

## Metering Guidelines

Latest Update to all specs can be found at [Bluebonnetelectric.coop](http://Bluebonnetelectric.coop)

**For the member's safety, wiring installation and material shall conform to the requirements of the NEC, TDLR and NESC. All Wiring Installations must also meet local guidelines, if applicable, set forth but the city, county, or other governing entity in the event these requirements are more stringent than Bluebonnet specifications.**

### General Notes

Applicable to All Specs

1. Weatherproof fittings are required for all connections.
2. The main electrical disconnect for each electrical service, if not mounted on a Bluebonnet pole or on an approved rack, shall be unenclosed and installed on the exterior of the building or approved structure in a location approved by Bluebonnet Electric Cooperative
3. Meter assembly must remain unenclosed on the exterior of a structure.
4. Meter assembly cannot be mounted on a mobile home.
5. Any part of a meter rack or equipment rack shall be a minimum of six feet from Bluebonnet poles or equipment, and shall not impede access for maintenance to Bluebonnet's poles or equipment.
6. Bluebonnet poles must remain free of structures and private attachments other than the meter loop/meter loop riser assembly.
7. Meter loops or risers shall be installed on pole by Bluebonnet.
8. All secondary connections are to be made by Bluebonnet.
9. Neutral(s) must be insulated and may only be reduced two sizes on residential applications. No reduction of the neutral(s) is allowed on commercial applications.
10. Each phase must be sized to accommodate the total main fuses or breakers installed
11. Electric service to fire pumps shall be served through a CT-metered service.
12. Where three-phase is used to provide single-phase service to individual occupants, the load must be balanced between all three phases as equally as possible. This applies whether the single phase services are individually metered or not.
13. For all jobs requiring excavation, including rack or underground, the individual or contractor performing the work shall call TEXAS811 for locating jobs before digging to Bluebonnet equipment. No private utilities will be located.
14. Mobile Home Feeder Cables may not be used from Transformer or UJB to Meter unless the fourth (Green or Bare) Ground wire can be and is removed before installing.
15. If Communication lines are present, 43" of clearance must be maintained between the lowest energized equipment and communication line. Equipment includes but is not limited to drip loops, neutral, transformers, etc.
16. Meter sockets not furnished by Bluebonnet will need to be ringless.

## CT Metering Notes

**Applies to:** MS-112B1, MS-112B3, MS-113B1, MS-113B3, MS-114A1, MS-114B3, MS-115-1, MS-115-3, MS-202A1, MS-202B3, MS-204B1, MS-204B2, MS-204B3, MS-207B, MS-301B, MS-301C, MS-406A, MS-533-1, MS-533-3, MS-554-1, MS-554-3

1. CT Enclosures may be purchased from Techline **(512-332-2978)** and Installed by Member:  
Minimum Size 1 Phase: Main Enclosure 30" x 30" x 12"  
Backup Enclosure 24" x 30" x 13"  
Minimum Size 3 Phase: Main Enclosure 42" x 30" x 13"  
Backup Enclosure 24" x 30" x 13"
2. CT enclosures may be purchased at any supplier as long as it meets the minimum dimensions and is able to accommodate a Bluebonnet pad lock.
3. Bluebonnet to provide CTs.
4. The electrical contractor will notify Bluebonnet 72 hours in advance to schedule Bluebonnet personnel to deliver the CT's. The electrician shall install the CT's on the rack with the correct polarity before the conductor is brought through the CT enclosure. Call **(800-842-7708)** to schedule a connect.
5. Electric service to fire pumps shall be served through a CT-metered service.

## Standby Generator Notes

**Applies to:** MS-400, MS-401, MS-401A, MS-402, MS-402A, MS-403, MS-404, MS-405, MS-406, MS-406A, MS-407, MS-408, MS-412

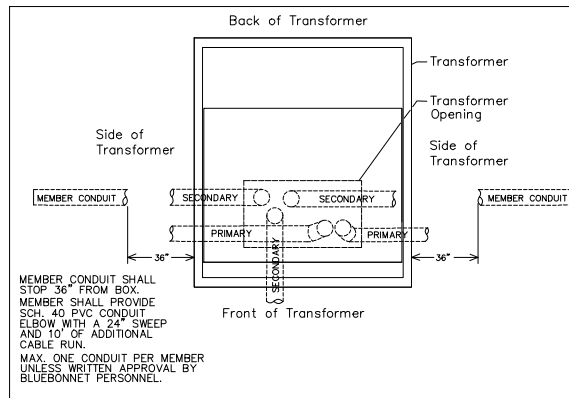
1. Generators shall be placed a minimum of 15' away from Bluebonnet's pole(s) and/or equipment and outside of Bluebonnet's easement.
2. Transfer switches may be on Bluebonnet pole, only if they are in place of a main panel. They may not be in addition to a panel.
3. Any transfer switch that serves as a main (first device past meter) must be service rated
4. Generators must be connected with a dedicated transfer switch. Breaker interlocks are not acceptable.
5. Portable generators may be connected to an inlet through a transfer switch.
6. Transfer switches that plug into the meter base are not acceptable.

## Renewable Energy Connection Notes

**Applies to:** MS-501, MS-502, MS-507T, MS-553-1, MS-553-3, MS-554-1, MS-554-3, MS-41115, MS-41119

1. The solar and/or battery disconnect(s), if not mounted on an approved rack, shall be installed on the exterior of the building or approved structure in a location approved by Bluebonnet Electric Cooperative.
2. DG disconnect must be clearly labeled and identified.
3. Bluebonnet poles must remain free of structures and private attachments other than the meter loop assembly or riser.
4. Inspection may be required by local jurisdiction if applicable.
5. DG meter or equipment rack (If Applicable) shall be a minimum of 6' away from Bluebonnet's poles and/or equipment.
6. Any installation with Batteries are required to have an accessible disconnect or method of shutdown to disable batteries.

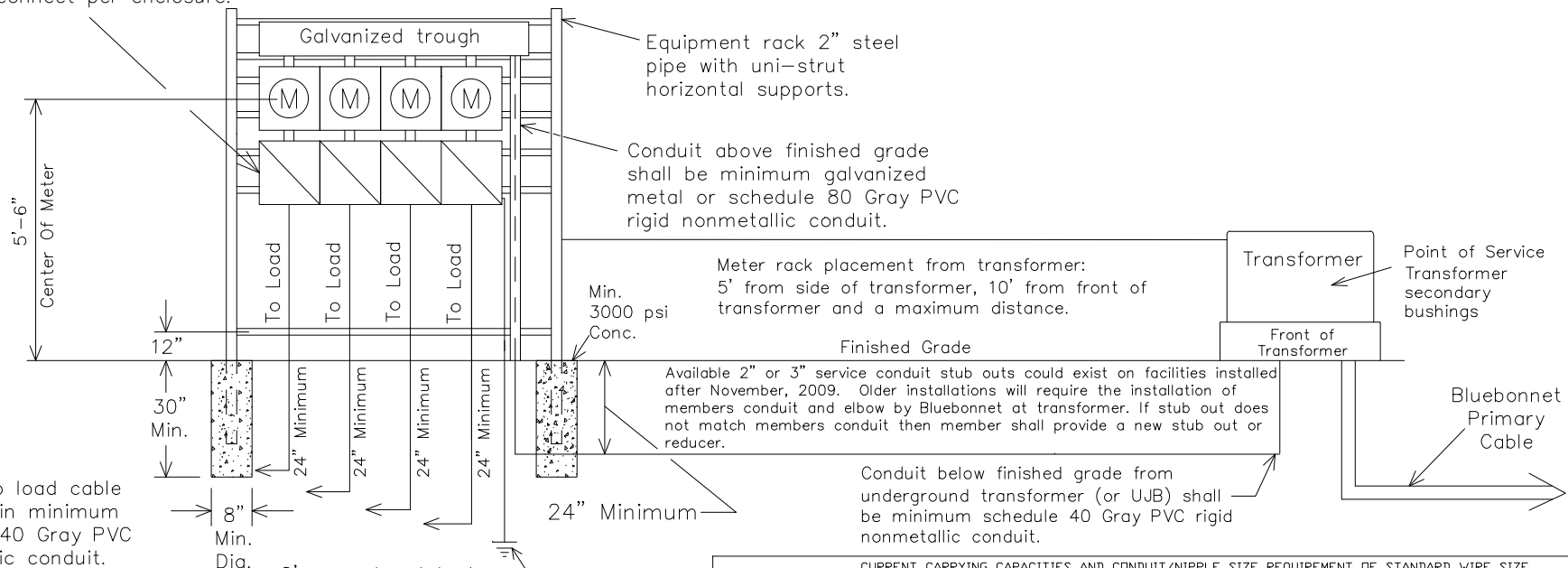
Single Phase Transformer Layout



No more than four 60-200 Amp meter sockets and weatherproof main disconnects. No more than one disconnect per enclosure.

Notes:

1. Line taps shall be made in the galvanized trough by the electrical contractor.
2. More than (6) main disconnects require a properly sized main disconnect ahead of the galvanized trough.
3. Bluebonnet will complete wiring into transformer. Have 10' additional amount of wire for termination.
4. THREE PHASE APPLICATIONS ONLY DESCRIPTION: 200amp, 7 terminal, 3-phase, 4-wire will require a lever by-pass meeting ANSI C12.7, UL 414, and NEMA 3R. Meter cans are available for purchase through Techline or any other electrical supplier provided it meets all Bluebonnet Electric Cooperative specifications.
5. Member/Electrician shall coordinate with Bluebonnet personal to install all conduit and the pulling of the secondary wire to the transformer. Member/Electrician shall notify Bluebonnet 48 hours in advance to schedule a time/date to perform the work.
6. If additional trips are made to the site by Bluebonnet personnel, applicable fees maybe applied.
7. See "Metering Guidelines" for other applicable notes.



Service to load cable enclosed in minimum schedule 40 Gray PVC nonmetallic conduit.

8' ground rod to be driven 12" below grade. (Member Installed)

CURRENT CARRYING CAPACITIES AND CONDUIT/NIPPLE SIZE REQUIREMENT OF STANDARD WIRE SIZE.  
(RHH, RHW, THW, THWN, THHN, AND XHHW)  
REFER TO NEC FOR OTHER CALCULATIONS.

WIRE SIZE	COPPER CONDUCTOR		WIRE SIZE	ALUMINUM CONDUCTOR	
	BREAKER SIZE	CONDUIT/NIPPLE SIZE		BREAKER SIZE	CONDUIT/NIPPLE SIZE
#6	60 AMP	1 1/4" CONDUIT	#4	60 AMP	1 1/4" CONDUIT
#4	100 AMP	1 1/2" CONDUIT	#2	100 AMP	1 1/2" CONDUIT
#2	125 AMP	1 3/4" CONDUIT	#1/0	125 AMP	1 3/4" CONDUIT
#1	150 AMP	2" CONDUIT	#2/0	150 AMP	1 3/2" CONDUIT
#2/0	200 AMP	2" CONDUIT	#4/0		2" CONDUIT



1Ø OR 3Ø, 60-200 AMP UNDERGROUND GANG MOUNTED METERS ON RACK OR BUILDING NOT TO EXCEED A TOTAL OF 800 AMPS.

DATE	REVISIONS
12-07-2017	ADDED WIRE SIZING CHART.
12-07-2017	ADDED MAIN BREAKER NOTE

Drawn By :	RG
Scale :	NONE

Checked By :	MS COMMITTEE
Date :	11-04-2021

Approved By :	MS COMMITTEE
	MS-205