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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

REGISTERED ELECTRICAL ENGINEER

October 30, 2015
PLANS APPROVAL DATE

Theresa Aziz Gabriel No. E15129 Exp. 6-30-16 ELECTRICAL STATE OF CALIFORNIA REGISTERED PROFESSIONAL ENGINEER

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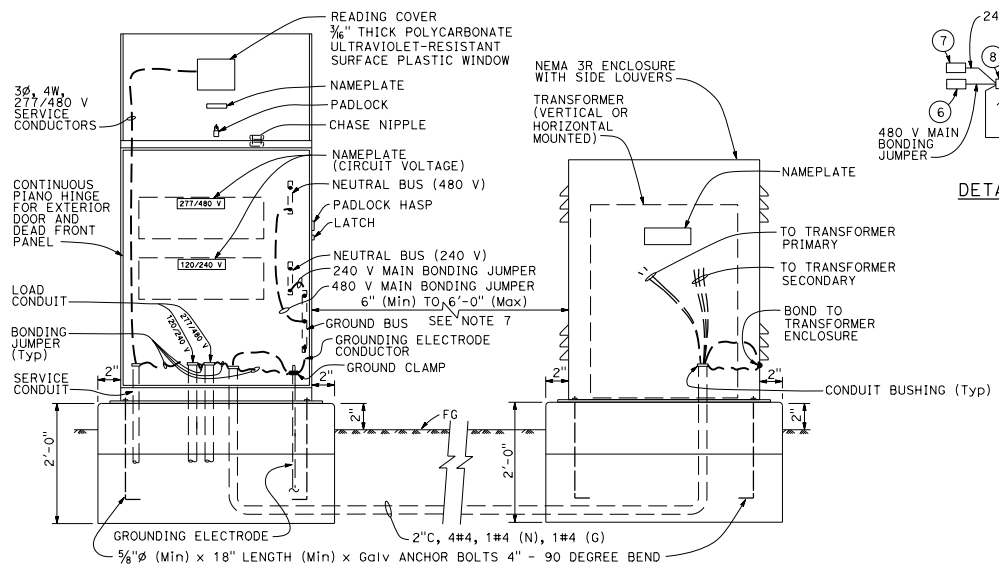
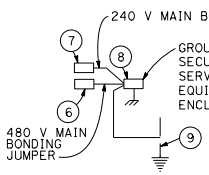
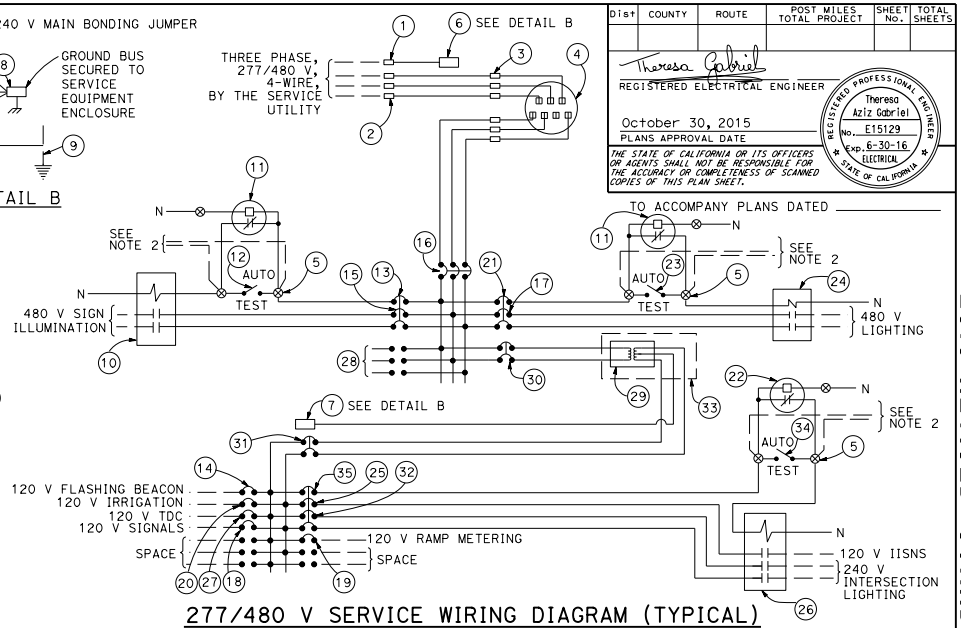


SIDE INSTALLATION OF TRANSFORMER

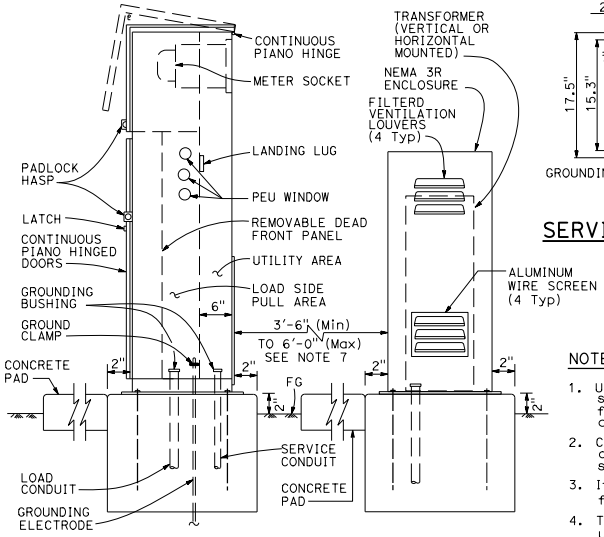


DETAIL B



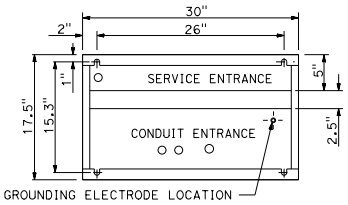
277/480 V SERVICE WIRING DIAGRAM (TYPICAL)

DETAIL C



REAR INSTALLATION OF TRANSFORMER

TYPE III-DF SERVICE EQUIPMENT ENCLOSURE TYPICAL



BASE FOR TYPE III-D SERVICE EQUIPMENT ENCLOSURE

DETAIL A

TYPE III-D SERVICE (277/480 V) EQUIPMENT LEGEND

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

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 V 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 1/2V system.
6. Items 13, 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.

NO SCALE

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (SERVICE EQUIPMENT ENCLOSURE AND TYPICAL WIRING DIAGRAM, TYPE III-D SERIES)

RSP ES-2G DATED OCTOBER 30, 2015 SUPERSEDES STANDARD PLAN ES-2G DATED MAY 20, 2011 - PAGE 434 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-2G

2010 REVISED STANDARD PLAN RSP ES-2G

8-19-15