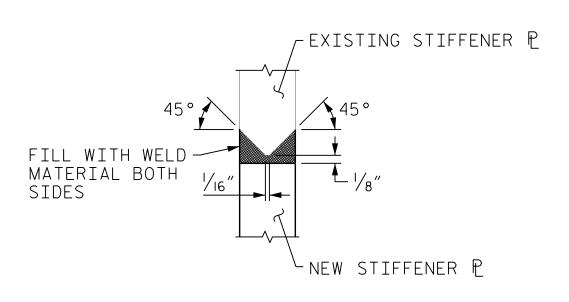


FLOORBEAM STIFFENER PREPAIR



DETAIL A

## STIFFENER REMOVAL PROCEDURE:

- 1. THERMAL CUT, AIR CARBON ARC GOUGE, ANGLE GRID OR SAW CUT THE STIFFENER TO WITHIN  $\frac{3}{8}$ " OF THE FLANGE OR WEB PLATE, AVOIDING ANY DAMAGE TO THE EXISTING STEEL TO REMAIN. USE MECHANICAL GUIDE WHILE MAKING THE CUT.
- 2. AIR CARBON ARC GOUGE THE WELD AND REMAINING STIFFENER TO WITHIN  $\frac{3}{16}$ " OF THE WEB PLATE AVOIDING ANY DAMAGE TO THE EXISTING STEEL TO REMAIN.
- 3. GRIND THE REMAINING WELD AND STIFFENER REMNANTS SMOOTH AND FLUSH WITH THE SURROUNDING BASE METAL. FINAL GRINDING SHALL BE IN THE DIRECTION OF THE FLANGE LENGTH. GROUND SURFACES SHALL HAVE A SURFACE ROUGHNESS OF RA = 1000 MICROINCHES OR LESS.
- 4. 100 PERCENT MAGNETIC PARTICLE TEST THE WELD REMOVAL AREAS.
- 5. ALIGN AND ATTACH THE NEW PORTION OF THE STIFFENER AND PLACE WELDS. TEST WELDS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND BRIDGE WELDING CODE.

## NOTES:

FLOORBEAM STIFFENER REMOVAL AND REPLACEMENT IS NOT REQUIRED. FLOORBEAM STIFFENER PLATES MAY BE REMOVED AND REPLACED TO FACILITATE STRINGER REPLACEMENT OPERATIONS.

CONTRACTOR SHALL ONLY REMOVE STIFFENERS REQUIRED TO FACILITATE ERECTION OF NEW STRUCTURAL STEEL. A SUGGESTED STIFFENER REMOVAL LAYOUT IS SHOWN ON THIS DRAWING. CONTRACTOR MAY PROPOSE AN ALTERNATE REMOVAL LAYOUT FOR REVIEW AND APPROVAL. THE DEPARTMENT WILL SUPPLY 108 STIFFENER PLATES WITH THE DIMENSIONS SHOWN ON THIS SHEET. CONTRACTOR WILL BE RESPONSIBLE FOR SUPPLYING ANY ADDITIONAL STIFFENER PLATES OR STIFFENER PLATES OF OTHER SIZES REQUIRED BY A DIFFERENT PROPOSED METHOD OF REPLACING THE STRINGERS.

REMOVE ONLY THE STIFFENERS ON THE HALF OF THE BRIDGE WHERE WORK IS OCCURING.

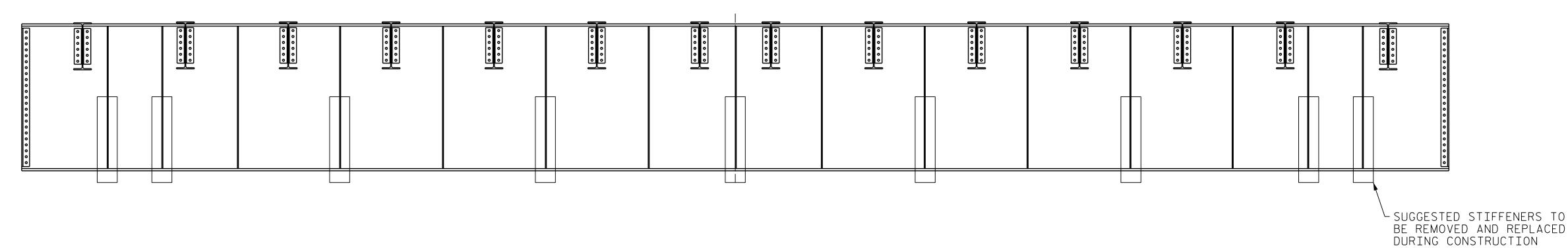
ONLY REMOVE THE STIFFENER PORTIONS SHOWN ON ONE FACE OF THE FLOORBEAM WEB, LEAVING THE STIFFENER ON THE OPPOSING SIDE OF THE WEB.

IT IS SUGGESTED THAT, WITHIN A BAY (BETWEEN FLOORBEAMS) ONLY REMOVE FROM ONE OF THE FLOORBEAM WEB FACES IN THAT BAY TO FACILITATE THE REMOVAL AND INSTALLATION OF STRINGERS.

EXCEPT FOR THE STIFFENER AT CENTERLINE BRIDGE UNDER MEDIAN BARRIER, STIFFENERS REMOVED ON THE EASTBOUND OR WESTBOUND SIDES SHALL BE REPAIRED PRIOR TO ALLOWING TRAFFIC ONTO THAT SIDE.

NO LIVE LOAD SHALL BE PRESENT ON THE LIFT SPAN DURING WELDING.

(NEAR FACE ONLY) (TYP.)



SUGGESTED FLOORBEAM STIFFENER REMOVAL ELEVATION

PROJECT NO. 15BPR.102.3 NEW HANOVER COUNTY BRIDGE NO. 640013

> STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

STRUCTURAL STEEL FLOORBEAM DETAILS

Experience great bridges. 333 FAYETTEVILLE STREET, SUITE 505 RALEIGH, NC 27601 NC LICENSE NO. C-2979

MODJESKI and MASTERS

**DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED** 

REVISIONS					SHEET NO.
	DATE:	NO.	BY:	DATE:	S-21
		<b>89</b>			TOTAL SHEETS
		<b>જ</b>			21

\_\_M.NIFONG \_\_ DATE : <u>AUG 2023</u> \_ DATE : <u>AUG 2023</u> R. JOHNSON DRAWN BY: B.LOFLIN \_\_ DATE : <u>AUG 2023</u> CHECKED BY: DESIGN ENGINEER, \_ DATE : <u>SEP 2023</u>