

UPSHUR RURAL ELECTRIC COOPERATIVE CORPORATION
GILMER, TX

Guide for Electric Service and Meter Installations

Overhead & Underground Services

Meter Loop Specifications for Upshur Rural Electric Cooperative
Overhead and Underground Services

07/03/2018
Rev. 1

UPSHUR RURAL ELECTRIC COOPERATIVE CORPORATION

Preface

Upshur Rural Electric Cooperative Corporation (URECC) is required to follow the National Electric Safety Code (NESC).

For the safety of Cooperative Members, URECC and the Texas Electrical Safety and Licensing Act also requires its Members to follow applicable rules found within the most current National Electric Code (NEC) that pertain to electric service connection between URECC and the Member. Compliance to these rules involving the service connection is generally determined by the URECC Serviceman before setting the electric meter; however, such compliance to the NEC requirements is the responsibility of the Member's electric installer.

URECC recommends that electrical installations be completed by an electrician licensed by the state of Texas.

The effective date of this document is August 1, 2018. All previous documents pertaining to URECC meter loop specifications are superseded by this document and should be discarded.

The document is made available in hardcopy via standard mail or by visiting the URECC main office. The document is also made available electronically by way of the URECC website and through email.

This document covers URECC meter loop specifications and shall be followed under the following service instances:

1. All new service connects
2. Re-connect service requiring crew construction

Questions concerning this document can be forwarded to:

Darren Sosebee
Staking Supervisor
Office Phone: 903-680-0235
Email: dsosebee@urecc.com

UPSHUR RURAL ELECTRIC COOPERATIVE CORPORATION

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SECTION I
General Information

As required by Upshur Rural Electric Cooperative, Corporation (URECC), 1200 W. Tyler St., Gilmer, TX 75644, (903)-843-2536. Office hours: 8:00 AM to 4:30 PM, Monday through Friday.

Notice: The following information is derived from various sections of the 2017 National Electric Code (NEC) and the National Electric Safety Code (NESC C2-2017). This information does not intend to accurately portray all possible variations of service installations, nor is it an exhaustive report of the NEC and NESC standards. The specifications guidelines given are intended to meet or exceed the minimum requirements of the latest NEC and NESC.

Although Texas state law allows electrical work to be performed in or on a dwelling by a person who owns and resides in the dwelling, URECC strongly urges Members to seek qualified assistance from Texas state licensed electricians. It is the responsibility of, and incumbent on the part of the installer, to at all times and in all cases adhere to the requirements of the governing issue of the NEC and NESC.

All wiring shall be in accordance with Articles of the latest edition of the NEC and the NESC.

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

SECTION II Overhead Services

A. General Requirements

Services between 0-750 Volts must be of sufficient height to maintain a 16 foot minimum clearance above final grade to the base of the drip-loop (NESC Table 232-1). Other minimum clearance conditions may apply depending on the area crossed and/or the service voltage. The Cooperative may require a greater point of attachment height from the Member to facilitate clearance requirements mandated by specific conditions.

URECC requires a minimum 2 inch rigid conduit be used where the service mast (roof jack) for overhead service is used as a support for the service-drop conductors. This is required to improve ability of bearing the tension of service-drop conductors (NEC 230.28(A) and (B)).

The Member is responsible for the installation of the conduit and conductors between the weatherhead and meter base. Copper or equivalent aluminum conductors sized per NEC Table 310.15(B)(16) may be used. All weatherhead conductors must be insulated and designed for use in conduit. All connectors must be sized, tightened, and have composition compatible for the type conductor used per the meter base/panel instructions and the NEC. The Member's installer shall allow 24 inch minimum conductor tails outside of weatherhead for service connections.

The Member is responsible for the measurement and installation of conduit and cable from the bottom lugs of the URECC meter base to the Member's disconnect or panel. The installer should ensure that the meter base is not energized before beginning work.

All weather head cables and underground cable from the overhead service meter base shall meet the requirements in Table 4.1 found on page 7 of this document.

A minimum of two (2) conduit straps shall be used when a conduit run is over 2 feet in length, and the maximum spacing between straps shall be 30 inches (NEC 230.51(A)).

Attachments of any kind shall not be affixed to URECC owned poles. This includes, but is not limited to, Member-Owned lights, fencing, antennae, etc.

URECC does not support or provide service to any type of meter base mounted on the side of a mobile or manufactured home.

B. Permanent Structures – Overhead Service Options

Standard 25 Foot Meter Pole:

To meet clearance requirements of the C2-2017 NESC, URECC's specification for a Member-Owned meter pole is a 25 foot pole in order to maintain an 18 foot minimum clearance between final grade and the top of the weatherhead and a 16 foot minimum clearance between final grade and the base of the drip-loop. The Member will be responsible for the installation of the 25 foot meter pole with weatherhead, conduit, and meter base. A 5 foot minimum separation between the meter pole and permanent structure is required.

Mast and Gable Weatherhead Installation Specifications:

For overhead services with the service wire attachment made to a permanent structure, there are two standard installation methods: mast and gable. These installations are described in

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OHS-1 and OHS-2 respectively. Mast and gable weatherhead installations are not allowed on mobile home applications. For gable or mast type service entrances, a 16 foot minimum clearance is required. Exceptions to this clearance requirement may be found in C2-2017 NESC Table 232-1.

The mast weatherhead installation requires that the weatherhead entrance be located not more than 3.5 feet above the structure's roof line per the details presented in OHS-1.

The gable/wall mounted weatherhead installation located below the soffit of the structure is per the details presented in OHS-2.

C. Mobile and Manufactured Homes – Overhead Service Options

For overhead service to mobile and manufactured homes the following is specified:

Standard 25 Foot Meter Pole:

For overhead service, a 25 foot Member-Owned Pole is the standard in order to meet an 18 foot minimum clearance between final grade and the top of the weatherhead and a 16 foot minimum clearance between final grade and the base of the drip-loop. The Member-Owned Pole shall be equipped by the Member with the specified weatherhead, conduit, and meter base. A 5 foot minimum separation between the meter pole and permanent structure is required.

The meter pole shall be located so that service wire to the weatherhead does not cross the roof of the mobile home.

**SECTION III
Underground Services**

A. General Requirements

The Member is responsible for the installation of the underground conduit and cable from the bottom lugs of the meter base to the Member's disconnect or panel. The installer should ensure that the meter base is not energized before beginning work.

Underground cable shall be installed in Schedule 40 Gray PVC buried at a minimum depth of 24 inches using 90 degree sweeps, locknuts, and plastic bushings. All conduit shall be sized per Table 4.1 of this document.

Attachments of any kind shall not be affixed to URECC owned poles or pedestal equipment. This includes, but is not limited to, Member-Owned lights, fencing, antennae, disconnect equipment, etc.

Temporary service to a mobile or manufactured home is prohibited.

URECC does not support or provide electrical service to any type of meter base mounted on the side of a mobile or manufactured home.

The mobile home service equipment must be located in sight of the mobile home, and the equipment must be a minimum of 5 feet but not more than 30 feet from the exterior wall of the mobile home it serves. The mobile home service equipment shall be rated at not less than 100 Amperes at 120/240 Volts, and provisions shall be made for connecting a mobile home feeder assembly by a permanent wiring method (NEC 550.32(A) and (C)).

B. Permanent Structure – Underground Service Options

Underground Service from Pole Mounted or Pad Mount Transformer:

To provide underground service to a permanent structure from a URECC overhead line, the Member must install underground conduit and conductor at a depth of 24 inches in Schedule 40 Gray PVC conduit from the bottom of the meter base to either the secondary pedestal or a minimum of 2 feet from the base of the existing pole. A 5 foot minimum conductor tail is required to make service connections. This installation is described in drawings UGS-1 and UGS-2.

C. Mobile and Manufactured Homes – Underground Service Options

Underground Service from Pole Mounted or Pad Mount Transformer:

To provide underground service to a mobile or manufactured home from a URECC overhead line, the Member must install underground conduit and conductor at a depth of 24 inches in Schedule 40 Gray PVC conduit from the bottom of the meter base to either the secondary pedestal or a minimum of 2 feet from the base of the existing pole. A 5 foot minimum conductor tail is required to make service connections. This installation is described in drawings UGS-1 and UGS-2.

**SECTION IV
Wire Sizes and Conduit**

Wire sizes and conduits shown on the associated drawings are minimums and shall be sized according to load and main size as recommended by the latest edition of the NEC. Minimum wire and conduit sizes for residential services are as shown in Table 4.1. Feeder wire sizes for mobile and manufactured homes also follow NEC Table 310.15(B)(16) and shall be rated at not less than 100 Amperes. Feeder conductors for mobile and manufactured homes shall be permanently installed and consist of four insulated, color-coded conductors identified by the factory or field marking of the conductors in compliance with NEC 310.110. Equipment grounding conductors shall not be identified by stripping the insulation (NEC 550.33(A) and (B)).

Conduit for all underground service wire shall be sized with Schedule 40 Gray PVC pipe per Table 4.1.

**Table 4.1: Conductor Size for 120/240V, 3-Wire Dwelling Service, Single Phase
From NEC Table 310.15(B)(16) and NEC Table 250.66**

Service Size	Ungrounded Conductor (AWG / kcmil)		Minimum Neutral	Grounding Conductor to Ground Rod	Rigid Conduit Size
	Copper	Aluminum			
100 Amp Main	#2	1/0	#4 Cu, #2 Al	#6 Solid Copper	1.25" minimum
200 Amp Main	3/0	250	1/0 Cu, 3/0 Al	#6 Solid Copper	2" minimum
320 Amp Main	350	500	4/0 Cu, 300 kcmil Al	#6 Solid Copper	3" minimum

Table 4.1 Notes:

- 1) URECC requires a minimum 2 inch rigid conduit be used where the service mast (roof jack) is used as a support for the service-drop conductors. This is required to improve ability of bearing the tension of service-drop conductors (NEC 230.28).
- 2) The minimum size ungrounded "hot" conductor shall be #2 AWG copper or 1/0 AWG aluminum equivalent.
- 3) The minimum size for a grounded neutral conductor is commonly allowed to be two standard trade sizes smaller than the ungrounded "hot" conductor under balanced load conditions; however, caution should be used when using this reduction and NEC 220.61 should be consulted to calculate neutral currents for unbalanced or nonlinear load conditions. A grounded neutral shall never be reduced smaller than #4 AWG copper or #2 AWG aluminum equivalent. In addition, the grounded neutral conductor shall never be smaller than the required grounding electrode conductor found in NEC Table 250.66 and NEC Table 250.102(C)(1). Reference also NEC 215.2, NEC 230.42, NEC Table 310.15(B)(16).
- 4) The Member is responsible for the installation of the conduit and conductors between the weatherhead and meter base. Copper or equivalent aluminum conductors sized per NEC Table 310.15(B)(16) may be used. All weatherhead conductors must be insulated and designed for use in conduit. All connectors must be sized, tightened, and have composition compatible for the type conductor used per the meter base/panel instructions and the NEC. The Member's installer shall allow 24 inch minimum

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conductor tails outside of weatherhead for service connections.

- 5) NEC 250.66(A) provides for an exception to grounding conductor size found in NEC Table 250.66 “where the grounding electrode conductor is connected to a single or multiple rod, pipe, or plate electrode(s), or any combination thereof, as permitted in NEC 250.52(A)(5) or (A)(7), that portion of the conductor that is the sole connection to the grounding electrode(s) shall not be required to be larger than #6 AWG copper wire or #4 AWG aluminum wire.” *URECC requires grounding conductors to be copper only.*

SECTION V
Circuit Protection / Disconnect

No more than six circuit breakers may be used without installing a main breaker (NEC 230.71, NEC 225.33). A circuit breaker enclosure or main disconnect enclosure is required before the service will be connected. Disconnect/panels using board mountings between the panel and the meter pole must use treated lumber in all cases to be accepted. The Member shall install the panel with lag screws.

For overhead meter base installations on permanent residences or structures, the main disconnect must be mounted within 18 inches of the meter base at a readily accessible location outside of the structure or inside nearest the point of entrance of the service conductors (NEC 230.70).

For services to mobile and manufactured homes, the main disconnect must be located in sight of the home, and it must be a minimum of 5 feet but not more than 30 feet from the exterior wall of the home it serves. The service equipment shall be rated at not less than 100 Amperes at 120/240 Volts, and provisions shall be made for connecting a mobile home feeder assembly by a permanent wiring method (NEC 550.32(A) and (C)).

SECTION VI
Grounding

A. Ground Rods

Ground rods must be 5/8 inches in diameter, a minimum of 8 feet in length, and shall be copper or copper-clad with an approved ground wire clamp (NEC 250.52 (A)(5)). Rods shall be located 6 inches from a slab foundation or Member-Owned Pole in undisturbed soil and shall be installed such that at least 8 feet of length is in contact with the soil (NEC 250.53 (G)).

B. Grounding Conductors

Grounding conductors must be sized at a minimum #6 AWG soft-drawn copper that is free from exposure to physical damage and be continuous from the meter base ground connection to the ground rod connector. The grounding conductor shall be permitted to be run along the surface of the structure's construction without metal covering/protection if it is securely fastened to the construction. Otherwise, it shall be protected in 1/2 inch RMC, IMC, PVC, RTRC, or EMT type conduit (NEC 250.64(B)) from meter base to the ground rod connection. Conduit shall have locknuts and plastic bushings, and it shall be secured to the structure wall (or other applicable support). Conductor shall be installed in one continuous length without splice or joint (NEC 250.64(C)).

C. Equipment Grounding Conductors

For mobile home applications, the equipment ground conductor (4th wire) in the feeder assembly shall be at minimum an insulated #4 AWG stranded copper conductor or an insulated #2 AWG stranded aluminum conductor. In this instance only, URECC allows an aluminum equipment grounding conductor to be used.

SECTION VII
Temporary Service Installations

A. General

“Temporary electric power and lighting installations shall be permitted during the period of construction, remodeling, maintenance, repair, or demolition of buildings, structures, equipment, or similar activities” (NEC 590.3(A)). “Temporary wiring shall be removed immediately upon completion of construction or purpose for which the wiring was installed” (NEC 590.3(D)).

Temporary service to recreational vehicles, mobile homes, or manufactured homes is prohibited.

The point of demarcation for URECC is the service connection at the weatherhead or underground pedestal. Temporary service equipment and wiring beyond the point of demarcation shall meet applicable electric codes and standards. URECC will not connect the service if the service is deemed unsafe and a danger to the public.

B. Overhead Service – Temporary

A temporary construction meter pole must be no shorter than 12 feet from ground level and be installed within 8 feet of a permanent URECC pole. If the construction of the temporary meter pole meets the standard for a permanent meter pole, then the temporary pole may be installed within 75 feet of a permanent URECC pole. The temporary construction pole will be required to have adequate circuit protection in the form of circuit breakers. At least one circuit breaker will be required in order for URECC to set a service meter.

C. Underground Service – Temporary

Temporary service shall consist of an H-structure, short pole, or short 4X4 post with meter base installed within 3 feet of a URECC pedestal. The Member shall be responsible for trenching and installing the underground conductor at a depth of 24 inches in Schedule 40 Gray PVC conduit from the bottom of the meter base to the secondary pedestal. The temporary service/disconnect panel must be designed for underground use. URECC will not connect the service where the service panel is not designed for an underground application.

SECTION VIII
Glossary of Terms and Definitions

Circuit Breaker – A device designed to open and close a circuit by non-automatic means and to open the circuit automatically on a predetermined overcurrent without damage to itself when properly applied within its rating (NEC 100).

Disconnect Panel (Disconnecting Means) – A device, or group of devices, or other means by which the conductors of a circuit can be disconnected from their source of supply (NEC 100). The disconnect panel provides fault protection for the conductors going from the meter base to the distribution panelboard.

Distribution Panelboard – A panel including buses and automatic overcurrent devices, and equipped with or without switches for the control of light, heat, or power circuits, designed to be placed in a cabinet or cutout box placed in or against a wall, partition, or other support, and accessible only from the front (NEC 100).

Electric Conduit – Pipe used as a raceway to route electric cables for services above and below ground. URECC requires conduit for all underground service wire be sized with Schedule 40 Gray PVC pipe per Table 4.1. Copper or equivalent aluminum conductors sized per NEC Table 310.15(B)(16) may be used in the overhead service conduit. All overhead conduit conductors must be insulated and designed for use in conduit.

Equipment Grounding Conductor – The conductive path(s) installed to connect normally non-current-carrying metal parts of equipment together and the system grounded conductor or to the grounding electrode conductor, or both (NEC 100). An equipment grounding conductor does not carry current except when there is an electrical fault. URECC requires that a minimum insulated #4 AWG stranded copper conductor be used. For Mobile Home Feeder Assembly applications only, a minimum insulated #2 AWG stranded aluminum conductor equivalent may be used.

Ground – The earth (NEC 100).

Grounded (Grounding) – Connected (connecting) to ground or to a conductive body that extends the ground connection (NEC 100).

Grounded Conductor – A circuit conductor that is intentionally ground to an earth ground. It is commonly known as the “neutral” conductor and carries current back to the electrical source (NEC 100).

Grounding Electrode – A conducting object through which a direct connection to earth is established (NEC 100). URECC’s grounding electrode specification is a 5/8” x 8’ copper or copper-clad ground rod.

Grounding Electrode Conductor – A conductor used to connect the system grounded conductor or the equipment to a grounding electrode (NEC 100). URECC requires that a minimum #6 AWG copper only grounding conductor be used.

Manufactured Home – A structure, transportable in one or more sections, that, in traveling mode, is 8 body-feet or more in width or 40 body-feet or more in length, or when erect on site is

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320 sq. ft. or more and is built on a permanent chassis and designed to be used as a dwelling, with or without a permanent foundation, when connected therein (NEC 550.2).

Member-Owned Pole – Pole installed by the Member to URECC specifications and used to support the service wire and meter base for a Member’s electrical service.

Mobile Home – A factory-assembled structure or structures transportable in one or more sections that are built on a permanent chassis and designed to be used as a dwelling without a permanent foundation where connected to the required utilities and that include the plumbing, heating, air-conditioning, and electrical system contained therein. For the purpose of the NEC and unless otherwise indicated, the term mobile home included manufactured homes (NEC 550.2).

(Mobile Home) Electrical Nameplate – A metal nameplate on the outside adjacent to the feeder assembly entrance shall read as follows: “This connection for 120/240-Volt, 3 pole, 4-wire, 60 Hertz, _____ Ampere Supply.” The correct ampere rating shall be marked in the blank space (NEC 550.11(D)).

(Mobile Home) Feeder Assembly – The overhead or under-chassis feeder conductors, including the equipment grounding conductor, together with the necessary fittings and equipment or a power supply cord listed for mobile home use, designed for the purpose of delivering energy from the source of electrical supply to the distribution panelboard within the mobile home (NEC 550.2).

Mobile Home Feeder Conductors – Mobile home feeder conductors shall consist of either a listed cord, factory installed in accordance with NEC 550.10(B), or a permanently installed feeder consisting of four insulated, color-coded conductors that shall be identified by the factory of field marking of the conductors in compliance with NEC 310.110. Equipment grounding conductors shall not be identified by stripping the insulation (NEC 550.33(A)). URECC requires that a minimum insulated #4 AWG stranded copper conductor or its insulated #2 AWG stranded aluminum equivalent be used for the (4th wire) equipment grounding conductor.

Mobile Home Service Equipment Disconnect Panel (Feed Through Panel) – The equipment containing the disconnecting means, overcurrent protective devices, and receptacles or other means for connecting a mobile home feeder assembly (NEC 550.2). The mobile home service equipment must be located in sight of the mobile home, and the equipment must be a minimum of 5 feet but not more than 30 feet from the exterior wall of the mobile home it serves. The mobile home service equipment shall be rated at not less than 100 Amperes at 120/240 Volts, and provisions shall be made for connecting a mobile home feeder assembly by a permanent wiring method (NEC 550.32(A) and (C)). Grounding at the disconnecting means shall be in accordance with NEC 250.32(A)). The mobile home service equipment shall have a 5/8” x 8’ copper or copper-clad ground rod.

Service Drop – The conductors between the utility electric supply and the service point (NEC 100). For example, the conductors between the URECC transformer to the weatherhead of a residential overhead service.

Service Equipment – The necessary equipment, usually consisting of a circuit breaker(s) or switch(es) and fuse(s) and their accessories, connected to the load end of service conductors to

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a building or other structure, or an otherwise designated area, and intended to constitute the main control and cutoff of the supply (NEC 100).

Service Point – The point of connection between the facilities of the serving utility and the premises wiring. Note: The service point can be described as the point of demarcation between where the serving utility ends and the premises wiring begins. The serving utility generally specifies the location of the service point based on the condition of service (NEC 100). For Members of URECC, the service point for overhead service is located at the weatherhead. For underground service, the service point is located at the bottom terminals of the meter base.

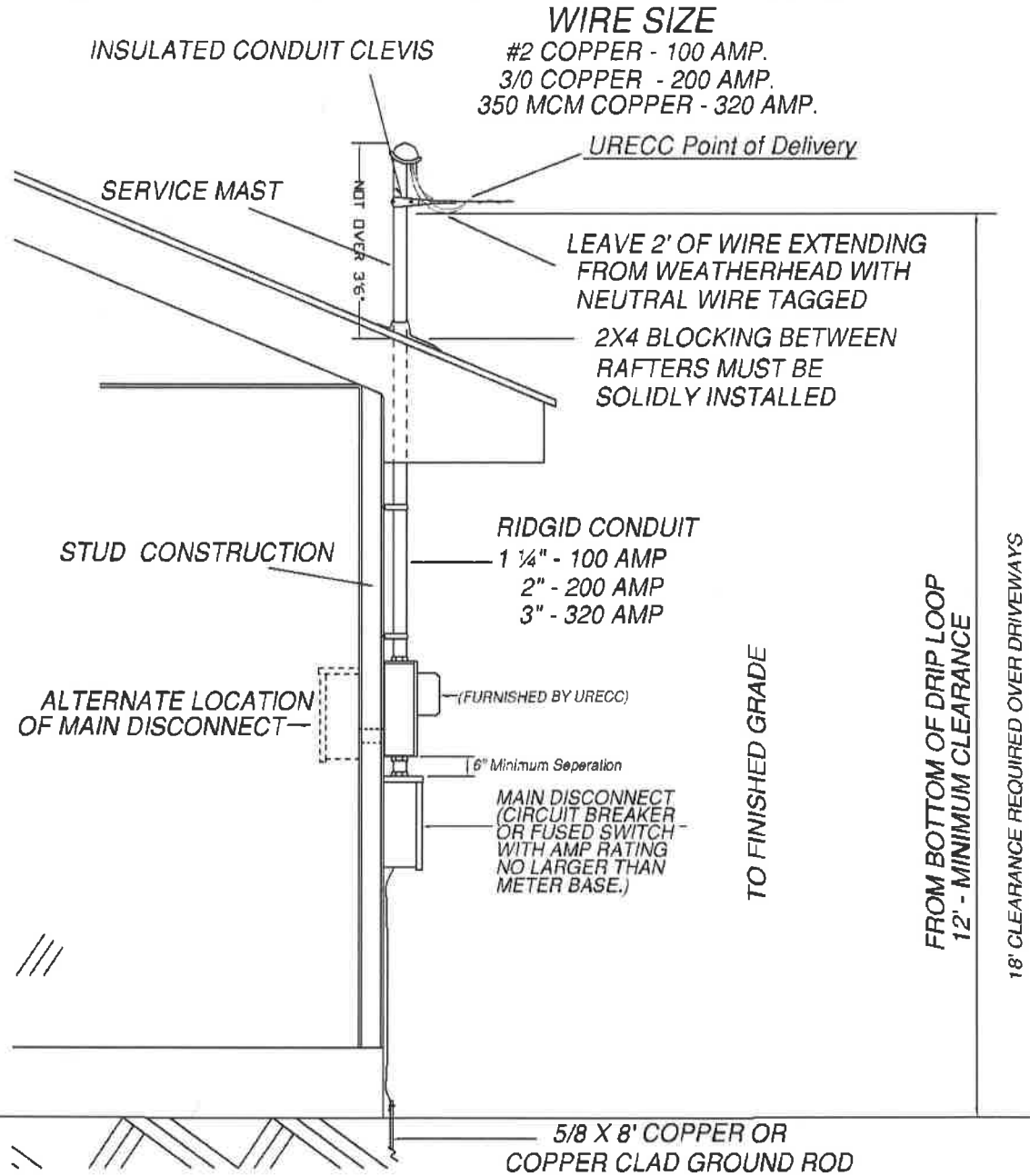
Ungrounded Circuit Conductor – The conductor with no connection to ground and energized to carry electrical power to the load. Commonly known as the “hot” conductor.

URECC – Upshur Rural Electric Cooperative Corporation

SECTION IX
Figures

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TYPICAL OVERHEAD SERVICE ENTRANCE INSTALLATIONS FOR DWELLINGS




METER MUST BE ACCESSIBLE FOR UPSHUR RURAL PERSONEL IF NEEDED. DOGS AND OTHER ANIMALS SHOULD NOT BE PLACED IN A WAY THAT MAY HINDER ACCESS TO THE METER.

	 DANGER
	HAZARD OF ELECTRICAL SHOCK OR BURN IF COVER IS REMOVED. SERVICE BY UTILITY AUTHORIZED PERSONNEL ONLY

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DETAIL FOR
 OVERHEAD SERVICE ENTRANCE
 INSTALLATION

DRAWN BY: 	DRAWING NO. OHS-1	REV 2
APPROVED BY:	SCALE: None	DATE DRAWN: 7/31/12
SHEET 1 OF 1		

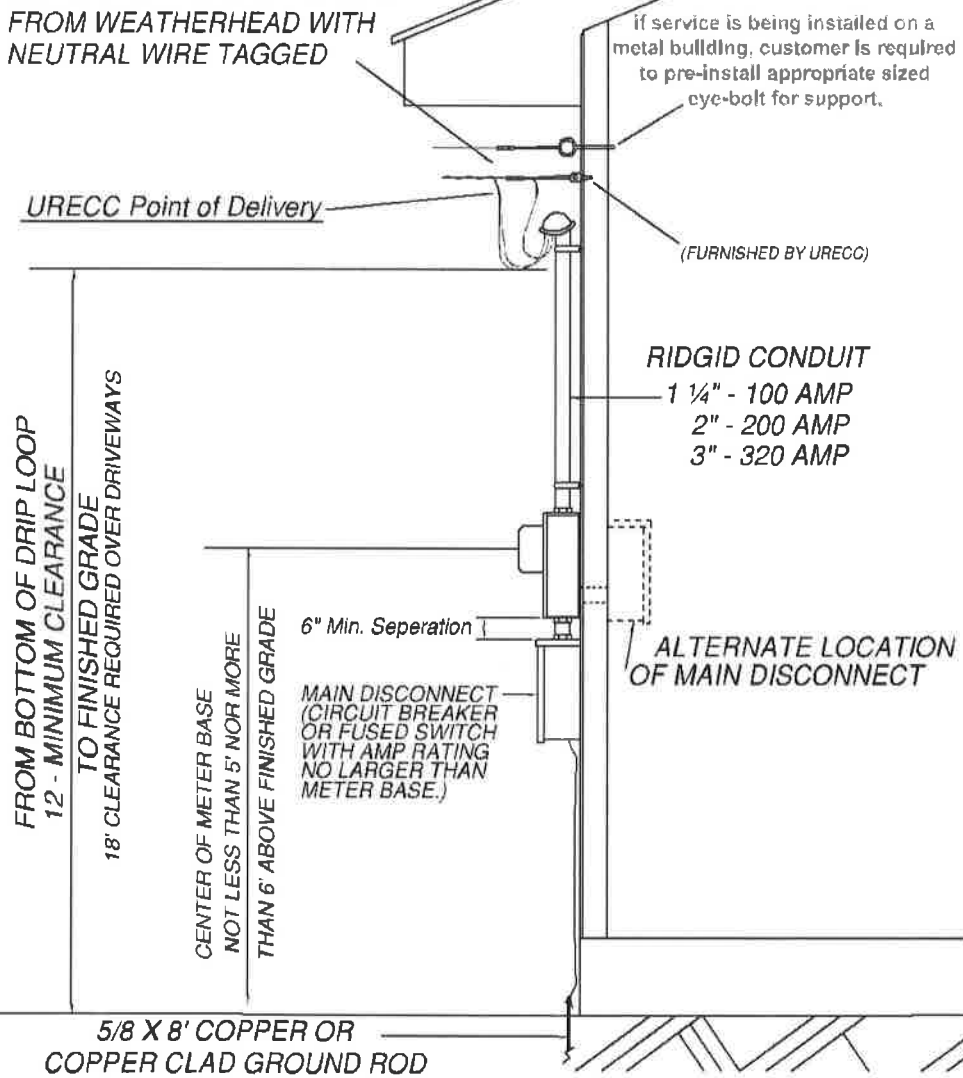
UPSHUR RURAL ELECTRIC COOP. CORP.

TYPICAL OVERHEAD SERVICE ENTRANCE INSTALLATIONS FOR DWELLINGS

WIRE SIZE

- #2 COPPER - 100 AMP.
- 3/0 COPPER - 200 AMP.
- 350 MCM COPPER - 320 AMP.

LEAVE 2' OF WIRE EXTENDING FROM WEATHERHEAD WITH NEUTRAL WIRE TAGGED



FROM BOTTOM OF DRIP LOOP
12' - MINIMUM CLEARANCE

TO FINISHED GRADE
18' CLEARANCE REQUIRED OVER DRIVEWAYS

CENTER OF METER BASE
NOT LESS THAN 5' NOR MORE
THAN 6' ABOVE FINISHED GRADE

6" Min. Separation

MAIN DISCONNECT
(CIRCUIT BREAKER
OR FUSED SWITCH
WITH AMP RATING
NO LARGER THAN
METER BASE.)

if service is being installed on a
metal building, customer is required
to pre-install appropriate sized
eye-bolt for support.

(FURNISHED BY URECC)

RIDGID CONDUIT

- 1 1/4" - 100 AMP
- 2" - 200 AMP
- 3" - 320 AMP

ALTERNATE LOCATION
OF MAIN DISCONNECT


5/8 X 8' COPPER OR
COPPER CLAD GROUND ROD

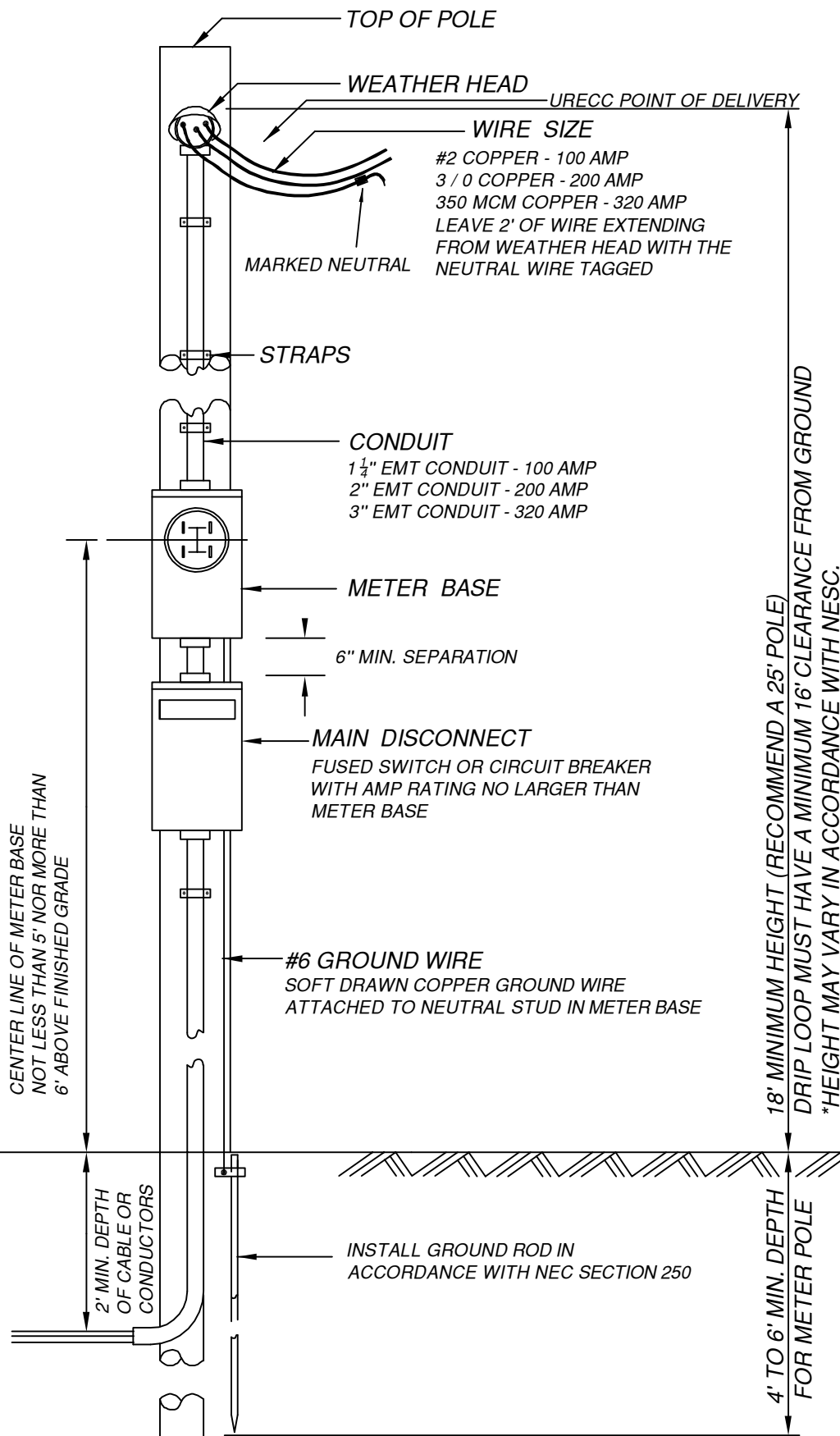
METER MUST BE ACCESSIBLE FOR UPSHUR RURAL PERSONEL IF NEEDED. DOGS AND OTHER ANIMALS SHOULD NOT BE PLACED IN A WAY THAT MAY HINDER ACCESS TO THE METER.

	 DANGER
	HAZARD OF ELECTRICAL SHOCK OR BURN IF COVER IS REMOVED. SERVICE BY UTILITY AUTHORIZED PERSONNEL ONLY

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DETAIL FOR
OVERHEAD SERVICE ENTRANCE
INSTALLATION

DRAWN BY 	DRAWING NO. OHS-2	REV 2
APPROVED BY	SCALE None	DATE DRAWN 7/31/12
		SHEET 1 OF 1



IF MOBILE HOME OR OTHER STRUCTURE IS NOT ON SITE, STAKE FOUR (4) CORNERS OF THE STRUCTURE.

PUT STAKE WITH PINK RIBBON 5' TO 30' FROM STRUCTURE FOR METER POLE LOCATION.

FACE METER LOOP AWAY FROM THE STRUCTURE.

BE SURE THE FOLLOWING ITEMS ARE CORRECT BEFORE CALLING CUSTOMER SERVICE AT 1-800-259-2536

- Correct wire size
- Weather head
- Correct size conduit
- Correct meter base
- Main disconnect
- Ground wire (Clamped to ground rod)
- Ground rod flush with or below grade

NOTES:

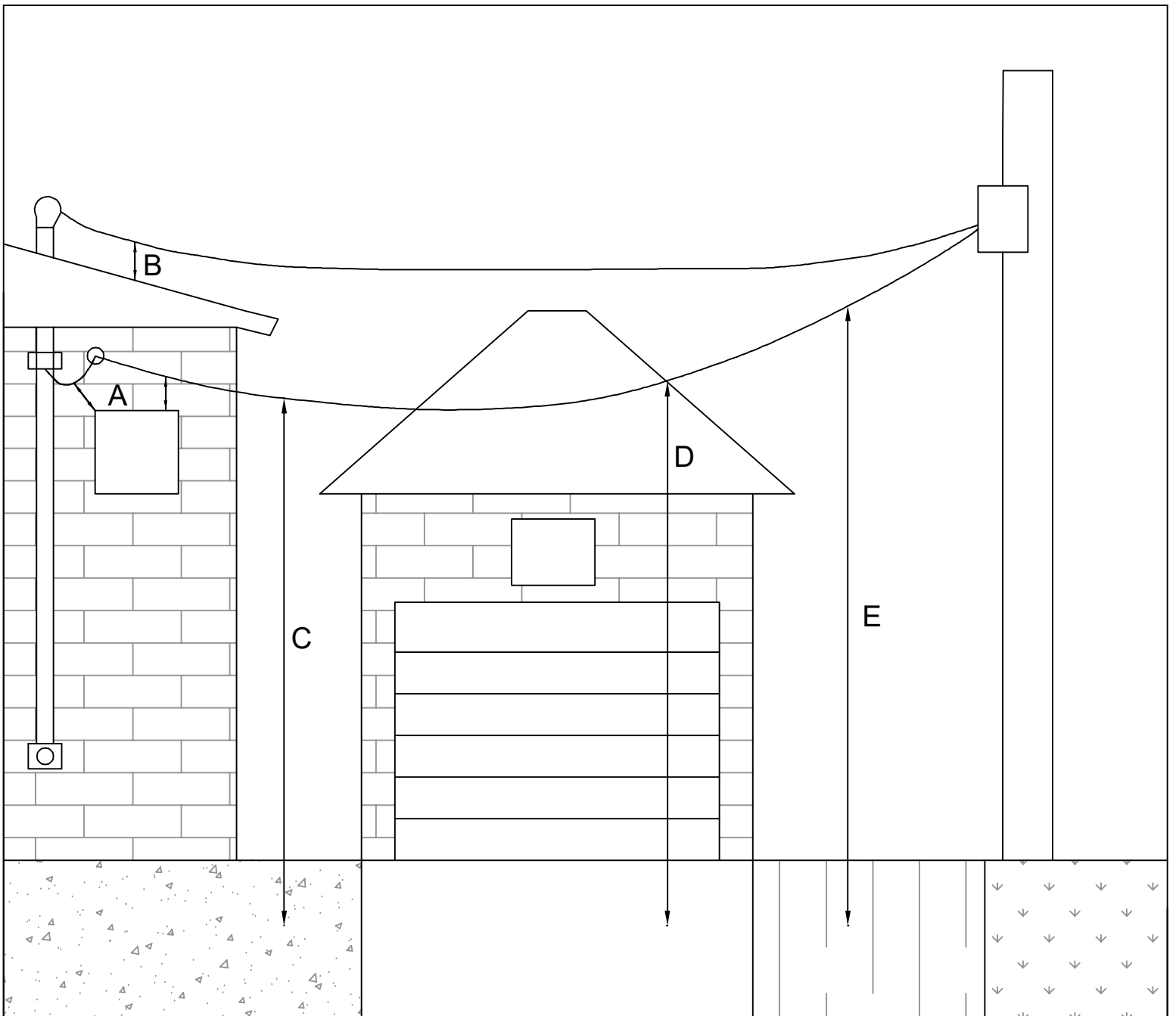
1. METER MUST BE ACCESSIBLE FOR UPSHUR RURAL PERSONNEL IF NEEDED. DOGS AND OTHER ANIMALS SHOULD NOT BE PLACED IN A WAY THAT MAY HINDER ACCESS TO THE METER.
2. BEFORE DIGGING, CONTACT TEXAS811 AT 1-800-344-8377.

	DANGER
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DETAIL FOR OVERHEAD ENTRANCE SERVICE INSTALLATION

DRAWN BY	<i>CZ</i>	DRAWING NO.	OHS-3	REV	1
APPROVED BY		SCALE	None	DATE DRAWN	1/26/17
			SHEET	1	OF 1



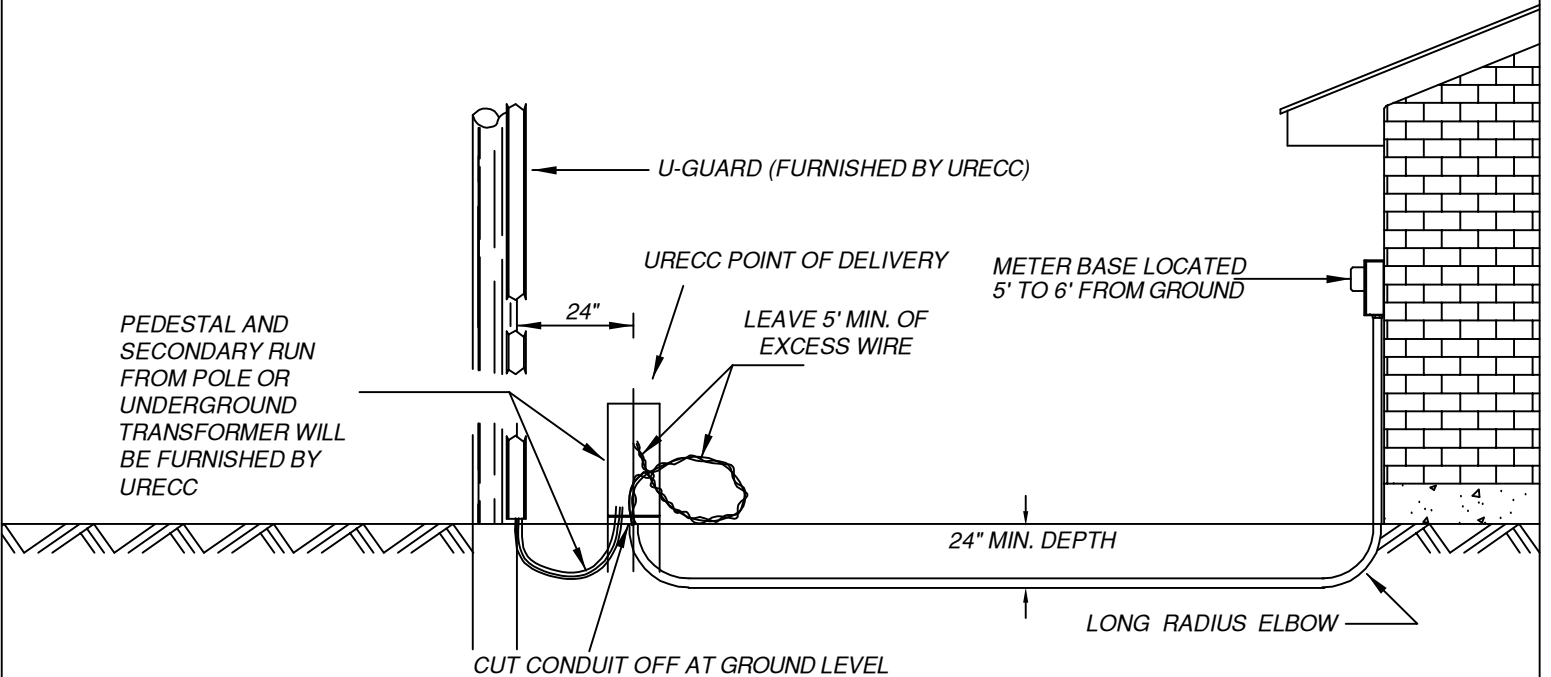
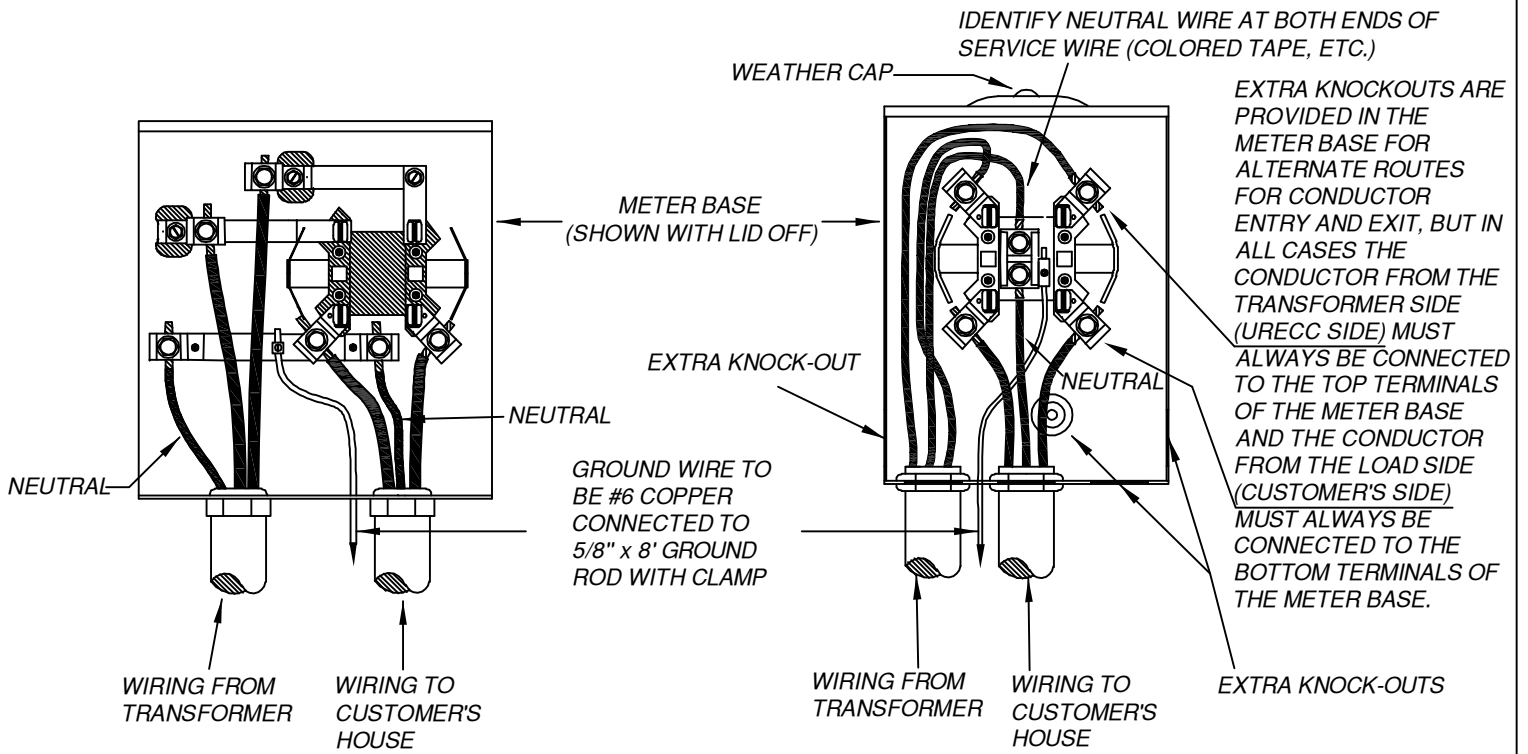
- A. 3' - Doors, porches, fire escapes, windows, and balconies
- B. 3' - Overhang above roof
- C. 12' - Pedestrian and restricted traffic areas, except where attachment at building does not permit 12' clearance:
 10.5' - Voltage limited to 300V to ground for service drops and drip loops
 10' - Voltage limited to 150V to ground for service drop and drip loops
- D. 16' - Driveways, alleys, and parking lots. Exception: residential driveways where only attachment at building does not permit 15' clearance:
 12.5' - Voltage limited to 300V to ground for service drops
 10.5' - Voltage limited to 300V to ground for drip loops
 12' - Voltage limited to 150V to ground for service drops
 10' - Voltage limited to 150V to ground for drip loops
- E. 16' - Streets, roads, highways, and areas with truck traffic

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UPSHUR RURAL ELECTRIC COOP. CORP.
P.O. BOX 70 GILMER, TX. 75644

**OVERHEAD
SERVICE-DROP
CLEARANCES**

DRAWN BY <i>JZ</i>	DRAWING NO. <i>OHS-4</i>	REV <i>1</i>
APPROVED BY		
SCALE <i>None</i>	DATE DRAWN <i>6/19/17</i>	SHEET <i>1</i> OF <i>1</i>



NOTES:

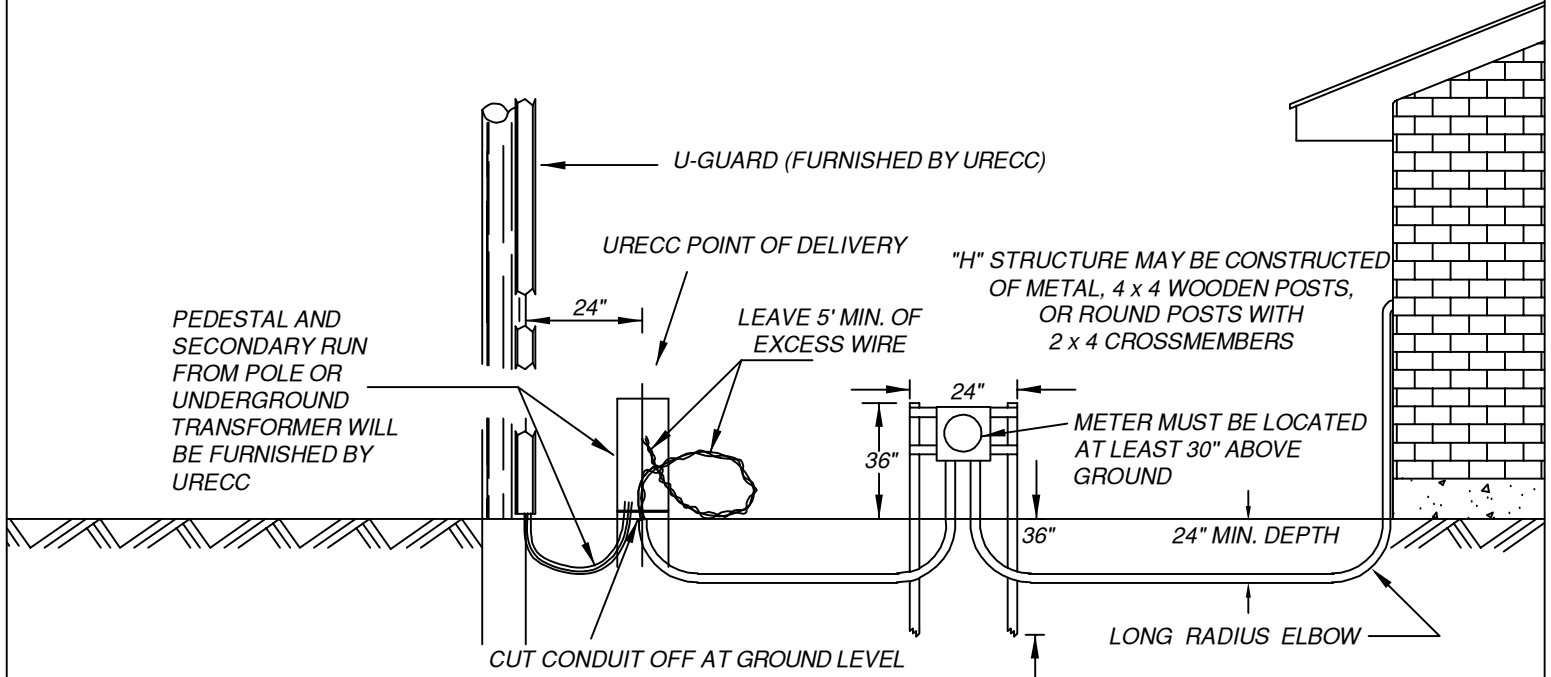
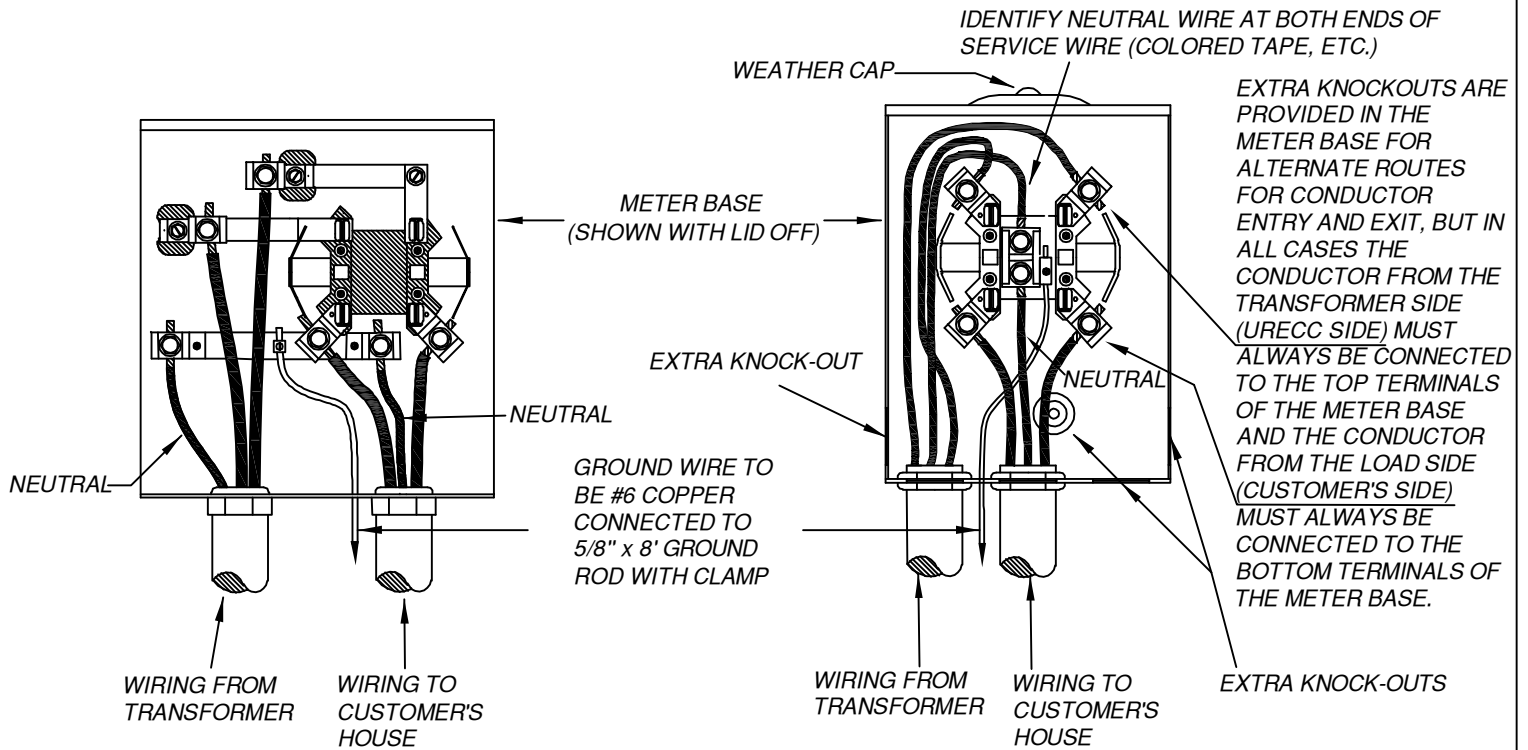
1. ALL CONDUIT TO BE SCHEDULE 40 GRAY PVC AS APPROVED BY THE NATIONAL ELECTRIC CODE.
2. BRING CONDUIT UP AT A DISTANCE OF 24" FROM UPSHUR RURAL'S POLE OR UP TO THE SECONDARY PEDESTAL.
3. MIN. 2" CONDUIT FOR TRIPLEXED CONDUCTORS UP TO AND INCLUDING 4/0 IS RECOMMENDED. FOR CONDUCTORS ABOVE 4/0, REFER TO THE NATIONAL ELECTRIC CODE.
4. METER MUST BE ACCESSIBLE FOR UPSHUR RURAL PERSONNEL IF NEEDED. DOGS AND OTHER ANIMALS SHOULD NOT BE PLACED IN A WAY THAT MAY HINDER ACCESS TO THE METER.
5. BEFORE DIGGING, CONTACT TEXAS811 AT 1-800-344-8377.

	DANGER
	HAZARD OF ELECTRICAL SHOCK OR BURN IF COVER IS REMOVED. SERVICE BY UTILITY AUTHORIZED PERSONNEL ONLY

UPSHUR RURAL ELECTRIC COOP. CORP.
 P.O. BOX 70 GILMER, TX. 75644

**DETAIL FOR
 UNDERGROUND SERVICE
 INSTALLATION**

DRAWN BY	DRAWING NO. UGS-1	REV 2
APPROVED BY		
SCALE None	DATE DRAWN 1/19/05	SHEET 1 OF 1



NOTES:

1. ALL CONDUIT TO BE SCHEDULE 40 GRAY PVC AS APPROVED BY THE NATIONAL ELECTRIC CODE.
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UPSUR RURAL ELECTRIC COOP. CORP. P.O. BOX 70 GILMER, TX. 75644		
DETAIL FOR UNDERGROUND SERVICE INSTALLATION		
DRAWN BY	DRAWING NO. UGS-2	REV 2
APPROVED BY	DATE DRAWN 1/19/05	SHEET 1 OF 1
SCALE None		