

VACUUM JACKETED PIPE

INNER LINE:

MATERIAL: 1" SCH5 304 SS WELDED
 2" SCH5 304 SS WELDED
 EXPANSION JOINTS AS REQUIRED

VACUUM JACKET:

MATERIAL: 3" SCH5 304 SS WELDED
 4" SCH5 304 SS WELDED

INSULATION:

MATERIAL: MULTI-LAYER SUPER INSULATION

TEST:

HELIUM LEAK TEST ENTIRE ASSEMBLY FOR
 MAXIMUM LEAK RATE OF 1×10^{-9} CC/SEC

7-DAY VACUUM RETENTION TEST

5% RADIOGRAPHY OF INNER BUTT-WELDS

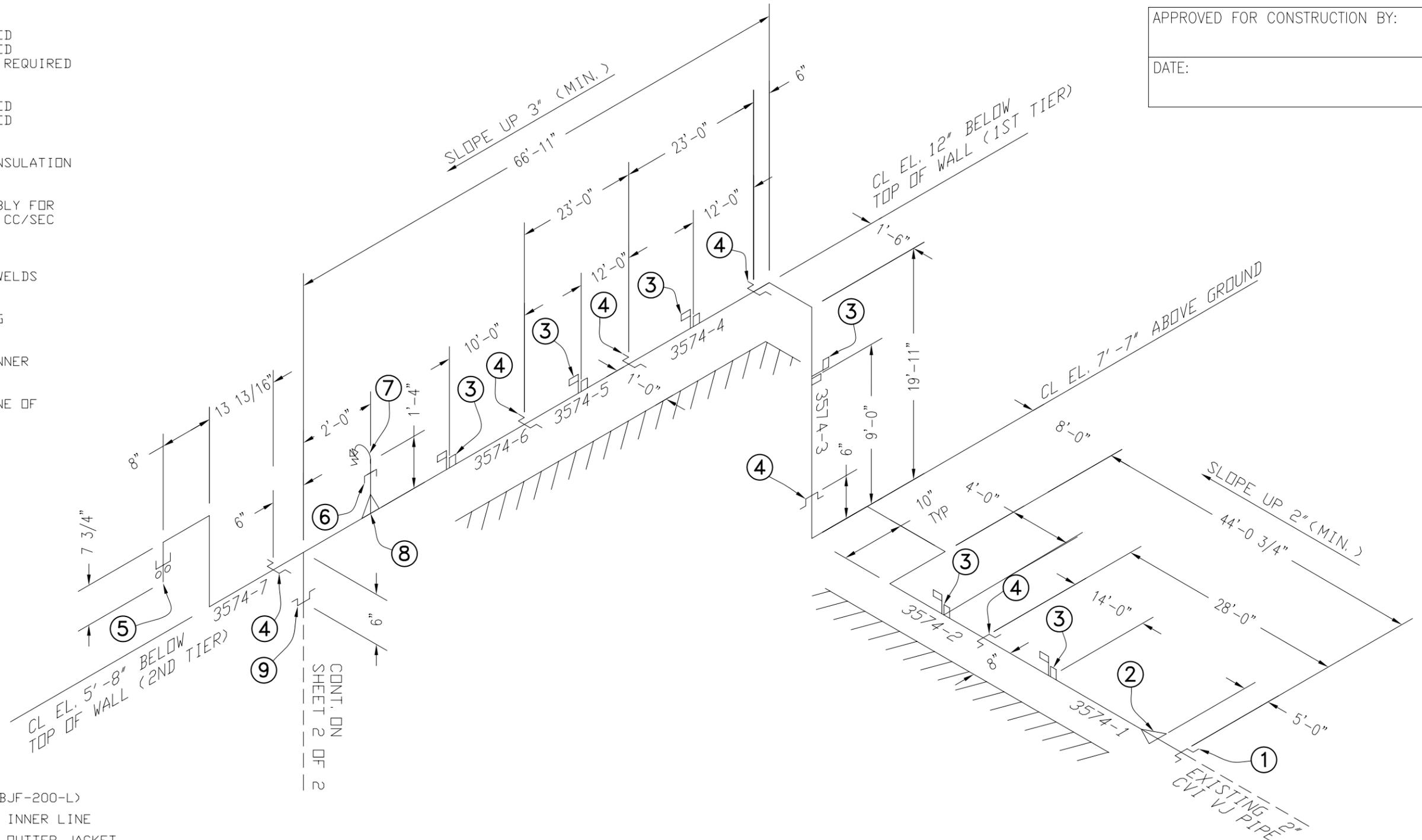
CODES:

ANSI B31.3 FOR PRESSURE PIPING

MATERIAL CERTS REQUIRED FOR INNER
 PRESSURE PIPING

ALL DIMENSIONS ARE TO CENTERLINE OF
 PIPE UNLESS NOTED OTHERWISE

APPROVED FOR CONSTRUCTION BY:
DATE:



LEGEND:

1. 2" X 4" CVI FEMALE BAYONET (BJF-200-L)
2. 2" X 1" CONCENTRIC REDUCER - INNER LINE
 4" X 3" CONCENTRIC REDUCER - OUTER JACKET
3. PUMP-OUT/VACUUM RELIEF PORT AND
 DV-6R VACUUM GAUGE TUBE W/
 ISOLATION VALVE (QTY. 6)
4. 1" X 3" BAYONET CONNECTION (QTY. 6)
5. 1" X 3" MECH. KEEP-COLD VENT
6. END OF VACUUM JACKET
7. 1/2" 150# ASME RELIEF VALVE
 ASSEMBLY ON VJ RISER
8. 1" X 1/2" REDUCING TEE
9. 1" X 3" MALE BAYONET

REVISIONS:

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JOB NAME: NASA GLENN -BLDG#16		
SERVICE: LN2	DESIGN PRESS: 150 PSIG	OPER. PRESS: 30 PSIG
DESCRIPTION: 1" X 3" VJ PIPE		
SCALE: N. T. S.	DRAWN BY: BG	DATE: 3-19-04
CHKD. & APPRVD. BY:		DATE APPRVD. :
INQ. #: 21749	DWG. #: 3574	SHT. #: 1 of 2

VACUUM JACKETED PIPE

INNER LINE:

MATERIAL: 1/2" ODT X .035W 304SS TUBING (SMLS)
 1/2" SCH5 304 SS WELDED
 1" SCH5 304 SS WELDED
 EXPANSION JOINTS AS REQUIRED

VACUUM JACKET:

MATERIAL: 2" ODT X .065W 304SS TUBING (WELDED)
 2" SCH5 304 SS WELDED
 3" SCH5 304 SS WELDED

INSULATION:

MATERIAL: MULTI-LAYER SUPER INSULATION

TEST:

HELIUM LEAK TEST ENTIRE ASSEMBLY FOR
 MAXIMUM LEAK RATE OF 1×10^{-9} CC/SEC

7-DAY VACUUM RETENTION TEST

5% RADIOGRAPHY OF INNER BUTT-WELDS

CODES:

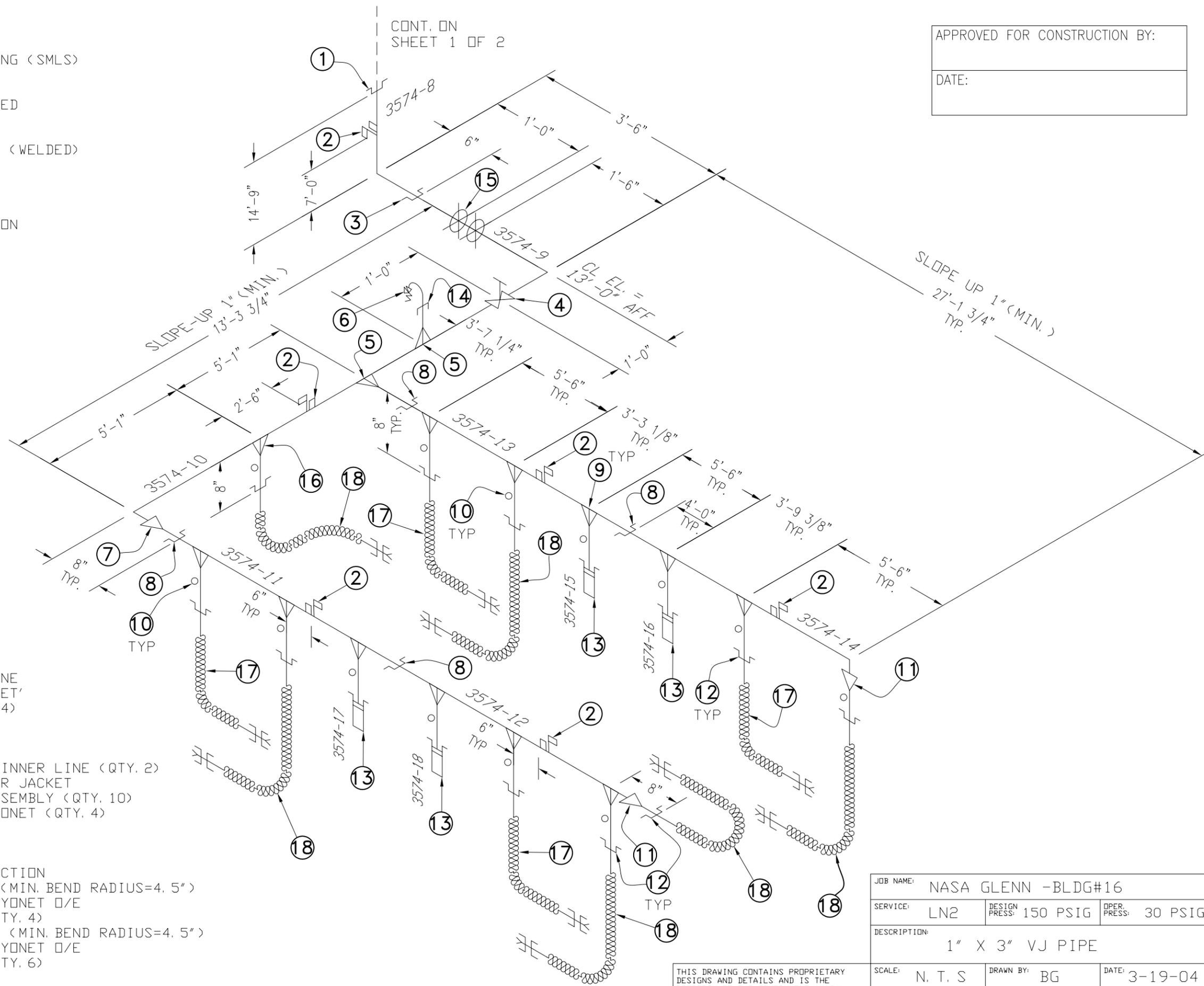
ANSI B31.3 FOR PRESSURE PIPING

MATERIAL CERTS REQUIRED FOR INNER
 PRESSURE PIPING

ALL DIMENSIONS ARE TO CENTERLINE OF
 PIPE UNLESS NOTED OTHERWISE

LEGEND:

1. 1" X 3" FEMALE BAYONET
2. PUMP-OUT/VACUUM RELIEF PORT AND
 DV-6R VACUUM GAUGE TUBE W/
 ISOLATION VALVE (QTY. 6)
3. 1" X 3" BAYONET CONNECTION
4. 1" CVI VJ VALVE (V-1060-100)
5. 1" X 1/2" REDUCING TEE (QTY. 2)
6. 1/2" 150# RELIEF VALVE ASSEMBLY
 ON VJ RISER
7. 1" X 1/2" CONC. REDUCER - INNER LINE
 3" X 2" CONC. REDUCER - OUTER JACKET
8. 1/2" X 2" BAYONET CONNECTION (QTY. 4)
9. 1/2" IPS X 1/2" ODT REDUCING TEE
 CONNECTION (QTY. 11)
10. 1/2" INTERNAL GAS TRAP (QTY. 11)
11. 1/2" IPS X 1/2" ODT CONC. REDUCER - INNER LINE (QTY. 2)
 2" IPS X 2" ODT CONC. REDUCER - OUTER JACKET
12. 1/2" X 9" LG LINDE-STYLE BAYONET ASSEMBLY (QTY. 10)
13. 1/2" X 9" LG LINDE-STYLE CAPPED BAYONET (QTY. 4)
14. END OF VACUUM JACKET
15. WALL PENETRATION
 (PROVIDED BY OTHERS)
16. 1" IPS X 1/2" ODT REDUCING TEE CONNECTION
17. 3/8" X 7FT LONG VJ SUPERFLEX HOSE (MIN. BEND RADIUS=4.5")
 W/ 1/2" X 9" LINDE STYLE FEMALE BAYONET O/E
 & 1/2" FEMALE JIC FLARE NUT O/E (QTY. 4)
18. 3/8" ID X 13FT LG VJ SUPERFLEX HOSE (MIN. BEND RADIUS=4.5")
 W/ 1/2" X 9" LINDE STYLE FEMALE BAYONET O/E
 & 1/2" FEMALE JIC FLARE NUT O/E (QTY. 6)



CONT. ON
 SHEET 1 OF 2

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DATE:

JOB NAME: NASA GLENN -BLDG#16		
SERVICE: LN2	DESIGN PRESS: 150 PSIG	OPER. PRESS: 30 PSIG
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