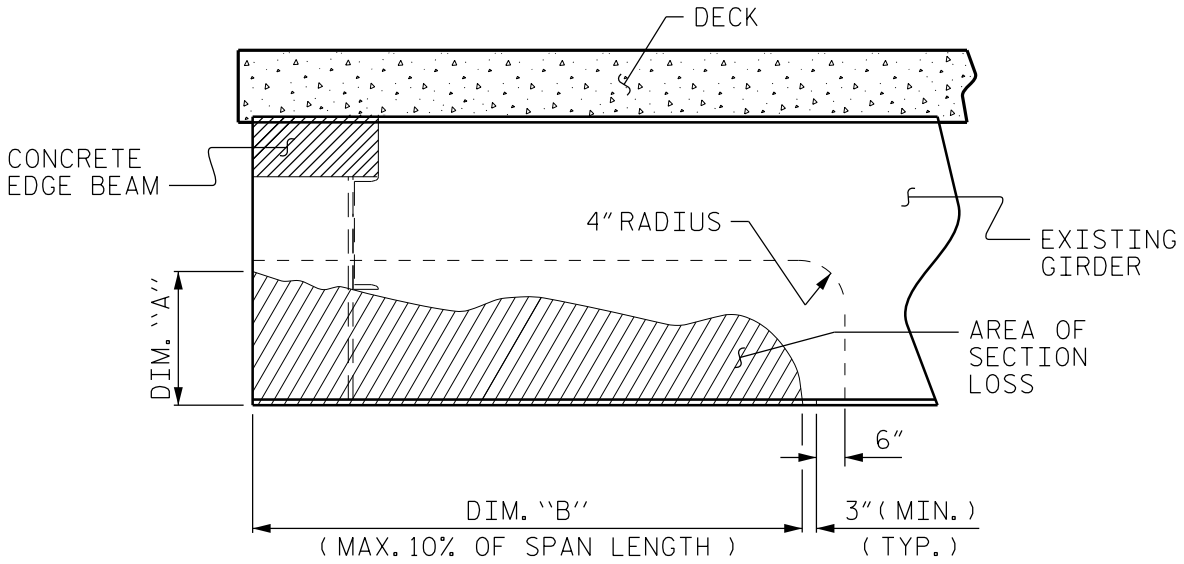
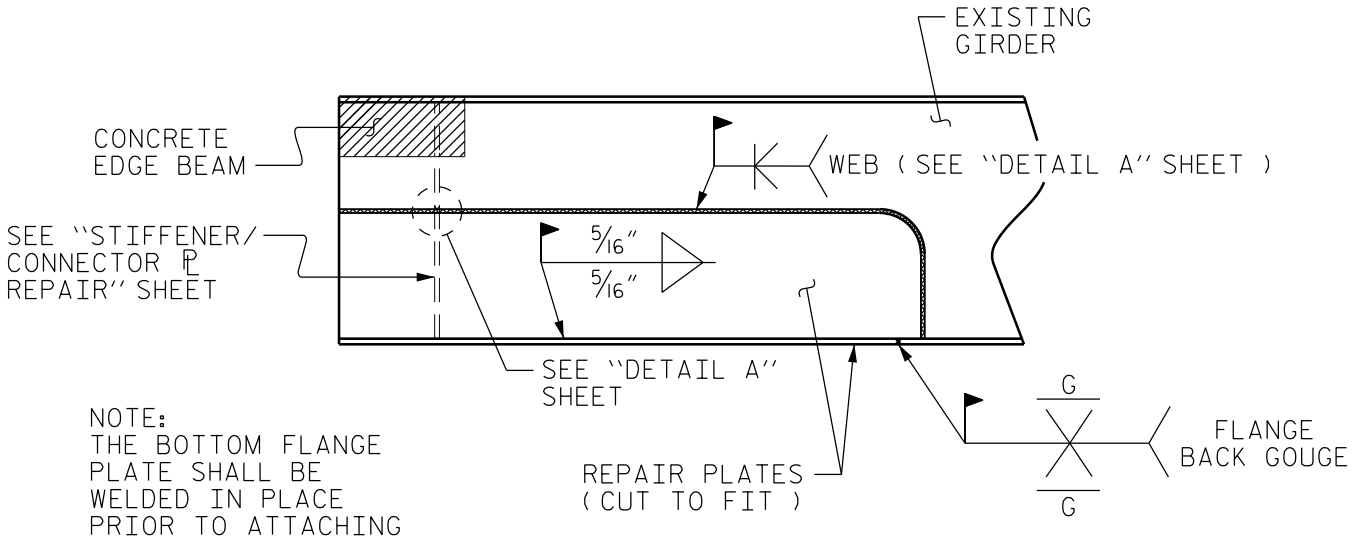


SECTION LOSS REMOVAL



NOTE:
THE BOTTOM FLANGE PLATE SHALL BE WELDED IN PLACE PRIOR TO ATTACHING THE CUT-TO-FIT WEB PLATE.

SECTION REPAIR

I HEREBY CERTIFY THAT ALL WELDS ARE SATISFACTORILY COMPLETED AS SHOWN ABOVE

SIGNATURE DATE

MATERIALS & TESTS UNIT WELD INSPECTOR

NOTES:

STEEL FOR GIRDER REPAIR PLATES SHALL EQUAL OR EXCEED THE YIELD STRENGTH OF EXISTING GIRDER. USE NEW OR SALVAGED "LIKE NEW" STEEL ONLY.

PROVIDE RUN-OFF WELD TABS, WHERE APPLICABLE, TO PROVIDE PROPER WELD START AND TERMINATION. SEE NCDOT M&T FIELD WELD MANUAL AND AWS D1.5 SECTION 3.12.

IF DIMENSION "B" EXTENDS BEYOND 10% OF SPAN LENGTH CONSULT WITH THE STRUCTURES MANAGEMENT UNIT.

PLATE GIRDER END REPAIR

PLATE GIRDER END REPAIR SEQUENCE:

1. COORDINATE SCHEDULE WITH MATERIALS AND TESTS UNIT WELD INSPECTOR AT LEAST FOUR DAYS PRIOR TO ANTICIPATED WORK.

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

3. JACK BEAM AND SUPPORT WITH BLOCKING TO FREE BEAM END FROM BEARING. LIMIT DIFFERENTIAL JACKING BETWEEN ADJACENT BEAMS TO 1/8".

4. STEEL DIAPHRAGM CHANNELS AND/OR STIFFENERS MAY BE TEMPORARILY REMOVED, IF NECESSARY, AND REPLACED AFTER GIRDER REPAIR.

5. CUT OUT BY APPROPRIATE MEANS THE DAMAGED BEAM AREA AND/OR BEARING STIFFENER. IF BEAM DETERIORATION EXTENDS INTO THE CONCRETE DIAPHRAGM, CHIP AWAY CONCRETE AND REMOVE DAMAGED BEAM END. (PICTURE REQUIRED)

6. MECHANICALLY CLEAN RUST, SCALE, AND EXISTING PAINT TO AT LEAST 9" BEYOND REPAIR AREA. (PICTURE REQUIRED)

7. WEB SECTION LOSS SHALL BE REMOVED 6" BEYOND THE CUT-OFF POINT FOR THE BOTTOM FLANGE.

8. INSTALL THE BOTTOM FLANGE PLATE AND WELD AS SHOWN. (PICTURE REQUIRED)

9. INSTALL THE CUT-TO-FIT WEB PLATE; FULLY WELD ALONG ALL SIDES OF PLATE AS SHOWN. (PICTURE REQUIRED)

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

11. ALL WELDS SHALL BE INSPECTED AND TESTED BY THE NCDOT MATERIALS AND TESTS UNIT IN ACCORDANCE WITH THE CURRENT AWS BRIDGE WELDING CODE AND STANDARD SPECIFICATIONS. SUBMIT APPLICABLE REPAIR DETAIL SIGNED BY THE WELD INSPECTOR WITH REPAIR PHOTOS.

12. ONCE THE REPAIR IS COMPLETE, GRIND ALL WELDS FLUSH. ANY GOUGES OR INDENTIONS FROM IMPACT ON BEAMS SHALL BE GROUND SMOOTH. CLEAN AREA TO REMOVE DEBRIS AND OILS FROM REPAIR PROCESS PRIOR TO CLEANING AND PAINTING. (PICTURE REQUIRED)

13. LOWER SPAN TO BEAR; CHECK FOR DISTRESS.

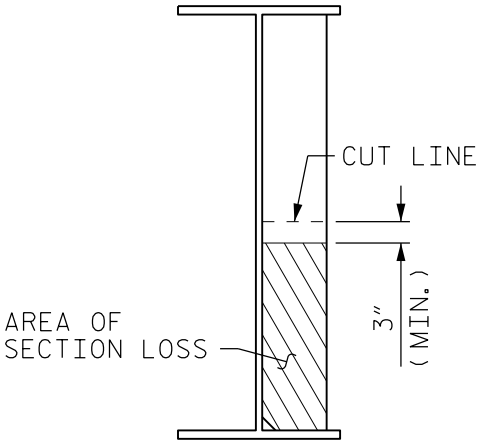
14. REMOVE JACKING EQUIPMENT AND TEMPORARY SUPPORTS.

15. CLEAN AND PAINT REPAIRED STRUCTURAL STEEL.

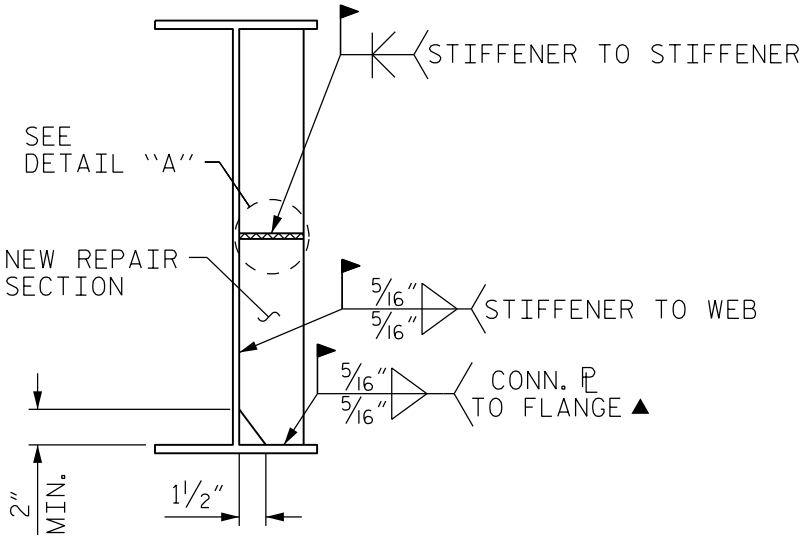
16. AFTER GIRDERS ARE REPAIRED AND PAINTED, ANY CONCRETE REMOVED FROM THE BENT DIAPHRAGMS SHALL BE CAST BACK. ANY REINFORCING STEEL CUT DURING THE REMOVAL PROCESS SHALL BE SPLICED WITH A SIMLAR SIZE BAR WITH AT LEAST A ONE FOOT SPLICE TO THE EXISTING STEEL. (PICTURE REQURIED)

17. RETURN TRAFFIC TO NORMAL PATTERN.

PLATE GIRDER END REPAIR SEQUENCE



STIFFENER/CONN. ℄ REMOVAL



STIFFENER/CONN. ℄ REPAIR

▲ FOR STIFFENERS, MILL TO BEAR AND DO NOT WELD

I HEREBY CERTIFY THAT ALL WELDS ARE SATISFACTORILY COMPLETED AS SHOWN ABOVE

SIGNATURE DATE

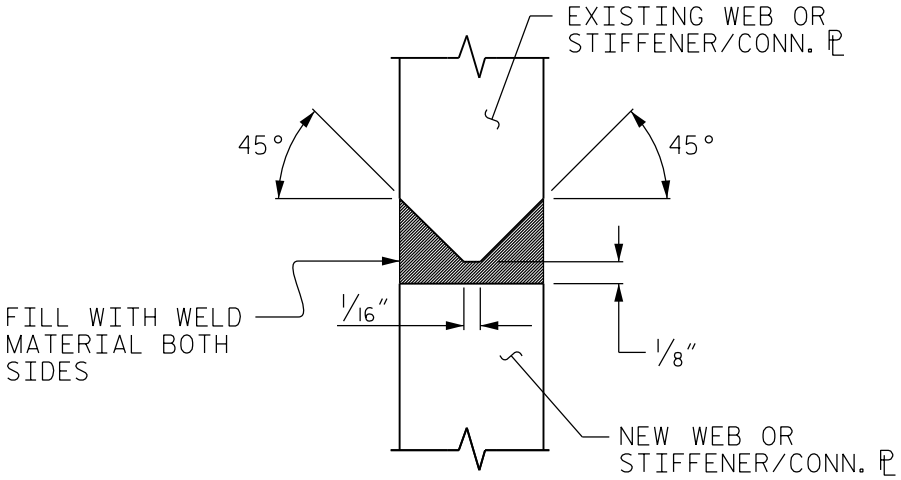
MATERIALS & TESTS UNIT WELD INSPECTOR

NOTE:

STEEL FOR BEAM REPAIR SECTION SHALL EQUAL OR EXCEED THE YIELD STRENGTH OF EXISTING BEAM. USE NEW OR SALVAGED "LIKE NEW" STEEL ONLY.

YOU MAY ELECT TO REPLACE THE ENTIRE STIFFENER/CONNECTOR PLATE.

STIFFENER/CONNECTOR ℄ REPAIR


EXISTING WEB OR
STIFFENER/CONN. PL
45°
45°
FILL WITH WELD
MATERIAL BOTH
SIDES
1/16"
1/8"
NEW WEB OR
STIFFENER/CONN. PL

DETAIL A