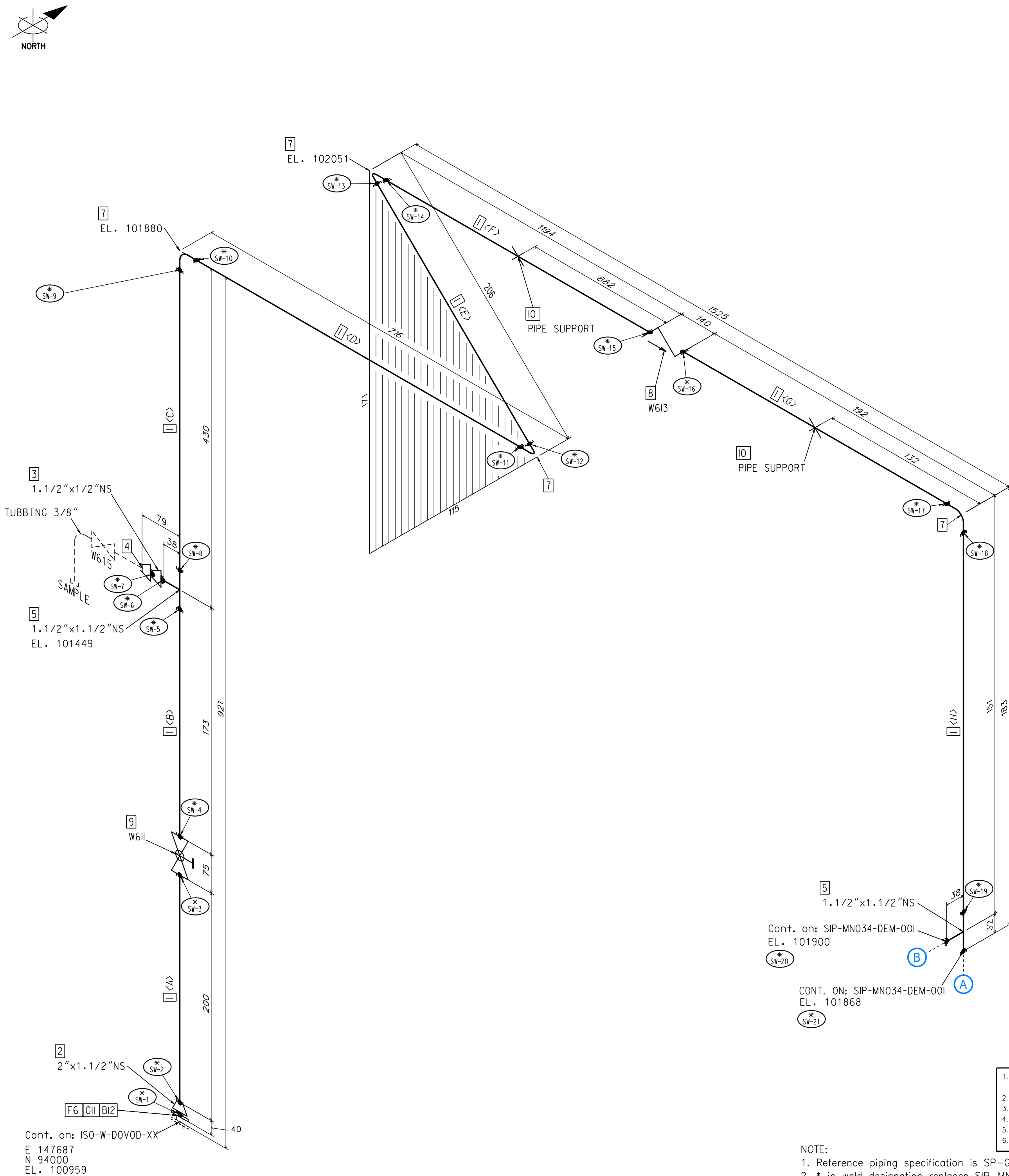




				Bill of Materials	
Pos	Quantity	Size1	Size2	Description	

Shop Materials					

PIPES					

1	2912	1.1/2"		PIPE, 40S, SW, SS, ASTM A-312, GR.TP304, ANSI B36.19	

FITTINGS					

2	1	2"	1.1/2"	REDUCER INSERT, TYPE 2, 3000LB, SW, SS, ASTM A-182, GR.F304, ANSI B16.11	
3	1	1.1/2"	1/2"	REDUCER INSERT, TYPE 3, 3000LB, SW, SS, ASTM A-182, GR.F304, ANSI B16.11	
4	1	1/2"	3/8"	PIPE TO TUBE ADAPTER, SWAGelok, SS-6-TA-1-SW	
5	2	1.1/2"	1.1/2"	TEE, 3000LB, SW, SS, ASTM A-182, GR.F304, ANSI B16.11	
6	1	2"		SOCKETWELD FLANGE, FLAT FACE, 150LB, SW, SS, ASTM A-182, GR.F304, ANSI B16.5	
7	4	1.1/2"		90 DEGREE ELBOW, 3000LB, SW, SS, ASTM A-182, GR.F304, ANSI B16.11	

VALVES					

8	1	1.1/2"		CHECK VALVE, SW, SS, 600 LB, ANSI B16.34, SPEC. SP-G403, SH. G0A6	
9	1	1.1/2"		BALL VALVE, SW, SS, 600 LB, ANSI B16.34, SPEC. SP-G332A, SH. S46-3	

Supports					

10	2	1.1/2"		PIPE SUPPORT SEE DWG: S1P-MN034-SUPPORT-001	

Field Materials					

Gaskets					

11	1	2"		ASME STANDARD 150LB FLAT FACE JACKETED GASKET	

Bolts					

12	4	15	85	ASTM A307, 5/8 X 85 STUD BOLT	