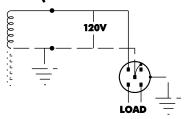
SINGLE PHASE SOCKETS

1.07.1

120V 2W 10 (OFF 120/240V 10 3W)

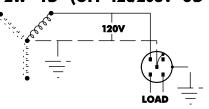
SECTION 1.07A



REFER TO DWG: 4.02.1

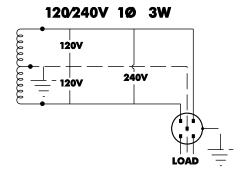
120V 2W 10 (OFF 120/208V 30 4W)

SECTION 1.07A



REFER TO DWG: 4.02.1

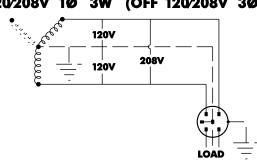
SECTION 1.07B



REFER TO DWG: 4.02.7

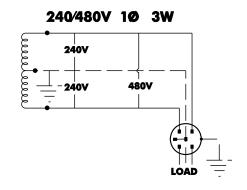
120/208V 10 3W (OFF 120/208V 30 4W)

SECTION 1.07C



REFER TO DWG: 4.02.14

SECTION 1.07D OVERHEAD ONLY



REFER TO DWG: 4.02.9

Revised 07-03-00 By BED DESIGN ENTRY BY: ROBERT B ADAMS

SINGLE PHASE INSTRUMENT TRANSFORMERS (CT'S)

1.07.2

120/240V 1Ø 3W

TO CABINET 240V 120V 120V

SECTION 1.07B

INSTRUMENT TRANSFORMER CABINET SIZE IS TO BE DETERMINED BY THE CUSTOMER AFTER RECEIPT OF INSTRUMENT TRANSFORMER'S FROM THE DISTRICT, TAKING INTO CONSIDERATION THE NUMBER, PHYSICAL SIZE AND ORIENTATION OF THE INSTRUMENT TRANSFORMER'S, THE DIRECTION AND SIZE OF INCOMING AND OUTGOING CONDUCTORS, AND THE CONDUCTOR BENDING RADIUS NEEDED TO COMPLY WITH THE NEC.

1" MIN STEEL CONDUIT FOR THE DISTRICT'S METERING INSTRUMENT

INSTRUMENT CABINET

REFER TO DWGS:

METER DIAGRAM: 4.06.3
RESIDENTAIL & GENERAL SERVICE OVERHEAD: 6.10
RESIDENTIAL UNDERGROUND: 7.07
GENERAL SERVICE UNDERGROUND: 8.06

INSTRUMENT TRANSFORMER

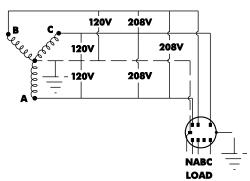
METER SOCKET

THREE PHASE, 4 WIRE, WYE SOCKETS

1.07.3

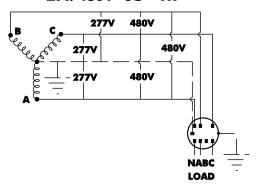
SECTION 1.07E

120/208V 3Ø 4W



SECTION 1.07F

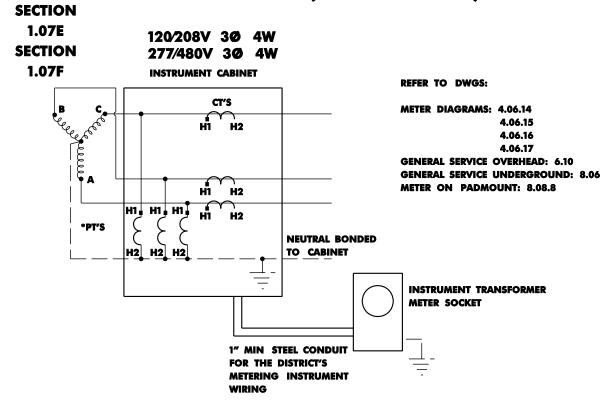
277/480V 3Ø 4W



REFER TO DWG: 4.02.13

REFER TO DWG: 4.02.13

THREE PHASE, 4 WIRE, WYE INSTRUMENT TRANSFORMERS (CT'S & PT'S)



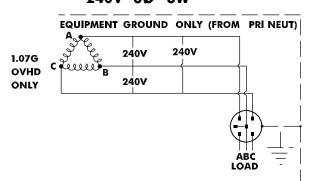
*PT'S WHEN REQUIRED

THREE PHASE, 3-WIRE, CLOSED DELTA SOCKETS

1.07.4

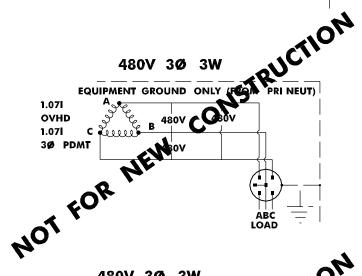


SECTION 1.07G



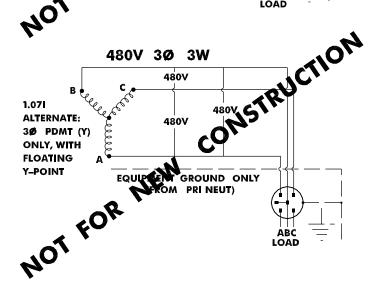
REFER TO DWG: 4.02.10

SECTION 1.071



REFER TO DWG: 4.02.10

SECTON 1.07l



REFER TO DWG: 4.02.11

THREE PHASE, 3-WIRE, CLOSED DELTA INSTRUMENT TRANSFORMERS (CT'S & PT'S)

1.07.5

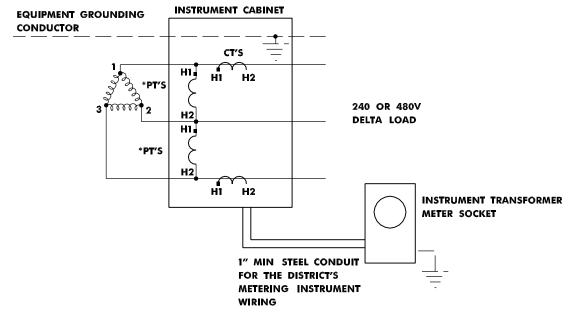
SECTION 1.07G **OVERHEAD**

240V 3W DELTA

ONLY

SECTION 1.07I

480V 3W DELTA - NOT FOR NEW CONSTRUCTION



*PT'S WHEN REQUIRED

REFER TO DWGS:

METER DIAGRAMS: 4.06.8

4.06.9 4.06.10

4.06.11

GENERAL SERVICE OVERHEAD: 8.06 GENERAL SERVICE UNDERGROUND: 7.07

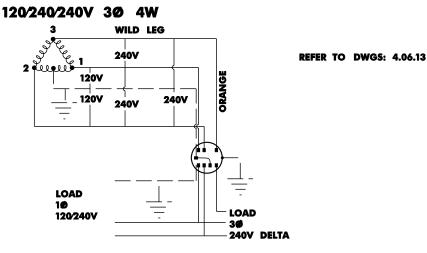
METER ON PADMOUNT: 8.08.8

THREE PHASE, 4-WIRE, CLOSED DELTA SOCKETS

1.07.6

SECTION 1.07H OVERHEAD

ONLY

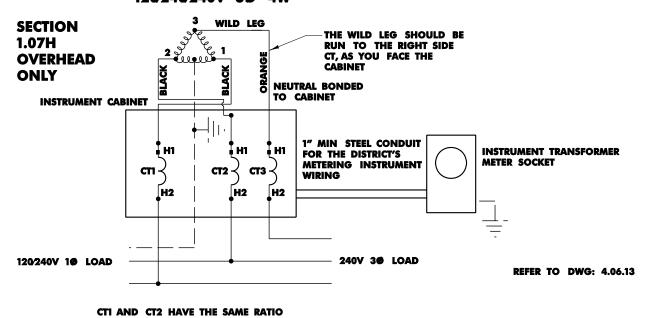


NOTE: MAXIMUM SINGLE PHASE LOAD
IS LIMITED TO FIVE PER CENT OF THE
TOTAL LOAD ON BANK

THREE PHASE, 4-WIRE, CLOSED DELTA INSTRUMENT TRANSFOMERS (CT'S)

120/240/240V 3Ø 4W

CT3 HAS A RATIO HALF OF CT1 AND CT2

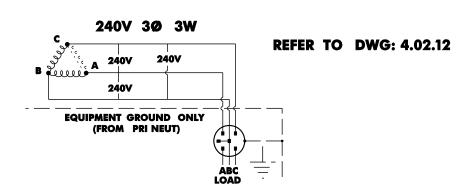


Revised 06-29-01 By BED DESIGN ENTRY BY: ROBERT B ADAMS

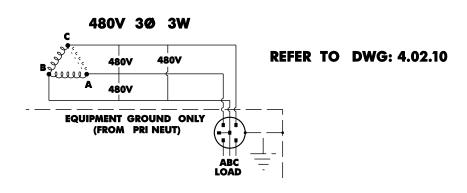
IE: CTI - 400/5 CT2 - 400/5 CT3 - 200/5

THREE PHASE, 3-WIRE, OPEN DELTA SOCKETS 1.07.7

SECTION 1.07J OVERHEAD ONLY



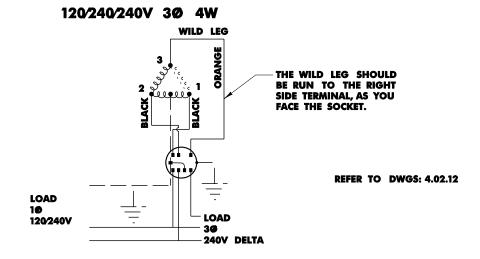
SECTION 1.07L



THREE PHASE, 4-WIRE, OPEN DELTA SOCKETS

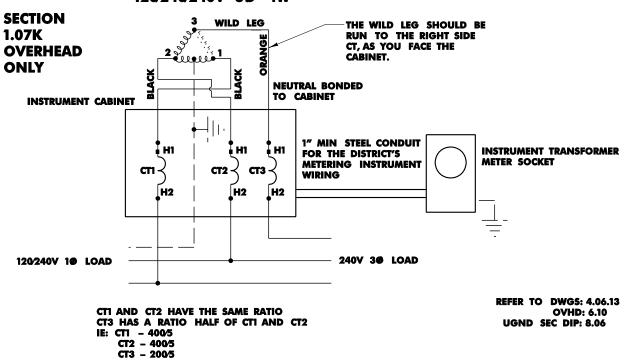
1.07.8

SECTION 1.07K OVERHEAD ONLY



THREE PHASE, 4-WIRE, OPEN DELTA INSTRUMENT TRANSFORMERS (CT'S)

120/240/240V 3Ø 4W

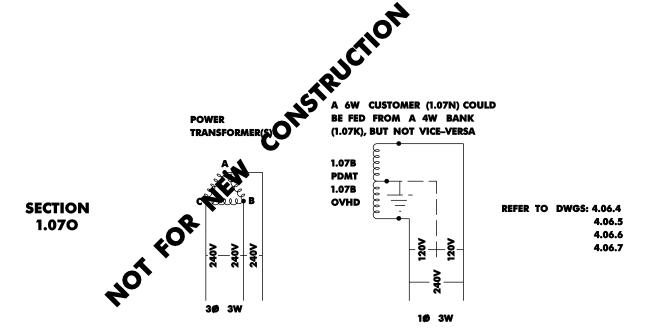


Revised 06-29-01 By BED DESIGN ENTRY BY: ROBERT B ADMAS

6-WIRE TOTALIZED SERVICE

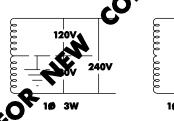
LIMITED TO EXISTING 6-WIRE CUSTOMERS ONLY

1.07.9



5-WIRE TOTALLED SERVICE LIMITED TO EXISTING WIRE CUSTOMERS ONLY

SECTION 1.07P



240V

ISOLATES 240V 2W FROM 10 3W TO AVOID FLICKER FROM WELDERS, ETC.

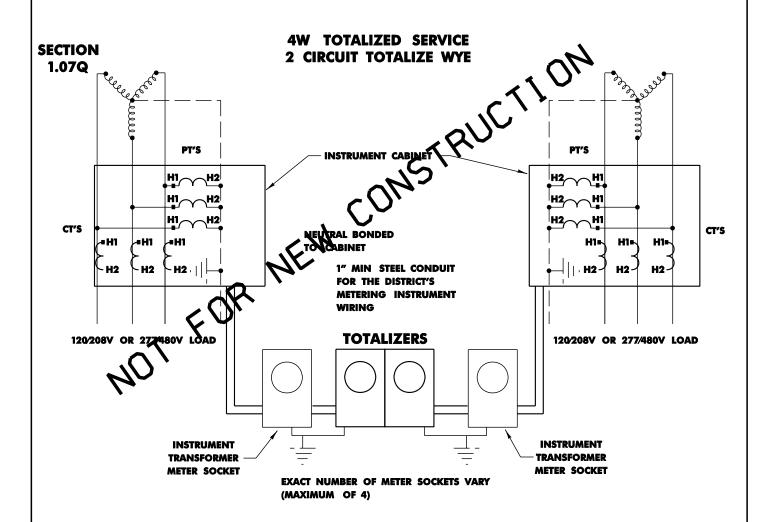
REFER TO DWG: 4.02.8

Revised 07-03-00 By BED DESIGN ENTRY BY: ROBERT B ADAMS

TWO CIRCUIT TOTALIZED

THREE PHASE, 4-WIRE, WYE

1.07.10



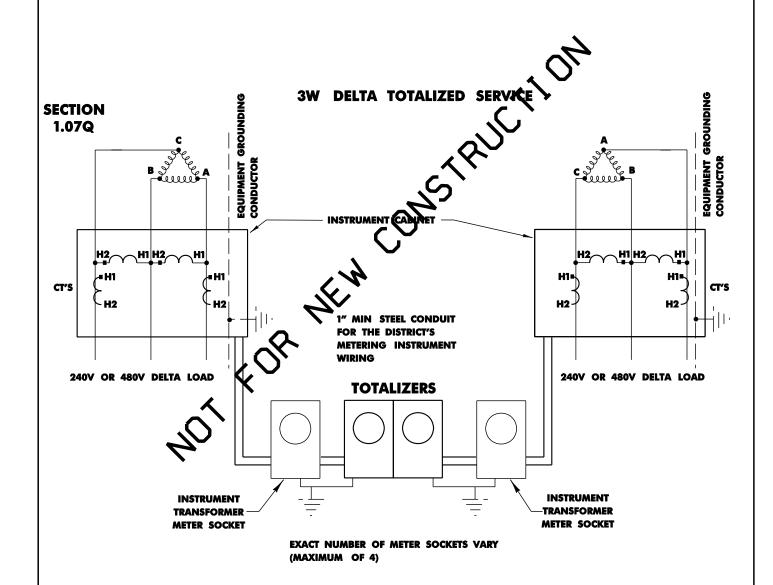
REFER TO DWGS: 4.06.18

Revised 09-15-08 By SAH DESIGN ENTRY BY: ROBERT B. ADAMS

TWO CIRCUIT TOTALIZED

THREE PHASE, 3-WIRE, CLOSED DELTA

1.07.11



REFER TO DWG: 4.06.12

Revised 09-15-08 By SAH DESIGN ENTRY BY: ROBERT B ADAMS

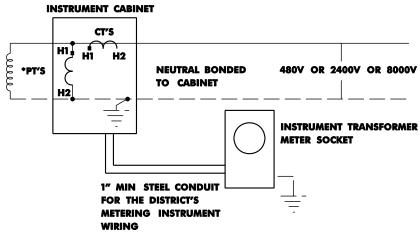
PRIMARY METERING

SINGLE PHASE

1.07.12

480V, 2400V, OR 8000V 1Ø 2W

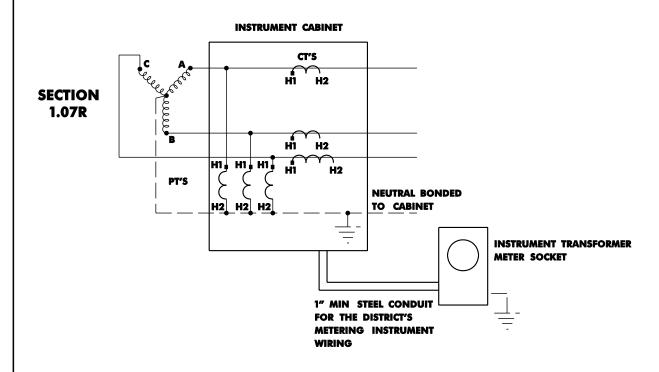
SECTION 1.07R



*PT'S WHEN REQUIRED

PRIMARY METERING

13,800V, THREE PHASE, 4-WIRE, WYE



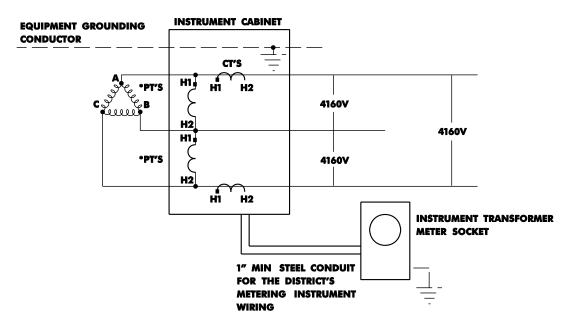
Revised 07-03-00 By BED DESIGN ENTRY BY: ROBERT B ADAMS

PRIMARY METERING

2400V, 4160V, THREE PHASE, 3-WIRE, CLOSED DELTA

1.07.13





*PT'S WHEN REQUIRED

Revised 07-03-00 By BED DESIGN ENTRY BY: ROBERT B ADAMS

SINGLE PHASE TWO WIRE METERING

120 VOLT SERVICE - ONE KILOWATT MAXIMUM

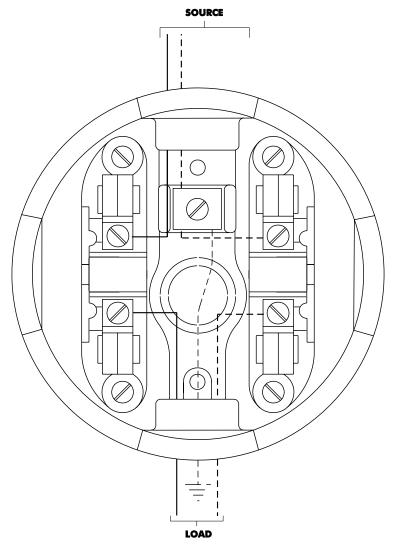
4.02.1

M104

NOTES:

TO BE WIRED AS SHOWN

HOT SIDE TO LEFT, FACING SOCKET



FRONT VIEW
COVER REMOVED

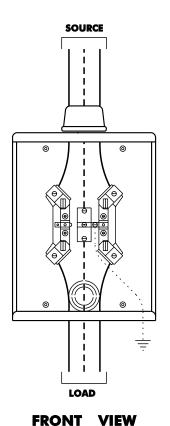
METER SOCKET: 0000006608 (BY CUSTOMER)

Revised 09-15-08 By SAH DESIGN ENTRY BY: BRANT DANGEL

120/240 VOLT 3-WIRE 150 AMPERES OVERHEAD SERVICE

4.02.2

M118 M118D 120/208V 10 3W: M218 M218D



COVER REMOVED

NOTES:

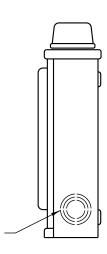
METER SOCKET 0000006616 (BY CUSTOMER)

TERMINALS FOR MAXIMUM 250 KCMIL CONDUCTORS

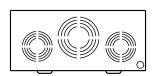
METER SOCKET AVAILABLE WITH FIFTH TERMINAL FOR THREE WIRE WYE SERVICE

METER CABINET AVAILABLE WITH 1 1/4", 1 1/2", 2", OR 2 1/2" INTERCHANGEABLE HUB OR BLANK COVER PLATE

3 KNOCKOUTS FOR 1" TO 1 1/2" CONDUIT IN SIDES AND BACK



SIDE VIEW COVER IN PLACE



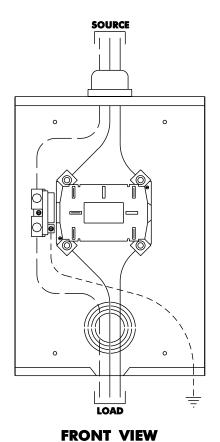
BOTTOM VIEW

2 KNOCKOUTS FOR 1/2" TO 1 1/2" CONDUIT 1 KNOCKOUT FOR 1/2" TO 2" CONDUIT 1 KNOCKOUT 1/4" FOR EQUIPMENT GROUND

HIGH CAPACITY
120/240 VOLT 3-WIRE 200 AMPERES
OVERHEAD SERVICE

4.02.3

M120 M120D 120/208V 19 3W: M220 M220D



COVER REMOVED

NOTES:

TERMINALS FOR MAXIMUM 350 KCMIL CONDUCTORS

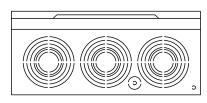
METER SOCKET AVAILABLE WITH FIFTH TERMINAL FOR THREE WIRE WYE SERVICE

METER CABINET AVAILABLE WITH 1 12", 2", OR 2 12" INTERCHANGEABLE HUB OR BLANK COVER PLATE

METER SOCKET 0000006617 (BY CUSTOMER)

> 3 KNOCKOUTS FOR 1 1/2", -2", OR 2 1/2" CONDUIT IN SIDES AND BACK

SIDE VIEW
COVER IN PLACE



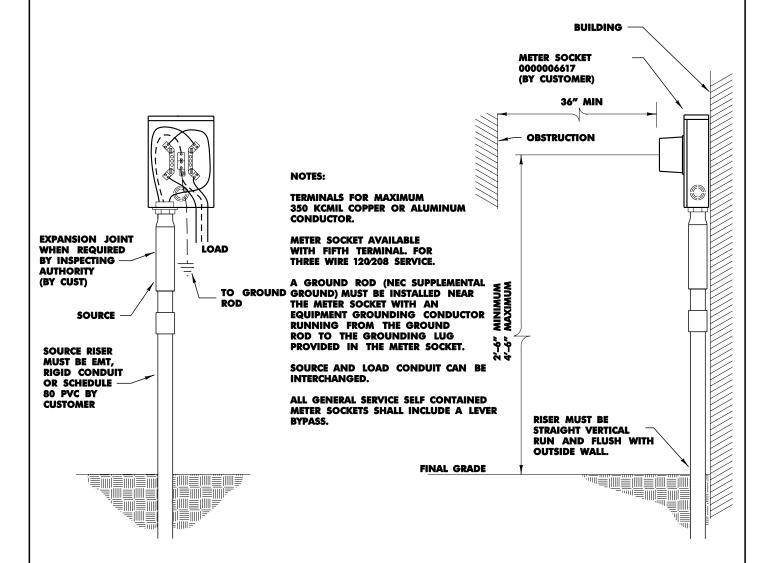
BOTTOM VIEW
3 KNOCKOUTS FOR 1 1/2", 2", OR 2 1/2" CONDUIT

Revised 09-15-08 By SAH DESIGN ENTRY BY: GRETE H SCHOLZ

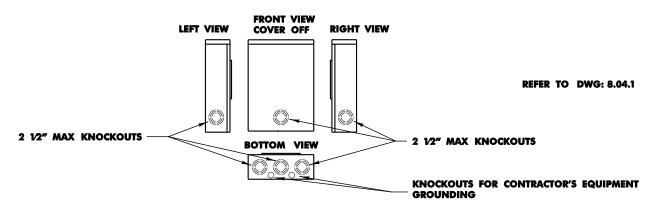
120/240 VOLT 3-WIRE 200 AMPERE UNDERGROUND SERVICE "GENERAL SERVICE ONLY"

4.02.4

M121, M121D M123, M123D 120/208V 10 3W: M221, M221D M223, M223D



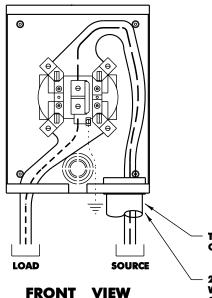
KNOCKOUT LOCATION



Revised 10-15-08 By SAH
DESIGN ENTRY BY: JULIA VICTOR

HIGH CAPACITY
120/240 VOLT 3 WIRE 200 AMPERES
UNDERGROUND SERVICE

4.02.5



COVER REMOVED

NOTES:

TERMINALS FOR MAXIMUM
250 MCM CONDUCTORS

METER SOCKET AVAILABLE
WITH FIFTH TERMINAL FOR
THREE WIRE WYE SERVICE

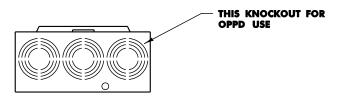
METER SOCKET 0000006617

3 KNOCKOUTS FOR 1 1/2", 2", OR 2 1/2" CONDUIT IN SIDES AND BACK

THIS KNOCKOUT FOR OPPD USE

SIDE VIEW COVER IN PLACE

2 1/2" RIGID GALVANIZED CONDUIT WITH NON-METALLIC BUSHING BY CUSTOMER IN ALL NON-RESIDENTIAL APPLICATIONS. OPPD WILL FURNISH A NON-METALLIC RISER IN SINGLE FAMILY RESIDENTIAL APPLICATION.



BOTTOM VIEW
3 KNOCKOUTS FOR 1 1/2", 2", OR 2 1/2" CONDUIT

Revised 07-03-00 By BED DESIGN ENTRY BY: GRETE H SCHOLZ

120/240 VOLT 3-WIRE 320 AMPERES **OVERHEAD SERVICE**

4.02.6

M130 M130D



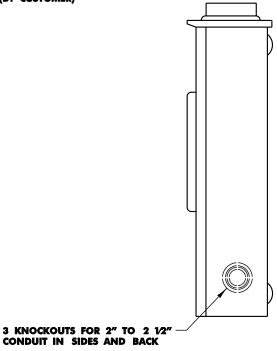
SOURCE:

SINGLE LUG - 350 KCMIL TO 500 KCMIL

LOAD: SINGLE LUG - 500 KCMIL DOUBLE LUG - 250 KCMIL

METER SOCKET 0000006618

(BY CUSTOMER)



FRONT VIEW COVER REMOVED

LOAD

 \oplus

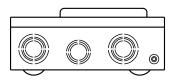
(

0

SOURCE

€

SIDE VIEW **COVER IN PLACE**



RESID. REFER TO DWG: 6.08.1 6.09

BOTTOM VIEW

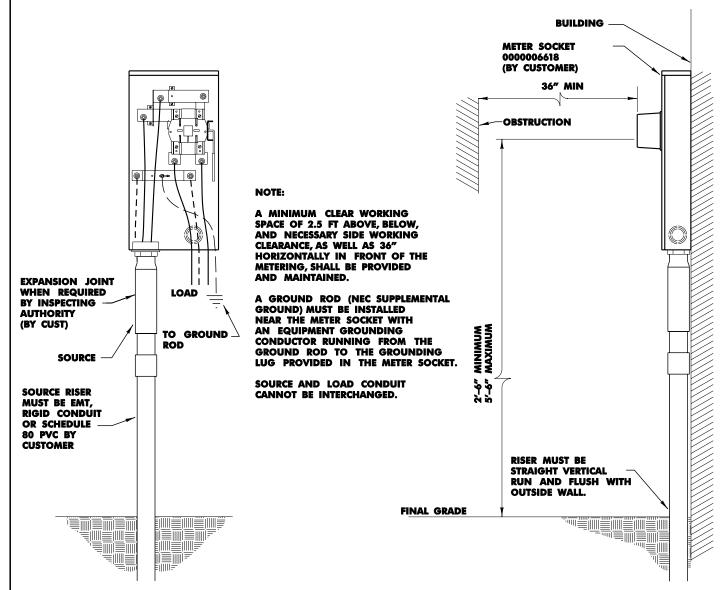
2 KNOCKOUTS FOR 1 1/2" TO 3" CONDUIT 1 KNOCKOUT FOR 1 1/2" TO 2 1/2" CONDUIT 1 KNOCKOUT 1/4" & 1/2" EQUIPMENT GROUND

Revised <u>09-15-08</u> By SAH DESIGN ENTRY BY: GRETE H SCHOLZ

120/240 VOLT 3-WIRE 320 AMPERE UNDERGROUND SERVICE "GENERAL SERVICE ONLY"

4.02.7

M131 M131D



REFER TO DWG: 8.04.2

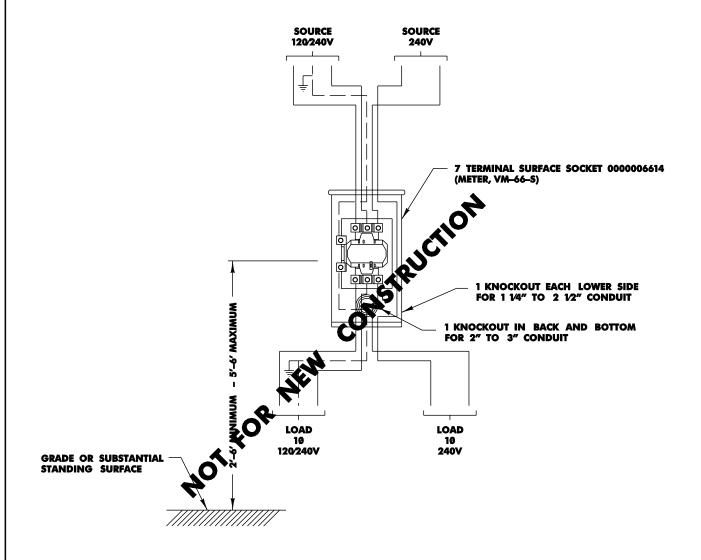
Revised 10-15-08 By SAH DESIGN ENTRY BY: JULIA VICTOR

SOCKET TYPE TOTALIZED METERING

CLASS 100 - RATING 24KVA OF 10 120/240V AND 24KVA OF 10 240V CLASS 200 - RATING 48KVA OF 10 120/240V AND 48KVA OF 10 240V

4.02.8

M180 M180D



NOTES:

THIS METHOD OF METERING IS TO BE USED ONLY AT SPECIAL LOCATIONS, WHERE IT IS NECESSARY TO SERVE A 10 240V LOAD FROM A SEPARATE SOURCE, IN ORDER TO AVOID VOLTAGE DIPS ON THE 10 120/240V LOAD.

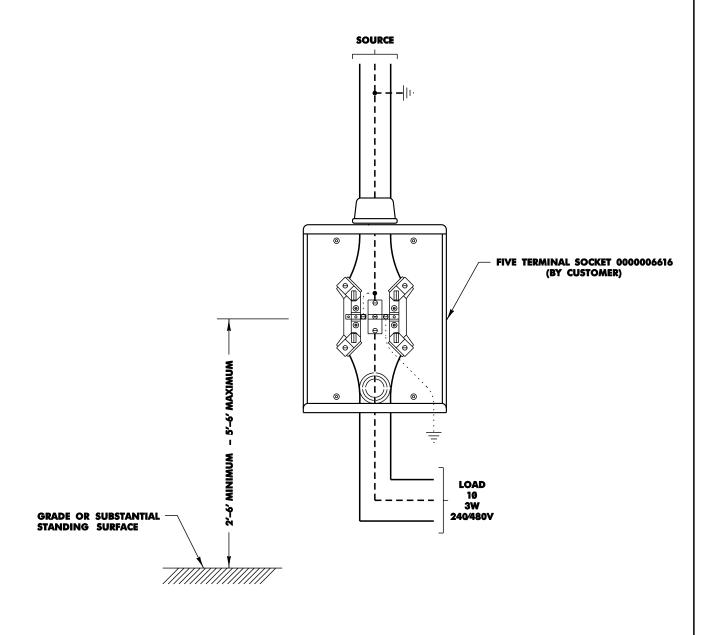
SERVICE ENTRANCE WIRES FOR THE 10 240V LOAD MUST BE PERMANENTLY IDENTIFIED TO DISTINGUISH THEM FROM THE 10 120240V LOAD WIRES.

Revised 07-03-00 By BED DESIGN ENTRY BY: GRETE H SCHOLZ

THREE WIRE SINGLE PHASE 480 VOLT

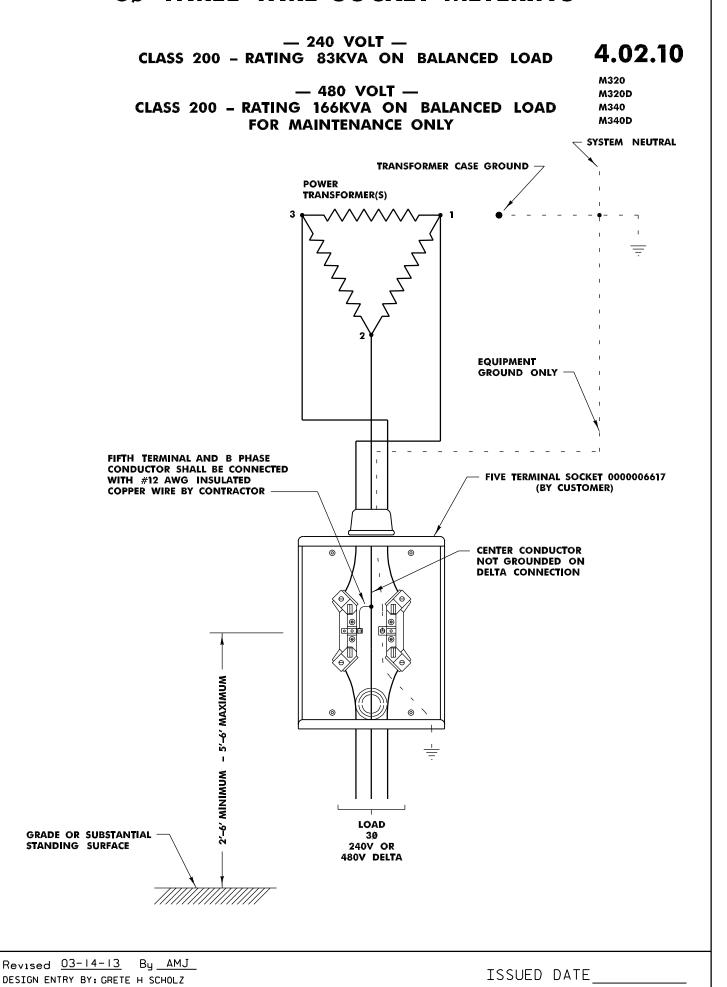
4.02.9

M184 M184D



Revised 09-15-08 By SAH DESIGN ENTRY BY: GRETE H SCHOLZ

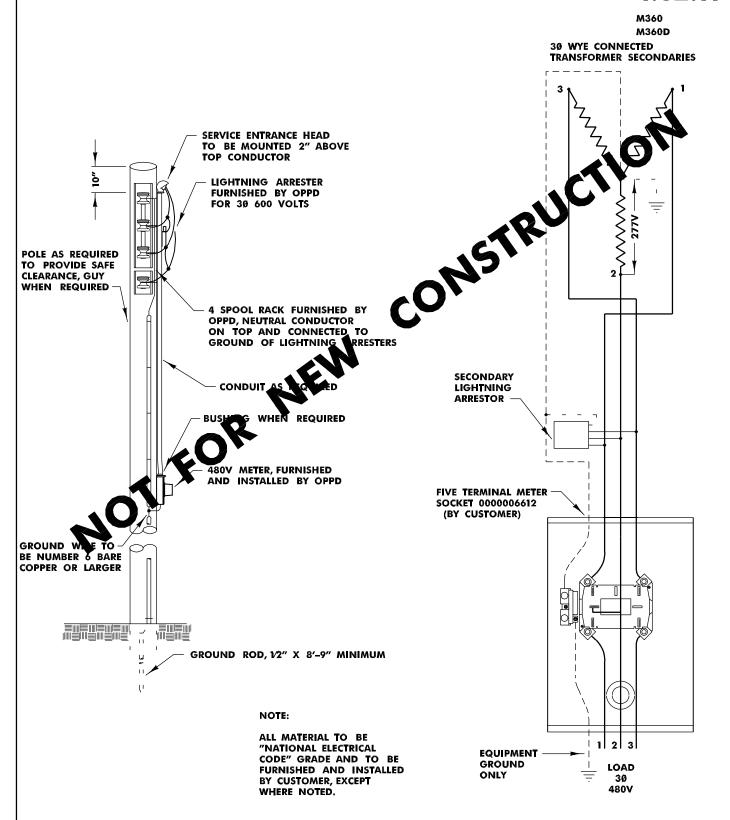
30 THREE WIRE SOCKET METERING



THREE PHASE THREE WIRE METERING

480 VOLT FROM WYE-CONNECTED TRANSFORMER SECONDARIES
— SOCKET TYPE —

CLASS 100 – RATING 100 AMPERES TOTAL PER PHASE ON BALANCED LOAD CLASS 200 – RATING 200 AMPERES TOTAL PER PHASE ON BALANCED LOAD TYPICAL IRRIGATION-PUMP METER-POLE 4.02.11



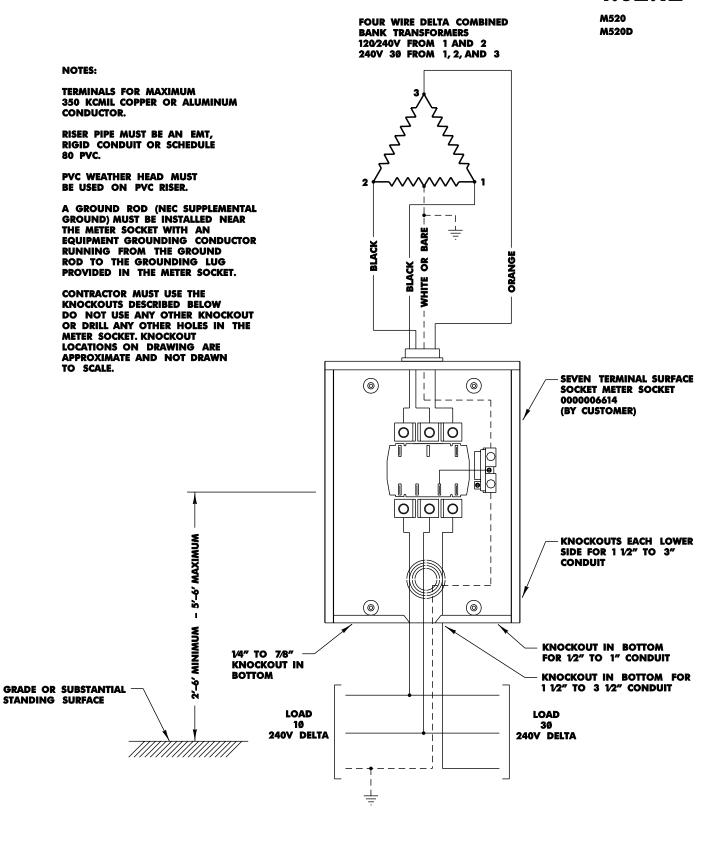
Revised 03-14-13 By AMJ DESIGN ENTRY BY: GRETE H SCHOLZ

FOUR WIRE DELTA SOCKET METERING

CLASS 200 - RATING 200 AMPERES TOTAL PER PHASE ON BALANCED LOAD

4.02.12

ISSUED DATE



Revised <u>09-15-08</u>

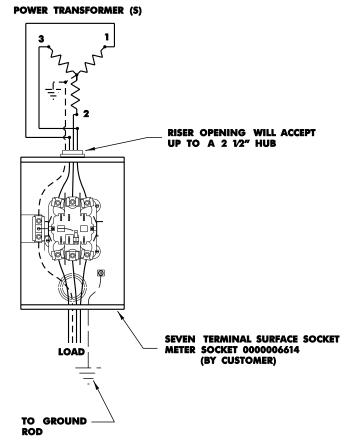
DESIGN ENTRY BY: GRETE H SCHOLZ

By SAH

OVERHEAD 3Ø FOUR-WIRE WYE SOCKET METERING

120/208V-CLASS 200-RATING 72KVA ON BALANCED LOAD 277/480V-CLASS 200-RATING 166KVA ON BALANCED LOAD

4.02.13



M420 M421D M441D

NOTES:

TERMINALS FOR MAXIMUM
350 KCMIL COPPER OR ALUMINUM
CONDUCTOR

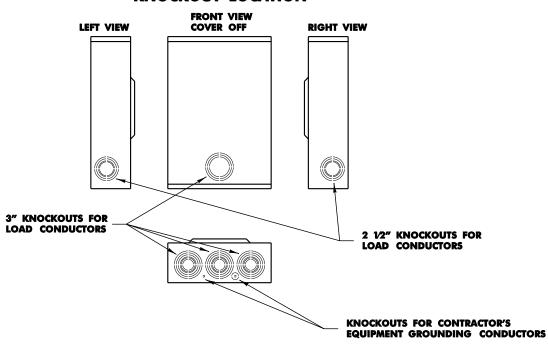
RISER PIPE MUST BE AN EMT, RIGID CONDUIT OR SCHEDULE 80 PVC.

PVC WEATHER HEAD MUST BE USED ON PVC RISER.

A GROUND ROD (NEC SUPPLEMENTAL GROUND) MUST BE INSTALLED NEAR THE METER SOCKET WITH AN EQUIPMENT GROUNDING CONDUCTOR RUNNING FROM THE GROUND ROD TO THE GROUNDING LUG PROVIDED IN THE METER SOCKET.

CONTRACTOR MUST USE THE KNOCKOUTS DESCRIBED BELOW DO NOT USE ANY OTHER KNOCKOUT OR DRILL ANY OTHER HOLES IN THE METER SOCKET. KNOCKOUT LOCATIONS ON DRAWING ARE APPROXIMATE AND NOT DRAWN TO SCALE.

KNOCKOUT LOCATION

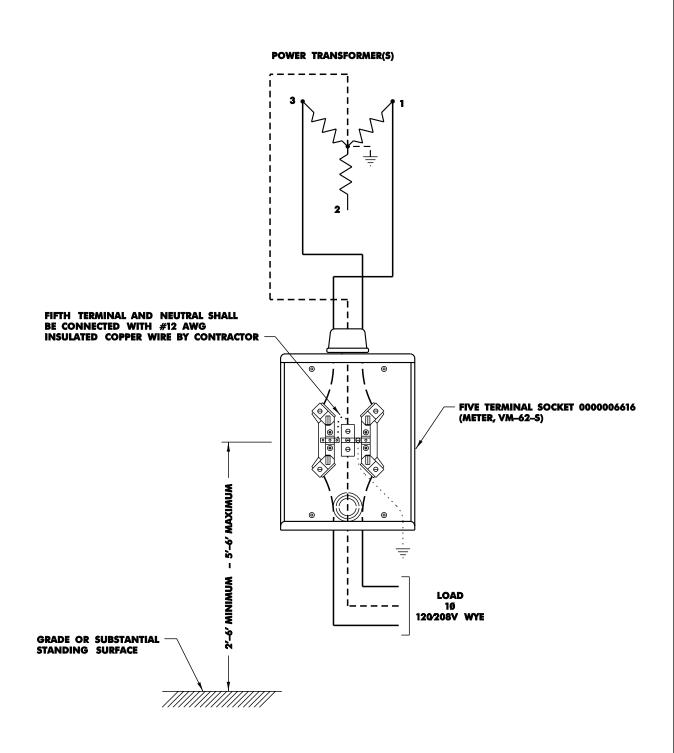


Revised 09-15-08 By SAH DESIGN ENTRY BY: JULIA VICTOR

THREE WIRE WYE SOCKET METERING 120/208V 10 3W

CLASS 100 - RATING 24KVA ON BALANCED LOAD CLASS 200 - RATING 48KVA ON BALANCED LOAD

4.02.14



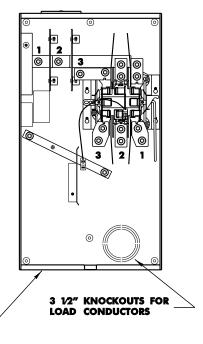
Revised 07-03-00 By BED DESIGN ENTRY BY: GRETE H SCHOLZ

GENERAL SERVICE

120/208V 30 4-WIRE / 320 AMP OVERHEAD OR UGND SOCKET

4.02.15

M422D



NOTES:

REFER TO SECTION 6.14

TERMINALS FOR MAXIMUM
600 KCMIL COPPER OR ALUMINUM
CONDUCTOR.

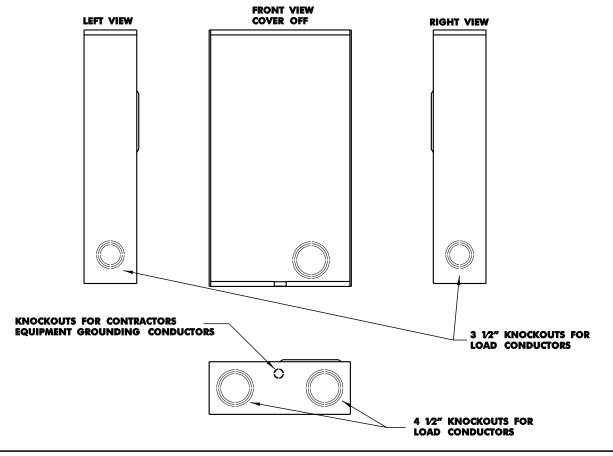
RISER PIPE MUST BE AN EMT, RIGID CONDUIT OR SCHEDULE 80 PVC.

PVC WEATHER HEAD MUST BE USED ON PVC RISER.

A GROUND ROD (NEC SUPPLEMENTAL GROUND) MUST BE INSTALLED NEAR THE METER SOCKET WITH AN EQUIPMENT GROUNDING CONDUCTOR RUNNING FROM THE GROUND ROD TO THE GROUNDING LUG PROVIDED IN THE METER SOCKET.

CONTRACTOR MUST USE THE KNOCKOUTS DESCRIBED BELOW DO NOT USE ANY OTHER KNOCKOUT OR DRILL ANY OTHER HOLES IN THE METER SOCKET. KNOCKOUT LOCATIONS ON DRAWING ARE APPROXIMATE AND NOT DRAWN TO SCALE.

KNOCKOUT LOCATION

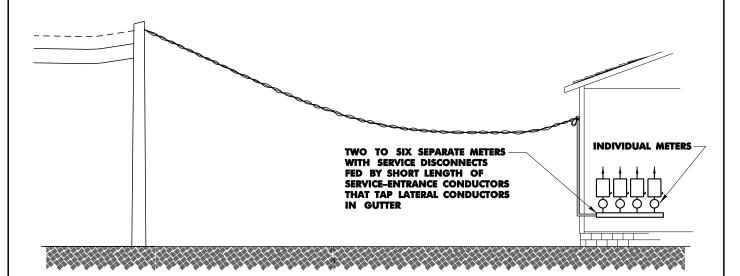


Revised 09-19-05 By JML DESIGN ENTRY BY: BRANT DANGEL

THIS IS KNOCK OUT FOR LINE-SIDE CONDUCTORS ONLY WHEN SOCKET IS USED FOR UGND

OVERHEAD SERVICE

4.05.1



NOTE:

FOR CLEARANCE, SEE SECTION 7.01

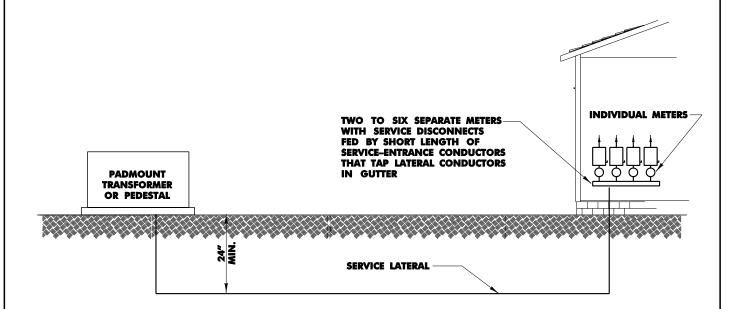
IDENTIFY METER WITH SPACE OR APARTMENT NUMBER

SCHEDULE 80 PVC EMT OR RIGID CONDUIT WILL BE ALLOWED OUTSIDE ON ANY COMMERCIAL OR MULTI-POSITION RESIDENTIAL METER PROJECTS

Revised 07-03-00 By BED DESIGN ENTRY BY: ROBERT B ADAMS

UNDERGROUND SERVICE

4.05.2



NOTE:

IDENTIFY METER WITH SPACE OR APARTMENT NUMBER

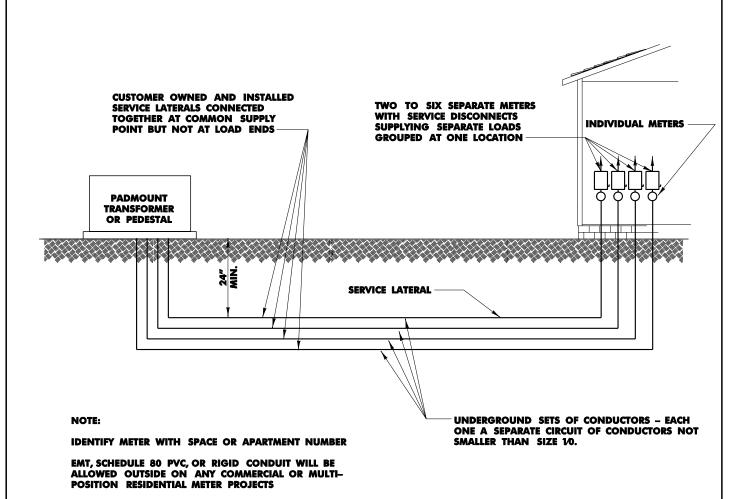
EMT, SCHEDULE 80 PVC, OR RIGID CONDUIT WILL BE ALLOWED OUTSIDE ON ANY COMMERCIAL OR MULTI-POSITION RESIDENTIAL METER PROJECTS

Revised 07-03-00 By BED DESIGN ENTRY BY: ROBERT B ADAMS

UNDERGROUND SERVICE

GENERAL SERVICE ACCOUNTS

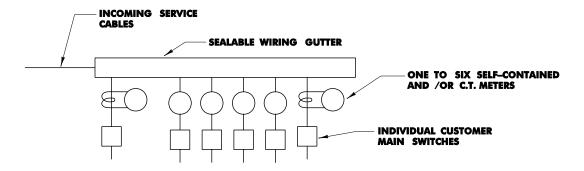
4.05.3



Revised 07-03-00 By BED DESIGN ENTRY BY: ROBERT B ADAMS

4.06.1

DIAGRAM I



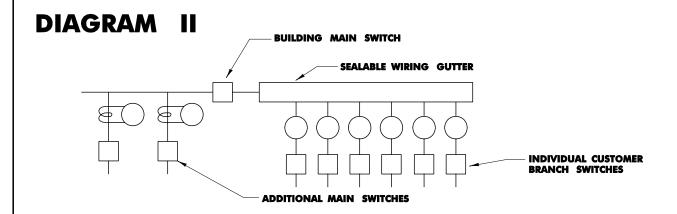
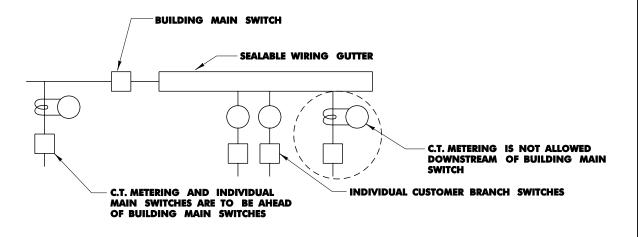


DIAGRAM III (NOT ALLOWED)

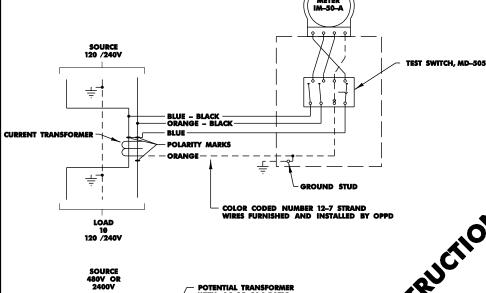


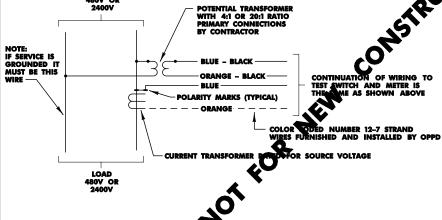
Revised 07-03-00 By BED DESIGN ENTRY BY: ROBERT B ADAMS

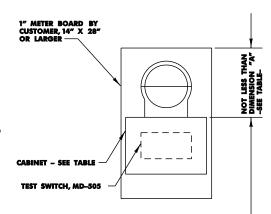
SINGLE PHASE "A" BASE METERING

FOR USE WITH INSTRUMENT TRANSFORMERS









- TABLE -

SERVICE	CABINET	DIMENSION "	Α"
120 /240 V	MD - 1190	12"	
480 V	MD - 1190-B	17‴	
2400 V	MD - 1190-B	17"	

NOTES:

CUSTOMER TO FURNISH AND INSTALL "NATIONAL ELECTRICAL CODE" GRADE STEEL CABINET OF ADEQUATE SIZE FOR THE INSTRUMENT TRANSFORMERS AND ALL WIRING CONNECTIONS

SERVICE ENTRANCE NEUTRAL MUST BE BONDED TO CURRENT TRANSFORMER CABINET

CUSTOMER TO FURNISH AND INSTALL 1" CONDUIT FROM INSTRUMENT TRANSFORMER CABINET TO METER CABINET

FOR LUG CONNECTIONS ON CURRENT TRANSFORMER UP TO 600 AMPERES MINIMUM BOLT SIZE 3/8" OVER 600 AMPERES MINIMUM BOLT SIZE 1/2"

FLOOR

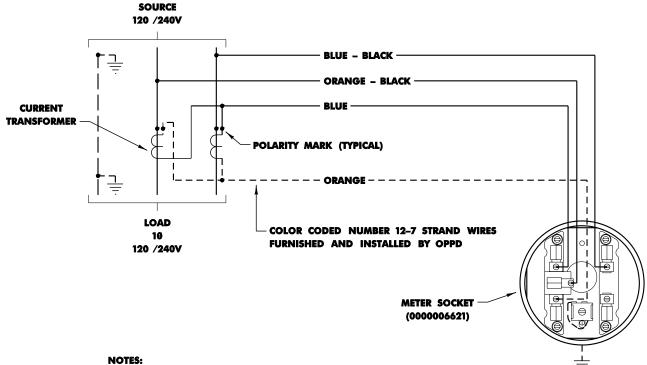
Revised 07-03-00 By BED DESIGN ENTRY BY: GRETE H SCHOLZ

SINGLE PHASE SOCKET METERING

120 /240V 10 3W **OVER 400 AMPERES** FOR USE WITH INSTRUMENT TRANSFORMERS

4.06.3

M171 M171D



CUSTOMER TO FURNISH AND INSTALL "NATIONAL **ELECTRICAL CODE" GRADE STEEL CABINET OF** ADEQUATE SIZE FOR THE INSTRUMENT TRANSFORMERS AND ALL WIRING CONNECTIONS.

SERVICE ENTRANCE NEUTRAL MUST BE BONDED TO **CURRENT TRANSFORMER CABINET.**

CUSTOMER TO FURNISH AND INSTALL 1" CONDUIT FROM INSTRUMENT TRANSFORMER CABINET TO METER SOCKET.

FOR LUG CONNECTIONS ON CURRENT TRANSFORMERS UP TO 600 AMPERES MINIMUM BOLT SIZE 3/8" OVER 600 AMPERES MINIMUM BOLT SIZE 1/2".

REFER TO DWGS:

RESIDENTIAL & GENERAL SERVICE OVERHEAD: 6.10 RESIDENTIAL UNDERGROUND: 7.07 GENERAL SERVICE UNDERGROUND: 8.06

Revised 06-29-01 By <u>BED</u> DESIGN ENTRY BY: GRETE H SCHOLZ

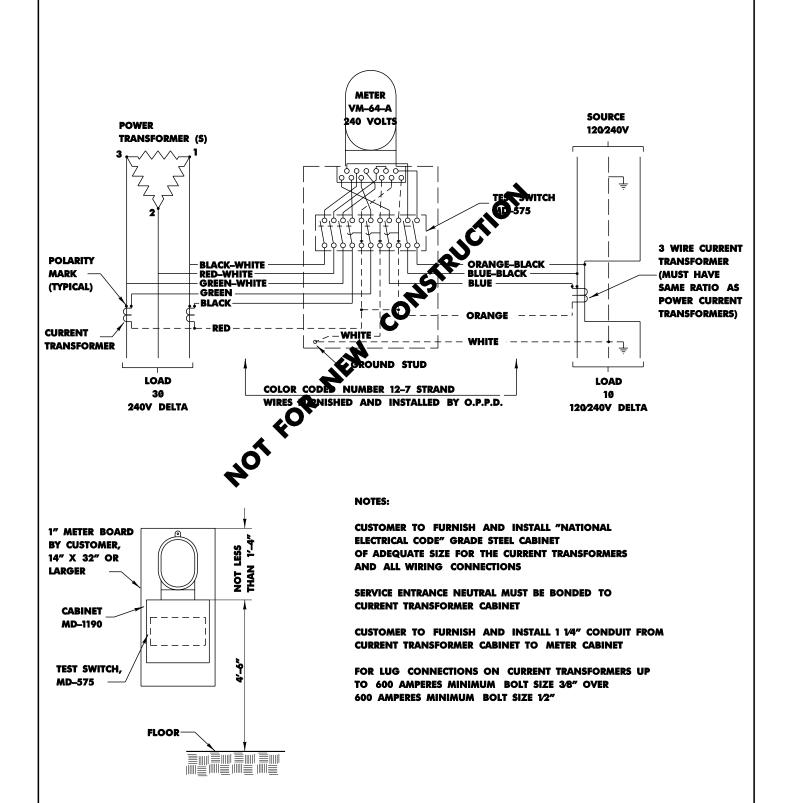
SIX WIRE TOTALIZED METERING

FOR USE WITH CURRENT TRANSFORMERS

4.06.4

M670DM

ISSUED DATE



Revised 07-03-00

DESIGN ENTRY BY: BRANT DANGEL

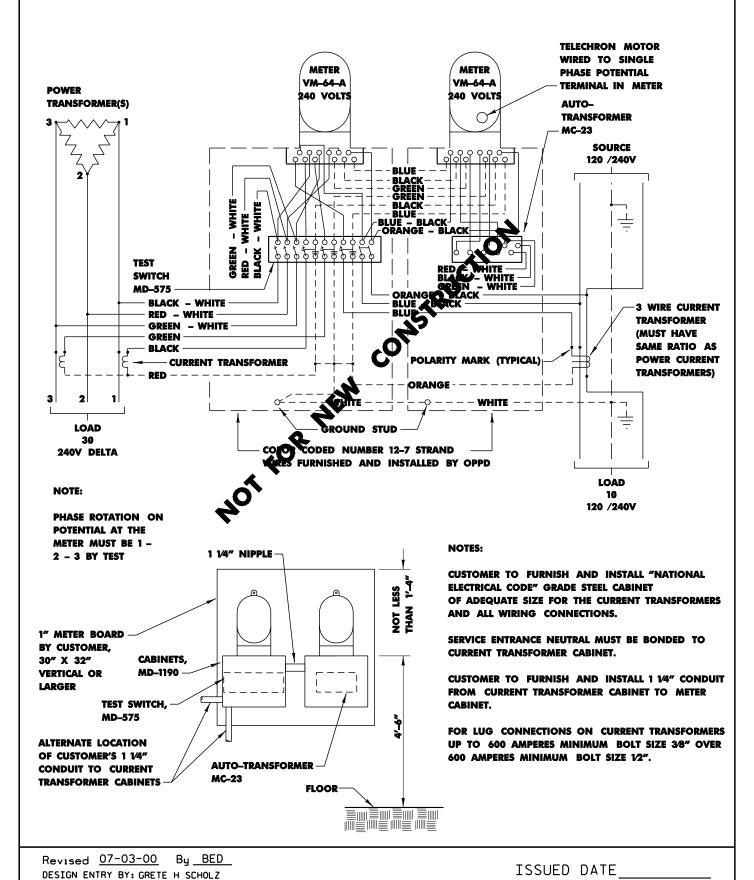
By <u>BED</u>

SIX WIRE TOTALIZED METERING

KW AND KVA - FOR USE WITH CURRENT TRANSFORMERS

4.06.5

M680DM

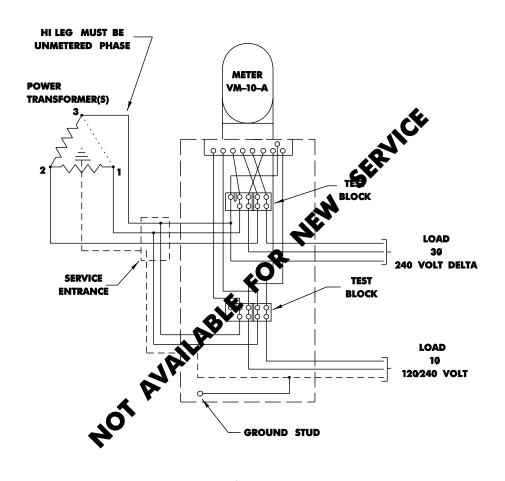


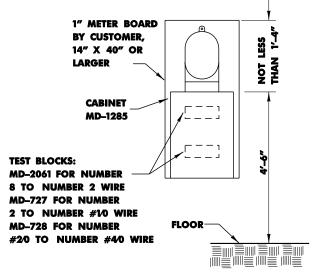
SIX WIRE TOTALIZED METERING

CLASS 45 - RATING 11KVA 10 AND 19KVA 30 - ON BALANCED LOAD CLASS 125 - RATING 30KVA 10 AND 52KVA 30 - ON BALANCED LOAD

4.06.6

M690





Revised 06-29-01 By BED DESIGN ENTRY BY: BRANT DANGEL

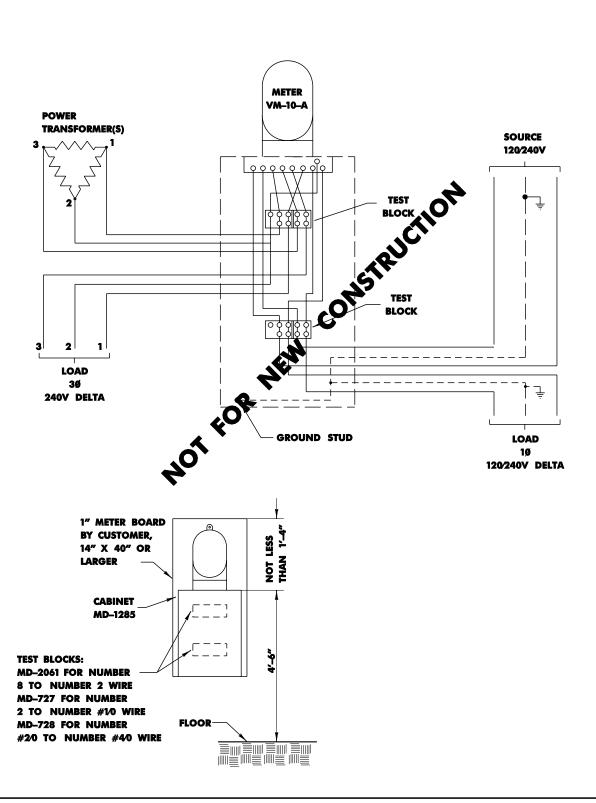
ISSUED DATE_____

SIX WIRE TOTALIZED METERING

CLASS 45 - RATING 11KVA 10 AND 19KVA 30 - ON BALANCED LOAD CLASS 125 - RATING 30KVA 10 AND 52KVA 30 - ON BALANCED LOAD

4.06.7

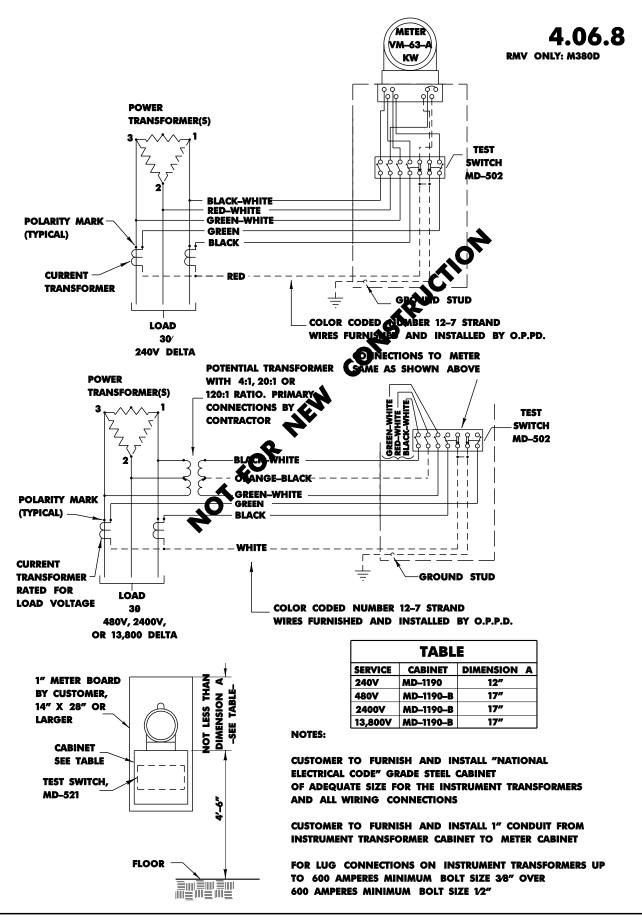
M691



Revised 06-29-01 By BED DESIGN ENTRY BY: BRANT DANGEL

ISSUED DATE____

3Ø THREE WIRE DELTA METERING FOR USE WITH INSTRUMENT TRANSFORMER



Revised 06-29-01 By BED DESIGN ENTRY BY: BRANT DANGEL

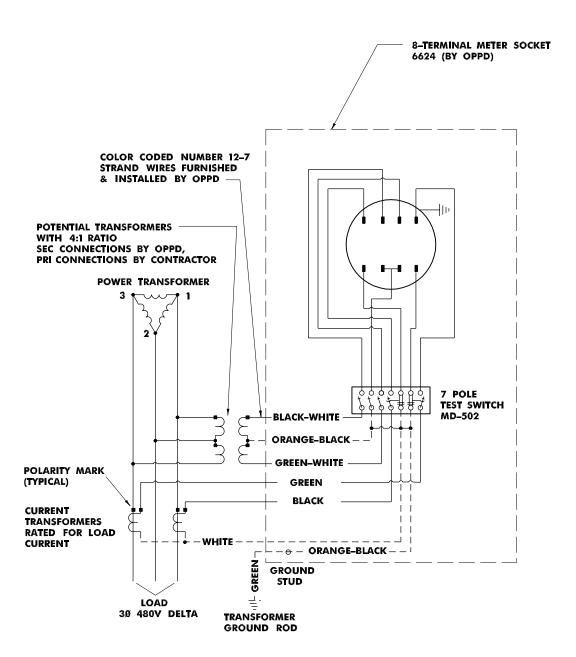
ISSUED DATE_____

3Ø THREE WIRE DELTA METERING

240V 3W DELTA 480V 3W DELTA – FOR MAINTENANCE ONLY

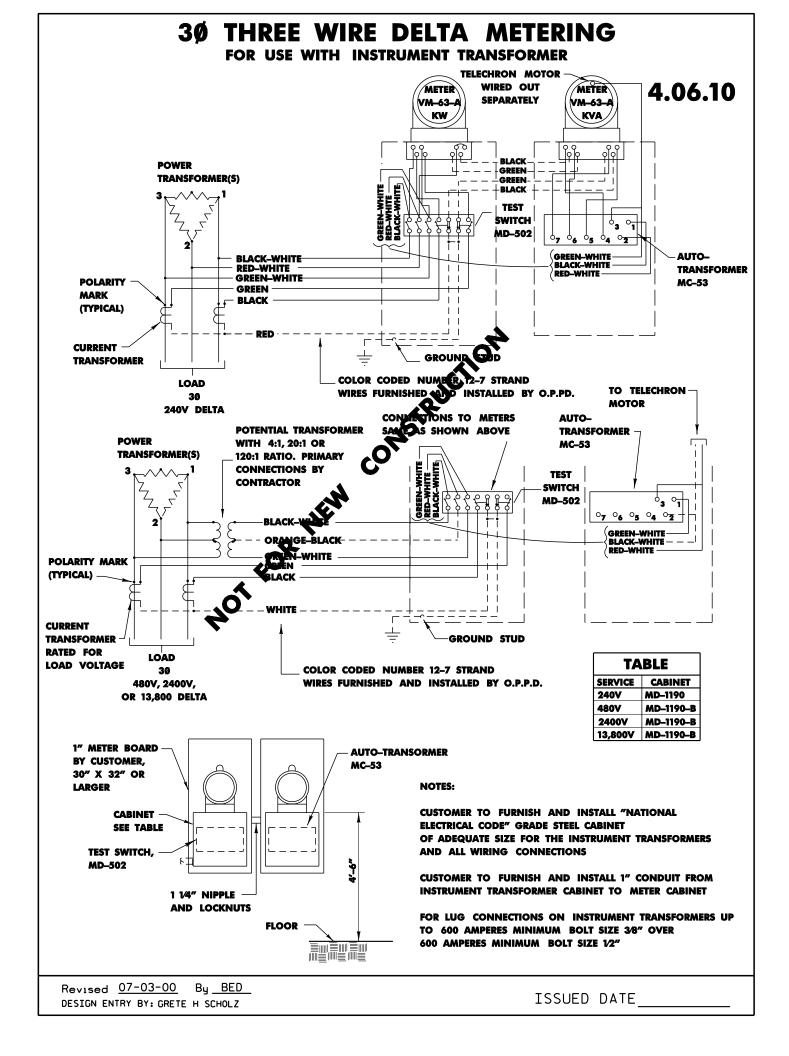
4.06.9

M371D M381D M383D



REFER TO DWG: 8.06

Revised 03-22-13 By AMJ DESIGN ENTRY BY: BRANT DANGEL

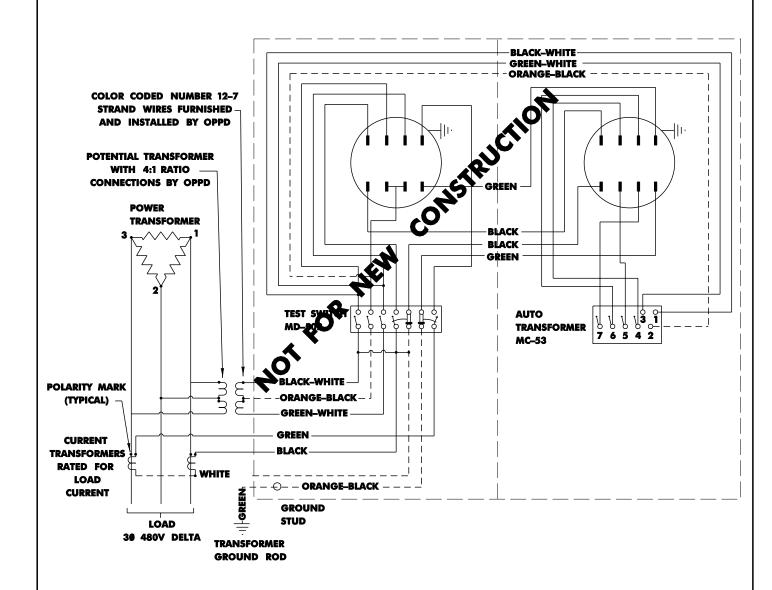


3Ø THREE WIRE DELTA METERING

KW AND KVA

4.06.11

M383D



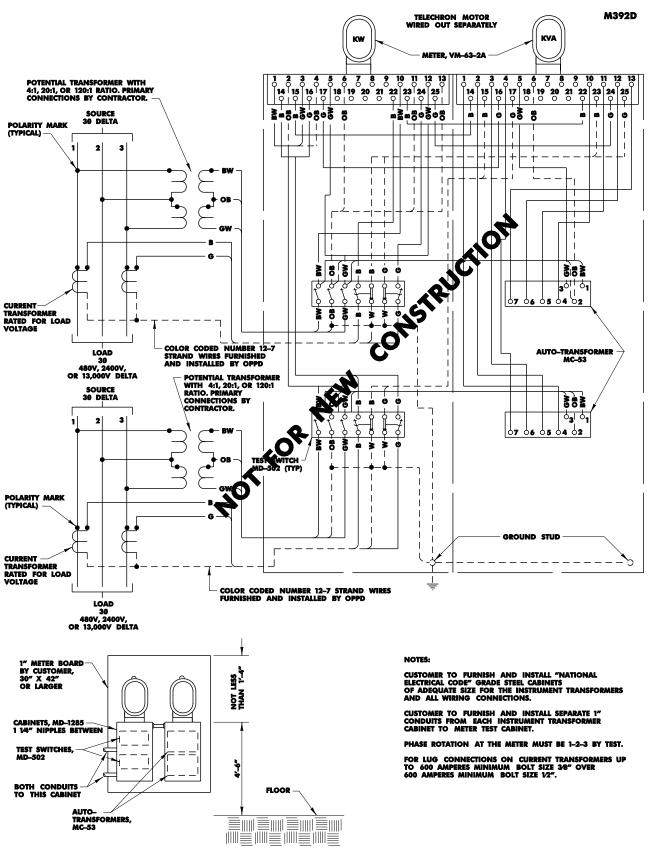
REFER TO DWG: 8.06

Revised 06-29-01 By BED DESIGN ENTRY BY: BRANT DANGEL

TWO CIRCUIT TOTALIZED METERING

FOR USE WITH INSTRUMENT TRANSFORMERS KW AND KVA - THREE PHASE THREE WIRE DELTA

4.06.12



Revised 06-29-01 By BED DESIGN ENTRY BY: GRETE H. SCHOLZ

ISSUED DATE_____

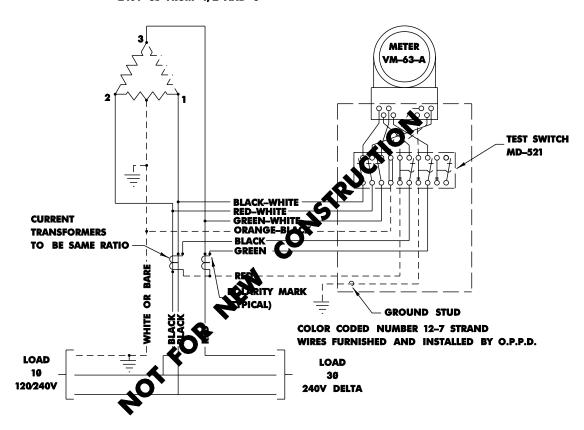
FOUR WIRE DELTA METERING

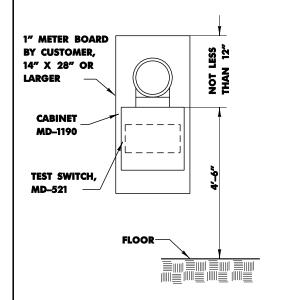
FOR USE WITH CURRENT TRANSFORMERS

4.06.13

RMV ONLY: M520D

FOUR WIRE DELTA COMBINED BANK TRANSFORMERS 120/240V FROM 1 AND 2 240V 30 FROM 1,2 AND 3





NOTES:

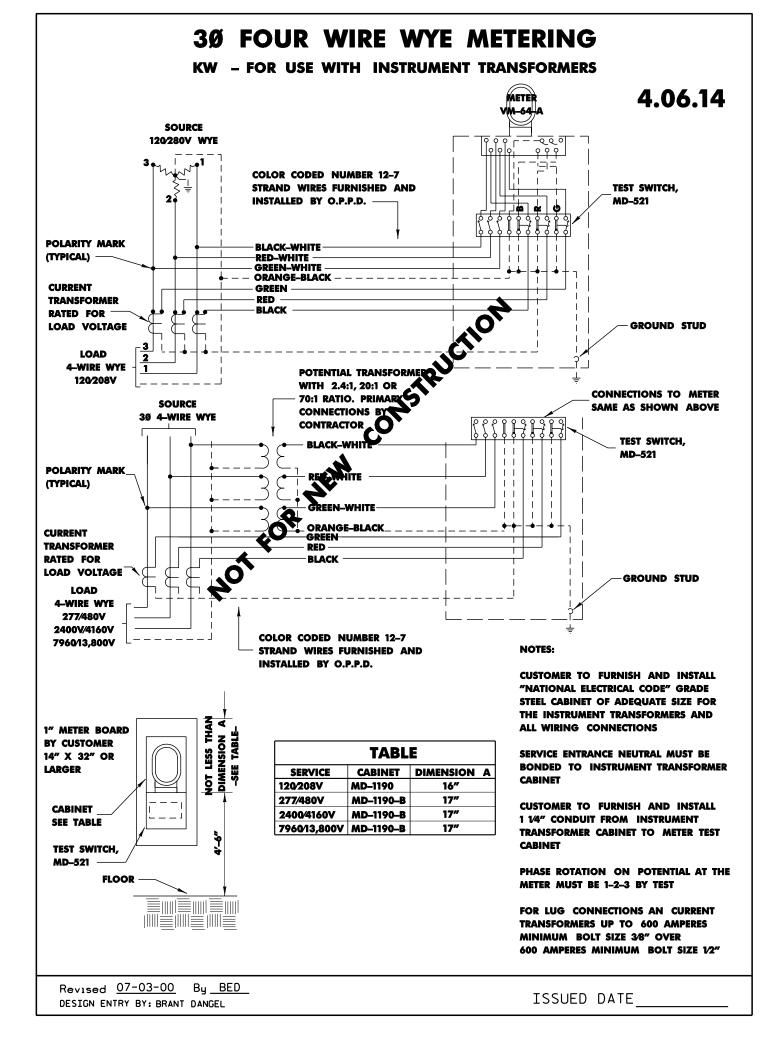
CUSTOMER TO FURNISH AND INSTALL "NATIONAL ELECTRICAL CODE" GRADE STEEL CABINET OF ADEQUATE SIZE FOR THE CURRENT TRANSFORMERS AND ALL WIRING CONNECTIONS

SERVICE ENTRANCE NEUTRAL MUST BE BONDED TO CURRENT TRANSFORMER CABINET

CUSTOMER TO FURNISH AND INSTALL 1" CONDUIT FROM CURRENT TRANSFORMER CABINET TO METER TEST CABINET

FOR LUG CONNECTIONS AN CURRENT TRANSFORMERS UP TO 600 AMPERES MINIMUM BOLT SIZE 3/8" OVER 600 AMPERES MINIMUM BOLT SIZE 1/2"

Revised 06-26-08 By JML DESIGN ENTRY BY: BRANT DANGEL

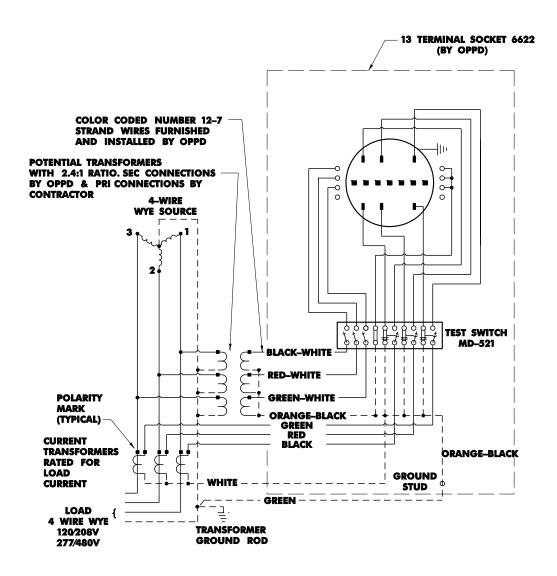


3Ø FOUR WIRE WYE METERING

KW

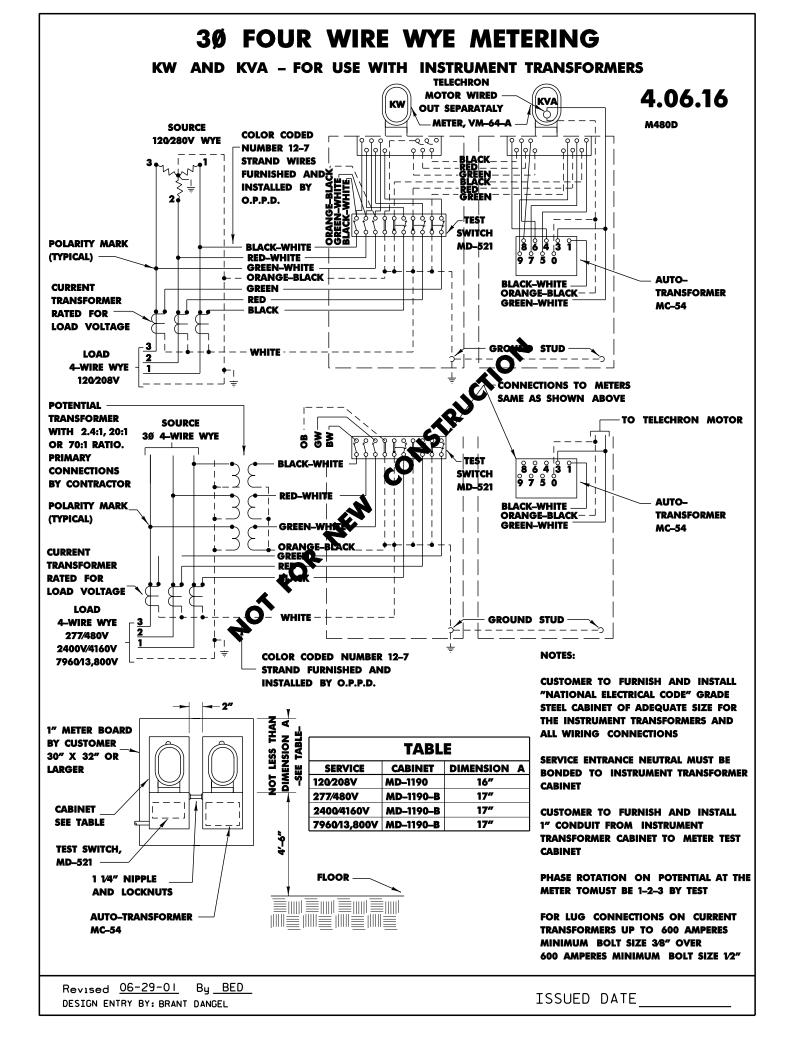
4.06.15

M471D M472D M483D



REFER TO DWG: 8.06

Revised 09-15-08 By SAH DESIGN ENTRY BY: BRANT DANGEL

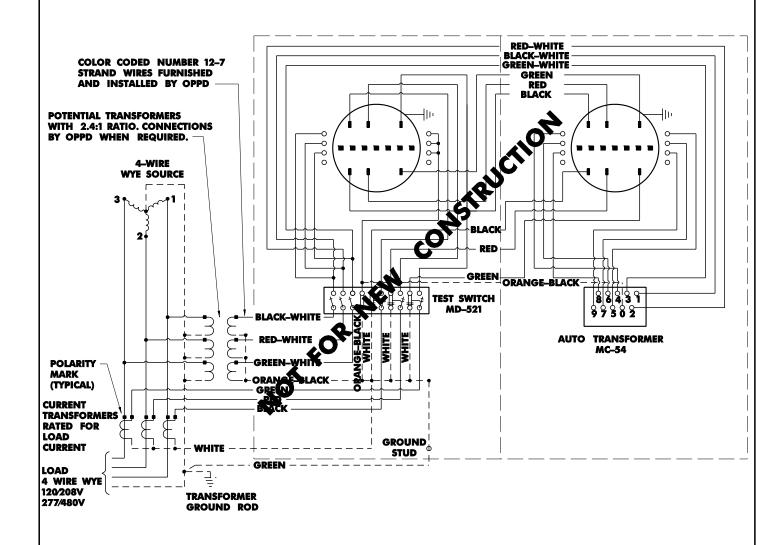


3Ø FOUR WIRE WYE METERING

KW AND KVA

4.06.17

M481D



REFER TO DWG: 8.06

Revised 06-29-01 By BED DESIGN ENTRY BY: BRANT DANGEL

TWO CIRCUIT TOTALIZED METERING FOR USE WITH INSTRUMENT TRANSFORMERS KW AND KVA - THREE PHASE FOUR WIRE WYE POTENTIAL TRANSFORMER WITH 4:1, 20:1, OR 120:1 RATIO. PRIMARY CONNECTIONS BY CONTRACTOR. TELECHRON MOTOR WIRED OUT SEPARATELY 4.06.18 COLOR CODED NUMBER 12-7 STRAND WIRES FURNISHED AND INSTALLED BY OPPD KVA KW POLARITY MARK (TYPICAL) — M492D SOURCE 36 4 WIRE WYE METER, VM-64-2A 5 6 7 8 9 10 11 12 13 18 19 20 21 22 23 24 25 0 0 0 0 0 0 0 0 1 2 3 4 5 6 6 6 14 15 16 17 9 1 9 1 9 1 16 17 20 21 22 23 24 25 15 18 — 9 — 19 14 808082828080808 9 8 CURRENT TRANSFORMER RATED FOR LOAD VOLTAGE 8 3 8 8 8 LOAD 36 4 WIRE WYE 277/480V, 2400/4160V, 7960/13,800V 8 6 4 3 1 POTENTIAL TRANSFOR SOURCE 30 4 WIRE WYE AUTO-TRANSFORMER 8 888 POLARITY MARK (TYPICAL) 9 7 5 0 TEST SWITCH MD-521 (TYP) GROUND STUD CURRENT TRANSFORMER RATED FOR LOAD VOLTAGE COLOR CODED NUMBER 12-7 STRAND WIRES FURNISHED AND INSTALLED BY OPPD 1" METER BOARD BY CUSTOMER, NOTES: LESS 74 FOR LUG CONNECTIONS ON CURRENT TRANSFORMERS UP TO 600 AMPERES MINIMUM BOLT SIZE 38" OVER 600 AMPERES MINIMUM BOLT SIZE 12". 30" X 42" OR LARGER CUSTOMER TO FURNISH AND INSTALL "NATIONAL ELECTRICAL CODE" GRADE STEEL CABINETS OF ADEQUATE SIZE FOR THE INSTRUMENT TRANSFORMERS AND ALL WIRING CONNECTIONS. CABINETS, MD-1285 — 1 1/4" NIPPLES BETWEEN CUSTOMER TO FURNISH AND INSTALL SEPARATE 1 1/4" CONDUITS FROM EACH INSTRUMENT TRANSFORMER CABINET TO METER TEST CABINET. TEST SWITCHES, MD-521 PHASE ROTATION AT THE METER MUST BE 1-2-3 BY TEST. BOTH CONDUITS TO THIS CABINET FLOOR AUTO-TRANSFORMERS, MC-54 Revised <u>06-29-01</u> By BED

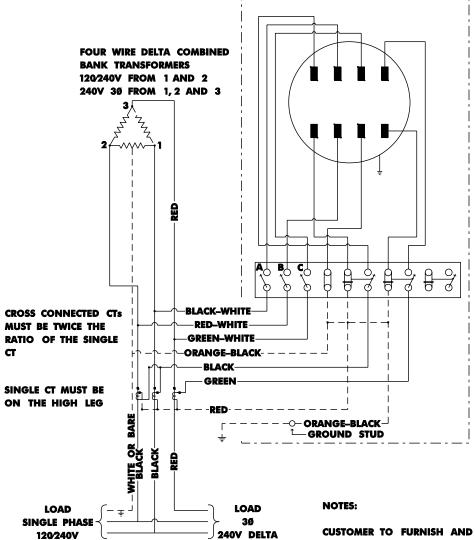
DESIGN ENTRY BY: GRETE H SCHOLZ

FOUR WIRE DELTA METERING

FOR USE WITH CURRENT TRANSFORMERS

4.06.19

RMV ONLY: M520D

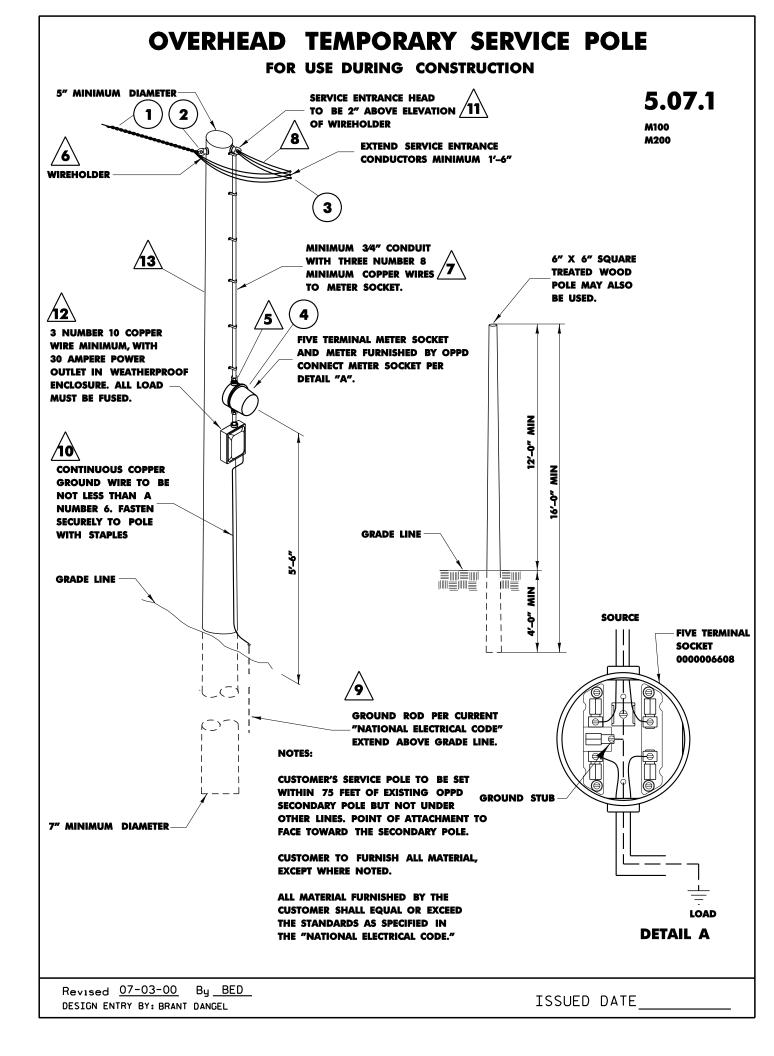


CUSTOMER TO FURNISH AND INSTALL "NATIONAL ELECTRICAL CODE" GRADE STEEL CABINET OF ADEQUATE SIZE FOR THE CURRENT TRANSFORMERS AND ALL WIRING CONNECTIONS

SERVICE ENTRANCE NEUTRAL MUST BE BONDED TO CURRENT TRANSFORMER CABINET CUSTOMER TO FURNISH AND INSTALL 1" CONDUIT FROM CT CABINET TO METER TEST CABINET

FOR LUG CONNECTIONS ON CURRENT TRANSFORMERS UP TO 600 AMPERES MINIMUM BOLT SIZE 3/8"
OVER 600 AMPERES MINIMUM BOLT SIZE 1/2"

Revised _____ By ____ DESIGN ENTRY BY: JOE LEE

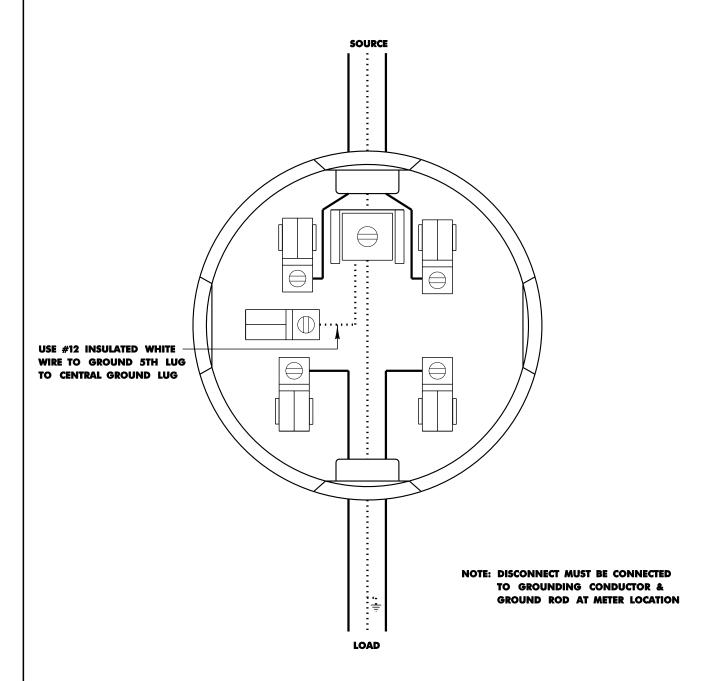


OVERHEAD TEMP. POLE SOCKET

120/208V 10 3W OR 120/240V 10 3W

5.07.2

M104



SOCKET LUGS CAN ACCEPT UP TO #2 WIRE

LEVER BY-PASS NOT REQUIRED FOR TEMP SOCKETS

Revised 07-03-00 By BED DESIGN ENTRY BY: GRETE H. SCHOLZ

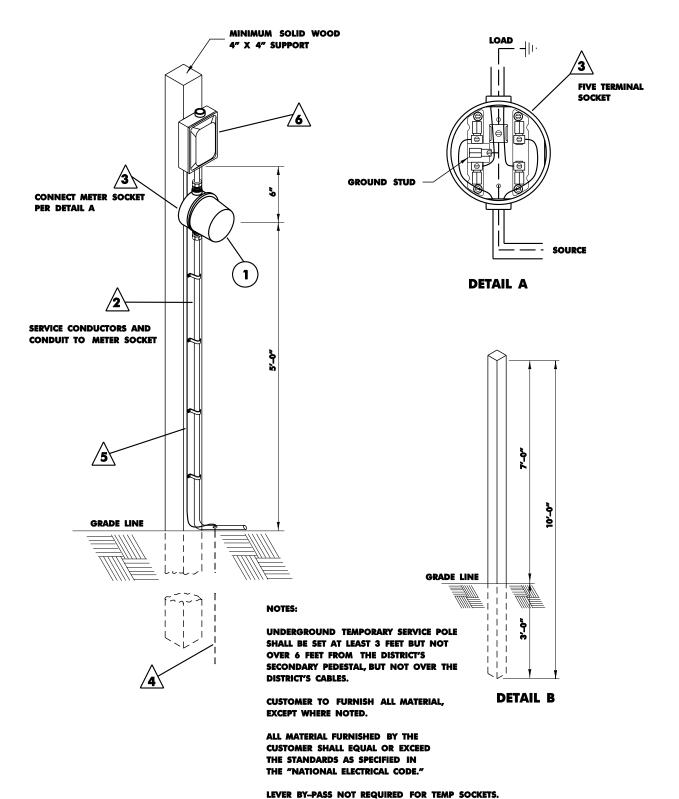
ISSUED DATE____

UNDERGROUND TEMPORARY SERVICE POST

FOR USE DURING CONSTRUCTION

5.55

M101 M201



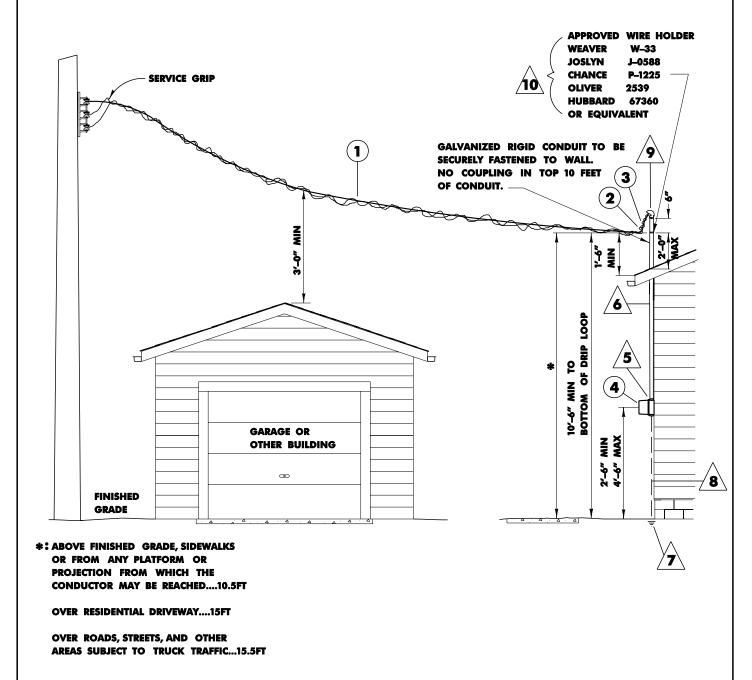
Revised 07-03-00 By BED DESIGN ENTRY BY: BRANT DANGEL

RESIDENTIAL OVERHEAD SERVICE

EXTERIOR SERVICE MAST

6.08.1

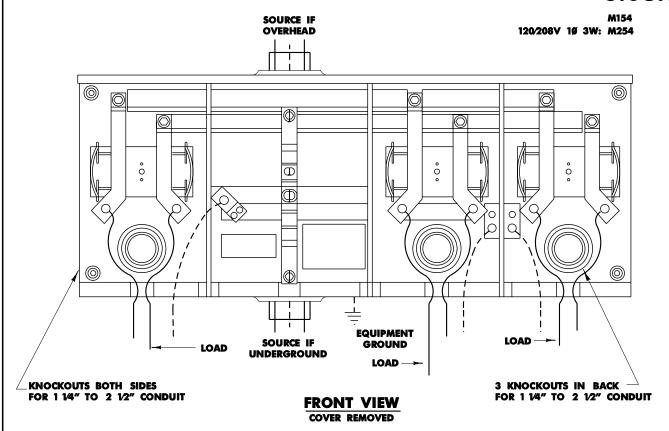
M118

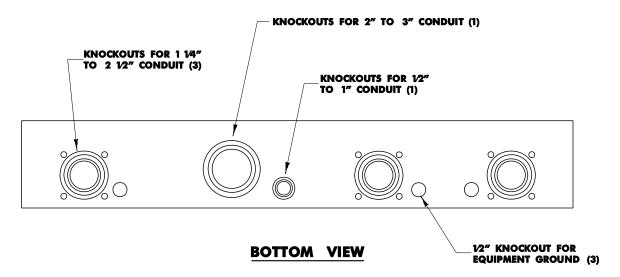


Revised 05-31-07 By CCN
DESIGN ENTRY BY: BRANT DANGEL

SURFACE TYPE METER SOCKET

120/240 VOLT 3 WIRE OVERHEAD /UNDERGROUND SERVICE ONLY 200 AMPERES PER POSITION 6.08.3





NOTES:

SOURCE TERMINALS FOR MAXIMUM 600 KCMIL CONDUCTORS. LOAD TERMINALS FOR MAXIMUM 350 KCMIL CONDUCTORS.

METER SOCKET ALSO AVAILABLE WITH FIFTH TERMINAL FOR THREE WIRE WYE SERVICE.

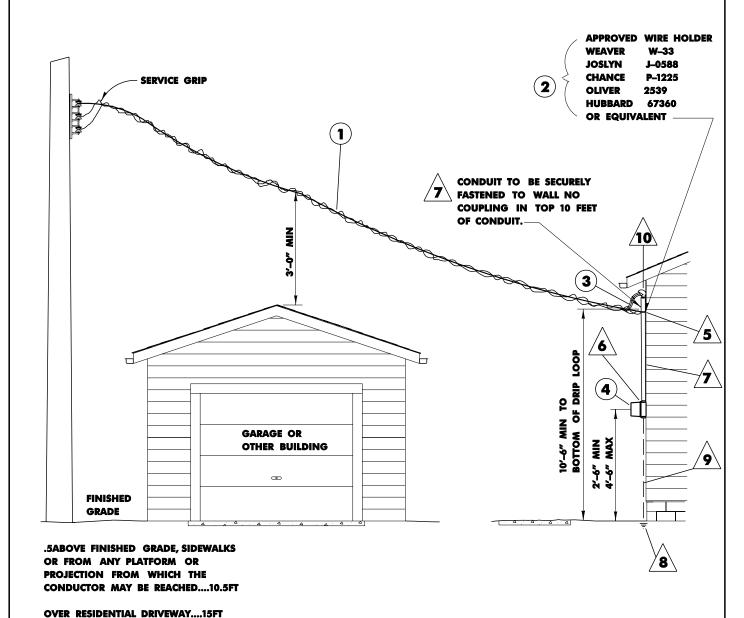
Revised 10-15-08 By SAH DESIGN ENTRY BY: ROBERT B ADAMS

RESIDENTIAL OVERHEAD SERVICE

SERVICE RISER CONDUIT ON EXTERIOR WALL

6.09

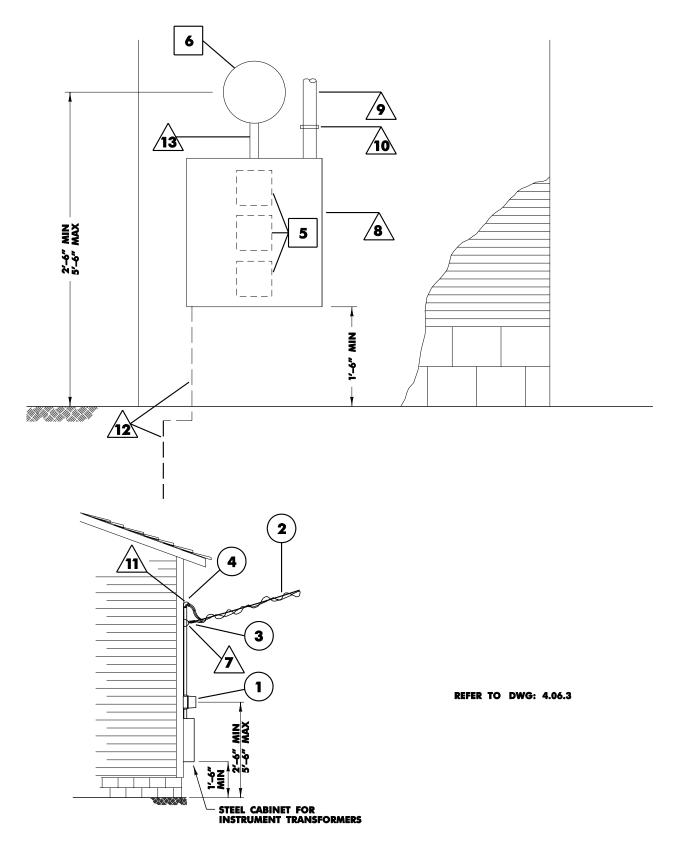
M118



Revised 05-31-07 By MCH DESIGN ENTRY BY: BRANT DANGEL

OVER ROADS, STREETS, AND OTHER AREAS SUBJECT TO TRUCK TRAFFIC....15.5FT.

INSTRUMENT TRANSFORMER METERING RESIDENTIAL & GENERAL SERVICE OVERHEAD 6.10

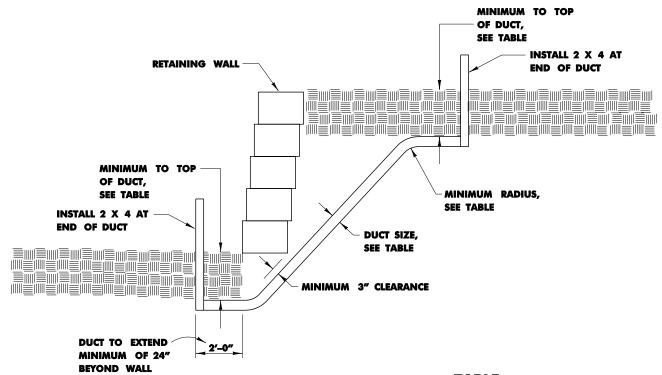


Revised 05-24-07 By MCH
DESIGN ENTRY BY: GRETE H SCHOLZ

ISSUED DATE____

CUSTOMER-INSTALLED CONDUIT UNDER RETAINING WALL

7.02.1

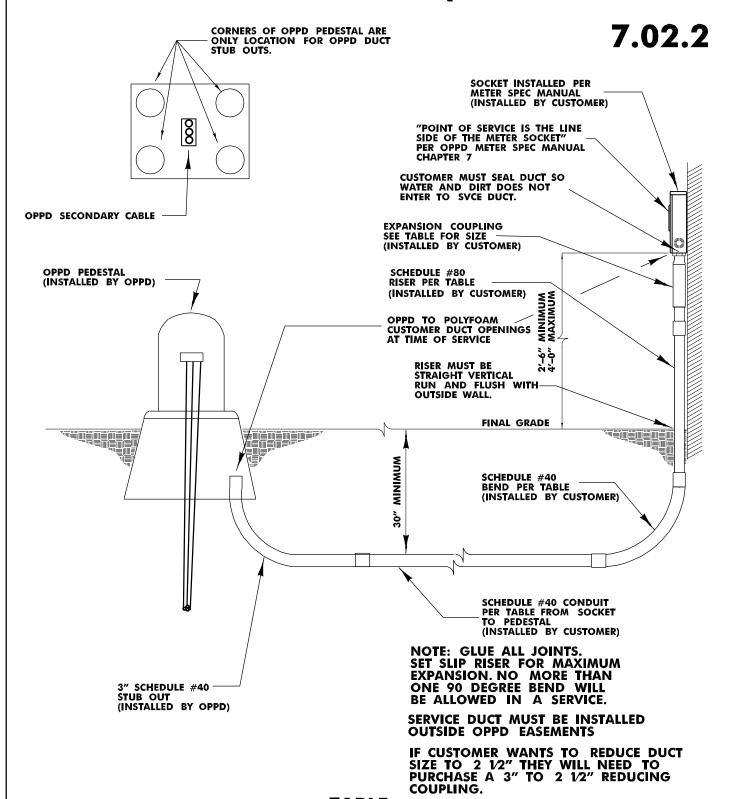


TABLE

CABLE	MINIMUM COVER OVER DUCT	MINIMUM RADIUS OF ALL BENDS	DUCT SIZE
600V OR LESS 200A HOUSE SERVICE 320A HOUSE SERVICE	24 INCHES 24 INCHES	24 INCHES 24 INCHES	2 1/2 INCHES 3 INCHES
OVER 600V	42 INCHES	36 INCHES	4 INCHES

Revised 07-03-00 By BED DESIGN ENTRY BY: BRANT DANGEL

DUCTED SERVICE REQUIREMENTS



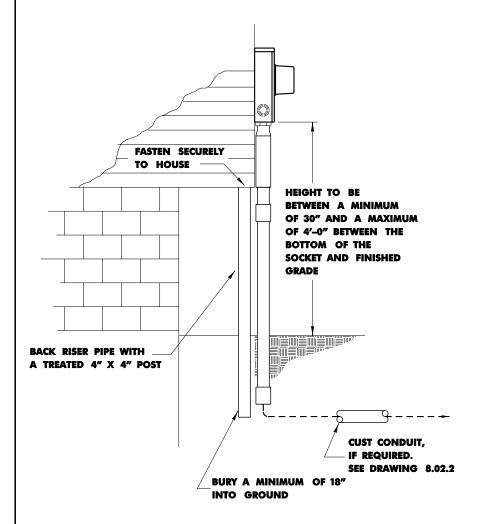
TABLE

SERVICE SIZE	MINIMUM COVER OVER DUCT	MINIMUM RADIUS OF ALL BENDS	MINIMUM DUCT SIZE
200A HOUSE SERVICE	30 INCHES	24 INCHES	2 1/2 INCHES
320A HOUSE SERVICE	30 INCHES	24 INCHES	3 INCHES

Revised 01-21-14 By AMJ
DESIGN ENTRY BY: ADOLFO MARTINEZ JR

UNDERGROUND RESIDENTIAL SOCKET ON A CANTILEVER

7.04.1



NOTES:

TERMINALS FOR MAXIMUM 350 KCMIL COPPER OR ALUMINUM CONDUCTOR.

METER SOCKET AVAILABLE WITH FIFTH TERMINAL, FOR THREE WIRE 120/208 SERVICE.

PATH FOR SERVICE CONDUCTORS MUST BE CLEAR OF OBSTRUCTION AND AT FINAL GRADE BEFORE INSTALLATION OF SERVICE.

AFTER ENTRANCE EQUIPMENT IS INSTALLED CALL ACCOUNT SERVICES AT 536-4155 OR OPPD'S AREA OFFICE FOR CABLE INSTALLATION.

150 FT MAXIMUM RUN.

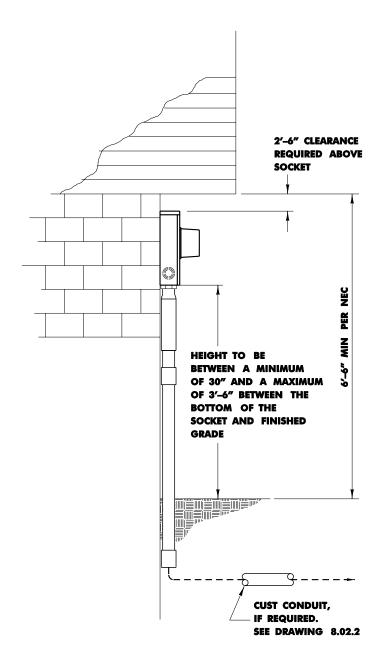
A GROUND ROD (NEC SUPPLEMENTAL GROUND) MUST BE INSTALLED NEAR THE METER SOCKET WITH AN EQUIPMENT GROUNDING CONDUCTOR RUNNING FROM THE GROUND ROD TO THE GROUNDING LUG PROVIDED IN THE METER SOCKET.

SOURCE AND LOAD CONDUIT CAN BE INTERCHANGED BY PRIOR APPROVAL ONLY. DETAILS ON CHANGES TO THIS DRAWING WILL BE GIVEN WHEN APPROVAL IS GRANTED.

Revised 09-15-08 By SAH DESIGN ENTRY BY: BRANT DANGEL

UNDERGROUND RESIDENTIAL SOCKET UNDER A CANTILEVER

7.04.2



NOTES:

TERMINALS FOR MAXIMUM 350 KCMIL COPPER OR ALUMINUM CONDUCTOR.

METER SOCKET AVAILABLE WITH FIFTH TERMINAL, FOR THREE WIRE 120/208 SERVICE.

PATH FOR SERVICE CONDUCTORS MUST BE CLEAR OF OBSTRUCTION AND AT FINAL GRADE BEFORE INSTALLATION OF SERVICE.

AFTER ENTRANCE EQUIPMENT IS INSTALLED CALL ACCOUNT SERVICES AT 536-4155 OR OPPD'S AREA OFFICE FOR CABLE INSTALLATION.

150 FT MAXIMUM RUN.

A GROUND ROD (NEC SUPPLEMENTAL GROUND) MUST BE INSTALLED NEAR THE METER SOCKET WITH AN EQUIPMENT GROUNDING CONDUCTOR RUNNING FROM THE GROUND ROD TO THE GROUNDING LUG PROVIDED IN THE METER SOCKET.

SOURCE AND LOAD CONDUIT CAN BE INTERCHANGED BY PRIOR APPROVAL ONLY. DETAILS ON CHANGES TO THIS DRAWING WILL BE GIVEN WHEN APPROVAL IS GRANTED.

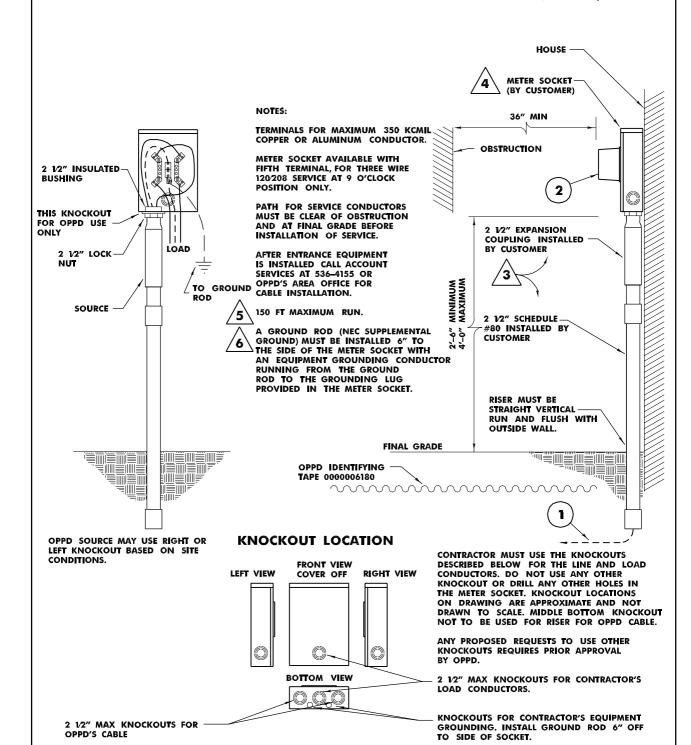
SURFACE TYPE METER SOCKET

120/240 VOLT 3 WIRE 200 AMPERE UNDERGROUND SERVICE "RESIDENTIAL SERVICE ONLY"

7.05.1

M118, M118D 120/208V 1# 3W: M218, M218D

ISSUED DATE



Revised 12-17-10

DESIGN ENTRY BY: ROBERT B ADAMS

B₄ JML

SURFACE TYPE METER SOCKET 120/240 VOLT 3 WIRE 320 AMPERE UNDERGROUND SERVICE "RESIDENTIAL SERVICE ONLY" 7.05.2 M135 HOUSE METER SOCKET (BY CUSTOMER) NOTES: 36" MIN **TERMINALS FOR MAXIMUM** 500 KCMIL OR PARALLEL 350 KCMIL COPPER OR ALUMINUM **OBSTRUCTION** CONDUCTOR. PATH FOR SERVICE CONDUCTORS MUST BE CLEAR OF OBSTRUCTIONS 2 AND AT FINAL GRADE BEFORE INSTALLATION OF SERVICE. AFTER ENTRANCE EQUIPMENT 3" INSULATED IS INSTALLED CALL ACCOUNT BUSHING SERVICES AT 536-4155 OR OPPD'S AREA OFFICE FOR CABLE INSTALLATION. THIS KNOCKOUT FOR OPPD USE 3" EXPANSION 150 FT MAXIMUM RUN. ONLY COUPLING INSTALLED **′6**` A GROUND ROD (NEC SUPPLEMENTAL BY CUSTOMER LOAD 3" LOCK GROUND) MUST BE INSTALLED NEAR NUT THE METER SOCKET WITH AN **EQUIPMENT GROUNDING CONDUCTOR** MINIMUM MAXIMUM TO GROUND RUNNING FROM THE GROUND ROD TO THE GROUNDING LUG ROD PROVIDED IN THE METER SOCKET. SOURCE -**′**5` 3" SCHEDULE #80 INSTALLED SOURCE AND LOAD CONDUIT BY CUSTOMER CANNOT BE INTERCHANGED. FOR HOMES CONVERTING FROM OVERHEAD TO UNDERGROUND SERVICE CALL ESD AT AREA OFFICE PRIOR TO INSTALLATION FOR INSTRUCTIONS ON **DUCT INSTALLATION AND ASSOCIATED** FFFS RISER MUST BE STRAIGHT VERTICAL RUN AND FLUSH WITH OUTSIDE WALL. FINAL GRADE OPPD IDENTIFYING TAPE 0000006180 KNOCKOUT LOCATION FRONT VIEW COVER OFF LEFT VIEW RIGHT VIEW CONTRACTOR MUST USE THE KNOCKOUTS DESCRIBED BELOW FOR THE LINE AND LOAD CONDUCTORS. DO NOT USE ANY OTHER KNOCKOUT OR DRILL ANY OTHER HOLES IN THE METER SOCKET. KNOCKOUT LOCATIONS ON DRAWING ARE APPROXIMATE AND NOT DRAWN TO SCALE. 3" MAX KNOCKOUTS FOR CONTRACTOR'S

BOTTOM VIEW

Bu JML Revised 09-09-09 DESIGN ENTRY BY: ROBERT B ADAMS

3" MAX KNOCKOUTS FOR -

OPPD'S CABLE

ISSUED DATE

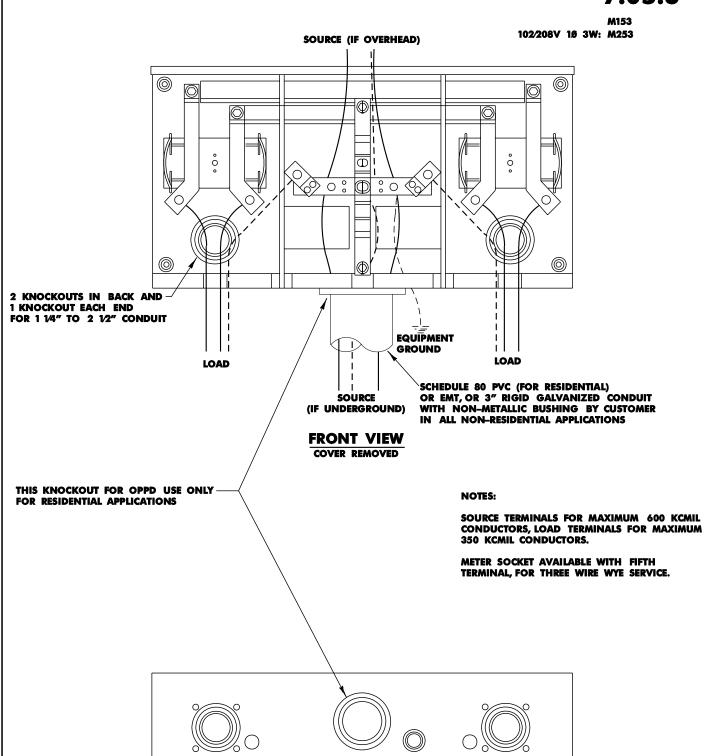
KNOCKOUTS FOR CONTRACTOR'S EQUIPMENT

LOAD CONDUCTORS.

GROUNDING.



120/240 VOLT 3 WIRE UNDERGROUND /OVERHEAD SERVICE
200 AMPERES PER POSITION 7.05.3



BOTTOM VIEW

1 KNOCKOUTS FOR 2" TO 3" CONDUIT
2 KNOCKOUTS FOR 1 1/4" TO 2 1/2" CONDUIT
1 KNOCKOUTS FOR 1/2" TO 1" CONDUIT
2 KNOCKOUTS FOR 1/2" CONDUIT

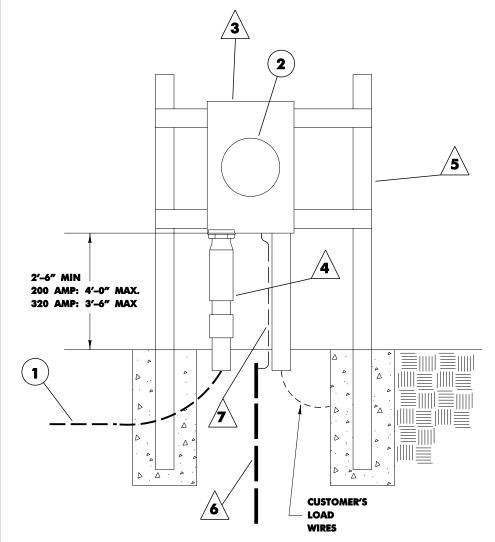
1 KNOCKOUT FOR 1/4" EQUIPMENT GROUND

Revised 06-27-07 By JML DESIGN ENTRY BY: ROBERT B ADAMS

CUSTOMER'S METER SUPPORT RESIDENTIAL, UNDERGROUND

7.06

M121 M121D 120/208V 1Ø 3W: M221 M221D



SEE DWG: 7.05.1 FOR ACCEPTABLE CONDUIT KNOCKOUT LOCATIONS IN SOCKET.

NOTES:

TERMINALS FOR MAXIMUM 250 KCMIL COPPER OR ALUMINUM CONDUCTOR.

METER SOCKET AVAILABLE WITH FIFTH TERMINAL, FOR THREE WIRE 120/208 SERVICE.

PATH FOR SERVICE CONDUCTORS MUST BE CLEAR OF OBSTRUCTION AND AT FINAL GRADE BEFORE INSTALLATION OF SERVICE.

AFTER ENTRANCE EQUIPMENT IS INSTALLED CALL ACCOUNT SERVICES AT 536-4155 OR OPPD'S AREA OFFICE FOR CABLE INSTALLATION.

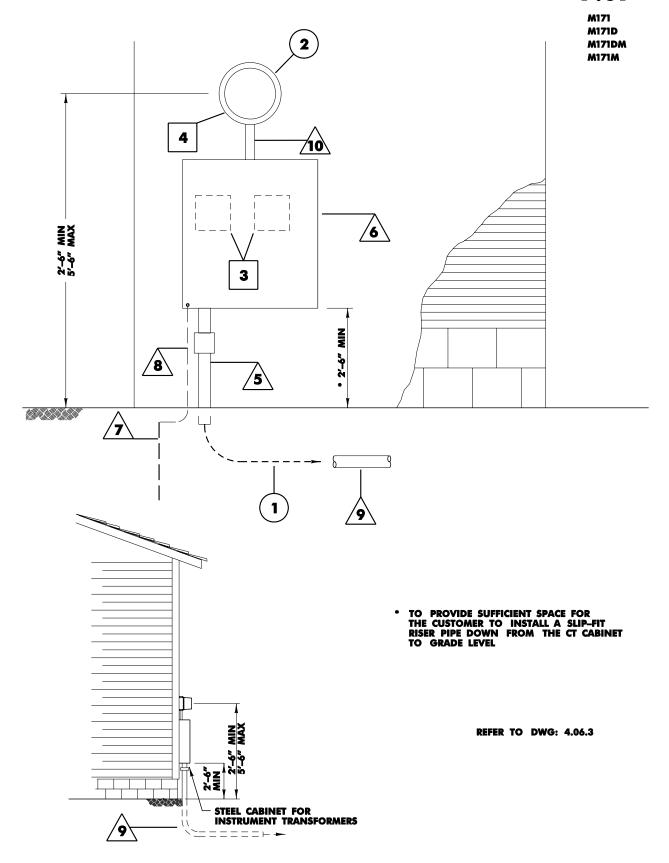
150 FT MAXIMUM RUN.

A GROUND ROD (NEC SUPPLEMENTAL GROUND) MUST BE INSTALLED NEAR THE METER SOCKET WITH AN EQUIPMENT GROUNDING CONDUCTOR RUNNING FROM THE GROUND ROD TO THE GROUNDING LUG PROVIDED IN THE METER SOCKET.

SOURCE AND LOAD CONDUIT CAN BE INTERCHANGED BY PRIOR APPROVAL ONLY. DETAILS ON CHANGES TO THIS DRAWING WILL BE GIVEN WHEN APPROVAL IS GRANTED.

INSTRUMENT TRANSFORMER METERING RESIDENTIAL, UNDERGROUND

7.07

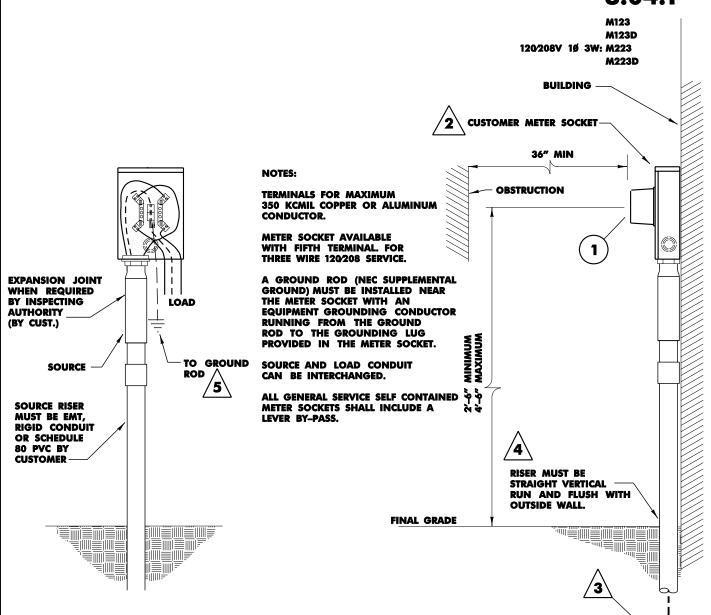


Revised 07-03-00 By BED DESIGN ENTRY BY: GRETE H SCHOLZ

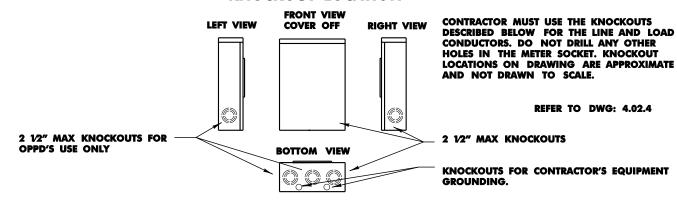
SURFACE TYPE METER SOCKET

120/240 VOLT 3 WIRE 200 AMPERE UNDERGROUND SERVICE "GENERAL SERVICE ONLY"

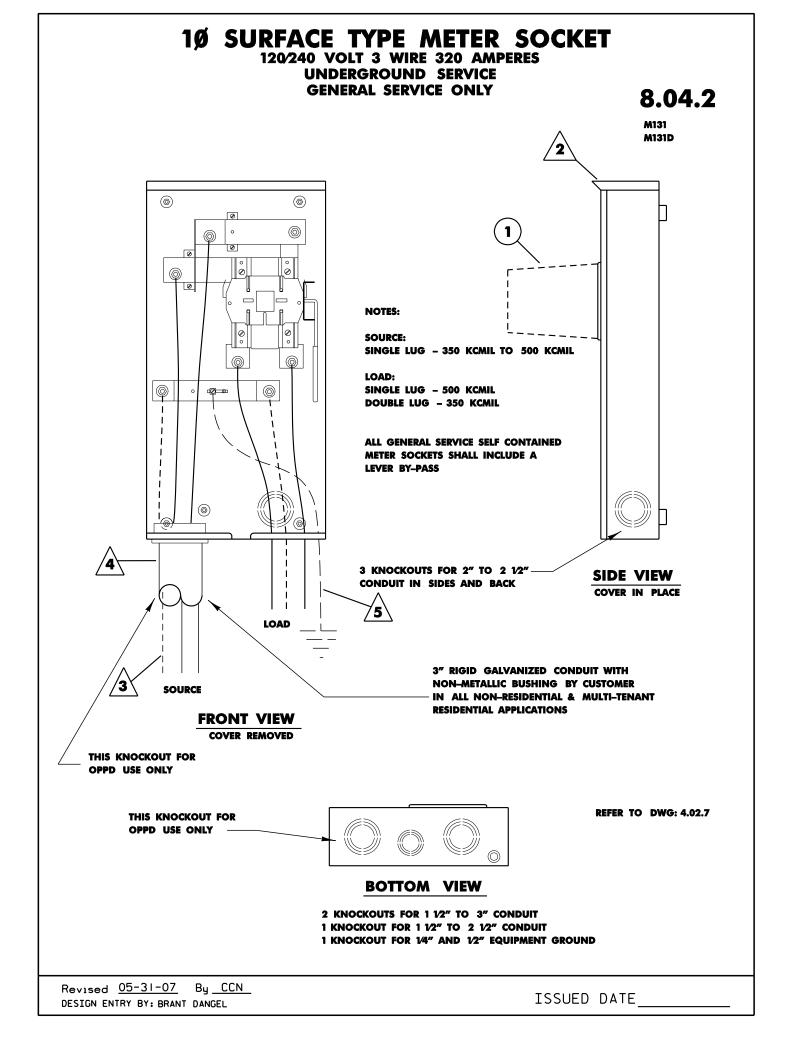
8.04.1



KNOCKOUT LOCATION

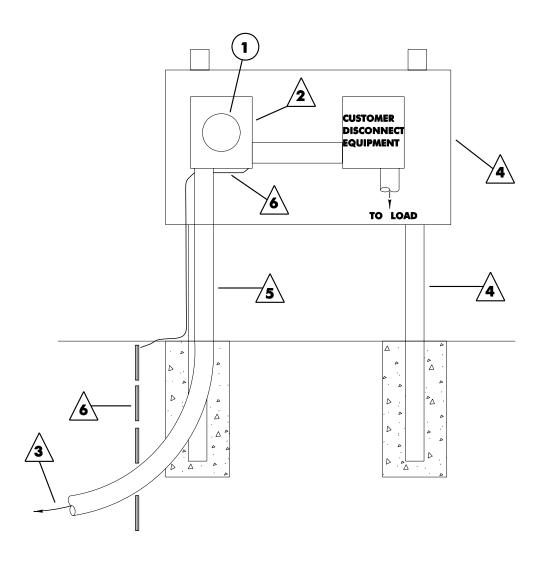


Revised 02-09-06 By JML DESIGN ENTRY BY: ROBERT B ADAMS



CUSTOMER'S METER SUPPORT GENERAL SERVICE, UNDERGROUND

8.05

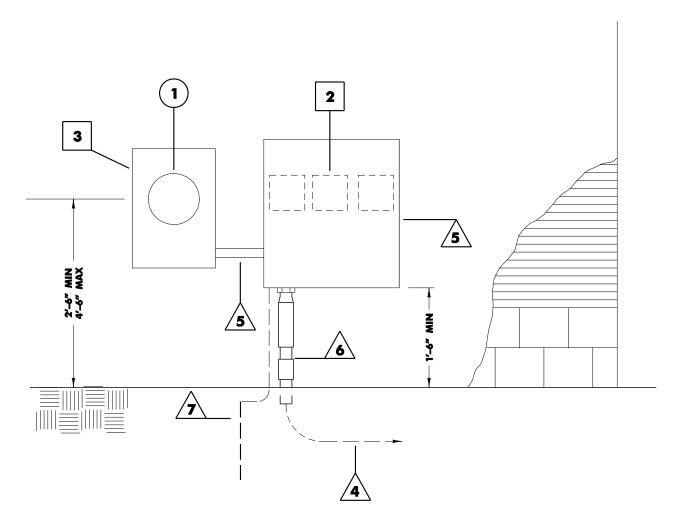


Revised 07-03-00 By BED DESIGN ENTRY BY: GRETE H SCHOLZ

ISSUED DATE_____

INSTRUMENT TRANSFORMER METERING GENERAL SERVICE, UNDERGROUND

8.06



REFER TO DWG: 120/240V 10 3W: 4.06.3 277/480V 30 4W & 120/208V 30 4W: 4.06.17 4.06.17 480V 30 3W: 4.06.9 4.06.11

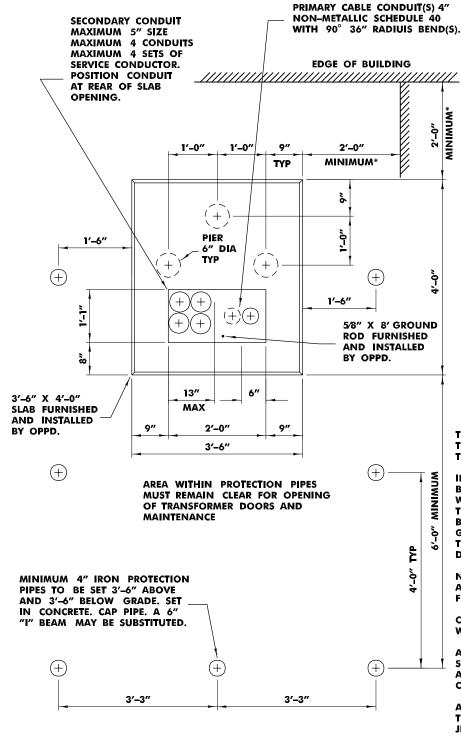
Revised 07-03-00 By BED DESIGN ENTRY BY: GRETE H SCHOLZ

ISSUED DATE_____

1Ø PADMOUNT TRANSFORMER SLAB DETAIL

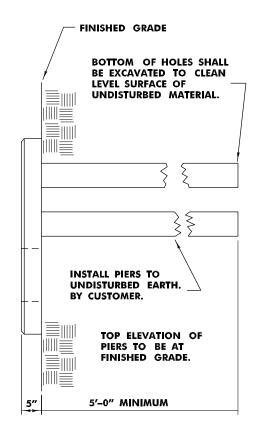
LOW PROFILE-TYPE, 25KVA TO 167KVA

8.08.1



* THIS DRAWING SHOWS THE MINIMUM CLEARANCE NEEDED FOR PHYSICAL REASONS; FACTORY MUTUAL INSURANCE COMPANY RECOMMENDS THE FOLLOWING SEPARATION DISTANCES BETWEEN THE SPECIFIED TYPE OF BUILDING AND TRANSFORMER FOR MINERAL-OIL FILLED TRANSFORMERS WITH UNDER 500 GALLONS OF OIL BUILDING OWNERS AND THEIR CONTRACTORS ARE RESPONSIBLE FOR LOCATING THE SLAB PER OPPD MINIMUM CLEARANCE GUIDELINES AND THEIR INSURANCE COMPANY RECOMMENDATIONS.

TWO HOURS FIRE RESISTANT CONSTRUCTION	NON-COMBUSTIBLE CONSTRUCTION	COMBUSTIBLE CONSTRUCTION
5′	15′	25′



THE TOP ONE (1) FOOT OF SUBGRADE BENEATH THE SLAB SHALL BE THOROUGHLY COMPACTED TO 90% OF MAXIMUM DENSITY PER ASTM D698.

IF THE TOP THREE (3) FEET OF SUBGRADE BENEATH THE SLAB IS SUSCEPTIBLE TO A HIGH WATER TABLE OR PERIODIC SATURATION, THE EXISTING SOIL SHALL BE EXCAVATED AND BACKFILLED WITH A CLEAN SAND OR GRAVEL AND THOROUGHLY COMPACTED TO 90% OF MAXIMUM DENSITY PER ASTM D2049 AND D1556.

NO WALLS TO BE BUILT AROUND OR CANOPIES ABOVE TRANSFORMER. PLACE TRANSFORMER AWAY FROM DOORS, WINDOWS, & BUILDING OPENINGS.*

CUSTOMER TO FURNISH ALL MATERIAL, EXCEPT WHERE NOTED.

ALL MATERIAL FURNISHED BY THE CUSTOMER SHALL EQUAL OR EXCEED THE STANDARDS AS SPECIFIED IN THE "NATIONAL ELECTRICAL CODE."

ALL CUSTOMER INSTALLED PRIMARY CONDUITS TO BE RODDED AND PROVEN CLEAR AND A JET LINE TO BE LEFT IN EACH CONDUIT.

ALL CONDUITS ENTERING SLAB TO BE VERTICAL AND AT A 90° ANGLE WITH TOP OF SLAB.

COORDINATE WITH OPPD TO INSPECT SITE PRIOR TO POURING CONCRETE. INSPECTION WILL INCLUDE LOCATION AND DEPTH OF HOLES FOR SUPPORT PIERS (IF REQUIRED), AND CONDUIT PLACEMENT. OPPD INSPECTION DOES NOT INCLUDE INSPECTING FOR INSURANCE RECOMMENDED BUILDING CLEARANCES.

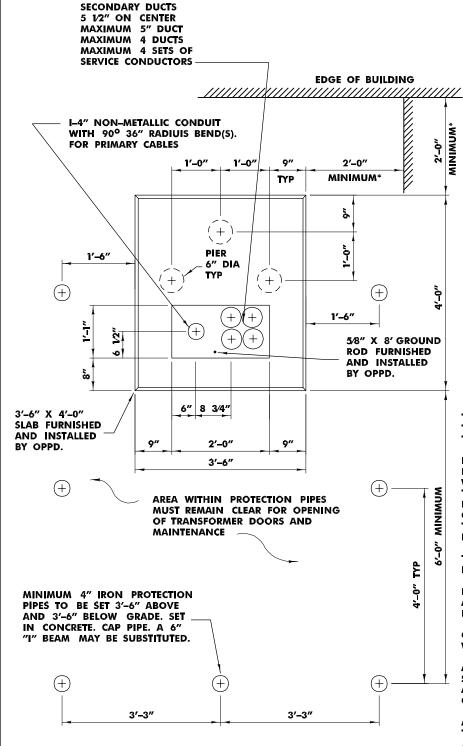
Revised 07-30-12 By AMJ
DESIGN ENTRY BY: ROBERT B ADAMS

ISSUED	DATE	

1Ø PADMOUNT TRANSFORMER SLAB DETAIL

CONVENTIONAL, 25KVA TO 167KVA

8.08.2



* THIS DRAWING SHOWS THE MINIMUM CLEARANCE NEEDED FOR PHYSICAL REASONS; FACTORY MUTUAL INSURANCE COMPANY RECOMMENDS THE FOLLOWING SEPARATION DISTANCES BETWEEN THE SPECIFIED TYPE OF BUILDING AND TRANSFORMER FOR MINERAL-OIL FILLED TRANSFORMERS WITH UNDER 500 GALLONS OF OIL BUILDING OWNERS AND THEIR CONTRACTORS ARE RESPONSIBLE FOR LOCATING THE SLAB PER OPPD MINIMUM CLEARANCE GUIDELINES AND THEIR INSURANCE COMPANY RECOMMENDATIONS.

TWO HOURS FIRE RESISTANT CONSTRUCTION	NON-COMBUSTIBLE CONSTRUCTION	COMBUSTIBLE CONSTRUCTION
5′	15′	25′

BOTTOM OF HOLES SHALL BE EXCAVATED TO CLEAN LEVEL SURFACE OF UNDISTURBED MATERIAL. **INSTALL PIERS TO** UNDISTURBED EARTH. BY CUSTOMER. TOP ELEVATION OF PIERS TO BE AT FINISHED GRADE. 重丽 4" 8" 5'-0" MINIMUM THE TOP ONE (1) FOOT OF SUBGRADE BENEATH

FINISHED GRADE

THE TOP ONE (1) FOOT OF SUBGRADE BENEATH THE SLAB SHALL BE THOROUGHLY COMPACTED TO 90% OF MAXIMUM DENSITY PER ASTM D698.

IF THE TOP THREE (3) FEET OF SUBGRADE BENEATH THE SLAB IS SUSCEPTIBLE TO A HIGH WATER TABLE OR PERIODIC SATURATION, THE EXISTING SOIL SHALL BE EXCAVATED AND BACKFILLED WITH A CLEAN SAND OR GRAVEL AND THOROUGHLY COMPACTED TO 90% OF MAXIMUM DENSITY PER ASTM D2049 AND D1556.

TOP OF SLAB MUST BE SMOOTH, FLAT AND LEVEL.

NO WALLS TO BE BUILT AROUND OR CANOPIES ABOVE TRANSFORMER. PLACE TRANSFORMER AWAY FROM DOORS, WINDOWS, & BUILDING OPENINGS.*

CUSTOMER TO FURNISH ALL MATERIAL, EXCEPT WHERE NOTED.

ALL MATERIAL FURNISHED BY THE CUSTOMER SHALL EQUAL OR EXCEED THE STANDARDS AS SPECIFIED IN THE "NATIONAL ELECTRICAL CODE."

ALL CUSTOMER INSTALLED PRIMARY CONDUITS TO BE RODDED AND PROVEN CLEAR AND A JET LINE TO BE LEFT IN EACH CONDUIT.

ALL CONDUITS ENTERING SLAB TO BE VERTICAL AND AT A 90° ANGLE WITH TOP OF SLAB.

COORDINATE WITH OPPD TO INSPECT SITE PRIOR TO POURING CONCRETE. INSPECTION WILL INCLUDE LOCATION AND DEPTH OF HOLES FOR SUPPORT PIERS (IF REQUIRED), AND CONDUIT PLACEMENT. OPPD INSPECTION DOES NOT INCLUDE INSPECTING FOR INSURANCE RECOMMENDED BUILDING CLEARANCES.

Revised 07-30-12 By AMJ DESIGN ENTRY BY: ROBERT B ADAMS

1Ø PADMOUNT TRANSFORMER SLAB DETAIL **CONVENTIONAL, 250KVA AND 333KVA** MAX. WEIGHT 3000 POUNDS 8.08.3 //////////EDGE OF BUILDING/////////////// MINIMUM* GRADE 1'-0" 1'-0" 4'-0" MINIMUM* 3'-8" **BOTTOM OF HOLES** SHALL BE EXCAVATED TO CLEAN LEVEL 5" 12" DIAMETER SURFACE OF PIER (TYP) UNDISTURBED MATERIAL. ONE LAYER D11 MIN. 6 #4 8" X 8" STEEL MESH. 3" CLEAR MESH **CUT HOLE FOR** COVER (TYP) OPENING. ALL SIDES 1′-0″ WIRE 4" NON-METALLIC 1/1 CONDUIT(\$) WITH 90° 36" RADIUS BEND(S), 1" 1'-0" DIA. ò #3 TIE \Box SEPARATION, REFER × @ 8" TO METER SPECIFICATIONS Ν 1′-0″ FOR QUANTITY REQUIRED Ξ زز: ا (ĺΚ 8-#4 X 2'-0" REBARS 2-EACH CORNER 545" 1 -1.1 \perp 111.// \perp **INSTALL PIERS TO** NI 11 UNDISTURBED EARTH 5/8" X 8' GROUND ROD FURNISHED AND 1'-0" INSTALLED BY OPPD MAX MAX 14-#4 X 5'-4" REBAR-1'-9" - 3" 2'-2" 3/4" CHAMFER 8" 5'-0"/ MIN 5'-8" ALL AROUND SECONDARY DUCTS ORGANIC AND/OR OTHER UNSUITABLE MATERIAL 5 1/2" ON CENTER SHALL BE REMOVED FROM SUBGRADE AND MAXIMUM 5" DUCT BACKFILL AREAS AND BACKFILLED WITH **MAXIMUM 4 DUCTS** ACCEPTABLE GRANULAR FILL, COMPACTED TO MAXIMUM 4 SETS OF 95 % OF MAXIMUM DENSITY AT OPTIMUM **SERVICE CONDUCTORS** MOISTURE CONTENT ASTM D1557 AND D2049. IF THE TOP THREE (3) FEET OF SUBGRADE POSITION AT RIGHT OF OPENING BENEATH THE SLAB IS SUSCEPTIBLE TO A MINIMUM 4" IRON PROTECTION AREA WITHIN PROTECTION PIPES HIGH WATER TABLE OR PERIODIC SATURATION, PIPES TO BE SET 3'-6" ABOVE AND 3'-6" BELOW GRADE. SET IN CONCRETE. CAP PIPE. A 6" MUST REMAIN CLEAR FOR OPENING & THE EXISTING SOIL SHALL BE EXCAVATED OF TRANSFORMER DOORS AND AND BACKFILLED WITH A CLEAN ACCEPTABLE MAINTENANCE. GRANULAR FILL AND THOROUGHLY COMPACTED "|" BEAM MAY BE SUBSTITUTED. TO 90% OF MAXIMUM DENSITY PER ASTM D2049 AND D1556. SLAB TO BE MADE OF CONCRETE WITH A MINIMUM 28 DAY STRENGTH 4'-0" 4'-0" OF 4,000 PSI AND 6 % AIR CONTENT TOP OF SLAB MUST BE SMOOTH, FLAT AND LEVEL. NO WALLS TO BE BUILT AROUND OR COORDINATE WITH OPPD TO INSPECT SITE PRIOR TO CANOPIES ABOVE TRANSFORMER. PLACE POURING CONCRETE. INSPECTION WILL INCLUDE LOCATION AND DEPTH OF HOLES FOR SUPPORT PIERS, AND CONDUIT TRANSFORMER AWAY FROM DOORS, PLACEMENT. OPPD INSPECTION DOES NOT INCLUDE INSPECTING WINDOWS, & BUILDING OPENINGS.* FOR INSURANCE RECOMMENDED BUILDING CLEARANCES. CUSTOMER TO FURNISH ALL MATERIAL, **EXCEPT WHERE NOTED** ALL MATERIAL FURNISHED BY THE CUSTOMER SHALL EQUAL OR EXCEED * THIS DRAWING SHOWS THE MINIMUM CLEARANCE NEEDED FOR PHYSICAL THE STANDARDS AS SPECIFIED IN THE REASONS; FACTORY MUTUAL INSURANCE COMPANY RECOMMENDS THE "NATIONAL ELECTRICAL CODE" FOLLOWING SEPARATION DISTANCES BETWEEN THE SPECIFIED TYPE OF BUILDING AND TRANSFORMER FOR MINERAL-OIL FILLED TRANSFORMERS WITH ALL CUSTOMER INSTALLED PRIMARY UNDER 500 GALLONS OF OIL BUILDING OWNERS AND THEIR CONTRACTORS CONDUITS TO BE RODDED AND PROVEN ARE RESPONSIBLE FOR LOCATING THE SLAB PER OPPD MINIMUM CLEARANCE CLEAR, AND A JET LINE TO BE LEFT IN GUIDELINES AND THEIR INSURANCE COMPANY RECOMMENDATIONS. **EACH CONDUIT** TWO HOURS FIRE RESISTANT NON-COMBUSTIBLE COMBUSTIBLE CONSTRUCTION CONSTRUCTION CONSTRUCTION ALL CONDUITS ENTERING SLAB TO BE VERTICAL AND AT A 90° ANGLE WITH 5 15' 25' TOP OF SLAB Revised <u>06-02-17</u> By AMJ

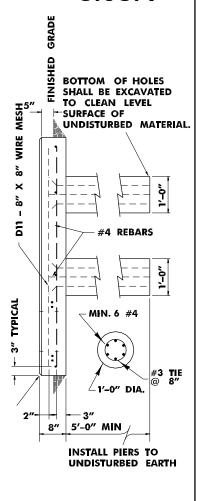
DESIGN ENTRY BY: ROBERT B ADAMS

3Ø PADMOUNT TRANSFORMER SLAB DETAIL

75 KVA TO 500 KVA 7000 POUNDS

EDGE OF BUILDING MINIMUM C_L PIERS CL PIERS 1'-6" 4'-0" MINIMUM* 1'-6" 3'-6" 12" DIAMETER PIER (TYP) 3" COVER ONE LAYER D11 (TYP) 8" X 8" STEEL MESH. **CUT HOLE FOR** CL PIERS OPENING. 4" NON-METALLIC CONDUIT(S) WITH 90° 36" RADIUS BEND(S), 1" SEPARATION, FOR PRIMARY CABLE, REFER TO METER SPECIFICATIONS FOR CL PIERS QUANTITY REQUIRED 1′-6″ \oplus TYPICAL ' 8- #4' x 2' REBARS 2- EACH CORNER 5/8" X 8' GROUND ROD FURNISHED AND 1'-0" 1′- 8″ MAX INSTALLED BY OPPD MAX 3'-2" 14-#4 X 6'-0" REBAR-1'-9" 6'-6" MINIMUM SECONDARY DUCTS 5 1/2" ON CENTER MAXIMUM 5" DUCT MAXIMUM 6 DUCTS MAXIMUM 6 CON-**DUCTORS PER PHASE** MINIMUM 4" IRON PROTECTION PIPES TO BE SET 3'-6" ABOVE **POSITION CONDUIT AT** AND 3'-6" BELOW GRADE. SET IN CONCRETE. CAP PIPE. A 6" RIGHT OF OPENING AREA WITHIN PROTECTION PIPES "I" BEAM MAY BE SUBSTITUTED. MUST BE CLEAR FOR OPENING OF TRANSFORMER DOORS AND MAINTENANCE. 4'-9" 4'-9"

8.08.4



ORGANIC AND/OR OTHER UNSUITABLE MATERIAL SHALL BE REMOVED FROM SUBGRADE AND BACKFILL AREAS AND BACKFILLED WITH ACCEPTABLE GRANULAR FILL, COMPACTED TO 95 % OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT ASTM D1557 AND D2049. IF THE TOP THREE (3) FEET OF SUBGRADE BENEATH THE SLAB IS SUSCEPTIBLE TO A HIGH WATER TABLE OR PERIODIC SATURATION, THE EXISTING SOIL SHALL BE EXCAVATED AND BACKFILLED WITH A CLEAN ACCEPTABLE GRANULAR FILL AND THOROUGHLY COMPACTED TO 90% OF MAXIMUM DENSITY PER ASTM D2049 AND D1556.

SLAB TO BE MADE OF CONCRETE
WITH A MINIMUM 28 DAY STRENGTH
OF 4,000 PSI AND 6 % AIR CONTENT

TOP OF SLAB MUST BE SMOOTH, FLAT AND LEVEL. NO WALLS TO BE BUILT AROUND OR CANOPIES ABOVE TRANSFORMER. PLACE TRANSFORMER AWAY FROM DOORS, WINDOWS, & BUILDING OPENINGS.*

CUSTOMER TO FURNISH ALL MATERIAL, EXCEPT WHERE NOTED

ALL MATERIAL FURNISHED BY THE CUSTOMER SHALL EQUAL OR EXCEED THE STANDARDS AS SPECIFIED IN THE "NATIONAL ELECTRICAL CODE"

ALL CUSTOMER INSTALLED PRIMARY CONDUITS TO BE RODDED AND PROVEN CLEAR, AND A JET LINE TO BE LEFT IN EACH CONDUIT

ALL CONDUITS ENTERING SLAB TO BE VERTICAL AND AT A 90° ANGLE WITH TOP OF SLAB

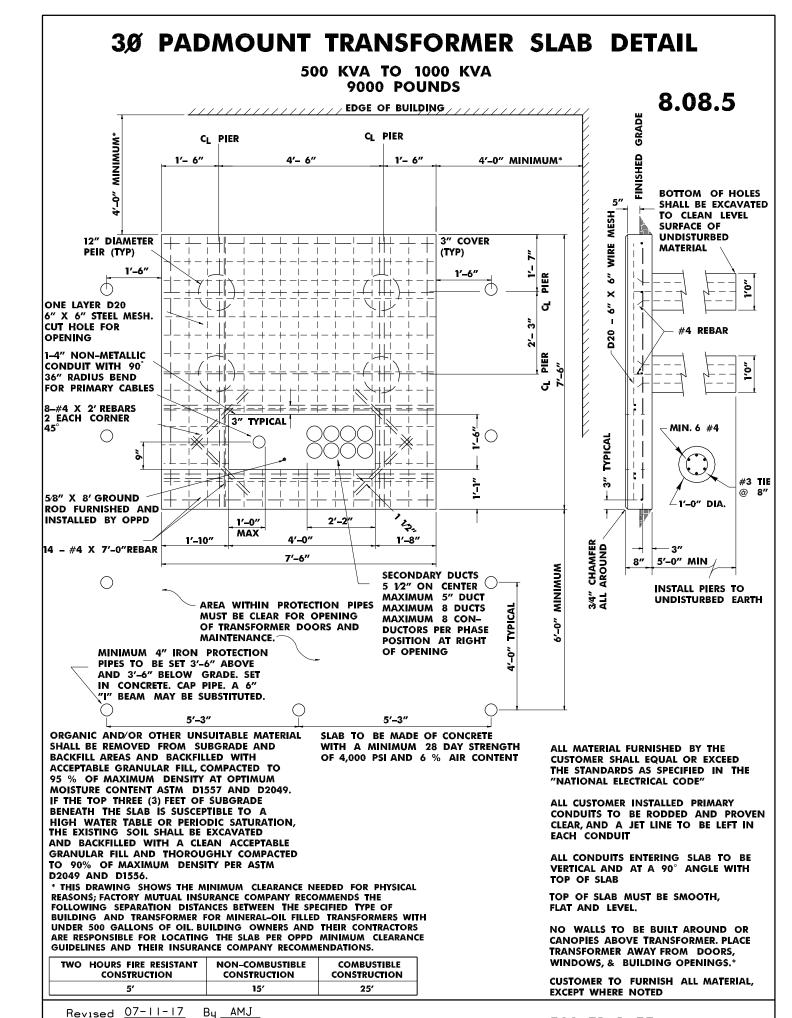
* THIS DRAWING SHOWS THE MINIMUM CLEARANCE NEEDED FOR PHYSICAL REASONS; FACTORY MUTUAL INSURANCE COMPANY RECOMMENDS THE FOLLOWING SEPARATION DISTANCES BETWEEN THE SPECIFIED TYPE OF BUILDING AND TRANSFORMER FOR MINERAL-OIL FILLED TRANSFORMERS WITH UNDER 500 GALLONS OF OIL. BUILDING OWNERS AND THEIR CONTRACTORS ARE RESPONSIBLE FOR LOCATING THE SLAB PER OPPD MINIMUM CLEARANCE GUIDELINES AND THEIR INSURANCE COMPANY RECOMMENDATIONS.

COORDINATE WITH OPPD TO INSPECT SITE PRIOR TO POURING CONCRETE. INSPECTION WILL INCLUDE LOCATION AND DEPTH OF HOLES FOR SUPPORT PIERS (IF REQUIRED), AND CONDUIT PLACEMENT. OPPD INSPECTION DOES NOT INCLUDE INSPECTING FOR INSURANCE RECOMMENDED BUILDING CLEARANCES.

TWO HOURS FIRE RESISTANT CONSTRUCTION	NON-COMBUSTIBLE CONSTRUCTION	COMBUSTIBLE CONSTRUCTION
5′	15′	25′

Revised 06-02-17 By AMJ
DESIGN ENTRY BY: ROBERT B ADAMS

ISSUED	DATE



DESIGN ENTRY BY: ROBERT B ADAMS

3Ø PADMOUNT TRANSFORMER SLAB DETAIL 1500, 2000 & 2500 KVA **20000 POUNDS** 8.08.6 ///////////EDGE OF BUILDING//////////// GRADE CL PIER C_L PIER MINIMUM FINISHED 2'- 0" 4'- 6" 2'- 0" 4'-0" MINIMUM* 4'-0" **BOTTOM OF HOLES** WESH T SHALL BE EXCAVATED TO CLEAN LEVEL SURFACE OF UNDISTURBED 4 - 2#4 X 7' 3" COVER WIRE MATERIAL (TYP) 12" DIAMETER 1'-6" 1'-6" š PEIR (TYP) PIER 1,0,1 × ***9** TWO LAYER D20 ď 6" X 6" WELD ı WIRE MESH TOP #4 REBAR & BOTTOM. 1-4" NON-METALLIC PIER CONDUIT WITH 90° 1,0,1 36" RADIUS BEND J FOR PRIMARY CABLES 8-2#4 X 2' - 6" 2 EACH CORNER 45° **TYPICAL** MIN. 6 #4 TYPICAL ιĪ š #3 TIE @ 8" 4 - 2#4 X 8' 1'-0" DIA. 5/8" X 8' GROUND ROD FURNISHED AND INSTALLED CHAMFER AROUND ST. 2.1 1'-6" 5'-3" BY OPPD 1'-8" 1'-7" 3" 8'-6" 5'-0" MIN 10" MINIMOM SECONDARY DUCTS \bigcirc 5 1/2" ON CENTER INSTALL PIERS TO MUMIXAM 5" DUCT UNDISTURBED EARTH AREA WITHIN PROTECTION PIPES **MAXIMUM 8 DUCTS** MUST BE CLEAR FOR OPENING MAXIMUM 8 CON-6'-0" OF TRANSFORMER DOORS AND **DUCTORS PER PHASE** MAINTENANCE. **POSITION AT RIGHT** OF OPENING MINIMUM 4" IRON PROTECTION PIPES TO BE SET 3'-6" ABOVE AND 3'-6" BELOW GRADE. SET IN CONCRETE. CAP PIPE. A 6" "I" BEAM MAY BE SUBSTITUTED. 5'-3" 5'-3"

ORGANIC AND/OR OTHER UNSUITABLE MATERIAL THE EXISTING SOIL SHALL BE EXCAVATED SHALL BE REMOVED FROM SUBGRADE AND **BACKFILL AREAS AND BACKFILLED WITH** ACCEPTABLE GRANULAR FILL, COMPACTED TO 95 % OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT ASTM D1557 AND D2049. IF THE TOP THREE (3) FEET OF SUBGRADE BENEATH THE SLAB IS SUSCEPTIBLE TO A HIGH WATER TABLE OR PERIODIC SATURATION,

AND BACKFILLED WITH A CLEAN ACCEPTABLE GRANULAR FILL AND THOROUGHLY COMPACTED TO 90% OF MAXIMUM DENSITY PER ASTM D2049 AND D1556.

SLAB TO BE MADE OF CONCRETE WITH A MINIMUM 28 DAY STRENGTH OF 4.000 PSI AND 6 % AIR CONTENT

* THIS DRAWING SHOWS THE MINIMUM CLEARANCE NEEDED FOR PHYSICAL REASONS; FACTORY MUTUAL INSURANCE COMPANY RECOMMENDS THE FOLLOWING SEPARATION DISTANCES BETWEEN THE SPECIFIED TYPE OF BUILDING AND TRANSFORMER FOR MINERAL-OIL FILLED TRANSFORMERS WITH UNDER 500 GALLONS OF OIL BUILDING OWNERS AND THEIR CONTRACTORS ARE RESPONSIBLE FOR LOCATING THE SLAB PER OPPD MINIMUM CLEARANCE GUIDELINES AND THEIR INSURANCE COMPANY RECOMMENDATIONS.

TWO HOURS FIRE RESISTANT CONSTRUCTION	NON-COMBUSTIBLE CONSTRUCTION	COMBUSTIBLE CONSTRUCTION
5′	15′	25′

ALL MATERIAL FURNISHED BY THE **CUSTOMER SHALL EQUAL OR EXCEED** THE STANDARDS AS SPECIFIED IN THE "NATIONAL ELECTRICAL CODE" ALL CUSTOMER INSTALLED PRIMARY CONDUITS TO BE RODDED IN PROVEN CLEAR, AND A JET LINE TO BE LEFT IN EACH CONDUIT ALL CONDUITS ENTERING SLAB TO BE VERTICAL AND 90° ANGLE WITH TOP OF SLAB

TOP OF SLAB MUST BE SMOOTH, FLAT AND LEVEL.

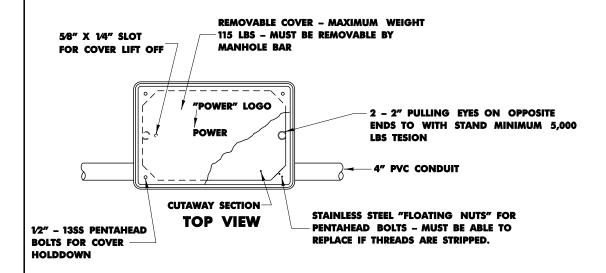
NO WALLS TO BE BUILT AROUND OR CANOPIES ABOVE TRANSFORMER. PLACE TRANSFORMER AWAY FROM DOORS, WINDOWS, & BUILDING OPENINGS.* CUSTOMER TO FURNISH ALL MATERIAL, **EXECPT WHERE NOTED**

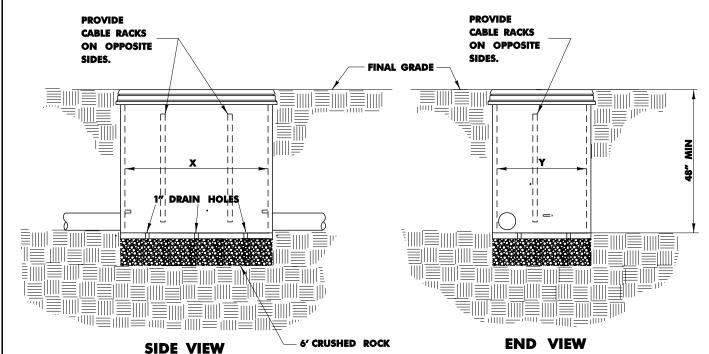
Revised 07-11-17 By AMJ DESIGN ENTRY BY: ROBERT B ADAMS

CUSTOMER INSTALLED PULLBOX

MAXIMUM 1/0 CABLE DO NOT INSTALL IN DRIVING SURFACE

SINGLE PHASE: 8.08.7A THREE PHASE: 8.08.7B





DIM	ENSION	IS	CONDUIT	EXCAVATION	MAX CABLE	MAX NO OF
STD		Y	KNOCKOUTS	REQ'D (LABOR)	SIZE	SPLICES
8.08.7A	60"	36"	4 3/4"	7 CU YDS	1/0	2
8.08.7B	78"	48"	4 3/4"	9.8 CU YDS	1/0	6

NOTE:

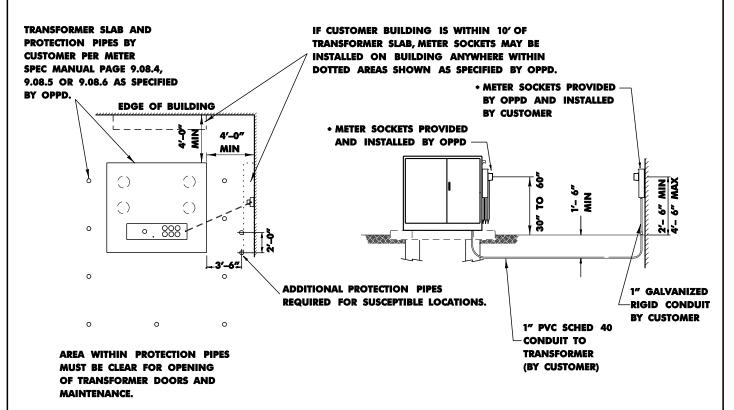
- 1 DESIGN LOAD HS-20-44 (FULL TRAFFIC LOADING).
- 2 CDR (DIVISION OF HOMAC MFG CO).
- 3 PLACEMENT PER MANUFACTURER'S RECOMMENDATION.
- 4 PULLBOX IS FOR OPPD'S EXCLUSIVE USE. JOINT USE WITH CUSTOMER EQUIPMENT OF ANY NATURE SHALL NOT BE ALLOWED.

Revised 09-15-08 By SAH DESIGN ENTRY BY: BRANT DANGEL

3Ø PADMOUNT TRANSFORMER

METERING EQUIPMENT ON TRANSFORMER

STD 8.08.8



REFER TO DWGS: 120/208V 39 4W OR 277/480V 39 4W: 4.06.15 4.06.17 480V 39 4W: 4.06.9 4.06.11

REFER TO DWGS: 8.08.1

THROUGH 8.08.6 FOR SLAB DETAILS

NOTES:

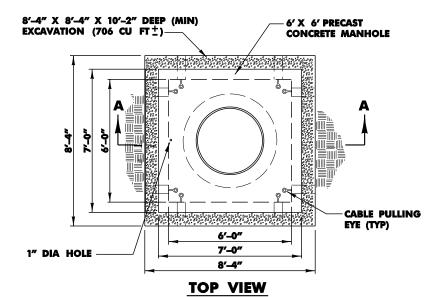
 A MINIMUM CLEAR WORKING SPACE OF 2.5 FT ABOVE, BELOW, AND NECESSARY SIDE WORKING CLEARENCE, AS WELL AS 36" HORIZONTALLY IN FRONT OF THE METERING, SHALL BE PROVIDED AND MAINTAINED.

METERING ON TRANSFORMER
IS FOR ONLY WITH INSTRUMENT
TRANSFORMERS MOUNTED INSIDE
PADMOUNTED TRANSFORMER AND
METER MOUNTED ON PADMOUNT
TRANSFORMER OR ON BUILDING
WALL. AEOT IS FOR NEW
CONSTRUCTION ONLY, UNLESS
EXISTING SERVICE ENTRANCE
CABLES ARE REPLACED.

6' X 6' PRECAST MANHOLE CUSTOMER INSTALLATION

HS 20 - 44 LOADING MAXIMUM CABLE SIZE #1/0

STD 8.08.9



NOTES:

CONTACT ENGINEER IF SOIL MOISTURE / GROUND WATER IS ENCOUNTERED AT DEPTH OF LESS THAN 3'-0" BELOW GRADE.

TOP PORTION OF MANHOLE = 2.42 TONS BOTTOM PORTION OF MANHOLE = 8.75 TONS

DRIVE 5/8" X 10' GROUND ROD (0000002821) THRU 1" HOLE IN BOTTOM OF PRECAST MANHOLE PRIOR TO THE SETTING OF THE TOP OF MANHOLE. EXTEND GROUND ROD 6" ABOVE MANHOLE FLOOR.

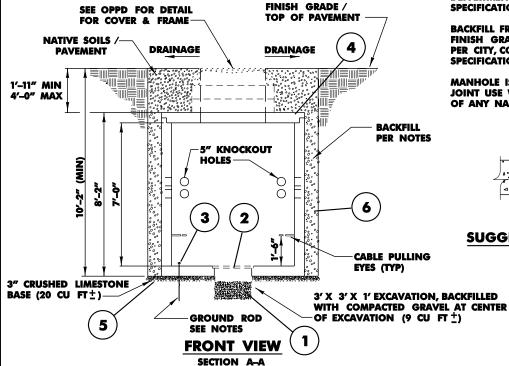
WATER BARRIER (MASTIC) PROVIDED BY MANHOLE MANUFACTURER MUST BE INSTALLED BETWEEN TOP AND BOTTOM PORTIONS.

COLLARS SHALL BE SHIMMED & GROUTED ON MANHOLE ROOF TO ATTAIN REQUIRED SLOPE PER DIRECTION OF ENGINEER.

BACKFILL TO TOP OF MANHOLE WITH "FLOWABLE FILL" PER NEBRASKA DEPARTMENT OF ROADS (NDOR) SPECIFICATIONS.

BACKFILL FROM TOP OF MANHOLE TO FINISH GRADE WITH COMPACTED SOIL PER CITY, COUNTY OR STATE SPECIFICATIONS, WHICHEVER GOVERNS.

MANHOLE IS FOR OPPD'S EXCLUSIVE USE.
JOINT USE WITH CUSTOMER EQUIPMENT
OF ANY NATURE SHALL NOT BE ALLOWED.



	AT JOINT WATER BARRIER (MASTIC)
SUGGESTED T	YPICAL JOINT

	BILL OF MATERIAL		
ITEM	DESCRIPTION	REQ'D	
1	GRAVEL	1/3 CU YD	
2	STEEL GRATING, 2' X 2'	1	
3	GROUND ROD, 5/8" X 10'	1	
4	MANHOLE, 6' X 6'	1	
5	CRUSHED LIMESTONE	3/4 CU YD	
6	FLOWABLE BACKFILL	7 CU YDS	

FLOWABLE FILL (NDOR)		
MATERIAL	MATERIAL WEIGHT	
CEMENT	50 LBS	
FLY ASH	200 LBS	
WATER	420 LBS	
SAND	2700 LBS	
AEA	10 OZ/CY	

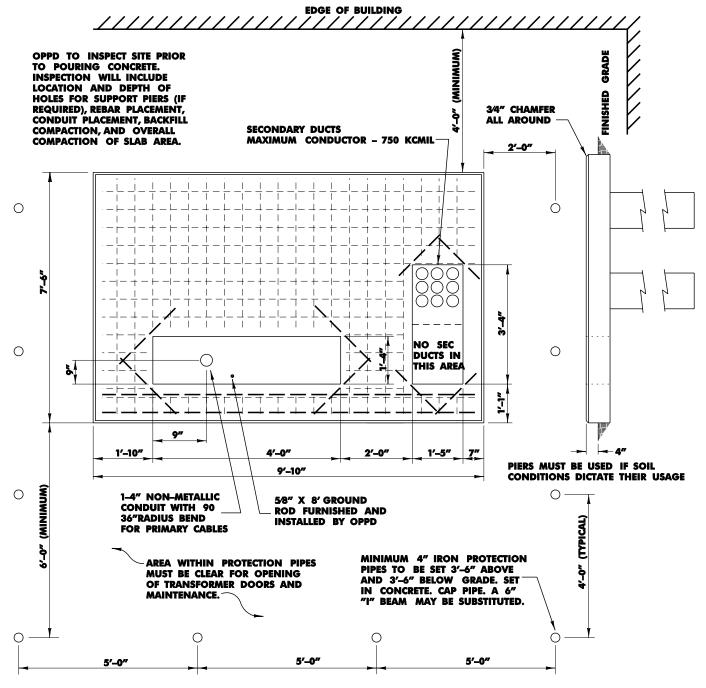
COMPRESSIVE STRENGTH (28 DAYS) 85-175 PSI AIR CONTENT FOR ALL MIXES WILL BE IN THE RANGE OF 10.0% TO 16.0%

Revised 11-21-02 By BED DESIGN ENTRY BY: BRANT DANGEL

TRANSFORMER AND SECONDARY CABINET SLAB DETAIL

750 KVA & 1000 KVA TRANSFORMERS

8.09.1



EACH LOCATION SHALL HAVE A SOIL TEST PERFORMED AND A SLAB DESIGNED PER THE RESULTS. BY CUSTOMER

TRANSFORMER SLAB TO BE DESIGNED AND CONSTRUCTED BY CUSTOMER

LOCATION AND DIMENSIONS OF SLOT AND CONDUITS MUST BE MAINTAINED IN RELATION TO OVERALL SLAB DIMENSION

ALL CUSTOMER INSTALLED PRIMARY CONDUITS TO BE RODDED AND PROVEN CLEAR, AND A JET LINE TO BE LEFT IN EACH CONDUIT

DUCTS ARE NOT TO BE INSTALLED IN CONCRETE WITHIN SLOT

OPPD ENGINEERING DEPT MUST REVIEW ALL DETAILS BEFORE CONSTRUCTION

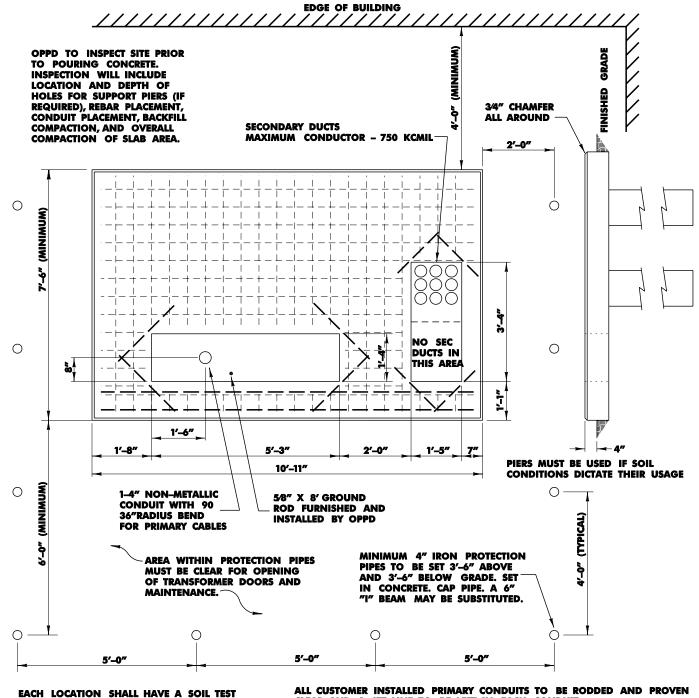
NO WALLS TO BE BUILT AROUND OR CANOPIES ABOVE TRANSFORMERS

ALL CONDUITS ENTERING SLAB TO BE VERTICAL AND AT A 90 $^{\circ}$ ANGLE WITH TOP OF SLAB

TRANSFORMER AND SECONDARY **CABINET SLAB DETAIL**

1500 KVA, 2000 KVA & 2500 KVA TRANSFORMERS

8.09.2



EACH LOCATION SHALL HAVE A SOIL TEST PERFORMED AND A SLAB DESIGNED PER THE RESULTS. BY CUSTOMER

TRANSFORMER SLAB TO BE DESIGNED AND CONSTRUCTED BY CUSTOMER

LOCATION AND DIMENSIONS OF SLOT AND CONDUITS MUST BE MAINTAINED IN RELATION TO OVERALL SLAB DIMENSION

CLEAR, AND A JET LINE TO BE LEFT IN EACH CONDUIT

DUCTS ARE NOT TO BE INSTALLED IN CONCRETE WITHIN SLOT OPPD ENGINEERING DEPT MUST REVIEW ALL DETAILS BEFORE CONSTRUCTION NO WALLS TO BE BUILT AROUND OR CANOPIES ABOVE TRANSFORMERS

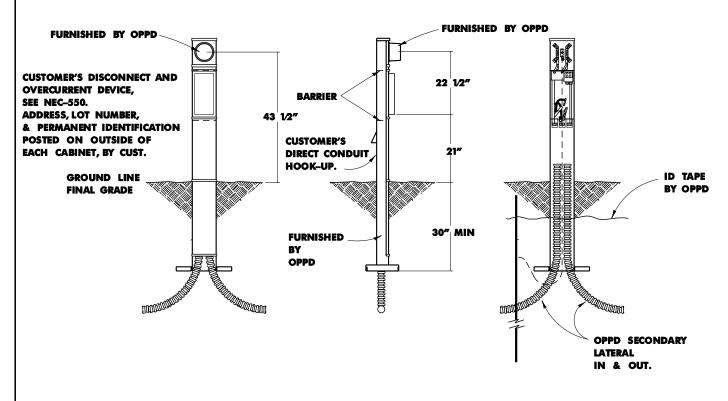
ALL CONDUITS ENTERING SLAB TO BE VERTICAL AND AT A 90° ANGLE WITH TOP OF SLAB

MOBILE HOME PARK UNDERGROUND SERVICE

120/240V SINGLE PHASE (SINGLE)
200 AMPERE MAX SERVICE

9.06.1

120/240V 10 3W: M191 120/208V 10 3W: M291

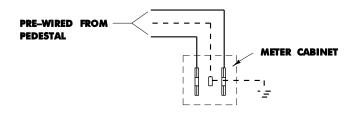


FRONT VIEW

SIDE VIEW

FRONT VIEW (COVER REMOVED)

UNDERGROUND METER DISTRIBUTION CENTER FURNISHED AND INSTALLED BY OPPD.



CUSTOMER'S DISCONNECT AND OVERCURRENT DEVICE MUST BE COMPATIBLE WITH MANUFACTURER'S PANEL. (ONE CUSTOMER PER PANEL).

ONE LINE DIAGRAM

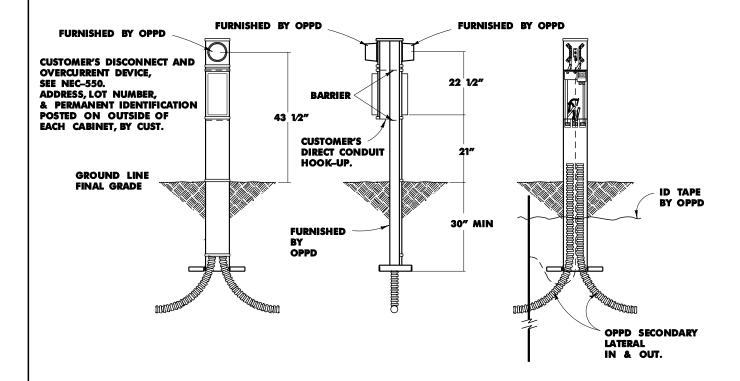
Revised 07-03-00 By BED DESIGN ENTRY BY: ROBERT B ADAMS

MOBILE HOME PARK UNDERGROUND SERVICE

120/240V SINGLE PHASE (DOUBLE) 200 AMPERE MAX SERVICE EACH

9.06.2

120/240V 18 3W: M193 120/208V 18 3W: M293

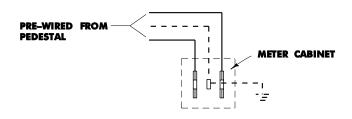


FRONT VIEW

SIDE VIEW

FRONT VIEW (COVER REMOVED)

UNDERGROUND METER DISTRIBUTION CENTER FURNISHED AND INSTALLED BY OPPD.



CUSTOMER'S DISCONNECT AND OVERCURRENT DEVICE MUST BE COMPATIBLE WITH MANUFACTURER'S PANEL. (ONE CUSTOMER PER PANEL).

ONE LINE DIAGRAM

Revised 07-03-00 By BED DESIGN ENTRY BY: ROBERT B ADAMS

ISSUED DATE_____

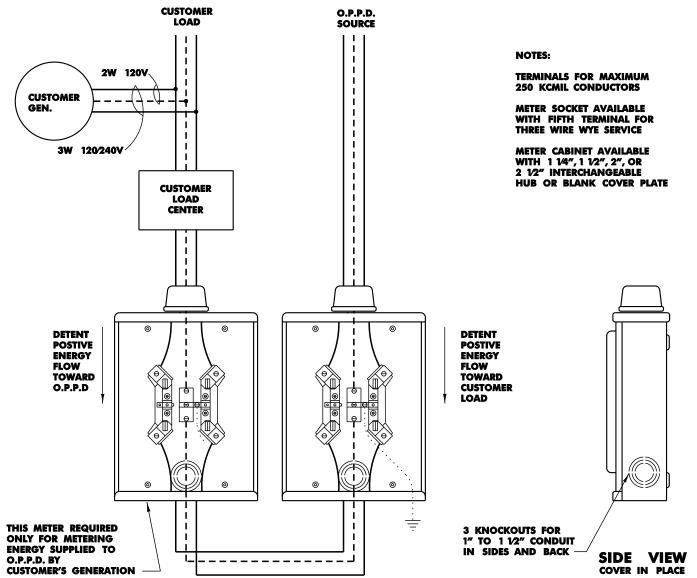
MOBILE HOME PARK SECONDARY SERVICE FROM OVERHEAD SERVICE ENTRANCE HEAD TO BE 2" ABOVE NEUTRAL 120/240V 10 3W: M190 INSULATOR 120/208V 19 3W: M290 2 NUMBER 2 RH-RW JUMPER TO COPPER WIRES OR EXTEND MINI-MUM 3 FEET FROM SERVICE **EQUIVALENT CONTINUOUS** TO BOTTOM METER 1 NUMBER 2 BARE OR ENTRANCE HEAD WHITE CODED COPPER WIRE TO BOTTOM METER RACK AND **INSULATORS** SECONDARY FURNISHED BY CONDUCTORS O.P.P.D FURNISHED 1 1/4" MINIMUM CONDUIT AND INSTALLED BY O.P.P.D. **SERVICE CONNECTORS FURNISHED AND** INSTALLED BY O.P.P.D. 1 1/4" METER SOCKET (S) FURNISHED BY CUSTOMER. 30' CLASS 6 POLE METER BY O.P.P.D. RUE FURNISHED AND SET BY O.P.P.D. **NEUTRAL CONDUTOR MUST** BE BONDED IN AND TO THE METER SOCKET (S) 1" LB CONDUIT CORVINCE NEW X 3" NIPPLE 1" CONDUIT **CONTINUOUS COPPER** GROUND WIRE TO BE NOT LESS THEN A NUMBER 6 FROM THE BOTTOM METER TO THE GROUND ROD. FASTEN MOBILE HOME SERVICE EQUIPMENT SHALL BE "NATIONAL ELETRICAL SECURELY TO POLE WITH STAPLES CODE" MINIMUM GRADE LINE **GROUND ROD PER CURRENT** NOTES: "NATIONAL ELECTRICAL 1/2" X 8' NON-FERROUS CODE" GROUND ROD IF ONLY ONE METER IS REQUIRED OMIT TOP SOCKET TOGETHER WITH ITS SERVICE EQUIPMENT. IF FOUR METERS ARE REQUIRED **DUPLICATE THIS INSTALLATION** ON OTHER SIDE OF POLE. SIZE OF METERED CONDUCTORS TO BE NATIONAL ELECTRICAL CODE OR LARGER. REFER TO SECTION 9.07 FOR CUSTOMER TO FURNISH ALL MATERIAL, EXCEPT WHERE NOTED. INSTALLATION AND SERVICE **REQUIREMENTS** ALL MATERIAL FURNISHED BY THE CUSTOMER SHALL EQUAL OR EXCEED THE STANDARDS AS SPECIFIED IN THE "NATIONAL ELECTRICAL CODE." Revised <u>05-24-</u>07 By <u>MC</u>H ISSUED DATE DESIGN ENTRY BY: ROBERT B ADAMS

SURFACE TYPE METER SOCKET

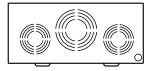
120/240 VOLT 3 WIRE 200 AMPERES FOR CUSTOMERS WITH INTERCONNECTED GENERATION

11.08

M128 M228







BOTTOM VIEW

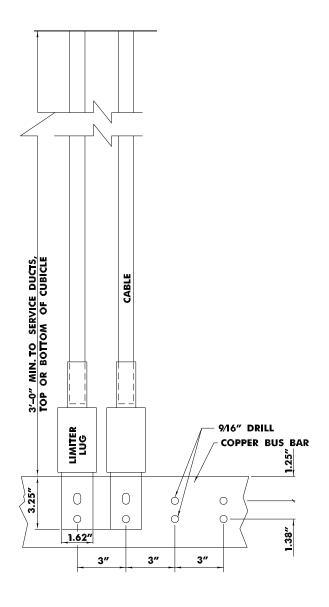
2 KNOCKOUTS FOR 1/2" TO 1 1/2" CONDUIT 1 KNOCKOUT FOR 1/2" TO 2" CONDUIT 1 KNOCKOUT 1/4" FOR EQUIPMENT GROUND

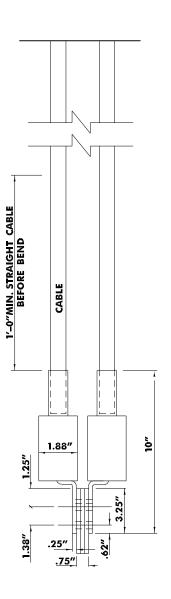
Revised <u>07-03-00</u> By <u>BED</u> DESIGN ENTRY BY: ROBERT B ADAMS

LIMITER INSTALLATION

500 KCMIL CABLES 120/208V 3Ø 4W 277/480V 3Ø 4W 480V 3Ø 3W

12.02.1





LIMITER CATALOG ID - 0000162577

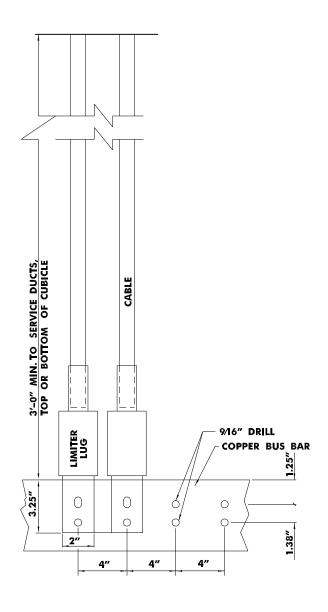
Revised 06-08-17 By AMJ DESIGN ENTRY BY: ROBERT B ADAMS

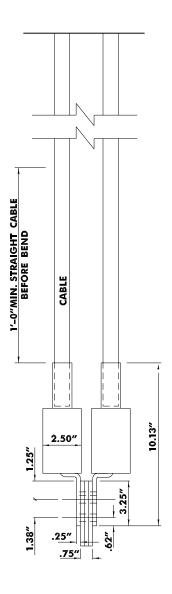
ISSUED DATE____

LIMITER INSTALLATION

750 KCMIL CABLES 120/208V 3Ø 4W 277/480V 3Ø 4W 480V 3Ø 3W – FOR MAINTENANCE ONLY

12.02.2





LIMITER CATALOG ID - 0000162578

Revised 06-08-17 By AMJ DESIGN ENTRY BY: ROBERT B ADAMS

ISSUED DATE_____