



Welcome to Bluebonnet Electric Cooperative

Bluebonnet Electric Cooperative Inc. was incorporated in 1939 as the Lower Colorado River Electric Cooperative. The name of the Cooperative was changed to Bluebonnet Electric Cooperative, Inc. in 1964, to enhance a separate identity from the Lower Colorado River Authority (LCRA).

Bluebonnet serves all or part of 14 counties, covers over 3,800 square miles and serves over 98,000 meters. Bluebonnet operates five retail centers: Bastrop, Brenham, Lockhart, Giddings and Manor. Bluebonnet is one of the largest electric cooperatives in Texas. A distribution cooperative, Bluebonnet purchases most of its power wholesale from the LCRA. Bluebonnet operates and maintains approximately 11,619 miles of distribution lines. Bluebonnet owns 20 substations and purchases power at 21 additional substations owned by the LCRA.

Bluebonnet provides this packet to all developers and their agents and it should be used as a guide in planning the installation of electrical equipment for receiving electrical power from the distribution system of Bluebonnet.

The information presented is subject to change and will be revised periodically to reflect any changes which may develop. Please refer to our website at www.bluebonnetelectric.coop for any additional information as well as an online source of this packet.

Thank you. We look forward to working with you as your electrical provider.

Bluebonnet Project Coordination Staff

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Meter Specifications

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Bluebonnet Electric Cooperative, Inc. Detailed Commercial Load Data

(Anything other than Residential)

Bluebonnet Electric Cooperative, Inc.
3198 E. Austin Street
Giddings, TX 78942
Phone: (800)-842-7708 Fax: (979)-542-4150

BP # _____ W.O. # _____

Email Address: _____

Applicant Name: _____ Phone No: _____

Service Address: _____ Date: _____

Electrician/Engineer: _____ Phone No: _____

REQUESTED ELECTRICAL SERVICE **BUSINESS TYPE:** _____

PRIMARY

- Overhead
- Underground

SECONDARY SERVICE

- Overhead
- Underground

SECONDARY VOLTAGE

- 120/240 - 1Ø 3 Wire
- 120/208 - 3Ø 4 Wire Wye (Service is limited to (3) 100 kVA (3) 100 kVA transformers on the pole).
- 120/240 - 3Ø 4 WIRE DELTA (O/H banks only)
- 240/480 - 1Ø 3 Wire
- 277/480 - 3Ø 4 Wire Wye (Service is limited to 100 kVA transformers on the pole).
- 480 - 3Ø 3 WIRE DELTA (O/H banks only)

Single phase transformers are limited to (1) 100 kVA transformer for an overhead service & (1) 167 kVA pad mount transformer for underground service.

MAIN DISCONNECT (AMPERES) New _____ Existing (If Any) _____

Total connected load in Amps. _____

SECONDARY SERVICE ENTRANCE CONDUIT

Size _____ In. Quantity _____

Member's service wire MUST be sized to accommodate the **TOTAL CONNECTED LOAD or **FUSE/BREAKER** installed inside the disconnect.**

Residential service may down size their neutral 2 sizes.

Commercial service MUST pull in a full size neutral whether it will be used or not. **See the NEC 250.24(C) for more details.**



SECONDARY SERVICE ENTRANCE CONDUCTORS

Size _____ Quantity _____ per phase

BUILDING SIZE _____ SQ.FT.

HOURS OF OPERATION _____ **DAYS OF THE WEEK** _____

HEAT and AIR CONDITIONING

Electric Heat (total) _____(kW) _____ (Amps)

A/C (total) _____(kW) _____ (Amps)

Geothermal (motor size) _____(kW) _____ (Amps)

_____ (FLA - Full Load Amps)

_____ (LRA - Locked Rotor Amps)

TOTAL LIGHTING LOAD _____ (kW) _____ (Amps)

MOTORS (Other Than Air Conditioning)

Motors or motor loads totaling more than 25 HP, may require soft starters or VFD's and/or 3 Phase Service. VFD's will require appropriate filtering. Please Contact Bluebonnet Electric's Engineering Department for further information.

1Ø Motor(s)

_____ HP _____ Quantity _____ (Amps)

_____ HP _____ Quantity _____ (Amps)

_____ HP _____ Quantity _____ (Amps)

_____ HP _____ Quantity _____ (Amps)

_____ HP _____ Quantity _____ (Amps)

Total 1Ø Motor _____ **HP** _____ **(Amps)**



3Ø Motor(s)

_____ HP _____ Quantity _____ (Amps)

_____ HP _____ Quantity _____ (Amps)

_____ HP _____ Quantity _____ (Amps)

_____ HP _____ Quantity _____ (Amps)

_____ HP _____ Quantity _____ (Amps)

Total 3Ø Motor _____ HP _____ (Amps)

Itemized Amp Load

	<u>Load</u>	<u>Quantity</u>	<u>Amps</u>	<u>kW</u>
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____
5.	_____	_____	_____	_____

Total Itemized Load _____ (Amps) _____ (kW)

Total Load on System

Heating Load _____ (Amps) _____ (kW)

A/C Load _____ (Amps) _____ (kW)

Lighting Load _____ (Amps) _____ (kW)

Motor Load _____ (Amps) _____ (kW)

Itemized Load _____ (Amps) _____ (kW)

Total Load _____ (Amps) _____ (kW)

AUTHORIZED ELECTRICIAN'S SIGNATURE _____

PRINT NAME: _____ LICENSE # _____

DATE: _____ PHONE # _____

Developer's Checklist

Responsibility of Developer:

- Developer must fill out a Development Information Request Form and submit to Bluebonnet along with design fee if required.
- Developer is responsible for confirming all Bluebonnet easement requirements with Bluebonnet prior to platting.
- Developer must have an engineering firm submit preliminary plan of development in digital (AutoCAD) format to Bluebonnet Engineering Department. These plans must include streets, wet utilities, and grading plans as well as any other utilities planned for said development.
- A design/re-design fee of \$50/hr. could be required either prior to or following the design process. This decision will be made at the discretion of Bluebonnet on a case by case basis. These fees are non-refundable and are subject to revision at Bluebonnet's discretion.
- Prior to Bluebonnet construction, two (2) hard copies of the approved plat must be submitted.
- Developer must provide and install all underground conduits at road crossings in the designated locations per Bluebonnet Crossing Plans, and if applicable, all electrical conduits in designated locations per Bluebonnet Construction Plans. See Bluebonnet Specifications.
- Developer is responsible for following Bluebonnet inspection policies and procedures prior to and during conduit installation if using his own contractor (see Page 8).
- Property pins must be set and clearly visible at all property corners, at developer's expense, prior to Bluebonnet commencing construction.
- Developer is responsible for submitting contribution-in-aid of construction (CIAC) to cover Bluebonnet's construction costs prior to Bluebonnet commencing construction. Bluebonnet will commence construction after receipt of this payment. Scheduled construction days for your project are contingent upon Bluebonnet's work load and weather.
- Developer is responsible for all right-of-way clearing and grubbing to Bluebonnet specifications. Bluebonnet will clear the right-of-way for proposed overhead facilities for an additional charge (\$5.00 per linear foot). See Bluebonnet Specifications.
- Developer is responsible for ensuring conduit contractor and/or subcontractor adherence to all Bluebonnet Construction Specifications at all times.
- Developer is to provide ALL materials necessary for the conduit system he installs for his Bluebonnet Underground System. Bluebonnet will own these materials after proper installation is certified by a Bluebonnet Inspector.

Developer's Fees and Information

Development Fees

1. A design/re-design fee of \$50/hr. could be required either prior to or following the design process. This decision will be made at the discretion of Bluebonnet on a case by case basis. These fees are non-refundable and are subject to revision at Bluebonnet's discretion.
2. Every request for design and every alteration to all initial requests for design services may be considered as an individual request and, therefore are subject to additional fees to be determined by Bluebonnet.
3. When the developer or prospective developer enters into a line extension agreement with Bluebonnet for service, monies received for engineering design estimates of service will be applied to the cost of construction. Bluebonnet's Line Extension Policy can be found in the enclosed Member Handbook or on the "Residential Development" link on our website at www.bluebonnetelectric.coop
4. If the developer or prospective developer does not notify Bluebonnet within a 180 day period of initial design with the intent to proceed, then any design fees paid to date will be forfeited and the prospective project will be treated as new.
5. A maintenance fee of \$1 per linear foot of trench will be required at the time of contribution by the developer to cover the cost of any necessary repairs in the first year following the completion of Bluebonnet facilities installation.

Easements / Right-of-Way

1. Bluebonnet shall be granted, at no cost and in writing suitable for recording, all rights-of-way and easements necessary to serve member, overhead or underground for the erection, maintenance, repair, replacement, removal or use of all wires, poles, machinery, fixtures, or equipment needed to supply and deliver electric service to the member.
2. A signed easement granted to Bluebonnet will be required before construction will commence. Once Bluebonnet facilities are installed, the easement will adhere to the facilities, from the installation point with a 15 foot easement on each side of the centerline (30 feet of easement) of overhead facilities and 20 foot easement (10 feet on each side of the centerline), for underground facilities.
3. Only Bluebonnet equipment or material is allowed to be attached to Bluebonnet property, except where said equipment and/or materials is required to provide electrical service and said equipment and/or material has been authorized by Bluebonnet.
4. Please note that Bluebonnet facilities must be installed in easements that are exclusive to Bluebonnet with no other utilities being allowed in these easements except for buried crossings.

Location of Facilities

All overhead or underground distribution lines and equipment will be located in an area that is easily accessible by Bluebonnet vehicles and personnel.

Developer Installed Conduit Guidelines and Procedures

1. Developer will review Bluebonnet's construction specifications prior to trenching and conduit installation (specifications included in this document). Developer is encouraged to contact Bluebonnet inspector listed in #3 below with any questions.

2. Developer must provide and install all underground material in the designated locations per Bluebonnet's design. Bluebonnet will provide and install the associated hardware such as sectionalizers and transformers that will be located above ground.

3. Developer will contact the Bluebonnet Project Coordinator when conduit and stub-ups are installed prior to filling the ditch (open ditch inspection). Bluebonnet will respond within 48 hours of notification. Please choose from the list of Bluebonnet Project Coordinators to schedule an inspection.
 - **Project Coordinator Rodney Gerik, may be reached at (979) 540-8814 (cell), or at rodnev.gerik@bluebonnet.coop.**
 - **Project Coordinator Shawn Ely, may be reached at (979) 540-7361 (cell), or at shawn.ely@bluebonnet.coop.**
 - **Project Coordinator Bill Scoggins, may be reached at (979) 716-7038 (cell), or at bill.scoggins@bluebonnet.coop.**
 - **Project Coordinator Shane Mathison, may be reached at (979) 542-8540, or at shane.mathison@bluebonnet.coop.**

4. Trenches will remain open until inspected and approved by the Bluebonnet inspector. Upon inspection, developer will be advised as to what may or may not be backfilled.

5. Bluebonnet retains the right to terminate any conduit installation if inspection reveals non-compliance with Bluebonnet inspection policies, procedures, or specifications until said issues are resolved and approved through re-inspection.

5. Equipment location and conduit stubs must meet clearance requirements on all sides as outlined in Bluebonnet Specifications.

6. Developer or his/her contractor is responsible for acquiring any and all permits and remitting any necessary fees for trench and conduit installation (excavation plans, traffic control plans, digging permits, etc.)

Developer's Checklist

Responsibility of Developer:

- Developer is responsible for confirming all easement requirements with Bluebonnet prior to installation.
- Developer is responsible for following Bluebonnet's inspection policies and procedures prior to and during conduit installation.
- Developer is responsible for all right-of-way clearing or grubbing to Bluebonnet's specifications.
- Developer is responsible for adherence to all Bluebonnet's Construction Specifications.

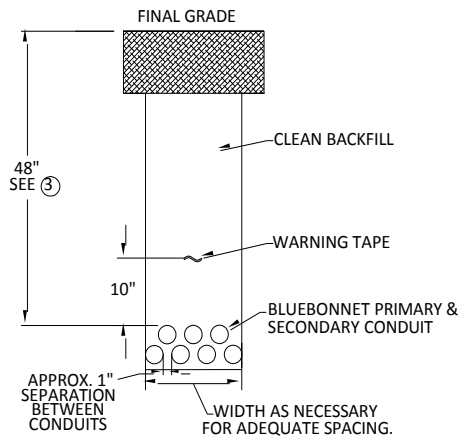
Developer's Fees and Information

1. Every request for alteration to initial requests for design services are subject to additional fees to be determined by Bluebonnet.
2. Bluebonnet's Line Extension Policy can be found in the Member Handbook.
3. A maintenance fee of \$1 per linear foot of trench will be required at the time of contribution by the member to cover the cost of any necessary repairs in the first year following the completion of Bluebonnet's underground facilities installation.
4. Cost estimate given to developer will be good for 90 days.

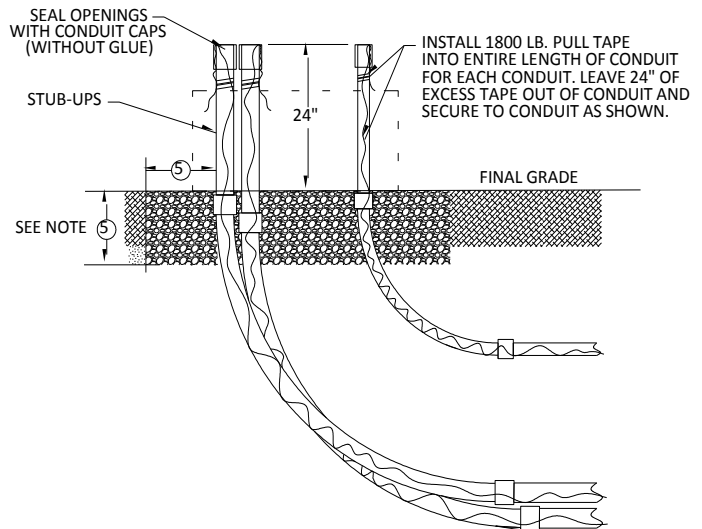
DITCH AND CONDUIT PLACEMENT

NON-ROAD CROSSING

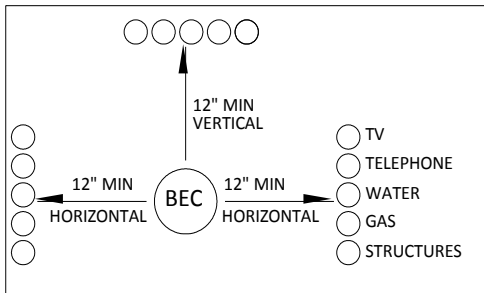
DITCH ASSIGNMENT
FRONT VIEW



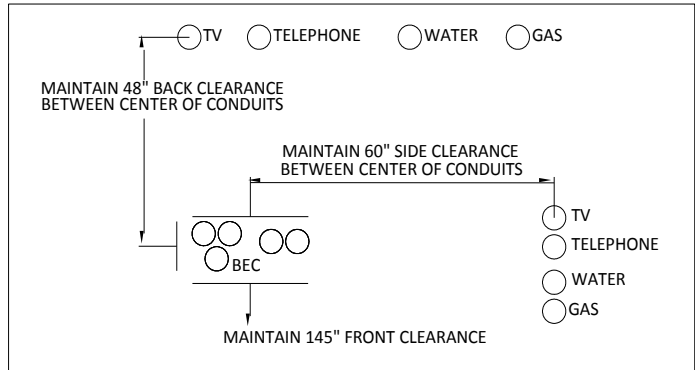
CONDUIT STUB-UP
SIDE VIEW



CONDUIT CLEARANCES
FRONT VIEW



CONDUIT STUB-UP CLEARANCES
TOP VIEW



ANY CONDUITS STUBBED OUT FOR FUTURE USE SHALL EXTEND A MINIMUM OF 5' FROM EQUIPMENT. ENDS SHALL BE MARKED WITH 3" DIAMETER GREY PVC CONDUIT, EXTENDING 4' ABOVE GRADE AND PAINTED RED.

NOTES:

1. CONDUIT SHALL BE GREY SCHEDULE 40 PVC. | PRIMARY & SECONDARY= 3" | LIGHTING= 2"
2. CONDUIT ELBOW: PRIMARY & SECONDARY= 90°, 48" SWEEP | STREETLIGHT = 90°, 24" SWEEP
3. NORMAL DITCH COVER DEPTH IS 48". ADJUSTMENTS MAY BE MADE TO 48" DEPTH IF NECESSARY UPON BLUEBONNET APPROVAL.
4. SEPARATION FROM OTHER UTILITIES SHALL BE 12" MINIMUM OR SUFFICIENT TO PREVENT ANY FORESEEN DAMAGE OF EITHER FACILITY TO THE OTHER.
5. GRAVEL FOR PADS SHALL BE 3/8" WASHED PEA GRAVEL. DEPTH AND WIDTH SHALL BE TO EQUIPMENT SPECIFICATION.



Bluebonnet

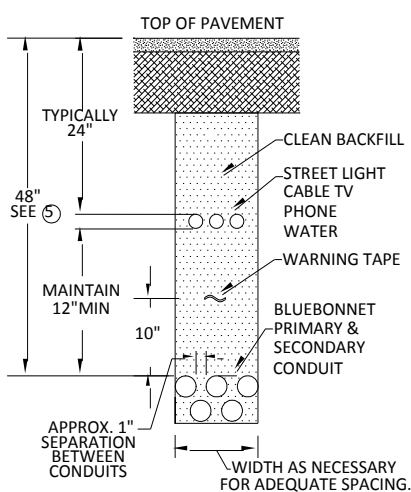
DATE APPROVED:
SEPTEMBER 8, 2016

UNDERGROUND DISTRIBUTION

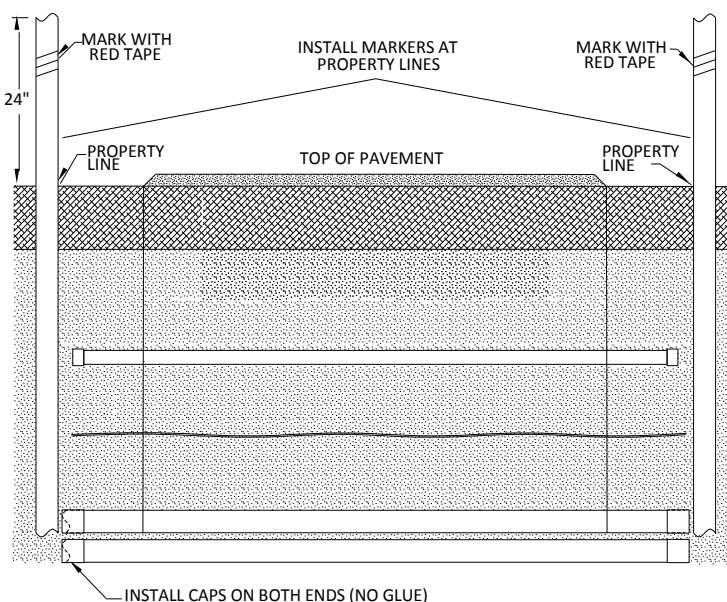
J-3

DITCH AND CONDUIT PLACEMENT ROAD CROSSING

CONDUIT FRONT VIEW



CONDUIT SIDE VIEW



ANY CONDUITS STUBBED OUT FOR FUTURE USE SHALL EXTEND A MINIMUM OF 5' FROM EQUIPMENT. ENDS SHALL BE MARKED WITH 3" DIAMETER GREY PVC CONDUIT, EXTENDING 4' ABOVE GRADE AND PAINTED RED.

NOTES:

1. STATE AND LOCAL CODES MAY REQUIRE DIFFERENT STANDARDS, IN WHICH CASE THE MOST STRINGENT CODE SHALL TAKE PRECEDENCE.
2. CONDUIT SHALL BE MINIMUM GRAY SCHEDULE 40 PVC. | PRIMARY & SECONDARY = 3" | LIGHTING = 2"
3. CONDUIT ELBOW: PRIMARY & SECONDARY = 90°, 48" SWEEP | LIGHTING = 90°, 24" SWEEP
4. LENGTH OF CONDUITS SHALL BE FROM PROPERTY LINE TO PROPERTY LINE.
5. NORMAL COVER DEPTH IS 48". ADJUSTMENTS MAY BE MADE TO 48" DEPTH IF NECESSARY UPON BLUEBONNET APPROVAL.



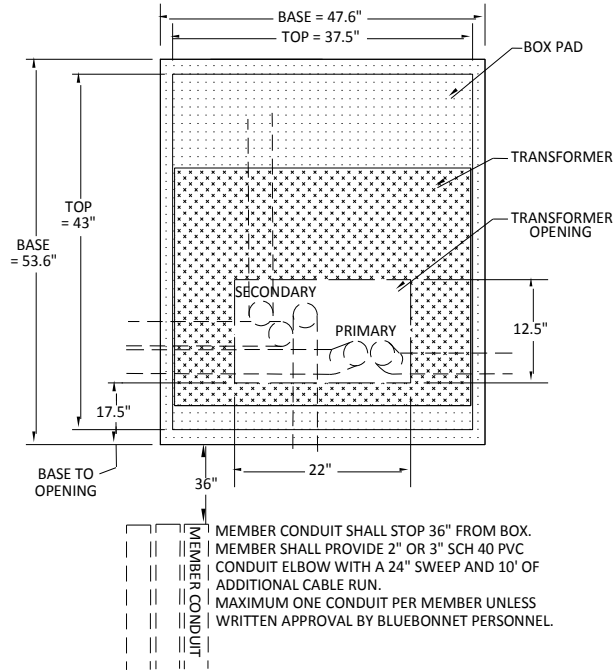
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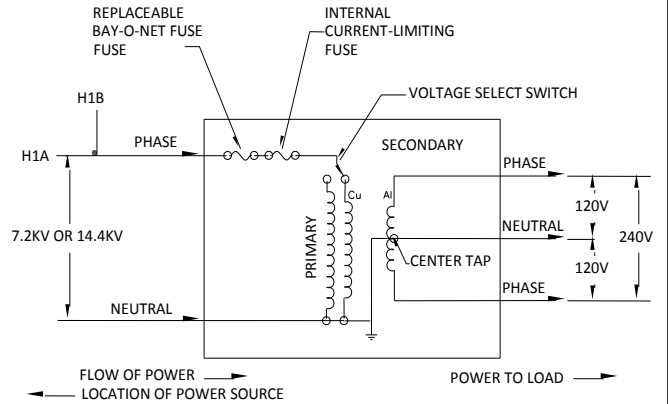
J-4

1PH PADMOUNT TRANSFORMER DIMENSIONS AND WIRING

TOP VIEW

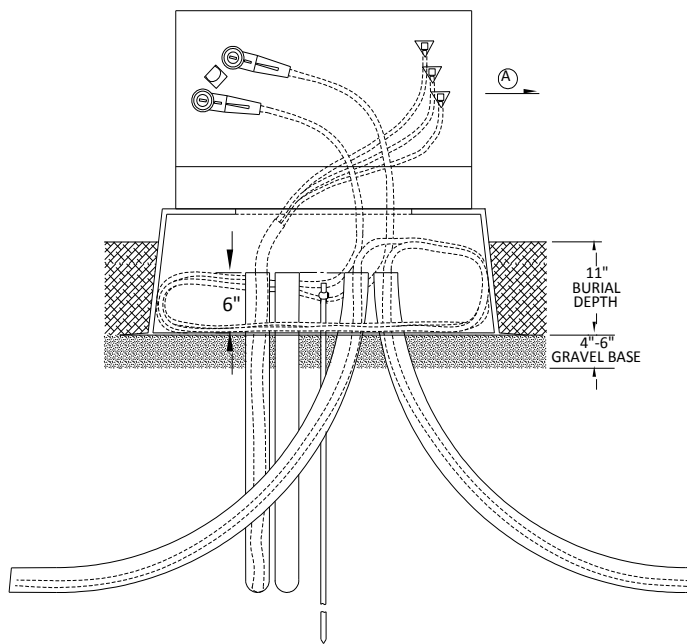


WIRING DIAGRAM

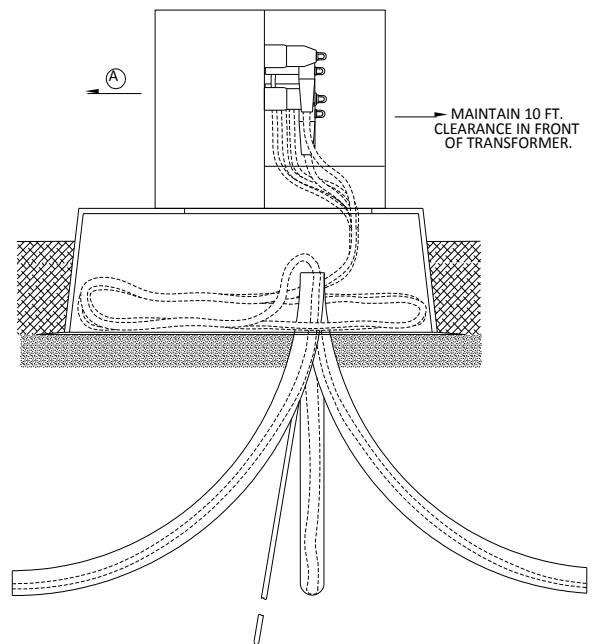


Ⓐ CLEARANCE BETWEEN WALLS AND TRANSFORMER:
 NON-COMBUSTIBLE - 3 FT.
 COMBUSTIBLE: UP TO 75 kVA - 10 FT.
 GREATER THAN 75 kVA - 20 FT.

FRONT VIEW



SIDE VIEW



DATE APPROVED:
 SEPTEMBER 8, 2016

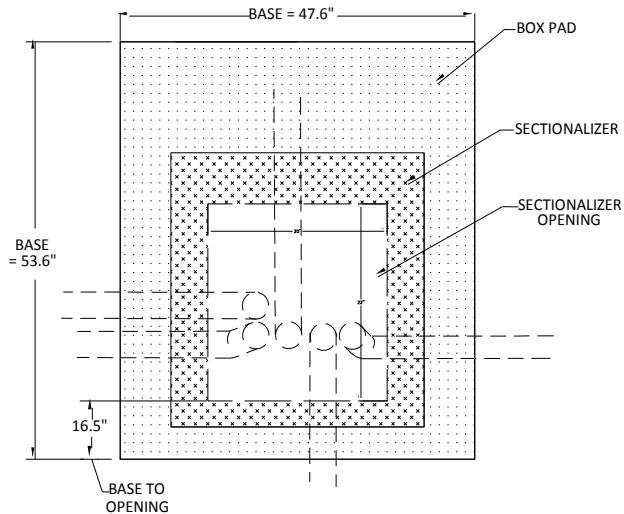
UNDERGROUND DISTRIBUTION

A-2

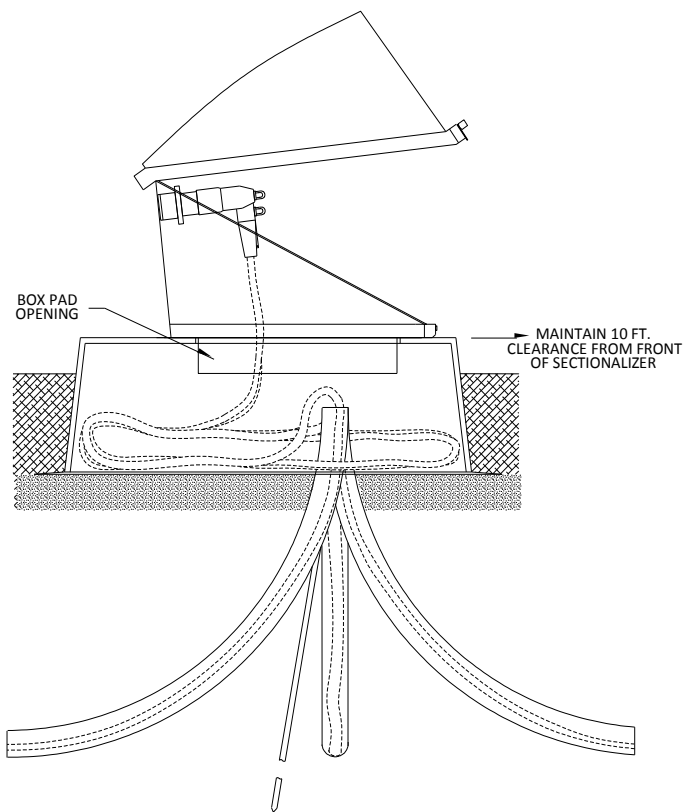
1PH PADMOUNT SECTIONALIZER

DIMENSIONS AND WIRING

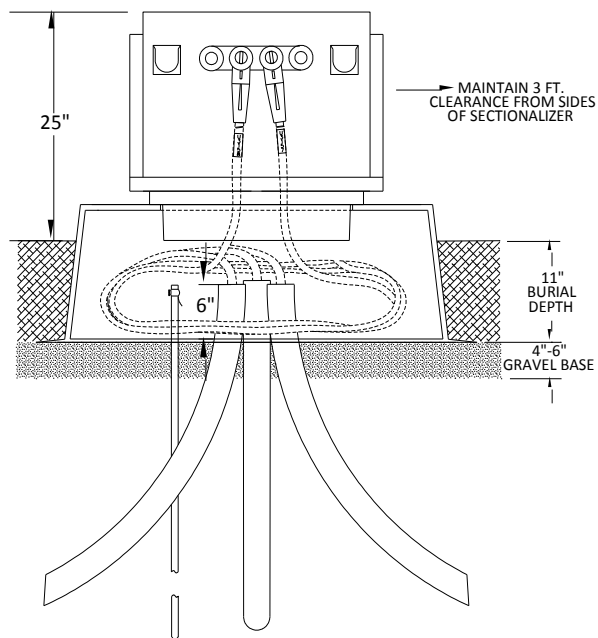
TOP VIEW



SIDE VIEW



FRONT VIEW

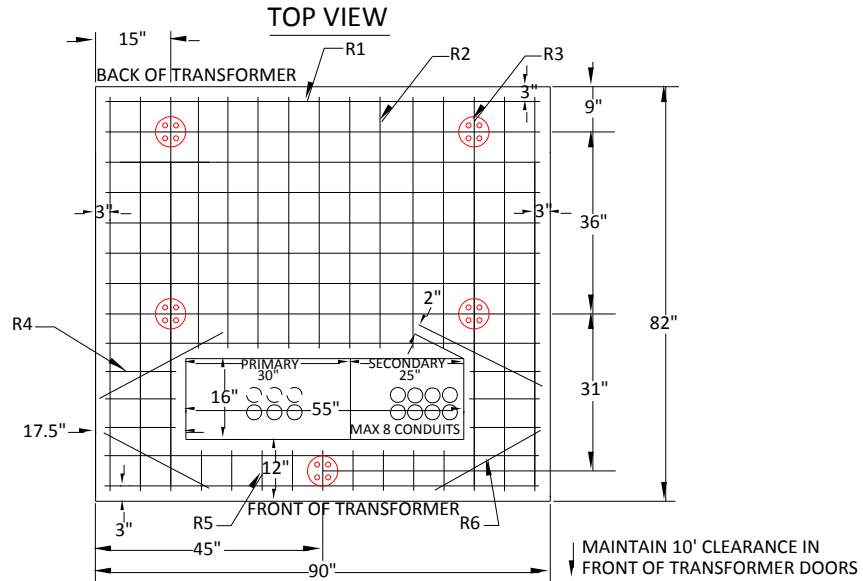


DATE APPROVED:
SEPTEMBER 8, 2016

UNDERGROUND DISTRIBUTION

C-2

3PH TRANSFORMER PAD 45 - 750 KVA (UM3-A)



MAINTAIN CLEARANCE FROM TRANSFORMER SIDES:
 OTHER TRANSFORMERS - 5 FT.
 NON-COMBUSTIBLE WALLS - 5 FT.
 COMBUSTIBLE WALLS:
 0 TO 75 KVA - 10 FT.
 >75 KVA - 20 FT.

REINFORCING BARS; 1/2"					
R1	R2	R3	R4	R5	R6
11 X	9 X	6 X	6 X	9 X	4 X
86"	50"	78"	14"	8"	25"

SEE NOTE #3

NOTES:

1. PIERS SHALL BE INSTALLED UNDER PAD WHEN DIRT HAS BEEN DISTURBED UNDER THE LOAD BEARING AREA OF PAD. TAMP BACKFILL (95%) TO TOP OF PIER SUPPORTS.
2. SUPPORT PIERS TO BE 6" IN DIAMETER.
3. PLACE PIERS AS SHOWN WITH PIER REBAR TIED INTO REBAR FOR PAD STRUCTURE.
4. TOP OF PIERS SHOULD BE LEVEL WITH FINISHED GRADE AND INSTALLED TO A DEPTH OF 48" OR BOTTOM OF DITCH.

ANY CONDUITS STUBBED OUT FOR FUTURE USE SHALL EXTEND A MINIMUM OF 5' FROM EQUIPMENT. ENDS SHALL BE MARKED WITH 3" DIAMETER GREY PVC CONDUIT, EXTENDING 4' ABOVE GRADE AND PAINTED RED.

NOTES:

1. TAMP GROUND UNDER PAD BEFORE SETTING TO PREVENT UNEVEN SETTLING.
2. CONCRETE: 3000 POUNDS MIN. PER SQUARE INCH; 4% TO 6% ENTRAINED AIR, 3/4" MAX. SIZE AGGREGATE.
3. REINFORCING STEEL: ATSM-A615 GRADE 60; EVENLY SPACE APPROXIMATELY 6" O.C. EACH WAY AND SECURELY TIED TOGETHER.
4. MINIMUM 2 INCH CONCRETE COVER OVER REINFORCING STEEL.
5. WOOD FLOAT LEVEL FINISH LEAVING NO DEPRESSIONS.
6. 3/4" CHAMFER ALL EDGES.
7. PRIMARY AND SECONDARY CONDUIT SHALL BE INSTALLED AND SEALED BEFORE POURING PAD.
8. IF FUTURE EXPANSION TO A TRANSFORMER LARGER THAN 750 KVA IS POSSIBLE, BLUEBONNET MAY REQUEST THE CONSTRUCTION OF THE PAD ON PAGE B-6.
9. **MAXIMUM OF 8 CONDUITS, 4" SCHEDULE 40 PVC PIPES ARE ALLOWED IN THE SECONDARY COMPARTMENT.**
10. STUB THE SECONDARY PIPES AS CLOSE TO THE EDGE SECONDARY CUTOUT AS POSSIBLE. (SEE DRAWING)
11. MAXIMUM OF 6 CONDUITS, 3" SCHEDULE 40 PVC PIPES ARE ALLOWED IN THE PRIMARY COMPARTMENT.



Bluebonnet

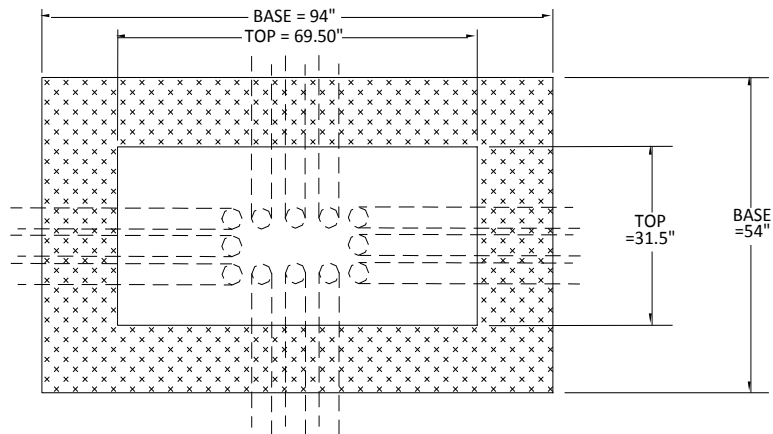
DATE APPROVED:
December 28, 2018

UNDERGROUND DISTRIBUTION

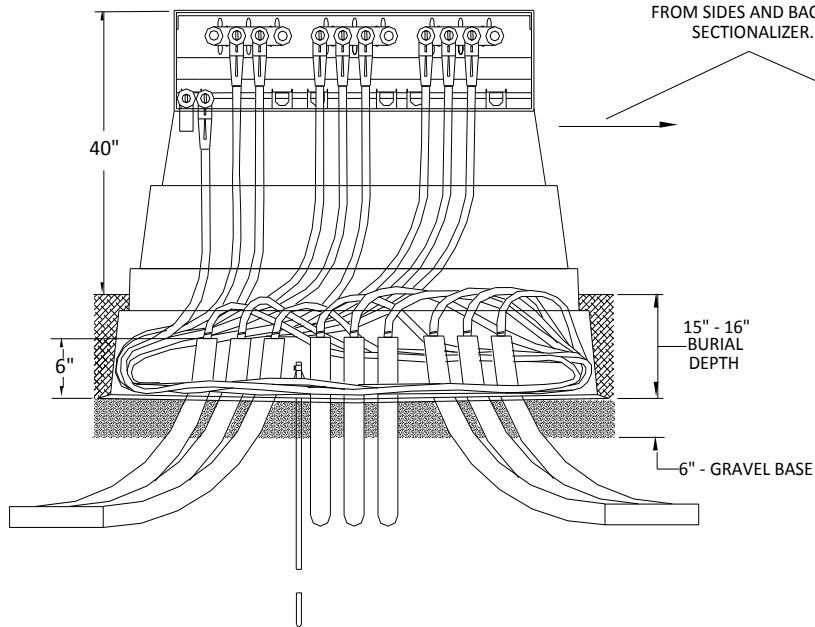
B-5

3PH 600A SECTIONALIZER - DIMENSIONS

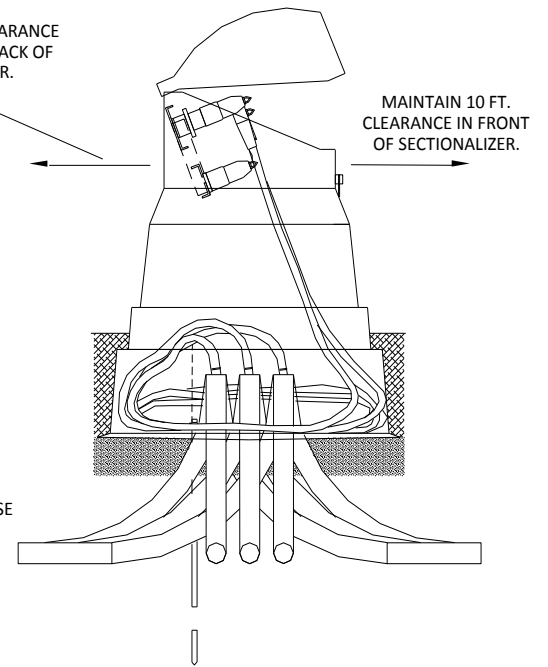
TOP VIEW



FRONT VIEW



SIDE VIEW



ANY CONDUITS STUBBED OUT FOR FUTURE USE SHALL EXTEND A MINIMUM OF 5' FROM EQUIPMENT. ENDS SHALL BE MARKED WITH 3" DIAMETER GREY PVC CONDUIT, EXTENDING 4' ABOVE GRADE AND PAINTED RED.

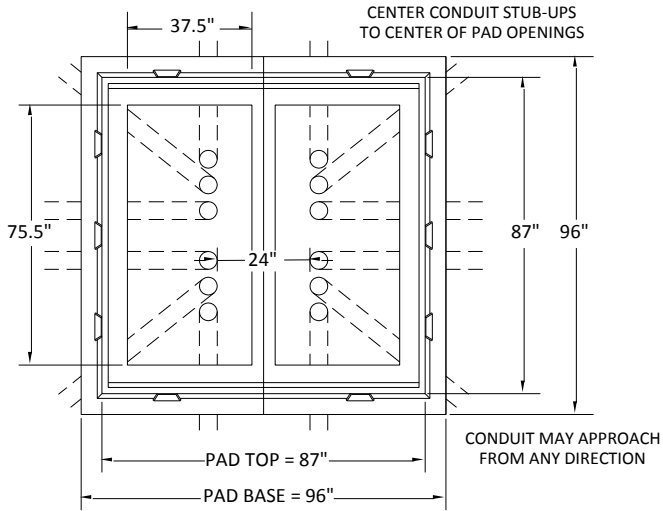


DATE APPROVED:
SEPTEMBER 8, 2016

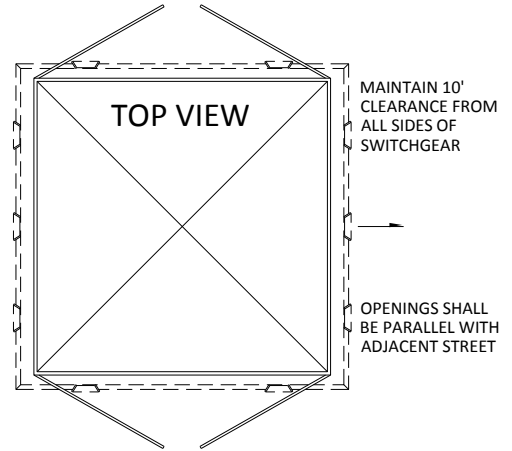
UNDERGROUND DISTRIBUTION D-2B

SWITCHGEAR - DIMENSIONS

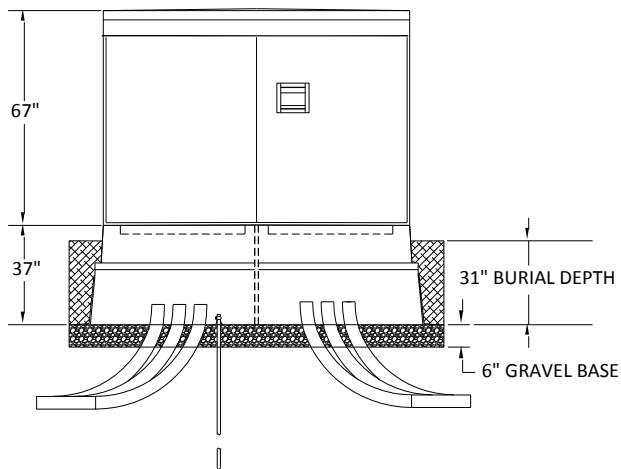
TOP VIEW



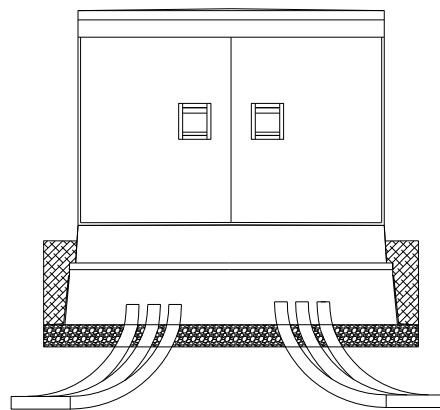
CLEARANCES



FRONT VIEW



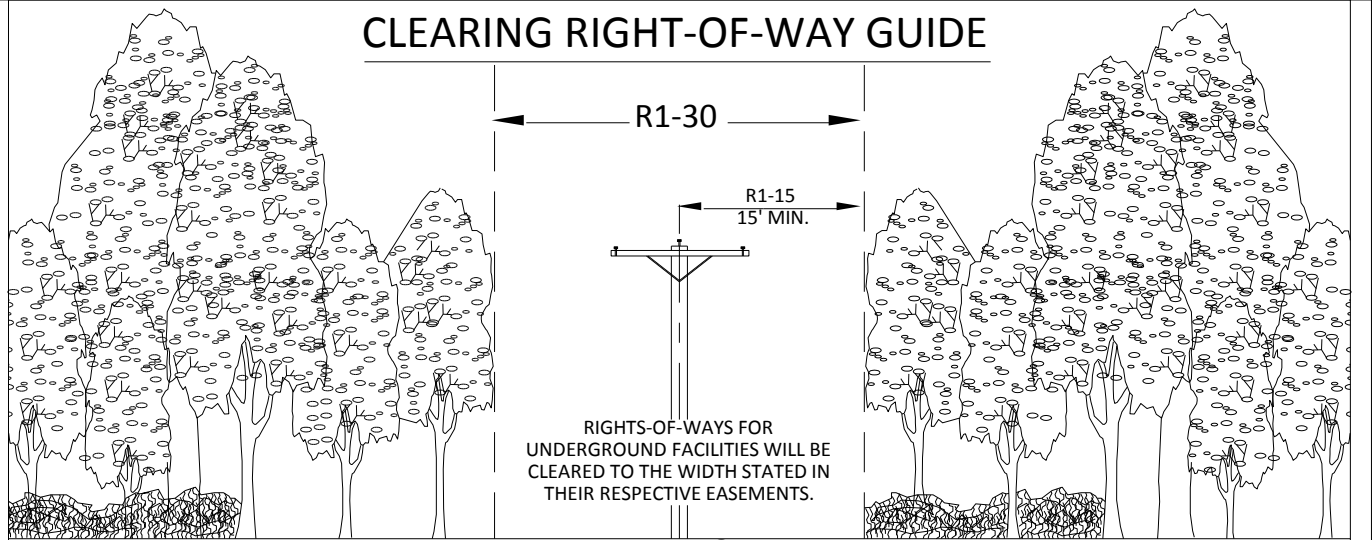
SIDE VIEW



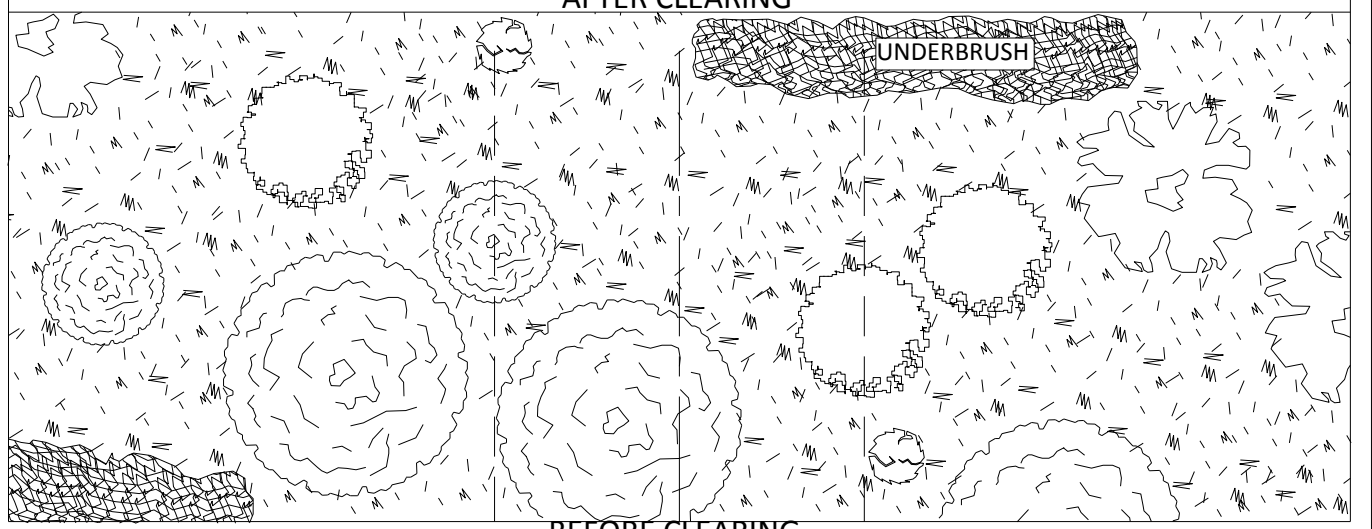
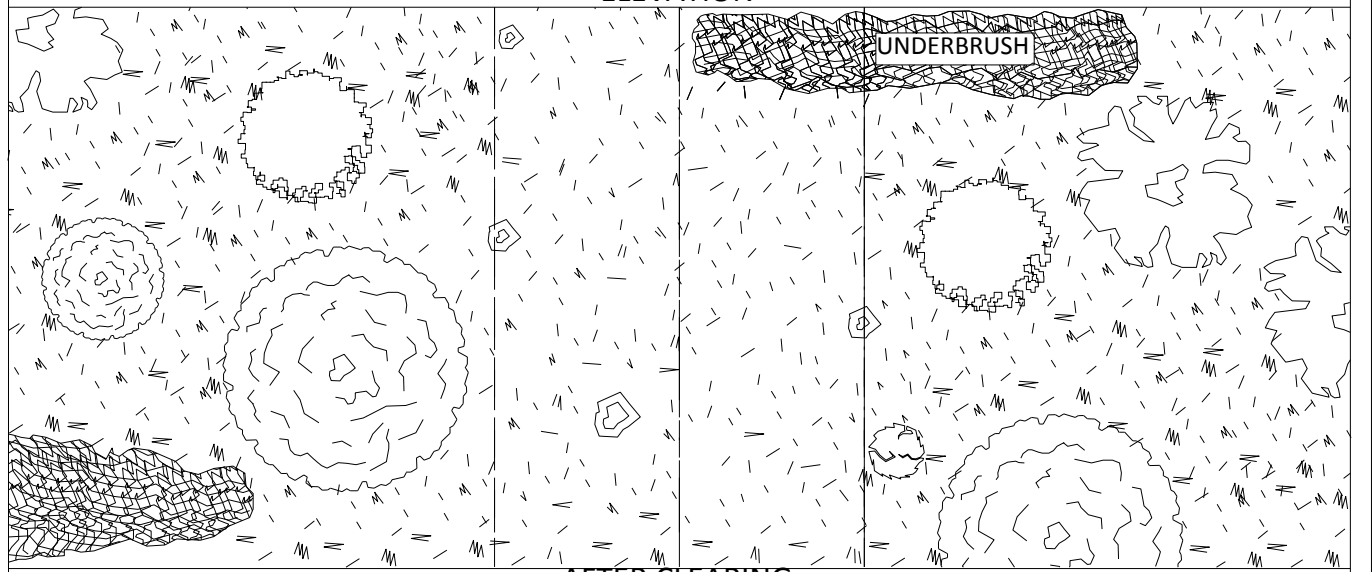
DATE APPROVED:
SEPTEMBER 8, 2016

UNDERGROUND DISTRIBUTION

CLEARING RIGHT-OF-WAY GUIDE



ELEVATION



UNDERGROUND DISTRIBUTION

Notes:

1. Neutral (must be insulated) may be reduced no more than two sizes on residential application. No reduction of the neutral is allowed on commercial applications.
2. Weatherproof fittings required.
3. This meter loop specification is good for the following voltages: 120/240, 120/208, 240/480 & 277/480. Please use MS-301 for straight 480 Delta applications only.
4. Meter pole must remain free of structures and private attachments other than meter loop.
5. Bluebonnet Electric will supply ground rod.
6. On steel poles use a 3/8" X 1 1/2" self topping screw.

FOR THREE PHASE APPLICATIONS

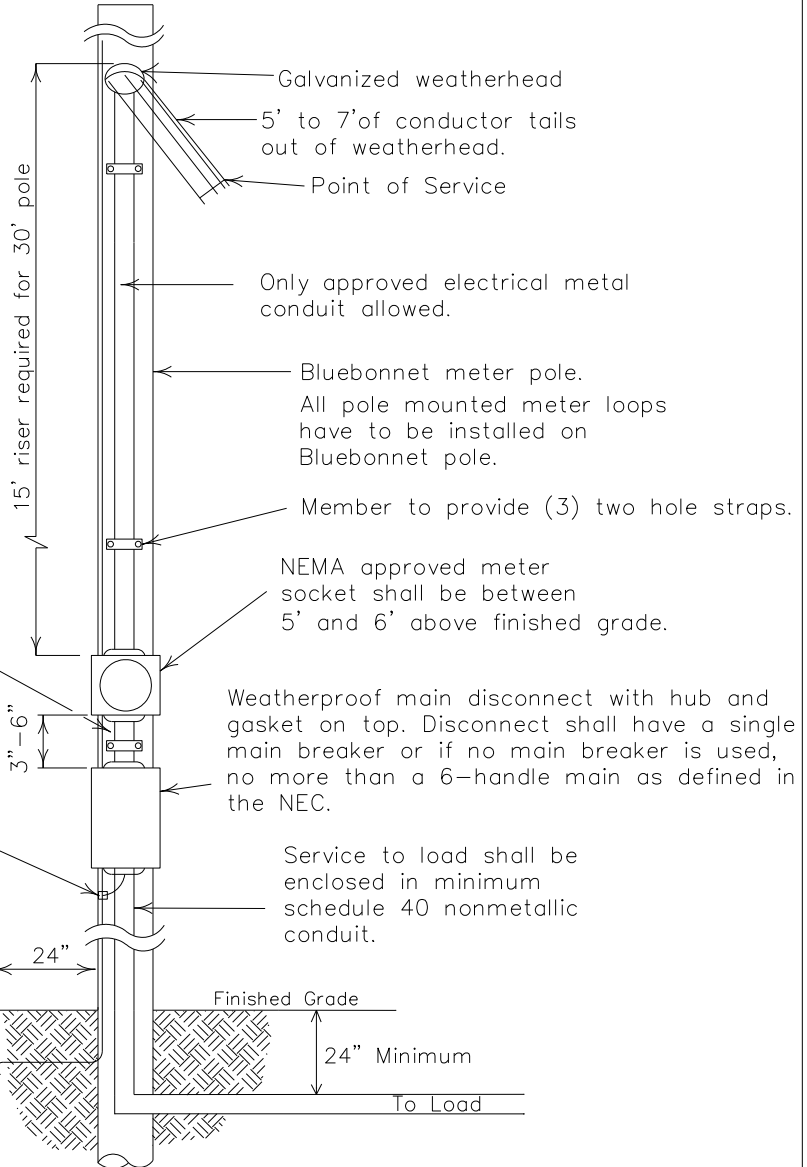
DESCRIPTION:
 200amp, 7 terminal, 3-phase, 4-wire will require a lever by-pass meeting ANSI C12.7, UL 414, on NEMA 3R. Meter cans are available for purchase through Techline or any other electrical supplier provided it meets all Bluebonnet Electric Cooperative specifications. Techline (512-332-2978)

Galvanized metal conduit with (1) locknut and fiber bushing inside meter can on nipple and (1) locknut under meter can. Maintain 3-6" distance between the meter can and the disconnect. Member shall use a metal nipple. A Straight or offset nipple is acceptable.

#6 solid, bare ground wire and clamp attached to Bluebonnet's pole ground. Ground rod provided by Bluebonnet.

* WIRING INSTALLATIONS MUST MEET LOCAL GUIDELINES, IF APPLICABLE, SET FORTH BY CITY, COUNTY, OR OTHER GOVERNING ENTITY IN THE EVENT THESE REQUIREMENTS ARE MORE STRINGENT THAN BLUEBONNET SPECIFICATIONS. *

FOR THE MEMBER'S SAFETY, WIRING INSTALLATIONS SHALL CONFORM TO THE REQUIREMENTS OF THE NEC, TDLR AND NESC.



Latest update can be found at <http://www.bluebonnetelectric.coop/myHome/electricServices/meterLoop.aspx>

CURRENT CARRYING CAPACITIES AND CONDUIT/NIPPLE SIZE REQUIREMENTS OF STANDARD WIRE SIZES (RHH, RHW, THW, THWN, THHN, AND XHHW)
 THIS GUIDE REFERS TO TABLE 310.15 (B)(7), SINGLE PHASE DWELLING SERVICES. REFER TO NEC FOR OTHER CALCULATIONS.

COPPER CONDUCTOR			ALUMINUM CONDUCTOR		
Wire Size	Breaker Size	Conduit/Nipple Size	Wire Size	Breaker Size	Conduit/Nipple Size
#6	60 Amp	1 1/4" Conduit	#4	60 Amp	1 1/4" Conduit
#4	100 Amp	1 1/4" Conduit	#2	100 Amp	1 1/4" Conduit
#2	125 Amp	1 1/2" Conduit	#1/0	125 Amp	1 1/2" Conduit
#1	150 Amp	2" Conduit	#2/0	150 Amp	2" Conduit
#2/0	200 Amp	2" Conduit	#4/0	200 Amp	2" Conduit

15' METER LOOP
 1Ø OR 3Ø 60-200 AMP
 METER LOOP ON METER POLE
 (GOOD FOR VOLTAGES: 120/240, 120/208, 240/480, 277/480)



DATE	REVISIONS		Drawn By :	Checked By :	Approved By :
11-27-17	Added Nipple after conduit size		RG	MS COMMITTEE	TE
			Scale :	Date:	MS-10115
			NONE	11-27-2017	

Notes:

1. Neutral (must be insulated) may be reduced no more than two sizes on residential application. No reduction of the neutral is allowed on commercial applications.
2. Weatherproof fittings required.
3. This meter loop specification is good for the following voltages: 120/240, 120/208, 240/480 & 277/480. Please use MS-301 for straight 480 Delta applications only.
4. Meter pole must remain free of structures and private attachments other than meter loop.
5. Bluebonnet Electric will supply ground rod.
6. On steel poles use a 3/8" X 1 1/2" self tapping screw.

FOR THREE PHASE APPLICATIONS DESCRIPTION:

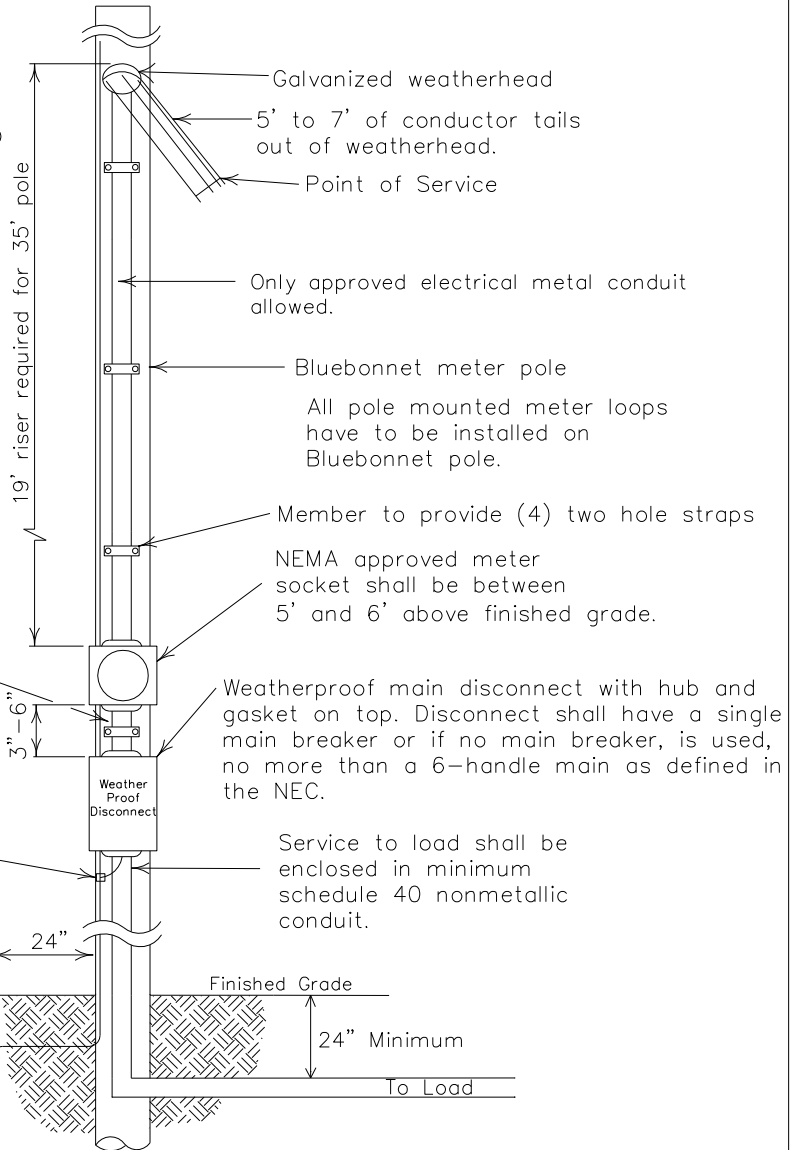
200amp, 7 terminal, 3-phase, 4-wire will require a lever by-pass meeting ANSI C12.7, UL 414, on NEMA 3R. Meter cans are available for purchase through Techline or any other electrical supplier provided it meets all Bluebonnet Electric Cooperative specifications. Techline (512-332-2978)

Galvanized metal conduit with (1) locknut and fiber bushing inside meter can on nipple and (1) locknut under meter can. Maintain 3-6" distance between the meter can and the disconnect. Member shall use a metal nipple. A Straight or offset nipple is acceptable.

#6 solid, bare ground wire and clamp attached to Bluebonnet's pole ground. Ground rod provided by Bluebonnet.

* WIRING INSTALLATIONS MUST MEET LOCAL GUIDELINES, IF APPLICABLE, SET FORTH BY CITY, COUNTY, OR OTHER GOVERNING ENTITY IN THE EVENT THESE REQUIREMENTS ARE MORE STRINGENT THAN BLUEBONNET SPECIFICATIONS. *

FOR THE MEMBER'S SAFETY, WIRING INSTALLATIONS SHALL CONFORM TO THE REQUIREMENTS OF THE NEC, TDLR AND NESC.



Latest update can be found at <http://www.bluebonnetelectric.coop/myHome/electricServices/meterLoop.aspx>

CURRENT CARRYING CAPACITIES AND CONDUIT/NIPPLE SIZE REQUIREMENTS OF STANDARD WIRE SIZES
(RHH, RHW, THW, THWN, THHN, AND XHHW)

THIS GUIDE REFERS TO TABLE 310.15 (B)(7), SINGLE PHASE DWELLING SERVICES. REFER TO NEC FOR OTHER CALCULATIONS.

COPPER CONDUCTOR			ALUMINUM CONDUCTOR		
Wire Size	Breaker Size	Conduit/Nipple Size	Wire Size	Breaker Size	Conduit/Nipple Size
#6	60 Amp	1 1/4" Conduit	#4	60 Amp	1 1/4" Conduit
#4	100 Amp	1 1/4" Conduit	#2	100 Amp	1 1/4" Conduit
#2	125 Amp	1 1/2" Conduit	#1/0	125 Amp	1 1/2" Conduit
#1	150 Amp	2" Conduit	#2/0	150 Amp	2" Conduit
#2/0	200 Amp	2" Conduit	#4/0	200 Amp	2" Conduit

19' METER LOOP
1Ø OR 3Ø 60-200 AMP
METER LOOP ON METER POLE
(GOOD FOR VOLTAGES: 120/240, 120/208, 240/480, 277/480)



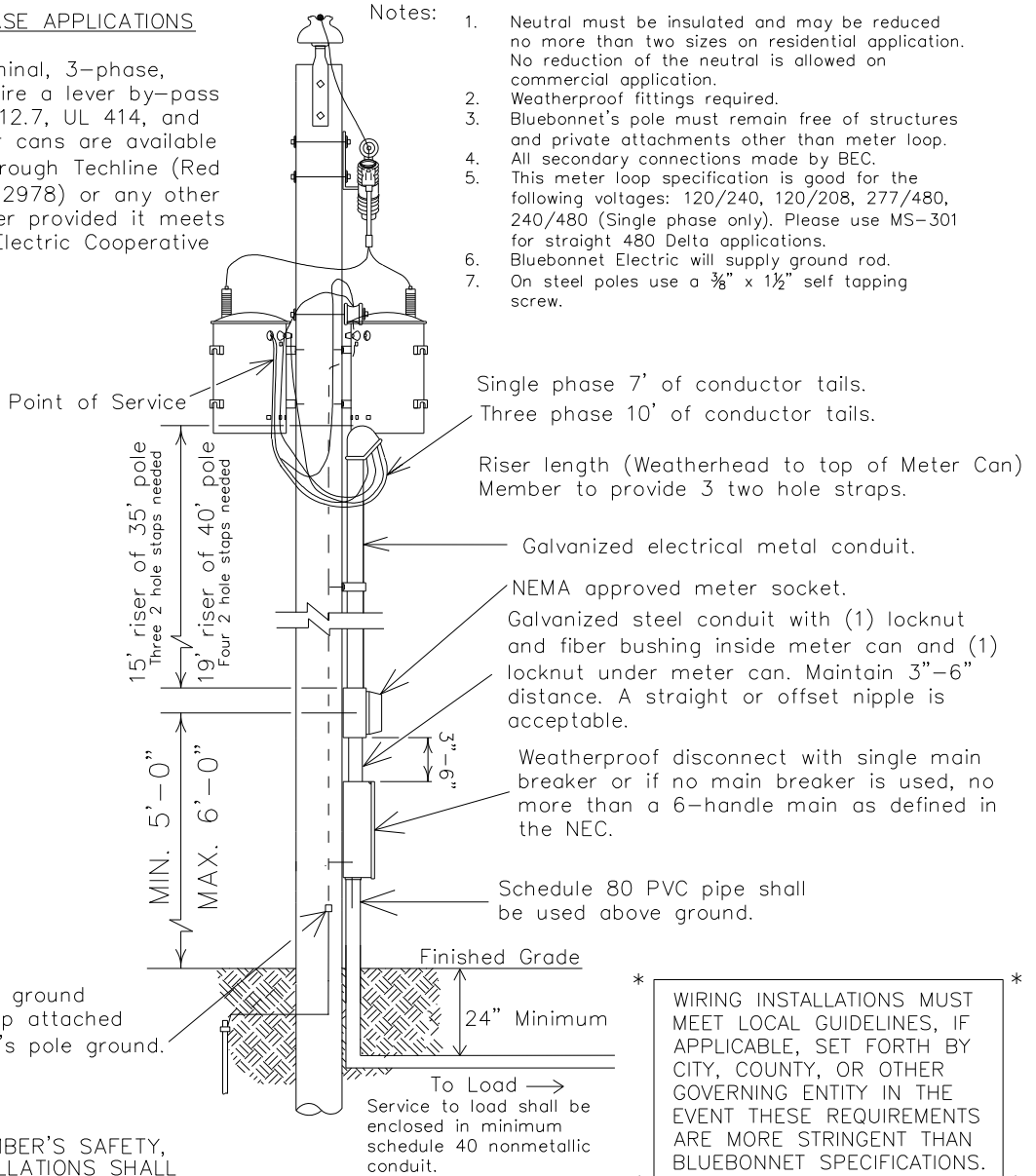
DATE	REVISIONS	Drawn By :	Checked By :	Approved By :
11-27-17	Added Nipple after conduit size	RG	MS COMMITTEE	TE
		Scale :	Date:	MS-10119
		NONE	11-27-2017	

FOR THREE PHASE APPLICATIONS
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 (Red Rock 512-332-2978) or any other electrical supplier provided it meets all Bluebonnet Electric Cooperative specifications.

Notes:

1. Neutral must be insulated and may be reduced no more than two sizes on residential application. No reduction of the neutral is allowed on commercial application.
2. Weatherproof fittings required.
3. Bluebonnet's pole must remain free of structures and private attachments other than meter loop.
4. All secondary connections made by BEC.
5. This meter loop specification is good for the following voltages: 120/240, 120/208, 277/480, 240/480 (Single phase only). Please use MS-301 for straight 480 Delta applications.
6. Bluebonnet Electric will supply ground rod.
7. On steel poles use a 3/8" x 1 1/2" self tapping screw.



#6 solid, bare ground wire and clamp attached to Bluebonnet's pole ground.

FOR THE MEMBER'S SAFETY, WIRING INSTALLATIONS SHALL CONFORM TO THE REQUIREMENTS OF THE NEC, TDLR AND NESC.

Latest update can be found at <http://www.bluebonnetelectric.coop/myHome/electricServices/meterLoop.aspx>

* WIRING INSTALLATIONS MUST MEET LOCAL GUIDELINES, IF APPLICABLE, SET FORTH BY CITY, COUNTY, OR OTHER GOVERNING ENTITY IN THE EVENT THESE REQUIREMENTS ARE MORE STRINGENT THAN BLUEBONNET SPECIFICATIONS. *

CURRENT CARRYING CAPACITIES AND CONDUIT/NIPPLE SIZE REQUIREMENTS OF STANDARD WIRE SIZES
 (RHH, RHW, THW, THWN, AND XHHW)

THIS GUIDE REFERS TO TABLE 310.15 (B)(7), SINGLE PHASE DWELLING SERVICES. REFER TO NEC FOR OTHER CALCULATIONS.

COPPER CONDUCTOR			ALUMINUM CONDUCTOR		
Wire Size	Breaker Size	Conduit/Nipple Size	Wire 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	2" Conduit
#2/0	200 Amp	2 1/2" Conduit	#4/0	200 Amp	2 1/2" Conduit

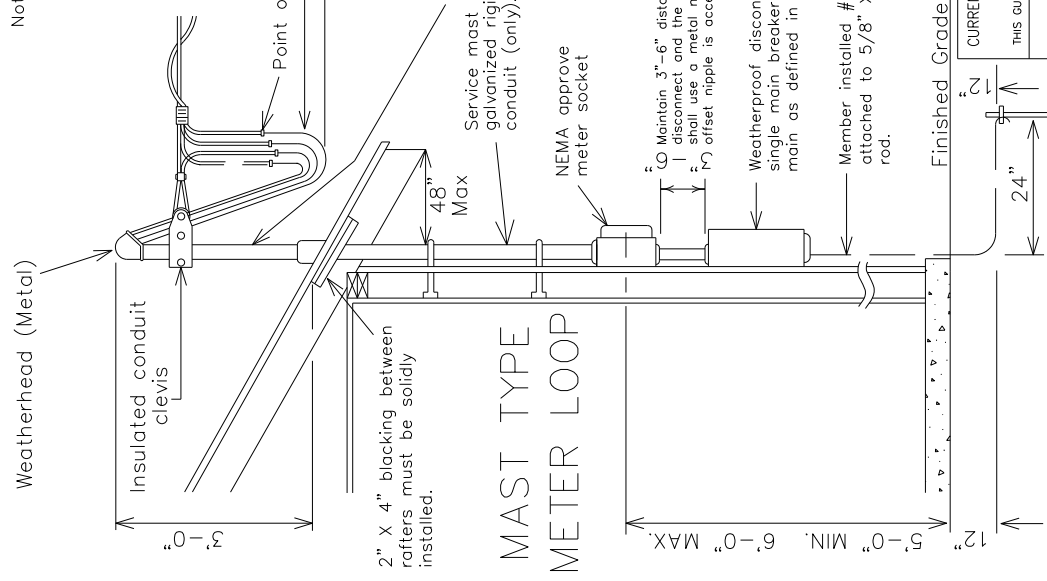
1Ø OR 3Ø 60-200 AMP METER LOOP ON TRANSFORMER POLE



DATE	REVISIONS	Drawn By :	Checked By :	Approved By :
11-27-17	Added nipple after conduit size.	RG	MS COMMITTEE	TE
		Scale :	Date:	
		NONE	11-27-17	MS-102

- Notes:
1. Wire sized to total disconnect size. (See Chart Below)
 2. Neutral must be insulated and may be reduced no more than two sizes on residential application. No reduction of the neutral is allowed on commercial application.
 3. Meter loop must remain unenclosed on exterior of structure.
 4. Meter loop can not be mounted on the side of a mobile home.
 5. Reference NEC SEC. 230.9 (A) for meter clearances that state three feet from openings.
 6. Member to provide a secure and reinforced point to connect service attachment.
 7. Member to provide a secure and reinforced point to connect service attachment.

FOR THREE PHASE APPLICATIONS
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.
Techline (512-332-2978)



3' of conductor tails out of weatherhead
Member to provide (2) two-hole straps attached with galvanized screws, within 6-12 inches from service head and meter socket.

12'-0" voltage does not exceed 300v to ground.
15'-0" voltage exceeds 300v to ground.

WIRING INSTALLATIONS MUST MEET LOCAL GUIDELINES. IF APPLICABLE, SET FORTH BY CITY, COUNTY, OR OTHER GOVERNING ENTITY IN THE EVENT THESE REQUIREMENTS ARE MORE STRINGENT THAN BLUEBONNET SPECIFICATIONS.

CURRENT CARRYING CAPACITIES AND CONDUIT/NIPPLE SIZE REQUIREMENTS OF STANDARD WIRE SIZES
(RH, RHH, RHW, THW, AND XHHW)
THIS GUIDE REFERS TO TABLE 310.15 (B)(7), SINGLE PHASE DWELLING SERVICES. REFER TO NEC FOR OTHER CALCULATIONS.

COPPER CONDUCTOR		ALUMINUM CONDUCTOR	
Wire Size	Breaker Size	Wire Size	Breaker Size
#6	60 Amp	#4	60 Amp
#4	100 Amp	#2	100 Amp
#2	150 Amp	#1/0	125 Amp
#1	200 Amp	#2/0	150 Amp
#2/0	200 Amp	#4/0	200 Amp

FOR THE MEMBER'S SAFETY, WIRING INSTALLATIONS SHALL CONFORM TO THE REQUIREMENTS OF THE NEC, TDLR AND NESC.

Checked By : MS COMMITTEE
Approved By : TE
Date: 11-27-17
Scale : NONE
MS-103MT

Drawn By : RG
10 OR 30 60-200 AMP METER LOOP ON BUILDING, MAST TYPE
REVISIONS
DATE: 11-27-17
Added Nipple to conduit size



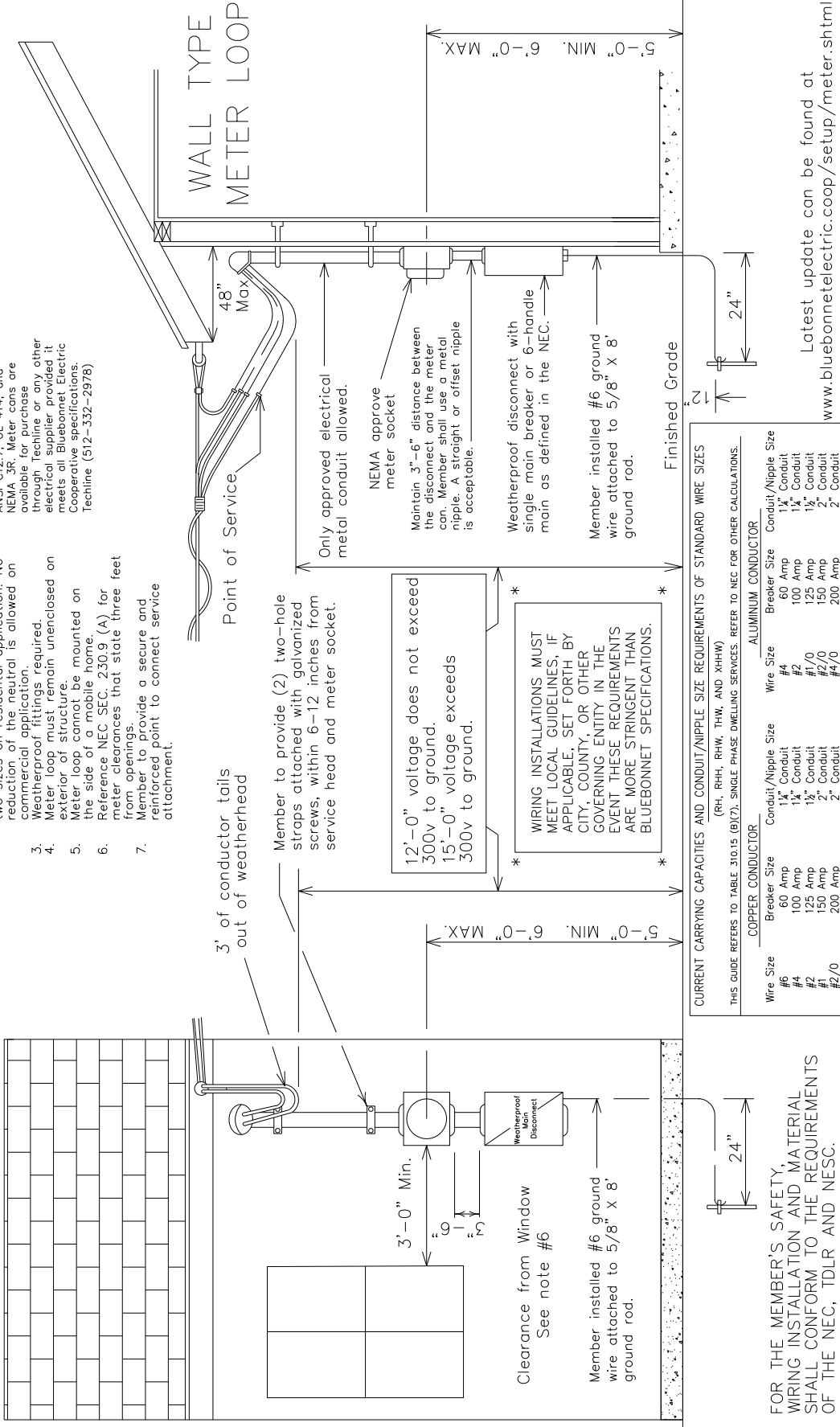
Latest update can be found at
<http://www.bluebonnetelectric.coop/myHome/electricServices/meterLoop.aspx>

Notes:

1. Wire sized to total disconnect size.
2. Neutral may be reduced no more than two sizes on residential application. No reduction of the neutral is allowed on commercial application.
3. Weatherproof fittings required.
4. Meter loop must remain unenclosed on exterior of structure.
5. Meter loop cannot be mounted on the side of a mobile home.
6. Reference NEC SEC. 230.9 (A) for meter clearances that state three feet from openings.
7. Member to provide a secure and reinforced point to connect service attachment.

EOR THREE PHASE APPLICATIONS

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. Techline (512-332-2978)



CURRENT CARRYING CAPACITIES AND CONDUIT/NIPPLE SIZE REQUIREMENTS OF STANDARD WIRE SIZES
 (FH, RHW, RHW, THW, AND XHHW)

THIS GUIDE REFERS TO TABLE 310.15 (B)(7), SINGLE PHASE DWELLING SERVICES. REFER TO NEC FOR OTHER CALCULATIONS.

COPPER CONDUCTOR		ALUMINUM CONDUCTOR	
Wire Size	Breaker Size	Conduit/Nipple Size	Conduit/Nipple Size
#4	60 Amp	1 1/2" Conduit	1 1/2" Conduit
#2	100 Amp	1 1/2" Conduit	1 1/2" Conduit
#1	125 Amp	2" Conduit	2" Conduit
#2/0	150 Amp	2" Conduit	2" Conduit
	200 Amp	#2/0	#4/0

FOR THE MEMBER'S SAFETY, WIRING INSTALLATION AND MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF THE NEC, TDLR AND NESC.



10 OR 30 60-200 AMP METER LOOP ON BUILDING, WALL TYPE		Drawn By : RG	Checked By : MS COMMITTEE	Approved By : TE
Date 11-27-17	REVISIONS Added Nipple to conduit size.	Scale : NONE	Date: 11-27-17	MS-103WT

Latest update can be found at
www.bluebonnetelectric.coop/setup/meter.shtml

Notes:

- Line taps shall be made in the galvanized trough by the electrical contractor.
- No more than (2) conductors per phase shall be allowed.
- No more than (2) risers will be connected per installation.
- Weatherproof fittings required.
- Wire sized to total disconnect sizes.
- Neutral(s) may be reduced no more than two sizes on residential application. No reduction of the neutral is allowed on commercial application.
- Bluebonnet pole must remain free of structures and private attachments other than meter loop riser assembly.
- Meter assembly must remain unenclosed on exterior of structure.
- Meter assembly cannot be mounted on a mobile home.
- If secondary service exceeds (2) 2", 3", or 4" approved electrical metal conduit; BEC will install a primary underground transformer at member's expense.
- Maintain 3"-6" distance between the disconnect and the meter can. Member shall use a metal nipple. A straight or offset nipple is acceptable.

Transformer Pole Riser Length:
 35' Pole = 20' Riser
 40' Pole = 24' Riser

Service Pole Riser Length:
 30' Pole = 20' Riser
 35' Pole = 24' Riser

Member's Conduit
 Member's conduit shall be installed 8"-12" from pole.

FOR THREE PHASE APPLICATIONS

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. Techline (512-332-2978)

RISER ONLY

Only 2", 3", or 4" approved electrical metal conduit allowed above finished grade. Risers will not exceed 2 risers per pole. Member will provide 10' of conductor tails from top of weatherhead. BEC to supply Stand-Offs. (Bluebonnet to mount risers to pole)

No more than four 60-200 amp metersockets and weatherproof main disconnects.

8' ground rod to be driven 12" below grade

3000 PSI. Concrete Min.

24" Minimum

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

Equipment rack 2" or 3" steel pipe with uni-strut horizontal support.

Galvanized Trough

Weatherproof Main Disconnect

Weatherproof Main Disconnect

Weatherproof Main Disconnect

Weatherproof Main Disconnect

Weatherproof Main Disconnect

Weatherproof Main Disconnect

Weatherproof Main Disconnect

Weatherproof Main Disconnect

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Weatherproof Main Disconnect

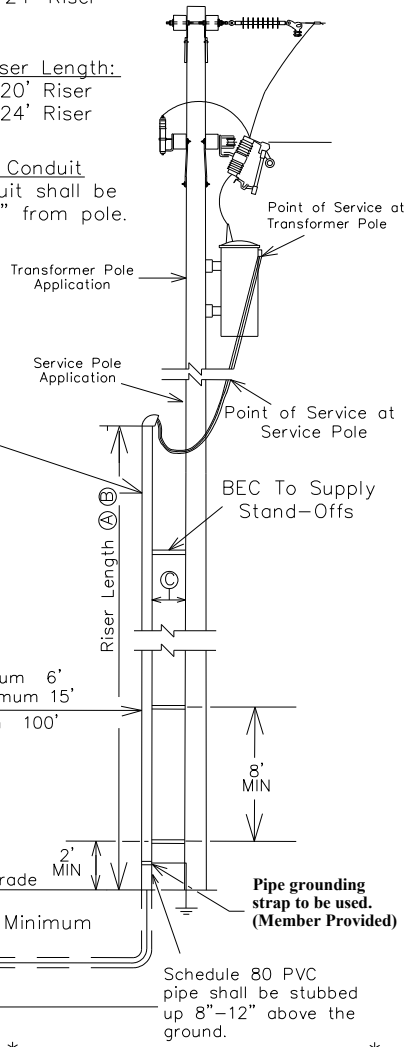
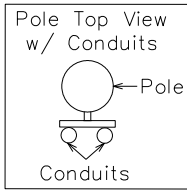
Weatherproof Main Disconnect

Weatherproof Main Disconnect

Weatherproof Main Disconnect

Weatherproof Main Disconnect

Weatherproof Main Disconnect



Minimum schedule 40 rigid nonmetallic service conduit below finished grade. No schedule 40 conduit allowed above ground level on source side of main disconnect.

WIRING INSTALLATIONS MUST MEET LOCAL GUIDELINES, IF APPLICABLE, SET FORTH BY CITY, COUNTY, OR OTHER GOVERNING ENTITY IN THE EVENT THESE REQUIREMENTS ARE MORE STRINGENT THAN BLUEBONNET SPECIFICATIONS.

FOR THE MEMBER'S SAFETY, WIRING INSTALLATION AND MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF THE NEC, TDLR AND NESC.

Latest update can be found at www.bluebonnetelectric.coop/myHome/electricServices/meterLoop.aspx

CURRENT CARRYING CAPACITIES AND CONDUIT/NIPPLE SIZE REQUIREMENT OF STANDARD WIRE SIZE. (RHH, RHW, THW, THWN, THHN, AND XHHW)					
THIS GUIDE REFERS TO TABLE 310.15 (B)(7), SINGLE PHASE DWELLINGS SERVICES.REFER TO NEC FOR OTHER CALCULATIONS.					
WIRE SIZE	COPPER CONDUCTOR/ BREAKER SIZE	CONDUIT/NIPPLE SIZE	WIRE SIZE	ALUMINUM CONDUCTOR/ BREAKER SIZE	CONDUIT/NIPPLE SIZE
#6	60 AMP	1/4" CONDUIT	#4	60 AMP	1/4" CONDUIT
#4	100 AMP	1/4" CONDUIT	#2	100 AMP	1/4" CONDUIT
#2	125 AMP	1/2" CONDUIT	#1/0	125 AMP	1/2" CONDUIT
#1	150 AMP	2" CONDUIT	#2/0	150 AMP	2" CONDUIT
#2/0	200 AMP	2" CONDUIT	#4/0	200 AMP	2" CONDUIT

1Ø OR 3Ø 60-200 AMP MULTIPLE METERS ON RACK OR BUILDING NOT TO EXCEED A TOTAL OF 800 AMPS

DATE	REVISIONS
12-07-2017	ADDED WIRE SIZING CHART.



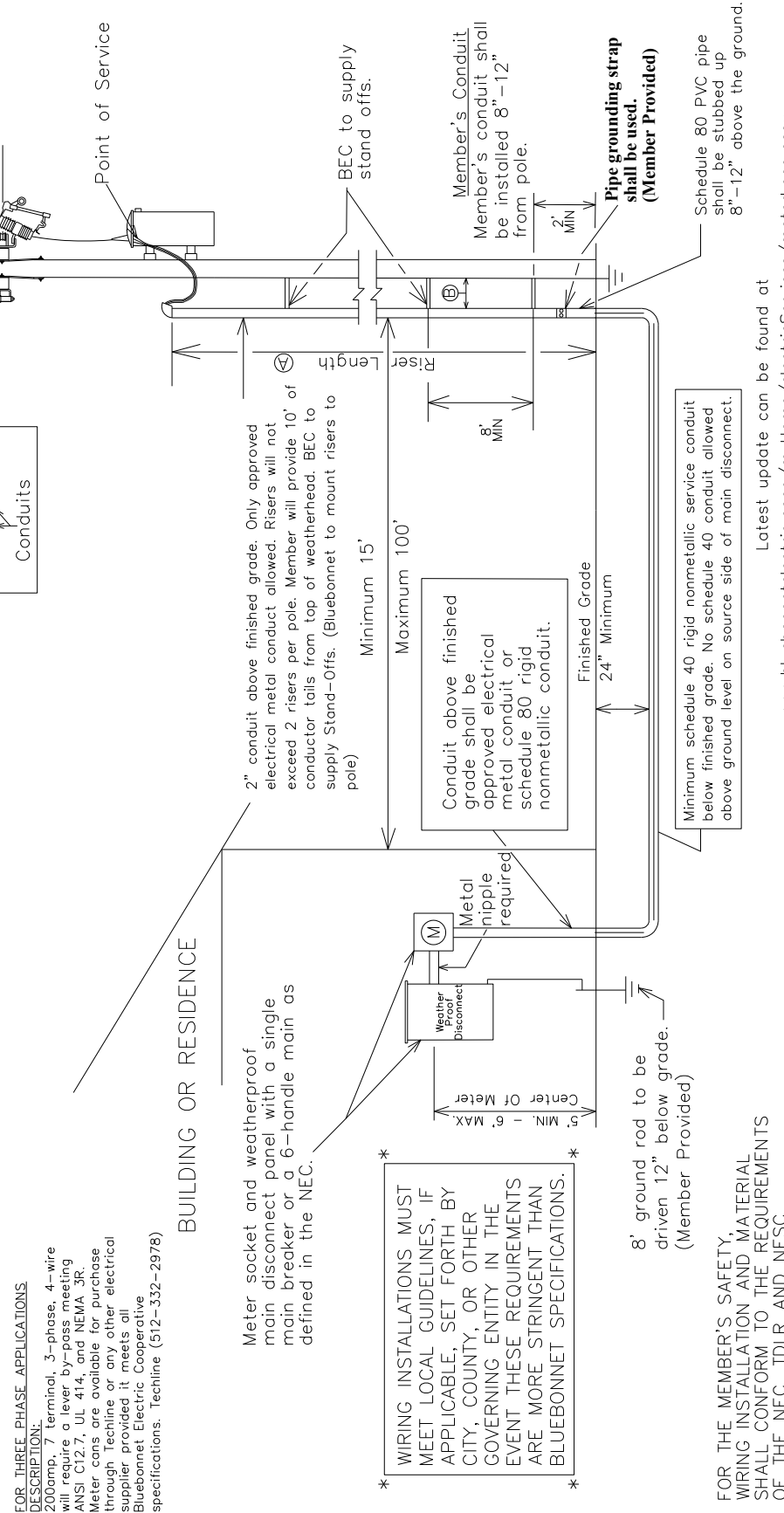
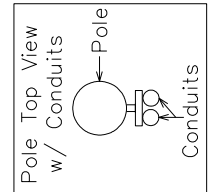
Drawn By : RG	Checked By : MS COMMITTEE	Approved By : TE
Scale : NONE	Date : 12-07-2017	MS-105

CURRENT CARRYING CAPACITIES AND CONDUIT/NIPPLE SIZE REQUIREMENT BY STANDARD WIRE SIZE:	
THIS GUIDE REFERS TO TABLE 310.15(B)(16) AND (17) OF THE 2017 NATIONAL ELECTRICAL CODE (NEC) FOR WIRING INSTALLATIONS. SERVICES REFER TO NEC FOR OTHER CALCULATIONS.	
COPPER CONDUCTOR	CONDUIT/NIPPLE SIZE
BREAKER SIZE	
#6	1 1/4" CONDUIT
#4	1 1/2" CONDUIT
#2	1 3/4" CONDUIT
#1	2" CONDUIT
#1/0	2" CONDUIT
ALUMINUM CONDUCTOR	CONDUIT/NIPPLE SIZE
BREAKER SIZE	
#4	1 1/4" CONDUIT
#2	1 1/2" CONDUIT
#1	1 3/4" CONDUIT
#1/0	2" CONDUIT
#4/0	2" CONDUIT

FOR THREE PHASE APPLICATIONS
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. Techline (512-332-2978)

- Notes:**
1. Weatherproof fittings required.
 2. Wire sized to total disconnect size.
 3. Neutral may only be reduced two sizes on residential application. No reduction of the neutral is allowed on commercial application. Bluebonnet pole must remain free of structures and private attachments other than meter loop riser assembly. Meter assembly must remain unenclosed on exterior of structure.
 4. Meter assembly cannot be mounted on a mobile home.
 5. All secondary connections made by BEC.

Riser Length:
 35' Pole = 20' Riser
 40' Pole = 24' Riser



* WIRING INSTALLATIONS MUST MEET LOCAL GUIDELINES, IF APPLICABLE, SET FORTH BY CITY, COUNTY, OR OTHER GOVERNING ENTITY IN THE EVENT THESE REQUIREMENTS ARE MORE STRINGENT THAN BLUEBONNET SPECIFICATIONS. *

FOR THE MEMBER'S SAFETY, WIRING INSTALLATION AND MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF THE NEC, TDLR AND NECC.



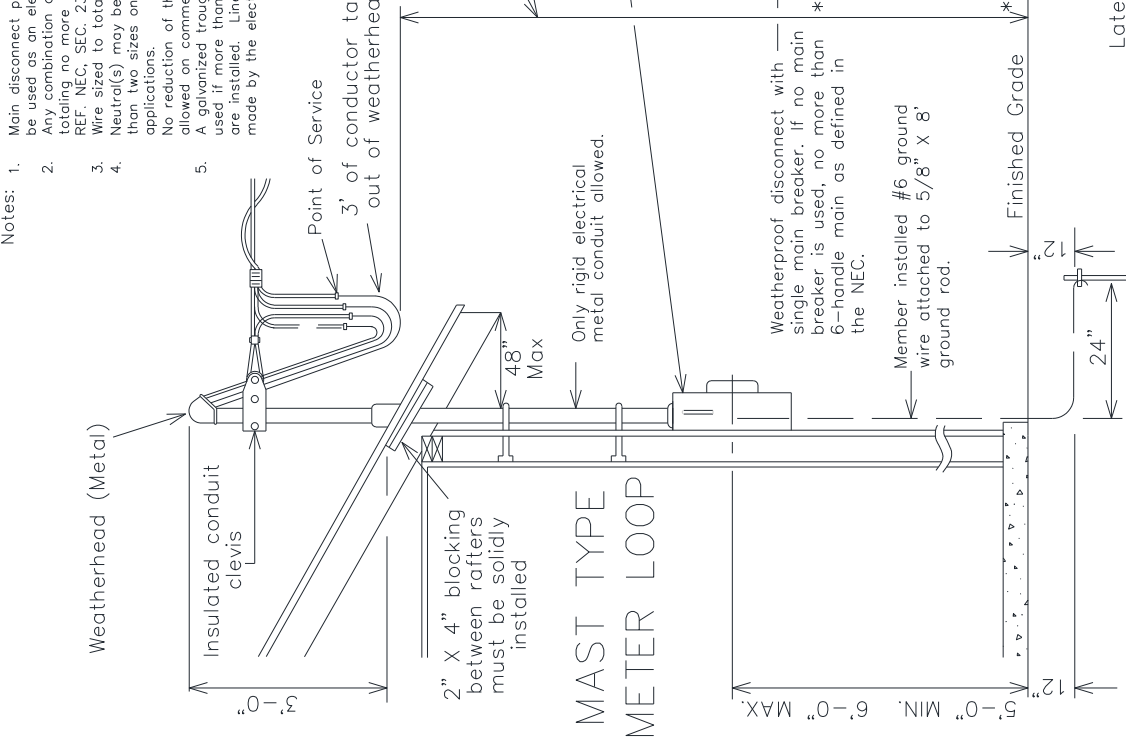
www.bluebonnetelectric.coop/myHome/electricServices/meterLoop.aspx	
Latest update can be found at	Approved By : BS
Drawn By : CV	Checked By : MS COMMITTEE
Scale : NONE	Date : 03/29/2018
MS-106	

- Main disconnect panel may not be used as an electrical race way.
- Any combination of six disconnects totaling no more than 400 amp.
- Wire sized to total disconnect sizes.
- Neutral(s) may be reduced no more than two sizes on residential applications.
- No reduction of the neutral(s) is allowed on commercial applications. A galvanized trough will have to be used if more than two disconnects are installed. Line taps shall be made by the electrical contractor.
- Reference NEC SEC. 230.9 (A) for meter clearances that state three feet from openings.
- Weatherproof fittings required.
- Weatherproof fittings required. Meter loop must remain unenclosed on exterior of structure.
- Meter loop cannot be mounted on the side of a mobile home.
- All services entering the meter can from a riser will be top fed.
- Only 400 amp meter can is allowed. 320 amp meter cans are not allowed. A detailed load sheet shall be filled and returned to Bluebonnet before the service will be connected.
- No wires shall run in the center of the can. (Due to the clearance needed to set the meter.)
- Largest wire to be pulled in to the meter can is 500 MCM Copper.
- All service wires entering the meter can (Top or Bottom Feed) will be terminated at the closest lugs. No phase conductors shall be run through the center of the meter can.

- 12'-0" voltage does not exceed 300v to ground.
- 15'-0" voltage exceeds 300v to ground.

Type K-4 Bolt-in Type Meter Can
 Description: 400 amp, 4 terminals, 3 wire, residential/commercial socket singlephase self-contained, large cover plate. These meter cans are available for purchase through Techline or any other electrical supplier provided it meets all Bluebonnet Electric Cooperative specifications. Techline (512-332-2978)

WIRING INSTALLATIONS MUST MEET LOCAL GUIDELINES, IF APPLICABLE, SET FORTH BY CITY, COUNTY, OR OTHER GOVERNING ENTITY IN THE EVENT THESE REQUIREMENTS ARE MORE STRINGENT THAN BLUEBONNET SPECIFICATIONS.



www.bluebonnetelectric.coop/myHome/electricServices/meterLoop.aspx

		Checked By : MS COMMITTEE Approved By : TE
DATE REVISIONS		Drawn By : BS MS COMMITTEE
METER LOOP ON BUILDING - MAST TYPE		Date: 07-25-2016
Scale : NONE		MS-107MT

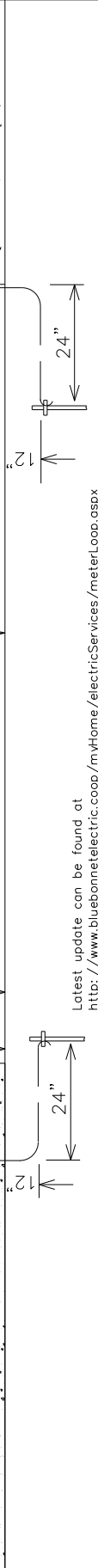
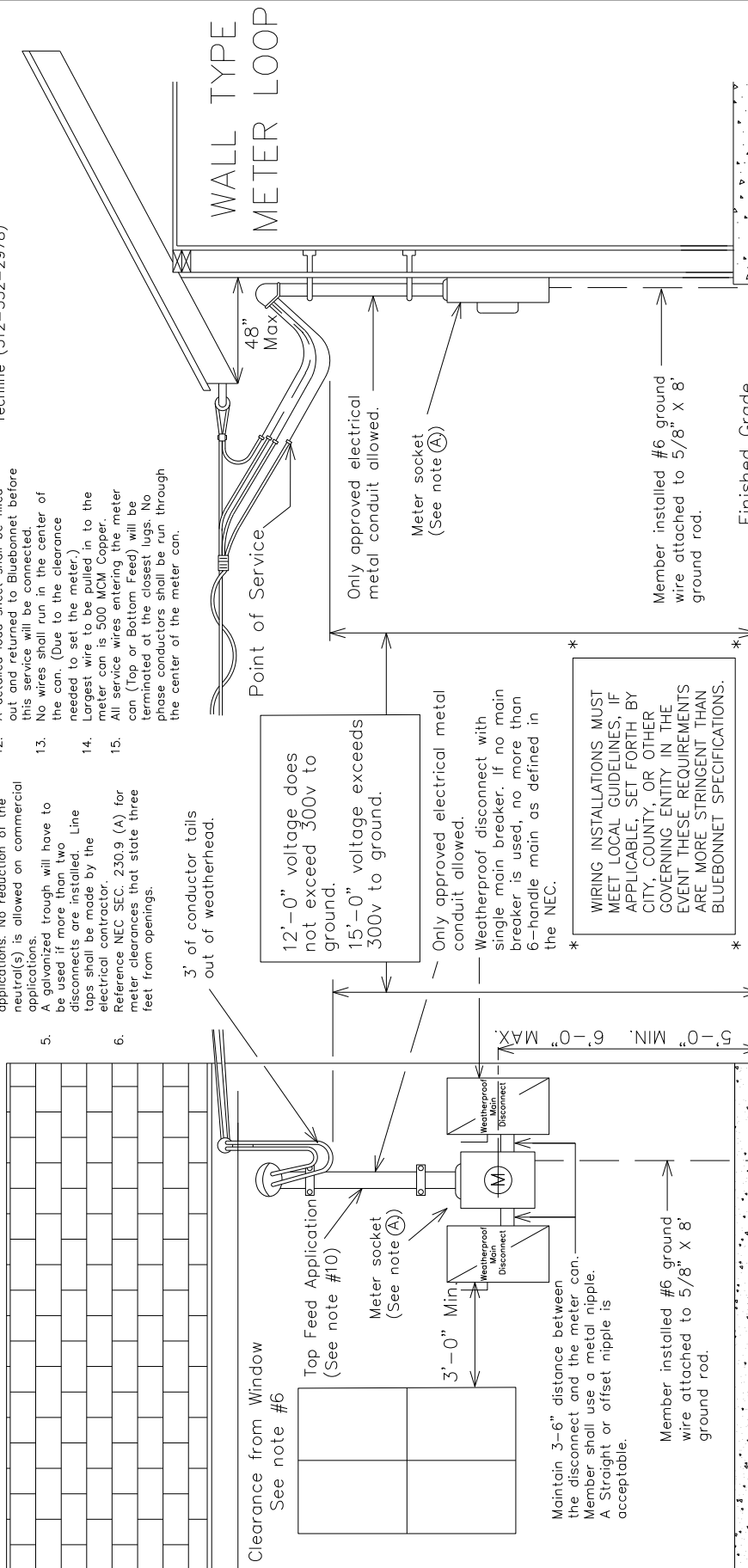
FOR THE MEMBER'S SAFETY, WIRING INSTALLATION AND MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF THE NEC, TDLR AND NESC.

Notes:

1. Main disconnect panel may not be used as an electrical race way.
2. Any combination of six disconnects totaling no more than 400 amp. REF. NEC, SEC. 230.71.
3. Wire sized to total disconnect sizes.
4. Neutral(s) may be reduced no more than two sizes on residential applications. No reduction of the neutral(s) is allowed on commercial applications.
5. A galvanized trough will have to be used if more than two disconnects are installed. Line tops shall be made by the electrical contractor.
6. Reference NEC SEC. 230.9 (A) for meter clearances that state three feet from openings.

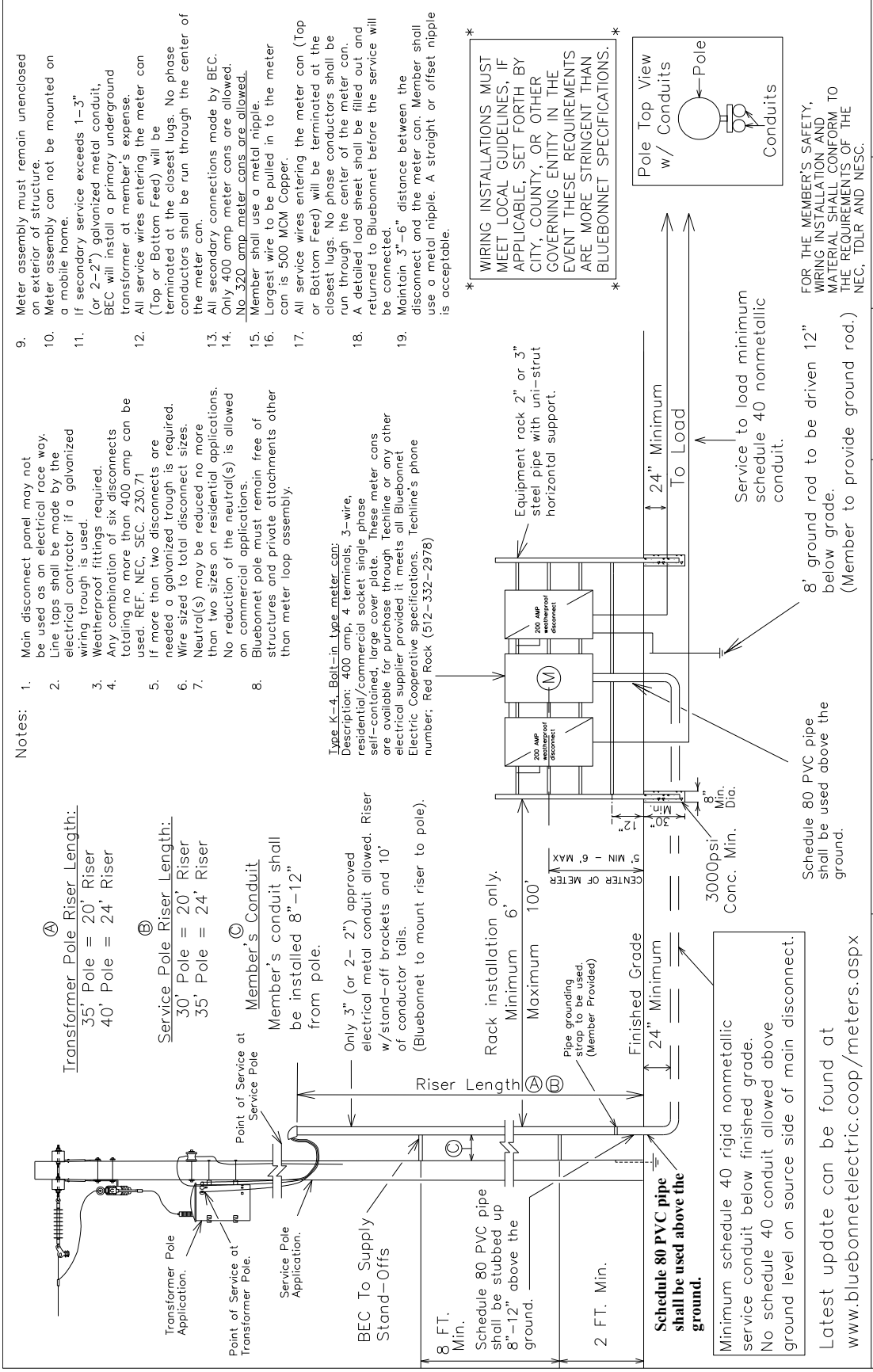
7. Weatherproof fittings required. Meter loop must remain unenclosed on exterior of structure.
8. Meter loop cannot be mounted on the side of a mobile home.
9. All services entering the meter can from a riser will be top feed.
10. Only 400 amp meter can is allowed.
11. 320 amp meter cans are not allowed.
12. A detailed load sheet shall be filled out and returned to Bluebonnet before this service will be connected.
13. No wires shall run in the center of the con. (Due to the clearance needed to set the meter.)
14. Largest wire to be pulled in to the meter can is 500 MCM Copper.
15. All service wires entering the meter can (Top or Bottom Feed) will be terminated at the closest lugs. No phase conductors shall be run through the center of the meter can.

(A) Type K-4, Bolt-in Type Meter Can Description: 400 amp, 4 terminals, 3 wire, residential/commercial socket singlephase self-contained, large coverplate. These meter cans are available for purchase through Techline or any other electrical supplier provided it meets all Bluebonnet Electric Cooperative specifications. Techline (512-332-2978)



Latest update can be found at
<http://www.bluebonnetelectric.coop/myHome/electricServices/meterLoop.aspx>

	1Ø 400 AMP SERVICE WITH METER LOOP ON BUILDING - WALL TYPE		Checked By : MS COMMITTEE	Approved By : TE
	DATE	REVISIONS	Drawn By : RG	Date: 07-26-2016
			Scale : NONE	MS-107WT



- Notes:
1. Main disconnect panel may not be used as an electrical race way. Line tops shall be made by the electrical contractor if a galvanized wiring trough is used.
 2. Weatherproof fittings required. Any combination of six disconnects totaling no more than 400 amp can be used. REF. NEC, SEC. 230.71
 3. If more than two disconnects are needed a galvanized trough is required. Wire sized to total disconnect sizes.
 4. Neutral(s) may be reduced no more than two sizes on residential applications. No reduction of the neutral(s) is allowed on commercial applications.
 5. Bluebonnet pole must remain free of structures and private attachments other than meter loop assembly.
 6. Type K-4, Bolt-in type meter can. Description: 400 amp, 4 terminals, 3-wire, residential/commercial socket single phase self-contained, large cover plate. These meter cans are available for purchase through Techline or any other electric supplier provided it meets all Bluebonnet Electric Cooperative specifications. Techline's phone number: Red Rock (512-332-2978)
 7. Meter assembly must remain unenclosed on exterior of structure.
 8. Meter assembly can not be mounted on a mobile home.
 9. If secondary service exceeds 1-3" (or 2-2") galvanized metal conduit, BEC will install a primary underground transformer at member's expense.
 10. All service wires entering the meter can (Top or Bottom Feed) will be terminated at the closest lugs. No phase conductors shall be run through the center of the meter can. A detailed load sheet shall be filled out and returned to Bluebonnet before the service will be connected.
 11. Maintain 3"-6" distance between the disconnect and the meter can. Member shall use a metal nipple. A straight or offset nipple is acceptable.
 12. All secondary connections made by BEC. Only 400 amp meter cans are allowed. No 320 amp meter cans are allowed.
 13. Member shall use a metal nipple.
 14. Largest wire to be pulled in to the meter can is 500 MCM Copper.
 15. All service wires entering the meter can (Top or Bottom Feed) will be terminated at the closest lugs. No phase conductors shall be run through the center of the meter can.
 16. A detailed load sheet shall be filled out and returned to Bluebonnet before the service will be connected.
 17. Maintain 3"-6" distance between the disconnect and the meter can. Member shall use a metal nipple. A straight or offset nipple is acceptable.

Transformer Pole Riser Length:
 35' Pole = 20' Riser
 40' Pole = 24' Riser

Service Pole Riser Length:
 30' Pole = 20' Riser
 35' Pole = 24' Riser

Member's Conduit
 Member's conduit shall be installed 8"-12" from pole.

Only 3" (or 2-2") approved electrical metal conduit allowed. Riser w/stand-off brackets and 10' of conductor tails. (Bluebonnet to mount riser to pole).

Rock installation only.
 Minimum 6'
 Maximum 100'

Finished Grade
 24" Minimum

Schedule 80 PVC pipe shall be stubbed up 8"-12" above the ground.
 2 FT. Min.

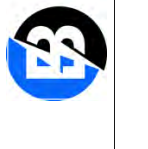
Schedule 80 PVC pipe shall be used above the ground.

Minimum schedule 40 rigid nonmetallic service conduit below finished grade. No schedule 40 conduit allowed above ground level on source side of main disconnect.

Latest update can be found at
www.bluebonnetelectric.coop/meters.aspx

FOR THE MEMBER'S SAFETY, WIRING INSTALLATION AND MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF THE NEC, IDLR AND NESC.

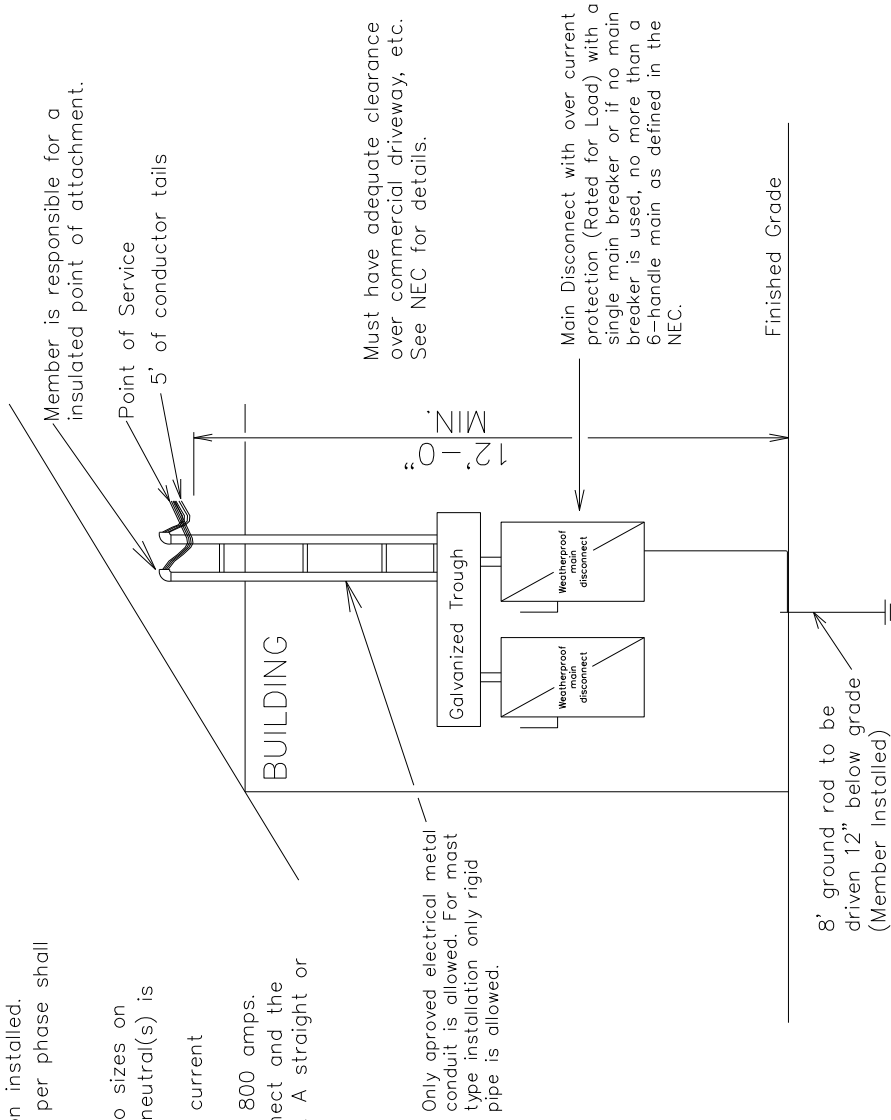
Checked By : MS COMMITTEE
 Drawn By : RG
 Approved By : TE
 Date : 11/28/2017
 Scale : NONE
 MS-108



RETIREMENT ONLY

Notes:

1. When more than (1) disconnect is used, a galvanized trough system shall be installed.
2. Line taps shall be made in the galvanized wire trough by the electrical contractor. (See Article 310.10 (H) Per NEC)
3. (2) disconnects can be substituted with (1) disconnect. All disconnects shall have over current protection installed.
4. No more than (2) risers or (2) conductors per phase shall be allowed.
5. Wire shall be sized to total disconnect sizes.
6. Neutral(s) may be reduced no more than two sizes on residential applications. No reduction of the neutral(s) is allowed on commercial application.
7. Bluebonnet to install meter can, meter and current transformers on pole.
8. Total disconnect's will not exceed a total of 800 amps.
9. Maintain 3"-6" distance between the disconnect and the meter can. Member shall use a metal nipple. A straight or offset nipple is acceptable.



Only approved electrical metal conduit is allowed. For most type installation only rigid pipe is allowed.

Must have adequate clearance over commercial driveway, etc. See NEC for details.


Main Disconnect with over current protection (Rated for Load) with a single main breaker or if no main breaker is used, no more than a 6-handle main as defined in the NEC.

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

* WIRING INSTALLATIONS MUST MEET LOCAL GUIDELINES, IF APPLICABLE, SET FORTH BY CITY, COUNTY, OR OTHER GOVERNING ENTITY IN THE EVENT THESE REQUIREMENTS ARE MORE STRINGENT THAN BLUEBONNET SPECIFICATIONS. *

FOR THE MEMBER'S SAFETY, WIRING INSTALLATION AND MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF THE NEC, TDLR AND NESC.

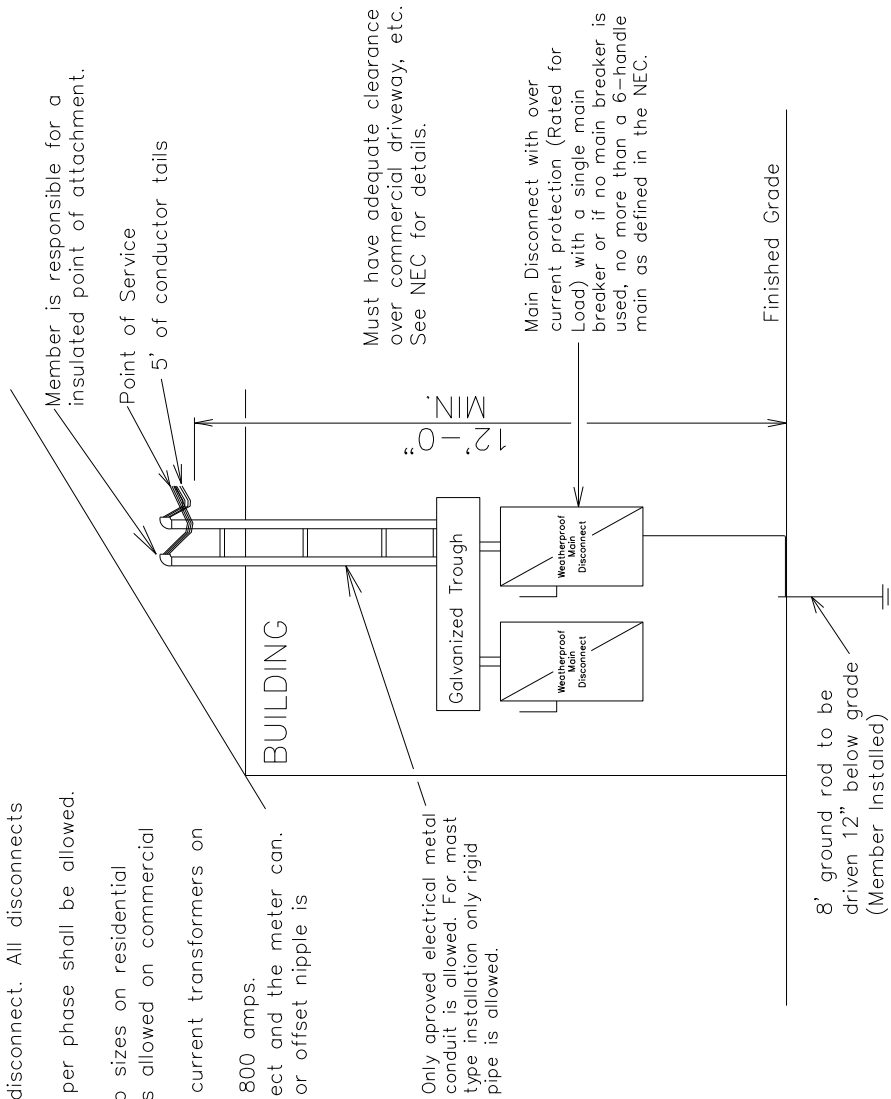
Latest update can be found at <http://www.bluebonnetelectric.coop/myHome/electricServices/meterLoop.aspx>

		1. PHASE >400-AMP SERVICE ON BUILDING WITH CT METERING ON POLE		Drawn By : RG	Checked By : MS COMMITTEE	Approved By : TE
		DATE: 06-07-18	REVISIONS: RETIREMENT ONLY	Scale : NONE	Date : 06-07-2018	MS-112A1

RETIREMENT ONLY

Notes:

1. When more than (1) disconnect is used, a galvanized trough system shall be installed.
2. Line taps shall be made in the galvanized wire trough by the electrical contractor. (See Article 310.10 (H) Per NEC).
3. (2) disconnects can be substituted with (1) disconnect. All disconnects shall have over current protection installed.
4. No more than (2) risers or (2) conductors per phase shall be allowed.
5. Wire shall be sized to total disconnect sizes.
6. Neutral(s) may be reduced no more than two sizes on residential applications. No reduction of the neutral(s) is allowed on commercial application.
7. Bluebonnet to install meter can, meter and current transformers on pole.
8. Total disconnect's will not exceed a total of 800 amps.
9. Maintain 3"-6" distance between the disconnect and the meter can. Member shall use a metal nipple. A straight or offset nipple is acceptable.



*
 WIRING INSTALLATIONS MUST MEET LOCAL GUIDELINES, IF APPLICABLE, SET FORTH BY CITY, COUNTY, OR OTHER GOVERNING ENTITY IN THE EVENT THESE REQUIREMENTS ARE MORE STRINGENT THAN BLUEBONNET SPECIFICATIONS.
 *

FOR THE MEMBER'S SAFETY, WIRING INSTALLATION AND MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF THE NEC, TDLR AND NESC.

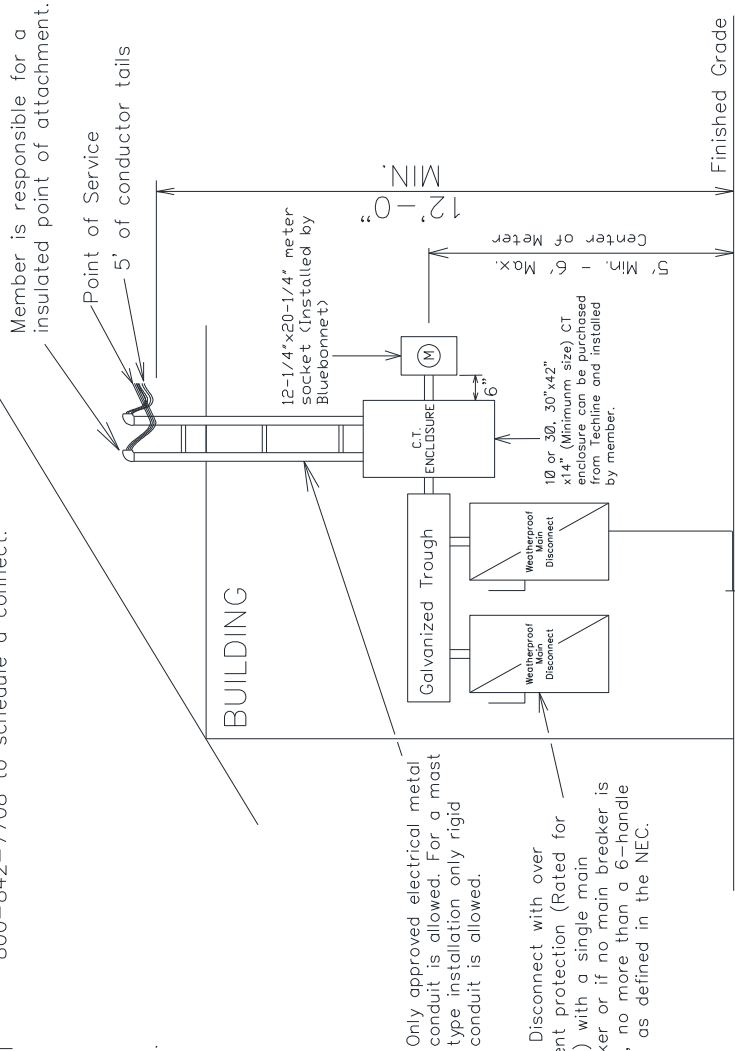
Latest update can be found at <http://www.bluebonnetelectric.coop/myHome/electricServices/meterLoop.aspx>

	3 PHASE >200-800 AMP SERVICE ON BUILDING WITH CT METERING ON POLE		Drawn By : RG	Checked By : MS COMMITTEE	Approved By : TE
	DATE 06/07/18	REVISIONS	Scale : NONE	Date : 06-07-2018	MS-112A3

Notes:

1. When more than (1) disconnect is used, a galvanized trough system shall be installed.
2. Line taps shall be made in the galvanized wire trough by the electrical contractor. (See Article 310.10 (H) Per NEC).
3. (2) disconnects can be substituted with (1) disconnect. All disconnects shall have over current protection installed.
4. No more than (2) risers or (2) conductors per phase shall be allowed.
5. Wire shall be sized to total disconnect sizes.
6. Neutral(s) may be reduced no more than two sizes on residential applications. No reduction of the neutral(s) is allowed on commercial application.
7. CT Cans can be purchased from Techline (512-332-2978).
8. Bluebonnet to install meter can, meter and current transformers unless there will be multiple metering points from the trough. Contact the support service department on this type of installation.
9. Maintain 3"-6" distance between the disconnect and the meter can. Member shall use a metal nipple. A straight or offset nipple is acceptable.

10. Total disconnect's will not exceed a total of 800 amps. The electrical contractor will notify Bluebonnet 72 hours in advance to schedule Bluebonnet personnel to deliver the CT's before the service wire is pulled. The electrician shall install them on the rack with the correct polarity before the conductor is brought thru the 30"x42"x16" (minimum size) CT enclosure. Call 800-842-7708 to schedule a connect.
11. Member is responsible for a insulated point of attachment.




Only approved electrical metal conduit is allowed. For a most type installation only rigid conduit is allowed.

*** WIRING INSTALLATIONS MUST MEET LOCAL GUIDELINES, IF APPLICABLE, SET FORTH BY CITY, COUNTY, OR OTHER GOVERNING ENTITY IN THE EVENT THESE REQUIREMENTS ARE MORE STRINGENT THAN BLUEBONNET SPECIFICATIONS. ***

FOR THE MEMBER'S SAFETY, WIRING INSTALLATION AND MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF THE NEC, TDLR AND NESC.

Must have adequate clearance over commercial driveway, etc. See NESC for details.

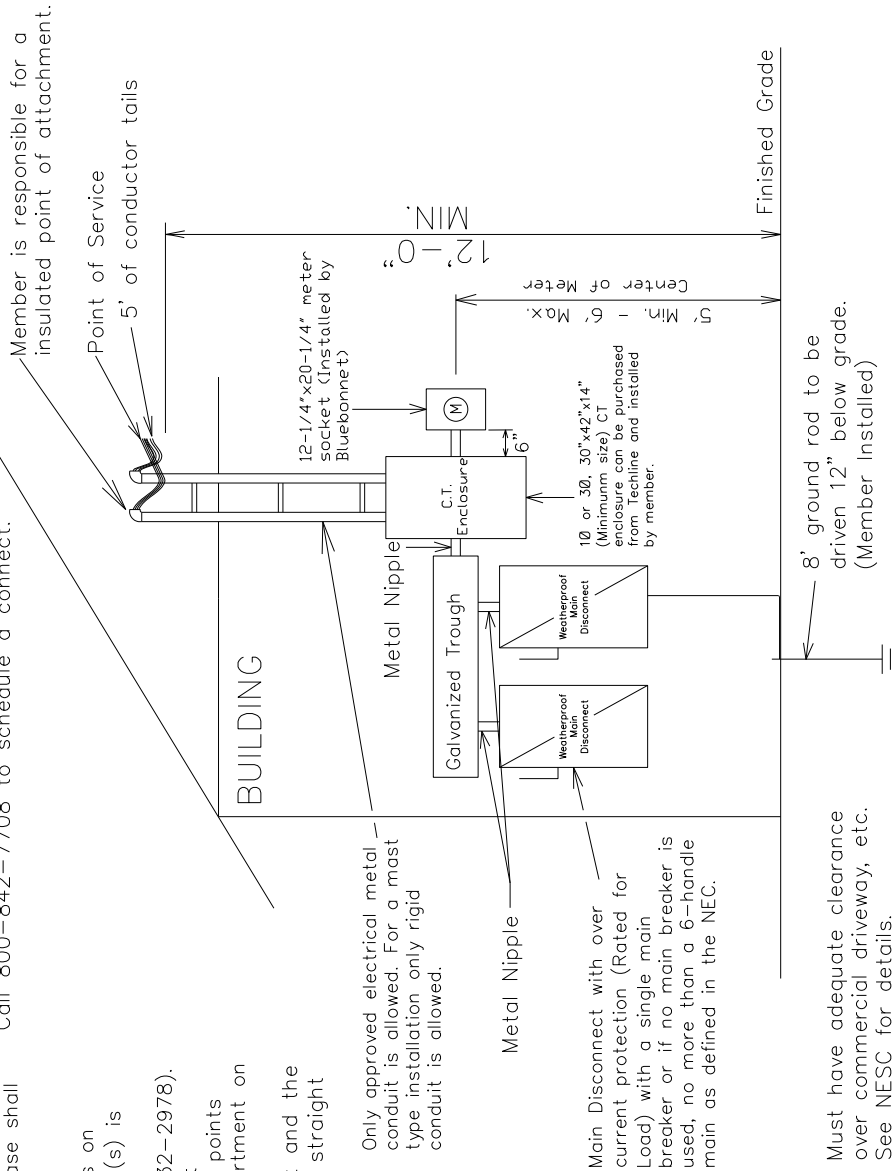
Latest update can be found at <http://www.bluebonnetelectric.coop/myHome/electricServices/meterLoop.aspx>

		1 PHASE >400-600 AMP SERVICE ON BUILDING WITH CT METERING ON BUILDING OR RACK	Drawn By : RG	Checked By : MS COMMITTEE	Approved By : TE
		DATE 01-29-2017	REVISIONS Changed dimensions of the CT Enclosure.	Scale : NONE	Date : 12-07-2017

Notes:

1. When more than (1) disconnect is used, a galvanized trough system shall be installed.
2. Line taps shall be made in the galvanized wire trough by the electrical contractor. (See Article 310.10 (H) Per NEC).
3. All disconnects can be substituted with (1) disconnect.
4. No more than (2) risers or (2) conductors per phase shall be allowed.
5. Wire shall be sized to total disconnect sizes.
6. Neutral(s) may be reduced no more than two sizes on residential applications. No reduction of the neutral(s) is allowed on commercial application.
7. CT Cans can be purchased from Techline (512-332-2978).
8. Bluebonnet to install meter can, meter and current transformers unless there will be multiple metering points from the trough. Contact the support service department on this type of installation.
9. Maintain 3"-6" distance between the disconnect and the meter can. Member shall use a metal nipple. A straight or offset nipple is acceptable.

10. Total disconnect's will not exceed a total of 800 amps. The electrical contractor will notify Bluebonnet 72 hours in advance to schedule Bluebonnet personnel to deliver the CT's before the service wire is pulled. The electrician shall install them on the rack with the correct polarity before the conductor is brought thru the 30"x42"x16" (minimum size) CT enclosure. Call 800-842-7708 to schedule a connect.



Only approved electrical metal conduit is allowed. For a most type installation only rigid conduit is allowed.

Main Disconnect with over current protection (Rated for Load) with a single main breaker or if no main breaker is used, no more than a 6-handle main as defined in the NEC.

Must have adequate clearance over commercial driveway, etc. See NESG for details.

Latest update can be found at

<http://www.bluebonnetelectric.coop/myHome/electricServices/meterLoop.aspx>

*
WIRING INSTALLATIONS MUST MEET LOCAL GUIDELINES, IF APPLICABLE, SET FORTH BY CITY, COUNTY, OR OTHER GOVERNING ENTITY IN THE EVENT THESE REQUIREMENTS ARE MORE STRINGENT THAN BLUEBONNET SPECIFICATIONS.
 *

FOR THE MEMBER'S SAFETY, WIRING INSTALLATION AND MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF THE NEC, TDLR AND NESG.



3 PHASE >200-600 AMP SERVICE ON BUILDING WITH CT METERING ON BUILDING OR RACK		Drawn By : RG	Checked By : MS COMMITTEE	Approved By : TE
DATE 01-29-2017	REVISIONS Changed the dimensions of the CT Enclosure.	Scale : NONE	Date : 06-06-2018	MS-112B3
12-07-2017 Changed the SERVICE FROM 200-800 AMPS TO 200-600 AMPS.				

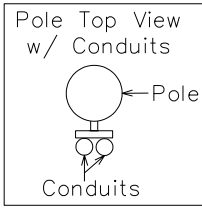
Notes:

1. When more than (1) disconnect is used, a galvanized trough system shall be installed.
2. Line taps shall be made in the galvanized wire trough by the electrical contractor.
3. Weatherproof fittings required.
4. Two (2) disconnects could be substituted with (1) disconnect. All disconnects shall have over current protection installed.
5. No more than two (2) risers or two (2) conductors per phase shall be allowed.
6. Wire shall be sized to total disconnect sizes.
7. Neutral(s) may be reduced no more than two sizes on residential applications. No reduction of the neutral(s) is allowed on commercial application.
8. Bluebonnet pole must remain free of structures and private attachments other than service riser assembly.
9. All secondary connections on pole will be made by Bluebonnet.
10. Maintain 3"-6" distance between the disconnect and the meter can. Member shall use a metal nipple. A straight or offset nipple is acceptable.

Ⓐ Transformer Pole Riser Length:
 35' Pole = 20' Riser
 40' Pole = 24' Riser

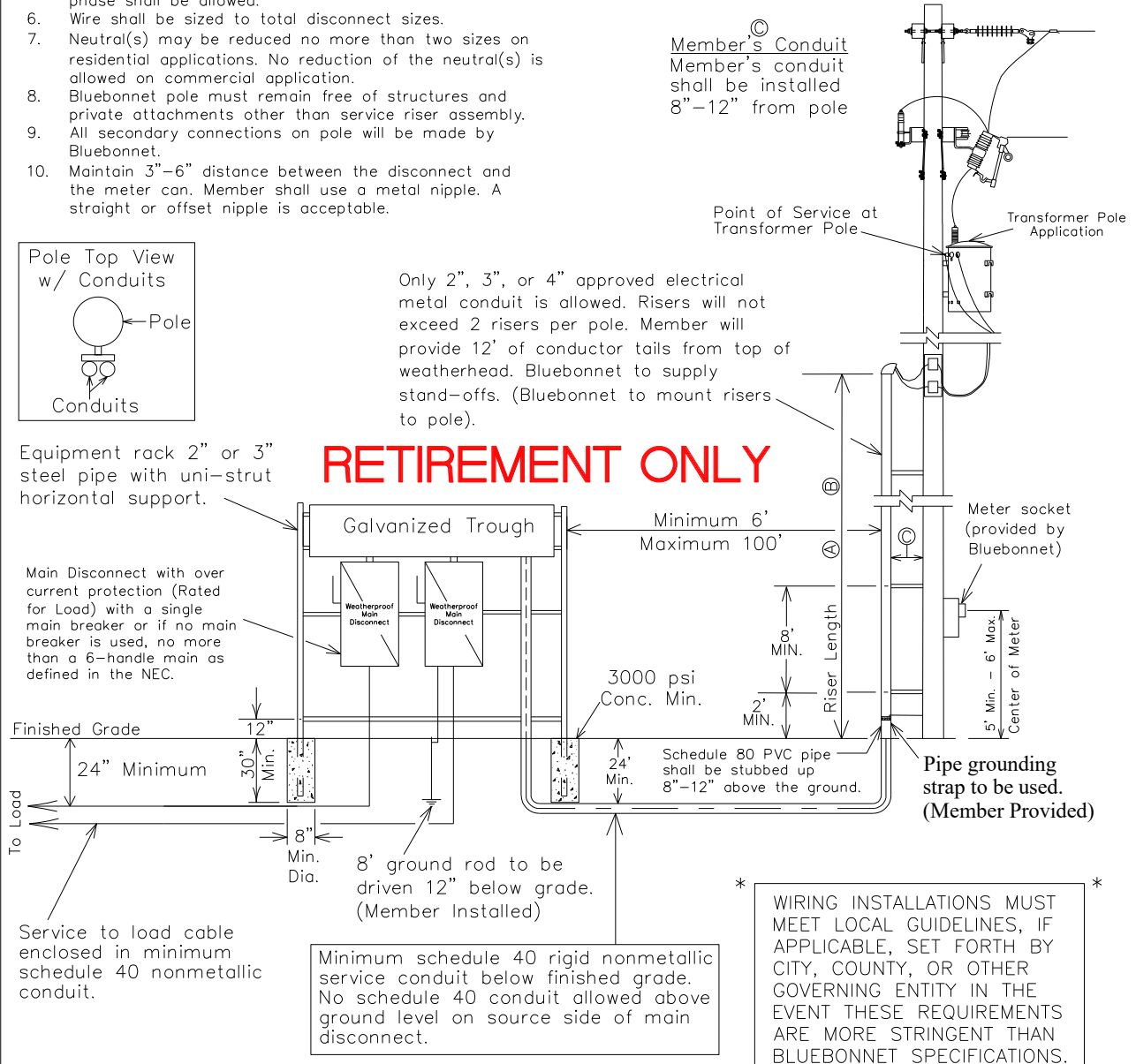
Ⓑ Service Pole Riser Length:
 30' Pole = 20' Riser
 35' Pole = 24' Riser

Ⓒ Member's Conduit
 Member's conduit shall be installed 8"-12" from pole



Only 2", 3", or 4" approved electrical metal conduit is allowed. Risers will not exceed 2 risers per pole. Member will provide 12' of conductor tails from top of weatherhead. Bluebonnet to supply stand-offs. (Bluebonnet to mount risers to pole).

RETIREMENT ONLY



FOR THE MEMBER'S SAFETY, WIRING INSTALLATION AND MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF THE NEC, TDLR AND NESC.

Latest update can be found at www.bluebonnetelectric.coop/myHome/electricServices/meterLoop.aspx

1 PHASE >400-800 AMP SERVICE WITH CT METERING ON POLE			
DATE	REVISIONS	Drawn By :	Checked By :
11/28/17	Bold lettering for pipe grounding strap	RG	MS COMMITTEE
06/07/18	Retirement Only	Approved By :	TE
		Scale :	DATE:
		NONE	06-07-2018
			MS-113A1

Notes:

1. When more than (1) disconnect is used, a galvanized trough system shall be installed.
2. Line taps shall be made in the galvanized wire trough by the electrical contractor.
3. Weatherproof fittings required.
4. Two (2) disconnects could be substituted with (1) disconnect. All disconnects shall have over current protection installed.
5. No more than two (2) risers or two (2) conductors per phase shall be allowed.
6. Wire shall be sized to total disconnect sizes.
7. Neutral(s) may be reduced no more than two sizes on residential applications. No reduction of the neutral(s) is allowed on commercial application.
8. Bluebonnet pole must remain free of structures and private attachments other than service riser assembly.
9. All secondary connections on pole will be made by Bluebonnet.
10. Maintain 3"-6" distance between the disconnect and the meter can. Member shall use a metal nipple. A straight or offset nipple is acceptable.

Ⓐ Transformer Pole Riser Length:

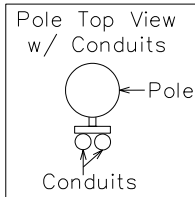
35' Pole = 20' Riser
40' Pole = 24' Riser

Ⓑ Service Pole Riser Length:

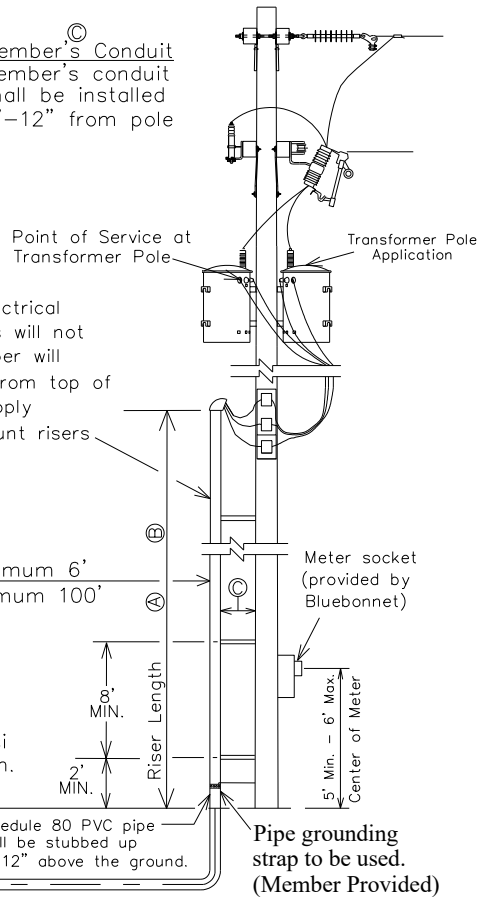
30' Pole = 20' Riser
35' Pole = 24' Riser

Ⓒ Member's Conduit
Member's conduit shall be installed 8"-12" from pole

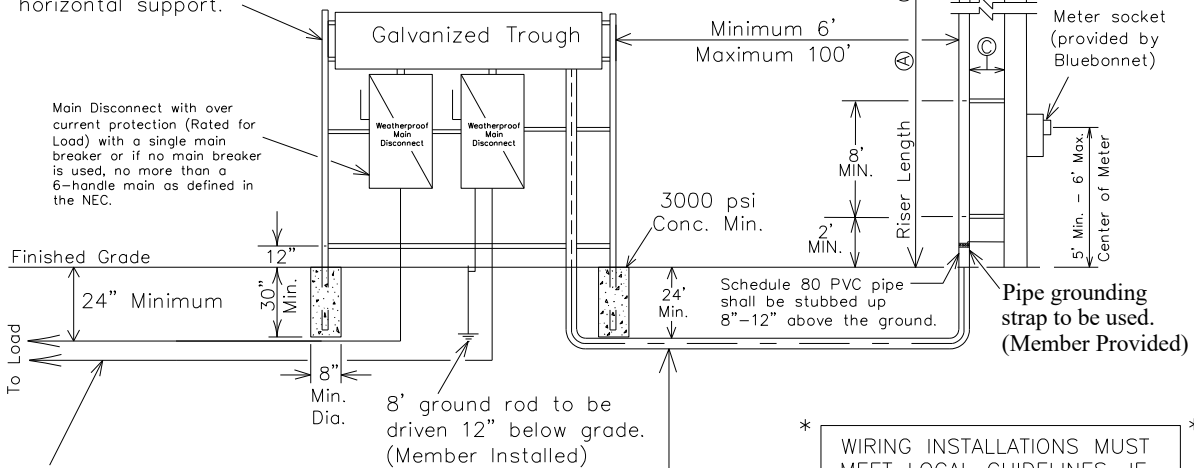
RETIREMENT ONLY



Only 2", 3", or 4" approved electrical metal conduit is allowed. Risers will not exceed 2 risers per pole. Member will provide 12' of conductor tails from top of weatherhead. Bluebonnet to supply stand-offs. (Bluebonnet to mount risers to pole).



Equipment rack 2" or 3" steel pipe with uni-strut horizontal support.



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

Minimum schedule 40 rigid nonmetallic service conduit below finished grade. No schedule 40 conduit allowed above ground level on source side of main disconnect.

* WIRING INSTALLATIONS MUST MEET LOCAL GUIDELINES, IF APPLICABLE, SET FORTH BY CITY, COUNTY, OR OTHER GOVERNING ENTITY IN THE EVENT THESE REQUIREMENTS ARE MORE STRINGENT THAN BLUEBONNET SPECIFICATIONS. *

FOR THE MEMBER'S SAFETY, WIRING INSTALLATION AND MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF THE NEC, TDLR AND NESC.

Latest update can be found at www.bluebonnetelectric.coop/myHome/electricServices/meterLoop.aspx

3 PHASE >200-800 AMP SERVICE WITH CT METERING ON POLE		Bluebonnet	
DATE	REVISIONS	Drawn By :	Checked By :
11/28/17	Bold lettering of pipe grounding strap	RG	MS COMMITTEE
06/07/18	Retirement Only	Approved By :	TE
		Scale :	DATE:
		NONE	06-07-2018
			MS-113A3

Notes:

1. Line taps shall be made in the galvanized wire trough by the electrical contractor.
2. When more than (1) disconnect is used, a galvanized trough system shall be installed.
3. Weatherproof fittings are required.
4. Two (2) disconnects could be substituted with (1) disconnect. All disconnects shall have over current protection installed.
5. No more than two (2) risers or two (2) conductors per phase shall be allowed.
6. Wire shall be sized to total disconnect sizes.
7. Neutral(s) may be reduced no more than two sizes on residential applications. No reduction of the neutral(s) is allowed on commercial application.
8. Bluebonnet pole must remain free of structures and private attachments other than service riser assembly.
9. All secondary connections on pole will be made by Bluebonnet.
10. The electrical contractor will notify Bluebonnet 72 hours in advance to schedule Bluebonnet personnel to deliver the CT's before the service wire is pulled. The electrician shall install them on the rack with the correct polarity before the conductor is brought thru the 30"x42"x16" (minimum size) CT enclosure. Call 800-842-7708 to schedule a connect.
11. CT enclosures can be purchased from Techline (512-332-2978).
12. Maintain 3"-6" distance between the disconnect and the meter can. Member shall use a metal nipple. A straight or offset nipple is acceptable.

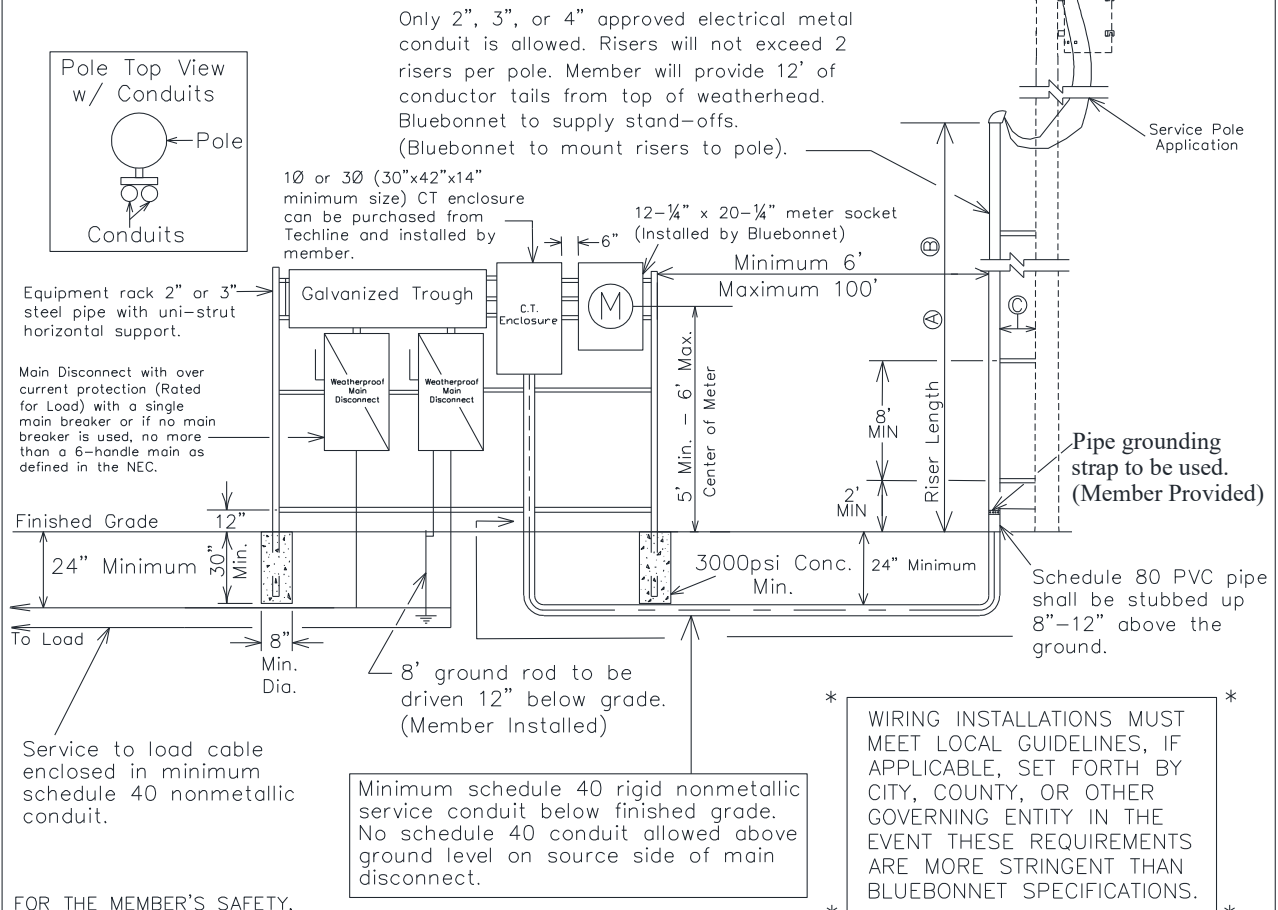
Ⓐ Transformer Pole Riser Length:

35' Pole = 20' Riser
40' Pole = 24' Riser

Ⓑ Service Pole Riser Length:


30' Pole = 20' Riser
35' Pole = 24' Riser

Ⓒ Member's Conduit
Member's conduit shall be installed 8"-12" from pole



FOR THE MEMBER'S SAFETY, WIRING INSTALLATION AND MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF THE NEC, TDLR AND NESC.

Latest update can be found at <http://www.bluebonnetelectric.coop/myHome/electricServices/meterLoop.aspx>

1 PHASE >400-800 AMP SERVICE WITH CT METERING ON RACK				
DATE	REVISIONS	Drawn By :	Checked By :	Approved By :
01-29-2017	Changed the dimensions of the CT Enclosure.	RG	MS COMMITTEE	TE
11/28/2017	Bold lettering of schedule 80 PVC	Scale :	DATE:	MS-113B1
		NONE	11/28/2017	

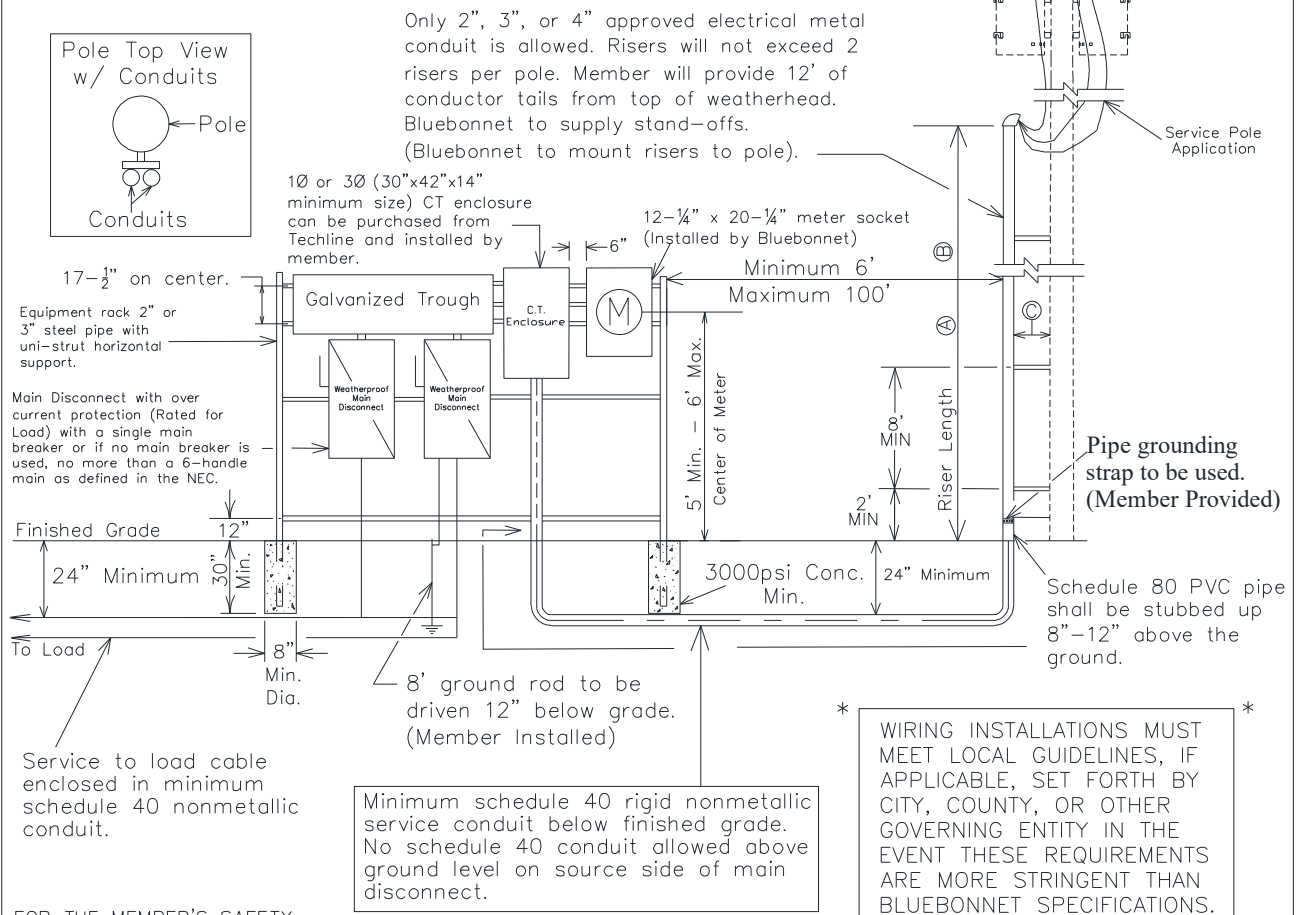
Notes:

- Line taps shall be made in the galvanized wire trough by the electrical contractor.
- When more than (1) disconnect is used, a galvanized rough system shall be installed.
- Weatherproof fittings are required.
- Two (2) disconnects could be substituted with (1) disconnect. All disconnects shall have over current protection installed.
- No more than two (2) risers or two (2) conductors per phase shall be allowed.
- Wire shall be sized to total disconnect sizes.
- Neutral(s) may be reduced no more than two sizes on residential applications. No reduction of the neutral(s) is allowed on commercial application.
- Bluebonnet pole must remain free of structures and private attachments other than service riser assembly.
- All secondary connections on pole will be made by Bluebonnet.
- The electrical contractor will notify Bluebonnet 72 hours in advance to schedule Bluebonnet personnel to deliver the CT's before the service wire is pulled. The electrician shall install them on the rack with the correct polarity before the conductor is brought thru the 30"x42" (minimum size) CT enclosure. Call 800-842-7708 to schedule a connect.
- CT enclosures can be purchased from Techline (512-332-2978).
- Maintain 3"-6" distance between the disconnect and the meter can. Member shall use a metal nipple. A straight or offset nipple is acceptable.

Ⓐ Transformer Pole Riser Length:
 35' Pole = 20' Riser
 40' Pole = 24' Riser

Ⓑ Service Pole Riser Length:
 30' Pole = 20' Riser
 35' Pole = 24' Riser

Ⓒ Member's Conduit
 Member's conduit shall be installed 8"-12" from pole




FOR THE MEMBER'S SAFETY, WIRING INSTALLATION AND MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF THE NEC, TDLR AND NESC.

Minimum schedule 40 rigid nonmetallic service conduit below finished grade. No schedule 40 conduit allowed above ground level on source side of main disconnect.

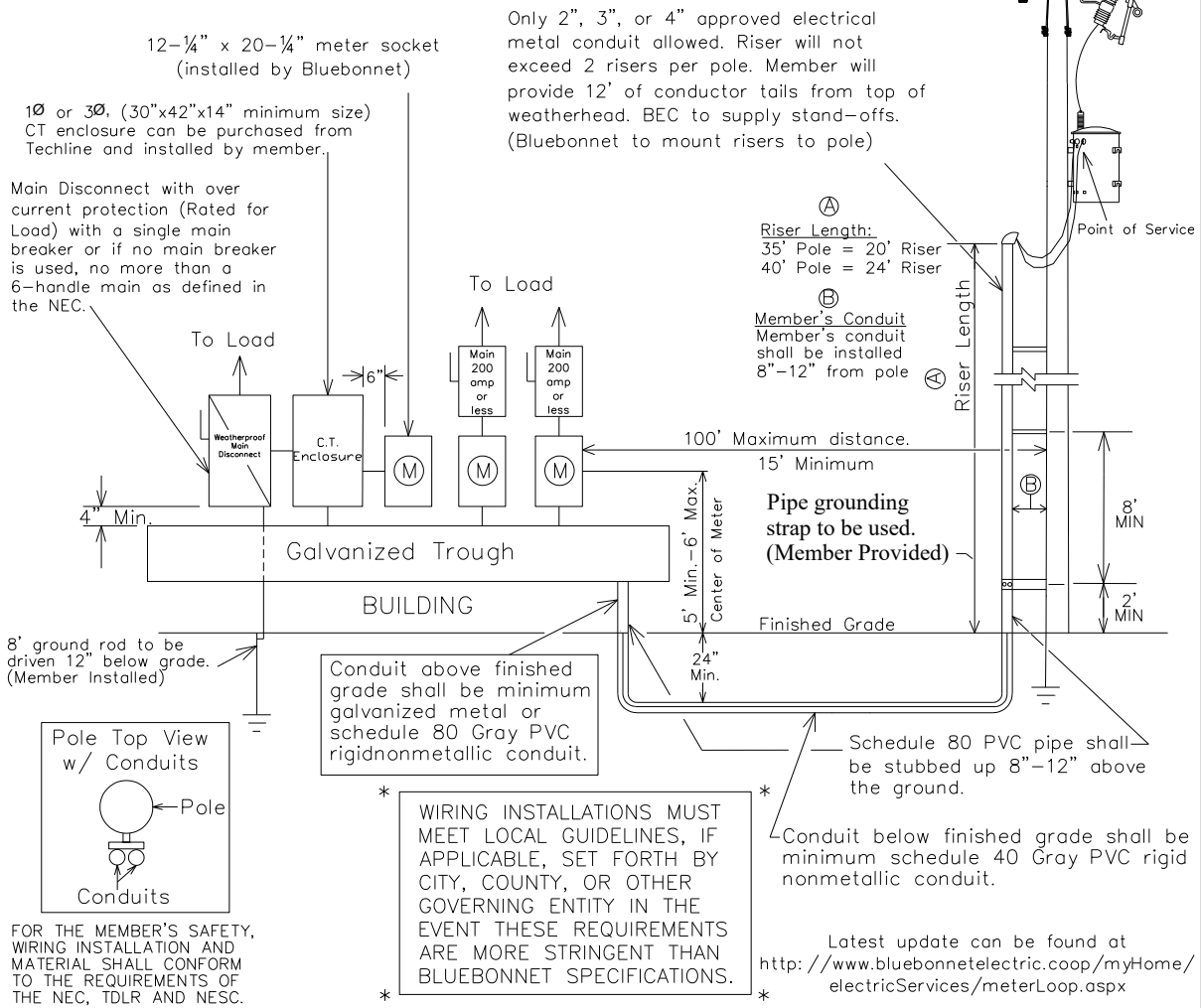
* WIRING INSTALLATIONS MUST MEET LOCAL GUIDELINES, IF APPLICABLE, SET FORTH BY CITY, COUNTY, OR OTHER GOVERNING ENTITY IN THE EVENT THESE REQUIREMENTS ARE MORE STRINGENT THAN BLUEBONNET SPECIFICATIONS. *

Latest update can be found at <http://www.bluebonnetelectric.coop/myHome/electricServices/meterLoop.aspx>

3 PHASE >200-800 AMP SERVICE WITH CT METERING ON RACK				
DATE	REVISIONS	Drawn By :	Checked By :	Approved By :
01-29-2017	Changed the dimensions of the CT Enclosure.	RG	MS COMMITTEE	TE
11/28/2017	Bold lettering of schedule 80 PVC	Scale :	DATE:	MS-113B3
		NONE	11/28/2017	

Notes:

1. Line taps shall be made in the galvanized wiring trough by the electrical contractor.
2. Weatherproof fittings Required.
3. (2) disconnects could be substituted with (1) disconnect. All disconnects shall have over current protection installed.
4. No more than (2) risers or (2) conductors per phase shall be allowed.
5. Wire shall be sized to total name plate disconnect sizes.
6. Neutral(s) may be reduced no more than two sizes on residential application. No reduction of the neutral(s) is allowed on commercial application.
7. The electrical contractor will notify Bluebonnet 72 hours in advance to schedule Bluebonnet personnel to deliver the CT's before the service wire is pulled. The electrician shall install them on the rack with the correct polarity before the conductor is brought thru the 30"x42" (minimum size) CT enclosure. Call 800-842-7708 to schedule a connect.
8. More than (6) main disconnects require a properly sized main disconnect ahead of the galvanized trough.
9. Bluebonnet pole must remain free of structures and private attachments other than meter loop riser assembly.
10. Meter assembly must remain unenclosed on exterior of structure.
11. Type K-4, Bolt-in type meter can: Description: 400 amp, 4 terminals, 3-wire, residential/commercial socket single phase self-contained, large cover plate. These meter cans are available for purchase through Techline (512-332-2978) or any other electrical supplier provided it meets all Bluebonnet Electric Cooperative specifications.
12. Maintain 3"-6" distance from the disconnect and the meter can. Member shall use a metal nipple. A straight or offset nipple is acceptable.



10 400-800 TOTAL AMPS WITH MULTIPLE METERING POINTS ON BUILDING. (RISER TYPE)

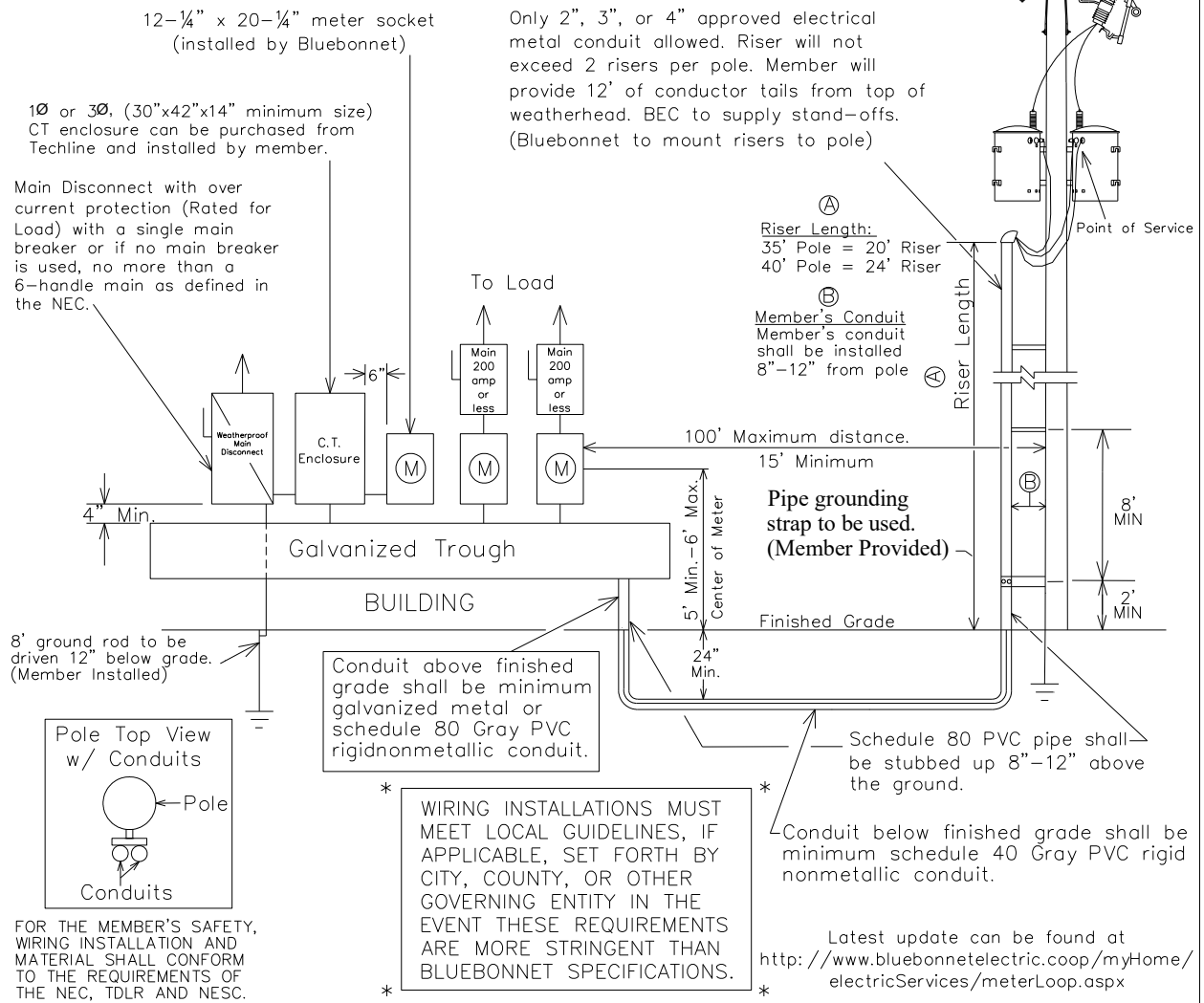


DATE	REVISIONS
01-29-2017	Changed the dimensions of the CT Enclosure.
11/28/2017	Bold lettering of Pipe grounding Strap

Drawn By : RG	Checked By : MS COMMITTEE	Approved By : TE
Scale : NONE	Date : 11/28/2017	MS-114A1

Notes:

1. Line taps shall be made in the galvanized wiring trough by the electrical contractor.
2. Weatherproof fittings Required.
3. (2) disconnects could be substituted with (1) disconnect. All disconnects shall have over current protection installed.
4. No more than (2) risers or (2) conductors per phase shall be allowed.
5. Wire shall be sized to total name plate disconnect sizes.
6. Neutral(s) may be reduced no more than two sizes on residential application. No reduction of the neutral(s) is allowed on commercial application.
7. The electrical contractor will notify Bluebonnet 72 hours in advance to schedule Bluebonnet personnel to deliver the CT's before the service wire is pulled. The electrician shall install them on the rack with the correct polarity before the conductor is brought thru the 30"x42" (minimum size) CT enclosure. Call 800-842-7708 to schedule a connect.
8. More than (6) main disconnects require a properly sized main disconnect ahead of the galvanized trough.
9. Bluebonnet pole must remain free of structures and private attachments other than meter loop riser assembly.
10. Meter assembly must remain unenclosed on exterior of structure.
11. Type K-4, Bolt-in type meter can: Description: 400 amp, 4 terminals, 3-wire, residential/commercial socket single phase self-contained, large cover plate. These meter cans are available for purchase through Techline (512-332-2978) or any other electrical supplier provided it meets all Bluebonnet Electric Cooperative specifications.
12. Maintain 3"-6" distance from the disconnect and the meter can. Member shall use a metal nipple. A straight or offset nipple is acceptable.



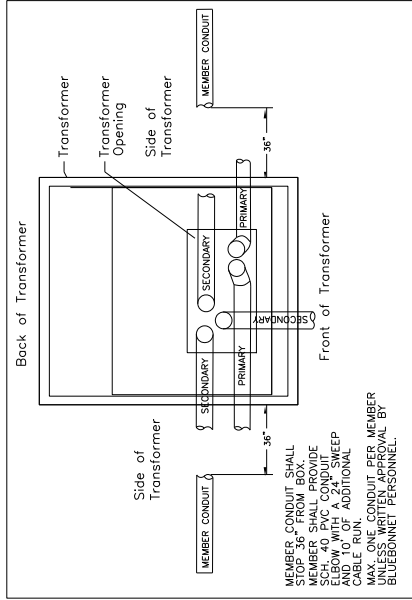
3 PHASE 200-800 TOTAL AMPS WITH MULTIPLE METERING POINTS ON BUILDING. (RISER TYPE)



DATE	REVISIONS
01-29-2017	Changed the dimensions of the CT Enclosure.
11/28/2017	Bold lettering of pipe grounding strap

Drawn By : RG	Checked By : MS COMMITTEE	Approved By : TE
Scale : NONE	Date : 11/28/2017	MS-114B3

Single Phase Transformer Layout

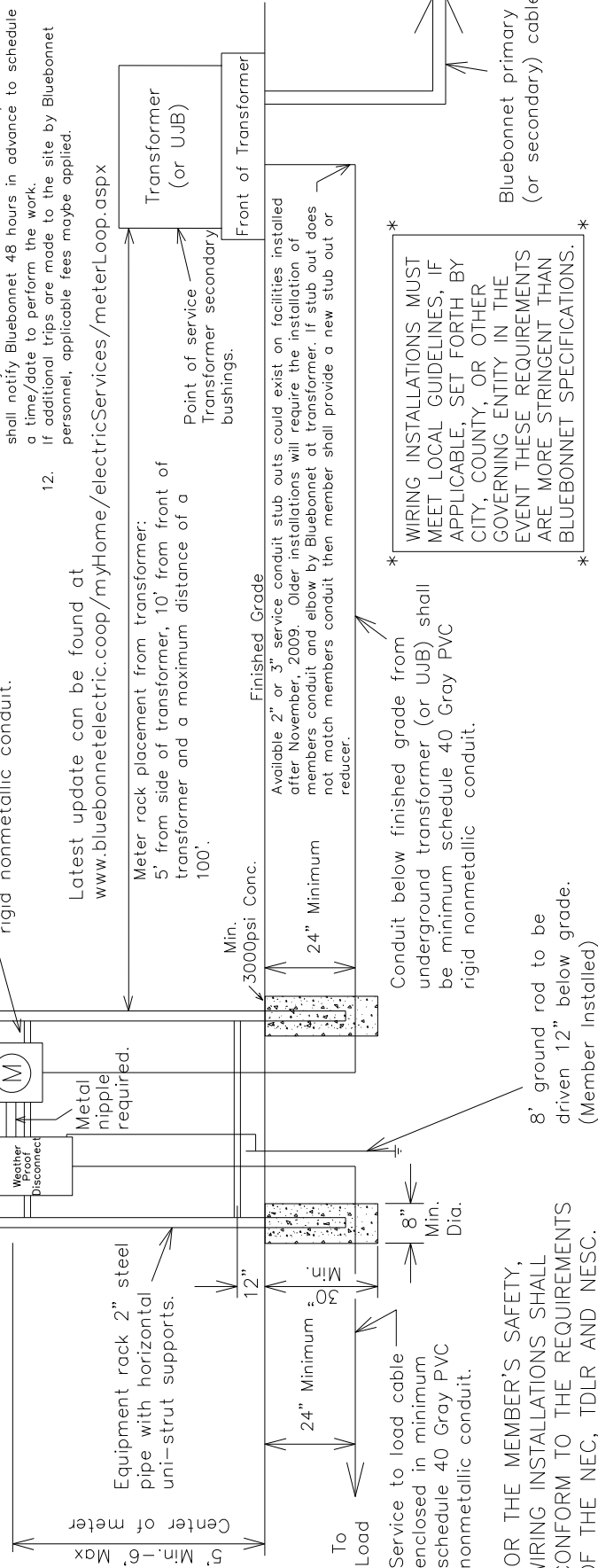


CURRENT CARRYING CAPACITIES AND CONDUIT/NIPPLE SIZE REQUIREMENT OF STANDARD WIRE SIZE.	
(RHW, RHW, THW, THHN, THHN, AND XHHW)	
THIS GUIDE REFERS TO TABLE 310.15 (B)(7), SINGLE PHASE DWELLINGS SERVICES, REFER TO NEC FOR OTHER CALCULATIONS.	
WIRE SIZE	CONDUIT/NIPPLE SIZE
#6	1/4" CONDUIT
#4	1/2" CONDUIT
#2	3/4" CONDUIT
#1	1" CONDUIT
#2/0	1 1/2" CONDUIT

COPPER CONDUCTOR	
BREAKER SIZE	CONDUIT/NIPPLE SIZE
60 AMP	1/4" CONDUIT
100 AMP	1/2" CONDUIT
125 AMP	3/4" CONDUIT
150 AMP	1" CONDUIT
200 AMP	1 1/2" CONDUIT

ALUMINUM CONDUCTOR	
BREAKER SIZE	CONDUIT/NIPPLE SIZE
60 AMP	1/4" CONDUIT
100 AMP	1/2" CONDUIT
125 AMP	3/4" CONDUIT
150 AMP	1" CONDUIT
200 AMP	1 1/2" CONDUIT

200 amp meter socket and weatherproof main disconnect.



Conduit above finished grade shall be minimum galvanized metal or schedule 80 Gray PVC rigid nonmetallic conduit.

Latest update can be found at www.bluebonnetelectric.coop/myHome/electricServices/meterLoop.aspx

Meter rack placement from transformer: 5' from side of transformer, 10' from front of transformer and a maximum distance of a 100'.

Available 2" or 3" service conduit stub outs could exist on facilities installed after November, 2009. Older installations will require the installation of members conduit and elbow by Bluebonnet at transformer, if stub out does not match members conduit then member shall provide a new stub out or reducer.

Conduit below finished grade from underground transformer (or UJB) shall be minimum schedule 40 Gray PVC rigid nonmetallic conduit.

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

FOR THE MEMBER'S SAFETY, WIRING INSTALLATIONS SHALL CONFORM TO THE REQUIREMENTS OF THE NEC, TDLR AND NESC.



10 OR 30, 60-200 AMP UNDERGROUND SERVICE ON RACK OR BUILDING

REVISIONS

DATE	ADDED NIPPLE AFTER CONDUIT SIZE
11/29/2017	ADDED NIPPLE AFTER CONDUIT SIZE
03/29/2018	MOVED DISCONNECT TO SIDE OF METER

Checked By :

MS COMMITTEE

Approved By :

CV

BS

Scale :

NONE

Date :

03/29/2018

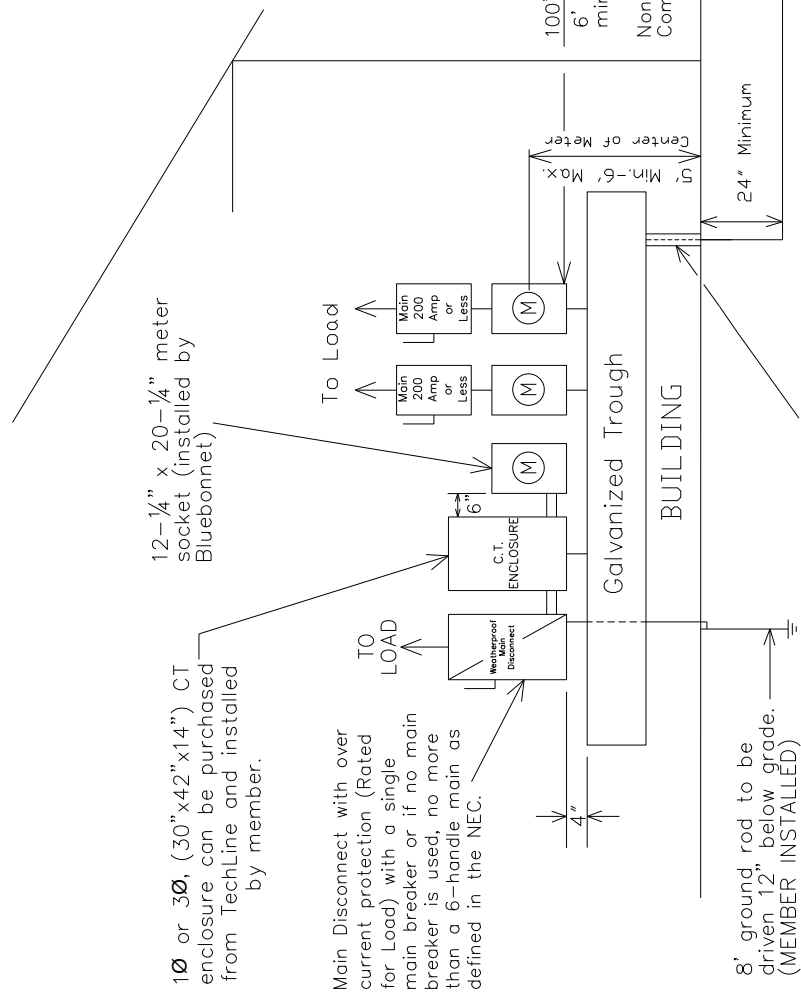
MS-201

Notes:

- Weatherproof fittings required.
- For all URD jobs, electricians shall call TEXAS811 for locates before digging to Bluebonnet equipment. No private utilities will be located.
- Shall install an additional 10' of wire for termination.
- Main disconnect shall have a single main breaker or 6-handle main as defined in the NEC.
- Neutral may be reduced no more than two sizes on residential application. No reduction of the neutral is allowed on commercial application.
- Metering point must remain unenclosed on exterior of structure.
- Metering point can not be mounted on the side of a mobile home.
- All connections inside pad mounted transformer and UJB's will be made by Bluebonnet.
- 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. Giddings(979-542-8657), Brenham (979-277-7240), Red Rock (512-332-2978)
- Member must contact Bluebonnet to determine where the secondary conduit is to be run to the transformer. Conduit to be installed 36" to the side of transformer. Conduit to schedule on appointment.
- 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.
- If additional trips are made to the site by Bluebonnet personnel, applicable fees may be applied.

Notes:

- Line taps shall be made in the galvanized wiring trough by the electrical contractor. The electrical contractor will notify Bluebonnet 72 hours in advance to schedule Bluebonnet personnel to deliver the CT's before the service wire is pulled.
- The electrician shall install the CT's on the rock with the correct polarity before the conductor is brought thru the 30"x42" minimum size CT enclosure, call 800-842-7708 to schedule a connect.
- Wire shall be sized to total name plate disconnect sizes.
- Neutral(s) may be reduced no more than two sizes on residential application. No reduction of the neutral(s) is allowed on commercial application.
- For all URD jobs, electricians, shall call TEXAS811 for locates before digging to Bluebonnet equipment. No private utilities will be located.
- Cooperative will complete wiring into transformer. Have an additional 10' of wire for termination.
- More than (6) main disconnects require a properly sized main disconnect ahead of the galvanized trough.
- Weatherproof fittings required.
- Meter assembly must remain unenclosed on exterior of structure.
- All connections inside pad mounted transformer will be made by Bluebonnet.
- 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. Techline (512-332-2978).
- Member/Electrician shall coordinate with Bluebonnet personnel 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. If additional trips are made to the site by Bluebonnet personnel, applicable fees may be applied.
- Maintain 3"-6" distance between the disconnect and the meter can. Member shall use a metal nipple. A straight or offset nipple is acceptable.



* WIRING INSTALLATIONS MUST MEET LOCAL GUIDELINES, IF APPLICABLE, SET FORTH BY CITY, COUNTY, OR OTHER GOVERNING ENTITY IN THE EVENT THESE REQUIREMENTS ARE MORE STRINGENT THAN BLUEBONNET SPECIFICATIONS. *

* Conduit below finished grade from underground transformer shall be minimum schedule 40 Gray PVC rigid nonmetallic conduit.

* Conduit above finished grade shall be minimum galvanized metal or schedule 80 Gray PVC rigid nonmetallic conduit.

Latest update can be found at www.bluebonnetelectric.coop/myHome/electricServices/meterLoop.aspx

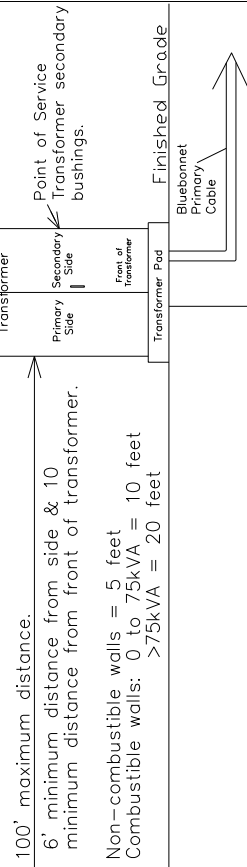
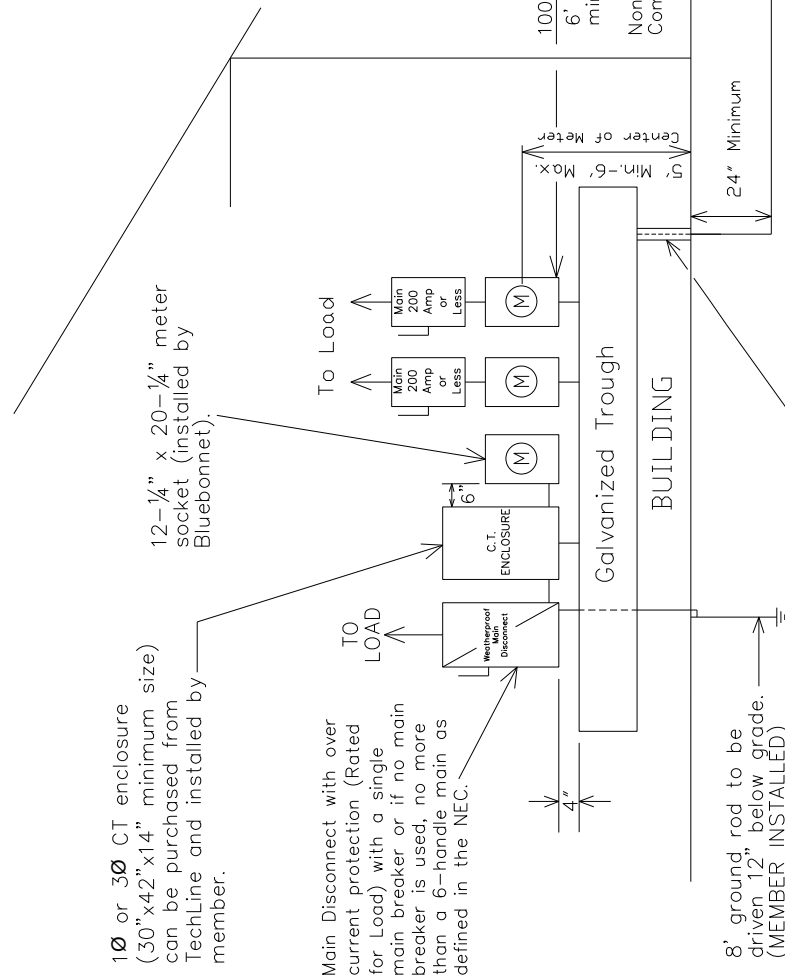
FOR THE MEMBER'S SAFETY, WIRING INSTALLATION AND MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF THE NEC, TDLR AND NESC.

	Drawn By : RG	Checked By : MS COMMITTEE	Approved By : TE
1 PHASE >400 AMP UNDERGROUND WITH MULTIPLE METERING POINTS AND CT METERING ON BUILDING.	Scale : NONE	Date : 01-30-2017	MS-202A1
REVISIONS: DATE: 01-30-2017 Changed the dimensions of the CT Enclosure.			



Notes:

- Line taps shall be made in the galvanized wiring trough by the electrical contractor.
- The electrical contractor will notify Bluebonnet 72 hours in advance to schedule Bluebonnet personnel to deliver the CT's before the service wire is pulled. The electrician shall install the CT's on the rack with the correct polarity before the conductor is brought thru the 30"x42" minimum size CT enclosure. call 800-842-7708 to schedule a connect.
- Wire shall be sized to total name plate disconnect sizes.
- Neutral(s) may be reduced no more than two sizes on residential application. No reduction of the neutral(s) is allowed on commercial application. For all URD jobs, electricians shall call TEXAS811 for locates before digging to Bluebonnet equipment. No private utilities will be located.
- Cooperative will complete wiring into transformer. Have an additional 10' of wire for termination.
- More than (6) main disconnects require a properly sized main disconnect ahead of the galvanized trough.
- Weatherproof fittings required.
- Meter assembly must remain unenclosed on exterior of structure.
- All connections inside pad mounted transformer will be made by Bluebonnet.
- THREE PHASE APPLICATIONS ONLY DESCRIPTION:
2000amp, 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. Techline (512-332-2978).
- Member/Electrician shall coordinate with Bluebonnet personnel 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.
- If additional trips are made to the site by Bluebonnet personnel, applicable fees, may be applied.
- Maintain 3'-6" distance between the disconnect and the meter can. Member shall use a metal nipple. A straight or offset nipple is acceptable.



100' maximum distance.
6' minimum distance from side & 10' minimum distance from front of transformer.
Non-combustible walls = 5 feet
Combustible walls: 0 to 75kVA = 10 feet
>75kVA = 20 feet


Conduit above finished grade shall be minimum galvanized metal or schedule 80 Gray PVC rigid nonmetallic conduit.

Conduit below finished grade from underground transformer shall be minimum schedule 40 Gray PVC rigid nonmetallic conduit.

WIRING INSTALLATIONS MUST MEET LOCAL GUIDELINES, IF APPLICABLE, SET FORTH BY CITY, COUNTY, OR OTHER GOVERNING ENTITY IN THE EVENT THESE REQUIREMENTS ARE MORE STRINGENT THAN BLUEBONNET SPECIFICATIONS.

Latest update can be found at www.bluebonnetelectric.coop/myHome/electricServices/meterLoop.aspx

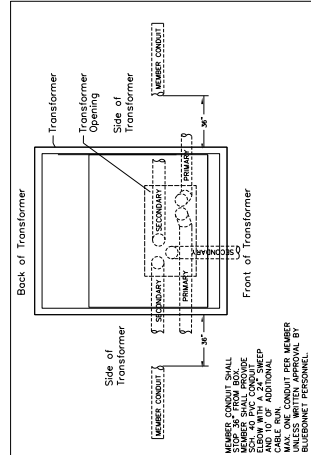
FOR THE MEMBER'S SAFETY, WIRING INSTALLATION AND MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF THE NEC, TDLR AND NESC.

	3 PHASE >200 AMP UNDERGROUND WITH MULTIPLE METERING POINTS AND CT METERING ON BUILDING.		Drawn By : RG	Checked By : MS COMMITTEE	Approved By : TE
	DATE 01-30-2017	REVISIONS Changed the dimensions of the CT Enclosure.	Scale : NONE	Date : 01-30-2017	MS-202B3

Notes:

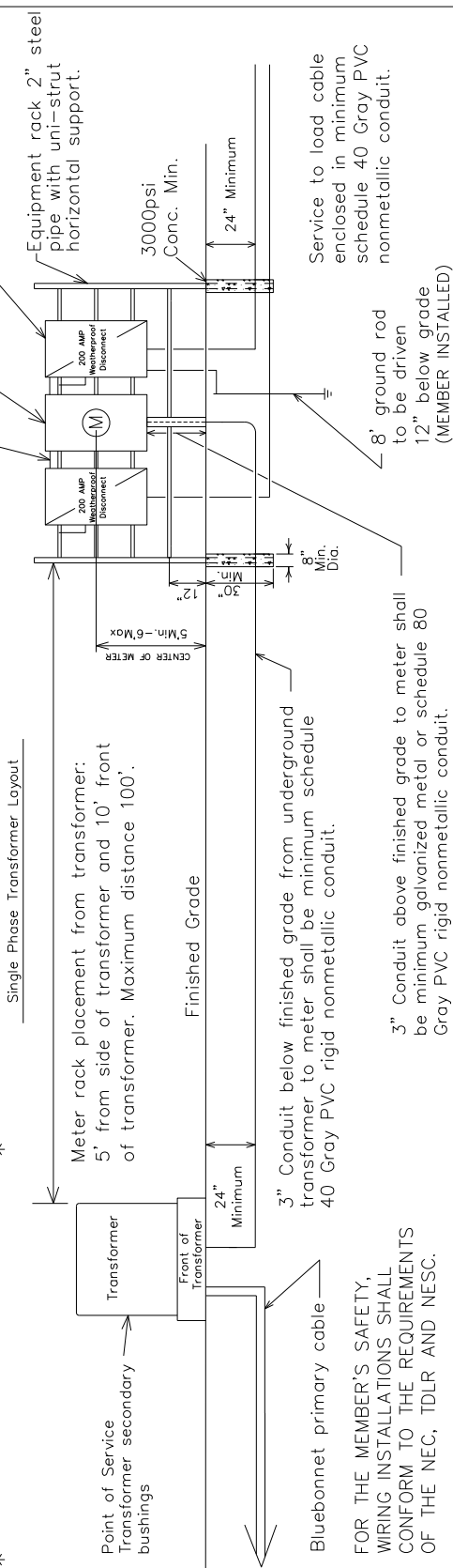
1. Main disconnect panel may not be used as a electrical race way.
2. Line taps shall be made by the electrical contractor if a galvanized wiring trough is used.
3. Weatherproof fittings required.
4. 400 amps can be used. REF. NEC, SEC. 230.71
5. Recommended wire size is either parallel 2/0 THHN copper or parallel 4/0 THHN aluminum.
6. Neutrals may be reduced no more than two sizes on residential applications. No reduction of the neutrals is allowed on commercial applications.
7. Member shall install an additional of 10' wire for termination.
8. Weatherproof main disconnect panels shall have a single main breaker or 6-handle main as defined in the NEC.
9. Metering point must remain unenclosed on exterior of structure.
10. Metering cannot be mounted on the side of a mobile home.

* WIRING INSTALLATIONS MUST MEET LOCAL GUIDELINES, IF APPLICABLE, SET FORTH BY CITY, COUNTY, OR OTHER GOVERNING ENTITY IN THE EVENT THESE REQUIREMENTS ARE MORE STRINGENT THAN BLUEBONNET SPECIFICATIONS. *



Latest update can be found at www.bluebonnetelectric.coop/myHome/electricServices/meterLoop.aspx

Landis & Gyr, Type K-4, Description: 400 amp, 4 terminals, 3 wire, residential/commercial socket single phase self-contained, large coverplate. The meter lugs can accommodate up to 500 MCM. These meter cans are available for purchase through Techline or any other electrical supplier provided it meets all Bluebonnet Electric Cooperative specifications. Techline phone numbers: Red Rock (512-332-2978).

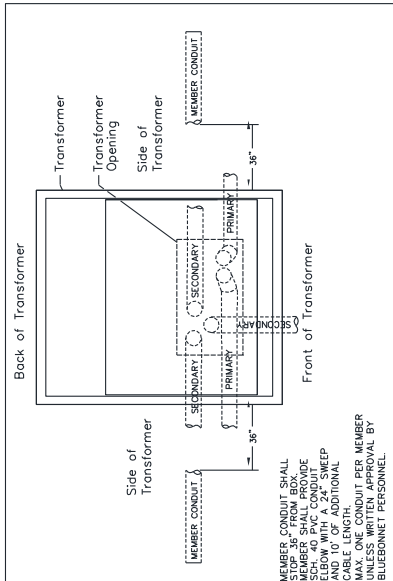


FOR THE MEMBER'S SAFETY, WIRING INSTALLATIONS SHALL CONFORM TO THE REQUIREMENTS OF THE NEC, TDLR AND NESC.

	1Ø 400 AMP URD SERVICE ON RACK OR BUILDING WITH K BASE BOLTED IN METER SOCKET		Drawn By : RG	Checked By : MS COMMITTEE	Approved By : TE
	REVISIONS		Scale : NONE	Date : 08-17-2016	MS-203
	DATE	REVISIONS	SCALE	DATE	APPROVED

FOR THE MEMBER'S SAFETY, WIRING INSTALLATION AND MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF THE NEC, TDLR AND NESC.

WIRING INSTALLATIONS MUST MEET LOCAL GUIDELINES, IF APPLICABLE, SET FORTH BY CITY, COUNTY, OR OTHER GOVERNING ENTITY IN THE EVENT THESE REQUIREMENTS ARE MORE STRINGENT THAN BLUEBONNET SPECIFICATIONS.

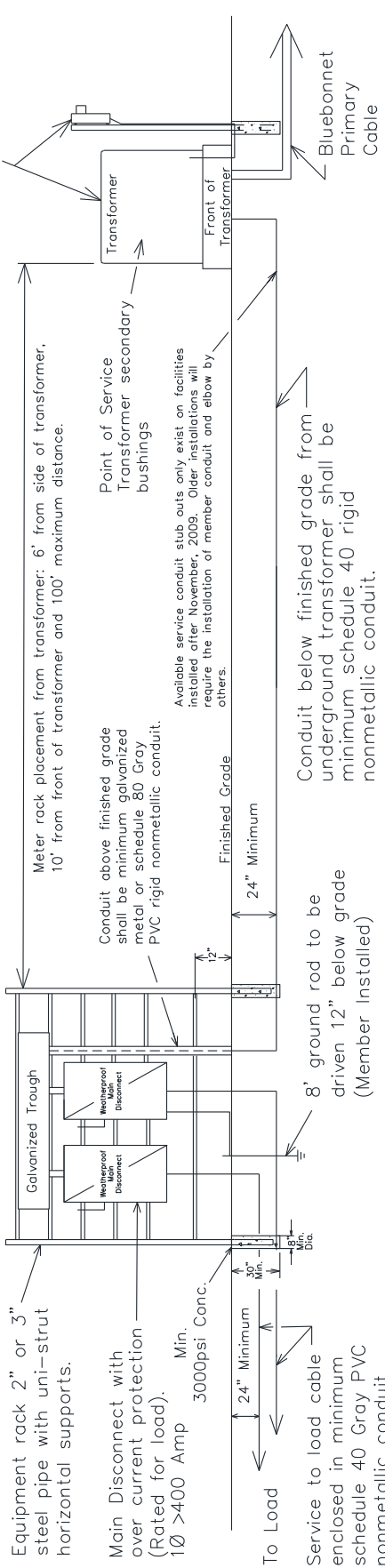


Single Phase Transformer Layout

- Notes:
- Line taps shall be made in the galvanized trough by the electrical contractor.
 - Weatherproof fittings required.
 - Two disconnects could be substituted with (1) disconnect. All disconnects shall have over current protection.
 - Wire shall be sized to total disconnect sizes.
 - Neutral(s) may be reduced no more than two sizes on residential application. No reduction of the neutral(s) is allowed on commercial application.
 - Member shall contact Bluebonnet Electric to determine the secondary conduit location. Conduit to be installed 36" to the side of transformer. Call 800-842-7708 to schedule an appointment.
 - Bluebonnet will complete wiring into transformer. Have sufficient amount of wire for termination. Member shall install an additional 10' of wire for termination.
 - All secondary connections to be made inside transformer by Bluebonnet.
 - Bluebonnet to provide the CT's.
 - Meter assembly must remain unenclosed on exterior of structure.
 - 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.
 - If additional trips are made to the site by Bluebonnet personnel, applicable fees may be applied.
 - Member shall use a metal nipple. A straight or offset nipple is acceptable.

Single Phase application, the CT's are located in the transformer the meter can be located on the meter rack installed and provided by Bluebonnet.

Non-combustible walls = 5 feet
 Combustible walls: 0 to 75kVA = 10 feet
 >75kVA = 20 feet



Latest update can be found at www.bluebonnetelectric.coop/myHome/electricServices/meterLoop.aspx

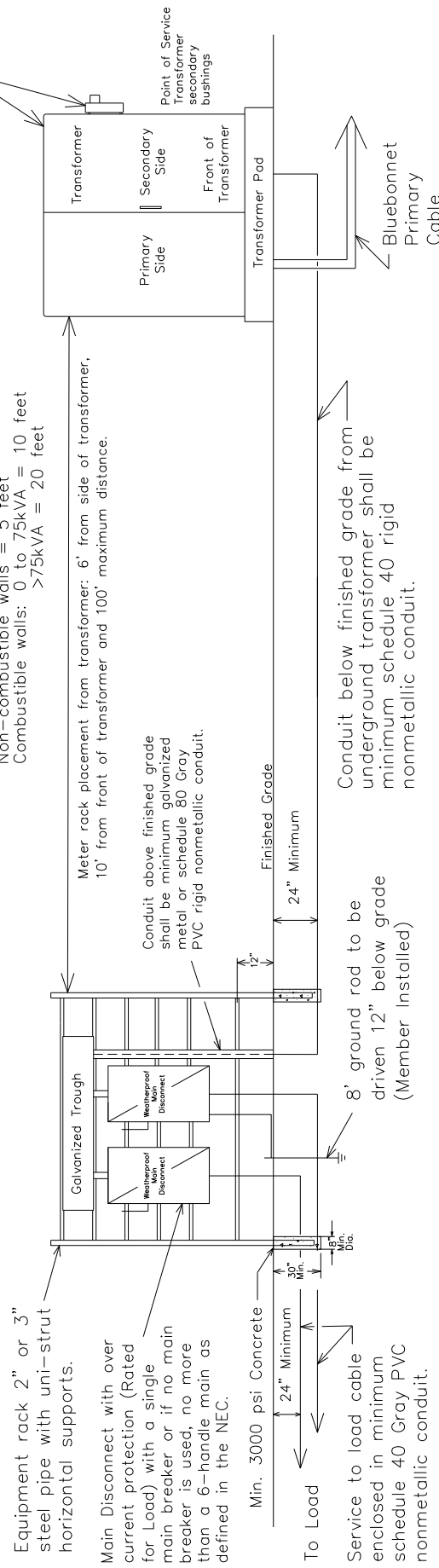
	1 PHASE >400 AMP UNDERGROUND SERVICE WITH DISCONNECT ON RACK OR BUILDING.		Checked By : MS COMMITTEE	Approved By : TE
	DATE	REVISIONS	Date : 07-25-2016	MS-204A1
			Scale : NONE	

Notes:

1. Line taps shall be made in the galvanized trough by the electrical contractor.
2. Weatherproof fittings required.
3. Two disconnects could be substituted with (1) disconnect. All disconnects shall have over-current protection.
4. Wire shall be sized to total disconnect sizes.
5. Neutral(s) may be reduced no more than two sizes on residential application. No reduction of the neutral(s) is allowed on commercial application.
6. Member shall contact Bluebonnet Electric to determine the secondary conduit location. Conduit to be installed 36" to the side of transformer. Call 800-842-7708 to schedule an appointment.
7. Bluebonnet will complete wiring into transformer. Have sufficient amount of wire for termination. Member shall install an additional 10' of wire for termination.
8. All secondary connections to be made inside transformer by Bluebonnet.
9. Bluebonnet to provide the CT's.
10. Meter assembly must remain unenclosed on exterior of structure.
11. Member/Electrician shall coordinate with Bluebonnet personnel to install all conduit and the pulling of the secondary wire to the transformer.
12. Member/Electrician shall notify Bluebonnet 48 hours in advance to schedule a time/date to perform the work.
13. If additional trips are made to the site by Bluebonnet personnel, applicable fees may be applied.
14. Maintain 3"-6" distance between the disconnect and the meter can. Member shall use a metal nipple. A straight or offset nipple is acceptable.

* WIRING INSTALLATIONS MUST MEET LOCAL GUIDELINES, IF APPLICABLE, SET FORTH BY CITY, COUNTY, OR OTHER GOVERNING ENTITY IN THE EVENT THESE REQUIREMENTS ARE MORE STRINGENT THAN BLUEBONNET SPECIFICATIONS. *

* FOR THE MEMBER'S SAFETY, WIRING INSTALLATION AND MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF THE NEC, TDLR AND NESC. *

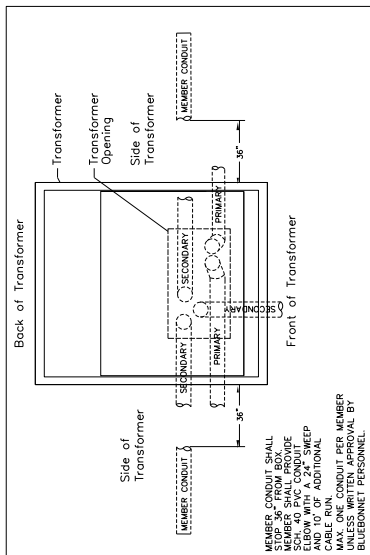


Latest update can be found at www.bluebonnetelectric.coop/myHome/electricServices/meterLoop.aspx

	3 PHASE >200 AMP UNDERGROUND SERVICE WITH DISCONNECT ON RACK OR BUILDING		Checked By : MS COMMITTEE	Approved By : TE
	DATE	REVISIONS	Drawn By : RG	Date : 11-02-2016
		Scale : NONE	MS-204A3	

Notes:

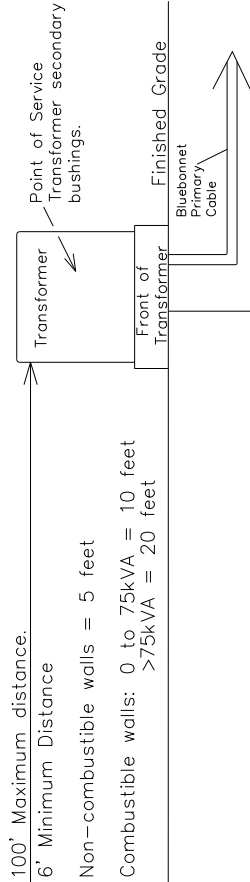
- Line taps shall be made in the galvanized wiring trough by the electrical contractor.
- The electrical contractor will notify Bluebonnet 72 hours in advance to schedule Bluebonnet personal to deliver the CT's. The electrician shall install the CT's (provided by BEC) on the rack with the correct polarity before the conductor is brought thru the 30"x42" (minimum size) CT enclosure. Call 800-842-7708 to schedule a connect.
- Wire shall be sized to total name plate disconnect sizes.
- Neutral(s) may be reduced no more than two sizes on residential application. No reduction of the neutral(s) is allowed on commercial application. For all URD jobs, electricians shall call TEXAS811 for locates before digging to Bluebonnet equipment. No private utilities will be located.
- Cooperative will complete wiring into transformer or UJB. Have an additional 10' of wire for termination.
- Weatherproof fittings required.
- Meter assembly must remain unenclosed on exterior of structure.
- All connections inside pad mounted transformer will be made by Bluebonnet. 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.
- If additional trips are made to the site by Bluebonnet personnel, applicable fees may be applied.
- CT enclosure can be purchased from Techline (512-332-2978).
- Maintain 3"-6" distance between the disconnect and the meter can. Member shall use a metal nipple. A straight or offset nipple is acceptable.



Single Phase Transformer Layout

Main Disconnect with over current protection (Rated for Load) with a single main breaker or if no main breaker is used, no more than a 6-handle main as defined in the NEC.

BUILDING



Conduit below finished grade from underground transformer shall be minimum schedule 40 Gray PVC rigid nonmetallic conduit.

Conduit above finished grade shall be minimum galvanized metal or schedule 80 Gray PVC rigid nonmetallic conduit.

WIRING INSTALLATIONS MUST MEET LOCAL GUIDELINES, IF APPLICABLE, SET FORTH BY CITY, COUNTY, OR OTHER GOVERNING ENTITY IN THE EVENT THESE REQUIREMENTS ARE MORE STRINGENT THAN BLUEBONNET SPECIFICATIONS.

FOR THE MEMBER'S SAFETY, WIRING INSTALLATION AND MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF THE NEC, TDLR AND NESC.

Latest update can be found at www.bluebonnetelectric.coop/myHome/electricServices/meterLoop.aspx

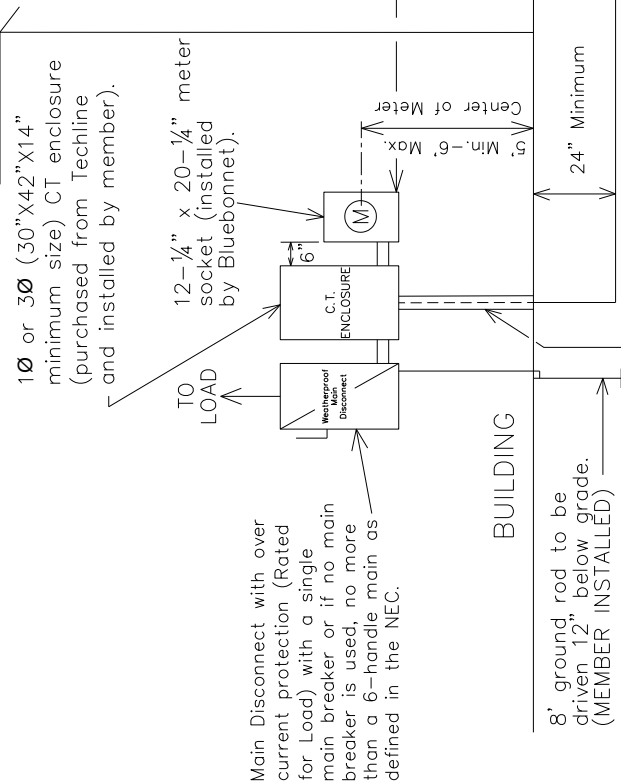
<p>1 PHASE >400 AMP SERVICE WITH CT METERING ON BUILDING OR RACK</p> <p>01-30-2017 Changed the dimensions of the CT Enclosure.</p>	<p>Drawn By : RG</p> <p>Scale : NONE</p>	<p>Checked By : MS COMMITTEE</p> <p>Date : 01-30-2017</p>	<p>Approved By : TE</p>
	<p>MS-204B1</p>	<p>MS-204B1</p>	<p>MS-204B1</p>



Notes:

1. Line taps shall be made in the galvanized wiring trough by the electrical contractor.
2. The electrical contractor will notify Bluebonnet 72 hours in advance to schedule Bluebonnet personal to deliver the CT's. The electrician shall install the CT's (provided by BEC) on the rack with the correct polarity before the conductor is brought thru the 30"x42" (minimum size) CT enclosure. Call 800-842-7708 to schedule a connect.
3. Wire shall be sized to total name plate disconnect sizes.
4. Neutral(s) may be reduced no more than two sizes on residential application. No reduction of the neutral(s) is allowed on commercial application. For all URD jobs, electricians shall call TEXAS811 for locates before digging to Bluebonnet equipment. No private utilities will be located.
5. Cooperative will complete wiring into transformer or UUB. Have an additional 10' of wire for termination.
6. Weatherproof fittings required.
7. Meter assembly must remain unenclosed on exterior of structure.
8. All connections inside pad mounted transformer will be made by Bluebonnet. Member/Electrician shall coordinate with Bluebonnet personal to install all conduit and the pulling of the secondary wire to the transformer.
9. Member/Electrician shall notify Bluebonnet 48 hours in advance to schedule a time/date to perform the work.
10. If additional trips are made to the site by Bluebonnet personnel, applicable fees may be applied.
11. CT enclosure can be purchased from Techline (512-332-2978).
12. Maintain 3"-6" distance between the disconnect and the meter can. Member shall use a metal nipple. A straight or offset nipple is acceptable.

FOR THE MEMBER'S SAFETY, WIRING INSTALLATION AND MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF THE NEC, TDLR AND NECC.



100' Maximum Distance.
 6' Minimum Distance
 Non-combustible walls = 5 feet
 Combustible walls: 0 to 75kVA = 10 feet
 >75kVA = 20 feet

Conduit below finished grade from underground transformer shall be minimum schedule 40 Gray PVC rigid nonmetallic conduit.

Conduit above finished grade shall be minimum galvanized metal or schedule 80 Gray PVC rigid nonmetallic conduit.

8' ground rod to be driven 12" below grade. (MEMBER INSTALLED)

24" Minimum

12-1/4" x 20-1/4" meter socket (installed by Bluebonnet).

10' or 30" x 42" x 14" minimum size) CT enclosure (purchased from Techline and installed by member).

TO LOAD

Weatherproof Main Disconnect

C.T. ENCLOSURE

Transformer Pad

Primary Side

Secondary Side

Point of Service Transformer secondary bushings.


Front of Transformer

Bluebonnet Primary Cable

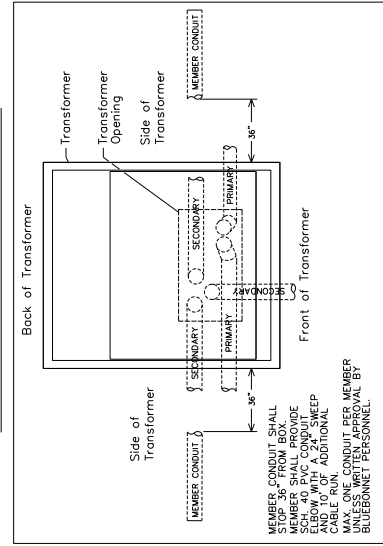
Finished Grade

WIRING INSTALLATIONS MUST MEET LOCAL GUIDELINES, IF APPLICABLE, SET FORTH BY CITY, COUNTY, OR OTHER GOVERNING ENTITY IN THE EVENT THESE REQUIREMENTS ARE MORE STRINGENT THAN BLUEBONNET SPECIFICATIONS.

Latest update can be found at www.bluebonnetelectric.coop/myHome/electricServices/meterLoop.aspx

	3 Phase >200 AMP SERVICE WITH CT METERING ON BUILDING OR RACK 01-30-2017 Changed the dimensions of the CT Enclosure.	Drawn By : RG Scale : NONE	Checked By : MS COMMITTEE Date : 01-30-2017	Approved By : TE MS-204B3
	Approved By : TE Date : 01-30-2017 MS-204B3			

Single Phase Transformer Layout

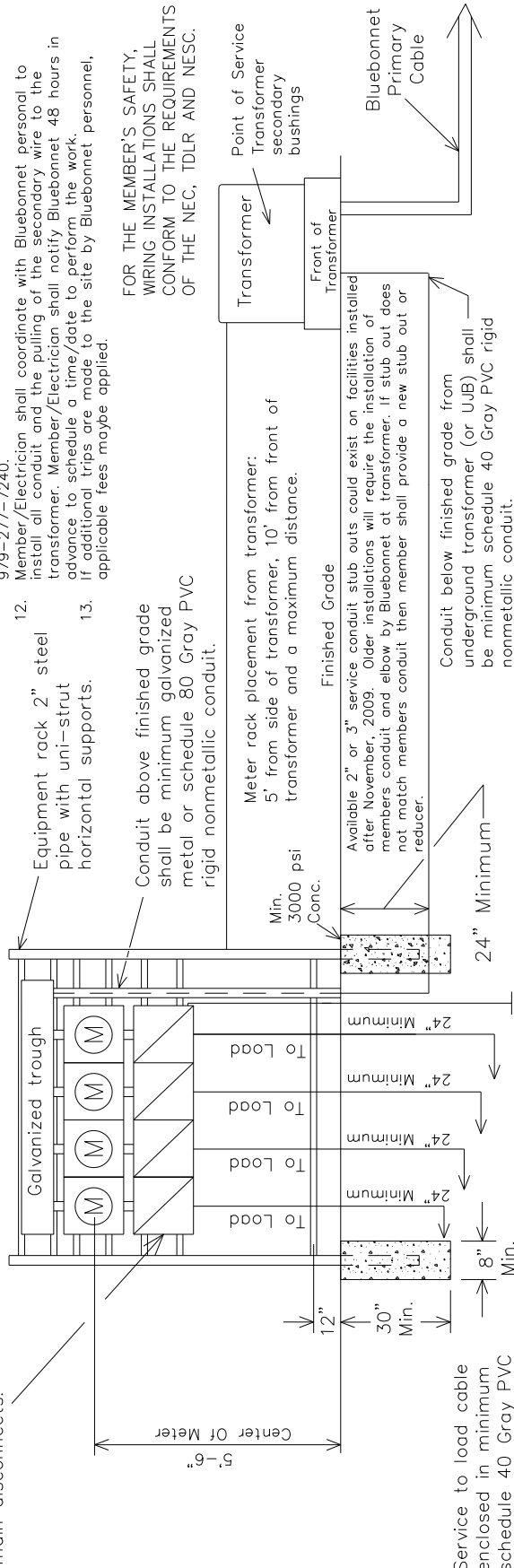


Notes:

- Line taps shall be made in the galvanized trough by the electrical contractor.
- More than (6) main disconnects require a properly sized main disconnect ahead of the galvanized trough.
- Weatherproof fittings required.
- Wire shall be sized to total disconnect sizes.
- Neutral(s) may be reduced no more than two sizes on residential application. No reduction of the neutral(s) is allowed on commercial application.
- For all URD jobs, electricians shall call TEXAS811 for locates before digging to Bluebonnet equipment. No private utilities will be located. Bluebonnet will complete wiring into transformer. Have 10' additional amount of wire for termination.
- Meter loop must remain unenclosed on exterior of structure.
- Meter loop can not be mounted on the side of a mobile home.
- All secondary connections made by Bluebonnet.
- 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. Giddings 979-542-8657, Red Rock 512-332-2978, Brenham 979-277-7240.
- Member/Electrician shall coordinate with Bluebonnet personnel 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. If additional trips are made to the site by Bluebonnet personnel, applicable fees maybe applied.

* WIRING INSTALLATIONS MUST MEET LOCAL GUIDELINES, IF APPLICABLE, SET FORTH BY CITY, COUNTY, OR OTHER GOVERNING ENTITY IN THE EVENT THESE REQUIREMENTS ARE MORE STRINGENT THAN BLUEBONNET SPECIFICATIONS. *

No more than four 60-200 Amp meter sockets and weatherproof main disconnects.



FOR THE MEMBER'S SAFETY, WIRING INSTALLATIONS SHALL CONFORM TO THE REQUIREMENTS OF THE NEC, TDLR AND NESC.

CURRENT CARRYING CAPACITIES AND CONDUIT/NIPPLE SIZE REQUIREMENT OF STANDARD WIRE SIZE.			
THIS GUIDE REFERS TO TABLE 310.15 (B)(7), SINGLE PHASE DWELLINGS SERVICES-REFER TO NEC FOR OTHER CALCULATIONS.			
COPPER CONDUCTOR	ALUMINUM CONDUCTOR	WIRE SIZE	CONDUIT/NIPPLE SIZE
60 AMP	60 AMP	#4	1/4" CONDUIT
100 AMP	100 AMP	#2	1/2" CONDUIT
125 AMP	125 AMP	#1/0	3/4" CONDUIT
150 AMP	150 AMP	#2/0	1" CONDUIT
200 AMP	200 AMP	#4/0	2" CONDUIT

Latest update can be found at www.bluebonnetelectric.coop/myHome/electricServices/meterLoop.aspx



Bluebonnet

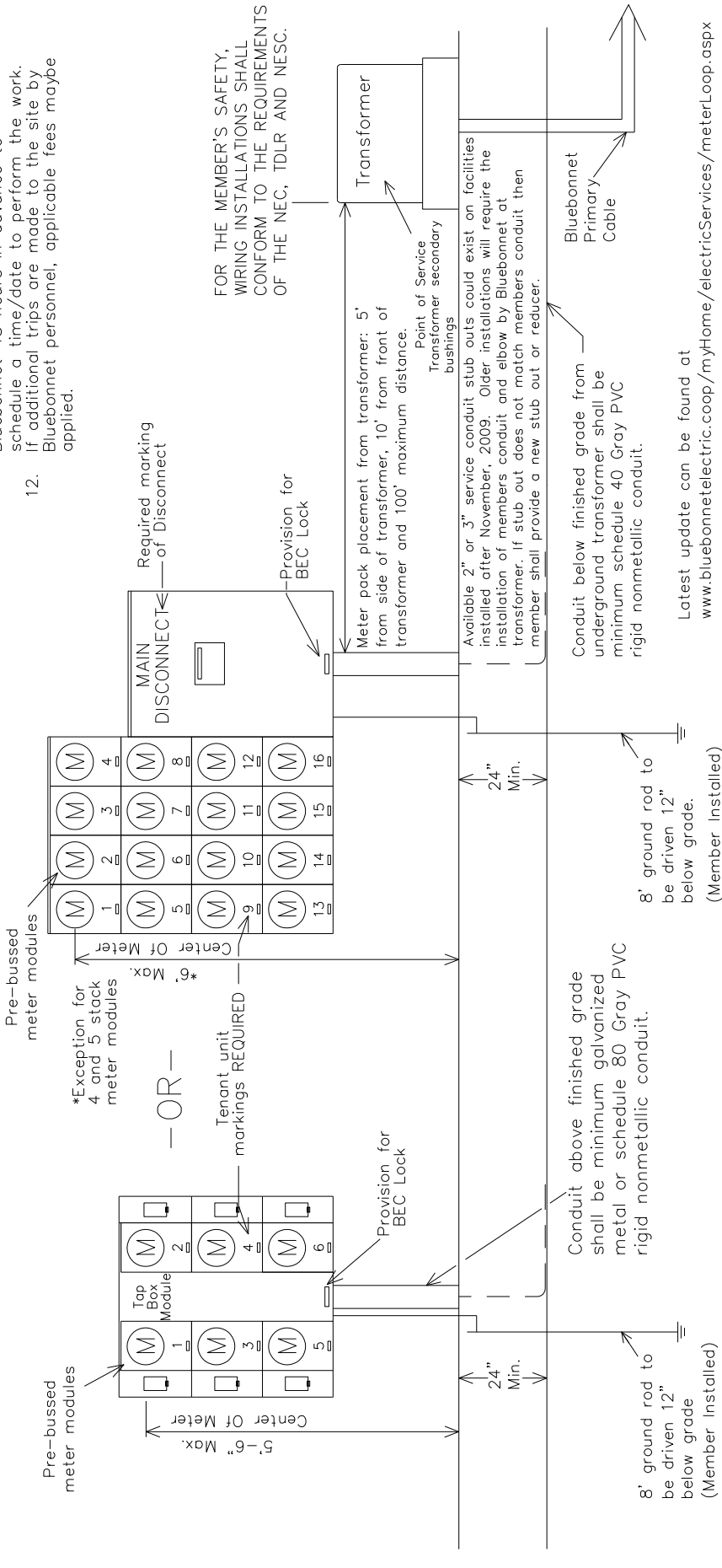
10 OR 30, 60-200 AMP UNDERGROUND GANG MOUNTED METERS ON RACK OR BUILDING NOT TO EXCEED A TOTAL OF 800 AMPS.


Checked By : MS COMMITTEE
 Drawn By : RG
 Date : 12-07-2017
 Scale : NONE
 Approved By : TE
 MS-205

*** WIRING INSTALLATIONS MUST MEET LOCAL GUIDELINES, IF APPLICABLE, SET FORTH BY CITY, COUNTY, OR OTHER GOVERNING ENTITY IN THE EVENT THESE REQUIREMENTS ARE MORE STRINGENT THAN BLUEBONNET SPECIFICATIONS. ***

Notes:

1. Covers on circuit breaker compartments must be removable without disturbing meters.
2. Meter socket components must be readily accessible and removable for maintenance.
3. Weatherproof fittings required.
4. Wire sized to total disconnect sizes.
5. Neutral(s) may be reduced no more than two sizes on residential application. No reduction of the neutral(s) is allowed on commercial application.
6. For all URD jobs, electricians should call in for locate before digging to Bluebonnet equipment.
7. Bluebonnet will complete wiring into transformer. Have sufficient amount of wire for termination.
8. Meter loop must remain unenclosed on exterior of structure.
9. If a main disconnect module is used, its cover must have provisions for a standard Bluebonnet padlock.
10. All secondary connections made by Bluebonnet. Member/Electrician shall coordinate with Bluebonnet personnel 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. If additional trips are made to the site by Bluebonnet personnel, applicable fees may be applied.
11. Member/Electrician shall coordinate with Bluebonnet personnel 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. If additional trips are made to the site by Bluebonnet personnel, applicable fees may be applied.
12. Member/Electrician shall coordinate with Bluebonnet personnel 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. If additional trips are made to the site by Bluebonnet personnel, applicable fees may be applied.





1 Ø 60-200 AMP UNDERGROUND MULTI-PACK METERS ON BUILDING

DATE	REVISIONS	Drawn By :
		BS
		Scale : NONE

Latest update can be found at www.bluebonnetelectric.coop/myHome/electricServices/meterLoop.aspx

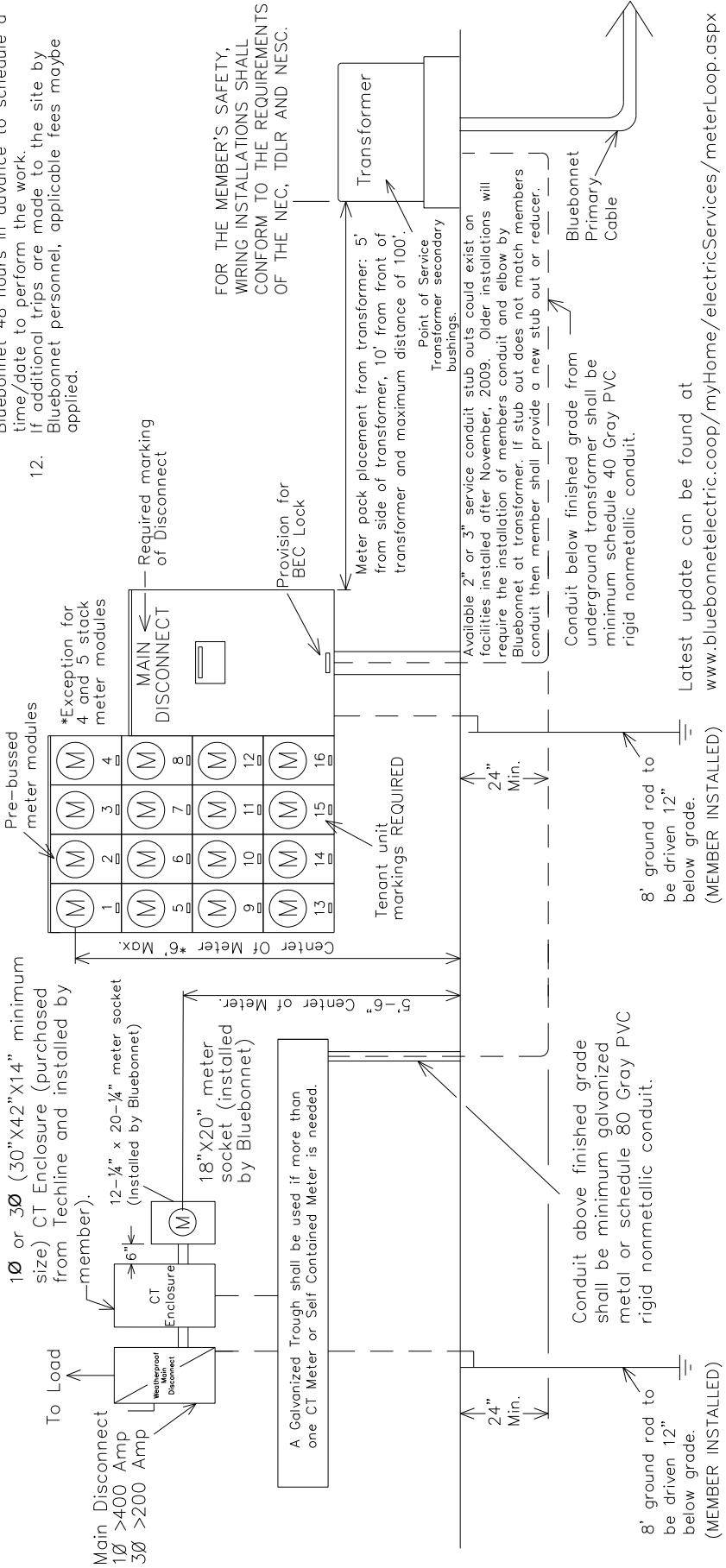
Checked By :	MS COMMITTEE	Approved By :	TE
Date :	01-20-2015		

WIRING INSTALLATIONS MUST MEET LOCAL GUIDELINES, IF APPLICABLE, SET FORTH BY CITY, COUNTY, OR OTHER GOVERNING ENTITY IN THE EVENT THESE REQUIREMENTS ARE MORE STRINGENT THAN BLUEBONNET SPECIFICATIONS.

Notes:

- Covers on circuit breaker compartments must be removable without disturbing meters.
- Meter socket components must be readily accessible and removable for maintenance.
- Weatherproof fittings required.
- Wire sized to total disconnect sizes.
- Neutral(s) may be reduced no more than two sizes on residential application. No reduction of the neutral(s) is allowed on commercial application.
- For all URD jobs, electricians should call in for locate before digging to Bluebonnet equipment.

- Bluebonnet will complete wiring into transformer. Have sufficient amount of wire for termination.
- Meter loop must remain unenclosed on exterior of structure.
- If a main disconnect module is used, its cover must have provisions for a standard Bluebonnet padlock.
- All secondary connections made by Bluebonnet. Member/Electrician shall coordinate with Bluebonnet personnel 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.
- If additional trips are made to the site by Bluebonnet personnel, applicable fees may be applied.



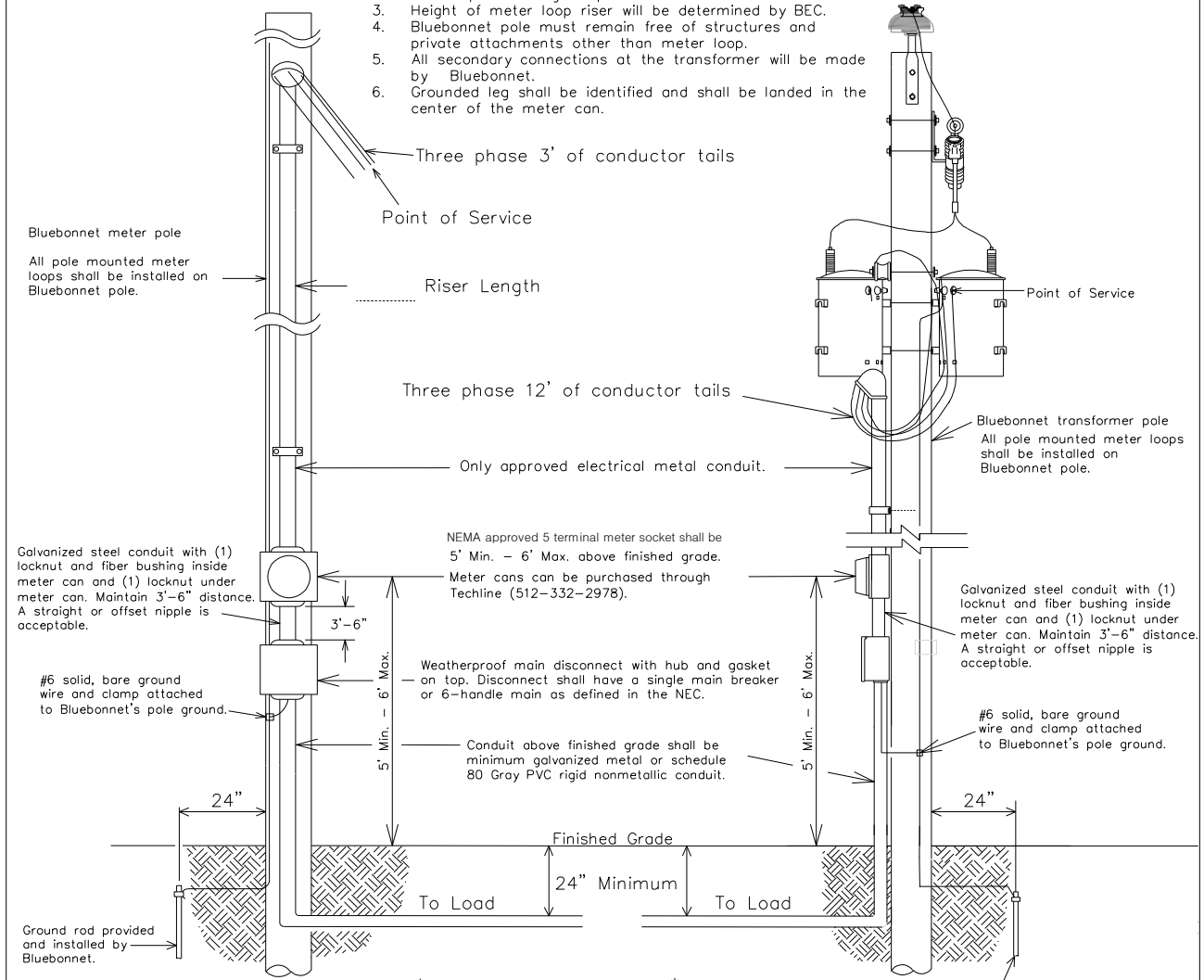
FOR THE MEMBER'S SAFETY, WIRING INSTALLATIONS SHALL CONFORM TO THE REQUIREMENTS OF THE NEC, TDLR AND NESC.

Latest update can be found at www.bluebonnetelectric.coop/myHome/electricServices/meterLoop.aspx

	30 60-200 AMP UNDERGROUND MULTI-PACK METERS & 30 < or > 200 AMP ON BUILDING		Drawn By : RG	Checked By : MS COMMITTEE	Approved By : TE
	DATE 01-30-2017	REVISIONS Changed the dimensions of the CT Enclosure.	Scale : NONE	Date : 01-30-2017	MS-207B

Notes:

1. A Bond wire shall be used, see NEC Table 250.66 for Bond Wire sizing.
2. Weatherproof fittings required.
3. Height of meter loop riser will be determined by BEC.
4. Bluebonnet pole must remain free of structures and private attachments other than meter loop.
5. All secondary connections at the transformer will be made by Bluebonnet.
6. Grounded leg shall be identified and shall be landed in the center of the meter can.



FOR THE MEMBER'S SAFETY, WIRING INSTALLATION AND MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF THE NEC, TDLR AND NESC.

* WIRING INSTALLATIONS MUST MEET LOCAL GUIDELINES, IF APPLICABLE, SET FORTH BY CITY, COUNTY, OR OTHER GOVERNING ENTITY IN THE EVENT THESE REQUIREMENTS ARE MORE STRINGENT THAN BLUEBONNET SPECIFICATIONS. *

Latest update can be found at www.bluebonnetelectric.coop/myHome/electricServices/meterLoop.aspx

CURRENT CARRYING CAPACITIES AND CONDUIT SIZE REQUIREMENT OF STANDARD WIRE SIZE-(RHH, RHW, THW, THWN, THHN, AND XHHW THIS GUIDE REFERS TO TABLE 310.15 (B)(7), SINGLE PHASE DWELLINGS SERVICES.REFER TO NEC FOR OTHER CALCULATIONS.

COPPER CONDUCTOR			ALUMINUM CONDUCTOR		
WIRE SIZE	BREAKER SIZE	CONDUIT SIZE	WIRE SIZE	BREAKER SIZE	CONDUIT SIZE
#6	60 AMP	1¼" CONDUIT	#4	60 AMP	1¼" CONDUIT
#4	100 AMP	1¼" CONDUIT	#2	100 AMP	1¼" CONDUIT
#2	125 AMP	1½" CONDUIT	#1/0	125 AMP	1½" CONDUIT
#1	150 AMP	2" CONDUIT	#2/0	150 AMP	2" CONDUIT
#2/0	200 AMP	2" CONDUIT	#4/0	200 AMP	2" CONDUIT

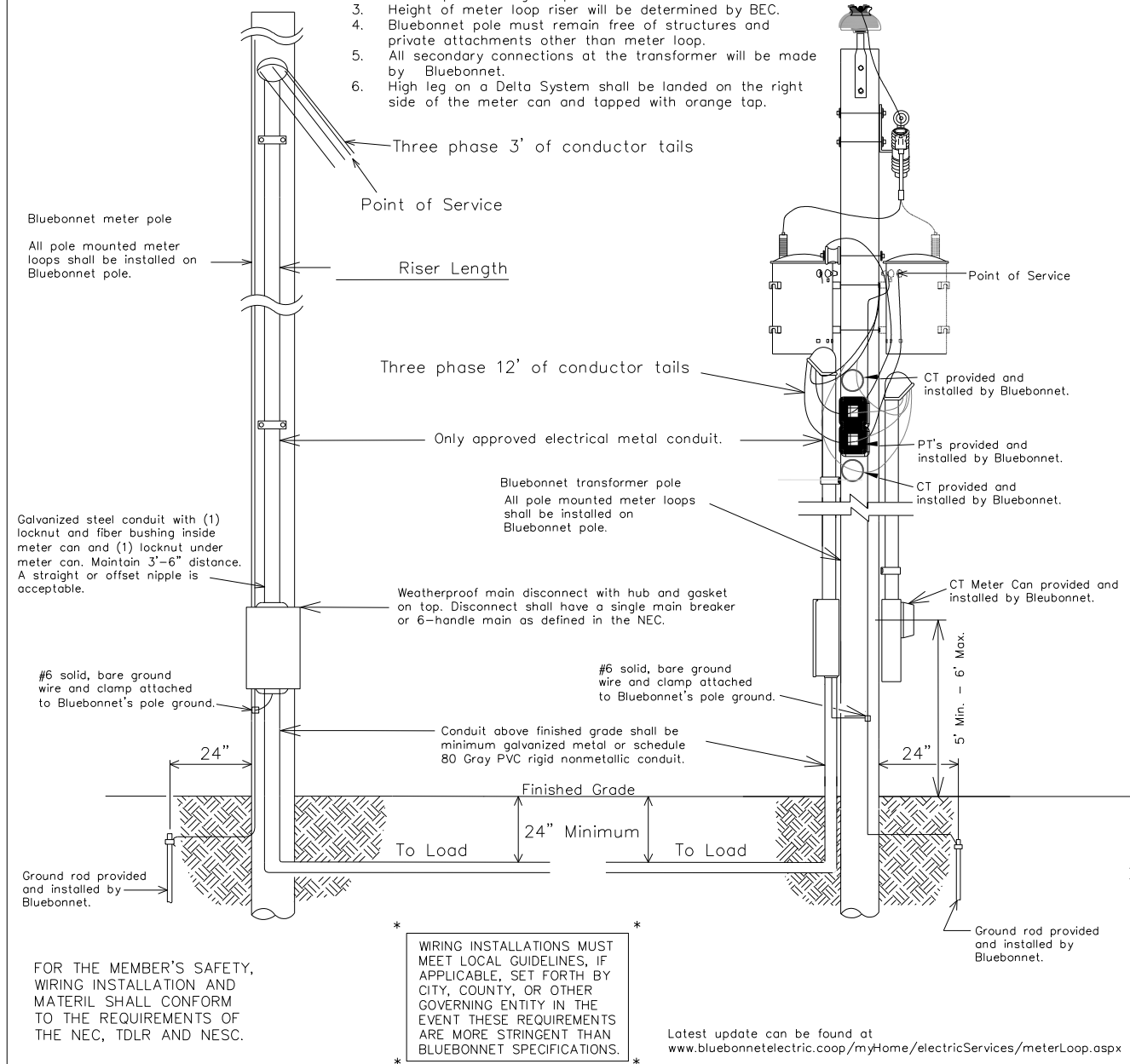
3Ø, STRAIGHT 480 VOLT
3W CORNER GROUND DELTA
60-200 AMP



DATE	REVISIONS	Drawn By :	Checked By :	Approved By :
12-07-2017	Changed the wording on Note # 6.	RG	MS COMMITTEE	TE
		Scale :	Date:	
		NONE	12-07-2017	MS-301A

Notes:


1. A Bond wire shall be used, see NEC Table 250.66 for Bond Wire sizing.
2. Weatherproof fittings required.
3. Height of meter loop riser will be determined by BEC.
4. Bluebonnet pole must remain free of structures and private attachments other than meter loop.
5. All secondary connections at the transformer will be made by Bluebonnet.
6. High leg on a Delta System shall be landed on the right side of the meter can and tapped with orange tap.



CURRENT CARRYING CAPACITIES AND CONDUIT SIZE REQUIREMENT OF STANDARD WIRE SIZE-(RHH, RHW, THW, THWN, THHN, AND XHHW THIS GUIDE REFERS TO TABLE 310.15 (B)(7), SINGLE PHASE DWELLINGS SERVICES.REFER TO NEC FOR OTHER CALCULATIONS.

COPPER CONDUCTOR			ALUMINUM CONDUCTOR		
WIRE SIZE	BREAKER SIZE	CONDUIT SIZE	WIRE SIZE	BREAKER SIZE	CONDUIT SIZE
#6	60 AMP	1¼" CONDUIT	#4	60 AMP	1¼" CONDUIT
#4	100 AMP	1½" CONDUIT	#2	100 AMP	1½" CONDUIT
#2	125 AMP	1½" CONDUIT	#1/0	125 AMP	1½" CONDUIT
#1	150 AMP	2" CONDUIT	#2/0	150 AMP	2" CONDUIT
#2/0	200 AMP	2" CONDUIT	#4/0	200 AMP	2" CONDUIT

3 PHASE, STRAIGHT 480 VOLT 3W CORNER GROUND DELTA >200 AMP

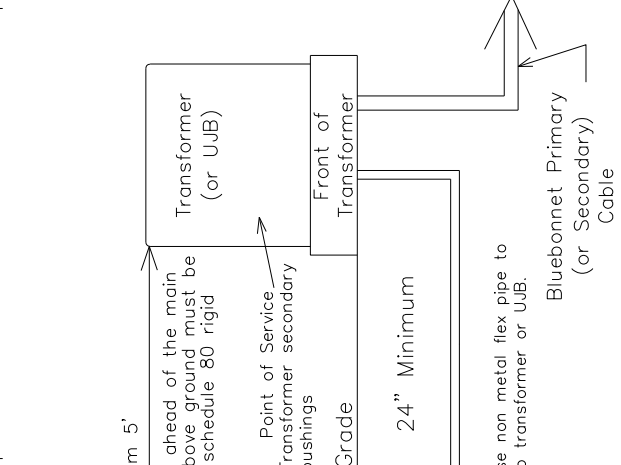


Drawn By : RG	Checked By : MS COMMITTEE	Approved By : TE
Scale : NONE	Date: 06-20-2016	MS-301B

DATE	REVISIONS
-	-
-	-

Notes:

1. All temporary wiring shall meet national electrical code standards.
2. All outlets attached to meter loop shall have ground-fault circuit interrupter protection.
3. For all URD jobs, electricians shall call TEXAS811 for locates before digging to Bluebonnet equipment. No private utilities will be located. Service wires shall be brought to the top side of the meter base.
4. Weatherproof disconnect with no more than (6) main breakers
5. Bluebonnet does inspect temporary meter loops and a fee shall be charged per trip for wiring inspection. Bluebonnet will refuse service if hazardous conditions exist and/or if connections do not meet specifications. Bluebonnet will complete wiring into transformer or UJB. Member shall have sufficient amount of wire for termination.
6. All connections inside pad mounted transformer and UJB's will be made by Bluebonnet.
7. Temporary Meter Loop Services are good for up to 24 months of service or less.
8. Member shall use non metal flex pipe to install service to transformer or UJB.



FOR MEMBER SAFETY, WIRING INSTALLATION AND MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF THE NEC, TDLR AND NESC.

Latest update can be found at www.bluebonnetelectric.coop/myHome/electricServices/meterLoop.aspx

CURRENT CARRYING CAPACITIES AND CONDUIT/NIPPLE SIZE REQUIREMENT OF STANDARD WIRE SIZE (RHH, RHW, THW, THWN, THHN, AND XHHW)

THIS GUIDE REFERS TO TABLE 310.15 (B)(7), SINGLE PHASE DWELLINGS SERVICES. REFER TO NEC FOR OTHER CALCULATIONS.

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

WIRING INSTALLATIONS MUST MEET LOCAL GUIDELINES, IF APPLICABLE, SET FORTH BY CITY, COUNTY, OR OTHER GOVERNING ENTITY IN THE EVENT THESE REQUIREMENTS ARE MORE STRINGENT THAN BLUEBONNET SPECIFICATIONS.

TEMPORARY METER LOOP FOR UNDERGROUND SERVICE	Drawn By :	RG	Checked By :	MS COMMITTEE	Approved By :	RG
DATE	REVISIONS	Scale :	DATE:			
11/29/2017	ADDED NIPPLE AFTER CONDUIT SIZE	NONE	03/29/2018			MS-302
03/29/2018	ADDED ADDITIONAL METER SETUP.					



Notes:

1. All pole mounted meter loops shall be mounted to Bluebonnet poles.
2. All secondary connections made by Bluebonnet.
3. All outlets attached to meter loop shall have ground-fault circuit interrupter protection.
4. Temporary Meter Loop Services are good for 24 months of service or less.

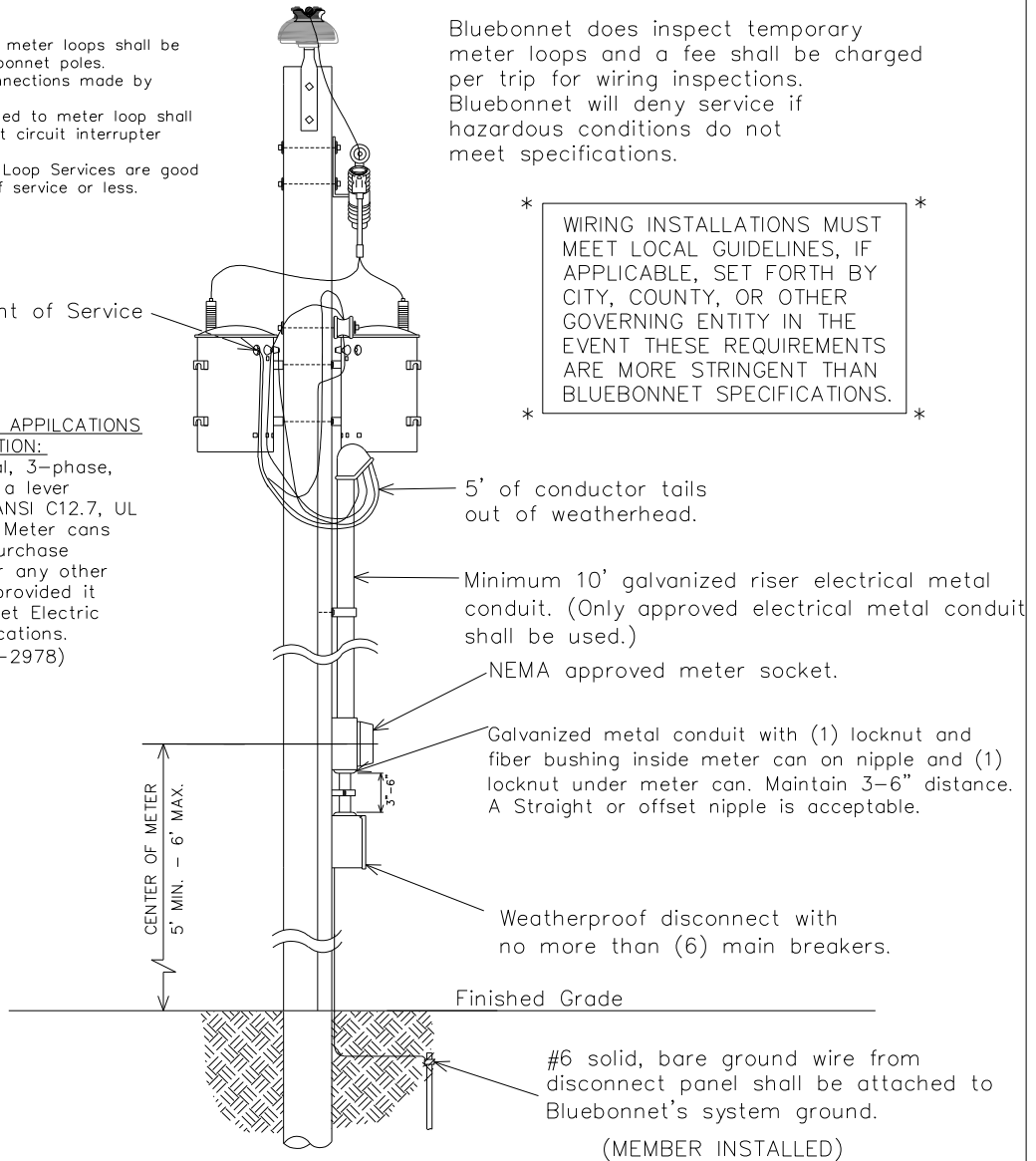
Bluebonnet does inspect temporary meter loops and a fee shall be charged per trip for wiring inspections. Bluebonnet will deny service if hazardous conditions do not meet specifications.

* WIRING INSTALLATIONS MUST MEET LOCAL GUIDELINES, IF APPLICABLE, SET FORTH BY CITY, COUNTY, OR OTHER GOVERNING ENTITY IN THE EVENT THESE REQUIREMENTS ARE MORE STRINGENT THAN BLUEBONNET SPECIFICATIONS. *

Point of Service

FOR THREE PHASE APPLICATIONS DESCRIPTION:

200amp, 7 terminal, 3-phase, 4-wire will require a lever by-pass meeting ANSI C12.7, UL 414, an NEMA 3R. Meter cans are available for purchase through Techline or any other electrical supplier provided it meets all Bluebonnet Electric Cooperative specifications. Techline (512-332-2978)



FOR THE MEMBER'S SAFETY, WIRING INSTALLATION AND MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF THE NEC, TDLR AND NESC.

Latest update can be found at www.bluebonnetelectric.coop/myHome/electricServices/meterLoop.aspx

CURRENT CARRYING CAPACITIES AND CONDUIT SIZE REQUIREMENT OF STANDARD WIRE SIZE - (RHH, RHW, THW, THWN, THHN, AND XHHW THIS GUIDE REFERS TO TABLE 310.15 (B)(7), SINGLE PHASE DWELLINGS SERVICES.REFER TO NEC FOR OTHER CALCULATIONS.

COPPER CONDUCTOR			ALUMINUM CONDUCTOR		
Wire Size	Breaker Size	Conduit Size	Wire Size	Breaker Size	Conduit Size
#6	60 Amp	1¼" Conduit	#4	60 Amp	1¼" Conduit
#4	100 Amp	1¼" Conduit	#2	100 Amp	1¼" Conduit
#2	125 Amp	1½" Conduit	#1/0	125 Amp	1½" Conduit
#1	150 Amp	2" Conduit	#2/0	150 Amp	2" Conduit
#2/0	200 Amp	2" Conduit	#4/0	200 Amp	2" Conduit

1Ø OR 3Ø 60-200 AMP TEMPORARY METER LOOP FOR TRANSFORMER AND SERVICE POLES



Drawn By : RG	Checked By : MS COMMITTEE	Approved By : TE
Scale : NONE	DATE: 08-18-2016	MS-303

DATE	REVISIONS
-	-
-	-