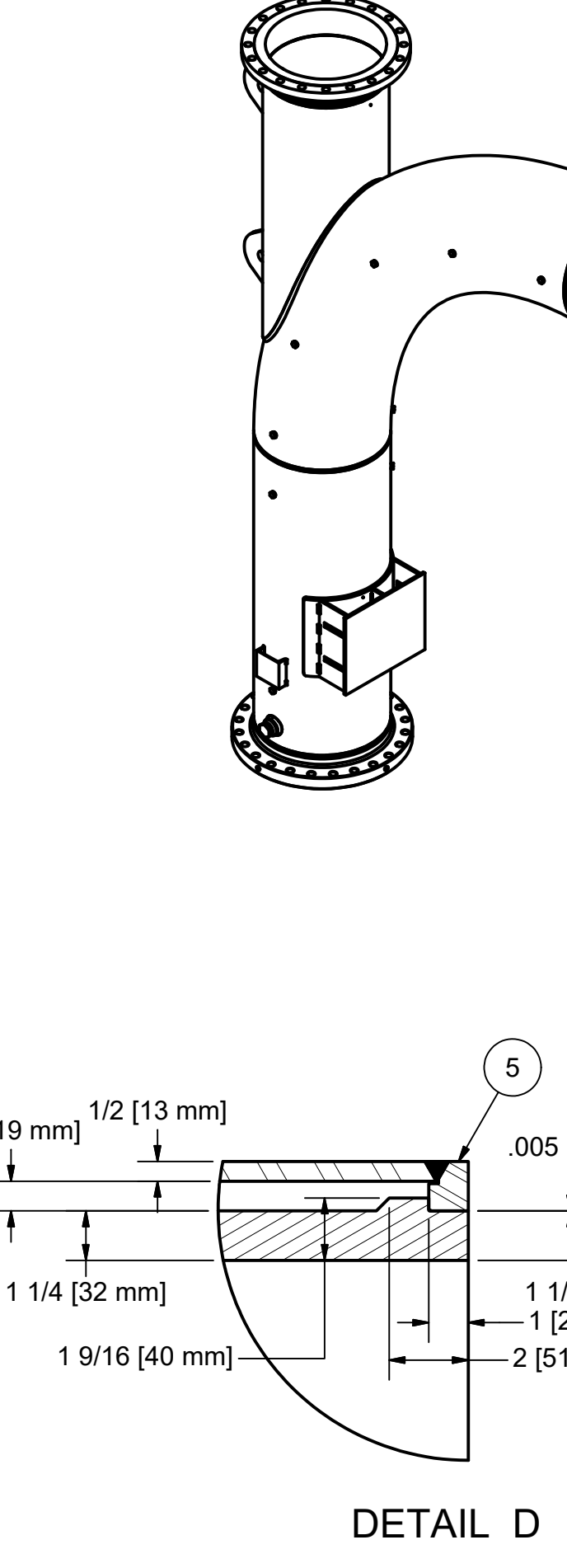
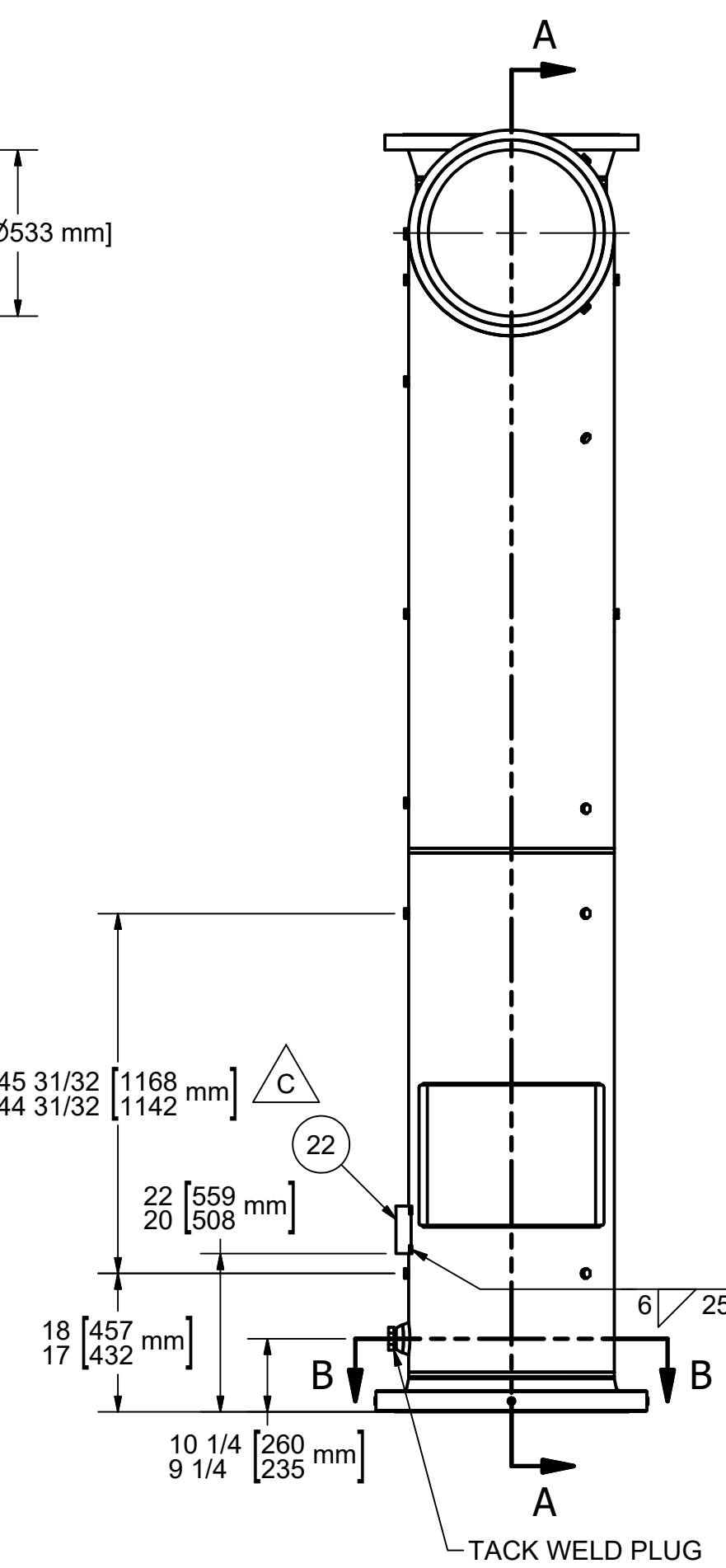
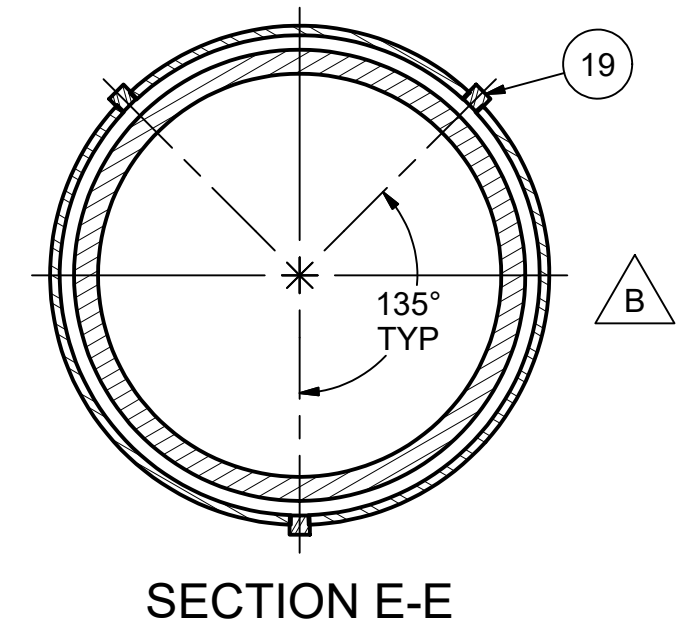
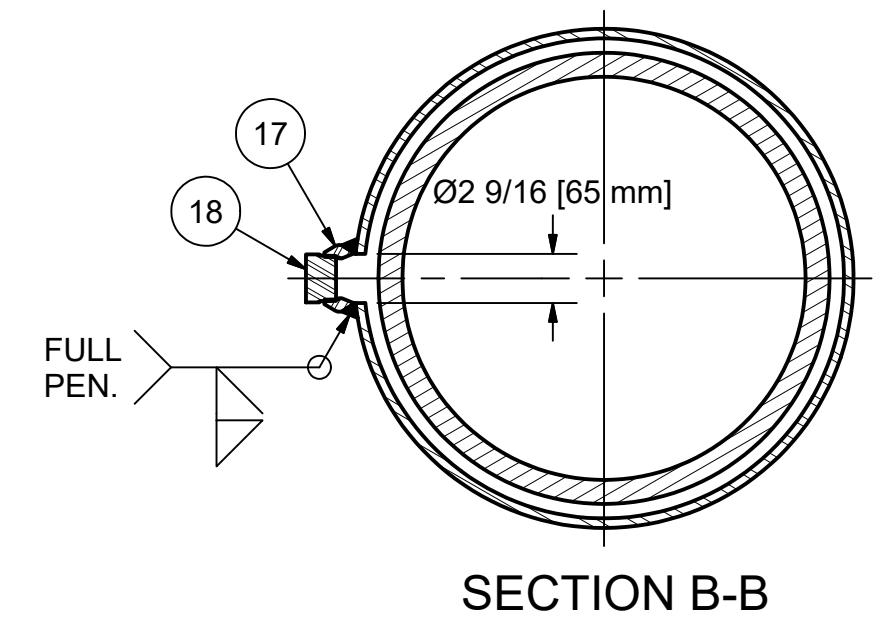


BILL OF MATERIAL			
ITEM	ITEM QTY	PART NUMBER	DESCRIPTION
1	1	A1-18001-200-01 26in elbow	26"-3D XS x 90° FORGED ELBOW, A234 WPR
2	1	A1-18001-200-02 26in pipe - inlet	26" XS x 1679mm PIPE, API 5L Gr.B PSL-2
3	1	A1-18001-200-03 26in pipe - outlet	26" XS x 4435mm PIPE, API 5L Gr.B PSL-2
4	1	A1-18001-200-04 24in dummy leg	24" XS x 1610mm PIPE, API 5L Gr.B PSL-2
5	1	A1-18001-200-05 End ring	Ø660mm x Ø597mm x 1" PLATE, A516 Gr.70N
6	1	A1-18001-200-06 26in CL150 RFWN flange - custom	26" XS CL150 ASME B16.47 Ser.A RFWN FLANGE, A105N
7	1	A1-18001-200-07 24in CL150 RFWN flange	24" XS CLASS 150 ASME B16.5 RFWN FLANGE, A105N
8	1	A1-18001-200-08 HCWI elbow - male	533mm ID x 32mm WALL x 2134mm RADIUS x 45° HCWI ELBOW, ASTM A532 CLASS III TYPE A, PF#
9	1	A1-18001-200-09 HCWI elbow - female	533mm ID x 32mm WALL x 2134mm RADIUS x 45° HCWI ELBOW, ASTM A532 CLASS III TYPE A, PF#
10	1	A1-18001-200-10 HCWI pipe - inlet	533mm ID x 32mm WALL x 1320mm HCWI LINER, ASTM A532 CLASS III TYPE A, PF#
11	2	A1-18001-200-11 HCWI pipe - center	533mm ID x 32mm WALL x 1473mm HCWI LINER, ASTM A532 CLASS III TYPE A, PF#
12	1	A1-18001-200-12 HCWI pipe - outlet	533mm ID x 32mm WALL x 1473mm HCWI LINER, ASTM A532 CLASS III TYPE A, PF#
13	1	A1-18001-200-13 26in HCWI liner - pup	533mm ID x 32mm WALL x 305mm HCWI LINER, ASTM A532 CLASS III TYPE A, PF#
14	4	A1-18001-200-14 Trap rod	Ø3/8" x 86mm ROUND BAR, A36
15	2	A1-18001-200-15 Lifting lug	450mm x 239mm x 1" PLATE, CSA G40.21 Gr.350 WT Cat.4, SEE: A1-17093-800-07
16	1	A1-18001-400-00 Pipe shoe - S4-A-2-26	AS PER 074-0000-220-000-026 01
17	1	A1-18001-100-07 2in x 26in CL3000 threadolet	2" x 26" CLASS 3000 THREADOLET, A105N
18	1	ASME B16.11 Hex Head Plug 2	2"-NPT HEX HEAD PLUG, A105N
19	28	ASME B16.11 Hex Head Plug 3/4	3/4"-NPT HEX HEAD PLUG, A105N
20	4	ANSI B18.3 - 1/2-13 UNC x 0.5	1/2"-NC x 1/2" SOCKET HEAD SET SCREW, PLATED
21	4	Parker Countersunk Hex-Head Plug 219P 219P-8	1/2"-NPT SOCKET HEAD PLUG, A105N
22	1	Tag mount - 6in	C6x8.2 x 6" [152mm], 44W
23	AS REQ'D	GROUT	SIKA 300PT



P.O.#	1397868
P.O. TITLE	MISC - K2 CWI PIPING
IOR #	141-3015-50
DOCUMENT #	1397868-A05-0010
SDRL CODE(S)	A05

EQUIPMENT TAG NUMBER(S)
TAG #: SP-K3493

SUPPLIER DOCUMENT REVIEW
PURCHASER'S REVIEW STATUS, CIRCLE THE APPROPRIATE STATUS:
CODE 1 - NO COMMENTS
CODE 2 - REVIEWED WITH MINOR COMMENTS
CODE 3 - REVIEWED WITH COMMENTS
CODE 4 - REJECTED
CODE 5 - SUPERSEDED
CODE 6 - VOID
CODE 7 - FOR INFORMATION
PURCHASER REVIEW / REVIEWER
DATE: SIGNATURE:

DESIGN CODE: ASME B31.3, Add.2016 EDITION
SERVICE: BITUMEN FROTH
DESIGN PRESSURE: 1580 kPag (229 psig)
DESIGN TEMPERATURE: 93°C (199°F) -29°C (-20°F)
TEST PRESSURE: 3000 kPag (435 psig)
TEST TEMPERATURE: 15°C (59°F)
TEST DURATION: 10 MINUTES

REVISION HISTORY		
REV	DATE	DESCRIPTION
D	11/20/18	REMOVED DETAIL F, INLET PIPE WAS 19mm WALL, INLET FLANGE WAS 24 1/2" BORE, TRAP ROD WAS 92mm LONG, DIMENSION WAS 1 7/8" [48mm], ADDED WEEP HOLE NOTE
C	11/15/18	ADDED GROUT TO BoM, REMOVED ONE & RELOCATED ONE LIFTING LUG, UPDATED CoG FOR LIFT WITH SUPPORT SPOOL ATTACHED & RELOCATED LIFTING LUGS TO SUIT, UPDATED SP NUMBER, ADDED TAG MOUNT, UPDATED DIMENSIONS, ADDED DETAIL F, UPDATED GENERAL NOTES DRAWING NUMBER
B	10/17/18	CHANGED OUTLET LINER CONFIGURATION, INLET PIPE WAS XS WALL, ADDED PIPE SHOE, ADDED LIFTING LUGS, DUMMY LEG NOW AT COMMON BOTTOM OF PIPE, ADDED CoG, ADDED SECTION E-E, ADDED MDMT
A	8/02/18	ISSUED FOR REVIEW

REFER TO DRAWING A1-00001-100-04 FOR ALL GENERAL NOTES AND SPECIFICATIONS

EST. WT. 18,465 lbs. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES. BREAK ALL SHARP EDGES 01-00R OR 01-00R1 PER ANSI Y14.5 STANDARD. TOLERANCES: X .XX = ±.118 X.XX = ±.050 X.XXX = ±.015 X.XXX = ±.005 ANGLES = ±.12° 125 FINISH ON ALL MACHINED SURFACES		DO NOT SCALE DRAWN BY: GVD DATE: 11/20/18 CHECKED BY: DATE APPROVED: DATE MATERIAL & HEAT TREAT		ALCO Industrial 11650 - 156 Street, Edmonton, Alberta, Canada T6M 3T5 Phone: (780) 451-6222 • Fax: (780) 452-4355	
TITLE 26" HCWI ELBOW SPOOL SP-K3493 IOL KEARL PLANT 2 - EXTRACTION		PROJECT No. A1-18001		REFERENCE 074-2300-080-141-010 01	
FILE NAME A1-18001-200-00 Spool SP-K3493.idw		REV. D		SHEET 1 OF 1	