SHEET NUM.												PART.	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
	2		3						9	OFFICE CALCS		01/NHS/BR						
																	EROSION CONTROL	
												1,000	832	30000	1,000	EACH	EROSION CONTROL	
																	STRUCTURE REPAIR (BRIDGE NO. JEF-22-0590)	
										369		369	202	11401	369	LB	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN (MAIN MEMBERS)	9
										8		8	202	11501	8	EACH	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN (SECONDARY MEMBERS)	9
										464		464	513	10201	464	LB	STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN	9
										16		16	513	95000	16	FT	STRUCTURAL STEEL, MISC.:REPAIR OF DAMAGED SECONDARY MEMBERS (FILLET WELDING)	9
									5	10		15	513	95000	15	FT	STRUCTURAL STEEL, MISC.:REPAIR OF DAMAGED MAIN MEMBERS (COMPLETE PENETRATION WELDING)	9
										17		17	513	95000	17	FT	STRUCTURAL STEEL, MISC.:TESTING OF EXISTING COMPLETE PENETRATION WELDS TO REMAIN	9
										165		165	514	20001	165	SF	FIELD PAINTING OF DAMAGED STRUCTURAL STEEL, AS PER PLAN (THREE COAT)	10
										LS		LS	516	47001	LS		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	9
										LS		LS	849	10000	LS		DAMAGE ASSESSMENT	
										LS		LS	849	10500	LS		SURFACE PREPARATION	
										2		2	849	10600	2	HOUR	REPAIRING DAMAGED MEMBERS BY GRINDING	
										LS		LS	849	10700	LS		STRAIGHTENING DAMAGED MEMBERS	
																	MAINTENANCE OF TRAFFIC	
			240									240	614	11110	240	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
			1									1	614	12740	1	EACH	WORK ZONE LIGHTING SYSTEM	
	6											6	614	18601	6	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	2
																	INCIDENTALS	
	LS											LS	614	11000	LS		MAINTAINING TRAFFIC	
												LS	624	10000	LS		MOBILIZATION	

CALCULATED RPT CHECKED CCW

GENERAL SUMMARY

JEF-22-5.90

STANDARD DRAWING AND SUPPLEMENTAL SPECIFICATION

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:
GSD-1-19 REVISED 1-18-2019

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION:
849 DATED 1/18/2013

STEEL RESTRAINT OR PRELOAD LIMITS

EXISTING STRUCTURAL STEEL - ASTM A36, GRADE 36
DO NOT SUBJECT ANY PART OF THE STRUCTURE TO A JACKING, PULLING OR RESTRAINING UNIT STRESS EXCEEDING 18 KSI.

EXISTING STRUCTURE PLANS

THE FOLLOWING PREVIOUS PLANS OF THE EXISTING BRIDGE ARE AVAILABLE FOR REFERENCE AT THE ODOT DISTRICT ELEVEN OFFICE IN NEW PHILADELPHIA:

ORIGINAL ROADWAY/STRUCTURE CONSTRUCTION:
JEF-22-3.86 (1968)

STRUCTURE REHABILITATION:
JEF-22-3.86 (1996) - PID NO. 12142

PREVIOUS BRIDGE HITS:
JEF-22-5.90 (2014) - PID NO. 98863
JEF-22-5.90 (2018) - PID NO. 106776

IN ADDITION, THE PREVIOUS PLANS CAN BE FOUND ON ODOT'S WEBSITE AT THE FOLLOWING ADDRESS:

http://www.dot.state.oh.us/Divisions/ContractAdmin/Contracts/Pages/designfiles.aspx

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02 AND 513.04.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED IN THE FIELD.

UTILITIES

THERE ARE NO KNOWN UNDERGROUND OR OVERHEAD UTILITIES WITHIN THE PROJECT CONSTRUCTION LIMITS.

ITEM 513, STRUCTURAL STEEL MISC.: REPAIR OF DAMAGED MAIN MEMBERS, (COMPLETE PENETRATION WELDING)

AFTER DAMAGED AREAS HAVE BEEN INSPECTED ACCORDING TO ITEM 849, DAMAGE ASSESSMENT, PREPARE THE DAMAGED MATERIAL FOR WELDING. PROVIDE RUNOFF TABS FOR ALL COMPLETE PENETRATION WELDS. PERFORM COMPLETE PENETRATION WELDS ACCORDING TO CMS 513 USING APPROVED ELECTRODES, PROCEDURES AND WELDERS. REMOVE RUNOFF TABS AND GRIND THE COMPLETED EDGES SMOOTH. GRIND THE COMPLETED WELDS SMOOTH AND FLUSH WITH THE ADJACENT SURFACES TO PROVIDE A SURFACE FINISH ACCORDING TO ANSI B46.1 OF 250 mil. DO NOT OVER-GRIND AS TO REDUCE THE MATERIAL THICKNESS OR WIDTH OF THE NEW OR EXISTING MATERIALS. PREPARE ALL REENTRANT CORNERS WITH A ONE INCH RADIUS. REMOVE WELDING, START AND STOP DISCONTINUITIES. RADIOGRAPHIC TEST THE FINISHED WELDS ACCORDING TO CMS 513.25A AND SUBMIT COPIES OF THE REPORTS TO THE ENGINEER FOR ACCEPTANCE. THE ENGINEER MAY OBTAIN TECHNICAL ASSISTANCE FROM THE OFFICE OF MATERIALS MANAGEMENT. THE DEPARTMENT WILL INCLUDE ALL MATERIALS, TOOLS, LABOR, EQUIPMENT, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK FOR PAYMENT WITH ITEM 513, STRUCTURAL STEEL MISC.: REPAIR OF DAMAGED MAIN MEMBERS, COMPLETE PENETRATION WELDING.

ITEM 513, STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN

ALL REQUIREMENTS OF 513 APPLY TO SHOP FABRICATED MEMBERS. PERFORM WORK FOR FIELD FABRICATED MEMBERS ACCORDING TO ITEM 513, EXCEPT AS MODIFIED HEREIN. THE DEPARTMENT WILL NOT REQUIRE THE CONTRACTOR PERFORMING FIELD FABRICATION TO BE PRE-QUALIFIED AS SPECIFIED IN SUPPLEMENT 1078. SUBMIT A WRITTEN LETTER OF MATERIAL ACCEPTANCE, 501.06, TO THE ENGINEER. PROVIDE SHOP DRAWINGS ACCORDING TO 513.06 OR SUPPLY THE ENGINEER WITH "AS-BUILT" DRAWINGS MEETING 513.06 AFTER COMPLETION OF FIELD FABRICATION. THE ENGINEER WILL REVIEW THE SUBMITTED DRAWINGS FOR CONCURRENCE WITH THE FINAL AS-BUILT CONDITION. THE ENGINEER MAY CONTACT THE OFFICE OF STRUCTURAL ENGINEERING FOR TECHNICAL ASSISTANCE. IF THE ENGINEER IS SATISFIED WITH THE "AS-BUILT" DRAWINGS AND THE DELIVERED MATERIALS, SUPPLY A COPY OF THE DRAWINGS (STAMPED, SEALED AND DATED ACCORDING TO SUPPLEMENT 1002) TO THE STRUCTURAL, WELDING AND METALS SECTION OF THE OFFICE OF MATERIAL MANAGEMENT FOR RECORD PURPOSES. THE MEMBERS INCLUDED IN THIS ITEM ARE THE CROSS FRAME ANGLES AT THE LOCATIONS INDICATED ON THE FRAMING PLAN. THE DEPARTMENT WILL INCLUDE ALL MATERIALS, TOOLS, LABOR, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK FOR PAYMENT WITH ITEM 513, STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN.

ITEM 513, STRUCTURAL STEEL MISC.: REPAIR OF DAMAGED SECONDARY MEMBERS, (FILLET WELDING)

AFTER DAMAGED AREAS HAVE BEEN INSPECTED ACCORDING TO ITEM 849, DAMAGE ASSESSMENT, PREPARE THE DAMAGED MATERIAL FOR WELDING. PERFORM 5/16 INCH FILLET WELDS ACCORDING TO ITEM 513 USING APPROVED ELECTRODES, PROCEDURES AND WELDERS. WELD EACH SECONDARY MEMBER ACCORDING TO PLAN DETAILS. MAGNETIC PARTICLE INSPECT ALL FILLET WELDS ACCORDING TO CMS 513.25B. THE ENGINEER MAY OBTAIN TECHNICAL ASSISTANCE FROM THE OFFICE OF MATERIALS MANAGEMENT. THE DEPARTMENT WILL INCLUDE ALL MATERIALS, TOOLS, LABOR, EQUIPMENT, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK FOR PAYMENT WITH ITEM 513, STRUCTURAL STEEL MISC.: REPAIR OF DAMAGED SECONDARY MEMBERS, FILLET WELDING.

ITEM 513, STRUCTURAL STEEL MISC.: TESTING OF EXISTING COMPLETE PENETRATION WELDS TO REMAIN

AFTER DAMAGED AREAS HAVE BEEN REPAIRED, BUT BEFORE THEY HAVE BEEN PAINTED, PERFORM RADIOGRAPHIC TESTING OF THE EXISTING COMPLETE PENETRATION WELDS FROM PREVIOUS BRIDGE REPAIRS. PERFORM RADIOGRAPHIC TESTING ACCORDING TO CMS 513.25A AND SUBMIT COPIES OF THE REPORTS TO THE ENGINEER FOR ACCEPTANCE. THE ENGINEER MAY OBTAIN TECHNICAL ASSISTANCE FROM THE OFFICE OF MATERIALS MANAGEMENT. REPAIR ALL AREAS DESIGNATED BY THE ENGINEER IN ACCORDANCE WITH ITEM 513, STRUCTURAL STEEL MISC.: REPAIR OF DAMAGED MAIN MEMBERS, (COMPLETE PENETRATION WELDING).

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY AND SHALL BE USED FOR BIDDING PURPOSES FOR WELD REPAIRS.

ITEM 513, STRUCTURAL STEEL MISC.: REPAIR OF DAMAGED MAIN MEMBERS, (COMPLETE PENETRATION WELDING)....5 FEET

MEASURE AREAS TO BE TESTED BY THE FOOT OF EXISTING COMPLETE PENETRATION WELDS IN PLACE AFTER THE INITIAL REPAIRS ARE MADE. PAYMENT FOR THIS ITEM OF WORK SHALL INCLUDE ALL WORK LISTED ABOVE (EXCEPT FOR REQUIRED REPAIRS) AND SHALL INCLUDE ALL MATERIALS, TOOLS, LABOR, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 202, PORTIONS OF STRUCTURE REMOVED, AS PER PLAN (MAIN MEMBERS)

AN ESTIMATED QUANTITY IS PROVIDED FOR PARTIAL REMOVAL OF BEAM 1, AS DETERMINED BY FIELD INSPECTION AND ACCORDING TO ITEM 849, DAMAGE ASSESSMENT OR AS DIRECTED BY THE ENGINEER. SUPPORT THE EXISTING MEMBERS ACCORDING TO ITEM 849, STRAIGHTENING WORK PLAN. SAW CUT THE EXISTING MEMBERS USING A MECHANICAL GUIDE ACCORDING TO CMS 513.12. PROVIDE SHIELDING AS NECESSARY TO PREVENT DAMAGE TO MAIN OR SECONDARY MATERIALS THAT REMAIN. GRIND THE EXISTING MAIN OR SECONDARY MEMBER SMOOTH IN PREPARATION FOR COMPLETE PENETRATION WELDING. PROVIDE A SURFACE FINISH ACCORDING TO ANSI B46.1 OF 250 mil (TO ACCOMMODATE THE PROPOSED REPLACEMENT MATERIALS). DETERMINE FINAL QUANTITIES BY FIELD MEASUREMENTS. THE DEPARTMENT WILL INCLUDE ALL MATERIALS, TOOLS, LABOR, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK FOR PAYMENT WITH ITEM 202, PORTIONS OF STRUCTURE REMOVED, AS PER PLAN (MAIN MEMBERS).

ITEM 202, PORTIONS OF STRUCTURE REMOVED, AS PER PLAN (SECONDARY MEMBERS)

AN ESTIMATED QUANTITY IS PROVIDED FOR REMOVAL OF SECONDARY MEMBERS AS DETERMINED BY FIELD INSPECTION ACCORDING TO ITEM 849, DAMAGE ASSESSMENT OR AS DIRECTED BY THE ENGINEER. SUPPORT THE EXISTING SECONDARY MEMBERS ACCORDING TO ITEM 849, STRAIGHTENING WORK PLAN. FLAME OR SAW CUT THE EXISTING MEMBERS TO WITHIN 1/8 INCH OF THE EXISTING MAIN MATERIAL USING A MECHANICAL GUIDE ACCORDING TO CMS 513.12. PROVIDE SHIELDING AS NECESSARY TO PREVENT DAMAGE TO MAIN OR SECONDARY MATERIALS THAT REMAIN. GRIND THE EXISTING MAIN OR SECONDARY MEMBER SMOOTH IN PREPARATION FOR COMPLETE PENETRATION OR FILLET WELDING. PROVIDE A SURFACE FINISH ACCORDING TO ANSI B46.1 OF 250 mil (TO ACCOMMODATE THE PROPOSED REPLACEMENT MATERIALS). DETERMINE FINAL QUANTITIES BY FIELD MEASUREMENTS. THE DEPARTMENT WILL INCLUDE ALL MATERIALS, TOOLS, LABOR, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK FOR PAYMENT WITH ITEM 202, PORTIONS OF STRUCTURE REMOVED, AS PER PLAN (SECONDARY MEMBERS).

ITEM 516, JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN

THIS WORK CONSISTS OF RAISING OR REPOSITIONING EXISTING STRUCTURES TO THE DIMENSIONS AND REQUIREMENTS DEFINED IN THE PROJECT PLANS.

SUBMIT CONSTRUCTION PLANS IN ACCORDANCE WITH CMS 501.05.

IF, DURING THE JACKING OPERATIONS, CRACKING OF THE CONCRETE SUPERSTRUCTURE, SEPARATION OF THE CONCRETE DECK FROM THE STEEL STRINGERS, OR OTHER DAMAGE TO THE STRUCTURE IS VISUALLY OBSERVED, IMMEDIATELY CEASE THE JACKING OPERATION AND INSTALL SUPPORTS TO THE SATISFACTION OF THE ENGINEER. ANALYZE THE DAMAGE AND SUBMIT A METHOD OF CORRECTION TO THE ENGINEER FOR APPROVAL.

EPOXY INJECT ALL BEAMS THAT SEPARATE FROM THE DECK FOR THE DISTANCE OF THE SEPARATION IN ACCORDANCE WITH CMS 512.07. THE DEPARTMENT WILL NOT PAY FOR THE COST OF THIS EPOXY INJECTION OR OTHER REQUIRED REPAIRS. THE BRIDGE BEARINGS SHALL BE FULLY SEATED AT ALL CONTACT AREAS. IF FULL SEATING IS NOT ATTAINED, SUBMIT A REPAIR PLAN TO THE ENGINEER. THE DEPARTMENT WILL NOT PAY FOR THE REPAIR COSTS TO ENSURE FULL SEATING ON BEARINGS.

THE DEPARTMENT WILL MEASURE THIS WORK ON A LUMP SUM BASIS.

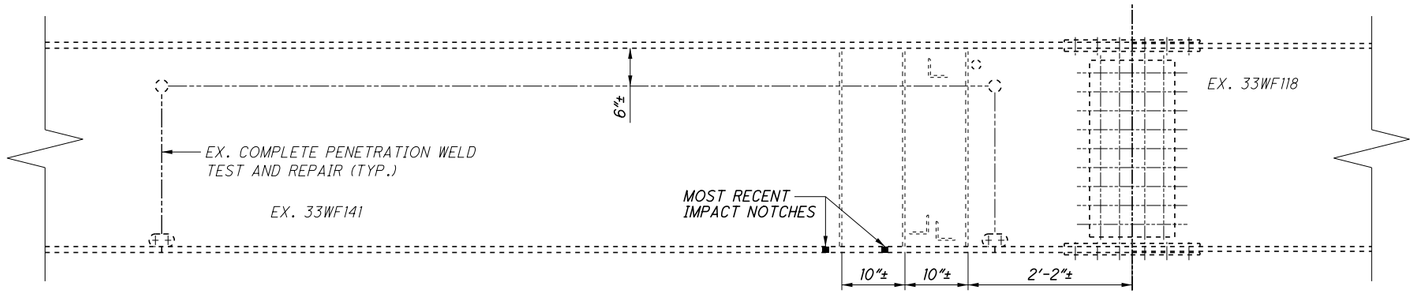
THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516, JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN.

DESIGN AGENCY
O.D.O.T. DISTRICT 11
ENGINEERING

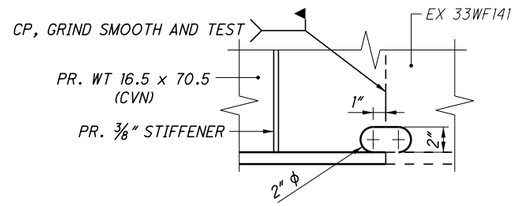
DESIGNED	DRAWN	REVIEWED	DATE
RPT	RPT	MVC	11/12/20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
DJL	-	4101804	

STRUCTURE NOTES
BRIDGE NO. JEF-22-0590
C.R. 22A OVER U.S. 22

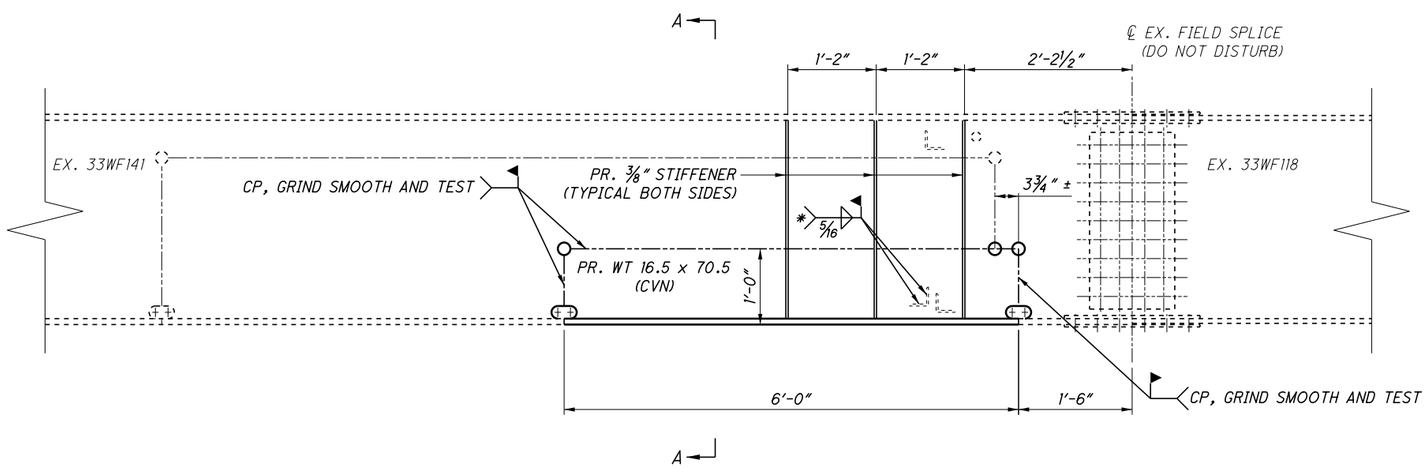
JEF-22.5.90
PID No. 113791



EXISTING BEAM 1 ELEVATION VIEW
(LOOKING UPSTATION)



BOTTOM COPE HOLE DETAIL
DETAIL IS SYMMETRIC ABOUT COMP. PEN. WELD
ALL DIMENSIONS TYPICAL
(FORWARD SHOWN, REAR SIMILAR)



* - TYPICAL ALL ANGLES

PROPOSED BEAM 1 ELEVATION VIEW
(LOOKING UPSTATION)

ALTERNATE CORNER DETAILS

NOTES:

1. THE LOWER CROSSFRAME ANGLES SHALL BE REMOVED FROM BEAM 1, AND REATTACHED TO THE NEWLY PLACED WT SECTION.
2. GRIND THE INSIDE FACE OF ALL COPE HOLES PROVIDE A SURFACE FINISH TO ANSI B46.1 OF 250 mil.
3. FOR SECTION A-A AND STIFFENER PLATE DETAILS SEE SHEET 6/8 .
4. FOR DETAILS NOT SHOWN, SEE SCD GSD-1-19.

DESIGN AGENCY
O.D.O.T. DISTRICT 11
ENGINEERING

DESIGNED RPT | DRAWN RPT | REVIEWED MVC | DATE 11/12/20
CHECKED DJL | REVISED - | STRUCTURE FILE NUMBER 4101804

BEAM #1 REPAIR DETAILS - 2
BRIDGE NO. JEF-22-0590
CR 22A OVER US 22

JEF-22-5.90
PID No. 113791

5/8

12/15

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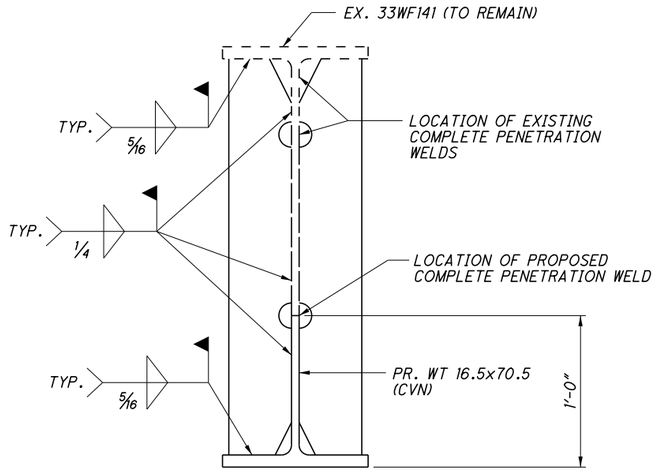
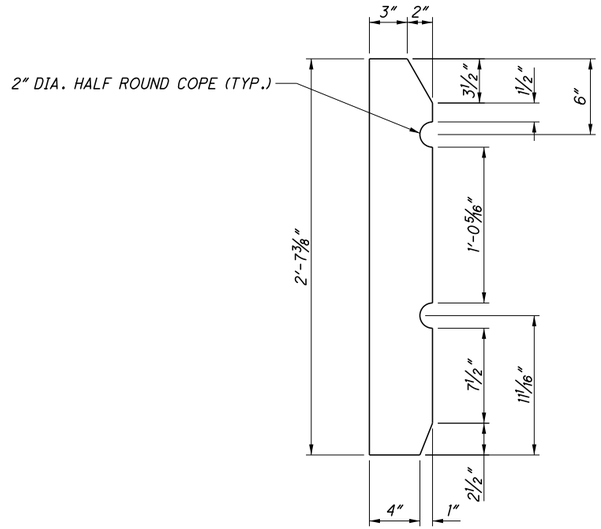


SECTION A-A



STIFFENER DETAIL

⅜" THICK, ITEM 513, STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN

DESIGN AGENCY
O.D.O.T. DISTRICT 11
ENGINEERING

DESIGNED	DRAWN	REVIEWED	DATE
RPT	RPT	MVC	11/12/20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
DJL	-	4101804	

BEAM #1 - STIFFENER DETAIL

BRIDGE NO. JEF-22-0590
CR 22 A OVER US 22

JEF-22-5.90
PID No. 113791

6 / 8

13
15

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