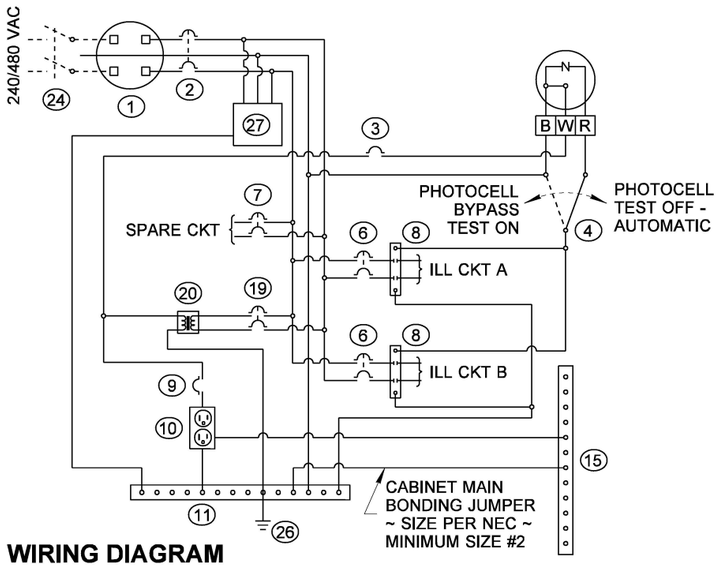
KEY

1. METER BASE PER SERVING UTILITY REQUIREMENTS ~ SEE **STANDARD PLAN J-10.30**.
2. MAIN BREAKER (DPST ~ SIZE PER BREAKER SCHEDULE)
3. PHOTOELECTRIC CONTROL BREAKER (SPST ~ 15 AMP ~ 120/240 VOLT)
4. TEST SWITCH (SPDT ~ SNAP ACTION ~ POSITIVE CLOSE ~ 15 AMP ~ 120/277 VOLT ~ "T" RATED)
5. PHOTOELECTRIC CONTROL UNIT ~ SEE **STANDARD SPECIFICATION 9-29.11(2)**
6. BRANCH BREAKER (DPST ~ SIZE PER BREAKER SCHEDULE)
7. SPARE BREAKER ~ SEE BREAKER SCHEDULE (DPST ~ 20 AMP ~ 240/480 VOLT)
8. CONTACTOR ~ SEE BREAKER SCHEDULE
9. RECEPTACLE BREAKER (SPST ~ 20 AMP ~ 120/240 VOLT)
10. RECEPTACLE ~ GROUNDED (GFCI ~ 20 AMP ~ 125 VOLT)
11. ISOLATED NEUTRAL BUSS ~ 14 LUG COPPER
12. MOUNTING HOLE ~ SEE **STANDARD PLAN J-10.12** CABINET BRACKET MOUNTING DETAIL
13. 1/4" (IN) DIAMETER DRAIN HOLE ~ DRILL BEFORE GALVANIZING
14. HINGED DEAD FRONT WITH 1/4 TURN FASTENERS OR SLIDE LATCH ~ DEAD FRONT PANEL BOLTS SHALL NOT EXTEND INTO VERTICAL LIMITS OF THE BREAKER ARRAY(S)
15. CABINET MAIN BONDING JUMPER ASSEMBLY ~ BUSS SHALL BE 12 LUG TINNED COPPER ~ SEE **STANDARD PLAN J-10.20** FOR CABINET MAIN BONDING JUMPER ASSEMBLY DETAILS
16. METAL WIRING DIAGRAM HOLDER
17. REMOVABLE SUBPANEL FOR EQUIPMENT
18. SCREENED VENTS ~ TWO REQUIRED (ONE EACH SIDE) ~ LOUVERED PLATES
19. TRANSFORMER BREAKER (DPST ~ 15 AMP ~ 480 VOLT)
20. DRY TRANSFORMER (480/120 VOLT) ~ 3 KVA ~ COPPER BUSSED AND COPPER WOUND
21. 16-CIRCUIT PANEL BOARD ~ MINIMUM SIZE WITH BACK FED MAIN BREAKER
22. LABEL CABINET WITH BUSSWORK RATING
23. 6-CIRCUIT PANEL BOARD ~ MINIMUM SIZE WITH 1P-30A BACK FED MAIN BREAKER
24. UTILITY DISCONNECT SWITCH ENCLOSURE WITH COVER ~ OMIT IF UTILITY DOES NOT REQUIRE THE DISCONNECT SWITCH
25. ARC FLASH AND SHOCK HAZARD LABEL (FIELD INSTALLED) ~ SEE DETAIL
26. CONNECTION TO GROUND ELECTRODE ~ SEE **STANDARD PLAN J-60.05**
27. 20 KA TYPE 1 OR TYPE 2 SURGE PROTECTION DEVICE ~ DIN RAIL MOUNT WITH PLUG-IN MODULE(S)
28. THREE POSITION DIN RAIL MOUNTED TERMINAL BLOCK ~ TERMINAL BLOCK SECTIONS SHALL BE BLACK, WHITE, AND RED AS SHOWN IN CABINET WIRING DIAGRAM

DRAWN BY: FERN LIDDELL



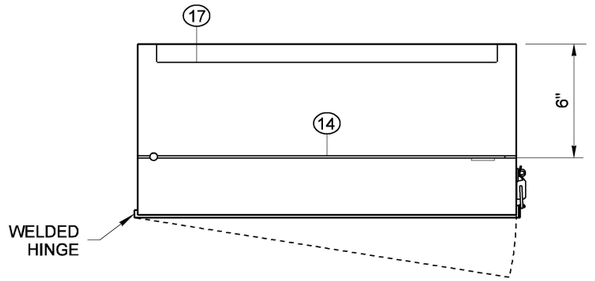
WIRING DIAGRAM

WARNING

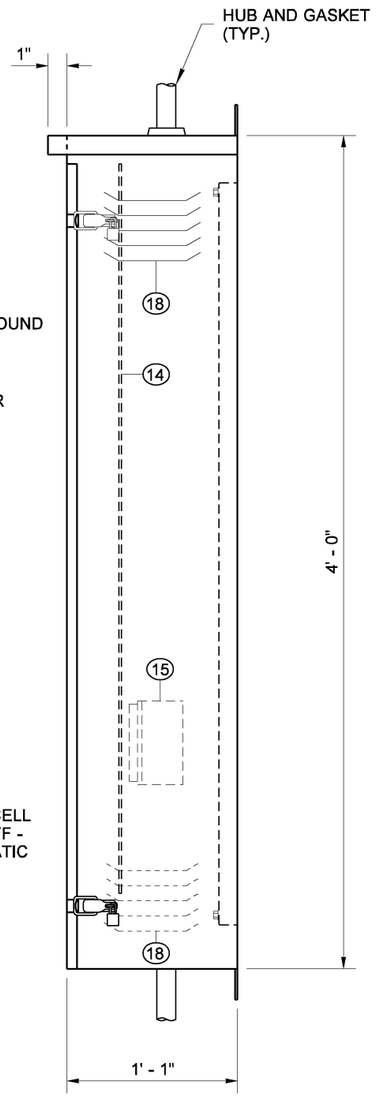
Arc Flash and Shock Hazard
Appropriate PPE Required

ARC FLASH PROTECTION		SHOCK PROTECTION	
Arc Flash Boundary (in)	00 in	Shock Hazard When Cover Removed	000 VAC
Incident Energy at 18 inches (cal/cm²)	0.00	Limited Approach	00 in
Assessment Date: 00-00-0000		Restricted Approach	00 in
By:		Glove Class	00
WSDOT Approval			
Inspector:	Date:		

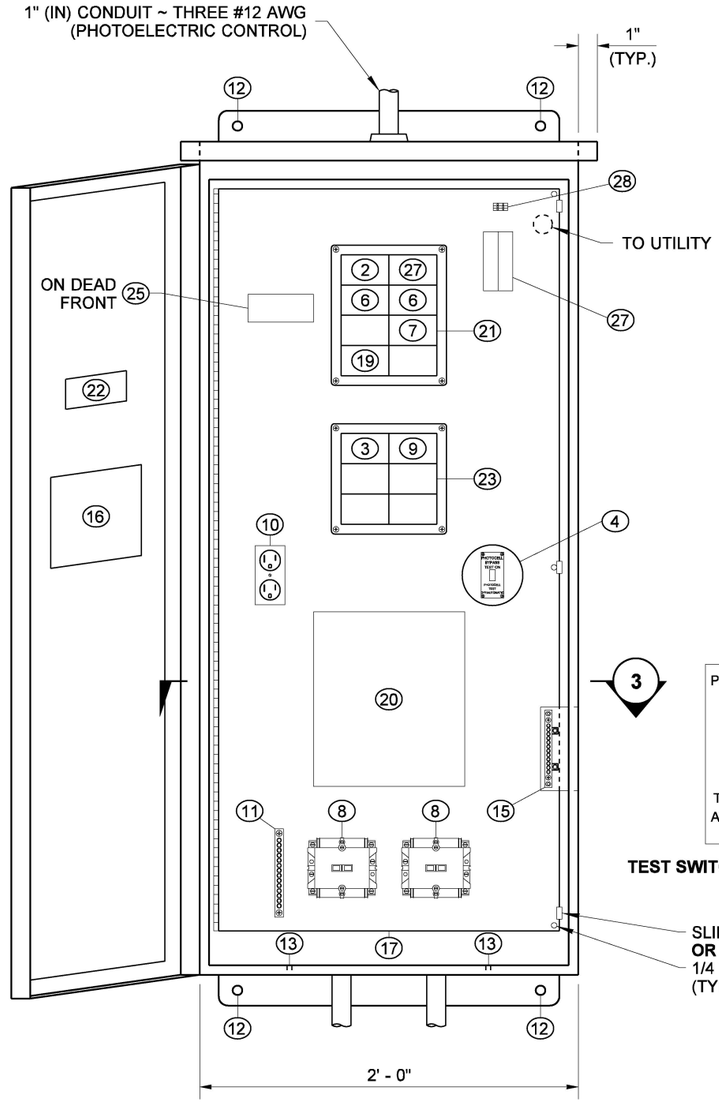
ARC FLASH AND SHOCK HAZARD LABEL DETAIL
25



SECTION 3



SIDE VIEW



ELEVATION VIEW
(14) NOT SHOWN FOR CLARITY)

3

PHOTOCELL BYPASS TEST ON

TEST OFF / AUTOMATIC

TEST SWITCH LABEL DETAIL
4

SLIDE LATCH (TYP.)
OR
1/4 TURN FASTENER (TYP.)

TYPE C SERVICE CABINET

NOTES

1. See **Standard Specification Section 9-29.24** (Service Cabinets).
2. Cabinet shall be rated NEMA 3R and shall include two rain-tight vents.
3. Dimensions shown are minimum and shall be adjusted to accommodate the various sizes of equipment installed. A 1% tolerance is allowed for all dimensions.
4. Door shall be pad-lockable and gasketed.
5. Hinges shall have stainless steel or brass pins. See **Standard Plan J-10.20** for door hinge details.
6. When using alternate door hinge, remove hinge pin prior to welding the hinge to the cabinet and prior to hot-dip galvanizing. After galvanizing, replace pin with a brass pin or solder in place. See **Standard Plan J-10.20** for alternate door hinge details.
7. Equipment identified by Key Numbers 2, 3, 4, 6, 7, 8, and 9 shall have an appropriately engraved phenolic name plate attached with screws or rivets. The name plate for Key Number 4 shall read as follows: "PHOTOCELL BYPASS TEST ON" AND "PHOTOCELL TEST OFF - AUTOMATIC." See Test Switch Label Detail.
8. All busswork shall be **ASTM B187** copper and shall have a minimum rating of 250 amps. All breakers shall bolt on to the busswork. Jumpering of breakers shall not be allowed. Busswork shall accommodate all future equipment as shown in the Breaker Schedule.
9. All internal wire runs shall be identified with "TO - FROM" coded tags labeled with the code letters and/or numbers shown on the Schedules. Approved PVC or polyolefin wire marking sleeves shall be used.
10. See Contract for Breaker and Contactor Schedule.
11. Buss bars shall be sized to accommodate up to #4 AWG wires.
12. See **Standard Plan J-10.14** for pole installation details.

WILLIAM FLINT JACKSON
STATE OF WASHINGTON
48821
REGISTERED PROFESSIONAL ENGINEER
William Flint Jackson Date: Aug 18, 2021 10:00 PDT

Aug 18, 2021

SERVICE CABINET TYPE C (0 - 200 AMP TYPE 480 VOLT SINGLE PHASE) STANDARD PLAN J-10.18-02

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Aug 18, 2021
STATE DESIGN ENGINEER
Washington State Department of Transportation