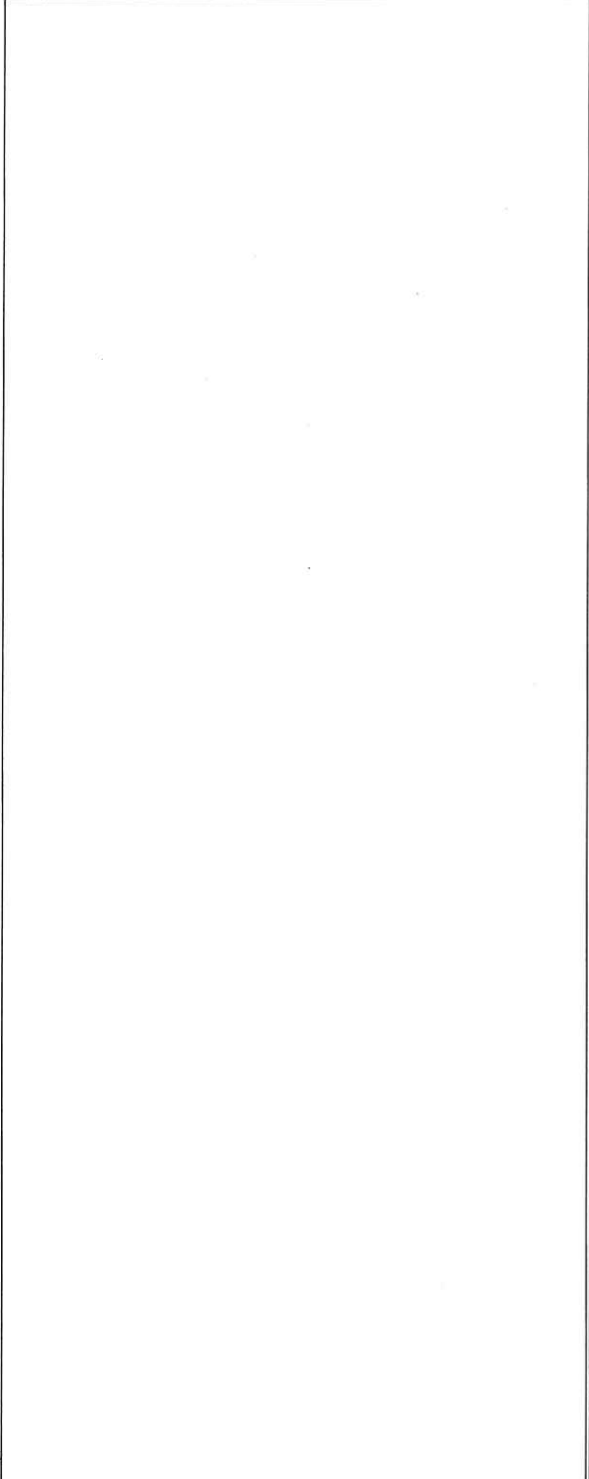


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 \* CONT. FROM 'SHT' 3 \*  
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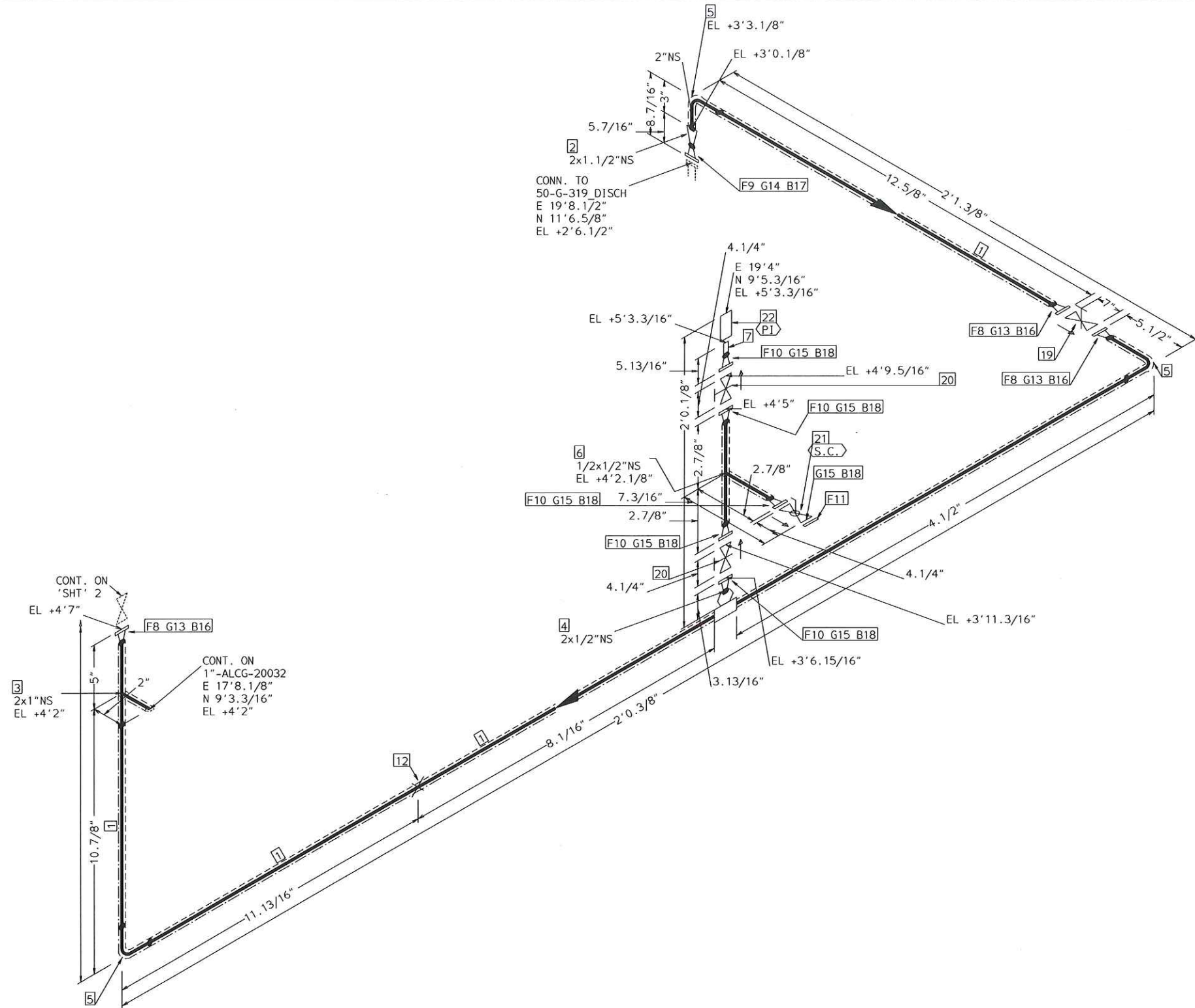
29	ALCG	PRESSURE INDICATOR WITH DIAPHRAGM SEAL	1/2	1
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TRACING SPEC: S-TRACING (NOTE-10)

AREA: CETYL		2"-ALCG-20030	
PIPING GA NO: -	P&ID NO: 1020	STRESS CRITICAL: NA	
OP. TEMP: 280 °F	OP. PRESS: 30 psig	TEST MEDIUM: Hydro	
DES. TEMP: 400 °F	DES. PRESS: 150 psig	TEST PRESS: 225 psig	
SCALE: NONE	INSUL. TYPE: NS-CELLULAR	INSUL. THK: 1.5	
LINE NO. / FILE NAME: 2"-ALCG-20030			ISSUE: R4

SIZE-A3



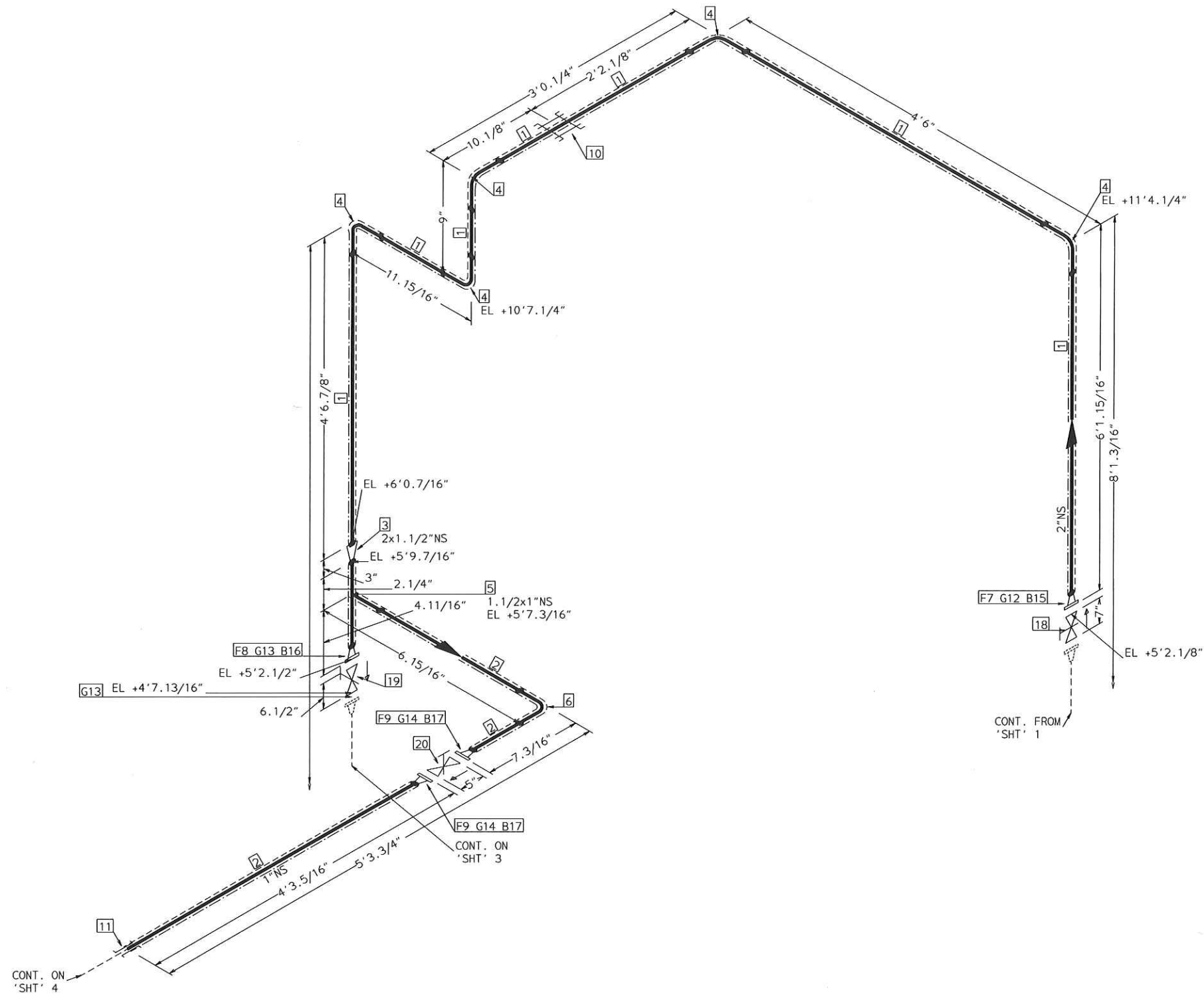
FABRICATION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
PIPE				
1	ALCG	PIPE STD WT SMLS STL A106-B	2	2.6'
FITTINGS				
2	ALCG	REDUCER CONC STD WT STL A234 WPB BW	2 x 1.1/2	1
3	ALCG	TEE STD WT STL A234 WPB BW	2 x 1	1
4	ALCG	WELDOLET STD WT STL A105	2 x 1/2	1
5	ALCG	ELL 90 DEG LR STD WT STL A234 WPB BW	2	3
6	ALCG	TEE STD WT STL A234 WPB BW	1/2 x 1/2	1
7	ALCG	NIPPLE POE/TOE NPT 100MM LONG ASTM A105	1/2	1
FLANGES				
8	ALCG	FLG WN 150# RF STL STD BORE A105	2	3
9	ALCG	FLG WN 150# RF STL STD BORE A105	1.1/2	1
10	ALCG	FLG WN 150# RF STL STD BORE A105	1/2	5
11	ALCG	FLG BLIND 150# RF STL A105	1/2	1

ERECTION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
FITTINGS				
12	SUPP	SPS-2 RESTING SUPPORT	2	1
GASKETS				
13	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	2	3
14	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	1.1/2	1
15	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	1/2	6
BOLTS				
16	ALCG	3.1/8 x 5/8" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	11/16	12
17	ALCG	2.3/4 x 1/2" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	9/16	4
18	ALCG	2.3/8 x 1/2" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	9/16	24
VALVES / IN-LINE ITEMS				
19	ALCG	GATE 150# FLANGED RF C.STL F6 TRIM	2	1
20	ALCG	GATE 150# FLANGED RF C.STL F6 TRIM	1/2	2
21	ALCG	BALL 150# FLGD RF FULL PORT S.S. BALL & STEM	1/2	1
INSTRUMENTS				
22	ALCG	PRESSURE INDICATOR WITH DIAPHRAGM SEAL	1/2	1

TRACING SPEC: S-TRACING (NOTE-10)

AREA: CETYL		2"-ALCG-20031	
PIPING GA NO: -	P&ID NO: 1020	STRESS CRITICAL: NA	
OP.TEMP: 280	OP.PRESS: 80psig	TEST MEDIUM: Hydro	
DES.TEMP: 400	DES.PRESS: 150	TEST PRESS: 225	
SCALE: NONE	INSUL.TYPE: NS-CELLULAR	INSUL.THK: 1.5	
LINE NO. / FILE NAME: 2"-ALCG-20031			ISSUE: R4

SIZE-A3



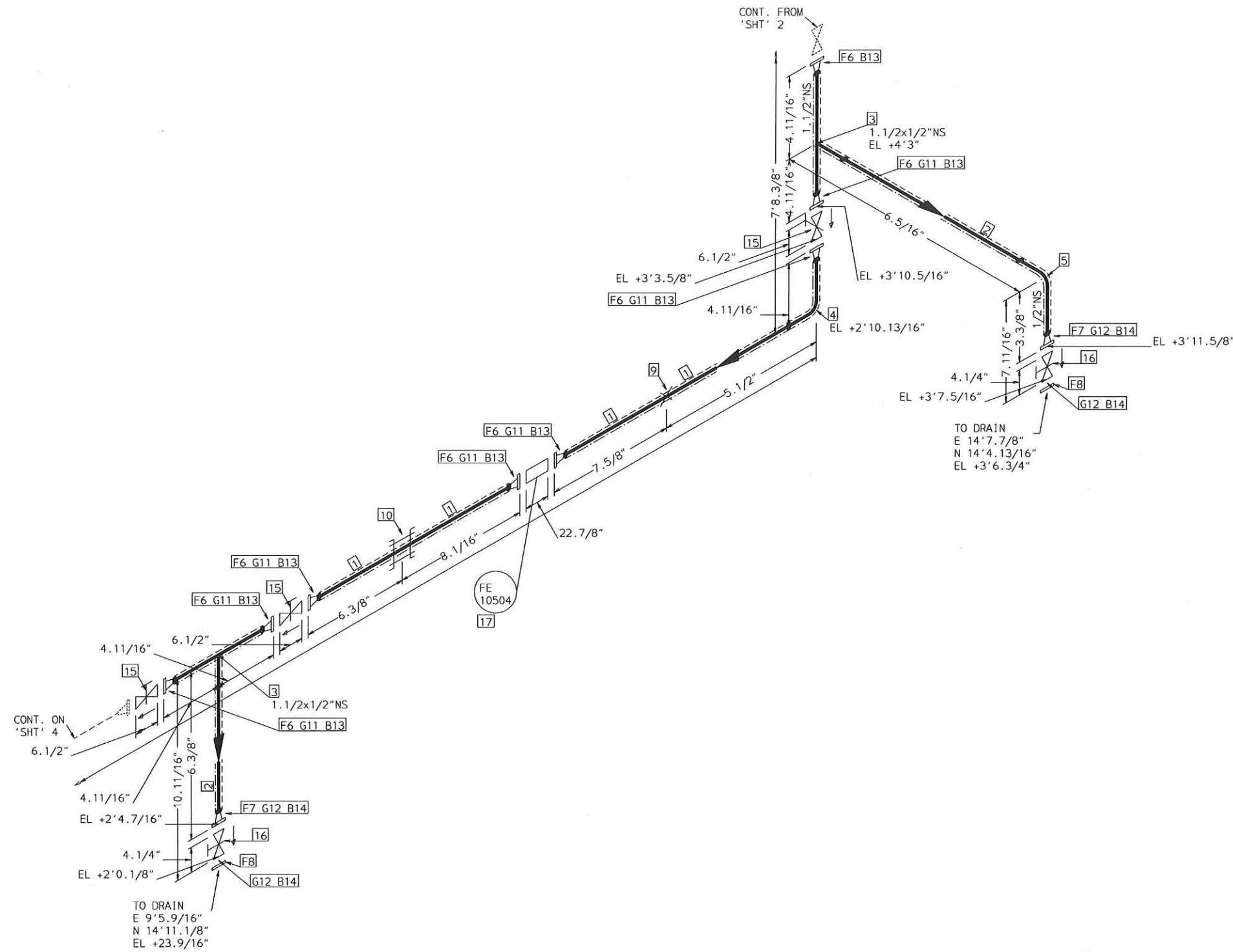
FABRICATION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
<b>PIPE</b>				
1	ALCG	PIPE STD WT SMLS STL A106-B	2	17.3'
2	ALCG	PIPE STD WT SMLS STL A106-B	1	4.7'
<b>FITTINGS</b>				
3	ALCG	REDUCER CONC STD WT STL A234 WPB BW	2 x 1.1/2	1
4	ALCG	ELL 90 DEG LR STD WT STL A234 WPB BW	2	5
5	ALCG	TEE STD WT STL A234 WPB BW	1.1/2	1
6	ALCG	ELL 90 DEG LR STD WT STL A234 WPB BW	1 x 1	1
<b>FLANGES</b>				
7	ALCG	FLG WN 150# RF STL STD BORE A105	2	1
8	ALCG	FLG WN 150# RF STL STD BORE A105	1.1/2	1
9	ALCG	FLG WN 150# RF STL STD BORE A105	1	2
ERECTION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
<b>FITTINGS</b>				
10	SUPP	SPS-37 TWO DIRECTIONAL RESTRAINT SUPPORT	2	1
11	SUPP	SPS-2G GUIDE SUPPORT	1	1
<b>GASKETS</b>				
12	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	2	1
13	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	1.1/2	2
14	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	1	2
<b>BOLTS</b>				
15	ALCG	3.1/8 x 5/8" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	11/16	4
16	ALCG	2.3/4 x 1/2" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	9/16	4
17	ALCG	2.9/16 x 1/2" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	9/16	8
<b>VALVES / IN-LINE ITEMS</b>				
18	ALCG	GATE 150# FLANGED RF C.STL F6 TRIM	2	1
19	ALCG	GATE 150# FLANGED RF C.STL F6 TRIM	1.1/2	1
20	ALCG	GATE 150# FLANGED RF C.STL F6 TRIM	1	1

TRACING SPEC: S-TRACING (NOTE-10)

AREA: CETYL		2"-ALCG-20031	
PIPING GA NO: -	P&ID NO: 1020	STRESS CRITICAL: NA	
OP.TEMP: 280	OP.PRESS: 80psig	TEST MEDIUM: Hydro	
DES.TEMP: 400	DES.PRESS: 150	TEST PRESS: 225	
SCALE: NONE	INSUL.TYPE: NS-CELLULAR	INSUL.THK: 1.5	
LINE NO. / FILE NAME: 2"-ALCG-20031			ISSUE: R4

SIZE-A3





TRACING SPEC: S-TRACING (NOTE-10)

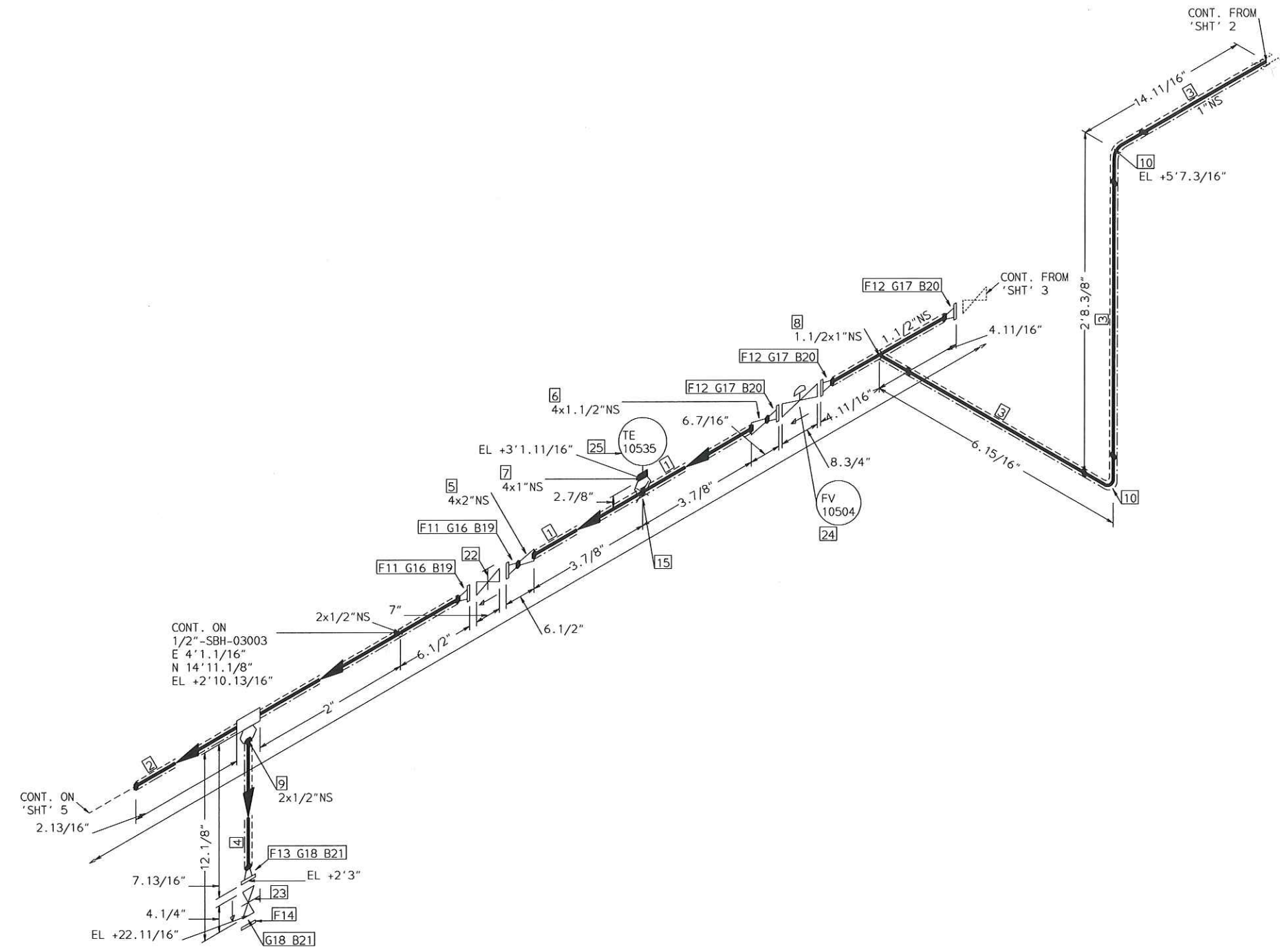
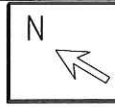
FABRICATION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
<b>PIPE</b>				
1	ALCG	PIPE STD WT SMLS STL A106-B	1.1/2	1.5'
2	ALCG	PIPE STD WT SMLS STL A106-B	1/2	0.5'
<b>FITTINGS</b>				
3	ALCG	TEE STD WT STL A234 WPB BW	1.1/2	2
4	ALCG	ELL 90 DEG LR STD WT STL A234 WPB BW	1.1/2	1
5	ALCG	ELL 90 DEG LR STD WT STL A234 WPB BW	1/2	1
<b>FLANGES</b>				
6	ALCG	FLG WN 150# RF STL STD BORE A105	1.1/2	8
7	ALCG	FLG WN 150# RF STL STD BORE A105	1/2	2
8	ALCG	FLG BLIND 150# RF STL A105	1/2	2

ERECTION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
<b>FITTINGS</b>				
9	SUPP	SPS-2 RESTING SUPPORT	1.1/2	1
10	SUPP	SPS-37 TWO DIRECTIONAL RESTRAINT SUPPORT	1.1/2	1
<b>GASKETS</b>				
11	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	1.1/2	7
12	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	1/2	4
<b>BOLTS</b>				
13	ALCG	2.3/4 x1/2" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	9/16	32
14	ALCG	2.3/8 x1/2" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	9/16	16
<b>VALVES / IN-LINE ITEMS</b>				
15	ALCG	GATE 150# FLANGED RF C.STL F6 TRIM	1.1/2	3
16	ALCG	GATE 150# FLANGED RF C.STL F6 TRIM	1/2	2
<b>INSTRUMENTS</b>				
17		MICRO MOTION FLOWMETER 150# RF FE 10504	1.1/2	1

AREA: CETYL	2"-ALCG-20031	
PIPING GA NO: -	P&ID NO: 1020	STRESS CRITICAL: NA
OP.TEMP: 280	OP.PRESS: 80psig	TEST MEDIUM: Hydro
DES.TEMP: 400	DES.PRESS: 150	TEST PRESS: 225
SCALE: NONE	INSUL.TYPE: NS-CELLULAR	INSUL.THK: 1.5
LINE NO. / FILE NAME: 2"-ALCG-20031	ISSUE: R4	

SIZE-A3



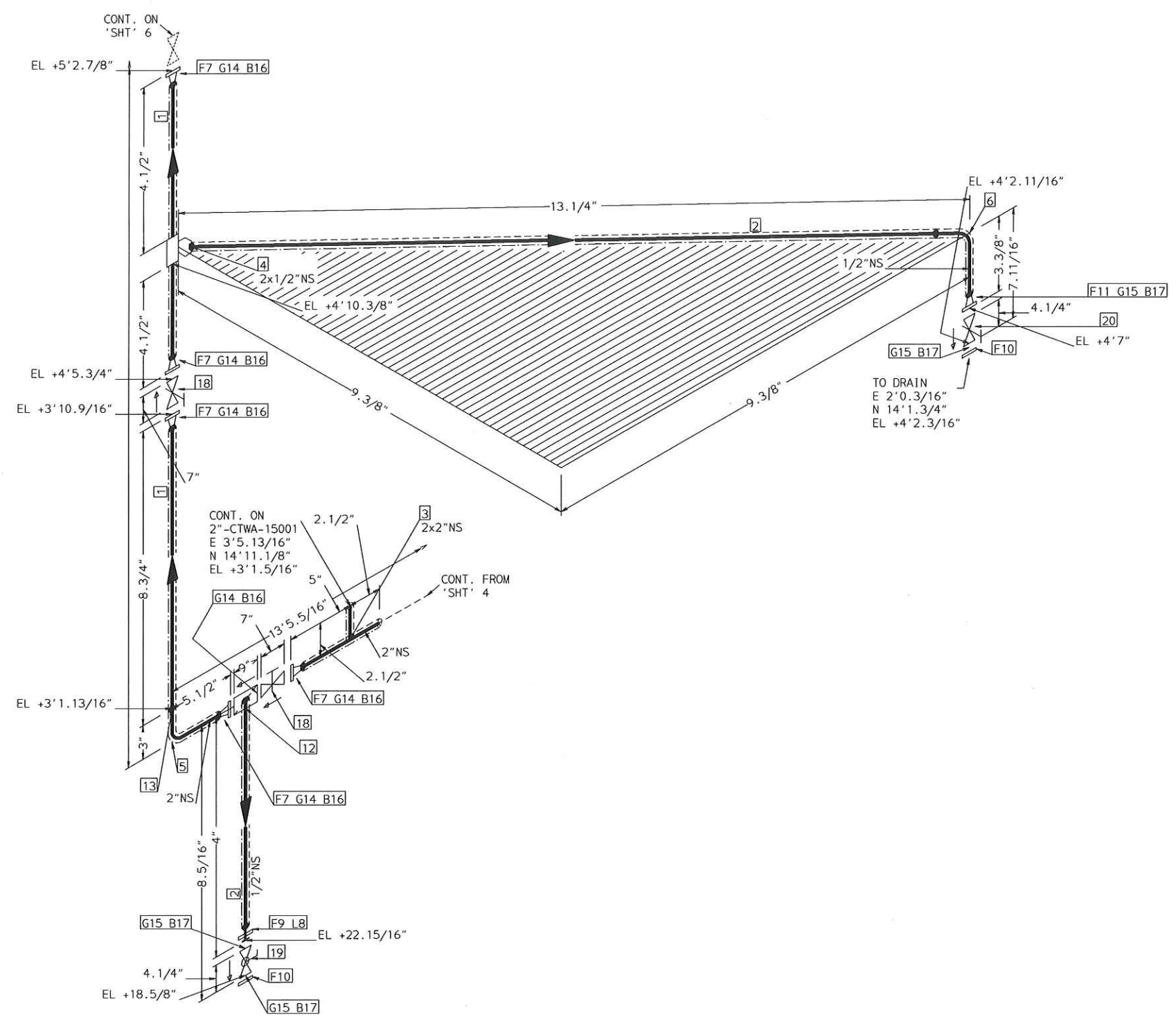


TRACING SPEC: S-TRACING (NOTE-10)

FABRICATION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
PIPE				
1	ALCG	PIPE STD WT SMLS STL A106-B	4	0.7'
2	ALCG	PIPE STD WT SMLS STL A106-B	2	0.8'
3	ALCG	PIPE STD WT SMLS STL A106-B	1	3.9'
4	ALCG	PIPE STD WT SMLS STL A106-B	1/2	0.4'
FITTINGS				
5	ALCG	REDUCER CONC STD WT STL A234 WPB BW	4 x 2	1
6	ALCG	REDUCER CONC STD WT STL A234 WPB BW	4 x 1.1/2	1
7	ALCG	THREDOLET 3000# STL A105	4 x 1	1
8	ALCG	TEE STD WT STL A234 WPB BW	1.1/2 x 1	1
9	ALCG	WELDOLET STD WT STL A105	2 x 1.1/2	1
10	ALCG	ELL 90 DEG LR STD WT STL A234 WPB BW	1	2
FLANGES				
11	ALCG	FLG WN 150# RF STL STD BORE A105	2	2
12	ALCG	FLG WN 150# RF STL STD BORE A105	1.1/2	3
13	ALCG	FLG WN 150# RF STL STD BORE A105	1/2	1
14	ALCG	FLG BLIND 150# RF STL A105	1/2	1

ERECTION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
FITTINGS				
15	SUPP	SPS-2 RESTING SUPPORT	4	1
GASKETS				
16	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	2	2
17	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	1.1/2	3
18	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	1/2	2
BOLTS				
19	ALCG	3.1/8 x 5/8" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	11/16	8
20	ALCG	2.3/4 x 1/2" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	9/16	12
21	ALCG	2.3/8 x 1/2" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	9/16	8
VALVES / IN-LINE ITEMS				
22	ALCG	GATE 150# FLANGED RF C.STL F6 TRIM	2	1
23	ALCG	GATE 150# FLANGED RF C.STL F6 TRIM	1/2	1
INSTRUMENTS				
24		STANDARD CONTROL VALVE 150#.RF B16.10 FV 10504	1.1/2	1
25		TEMPERATURE TRANSMITTER TE 10535	1	1

AREA: CETYL	2"-ALCG-20031	
PIPING GA NO: -	P&ID NO: 1020	STRESS CRITICAL: NA
OP.TEMP: 280	OP.PRESS: 80psig	TEST MEDIUM: Hydro
DES.TEMP: 400	DES.PRESS: 150	TEST PRESS: 225
SCALE: NONE	INSUL.TYPE: NS-CELLULAR	INSUL.THK: 1.5
LINE NO. / FILE NAME: 2"-ALCG-20031	ISSUE: R4	SIZE-A3



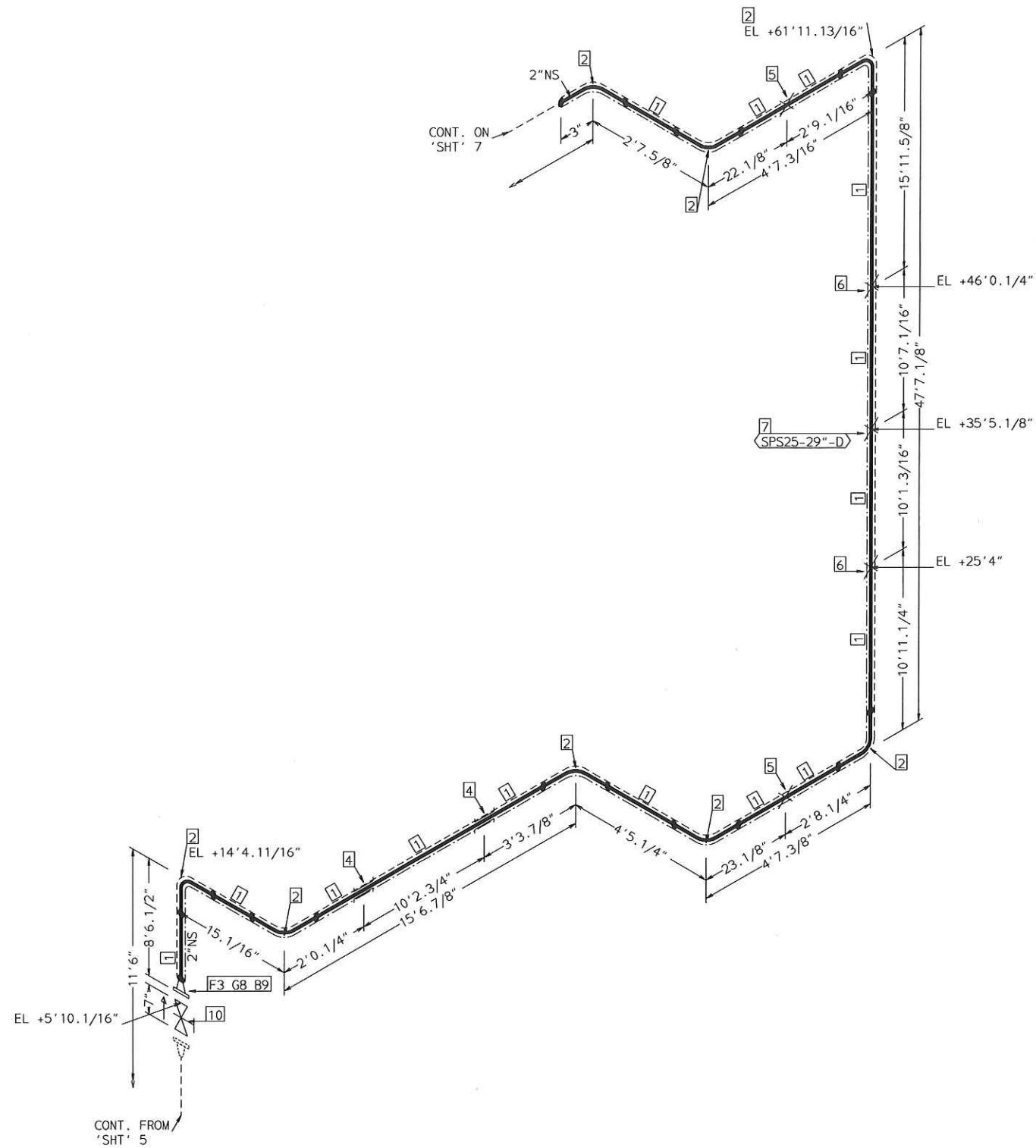
TRACING SPEC: S-TRACING (NOTE-10)

FABRICATION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
<b>PIPE</b>				
1	ALCG	PIPE STD WT SMLS STL A106-B	2	0.9'
2	ALCG	PIPE STD WT SMLS STL A106-B	1/2	1.0'
<b>FITTINGS</b>				
3	ALCG	TEE STD WT STL A234 WPB BW	2 x 2	1
4	ALCG	WELDOLET STD WT STL A105	2 x 1/2	1
5	ALCG	ELL 90 DEG LR STD WT STL A234 WPB BW	2	1
6	ALCG	ELL 90 DEG LR STD WT STL A234 WPB BW	1/2	1
<b>FLANGES</b>				
7	ALCG	FLG WN 150# RF STL STD BORE A105	2	5
8	ALCG	STUB END STD WT STL TYPE A A234 WPB (SHORT PATTERN LENGTH) BW	1/2	1
9	ALCG	FLG LAP JOINT 150# STL A105	1/2	1
10	ALCG	FLG BLIND 150# RF STL A105	1/2	2
11	ALCG	FLG WN 150# RF STL STD BORE A105	1/2	1
<b>VALVES / IN-LINE ITEMS</b>				
12	ALCG	STRAINER ( BASKET-TYPE ) 150CL. RF	2	1

ERECTION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
<b>FITTINGS</b>				
13	SUPP	SPS13A TRUNNION SUPPORT	2	1
<b>GASKETS</b>				
14	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	2	6
15	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	1/2	4
<b>BOLTS</b>				
16	ALCG	3.1/8 x 5/8" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	11/16	24
17	ALCG	2.3/8 x 1/2" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	9/16	16
<b>VALVES / IN-LINE ITEMS</b>				
18	ALCG	GATE 150# FLANGED RF C.STL F6 TRIM	2	2
19	ALCG	BALL 150# FLGD RF FULL PORT S.S. BALL & STEM	1/2	1
20	ALCG	GATE 150# FLANGED RF C.STL F6 TRIM	1/2	1

AREA: CETYL	2"-ALCG-20031	
PIPING GA NO: -	P&ID NO: 1020	STRESS CRITICAL: NA
OP.TEMP: 280	OP.PRESS: 80psig	TEST MEDIUM: Hydro
DES.TEMP: 400	DES.PRESS: 150	TEST PRESS: 225
SCALE: NONE	INSUL.TYPE: NS-CELLULAR	INSUL.THK: 1.5
LINE NO. / FILE NAME: 2"-ALCG-20031	ISSUE: R4	

SIZE-A3

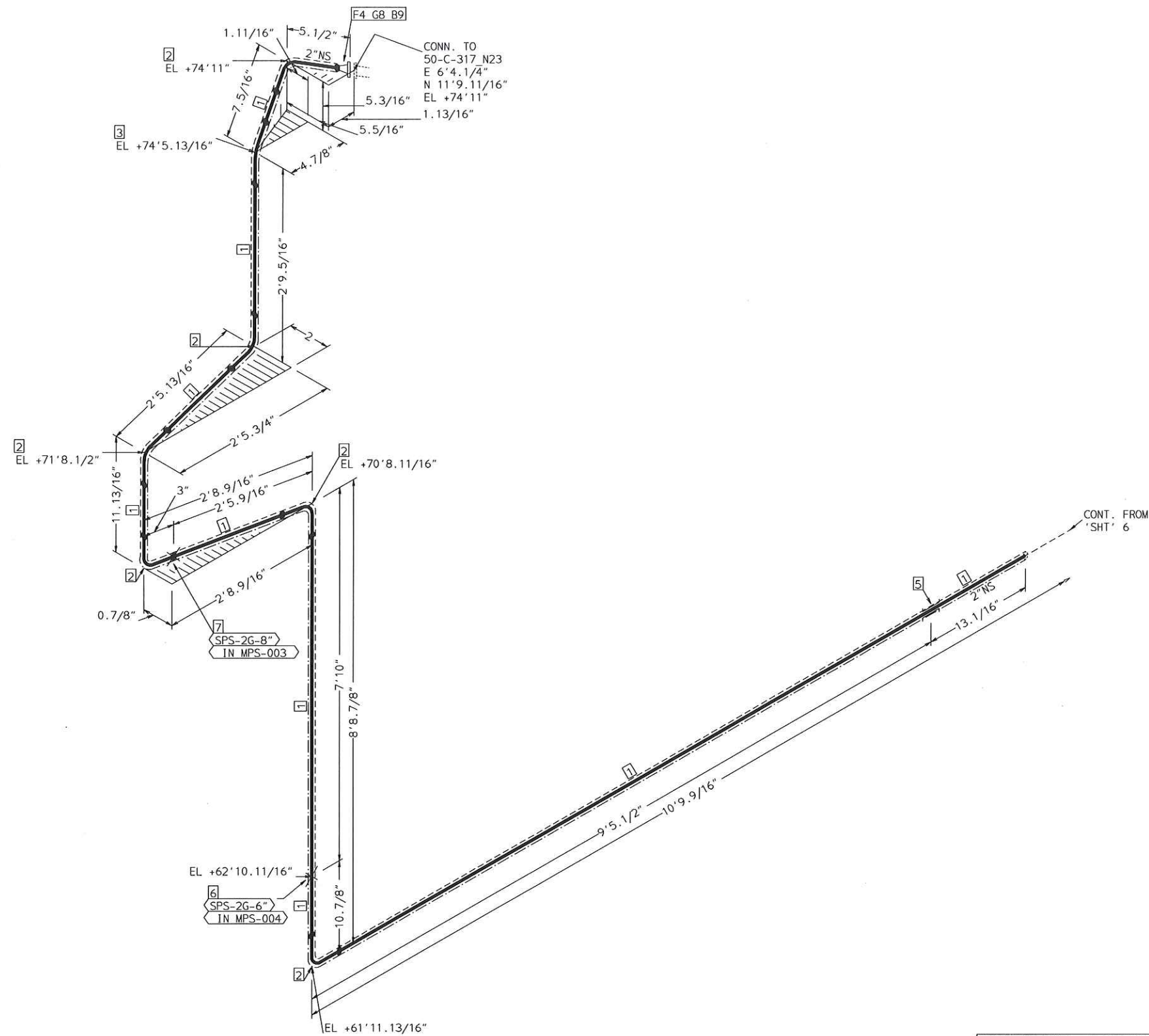


TRACING SPEC: S-TRACING (NOTE-10)

FABRICATION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
1	ALCG	PIPE	2	85.3'
		PIPE STD WT SMLS STL A106-B		
2	ALCG	FITTINGS	2	8
		ELL 90 DEG LR STD WT STL A234 WPB BW		
3	ALCG	FLANGES	2	1
FLG WN 150# RF STL STD BORE A105				
ERECTION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
4	SUPP	FITTINGS	2	2
		SPS-2G GUIDE SUPPORT		
		SPS-2 RESTING SUPPORT		
		SPS-67G1 support		
5	SUPP	SPS-25 TRUNNION SUPPORT	2	1
8	ALCG	GASKETS	2	1
		GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG		
9	ALCG	BOLTS	11/16	4
		3.1/8 x5/8" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS		
10	ALCG	VALVES / IN-LINE ITEMS	2	1
		GATE 150# FLANGED RF C.STL F6 TRIM		

AREA: CETYL	2"-ALCG-20031	
PIPING GA NO: -	P&ID NO: 1020	STRESS CRITICAL: NA
OP.TEMP: 280	OP.PRESS: 80psig	TEST MEDIUM: Hydro
DES.TEMP: 400	DES.PRESS: 150	TEST PRESS: 225
SCALE: NONE	INSUL.TYPE: NS-CELLULAR	INSUL.THK: 1.5
LINE NO. / FILE NAME: 2"-ALCG-20031	ISSUE: R4	

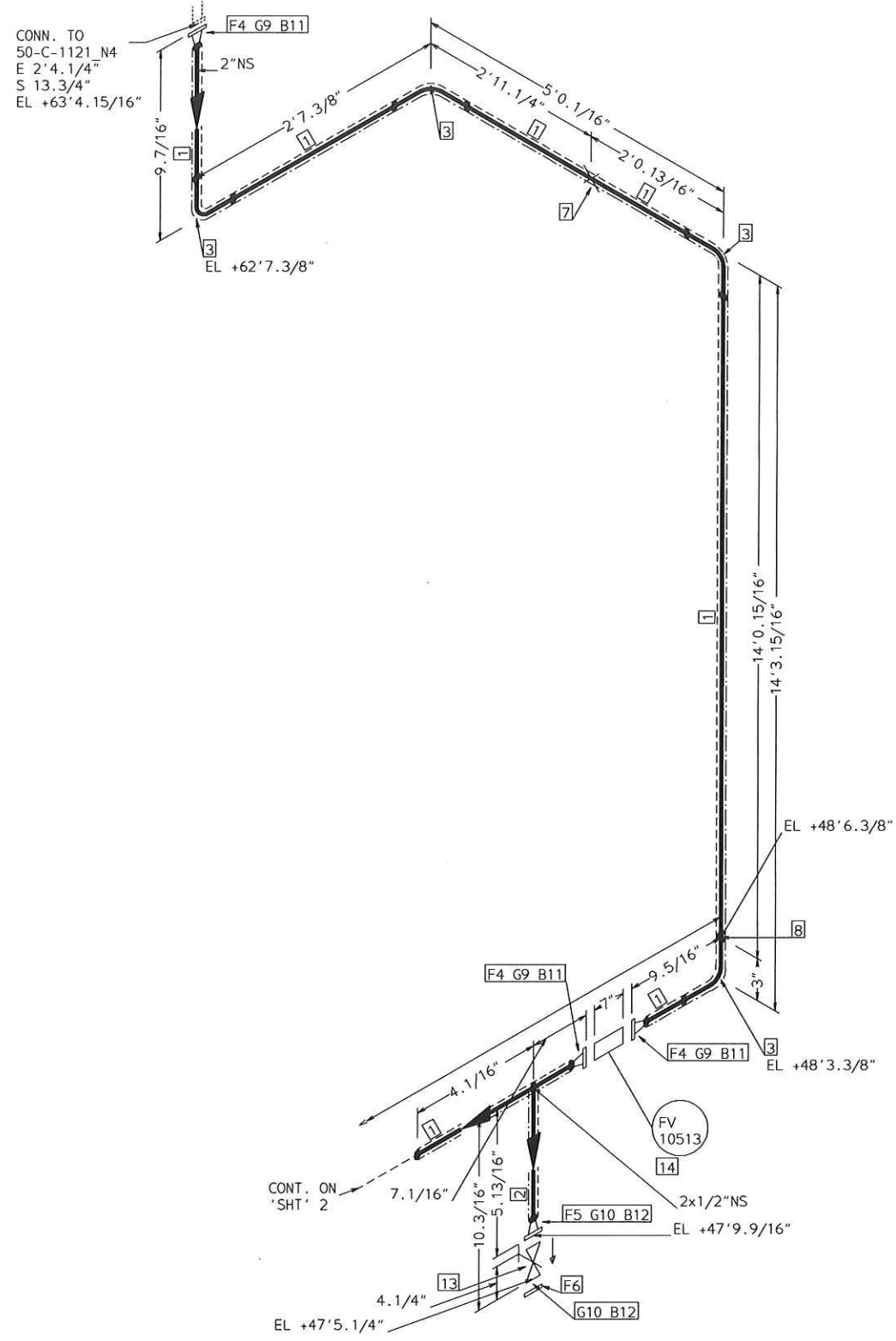
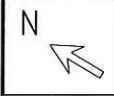




TRACING SPEC: S-TRACING (NOTE-10)

FABRICATION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
1	ALCG	PIPE	2	25.9'
		PIPE STD WT SMLS STL A106-B		
2	ALCG	FITTINGS	2	6
		ELL 90 DEG LR STD WT STL A234 WPB BW		
3	ALCG	ELL 45 DEG STD WT STL A234 WPB BW	2	1
4	ALCG	FLANGES	2	1
		FLG WN 150# RF STL STD BORE A105		
ERECTION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
5	SUPP	FITTINGS	2	1
		SPS-2G GUIDE SUPPORT		
		SPS-25 TRUNNION SUPPORT		
6	SUPP	SPS25 TRUNNION SUPPORT	2	1
7	SUPP	SPS25 TRUNNION SUPPORT	2	1
8	ALCG	GASKETS	2	1
		GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG		
9	ALCG	BOLTS	11/16	4
		3.1/8 x5/8" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS		

AREA: CETYL	2" -ALCG-20031	
PIPING GA NO: -	P&ID NO: 1020	STRESS CRITICAL: NA
OP.TEMP: 280	OP.PRESS: 80psig	TEST MEDIUM: Hydro
DES.TEMP: 400	DES.PRESS: 150	TEST PRESS: 225
SCALE: NONE	INSUL.TYPE: N5-CELLULAR	INSUL.THK: 1.5
LINE NO. / FILE NAME: 2" -ALCG-20031	ISSUE: R4	

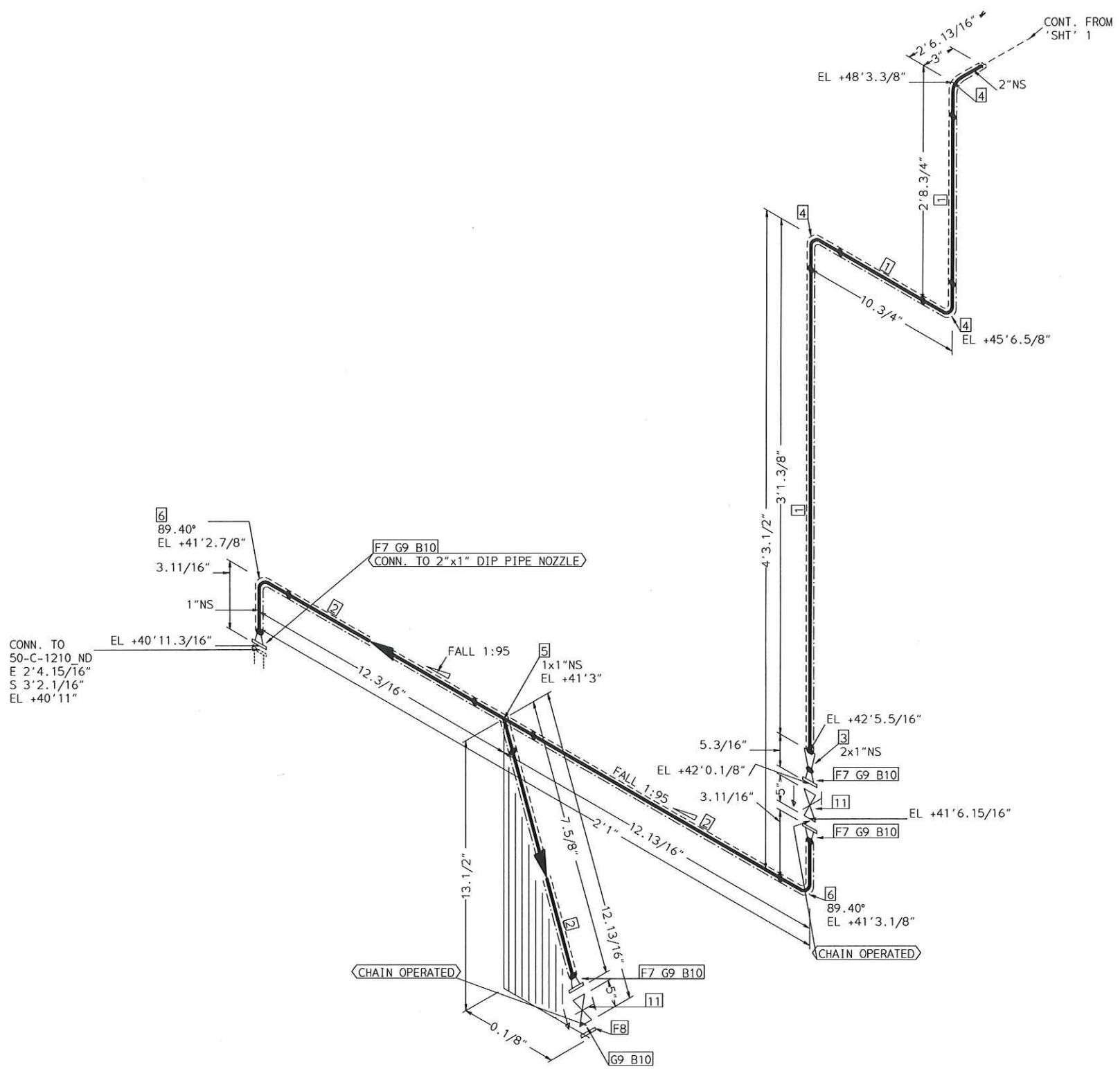


TRACING SPEC: S-TRACING (NOTE-10)

FABRICATION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
PIPE				
1	ALCG	PIPE STD WT SMLS STL A106-B	2	21.9'
2	ALCG	PIPE STD WT SMLS STL A106-B	1/2	0.4'
FITTINGS				
3	ALCG	ELL 90 DEG LR STD WT STL A234 WPB BW	2	4
FLANGES				
4	ALCG	FLG WN 150# RF STL STD BORE A105	2	3
5	ALCG	FLG WN 150# RF STL STD BORE A105	1/2	1
6	ALCG	FLG BLIND 150# RF STL A105	1/2	1
ERECTION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
FITTINGS				
7	SUPP	SPS-2 RESTING SUPPORT	2	1
8	SUPP	SPS13A TRUNNION SUPPORT	2	1
GASKETS				
9	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	2	3
10	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	1/2	2
BOLTS				
11	ALCG	3.1/8 x5/8" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	11/16	12
12	ALCG	2.3/8 x1/2" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	9/16	8
VALVES / IN-LINE ITEMS				
13	ALCG	GATE 150# FLANGED RF C.STL F6 TRIM	1/2	1
INSTRUMENTS				
14		ON-OFF VALVE 150# RF FV 10513	2	1

AREA: CETYL	2" -ALCG-20037	
PIPING GA NO: -	P&ID NO: 1020	STRESS CRITICAL: NA
OP. TEMP: 200°F	OP. PRESS: 32 mmHg psig	TEST MEDIUM: Hydro
DES. TEMP: 400°F	DES. PRESS: FV psig	TEST PRESS: 75 psig
SCALE: NONE	INSUL. TYPE: N5-CELLULAR	INSUL. THK: 1.5 Inch
LINE NO. / FILE NAME: 2" -ALCG-20037	ISSUE: R3	

SIZE-A3



FABRICATION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
<b>PIPE</b>				
1	ALCG	PIPE STD WT SMLS STL A106-B	2	5.5'
2	ALCG	PIPE STD WT SMLS STL A106-B	1	2.0'
<b>FITTINGS</b>				
3	ALCG	REDUCER CONC STD WT STL A234 WPB BW	2 x 1	1
4	ALCG	ELL 90 DEG LR STD WT STL A234 WPB BW	2	3
5	ALCG	TEE STD WT STL A234 WPB BW	1 x 1	1
6	ALCG	ELL 90 DEG LR STD WT STL A234 WPB BW	1	2
<b>FLANGES</b>				
7	ALCG	FLG WN 150# RF STL STD BORE A105	1	4
8	ALCG	FLG BLIND 150# RF STL A105	1	1
ERECTION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
<b>GASKETS</b>				
9	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	1	5
<b>BOLTS</b>				
10	ALCG	2.9/16 x 1/2" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	9/16	20
<b>VALVES / IN-LINE ITEMS</b>				
11	ALCG	GATE 150# FLANGED RF C.STL F6 TRIM	1	2

TRACING SPEC: S-TRACING (NOTE-10)

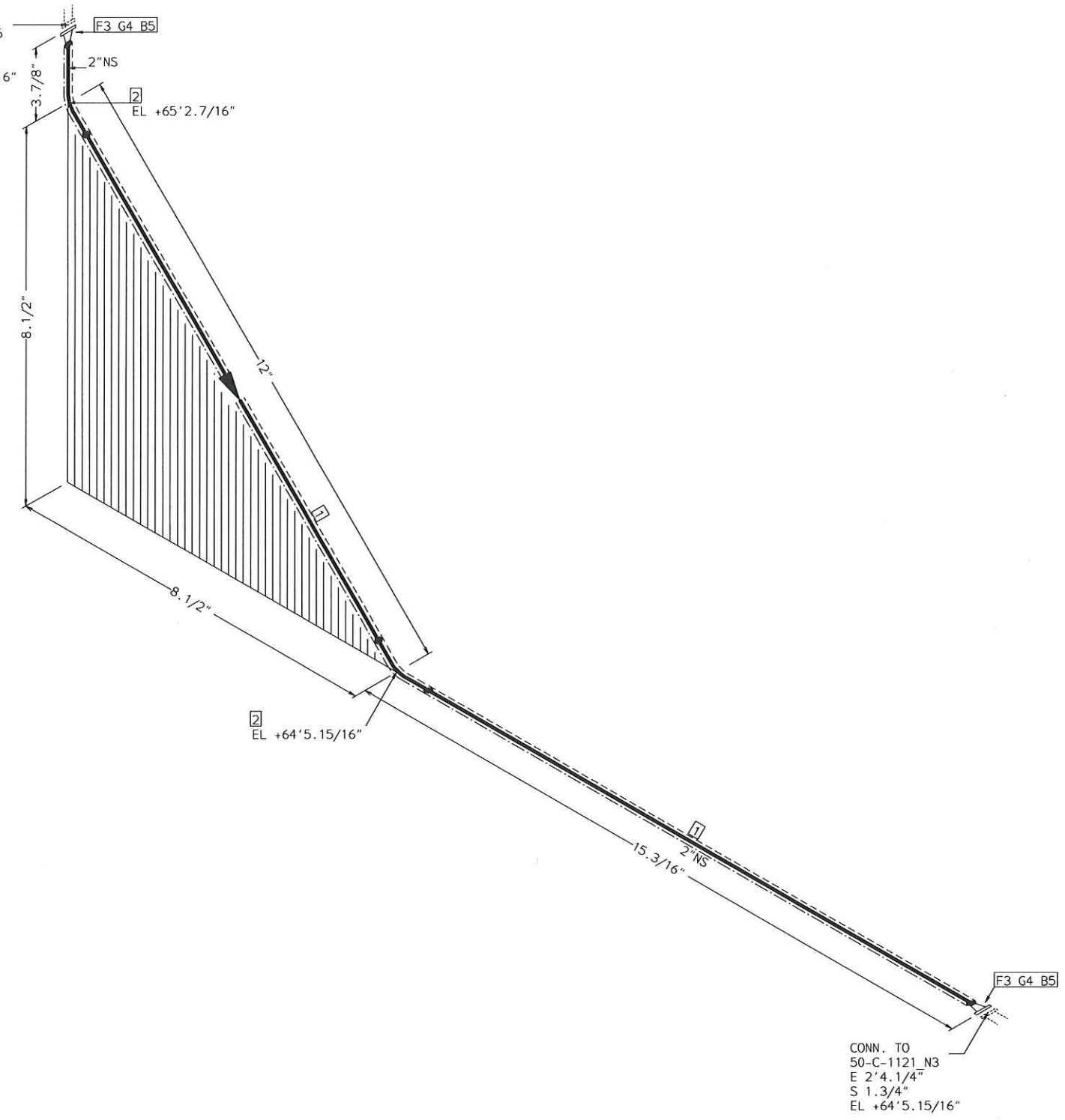
AREA: CETYL		2"-ALCG-20037	
PIPING GA NO: -	P&ID NO: 1020	STRESS CRITICAL: NA	
OP.TEMP: 200°F	OP.PRESS: 32 mmHg psig	TEST MEDIUM: Hydro	
DES.TEMP: 400°F	DES.PRESS: FV psig	TEST PRESS: 75 psig	
SCALE: NONE	INSUL.TYPE: NS-CELLULAR	INSUL.THK: 1.5 inch	
LINE NO. / FILE NAME: 2"-ALCG-20037			ISSUE: R3

SIZE-A3





CONN. TO  
50-E-7358 N5  
E 2'4.1/4"  
N 22.1/8"  
EL +65'6.7/16"



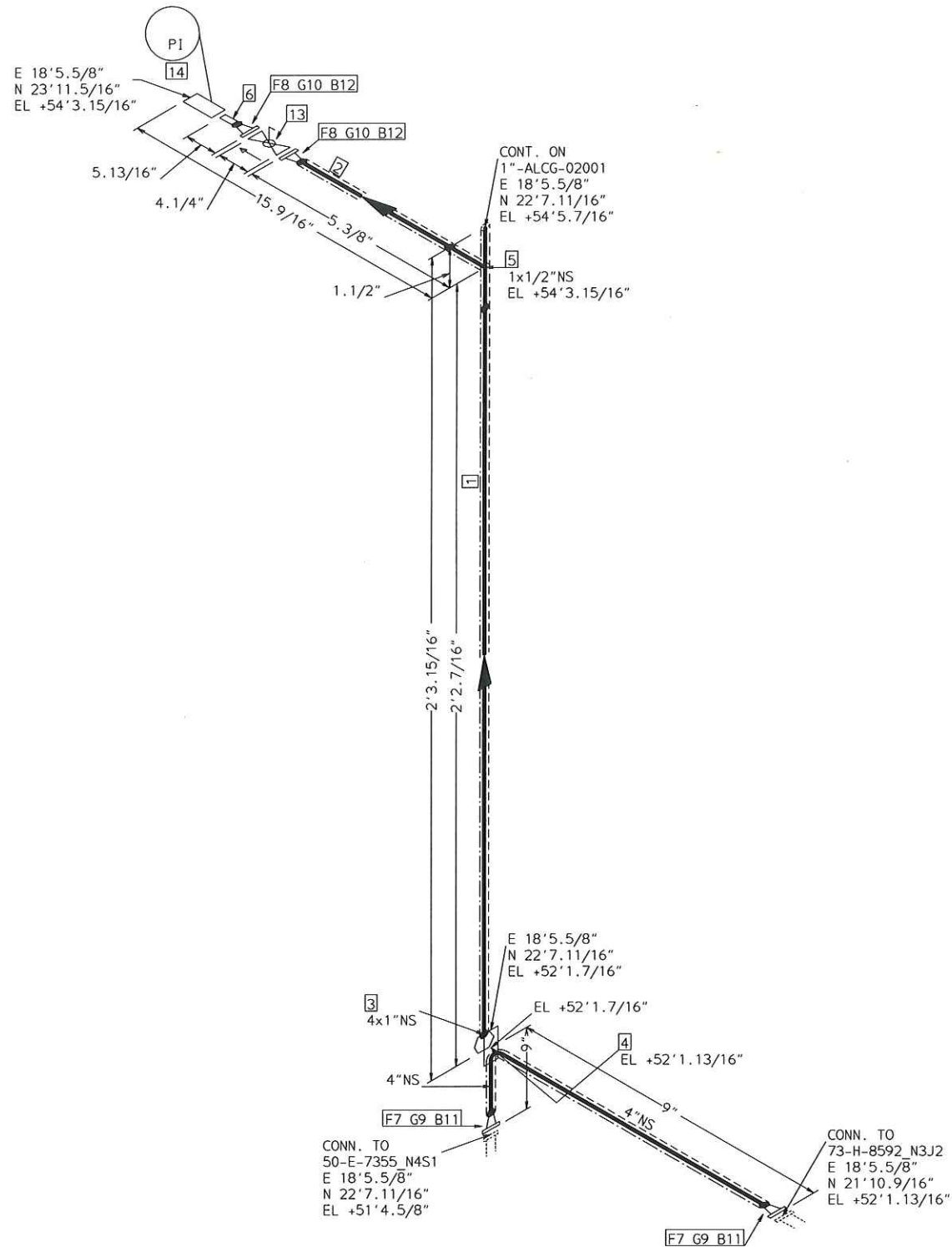
CONN. TO  
50-C-1121 N3  
E 2'4.1/4"  
S 1.3/4"  
EL +64'5.15/16"

TRACING SPEC: S-TRACING (NOTE-10)

FABRICATION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
1	ALCG	PIPE	2	1.8'
		PIPE STD WT SMLS STL A106-B		
2	ALCG	FITTINGS	2	2
		ELL 45 DEG STD WT STL A234 WPB BW		
3	ALCG	FLANGES	2	2
		FLG WN 150# RF STL STD BORE A105		
ERECTION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
4	ALCG	GASKETS	2	2
		GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG		
5	ALCG	BOLTS	11/16	8
		3.1/8 x5/8" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS		

AREA: CETYL		2"-ALCG-20038	
PIPING GA NO: -	P&ID NO: 1020	STRESS CRITICAL: NA	
OP. TEMP: 200°F	OP. PRESS: 32 mmHg psig	TEST MEDIUM: Hydro	
DES. TEMP: 400°F	DES. PRESS: FV psig	TEST PRESS: 75 psig	
SCALE: NONE	INSUL. TYPE: N5-CELLULAR	INSUL. THK: 1.5 inch	
LINE NO. / FILE NAME: 2"-ALCG-20038			ISSUE: R3

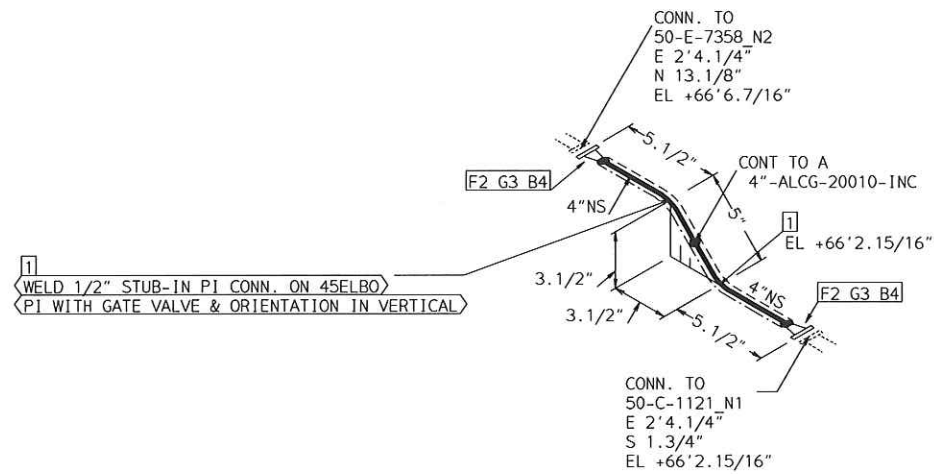
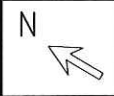
SIZE-A3



TRACING SPEC: S-TRACING (NOTE-10)

FABRICATION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
PIPE				
1	ALCG	PIPE STD WT SMLS STL A106-B	1	1.9'
2	ALCG	PIPE STD WT SMLS STL A106-B	1/2	0.2'
FITTINGS				
3	ALCG	ELBOLET STD WT STL A105	4 x 1	1
4	ALCG	ELL 90 DEG LR STD WT STL A234 WPB BW	4	1
5	ALCG	TEE STD WT STL A234 WPB BW	1 x 1/2	1
6	ALCG	NIPPLE POE/TOE NPT 100MM LONG ASTM A105	1/2	1
FLANGES				
7	ALCG	FLG WN 150# RF STL STD BORE A105	4	2
8	ALCG	FLG WN 150# RF STL STD BORE A105	1/2	2
ERECTION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
GASKETS				
9	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	4	2
10	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	1/2	2
BOLTS				
11	ALCG	3.9/16 x5/8" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	11/16	16
12	ALCG	2.3/8 x1/2" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	9/16	8
VALVES / IN-LINE ITEMS				
13	ALCG	BALL 150# FLGD RF FULL PORT S.S. BALL & STEM	1/2	1
INSTRUMENTS				
14		PRESSURE INDICATOR WITH DIAPHRAGM SEAL PI	1/2	1

AREA: CETYL	4"-ALCG-02009	
PIPING GA NO: -	P&ID NO: 1002	STRESS CRITICAL: NA
OP.TEMP: 305°F	OP.PRESS: 32 mHg psig	TEST MEDIUM: Hydro
DES.TEMP: 332°F	DES.PRESS: FV / 150 psig	TEST PRESS: 225 psig
SCALE: NONE	INSUL.TYPE: NS-CELLULAR	INSUL.THK: 2 inch
LINE NO. / FILE NAME: 4"-ALCG-02009	ISSUE: R3	SIZE-A3

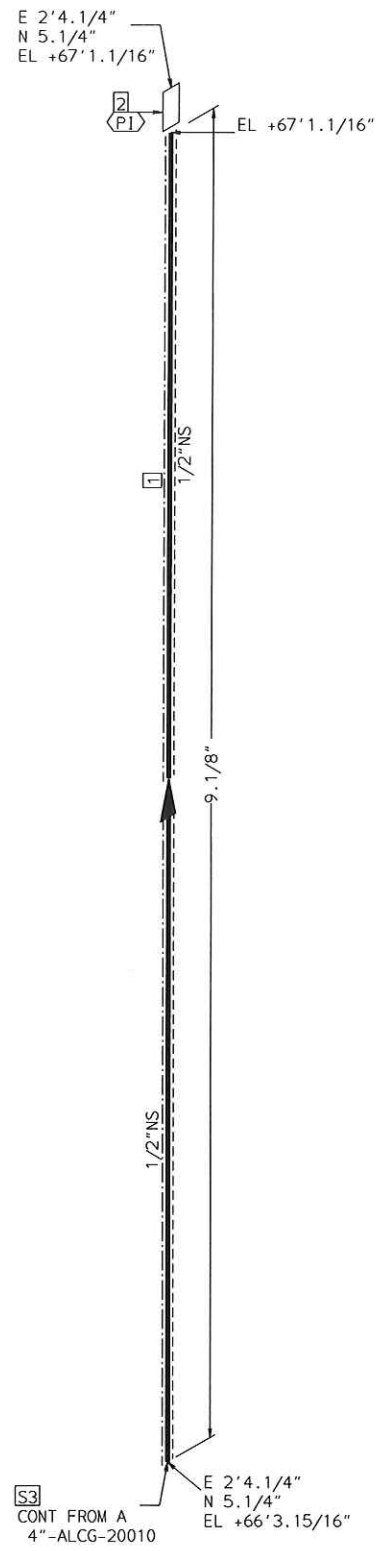
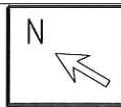


TRACING SPEC: S-TRACING (NOTE-10)

FABRICATION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
1	ALCG	FITTINGS	4	2
		ELL 45 DEG STD WT STL A234 WPB BW		
2	ALCG	FLANGES	4	2
		FLG WN 150# RF STL STD BORE A105		
ERECTION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
3	ALCG	GASKETS	4	2
		GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG		
4	ALCG	BOLTS	11/16	16
		3.9/16 x5/8" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS		

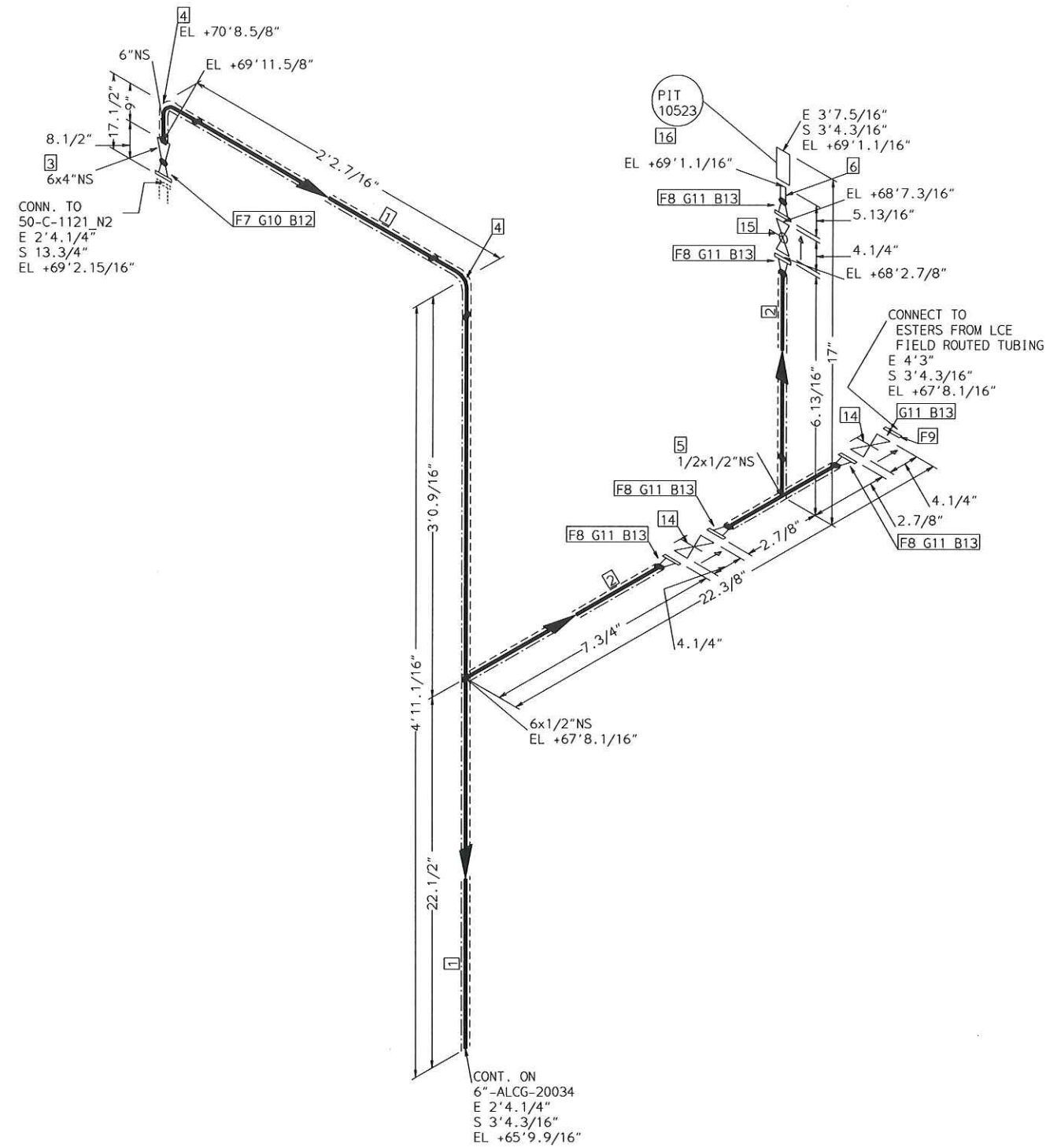
AREA: CETYL	4"-ALCG-20010	
PIPING GA NO: -	P&ID NO: 1020	STRESS CRITICAL: NA
OP. TEMP: 200°F	OP. PRESS: 32 miHg psig	TEST MEDIUM: Hydro
DES. TEMP: 400°F	DES. PRESS: 150/FV psig	TEST PRESS: 225 psig
SCALE: NONE	INSUL. TYPE: NS-CELLULAR	INSUL. THK: 2 Inch
LINE NO. / FILE NAME: 4"-ALCG-20010	ISSUE: R3	





FABRICATION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
1	ALCG	PIPE	1/2	0.8'
		PIPE STD WT SMLS STL A106-B		
ERECTION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
2	ALCG	INSTRUMENTS	1/2	1
		PRESSURE INDICATOR WITH DIAPHRAGM SEAL		
3	ALCG	SUPPORTS	1/2	1
		PIPE SUPPORT ATT POINT		

AREA:		4"-ALCG-20010-INC	
PIPING GA NO:	P&ID NO: 0	STRESS CRITICAL:	
OP.TEMP:	OP.PRESS:	TEST MEDIUM:	
DES.TEMP:	DES.PRESS:	TEST PRESS:	
SCALE: NONE	INSUL.TYPE:	INSUL.THK:	
LINE NO. / FILE NAME: 4"-ALCG-20010-INC	ISSUE: R3		SIZE-A3

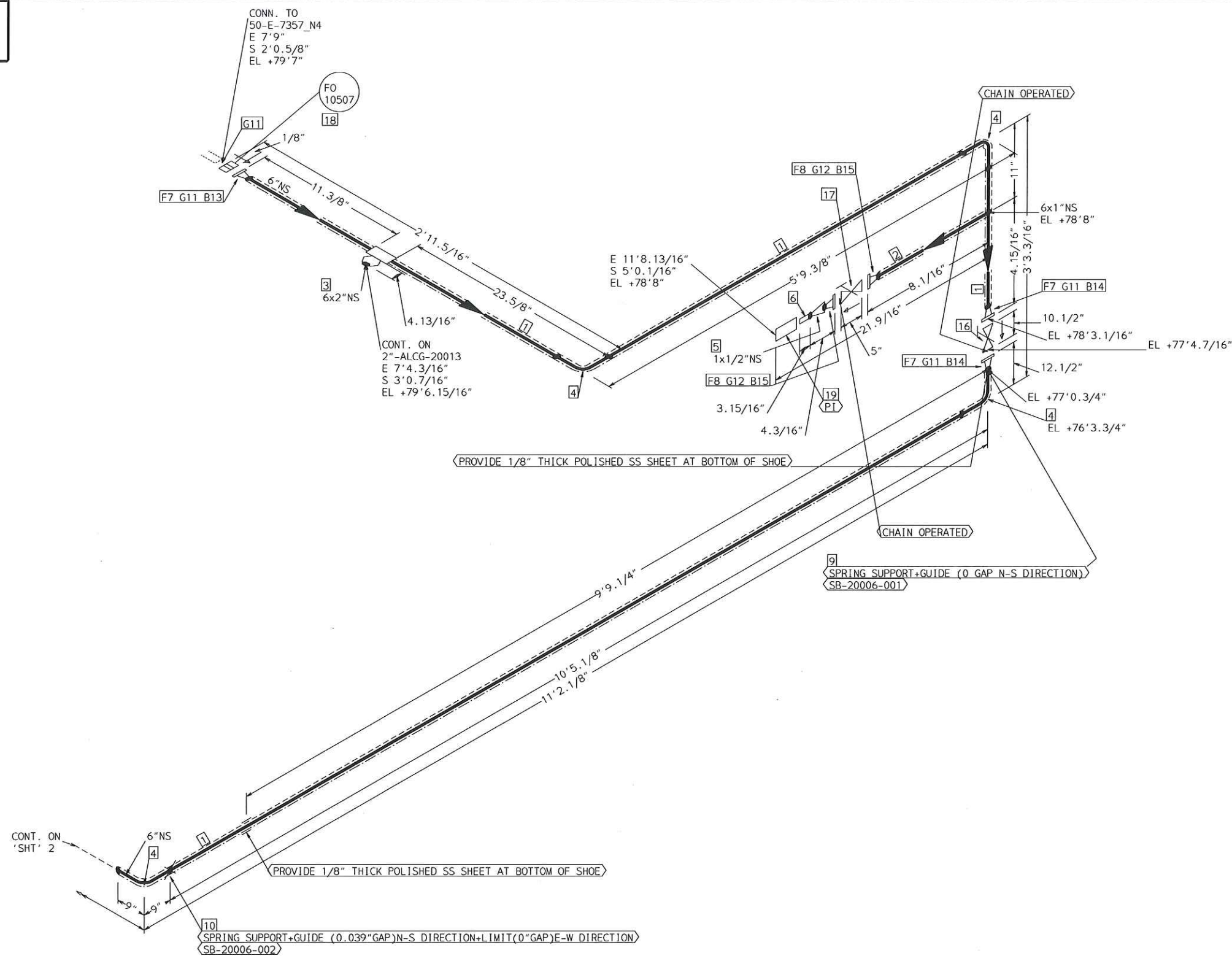


FABRICATION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
<b>PIPE</b>				
1	ALCG	PIPE STD WT SMLS STL A106-B	6	4.9'
2	ALCG	PIPE STD WT SMLS STL A106-B	1/2	0.9'
<b>FITTINGS</b>				
3	ALCG	REDUCER CONC STD WT STL A234 WPB BW	6 x 4	1
4	ALCG	ELL 90 DEG LR STD WT STL A234 WPB BW	6	2
5	ALCG	TEE STD WT STL A234 WPB BW	1/2 x	1
6	ALCG	NIPPLE POE/TOE NPT 100MM LONG ASTM A105	1/2	1
<b>FLANGES</b>				
7	ALCG	FLG WN 150# RF STL STD BORE A105	4	1
8	ALCG	FLG WN 150# RF STL STD BORE A105	1/2	5
9	ALCG	FLG BLIND 150# RF STL A105	1/2	1
ERECTION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
<b>GASKETS</b>				
10	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	4	1
11	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	1/2	6
<b>BOLTS</b>				
12	ALCG	3.9/16 x5/8" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	11/16	8
13	ALCG	2.3/8 x1/2" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	9/16	24
<b>VALVES / IN-LINE ITEMS</b>				
14	ALCG	GATE 150# FLANGED RF C.STL F6 TRIM	1/2	2
15	ALCG	BALL 150# FLGD RF FULL PORT S.S. BALL & STEM	1/2	1
<b>INSTRUMENTS</b>				
16		PRESSURE INDICATOR WITH DIAPHRAGM SEAL PIT 10523	1/2	1

TRACING SPEC: S-TRACING (NOTE-10)

AREA: CETYL		4"-ALCG-20011	
PIPING GA NO: -	P&ID NO: 1020	STRESS CRITICAL: NA	
OP.TEMP: 200°F	OP.PRESS: 32 mmHg psig	TEST MEDIUM: Hydro	
DES.TEMP: 400°F	DES.PRESS: FV psig	TEST PRESS: 75 psig	
SCALE: NONE	INSUL.TYPE: NS-CELLULAR	INSUL.THK: 2 inch	
LINE NO. / FILE NAME: 4"-ALCG-20011			ISSUE: R3

SIZE-A3



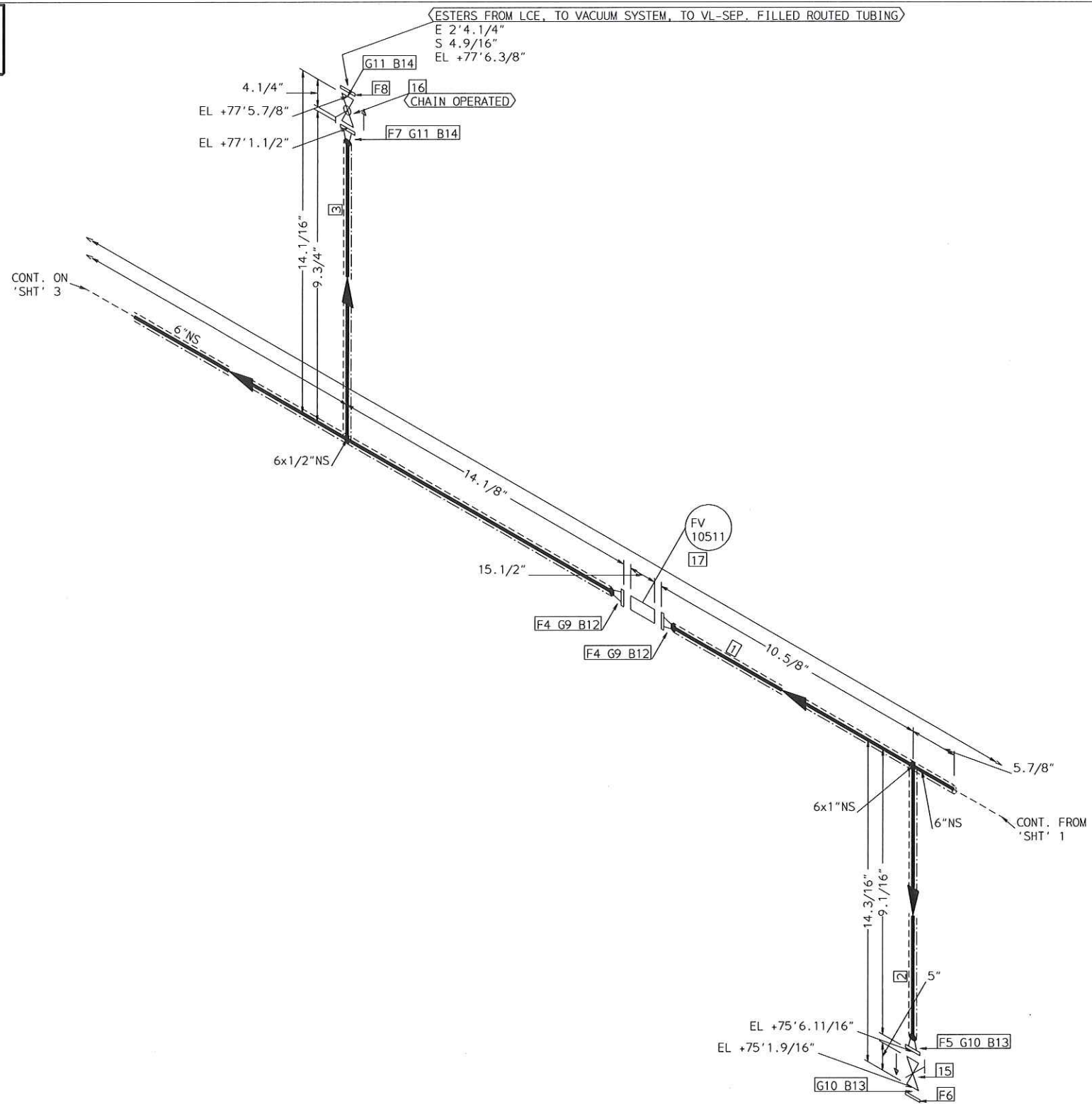
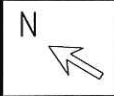
FABRICATION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
PIPE				
1	ALCG	PIPE STD WT SMLS STL A106-B	6	16.2'
2	ALCG	PIPE STD WT SMLS STL A106-B	1	0.5'
FITTINGS				
3	ALCG	WELDOLET STD WT STL A105	6 x 2	1
4	ALCG	ELL 90 DEG LR STD WT STL A234	6	4
5	ALCG	REDUCER CONC STD WT STL A234 WPB BW	1 x 1/2	1
6	ALCG	NIPPLE POE/TOE NPT 100MM LONG ASTM A105	1/2	1
FLANGES				
7	ALCG	FLG WN 150# RF STL STD BORE A105	6	3
8	ALCG	FLG WN 150# RF STL STD BORE A105	1	2
ERECTION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
FITTINGS				
9	SUPP	SPS13A TRUNNION SUPPORT	6	1
10	SUPP	SPS25 TRUNNION SUPPORT	6	1
GASKETS				
11	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	6	4
12	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	1	2
BOLTS				
13	ALCG	4.5/16 x3/4" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	7/8	8
14	ALCG	3.15/16 x3/4" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	7/8	16
15	ALCG	2.9/16 x1/2" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	9/16	8
VALVES / IN-LINE ITEMS				
16	ALCG	GATE 150# FLANGED RF C.STL F6 TRIM	6	1
17	ALCG	GATE 150# FLANGED RF C.STL F6 TRIM	1	1
INSTRUMENTS				
18	ALCG	ORIFICE PLATE RF 150# FO 10507	6	1
19	ALCG	PRESSURE INDICATOR WITH DIAPHRAGM SEAL	1/2	1

TRACING SPEC: S-TRACING (NOTE-10)

AREA: CETYL		6"-ALCG-20006	
PIPING GA NO: -	P&ID NO: 1020	STRESS CRITICAL: NA	
OP.TEMP: 340°F	OP.PRESS: 32 mmHg psig	TEST MEDIUM: Hydro	
DES.TEMP: 400°F	DES.PRESS: FV psig	TEST PRESS: 75 psig	
SCALE: NONE	INSUL.TYPE: NS-CELLULAR	INSUL.THK: 3 inch	
LINE NO. / FILE NAME: 6"-ALCG-20006			ISSUE: R3

SIZE-A3



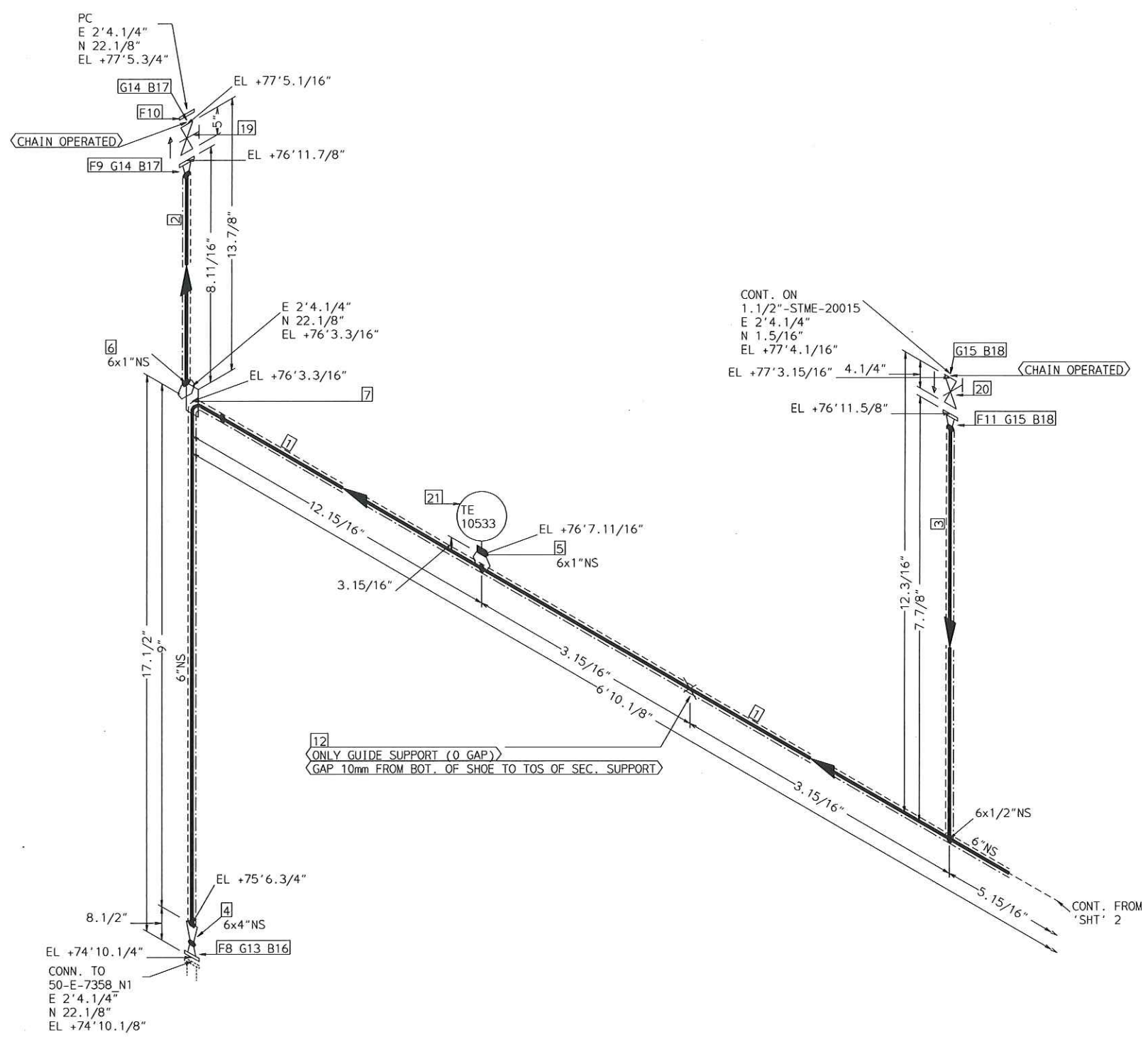
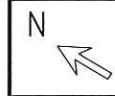


TRACING SPEC: S-TRACING (NOTE-10)

FABRICATION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
PIPE				
1	ALCG	PIPE STD WT SMLS STL A106-B	6	2.5'
2	ALCG	PIPE STD WT SMLS STL A106-B	1	0.6'
3	ALCG	PIPE STD WT SMLS STL A106-B	1/2	0.7'
FLANGES				
4	ALCG	FLG WN 150# RF STL STD BORE A105	6	2
5	ALCG	FLG WN 150# RF STL STD BORE A105	1	1
6	ALCG	FLG BLIND 150# RF STL A105	1	1
7	ALCG	FLG WN 150# RF STL STD BORE A105	1/2	1
8	ALCG	FLG BLIND 150# RF STL A105	1/2	1
ERECTION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
GASKETS				
9	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	6	2
10	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	1	2
11	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	1/2	2
BOLTS				
12	ALCG	3.15/16 x3/4" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	7/8	16
13	ALCG	2.9/16 x1/2" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	9/16	8
14	ALCG	2.3/8 x1/2" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	9/16	8
VALVES / IN-LINE ITEMS				
15	ALCG	GATE 150# FLANGED RF C.STL F6 TRIM	1	1
16	ALCG	BALL 150# FLGD RF FULL PORT S.S. BALL & STEM	1/2	1
INSTRUMENTS				
17		ON-OFF VALVE 150# RF FV 10511	6	1

AREA: CETYL		6"-ALCG-20006	
PIPING GA NO: -	P&ID NO: 1020	STRESS CRITICAL: NA	
OP. TEMP: 340°F	OP. PRESS: 32 mmHg psig	TEST MEDIUM: Hydro	
DES. TEMP: 400°F	DES. PRESS: FV psig	TEST PRESS: 75 psig	
SCALE: NONE	INSUL. TYPE: NS-CELLULAR	INSUL. THK: 3 inch	
LINE NO. / FILE NAME: 6"-ALCG-20006			ISSUE: R3

SIZE-A3



CONT. ON  
 1.1/2"-STME-20015  
 E 2'4.1/4"  
 N 1.5/16"  
 EL +77'4.1/16"

CONT. FROM  
 'SHT' 2

12 ONLY GUIDE SUPPORT (0 GAP)  
 GAP 10mm FROM BOT. OF SHOE TO TOS OF SEC. SUPPORT

TRACING SPEC: S-TRACING (NOTE-10)

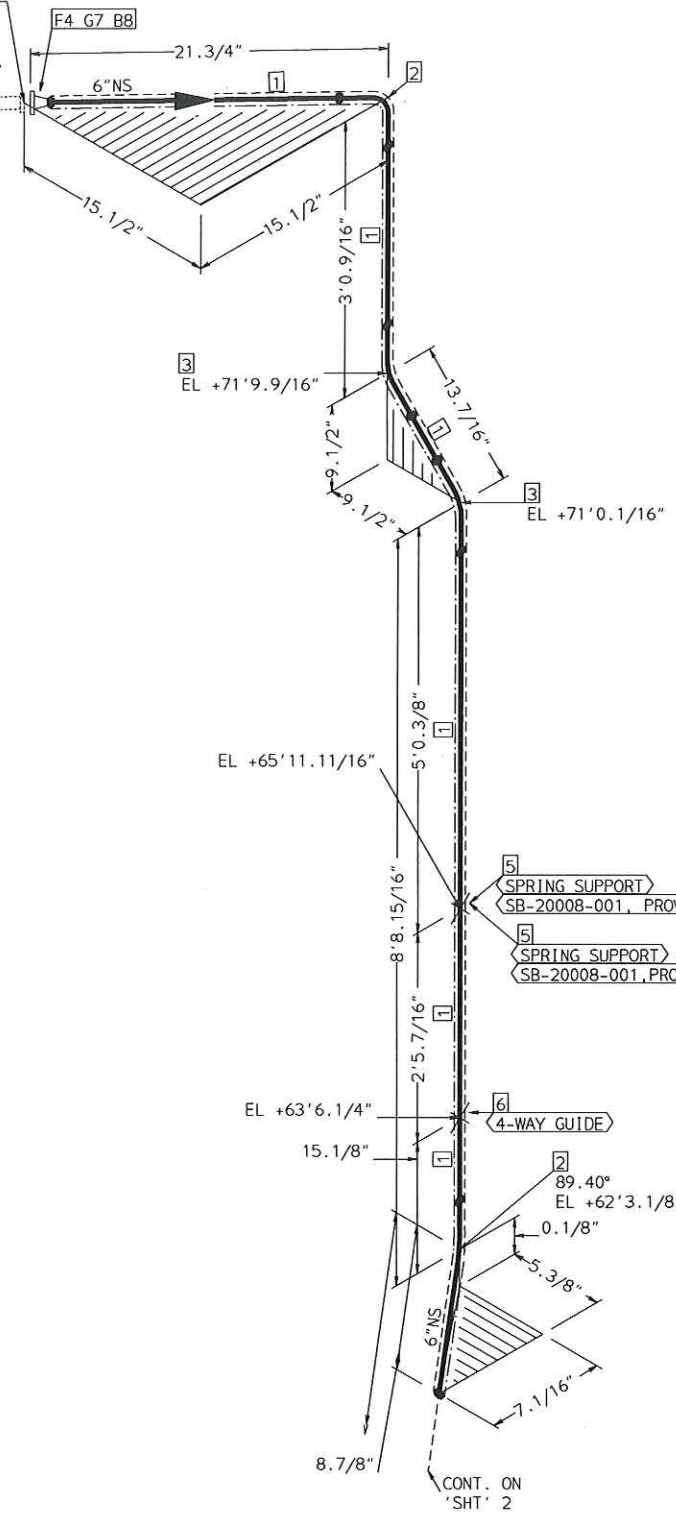
FABRICATION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
<b>PIPE</b>				
1	ALCG	PIPE STD WT SMLS STL A106-B	6	1.0'
2	ALCG	PIPE STD WT SMLS STL A106-B	1	0.2'
3	ALCG	PIPE STD WT SMLS STL A106-B	1/2	0.5'
<b>FITTINGS</b>				
4	ALCG	REDUCER CONC STD WT STL A234 WPB BW	6 x 4	1
5	ALCG	THREDOLET 3000# STL A105	6 x 1	1
6	ALCG	ELBOLET STD WT STL A105	6 x 1	1
7	ALCG	ELL 90 DEG LR STD WT STL A234 WPB BW	6	1
<b>FLANGES</b>				
8	ALCG	FLG WN 150# RF STL STD BORE A105	4	1
9	ALCG	FLG WN 150# RF STL STD BORE A105	1	1
10	ALCG	FLG BLIND 150# RF STL A105	1	1
11	ALCG	FLG WN 150# RF STL STD BORE A105	1/2	1
ERECTION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
<b>FITTINGS</b>				
12	SUPP	SPS-2 RESTING SUPPORT	6	1
<b>GASKETS</b>				
13	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	4	1
14	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	1	2
15	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	1/2	2
<b>BOLTS</b>				
16	ALCG	3.9/16 x5/8" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	11/16	8
17	ALCG	2.9/16 x1/2" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	9/16	8
18	ALCG	2.3/8 x1/2" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	9/16	8
<b>VALVES / IN-LINE ITEMS</b>				
19	ALCG	GATE 150# FLANGED RF C.STL F6 TRIM	1	1
20	ALCG	GATE 150# FLANGED RF C.STL F6 TRIM	1/2	1
<b>INSTRUMENTS</b>				
21		TEMPERATURE TRANSMITTER TE 10533	1	1

AREA: CETYL		6"-ALCG-20006	
PIPING GA NO: -	P&ID NO: 1020	STRESS CRITICAL: NA	
OP.TEMP: 340°F	OP.PRESS: 32 mmHg psig	TEST MEDIUM: Hydro	
DES.TEMP: 400°F	DES.PRESS: FV psig	TEST PRESS: 75 psig	
SCALE: NONE	INSUL.TYPE: NS-CELLULAR	INSUL.THK: 3 inch	
LINE NO. / FILE NAME: 6"-ALCG-20006			ISSUE: R3

SIZE-A3



CONN. TO  
50-E-7357 NS  
E 9'6.3/16"  
S 15.13/16"  
EL +74'10.1/8"



5 SPRING SUPPORT  
SB-20008-001, PROVIDE 1/8" THICK POLISHED SS SHEET AT BOTTOM OF SHOE

5 SPRING SUPPORT  
SB-20008-001, PROVIDE 1/8" THICK POLISHED SS SHEET AT BOTTOM OF SHOE

6 4-WAY GUIDE

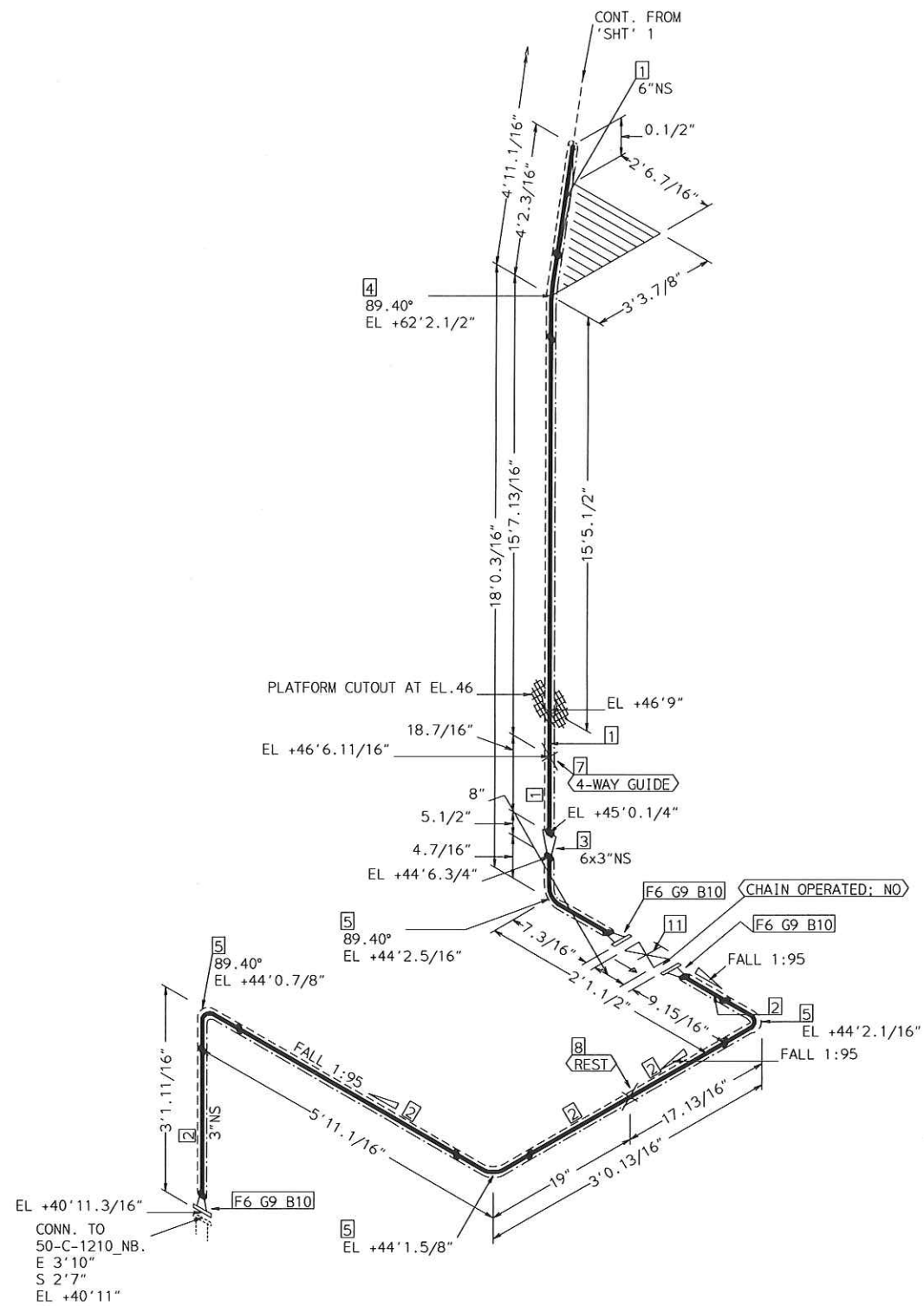
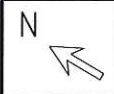
TRACING SPEC: S-TRACING (NOTE-10)

FABRICATION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
1	ALCG	PIPE	6	11.0'
		PIPE STD WT SMLS STL A106-B		
2	ALCG	FITTINGS	6	2
		ELL 90 DEG LR STD WT STL A234 WPB BW		
3	ALCG	FITTINGS	6	2
		ELL 45 DEG STD WT STL A234 WPB BW		
4	ALCG	FLANGES	6	1
		FLG WN 150# RF STL STD BORE A105		
ERECTION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
5	SUPP	FITTINGS	6	2
		SPS-25 TRUNNION SUPPORT		
6	SUPP	FITTINGS	6	1
		SPS-67G support		
7	ALCG	GASKETS	6	1
		GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG		
8	ALCG	BOLTS	7/8	8
		3.15/16 x3/4" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS		

AREA: CETYL		6"-ALCG-20008	
PIPING GA NO: -	P&ID NO: 1020	STRESS CRITICAL: NA	
OP.TEMP: 340°F	OP.PRESS: 32 mmHg	TEST MEDIUM: Hydro	
DES.TEMP: 400°F	DES.PRESS: FV	TEST PRESS: 75 psig	
SCALE: NONE	INSUL.TYPE: NS-CELLULAR	INSUL.THK: 2	
LINE NO. / FILE NAME: 6"-ALCG-20008			ISSUE: R3

SIZE-A3

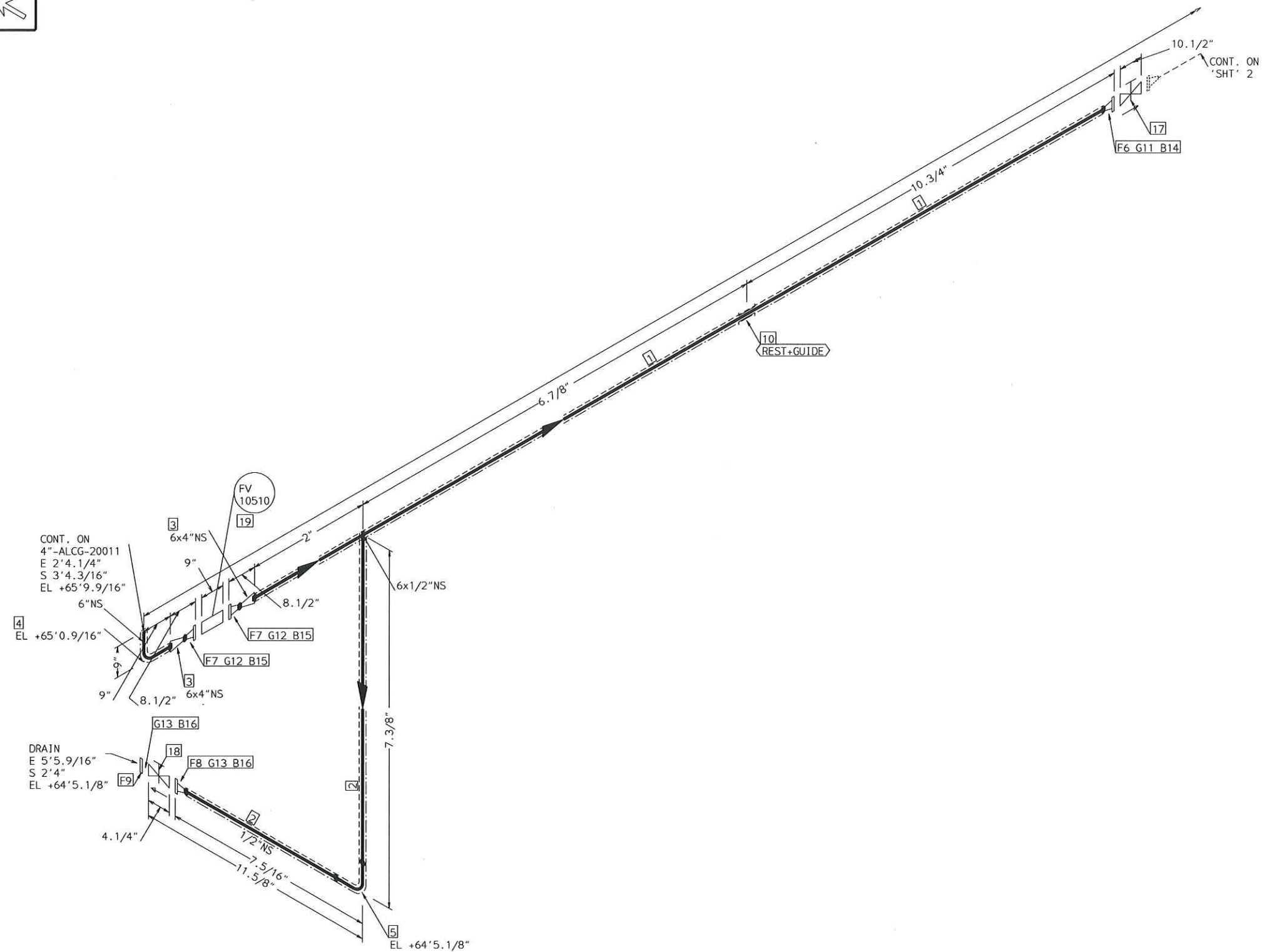




TRACING SPEC: S-TRACING (NOTE-10)

FABRICATION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
<u>PIPE</u>				
1	ALCG	PIPE STD WT SMLS STL A106-B	6	19.9'
2	ALCG	PIPE STD WT SMLS STL A106-B	3	10.3'
<u>FITTINGS</u>				
3	ALCG	REDUCER CONC STD WT STL A234 WPB BW	6 x 3	1
4	ALCG	ELL 90 DEG LR STD WT STL A234 WPB BW	6	1
5	ALCG	ELL 90 DEG LR STD WT STL A234 WPB BW	3	4
<u>FLANGES</u>				
6	ALCG	FLG WN 150# RF STL STD BORE A105	3	3
ERECTION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
<u>FITTINGS</u>				
7	SUPP	support SPS-68G	6	1
8	SUPP	SPS-2 RESTING SUPPORT	3	1
<u>GASKETS</u>				
9	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	3	3
<u>BOLTS</u>				
10	ALCG	3.9/16 x 5/8" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	11/16	12
<u>VALVES / IN-LINE ITEMS</u>				
11	ALCG	GATE 150# FLANGED RF C.STL F6 TRIM	3	1

AREA: CETYL		6"-ALCG-20008	
PIPING GA NO: -	P&ID NO: 1020	STRESS CRITICAL: NA	
OP. TEMP: 340°F	OP. PRESS: 32 mmHg	TEST MEDIUM: Hydro	
DES. TEMP: 400°F	DES. PRESS: FV	TEST PRESS: 75 psig	
SCALE: NONE	INSUL. TYPE: NS-CELLULAR	INSUL. THK: 2	
LINE NO. / FILE NAME: 6"-ALCG-20008			ISSUE: R3



FABRICATION MATERIALS

PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
<u>PIPE</u>				
1	ALCG	PIPE STD WT SMLS STL A106-B	6	1.4'
2	ALCG	PIPE STD WT SMLS STL A106-B	1/2	0.9'
<u>FITTINGS</u>				
3	ALCG	REDUCER CONC STD WT STL A234 WPB BW	6 x 4	2
4	ALCG	ELL 90 DEG LR STD WT STL A234 WPB BW	6	1
5	ALCG	ELL 90 DEG LR STD WT STL A234 WPB BW	1/2	1
<u>FLANGES</u>				
6	ALCG	FLG WN 150# RF STL STD BORE A105	6	1
7	ALCG	FLG WN 150# RF STL STD BORE A105	4	2
8	ALCG	FLG WN 150# RF STL STD BORE A105	1/2	1
9	ALCG	FLG BLIND 150# RF STL A105	1/2	1

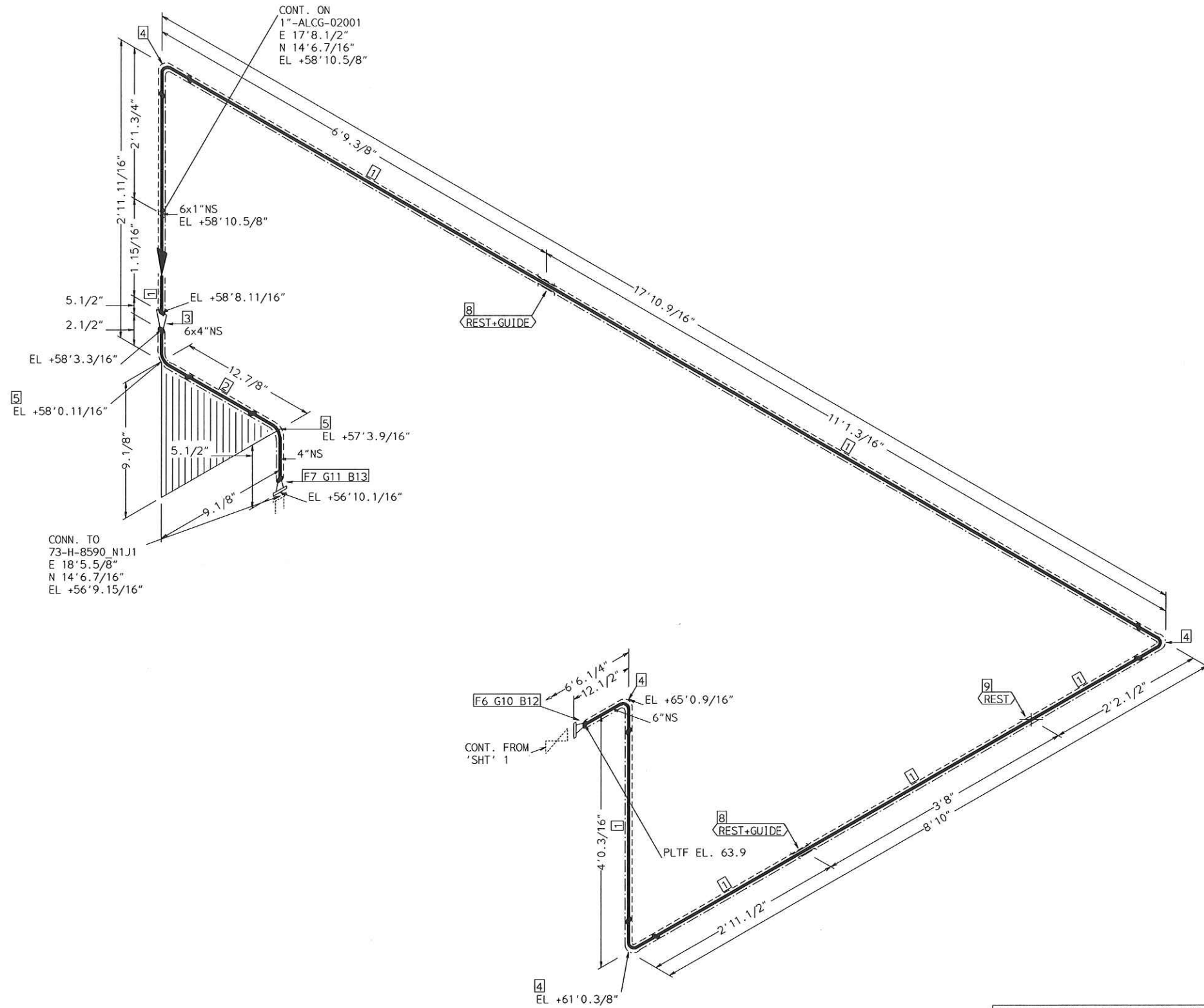
ERECTION MATERIALS

PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
<u>FITTINGS</u>				
10	SUPP	SPS-2G GUIDE SUPPORT	6	1
<u>GASKETS</u>				
11	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	6	1
12	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	4	2
13	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	1/2	2
<u>BOLTS</u>				
14	ALCG	3.15/16 x3/4" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	7/8	8
15	ALCG	3.9/16 x5/8" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	11/16	16
16	ALCG	2.3/8 x1/2" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	9/16	8
<u>VALVES / IN-LINE ITEMS</u>				
17	ALCG	GATE 150# FLANGED RF C.STL F6 TRIM	6	1
18	ALCG	GATE 150# FLANGED RF C.STL F6 TRIM	1/2	1
<u>INSTRUMENTS</u>				
19		ON-OFF VALVE 150# RF FV 10510	4	1

TRACING SPEC: S-TRACING (NOTE-10)

AREA: CETYL	6"-ALCG-20034	
PIPING GA NO: -	P&ID NO: 1020	STRESS CRITICAL: NA
OP.TEMP: 304°F	OP.PRESS: 32 mmHg psig	TEST MEDIUM: Hydro
DES.TEMP: 400°F	DES.PRESS: FV /150 psig	TEST PRESS: 225 psig
SCALE: NONE	INSUL.TYPE: NS-CELLULAR	INSUL.THK: 3 inch
LINE NO. / FILE NAME: 6"-ALCG-20034	ISSUE: R3	

SIZE-A3



TRACING SPEC: S-TRACING (NOTE-10)

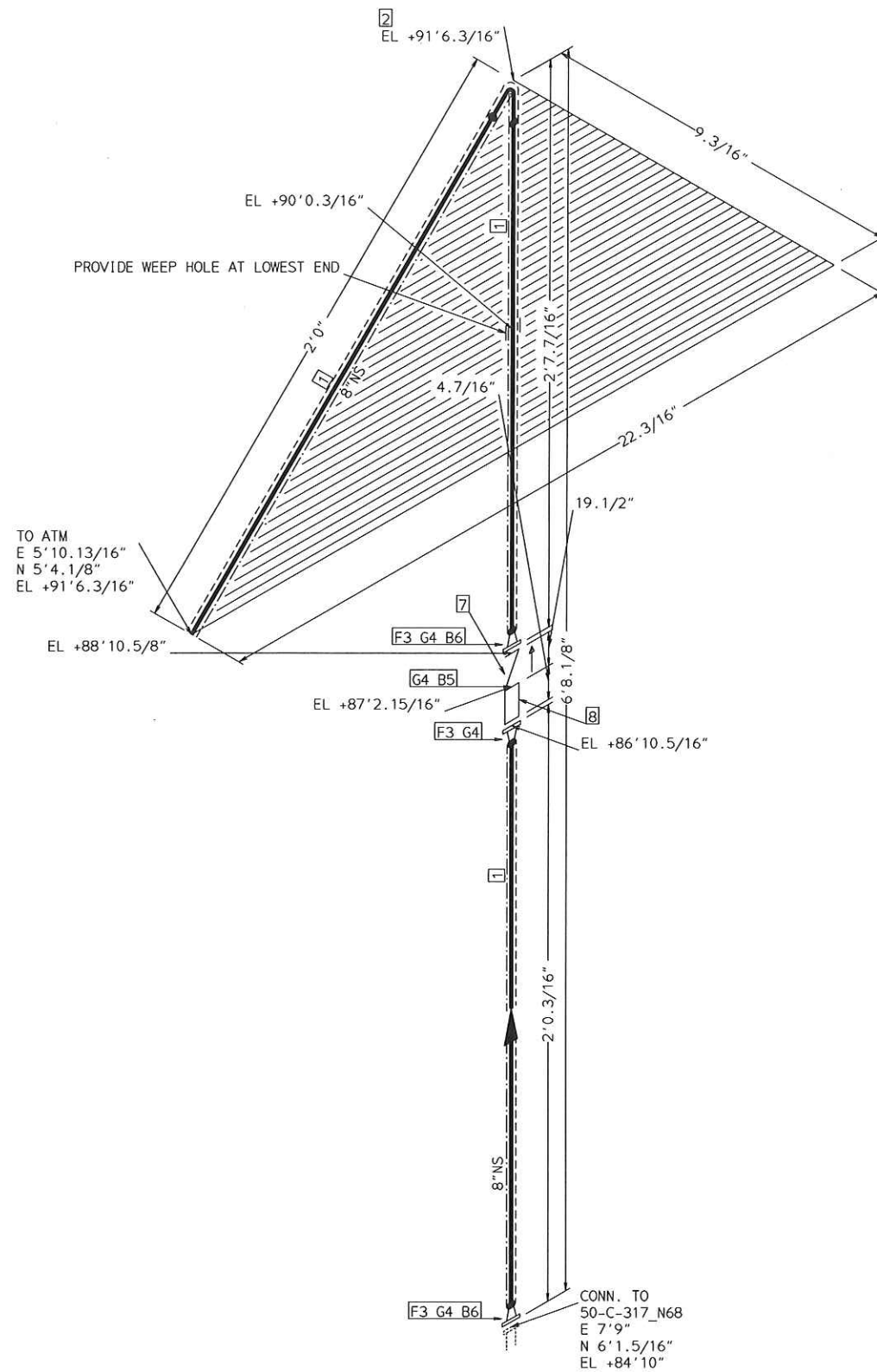
FABRICATION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
PIPE				
1	ALCG	PIPE STD WT SMLS STL A106-B	6	27.8'
2	ALCG	PIPE STD WT SMLS STL A106-B	4	0.7'
FITTINGS				
3	ALCG	REDUCER CONC STD WT STL A234 WPB BW	6 x 4	1
4	ALCG	ELL 90 DEG LR STD WT STL A234 WPB BW	6	4
5	ALCG	ELL 45 DEG STD WT STL A234 WPB BW	4	2
FLANGES				
6	ALCG	FLG WN 150# RF STL STD BORE A105	6	1
7	ALCG	FLG WN 150# RF STL STD BORE A105	4	1

ERECTION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
FITTINGS				
8	SUPP	SPS-2G GUIDE SUPPORT	6	2
9	SUPP	SPS-2 RESTING SUPPORT	6	1
GASKETS				
10	ALCG	GASKET 150# 1/8\" 304 SPRL WND W/FLEXICARB TYPE CG	6	1
11	ALCG	GASKET 150# 1/8\" 304 SPRL WND W/FLEXICARB TYPE CG	4	1
BOLTS				
12	ALCG	3.15/16 x3/4\" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	7/8	8
13	ALCG	3.9/16 x5/8\" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	11/16	8

AREA: CETYL		6\"-ALCG-20034	
PIPING GA NO: -	P&ID NO: 1020	STRESS CRITICAL: NA	
OP. TEMP: 304°F	OP. PRESS: 32 mmHg psig	TEST MEDIUM: Hydro	
DES. TEMP: 400°F	DES. PRESS: FV /150 psig	TEST PRESS: 225 psig	
SCALE: NONE	INSUL. TYPE: NS-CELLULAR	INSUL. THK: 3 inch	
LINE NO. / FILE NAME: 6\"-ALCG-20034			ISSUE: R3

SIZE-A3



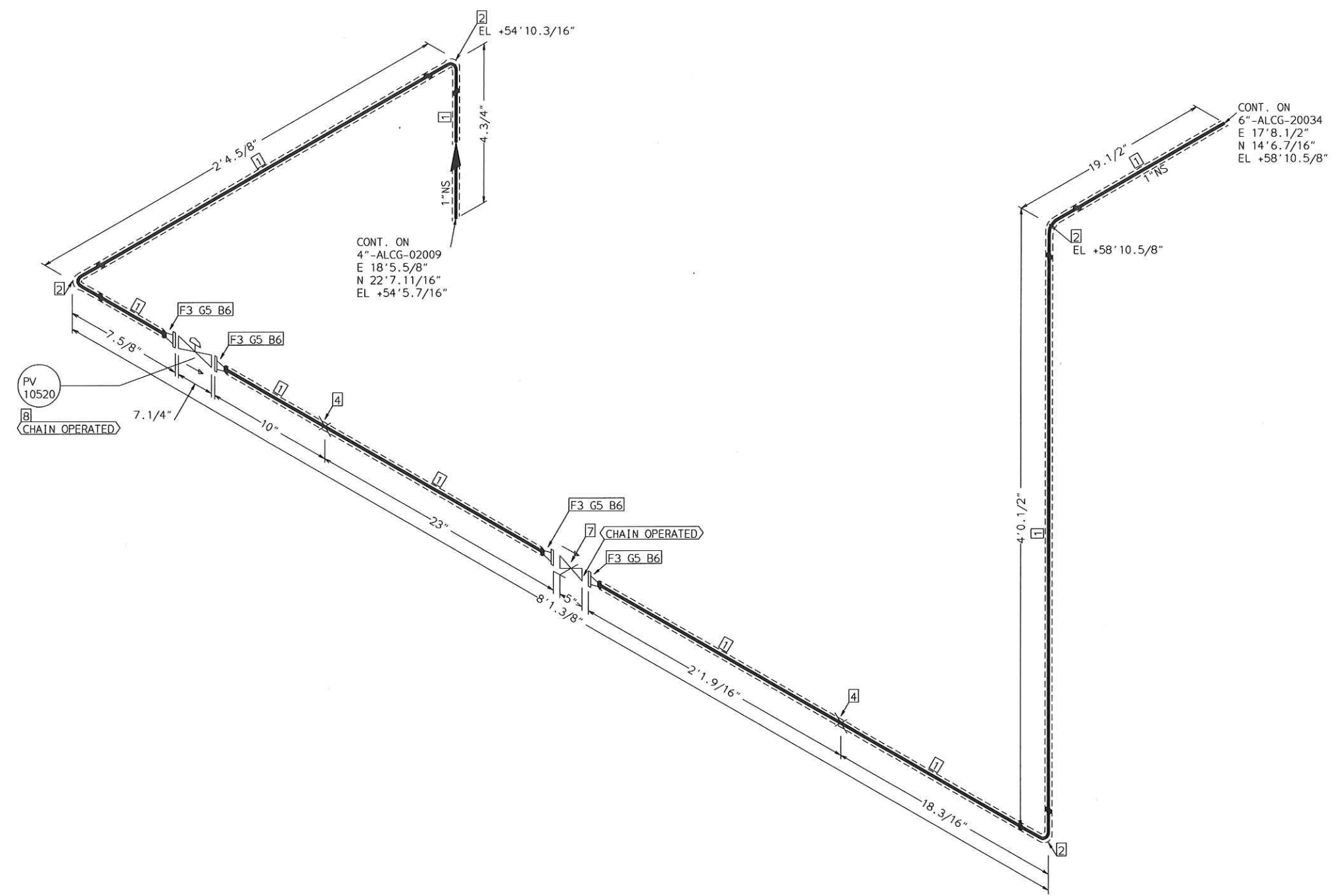


FABRICATION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
1	ALCG	PIPE	8	3.7'
		PIPE STD WT SMLS STL A106-B		
2	ALCG	FITTINGS	8	1
		ELL 90 DEG LR STD WT STL A234 WPB BW		
3	ALCG	FLANGES	8	3
		FLG WN 150# RF STL STD BORE A105		
ERECTION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
4	ALCG	GASKETS	8	4
		GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG		
5	ALCG	BOLTS	7/8	8
		9.1/16 x3/4" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS		
6	ALCG	BOLTS	7/8	16
		4.5/16 x3/4" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS		
7	ALCG	VALVES / IN-LINE ITEMS	8	1
		CHECK 150# FLGD RF C.STL SWING FULL PORT F6 TRIM		
8	ALCG	INSTRUMENTS	8	1
		RUPTURE-DISC #150 RF		

TRACING SPEC: S-TRACING (NOTE-10)

AREA: CETYL		8"-ALCG-20003	
PIPING GA NO: -	P&ID NO: 1020	STRESS CRITICAL: NA	
OP. TEMP: 414°F	OP. PRESS: 50 / 32 mmHg psig	TEST MEDIUM: Hydro	
DES. TEMP: 441°F	DES. PRESS: 150 / FV psig	TEST PRESS: 225 psig	
SCALE: NONE	INSUL. TYPE: NS-CELLULAR	INSUL. THK: 1.5 Inch	
LINE NO. / FILE NAME: 8"-ALCG-20003			ISSUE: R3

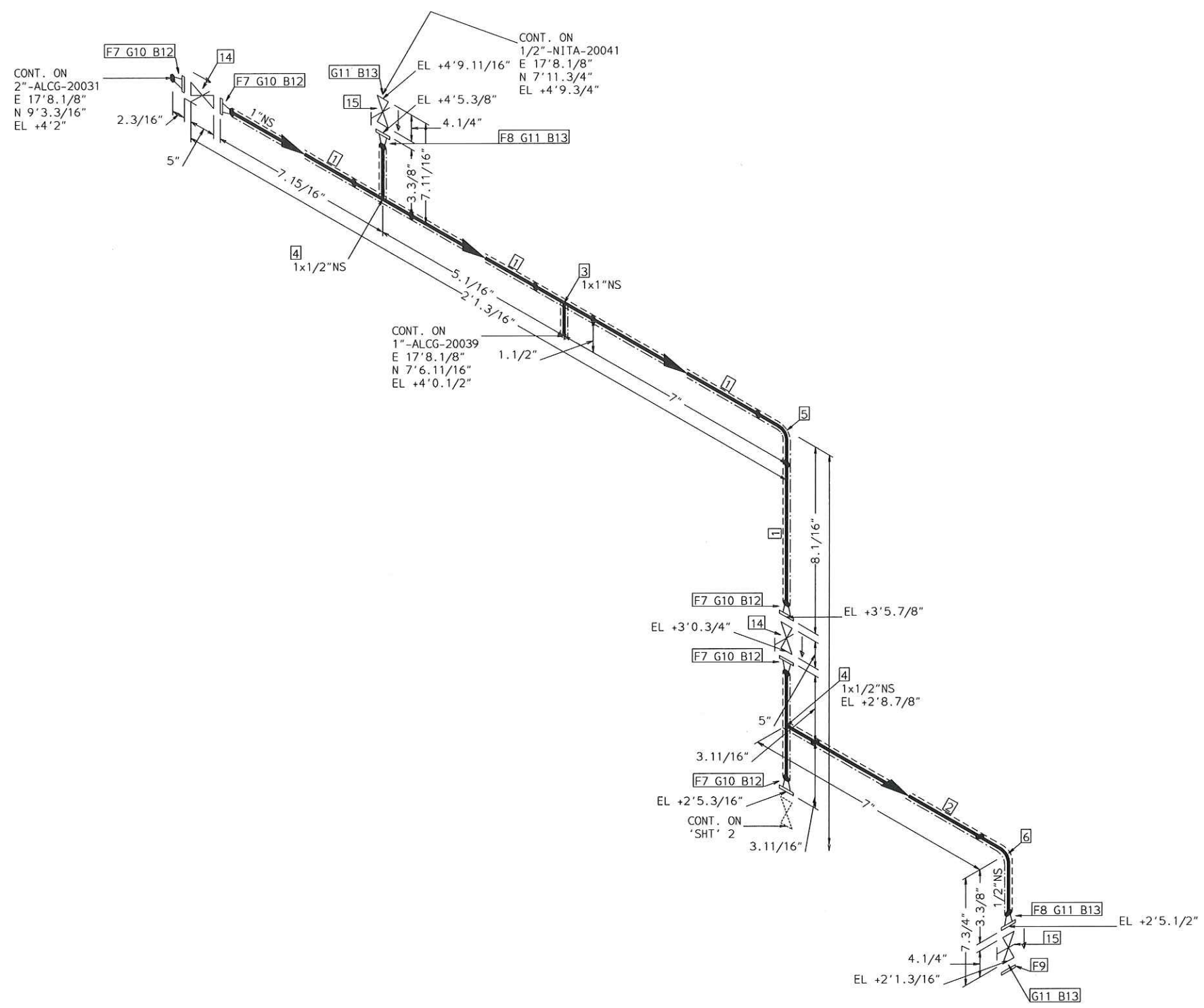
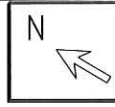
SIZE-A3



FABRICATION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
<u>PIPE</u>				
1	ALCG	PIPE STD WT SMLS STL A106-B	1	13.8'
<u>FITTINGS</u>				
2	ALCG	ELL 90 DEG LR STD WT STL A234 WPB BW	1	4
<u>FLANGES</u>				
3	ALCG	FLG WN 150# RF STL STD BORE A105	1	4
ERECTION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
<u>FITTINGS</u>				
4	SUPP	SPS-2 RESTING SUPPORT	1	2
<u>GASKETS</u>				
5	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	1	4
<u>BOLTS</u>				
6	ALCG	2.9/16 x 1/2" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	9/16	16
<u>VALVES / IN-LINE ITEMS</u>				
7	ALCG	GATE 150# FLANGED RF C.STL F6 TRIM	1	1
<u>INSTRUMENTS</u>				
8		STANDARD CONTROL VALVE 150#.RF B16.10 PV 10520	1	1

AREA: CETYL		1"-ALCG-02001	
PIPING GA NO: -	P&ID NO: 1002	STRESS CRITICAL: NA	
OP. TEMP: 304°F	OP. PRESS: 30 psig	TEST MEDIUM: Hydro	
DES. TEMP: 400°F	DES. PRESS: 150 psig	TEST PRESS: 225 psig	
SCALE: NONE	INSUL. TYPE: NS-CELLULAR	INSUL. THK: 1.5 Inch	
LINE NO. / FILE NAME: 1"-ALCG-02001			ISSUE: R3

SIZE-A3



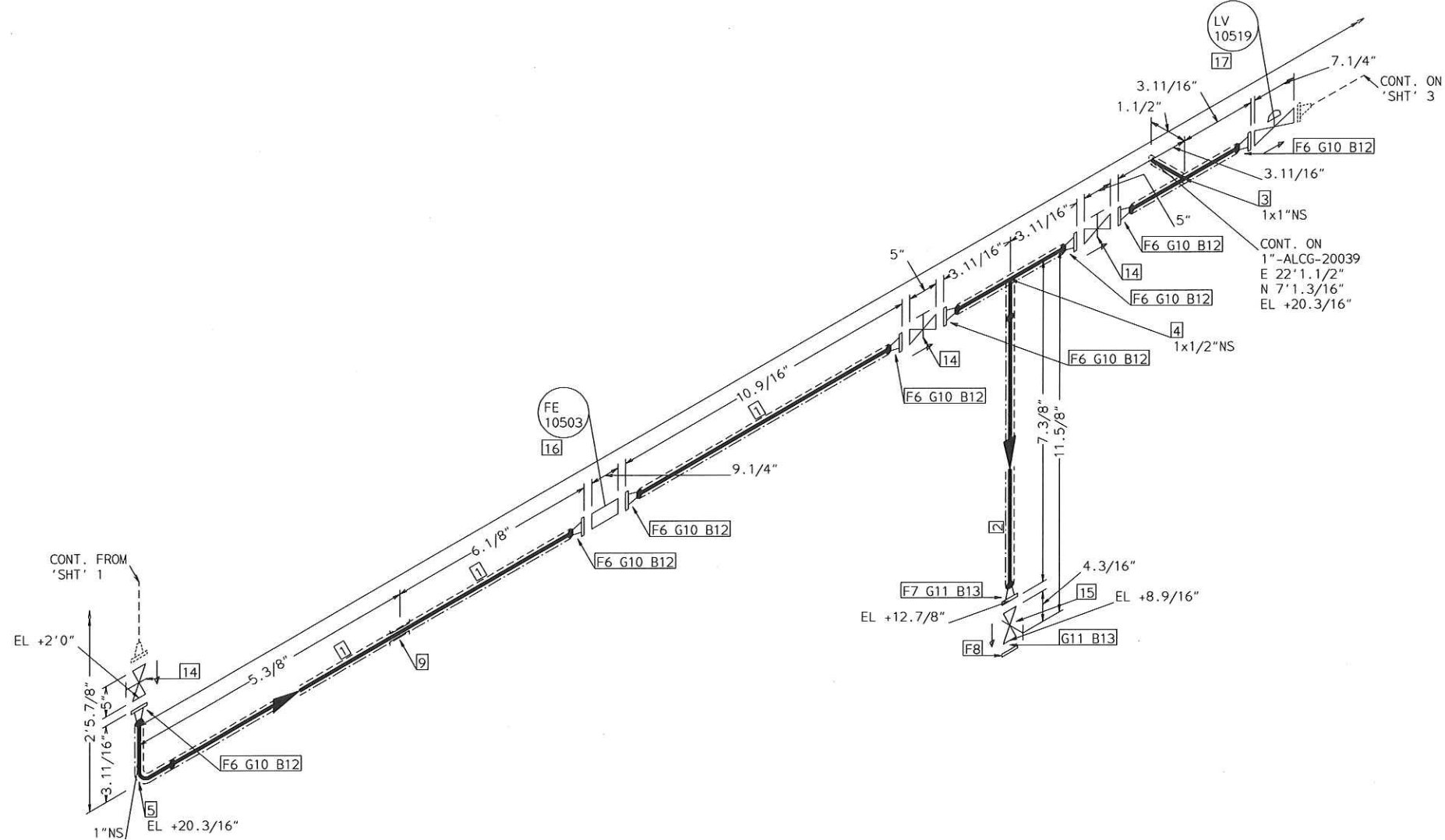
TRACING SPEC: S-TRACING (NOTE-10)

FABRICATION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
<b>PIPE</b>				
1	ALCG	PIPE STD WT SMLS STL A106-B	1	1.3'
2	ALCG	PIPE STD WT SMLS STL A106-B	1/2	0.4'
<b>FITTINGS</b>				
3	ALCG	TEE STD WT STL A234 WPB BW	1 x 1	1
4	ALCG	TEE STD WT STL A234 WPB BW	1 x 1/2	2
5	ALCG	ELL 90 DEG LR STD WT STL A234 WPB BW	1	1
6	ALCG	ELL 90 DEG LR STD WT STL A234 WPB BW	1/2	1
<b>FLANGES</b>				
7	ALCG	FLG WN 150# RF STL STD BORE A105	1	5
8	ALCG	FLG WN 150# RF STL STD BORE A105	1/2	2
9	ALCG	FLG BLIND 150# RF STL A105	1/2	1
ERECTION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
<b>GASKETS</b>				
10	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	1	5
11	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	1/2	4
<b>BOLTS</b>				
12	ALCG	2.9/16 x 1/2" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	9/16	20
13	ALCG	2.3/8 x 1/2" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	9/16	16
<b>VALVES / IN-LINE ITEMS</b>				
14	ALCG	GATE 150# FLANGED RF C.STL F6 TRIM	1	2
15	ALCG	GATE 150# FLANGED RF C.STL F6 TRIM	1/2	2

AREA: CETYL		1" -ALCG-20032	
PIPING GA NO: -	P&ID NO: 1020	STRESS CRITICAL: NA	
OP. TEMP: 300°F	OP. PRESS: 80 psig	TEST MEDIUM: Hydro	
DES. TEMP: 400°F	DES. PRESS: 150 psig	TEST PRESS: 225 psig	
SCALE: NONE	INSUL. TYPE: NS-CELLULAR	INSUL. THK: 1.5 Inch	
LINE NO. / FILE NAME: 1" -ALCG-20032			ISSUE: R3

SIZE-A3





TRACING SPEC: S-TRACING (NOTE-10)

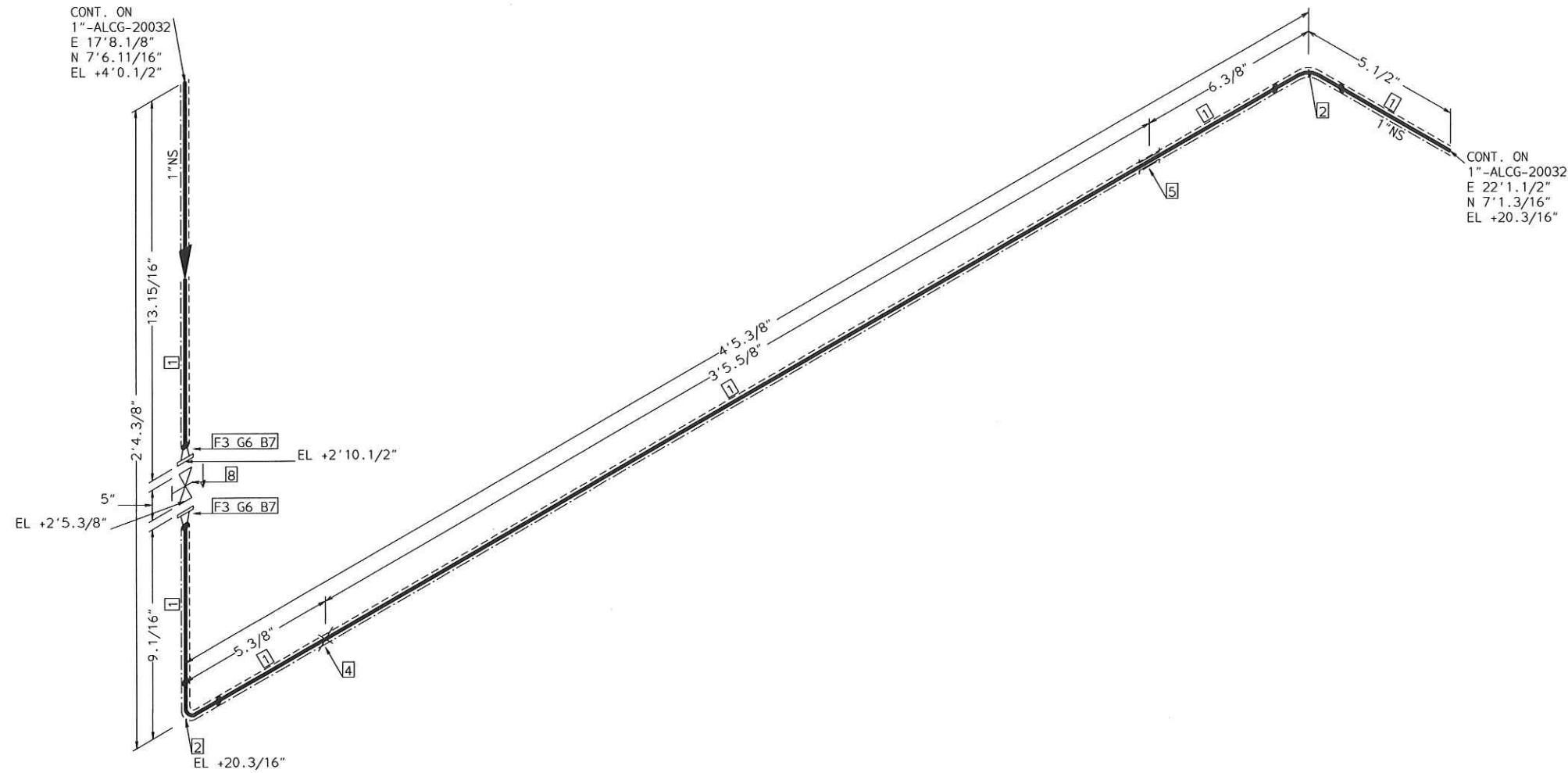
FABRICATION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
<u>PIPE</u>				
1	ALCG	PIPE STD WT SMLS STL A106-B	1	1.2'
2	ALCG	PIPE STD WT SMLS STL A106-B	1/2	0.4'
<u>FITTINGS</u>				
3	ALCG	TEE STD WT STL A234 WPB BW	1 x 1	1
4	ALCG	TEE STD WT STL A234 WPB BW	1 x 1	1
5	ALCG	ELL 90 DEG LR STD WT STL A234 WPB BW	1/2	1
<u>FLANGES</u>				
6	ALCG	FLG WN 150# RF STL STD BORE A105	1	8
7	ALCG	FLG WN 150# RF STL STD BORE A105	1/2	1
8	ALCG	FLG BLIND 150# RF STL A105	1/2	1

ERECTION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
<u>FITTINGS</u>				
9	SUPP	SPS-2G GUIDE SUPPORT	1	1
<u>GASKETS</u>				
10	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	1	8
11	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	1/2	2
<u>BOLTS</u>				
12	ALCG	2.9/16 x1/2" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	9/16	32
13	ALCG	2.3/8 x1/2" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	9/16	8
<u>VALVES / IN-LINE ITEMS</u>				
14	ALCG	GATE 150# FLANGED RF C.STL F6 TRIM	1	3
15	ALCG	GATE 150# FLANGED RF C.STL F6 TRIM	1/2	1
<u>INSTRUMENTS</u>				
16		MICRO MOTION FLOWMETER 150# RF FE 10503	1	1
17		STANDARD CONTROL VALVE 150#.RF B16.10 LV 10519	1	1

AREA: CETYL	1"-ALCG-20032	
PIPING GA NO: -	P&ID NO: 1020	STRESS CRITICAL: NA
OP. TEMP: 300°F	OP. PRESS: 80 psig	TEST MEDIUM: Hydro
DES. TEMP: 400°F	DES. PRESS: 150 psig	TEST PRESS: 225 psig
SCALE: NONE	INSUL. TYPE: NS-CELLULAR	INSUL. THK: 1.5 inch
LINE NO. / FILE NAME: 1"-ALCG-20032	ISSUE: R3	

SIZE-A3





CONT. ON  
1"-ALCG-20032  
E 17'8.1/8"  
N 7'6.11/16"  
EL +4'0.1/2"

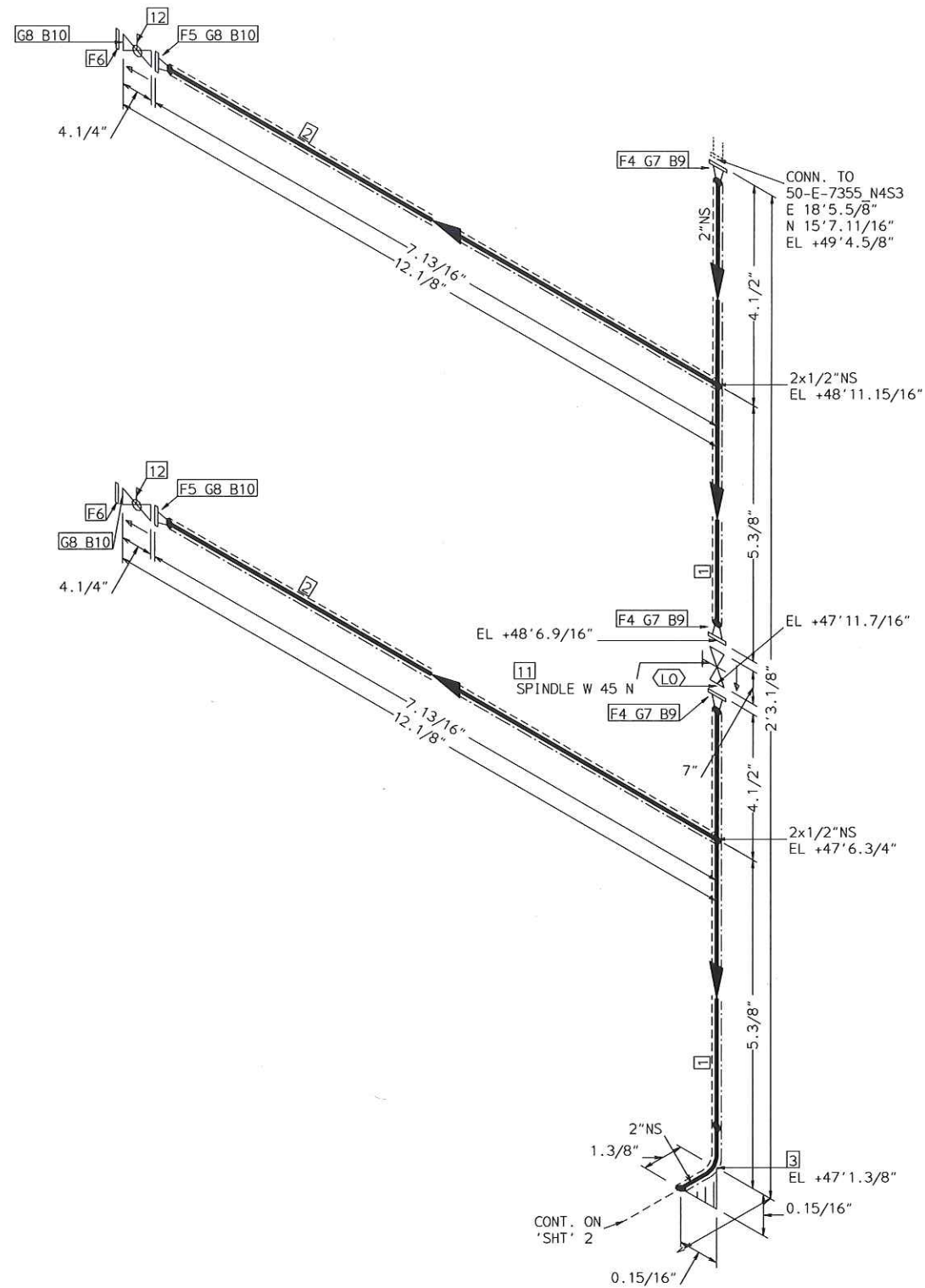
CONT. ON  
1"-ALCG-20032  
E 22'1.1/2"  
N 7'1.3/16"  
EL +20.3/16"

TRACING SPEC: S-TRACING (NOTE-10)

FABRICATION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
PIPE				
1	ALCG	PIPE STD WT SMLS STL A106-B	1	6.0'
FITTINGS				
2	ALCG	ELL 90 DEG LR STD WT STL A234 WPB BW	1	2
FLANGES				
3	ALCG	FLG WN 150# RF STL STD BORE A105	1	2
ERECTION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
FITTINGS				
4	SUPP	SPS-2 RESTING SUPPORT	1	1
5	SUPP	SPS-2G GUIDE SUPPORT	1	1
GASKETS				
6	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	1	2
BOLTS				
7	ALCG	2.9/16 x1/2" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	9/16	8
VALVES / IN-LINE ITEMS				
8	ALCG	GATE 150# FLANGED RF C.STL F6 TRIM	1	1

AREA: CETYL		1"-ALCG-20039	
PIPING GA NO: -	P&ID NO: 1020	STRESS CRITICAL: NA	
OP.TEMP: 280	OP.PRESS: 80psig	TEST MEDIUM: Hydro	
DES.TEMP: 400	DES.PRESS: 150	TEST PRESS: 225	
SCALE: NONE	INSUL.TYPE: NS-CELLULAR	INSUL.THK: 1.5	
LINE NO. / FILE NAME: 1"-ALCG-20039			ISSUE: R3

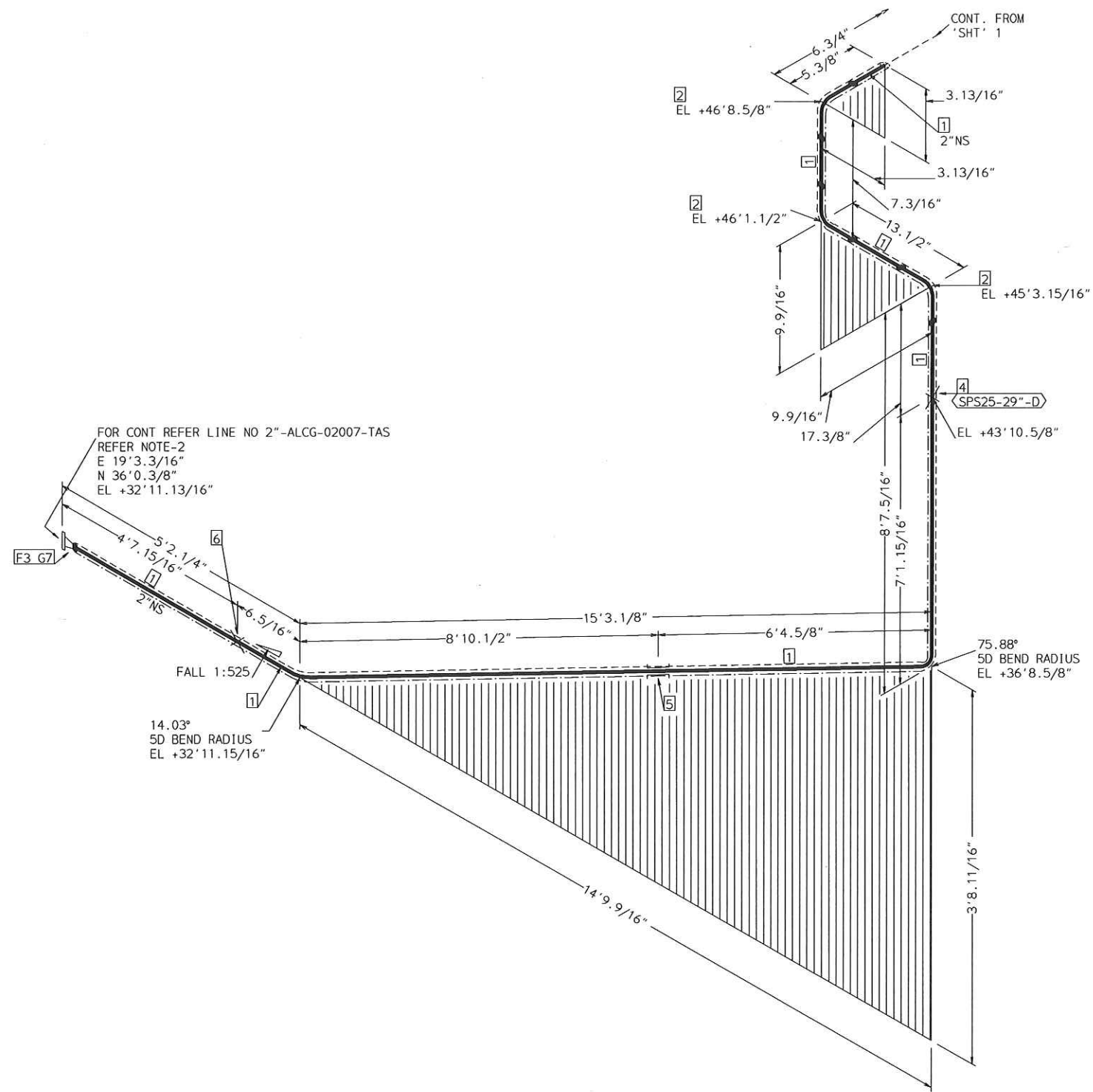




TRACING SPEC: S-TRACING (NOTE-10)

FABRICATION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
PIPE				
1	ALCG	PIPE STD WT SMLS STL A106-B	2	1.0'
2	ALCG	PIPE STD WT SMLS STL A106-B	1/2	1.0'
FITTINGS				
3	ALCG	ELL 45 DEG STD WT STL A234 WPB BW	2	1
FLANGES				
4	ALCG	FLG WN 150# RF STL STD BORE A105	2	3
5	ALCG	FLG WN 150# RF STL STD BORE A105	1/2	2
6	ALCG	FLG BLIND 150# RF STL A105	1/2	2
ERECTION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
GASKETS				
7	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	2	3
8	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	1/2	4
BOLTS				
9	ALCG	3.1/8 x 5/8" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	11/16	12
10	ALCG	2.3/8 x 1/2" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	9/16	16
VALVES / IN-LINE ITEMS				
11	ALCG	GATE 150# FLANGED RF C.STL F6 TRIM	2	1
12	ALCG	BALL 150# FLGD RF FULL PORT S.S. BALL & STEM	1/2	2

AREA: CETYL		2"-ALCG-02007	
PIPING GA NO: -	P&ID NO: 1002	STRESS CRITICAL: NA	
OP. TEMP: 195°F	OP. PRESS: 50 psig	TEST MEDIUM: Hydro	
DES. TEMP: 400°F	DES. PRESS: 150 psig	TEST PRESS: 225 psig	
SCALE: NONE	INSUL. TYPE: NS-CELLULAR	INSUL. THK: 1.5 inch	
LINE NO. / FILE NAME: 2"-ALCG-02007			ISSUE: R3

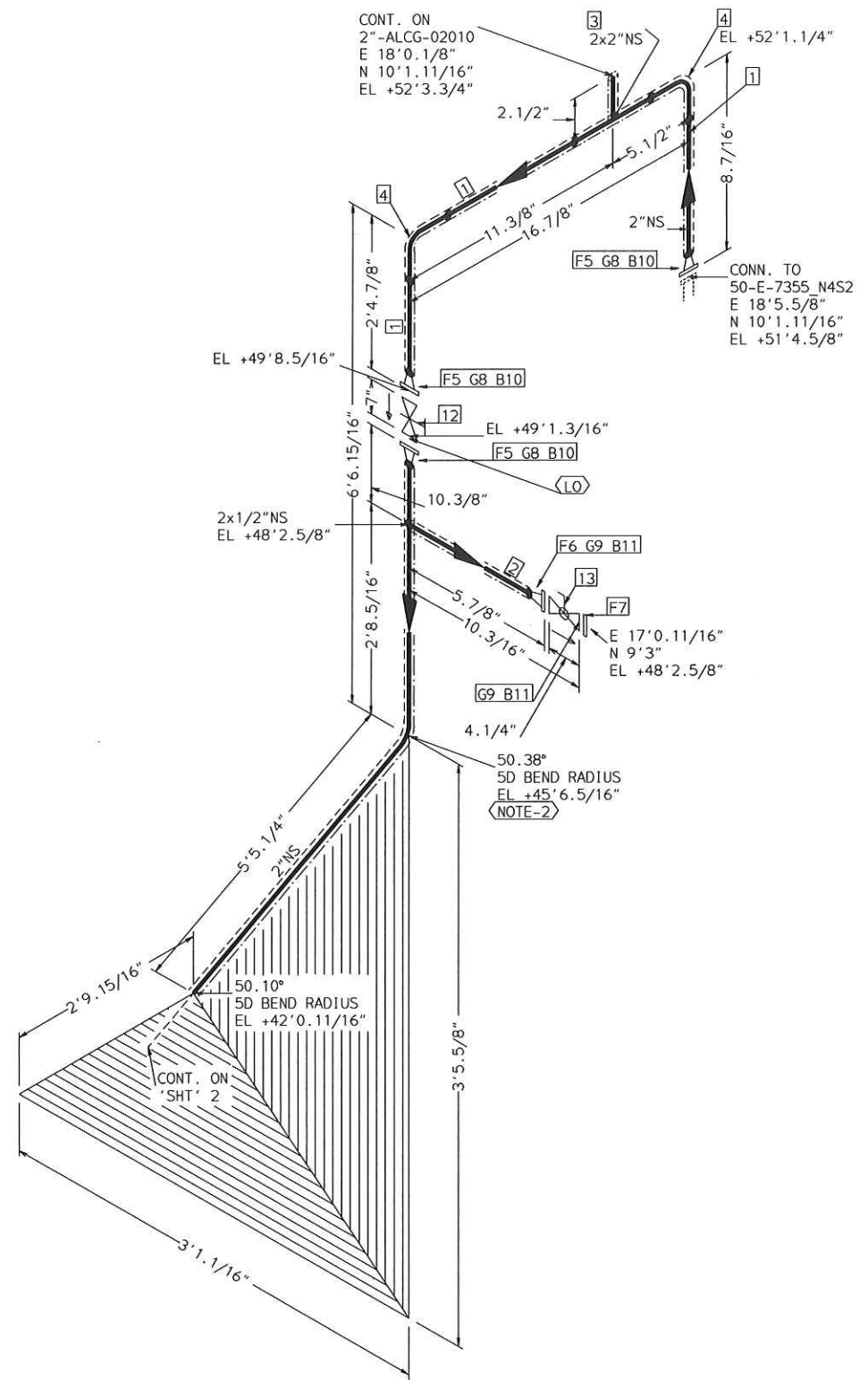


FOR CONT REFER LINE NO 2"-ALCG-02007-TAS  
 REFER NOTE-2  
 E 19'3.3/16"  
 N 36'0.3/8"  
 EL +32'11.13/16"

TRACING SPEC: S-TRACING (NOTE-10)

FABRICATION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
1	ALCG	PIPE	2	30.2'
		PIPE STD WT SMLS STL A106-B		
2	ALCG	FITTINGS	2	3
		ELL 45 DEG STD WT STL A234 WPB BW		
3	ALCG	FLANGES	2	1
		FLG WN 150# RF STL STD BORE A105		
ERECTION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
4	SUPP	FITTINGS	2	1
		SPS-25 TRUNNION SUPPORT		
		SPS-26 GUIDE SUPPORT		
5	SUPP	SPS-2 RESTING SUPPORT	2	1
6	SUPP	SPS-2 RESTING SUPPORT	2	1
7	ALCG	GASKETS	2	1
		GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG		

AREA: CETYL		2"-ALCG-02007	
PIPING GA NO: -	P&ID NO: 1002	STRESS CRITICAL: NA	
OP. TEMP: 195°F	OP. PRESS: 50 psig	TEST MEDIUM: Hydro	
DES. TEMP: 400°F	DES. PRESS: 150 psig	TEST PRESS: 225 psig	
SCALE: NONE	INSUL. TYPE: NS-CELLULAR	INSUL. THK: 1.5 inch	
LINE NO. / FILE NAME: 2"-ALCG-02007			ISSUE: R3



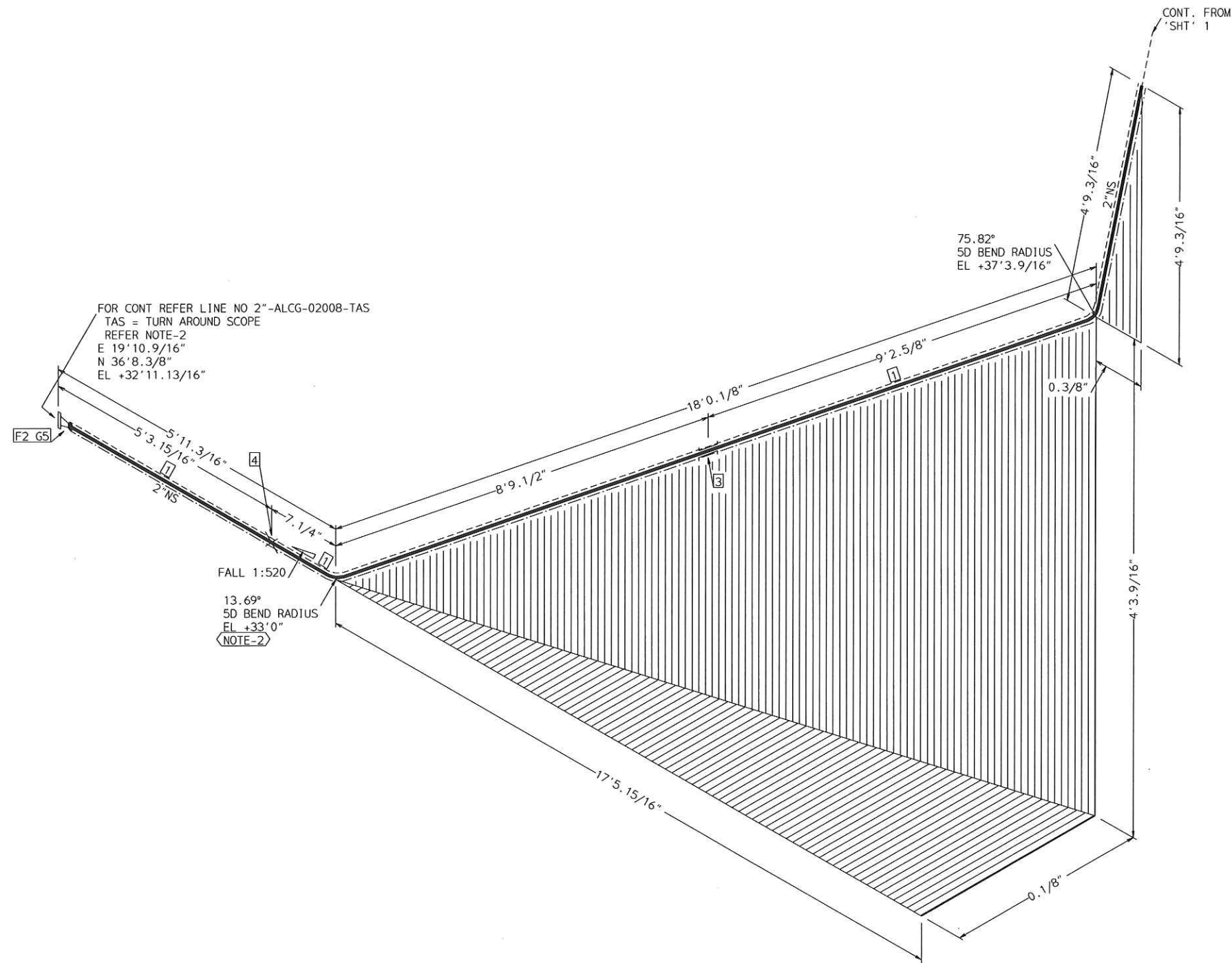
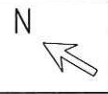
FABRICATION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
<u>PIPE</u>				
1	ALCG	PIPE STD WT SMLS STL A106-B	2	11.4'
2	ALCG	PIPE STD WT SMLS STL A106-B	1/2	0.4'
<u>FITTINGS</u>				
3	ALCG	TEE STD WT STL A234 WPB BW	2 x 2	1
4	ALCG	ELL 90 DEG LR STD WT STL A234 WPB BW	2	2
<u>FLANGES</u>				
5	ALCG	FLG WN 150# RF STL STD BORE A105	2	3
6	ALCG	FLG WN 150# RF STL STD BORE A105	1/2	1
7	ALCG	FLG BLIND 150# RF STL A105	1/2	1
ERECTION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
<u>GASKETS</u>				
8	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	2	3
9	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	1/2	2
<u>BOLTS</u>				
10	ALCG	3.1/8 x5/8" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	11/16	12
11	ALCG	2.3/8 x1/2" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	9/16	8
<u>VALVES / IN-LINE ITEMS</u>				
12	ALCG	GATE 150# FLANGED RF C.STL F6 TRIM	2	1
13	ALCG	BALL 150# FLGD RF FULL PORT S.S. BALL & STEM	1/2	1

TRACING SPEC: S-TRACING (NOTE-10)

AREA: CETYL		2"-ALCG-02008	
PIPING GA NO: -	P&ID NO: 1002	STRESS CRITICAL: NA	
OP.TEMP: 195°F	OP.PRESS: 50 psig	TEST MEDIUM: Hydro	
DES.TEMP: 400°F	DES.PRESS: 150 psig	TEST PRESS: 225 psig	
SCALE: NONE	INSUL.TYPE: NS-CELLULAR	INSUL.THK: 1.5 inch	
LINE NO. / FILE NAME: 2"-ALCG-02008			ISSUE: R3

SIZE-A3





FOR CONT REFER LINE NO 2"-ALCG-02008-TAS  
 TAS = TURN AROUND SCOPE  
 REFER NOTE-2  
 E 19' 10.9/16"  
 N 36' 8.3/8"  
 EL +32' 11.13/16"

FALL 1:520  
 13.69°  
 5D BEND RADIUS  
 EL +33' 0"  
 NOTE-2

75.82°  
 5D BEND RADIUS  
 EL +37' 3.9/16"

TRACING SPEC: S-TRACING (NOTE-10)

FABRICATION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
1	ALCG	PIPE	2	28.3'
		PIPE STD WT SMLS STL A106-B		
2	ALCG	FLANGES	2	1
		FLG WN 150# RF STL STD BORE A105		
ERECTION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
3	SUPP	FITTINGS	2	1
		SPS-2G GUIDE SUPPORT		
4	SUPP	SPS-2 RESTING SUPPORT	2	1
5	ALCG	GASKETS	2	1
		GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG		

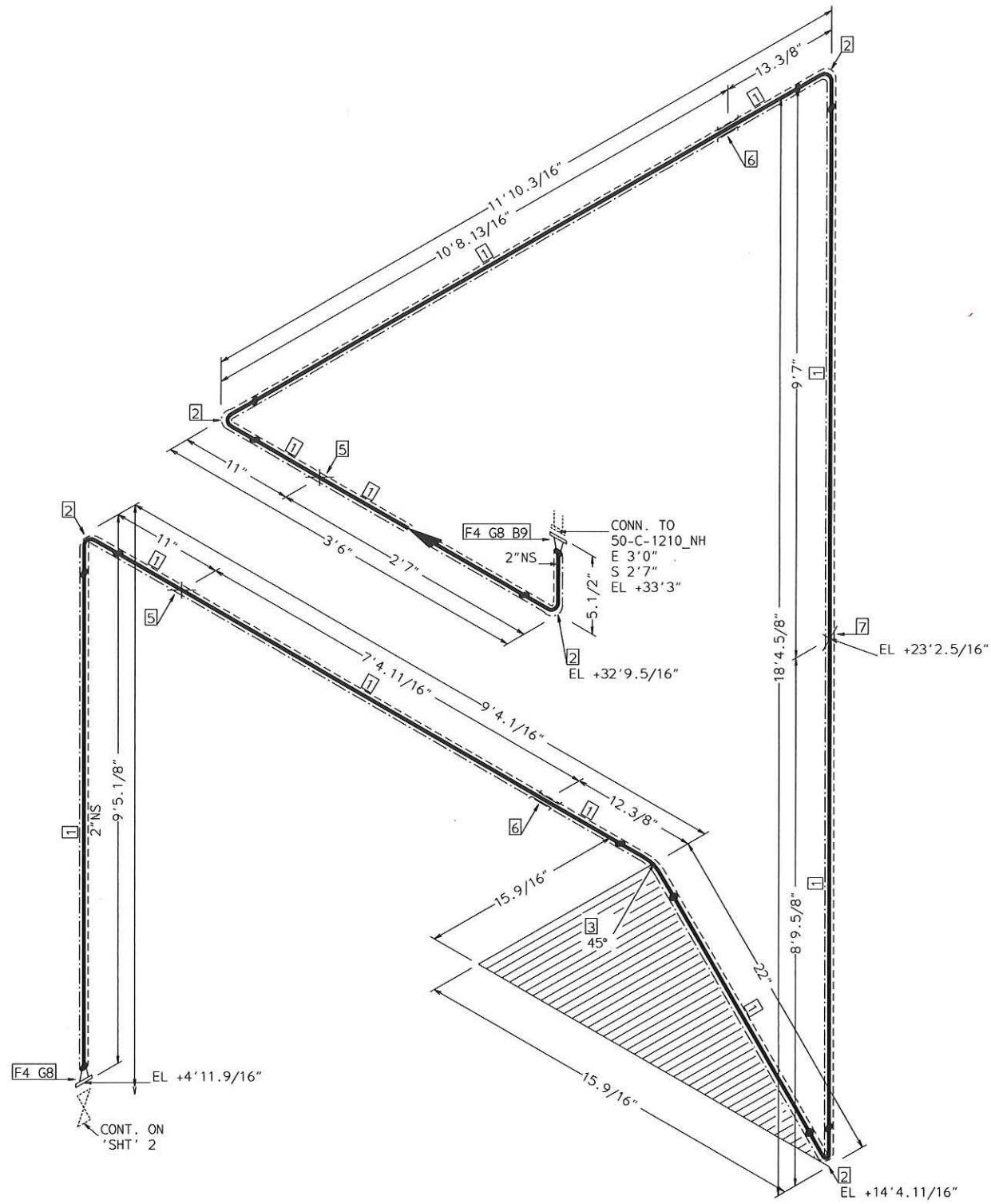
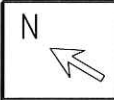
AREA: CETYL		2"-ALCG-02008	
PIPING GA NO: -	P&ID NO: 1002	STRESS CRITICAL: NA	
OP. TEMP: 195°F	OP. PRESS: 50 psig	TEST MEDIUM: Hydro	
DES. TEMP: 400°F	DES. PRESS: 150 psig	TEST PRESS: 225 psig	
SCALE: NONE	INSUL. TYPE: NS-CELLULAR	INSUL. THK: 1.5 inch	
LINE NO. / FILE NAME: 2"-ALCG-02008			ISSUE: R3

SIZE-A3





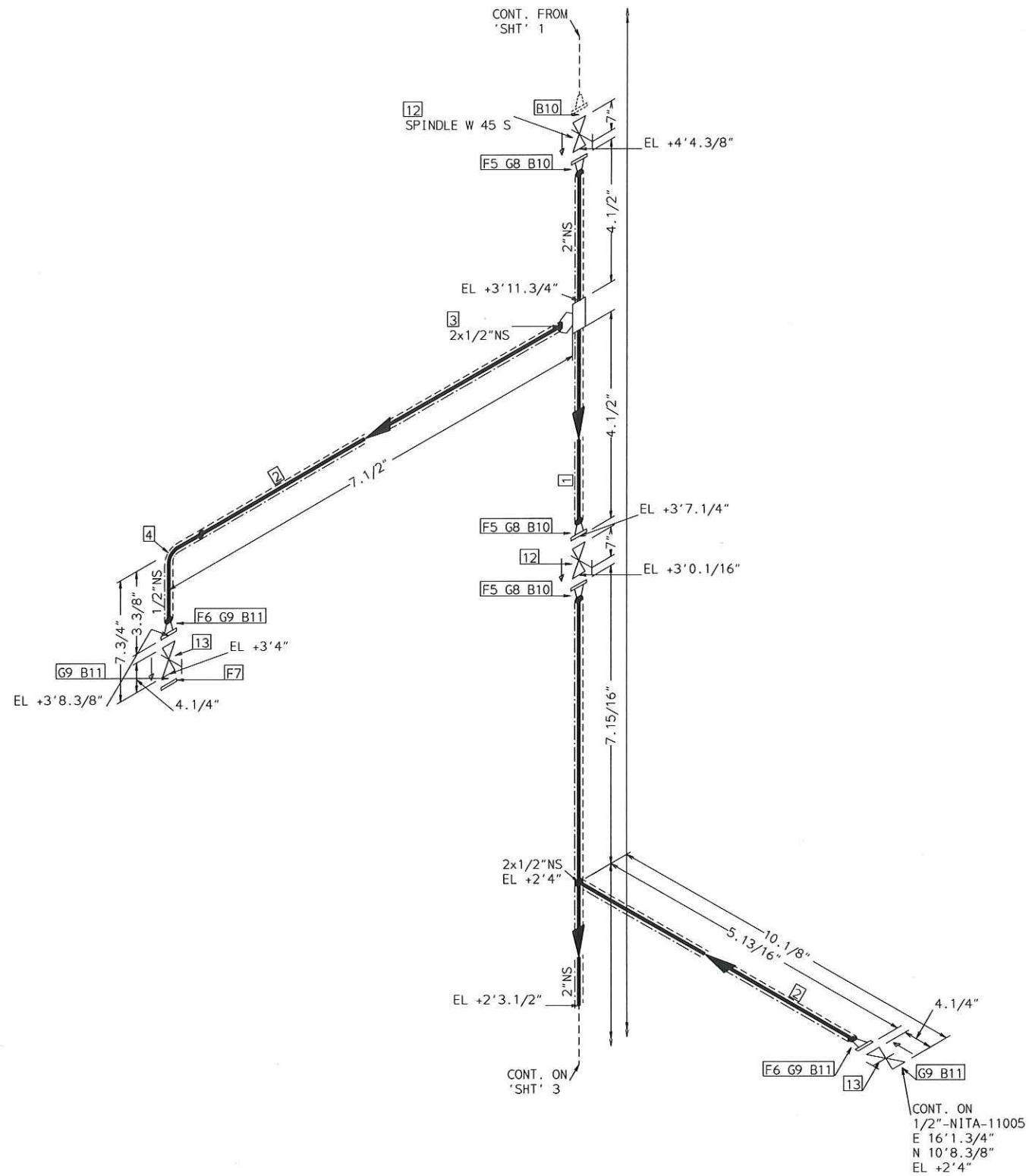




TRACING SPEC: S-TRACING (NOTE-10)

FABRICATION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
PIPE				
1	ALCG	PIPE STD WT SMLS STL A106-B	2	51.7'
FITTINGS				
2	ALCG	ELL 90 DEG LR STD WT STL A234 WPB BW	2	5
3	ALCG	ELL 45 DEG STD WT STL A234 WPB BW	2	1
FLANGES				
4	ALCG	FLG WN 150# RF STL STD BORE A105	2	2
ERECTION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
FITTINGS				
5	SUPP	SPS-2 RESTING SUPPORT	2	2
6	SUPP	SPS-2G GUIDE SUPPORT	2	2
7	SUPP	SPS-67G support	2	1
GASKETS				
8	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	2	2
BOLTS				
9	ALCG	3.1/8 x5/8" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	11/16	4

AREA: CETYL		2"-ALCG-20030	
PIPING GA NO: -	P&ID NO: 1020	STRESS CRITICAL: NA	
OP.TEMP: 280 °F	OP.PRESS: 30 psig	TEST MEDIUM: Hydro	
DES.TEMP: 400 °F	DES.PRESS: 150 psig	TEST PRESS: 225 psig	
SCALE: NONE	INSUL.TYPE: NS-CELLULAR	INSUL.THK: 1.5	
LINE NO. / FILE NAME: 2"-ALCG-20030			ISSUE: R4

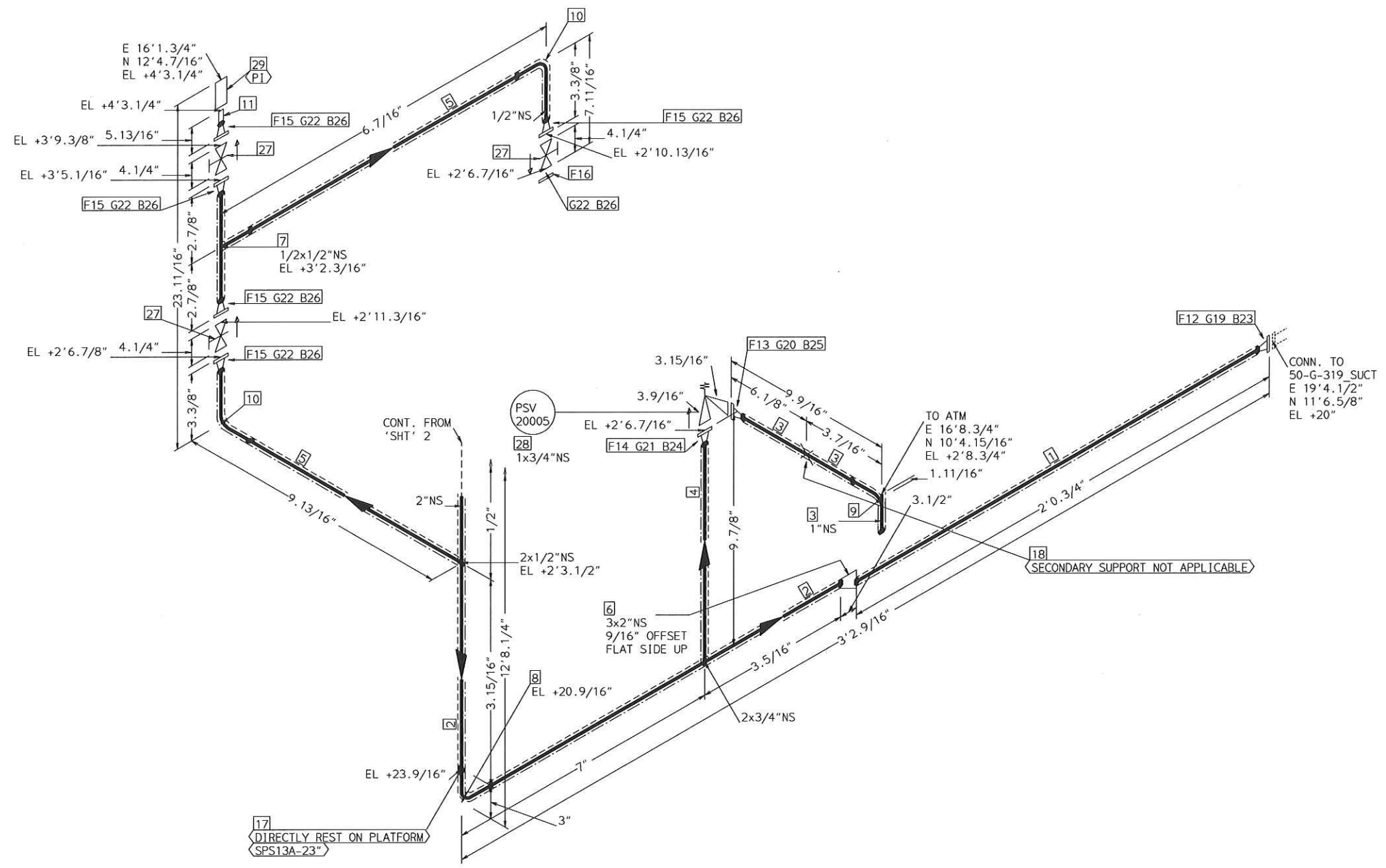
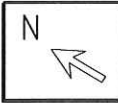


TRACING SPEC: S-TRACING (NOTE-10)

FABRICATION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
PIPE				
1	ALCG	PIPE STD WT SMLS STL A106-B	2	0.9'
2	ALCG	PIPE STD WT SMLS STL A106-B	1/2	0.7'
FITTINGS				
3	ALCG	WELDOLET STD WT STL A105	2 x 1/2	1
4	ALCG	ELL 90 DEG LR STD WT STL A234 WPB BW	1/2	1
FLANGES				
5	ALCG	FLG WN 150# RF STL STD BORE A105	2	3
6	ALCG	FLG WN 150# RF STL STD BORE A105	1/2	2
7	ALCG	FLG BLIND 150# RF STL A105	1/2	1

ERECTION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
GASKETS				
8	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	2	3
9	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	1/2	4
BOLTS				
10	ALCG	3.1/8 x 5/8" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	11/16	16
11	ALCG	2.3/8 x 1/2" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	9/16	16
VALVES / IN-LINE ITEMS				
12	ALCG	GATE 150# FLANGED RF C.STL F6 TRIM	2	2
13	ALCG	GATE 150# FLANGED RF C.STL F6 TRIM	1/2	2

AREA: CETYL		2"-ALCG-20030	
PIPING GA NO: -	P&ID NO: 1020	STRESS CRITICAL: NA	
OP.TEMP: 280 °F	OP.PRESS: 30 psig	TEST MEDIUM: Hydro	
DES.TEMP: 400 °F	DES.PRESS: 150 psig	TEST PRESS: 225 psig	
SCALE: NONE	INSUL.TYPE: NS-CELLULAR	INSUL.THK: 1.5	
LINE NO. / FILE NAME: 2"-ALCG-20030			ISSUE: R4



TRACING SPEC: S-TRACING (NOTE-10)

FABRICATION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
<b>PIPE</b>				
1	ALCG	PIPE STD WT SMLS STL A106-B	3	1.9'
2	ALCG	PIPE STD WT SMLS STL A106-B	2	1.0'
3	ALCG	PIPE STD WT SMLS STL A106-B	1	0.6'
4	ALCG	PIPE STD WT SMLS STL A106-B	3/4	0.7'
5	ALCG	PIPE STD WT SMLS STL A106-B	1/2	1.1'
<b>FITTINGS</b>				
6	ALCG	REDUCER ECC STD WT STL A234 WPB BW	3 x 2	1
7	ALCG	TEE STD WT STL A234 WPB BW	1/2 x 1/2	1
8	ALCG	ELL 90 DEG LR STD WT STL A234 WPB BW	2	1
9	ALCG	ELL 90 DEG LR STD WT STL A234 WPB BW	1	1
10	ALCG	ELL 90 DEG LR STD WT STL A234 WPB BW	1/2	2
11	ALCG	NIPPLE POE/TOE NPT 100MM LONG ASTM A105	1/2	1
<b>FLANGES</b>				
12	ALCG	FLG WN 150# RF STL STD BORE A105	3	1
13	ALCG	FLG WN 150# RF STL STD BORE A105	1	1
14	ALCG	FLG WN 150# RF STL STD BORE A105	3/4	1
15	ALCG	FLG WN 150# RF STL STD BORE A105	1/2	5
16	ALCG	FLG BLIND 150# RF STL A105	1/2	1

ERECTION MATERIALS				
PT NO	SPEC	COMPONENT DESCRIPTION	N.S.	QTY
<b>FITTINGS</b>				
17	SUPP	SPS13A TRUNNION SUPPORT	2	1
18	SUPP	SPS-24 SUPPORT	1	1
<b>GASKETS</b>				
19	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	3	1
20	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	1	1
21	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	3/4	1
22	ALCG	GASKET 150# 1/8" 304 SPRL WND W/FLEXICARB TYPE CG	1/2	6
<b>BOLTS</b>				
23	ALCG	3.9/16 x 5/8" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	11/16	4
24	ALCG	2.9/16 x 1/2" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	9/16	4
25	ALCG	2.9/16 x 1/2" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	9/16	4
26	ALCG	2.3/8 x 1/2" STUD BOLT A193 GR B7 W/2 A194 GR 2H NUTS	9/16	24
<b>VALVES / IN-LINE ITEMS</b>				
27	ALCG	GATE 150# FLANGED RF C.STL F6 TRIM	1/2	3
<b>INSTRUMENTS</b>				
28		RELIEF VALVE .05.16 PSV 20005	1 x 3/4	1

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\* CONT. ON 'SHT' 3A \*  
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AREA: CETYL	2"-ALCG-20030	
PIPING GA NO: -	P&ID NO: 1020	STRESS CRITICAL: NA
OP. TEMP: 280 °F	OP. PRESS: 30 psig	TEST MEDIUM: Hydro
DES. TEMP: 400 °F	DES. PRESS: 150 psig	TEST PRESS: 225 psig
SCALE: NONE	INSUL. TYPE: NS-CELLULAR	INSUL. THK: 1.5
LINE NO. / FILE NAME: 2"-ALCG-20030	ISSUE: R4	

SIZE-A3