



VALVE NUMBER	VALVE DESCRIPTION	SIZE	NO. OF VALVES
ADV188	VCV098-E-100	18"	1
MCV128	VCV098-C-120	18"	1
MOV107	BY CE	18"	1
MOV111	BY CE	18"	1
MOV118	BY CE	18"	1
V18	VCV015-E-2K	24"	1
V58, 59, 73, 83, 84, 119, 121, 122, 123	V58158-B-2	3/4"	9
V38	VCV098-F-22	3"	1
V31	VCV098-F-24	3"	1
V36, 37	VCV048-E-2	3"	2
V48	VCV015-B-2	3/4"	1
V51, 81, 79, 80, 121	VCV015-P-2K	3/4"	5
V52	VCV015-P-2K	3/4"	1
V53	VCV015-E-2K	3/4"	1
V54, 36	VCV015-M-2K	3/4"	2
V56, 57, 58, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200	VCV015-F-2	3/4"	17
V75, 76, 77, 78	VCV048-D-2	3"	4
V78, 81, 122	VCV048-C-2	3/4"	3
V98, 100, 101, 102	VCV048-E-2	3/4"	4
V128	V58158-B-2	3/4"	1

- NOTES:
- ALL INSTRUMENT AND EQUIP NUMBERS TO BE PREFIXED BY "2CSH" EXCEPT WHERE A DIFFERENT PREFIX IS SHOWN. AN INSTRUMENT WILL REPLACE THE DASH (-) IN THE PREFIX FOR EQUIPMENT OR INSTRUMENTS WHICH ARE A PART OF NUCLEAR SAFETY FEATURES SYSTEM.
 - BONNETT VEIN CONNECTIONS ON VALVES 2CSHMOV107 & 118 HAVE A 3/4" NIPPLE AND CAP OF THE SAME PIPE CLASS AS THE LINES WHERE THE VALVES ARE LOCATED.
 - VALVE 2CSHMOV107 HAS A WELDED PLUG AT THE BOTTOM DRAIN LOCATION.
 - SE IDENTIFICATION NUMBERS ARE SHOWN IN SQUARES (TO BE PREFIXED BY E22 UNLESS OTHERWISE PREFIXED).
 - ALL LOCAL VENTS, DRAINS, TEST CONN, PRESSURE CONN, FLOW TAPS SHALL BE 3/4".
 - INDICATES A DISSEMBLER WELD AT PIPE CLASS CHANGE.
 - VALVE POSITIONS ARE SHOWN FOR NORMAL OPERATION OF THE PLANT. THE SYSTEM IS ON STANDBY, READY TO START ON "LOCAL" SIGNALS.
 - ALL INSTRUMENT LINES INSIDE DRYWELL TO BE 3/4" CL1502, SCH160 UNLESS OTHERWISE NOTED.
 - LINES 1" AND SMALLER WHICH ARE PART OF THE REACTOR COOLANT PRESSURE BOUNDARY SHALL BE SAFETY CLASS 2.
 - MOV111 SHALL BE INSTALLED WITH THE PACKING GLAND ON UPSTREAM SIDE OF THE VALVES DISC.
 - LEVEL CONNECTIONS ARE 1" UNLESS OTHERWISE NOTED.
 - SEE PID-4A FOR OTHER PIPING & INSTRUMENTATION ON CONDENSATE STORAGE TANK.
 - LEVEL SWITCH IS ULTRASONIC TYPE FOR ANNUNCIATION ONLY.
 - CLASS 153 STAINLESS STEEL PIPE, SCHEDULE 10B.
 - VALVE 2CSHMOV133 IS THROTTLED TO MAINTAIN FLOW OF 7175 GPM.
 - 2CSHMOV186 HAS BEEN PROCURED AND DELIVERED TO THE SITE AS A BLANK ORIFICE, BASED UPON CALCULATION A. 10-C-28 REV 0 AND PRE-OP TEST RESULTS. THIS ORIFICE IS NOT REQUIRED.
 - IF DENOTES EQUIPMENT SUPPLIED BY GE-MED.
 - MINIMUM DISTANCE FOR INSTALLATION.
 - VALVES V54 AND V96 WILL BE THROTTLED AND LOCKED IN THROTTLED POSITION.

PIPING & INSTRUMENTATION DIAGRAM
HIGH PRESSURE CORE SPRAY
SYSTEM
NINE MILE POINT NUCLEAR STATION-UNIT 2
NIAGARA MOHAWK POWER CORPORATION
STONE & WEBSTER ENGINEERING CORPORATION
CHERRY HILL, N.J.
DRAWING NUMBER 12177-PID-33A-11
CHECKED BY: E.F. CURRAN
DESIGNED BY: E.F. CURRAN

ISSUE	DESCRIPTION	CHKD	CORRECT	DATE	ISSUE	DESCRIPTION	CHKD	CORRECT	DATE	ISSUE	DESCRIPTION	CHKD	CORRECT	DATE	ISSUE	DESCRIPTION	CHKD	CORRECT	DATE
1	INCORPORATES ECN NO. CSH-027				1	INCORPORATES ECN NO. 2488853				1	INCORPORATES ECN NO. CSH-028				1	INCORPORATES ECN NO. CSH-025			
2	ISSUE				2	ISSUE				2	ISSUE				2	ISSUE			

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