

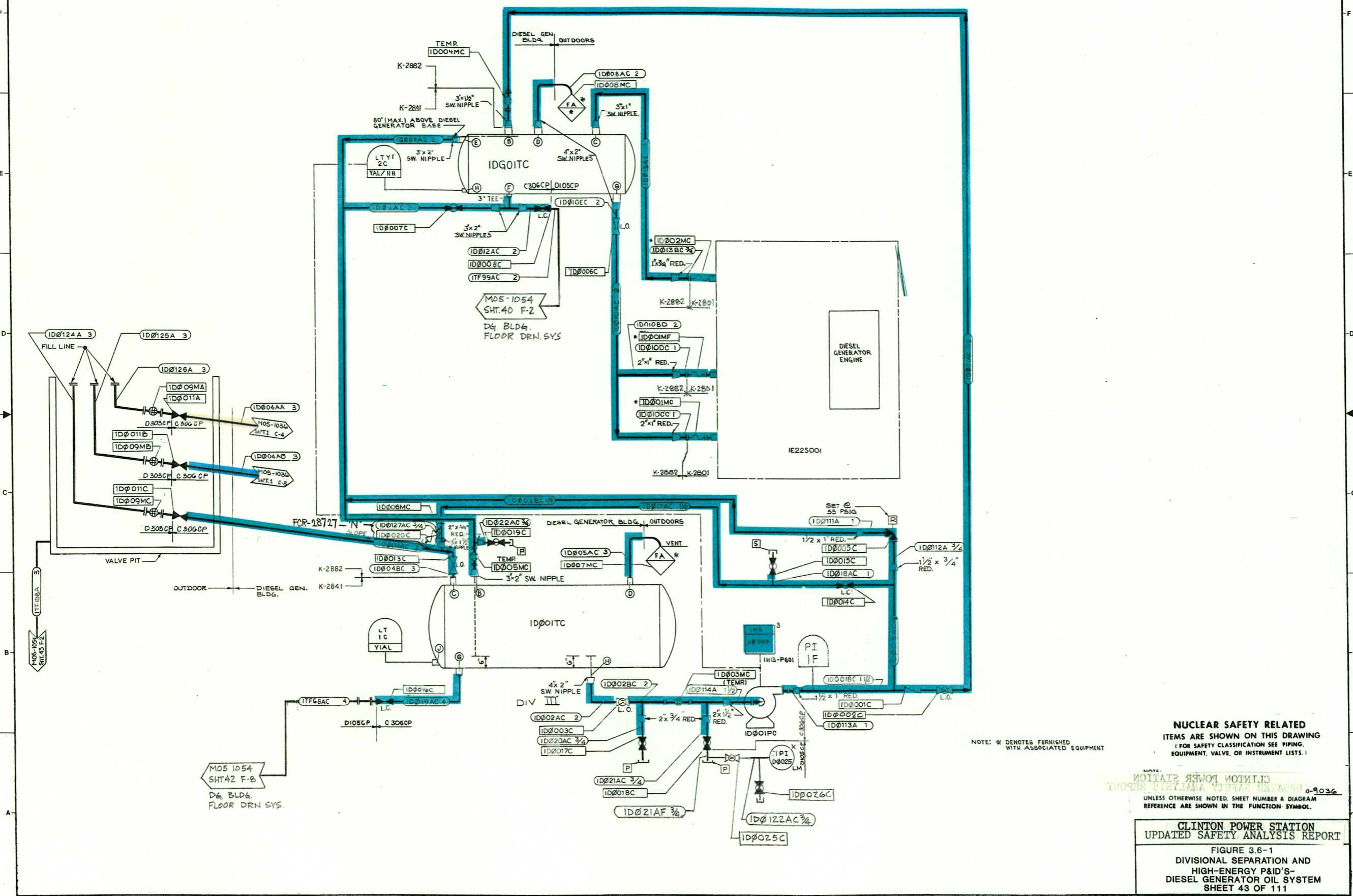
9E01-G0W
SHEET 2
OF 3
MOS-1036

ID001TC
DIESEL GENERATOR
FUEL OIL STORAGE TANK
K-2841

IDG01TC
DIESEL GENERATOR
FUEL OIL DAY TANK
K-2841

ID001PC
DIESEL GENERATOR
FUEL OIL TRANSFER PUMP
K-2826A

IE225001
DIESEL ENGINE
GENERATOR SET SKID
K-2801



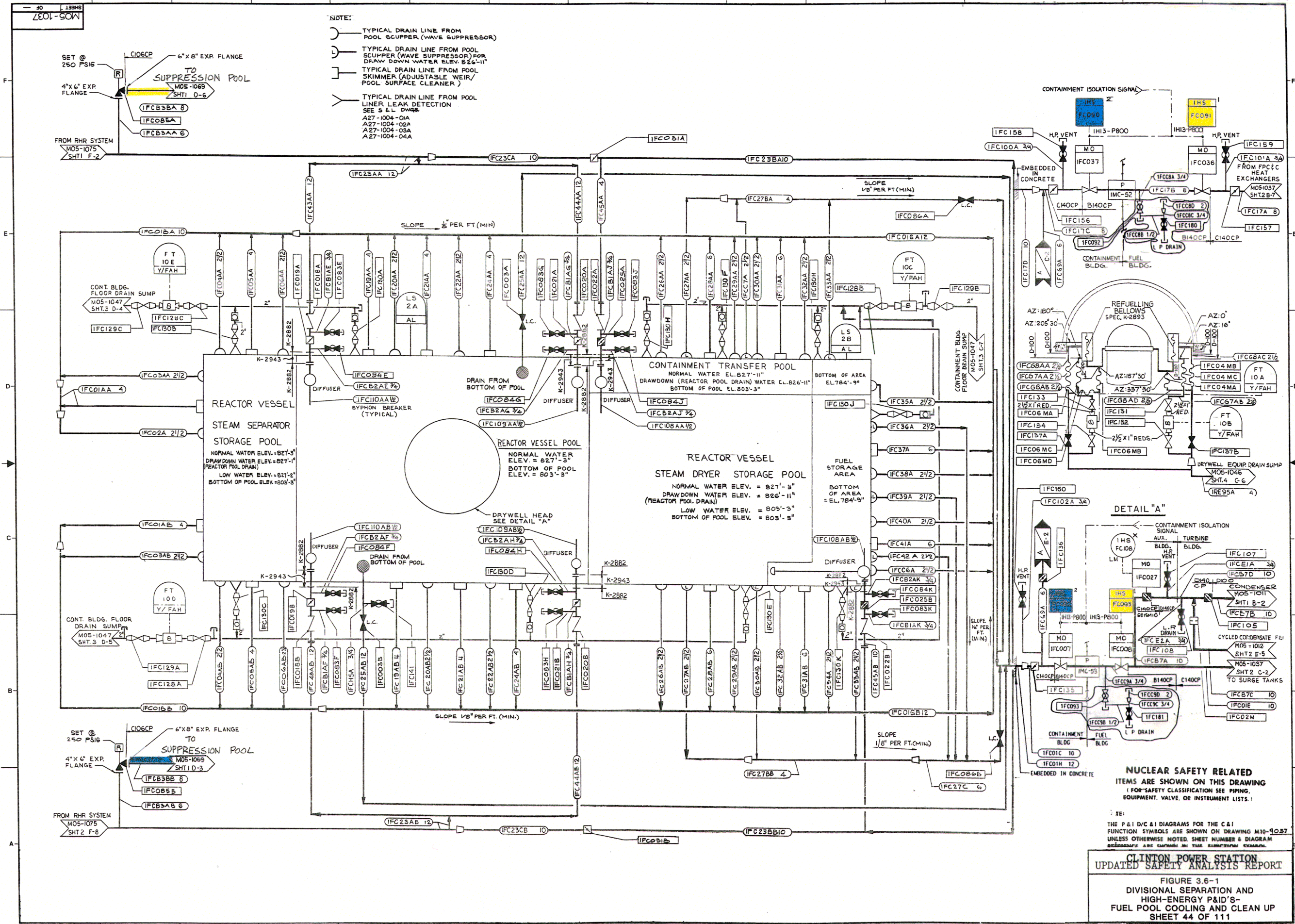
NOTE: * DENOTES FURNISHED WITH ASSOCIATED EQUIPMENT

NUCLEAR SAFETY RELATED
ITEMS ARE SHOWN ON THIS DRAWING
(FOR SAFETY CLASSIFICATION SEE PIPING,
EQUIPMENT, VALVE, OR INSTRUMENT LISTS.)

NOTE:
UNLESS OTHERWISE NOTED, SHEET NUMBER & DIAGRAM
REFERENCE ARE SHOWN IN THE FUNCTION SYMBOL.

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND
HIGH-ENERGY P&ID'S-
DIESEL GENERATOR OIL SYSTEM
SHEET 43 OF 111

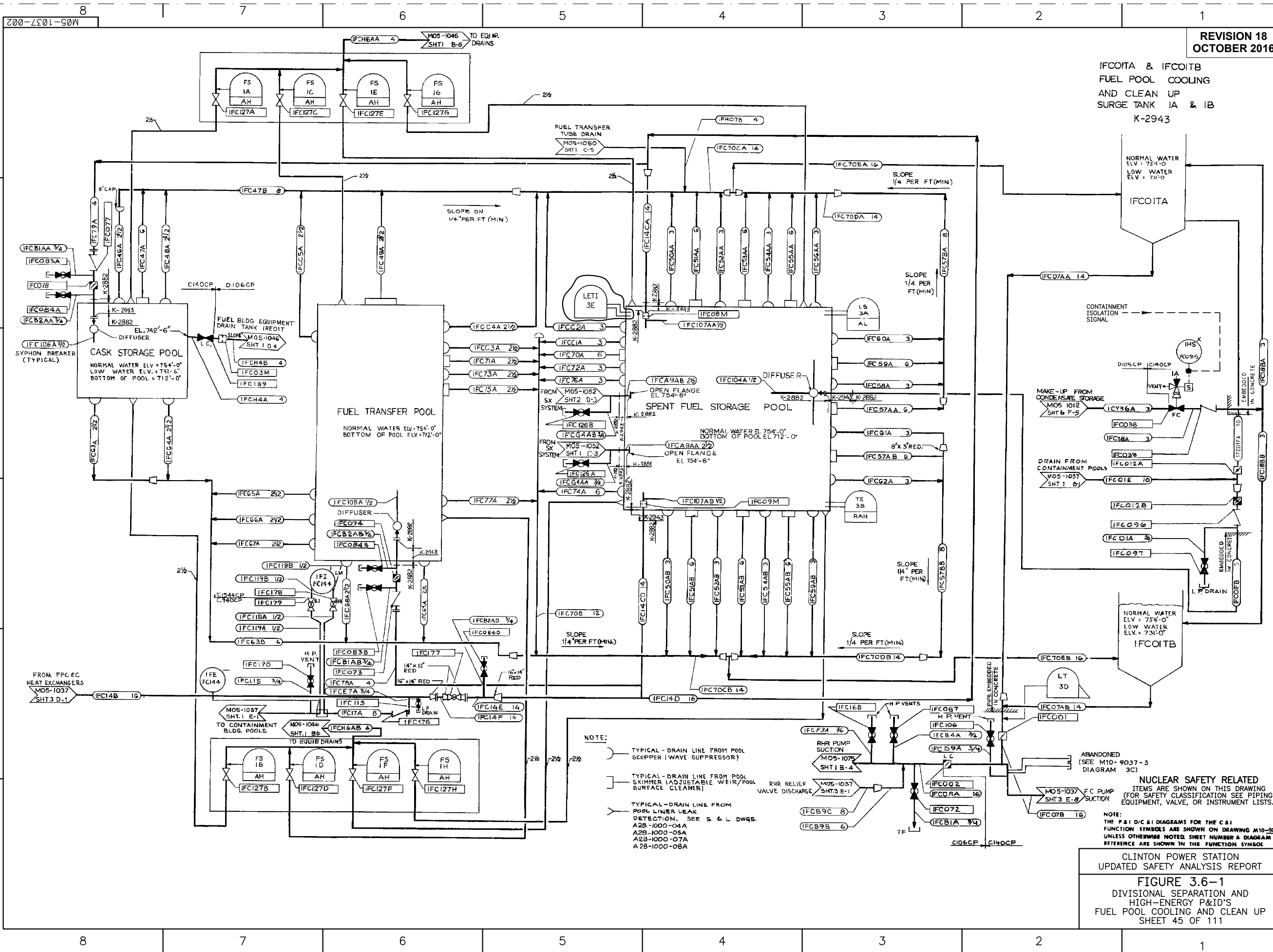


CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND
HIGH-ENERGY P&ID'S-
FUEL POOL COOLING AND CLEAN UP
SHEET 44 OF 111

REVISION 18
OCTOBER 2016

IFCO1TA & IFCO1TB
FUEL POOL COOLING
AND CLEAN UP
SURGE TANK IA & IB
K-2943



NOTE:

- TYPICAL - DRAIN LINE FROM POOL SCUPPER (WAVE SUPPRESSOR)
- TYPICAL - DRAIN LINE FROM POOL SKIMMER (ADJUSTABLE WEIR/POOL SURFACE CLEANER)
- TYPICAL - DRAIN LINE FROM POOL LINER LEAK DETECTION. SEE S & L DWGS. A2B-1000-04A A2B-1000-05A A2B-1000-07A A2B-1000-08A

NUCLEAR SAFETY RELATED ITEMS ARE SHOWN ON THIS DRAWING (FOR SAFETY CLASSIFICATION SEE PIPING, EQUIPMENT, VALVE, OR INSTRUMENT LISTS.)

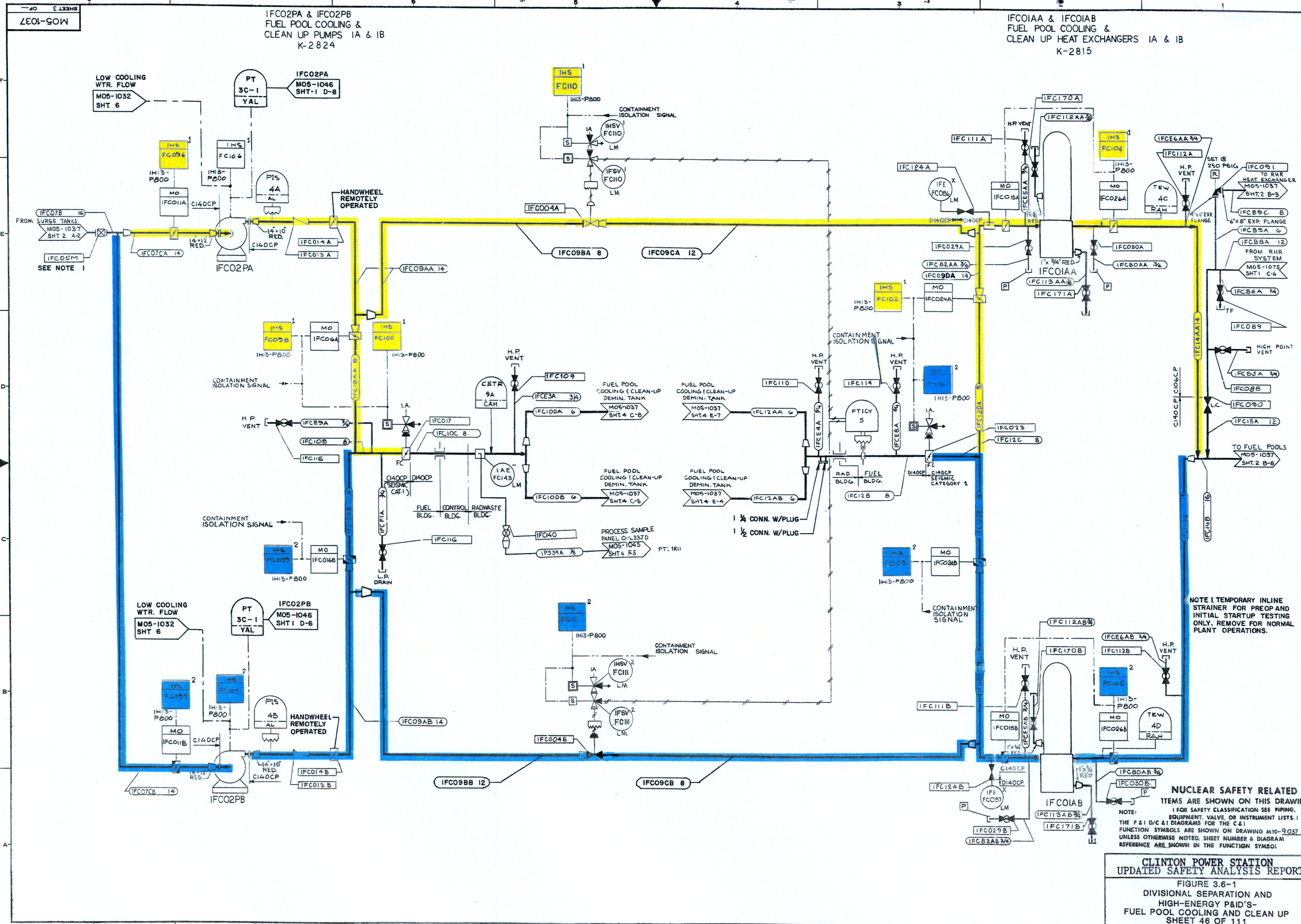
NOTE: THE P&ID'S DIAGRAMS FOR THE C&I FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-1051 UNLESS OTHERWISE NOTED. SHEET NUMBER & DIAGRAM REFERENCE ARE SHOWN IN THE FUNCTION SYMBOL

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND
HIGH-ENERGY P&ID'S
FUEL POOL COOLING AND CLEAN UP
SHEET 45 OF 111

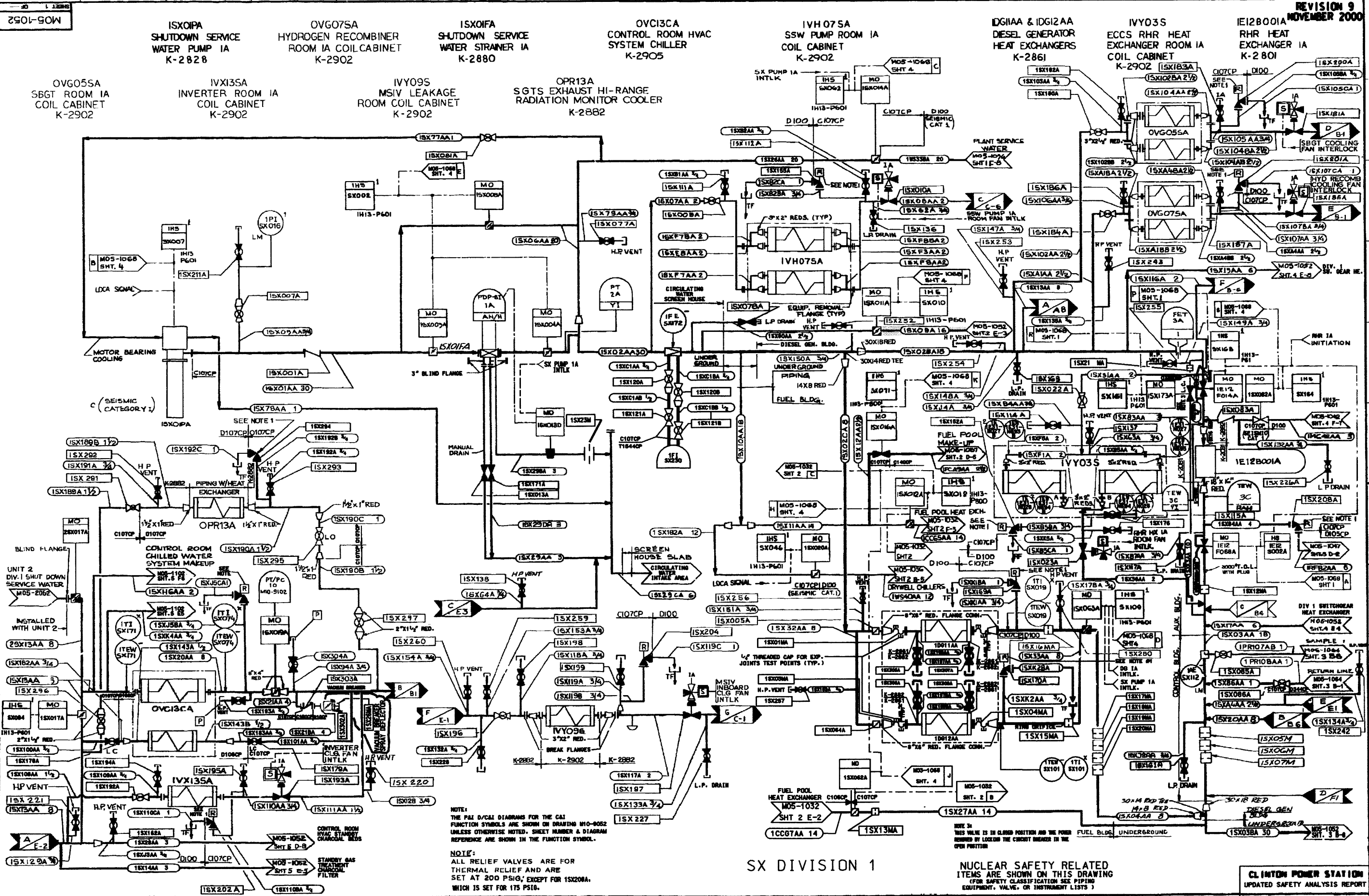
IFCO2PA & IFCO2PB
FUEL POOL COOLING &
CLEAN UP PUMPS 1A & 1B
K-2824

IFCO1AA & IFCO1AB
FUEL POOL COOLING &
CLEAN UP HEAT EXCHANGERS 1A & 1B
K-2815



NUCLEAR SAFETY RELATED
ITEMS ARE SHOWN ON THIS DRAWING
NOTE:
FOR SAFETY CLASSIFICATION SEE PIPING,
EQUIPMENT, VALVE, OR INSTRUMENT LISTS. 1
THE P & I D/C & I DIAGRAMS FOR THE C & I
FUNCTION SYMBOLS ARE SHOWN ON DRAWING A10-9037
UNLESS OTHERWISE NOTED, SHEET NUMBER & DIAGRAM
REFERENCE ARE SHOWN IN THE FUNCTION SYMBOL

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT
FIGURE 3.6-1
DIVISIONAL SEPARATION AND
HIGH-ENERGY P&ID'S-
FUEL POOL COOLING AND CLEAN UP
SHEET 46 OF 111



NOTE 1:
THE P&ID DIAGRAMS FOR THE CAI
FUNCTION SYMBOLS ARE SHOWN ON DRAWING W10-6062
UNLESS OTHERWISE NOTED, SHEET NUMBER & DIAGRAM
REFERENCE ARE SHOWN IN THE FUNCTION SYMBOL.

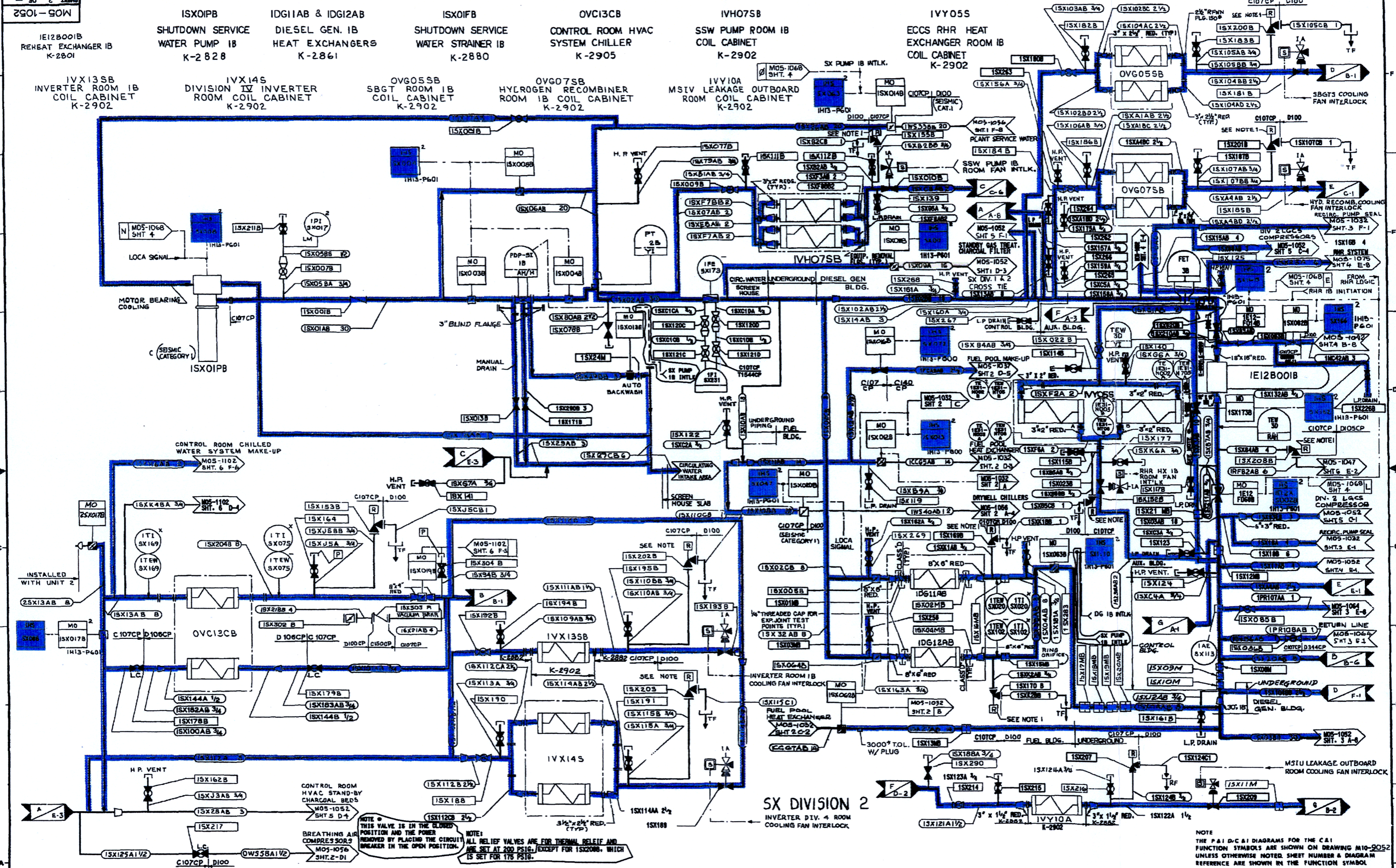
NOTE 2:
ALL RELIEF VALVES ARE FOR
THERMAL RELIEF AND ARE
SET AT 200 PSIG, EXCEPT FOR 1SX200A,
WHICH IS SET FOR 175 PSIG.

SX DIVISION 1

NUCLEAR SAFETY RELATED
ITEMS ARE SHOWN ON THIS DRAWING
(FOR SAFETY CLASSIFICATION SEE PIPING
EQUIPMENT, VALVE, OR INSTRUMENT LISTS)

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND
HIGH-ENERGY PAID'S-
SHUTDOWN SERVICE WATER
SHEET 47 OF 111



101-1052

ISX01PB SHUTDOWN SERVICE WATER PUMP 1B K-2828

IVX13SB INVERTER ROOM 1B COIL CABINET K-2902

IVX14S DIVISION 14 INVERTER ROOM COIL CABINET K-2902

ISX01FB SHUTDOWN SERVICE WATER STRAINER 1B K-2880

OVC13CB CONTROL ROOM HVAC SYSTEM CHILLER K-2905

IVH07SB SSW PUMP ROOM 1B COIL CABINET K-2902

IVY055 ECCS RHR HEAT EXCHANGER ROOM 1B COIL CABINET K-2902

OVC05SB SSGT ROOM 1B COIL CABINET K-2902

OVC07SB HYDROGEN RECOMBINER ROOM 1B COIL CABINET K-2902

ISX03AB 3/4" ISX102BC 2 1/2" ISX104AC 2 1/2" ISX200B ISX105CB 1" ISX104BB 2 1/2" ISX105AB 3/4" ISX105BB 3/4" ISX104AD 2 1/2" ISX104AB 2 1/2" ISX104BC 2 1/2" ISX104C 2 1/2" ISX104D 2 1/2" ISX104E 2 1/2" ISX104F 2 1/2" ISX104G 2 1/2" ISX104H 2 1/2" ISX104I 2 1/2" ISX104J 2 1/2" ISX104K 2 1/2" ISX104L 2 1/2" ISX104M 2 1/2" ISX104N 2 1/2" ISX104O 2 1/2" ISX104P 2 1/2" ISX104Q 2 1/2" ISX104R 2 1/2" ISX104S 2 1/2" ISX104T 2 1/2" ISX104U 2 1/2" ISX104V 2 1/2" ISX104W 2 1/2" ISX104X 2 1/2" ISX104Y 2 1/2" ISX104Z 2 1/2"

NOTE: THIS VALVE IS IN THE CLOSED POSITION AND THE POWER REMOVED BY PLACING THE CIRCUIT BREAKER IN THE OPEN POSITION.

NOTE: ALL RELIEF VALVES ARE FOR THERMAL RELIEF AND ARE SET AT 200 PSIG, EXCEPT FOR ISX200B, WHICH IS SET FOR 176 PSIG.

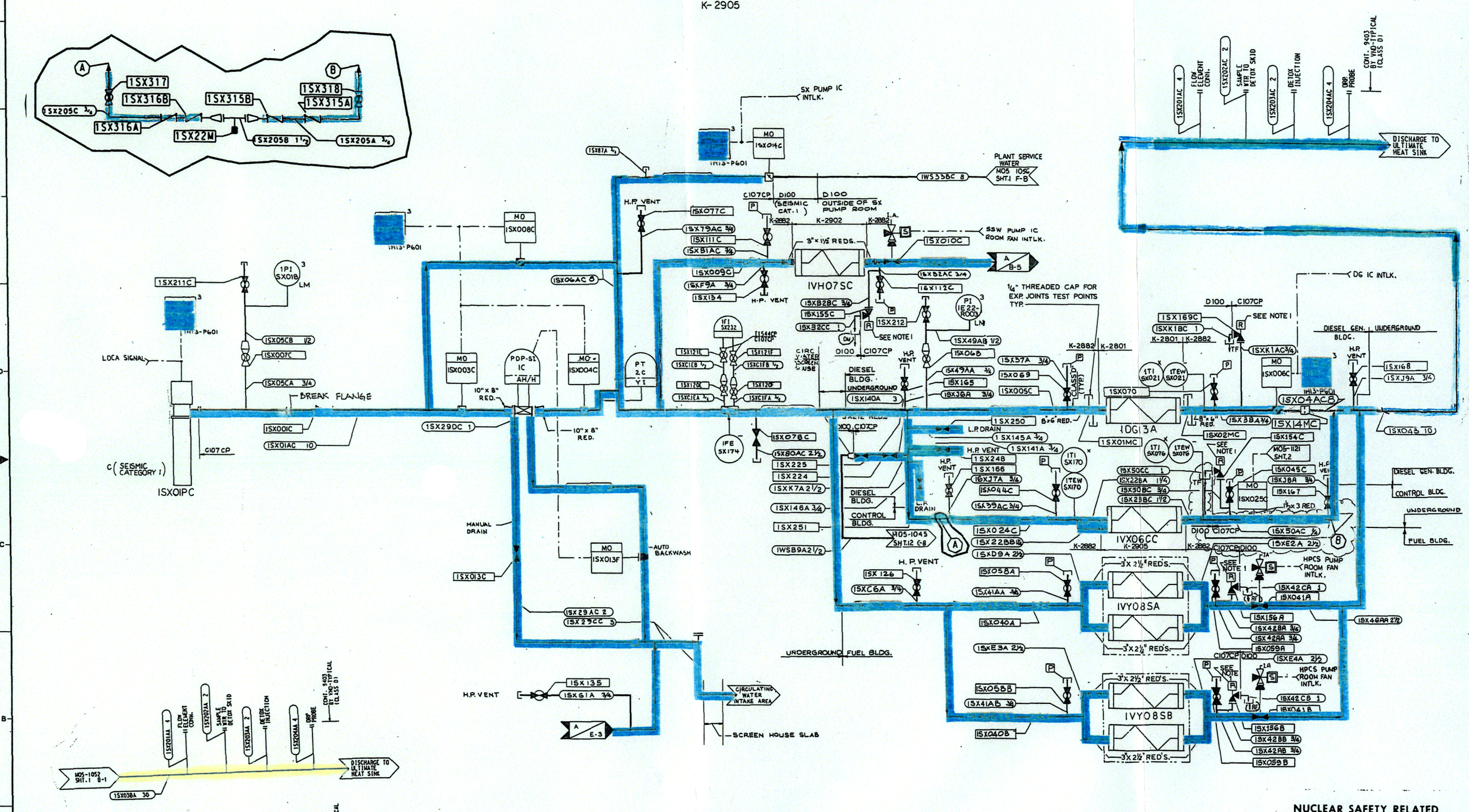
NOTE: THE P&ID/C&I DIAGRAMS FOR THE C&I FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-2052 UNLESS OTHERWISE NOTED. SHEET NUMBER & DIAGRAM REFERENCE ARE SHOWN IN THE FUNCTION SYMBOL.

CLINTON POWER STATION
 UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1

DIVISIONAL SEPARATION
 HIGH-ENERGY PAID'S
 SHUTDOWN SERVICE WATER
 SHEET 48 OF 111

ar:\usercd\193-6-1-48.dgn Sep. 02, 1999 11:55:18



NOTE:
 1. ALL RELIEF VALVES ARE FOR THERMAL RELIEF AND ARE SET AT 170 PSIG. EXCEPT ISX169C WHICH IS SET AT 150 PSIG.

SX DIVISION 3

NUCLEAR SAFETY RELATED
 ITEMS ARE SHOWN ON THIS DRAWING (FOR SAFETY CLASSIFICATION SEE PIPING, EQUIPMENT, VALVE, OR INSTRUMENT LISTS.)

NOTE
 THE P&I D/C #1 DIAGRAMS FOR THE C&I FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-9052 UNLESS OTHERWISE NOTED SHEET NUMBER & DIAGRAM REFERENCE ARE SHOWN IN THE FUNCTION SYMBOL.

CLINTON POWER STATION
 UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
 DIVISIONAL SEPARATION AND HIGH-ENERGY P&I'S - SHUTDOWN SERVICE WATER SHEET 49 OF 111

SHEET 4 OF 5
MOS-1052

IVX06CA
DIV. 1 SWITCHGEAR
HEAT REMOVAL
CONDENSING UNIT
K-2905

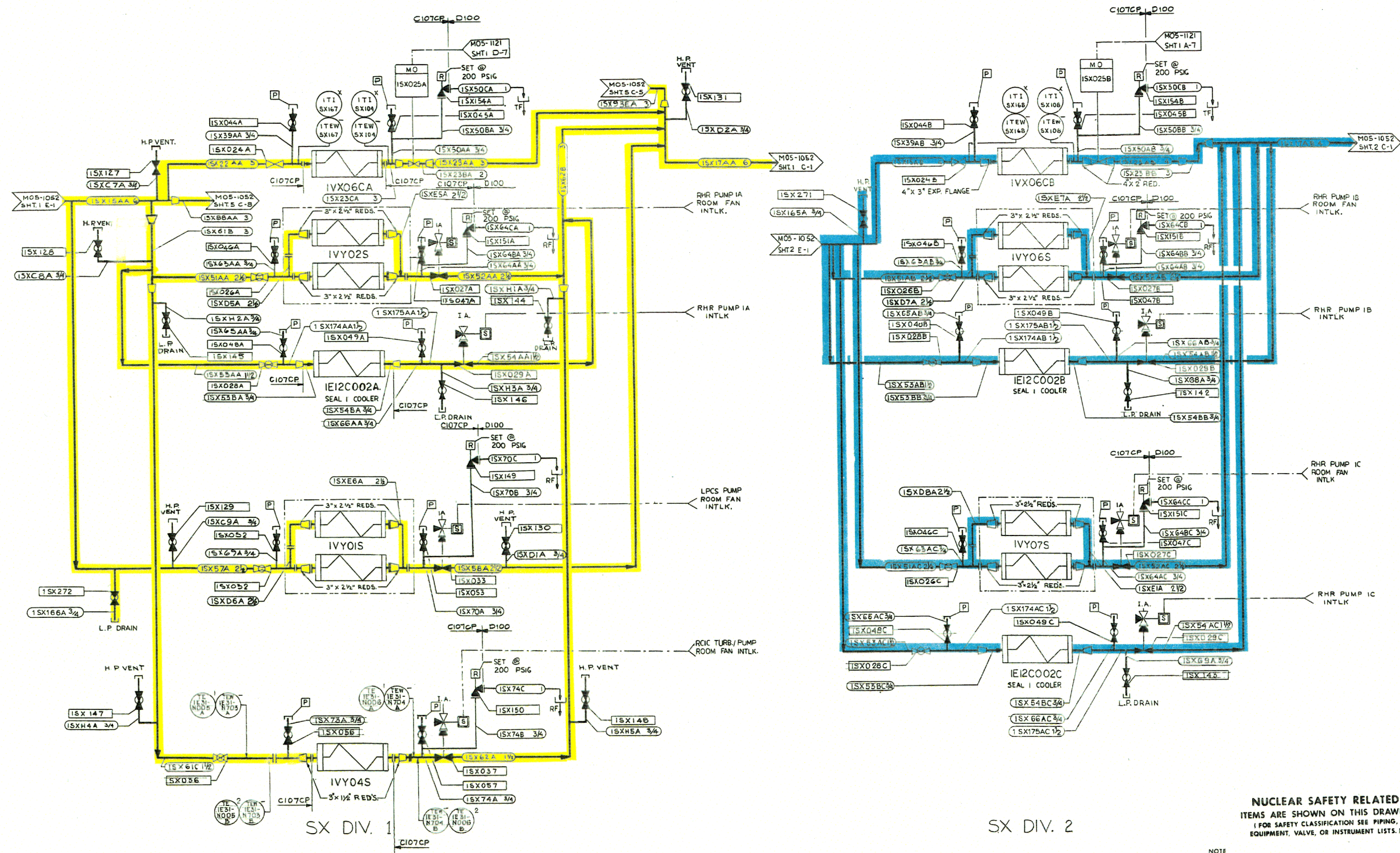
IVY02S, IVY06S & IVY07S
ECCS RHR IA IB & IC
PUMP ROOM COIL CABINETS
K-2902

IE12C002A, IE12C002B & IE12C002C
RHR PUMP SEAL COOLERS
IA, IB & IC
K-2801

IVX06CB
DIV. 2 SWITCHGEAR
HEAT REMOVAL
CONDENSING UNIT
K-2905

IVY01S
ECCS LPCS PUMP ROOM
COIL CABINET
K-2902

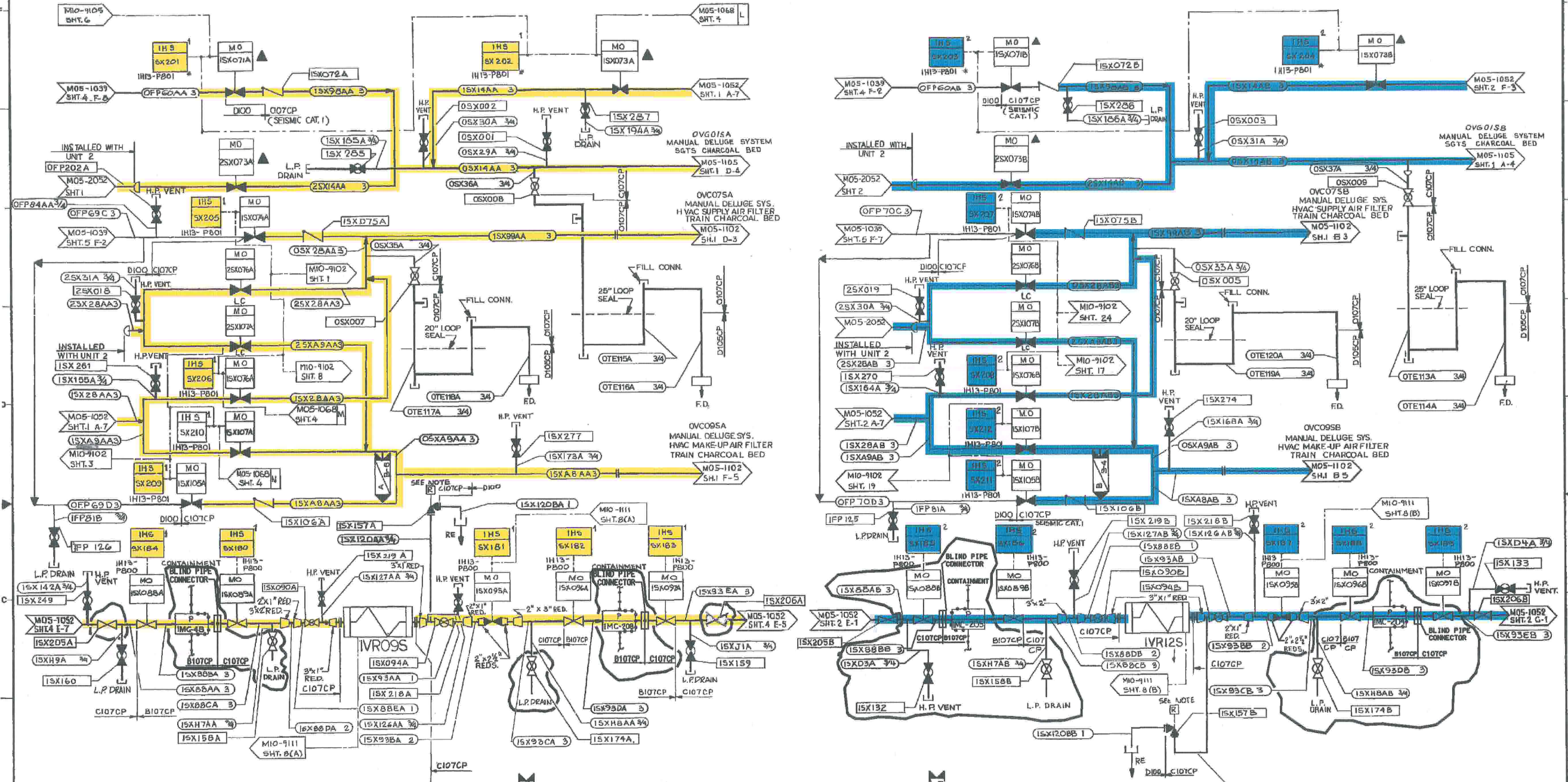
AMENDMENT 37
MARCH 1986
IVY04S
ECCS RCIC PUMP
ROOM COIL CABINET
K-2902



NUCLEAR SAFETY RELATED
ITEMS ARE SHOWN ON THIS DRAWING
(FOR SAFETY CLASSIFICATION SEE PIPING,
EQUIPMENT, VALVE, OR INSTRUMENT LISTS.)

NOTE
THE P&ID/C&I DIAGRAMS FOR THE C&I
FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-9052
UNLESS OTHERWISE NOTED, SHEET NUMBER & DIAGRAM
REFERENCE ARE SHOWN IN THE FUNCTIONAL SYMBOLS.

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT
FIGURE 3.6-1
DIVISIONAL SEPARATION AND
HIGH-ENERGY P&ID'S-
SHUTDOWN SERVICE WATER
SHEET 50 OF 111



NOTE 1. M05 FOR 25X076A/B AND 25X077A/B ARE ELECTRICALLY DISCONNECTED

NOTE:
RELIEF VALVES ARE FOR THERMAL RELIEF AND ARE SET AT 200 PSIG.

▲ REFERENCE M10-9105-006-012

NUCLEAR SAFETY RELATED
ITEMS ARE SHOWN ON THIS DRAWING
(FOR SAFETY CLASSIFICATION SEE PIPING,
EQUIPMENT, VALVE, OR INSTRUMENT LISTS.)

NOTE:
THE P&ID/C&I DIAGRAMS FOR THE C&I
FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-3062
UNLESS OTHERWISE NOTED SHEET NUMBER & DIAGRAM
REFERENCE ARE SHOWN IN THE FUNCTION SYMBOL.

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND
HIGH-ENERGY P&ID'S-
SHUTDOWN SERVICE WATER

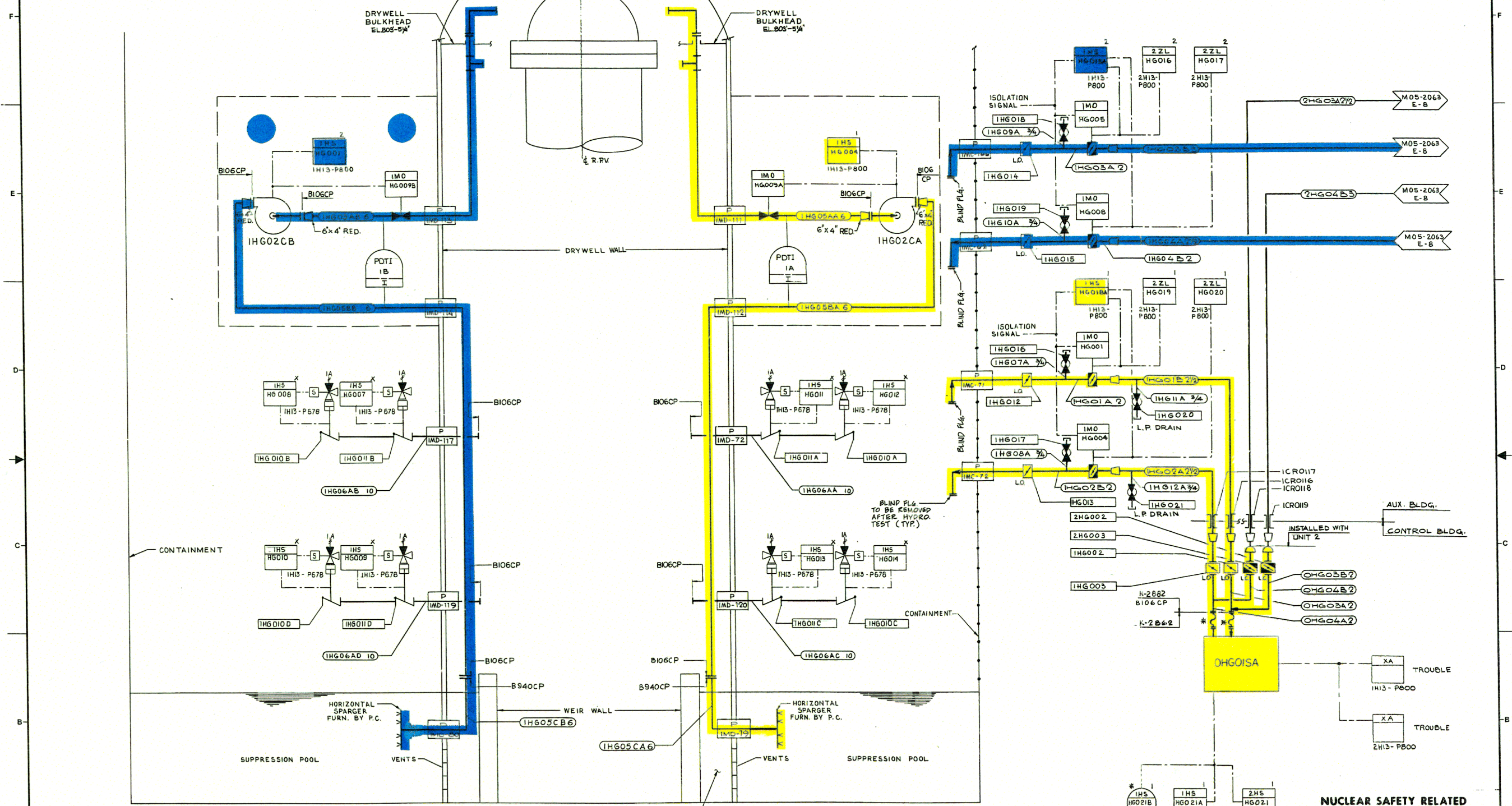
SHEET 51 OF 111

...:USARRev 12\fig3-6-1-51.dgn 11/18/2005 09:27:39 AM

MS-1063

OHG01SA
HYDROGEN RECOMBINER
K-2862

IHG02CA & IHG02CB
CGCS HYDROGEN COMPRESSORS
K-2863



NOTE: 1. WHEN UNIT 2 IS INSTALLED, VALVES IHG006 AND IHG007 SHALL BE LOCKED CLOSED, AND VALVES 2HG006 AND 2HG007 SHALL BE LOCKED OPEN.

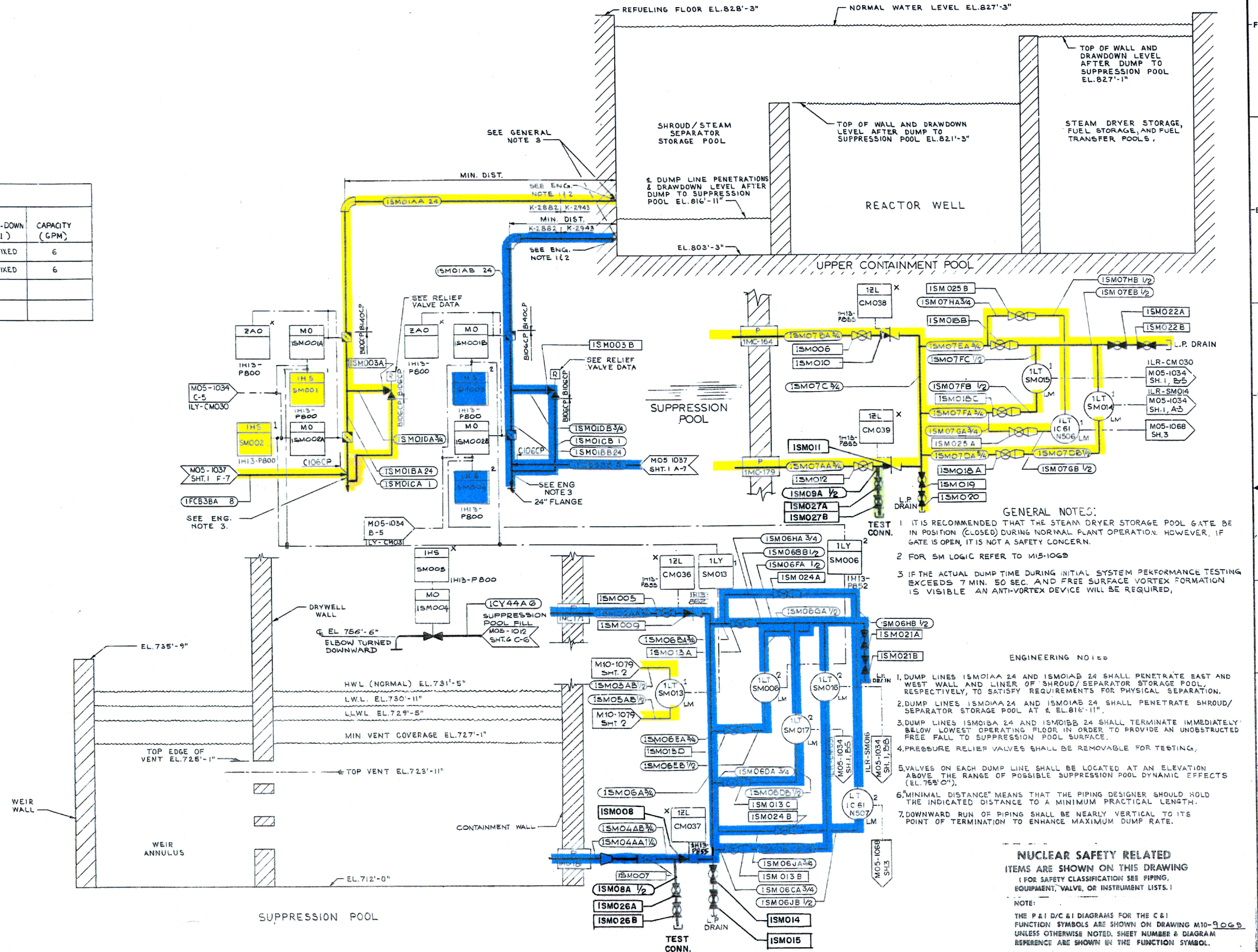
NUCLEAR SAFETY RELATED
ITEMS ARE SHOWN ON THIS DRAWING
(FOR SAFETY CLASSIFICATION SEE PIPING,
EQUIPMENT, VALVE, OR INSTRUMENT LISTS.)

NOTE:
THE P&ID/C&I DIAGRAMS FOR THE C&I
FUNCTION SYMBOLS ARE SHOWN ON DRAWING MS-1063
UNLESS OTHERWISE NOTED. SHEET NUMBER & DIAGRAM
REFERENCE ARE SHOWN IN THE FUNCTION SYMBOL.

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT
FIGURE 3.6-1
DIVISIONAL SEPARATION AND
HIGH-ENERGY P&ID'S-
COMBUSTIBLE GAS CONTROL SYSTEM
SHEET 52 OF 111

6901-90M

RELIEF VALVE DATA					
VALVE NUMBER	MAKE & TYPE	SIZE (INCHES)	VALVE SET	BLOW-DOWN (PSI)	CAPACITY (GPM)
ISM003A	DRESSER K-1975C	1x3/4	15 PSIG	FIXED	6
ISM003B	DRESSER K-1975C	1x3/4	15 PSIG	FIXED	6



- GENERAL NOTES:**
- IT IS RECOMMENDED THAT THE STEAM DRYER STORAGE POOL GATE BE IN POSITION (CLOSED) DURING NORMAL OPERATION. HOWEVER, IF GATE IS OPEN, IT IS NOT A SAFETY CONCERN.
 - FOR SM LOGIC REFER TO M15-1069
 - IF THE ACTUAL DUMP TIME DURING INITIAL SYSTEM PERFORMANCE TESTING EXCEEDS 7 MIN. 50 SEC. AND FREE SURFACE VORTEX FORMATION IS VISIBLE AN ANTI-VORTEX DEVICE WILL BE REQUIRED.

- ENGINEERING NOTES:**
- DUMP LINES ISM01AA 24 AND ISM01AB 24 SHALL PENETRATE EAST AND WEST WALL AND LINER OF SHROUD/SEPARATOR STORAGE POOL, RESPECTIVELY, TO SATISFY REQUIREMENTS FOR PHYSICAL SEPARATION.
 - DUMP LINES ISM01AA 24 AND ISM01AB 24 SHALL PENETRATE SHROUD/SEPARATOR STORAGE POOL AT EL. 816'-11".
 - DUMP LINES ISM01BA 24 AND ISM01BB 24 SHALL TERMINATE IMMEDIATELY BELOW LOWEST OPERATING FLOOR IN ORDER TO PROVIDE AN UNOBSTRUCTED FREE FALL TO SUPPRESSION POOL SURFACE.
 - PRESSURE RELIEF VALVES SHALL BE REMOVABLE FOR TESTING.
 - VALVES ON EACH DUMP LINE SHALL BE LOCATED AT AN ELEVATION ABOVE THE RANGE OF POSSIBLE SUPPRESSION POOL DYNAMIC EFFECTS (EL. 756'-0").
 - MINIMAL DISTANCE MEANS THAT THE PIPING DESIGNER SHOULD HOLD THE INDICATED DISTANCE TO A MINIMUM PRACTICAL LENGTH.
 - DOWNWARD RUN OF PIPING SHALL BE NEARLY VERTICAL TO ITS POINT OF TERMINATION TO ENHANCE MAXIMUM DUMP RATE.

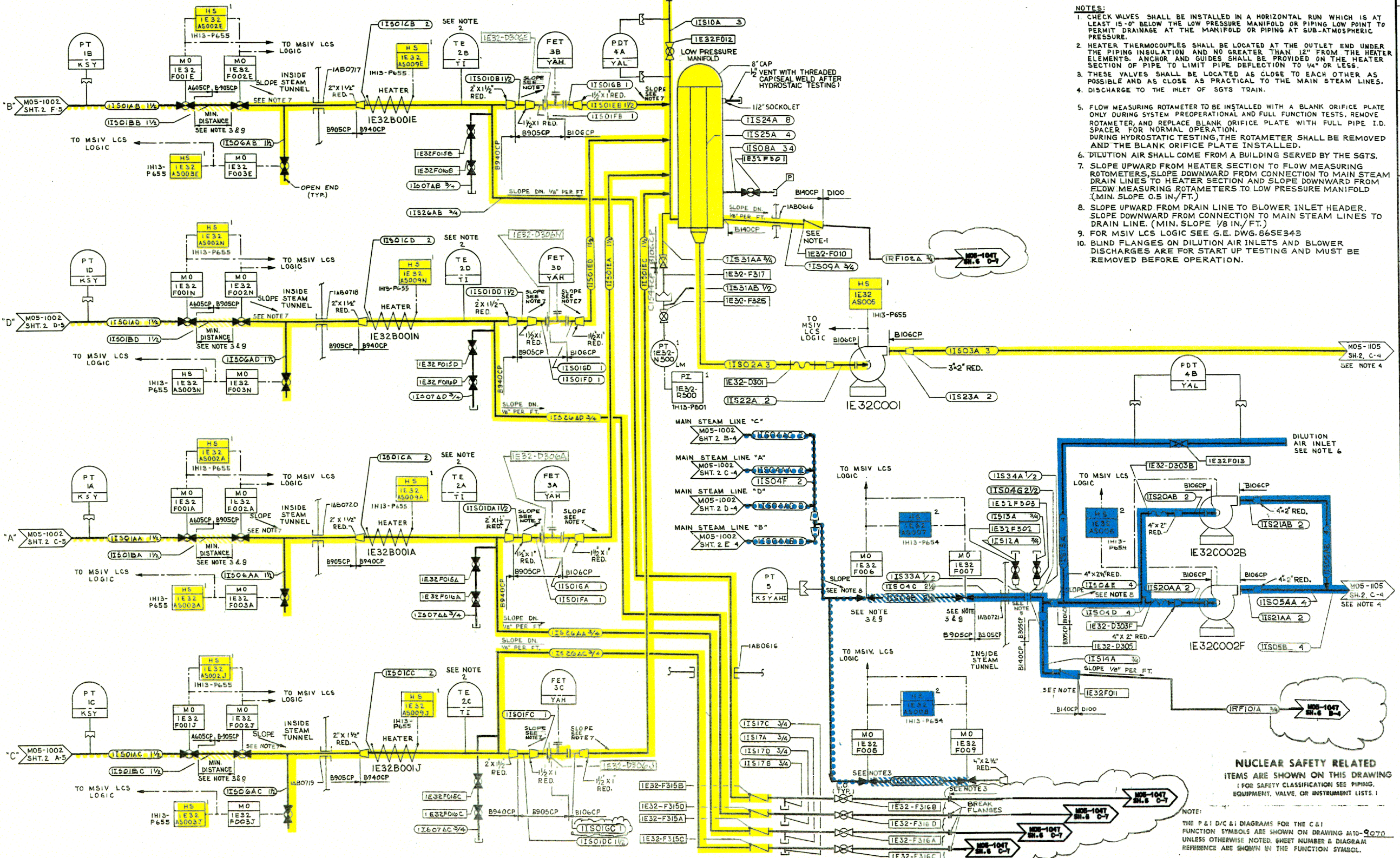
NUCLEAR SAFETY RELATED
 ITEMS ARE SHOWN ON THIS DRAWING
 (FOR SAFETY CLASSIFICATION SEE PIPING,
 EQUIPMENT, VALVE, OR INSTRUMENT LISTS.)

NOTE:
 THE P&ID/C&I DIAGRAMS FOR THE C&I
 FUNCTION SYMBOLS ARE SHOWN ON DRAWING M10-9069
 UNLESS OTHERWISE NOTED, SHEET NUMBER & DIAGRAM
 REFERENCE ARE SHOWN IN THE FUNCTION SYMBOL.

IE32B001A, IE32B001E, IE32B001J & IE32B001N MSIV HEATERS K-2801

IE32C001 BLOWER K-2801

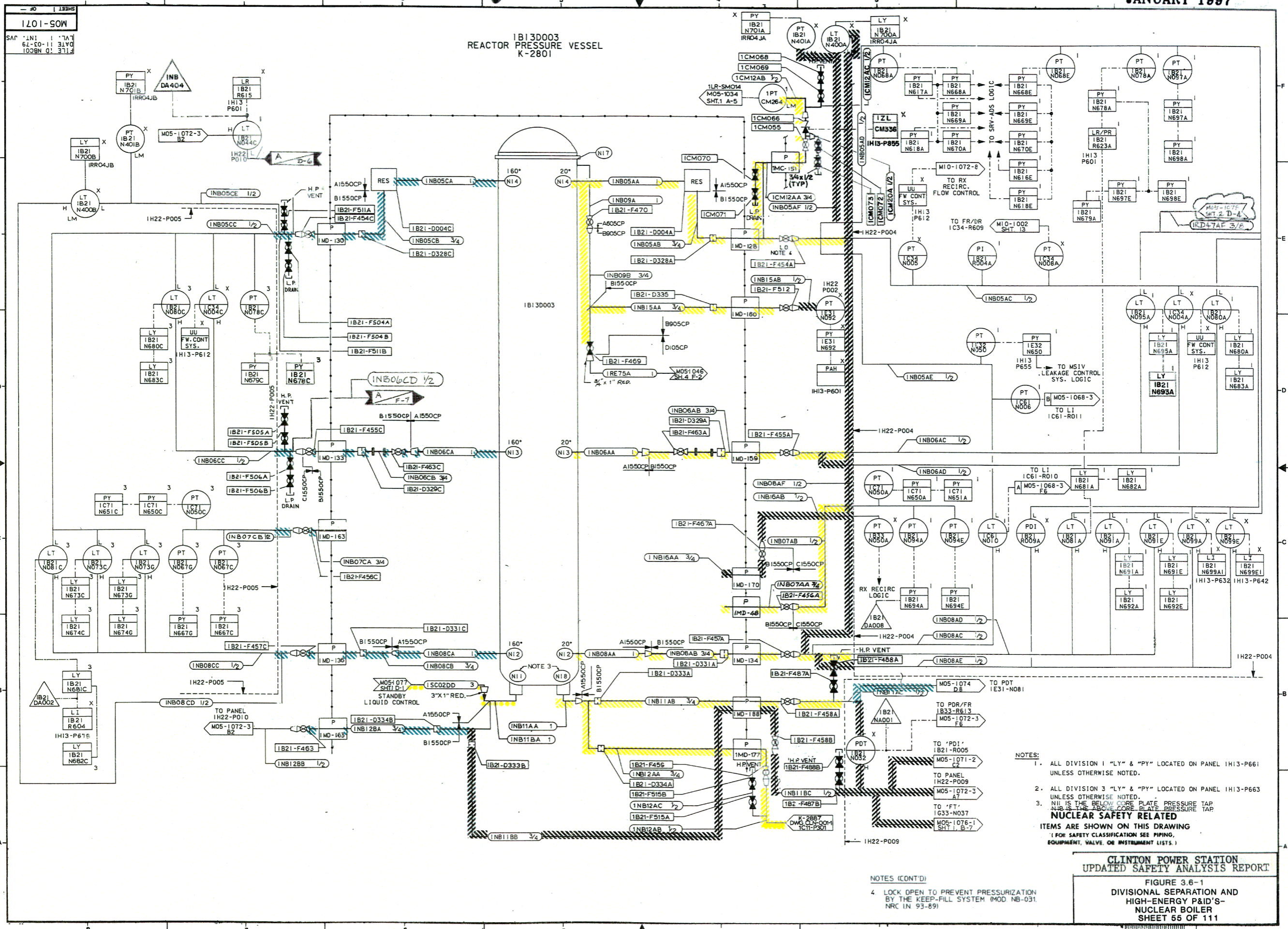
IE32C002B & IE32C002F BLOWERS K-2801



- NOTES:
- CHECK VALVES SHALL BE INSTALLED IN A HORIZONTAL RUN WHICH IS AT LEAST 15'-0" BELOW THE LOW PRESSURE MANIFOLD OR PIPING LOW POINT TO PERMIT DRAINAGE AT THE MANIFOLD OR PIPING AT SUB-ATMOSPHERIC PRESSURE.
 - HEATER THERMOCOUPLES SHALL BE LOCATED AT THE OUTLET END UNDER THE PIPING INSULATION AND NO GREATER THAN 12" FROM THE HEATER ELEMENTS. ANCHOR AND GUIDES SHALL BE PROVIDED ON THE HEATER SECTION OF PIPE TO LIMIT PIPE DEFLECTION TO 1/4" OR LESS.
 - THESE VALVES SHALL BE LOCATED AS CLOSE TO EACH OTHER AS POSSIBLE AND AS CLOSE AS PRACTICAL TO THE MAIN STEAM LINES.
 - DISCHARGE TO THE INLET OF SGTS TRAIN.
 - FLOW MEASURING ROTAMETER TO BE INSTALLED WITH A BLANK ORIFICE PLATE ONLY DURING SYSTEM PRE-OPERATIONAL AND FULL FUNCTION TESTS. REMOVE ROTAMETER AND REPLACE BLANK ORIFICE PLATE WITH FULL PIPE I.D. SPACER FOR NORMAL OPERATION. DURING HYDROSTATIC TESTING, THE ROTAMETER SHALL BE REMOVED AND THE BLANK ORIFICE PLATE INSTALLED.
 - DILUTION AIR SHALL COME FROM A BUILDING SERVED BY THE SGTS.
 - SLOPE UPWARD FROM HEATER SECTION TO FLOW MEASURING ROTAMETERS, SLOPE DOWNWARD FROM CONNECTION TO MAIN STEAM DRAIN LINES TO HEATER SECTION AND SLOPE DOWNWARD FROM FLOW MEASURING ROTAMETERS TO LOW PRESSURE MANIFOLD (MIN. SLOPE 0.5 IN./FT.).
 - SLOPE UPWARD FROM DRAIN LINE TO BLOWER INLET HEADER, SLOPE DOWNWARD FROM CONNECTION TO MAIN STEAM LINES TO DRAIN LINE. (MIN. SLOPE 1/8 IN./FT.).
 - FOR MSIV LCS LOGIC SEE G.E. DWG. 646E343
 - BLIND FLANGES ON DILUTION AIR INLETS AND BLOWER DISCHARGES ARE FOR START UP TESTING AND MUST BE REMOVED BEFORE OPERATION.

NUCLEAR SAFETY RELATED
 ITEMS ARE SHOWN ON THIS DRAWING
 1 FOR SAFETY CLASSIFICATION SEE PIPING,
 EQUIPMENT, VALVE, OR INSTRUMENT LISTS 1

NOTE:
 THE P & I D/C & I DIAGRAMS FOR THE C & I
 FUNCTION SYMBOLS ARE SHOWN ON DRAWING A10-9070
 UNLESS OTHERWISE NOTED, SHEET NUMBER & DIAGRAM
 REFERENCE ARE SHOWN IN THE FUNCTION SYMBOL.



IB13D003
REACTOR PRESSURE VESSEL
K-2801

1701-SOM
SAC LN1 1 7A1
6L-03-11 3LYD
1008N 01 371E

- NOTES:
1. ALL DIVISION 1 "LY" & "PY" LOCATED ON PANEL IH13-P661 UNLESS OTHERWISE NOTED.
 2. ALL DIVISION 3 "LY" & "PY" LOCATED ON PANEL IH13-P663 UNLESS OTHERWISE NOTED.
 3. N11 IS THE BELOW CORE PLATE PRESSURE TAP
N18 IS THE ABOVE CORE PLATE PRESSURE TAP
- NUCLEAR SAFETY RELATED**
ITEMS ARE SHOWN ON THIS DRAWING
(FOR SAFETY CLASSIFICATION SEE PIPING,
EQUIPMENT, VALVE, OR INSTRUMENTATION LISTS.)

- NOTES (CONT'D)
4. LOCK OPEN TO PREVENT PRESSURIZATION BY THE KEEP-FILL SYSTEM (MOD NB-031, NRC IN 93-69)

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-1
DIVISIONAL SEPARATION AND
HIGH-ENERGY P&ID'S-
NUCLEAR BOILER
SHEET 65 OF 111