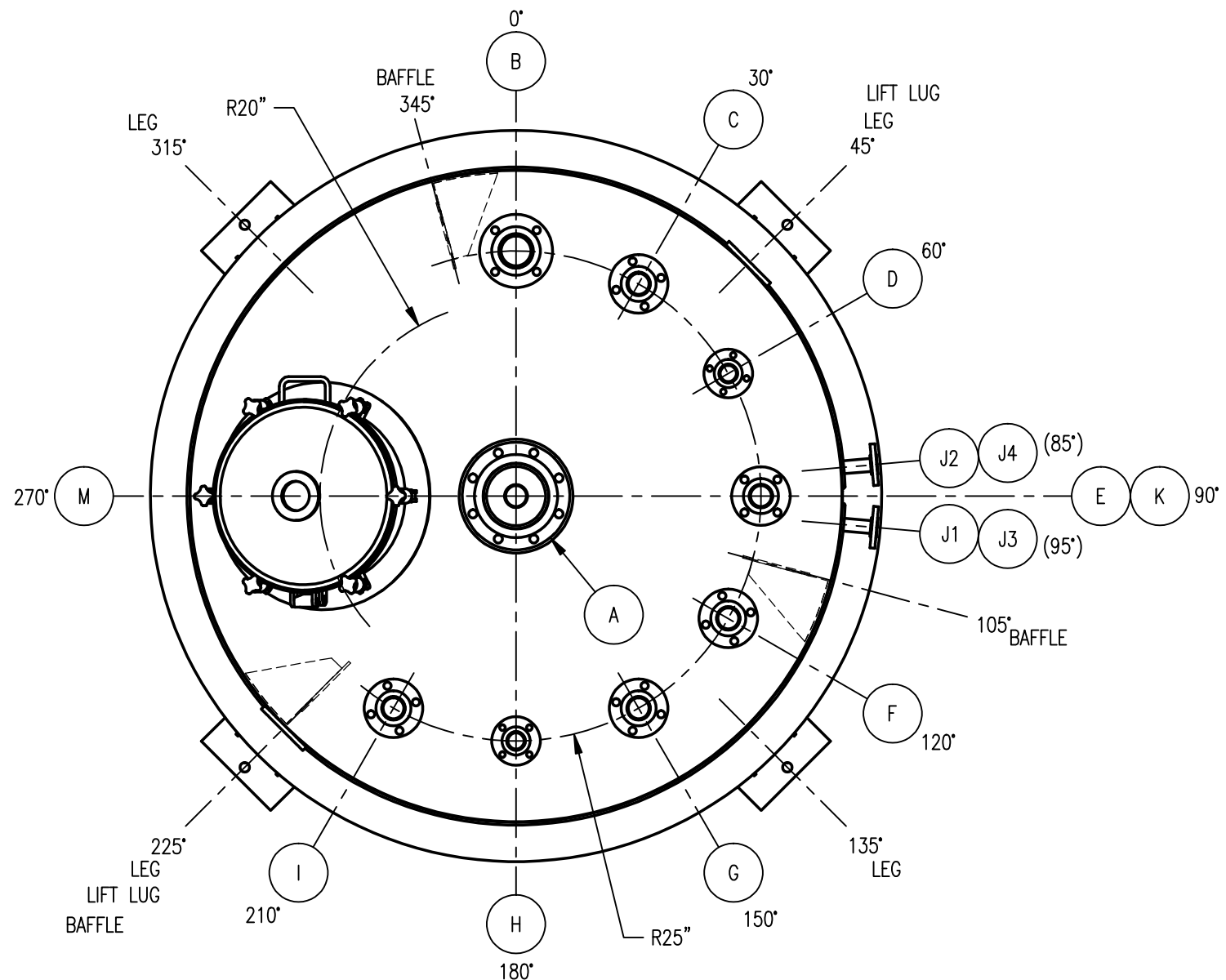


TOP & BOTTOM ELLIPSOIDAL HEADS
66" I.D.
SA-240 316/316L
1/4" THK NOM (.1875" MIN)
2" S.F.

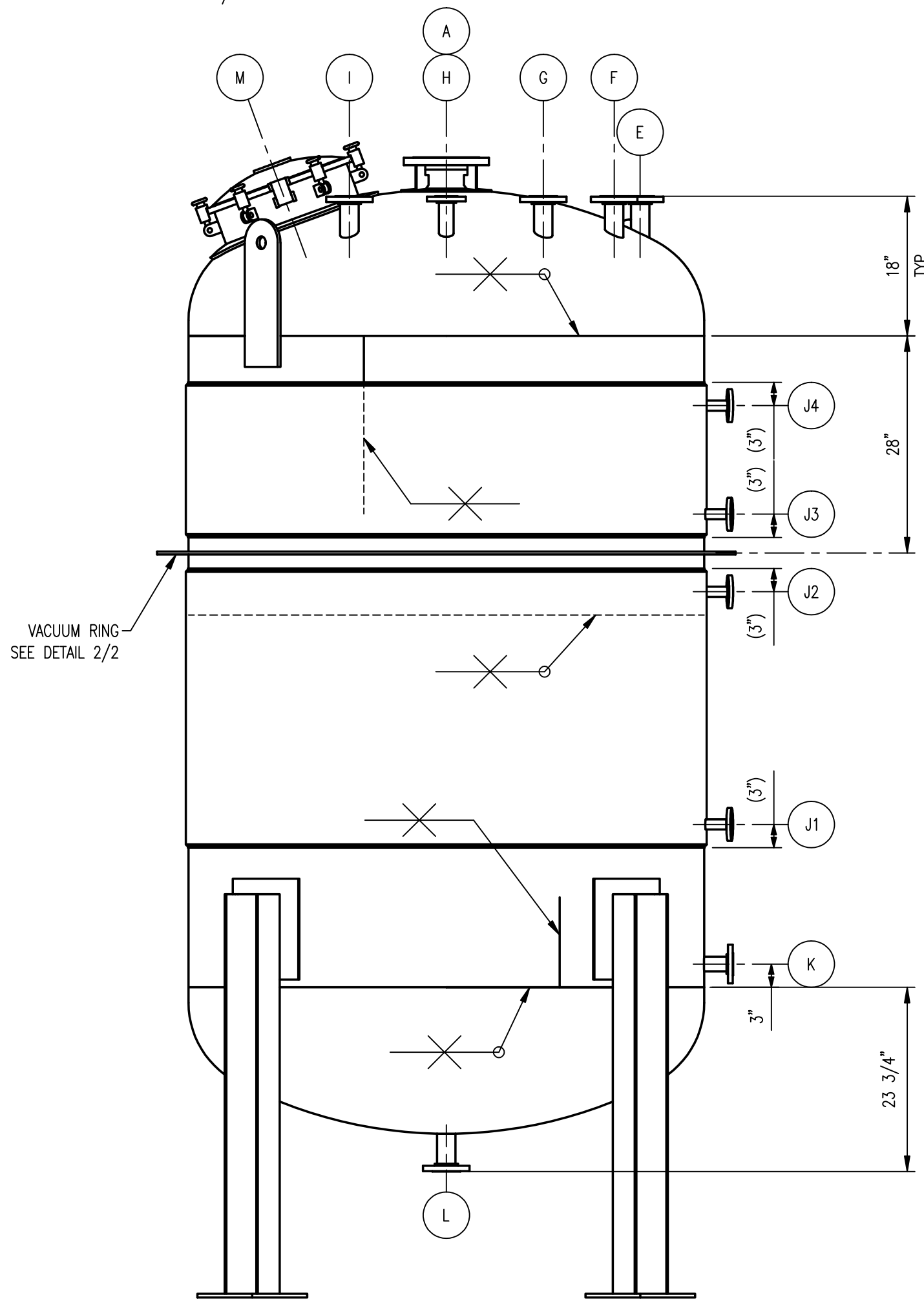
SHELL
66" I.D.
SA-240 316/316L
1/4" THK

SHELL DIMPLE JACKET
14 Ga. (.075" THK)
2" x 2" SPOT SPACING
SA-240 304/304L
SEE DETAIL 7/2 FOR ATTACHMENT

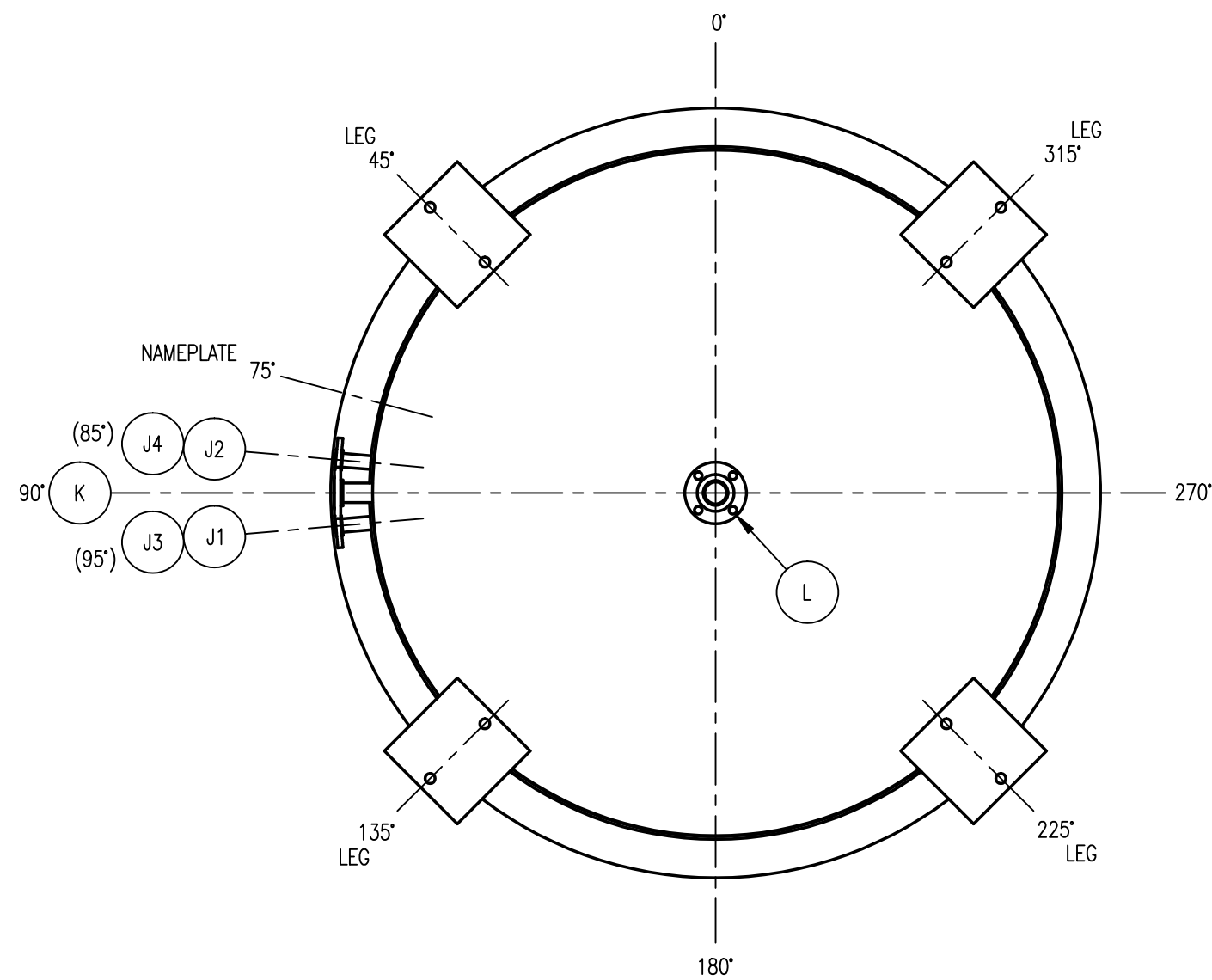
BAFFLES
SEE DETAIL 1/2



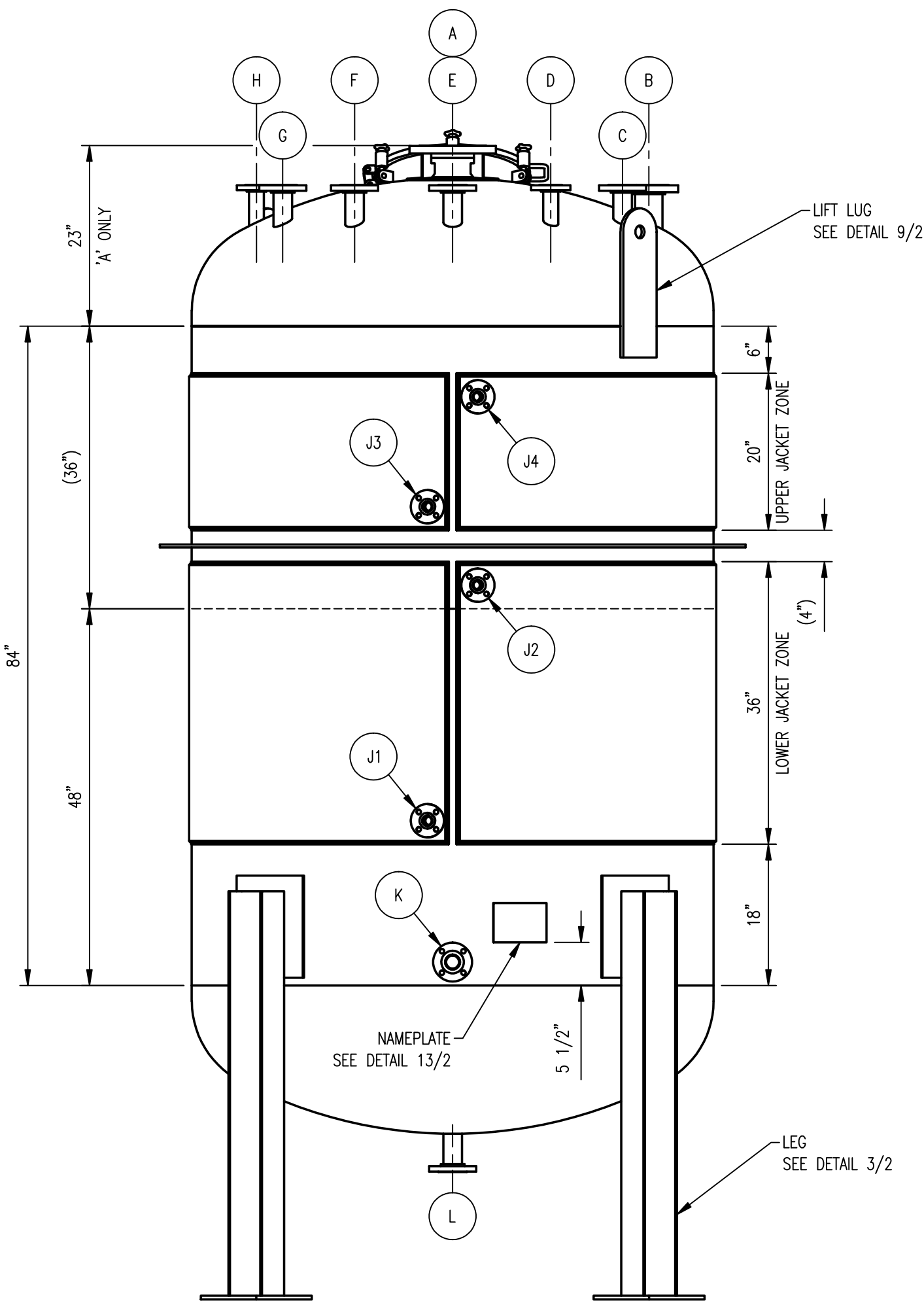
TOP VIEW
3/4"=1'-0"



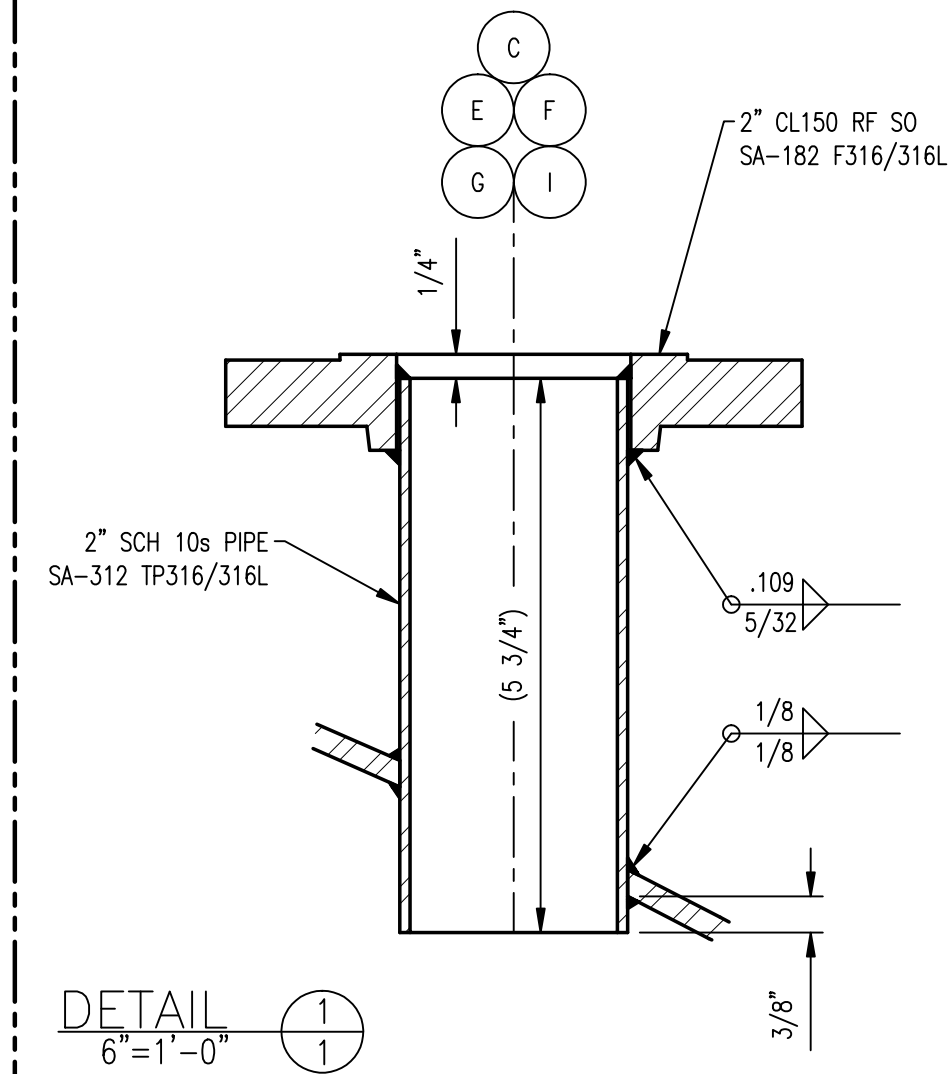
FRONT VIEW
3/4"=1'-0"



BOTTOM VIEW
3/4"=1'-0"



RIGHT VIEW
3/4"=1'-0"



DETAIL
6"=1'-0"

JACKET NOZZLES NOT DESIGNED FOR
EXTERNAL LOADS; PIPING SHOULD NOT
USE JACKET CONNECTIONS AS SUPPORTS

SCHEDULE OF OPENINGS

MARK	SIZE	RTG/TYPE	SCH.	SERVICE	DETAIL	NOTES
A	6"	CL150 RF SO	40s	AGITATOR	4/2	
B	3"	CL150 RF SO	40s	RELIEF VENT	6/2	
C	2"	CL150 RF SO	10s	SPRAY BALL	1/1	
D	1 1/2"	CL150 RF SO	10s	NOZZLE	12/2	
E	2"	CL150 RF SO	10s	BULK FEED INLET	1/1	
F	2"	CL150 RF SO	10s	RECIRC / DRUM FEED	1/1	
G	2"	CL150 RF SO	10s	SPRAY BALL	1/1	
H	1 1/2"	CL150 RF SO	10s	LEVEL SWITCH / N2	12/2	
I	2"	CL150 RF SO	10s	LEVEL TRANSMITTER	1/1	
J1-J4	1"	CL150 RF SO	10s	JACKET CONNECTION	5/2	
K	1 1/2"	CL150 RF SO	10s	TEMPERATURE SENSOR	8/2	
L	2"	CL150 RF SO	10s	OUTLET	11/2	
M	18"	SPECIAL	.236"	MANWAY	10/2	

*INDICATES NOZZLE FLANGE TO BE SUPPLIED WITH BLIND COVER, BOLTS, NUTS & GASKET / COUPLING: w/ HEX PLUG

DESIGN DATA

	MAIN VESSEL	JACKET/COIL
DESIGN PRESSURE:	25 PSIG / FV (14.7 PSI EXT.)	150 PSIG
DESIGN TEMPERATURE:	MIN -20°F MAX 350°F	MIN -20°F MAX 350°F
HYDRO TEST PRESSURE:	33 PSIG	198 PSIG
RADIOGRAPHIC EXAMINATION:	NONE	NONE
STRESS RELIEVE:	NONE	NONE
SPECIFIC GRAVITY OF CONTENTS:	1.4	1.0
JOINT EFFICIENCY:	HEAD(s) 85% / SHELL 70%	JACKET 55%
CORROSION ALLOWANCE:	NONE	NONE
POLISHING ALLOWANCE:	NONE	NONE

VESSEL HYDRO-TEST: 1.3 x 25 PSIG x $\frac{20000 \text{ PSI}}{19700 \text{ PSI}}$ = 33 PSIG (PER SP-PD-001 REV B)

JACKET HYDRO-TEST: 1.3 x 150 PSIG x $\frac{20000 \text{ PSI}}{19700 \text{ PSI}}$ = 198 PSIG (PER SP-PD-001 REV B)

FABRICATION

ASME PRESSURE VESSEL CODE	SECTION VIII, DIVISION 1, 2019 EDITION
ASME CODE STAMP (VESSEL):	YES ☒ NO ☐
ASME CODE STAMP (JACKET/COIL):	YES ☒ NO ☐
SPECIFICATIONS:	OTHER: NATIONAL BOARD REGISTRY
	NAME PLATE: STEEL-PRO STANDARD
WELDING PROCEDURES	INTERIOR/EXTERIOR PREPARATION
C/S TO C/S:	1-1-FC, 1-1-T
S/S TO S/S:	8-8-FC, 8-8-T, 8-8-TPM
C/S TO S/S:	8-1-FC
SPECIAL INSTRUCTIONS	EXTERIOR SURFACE FINISH: MILL
	INTERIOR SURFACE FINISH: MILL
	EXTERIOR WELDING FINISH: MILL, CLEANED
	INTERIOR WELDING FINISH: MILL, CLEANED
	EXTERIOR COATING: RED OXIDE PRIMER, C/S ONLY
	INTERIOR COATING: PASSIVATION: CITRIC ACID PASSIVATION, PER SP-PD-002 REV D

OVERALL HEIGHT: 147"

OVERALL WIDTH: 80 3/4"

NOTES

- 1) FLANGE BOLT HOLES: (UNLESS OTHERWISE NOTED)
ON SHELL - TO STRADDLE LONGITUDINAL CENTER LINES
ON HEADS - TO STRADDLE RADIAL CENTER LINES
- 2) ALL OPENINGS TO BE WEATHER PROTECTED FOR SHIPMENT.
- 3) VESSEL SHALL BE FREE OF EXCESSIVE WELD SPATTER, MILL SCALE, ETC.
- 4) UNLESS OTHERWISE NOTED:
ALL FACTORY MADE WROUGHT STEEL BUTT WELDING FITTINGS TO MEET ASME B16.9-2018
ALL PIPE FLANGES & FLANGED FITTINGS TO MEET ASME B16.5-2013
ALL FORGED FITTINGS, SOCKET WELDING & THREADED FITTINGS TO MEET ASME B16.11-2016.
- 5) UNLESS OTHERWISE NOTED CIRCULAR AND LONG SEAMS ARE OF TYPE 1.
- 6) UNLESS OTHERWISE NOTED ALL REPADS TO HAVE AT LEAST (1) 1/8" MIN DIA. WEEP HOLE
- 7) UNLESS OTHERWISE NOTED ALL STAINLESS STEEL VESSELS TO BE PASSIVATED.

C	-NOZZLES 'B' THRU 'I' ORIENTATION CHANGED	JO			08/06/20
B	-NOZZLES 'B' THRU 'I' ORIENTATION CHANGED	JO			08/05/20
A	-SHELL HEIGHT WAS 96", NOZZLE 'M' ORIENTATION CHANGED, -NOZZLE 'C', 'E', 'F', 'G', 'I' WERE 1 1/2", BAFFLE ORIENTATION CHANGED, -NOZZLE NAMES UPDATED, DETAIL 1/1 ADDED	JO			07/23/20
0	-FOR APPROVAL	JO			07/13/20

REV	DESCRIPTION	BY	ENGR	QC	DATE
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WEIGHTS

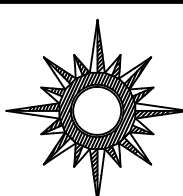
NOM. CAPACITY:	1430 Gals
FULL. CAPACITY:	1639 Gals
EMPTY WEIGHT:	3048 Lbs
WEIGHT FULL H ₂ O:	16836 Lbs

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:

FRACTIONS DECIMALS ANGLES
±1/4" .XX- ±0"-30'
.XXX- .XXX-

DO NOT SCALE DRAWING

REV	STATUS	OF SHEETS
B	C	REVISION
5	4	3
2	1	SHEET



Steel-Pro Incorporated

P.O. Box 449 * Rockland, Maine 04841

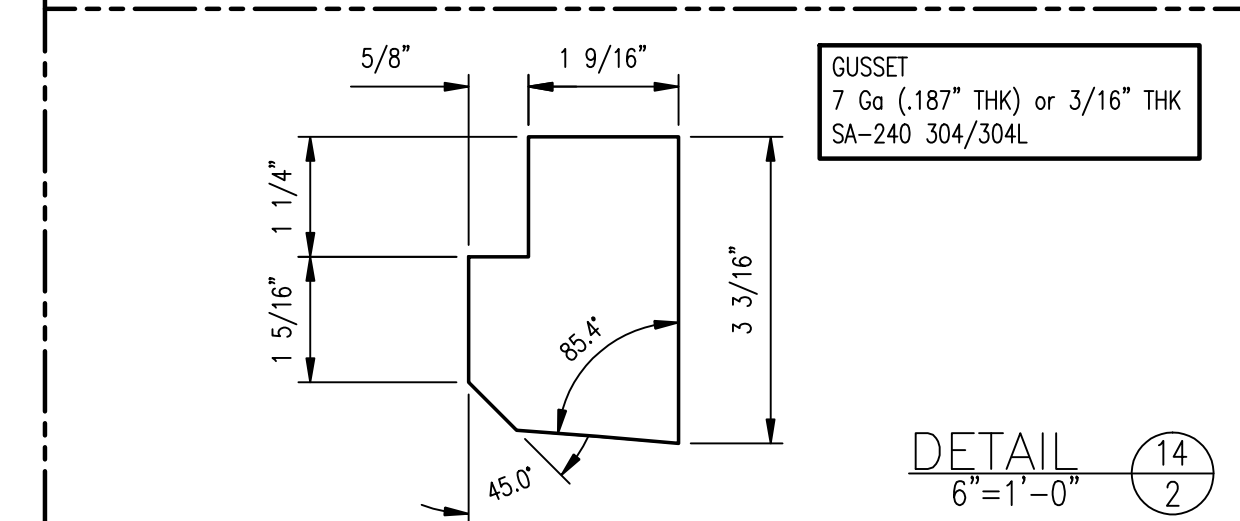
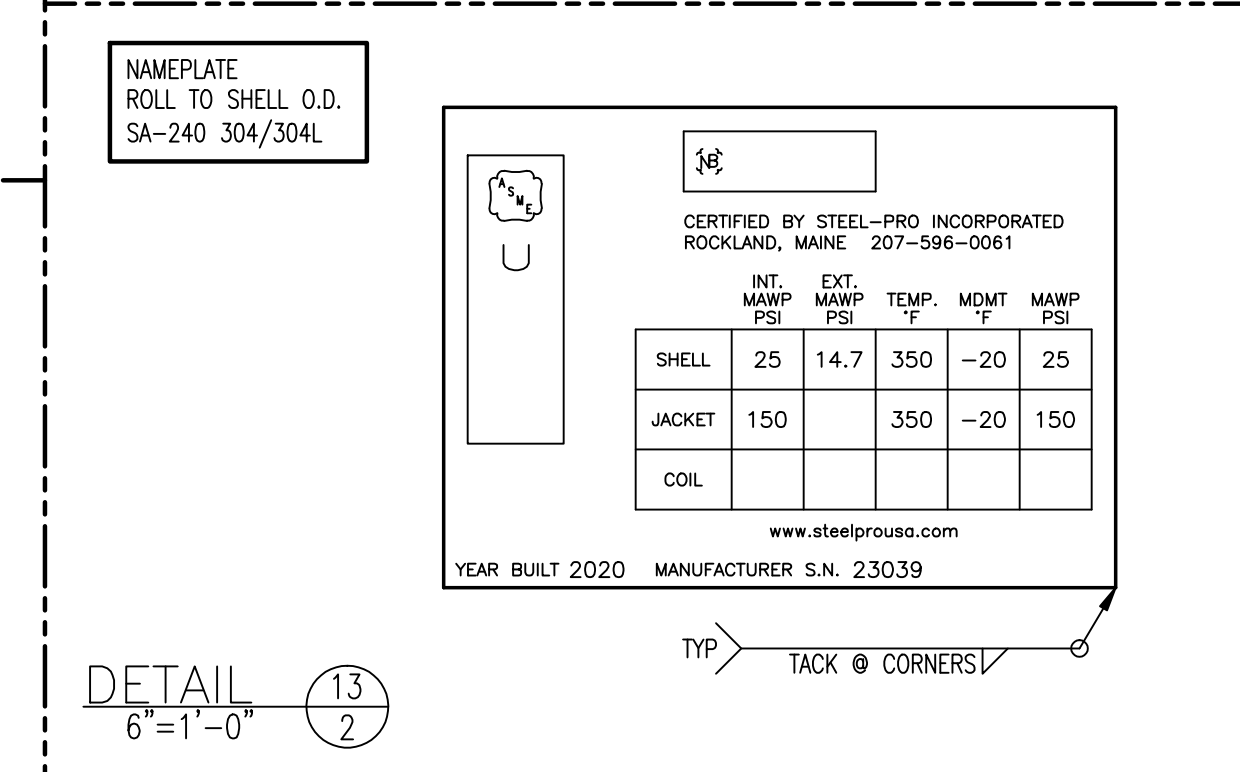
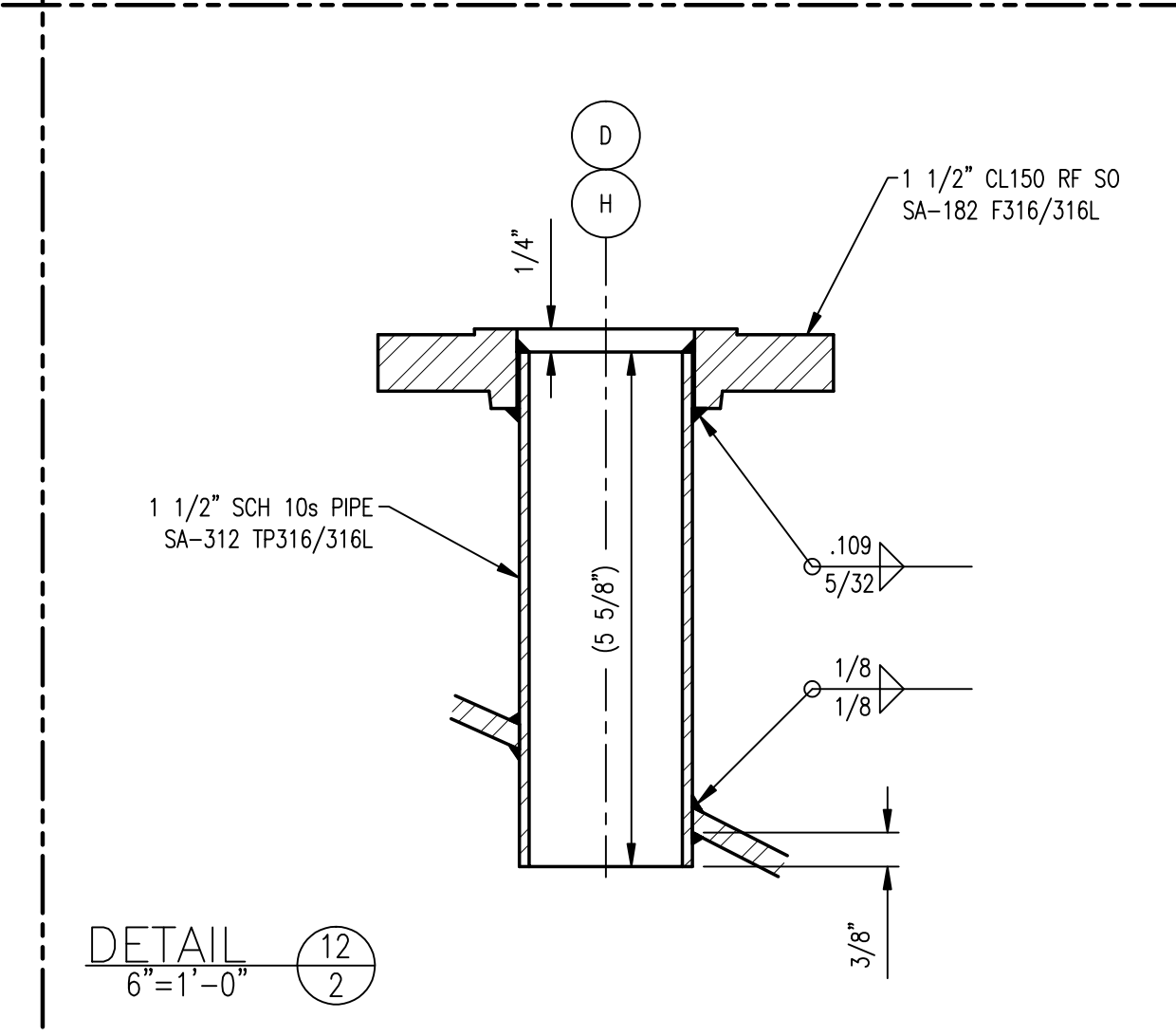
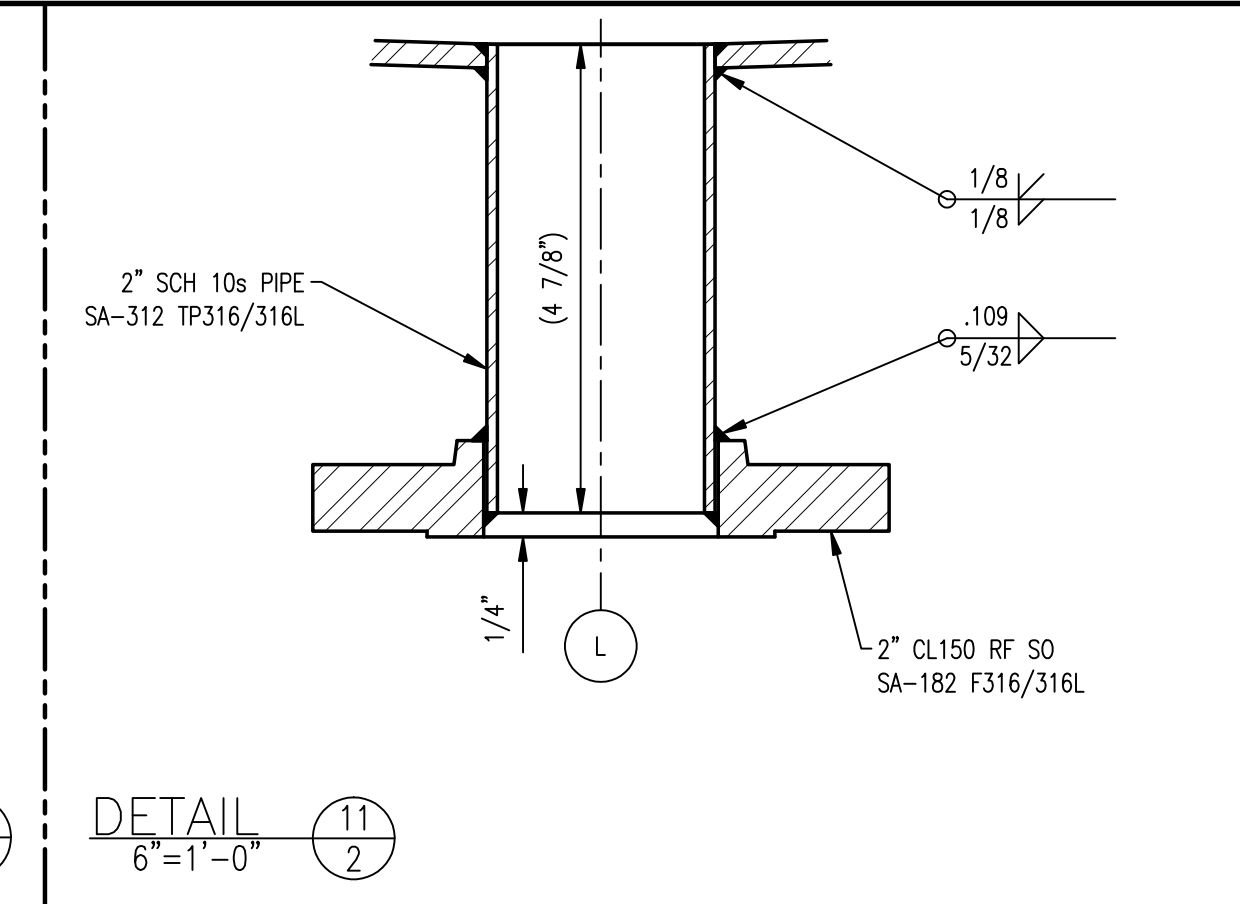
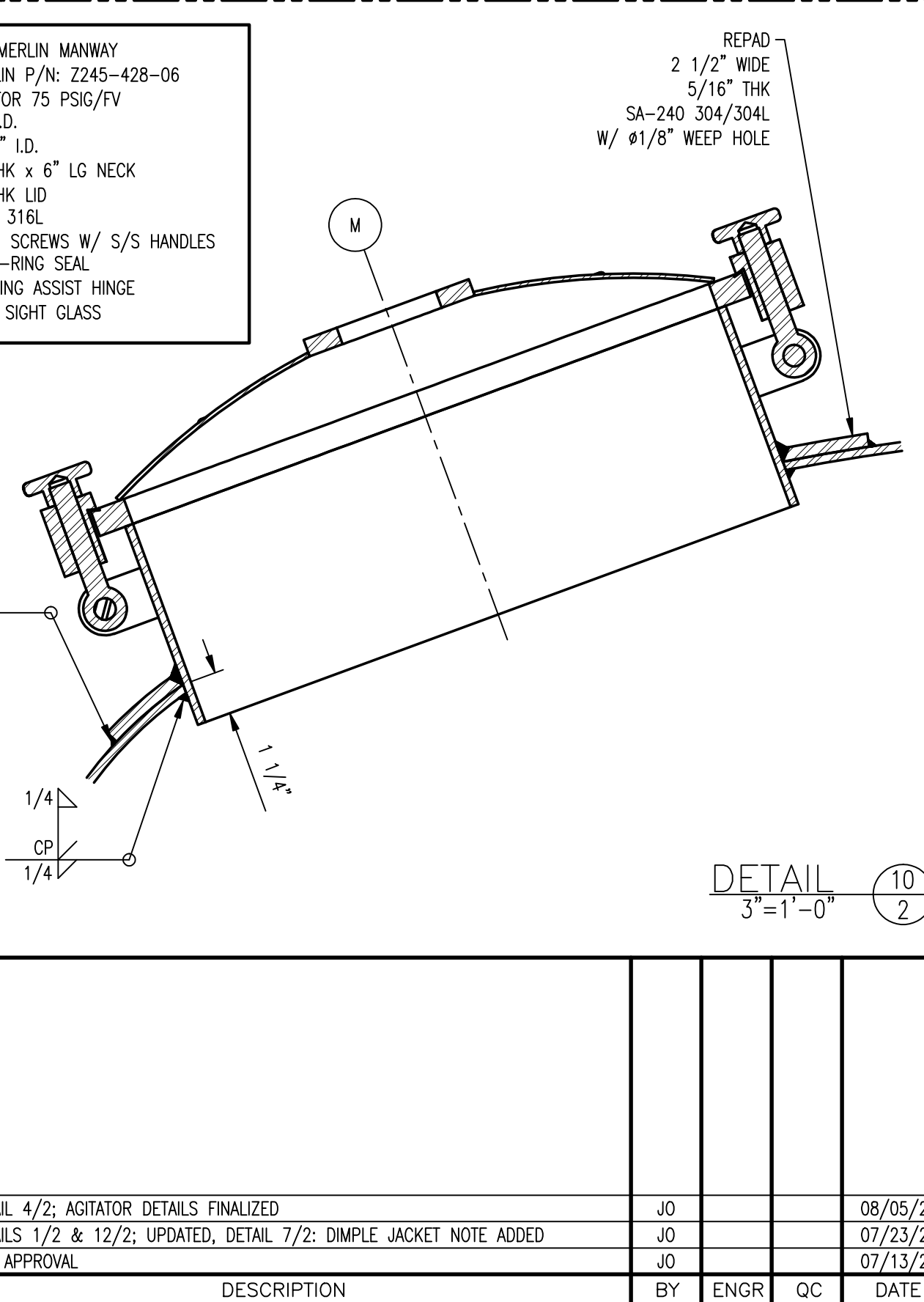
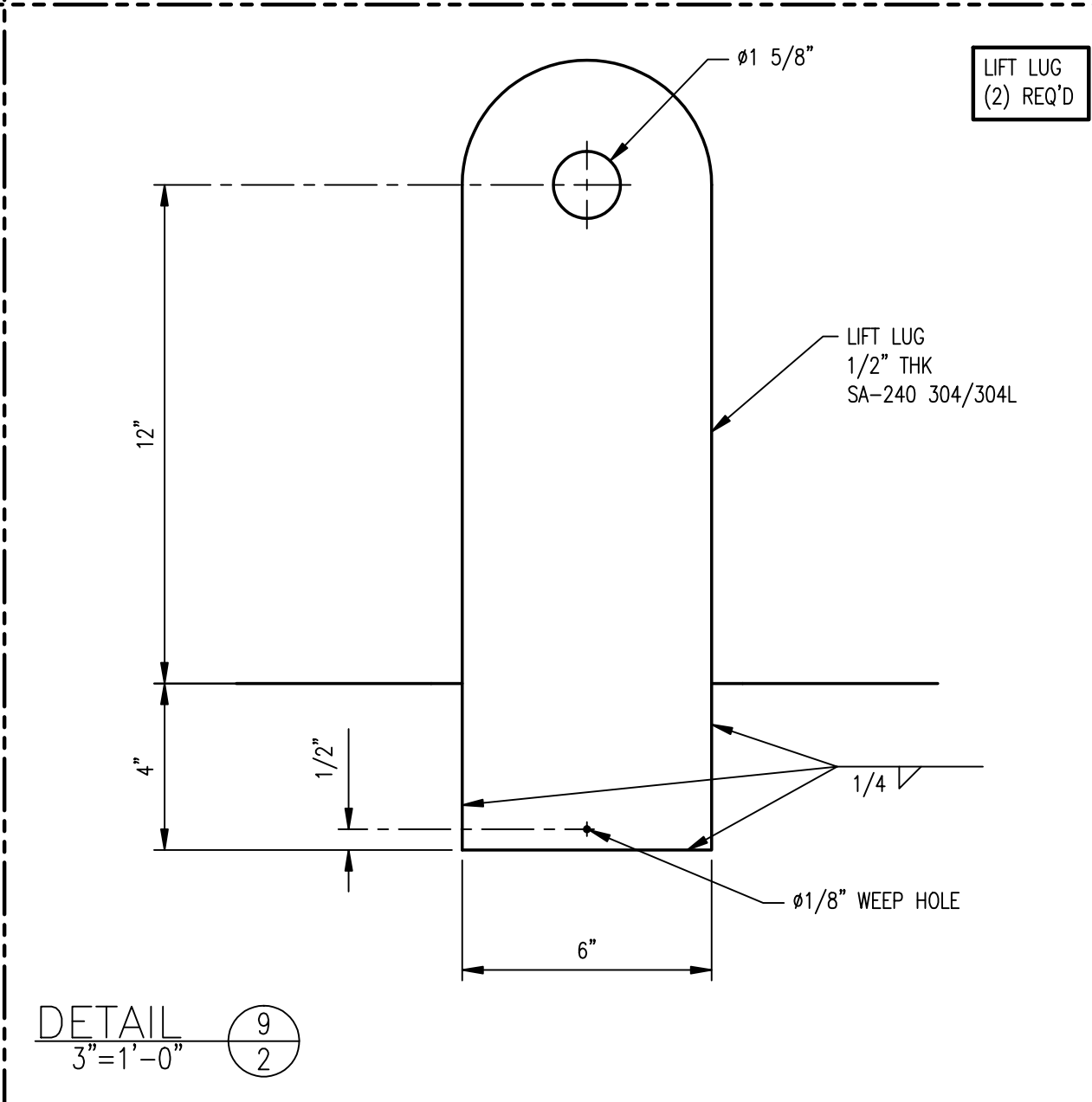
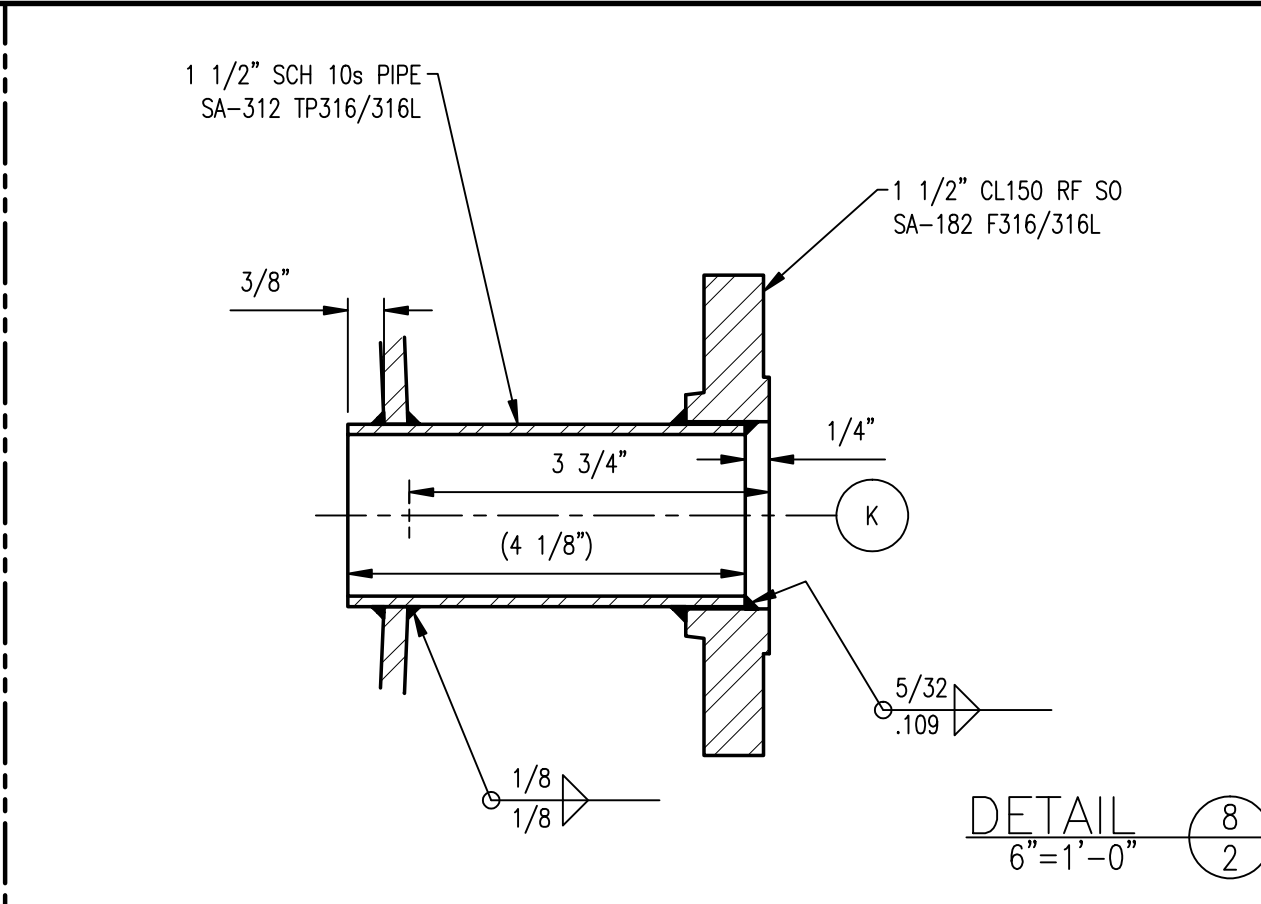
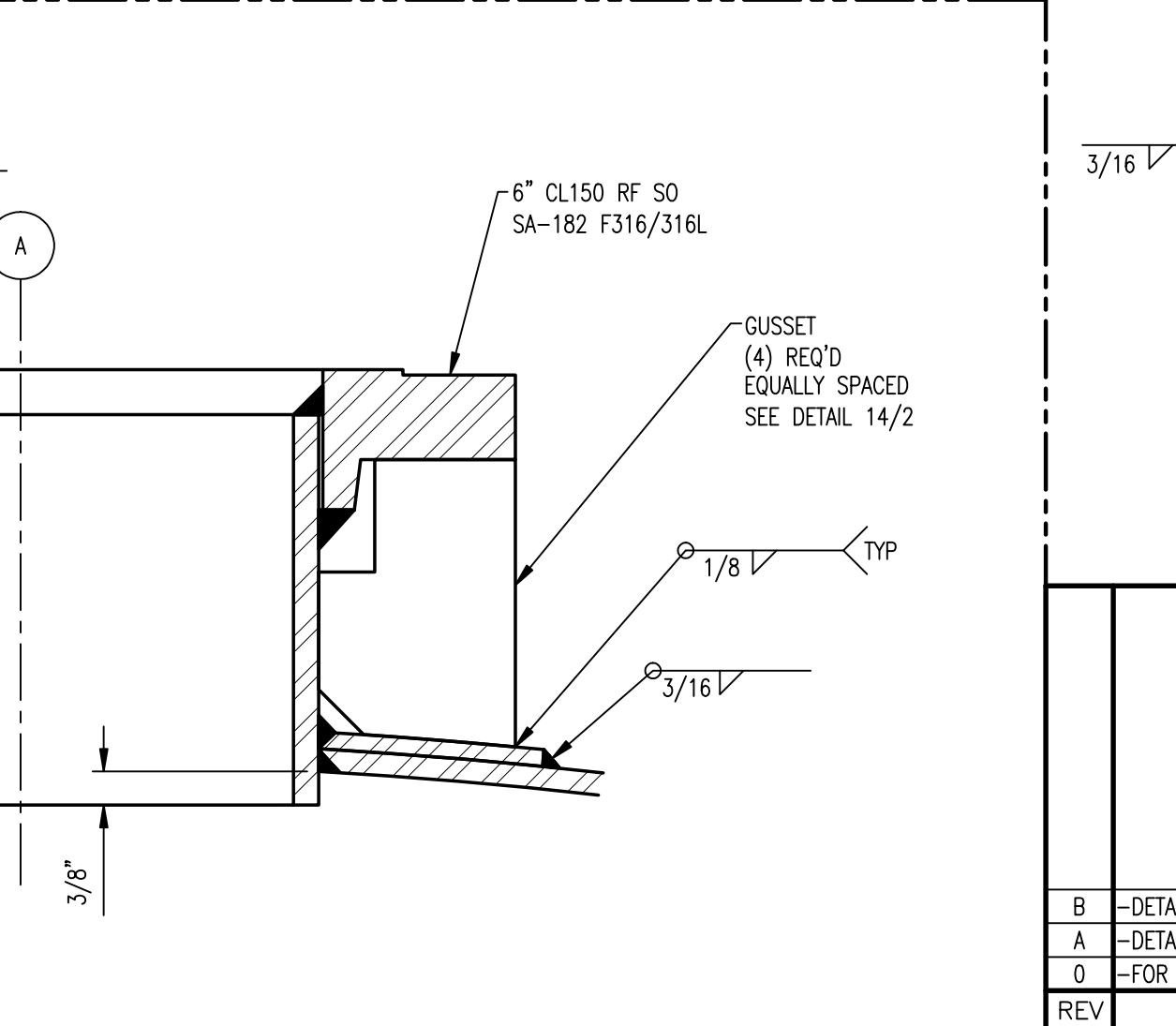
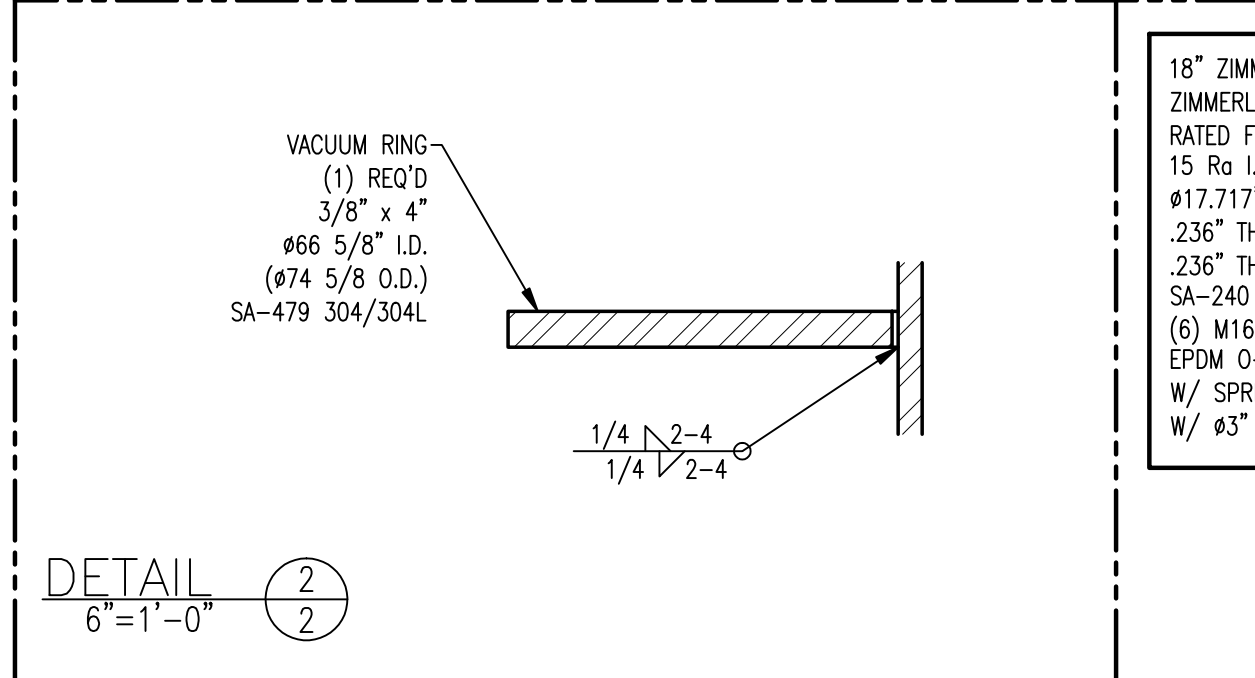
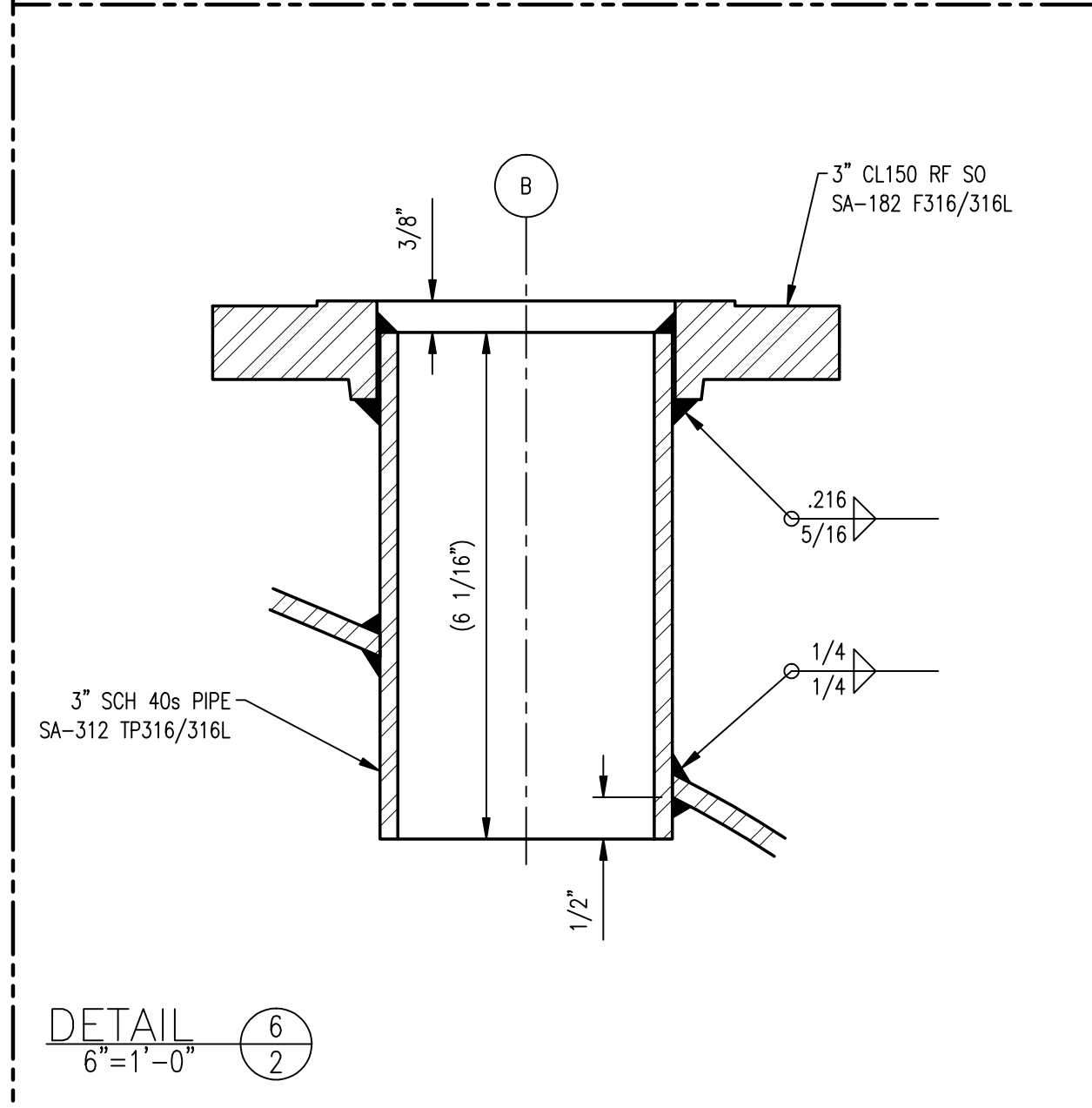
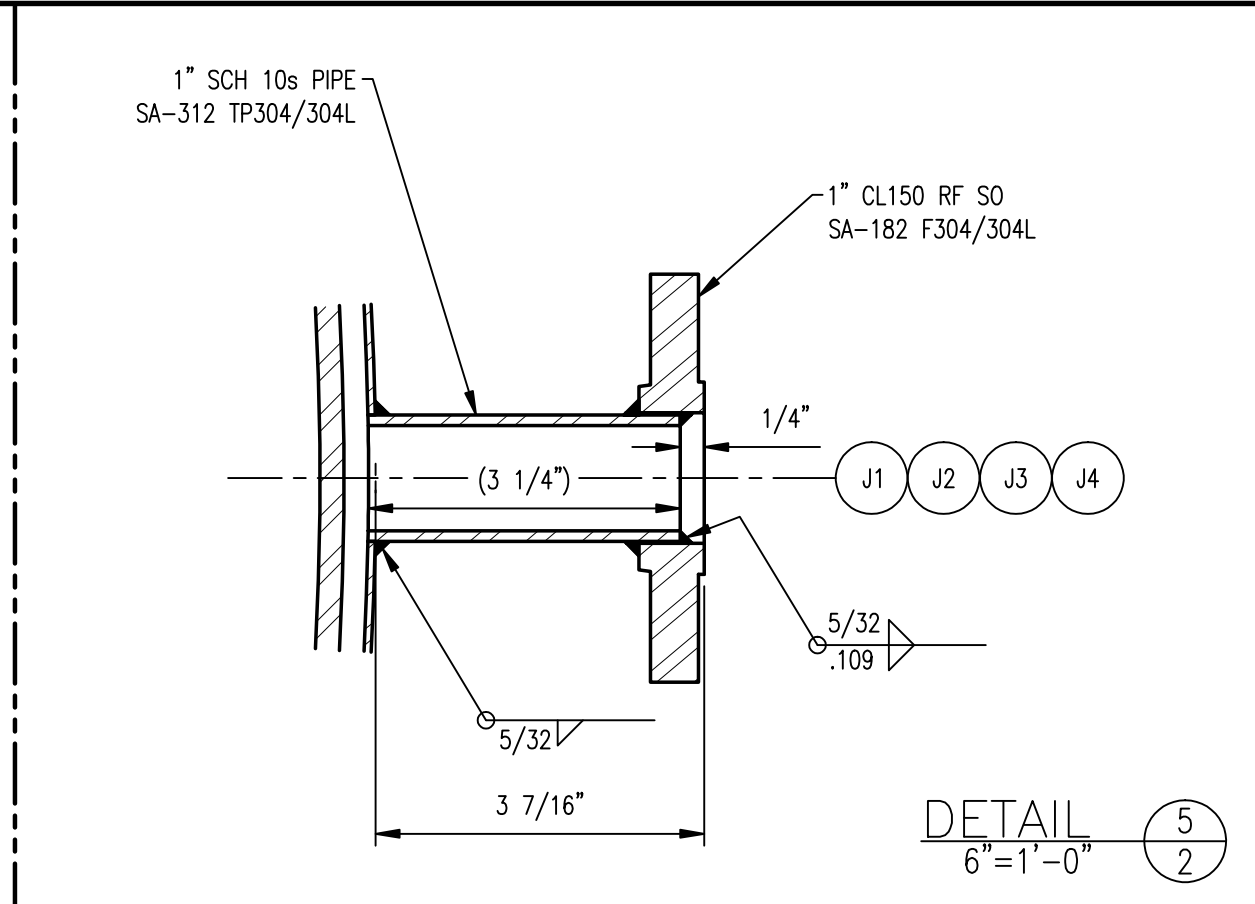
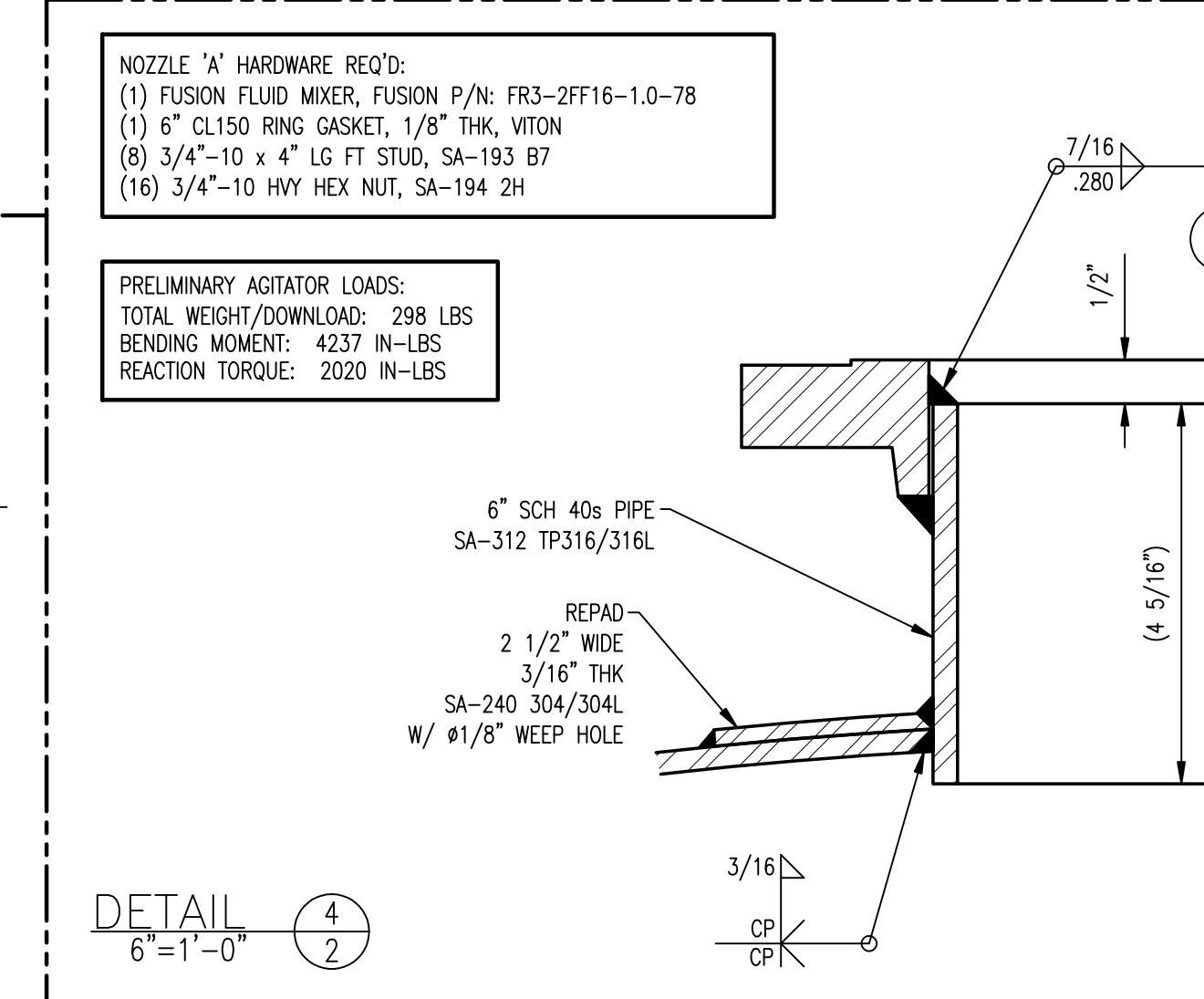
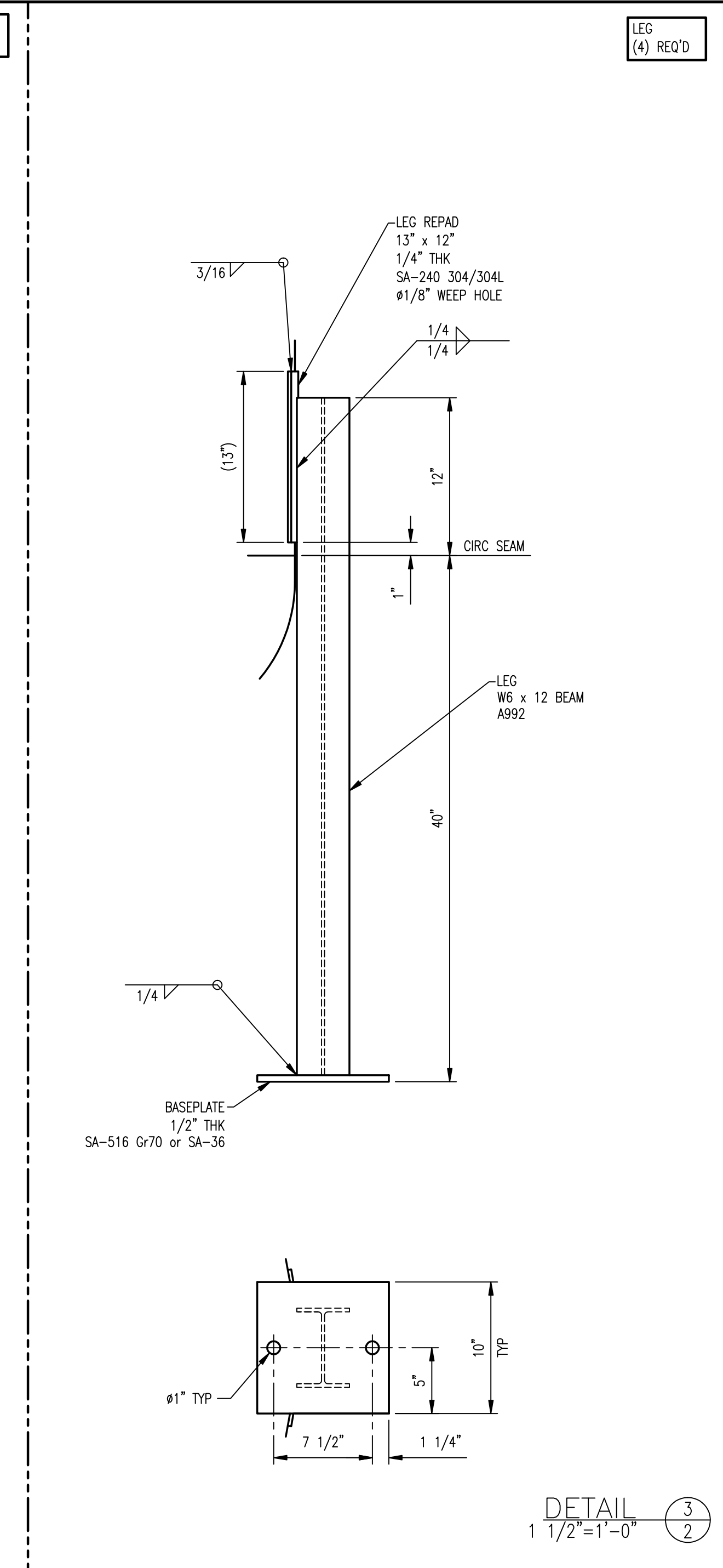
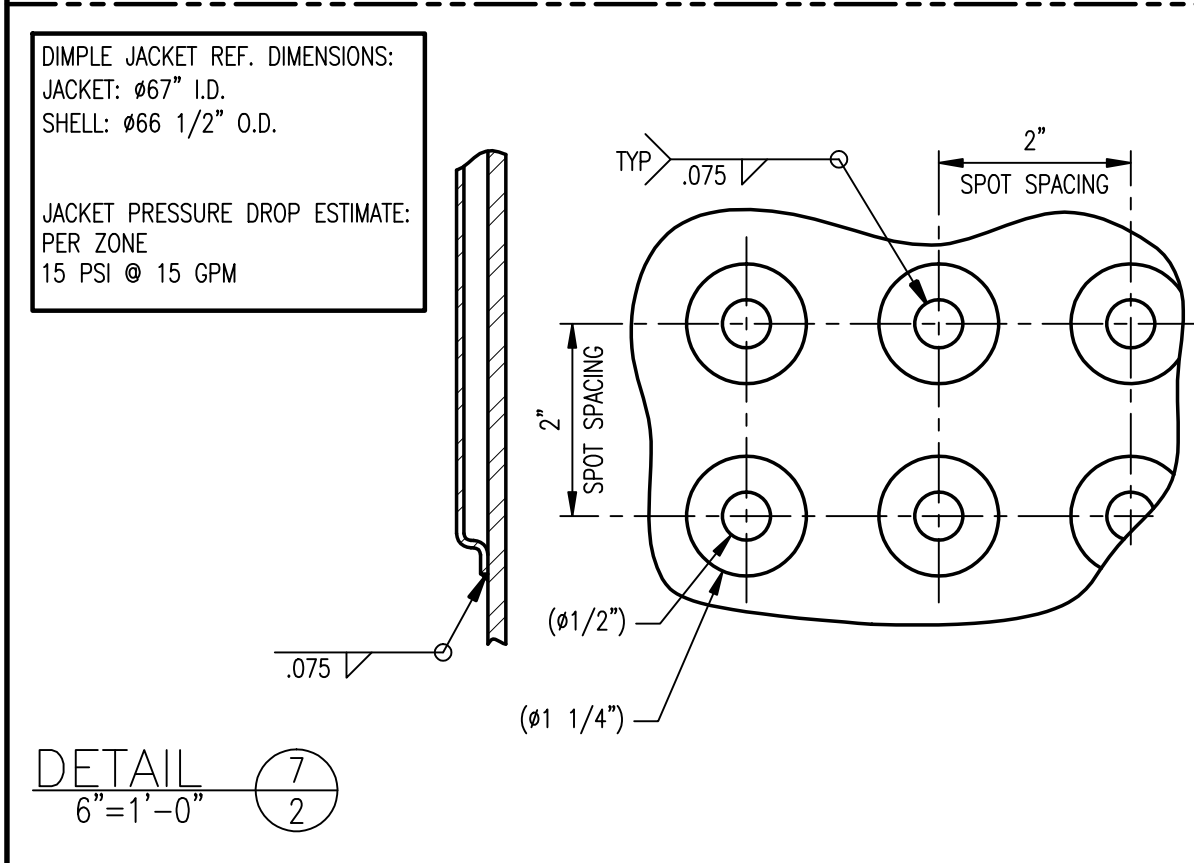
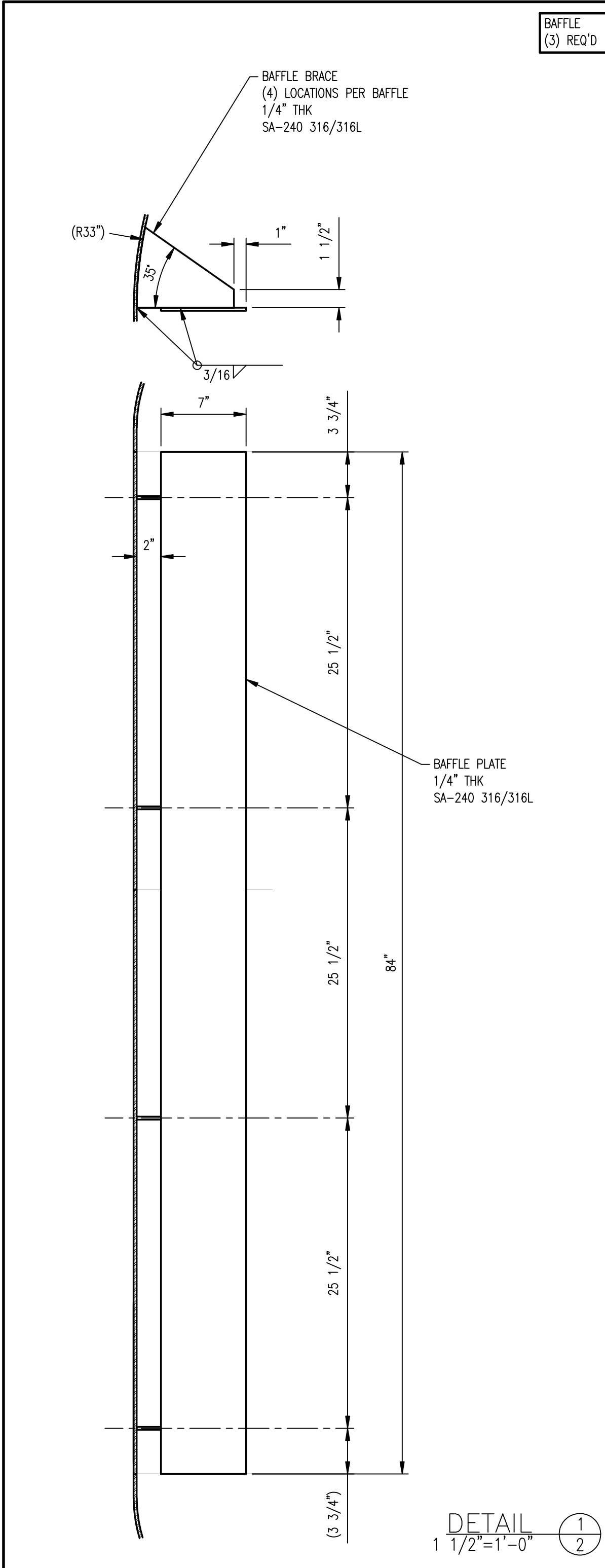
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V-102 MIX TANK

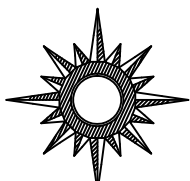
CUST. DREW MARINE P.O. NO. PB-2020-003

APPROVALS DATE S.O. NO. 23039 QTY 1

DRAWN J OJALA 07/13/20 DWG.NO. T-1902 REV. C

ENGR. CHK. SCALE AS NOTED SHEET 1 OF 2 SHEETS



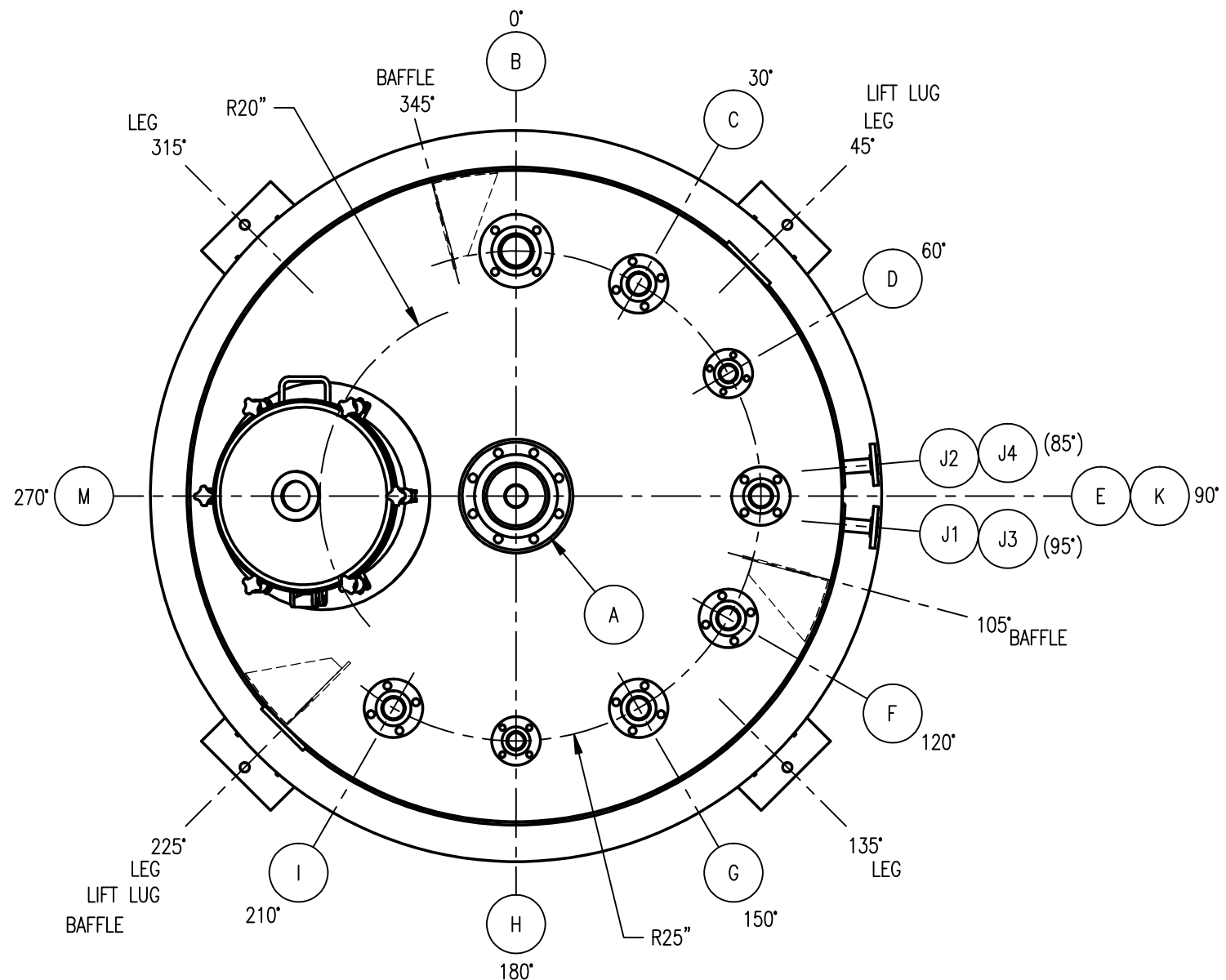
		Steel-Pro Incorporated	
P.O. Box 449 * Rockland, Maine 04841			
TITLE V-102 MIX TANK			
CUST. DREW MARINE		P.O. NO. PB-2020-003	
APPROVALS	DATE	S.O. NO. 23039	QTY 1
DRAWN J OJALA	07/13/20		
ENGR. CHK.		DWG.NO. T-1902	REV. B
Q.C. CHK.			
SCALE AS NOTED		SHEET 2 OF 2 SHEETS	

TOP & BOTTOM ELLIPSOIDAL HEADS
66" I.D.
SA-240 316/316L
1/4" THK NOM (.1875" MIN)
2" S.F.

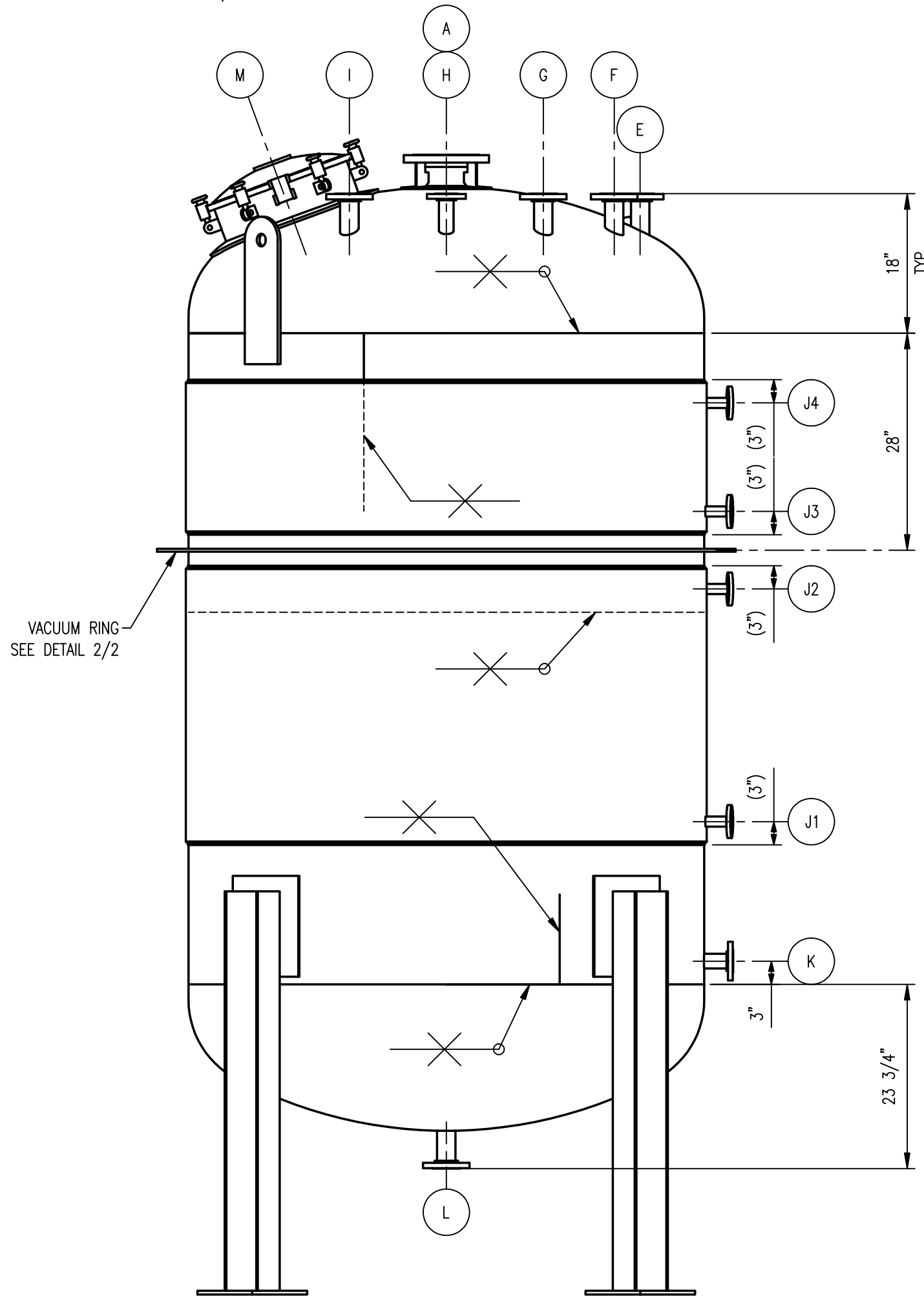
SHELL
66" I.D.
SA-240 316/316L
1/4" THK

SHELL DIMPLE JACKET
14 Ga. (.075" THK)
2" x 2" SPOT SPACING
SA-240 304/304L
SEE DETAIL 7/2 FOR ATTACHMENT

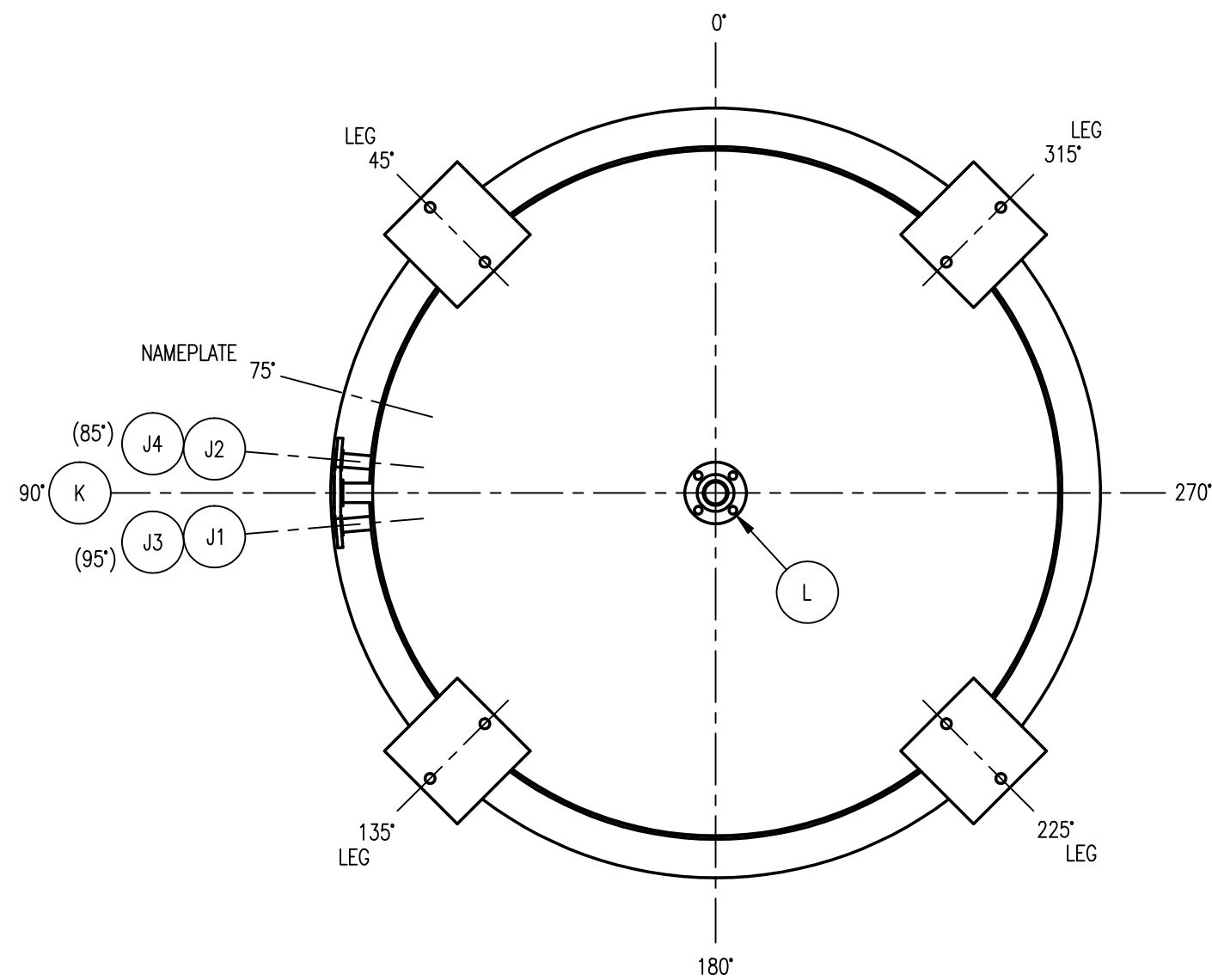
BAFFLES
SEE DETAIL 1/2



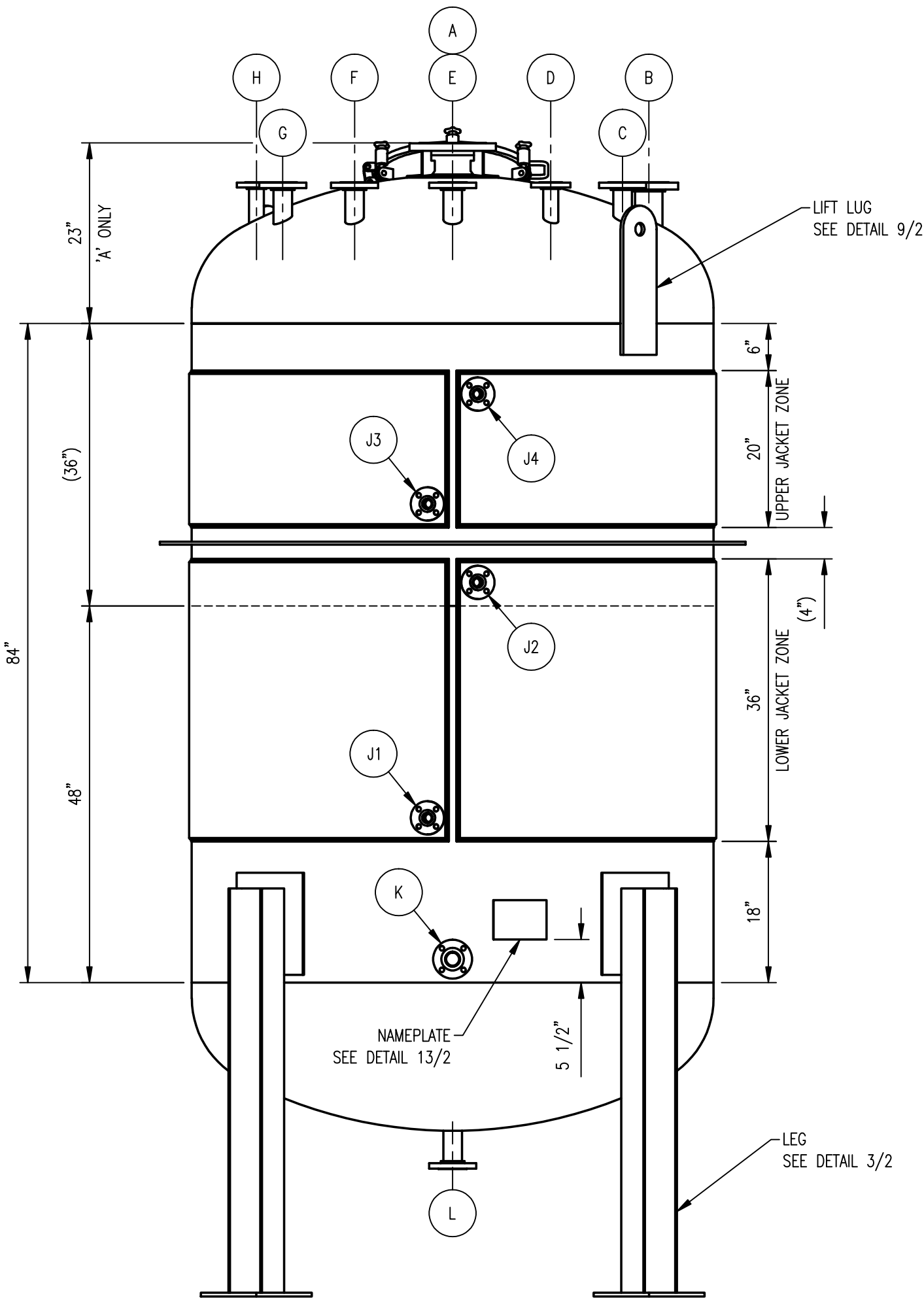
TOP VIEW
3/4"=1'-0"



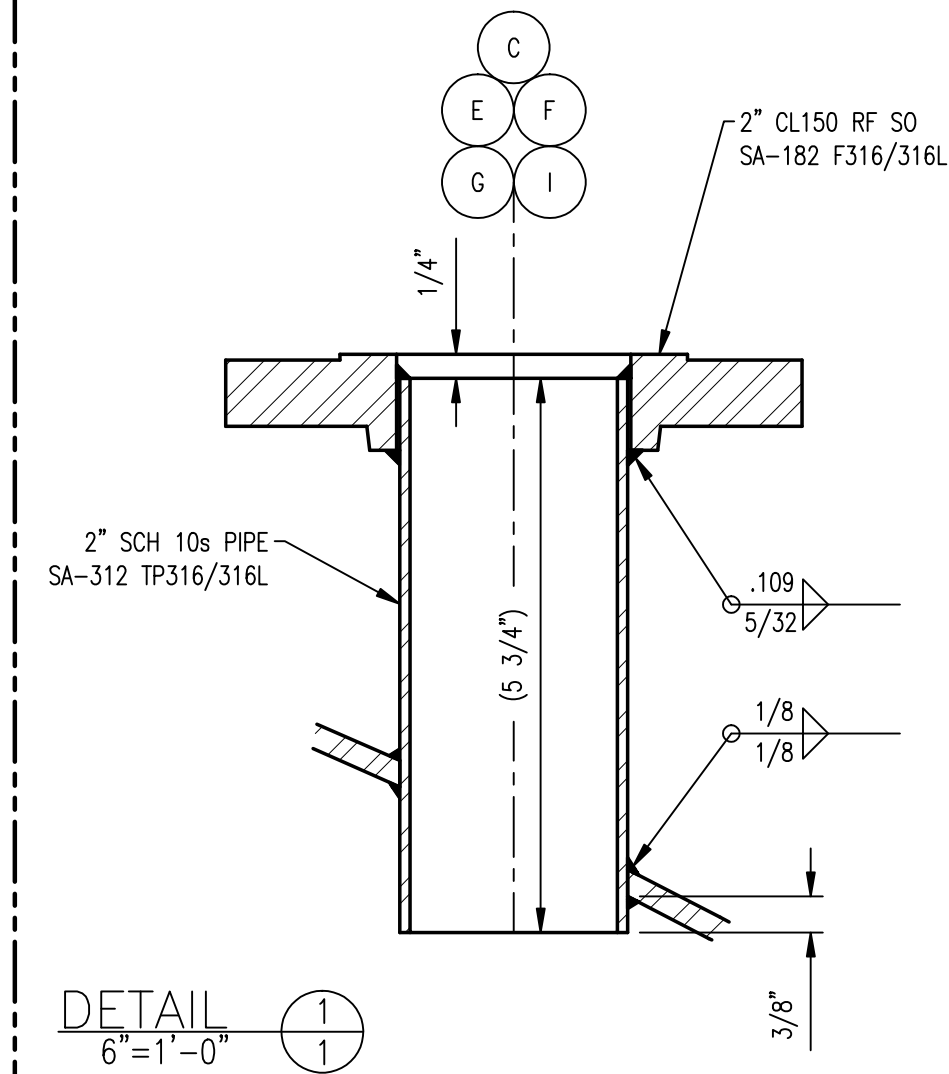
FRONT VIEW
3/4"=1'-0"



BOTTOM VIEW
3/4"=1'-0"



RIGHT VIEW
3/4"=1'-0"



DETAIL
6"=1'-0"

JACKET NOZZLES NOT DESIGNED FOR EXTERNAL LOADS; PIPING SHOULD NOT USE JACKET CONNECTIONS AS SUPPORTS

SCHEDULE OF OPENINGS

MARK	SIZE	RTG/TYPE	SCH.	SERVICE	DETAIL	NOTES
A	6"	CL150 RF SO	40s	AGITATOR	4/2	
B	3"	CL150 RF SO	40s	RELIEF VENT	6/2	
C	2"	CL150 RF SO	10s	SPRAY BALL	1/1	
D	1 1/2"	CL150 RF SO	10s	NOZZLE	12/2	
E	2"	CL150 RF SO	10s	BULK FEED INLET	1/1	
F	2"	CL150 RF SO	10s	RECIRC / DRUM FEED	1/1	
G	2"	CL150 RF SO	10s	SPRAY BALL	1/1	
H	1 1/2"	CL150 RF SO	10s	LEVEL SWITCH / N2	12/2	
I	2"	CL150 RF SO	10s	LEVEL TRANSMITTER	1/1	
J1-J4	1"	CL150 RF SO	10s	JACKET CONNECTION	5/2	
K	1 1/2"	CL150 RF SO	10s	TEMPERATURE SENSOR	8/2	
L	2"	CL150 RF SO	10s	OUTLET	11/2	
M	18"	SPECIAL	.236"	MANWAY	10/2	

*INDICATES NOZZLE FLANGE TO BE SUPPLIED WITH BLIND COVER, BOLTS, NUTS & GASKET / COUPLING: w/ HEX PLUG

DESIGN DATA

	MAIN VESSEL	JACKET/COIL
DESIGN PRESSURE:	25 PSIG / FV (14.7 PSI EXT.)	150 PSIG
DESIGN TEMPERATURE:	MIN -20°F MAX 350°F	MIN -20°F MAX 350°F
HYDRO TEST PRESSURE:	33 PSIG	198 PSIG
RADIOGRAPHIC EXAMINATION:	NONE	NONE
STRESS RELIEVE:	NONE	NONE
SPECIFIC GRAVITY OF CONTENTS:	1.4	1.0
JOINT EFFICIENCY:	HEAD(s) 85% / SHELL 70%	JACKET 55%
CORROSION ALLOWANCE:	NONE	NONE
POLISHING ALLOWANCE:	NONE	NONE

VESSEL HYDRO-TEST: 1.3 x 25 PSIG x $\frac{20000 \text{ PSI}}{19700 \text{ PSI}}$ = 33 PSIG (PER SP-PD-001 REV B)

JACKET HYDRO-TEST: 1.3 x 150 PSIG x $\frac{20000 \text{ PSI}}{19700 \text{ PSI}}$ = 198 PSIG (PER SP-PD-001 REV B)

FABRICATION

ASME PRESSURE VESSEL CODE	SECTION VIII, DIVISION 1, 2019 EDITION
ASME CODE STAMP (VESSEL):	YES ☒ NO ☐ INSPECTION
ASME CODE STAMP (JACKET/COIL):	YES ☒ NO ☐ STEEL-PRO INC. QUALITY-CONTROL: YES
SPECIFICATIONS:	OTHER: NATIONAL BOARD REGISTRY
	NAME PLATE: STEEL-PRO STANDARD
WELDING PROCEDURES	INTERIOR/EXTERIOR PREPARATION
C/S TO C/S:	1-1-FC, 1-1-T
S/S TO S/S:	8-8-FC, 8-8-T, 8-8-TPM
C/S TO S/S:	8-1-FC
SPECIAL INSTRUCTIONS	EXTERIOR SURFACE FINISH: MILL
	INTERIOR SURFACE FINISH: MILL
	EXTERIOR WELDING FINISH: MILL, CLEANED
	INTERIOR WELDING FINISH: MILL, CLEANED
	EXTERIOR COATING: RED OXIDE PRIMER, C/S ONLY
	INTERIOR COATING: PASSIVATION: CITRIC ACID PASSIVATION, PER SP-PD-002 REV D

OVERALL HEIGHT: 147"

OVERALL WIDTH: 80 3/4"

NOTES

- FLANGE BOLT HOLES: (UNLESS OTHERWISE NOTED)
ON SHELL - TO STRADDLE LONGITUDINAL CENTER LINES
ON HEADS - TO STRADDLE RADIAL CENTER LINES
- ALL OPENINGS TO BE WEATHER PROTECTED FOR SHIPMENT.
- VESSEL SHALL BE FREE OF EXCESSIVE WELD SPATTER, MILL SCALE, ETC.
- UNLESS OTHERWISE NOTED:
ALL FACTORY MADE WROUGHT STEEL BUTT WELDING FITTINGS TO MEET ASME B16.9-2018
ALL PIPE FLANGES & FLANGED FITTINGS TO MEET ASME B16.5-2013
ALL FORGED FITTINGS, SOCKET WELDING & THREADED FITTINGS TO MEET ASME B16.11-2016.
- UNLESS OTHERWISE NOTED CIRCULAR AND LONG SEAMS ARE OF TYPE 1.
- UNLESS OTHERWISE NOTED ALL REPAIRS TO HAVE AT LEAST (1) 1/8" MIN DIA. WEEP HOLE
- UNLESS OTHERWISE NOTED ALL STAINLESS STEEL VESSELS TO BE PASSIVATED.

REV	DESCRIPTION	BY	ENGR	QC	DATE
C	-NOZZLES 'B' THRU 'I' ORIENTATION CHANGED	JO			08/06/20
B	-NOZZLES 'B' THRU 'I' ORIENTATION CHANGED	JO			08/05/20
A	-SHELL HEIGHT WAS 96", NOZZLE 'M' ORIENTATION CHANGED, -NOZZLE 'C', 'E', 'F', 'G', 'I' WERE 1 1/2", BAFFLE ORIENTATION CHANGED, -NOZZLE NAMES UPDATED, DETAIL 1/1 ADDED	JO			07/23/20
0	-FOR APPROVAL	JO			07/13/20

WEIGHTS

NOM. CAPACITY: 1430 Gals
FULL. CAPACITY: 1639 Gals
EMPTY WEIGHT: 3048 Lbs
WEIGHT FULL H₂O: 16836 Lbs

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:

FRACTIONS DECIMALS ANGLES
±1/4" .XX- ±0"-30"

DO NOT SCALE DRAWING

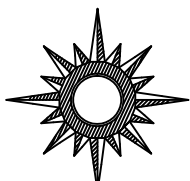
REV STATUS
OF SHEETS

REV STATUS
OF SHEETS

REV STATUS
OF SHEETS

REV STATUS
OF SHEETS

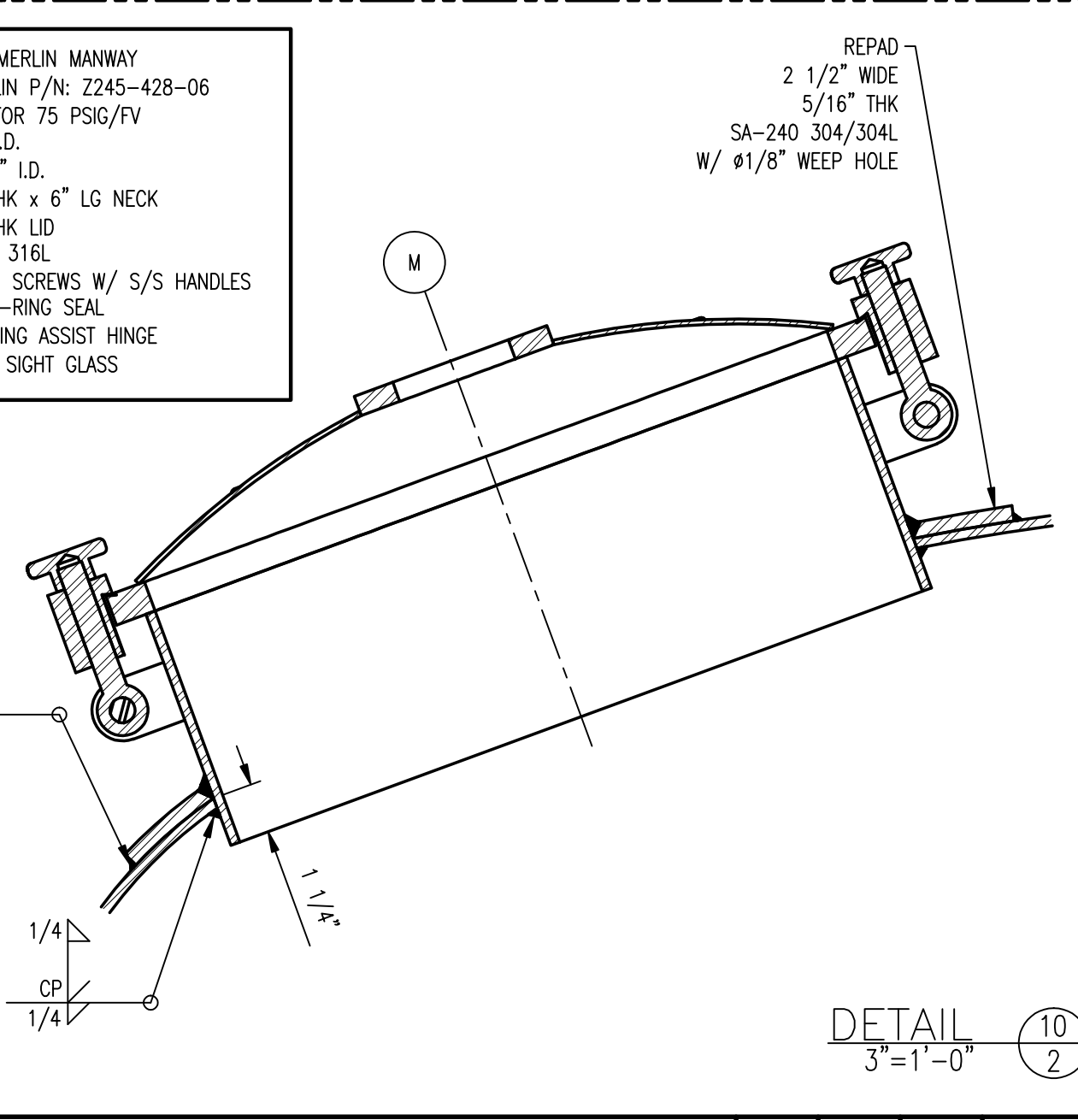
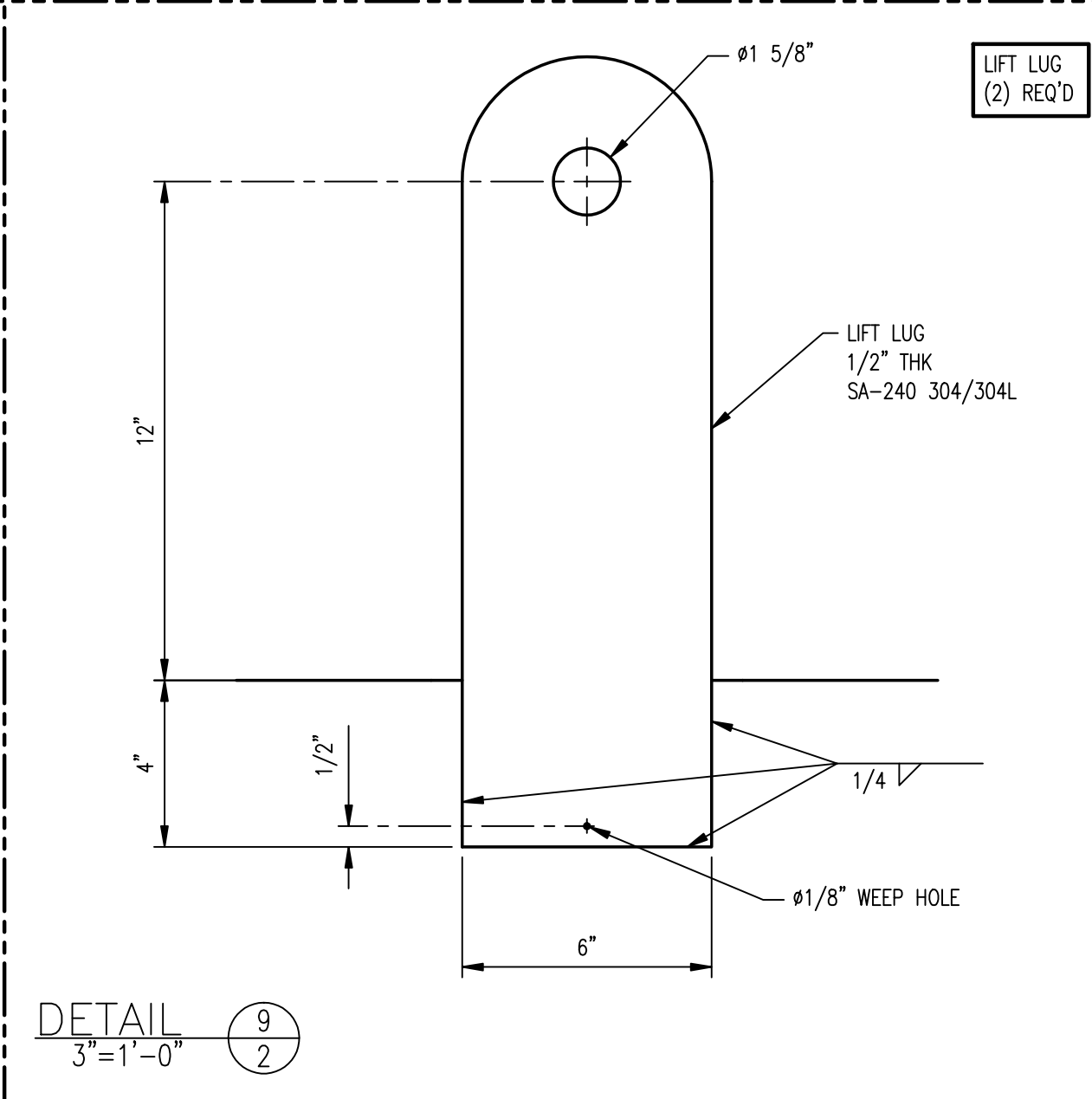
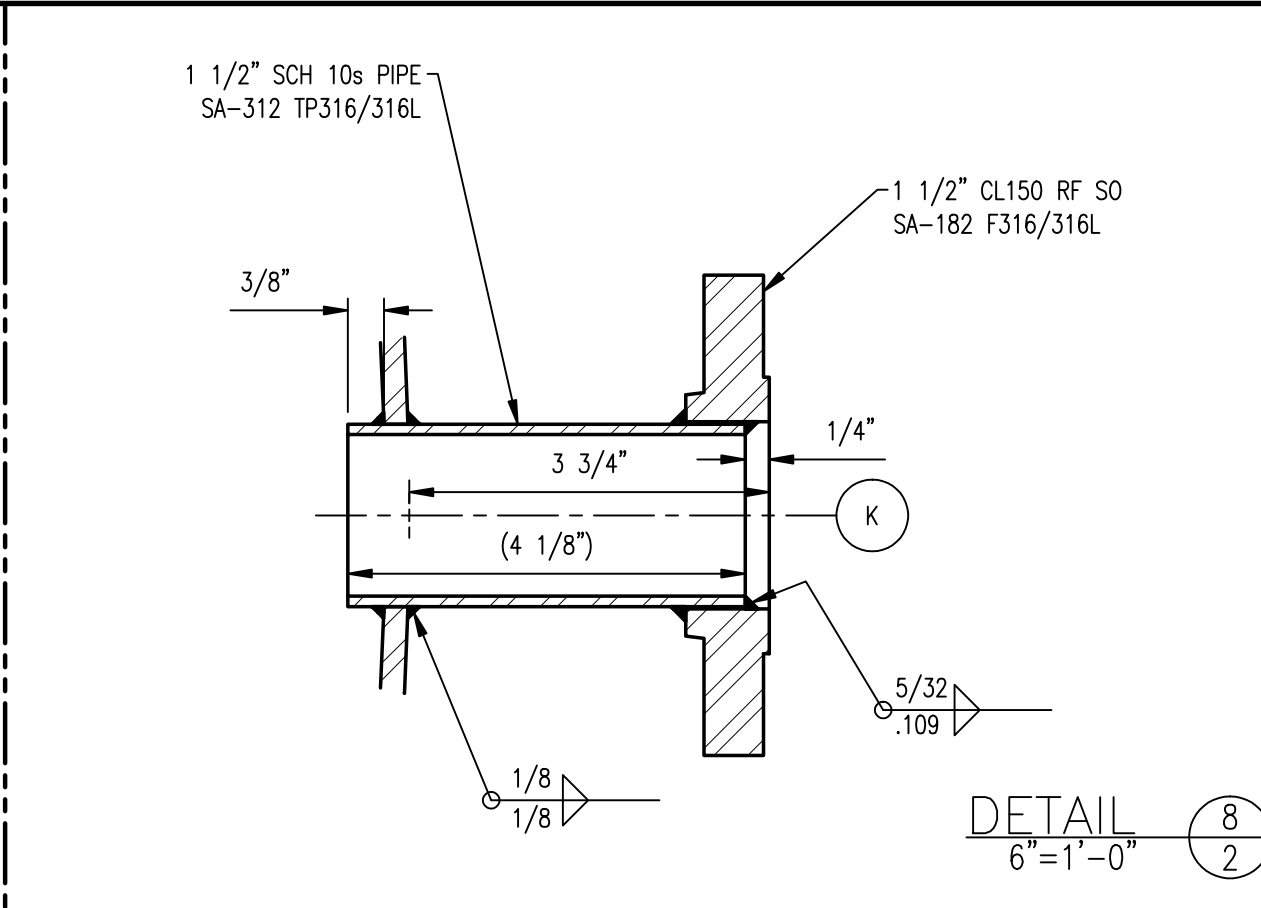
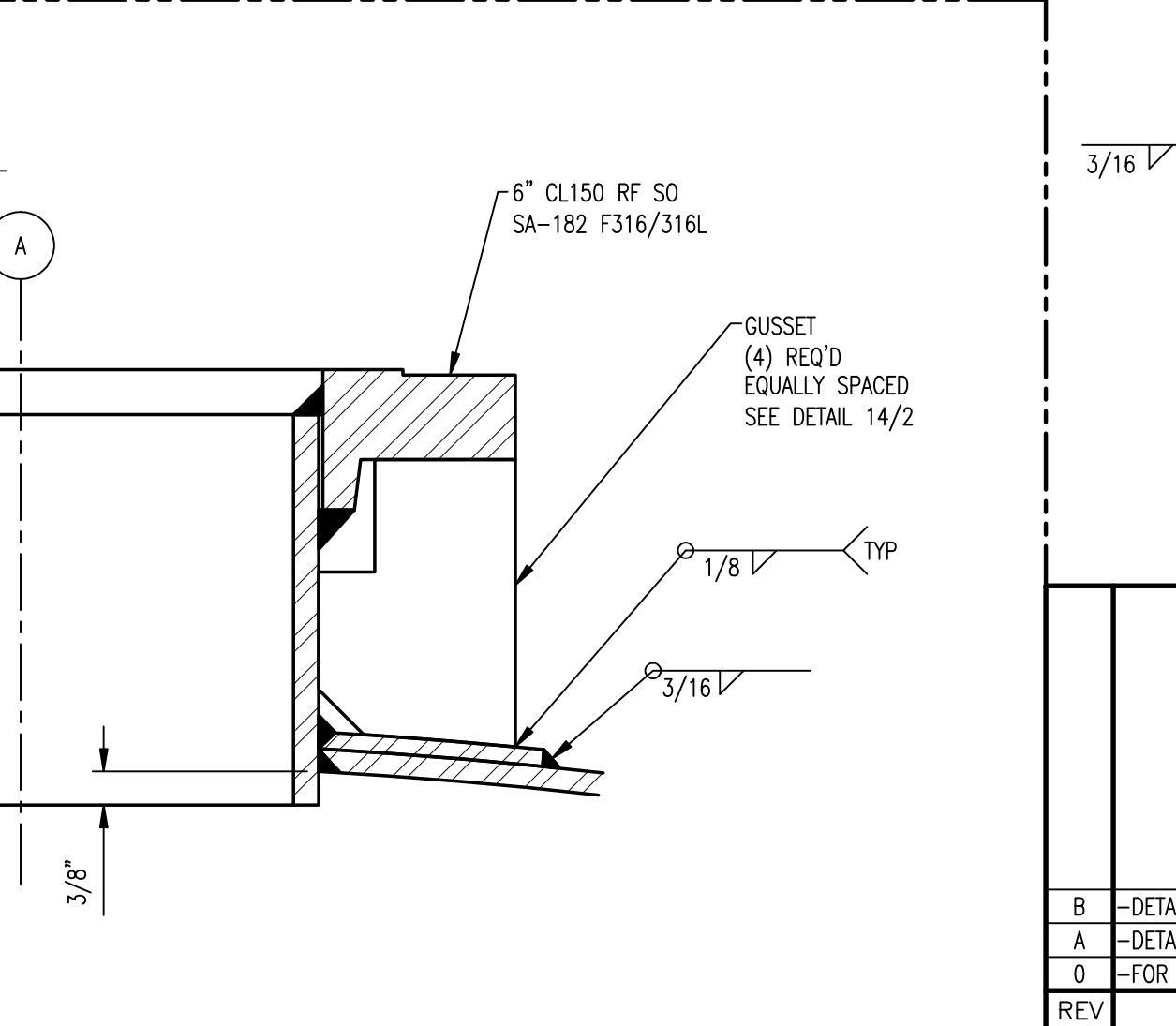
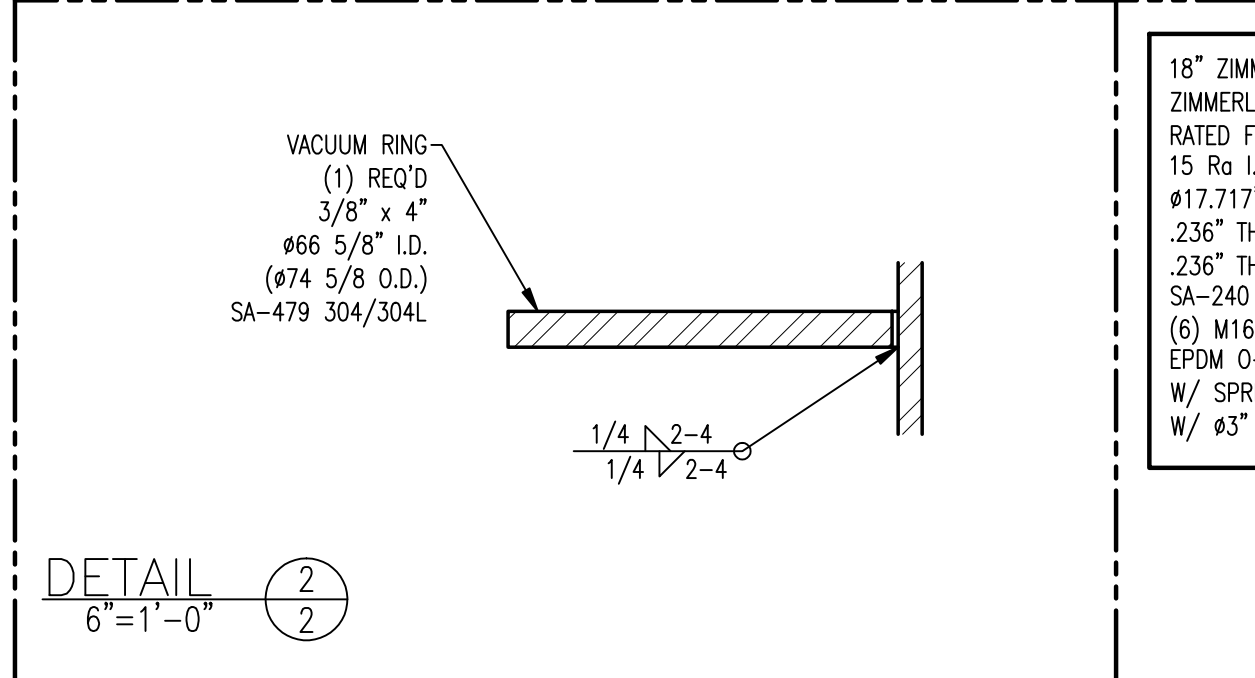
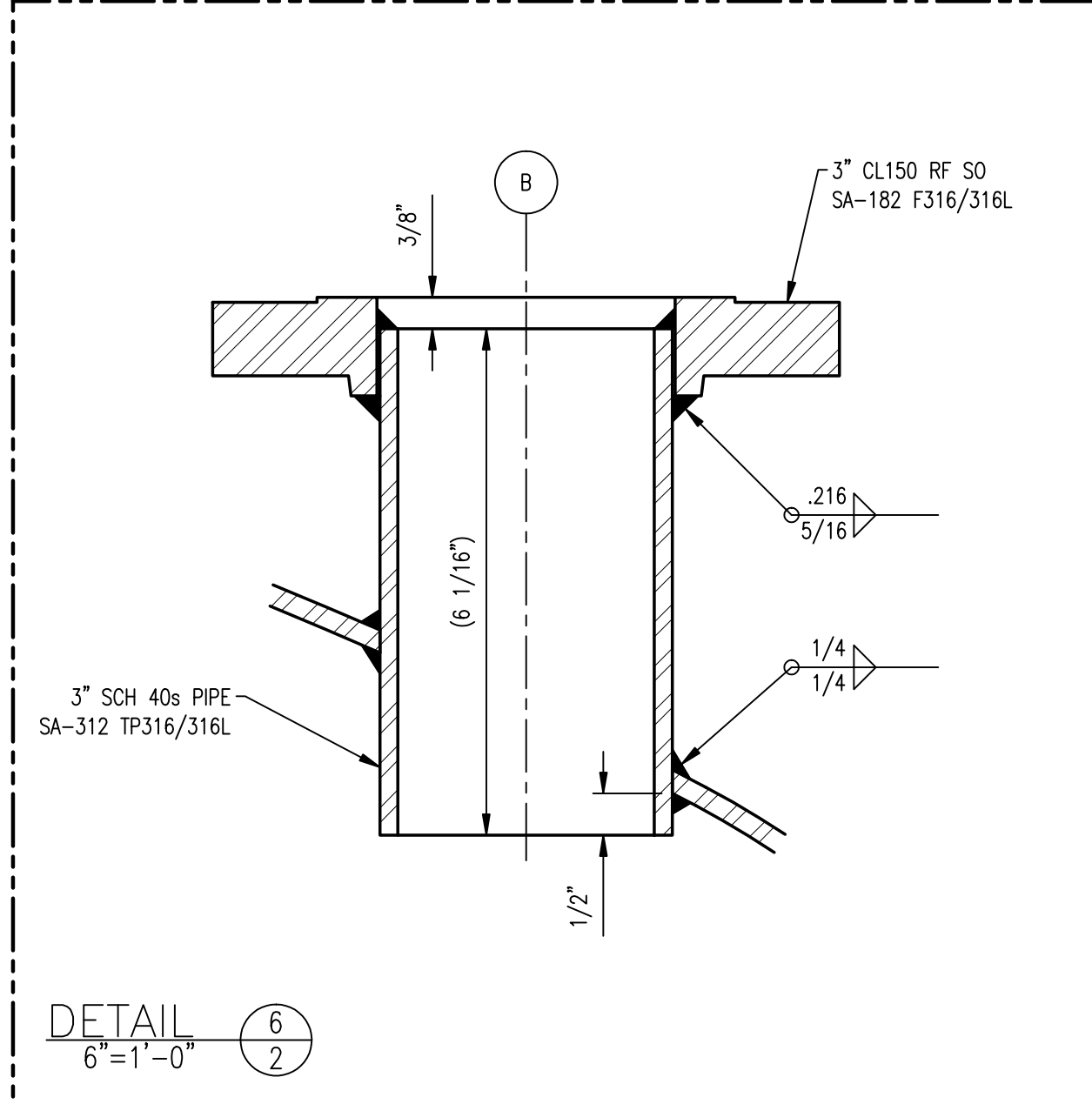
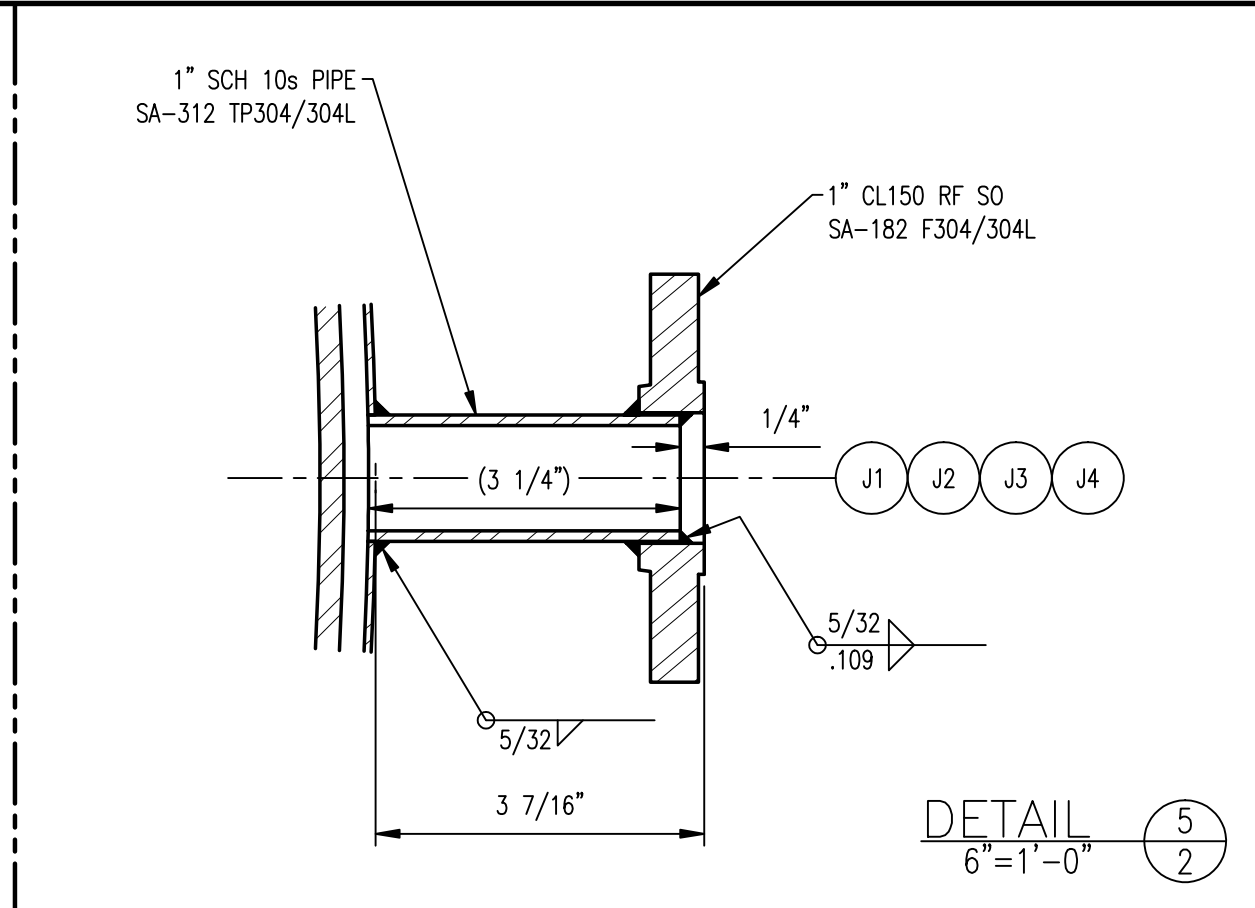
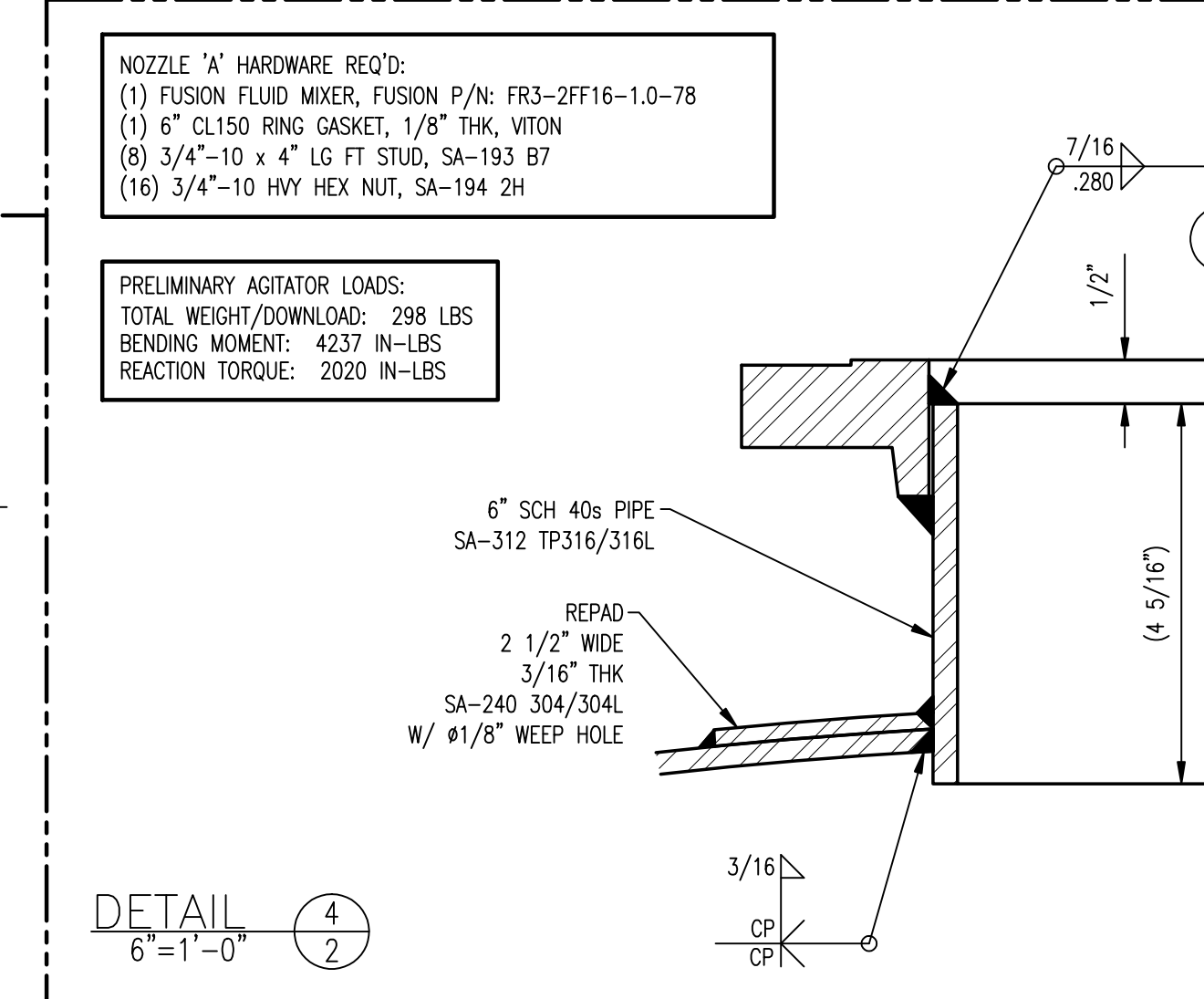
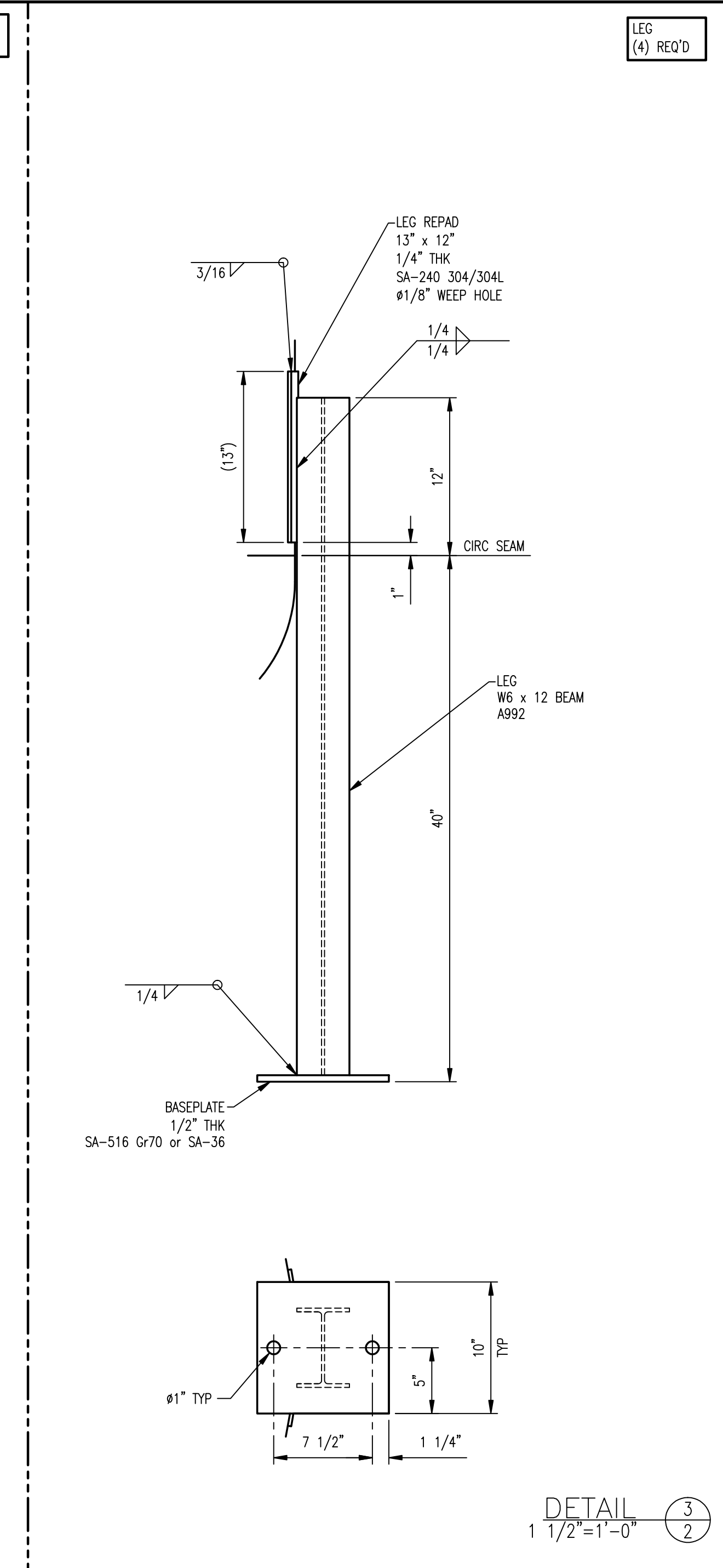
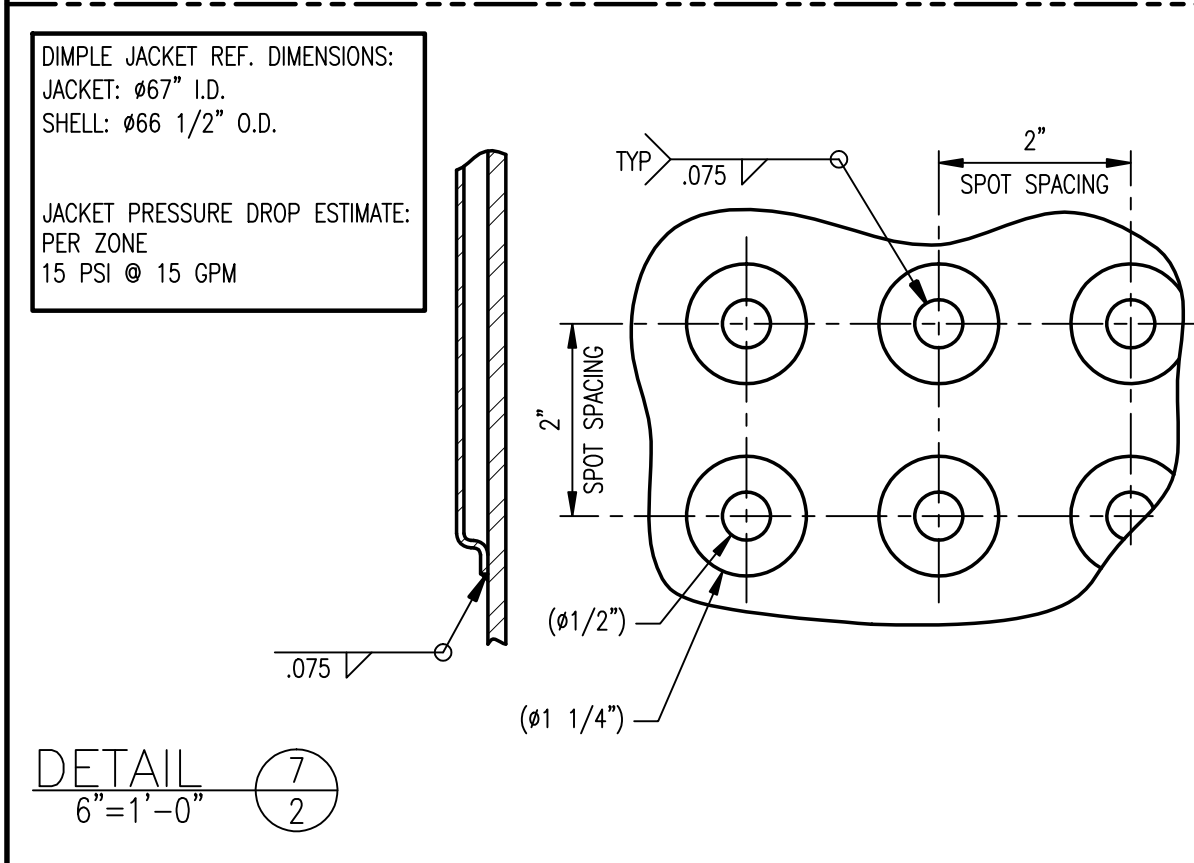
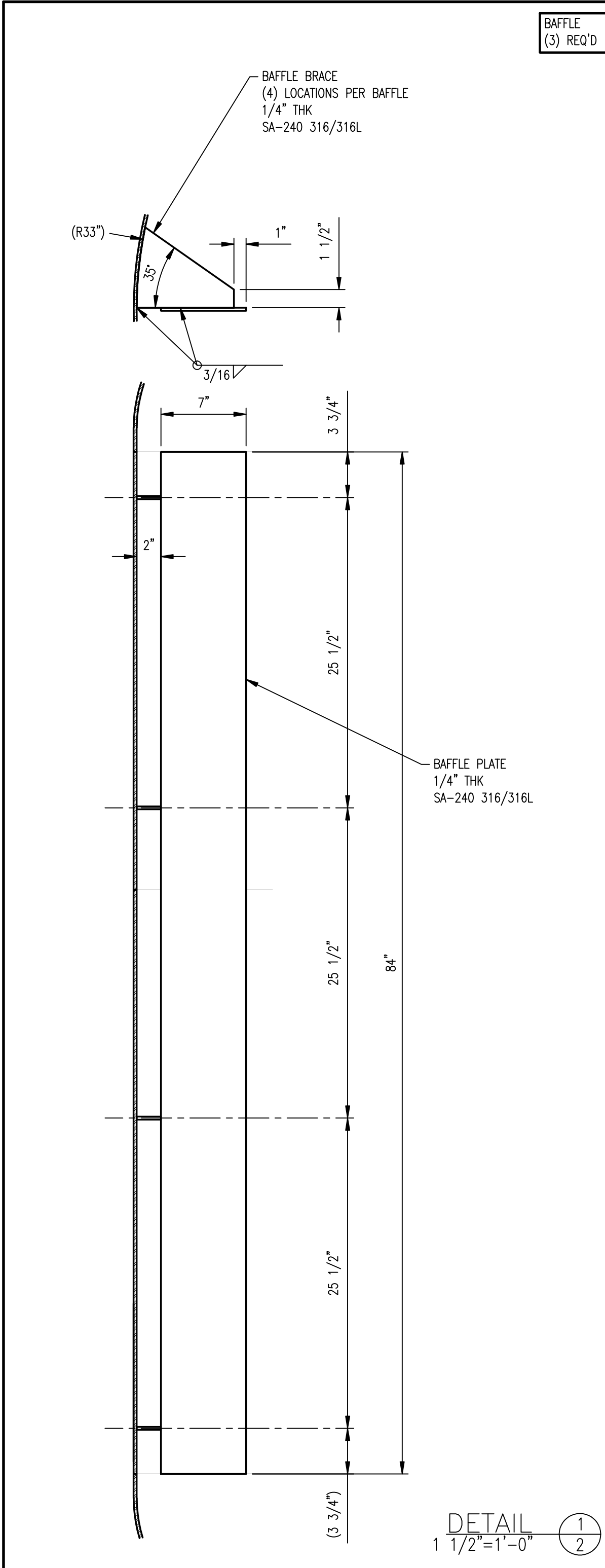
REV STATUS
OF SHEETS



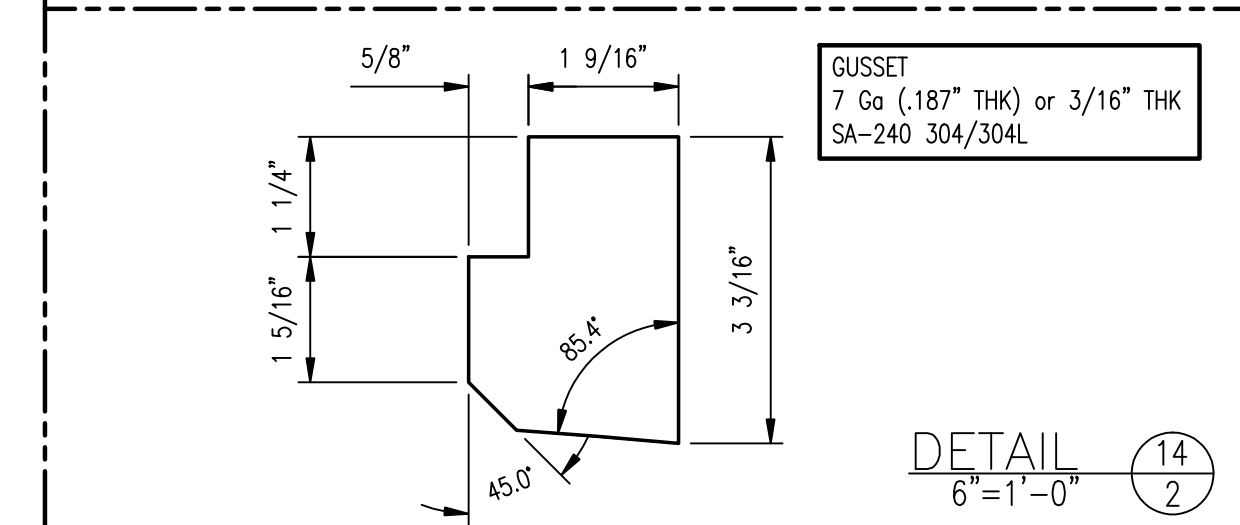
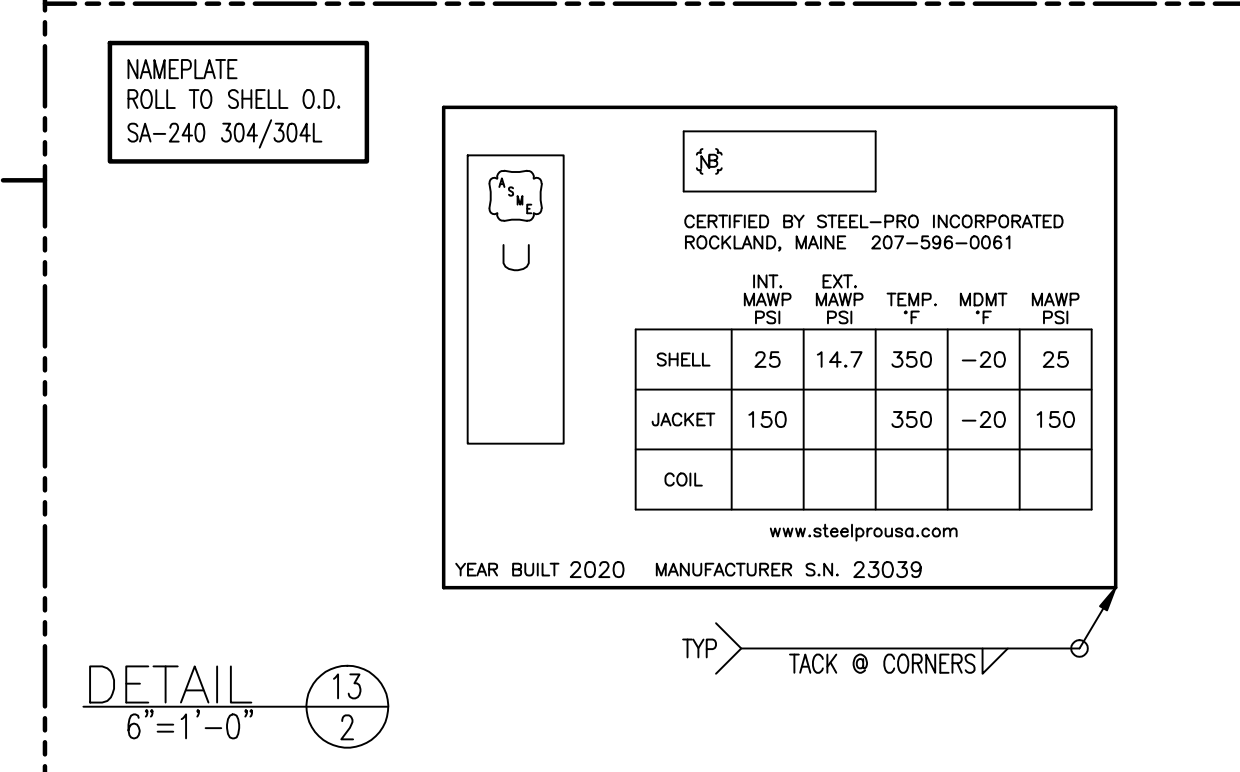
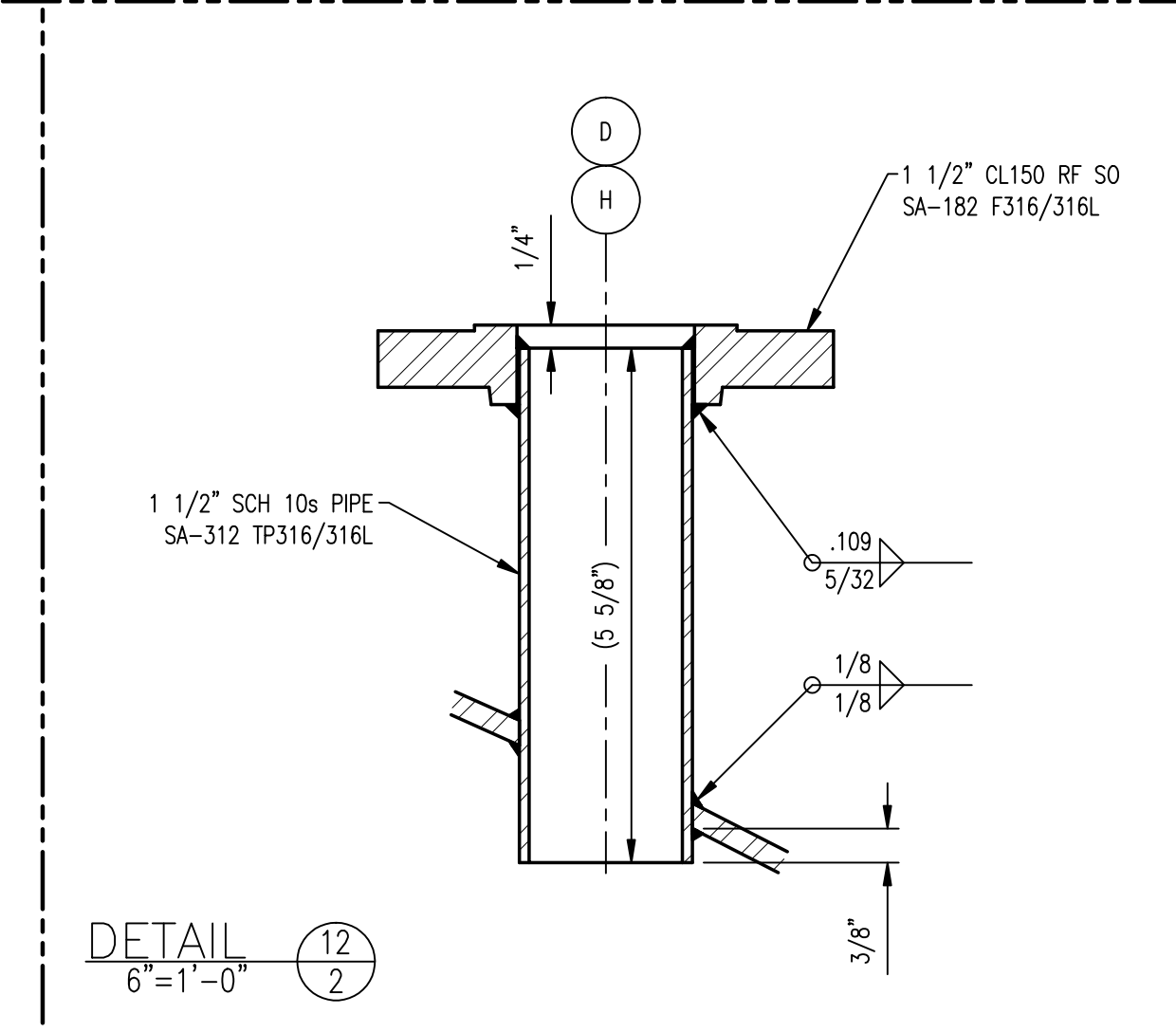
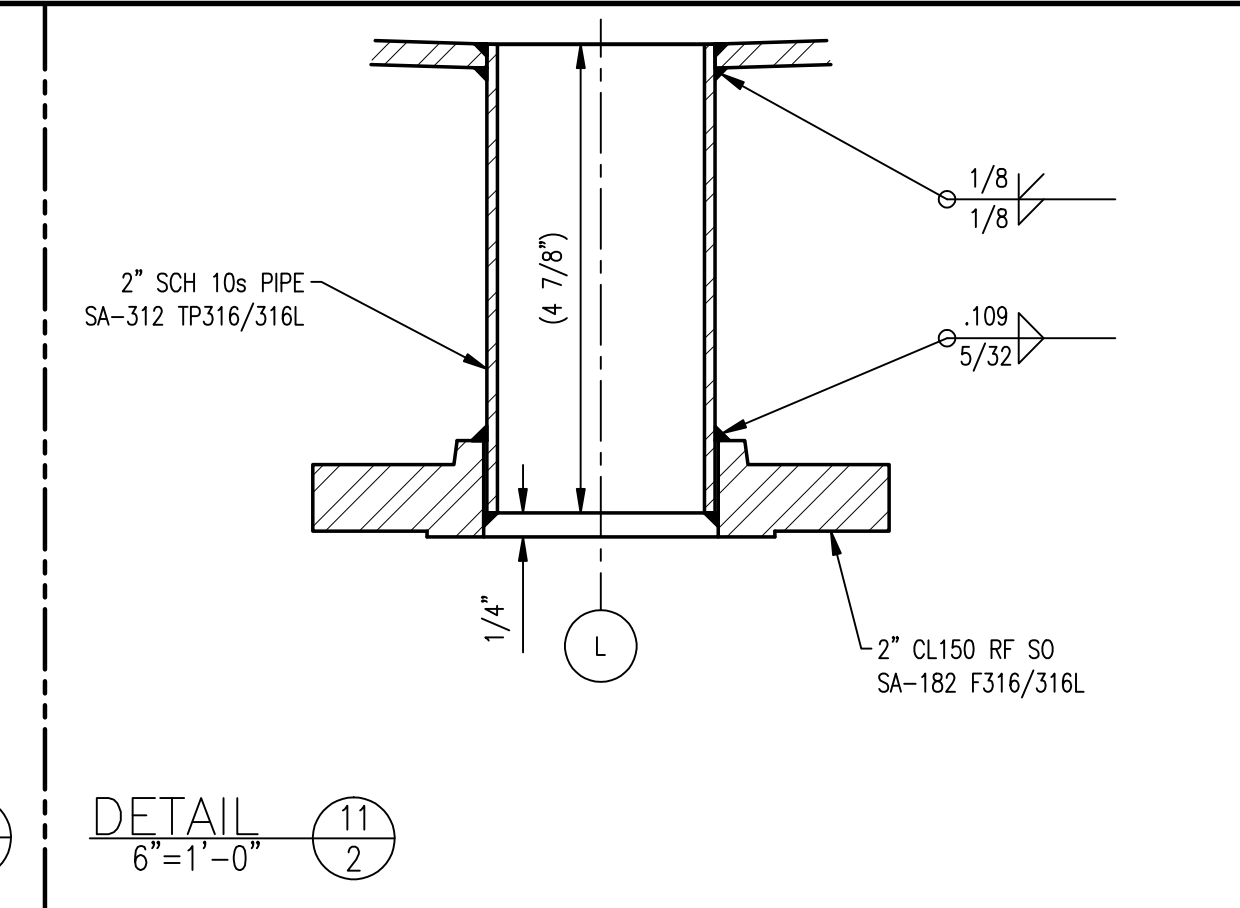
Steel-Pro Incorporated

P.O. Box 449 * Rockland, Maine 04841

TITLE	CUST. DREW MARINE	P.O. NO. PB-2020-003
V-102 MIX TANK		
APPROVALS	DATE	QTY
J OJALA	07/13/20	1
ENGR. CHK.		
DWG.NO. T-1902		REV. C
SCALE AS NOTED	SHEET 1 OF 2	SHEETS



REV	DESCRIPTION	BY	ENGR	QC	DATE
B	-DETAIL 4/2; AGITATOR DETAILS FINALIZED	JO			08/05/20
A	-DETAILS 1/2 & 12/2; UPDATED, DETAIL 7/2: DIMPLE JACKET NOTE ADDED	JO			07/23/20
0	-FOR APPROVAL	JO			07/13/20



P.O. Box 449 * Rockland, Maine 04841			
TITLE V-102 MIX TANK			
CUST. DREW MARINE		P.O. NO. PB-2020-003	
APPROVALS	DATE	S.O. NO. 23039	QTY 1
DRAWN J OJALA	07/13/20		
ENGR. CHK.		DWG.NO. T-1902	REV B
QC. CHK.		SCALE AS NOTED	SHEET 2 OF 2 SHEETS