONS (TOP)

NO LIVE LOAD IS PERMITTED WITHIN 6 FEET OF STRINGER BEING REPAIRED. AFTER FIELD DRILLING AND BOLTING OF REPAIR ANGLES AND PLATES IS COMPLETE LIVE LOAD CAN BE PLACED OVER STRINGER BEING REPAIRED.

DIAPHRAGM CONNECTIONS SHALL USE CONNECTION PLATES SIMILAR TO THE NEW PLATES SHOWN IN REPAIR 2. THE NEW STRINGER SHALL BE ASTM A-709 GRADE 36 OR 50 AND SHALL BE SHOP PAINTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. THE NEW STRINGERS, HARDWARE AND PAINTING SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE DEPARTMENT.

REPAIR (3) AND (13) MAY OR MAY NOT OCCUR AT THE SAME LOCATION.

DESIGNED BY: B.LOFLIN _ DATE : <u>NOV 2017</u> <u>K.WHITE</u> _ DATE : <u>NOV 2017</u> DRAWN BY: CHECKED BY: <u>J.DOUGHTY</u> _ DATE : <u>DEC 2017</u> DESIGN ENGINEER OF RECORD: J. DOUGHTY _ DATE : <u>DEC 2017</u>

MODJESKI and MASTERS Experience great bridges. 333 FAYETTEVILLE STREET, SUITE 505 RALEIGH, NC 27601

FOR NOTES AND BOLT LEGEND, SEE SHEET 1 OF 3.

NOTES:

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL 032967 NC LICENSE NO. C-2979 --- DocuSigned by: