



- NOTES FOR SWITCHBOARD METERING WIRING DIAGRAM 480/277 VOLTS
1. WIRING DIAGRAM APPLIES TO ALL BUILDING MAIN SWITCHBOARDS UTILIZED AS THE SERVICE ENTRANCE AND FOR ANY SUB-FEED SWITCHBOARD IF LOCAL METERING OR ENERGY MANAGEMENT METERING IS REQUIRED.
  2. ALL METERING WIRING AND COMPONENTS SHALL BE LOCATED IN A COMPLETELY ISOLATED SECTION FROM ANY EXPOSED BUSS OR CABLE TERMINATIONS. SWITCHBOARD TVSS EQUIPMENT WHERE SPECIFIED IS NOT ALLOWED TO BE INSTALLED IN THIS AREA.
  3. ALL VOLTAGE WIRING TO BE #14 AWG, ALL CURRENT WIRING TO BE #12 AWG.
  4. DASHED WIRING DENOTE FIELD WIRING BY INSTALLATION CONTRACTOR.
  5. MULTIFUNCTION METER WIRING SHOWN IS TYPICAL AND SHALL BE MODIFIED TO MATCH THE PANEL METER PROVIDED BY THE EQUIPMENT VENDOR.
  6. NON-FUSED 3 POLE DISCONNECT, BUSSMANN PART NUMBER CDFN16A3 OR EQUIVALENT.
  7. PRIMARY FUSES, BUSSMANN PART NUMBER LPJ-XSP, (X IS THE AMPERAGE THAT SHALL NOT EXCEED 6 AMPS) INSTALLED IN BUSSMANN 3 POLE FUSE BLOCK PART NUMBER CH30J3I OR EQUIVALENT.
  8. POTENTIAL TRANSFORMERS SHALL BE 288:120 VOLT, TOTAL OF THREE.
  9. SECONDARY FUSES, BUSSMANN PART NUMBER LPN-RK-XSP, (X IS THE AMPERAGE THAT SHALL NOT EXCEED 2 AMPS) INSTALLED IN BUSSMANN 3 POLE FUSE BLOCK PART NUMBER R25030-3 OR EQUIVALENT.
  10. SHORT CIRCUITING TERMINAL BLOCK, 6 POLE WITH 6 SHORTING SCREWS, MARATHON PART NUMBER 1606SC OR EQUIVALENT.
  11. TERMINAL BLOCK, 4 POLE, MARATHON PART NUMBER 1604STD, OR EQUIVALENT.
  12. REFER TO VERIS METER CABINET WIRING DIAGRAM VMC-2 DETAIL FOR MORE INFORMATION.
  13. REFER TO KWHR METER WIRING DIAGRAM KWH-1 DETAIL FOR MORE INFORMATION.
  14. JUMPERS BETWEEN SCTB1 AND SCTB2 TO BE REMOVED WHEN KWHR OR VERIS METERS ARE INSTALLED.
  15. ALL WIRING ON TERMINAL BLOCKS SHALL BE MADE WITH COMPRESSION RING STYLE CONNECTORS.
  16. ALL EQUIPMENT SHALL BE LABELED AS INDICATED. LABELS SHALL BE PHENOLIC, BLACK WITH WHITE LETTERS.
  17. ALL WIRING SHALL HAVE LABELS INSTALLED AT BOTH ENDS OF THE CONDUCTORS. ALL LABELS SHALL BE TYPED, HEAT SHRINKABLE SLEEVES

EQUIPMENT AND WIRING SHOWN WITH SOLID LINES SHALL BE PROVIDED BY SWITCHBOARD MANUFACTURER AND BE FACTORY WIRED.  
 KWH AND VERIS METER EQUIPMENT AND DASHED WIRING SHALL BE FIELD INSTALLED.

#	Date	Revision	By

SCALE: NOT TO SCALE      SHEET SIZE: 11 X 17

**IOWA STATE UNIVERSITY**  
  
 FACILITIES PLANNING & MANAGEMENT  
 UTILITY SERVICES  
 POWER PLANT      AMES, IA