

GENERAL NOTES:

1. PROVIDE 4" HIGH CONCRETE HOUSEKEEPING PAD FOR MCC.
2. LOCATE MCC SUCH THAT PROPER FRONT WORKING SPACE IS MAINTAINED IN ACCORDANCE TO NEC 110-16(a).
3. ALL WIRE TO BE TYPE THHN/THWN.

MCC NOTES:

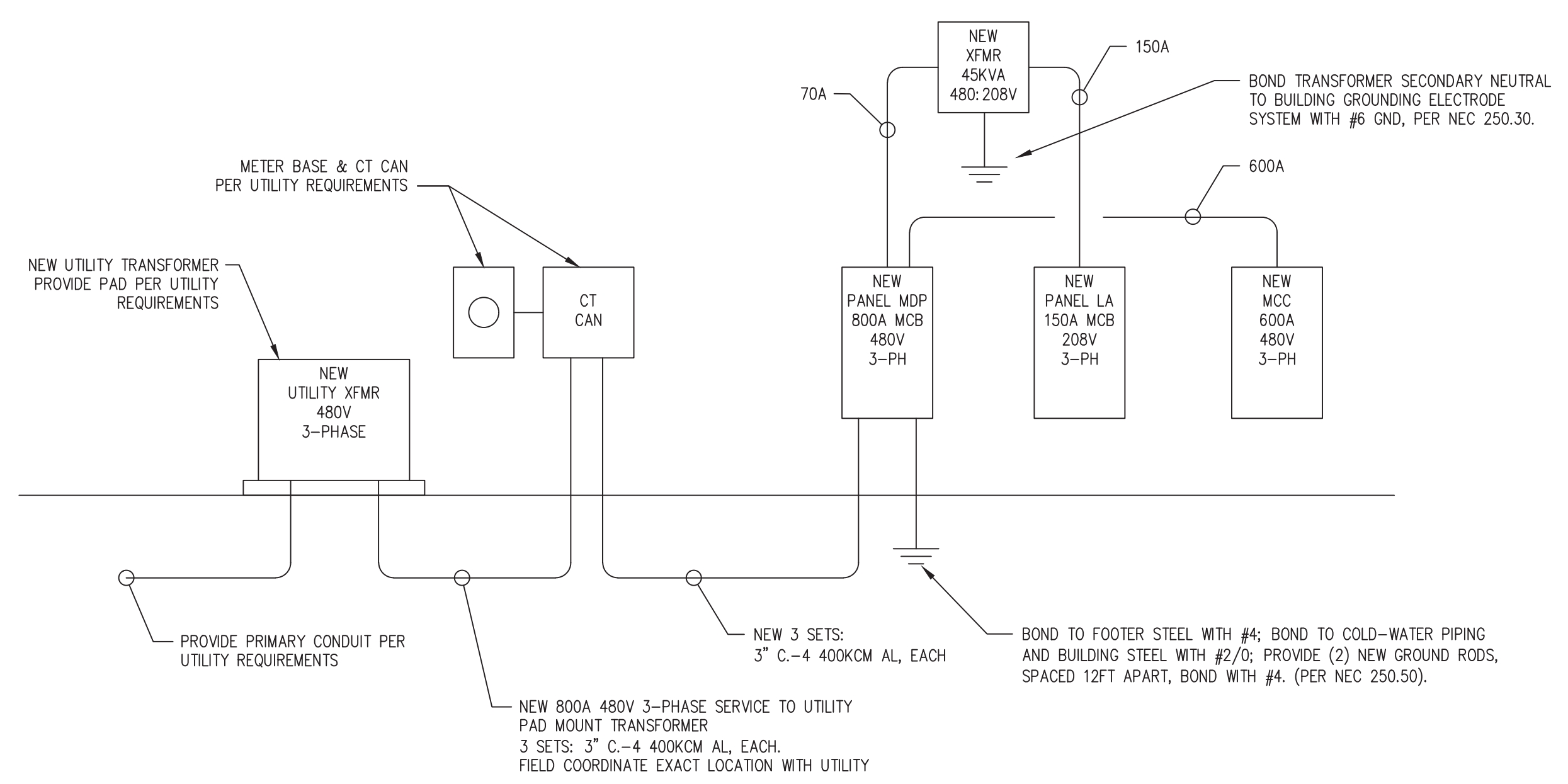
- o (4C)-DISCONNECTS IF NEEDED TO BE MOUNTED IN TUNNEL OR OTHER AREAS NOT WITHIN 50 LF. OR L.O.S. OF MCC IN CONFORMANCE WITH N.E.C. AND/OR LOCAL CODES. ALSO TO BE TYPE 4X NON-METALLIC ENCLOSURES, NON-FUSED SIZED FOR LOAD. DISCONNECTING MEANS SHALL NOT BE REQUIRED WHERE SUCH A LOCATION OF THE DISCONNECTING MEANS IS IMPRACTICABLE OR INTRODUCES ADDITIONAL OR INCREASED HAZARDS TO PERSON OR PROPERTY. N.E.C. (ARTICLE 430.102-B-0)
- o ALL CONDUIT, WIRES, DISCONNECTS, AND TERMINATIONS BY G.C. ELECTRICIAN.
- o MOTOR WIRE SIZE INDICATED ON THIS SHEET ASSUMES LENGTHS OF RUN TO BE 100 LF. OR LESS. IF RUNS EXCEED 100 LF, PROJECT M.E.P. ENGINEER OF RECORD IS REQUIRED TO RUN NECESSARY CALCULATIONS TO DETERMINE VOLTAGE DROP AND CHANGE WIRE SPECIFICATIONS, AS NECESSARY.
- o HANDLE MECHANISMS SHALL HAVE "LOCK-OFF" PROVISIONS
- o ALL STARTERS ARE FVNR
- o MCC SHALL BE WIRED NEMA CLASS I, TYPE A
- o MCC SHALL HAVE MOTOR CIRCUIT PROTECTORS ON STARTER UNITS
- o IF VFD'S ARE USED, ALL CONDUITS TO MOTORS CONTROLLED BY VFD MUST BE STEEL (NO PVC ALLOWED), AND ALL VFD MUST HAVE INDIVIDUAL DRIVEN GROUND RODS. VFD'S CONTROL REQUIRES (2) #6 TO DRY-CONTACT POWER SUPPLY INDIVIDUALLY PER VFD'S. ALSO THE CB IS INSTANTANEOUS TRIP BREAKER (ARTICLE 430.52-A)

ONE LINE DIAGRAM - PANEL MCC

NO SCALE

SERVICE DEMAND LOAD:

HVAC: 7.8kVA @ 100%	7.8kVA
LIGHTING: 5.9kVA @ 125%	11.1kVA
RECEPTACLES: 5.1kVA @ 100%	5.1kVA
CAR WASH EQUIPMENT: 437.3kVA @ 100%	437.3kVA
WATER HEATER(S): 4.4kVA @ 100%	4.4kVA
MISC EQUIPMENT: 13.3kVA @ 100%	13.3kVA
TOTAL DEMAND LOAD:	479.0kVA = 576A @ 277/480V 3-Ø



RISER DIAGRAM

NO SCALE

FEEDER SCHEDULE

70A FEEDER	1-1/4" C.-3 #4, #8 GND
150A FEEDER	2" C.-4 #1/0, #6 GND
600A FEEDER	2 SETS: 3" C.-4 350KCM, #1 GND, EACH

NOTE:
ARC FLASH WARNING LABELS ARE REQUIRED ON ALL EQUIPMENT DESIGNATED IN 2014 NEC, ART. 110.16, INCLUDING ALL EQUIPMENT SHOWN ON THE RISER, AND ANY OTHER ELECTRICAL EQUIPMENT, SUCH AS SWITCHBOARDS, PANELBOARDS, INDUSTRIAL CONTROL PANELS, METER SOCKET ENCLOSURES, AND MOTOR CONTROL CENTERS, THAT ARE IN OTHER THAN DWELLING UNITS, AND ARE LIKELY TO REQUIRE EXAMINATION, ADJUSTMENT, SERVICING OR MAINTENANCE WHILE ENERGIZED; EQUIPMENT SHALL BE FIELD MARKED TO WARN QUALIFIED PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS. THE MARKING SHALL BE LOCATED SO AS TO BE CLEARLY VISIBLE TO QUALIFIED PERSONS BEFORE EXAMINATION, ADJUSTMENT, SERVICING, OR MAINTENANCE OF THE EQUIPMENT.

PROVIDE WARNING RIBBON PER NEC 300.5 D.3; UNDERGROUND SERVICE CONDUCTORS THAT ARE NOT ENCASED IN CONCRETE AND THAT ARE BURIED 18 INCHES OR MORE BELOW GRADE SHALL HAVE THEIR LOCATION IDENTIFIED BY A WARNING RIBBON THAT IS PLACED IN THE TRENCH AT LEAST 12 INCHES ABOVE THE UNDERGROUND INSTALLATION.

CALL SUNSHINE 811 OR GO ONLINE TO www.sunshine811.com, AT LEAST TWO FULL BUSINESS DAYS BEFORE DIGGING TO HAVE UTILITIES LOCATED AND MARKED.

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