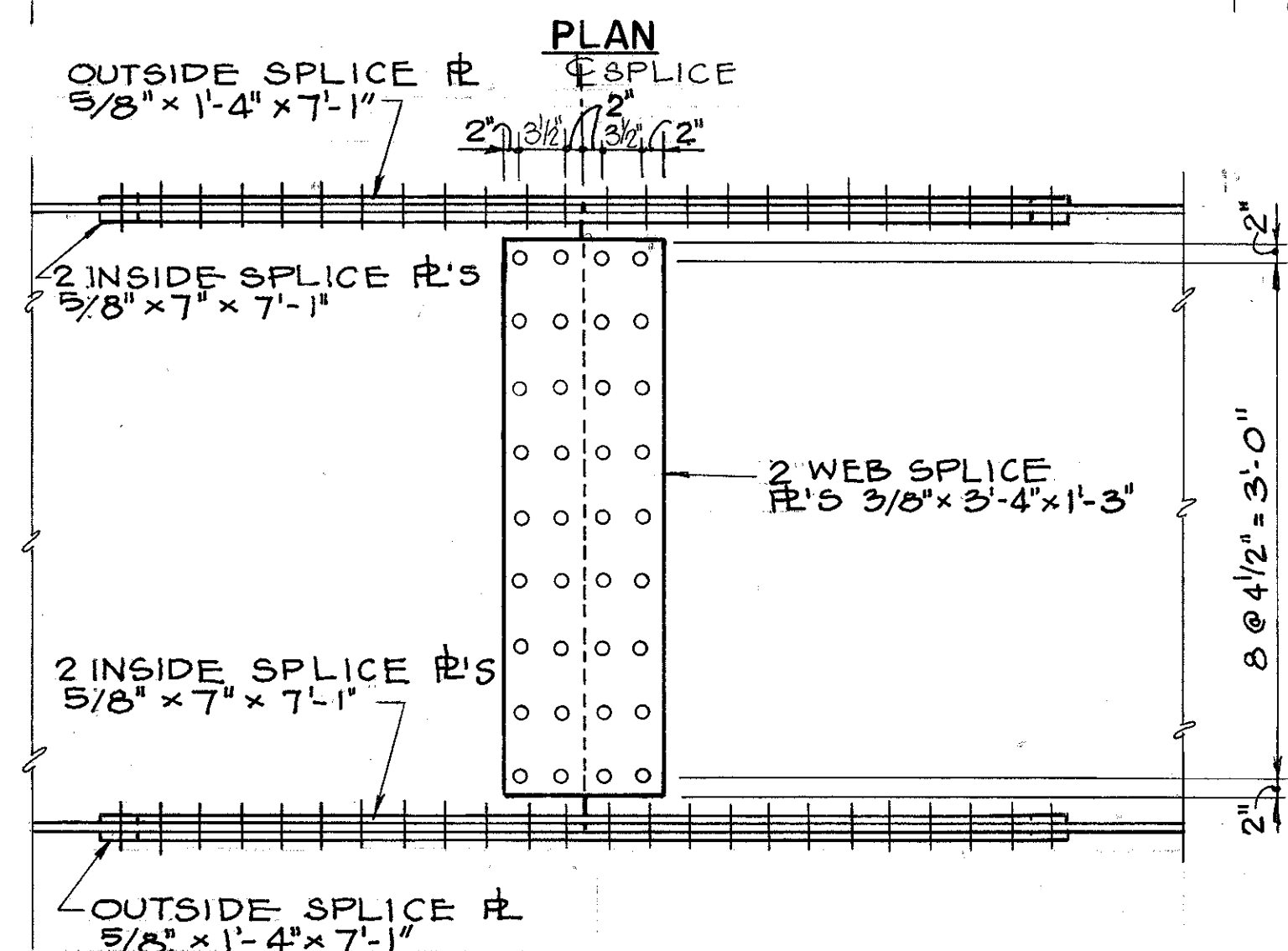
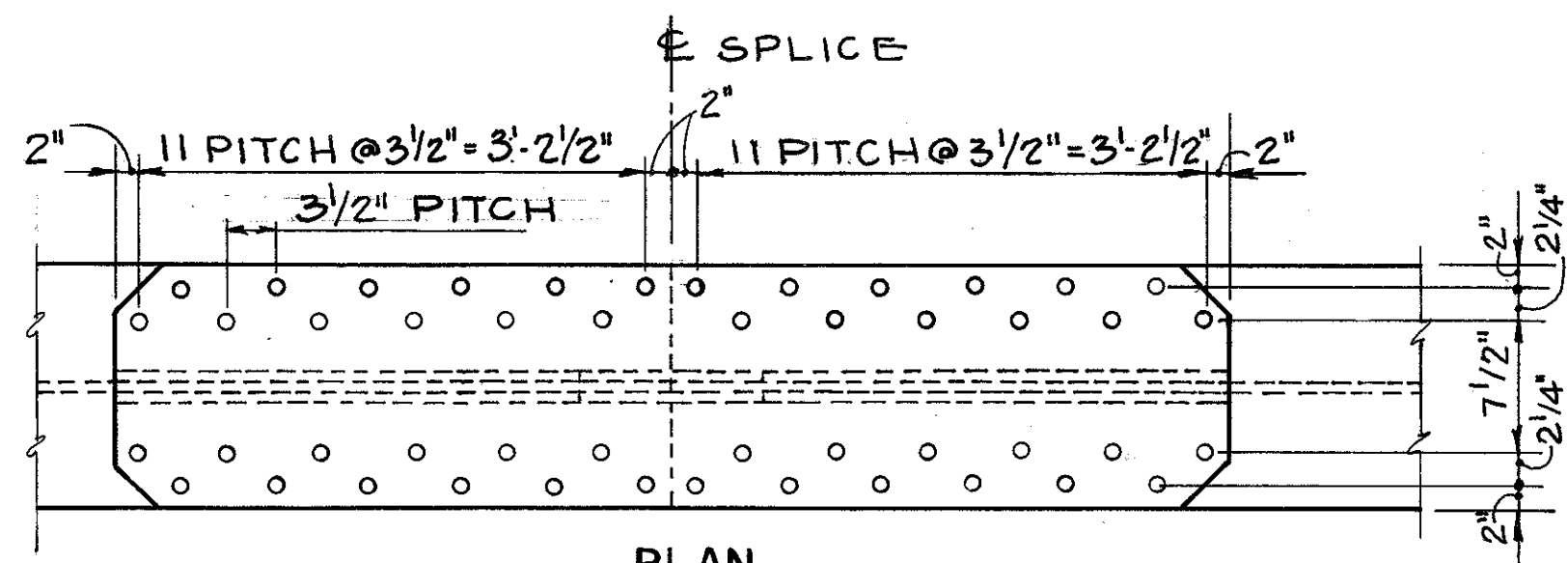


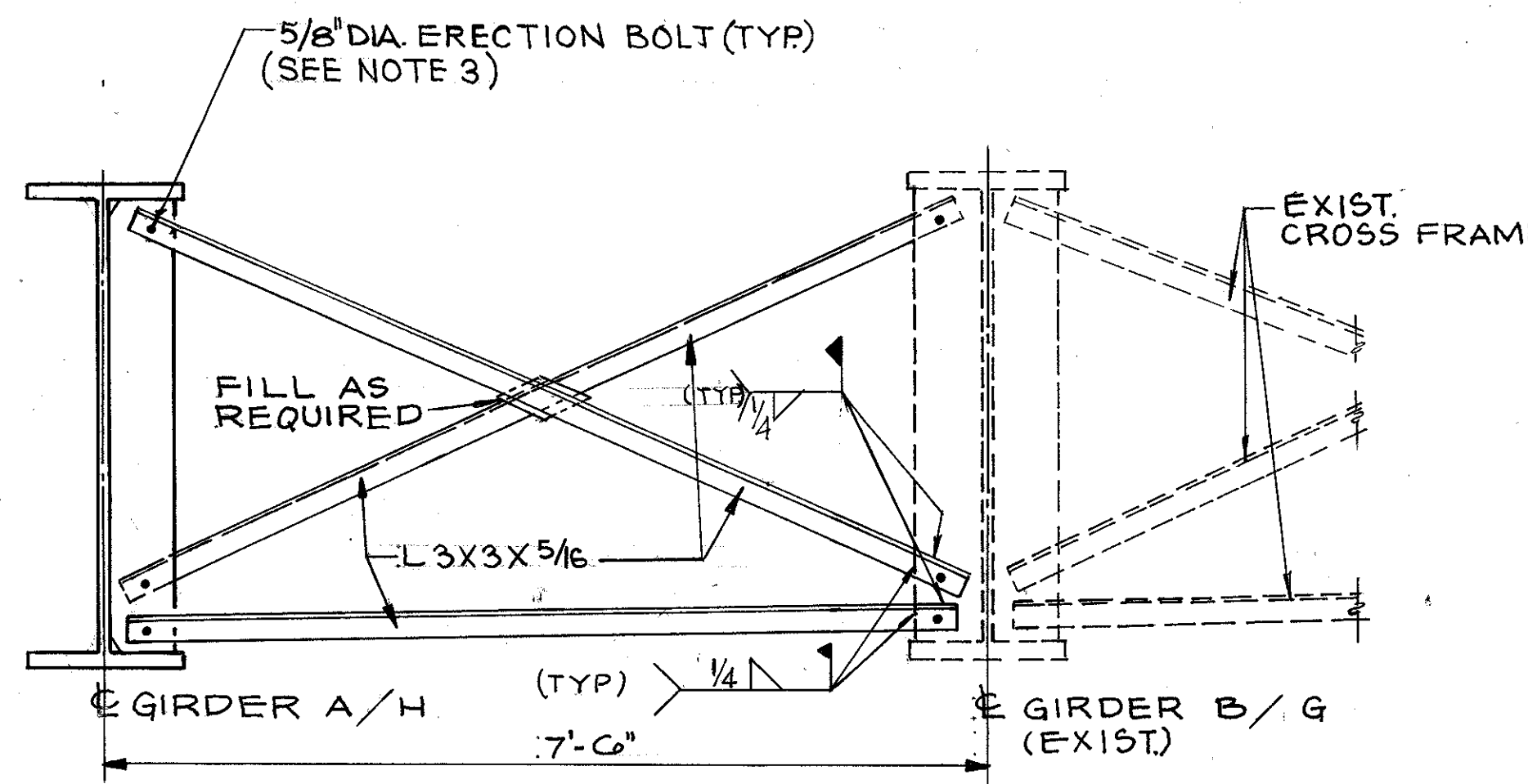
FHWA REGION	STATE	PROJECT
5	OHIO	

LAKE COUNTY
LAK-20-19.39

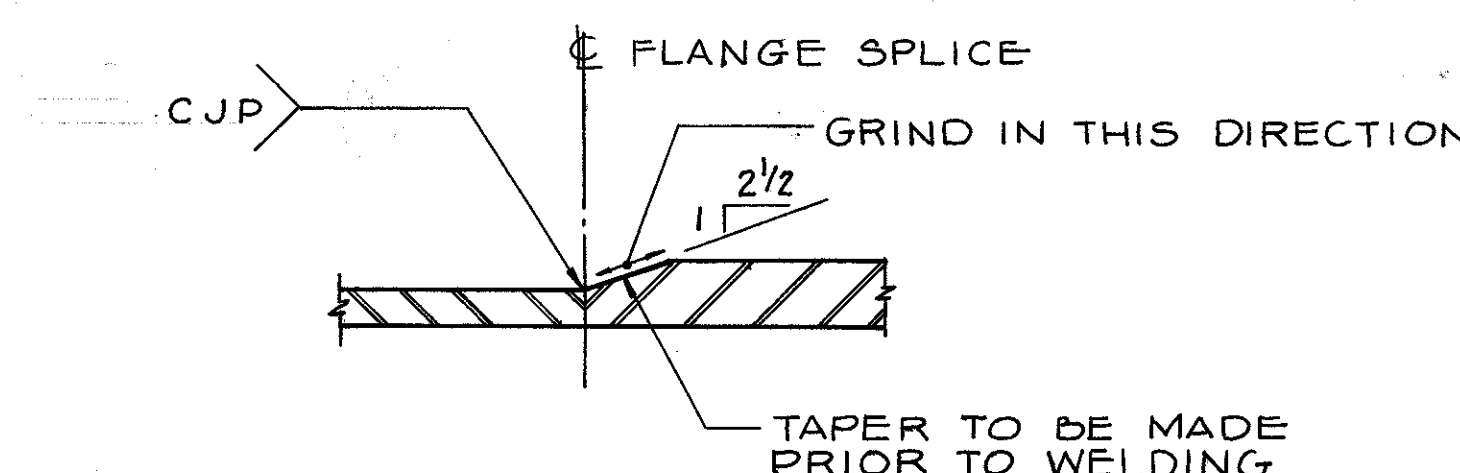


ELEVATION

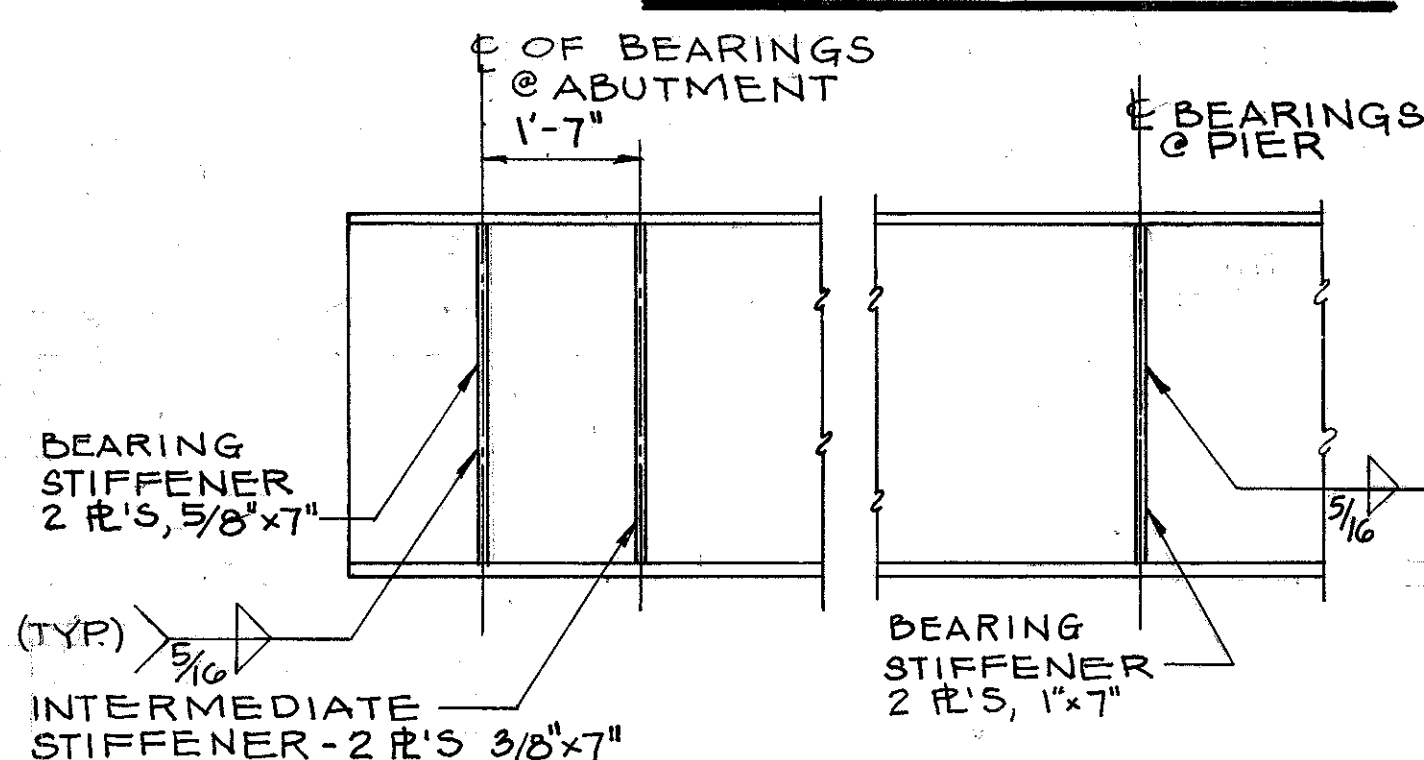
FIELD SPLICE DETAIL



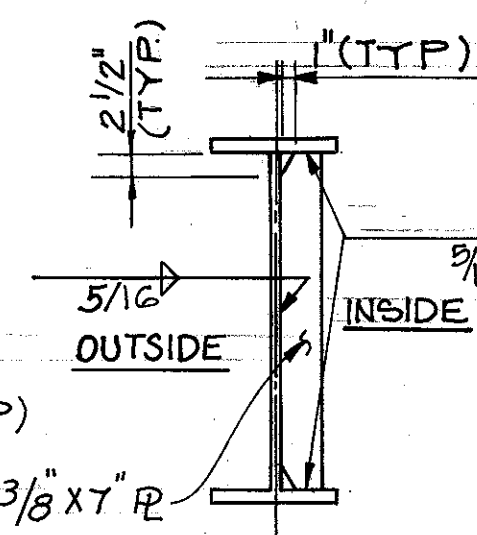
TYPICAL INTERMEDIATE CROSS FRAME



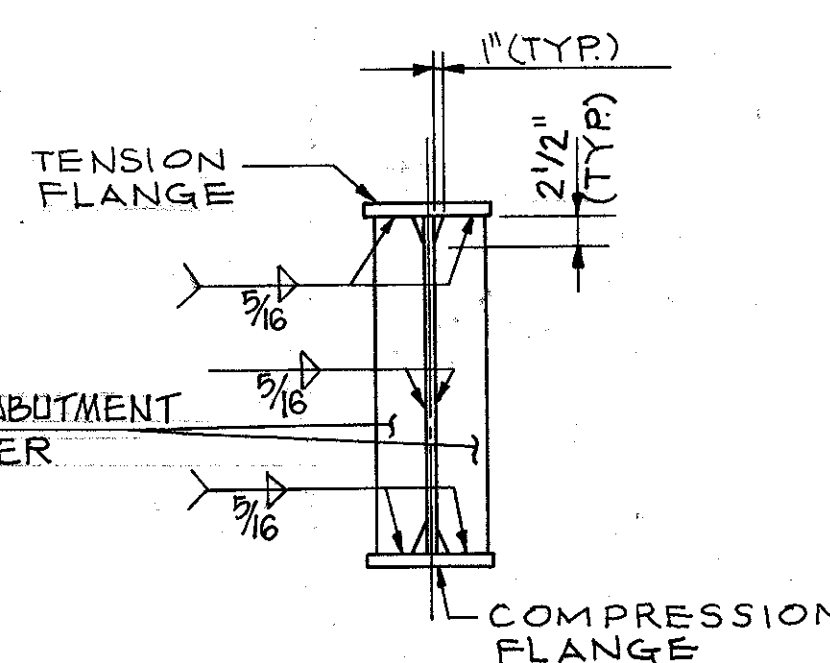
GIRDER FLANGE SPLICE DETAIL



STIFFENER DETAILS



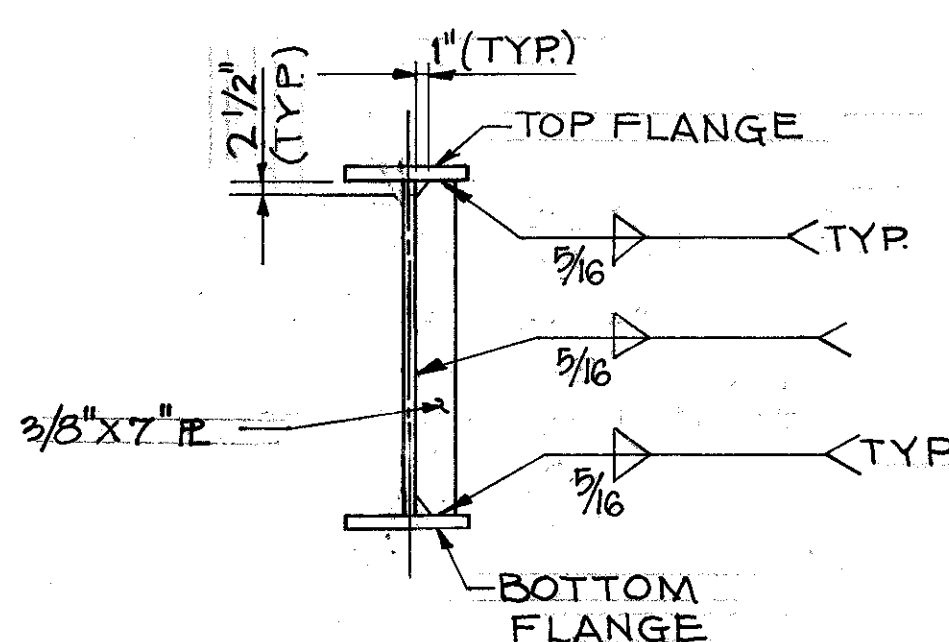
COMPRESSION FLANGE ONLY, OTHER AREAS, TIGHT FIT.



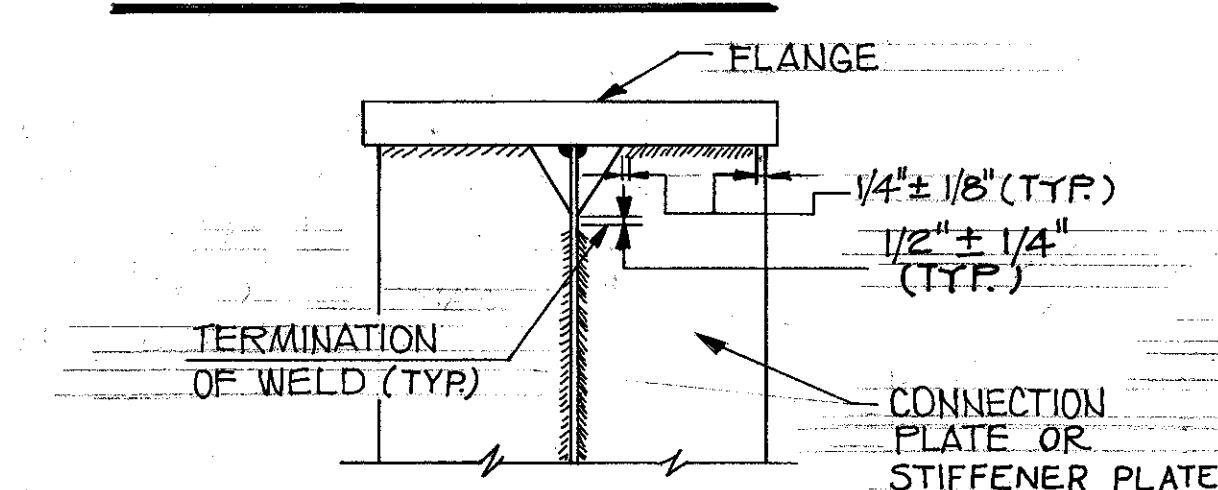
BEARING STIFFENERS FOR PLATE GIRDERS

⊕ THE COMPRESSION FLANGE AREAS ARE SHOWN ON SHEET 12/18

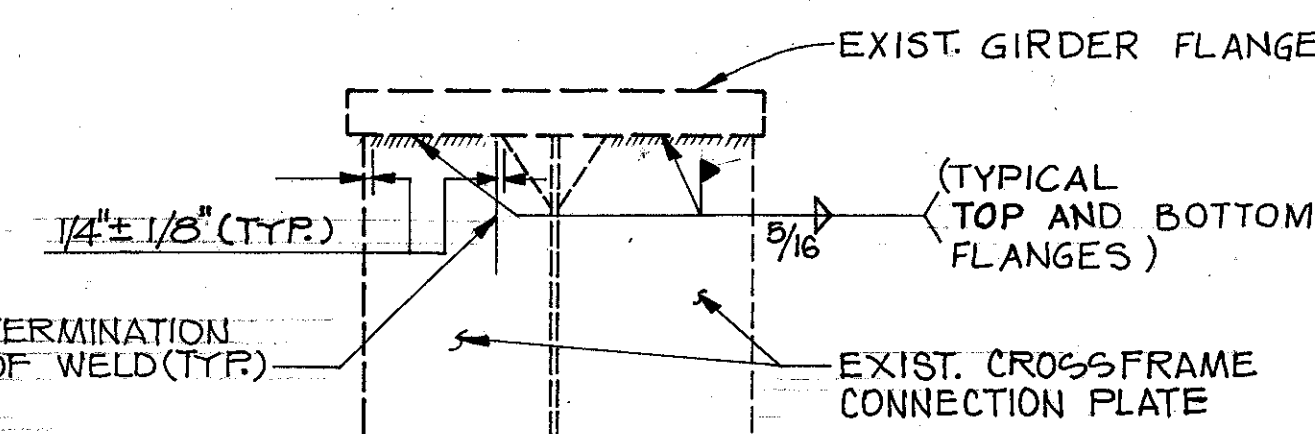
INTERMEDIATE STIFFENERS FOR PLATE GIRDERS



INTERMEDIATE CROSS FRAME CONNECTION PLATE DETAIL FOR PLATE GIRDERS



TYPICAL WELD TERMINATION DETAIL



TYPICAL WELDING DETAILS FOR EXIST. CROSS FRAME CONNECTION PLATE TO FLANGES OF EXIST. GIRDERS

NOTE:

- HIGH STRENGTH BOLTS SHALL BE ONE-INCH DIAMETER, ASTM A325 UNLESS OTHERWISE NOTED.
- THE BOLTS SHALL BE PLACED WITH THEIR HEADS ON THE OUTSIDE FACE OF THE EXTERIOR GIRDERS AND ON THE BOTTOM OF THE FLANGES. FOR ADDITIONAL DETAILS AND NOTES, SEE OHIO STANDARD BRIDGE DRAWING SD-1-69, SHEET 4 OF 4.
- ERECTION BOLTS HOLE DIAMETER IN CROSSFRAME ANGLES AND CONNECTION PLATES SHALL BE RESPECTIVELY 1/16" AND 1/4" LARGER THAN THE DIAMETER OF ERECTION BOLTS, UNLESS REPLACED BY PERMANENT HIGH STRENGTH BOLTS. ERECTION BOLTS SHALL REMAIN IN PLACE, TACK WELDED TO THE CONNECTION PLATE. LOCK WASHERS SHALL BE FURNISHED FOR OTHER THAN FULLY TORQUED HIGH STRENGTH ERECTION BOLTS. ERECTION BOLTS SHALL BE FURNISHED AS PART OF ITEM 513. IN LIEU OF ERECTION BOLTS AT THE OPTION OF THE CONTRACTOR, ALTERNATIVE MEANS OF TEMPORARY BRACING MAY BE USED SUBJECT TO THE APPROVAL OF THE DIRECTOR AS PER ITEM 501.06 OF CMS.

NOTE:

- FIELD WELDING OF EXISTING CROSSFRAME CONNECTION PLATES TO TOP AND BOTTOM FLANGES OF EXISTING PLATE GIRDERS SHALL BE DONE AS PER C.M.S. SPECIFICATION NO. 513.17 AND INCLUDED WITH ITEM 513 - STRUCTURAL STEEL, MISCELLANEOUS FOR PAYMENT. APPROXIMATELY 400 L.F. OF WELD IS ESTIMATED FOR THIS ITEM OF WORK.

POLYTECH, INC.		13/18
CONSULTING ENGINEERS		CLEVELAND, OHIO
SUPERSTRUCTURE DETAILS		
BRIDGE NO. LAK-20-1939 OVER S.R.2. (EAST BOUND)		
DESIGNED	DRAWN	TRACED
CT	CT	EPW
CHECKED	REVIEWED	DATE
GA	BS	4/88