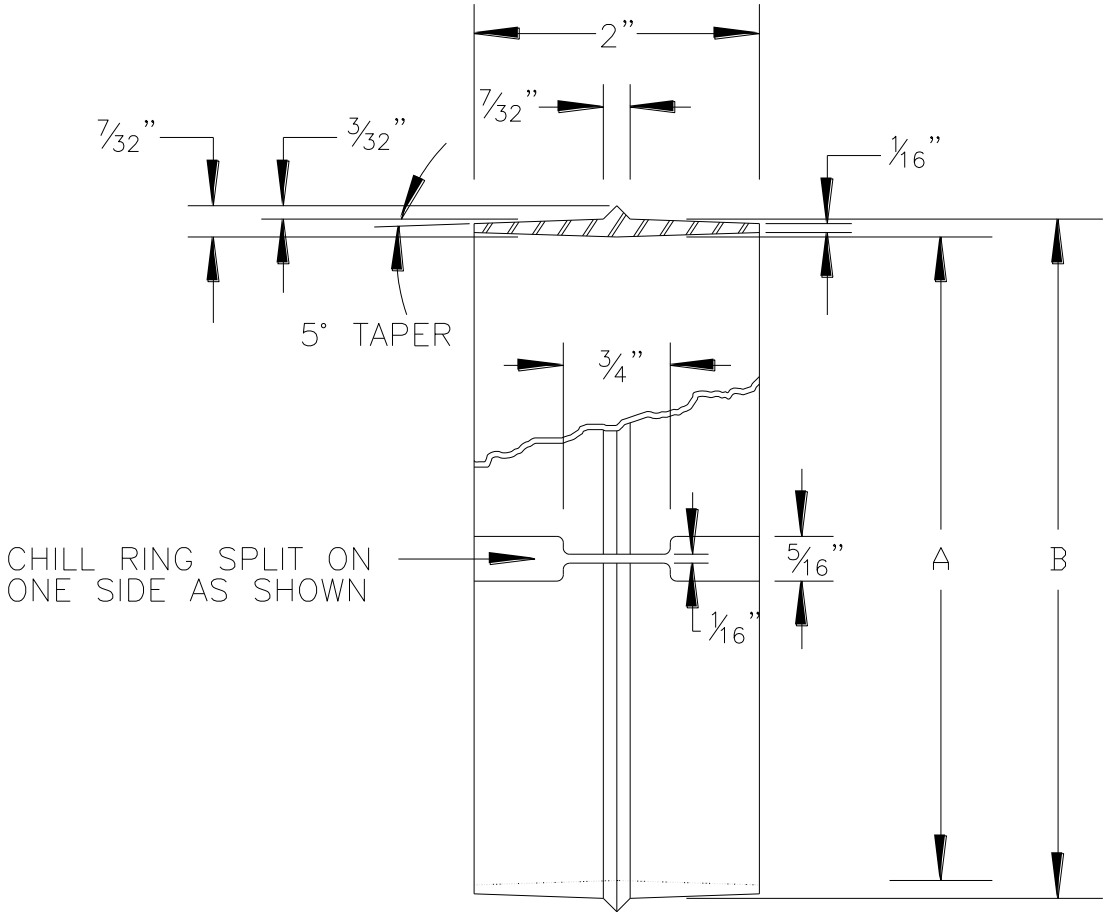
UNDERGROUND TRANSMISSION

MATERIAL

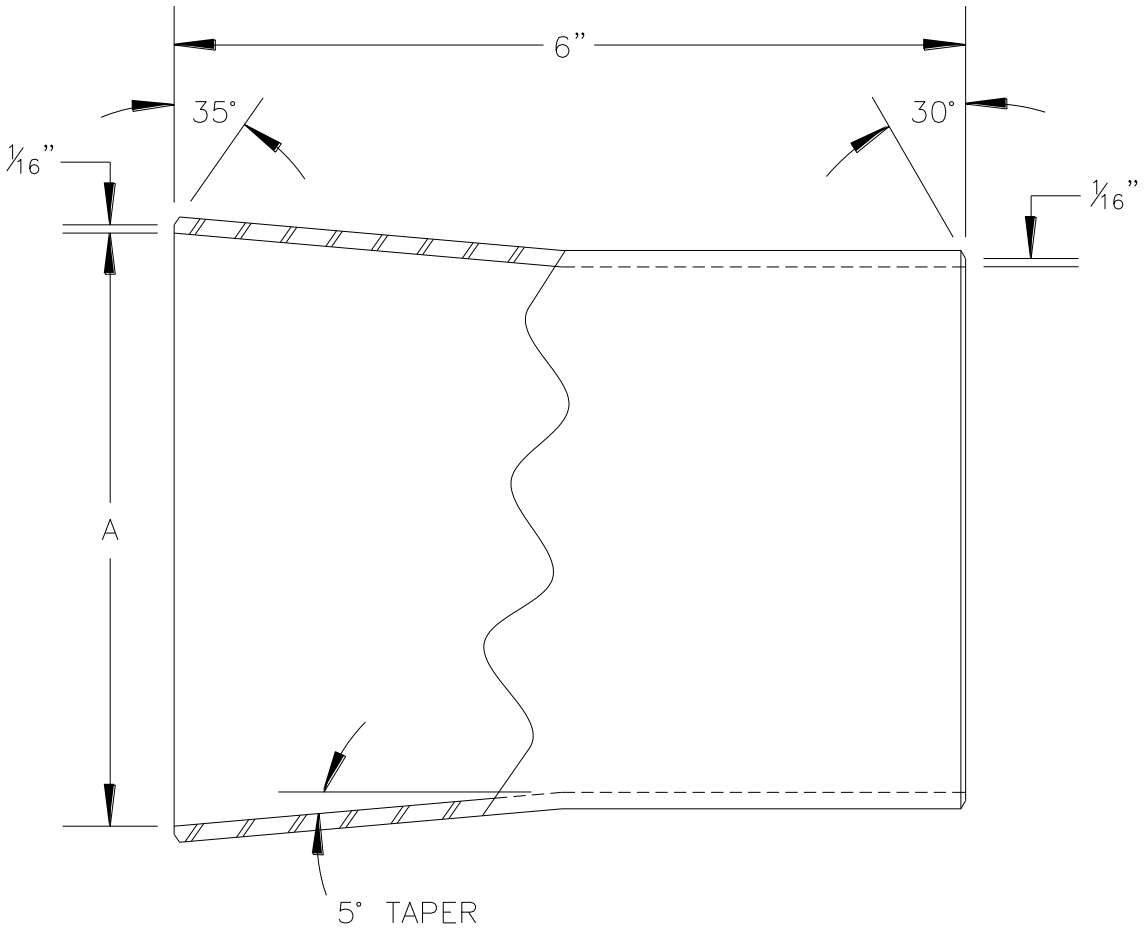
ITEM ID	DESCRIPTION	Min/Max
CAICL 014	CABLE, 1500 KCM, 69 KV, SINGLE CONDUCTOR AL., CROSS-LINKED POLYETHYLENE POWER SHIELDED	INACTIVATED
CAICL 016	CABLE, SOLID DIELECTRIC (XLPE) 1500-KCM, 69KV, 1/C, ALUMINUM CONDUCTOR JACKETED PER LATEST AEIC CS7 SPECIFICATION	INACTIVATED
CAICL 017	CABLE, SOLID DIELECTRIC (XLPE) 2000-KCM, 69KV, 1/C, ALUMINUM CONDUCTOR JACKETED PER LATEST AEIC CS7 SPECIFICATION	INACTIVATED
CAICL 022	CABLE, 750KCM COPPER, XLPE, INSULATED 138KV CONDUCTOR	0/0
CNNHS 001	CONNECTOR, FOR HEAT-SHRINK SPLICE 1500KCM, 69KV CONDUCTOR	3/9
CNNHS 002	CONNECTOR, FOR HEAT-SHRINK SPLICE 2000KCM, 69KV CONDUCTOR	3/9
GSKKT 001	GASKET KIT, PIPE TYPE CABLE TERMINATOR, FOR G & W MODEL ATA-130, 69 KV POTHEAD, (KIT INCLUDES-(1) A-1851-34, (1) A1851- 39, (3) A-1876, (1) A-1876-2, KITS TO BE ASSEMBLED IN ONE PACKAGE.	INACTIVATED
GSKKT 002	GASKET KIT, PIPE TYPE CABLE TERMINATOR, FOR G & W MODEL #ATA-137, 115 KV POTHEAD (PER DWG #D7260-41YAO), TERMINATION S/N ATA-1673, KIT PARTS TO BE ASSEMBLED IN ONE SHRINK WRAP PACKAGE	INACTIVATED
SPLKI 008	SPLICE KIT, REPAIR, 69-KV, 1500MCM & 2000MCM. 5488A-1750-2000 QSIII COLD SHRINK SILICONE RUBBER SPLICE KIT.(69/72 KV) EACH KIT INCLUDES RE-JACKETING MATERIALS,SHIELDING COMPONENTS AND 1750-2000KCMIL SHEAR CONNECTOR.	3/6
TAPEL 020	TAPE, HIGH VOLTAGE, LINER LESS RUBBER SPLICING FOR UP TO 69 KV, 130 C, 2" X 30'	18/36
THEHS 013	THERMOFIT HEAT-SHRINK PRODUCTS, SPLICE- KIT, 69KV CONDUCTOR, 1500-2000KCM CABLE RANGE NO-CONNECTOR	3/9
TRMKT 001	TERMINATOR KIT, HEAT SHRINK, 69KV, TO BE PROVIDED WITH (1) ONE ANDERSON ELECTRIC ALUMINUM COMPRESSION TERMINAL - #CCLS- 1424-D, (1) ANDERSON ELECTRIC TRANSITION PAD - TP-C & (1) ONE KELLEMS GRIP - #022-11-1560 OR APPROVED EQUALS FOR 1500 KC	1/1
TRMKT 002	TERMINATOR KIT ADAPTER, FOR 2000 KCM CABLE, 69KV HEAT SHRINK. TO INCLUDE (1) ONE, ANDERSON ELECTRIC ALUMINUM COMP. TERMINAL #CCLS 1659D AND (1) ONE, KELLEMS GRIP #022-11-1561 OR APPROVED EQUALS. TO BE USED WITH 69KV, HEAT SHRINK TERMINATOR.	3/3

CHILL RING



PIPE O.D.	DIM. (A)	DIM. (B)
4½"	4.250"	4.500"
5 9/16"	5.3125"	5.5625"
6"	5.750"	6.000"
6 5/8"	6.375"	6.625"
7"	6.750"	7.000"
8 5/8"	8.375"	8.625"
10 3/4"	10.500"	10.750"
12 3/4"	12.500"	12.750"

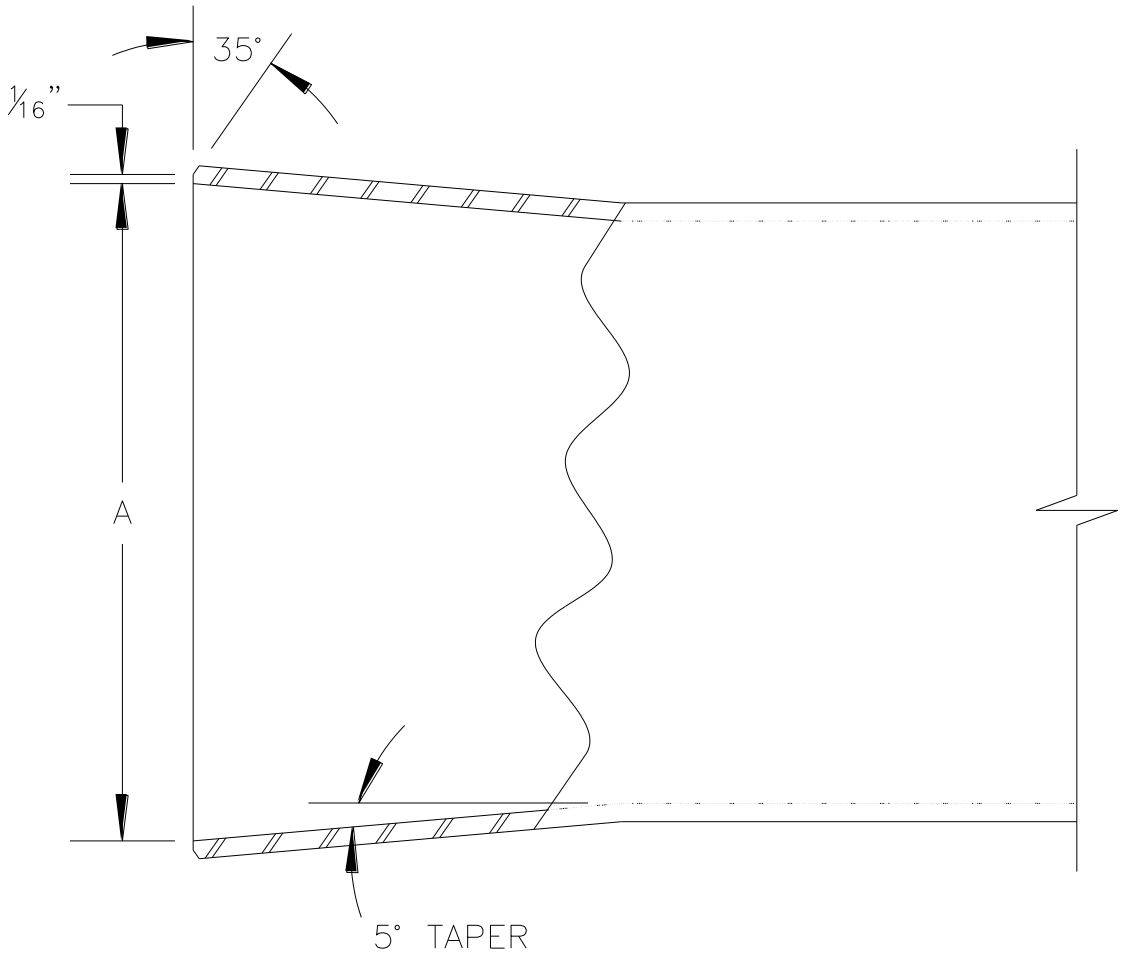
FLARE, FIELD, OILOSTATIC



NOTE: DEPTH OF FLARE SHALL VARY WITH THICKNESS OF PIPE

PIPE O.D.	DIM. (A)
4½"	4.500"
5 9/16"	5.5625"
6"	6.000"
6 5/8"	6.625"
7"	7.000"
8 5/8"	8.625"
10 3/4"	10.750"

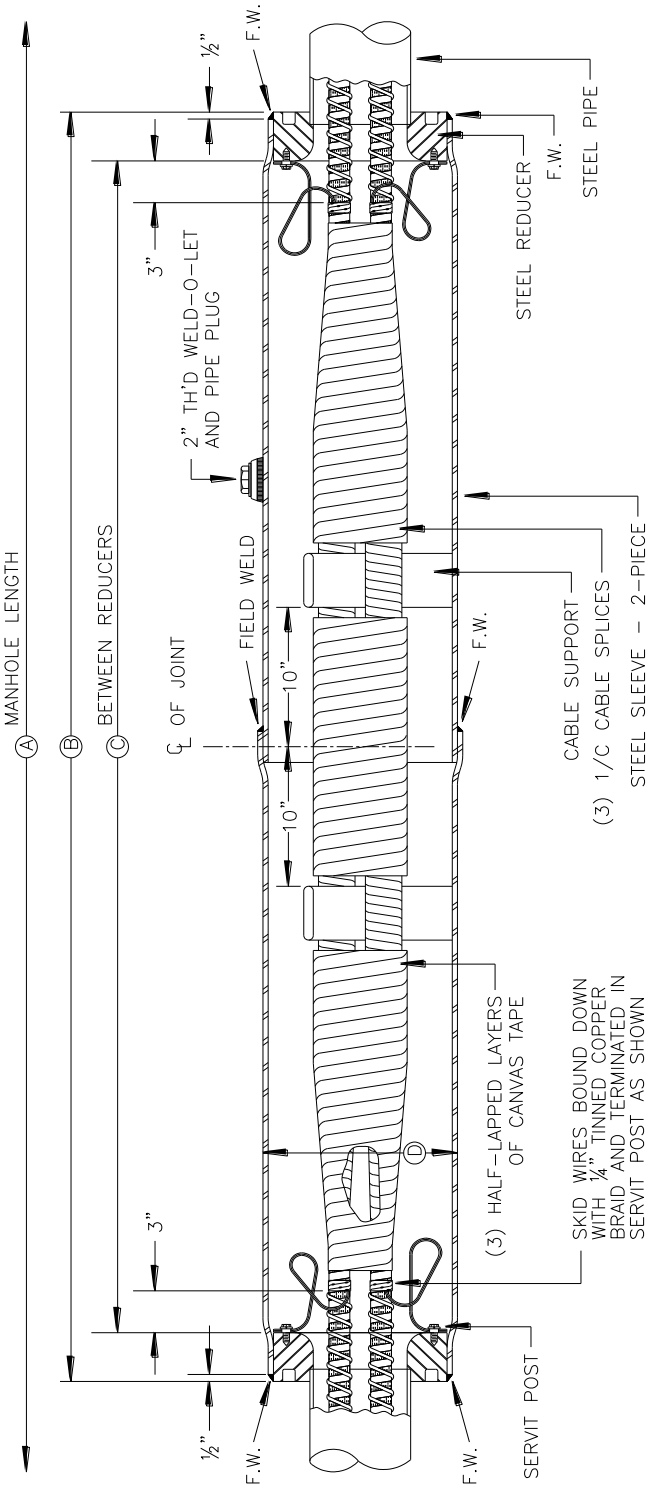
FLARE, PIPE END, OILOSTATIC



NOTE: DEPTH OF FLARE SHALL VARY WITH THICKNESS OF PIPE

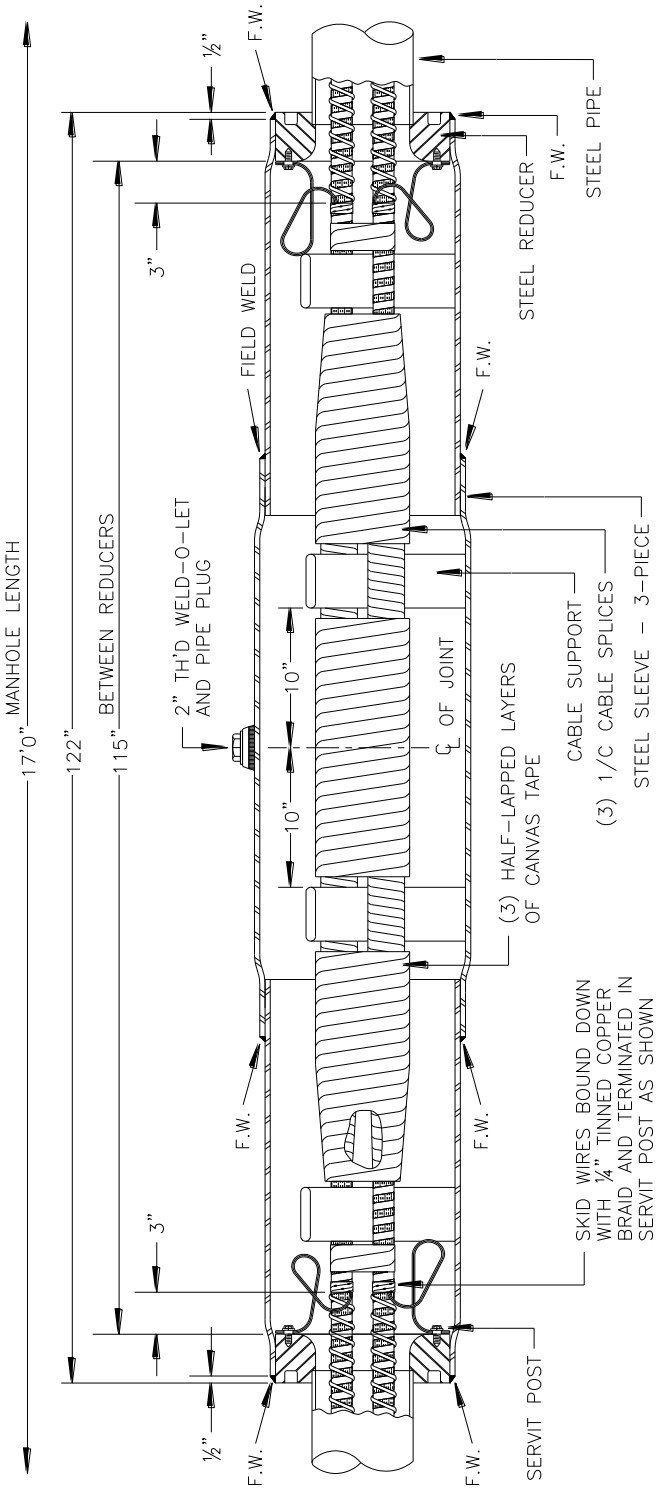
PIPE O.D.	DIM. (A)
4½"	4.500"
5 9/16"	5.5625"
6"	6.000"
6⅝"	6.625"
7"	7.000"
8⅝"	8.625"
10¾"	10.750"

JOINT ASSEMBLY, 69 & 138KV

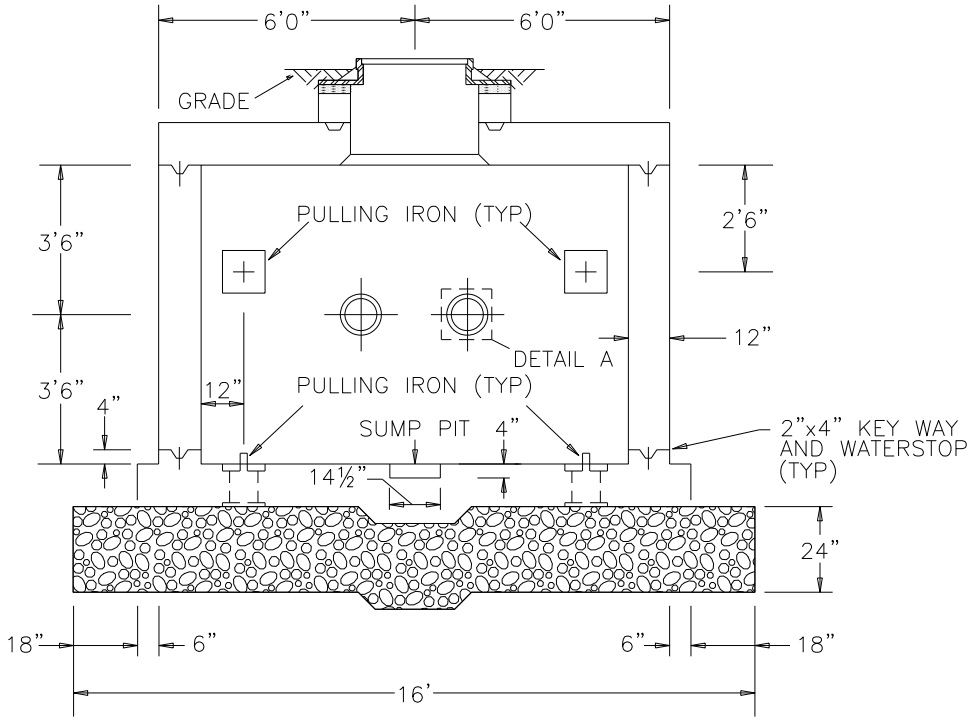


TYPICAL DIMENSIONS				
VOLTS kV	Ⓐ	Ⓑ	Ⓒ	Ⓓ
69	14'0"	67"	60"	12¾"
138	15'0"	91"	84"	14"

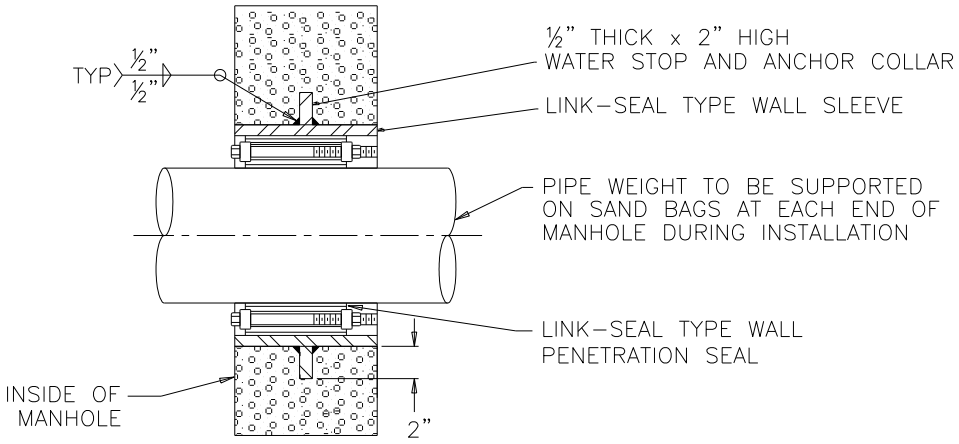
JOINT ASSEMBLY, 230KV



MANHOLE, END VIEW

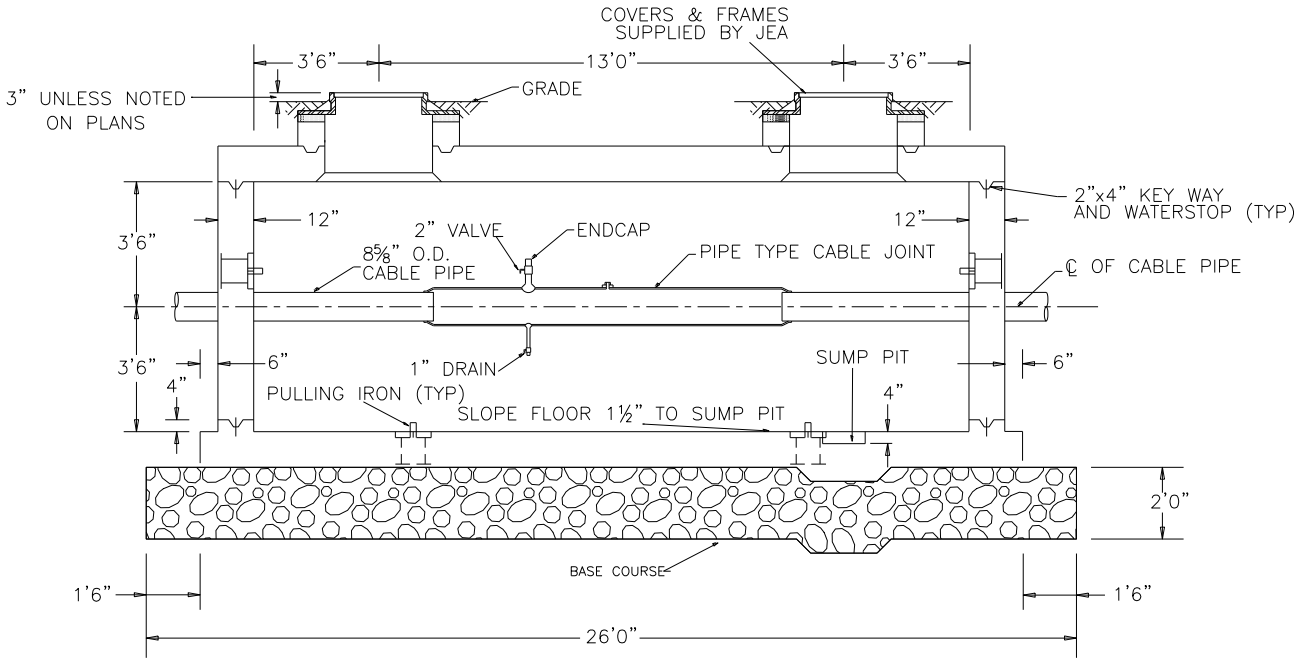


END VIEW



CROSS SECTION DETAIL A

MANHOLE, SIDE VIEW

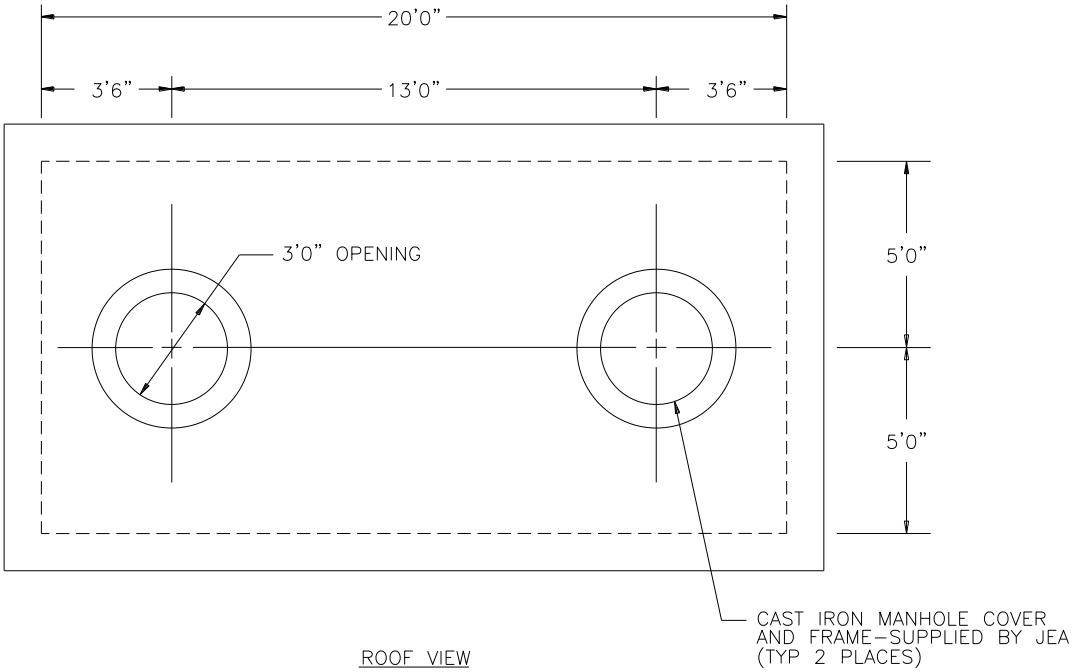


SIDE VIEW

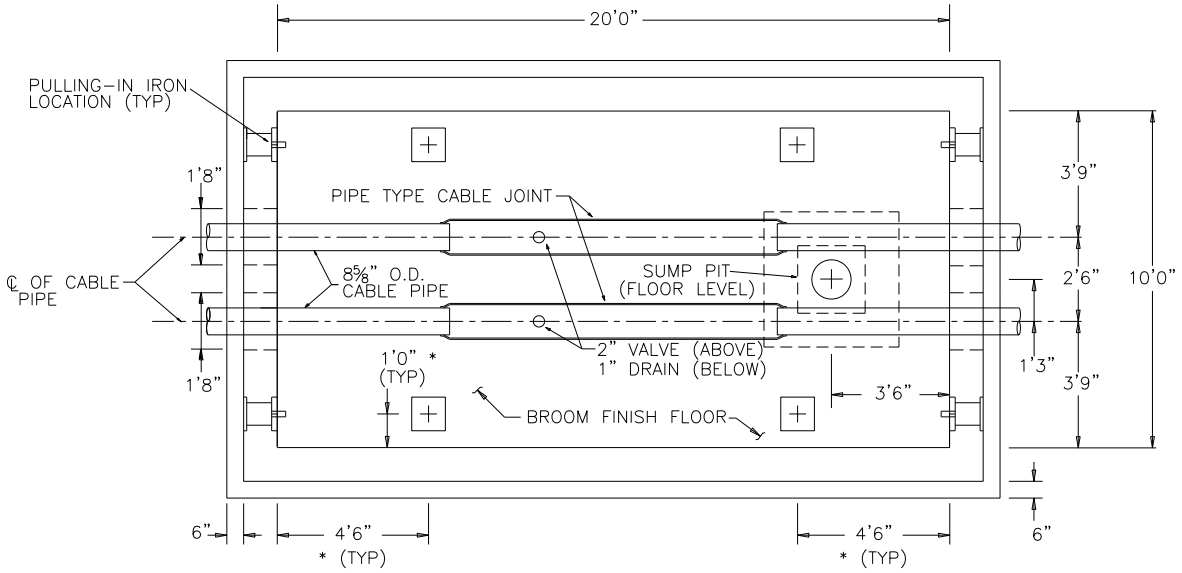
NOTES:

1. ALL CONCRETE SHALL BE 4000 PSI MIN STRENGTH AT 28 DAYS.
2. MANHOLE SHALL BE DAMP PROOFED BY APPLYING TWO COATS OF COAL TAR DAMPPROOFING PAINT–KOPPERS "BITUMASTIC SUPERSERVICE BLACK", POLYGUARD "CA–7" COATING, OR TNEMEC "46–450 HEAVY TNEMECOL" TO EXTERIOR WALL SURFACES BELOW GRADE.
3. ALL REINFORCING LAP SPLICES SHALL BE AS REQUIRED BY ACI CODE.
4. PRECAST CONSTRUCTION SHALL BE DESIGNED TO SUPPORT LOADING INDICATED AND INTERIOR DIMENSIONS SHALL BE AS INDICATED. NO INDIVIDUAL PRECAST COMPONENT TO BE INSTALLED VERTICAL SHALL HAVE A VERTICAL DIMENSION GREATER THAN 6' IN HEIGHT. MANHOLES SHALL BE DESIGNED TO RESIST UPLIFT ASSUMING WATER TABLE AT GRADE.
5. CONTRACTOR SHALL INSTALL CABLE PIPE STRAIGHT THROUGH MANHOLE. CABLE JOINTS TO BE INSTALLED BY CONTRACTOR.
6. BASE COURSE SHALL BE 24" THICK AND EXTEND 18" BEYOND PERIMETER OF MANHOLE. BASE COURSE SHALL BE WELL–GRADED CRUSHED STONE, CRUSHED GRAVEL OR CRUSHED CONCRETE MEETING ASTM C33, GRADATION 7 (½" TO #4) COMPACTED TO 85% RELATIVE DENSITY.
7. LIVE LOADING DESIGN SHALL BE IN ACCORDANCE WITH AASHTD–H20 SPECIFICATIONS.

MANHOLE, ROOF VIEW & TOP VIEW



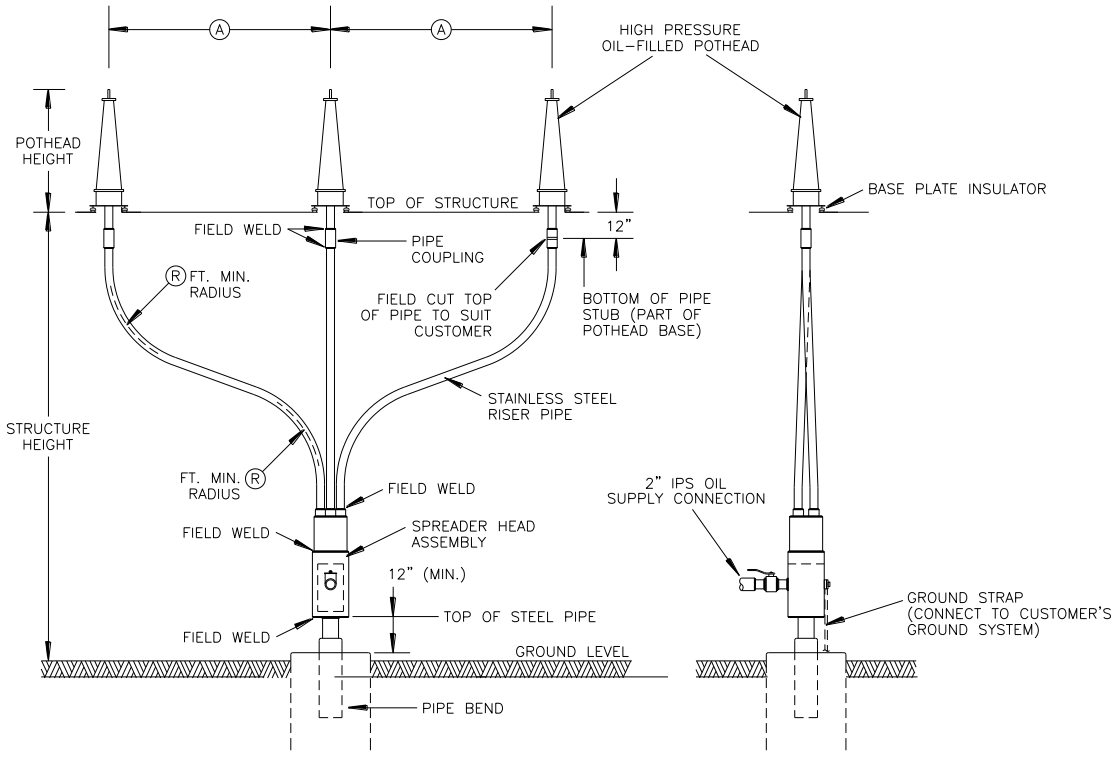
ROOF VIEW



TOP VIEW
(COVER REMOVED)

* PULLING IRONS SHALL BE CAST IN WALLS AND FLOOR. CONTRACTOR SHALL DESIGN AND FABRICATE THE PILLING IRONS. IRONS SHALL BE DESIGNED TO ACCEPT PULLING HARDWARE REQUIRED FOR CABLE PULLING. PULLING IRONS SHALL BE DESIGNED FOR 40000 POUNDS TENSION AT THE LOCATIONS SHOWN. IRONS SHALL BE HOT–DIP GALVANIZED AFTER FABRICATION. LOCATION OF PULLING IRONS WILL BE VERIFIED BY CONTRACTOR BASED ON PULLING SHEAVE DIAMETER AND PREFERRED LOCATION.

TERMINATION ASSEMBLY, ABOVE GROUND

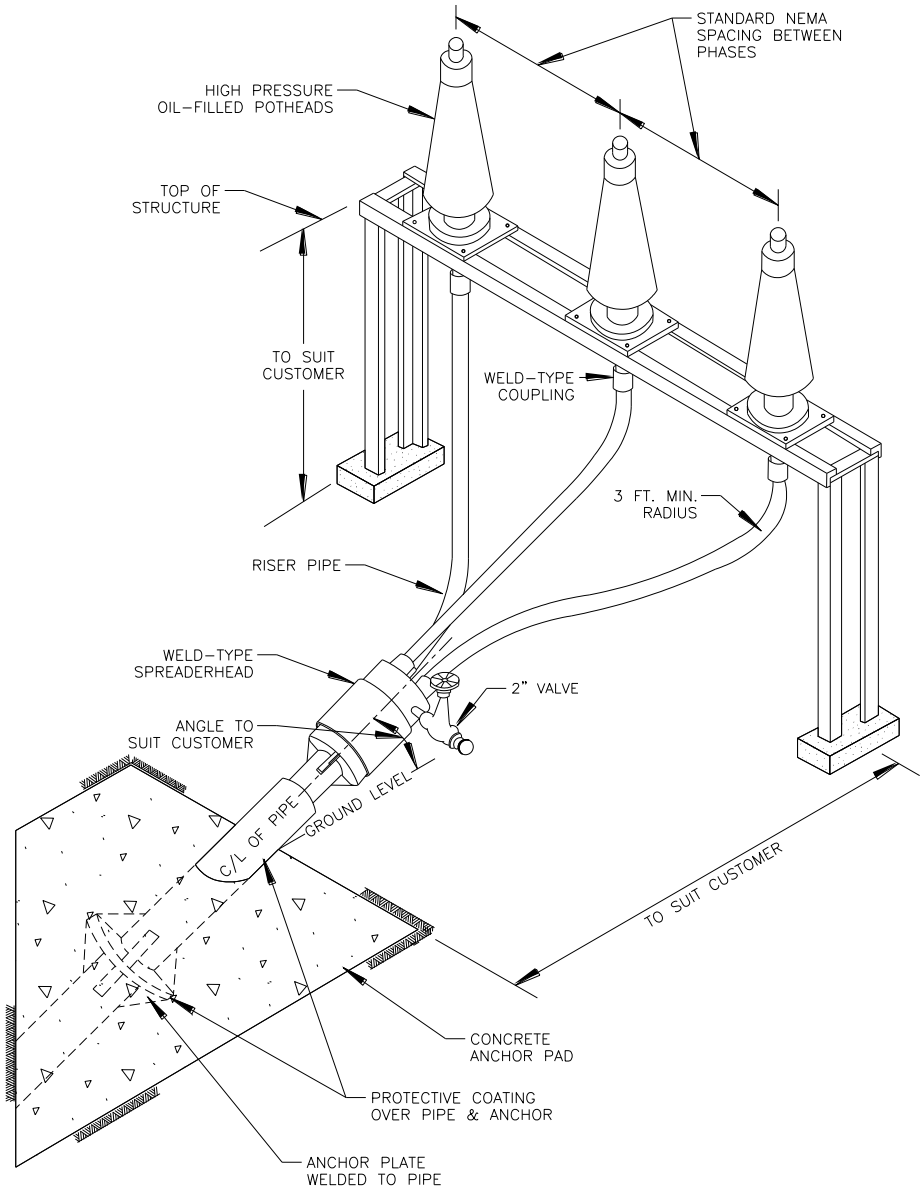


TYPICAL DIMENSIONS					
FIG. NO.	kV	A NEMA STD.	R	POTHEAD HEIGHT	STRUCTURE HEIGHT
1	69	4'6"	3'	5'0"	11'0"
2	92	5'0"	3'	5'8"	11'0"
3	115	6'0"	3'	6'2"	12'6"
4	138	7'0"	3'6"	7'1"	13'6"
5	161	8'0"	4'	7'6"	15'6"
6	230	11'0"	4'	10'0"	15'6"
7	345	16'0"	6'	12'6"	21'0"

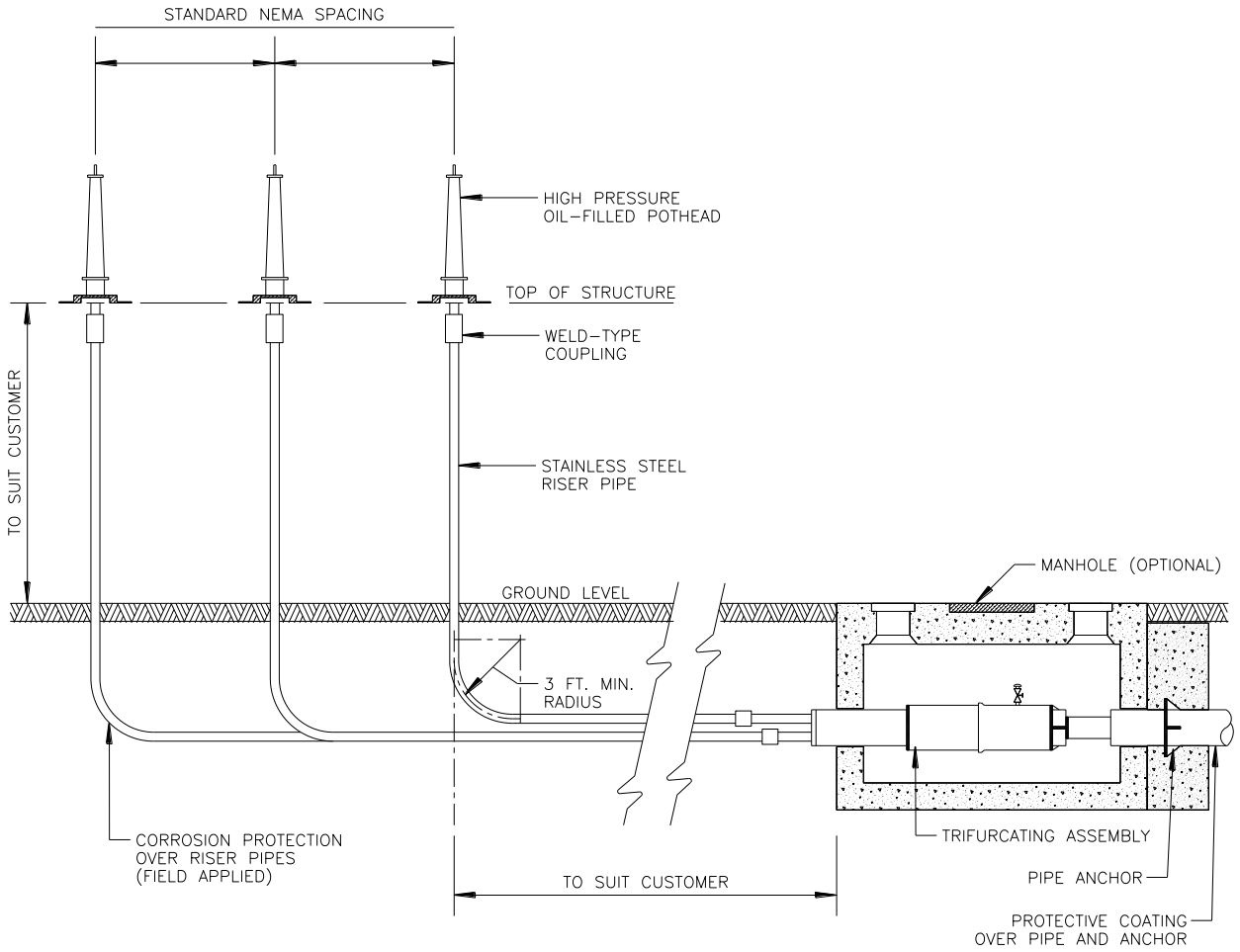
NOTES:

1. RADII & DIMENSIONS OF RISER PIPE ASSEMBLY ARE APPROXIMATE AND SHOULD BE VERIFIED TO SUIT FIELD CONDITIONS.

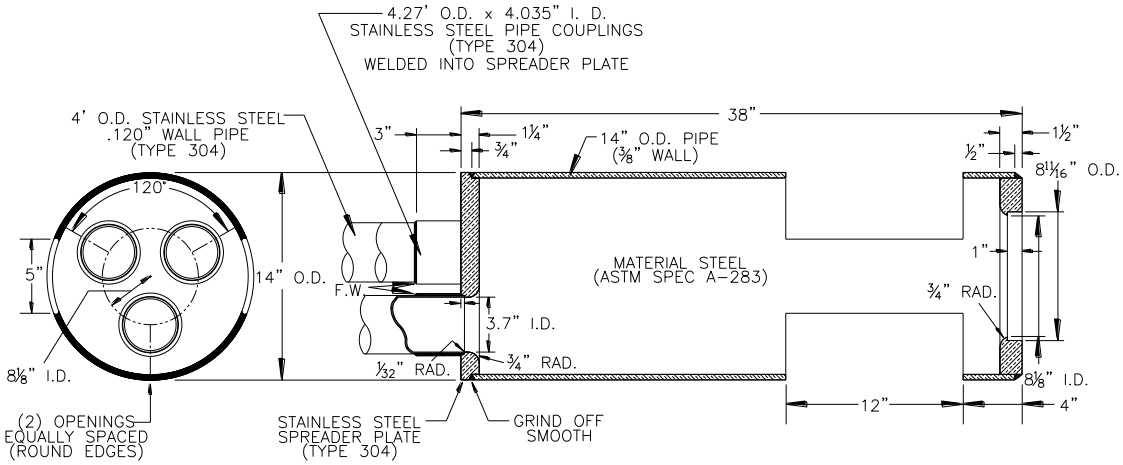
TERMINATION ASSEMBLY, ANGLE TYPE

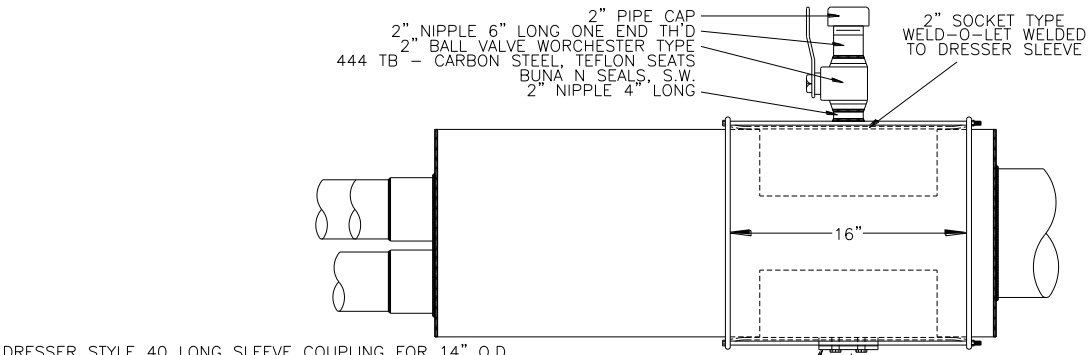


TERMINATION ASSEMBLY, BELOW GROUND



TERMINATION ASSEMBLY, WELD-TYPE





DRESSER STYLE 40 LONG SLEEVE COUPLING FOR 14" O.D. STEEL PIPE WITH ⅜" x 1³⁄₁₆" ARMORED GASKETS FOR TEMPORARY CLOSURE OF OPENINGS. FOR FINAL CLOSURE, FLARE AT EACH END OF COUPLING IS TO BE REMOVED AND SLEEVE WELDED CIRCUMFERENTIALLY IN PLACE.

INSTRUCTIONS

INTERIOR FINISH:
1. WIRE BRUSH & WIPE CLEAN
2. APPLY (1) COAT OF NO-OX-ID #600 SOLVENT CLEANER
3. APPLY (1) COAT OF NO-OX-ID #260 PAINT (BOND COAT)

EXTERIOR FINISH:
1. SANDBLAST TO BRIGHT METAL
2. APPLY (1) COAT OF YELLOW ZINC CHROMATE

AFTER FABRICATION, TEST AT 100# GAS PRESSURE SUBMERGED IN WATER BATH FOR POROSITY AND AGAIN AT 400# GAS PRESSURE

THIS PAGE IS INTENTIONALLY LEFT BLANK