

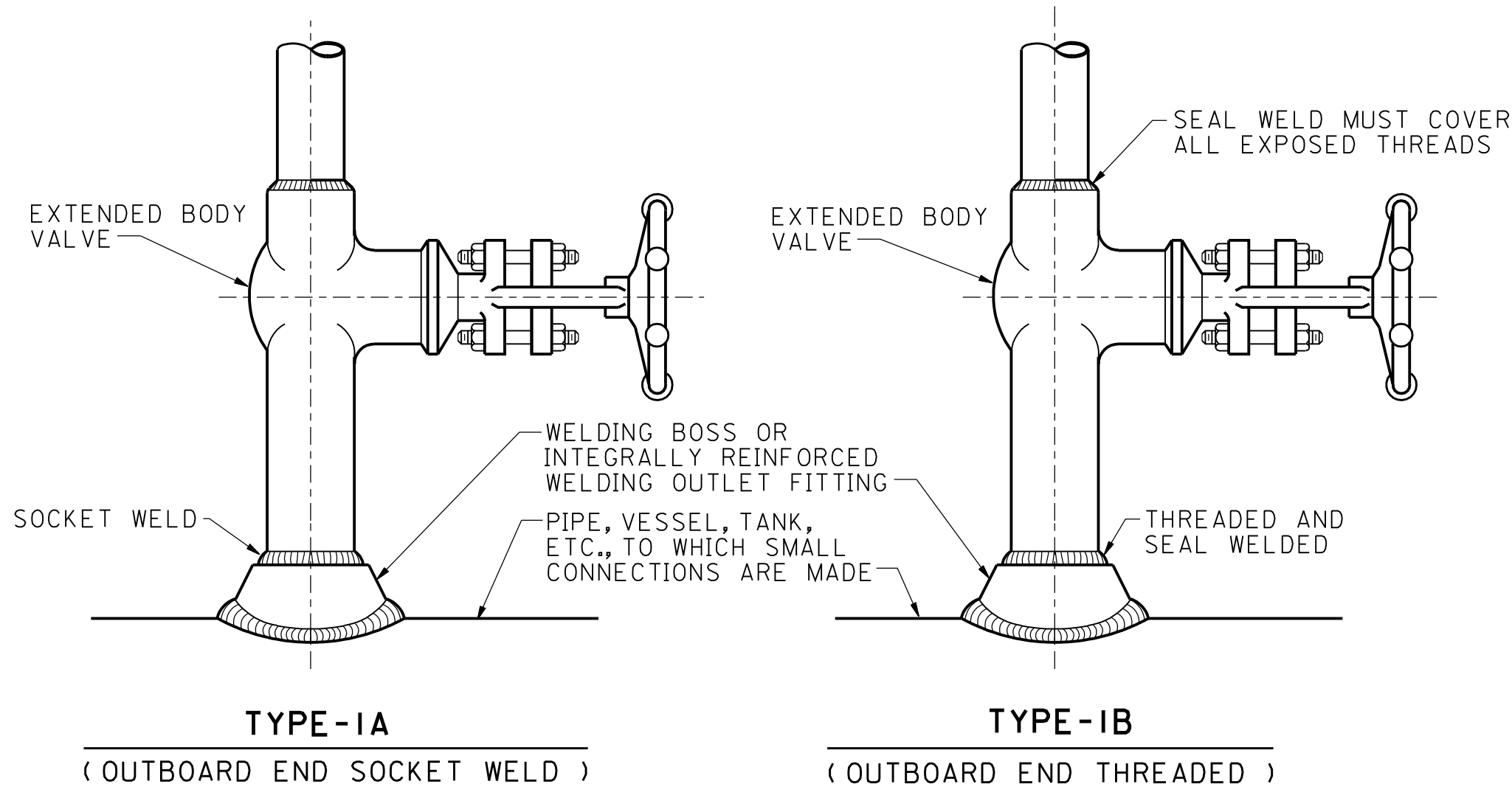


FIGURE 1 - TYPE 1 CONNECTIONS

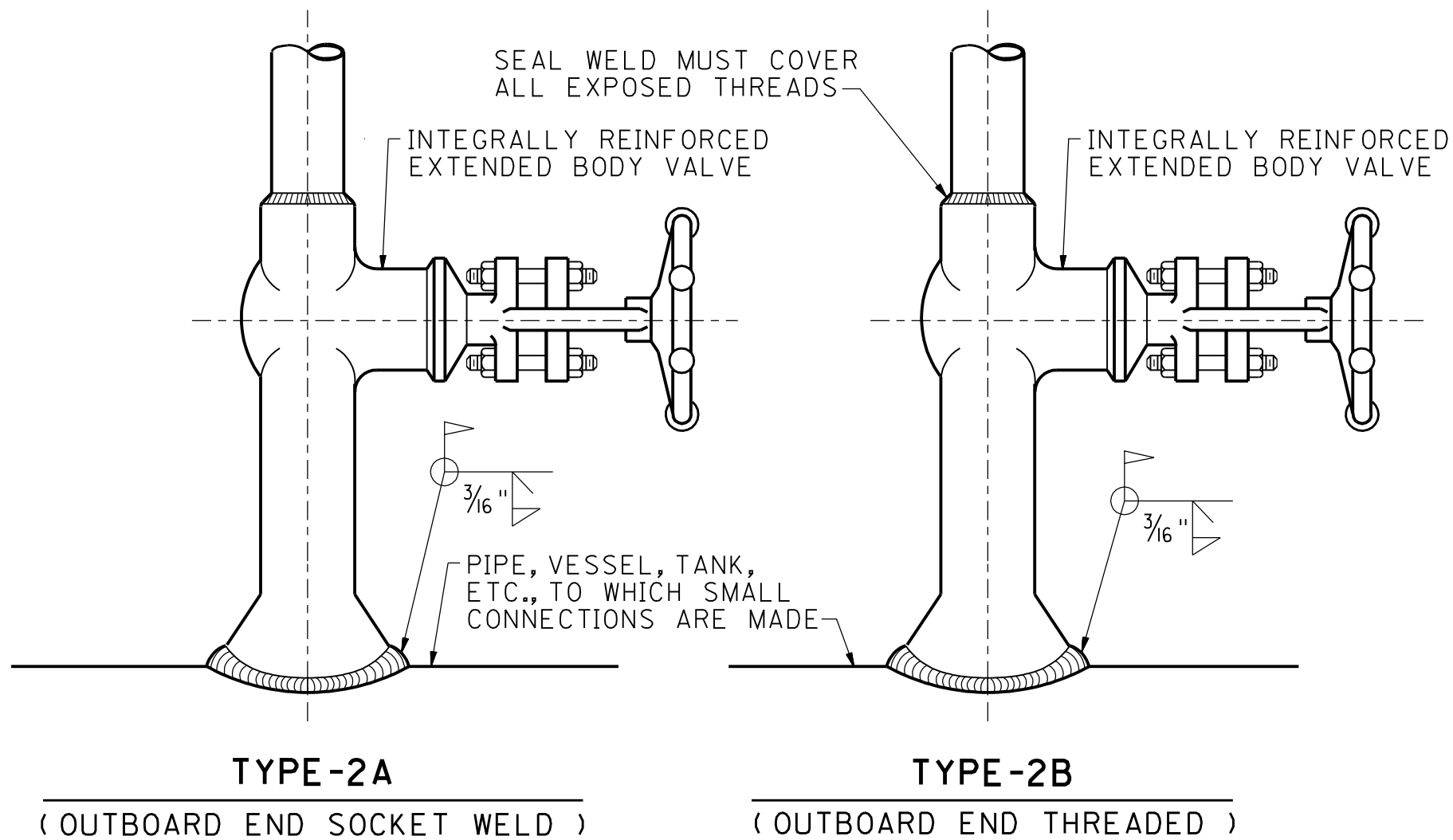


FIGURE 2 - TYPE 2 CONNECTIONS

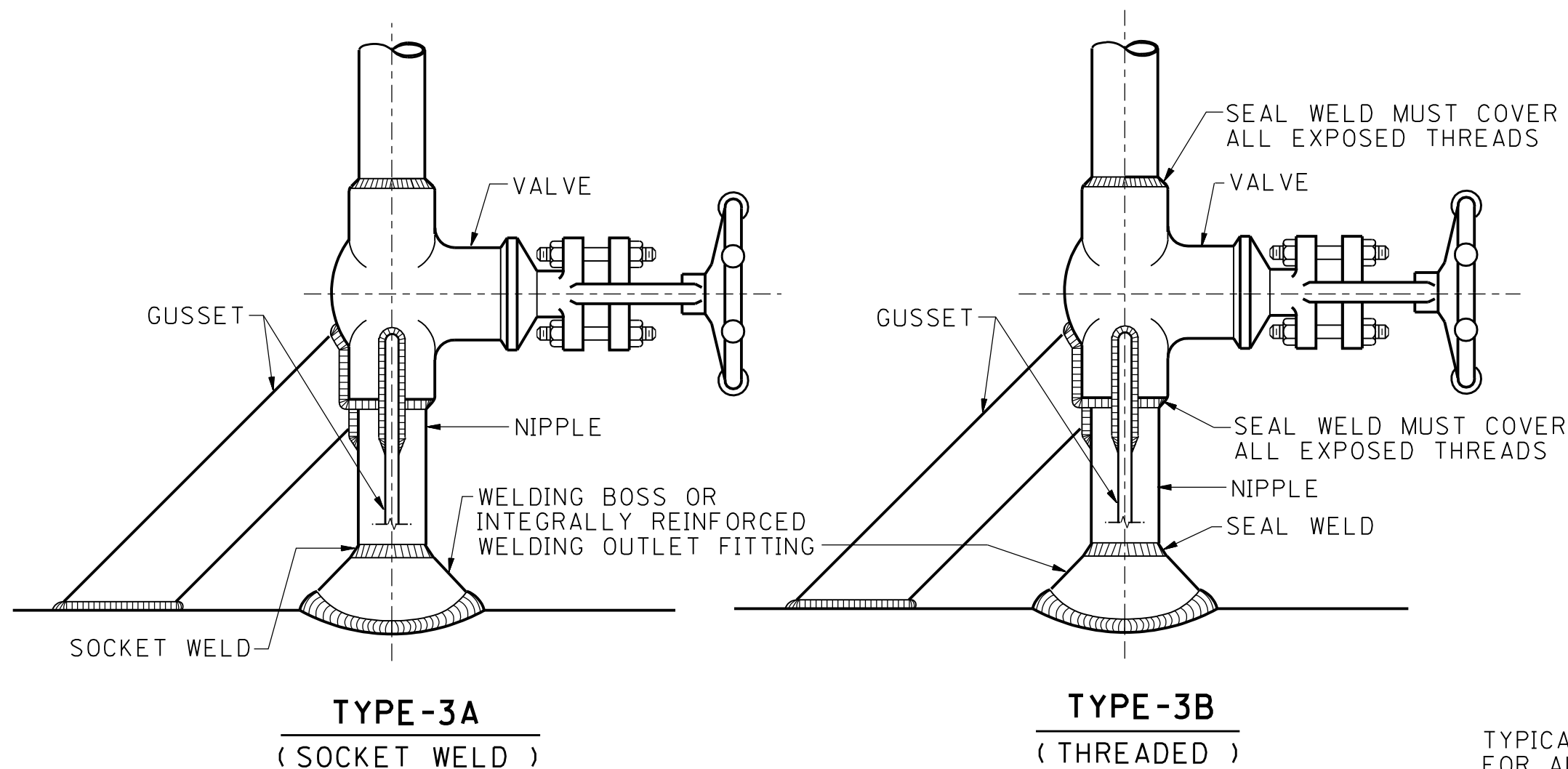


FIGURE 3 - TYPE 3 CONNECTIONS
(SEE FIGURE 4 FOR GUSSET DETAILS)

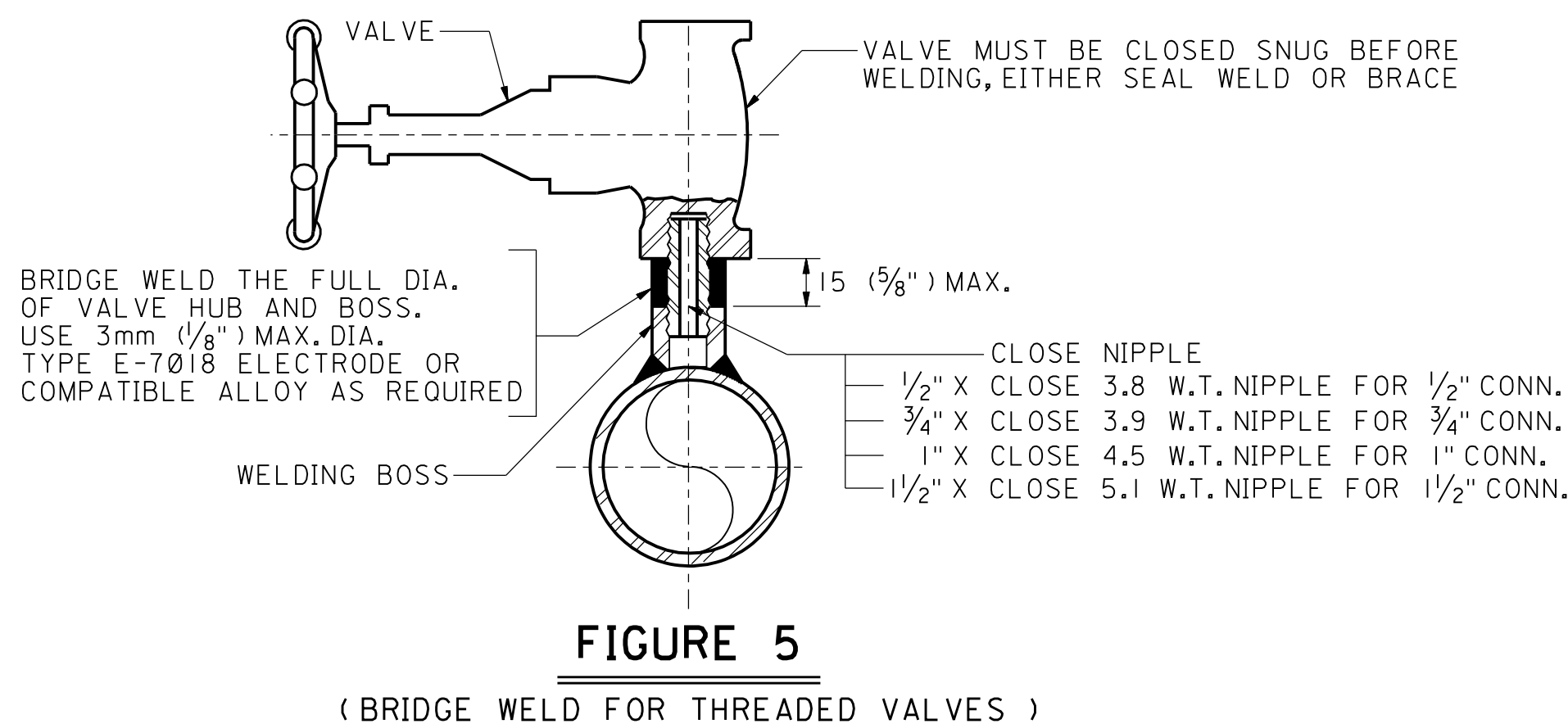


FIGURE 5
(BRIDGE WELD FOR THREADED VALVES)

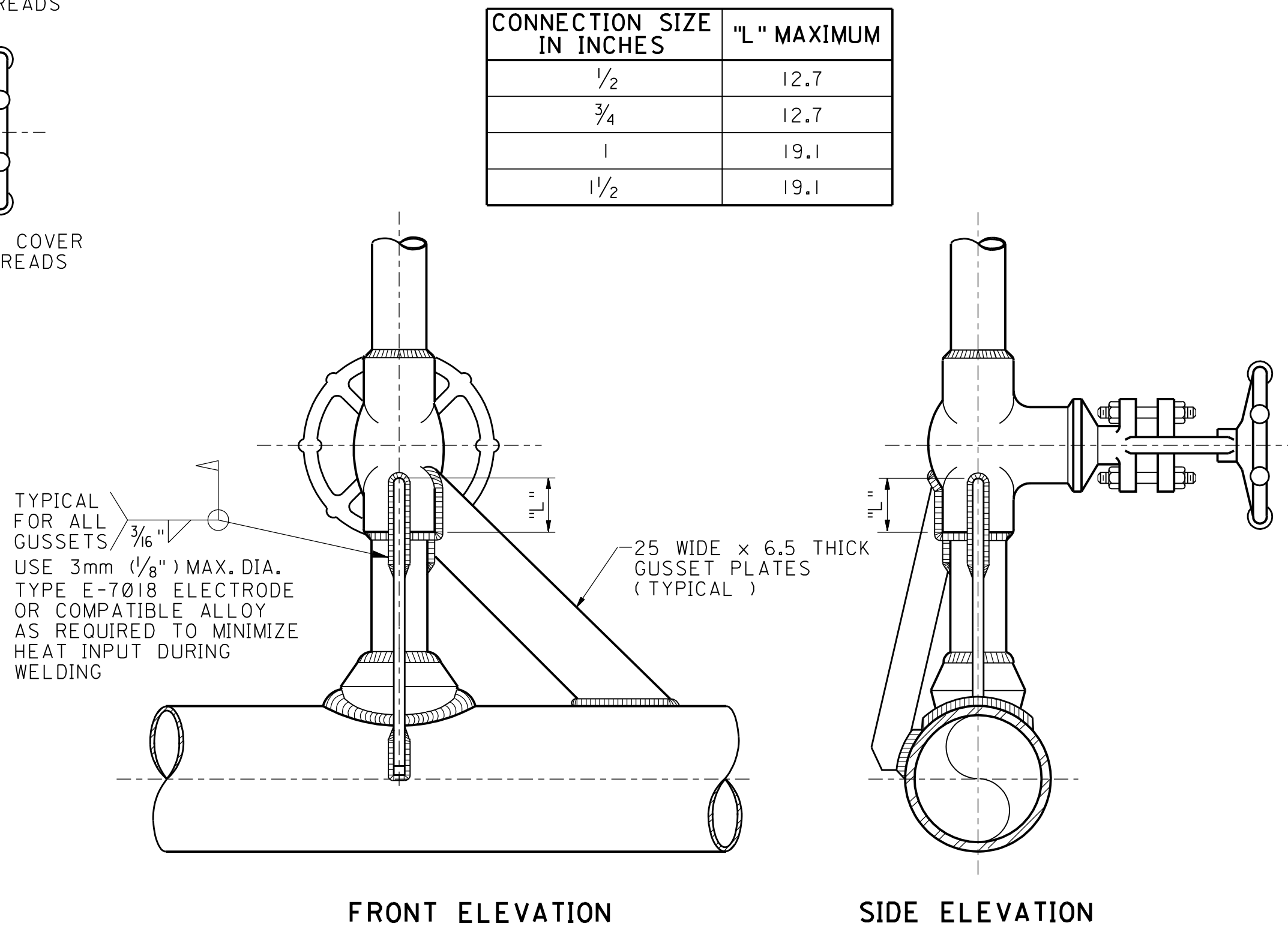


FIGURE 4 - GUSSETS

NOTES:

1. SEAL WELD SHALL COMPLY WITH SAES-L-110 .IN CASE APPLIED,SEAL WELD SHALL COVER ALL EXPOSED THREADS .
2. FOR REINFORCEMENT AND BRACING OF SMALL BRANCH CONNECTIONS IN VIBRATION SERVICE, REFER TO SAES-L-310
3. THE BRACE ANGLE WITH RESPECT TO THE VALVE CENTER LINE SHOULD RANGE FROM 30° TO 45° EXCEPT WHEN IMPRACTICAL FOR SMALLER DIAMETER MAIN RUN PIPE.
4. BRIDGE WELD AS SHOWN IN FIG.5 IS REQUIRED IF THE VALVE CAN BE USED AS A STEP EVEN THOUGH VIBRATION IS NOT EXPECTED.
5. PWHT OF ALLOY STEEL WELDS SHALL BE PER ANSIB 31.3 CRITERIA. SPECIAL WELDING PROCEDURES IN LIEU OF PWHT SHALL BE APPROVED BY CSD.
6. ALL DIMENSIONS ARE IN MILLIMETER UNLESS NOTED OTHERWISE.

REFERENCE DRAWINGS

STD.HEAVY WELDING BOSS	AE-036175
STD.HEAVY WELDING BOSS SOCKET WELD	AE-036643

DRAWING RESPONSIBILITY:
PIPING STANDARDS COMMITTEE

09	05/06	MSM	REVISED NOTES	HMM	MAS
08	OCT98	EDSD WED	CHANGED DWG.FROM TYPICAL INSTALL'N TO MANDATORY STANDARD DWG.		
07	MAY88	RLO	REDRAWN, REVISED AND ADDED TYP.INSTALL.NOTE.	ORIG. SIGNED	ORIG. SIGNED
REV. NO.	DATE	BY	DESCRIPTION	CHKD.	CERT.

SAUDI ARABIAN OIL COMPANY

DRAWN BY	NJF/	CHECKED BY		SCALE	NONE
DATE STARTED		DATE COMPLETED			
OPR'G. DEPT.		ENG. DEPT.			
APP'D FOR CONSTR.					

THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION OR FOR ORDERING MATERIAL UNTIL CERTIFIED AND DATED	CERTIFIED	CERTIFIED ORIGINAL
	BY	DATE

BRIDGE WELD & TYPICAL BRACE
SEAL WELDED AND SOCKET WELDED
VALVES ON PROCESS LINES

STD. DWG.			METRIC	
PLANT NO.	INDEX	DRAWING NUMBER	SHT. NO.	REV. NO.
990	L	AB-036521	001	09