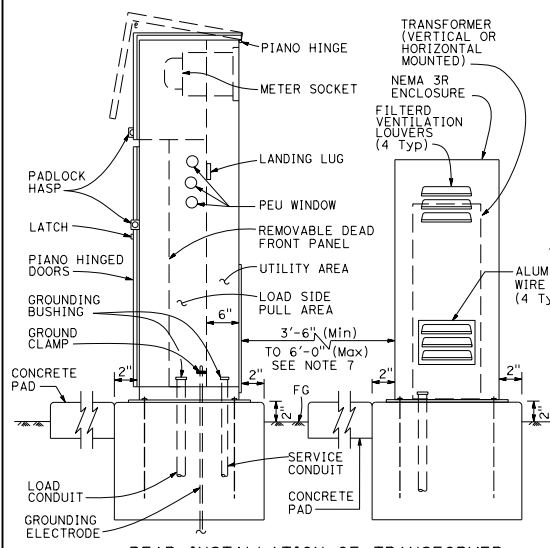
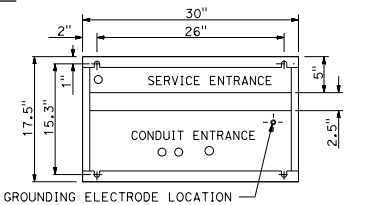


**SIDE INSTALLATION OF TRANSFORMER**

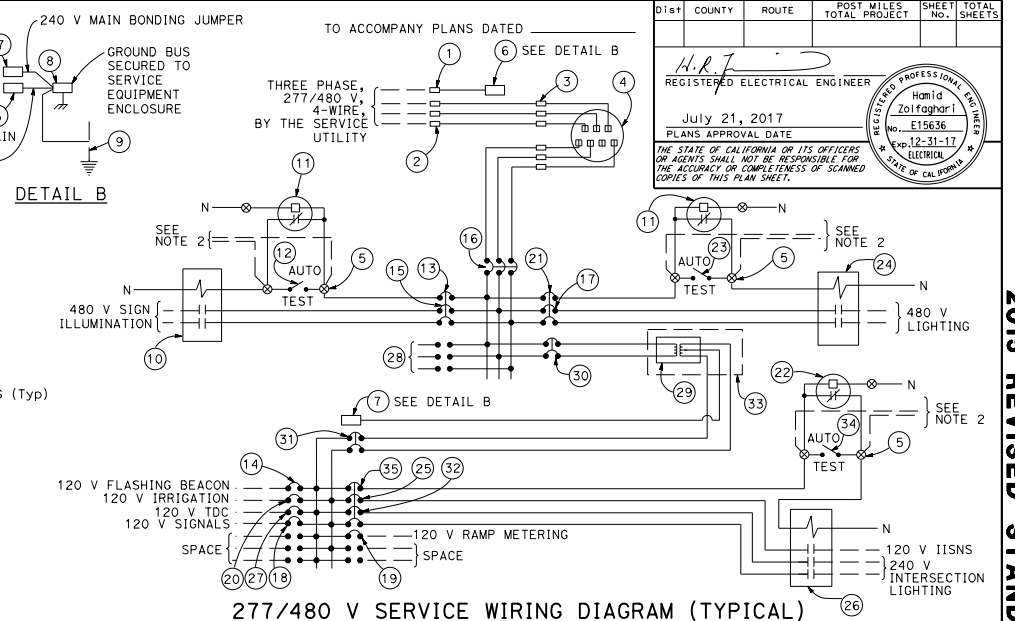


**REAR INSTALLATION OF TRANSFORMER  
TYPE III-DF SERVICE EQUIPMENT ENCLOSURE  
TYPICAL**



**BASE FOR TYPE III-D  
SERVICE EQUIPMENT ENCLOSURE  
DETAIL A**

- NOTES:**
1. Unless otherwise indicated on the plans, service equipment items shall be provided for each service equipment enclosure as shown.
  2. Connect to remote test switch mounted on lighting standards, sign post or structure when required.
  3. Items No. (1), (6) and (7) shall be isolated from the service equipment enclosure.
  4. Type I photoelectric control shall be used unless otherwise indicated on the plans.
  5. Color of insulation of the neutral shall be gray for the 277/480 V system and shall be white for the 120/240 V system.
  6. Items (3), (21) and (35) shall be ganged operated CB.
  7. The NEMA 3R enclosure shall be located to the side of the service equipment enclosure unless otherwise indicated on the plans.
  8. The base dimension for the NEMA 3R enclosure for the transformer shall be as per manufacturer's design.



**277/480 V SERVICE WIRING DIAGRAM (TYPICAL)  
DETAIL C**

TYPE III-D SERVICE (277/480 V) EQUIPMENT LEGEND					
ITEM No.	COMPONENT	NAMEPLATE DESCRIPTION	ITEM No.	COMPONENT	NAMEPLATE DESCRIPTION
(1)	NEUTRAL LUG		(20)	20 A, 120 V, 1P, CB	IRRIGATION (120 V)
(2)	LANDING LUG		(21)	10 A, 277 V, 1P, CB	LIGHTING CONTROL (277 V)
(3)	TEST BYPASS FACILITY		(22)	PHOTOELECTRIC UNIT (NOTE 4)	PEU (120/240 V)
(4)	METER SOCKET AND SUPPORT		(23)	15 A, 1P, TEST SWITCH	LIGHTING TEST SWITCH (277 V)
(5)	TERMINAL BLOCKS		(24)	30 A, 2P, NO CONTACTOR	LIGHTING (480 V)
(6)	NEUTRAL BUS	NEUTRAL BUS (480 V)	(25)	15 A, 120 V, 1P, CB	IISNS (120 V)
(7)	NEUTRAL BUS	NEUTRAL BUS (240 V)	(26)	30 A, 3P, NO CONTACTOR	INTERSECTION LIGHTING (120 V)
(8)	GROUND BUS		(27)	20 A, 120 V, 1P, CB	TELEPHONE DEMARCATION CABINET (120 V)
(9)	GROUNDING ELECTRODE		(28)	20 A, 480 V, 3P, CB	SPACE
(10)	30 A, 2P, NO CONTACTOR	SIGN ILLUMINATION (480 V)	(29)	15 kVA, 480-120/240 V TRANSFORMER	TRANSFORMER, 15 kVA, 480-240 V
(11)	PHOTOELECTRIC UNIT (NOTE 4)	PEU (277/480 V PEU)	(30)	40 A, 480 V, 2P, CB	TRANSFORMER PRIMARY (480 V)
(12)	15 A, 1P, TEST SWITCH	SIGN ILLUMINATION TEST SWITCH (277 V)	(31)	80 A, 240 V, 2P, CB	TRANSFORMER SECONDARY (240 V)
(13)	10 A, 277 V, 1P, CB	SIGN ILLUMINATION CONTROL (277 V)	(32)	30 A, 240 V, 2P, CB	INTERSECTION LIGHTING (240 V)
(14)	15 A, 120 V, 1P, CB	FLASHING BEACON (120 V)	(33)	NEMA 3R ENCLOSURE WITH LOUVERS	TRANSFORMER, 15 kVA, 480-240 V
(15)	15 A, 480 V, 2P, CB	SIGN ILLUMINATION (480 V)	(34)	15 A, 1P, TEST SWITCH	IISNS AND INTERSECTION LIGHTING TEST SWITCH (120 V)
(16)	100 A, 480 V, 3P, CB	MAIN BREAKER (480 V)	(35)	10 A, 120 V, 1P, CB	IISNS AND INTERSECTION LIGHTING CONTROL (120 V)
(17)	15 A, 480 V, 2P, CB	LIGHTING (480 V)			
(18)	50 A, 120 V, 1P, CB	SIGNAL (120 V)			
(19)	30 A, 120 V, 1P, CB	RAMP METERING (120 V)			

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**ELECTRICAL SYSTEMS  
(SERVICE EQUIPMENT ENCLOSURE  
AND TYPICAL WIRING DIAGRAM,  
TYPE III-D SERIES)**

RSP ES-2G DATED JULY 21, 2017 SUPERSEDES STANDARD PLAN ES-2G  
DATED OCTOBER 30, 2015 - PAGE 427 OF THE STANDARD PLANS BOOK DATED 2015.

**REVISED STANDARD PLAN RSP ES-2G**

NO SCALE

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

REGISTERED ELECTRICAL ENGINEER  
Hamid Zolfaghari  
No. E15636  
Exp. 12-31-17  
ELECTRICAL

July 21, 2017  
PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

2015 REVISED STANDARD PLAN RSP ES-2G