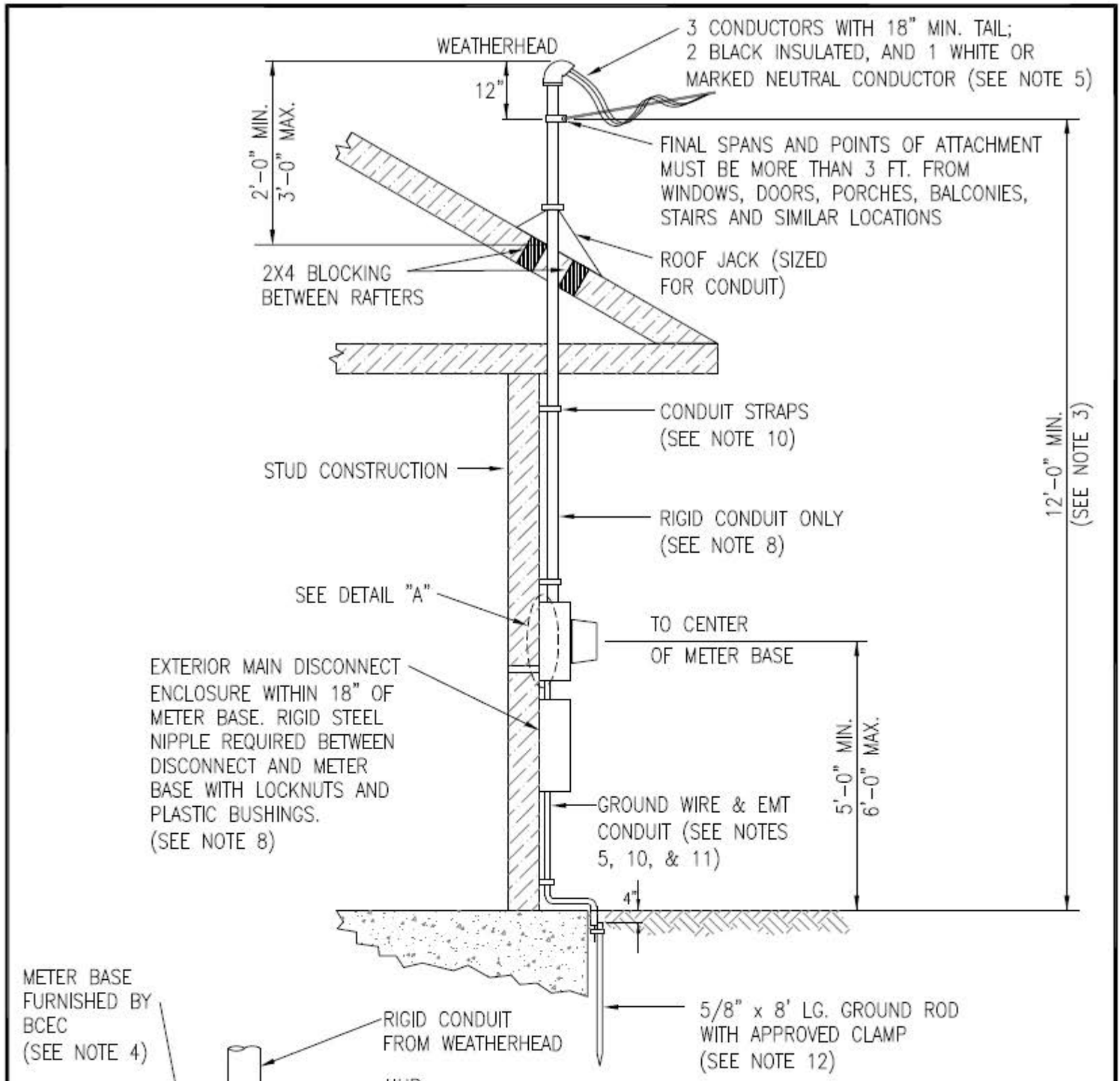

DETAIL "A"

POWER ENGINEERS

TYLER, TX.

REVISED: 10-11-2024

BOWIE-CASS ELECTRIC COOPERATIVE, INC.

DOUGLASSVILLE, TEXAS

TYPICAL MAST SERVICE INSTALLATION

POWER ENGINEERS, INC.			DRAWING
DWN. BY: ALM	CKD. BY: AP	SCALE NONE	BCEC-M1
ENGRS FILE NO. 0248698	DATE: 10/11/24		

BOWIE-CASS ELECTRIC COOPERATIVE, INC.

METER SPECIFICATION NOTES

1. All wiring shall be in accordance with Articles of the latest edition of the National Electric Code.

2. Minimum requirements only are shown on the attached standard and are not intended to supercede local codes.

3. Points of attachment for overhead service must be of sufficient height (NEC Section 230.24, NESC Table 232-1, or Texas Legal Statutes) to maintain:

   12 foot minimum clearance for areas accessible to pedestrians only.
   16 foot minimum clearance over residential driveways.
   18 foot minimum clearance over commercial driveways or parking lots.
   22 foot minimum clearance over public streets and roads.

4. Cooperative to supply meter and meter base. Member shall install meter base with lag screws. Cooperative supplied meter base must be used. No alternates will be accepted. No boards allowed behind meter bases or disconnect enclosures mounted on poles.

5. Wire sizes shown on the attached drawing are minimums and shall be sized according to load and main size as recommended by the latest edition of the National Electric Code (Section 250.66). Minimum wire sizes for residential services (Section 310.15(B)(6)):

	Conductor Sizes			
Service Size	**Ungrounded**	**Neutral**	**Ground Rod**	**Conduit Size**
100 Amp Main:	#4 Copper THW	#4 Copper THW	#6 Solid Copper	1 1/4" Minimum*
200 Amp Main:	2/0 Copper THW	2/0 Copper THW	#4 Solid Copper	2" Minimum
320 Amp Main:	350 Copper THW	350 Copper THW	#2 Strand Copper	3" Minimum

* 100 Amp Main shall use 2" Conduit when used for "mast type" service.

6. No more than six circuit breakers may be used without installing a main breaker. A circuit breaker enclosure or main disconnect is required before the service will be connected. Main disconnect must be mounted within 18 inches of the meter base at a readily accessible location (Section 230.70).

7. Main disconnect location must meet "working space" clearance and location requirements as specified by Section 110.26 of the National Electric Code. Circuit breaker enclosure/main disconnect shall not be located in a clothes closet and shall have a clear work space of at least 30"W x 36" in front, and 6 1/2 feet height from the ground.

8. All conduit for residential services shall be sized per Note 5 including conduit from the meter base to the exterior main disconnect, and shall have locknuts and plastic bushings. Conduit between meter base and main disconnect shall be rigid type. (Section 230.85 Emergency Disconnects)

9. No uncovered knockout holes or other openings are allowed in the meter base or main disconnect enclosure. (Section 230.62)

10. A minimum of 2 conduit straps shall be used when conduit run is over 2 foot in length, and the maximum spacing between straps shall be 30 inches (Section 230.51(A)). Straps secured with nails, drywall screws or sheet-metal screws will not be accepted.

11. Ground rod conductor shall be installed in ½ inch EMT type conduit from meter base to 4" below grade. Conduit shall have locknuts, and plastic bushings, and shall be secured to the structure wall (or other applicable support). Conductor shall be installed in one continuous length without splice or joint (Section 250.64(B) & (C)).

12. Ground rods must be 5/8 inches in diameter and 8 foot in length minimum and shall be copper coated with an approved ground wire clamp.

13. Minimum requirements only are shown on this standard and are not intended to conflict with any national or local code which may require more than the minimum indicated by the drawings.

Revised: 10-11-2024