



- NOTES:**
- HELIUM RECIRC., HELIUM SUPPLY, VACUUM AND OFFGAS CONNECTIONS AND INSTRUMENTATION CABINET DETAILS ARE SPECIFIED ON DWG XXX-XXX BY ARGONNE INSTRUMENT GROUP.
 - ARGONNE INSTRUMENT GROUP DESIGN RESPONSIBILITY.
 - INDIVIDUAL INSERTS UTILITY LINES (TYPICAL 1 OF 18):
 - A- HOG-2119 - 895 THROUGH 2136 - 895
 - B- VAC-2137 - 456 THROUGH 2154 - 456
 - C- HEL-2230 - 455 THROUGH 2247 - 455
 - D- MUL-2248 - 455 THROUGH 2265 - 455
 - E- MUL-2266 - 455 THROUGH 2283 - 455
 - F- MUL-2284 - 455 THROUGH 2301 - 455
 - G- HEL-2302 - 455 THROUGH 2319 - 455
 - H- HEL-2320 - 455 THROUGH 2337 - 455
 - I- MUL-2338 - 455 THROUGH 2355 - 455
 - J- MUL-2356 - 455 THROUGH 2373 - 455
 - K- WLS-2101-3/4-130 THROUGH 2118-3/4-130
 - L- WLR-2201-3/4-130 THROUGH 2218-3/4-130
 - VALVES IN INDIVIDUAL INSERTS UTILITY LINES (TYPICAL 1 OF 18):
 - A- HV-2007 THROUGH HV-2024
 - B- HV-2025 THROUGH HV-2042
 - C- HV-2043 THROUGH HV-2060
 - D- HV-2061 THROUGH HV-2078
 - E- HV-2079 THROUGH HV-2096
 - F- HV-2097 THROUGH HV-2114 AND FCV-2115 THROUGH FCV-2132
 - G- HV-2133 THROUGH HV-2150
 - ARGONNE INSTRUMENT GROUP TO PROVIDE THERMOCOUPLES FOR INNER INSERTS.
 - EQUIPMENT LOCATED IN THE HEAVY WATER STATION #4 SERVICE PANEL SHOWN IN SVERDRUP DRAWING 106060000-J8E-8700-A028.
 - FLEXIBLE HOSES IN INDIVIDUAL UTILITY LINES (TYPICAL 1 OF 18):
 - D- FH-2116 THROUGH FH-2133
 - E- FH-2134 THROUGH FH-2151
 - F- FH-2152 THROUGH FH-2169
 - I- FH-2170 THROUGH FH-2187
 - J- FH-2188 THROUGH FH-2205
 - K- FH-2206 THROUGH FH-2223
 - L- FH-2224 THROUGH FH-2241

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SECTION AND DETAIL KEY	NUMBER OF SECTION OR DETAIL	THIS DOCUMENT CONTROLLED BY	CHANGE CONTROL SYSTEM
			ENGINEERING PROCEDURE SNS-TS-C001

REV	DATE	DESCRIPTION	BY	CHK	SECT	DEPT	DATE	PE	REG	DATE	DATE	RPE	RPE	DATE	ST	CV	EC	EE	EM	IE	M	PD	SE	AR
0	01/02	CERTIFIED FOR CONSTRUCTION, 1-18-02	CHM	JPF			01/02																	

PROCESS DRAWING NO. 1660-A23-2			
PROJECT NAME: SPALLATION NEUTRON SOURCE			
MODERATORS/SHUTTERS/INSERTS UTILITIES PIPING AND INSTRUMENTATION DIAGRAM			
1	48	50	PLANT
3	X	X	8
51	52	53	WBS
NC	NA	IN	106060000- J8E-8700-A023