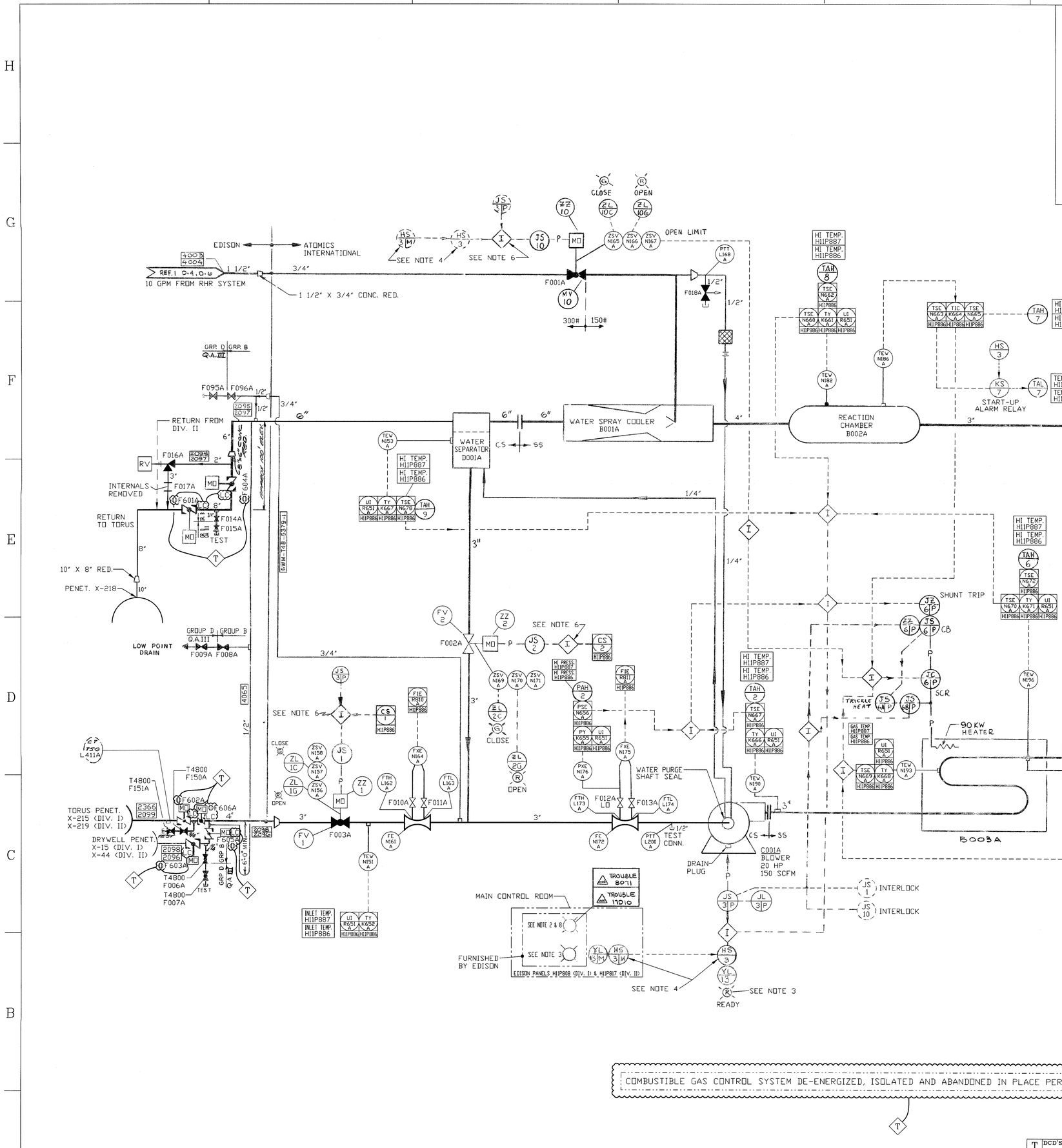

LEGEND

LINES

- LINE NO. / LINE SIZE IN INCHES / LINE CATEGORY — 100 – 2 – A
- PRINCIPAL FLOW
- AUXILIARY FLOWS
- INSTRUMENT AIR LINE
- INSTRUMENT PRIMARY LINE
- INSTRUMENT CAPILLARY TUBING
- INSTRUMENT ELECTRIC AND THERMOCOUPLE LEADS
- INSTRUMENT RESISTANCE LEADS
- PIPING FOR REFERENCE PURPOSES ONLY
- GUARDED PIPING
- HYDRAULIC SIGNAL
- P — ELECT POWER

GENERAL

- AREA LIMIT
- MATCH LINE — CATEGORY "X" / CATEGORY "Y"
- CATEGORY CHANGES
- ITEM SUPPLIED WITH EQUIPMENT

MISC ABBREVIATIONS

EM	– ELECTROMAGNETIC
FO	– FAIL OPEN
FC	– FAIL CLOSED
LO	– LOCK OPEN
LC	– LOCK CLOSED
NO	– NORMALLY OPEN
NC	– NORMALLY CLOSED
BF	– BLIND FLANGE
HC	– HOSE CONNECTION
SC	– SAMPLE CONNECTION
SO	– STEAM OUT
SS	– SAMPLE STATION

FITTINGS

REDUCER, WELDED CAP, SCREWED OR SOCKET WELDED CAP, BLIND FLANGE

PIPING SPECIALTIES

VAPOR TRAP, FREEZE TRAP, STEAM TRAP, RUPTURE DISC, EXPANSION JOINT, WYE STRAINER, HOSE CONNECTION, FLEXIBLE CONNECTION, STRESS RELIEVING JOINT, FUNNEL, SPECTACLE BLIND, RESTRICTING ORIFICE

FORM 706-0-3(A), REV. 9-72

VALVES

VALVE NO.

GATE, GLOBE, CHECK, PLUG, BUTTERFLY, ANGLE, THREE-WAY, BELLOWS SEAL, Y PATTERN, NEEDLE (GLOBE), NEEDLE (ANGLE), LIQUID COOLED FREEZE SEAL, GAS COOLED FREEZE SEAL, NON-RETURN, OFFSET GLOBE, MANUAL REMOTE OPERATED

CONTROL VALVES

TEMPERATURE, FLOW, LEVEL, PRESSURE, HANDWHEEL, RELIEF, DIAPHRAGM OPERATED

SELF-CONTAINED REGULATING VALVES

SOLENOID, MOTOR OPERATED, PISTON OPERATED

INSTRUMENTATION

SURFACE TYPE

NOZZLE, ORIFICE, VENTURI — FLOW ELEMENTS (TYPICAL); EM FLOW METER, CHEMICAL SEAL, BOARD MOUNTED INSTR, LOCAL MOUNTED INSTR, INSERTION THERMOWELL & THERMAL ELEMENTS, MOUNTED BEHIND BOARD

M = MAIN CONT PNL
P = POWER CABINET

INTERLOCK

	FIRST LETTER: MEASURED OR INITIATING VARIABLE	MODIFIER	SUCCEEDING LETTERS: READOUT OR PASSIVE FUNCTION	OUTPUT FUNCTION	MODIFIER
A	ANALYSIS		ALARM		
B	BURNER FLAME				
C	CONDUCTIVITY			CONTROL	
D	DENSITY OR SPECIFIC GRAVITY	DIFFERENTIAL OR DETECTOR			
E	VOLTAGE		PRIMARY ELEMENT		
F	FLOW	RATIO			
G	GAGING		GLASS		
H	HAND				HIGH
I	CURRENT		INDICATE		
J	POWER	SCAN			
K	TIME OR TIME SCHEDULE			CONTROL STATION	
L	LEVEL		LIGHT		LOW
M	MOISTURE OR HUMIDITY				MIDDLE OR INTERMEDIATE
N					
O			ORIFICE		
P	PRESSURE OR VACUUM		POINT		
Q	QUANTITY OR EVENT	INTEGRATE OR TOTALIZE			
R	RADIOACTIVITY		RECORD OR PRINT		
S	SPEED OR FREQUENCY	SAFETY		SWITCH	
T	TEMPERATURE			TRANSMIT	
U	MULTIVARIABLE		MULTIFUNCTION	MULTIFUNCTION	MULTIFUNCTION
V	VISCOSITY			VALVE, DAMPER, OR LOUVER	
W	WEIGHT OR FORCE		WELL		
X					
Y				RELAY / COMP. CONV.	
Z	POSITION			DRIVE ACTUATE OR SHUTDOWN	

FORM 706-0-3(B), REV. 9-72

NOTES:

1. ALL ITEMS THAT MAKE UP THE PRESSURE BOUNDARY SHALL BE IN ACCORDANCE WITH ASME CODE SECTION III CLASSE 2.
2. A CONTACT FOR ANNUNCIATION IN THE MAIN CONTROL ROOM IS FURNISHED, THAT WILL OPEN WHEN ANY RECOMBINER ANNUNCIATOR IS IN AN ALARM CONDITION.
3. CONTACT WILL BE FURNISHED TO INDICATE THE FOLLOWING:
   A. TRICKLE HEAT POWER OFF (WHITE) YL-16M
   B. SYSTEM IN READY MODE (RED) YL-13M
   C. SYSTEM IN START UP MODE (RED) YL-14M
   D. SYSTEM IN OPERATE MODE (RED) YL-15M
4. HS-3 AND HS-3M ARE 2-POSITION SELECTOR SWITCHES. BOTH MUST BE IN "READY" TO START SYSTEM OPERATION.
5. ALL THERMOCOUPLES ARE DUPLICATED.
6. MULTIPLE TORQUE & POSITION SWITCHES NOT SHOWN.
7. PIS NO.S FOR OVERALL H2 RECOMBINERS ARE T4804Z001 FOR DIV. I AND T4804Z002 FOR DIV. II.
   ALL EQUIPMENT NO.S ARE PRECEDED BY T4804
   EQUIPMENT COMPONENTS NUMBERED 'A' BELONG TO DIV. I
   EQUIPMENT COMPONENTS NUMBERED 'B' BELONG TO DIV. II
   VALVES NUMBERED EVEN BELONG TO DIV. I
   VALVES NUMBERED ODD BELONG TO DIV. II
   } UNLESS OTHERWISE SHOWN
8. SYMBOLS FOR ANNUNCIATORS

VENDOR	MAIN CONTROL ROOM
ALARM PT H11P886	△ 8D71
	△ 10A H11P808-DIV. I
ALARM PT H11P887	△ 17D10
	△ 10B H11P817-DIV. II

9. QA LEVEL I UNLESS NOTED.
10. ALL INSTRUMENTATION IS OF THE T48 SYS. UNLESS OTHERWISE SPECIFIED.
    A. INSTRUMENTS SUFFIXED 'A' ARE DIV. I (SHOWN)
    B. INSTRUMENTS SUFFIXED 'B' ARE DIV. II
11. ALL DIV. I RELAY ROOM INSTRUMENTS ARE SHOWN WITH PANEL NUMBER H11P886. DIV. II RELAY ROOM INSTRUMENTS ARE LOCATED IN PANEL H11P887.
12. (T) INDICATES VALVE LOCKED CLOSED AND DE-ENERGIZED PER TSR 38268.

REFERENCES:

1. M-2084 – RHR SYSTEM DIAGRAM (DIV. I)
   M-2083 – RHR SYSTEM DIAGRAM (DIV. II)
2. EDISON FILE P4-62 – LOGIC DIAGRAM
3. I-2654-07 THRU 10 – SCHEMATIC DIAGRAM
4. M-2001 – EDISON LEGEND OF SYMBOLS & INSTR. IDENT.
5. CECO

6M721-2087
LATEST REVISION T

NUCLEAR SAFETY RELATED

THIS IS AN AUTOCAD PRODUCED DRAWING. CHANGES OR REVISIONS MUST BE BROUGHT TO THE ATTENTION OF THE PLANT ENGINEERING DESIGN GROUP TO ENSURE THAT CONFIGURATION CONTROL IS MAINTAINED.

COMBUSTIBLE GAS CONTROL SYSTEM DE-ENERGIZED, ISOLATED AND ABANDONED IN PLACE PER TSR 38268. (T)

THIS DRAWING WAS REFORMATTED BY AUTOCAD AT REVISION "0". ALL PREVIOUS APPROVAL SIGNATURES ARE ON FILE ON MICROFILM IN DOCUMENT CONTROL.

T DCD'S INCORPORATED: TSR 38268, REV. 0

OTHER REVISIONS:

A PORTION OF THIS DRAWING IS AFFECTED BY THE FOLLOWING:

TC	CHANGE DOCUMENT

EDP POSTING ENTRIES REQUIRE THE ADDITION OF THE ARMS STATUS CODE: EITHER "AFC" OR "ASB"

PREPARED BY A. DITTMAN	DATE 6/11/20	CHECKED BY Clement	DATE 7-7-2020
APPROVED BY W.D. Mayer / WD Mayer			DATE 7/10/2020

PREPARED BY — DATE
CHECKED BY — DATE
APPROVED BY — DATE
OTHER APPROVALS — DATE

INC. CODE: T

Detroit Edison — Fermi 2

TITLE: DIAGRAM (POST LOCA) COMBUSTIBLE GAS CONTROL SYSTEM

APERTURE CARD TITLE: P&ID POST LOCA CGC SYS

PLANT IDENTIFICATION SYSTEM NUMBER: T4804

ARMS RECIPIENT #

DOCUMENT TYPE CODE: DDDMEC

NUC OPS FILE NO.: 1801

DATE ISSUED TO IS: 7-15-20

DRAWING NUMBER: 6M721-2087

REV.: T