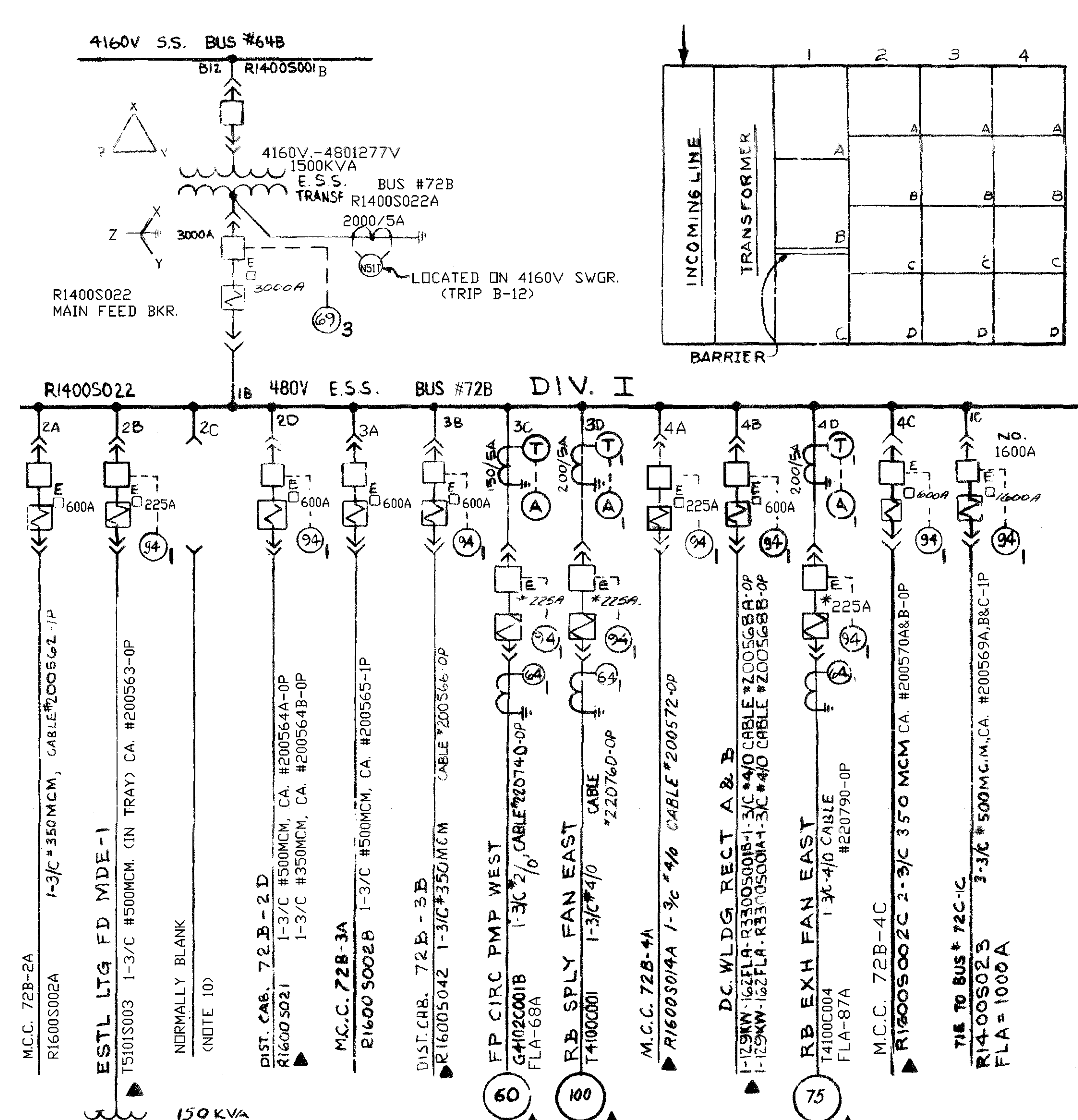
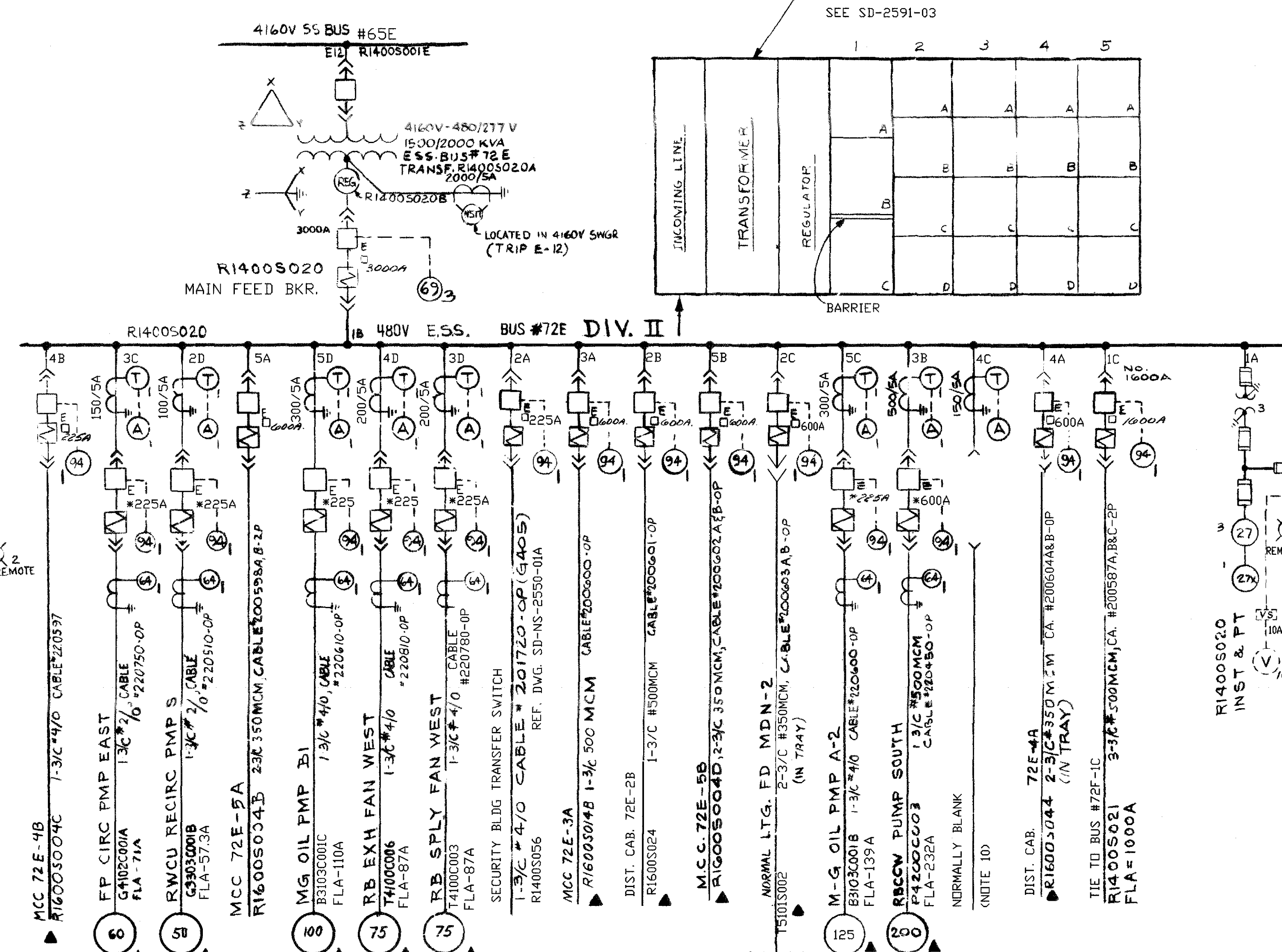


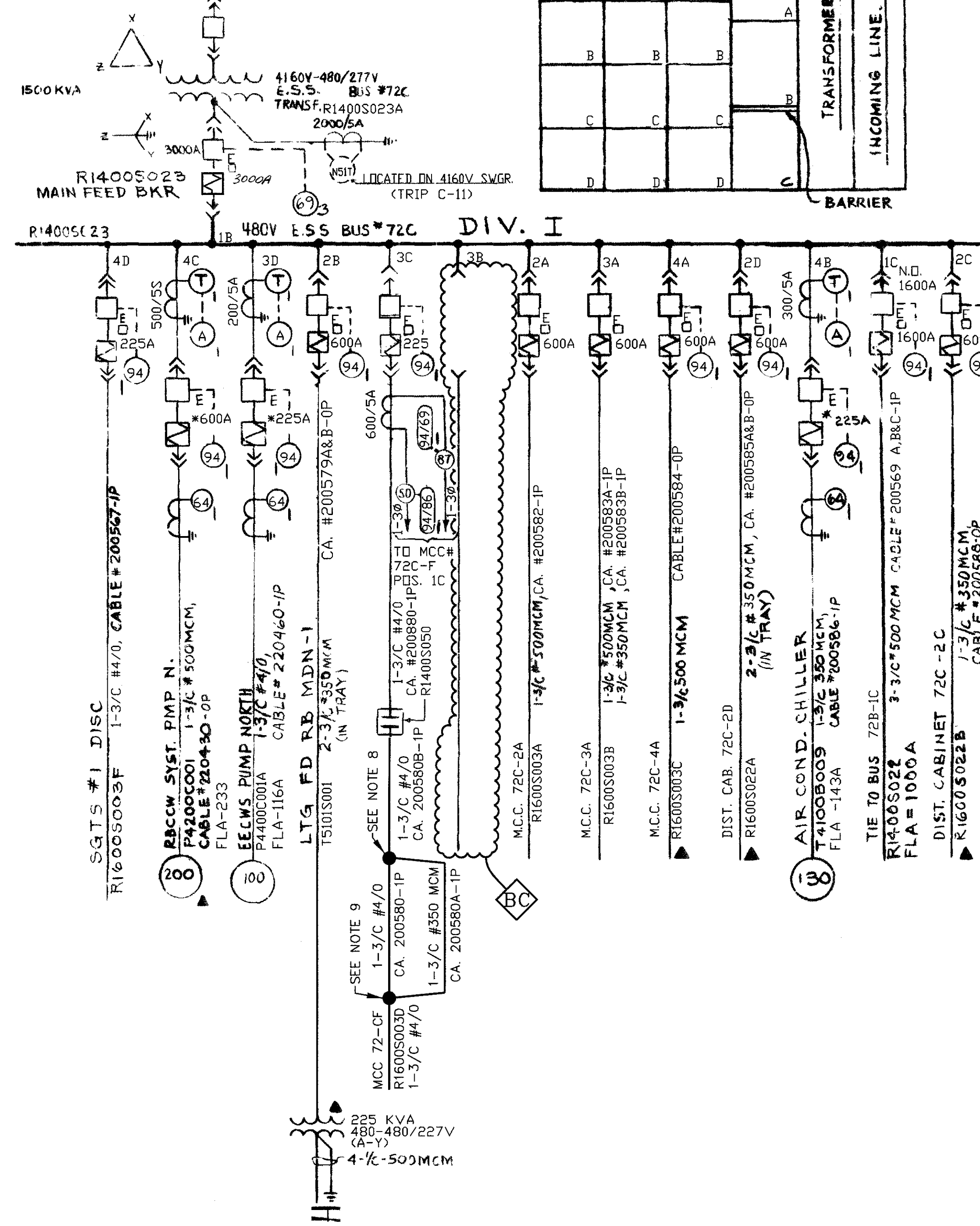
DIVISION I



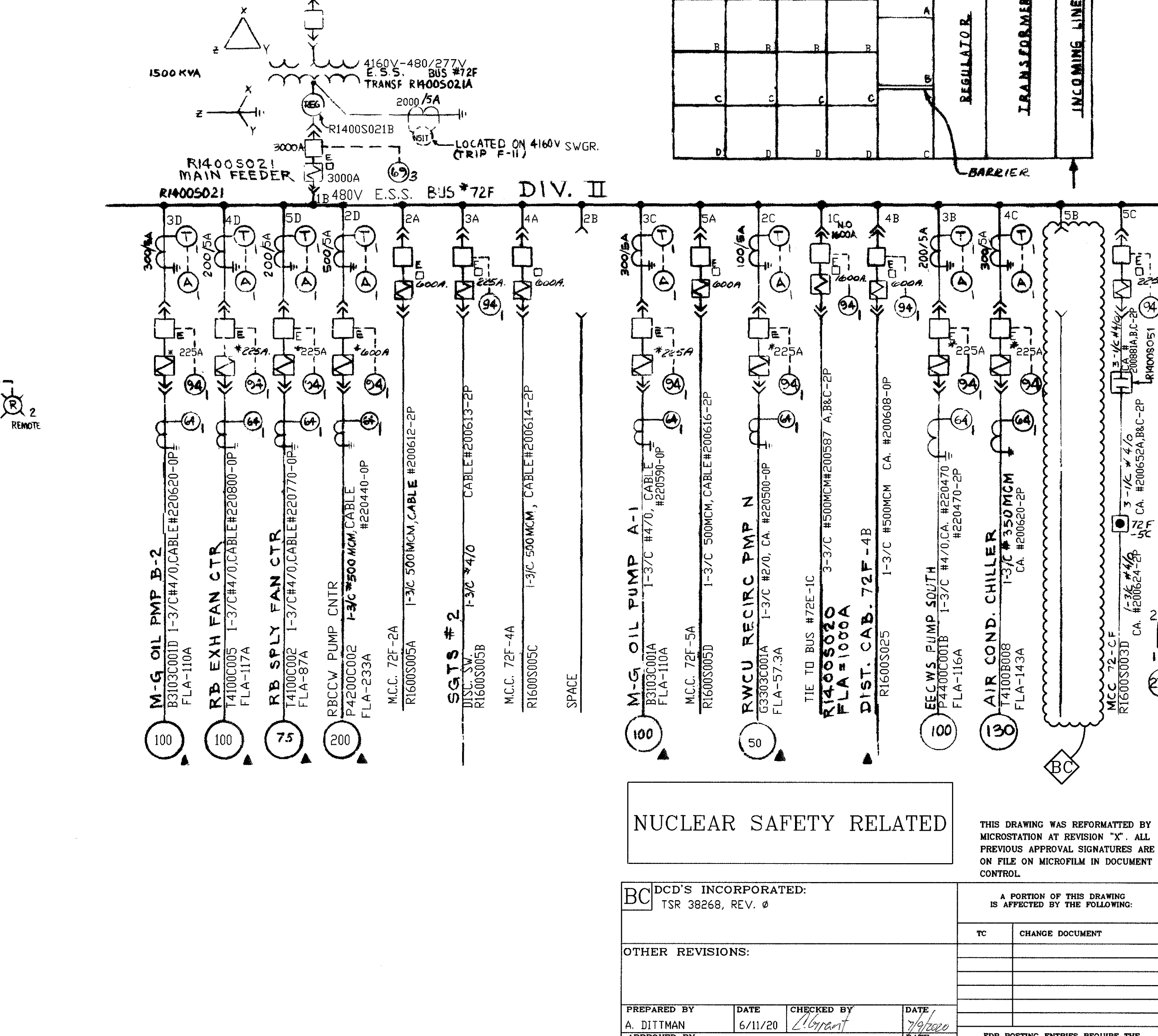
DIVISION II



DIVISION I



DIVISION II



- SYMBOLS**
- (69) TYPE HMA; INITIATED FROM LOAD SHEDDING SCHEME OF RELATED 4160 V BUS & ACTIVATES LOAD SHEDDING TRIP STRING OF ASSOCIATED 480 V BUS (S).
  - (94/69) TYPE LOR; INITIATED BY 87 DIFF'L RELAY TRIPS NORMAL FD (BUS 72C, POS. 3C) & PERMITS ALTERNATE FD (BUS 72E, POS. 5C) TO CLOSE.
  - AIR CIRCUIT BREAKER DRAW OUT TYPE STORED ENERGY WITH UNDERVOLTAGE TRIP
  - DE-1 - ELECTRICALLY OPERATED
  - M - MANUALLY OPERATED
  - POWER SHIELD SOLID STATE OVERCURRENT DEVICE WITH MAXIMUM AMPERE TAP SHOWN.
  - \* TYPE SS3: BREAKER EQUIPPED WITH LONG TIME & INSTANTANEOUS ELEMENTS.
  - TYPE SS4G: BREAKER EQUIPPED WITH LONG TIME, SHORT TIME & GROUND ELEMENTS.
  - GROUND SHIELD STATIC TYPE GROUND FAULT DEVICE, ITC GR-5 RANGE IS 5-50A, 2-24 CYCLES
  - TRANSBUCCER
  - CURRENT TRANSFORMER RATIO 150/5A
  - AMMETER (REMOTE)
  - 60V ETHYLENE, PROPYLENE AND NYLON JACKETED 3-CONDUCTOR CABLE
  - E.S.S. ENGINEERED SAFEGUARD SYSTEM.
  - VOLTMETER SWITCH (REMOTE)
  - RECORDING VOLTMETER
  - INDICATING VOLTMETER
  - MCC MOTOR CONTROL CENTER
  - LIGHTS - BLUE INDICATING BUS POTENTIAL (REMOTE).
  - INTERMEDIATE TERMINALS
  - TRANSF. NEUTRAL OVERCURRENT RELAY G.E. TYPE 24C51.
  - TYPE ITC 50H; INSTANTANEOUS OVERLOAD PROTECTION BUS 72C, POS. 3C.
  - TYPE HMA; TRIPS A SPECIFIC POSITION IS ASSOCIATED WITH A PARTICULAR PROTECTIVE SCHEME.
  - TYPE ITC 27; DEGRADED VOLTAGE PROTECTION FOR SWING BUS FEEDERS
  - TYPE ITC 27; INITIATES LOAD SHEDDING OF ASSOCIATED BUS
  - TYPE LOR; INITIATED BY 27 RELAY & ACTIVATES 94 TRIP STRING FOR U/V LOAD SHEDDING
  - AUXILIARY POTENTIAL TRANS. 120V/120V.
  - TYPE ITC 50H; CABLE DIFF'L PROTECTION BUS 72C, POS. 3C
  - POTENTIAL TRANS. 480V/120V
  - DENOTES QUANTITY
  - REFER TO DECO SPEC. 3071-128, STD. EJ FOR FUSE SIZE & TYPE FOR CLASS 1E FUSES
  - (94/66) TYPE LOR; INITIATED BY 50 OVERLOAD RELAY. TRIPS NORMAL FD (BUS 72C, POS. 3C) & BLOCKS CLOSING OF THE ALTERNATE FD (BUS 72E, POS. 5C). INDICATES TOP OR BOTTOM ENTRY AS APPROPRIATE FOR POWER FEEDS TO 480V TRANS. CONTACTOR

- NOTES**
- ALL BREAKERS UNLESS OTHERWISE NOTED SHALL BE 600A FRAME.
  - TRANSFORMER TAP SETTINGS AND PERCENT IMPEDANCE (%Z) CAN BE FOUND ON ONE LINE DIAGRAM SD-2500-01.
  - R14005024 TYPICAL PLANT EQUIPMENT IDENTIFICATION NUMBER SEE SPEC.3071-43 ARTICLE 8.2.
  - EQUIPMENT ON THIS DRAWING IS CLASS I.
  - INSTALLATION IS TO BE QUALITY LEVEL 1.
  - POWER & CONTROL CABLES REQUIRE TOP ENTRANCE ON SVGR BUSES #72B & #72C. BOTTOM ENTRANCE ON BUSES #72E & 72F.
  - ▲ DENOTES NON-NUCLEAR SAFETY RELATED EQUIPMENT.
  - SPLICE IN MI-003 LOCATED IN 2ND FLOOR SWITCHGEAR ROOM AT 480V SWITCHGEAR R14005023.
  - SPLICE IN CC-817 LOCATED ON 1ST FLOOR CEILING BELOW 72C-F.
  - BREAKER POSITION TO BE USED DURING BEYOND DESIGN BASIS EXTERNAL EVENT (DBDEC). SEE FLEX PROCEDURES (BUS #72B POS. 2C FOR K110P001A) (BUS #72E POS. 2C FOR K110P001B)
- REFERENCE DWGS.**
- SD-2500-01 ONE LINE DIAG.-4160 & 480V. AUX. PDV. & STANDBY DIESEL GEN. SYSTEM
  - SD-2500-03 ONE LINE DIAG.-4160V S.S. BUSES 64B, 64C
  - SD-2500-04 ONE LINE DIAG.-4160V S.S. BUSES 65E, 65F & 65G
  - 3071-43 480 V. INDOOR UNIT SUBSTATION SPEC.
  - 1-2573-43 & 44 S/B FOR 480V LOAD SHEDDING SCHEME
  - SD-2500-13 FLEX ONE LINE DIAGRAM

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

NUCLEAR SAFETY RELATED

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

BC	DOD'S INCORPORATED: 1SR 38268, REV. 0	APPROVED BY: A. BITTMAN DATE: 6/11/20	CHECKED BY: W.D. MAYE DATE: 7/16/20
OTHER REVISIONS:	DATE	DATE	DATE

INC. CODE	U	PROJECT	Detroit Edison	UNIT	Fermi 2
TITLE	ONE LINE DIAGRAM 480V E.S.S. BUS # 72B, 72C, 72E & 72F				
APERTURE CARD TITLE	1-LINE 480V BUS 72B 72C 72E 72F				
PLANT IDENTIFICATION SYSTEM NUMBER	R1400				
DOCUMENT TYPE CODE	DDDELE	MIC OPS FILE NO.	1601	DATE ISSUED TO IS	7-10-20
DRAWING NUMBER	6SD721-2510-01				
REV.	BC				