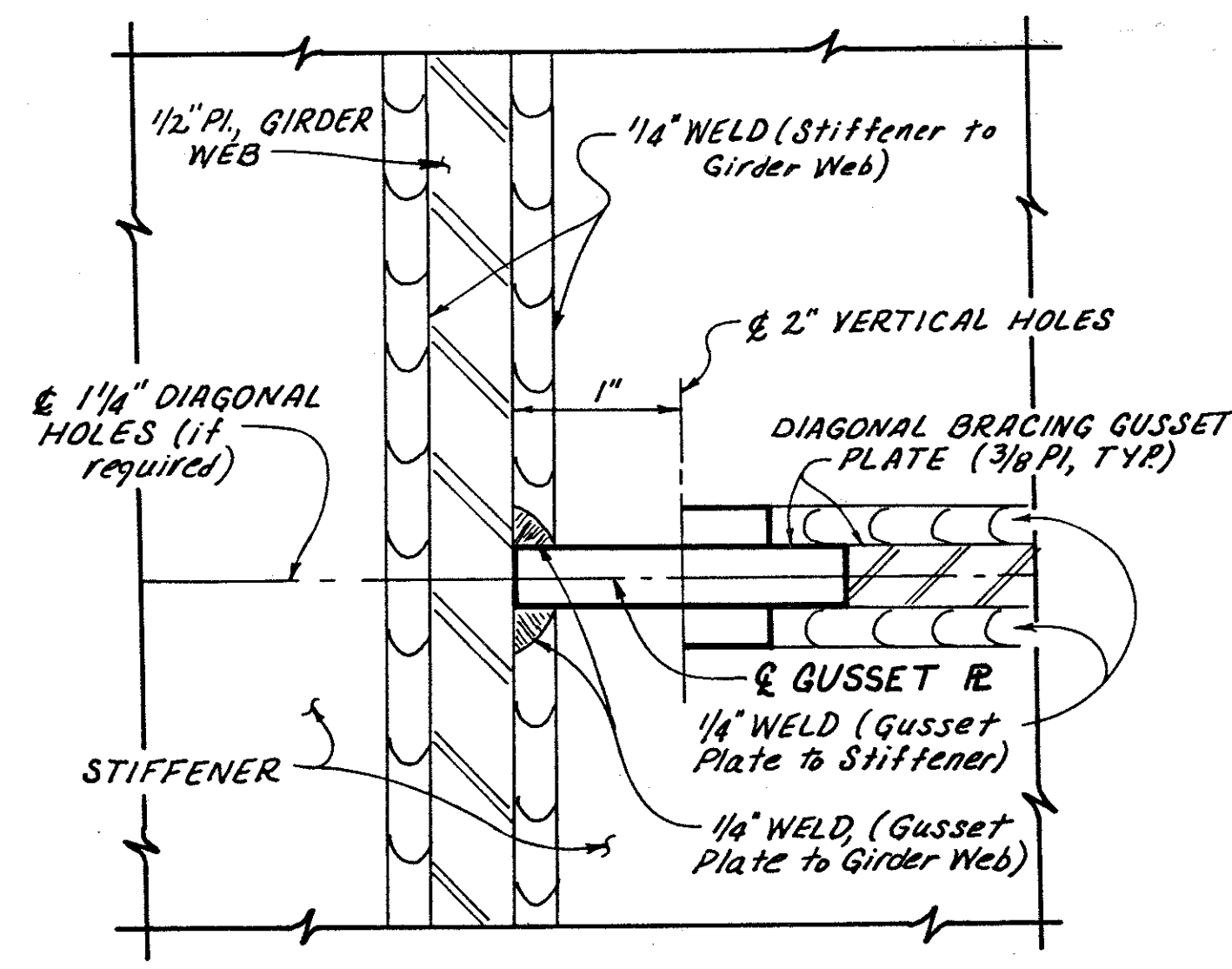
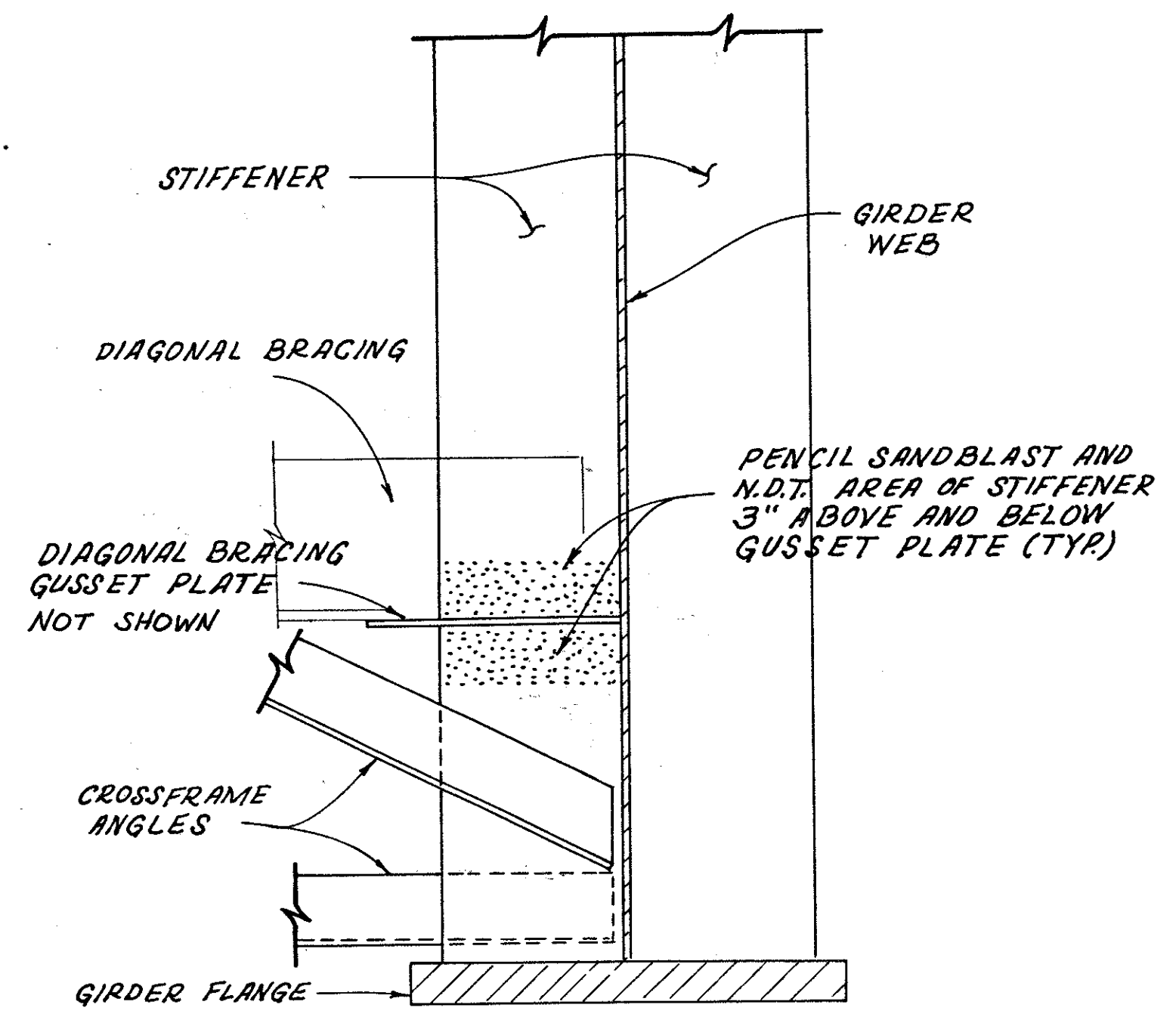


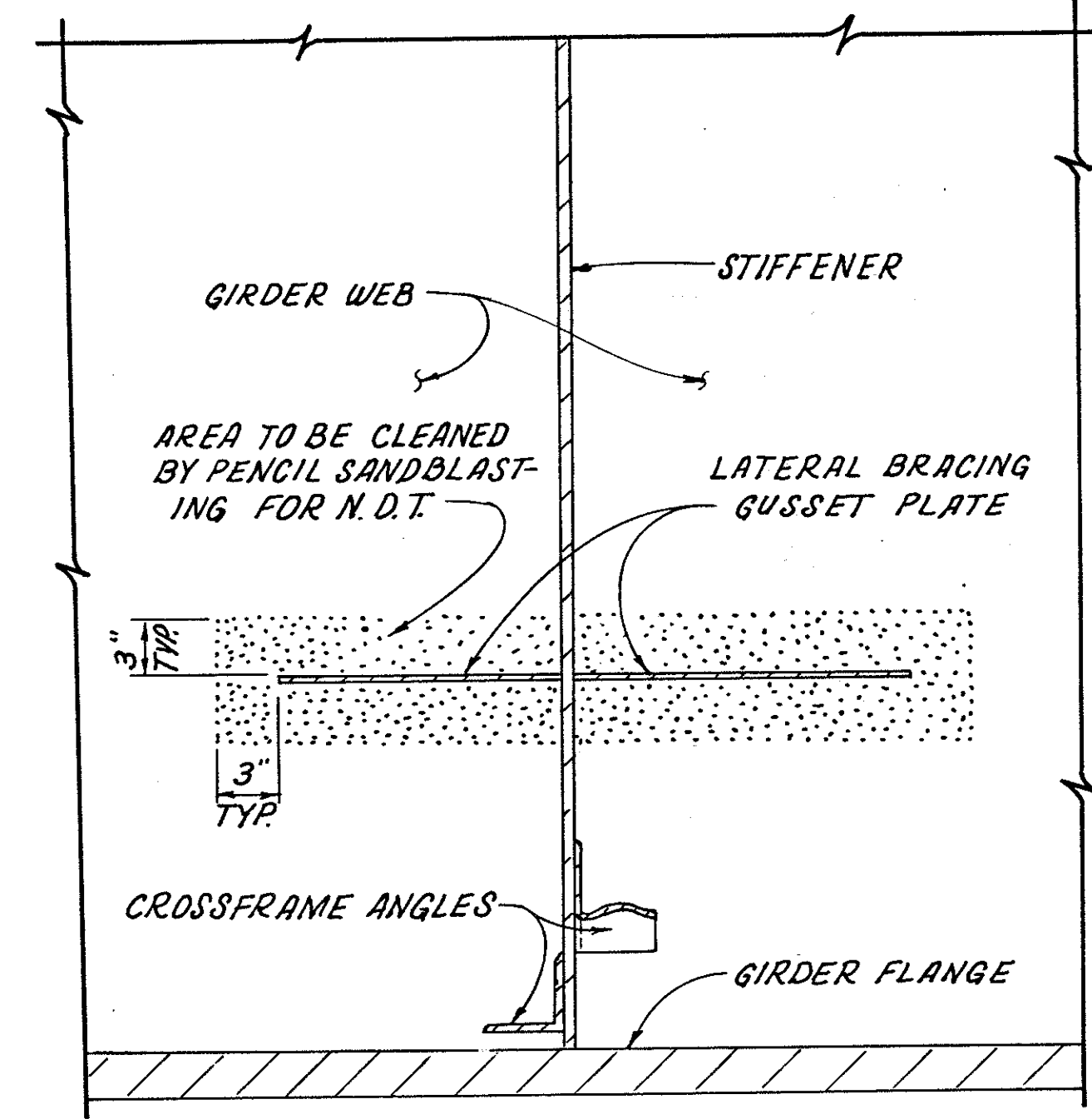
GUSSET RETROFIT PLAN



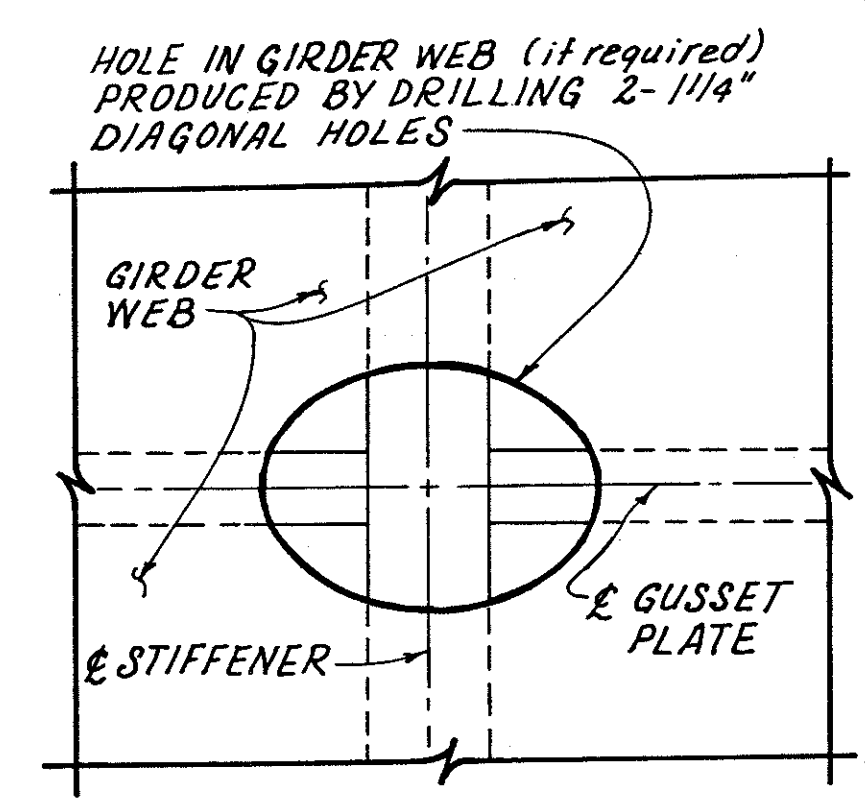
SECTION B-B



GIRDER SECTION
(AT GUSSET RETROFIT)



SECTION D-D



SECTION C-C
(TAKEN THRU MIDDLE OF GIRDER WEB)

LATERAL BRACING GUSSET RETROFIT

THIS WORK SHALL CONSIST OF THE FOLLOWING SEQUENCE OF OPERATIONS PERFORMED UPON ONE STIFFENER PLATE TO LATERAL BRACING GUSSET PLATE CONNECTION DETAIL:

1. CLEAN THE AREAS TO BE DRILLED AND TO HAVE NDT BY PENCIL SANDBLASTING THE PAINT, RUST AND DIRT FROM THE AREA INCLUDING THE TOP AND BOTTOM WELDS ATTACHING THE GUSSET PLATE TO THE WEB AND STIFFENER PLATE. SPECIAL CLEANING BY GRINDING SHALL BE USED ONLY AS DIRECTED BY THE ENGINEER FOR FURTHER INVESTIGATION OF CRACK PRESENCE.
2. DRILL THE VERTICAL HOLES THROUGH THE GUSSET PLATES INTERSECTING BOTH THE WEB AND STIFFENER CONNECTION PLATE FILLET WELDS AS PER RETROFIT DETAIL WITHOUT GOUGING THE ADJACENT SURFACES.
3. IF THE VERTICAL HOLES OF STEP 2 DID NOT TOUCH THE FACE OF THE WEB AND STIFFENER PLATE, THE HOLES SHALL BE GROUND SO THAT A SMOOTH RADIUS FROM THE FACE OF THE WEB OR STIFFENER PLATE TO THE GUSSET PLATE RESULTS. ANY REMAINING FILLET WELD SHALL BE GROUND SO THAT THE RESULTING SURFACES OF THE WEB AND OF THE STIFFENER PLATE ARE SMOOTH. CARE SHALL BE TAKEN THAT THE FULL THICKNESS OF THE WEB AND OF THE STIFFENER PLATE IS MAINTAINED AND NO UNDERCUT, GOUGING OR OVER-GRINDING TAKES PLACE. USE OF A CUTTING TORCH IS NOT PERMITTED.
4. THE CONTRACTOR SHALL CAREFULLY NON-DESTRUCTIVELY TEST THE REMAINING EXPOSED SURFACES OF THE GUSSET PLATE WELDS, AND THE ADJACENT GIRDER WEB AND STIFFENER PLATE USING BOTH DYE PENETRANT AND MAGNETIC PARTICLE EXAMINATION SO THAT THE ENGINEER CAN INSPECT FOR CRACKS.
5. ANY CRACKS FOUND IN THE WEB SHALL BE REMOVED PER ITEM SPECIAL - DRILLING STRUCTURAL STEEL AND PER RETROFIT DETAIL. ANY CRACKS INTO OR BEHIND ANOTHER PLATE SHALL BE REMOVED BY CAREFUL GRINDING, BY CAREFULLY ENLARGING THE HORIZONTAL HOLES IN THE WEB BY GRINDING, OR BY FURTHER DRILLING.
6. DRILLING, GRINDING AND TESTING SHALL CONTINUE UNTIL ALL THE CRACK ENDS OR CRACKS ARE REMOVED.

THE ACCEPTED NUMBER OF RETROFITS AS DETAILED ABOVE WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER LOCATION, WHICH PRICE AND PAYMENT SHALL BE FULL COMPENSATION FOR FURNISHING MATERIAL, LABOR AND EQUIPMENT NECESSARY TO CLEAN, DRILL, GRIND AND PERFORM NON-DESTRUCTIVE TESTING TO THE LATERAL BRACING GUSSET RETROFIT AREAS. PAYMENT WILL BE MADE AT THE CONTRACT PRICE BID UNDER:

ITEM	UNIT	DESCRIPTION
SPECIAL	51 EACH	LATERAL BRACING GUSSET RETROFIT

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
DISTRICT 12 BRIDGE DEPARTMENT

DIAGONAL BRACING
GUSSET RETROFIT DETAILS
BRIDGE NO. LAK-528-0192
OVER
THE GRAND RIVER

DESIGNED NCP	TRACED BCF	CHECKED DWH	REVIEWED GWM	REVISED
DATE	DATE	DATE	DATE 3/10/61	