

**BEAM PLATING REPAIR NOTES**

ALL CONDITIONS AND DIMENSIONS SHALL BE FIELD VERIFIED PRIOR TO FABRICATION OR INSTALLATION OF ANY COMPONENTS.

REPAIR PLATES SHALL BE MINIMUM 36 KSI STEEL.

REPAIR SEQUENCE:

COORDINATE WITH MATERIALS AND TEST UNIT AT LEAST 4 DAYS PRIOR TO ANTICIPATED WORK.

REMOVE LIVE LOAD FROM REPAIR AREA BY EITHER CLOSING BRIDGE TO TRAFFIC OR SHIFTING TRAFFIC AWAY FROM REPAIR AREA.

IF NECESSARY, REMOVE EXISTING STIFFENER TO INSTALL WELDED PLATE REPAIR. REPLACE WITH A NEW STIFFENER PLATE OF SIMILAR SIZE.

IF BEAM DETERIORATION EXTENDS INTO THE CONCRETE DIAPHRAGM THEN CHIP AWAY CONCRETE TO DETERMINE THE EXTENT OF THE DAMAGE.

MECHANICALLY CLEAN RUST, SCALE, AND EXISTING PAINT TO AT LEAST 3" BEYOND REPAIR AREA.

PRIME ENTIRE REPAIR AREA AND REPAIR PLATES WITH AN ORGANIC ZINC PRIMER PRIOR TO WELDING NEW PLATES. REMOVE PRIMER IN WELD AREA.

ONE PLATE SHALL BE PLACED, AS INDICATED ON EACH SIDE OF THE BEAM WEB.

EACH PLATE SHALL BE APPROXIMATELY ONE- HALF THE ORIGINAL THICKNESS OF THE BEAM WEB.

FULLY WELD ALONG TOP AND SIDES OF THE PLATES AS SHOWN.

ALL WELDING SHALL BE IN ACCORDANCE WITH CURRENT APPLICABLE AWS AND NCDOT STANDARD SPECIFICATIONS.

ALL WELDS SHALL BE INSPECTED AND TESTED BY THE NCDOT MATERIALS AND TEST UNIT IN ACCORDANCE WITH THE CURRENT AWS BRIDGE WELDING CODE AND STANDARD SPECIFICATIONS.

IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, AFTER REPAIR, GRIND ALL WELDS FLUSH, THOROUGHLY CLEAN AREA TO REMOVE DEBRIS AND OILS FROM THE REPAIR PROCESS.

CLEANING AND PAINTING OF REPAIRED STRUCTURAL STEEL SHALL BE PERFORMED AS PART OF THE OVERALL CLEANING AND PAINTING CONTRACT.

FOR CLEANING AND PAINTING, SEE PAINTING EXISTING STRUCTURE SPECIAL PROVISIONS.

AFTER BEAMS ARE REPAIRED AND PAINTED, ANY CONCRETE REMOVED FROM THE BENT DIAPHRAGMS SHALL BE CAST BACK. ANY REINFORCING STEEL CUT DURING THE REMOVAL PROCESS SHALL BE SPLICED WITH A SIMILAR SIZE BAR WITH AT LEAST A ONE FOOT SPLICE TO THE EXISTING STEEL. NO SEPARATE PAYMENT SHALL BE MADE FOR CONCRETE AND REINFORCING STEEL AS THIS IS CONSIDERED INCIDENTAL TO THE PAY ITEM "BEAM REPAIR". FOR BEAM REPAIR, SEE SPECIAL PROVISIONS.

REMOVE ALL TRAFFIC CONTROL DEVICES.

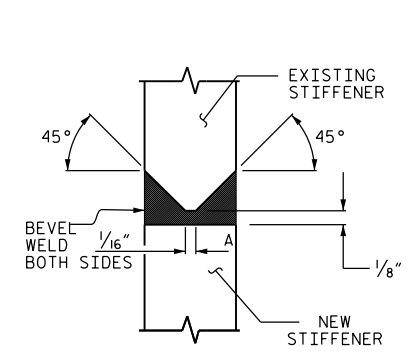
PROJECT NO. I-5892  
BUMCOMBE COUNTY  
 BRIDGE NO. 412, 415, 421, 422,  
429, 827

DocuSigned by:  
*John A. Yannaccone*  
 NORTH CAROLINA  
 PROFESSIONAL  
 SEAL  
 32492  
 ENGINEER  
 JOHN A. YANNACCONE  
 1/21/2017

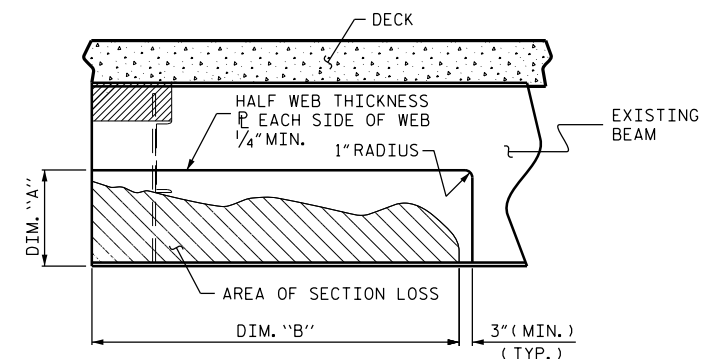
STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
**BEAM PLATING  
 REPAIR DETAILS**

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-66
1			3			TOTAL SHEETS
2			4			68

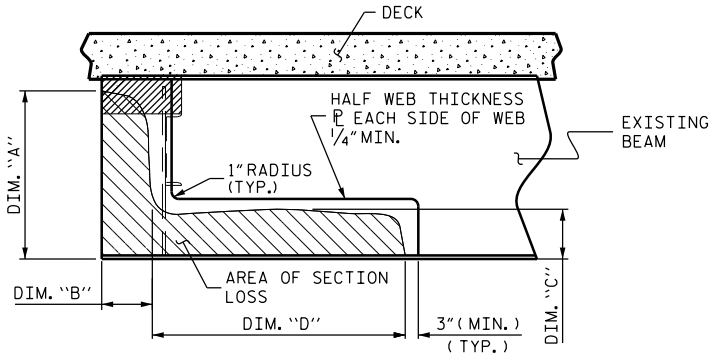
DOCUMENT NOT CONSIDERED  
 FINAL UNLESS ALL  
 SIGNATURES COMPLETED



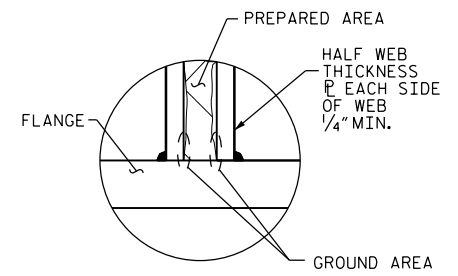
**DETAIL "A"**



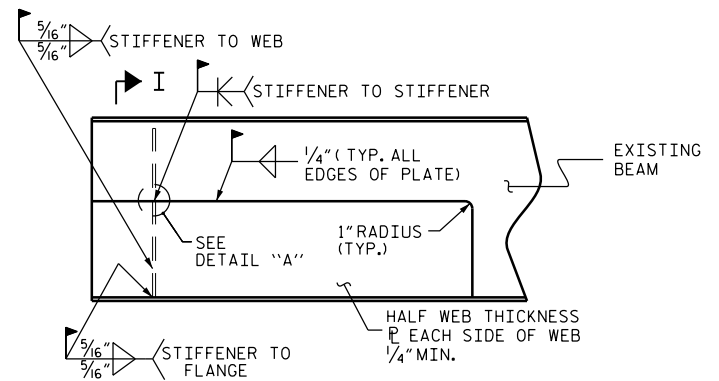
**BEAM END SECTION LOSS AND PLATING REPAIR**



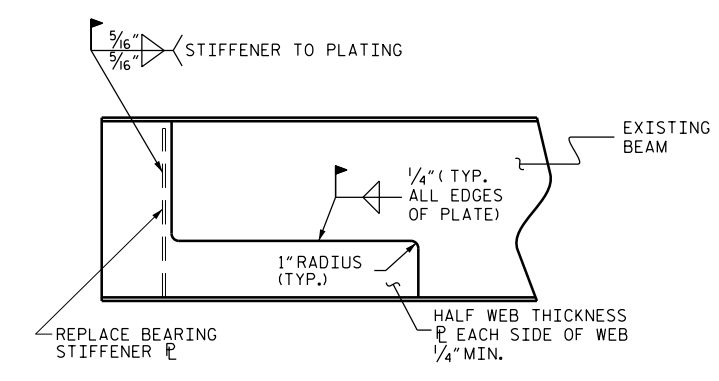
**BEAM END SECTION LOSS AND PLATING REPAIR**



**DETAIL "B"**

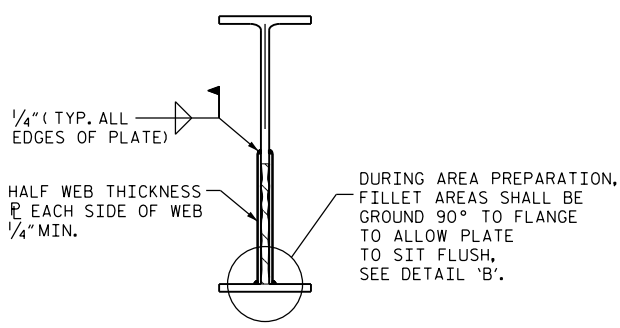


**BEAM END PLATING REPAIR**

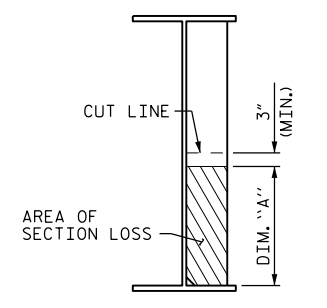


**BEAM END PLATING REPAIR**

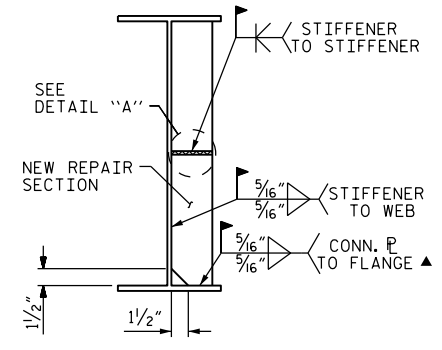
**BEAM END PLATING REPAIR**



**SECTION I-I**



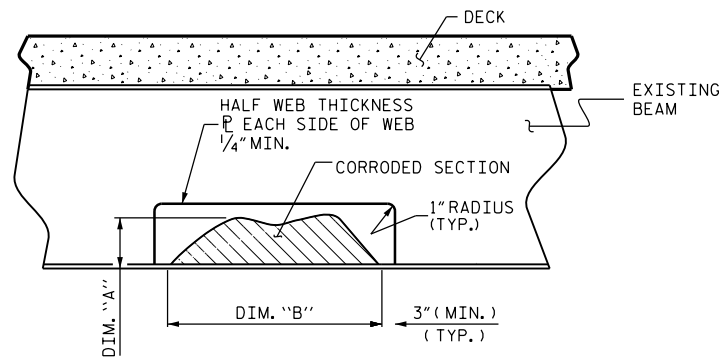
**STIFFENER/CONN. PLATE SECTION LOSS**



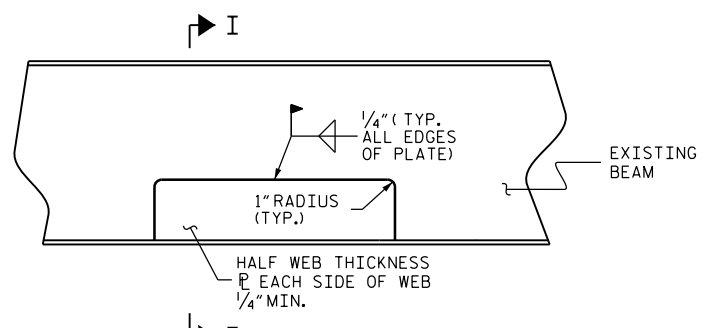
**STIFFENER/CONN. PLATE SECTION REPAIR**

▲ FOR STIFFENERS, MILL TO BEAR AND DO NOT WELD

**STIFFENER/CONNECTOR PLATE REPAIR**



**INTERMEDIATE SECTION LOSS BEAM PLATING REPAIR**



**INTERMEDIATE SECTION LOSS BEAM PLATING REPAIR**

**INTERMEDIATE BEAM PLATING REPAIR**

DRAWN BY : S. WAN DATE : 06/16  
 CHECKED BY : J. A. YANNACCONE DATE : 06/16