Customer Installation Standards for Electric Service

August 2026 Revision 1

A transition period will exist in which installations may be approved and connected as long as they meet either the 20*18* or the 20*26* editions. Beginning January 2027, only the 20*26* edition of the Customer Installation Standards will be accepted.

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The latest edition is available at **Entergy.com** (See §1.3 for web address)

New and changed information in italicized red

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Summary of Major Changes from 2018 Edition

Sections

§1.5 *Nationally Recognized Testing Laboratories (NRTL): UL, ETL, Intertek, etc*.

§2.2.4 Bends, *deflects, or leans with or without wires attached*

§2.4 *The company shall be notified in advance of any work to be performed* within ten feet of a distribution overhead electric utility line owned or operated by it, please call 1-800-ENTERGY (1-800-368-3749) not less than two business days prior to commencing work.

§2.10 In areas where side trimming is needed, after the Customer completes the groundwork, the Company will trim only those trees *that remain within the OSHA working clearance zone.*

§2.2.3 *A second grounding electrode may be required per the NEC.*

§4.10 *Service to be provided per Company policy with coordination between the Company and Customer*

§4.13 *All of the* following requirements must be satisfied:

§8.4.2 *When the Company needs equipment access onto the Customer's property, to perform maintenance, provide service or to install new facilities, the Customer and the Company should coordinate to avoid damage to the Customer-owned facilities. This includes the Customer providing input to locate below grade facilities such as; irrigation, pool, sewerage, drainage, electrical circuits, etc. in advance of Company, or its Contractors entering.*

§8.5 *Must be tested by and approved by a nationally recognized testing laboratory.*

§8.12.1 *The Customer is not allowed to enter the cable compartment of the transformer without local network oversite. Modifying the Company's equipment, including the transformer is explicitly prohibited.*

§8.9.5.3 *Minimum conduit requirements for 350 quadruplex underground secondary is now 4".*

§9.1.2.1 *Meter socket devices meeting the UL requirements will be allowed. See Section 14.6*

§9.1.2.1 *Refer to NEC for current carrying and grounding conductor sizing.*

§9.4 *Consult the Company in advance of new construction (in the design phase) to determine the appropriate location and type of metering installation.*

§9.7.1 *The Company stresses the importance of advanced communication from the Customer regarding requesting electric service.*

§9.7.2 *When, in the Company's judgement, the load does not exceed the capacity of a self-contained meter, a self-contained meter should be used. However, if the Customer insists upon the transformer-rated equipment, the Company may opt to allow it, at the Customer's expense.*

§9.7.4 ~~*If the grounding connection is made anywhere other than the meter socket, the Customer shall be responsible for grounding continuity between the point where the grounding is made and the meter socket.*~~ Removed

§9.7.5 *For residential and most non-residential applications, service disconnecting means shall be installed at a readily accessible location, on the exterior of a building or structure and shall be available to the Company 24 hours a day, without notice. For non-residential applications and high-rise buildings proposed to be served with an electrical room, consult the Company in advance of the design. All equipment shall be approved by a NRTL* and be installed in enclosures suitable for prevailing conditions, such as weather extremes or corrosive environments. *If the service disconnect is above 1200 amps, then a mutually verifiable open point by the Company and the Customer may be deemed acceptable.*

§9.8.1 *For non-residential applications serving a group of separate enclosures*, or in a switchboard, the disconnecting means shall be located in a readily accessible location near the point of delivery, within 10 feet, preferably on the outside of a building or structure or on the inside wall directly behind the outside service entrance. *The location of the service disconnect will require approval from the authority having jurisdiction.*

For residential applications, the main breaker should be a maximum of 2 feet horizontal and vertical from the meter, *and readily accessible on the exterior.*

§9.8.5 If the Customer desires to have an additional distribution feeder as the second source, the Customer is responsible for the costs to install, operate and maintain the Company's additional facilities*, as well as cost for reserve capacity* in addition to the charges, if any, required for the original service.

§10.5 *Proposed louver drawings and specifications shall be submitted to the Company for approval prior to placing an order with the louver manufacturer with consideration given to the supplier lead time.*

§12.5 Some equipment may cause unsatisfactory operation of television, radios and other electronic equipment. The Customer is responsible for designing *and operating* their equipment to *FCC standards and* avoids *causing* interference *and damage to utilities and others* equipment. An U. L. approved interference suppresser can eliminate or minimize this interference. See §16.

§14.5 *Meter Socket Adapter Connection Devices (entire section)*

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Section 1 Foreword, General Information, and Terms

1.1 Purpose

The information contained in this book is presented for use in planning electrical wiring and apparatus installations intended for connection to the Entergy distribution power lines. Current procedures, practices and requirements, adopted by the Entergy companies to assure economical and satisfactory service to Customers, consistent with the most recent version of the National Electrical Safety Code (NESC), are set forth and discussed herein. (Note: Any statement concerning the National Electrical Code (NEC) refers to Customer owned facilities.) Any mention of the NESC or the NEC indicates the basic provisions that are considered necessary for safety. To the extent that Entergy's standards are more stringent than provisions of the NESC or NEC, Entergy's standards must be satisfied. This book is limited to information considered essential in planning installations which are adequate and satisfactory for the many uses and conveniences of electric service. If the total service requested is over 200 Amps, other than 120/240 volts single phase or requires more than one meter contact the Company.

1.2 Service Contracts, Terms and Conditions

The following documents are not included in the Service Standards:

1. Service Regulations (or Terms and Conditions) which prescribe the rules, obligations, and liabilities of the Company in providing service and the Customer in receiving electric service;
2. Rate Schedules (or tariffs) which set forth the price, periods of taking, and payment terms for electric service;
3. Service Agreements wherein the Customer and the Company agree to specific quantities and type of service.

The Company’s currently approved Service Regulations, Rate Schedules, Service Agreements, and other forms are available by contacting the Company. The Customer should contact the Company early in the design phase of a project for information concerning the terms and conditions of service.

1.3 Service Standards Availability and Revisions

The Service Standards are issued in an electronic format located at Entergy.com or a utility website below:

Arkansas: http://www.entergy-arkansas.com/your_business/builder.aspx

Louisiana: http://www.entergy-louisiana.com/your_business/builder.aspx

Mississippi: http://www.entergy-mississippi.com/your_business/builder.aspx

New Orleans: http://www.entergy-neworleans.com/your_business/builder.aspx

Texas: http://www.entergy-texas.com/your_business/builder.aspx

Another important reference is the Power Quality Standards for Electric Service which is at the same location on the Entergy web page.

These Service Standards will be revised as new methods, improved equipment become available and codes change. Changes to the policy made after the publication date, will be in effect despite the fact that they will not be in the document. These changes of policy will be available upon request. If the issue date is not the current year, contact the Company or go to the website to determine if yours is the current edition or to obtain supplementary information. To acquire the Service Standards in a book go to the website and print.

1.4 How to Interpret and Apply the Standards

When reading the standard, check out the key words (verbs):

Shall: A rule using the word “shall” is strictly enforced.

Should: A rule using “should” carries the idea that options exist, but that the rule contains the best engineering expertise as written. This rule could be less strictly enforced than the “shall” rule.

Recommend: A rule using “recommend” has several options, but the Company would like for the customer to use the one given. “Recommend” is never used where safety is an issue.

Ahead of the meter: The Company side of the meter also called the supply or line side

Behind the meter: The Customer side of the meter also called demand side or load side

1.5 General Terms Used in Service Standards

Agreement for Service: See "Application".

Application (or Agreement for Service or Contract): The agreement between the Company and the Customer under which service is taken. Until a written agreement for service has been signed, service rendered by the Company is subject to the provisions of the Company's Service Regulations and applicable rate schedule. The provisions of the Company's standard application for service will be presumed to apply. The supplying and taking of such service shall constitute an Agreement for Service.

The American National Standards Institute (ANSI): The private non-profit organization that oversees the development of voluntary consensus standards for products, services, processes, systems, and personnel in the United States. The organization also coordinates U.S. standards with international standards so that American products can be used worldwide.

Authorities (having jurisdiction) (AHJ): The organization, office, or individual responsible for approving equipment, materials, an installation, or a procedure. The basic role of an AHJ is to verify that an installation complies with the National Electrical Code.

Business Day: excludes weekends, Holidays and extreme weather events.

Company: Entergy Corporation, its operating subsidiaries, officers, agents or employees.

CIAC: Contribution In Aid of Construction (by Customer)

Company Designated Underground Areas: Those portions of the Company's service area, defined by the Company, where overhead service is not available. This includes concentrations of commercial buildings with large loads that are not practical to serve with overhead facilities.

Company's Installation: In general, all the wires, devices, or apparatus on the Company's side of the point of delivery. Some equipment, such as devices installed for metering electric consumption or for demand side management, may belong to the Company, yet be installed on Customer's side of the point of delivery.

Company Pole: Includes Company owned poles and poles occupied by the Company under joint use agreements.

Conduit System: Any combination of duct, conduit(s), manholes, handholds, and vaults joined to form an integrated whole.

Contract: See "Application".

Customer: An individual, firm, partnership, association, corporation, organization, or governmental agency who is taking service as defined by regulatory authorities. Also refers to those acting on Customer’s behalf (e.g. Architects, Builders, Contractors, Developers, Engineers, Electricians, Project Managers, etc.)

Customer Installation (Premise Wiring): In general, all the wires, appliances, devices or apparatus of any kind or character on the Customer's side of the point of delivery except the meters, metering devices and facilities of the Company that may be located on the Customer's side of the point of delivery. The Customer's wiring and electrical equipment within or on the premises shall be installed and maintained in accordance with all effective building and wiring codes, and local laws and ordinances.

Demand: The kW or kVA, as shown or computed from the readings of the Company's demand meter installation, for the interval of the customer's greatest use between readings. (This is also known as maximum demand.)

Disconnect or Disconnect switch shall

- Be lockable in the open position (by the Company)
- Be available to Company personnel at all hours without notice
- Be within sight of service entrance meter preferably adjacent to meter, but within 10 feet of meter,
- Have an open and visible break verifiable by Company personnel
- Be load break and one piece
- Have a label (see definition of label)
- In underground service normally is on the customer side of a junction box

The Company may operate and lock down this switch for safety, non-payment or any other valid reason. Review the applicable drawings for proper installation. Disconnect switch box design and location must be approved by the Company in advance of installation.

Double Lug (not allowed): The practice of putting two wires under a single lug.



Single



Twin lugs shall be used to parallel wires. The paralleled wires in each phase shall:

- Be the same length
- Consist of the same conductor material
- Be the same size in circular mil area
- Have the same insulation type and thickness
- Be terminated in the same manner in the same terminal block.

Meter enclosure is not a junction box and shall not be used as a junction box.

Easement: An interest in land owned by another that entitles its holder to a specific limited use (The Company's right-of-way is an easement.)

Electric Service: See "Service".

Emergency Service: An additional, separate service, when required by regulatory authorities, for exit or emergency lighting, fire pumps, or to satisfy other safety regulations.

Inaccessible Area: Any area, as designated by Company, which would be difficult to enter for the purpose of conducting normal or emergency operations or maintenance.

Label: When permanently attached tags or labels are required, they shall be red background with white letters and UV resistant. The lettering on each label/tag shall be 3/16 inch or larger and be either raised or incised on each tag. Each tag shall be permanently attached to the meter enclosure or switch and not easily removed.

General examples of labeling include:

For Net Metering, interconnection the Customer shall label the meter.

Generally, Multiple Service drops to the same building more than 10 feet apart, Customer shall label each service drop's meter-socket with an arrow pointing to other service drop meter(s) and a description of the location (Examples: Service #1 Suite 10 located at northeast corner of building, Service #2 Suite 20 located at southwest corner of building)

For multiple meters, the meter enclosures and disconnects shall be labeled with suite or apartment identification.

For 480 volt services the disconnect ahead of the meter shall be labeled utility disconnect

In areas where cable can be owned by Company or Customer, for Customer owned cable, Customer supplied label shall say "Customer owned cable" (two required). One label shall be installed by Customer on meter socket; one label shall be given to Company for installation on the transformer.

Consult the Company.

Load: The amount of electric power delivered or required at any specified point or multiple points on an electric system.

Mandatory Rules: The rules of the Service Standards which are characterized using the word "shall."

Meter: A device or devices together with auxiliary equipment used for measuring any of the following: apparent, real, and reactive power and/or energy, which are supplied to any customer at a single point of delivery.

Mobile Home or Trailer Park: A continuous parcel of land that is used for the accommodation of five or more occupied mobile homes or trailers with individually metered service and its accessory buildings or structures for the exclusive use of its occupants or owners. A parcel is a unit of land under unified ownership (with or without buildings).

National Electrical Code (NEC): The code adopted by the National Fire Protection Association, Inc (NFPA) and American National Standards Institute (ANSI) as advisory information on the installation of electric facilities on private property. It is offered for the use in law and regulatory purposes in the interest of life and property protection.

National Electrical Safety Code (NESC): The code adopted by the Institute of Electrical and Electronics Engineers, Inc. (IEEE) and the American National Standards Institute (ANSI) to

bring consistency and safety to the design, construction, operation and use of electric supply and communications installations.

Network Areas: Those designated portions of the Company's service area which include concentrations of commercial buildings, and which are typically supplied by a secondary network underground distribution system.

NRTL: *Nationally Recognized Testing Laboratory*

Point of Delivery: (also called "Point of Common Coupling) The physical location designated/approved by the Company where the Customer's service terminals or wires are joined to the Company's facilities.

Power Quality Standard for Electric Service: This Standard describes the Power Quality requirements of Entergy. The Power Quality Standard for Electric Service is issued in an electronic format on the Entergy web page. See §1.3 for web links.

Public Property: Property dedicated to public use such as streets, alleys, canals, roadways, and highways. This does not include schools, parks, public housing, gyms, playgrounds, public buildings, etc., which are considered customer premises.

Rigid Metal Conduit: A raceway specially constructed for the purpose of the pulling in or the withdrawing of wire or cable after the conduit is in place and made of metal pipe of standard weight and thickness permitting the cutting of standard threads.

Rigid Non-metallic Conduit: Gray polyvinyl chloride (PVC), schedule 80 or schedule 40, tube for enclosure of electrical wires and cables which includes associated equipment such as adapters, cable enclosures, couplings, junction boxes, pull boxes, etc., as required for a complete enclosure system. (Schedule 80 PVC shall be manufactured per NEMA TC-2 standard.)

Service (or Electric Service): The availability of electric power and energy to the Customer, regardless of whether any power is used. Supplying of service by the Company consists of it's maintaining at the point of delivery the approximate nominal voltage and frequency by means of facilities adequate for supplying the Customer's contracted load.

Service Conductors: The supply conductors that extend from the street main or from transformers to the service equipment of the premises supplied.

Service Drop: The overhead service conductors from the last pole or other aerial support to and including the splices, if any, connecting to the service-entrance conductors at the building or other structure;

Service Entrance: The Customer owned equipment for connecting to the service conductors or the service entrance conductors.

Service Entrance Conductors:

Overhead System: The service conductors between the terminals of the service equipment and a point usually outside the building, clear of building walls, where it is joined by tap or splice to the service drop.

Underground System: The service conductors between the terminals of the service equipment and the point of connection to the service lateral.

Shall: The highest degree of requirement, no other options exist when shall is used. (Also see 1.4)

Type of Service: The electrical or physical attributes of the service such as voltage, phase, frequency, transformer connection, number of wires, overhead or underground installation, etc.

Underground Service: The underground cable installation which connects the Company's distribution system to the Customer's service entrance wires, or to the line side lugs of the meter enclosure.

1.6 Electrical Terms Used in Service Standards

Ampere: The unit of measurement of the rate of flow of electricity. It is the unit of current produced in a circuit by one volt acting through a resistance of one ohm.

Btu (British Thermal Unit): The quantity of heat required to raise the temperature of one pound of water one degree Fahrenheit. Capacity of air conditioning, heating, or heat content of fuel, etc. is measured in Btu. Btu/h is the rate of heat change - Btu per hour.

Current: The rate of flow of electricity is usually measured in amperes. The Company supplies alternating current (AC) and will not supply direct current (DC).

Energy: The total work done as distinguished from the rate of doing work (power), usually measured in kilowatt-hours. Its amount depends upon the power and the time that the power is taken. For instance, a power rate of one kilowatt maintained for one hour is one kilowatt-hour of energy.

Hertz: Unit of frequency in Cycles per second for example, the Company furnishes 60 Hertz alternating current.

Horsepower: A unit of power, equal to a rate of 33,000 foot pounds of work per minute. Motors are normally rated in horsepower to indicate the mechanical power they are designed to produce. One horsepower equals 746 watts. Motors require 746 watts input, plus losses, for each horsepower output.

Kilovolt-ampere: (kVA) 1,000 volt amperes, the unit of apparent power, volts times amperes, which is comprised of both real and reactive power.

Kilowatt: (kW) 1,000 watts.

Kilowatt-hour: (kWh) A quantity of electrical energy - equal to 1000 watts used continuously for one hour, or 100 watts used continuously for ten hours, or some other equivalent.

Number of Phases: See "Phase".

Ohm: The unit of measurement of electrical resistance or impedance. It is that resistance through which one volt will produce a current of one ampere.

Phase (or Number of Phases): Term which designates characteristics of alternating current. It is a term used in the electric industry relating to the characteristics of the electrical service available or supplied at a given location or required for the operation of a given electrical device. Single phase is normally supplied for residences and small power customers and three phase is supplied for larger power customers.

Power: The time rate of doing work, generating, transferring, or using electric energy, usually expressed in kilowatts (kW).

Power Factor: The ratio of real power (kW) to apparent power (kVA) for any given load and time. Normally, power factor is expressed as a ratio and stated as a percentage.

Reactive-kilovolt-amperes: (kVAR) (rkVA) (kilovar) The product of the applied voltage and the magnetizing or charging current, divided by 1,000. Reactive-kilovolt-amperes do no work but must be supplied to magnetic equipment, such as motors. Generators or capacitors supply it.

Sag (Voltage sag): A decrease in RMS voltage at the power frequency for duration of 0.5 cycles to 1 minute. Typical values are 0.1 to 0.9 per unit.

Volt / Voltage: A unit of electrical pressure or potential or electromotive force which if applied to a load of one ohm resistance will cause a current of one ampere to flow. Primary distribution and transmission voltages are usually designated in kilovolts (kV). One kilovolt is equal to 1,000 volts.

Watt: An electrical unit of power. Electrical appliances and lamps are rated in watts to indicate their capacity or rate of using power for doing work. A 100 watt lamp used 10 hours will use one kilowatt-hour (kWh) of energy (1,000 watt-hours). Likewise, a household iron rated at 1,000 watts will use one kilowatt-hour in one hour.

Section 2 Safety, Customer's Service Obligations and Protection

2.1 Safety

Safety is paramount. If the Company believes, based upon observation, information or experience, that danger to the public or to an individual exists, work shall stop until such danger is remedied.

2.2 Code Requirements

2.2.1 General

The data contained herein is intended to conform with and be supplementary to recognized codes or rules and regulations of the authority having jurisdiction over the installation. In all cases, those codes or rules and regulations shall govern, regardless of possible conflict in the expressed or implied meaning of the contents of this book. The contents are intended to be consistent with the principles of the NEC on the Customer's side of service and consistent with the NESC on the Company side. Compliance with the requirements of the NEC will provide the Customer with what is considered a standard for appropriate use of electricity. **Any difference from the NEC is intended to provide better service than required by the standards of the Code.**

2.2.2 Inspection and Approvals

The wiring, electrical equipment and appliances of the Customer should be installed in accordance with the requirements of the latest NEC and of authorities having jurisdiction. **The Company does not inspect Customer premise wiring.** Where inspection is available, the Company requires the Customer to have the premise wiring inspected and approved by the authorities having jurisdiction before requesting connection to the Company's service. Where inspection is required, the Company is not allowed to connect to the Customer's installation until it has been inspected and approved by the authorities having jurisdiction

The Company reserves the right to refuse connection to any new installation and/or to disconnect from any existing service, should the Company learn that the wiring is unsafe or that it has not been approved. The authorities having jurisdiction also have the right to require the Company by written notification to discontinue service to an installation which has been found unsafe. The Company is not liable for any damage incurred when electrical service is discontinued under order of the authorities having jurisdiction. The Company accepts no responsibility for injury or damage to the Customer's premises or to persons on the Customer's premises resulting from defective wiring or equipment.

2.2.3 Grounding of Service Equipment

The identified neutral conductor and metallic parts of the service equipment, including all meter sockets, and instrument transformer enclosures, shall be effectively grounded. All grounding shall be properly bonded together.

A driven ground rod is preferred by the Company and is shown in drawings in §7 (Overhead Services) and §8 (Underground Services). *A second grounding electrode may be required per the NEC Article 250.53.*

The Company reserves the right to refuse installation of service contingent upon inspection of Customer's grounding connections.

Grounding requirements are shown on many of the drawings in the Customer Installation Standards.

A grounding conductor (#6 CU minimum – refer to NEC for correct sizing) that is free from exposure to physical damage shall be permitted to be run along the surface of the building construction without metal covering or protection where it is securely fastened to the construction; otherwise, it shall be in conduit, electrical metallic tubing, or cable armor.

All metal buildings, metal structures, and metal siding on buildings to which electric service is to be supplied shall be permanently bonded to the service entrance ground before service is connected.

2.2.4 Bracing of Poles or Risers

Bracing is required if a pole or riser:

- Is unstable,
- Bends, *deflects, or leans with or without wires attached*
- Moves when shaken
- Moves when a ladder is put against it
- Moves when the lineman gets on the ladder, or

Consult the Company for specific requirements. See Drawing D2-1

2.3 Distance Requirements for Customer Structures

The construction of any structure near, under or over electrical facilities can cause a code and / or safety violation and be an encroachment on Company right of way. No structures allowed over or under company facilities. Consult the Company concerning all clearances.

Permanent or temporary structures shall never be located within 10 feet (measured horizontally) of the Company's aboveground electrical facilities.

The Company will not allow the placement of electrical service near, over or under a pool nor permit the construction of a pool over or under electrical facilities.

2.4 Working in Close Proximity to the Company's Facilities

The company shall be notified in advance of any work to be performed within ten feet of a distribution overhead electric utility line owned or operated by it, please call 1-800-ENTERGY (1-800-368-3749) not less than two business days prior to commencing work. Please note Transmission level voltage lines/structures require greater clearance.

In locations with underground facilities, the Customer shall notify One Call at **811** not *less* than two business days prior to commencing work and shall have One Call locate all underground facilities before digging. It shall be the responsibility of the Customer to stay clear of all electric facilities.

Customers should use extreme caution to avoid contact when working in the proximity of the Company's overhead or underground conductors or other electric facilities to prevent injury and to prevent damage to either the Company's or the Customer's equipment. State Law prohibits unauthorized persons from working, including moving equipment, within ten feet of distribution overhead electric utility line.

Work shall be performed only after satisfactory mutual arrangements have been completed between the owner or operator of the high voltage overhead electric utility line and the person responsible for the work to be done.

2.5 OSHA Working Requirements

OSHA requires that all operators of equipment maintain a minimum of 10 feet of radial clearance from energized electrical facilities. Please note Transmission level voltage requires greater clearance.

2.6 Lightning and Other Surge Protection

Surge arrester protection is recommended by the Company. Customer surge protection equipment shall:

- be installed behind the meter, past the disconnect, and
- not be connected to:
    - meter sockets
    - service drop wires,
    - service entrance wires.

Customers installing surge arresters should consult applicable codes, a licensed, professional engineer or electrician, or the manufacturer of protective equipment.

Refer to §16 for Power Quality Parameters for Customer Equipment Specifications and Entergy’s Power Quality Standard for Electric Service

2.7 Public Sign Clearance

Clearances of signs from conductors shall meet or exceed the clearance requirements set forth in the National Electrical Safety Code.

2.8 Attachments to Company Poles

Attachments to Company poles are normally not allowed. Attachments shall be made only with approval of the Company. If an attachment is allowed, an attachment agreement shall be signed, and the agreement will set forth any charges. All allowed attachments are to be made under the supervision and to the satisfaction of the Company. All allowed attachments shall be made in accordance with the specifications of authorities having jurisdiction, where applicable. Consult the Company for details.

2.9 Right-of-Way for Service Facilities

The property owner(s) will grant, at no cost to the Company, right-of-way suitable to the Company for the installation of the Company's facilities. The Company will provide a written right-of-way permit document for execution by the property owner(s). The Company may require the Customer's assistance in obtaining right(s)-of-way from adjacent property owner(s).

The Company shall also be provided, at no cost, written agreements covering proper easements if:

1. Primary facilities are installed on private property,
2. Secondary facilities are to be installed on the Customer's premises that could serve one or more Customers on adjoining properties,
3. Facilities cross over or under private property, such as, cross country, adjoining highways and roadways, within subdivisions, etc., and
4. Facilities are constructed within the confines of a highway or roadway that exists by virtue of servitude only.

All parties, i.e., in fee land owner(s), grantee(s), shall give their consent.

2.10 Initial Clearing of Property for Right-of-Way

The Customer requesting a new service is responsible for the cost of preparing the initial right-of-way. The Customer may perform the clearing as instructed by the Company on all property owned by the Customer. In areas where side trimming is needed, after the Customer completes the groundwork, the Company will trim only those trees *that remain within the OSHA working clearance zone.* The Customer shall be responsible for removal of all debris. At the Company's option, the Company may clear the right-of-way and be reimbursed by the Customer. For additional details covering underground installations, refer to §8.3, Initial Clearing of Property for Service.

2.11 Relocation of Company's Facilities

The Company will move or relocate the Company's facilities where practical to do so at the request of the Customer. The Customer may be required to provide consideration (i.e., payment, furnishing of installed facilities, etc.) in exchange for the relocation.

Section 3 Information for Providing Electric Service

3.1 Application for Service

Customers can apply for service online at Entergy.com or call 1-800-ENTERGY (1-800-368-3749).

Service rendered by the Company is subject to the provisions of the Company's Service Regulations and applicable rate schedule. The supplying and taking of such service shall constitute an Agreement for Service if no written agreement for service or application for service has been executed.

3.2 Pre-Installation Information

Architects, Builders, Contractors, Developers, Engineers, Electricians, or Owners are required to consult the Company for information regarding the availability and type of service, and location of the service drop, service entrance, and meter.

The Company is not responsible for the cost of replacing any of the Customer's facilities that do not meet the requirements for service. Connection to the Company's electric system is not available prior to approval by the Company. The approval process may include the acquisition of permits and/or inspections by the authorities having jurisdiction. The service may be installed overhead or underground depending on the Customer's preference and/or the facilities available in the area of the premises to be served. Consult the Company.

3.3 Alterations to Existing Service (also see §5)

The Company's facilities, including meters, transformers, and other equipment, are sized and installed to satisfy the Customer's requirements at the time the service is initiated and is based on information supplied by the Customer.

It is essential that the Customer give notice to the Company of any substantial additional load (e.g., a large motor) that is to be connected to the electric system. The Customer should not proceed to make these additions until after the Company has notified them that it can either supply the increased load or the conditions or under which the increased load can be served. **The Customer may be required to pay for these changes. The Company is not liable for any damages incurred by the Customer connecting additional equipment without notice to the Company.**

Under no circumstances shall any service drop wire, meter or metering equipment belonging to the Company be disconnected, removed, or relocated unless authorized by the Company. This authorization requires advance notification. The Company may require the replacement of the Customer's obsolete equipment at the service entrance or relocation of the service entrance to a more accessible area prior to providing the requested service.

The construction of pools, decks, fences or any structure near, under or over electrical facilities may cause a code and / or safety violation. Consult the Company concerning all clearances.

3.4 Required Information for New Service or Alteration to Service

The Customer **shall** furnish the following information to Company for any new service, or alterations to existing service, desired by the Customer:

1. Exact location(s) of premises, including street address if available, where service is desired.
2. 911 address if different than street address
   [Note: 911 address (house number) or other address if no 911 address is available shall be posted near the location where the meter is to be installed.] A minimum 3” lettering marked on meter enclosure, pole or durable material attached to pole and should be visible from the street.
3. All locations must have street or road name and good directions to service location.
4. Name of city and county/parish if service location is within an incorporated city limits.
5. Billing address and name.
6. Home phone, work phone and mobile phone if applicable.
7. Permitting requirements, if any
8. Type of service (including service voltage), equipment rating, and amount of electrical load to be installed.
9. Total motor load (to include size(s) of largest motor(s), starting current(s), NEMA letter or code) and rated voltage.
10. General characteristics of equipment to be driven by motors.
11. Date new electric service or alterations to existing service are needed.
12. Desired point of delivery or service entrance location and location of disconnect and/or breaker box. Sketch or drawing may be required. Company maintains the right to designate point of delivery.

For residential applications the Customer will be asked to provide both his or her social security number and the place of employment, as well as the social security number and place of employment of their spouse or roommate.

The Company may refuse service for other than technical reasons. Also see §2.2.

The Company (or the Company's contractor) shall make the connection at the point of delivery. In special cases the Company may authorize and/or require the Customer's contractor to make this connection. This authorization shall be obtained before any connections are made directly to the electric system. This requirement does not preclude the Customer's contractor or electrician from installing meter sockets, metering transformers, or other equipment when furnished by the Company.

The Customer shall install and maintain the Customer's wiring and electrical equipment within or on the premises, in accordance with building and wiring codes, laws and local ordinances that are in effect.

3.5 Connection of Service

The Customer is required to contact the Company to schedule the connection of the service. The Company will schedule service connection after the authority having jurisdiction has notified the Company all required permits and inspections are passed and approved.

If the main breaker or disconnect switch is outside, by the meter, the grounding conductor and connections are identifiable and inspectable, the switch will be placed in the “off” position and the meter installed. The switch will be left in the “off” position and the Customer shall be responsible for putting the switch in the “on” position.

If no breaker or disconnect is available or the grounding conductor and connections cannot be identified and/or inspected, a Customer who can and shall operate the inside switch and assist in the inspection of the grounding conductor and connections shall be present so the Company can safely connect the meter. If that qualified Customer is not present, Company will not connect the service. Customer will be required to contact Company to schedule a timeframe when Customer can be present.

Section 4 Types of Service

4.1 General Characteristics

The electric service furnished by the Company is 60 Hertz alternating current, single and three phase.

4.2 Generally Available Types of Service

The type of service (number of wires, phase, and voltage) furnished by the Company depends on two factors:

1. The voltage available near the service location.
2. The type of service which in the Company's judgment can most economically be made available to serve the nature, size, and location of the Customer's requirements.

A particular type of service may or may not be available at a given location.

4.2.1 Generally Available Standard Transformations of Electric Service

	Types of Service	**Typical Loads Served**
1.	1 phase - 120/240 volts – 3 wire	Residential and other small loads
2.	3 phase delta - 120/240 volts - 4 wire (Consult Company for availability on 35 kV systems.)	Loads with both single and three phase requirements not exceeding 1,000 kVA
3.	3 phase wye - 120/208 volts - 4 wire	Three phase loads from 50 kVA to 1,000 kVA
4.	3 phase wye - 277/480 volts - 4 wire	Loads between 75 kVA and 3,000 kVA
5.	3 phase wye - 2400/4160 volts - 4 wire	Contact Company for minimum load requirements
6.	Service voltages within network grids	Refer to § 8.6

Notes:

- For specific information on voltage transformations, consult the Company or the rate schedules. Refer to Table 5.4 for allowable motor sizes for various voltages.
- Five wire service is prohibited. The neutral must be grounded at the meter enclosure or for multiple services as shown in the drawings in this book.
- Three phase services are normally four wire. Customer is required to take the neutral to the first disconnect switch past the meter. Consult the Company
- Does not include all types of service available. Contact the Company for further information on the availability of all distribution voltages not listed.

4.2.2 The following scenarios require the Customer to contact the Company online at Entergy.com or call 1-800-ENTERGY in the planning stage to discuss availability, design, and costs.

1. Fire pumps, Emergency systems, and legally required standby systems services (which shall be allowed separate additional service drops).
2. Different Characteristics (voltages, or phases, or for different uses, such as for different rate schedules which may be allowed additional service drops.)
3. Very large services (>2000 amps may also qualify for an additional service drop.)
4. Apartment Buildings and multiple service buildings (shall have the service grouped at a single Company approved location. The exception is where a maximum two areas are separated by a firewall and then a second service drop in a different Company approved area may be permitted. (Labels required see §1.5.))
5. Typically, all of the service drops will be to the same place on a building. These services shall otherwise conform to the Standards.

4.3 Availability of Three Phase Service

The Company has many locations in which three-phase facilities are not available. Customer's cost may be prohibitive in relation to the value of three-phase service. Customer should contact the Company to determine if any charges are associated with the desired service prior to making any decision concerning the purchase of electrical equipment.

4.4 Facilities for Highly Fluctuating or Special Loads

Highly fluctuating loads such as welders, X-ray or other medical imaging machines, and motors with unusual or frequent starting requirements may interfere with other Customers' electric service. See § 5.5

4.5 Temporary Service

The Company provides many types and classes of temporary service that may be available at the location for construction work, traveling shows, etc. The Customer shall provide required ground clearance and protective devices for all temporary services. Customer installed poles to be used for temporary service shall be treated. Overhead temporary service poles are typically set no more than 75 feet from the nearest Company pole. For additional information see:

- **Drawing D4-1** for a typical structure for temporary service from an overhead source
- **Drawing D4-2** for a typical structure for temporary service from an underground source. The Company will specify the temporary service pole location for either overhead or underground service.

Specific terms and conditions under which temporary service will be provided may be obtained from the Company. When air conditioned or electrically heated construction trailers are to be served, please see §4.6 or consult the company.

4.6 Permanent Pole Services for Buildings, Structures, Mobile Homes and Travel Trailers

Requirements for electrical service for individually located mobile homes and travel trailers differ from other types of service. Provisions shall be made for connecting a mobile home feeder assembly by a permanent wiring method. Customer feeder conductors shall consist of either a factory-installed listed cord or a permanently installed feeder consisting of four, insulated, color coded conductors. For information on the location of meter service, see **Drawings D4-4** and **D4-6**.

For mobile homes installed in locations other than in a mobile home park, see **Drawings D4-3** and **D4-4** for a typical meter service installation from an overhead source and **Drawings D4-5** and **D4-6** for a typical meter service installation from an underground source.

4.7 Services for Mobile Home Parks

Mobile Home Parks that have five or more mobile homes or trailers and accessory buildings on a continuous parcel of land used by its occupants or owners. These parks shall be served at a common point as shown in **Drawings D4-8, D4-9** and **D4-10**. The park management shall be responsible for running service from the disconnect beyond the 120/240-volt Entergy meter to the individual trailers.

On overhead service from Entergy, Entergy shall have exclusive use of the pole where the point of common connection is. Entergy recommends the Park use underground feeds to individual trailers to avoid the hazards of tall trailers contacting electric lines. If the Park wishes to distribute the electricity overhead it must use a separate pole from the Entergy feed pole. Consult the NEC for overhead clearances and underground construction on Customer owned lines.

4.8 Central Service Poles or Load Center Distribution Pole for a Farmstead

For farm and other Customers who have two or more points of utilization at contiguous locations and where it is more practicable to deliver service at a central service pole on the Customer's property than at a building, the Company will deliver service under the following conditions:

1. Central service pole will be installed, owned, and maintained by the Customer. Refer to **Drawings D4-7**.
2. No foreign objects such as television masts, bird boxes, cameras and Wi-Fi equipment, etc. will be allowed on the pole.
3. The Company will connect its service wires to the Customer's service entrance conductors on the central pole, this point of connection being the point of delivery of service.
4. Customer will install service entrance equipment: meter enclosure, fused switch or circuit breaker on central service pole.
5. The wires extending from the central service pole to the Customer's buildings or points of utilization will be a part of the Customer's installation and shall be installed and maintained by the Customer.

4.9 Apartment Building Service

Where apartment buildings are contemplated, the Company should be contacted before plans are drawn, in order that adequate service can be made available to the prospective tenants.

4.10 High Rise Building Service

The Company will not install, own or maintain a vertical distribution system in high rise buildings. *Service to be provided per Company policy with coordination between the Company and Customer.* Consult the Company for interior meter room locations.

4.11 Service to Marinas and Boat Docks/ Buildings Built over Water

The Company will provide electric service to marinas and boat docks and buildings built over water. These electric services shall terminate on land at a point above the expected high-water level designated by the Company. The height of the meter may be increased to accommodate flood plains. Accessibility for Company personnel is required see §9.6 Meter Mounting Height regarding platforms needed. Consult the Company for the exact location and other details.

A disconnect switch shall be installed at the point of delivery. All underground served installations will have a junction box before the disconnect as the point of delivery (see §8.5). With the exception of the meters, the Customer shall own, install, and maintain all facilities beginning at the point of delivery. Meters will be owned by the Company and may be installed near each boat slip. Shore to ship power shall meet the requirements of Section 4.13 without the resistance grounded system, since single phase loads are referenced internal to the vessel.

4.12 Structure / house / raised or built elevated to avoid rising water

See §9.6 Meter Mounting Height.

4.13 Resistance Grounded Services

A grounding resistor desired by the customer must be on the customer's premises past the point of delivery and preferably near the customer's fault interrupting equipment. Company does NOT allow grounding resistors to be installed in Company padmount transformers. *All of the* following requirements must be satisfied:

1. *The grounding straps on the padmount must be disconnected from the grounding bushing and folded down and out of the way for possible future use of the padmount on a grounded neutral installation.*
2. *A fully insulated neutral conductor, the same size as the secondary phase conductors, must be maintained from the neutral bushing to the point of delivery for the customer to carry to the grounding resistor* or directly to the shipboard service. Service neutral shall be permitted to have an additional demand factor of 70 percent applied to the portion of the unbalance load in excess of 200 amperes.
3. *There must be a clear and obvious label above the neutral bushing that says: STOP! DO NOT CONNECT "GROUND STRAP" --- Ungrounded Neutral and on the front of the padmount, a label that says "CAUTION --- Ungrounded Neutral".*
4. *If the point of delivery is at the padmount, the customer's contractor must have four fully insulated conductors; one for each phase and one for the neutral.*

5. *Metering on the secondary side of the padmount must be line to neutral with two bushing PT's to handle the neutral the same as a phase conductor. The metering installation must be clearly labeled "CAUTION --- Ungrounded Neutral; do NOT connect neutral to ground".*
6. *The padmount transformer tank, metering enclosure or rack, and primary insulated shielding conductors must be solidly grounded and isolated from the insulated neutral conductor.*

Section 5 Voltage Categories and Customer Equipment

5.1 General Comments

Any type of service or voltage not defined as the Company's standard voltage may be supplied only after specific written approval is obtained from the Company.

Equipment operated at the Customer's service voltage should be designed for operation at that voltage.

5.2 Voltages for Lighting

The recommended service voltage for lighting is 120 volts. Customers served by higher voltages may use 208, 240, 277, or 480 volts for lighting. Where the lighting voltage is different from the voltage supplied by the Company, the Customer will install and maintain suitable transformers on the Customer's side of the point of delivery.

5.3 Voltages for Heating, Instant Water heating units, and Car Chargers

The recommended voltage for space and water heating, ovens and Car chargers is normally 208 or 240 volts, depending on the service voltage. Higher voltages, as available, may be used for larger loads.

Units rated 30kVA or larger should be three-phase. Prior to purchase of equipment, consult the Company for service to units rated 15 kVA (60 amps) or higher, and when the newly added units bring the total load over 30 kVA. See §5.5 & §3.3.

5.4 Voltages for Motors

Consult the Company before commitments are made for all single-phase motors over 6½ hp, three-phase motors over 30 hp and for any motor that may have requirements not suited for the available service near the Customer location.

Motors larger than 30 hp should typically be served with a three-transformer bank or three phase padmount transformer and not an Open Wye – Open Delta bank. The customer may be required to pay any additional cost required to provide this service, such as installing a third primary phase. Motors with no service factor are more sensitive to small phase voltage unbalances and voltages below nominal.

Table 5.4 offers a general guide for selection of motor voltages for various horsepower ratings.

Table 5.4 General Guide for Service to Motors

Total Connected Motor Load (hp)	Size of Largest Individual Motor (hp)[a]	Minimum Voltage and Phase
Up to 5	1	120 volts 1 phase
5 – 50	5[b]	240 volts[c] 1 phase
7.5 – 150	30	208 or 240 volts 3 phase
50 - 4,000	Over 30	480 volts 3 phase

a. Larger Motors may be allowed under certain conditions and may require the use of auxiliary starting devices or other special equipment. See §11.
b. Company may allow up to one 7½ horsepower motor to be connected to a 240-volt single-phase service.
c. The standard voltage in network areas may be 208V, single phase.

5.5 Voltages for Special Equipment

Consult the Company before specifying or purchasing welders, elevators, hoists, electronic transmitters, x-ray machines, draglines or any apparatus with highly fluctuating load characteristics. In some instances, the most practical solution to problems associated with fluctuating loads may be the installation of additional facilities including dedicated circuits from the substation to serve the Customer. Should the Company install such additional facilities; the Customer will be required to pay for them. Also consult the Power Quality Standards for Electric Service.

Wired radio, or any related means of transmitting information, shall not be connected or coupled to the Company's lines except by special arrangement with the Company.

Consult the Company for service to commercial radio, television and cellular/communications facilities.

5.6 Voltages for Loads Served from Network Area

Customers in network areas typically will be served at 120/208 volts, single phase, two or three wire, or three-phase, four wire. In some networks, 277/480-Volt service may be available. In Mississippi and Arkansas 125/216 Volt service may be available. Individual loads 300 kVA or more may require installation of transformers in a vault on the Customer's premises. Contact the Company to arrange for such an installation, to learn what voltage is available, or to request service at another voltage.

Section 6 This Section Reserved for Future Use

Section 7 Overhead Service

7.1 General Comments

Consult the Company for the closest and most reasonable location for the service drop attachment. Ordinarily, only one type of service and one service drop is permitted to the Customer's premises. The Company will normally make connection to the Customer's service entrance conductors. Connection shall be made only after the Customer's wiring has passed inspection and has been approved by the authorities having jurisdiction. From the point where the Company's overhead service drop terminates, the Customer shall install service entrance wires to the meter socket and service entrance switch or circuit breaker panel in accordance with the requirements of the NEC, NESC, or other authorities having jurisdiction.

Not less than three feet of each conductor of the service entrance cable or wires shall be left extending beyond the weather head for connection to Company's service drop. For polyphase services, like phases shall be appropriately identified and marked. Neutrals shall be marked with white tape on both ends. Neutrals may be bare wire. The Company will make the connection(s). Refer to Drawing D7-1 and Drawing D7-2 for overhead residential installations.

It is the customer's responsibility to ensure that like phases are appropriately marked and connected together on the line side and the load side of the metering equipment.

7.2 Point of Attachment

The point of attachment

- shall be provided by the Customer for the Company's service drop to the Customer's premises,
- shall be of sufficient height to permit the Company's service drop to conform to the requirements of the National Electrical Safety Code and any other controlling codes, ordinances, or orders of authorities having jurisdiction,
- shall not exceed 21 feet in height from final grade to attachment point for residential services, and shall be either accessible to Company's bucket truck or have enough surface (such as a wall or building structure) and sufficient ground space on same customer's property to safely support a ladder,
- shall have a clear line of sight to the pole from which the service wire is or will be attached,
- shall not have any other attachments (such as telephone, cable, Internet) and maintain a separation of 1 foot at any point in the span including the attachment point.
- shall not have customer accessible junctions between the weather head and the meter socket

Also see §9.4 Location of Meter Installations.

The Customer may be required to install a service extension or a metal riser pole. When a service extension or metal riser extends above the roof, the point of attachment and clearances above the roof shall conform to the appropriate codes. Where a service mast is used for the

support of service drop conductors it shall be of adequate strength and supported by braces or guy wire to withstand safely the strain imposed by these drops (see §2.2.4) and be no higher than 60” higher than the roof. Where the raceway type service mast is used, all raceway fittings shall be identified for use with service mast. Rain type service head shall be used at the point of connection to service drop wires.

For temporary overhead service refer to §4.5, Temporary Service, and **Drawing D4-1**.
For permanent service, see **Drawings D7-1** and **D7-2.**

7.3 Clearances

The point of attachment of the service drop (0-750 Volts) shall be high enough to allow for the service drop conductors to have the following required clearances at their lowest point (To allow for typical cable sag, point of attachment is usually 1 1/2 -2 ft higher than the required clearance below- consult the Company):

12 feet over areas of pedestrian traffic, residential driveways, and commercial areas not subject to truck traffic

18 feet above roads, streets, alleys, non-residential driveways, and other areas subject to truck traffic.

Where the height of a residential building does not permit service drops to meet these values, the clearances may be reduced to the following:

150V or less to ground	For residential driveways only *(limited to vehicles less than 8 feet)*	Spaces accessible to pedestrian traffic only
Insulated Service drops	12	10
Insulated drip loops	10	10

If vehicles over 8 feet are expected, higher clearances are required consult the Company.

The point of attachment shall never be installed so the service drop would extend over a swimming pool or any other permanent or temporary structure. See §2.3 Distance Requirements for Customer Structures.

7.4 Length of Service Drop

The clearance of the unsupported length of the service drop from the Company's facilities to the first point of attachment will in no case violate the clearances given in this document. The allowable unsupported length of a service drop shall depend on wire sizes as shown in the table on **Drawings D4-4, D7-1, D7-2, D7-3** and **D7-4**. Other significant factors and conditions at the Customer's property may affect these standard lengths. Consult the Company for length limitations.

7.5 Method of Attachment

The service drop shall be attached to the building or approved extension by suitable means supplied by the Customer. The Customer shall provide suitable reinforcement or backing for secure mounting of attachment fittings and adequate anchorage of the service drop. The service drop shall be at the appropriate height with the appropriate separation. Refer to **Drawing D7-1, Drawing D7-2** or **Drawing D7-3** for residential installations.

For loads where parallel phase and neutral service entrance conductors are installed, the Customer shall consult with the Company early in the design phase to determine how many and the sizing of conductors that may be brought out for their system.

Company approved, Customer furnished connectors, moles, buss duct or junction box should be required for loads that exceed four conductors per phase.

7.6 Extension of Overhead Distribution Facilities

The Company standard for overhead distribution facilities is installation on front lot easement. Consult the Company early in the design phase for more information on other options.

A Customer's service location may require the Company to incur expense greater than normally allowed in providing the service. The extension of primary overhead distribution lines, relocation of Company facilities or removal of Company facilities are some *examples of when a CIAC is needed.* When such a situation exists, the Company may require payment from the Customer in addition to the amount normally charged. For complete details on payment options, consult the Company's policy for extension of overhead electric distribution facilities.

7.7 480 Volts Metered Service

A 480 volts service with a self-contained meter shall have

- on the line side of the meter
    - a labeled, non-fused disconnect switch, and
- *on the load side*
    - a breaker or over current device and disconnect.

All equipment and materials shall be customer furnished and customer maintained**.** See Label and Disconnect or Disconnect switch §1.5. Also refer to **Drawing D7-4 and Drawing D7-4A.**

Section 8 Underground Services and Installations

8.1 General Comments

All facilities, which the Company will own and operate, shall be installed either by the Company or to the Company's specifications. The Company shall not accept ownership of any facilities that do not meet the Company's specifications.

Economic, physical and technical considerations normally dictate the use of overhead distribution facilities in the Company's operating area. Customer may either elect or be required to take underground electric service. The Customer will be required to pay the additional cost, if any, in excess of the cost of an overhead system. The Customer may have the option to either:

- Do part of the work or
- Have the Company install the complete service.

Consult the Company.

8.2 Ownership of Facilities

The Company will generally own and operate all facilities on the Company side of the point of delivery. The Company will own metering equipment and selected equipment located in vaults.

8.3 Initial Clearing of Property for Service

The Customer requesting a new service shall:

- Notify One Call (811) two business days before digging and shall have One Call locate all underground facilities before digging;
- Prepare the initial right of way;
- Perform all grubbing and clearing as instructed by the Company on all property owned by the Customer;
- Remove all debris;
- Bring the easement to final grade prior to any installation of facilities by the Company;
- Be responsible for costs associated with raising, lowering or relocating facilities due to changes in the surface grade after installation of the Company's facilities.

At the Company's option, the Company may prepare the right-of-way and will be reimbursed by the Customer.

8.4 Requirements for Obtaining Underground Service

8.4.1 General Comments

Underground service may be available from either overhead or underground facilities. Underground Service is not allowed to be under or inside a building or structure unless the Company gives written permission designating where the cable, etc. will go.

The Customer shall provide, install, own and maintain the conduit from the meter enclosure against the wall, down to a point thirty inches (30") below ground in accordance with Company specifications. A 36” radius 90˚ Schedule 80 PVC elbow or equivalent shall be required (see

Drawing D8-2.) (Note: The foundation may be required to have a blocked-out area for conduit in order for conduit to be flush with wall when installed.) Consult the Company for information if conflict arises.

When a complete conduit system is used, a continuous run of conduit with a minimum size of 2.5" (except in Arkansas where 2" is the minimum) for 200 ampere single phase service. Refer to §8.9, Conduit.)

8.4.2 Easements

Easements for underground facilities shall be furnished to the Company on Company's right-of-way agreement forms as outlined by Company policy. Refer to §2.9, Right-of-Way for Service Facilities.

When the Company needs equipment access onto the Customer's property, to perform maintenance, provide service or to install new facilities, the Customer and the Company should coordinate to avoid damage to the Customer-owned facilities. This includes the Customer providing input to locate below grade facilities such as; irrigation, pool, sewerage, drainage, electrical circuits, etc. in advance of Company, or its Contractors entering.

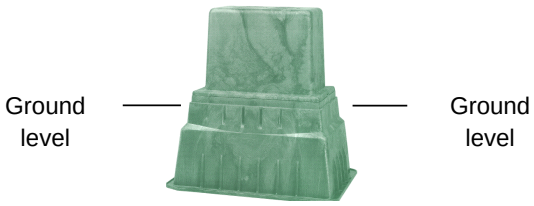
8.4.3 Underground Electric Service for New Residential Subdivisions

Contact the Company at the earliest date possible so that, the Company can

- plan the distribution system,
- design any applicable street lighting feed points or other lighting systems and
- determine the meter and service locations.

8.4.4 Underground Service from Underground Systems

Underground facilities will be installed on the front lot easement with pad mount transformers and pedestals where needed.



Typical Pedestal

The conduit shall be installed to a point 24 inches from the transformer pad (or secondary pedestal) for service from an underground source. See Drawing D8-4. The Company will pull the conductors in the residential conduit system.

Customers within an underground subdivision adjacent to an overhead distribution system may be served with an underground service from the overhead system.

Underground secondary service from an underground distribution system may be provided to non-residential Customers. This includes both single and multi-meter installations.

The service from three phase pad mount or vault type transformers should be restricted to 120/208Y or 277/480Y volts, four wire. The Company's typical installation includes a pad mount transformer and/ or pedestals.

8.4.5 Underground Service from Overhead Distribution System / Power Poles

The Customer shall install the end of the elbow coming up at a point 7 inches from the base of the pole for service from an overhead source.

The Company will install the Customer supplied riser on the pole. For Residential Service, Company will pull the conductors in the conduit system see **Drawing D8-5**. All others should consult the Company.

Normally, conduits on a Company owned pole will be normally limited to one. More than one conduit may be allowed in certain circumstances, with prior Company approval. Customers requesting additional conduits may be required to provide a separate support structure for the conduits and a suitable attachment point for the Company owned overhead service conductors. When more than one conduit is allowed, they shall be installed adjacent to each other, and not cover more than one quarter of the pole circumference. At Company's option an above ground pedestal may be installed at Customer's cost to accommodate additional service.

8.4.6 Underground Service Replacing Existing Overhead Service

An existing Customer served with an overhead service may request the removal of the overhead service and the installation of a new underground service.

If the existing service is of adequate size to serve the load, the Customer is responsible for paying the total estimated cost.

Where the existing service is not adequate to serve the increased load, the Customer shall pay the difference between the estimated cost of an underground service and a new overhead service. Consult the Company.

8.5 Junction Box Requirements

A junction box is equipment designated/approved by the Company where the Customer's service terminals are joined to the Company's cables.

Junction boxes are not normally required or accepted for 120/208/240volt self-contained single meter installations or residential unless a main disconnect is required ahead of the meter.

When the Customer provides, owns, installs & maintains the secondary wire to the Company's transformer, a Junction box is not required. Consult the Company for requirements in your area.

A Customer Supplied Company approved Junction box is required when Company owned Underground conductors feed the Underground Service and:

- A main disconnect is required (e.g. 480 volts service, etc.);
- multiple services are joined together; or
- transformer rated services exist.

The Customer supplied junction box shall:

- Have a rain-tight (NEMA 3R) weatherproof front cover that is hinged to the side(s)
- Have a locking mechanism to secure it suitable for a Company padlock
- *Must be tested by and approved by a nationally recognized testing laboratory*

Junction boxes used for various situations are shown in **Drawings D9-7, D9-9, and D9-10**.

The Customer shall supply *NRTL* connectors inside, which will be the point of common coupling between Company and Customer. These connectors shall be sized no less that 125% of continuous load, plus 100% of the non-continuous load. Connectors shall be suitable for both copper and aluminum. Insulated multi-connector block or buss bar type shall be used. Buss bar or bare multi connector block(s) type shall be fastened properly to the back of junction box. Insulated multi connector block(s) shall not be fastened.

A durable marking for color or word coding shall be installed. The neutral conductor shall have a white marking or a suitable identifying mark. The next section of the terminals shall have color suitable for applicable voltage. Plastic anchors are not allowed.

The customer supplied connector should be located in the center of the junction box four feet from grade or lower (normally should be low enough that the lineman can work on without a ladder).

Without prior Company approval, a junction box may only serve one meter, one main, or one weatherproof wire way.

Table 8.5: Guideline for Junction Box Use with Multiple Circuits

Total Customer Conduits (4" min)	***Maximum Customer Conductor Size***	***Minimum Dimensions***		
		Depth	***Width***	***Height***
1	*600 kcmil*	*12"*	*24"*	*24"*
2-4	*600 kcmil*	*12"*	*36"*	*36"*
5-6	*500 kcmil*	*12"*	*48"*	*48"*

Company conductors shall enter from the bottom. For situations that can't meet the standard junction box installation requirements consult the Company.

For larger sizes consult the Company.

8.6 Underground Service from an Underground Network

Specific portions of the distribution system in downtown areas with highly concentrated loads have been designated as Underground Network Areas. Area boundaries may be obtained from the Company.

Service for individual loads up to 300 kVA may be provided directly from the secondary system. Voltages available are single phase, three wire, and three phase, four wire, and 120/208 volts. In some networks, 277/480volts service may be available.

In Mississippi and Arkansas 125/216 volts service may be available. Consult the Company for available voltage at specific locations. Larger loads may require installation of one or more transformers, which shall be located in a suitable vault furnished by the Customer. The Company and authorities having jurisdiction shall approve the vault and its location. Contact the Company to arrange for such an installation or to arrange for service at other voltages.

The location of the point of termination of the service run shall be approved by the authorities having jurisdiction and by the Company. Consult the Company about service requirements.

8.7 Underground Electric Service for Mobile Homes

See §4.6 Services for Individually Located Mobile Homes and Travel Trailers.

8.8 Underground Electric Service for Mobile Home Parks

See §4.7 Services for Mobile Home Parks.

8.9 Conduit

8.9.1 General Comments

Conduit is the preferred system for primary, secondary and service cables.

Conduit is always required in places with

- restricted access, i.e. under or potentially under
  - concrete driveways,
  - sidewalks,
  - patios,
  - flowerbeds, etc.)
- poor local soil,
- underground congestion of
  - pipes,
  - other utilities service lines, or
- other conditions.

Consult the Company for details. Note: In all service territories Customers provide and install conduit for the installation of service cables.

The Customer's anticipated future load requirements should also be considered when sizing cable and conduit to serve the Customer's present load requirements.

8.9.2 Poor Soil Conditions

Due to the quality of the soil in some portions of the Company's service area, concrete around the conduit may be required. If concrete encased conduit bends are required at the base of the pole or the entrance to the building service, the concrete shall be formed to prevent its touching the pole or building and a fibrous separator is required between the pole and the concrete.

8.9.3 Pull boxes /Pedestals (many bends, long cable)

Customer shall consult the Company if:

- There are more than three bends (any angle) including riser bends or
- The cable run is greater than 200 ft. (Long cable runs may also require bigger cable and conduit to compensate for voltage drops)

Customer shall provide a Company approved pull box (If vehicular traffic is expected to traverse it, or a load-rated pre-cast manhole will be required). Customer shall install pull box in a Company approved location. Also see **Drawing D8-2**. for secondary pull boxes/ pedestals. See **Drawing D8-6** for a typical primary service to a single pad mount transformer serving commercial or industrial Customers.

8.9.4 Conduit Used in Commercial, Industrial, and Other Non-Residential Underground Installations

Based upon Customer information and requirements, The Company shall specify:

- The number, design and location of pull boxes;
- Total number of conduit runs including spare conduit runs;
- Total length of conduit runs to be installed;
- If pull boxes or junction boxes are required

8.9.5 Types of Conduit

8.9.5.1 *General Comments*

Conduits above the ground and transition elbow or conduit from underground to aboveground shall be electrical gray schedule 80 PVC or equivalent.

Nonmetallic conduit installed totally below grade shall be at least Schedule 40 PVC or equivalent and shall be electrical gray or black with red stripes for continuous conduit.

In certain cases, concrete encasement may be required according to **Drawing D8-3 & D8-7.** All conduits, elbows, fittings, etc. shall be UL approved with an U. L. label, meet Company Specifications and Local Building Codes.

8.9.5.2 *Elbows and bends*

All Elbows and bends shall have a minimum 36" radius. Consult Company to learn if Company approved rigid galvanized steel elbows with 4" red concrete is required for primary cable.

8.9.5.3 *Minimum Conduit* Guide for Typical Underground Conductor*

Secondary Conductors

Size	Conduit
#4 Al Triplex	2.5” (2” in Arkansas only)
1/0 Al Triplex	2.5” (2” in Arkansas only)
4/0 Al Triplex	2.5” (2” in Arkansas only)
350 Al Triplex	3”
500 Al Triplex	3”
750 Al Triplex	5”
1000 Al Triplex	5”
1/0 Al Quadruplex	3”
4/0 Al Quadruplex	3”
350 Al Quadruplex	*4*”
500 Al Quadruplex	4”
750 Al Quadruplex	5”
1000 Al Quadruplex	5”

*The recommended conduit size conforms to the Company standards for conduit used on the Company system. Consult the Company during the design process to ensure that the proposed conduit system meets Company requirements.

8.10 Termination of Customers’ Conductors in Company’s Transformers

When the Customer brings cable to the transformer see §1.5 labels.

The Company shall furnish terminals for secondary conductors when Company’s standard connectors can be used.

The maximum size Company supplied connectors in:

- A single-phase transformer is for 500 kcmil cable,
- A three-phase transformer is for 1000 kcmil cable.

Larger cable or cable with more strands than Company cable listed above (such as locomotive cable or welding cable), shall require Company approval of Customer furnished cable and connectors. Customer may supply Aluminum or Copper cable designed for the application. Consult the Company in advance.

The Company will normally bolt all terminals to the connectors of the transformer. The phasing and proper conductor length will be the responsibility of the Customer regardless of who installs the terminals or bolts the terminals to the transformer connectors.

For three phase loads where parallel service entrance conductors are installed, the **Customer shall consult with the Company early in the design phase to determine the number and size of conductors that may be brought out for their system**.

1. Pad mount transformers *(*Sized based upon Company guidelines and requirements not the NEC*)*
    - 500 kVA or smaller can accept eight conductors per phase;
    - 750 kVA and larger can accept twelve conductors per phase.
2. For underground service, buss duct or a Customer furnished, Company approved junction box should be required for loads that exceed the number of conductors the Company can accept.

8.11 Metering for Underground Service

The meter installation shall be located outside of a building or structure. Refer to §9.4, Location of Meter Installations. Disconnect switches or a main breaker panel shall be mounted within 2 feet of the meter socket. Prior approval shall be obtained from the Company for the installation of any service equipment directly below the meter sockets.

Special metering options may be available with approval of the Company. The Customer shall bear the additional cost made necessary by the special metering options.

8.12 Transformers Used in Underground Installations

8.12.1 General Comments

The Company will generally own and operate all transformers on the Company side of the point of delivery. Padmount transformers shall be installed in accordance with Company specifications. Vaults, enclosures, etc. (when used) will be at Customer's expense and shall conform to Company specifications. See **Section 10** Transformers Vaults and Substations. *The Customer is not allowed to enter the cable compartment of the transformer without local network oversite. Modifying the Company's equipment, including the transformer is explicitly prohibited.*

8.12.2 Transformer Pads or Slabs

The Company will generally furnish single-phase transformer pads. Three phase transformer pads / slabs shall be provided by the Customer, and shall conform to Company specifications. When supporting foundations are needed for the transformer installation the Customer will be responsible for the design of the supporting foundation and for obtaining approval of the design by the Company.

Section 9 Metering Installations and Equipment

9.1 General Comments

9.1.1 Responsible Parties

The metering equipment is usually installed on the Customer's premises (on Customer owned building; pole or structure). The Company will provide, as required, meters, metering transformers, relays, color-coded cable and transformer-rated meter sockets. The type of equipment supplied will depend on the requirements of the applicable rate schedule and the Company's standard practices.

The Customer will be required to provide the Company with information regarding the total connected load. The Customer may be required to provide, maintain and / or install the meter socket, metering transformer enclosure and adequate attachments or devices for attaching Company's metering facilities to the building. (This may require running conduit through eaves of roof and other similar necessities that could alter the Customer's building.)

9.1.2 Meter Socket Specifications

9.1.2.1 *General*

1. All meter sockets have a NRTL label which signifies they meet ANSI C12.7 and UL 414. In accordance with all applicable codes, a socket shall be properly installed and used in the application for which it is designed. All outside meter sockets shall be weatherproof/rain-tight (NEMA 3R).
2. The metering installation should be as tamper-proof as possible. The equipment shall be of good quality and strength so that corrosion and deterioration will not present safety problems and require the Customer to replace the meter socket. The Company at its option can require the Customer to replace obsolete metering facilities that cannot accept the Company's meters.
3. All meter sockets shall be sealable and in serviceable condition. Customer shall properly seal all unused openings on the meter socket assembly. The Company recommends meter socket that provide a knockout in the front cover and flange inside for barrel-locking.
4. Meter socket shall be large enough to accommodate conductor size.
5. Overhead sockets are required in overhead installations and underground sockets are required in underground installations.
6. *Meter socket devices meeting the UL requirements will be allowed. See Section 14.6*
7. Load and line wires shall not cross in the meter socket.
8. If ring-type sockets are used, Customer shall supply a meter ring to secure the meter in the socket. The ring should be stainless steel.
9. Meter sockets shall not be used as raceways or junction boxes.
10. All meter sockets - except residential single phase less than 320 Amps - shall have a manual mechanical gang operated bypass switch. Horn bypasses and similar devices are not allowed. (Any commercial 100 amp service such as billboards and other noncritical small commercial services should consult with the Company.)
11. Service entrance wires shall enter and stay opposite of the bypass switch.

12. For **5 terminal meter sockets**, the 5th terminal shall be supplied by the Customer and physically secured to the meter socket. It should be re-lockable but shall be securely attached to the socket in the proposed operating position.
13. The lugs in **320 Amp meter sockets** shall accept up to 500 kcmil conductors.
14. **All Underground Connected meter sockets & power panels** shall be side-wired.
15. **Power panels /combination meter/ breaker boxes** --- The wires behind the breakers and the Company wires shall be behind separate barriers. Company personnel shall have access to Company wires without exposing the wires behind the breakers.
16. *Refer to NEC for current carrying and grounding conductor sizing*.

9.1.3 Meter Transformer Enclosure Specifications

The Company specifies instrument transformer enclosures that accommodate the Company's equipment standards. Customers should determine the enclosure size based upon the size and number of service conductors. Instrument transformers shall be bolted to the back-plate and each shall be capable of being removed individually.

All enclosures shall:

- Have a metal or ¾" treated plywood back-plate in addition to the back wall of the enclosure
- Be *NRTL*
- Be weatherproof/rain-tight (NEMA 3R)
- Have a locking mechanism to secure it suitable for a Company padlock (handles with keys are not acceptable)
- Be side-hinged
- Be minimum Aluminum or 14-gauge G90 steel enclosure

Table 9.1.3: Guideline for Meter Transformer Enclosure with Multiple Circuits

Total Customer Conduits (4" min)	Maximum Customer Conductor Size	Minimum Dimensions		
		Depth	Width	Height
Up to 4	600 kcmil	14"	32"	40"
Up to 6	500 kcmil	14"	32"	54"

CTs will be placed at center. Customer Conduit spaced evenly.

Service connections shall not be made in an instrument transformer enclosure.

For larger sizes consult the Company.

9.2 Meter Connections and Seals

The Company shall install the meters, seal all meters, and seal all instrument transformer enclosures. Except as noted below, only the Company and its authorized agents are permitted to break or replace a seal, or to remove or change a meter. A licensed electrical contractor shall obtain approval prior to removing any meter seal, or notify the Company after doing so under emergency circumstances. Any infringement or violation shall be dealt with in accordance with the Company procedure for dealing with meter tampering.

9.3 Meter Clearance

Meters and metering equipment enclosures shall be mounted in locations that will provide at least 15 inches clearance on all sides and at least three feet in front. Equipment and clearances shall be within Customer's property. Some additional requirements for distance between a gas meter and an electric meter are as follows:

- National Gas Code - Gas Meter Locations: Gas meters shall be located at least 3 feet (0.9m) from sources of ignition.
- Office of Pipeline Safety - Minimum Federal Safety Standard: Customer meters and regulators …each meter installed within a building must be located in a ventilated space and not less than 3 feet (0.9m) from any source of ignition or any source of heat that may damage the meter.

An electric meter is a possible source of ignition.

9.4 Location of Meter Installations

An outdoor meter installation is the Company's standard.

Consult the Company in advance of new construction (in the design phase) to determine the appropriate location and type of metering installation.

For residential service, when served from the street, the meter is to be located on the outside of the building on the side of residence within 3 feet of the front wall and outside of fences on the side most economical to the Company. This location minimizes the Company's required access to the Customer's premises.

For residential service (new construction), when served from existing Company facilities in the rear of the property, the meter is to be located on the outside of the building on the side most economical to the Company. Every effort should be taken to assure access to the meter from the street side of fences/gates. If it is mutually agreed that the only place for the meter to be located is in the rear of the home, then appropriate access to the Company shall be established via a Company issued padlock specific to the cause. The intention is to limit the Company's required access to the Customer's premises.

Meter pan replacements, when served from the rear property can remain on the rear of the home provided that the Company has access 24 hours without notice.

Prior written approval of the Company is required to locate the meter other than in the preferred location, and the Customer shall pay any and all appropriate charges.

Locations inside porches or beneath carports are not considered as being outdoors and may not always be accessible by Company personnel.

The meter shall be in a safe location accessible to the Company at all hours. If the metering installation is difficult to access, the Company may require the use of the Customer's telephone line to access the meter for reading and programming.

The meter shall not be installed above or behind any piece of apparatus or machinery. The location should minimize the possibility of damage from moisture, vibration, dirt, mechanical damage and corrosive or dangerous fumes. Any code and / or safety violation may require relocation of the meter at the Customer’s expense.

9.5 Grouping of Meters

When more than one meter is involved, the meters shall be grouped at one location. Therefore, it is important that a meter location be selected which will provide ample space for the meters required. In group installations, the Customer shall permanently mark each meter loops and service switches. **Permanently attached labels are required**. (See §1.5 Labels)

If the Customer furnishes Ganged Factory Bussed Meter Sockets, the Customer shall check with the Company for approval before purchasing.

Ganged Factory Bussed Meter Sockets shall:

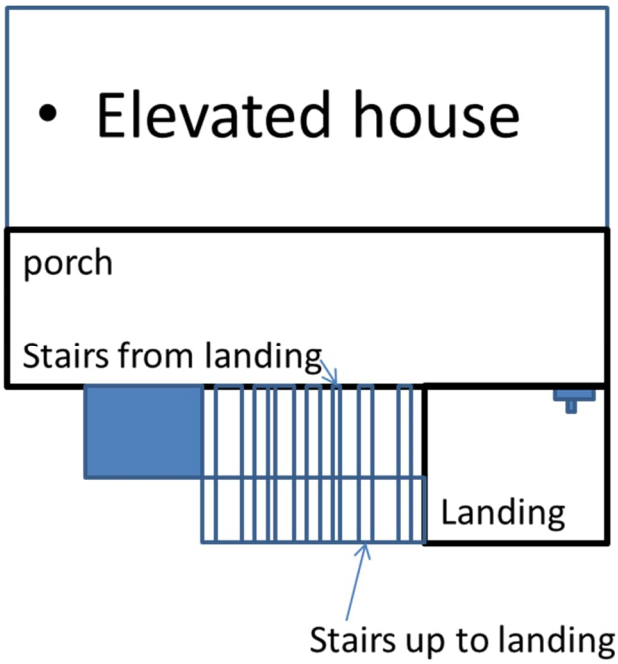
- Have provisions for locking each individual meter space,
- Allow for any one meter to be removed or serviced without disturbing the other meters.

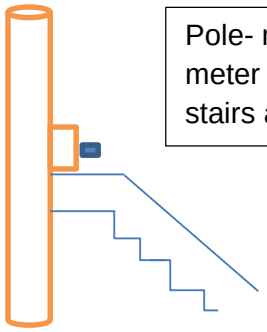
Where the Company provides underground service, all non-residential underground services for multiple meter arrangements shall terminate in a junction box. See § 8.5 Junction Box Requirements.

9.6 Meter Mounting Height

To facilitate reading, resetting and servicing, the preferred mounting height of a single meter or a single row of meters is 5 1/2 feet above the ground to center of the meter(s). It shall not be less than 5 feet and no more than 6 feet above ground to center of the meter(s).

For Structures/ houses raised or built elevated to avoid rising water: the service entrance or pole-mounted equipment (meter base, disconnect, breakers, etc.) shall be mounted at an elevation sufficient to avoid inundation (at least as high as the bottom of the house/ structure).





Pole- mounted meter with platform, stairs and railing

Service above 100 year flood plain

Remember to make sure cable is protected .

If the height of the meter is increased, Customer shall furnish a permanent 4 feet by 4 feet (4' X 4') platform, five to six feet below the center of the meter with permanent rails around the platform and steps. Consult Company for details (also see **Drawings D9-13 & D9-14**).

Where two meters are mounted vertically on a wall as a gang installation, the upper meter shall be mounted at least 5 1/2 feet to center above ground, and not more than 6 feet to center above ground. The lower meter shall be mounted so as to allow three inches clearance between meter sockets. Where more than two meters are to be installed as a gang installation, they shall be mounted in horizontal rows.

Individually metered apartment complexes may have meters installed in manufactured combination meter enclosure and switchgear assemblies. Such assemblies shall not have more than six horizontal rows of meters.

Assemblies installed indoors or in enclosures, the center of the highest meter shall not be more than 6 1/2 feet above the floor and the center of the lowest meter shall not be less than 18 inches above the floor or bottom of enclosure

Assemblies mounted on the exterior walls of a building or on poles, the center of the highest meter shall not be more than 6 1/2 feet above finished grade and the center of the lowest meter shall not be less than 34 inches above finished grade. Assemblies mounted on the outside shall be rain tight.

The Company, at its option, may require a barricade to be installed to prevent damage to the meters or encroachment on the clearances (driveways, parking lots, etc.)

9.7 Types of Meter Installations

9.7.1 Self-Contained Metering Installations

The Company stresses the importance of advanced communication from the Customer regarding requesting electric service.

Normally, residential and small non-residential loads are metered with self-contained meters.

All three phase self-contained meters shall have a meter socket containing a by-pass switch. All three-phase, four wire, 120/ 240 volts self-contained meter installations shall have the high voltage leg clearly and properly identified at the service entrance and connected to the right-hand (line) side of the meter socket.

9.7.2 Instrument Transformer Installation

The Company will determine the type of metering *that should* be used. When in the Company's judgment the load exceeds the capacity of a self-contained meter (320 Amps), the Company shall provide instrument transformers and a transformer-rated socket.

When, in the Company's judgement, the load does not exceed the capacity of a self-contained meter, a self-contained meter should be used. However, if the Customer insists upon the transformer-rated equipment, the Company may opt to allow it, at the Customer's expense.

Unless specified by the Company, an instrument transformer enclosure is required for all transformer-rated installations (see 9.1.3 Meter Transformer Enclosure Specifications). The bottom of the enclosure shall not be less than twelve inches above final grade. The center of the enclosure shall not be more than six feet above grade. All transformer-rated sockets should be no more than 25 feet from the instrument transformer enclosure.

The Customer or contractor contemplating an installation of this nature shall consult with the Company as to the number, size, location of and provisions for mounting instrument transformers and metering enclosures. Upon request, the Company will furnish information regarding the type, dimensions and connections of metering equipment to be used. For larger installations it is essential that such information be obtained before wiring plans are completed.

All three phase, four wire 120V/240 volts transformer-rated installations shall have the high voltage leg clearly and properly identified at the service entrance. If the transformers are mounted horizontally, the high voltage leg should pass through the right-most transformer. If mounted vertically, the high voltage leg should pass through the bottom transformer.

9.7.3 Primary Metering Installations

Consult the Company in Advance. The three options for furnishing service involving primary voltage delivery or metering are as follows:

1. For specific information on voltage transformation, consult the company.
2. Primary voltage delivery and metering: All service is delivered and metered at primary line voltage and the Customer owns and maintains all of the service transformers and substation installation, except for the metering equipment.

3. Primary voltage metering and secondary voltage delivery: All service is metered at primary line voltage and the Company owns some or all of the service transformers or substation installation. The Customer takes delivery at the secondary voltage level.
4. Primary voltage delivery and secondary voltage metering: All service is delivered at primary line voltage and the Customer owns and maintains all of the service installation on the Customer's premises, except for the metering installation. The meters are part of the service installation on the Customer's premises, but they are owned and maintained by the Company. Service is metered at the secondary voltage level.

Regardless of the option desired, when the metering installation is located on the Customer's premises, the Customer shall provide a suitable location without cost to the Company. The Customer shall also provide the Company suitable right-of-way over the premises for the Company's overhead primary circuit to the substation or in lieu thereof an underground service for primary voltage may be provided.

9.7.4 Meter Grounding

Grounding the metering installation is a safety consideration both for the Company and the Customer. The grounding connection shall be made in accordance with code and visible in the meter socket.

9.7.5 Service Disconnecting Means

For residential and most non-residential applications, service disconnecting means shall be installed at a readily accessible location, on the exterior of a building or structure and shall be available to the Company 24 hours a day, without notice. For non-residential applications and high-rise buildings, proposed to be served with an electrical room, consult the Company in advance of design. All equipment must be approved from a NRTL and be installed in enclosures suitable for prevailing conditions, such as weather extremes or corrosive environments. *If the service disconnect is above 1200 amps, then a mutually verifiable electrical open point by the Company and the Customer may be deemed acceptable.*

9.8 Disconnecting Means for Services Less Than 600 Volts

9.8.1 Self-contained meters (240 volts nominal, 320 amps maximum per service)

The Customer is required to provide a means of disconnecting all energized wires from the source of supply. The disconnecting means may consist of not more than six switches with over current protection or six manually operable circuit breakers mounted in a single enclosure.

For residential applications, the main breaker should be a maximum of 2 feet horizontal and vertical from the meter, *and readily accessible on the exterior.*

For non-residential applications serving a group of separate enclosures, or in a switchboard, the disconnecting means shall be located in a readily accessible location near the point of delivery, within 10 feet, preferably on the outside of a building or structure or on the inside wall directly behind the outside service entrance. *The location of the service disconnect will require approval from the authority having jurisdiction.*

9.8.2 480 volts service, self-contained meters

See §7.7 480 Volts Metered Service

9.8.3 Instrument Transformer Installation

See Disconnect or Disconnect switch §1.5.

The Customer shall provide a means of disconnecting all energized conductors of each service entrance from the source of supply. The disconnecting means shall comply with code and/or authorities having jurisdiction.

Where the Customer has self-generation or takes two or more points of service that can be tied together, automatic trip circuit breakers shall be required. Relaying on these circuit breakers should be coordinated with the Company.

For disconnecting means required on service above 4160/2400Y volts, contact the Company.

9.8.4 Isolation Switches for Services Over 600 Volts

The Customer shall install isolating switches between the supply conductors and the disconnecting means. This disconnecting means shall separate the conductors of the circuit from any source of supply.

Isolation switches are not required where disconnecting equipment is mounted on removable panels or metal-enclosed switch gear units which cannot be opened unless the circuit is disconnected, and which, when removed from the normal operating position, automatically disconnects the circuit breaker or switch from all live parts.

Fuses or cutouts used with non-automatic oil switches as disconnecting means may serve as isolating switches provided that they can be operated as a disconnect switch and completely disconnect the oil switch and all service equipment from the source of supply. The Customer shall be equipped to operate the fuses or cutouts.

Pole top air break switches accessible to the Customer's authorized personnel only and arranged so that grounding connection can readily be made on the load side may be used as isolating switches.

9.8.5 Alternate Sources and Automatic Transfer Systems

If the Customer desires to have an additional distribution feeder as the second source, the Customer is responsible for the costs to install, operate and maintain the Company's additional facilities, as well as cost for reserve capacity in addition to the charges, if any, required for the original service.

An automatic transfer switch may be specified as part of any alternative source system. The Company does not normally specify switches that are installed on the Customer's premises, past the metering point. However, any automatic switch connected to the Company's system shall be able to sense a dead power line and shall be blocked from closing in on the deadline. The Customer shall be responsible for the consequences of any back feed that occurs due to the switch closing in on a dead power line.

The automatic transfer system shall block any faults occurring in the Customer’s facilities from the utility system.

Furthermore, a closed transition transfer switching (CTTS) (make-before-break) application, while momentarily paralleling the Customer’s system to the original power source, shall limit the parallel power feed to 10 cycles or less after a fault occurs. This CTTS (make-before-break) application shall be performed while the utility supply is energized and shall contain the necessary synchronizing checks.

Consult the Company for automatic transfer system guidelines.

Section 10 Transformers, Vaults and Substations

10.1 General Comments

When large concentrated loads or long distances are encountered, it may be necessary to install transformers and high voltage conductors on or in the Customer's property. When transformers are to be installed outside, on, or in the Customer's property, the Customer shall provide a suitable location. **The Customer shall consult the Company regarding the location, size, and construction of the facilities during the design and planning phase.**

The Company will not energize its facilities until the installation is:

1. Made in accordance with manufacturer recommendations and engineering standards,
2. Approved by authorities having jurisdiction and,
3. Acceptable to the Company.

10.2 Access, Fences, Screen Walls, Decorative Walls

Adequate access and support to accommodate line trucks or other necessary lifting and hauling equipment shall be provided and maintained by Customer to allow for maintenance, operation or replacement of equipment at all hours without notice.

The Customer shall equip each door (or other barrier) between the transformer and the nearest public access with Company provided locks or Company approved alternate.

The Company will not construct, reimburse the Customer, or accept ownership and maintenance responsibility of any fences, screen walls, or decorative walls which restrict access to Company facilities. Prior written approval shall be obtained from the Company before the Customer constructs such walls or fences. See **Drawing D10-1.**

The Company will construct or reimburse the Customer and accept ownership and maintenance responsibilities for chain link fences meeting Company specifications which are required for protection around ground type substations.

10.3 Types of Transformer Installations

The Company provides electric service from one of the following general transformer installations:

1. Pole mounted transformers, one or cluster of two or three transformers,
2. Platform mounted transformers,
3. Ground substations-fenced,
4. Padmount transformers,
5. Transformer vaults-usually on the Customer's premises.

10.4 Pad Mount Transformers

Pad mount transformers are generally provided, owned and maintained by the Company for underground service. Consult the Company for requirements and availability.

For ready and sufficient access to pad mount transformers, a minimum clearance of three feet from the side and back edges of the pad and twelve feet from the front of the transformer shall be maintained at all times. See **Drawing D10-1** for other restrictions on transformer placement. The Company, at its option, may require a barricade to be installed to prevent damage to the meters or encroachment on the clearances (driveways, parking lots, etc.)

For pad-mount transformers in non-residential applications, the Customer may be required to provide the conductors to the transformer secondary terminals.

10.5 Transformer Vaults

Transformer vaults are generally provided, owned, and maintained by the Customer on the Customer's premises and constructed in accordance with the Company's specifications and all applicable codes. Vaults should be located where they can be vented to the outside air without ducts.

In above ground vaults, venting shall be provided by louvers in the doors or combination of door louvers and wall louvers. Consult company for the total square footage of louver required. For example “free area of louver space” shall be equivalent to 5.17 sq ft (0.48 sq m) = 32.3% for 48" x 48". Acceptable louvers shall be site proof, tamper resistant, and meet all of the local structural building codes. *Proposed louver drawings and specifications shall be submitted to the Company for approval prior to placing an order with the louver manufacturer with consideration given to the supplier lead time.*

Vaults shall be provided with suitable hasps for the Company's padlock. These locks will be provided by the Company and installed by the Customer.

The Company will generally provide and install the transformers and primary cables in the Customer's vault. The Customer will provide the transformer vault, service conduits, and extend the service cables into the vault. The cable extensions shall have sufficient length of slack cable for the Company to connect them to its facilities. If the customer utilizes a buss termination instead of cables, the buss shall meet the requirements shown in **Drawing 10-2**. The customer’s switchboard/switchgear shall have lockable, separated compartment to house Company’s current transformers (CT)s and an area inside the compartment to house the potential transformers (PT)s. The meter shall always be located outside the transformer vault.

10.6 Termination of Secondary Conductors to Transformers for Non-Residential Services

Terminals for secondary conductors shall be installed as provided in § 8.10, Termination of Customer’s Conductors in Company’s Pad-Mounted Transformers.

The phasing, sizing and proper length of conductors is the sole responsibility of the Customer. The Customer shall also be responsible for properly marking the phases. The Company will generally make connection of the terminals to the connectors of the transformer.

Section 11 Customer's Motors & Capacitors

11.1 General Comments

The Company recommends that the Customer's wiring be designed so that the voltage drop between the disconnecting means or service entrance switch, and the farthest outlet is limited to not more than 2% at full load. Consult the Power Quality Standard for Electric Service §16 for the voltage sag on the primary side of a distribution transformer.

11.2 Motor - Voltage Rating

Single-phase motors manufactured under American National Standard Institute (ANSI) Standard C84.1 have 115 or 230 Volt nameplates and, if three phase, have 208, 230, 460, 2,300, 4,000, or 13,200 Volt nameplates. These are nominal voltage ratings and do not imply that the motors shall be operated at the exact voltages supplied. Motors may be supplied with nominal voltages as listed below:

Nominal Voltage Rating of Motors

Type of Service	Motor Voltage Rating - Nameplate	Nominal Supply Voltage
Single Phase	115	120
Single Phase	230	240
Three Phase	208	208
Three Phase	230	240
Three Phase	460	480
Three Phase	2,300	2,400
Three Phase	4,000	4160
Three Phase	13,200	13,800

All motors should have a manufacturer's nameplate indicating the voltage, current rating, speed and horsepower rating for continuous or intermittent use as the case may be. This nameplate should also carry the NEMA "code letter" designation of the motor. When a motor is rewound to produce a change in its original design, a new nameplate should be attached indicating the new characteristics and the name of the firm or person making the change.

11.3 Motor Starting

11.3.1 General Comments

The Customer's equipment shall have good starting characteristics to protect Customer's equipment and other Customers. The Company finds it necessary to establish certain limitations for the maximum allowable starting currents of motors to be connected to its lines.

Frequency of starting is also a factor. Considerable latitude in the amount of starting current is permissible under certain conditions, especially where the motors are started not more than two or three times per day.

Consult with the Company on the acceptability of the proposed installation.

11.3.2 Single Phase Motors

11.3.2.1 *Horsepower Rated*

Single-phase motors rated in horsepower may be started "across the line", that is, at full rated voltage by merely closing a switch. It is recommended that single phase motors larger than 1/2 hp be operated at 240 or 208 volts. Locked rotor current specified in the Table below will be permitted under the following conditions only:

- When such motors are provided with proper current limiting starting equipment; or
- When the total locked rotor currents of two or more smaller motors, which may be started simultaneously, are less than the allowable locked rotor current of the largest motor in said installation.

Allowable Starting Currents for Single Phase Motors

Equipment Rated	Maximum Allowable Locked Rotor Current
115 volts	
All Sizes	50 amps
230 volts	
2 hp. or less	60 amps
3 hp.	80 amps
5 hp.	120 amps
6-1/2 hp.	150 amps
Over 6 1/2 hp.	Consult the Company

11.3.2.2 *Air Conditioners and Heat Pumps --Btu/h Rated*

Air Conditioners up to 60,000 Btu/h (5 ton) rating will be served single phase provided they do not exceed the locked rotor current values below.

Single Phase Air Conditioning and Heat Pump Equipment Rated In BTU per Hour

Equipment Rated	Maximum Allowable Locked Rotor Current
115 volts	
All sizes	50 amps
230 volts	
20,000 BTU/H or less	60 amps
20,000 Btu/h to and including 60,000 Btu/h	60 amps plus 3 amps per 1,000 Btu/h in excess of 20,000 Btu/h (150 amps max)
Over 60,000 Btu/h	Consult the Company

11.3.3 Three Phase Motors

11.3.3.1 *Horsepower Rated*

Consult the Company for motors of 10 hp size and larger to determine the maximum value of starting current permissible at a given location. Refer to §11.6, Converters - Operation of Three Phase Motors from Single Phase Electric Supply, for phase converter operations.

11.3.3.2 *Btu/h Rated*

Where it has been determined that three-phase service will be rendered, motor starting currents shall not exceed the following values:

- 159 amps if the service voltage is 208 V,
- 150 amps if the service voltage is 230 V or,
- 75 amps if the service voltage is 460 V.

For motors exceeding these values and for units greater than 120,000 Btu/h, (10 tons), it will be necessary to provide facilities to limit the starting current to values specified by the Company for the location involved.

11.3.4 Motor Starting and Control Equipment

All motors and motor control equipment shall be installed in accordance with the Power Quality Standard for Electric Service, §16 and any other referenced code.

Auxiliary starting devices shall be used on all motors that cannot be safely subjected to full voltage while starting. The auxiliary starting device should be designed in such a way that the motor can be thrown into the running position before the motor has reached rated running speed in the starting position. Typically, electric irrigation motors above 60 hp served at three

phase, 480 volts will be started with reduced voltage starting equipment. The Company may specify the particular voltage tap setting to be used.

Motor Starters/Controllers can create harmonic disturbances that have detrimental effects on the Company's electric system and/or service to other Customers. Disturbances of this nature shall be corrected at the Customer's expense. Consult the Company.

11.4 Critical Service Motor Operation

Where continuous operation of a motor is essential, the no-voltage release should have a time delay relay, which will prevent the opening of the circuit in the event of momentary voltage fluctuation. The Company will assist the Customer in selection of an automatic starting device and any other device to hold motors on line during voltage disturbances.

11.5 Motor Protection

11.5.1 Phase Reversal Protection

Reverse phase relays are required on three phase elevator services by the NEC. Customer should install them where accidental reversal of motor rotation would cause serious inconvenience, damage, or delay. The Company shall not be responsible for any damages caused by phase reversal.

11.5.2 Over Current Protection

Motor protection is the responsibility of the Customer. The NEC requires that adequate over current protection be provided in each phase on all motor installations.

11.5.3 Partial or Complete Loss of One or More Phases

The Customer shall ensure complete protection against Partial or Complete Loss of One or More Phases or "single-phasing" on all three-phase motors.

The Company operates the three-phase distribution system with single-phase devices Single phasing on the distribution system is necessary at times for fault clearing and switching and occurs occasionally due to unforeseen circumstances. The Company shall not be held responsible or liable for damage to the Customer's installation due to such causes in the inherent operation of their distribution system.

11.6 Converters - Operation of Three Phase Motors from Single Phase Electric Supply

The phase converter is used to simulate a three-phase voltage from a single-phase source. One converter is recommended for each three-phase motor. The phase converter shall be matched with both the motor horsepower and the motor application. Special consideration shall be given to the type of phase converter being used on the motor. The Company shall be consulted prior to the installation of a phase converter.

11.7 Customer’s Capacitors and Other Reactive Equipment

It is important to maintain the power factor of any load as near unity as possible. This may suggest the installation of capacitors.

The Customer shall provide automatic disconnecting of capacitors when the equipment causing the low power factor is not operating.

Where large capacity motors are to be installed, consideration should be given to the use of synchronous type equipment.

Section 12 Customer's Special Equipment

12.1 General Comments

The Customer, early in the design phase, shall submit to the Company information and specifications of any equipment that might cause interference with the service to the Customer or to other Customers. Customer shall also present proposed remedies. The Company will not connect electric service until all problems that may cause interference with other Customers has been remedied by the Customer. See §16 Power Quality.

The Company reserves the right to inspect and test any equipment connected to its lines and to require that such equipment be provided with nameplates showing the voltage, phase, full-load amperes, maximum current, maximum kVA and such other information as may be necessary to determine the operating characteristics of the equipment.

The Company has the right to suspend service for interference with the use of service of others.

12.2 Customer's Sensitive Equipment

Equipment such as computers and other sensitive electronic devices may be adversely affected by minor voltage variations. It is the Customer's responsibility to provide any uninterruptible power supplies, voltage regulating equipment or other protective apparatus for these sensitive devices and equipment.

12.3 Antennae & Dishes

Antennae and Dishes for radio, radio transmitter, television, etc. shall never be erected over, under, or in close proximity of either side of the Company's power lines or other wires carrying electric current. Nor should they be constructed in such a place where they may accidentally fall into energized wires. Wires shall not cross over, or under Company's electric conductors. Such location of the Customer's apparatus may result in serious accidents, damage to the equipment, or poor reception. Where proximity to electric power service conductors cannot be avoided, a ten-foot minimum clearance is required. The attachment of antenna/ dishes systems to poles or service masts carrying the Company's conductors is strictly prohibited. The Company will remove such attachments upon discovery, and the responsible party will be billed for all removal costs.

12.4 CATV and Carrier Installations

Service for the operation of transmitting apparatus will be furnished under conditions specified by the Company and conditions of use of such service shall not cause undue disturbance of electric service to other Customers.

Where necessary, the Customer shall install suitable filters or other devices to prevent radio, telephone, television, etc. interference by the electrical power supply.

Consult the Company for installation of community antenna television (CATV) systems on Company poles. The Customer shall sign a Service Agreement and the Company will designate the service locations and specifications for attachment and operation on Company poles.

12.5 Radio and Television Interference

Some equipment may cause unsatisfactory operation of television, radios and other electronic equipment. The Customer is responsible for designing and operating their equipment to FCC standards and avoids causing interference and damage to utilities and others equipment. An U. L. approved interference suppresser can eliminate or minimize this interference. See §16.

12.6 Facilities for Highly Fluctuating or Special Loads

Highly fluctuating loads such as welders, X-ray machines, and motors with unusual or frequent starting requirements may interfere with other Customers' electric service. See § 5.5

Section 13 Arc Flash

You may request Arc Flash information online at Entergy.com or call Entergy at 1-800-ENTERGY (1-800-368-3749)

Section 14 Consumer Owned Generators (not connected to utility)

14.1 General

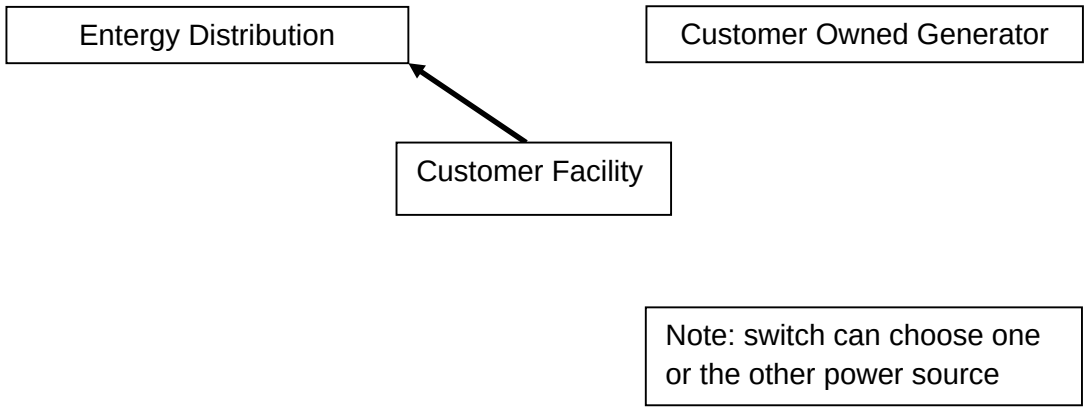
The Customer may have generators that are NEVER connected to the Entergy distribution system.

14.2 Electrical Emergency or Standby Systems not connected

An example is an emergency generator where electric cords are run directly to this generator from refrigerator, free standing lights, appliances etc. Refer to your local inspectors in this case and manufacturer's operating guidelines.

14.3 Permanently Installed Generators (not connected to utility)

Example: A house/building has a switch, rated for the customer's generator size that does not allow electricity to flow from the generator into the facility when the facility is connected to the grid.



No Customer device shall be allowed between meter and socket. (See §9.1.2.1 #6)

Refer to your local inspectors in this case.

There is never a path from these generators to the Company's distribution grid.

14.4 Temporary Connection of Emergency Generators

The Customer shall supply an open and visible break verifiable by Company personnel.~~,~~ The location shall be on the outside of the facility accessible to Company personnel at all hours. A main disconnect in the off position qualifies as an open break.

Failure to have a visible break is reason for being disconnected, and subjects Customer to liability for resulting injury to people or property.

14.5 Customer Owned Meter Socket Adapter Connection Devices

14.6 General

For installation of a meter socket adapter a licensed electrician shall be consulted and coordination with the Company may be needed.

Installation is strictly limited to one adapter only between the meter socket and meter; stacking of multiple adapters is not permitted. Adapters shall not extend beyond meter pan edges, shall not interfere with adjacent meter pans, and shall not block walkways or adjacent areas.

Installation of a ring-type locking device shall secure the meter to the meter socket adapter.

Power source adapters are not allowed.

Customers may install one of three different meter socket adapter types that follow ANSI C12.7 and C12.10:

1. *Transfer switches meeting UL414 and UL1008M.*
2. *DER connector meeting UL414.*
3. *Surge arresters meeting UL414 and UL1449.*

Transfer switches and DER connectors shall meet UL1449 if surge protection is included.

All three devices shall meet UL2900 if communications are included.

All three devices shall meet UL916 if energy management is included.



Section 15 Generators Interconnected to and Operating in Parallel with the Utility Grid

Examples include Fossil, Solar, Wind, Hydro, Geothermal, Biomass, Fuel Cell, Micro turbine, others

An Interconnection Agreement with the Company is required before the Customer connects an electrical generator directly to the distribution system or to a building, house, etc. that is connected to the distribution system for any length of time from a fraction of a second to hours, days, years.

The Customer shall consult the Company early in the design phase.

For complete information refer to the Company's policies for Connecting Electric Generators to the Entergy Distribution System available online at www.Entergy.com or calling Entergy at 1-800-ENTERGY (1-800-368-3749).

Generation facilities, including Company provided, shall be permitted to interconnect and operate in parallel with the Company's distribution system provided that all of the following are met throughout the life of the interconnection:

1. The safety of the general public and the personnel and equipment of the Company shall in no way be reduced or impaired as a result of the interconnection.
2. The quality, reliability, and the availability of service to the Company's other Customers shall not be diminished or impaired as a result of the interconnection.
3. The generator is connected through a lockable switch which has an open and visible break verifiable by Company personnel. The Customer shall supply a disconnect method acceptable to the Company. The location shall be on the outside of the facility accessible to Company personnel at all hours. Customer, at his own expense, shall meet all safety and performance standards established by local and national electrical codes including the National Electrical Code (NEC), the Institute of Electrical and Electronics Engineers (IEEE), the National Electrical Safety Code (NESC), and Underwriters Laboratories (UL) and any other relevant standards.
4. A written interconnection agreement between the Company and Customer covering parallel operation of Customer generation and the proper coordination of protective devices has been executed and is in force. The Company may enter the Customer's premises to inspect the Customer's protective devices and read or test the meter. The Company may disconnect the interconnection facilities without notice if the Company reasonably believes a hazardous condition exists and such immediate action is necessary to protect persons, or the Company's facilities, or property of others from damage or interference caused by the Customer's facilities, or lack of properly operating protective devices.

Section 16 Power Quality Parameters for Customer Equipment Specifications

The best time to address power quality issues is during the design stage of a new facility or plant expansion. The Power Quality Standard for Electric Service was developed to aid Customers in specifying new equipment and in determining the need for power conditioning equipment for critical systems. See § 1.3 for the Internet location. The Company's and other Customers' equipment shall not be adversely impacted by a new Customer's facilities or an existing Customer's planned expansion.

The Company should be consulted early in the design phase for new installations and load additions to address specific installation requirements for new facilities and planned expansions.

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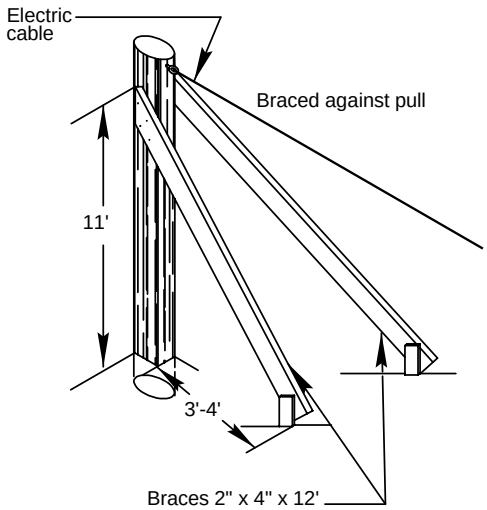
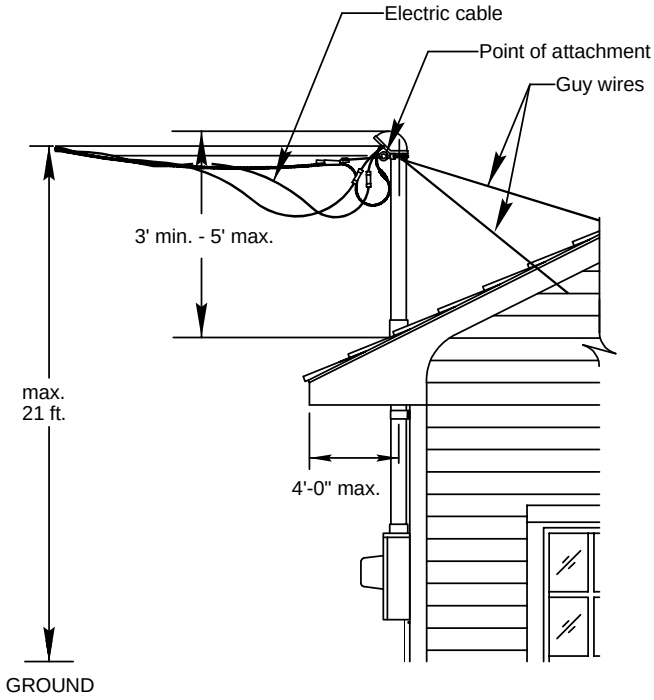


POLE



MAST ABOVE ROOF

CALL 811 TWO BUSINESS DAYS BEFORE YOU DIG

In locations with underground facilities, the Customer shall notify One Call and shall have One Call locate all underground facilities before digging. It shall be the responsibility of the Customer to stay clear of all underground facilities.

NOTES:

1. Bracing is required if a pole or riser is unstable, deflects, bends, or moves when shaken or a ladder is put against it or bends when wires are attached.

2. Consult the Company for specific requirements.

NO.	DATE:	REVISION	BY:	APPR:
2	11-3-25	REVISED PER CUSTOMER INSTALLATIONS 2025	ERG	GB
1	02/13	THIS DRAWING ADDED-NEW	JED	

ENTERGY SERVICES, INC.

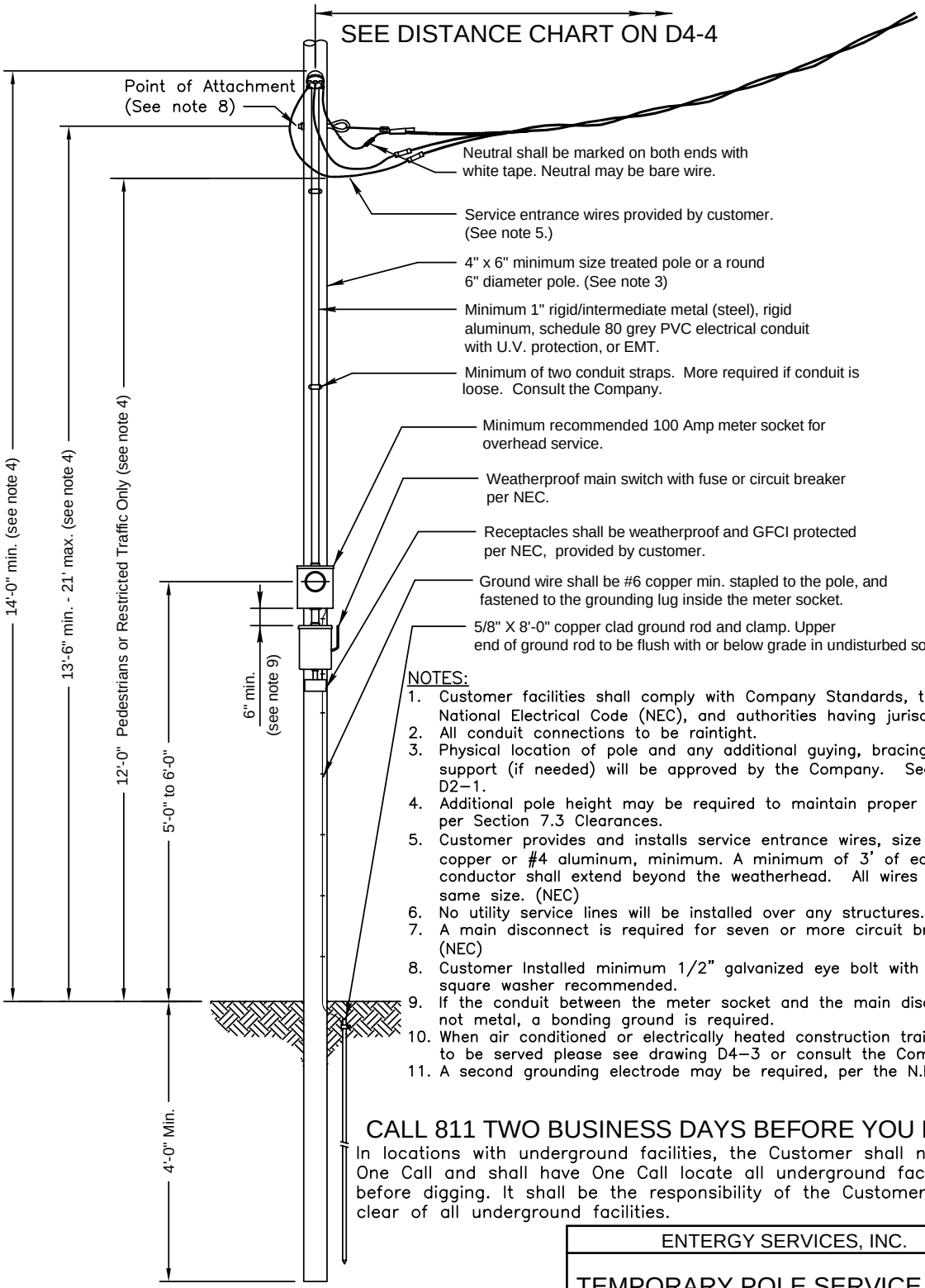
BRACING

APPROVED BY:	GB	DATE:	02/26/2013
CHECKED BY:	EB	SCALE:	None
DRAWN BY:	krich95		

entergy

No. D2-1

PLOT 1=1 SH. 1 OF 1



NOTES:

1. Customer facilities shall comply with Company Standards, the National Electrical Code (NEC), and authorities having jurisdiction.
2. All conduit connections to be raintight.
3. Physical location of pole and any additional guying, bracing, or support (if needed) will be approved by the Company. See drawing D2–1.
4. Additional pole height may be required to maintain proper clearance per Section 7.3 Clearances.
5. Customer provides and installs service entrance wires, size #6 copper or #4 aluminum, minimum. A minimum of 3' of each conductor shall extend beyond the weatherhead. All wires should be same size. (NEC)
6. No utility service lines will be installed over any structures.
7. A main disconnect is required for seven or more circuit breakers. (NEC)
8. Customer Installed minimum 1/2" galvanized eye bolt with 2"x2" square washer recommended.
9. If the conduit between the meter socket and the main disconnect is not metal, a bonding ground is required.
10. When air conditioned or electrically heated construction trailers are to be served please see drawing D4–3 or consult the Company.
11. A second grounding electrode may be required, per the N.E.C.

CALL 811 TWO BUSINESS DAYS BEFORE YOU DIG

In locations with underground facilities, the Customer shall notify One Call and shall have One Call locate all underground facilities before digging. It shall be the responsibility of the Customer to stay clear of all underground facilities.

911 address shall be a minimum 3" lettering permanently marked on meter enclosure, pole, or durable material attached to pole and should be visible from street. (See section 3.4)

NO.	DATE:	REVISION	BY:	APPR:
3	11-3-25	REVISED PER CUSTOMER INSTALLATIONS 2025	ERG	EB
2	06/15/17	ADDED POLE DEPTH DIMENSION	ERG	
1	01/13	REVISION OF DRAWING SS4.5-1	JED	

ENTERGY SERVICES, INC.

TEMPORARY POLE SERVICE FROM AN OVERHEAD SOURCE

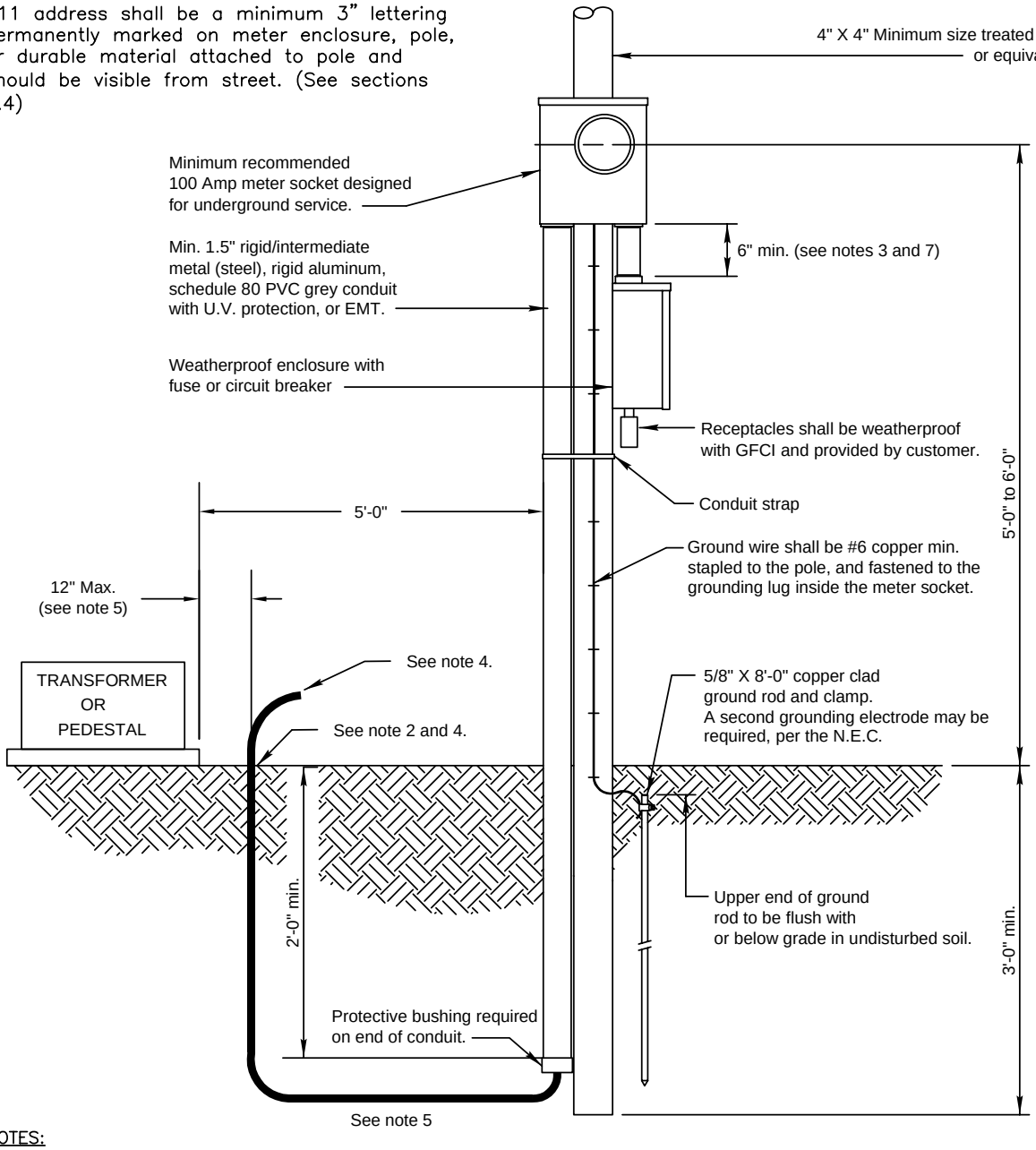
APPROVED BY:	GB	DATE:	01/10/2013
CHECKED BY:	EB	SCALE:	None
DRAWN BY:	krich95		

entergy

No. D4-1

PLOT 1=1 SH. 1 OF 1

911 address shall be a minimum 3" lettering permanently marked on meter enclosure, pole, or durable material attached to pole and should be visible from street. (See sections 3.4)



NOTES:

1. Customer facilities shall comply with Company Standards, the National Electrical Code (NEC), and authorities having jurisdiction.
2. Customer provides minimum wire size of #6 copper or #4 aluminum. All conduit connections to be weatherproof.
3. Service wire suitable for direct burial to be furnished, installed and maintained by customer. Customer to tail out enough service wire to reach inside of pedestal or transformer lugs.
4. Customer to trench to within 12" of pedestal or transformer. Minimum depth of trench 24".
5. Location of Customer's underground cables shall be visibly marked by customer prior to Company energizing service.
6. If the conduit between the meter socket and the main disconnect is not metal, a bonding ground is required.
7. When air conditioned or electrically heated construction trailers are to be served, please see drawing D4–5 or consult the Company.

CALL 811 TWO BUSINESS DAYS BEFORE YOU DIG

In locations with underground facilities, the Customer shall notify One Call and shall have One Call locate all underground facilities before digging. It shall be the responsibility of the Customer to stay clear of all underground facilities.

NO.	DATE:	REVISION	BY:	APPR:
3	11-3-25	REVISED PER CUSTOMER INSTALLATIONS 2025	ERG	EB
2	06/15/17	ADDED SOURCE TO POLE DIMENSION, RENUMBERED NOTES.	ERG	
1	02/13	REVISION OF DRAWING SS4.5-2	JED	

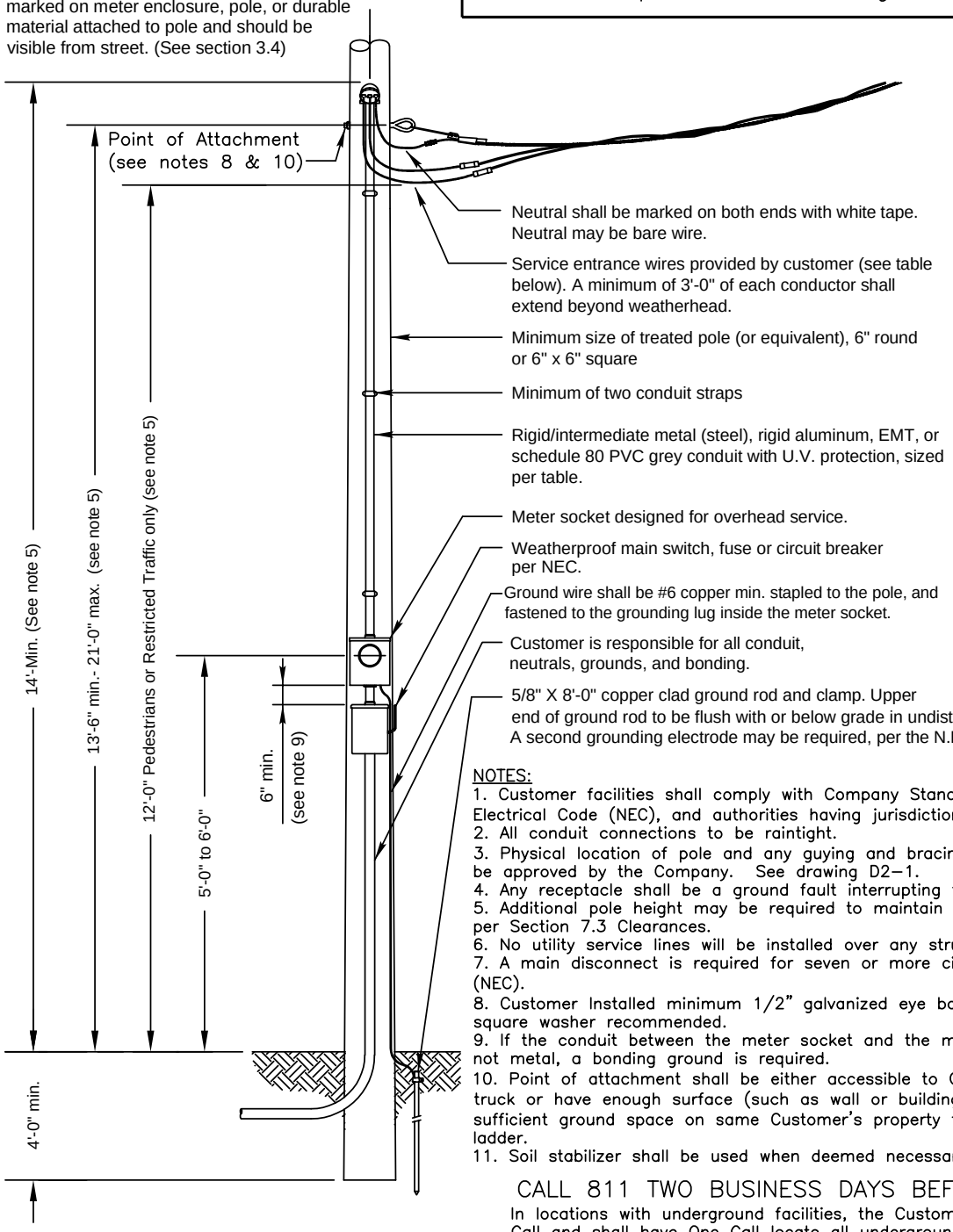
ENTERGY SERVICES, INC.

TEMPORARY POLE SERVICE FROM AN UNDERGROUND SOURCE

APPROVED BY:	GB	DATE:	03/11/2013
CHECKED BY:	EB	SCALE:	None
DRAWN BY:	krich95		
entergy		No.	D4-2
		PLOT	1=1
		SH.	1 OF 1

911 address shall be a minimum 3" lettering permanently marked on meter enclosure, pole, or durable material attached to pole and should be visible from street. (See section 3.4)

Shall meet requirements of drawings D4–4 and D9–2.



NOTES:

1. Customer facilities shall comply with Company Standards, the National Electrical Code (NEC), and authorities having jurisdiction.
2. All conduit connections to be raintight.
3. Physical location of pole and any guying and bracing (if needed) will be approved by the Company. See drawing D2–1.
4. Any receptacle shall be a ground fault interrupting type.
5. Additional pole height may be required to maintain proper clearance per Section 7.3 Clearances.
6. No utility service lines will be installed over any structures.
7. A main disconnect is required for seven or more circuit breakers (NEC).
8. Customer Installed minimum 1/2" galvanized eye bolt with 2" x 2" square washer recommended.
9. If the conduit between the meter socket and the main disconnect is not metal, a bonding ground is required.
10. Point of attachment shall be either accessible to Company's bucket truck or have enough surface (such as wall or building structure) and sufficient ground space on same Customer's property to safely support a ladder.
11. Soil stabilizer shall be used when deemed necessary by Company.

CALL 811 TWO BUSINESS DAYS BEFORE YOU DIG

In locations with underground facilities, the Customer shall notify One Call and shall have One Call locate all underground facilities before digging. It shall be the responsibility of the Customer to stay clear of all underground facilities.

Minimum Customer Wiring Size - Residence Single Phase **

METER SIZE	CONDUIT SIZE	Current carrying & neutral wire size (per NEC) *		COPPER GROUND WIRE SIZE**
		ALUMINUM	COPPER	
100 Amp	1.5"	#2	#4	#6 *
200 Amp	2"	4/0	2/0	#4
320 Amp	3"	500	350	#2

* Wire sizes based upon customer breaker size
** For 3Ø, consult the company Commercial & Industrial. Wire sizes are typically larger.

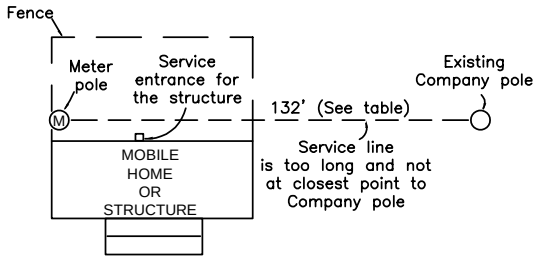
NO.	DATE:	REVISION	BY:	APPR:
3	11-3-25	Revised per customer installations 2025	ERG	EB
2	06/15/17	Revised dimensions and added note 11.	ERG	
1	01/13	REVISION OF DRAWING SS4.6-1	JED	

ENTERGY SERVICES, INC.

SERVICE TO PERMANENT POLE LOCATION FROM AN OVERHEAD SOURCE (EXAMPLE MOBILE HOMES)

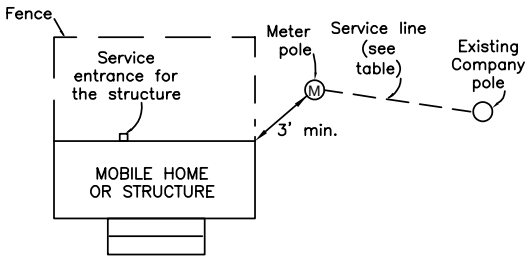
APPROVED BY:	GB	DATE:	01/09/2013
CHECKED BY:	EB	SCALE:	None
DRAWN BY:	krich95		
entergy		No.	D4-3
		PLOT 1=1	SH. 1 OF 1

WRONG POSITION TO SET METER POLE



Meter point shall not be behind the mobile home on inside of fence.

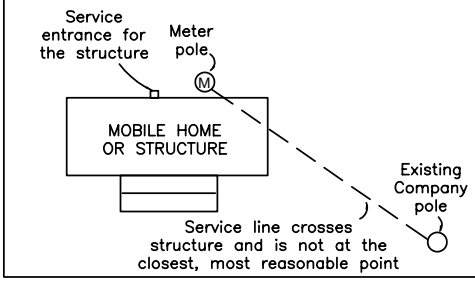
METER POLE SET CORRECTLY



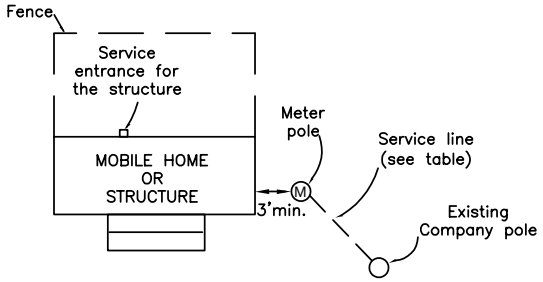
Meter point shall be outside of fence and clear of shrubs.

SERVICE CABLE IS NOT ALLOWED ABOVE OR BELOW A STRUCTURE INCLUDING CARPORT.

WRONG POSITION TO SET METER POLE

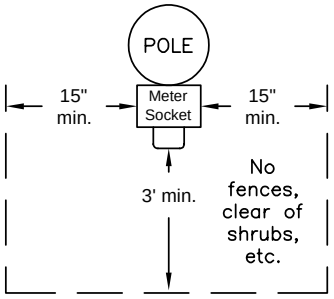


METER POLE SET CORRECTLY



Service line does not cross over structure

METER CLEARANCES



CAUTION:
No gas meters within a 3' radius of meter enclosure.
Meter pole shall be a minimum of 3 ft. from structure.

Maximum Recommended Distance (NOTE 3)

Amps	Length
100	100'
200	75'
320	40'

CALL 811 TWO BUSINESS DAYS BEFORE YOU DIG

In locations with underground facilities, the Customer shall notify One Call and shall have One Call locate all underground facilities before digging. It shall be the responsibility of the Customer to stay clear of all underground facilities.

Notes:

1. Customer facilities shall comply with Company Standards, the NEC, and authorities having jurisdiction.
2. The customer is responsible for clearing and maintaining all right of way.
3. The Company service cable shall not go over the top of the mobile home or structure. Should there not be a clear path to the meter pole, or the maximum distance is exceeded, service will not be rendered.

NO.	DATE:	REVISION	BY:	APPR:
3	11-3-25	REVISED PER CUSTOMER INSTALLATIONS 2025	ERG	EB
2	06/15/17	Revised Meter Pole Set Correctly Details.	ERG	
1	10/12	REVISION OF DRAWING SS4.6-2	JED	

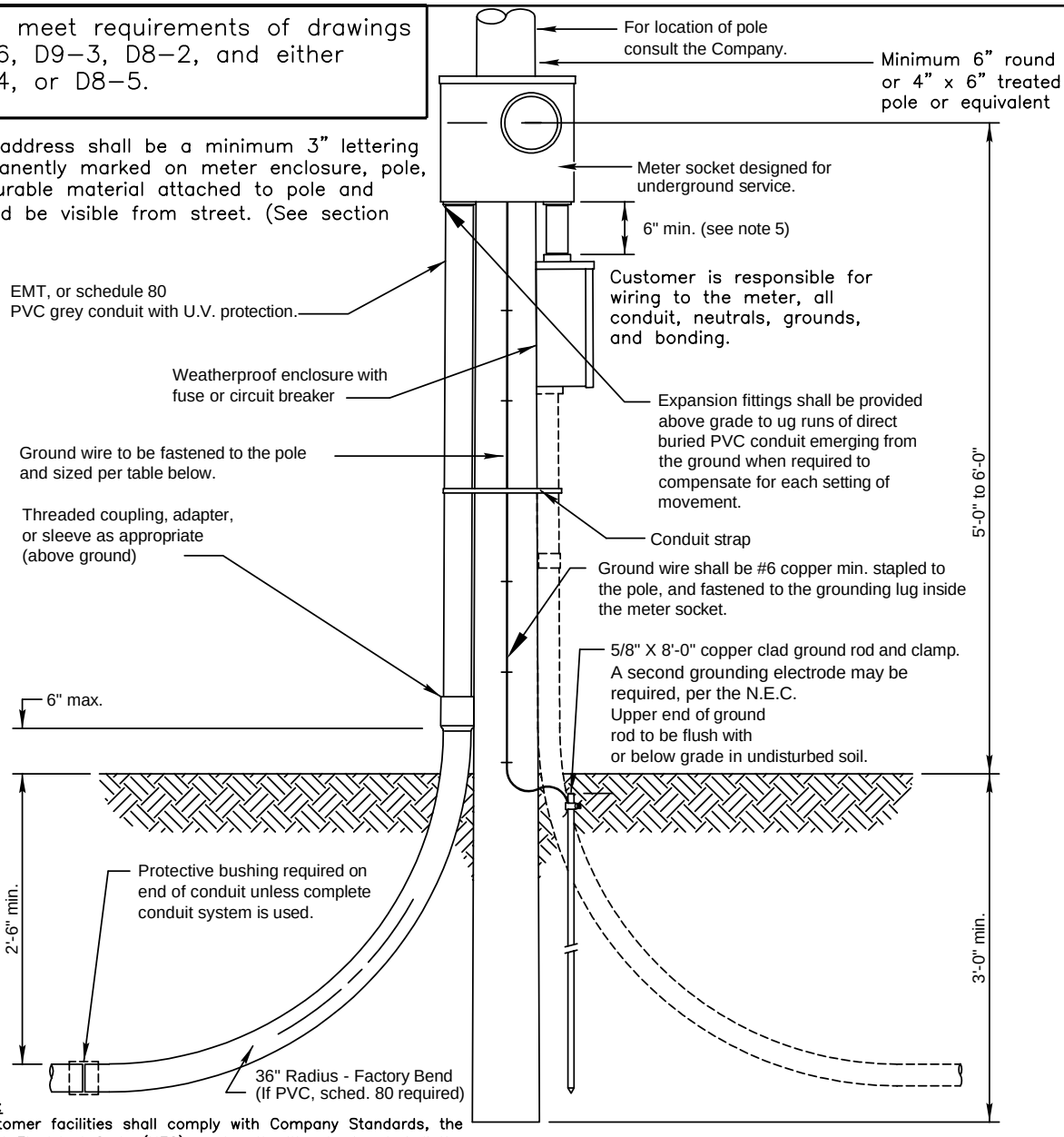
ENTERGY SERVICES, INC.

PERMANENT POLE – OVERHEAD SERVICE DETAILS FOR SINGLE MOBILE HOME INSTALLATION OR STRUCTURE

APPROVED BY:	GB	DATE:	10/30/2012
CHECKED BY:	EB	SCALE:	None
DRAWN BY:	krich95		
entergy	No. D4-4		
	PLOT 1=1	SH. 1 OF 1	

Shall meet requirements of drawings D4–6, D9–3, D8–2, and either D8–4, or D8–5.

911 address shall be a minimum 3" lettering permanently marked on meter enclosure, pole, or durable material attached to pole and should be visible from street. (See section 3.4)



NOTES:
1. Customer facilities shall comply with Company Standards, the National Electrical Code (NEC), and authorities having jurisdiction.
2. All conduit connections to be raintight.
3. When installing conduit system, customer shall extend conduit to pole or underground system. Consult the company for details. (See drawings D8–4 and D8–5).
4. Location of underground cables shall be identified prior to digging.
5. If the conduit between the meter socket and the main disconnect is not metal, a bonding ground is required.

Minimum Customer Wiring Size - Family Residence Single Phase **

METER SIZE	CONDUIT SIZE	Current carrying & neutral wire size (per NEC)		GROUND WIRE SIZE
		ALUMINUM	COPPER	
100 Amp	2"	#2	#4	#6 *
200 Amp	2.5" ***	4/0	2/0	#4
320 Amp	3"	500	350	#2

*** Wire sizes based upon customer breaker size.**
**** For 3Ø, consult the Company Commercial & Industrial. Wire sizes are typically larger.**
*****Arkansas only 2" permitted.**

CALL 811 TWO BUSINESS DAYS BEFORE YOU DIG

In locations with underground facilities, the Customer shall notify One Call and shall have One Call locate all underground facilities before digging. It shall be the responsibility of the Customer to stay clear of all underground facilities.

NO.	DATE:	REVISION	BY:	APPR:
3	11-3-25	REVISED PER CUSTOMER INSTALLATIONS 2025	ERG	EB
2	06/15/17	Revised notes	ERG	
1	02/13	REVISION OF DRAWING SS4.6-3	JED	

ENTERGY SERVICES, INC.

PERMANENT POLE - UNDERGROUND SERVICE TO LOCATION (EXAMPLE: MOBILE HOME)

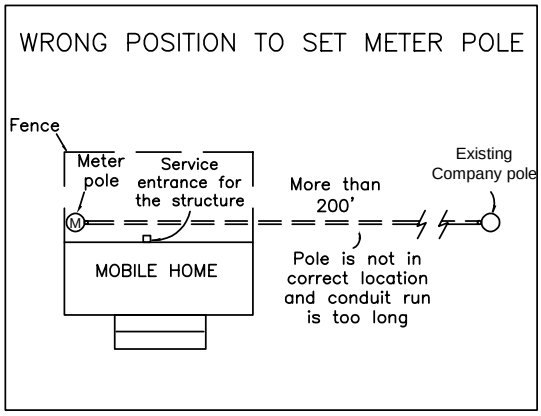
APPROVED BY:	GB	DATE:	02/20/2013
CHECKED BY:	EB	SCALE:	3/4"=1'-0"
DRAWN BY:	krich95		

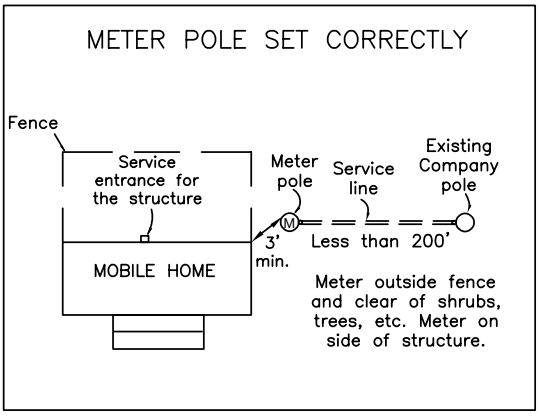
..\..\..\Desktop\entergy logo.png

No. D4-5

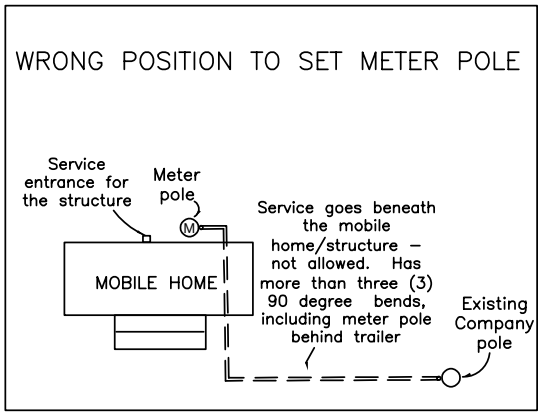
PLOT 1=1 SH. 1 OF 1

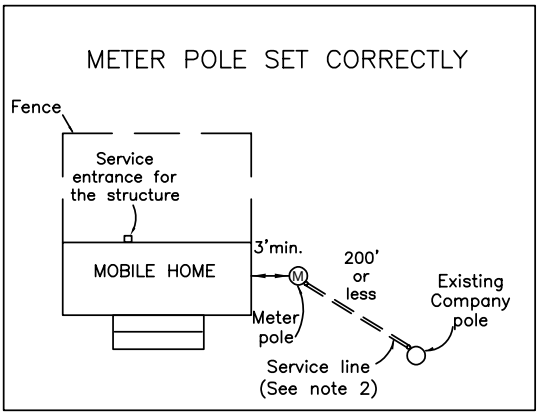
Shall meet requirements of drawings D4–5 and D9–3.

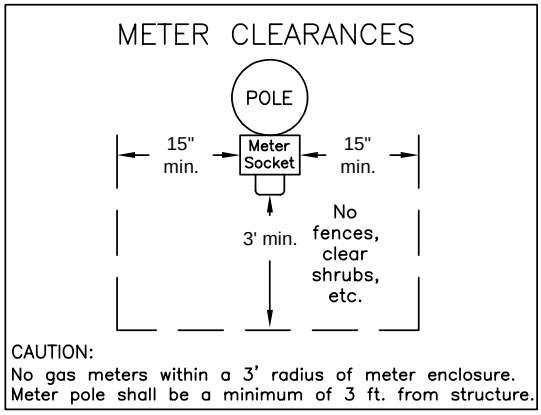


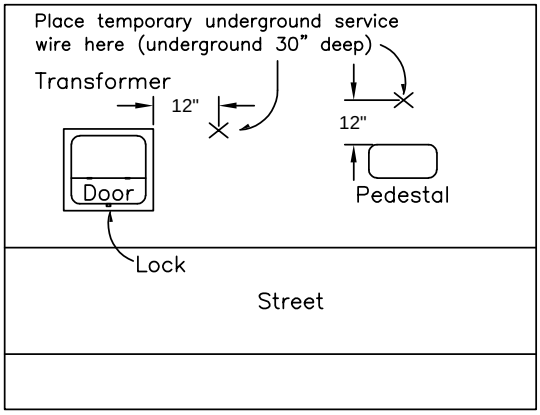


A Company approved Customer furnished and installed pedestal box may be required if length is more than 200' or if conduit installation has more than three (3) 90° bends, including bends in conduit on meter pole and utility pole.









Call 811 Two Business Days Before You Dig

In locations with underground facilities, the Customer shall notify One Call and shall have One Call locate all underground facilities before digging. It shall be the responsibility of the Customer to stay clear of all underground facilities.

Notes:

1. Customer facilities shall comply with Company Standards, the National Electrical Code (NEC), and authorities having jurisdiction.
2. When installing conduit system, customer shall extend conduit to pole or underground system. Consult the company for details.
3. Company owned or maintained underground service shall not be installed beneath a mobile home or any other structure.
4. The customer is responsible for clearing and maintaining all right of way.

NO.	DATE:	REVISION	BY:	APPR:
3	11-3-25	REVISED PER CUSTOMER INSTALLATIONS 2025	ERG	EB
2	06/15/17	Revised Meter pole Set Correctly Details	ERG	
1	10/12	REVISION OF DRAWING SS4.6-4	JED	

ENTERGY SERVICES, INC.

PERMANENT POLE – UNDERGROUND SERVICE DETAILS FOR SINGLE MOBILE HOME OR STRUCTURE

APPROVED BY:	GB	DATE:	10/23/2012
CHECKED BY:	EB	SCALE:	None
DRAWN BY:	krich95		

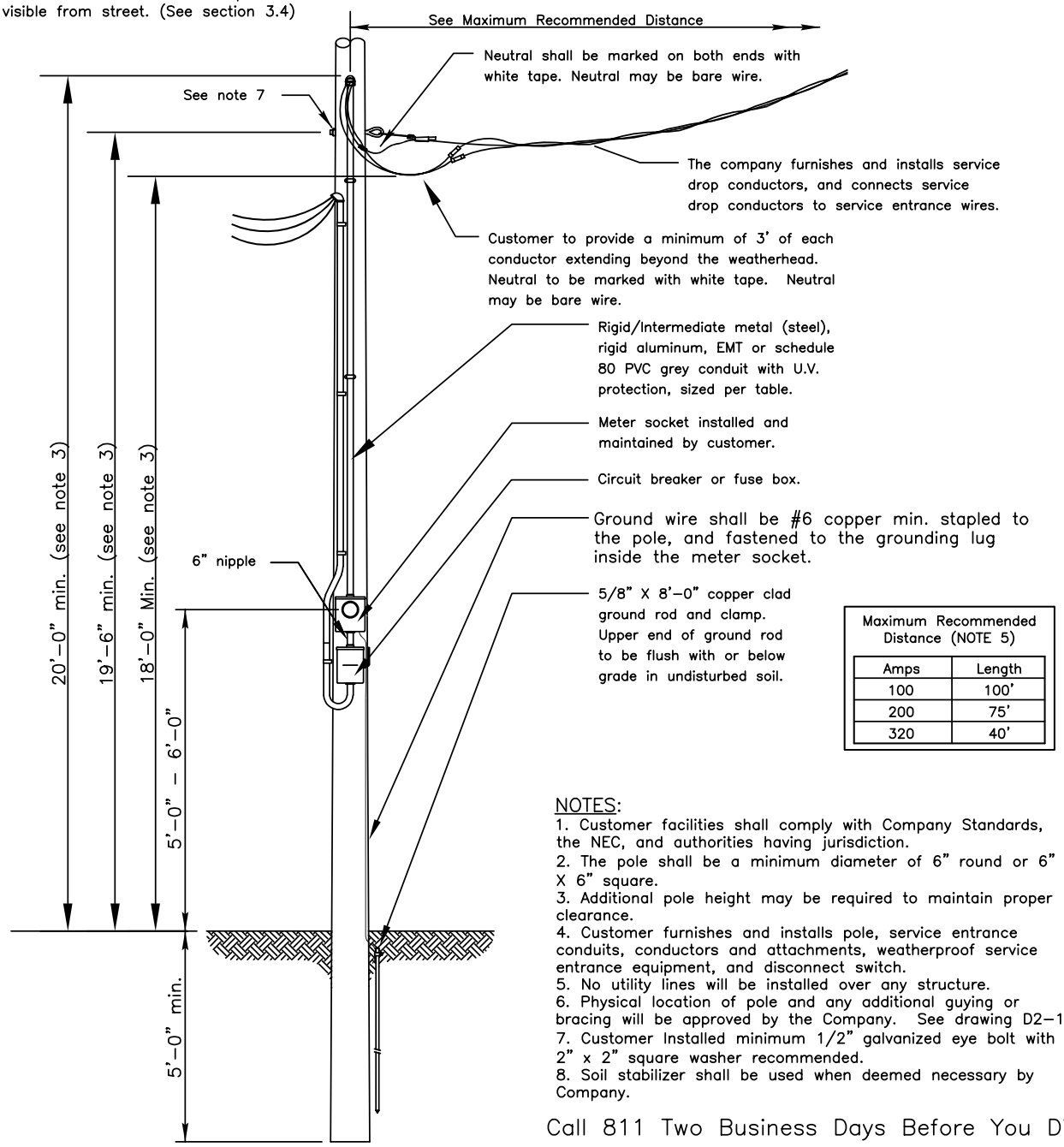
entergy

No. D4-6

PLOT 1=1 SH. 1 OF 1

911 address shall be a minimum of 3" lettering permanently marked on meter enclosure, pole, or durable material attached to pole and should be visible from street. (See section 3.4)

Shall meet requirements of drawings D4–4 and D9–2.



Maximum Recommended Distance (NOTE 5)	
Amps	Length
100	100'
200	75'
320	40'

NOTES:
1. Customer facilities shall comply with Company Standards, the NEC, and authorities having jurisdiction.
2. The pole shall be a minimum diameter of 6" round or 6" X 6" square.
3. Additional pole height may be required to maintain proper clearance.
4. Customer furnishes and installs pole, service entrance conduits, conductors and attachments, weatherproof service entrance equipment, and disconnect switch.
5. No utility lines will be installed over any structure.
6. Physical location of pole and any additional guying or bracing will be approved by the Company. See drawing D2–1.
7. Customer Installed minimum 1/2" galvanized eye bolt with 2" x 2" square washer recommended.
8. Soil stabilizer shall be used when deemed necessary by Company.

Call 811 Two Business Days Before You Dig

In locations with underground facilities, the Customer shall notify One Call and shall have One Call locate all underground facilities before digging. It shall be the responsibility of the Customer to stay clear of all underground facilities.

Minimum Customer Wiring Size - Residence Single Phase **				
METER SIZE	CONDUIT SIZE	Current carrying & neutral wire size (per NEC) *		GROUND WIRE SIZE
		ALUMINUM	COPPER	
100 Amp	1.5"	#2	#4	#6 *
200 Amp	2"	4/0	2/0	#4
320 Amp	3"	500	350	#2

* Wire sizes based upon customer breaker size
** For 3Ø, consult the Company Commercial & Industrial. Wire sizes are typically larger.

NO.	DATE:	REVISION	BY:	APPR:
3	11–3–25	REVISED PER CUSTOMER INSTALLATIONS 2025	ERG	EB
2	06/15/17	Revised notes as needed.	ERG	
1	01/13	REVISION OF DRAWING SS4.8–1	JED	

ENTERGY SERVICES, INC.

TYPICAL INSTALLATION – CENTRAL SERVICE POLE (FARMS & MULTIPLE SERVICE DROPS)

APPROVED BY: GB	DATE: 01/09/2013
CHECKED BY: EB	SCALE: NONE
DRAWN BY: krich95	

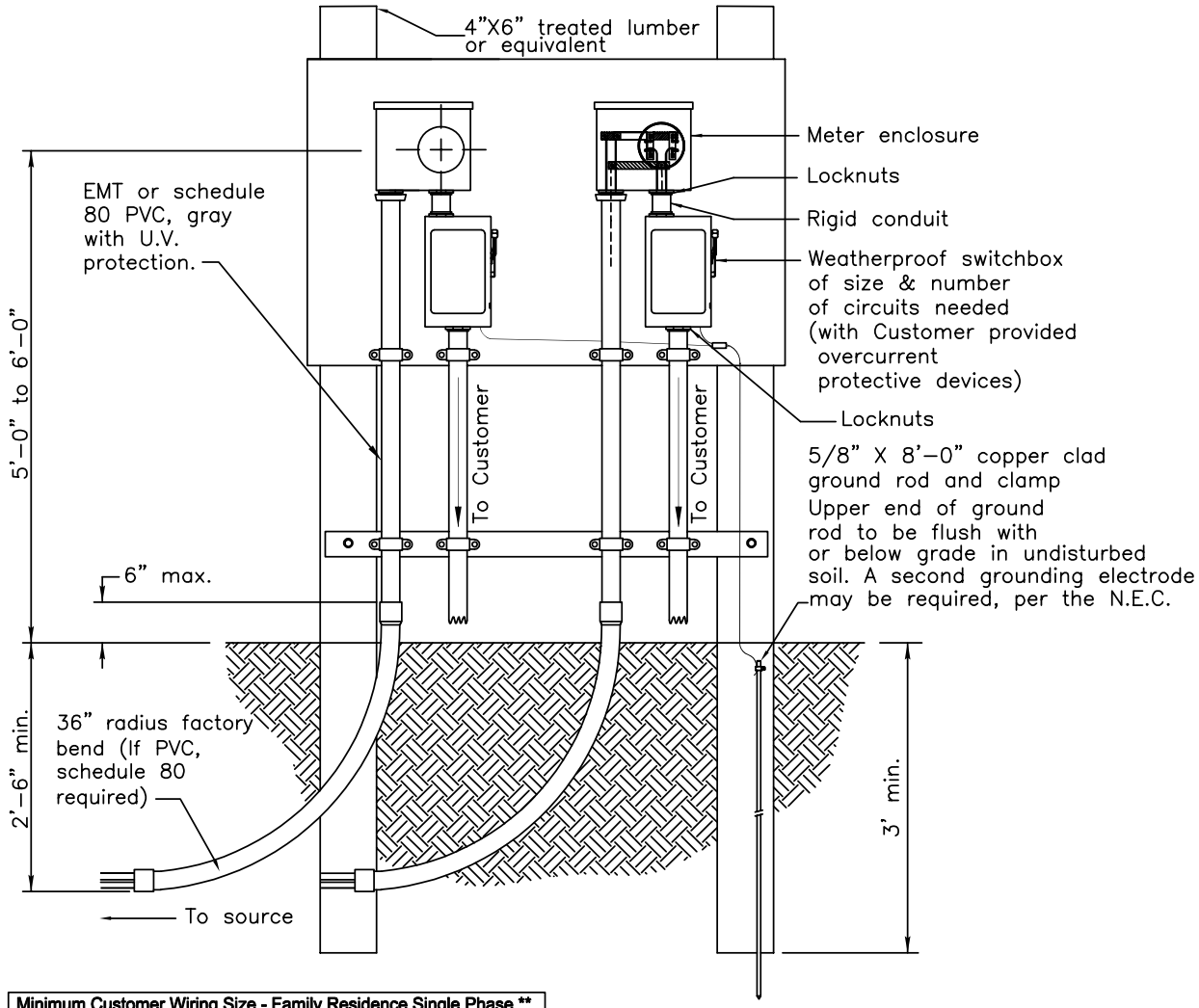
entergy

No. D4–7

PLOT 1=1 | SH. 1 OF 1

Shall meet requirements of drawingsD4–10, D8–4, and D9–3.

911 address shall be a minimum 3" lettering marked on meter enclosure, pole, or durable material attached to pole and should be visible from street. (See section 3.4)



Minimum Customer Wiring Size - Family Residence Single Phase **				
METER SIZE	CONDUIT SIZE	Current carrying & neutral wire size (per NEC)		GROUND WIRE SIZE
		ALUMINUM	COPPER	
100 Amp	2"	#2	#4	#6 *
200 Amp	2.5" ***	4/0	2/0	#4
320 Amp	3"	500	350	#2

*** Wire sizes based upon customer breaker size.**
**** For 3Ø, consult the Company Commercial & Industrial. Wire sizes are typically larger shall meet requirements of D4-4 and D9-9.**
*****Arkansas only 2" permitted.**

NOTES:
1. Customer facilities shall comply with Company Standards, the National Electrical Code (NEC), and authorities having jurisdiction.
2. This installation applies to two (2) or more meters at one location. Maximum six (6) meters allowed per installation (3 per side).
3. See section 4.7 for additional information on mobile home parks.
4. If a current transformer (CT) installation is required, see D9–6.
5. Each meter and disconnect shall be plainly marked to designate unit served.
6. The Customer shall install 80lb test nonmetallic (manila or grass) pull line or bull tape in the conduit.
7. All material shall be suitable for outdoor use.
8. Equipment to be installed at a location designated by the Company.

CALL 811 TWO BUSINESS DAYS BEFORE YOU DIG

In locations with underground facilities, the Customer shall notify One Call and shall have One Call locate all underground facilities before digging. It shall be the responsibility of the Customer to stay clear of all underground facilities.

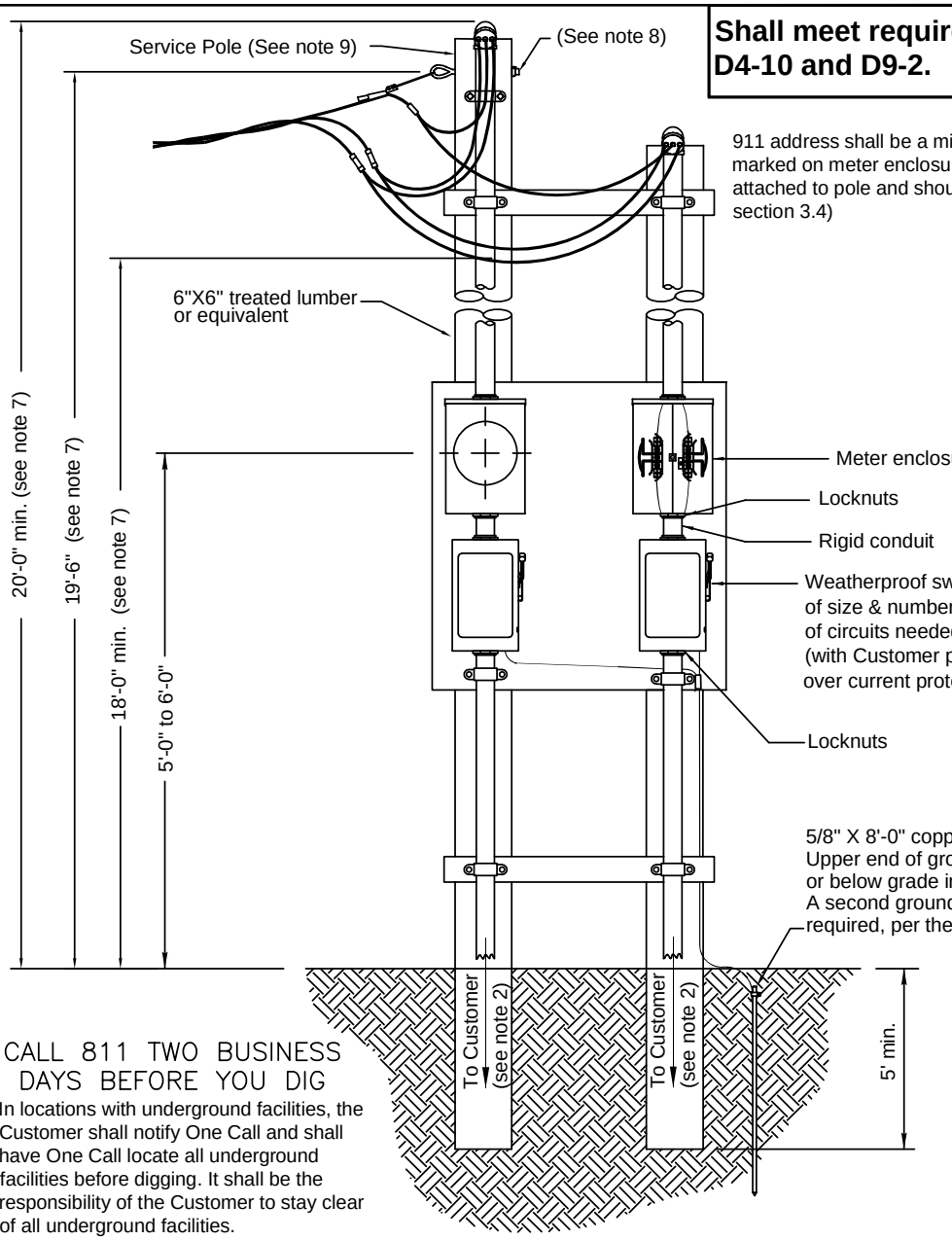
NO.	DATE:	REVISION	BY:	APPR:
3	11–3–25	REVISED PER CUSTOMER INSTALLATIONS 2025	ERG	EB
2	06/15/17	Updated Meter Enclosure Diagram	ERG	
1	10/12	REVISION OF DRAWING SS4.7–2	JED	

ENTERGY SERVICES, INC.

MULTIPLE METER INSTALLATION FOR MOBILE HOME 120/240 VOLT UNDERGROUND SERVICE

APPROVED BY: GB	DATE: 10/24/2012
CHECKED BY: EB	SCALE: NONE
DRAWN BY: krich95	
entergy	No. D4–8
	PLOT 1=1 SH. 1 OF 1

Shall meet requirements of drawings D4-10 and D9-2.



CALL 811 TWO BUSINESS DAYS BEFORE YOU DIG

In locations with underground facilities, the Customer shall notify One Call and shall have One Call locate all underground facilities before digging. It shall be the responsibility of the Customer to stay clear of all underground facilities.

Minimum Customer Wiring Size - Residence Single Phase **				
METER SIZE	CONDUIT SIZE	Current carrying & neutral wire size (per NEC) *		GROUND WIRE SIZE
		ALUMINUM	COPPER	
100 Amp	1.5"	#2	#4	#6 *
200 Amp	2"	4/0	2/0	#4
320 Amp	3"	500	350	#2

* Wire sizes based upon customer breaker size
** For 3Ø, consult the Company Commercial & Industrial. Wire sizes are typically larger.

NOTES:
1. Customer facilities shall comply with Company Standards, the National Electrical Code (NEC), and authorities having jurisdiction.
2. This installation applies to two (2) or more meters at one location. Maximum six (6) meters allowed per installation (3 per side).
3. See section 4.7 for additional information on mobile home parks.
4. Each meter and disconnect shall be plainly marked to designate unit served.
5. All material shall be suitable for outdoor use.
6. Equipment to be installed at a location designated by the Company.
7. Additional pole height may be required to maintain proper clearance. (See section 7.3)
8. Customer Installed minimum 1/2" galvanized eye bolt with 2" x 2" square washer recommended. Service Pole for service wires from Company to meter only.
9. If Customer decides to distribute overhead, a separate pole from Service Pole shall be used.

NO.	DATE:	REVISION	BY:	APPR:
3	11–3–25	REVISED PER CUSTOMER INSTALLATIONS 2025	ERG	EB
2	06/15/17	Revised dimensions and notes as needed.	ERG	
1	10/12	REVISIONS TO DRAWING SS4.7–1	JED	

ENTERGY SERVICES, INC.

MULTIPLE METER SERVICE FOR MOBILE HOME 120/240 VOLT OVERHEAD SERVICE

APPROVED BY: GB	DATE: 10/31/2012
CHECKED BY: EB	SCALE: NONE
DRAWN BY: krich95	

entergy

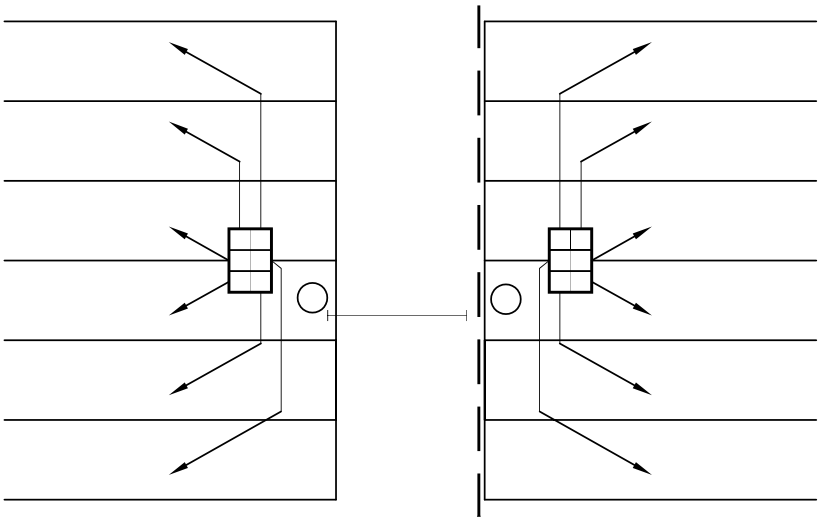
No. D4-9

PLOT 1=1 | SH. 1 OF 1

911 address shall be a minimum 3" lettering permanently marked on meter enclosure, pole, or durable material attached to pole and should be visible from street. (See section 3.4)

Typical Overhead Layout for Mobile Home Park

For details on overhead layout for mobile home parks, see drawing D4-9



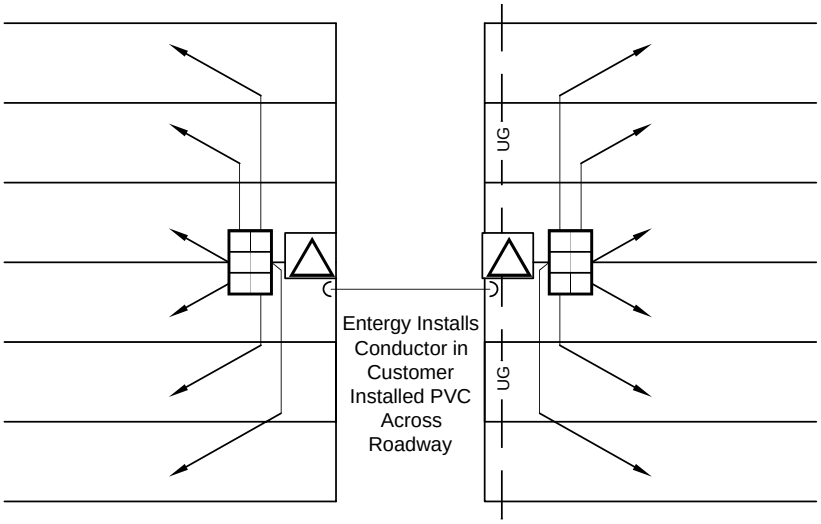
When existing distribution facilities are not along the street, but along the back, service may continue to be provided at the rear; consult Company.

Note:

Meter bank shall be accessible by truck on all weather road approved by Entergy. (See section 4.7)

Typical Underground Layout for Mobile Home Park

For details on underground layout for mobile home parks, see drawing D4-8



Legend

- Utility Pole
- Entergy Padmount Transformer or Pedestal
- Multiple meter (2 MIN-installation by 6-MAX) Developer
- Trailer wiring from meter by developer
- UG Underground Primary Cable
- Overhead Primary Cable

CALL 811 TWO BUSINESS DAYS BEFORE YOU DIG

In locations with underground facilities, the Customer shall notify One Call and shall have One Call locate all underground facilities before digging. It shall be the responsibility of the Customer to stay clear of all underground facilities.

NO.	DATE:	REVISION	BY:	APPR:
2	11–3–25	REVISED PER CUSTOMER INSTALLATIONS 2025	ERG	EB
1	10/12	REVISION OF DRAWING SS4.7–3	JED	

ENTERGY SERVICES, INC.

TYPICAL LAYOUT FOR MOBILE HOME PARK WITH MULTIPLE METER INSTALLATIONS

APPROVED BY: GB	DATE: 10/24/2012
CHECKED BY: EB	SCALE: NONE
DRAWN BY: krich95	

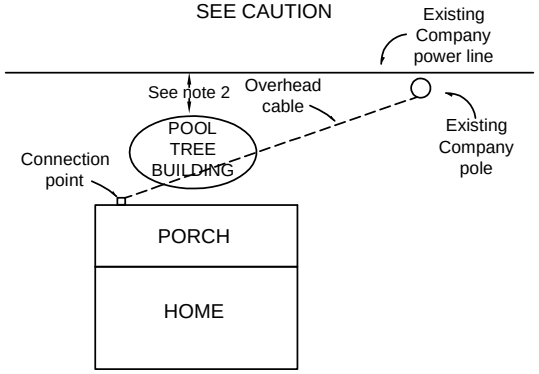
entergy

No. D4-10

PLOT 1=1 SH. 1 OF 1

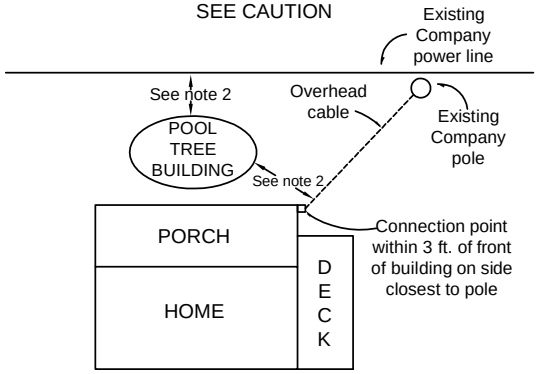
INCORRECT CONNECTION POINT

SEE CAUTION



CORRECT CONNECTION POINT

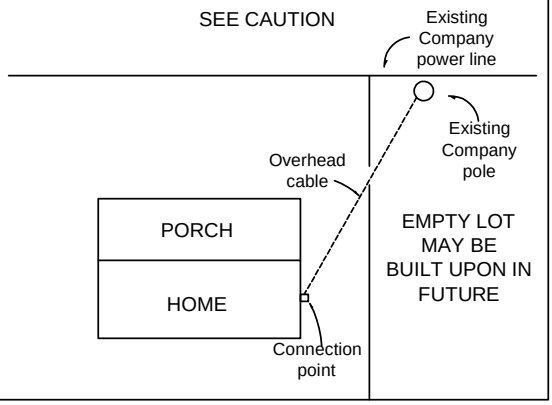
SEE CAUTION



The Company will not install an electrical facility over a pool, building, shed, or deck.

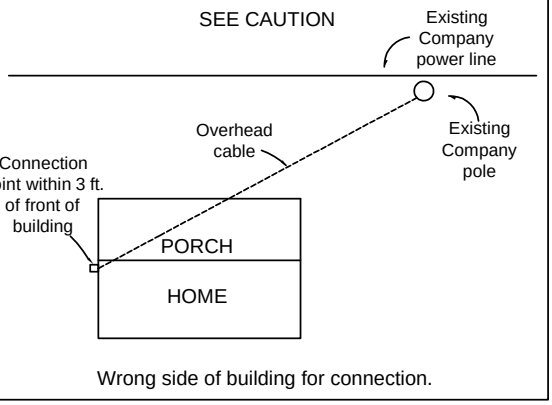
INCORRECT CONNECTION POINT

SEE CAUTION



INCORRECT CONNECTION POINT

SEE CAUTION

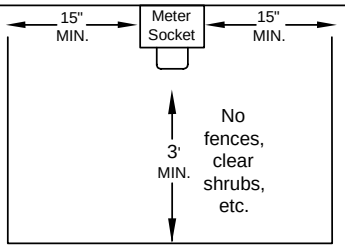


Wrong side of building for connection.

Right of way for power line shall be on customer's land or customer shall get right of way from property owner.

METER CLEARANCES

HOUSE



CAUTION: No gas meters within a 3' radius of meter enclosure.

For residential service, the meter is to be located on the outside of the building on the side of the residence within three feet of the front wall and outside of the fences on the side most economical to reach the company's facilities. Main Breaker should be located outside within 2 feet of meter.

CAUTION : Connection points, when such obstructions interfere with an overhead service, may need to be moved or converted to underground (if possible), at the customers expense.

TABLE

Maximum Recommended Distance

Amps	Length
100	100'
200	75'
320	40'

CALL 811 TWO BUSINESS DAYS BEFORE YOU DIG

In locations with underground facilities, the Customer shall notify One Call and shall have One Call locate all underground facilities before digging. It shall be the responsibility of the Customer to stay clear of all underground facilities.

Notes:

1. NEVER build structures under or over existing electrical lines or facilities. Check with the Company for clearances.
2. ***Contact Company for clearances prior to pool construction.***
3. See Section 9.4 for meter location. Connection point shall be pre-approved by the Company.
4. See *TABLE* for maximum recommended service lengths. Longer lengths than those in the table may require the Company to install an additional pole. This may involve additional cost, to the customer.
5. The Customer is responsible for clearing and maintaining all right of way.

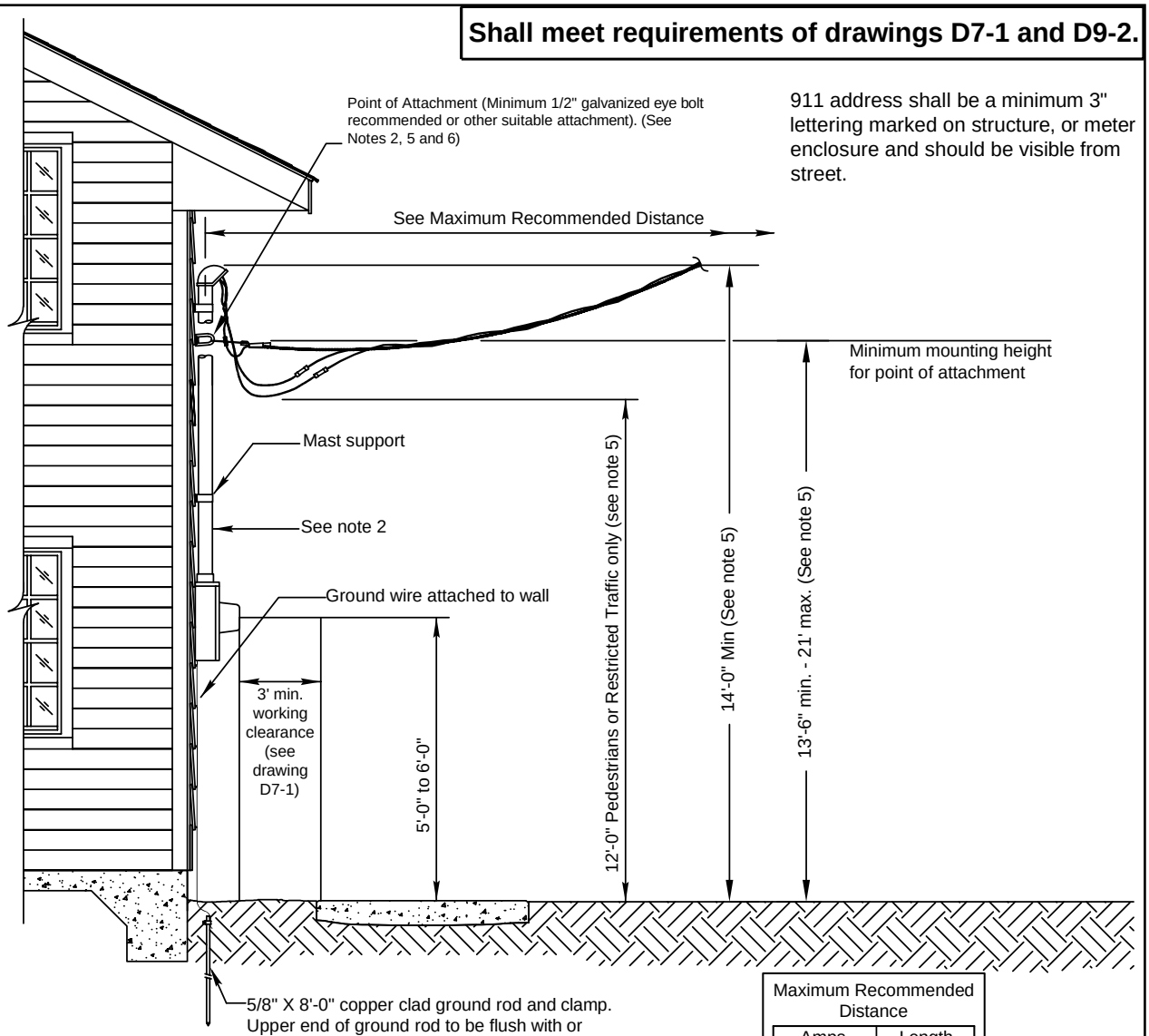
NO.	DATE:	REVISION	BY:	APPR:
3	11–3–25	REVISED PER CUSTOMER INSTALLATIONS 2025	ERG	EB
2	06/15/17	Revised notes as needed.	ERG	
1	01/13	REVISION OF DRAWING SS7.2–1	JED	

ENTERGY SERVICES, INC.

OVERHEAD SERVICE INSTALLATION DETAILS

APPROVED BY:	GB	DATE:	01/09/2013
CHECKED BY:	EB	SCALE:	None
DRAWN BY:	krich95		
entergy	No. D7-1		
	PLOT 1=1	SH. 1 OF 1	

Shall meet requirements of drawings D7-1 and D9-2.



911 address shall be a minimum 3" lettering marked on structure, or meter enclosure and should be visible from street.

Maximum Recommended Distance

Amps	Length
100	100'
200	75'
320	40'

NOTES:

1. Customer facilities shall comply with Company Standards, the National Electrical Code (NEC), and authorities having jurisdiction.
2. Customer shall install meter enclosure, conduit, weatherhead, point of attachment and conductor to point of attachment.
3. A minimum of 3'-0" of each conductor shall extend from the top of the service mast. The neutral shall be marked with white tape at both ends. Neutral can be bare.
4. Main breaker should be within 2'-0" of meter. Outside wall is recommended.
5. Clearance. (See Section 7.3)
   a. Point of attachment shall be either accessible to Company's bucket truck or have enough surface (such as wall or building structure) and sufficient ground space.
   b. Additional height may be required to maintain clearance.
   c. Point of attachment can be no higher than 21'.
   d. Minimum 10'-0" height to bottom of drip loop allowed when all traffic under wire does not exceed 8'-0" height.
6. No telephone or cable attachment allowed on mast (NEC).
7. Any Service greater than 200 amps, consult the Company.

Minimum Customer Wiring Size - Residence Single Phase

METER SIZE	CONDUIT SIZE	Current carrying & neutral wire size (per NEC)		COPPER GROUND WIRE SIZE
		ALUMINUM	COPPER	
100 Amp	1.5"	#2	#4	#6
200 Amp	2"	4/0	2/0	#4
320 Amp	3"	500	350	#2

Wire sizes based upon customer breaker size
For 3Ø, consult the company Commercial & Industrial. Wire sizes are typically larger.

NO.	DATE:	REVISION	BY:	APPR:
3	11–3–25	REVISED PER CUSTOMER INSTALLATIONS 2025	ERG	EB
2	7/2017	UPDATED NOTES	ERG	
1	10/12	REVISION OF DRAWING SS7.1–1	JED	

ENTERGY SERVICES, INC.

TYPICAL PERMANENT OVERHEAD SERVICE (UNDER ROOF LINE)

APPROVED BY:	GB	DATE:	10/24/2012
CHECKED BY:	EB	SCALE:	1/8"=1'-0"
DRAWN BY:	krich95		

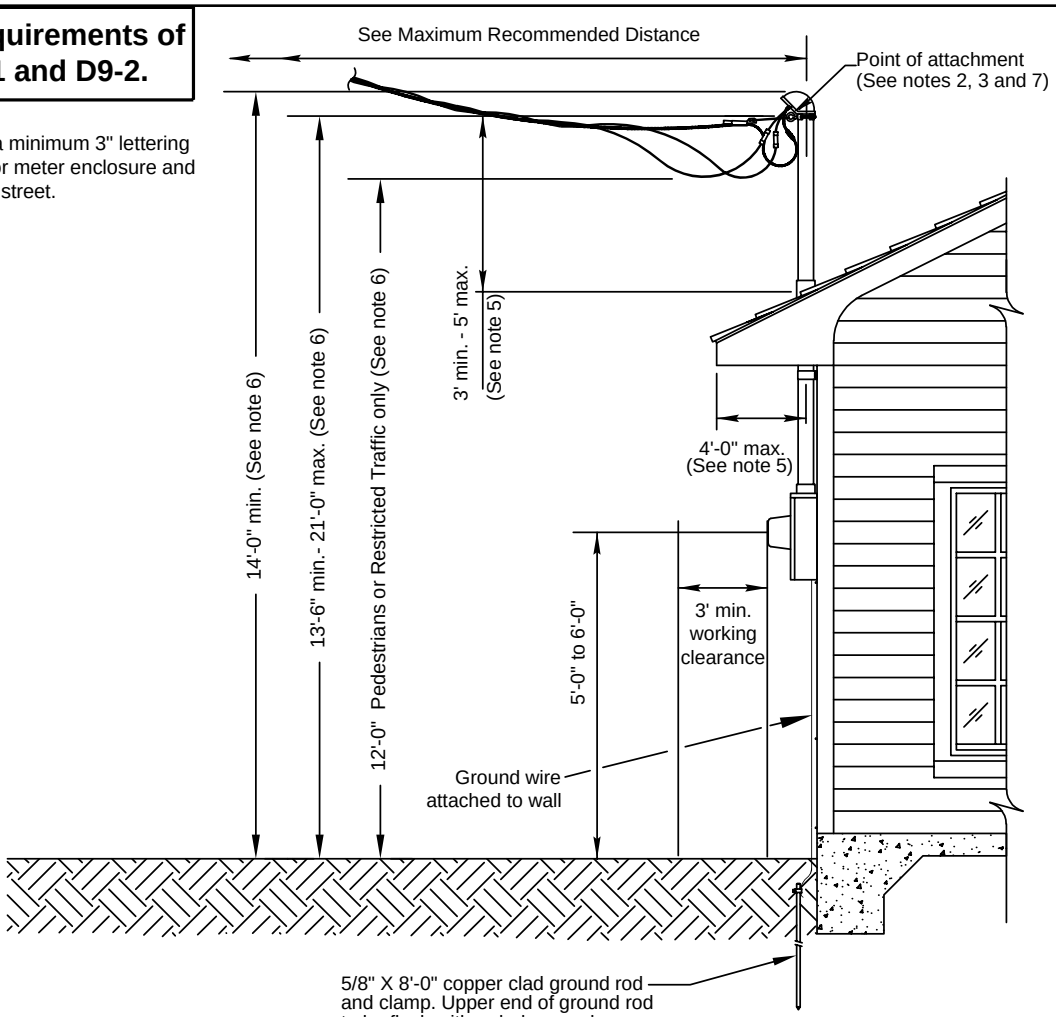
entergy

No. D7-2

PLOT 1=1 SH. 1 OF 1

Shall meet requirements of drawings D7-1 and D9-2.

911 address shall be a minimum 3" lettering marked on structure, or meter enclosure and should be visible from street.



Maximum Recommended Distance

Amps	Length
100	100'
200	75'
320	40'

NOTES:

1. Customer facilities shall comply with Company Standards, the National Electrical Code, and authorities having jurisdiction.
2. Customer shall install meter enclosure, conduit, weatherhead, point of attachment and conductor to point of attachment.
3. A minimum of 3'-0" of each conductor shall extend from the top of the service mast. The neutral shall be marked with white tape at both ends. Neutral can be bare.
4. Main breaker should be within 2'-0" of meter. Outside wall is recommended.
5. Distance from fascia to center of mast to be 4'-0" max. NEC. Only rigid metal or IMC conduit can be used above the roof. Guying or bracing of the mast may be required. See drawing D2-1.
6. Clearance. (See Section 7.3)
   a. Point of attachment shall be either accessible to Company's bucket truck or have enough surface (such as wall or building structure) and sufficient ground space.
   b. Additional height may be required to maintain clearance.
   c. Point of attachment can be no higher than 21'.
   d. Minimum 10'-0" height to bottom of drip loop allowed when all traffic under wire does not exceed 8'-0" height.
7. No telephone or cable attachment allowed on mast (NEC).
8. Any Service greater than 200 amps, consult the Company.

Minimum Customer Wiring Size - Residence Single Phase

METER SIZE	CONDUIT SIZE	Current carrying & neutral wire size (per NEC)		COPPER GROUND WIRE SIZE
		ALUMINUM	COPPER	
100 Amp	1.5"	#2	#4	#6
200 Amp	2"	4/0	2/0	#4
320 Amp	3"	500	350	#2

Wire sizes based upon customer breaker size
For 3Ø, consult the company Commercial & Industrial. Wire sizes are typically larger.

NO.	DATE:	REVISION	BY:	APPR:
3	11–3–25	REVISED PER CUSTOMER INSTALLATIONS 2025	ERG	EB
2	7/2017	Updated notes	ERG	
1	01/13	REVISION OF DRAWING SS7.1–2	JED	

ENTERGY SERVICES, INC.

TYPICAL PERMANENT OVERHEAD SERVICE (ABOVE ROOF LINE)

APPROVED BY: GB	DATE: 01/09/2013
CHECKED BY: EB	SCALE: None
DRAWN BY: krich95	

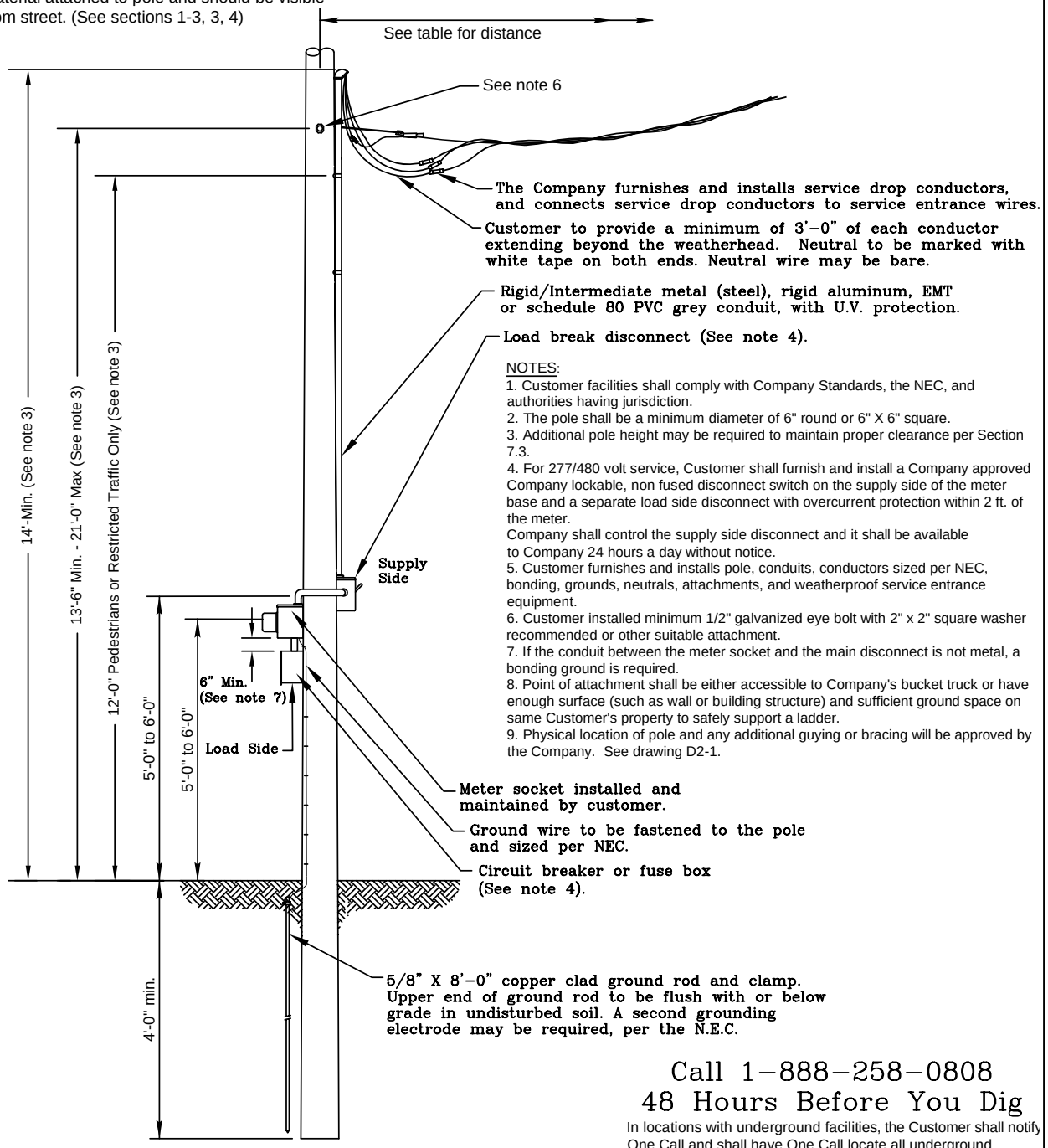
entergy

No. D7-3

PLOT 1=1 SH. 1 OF 1

911 address shall be a minimum 3" lettering marked on meter enclosure, pole, or durable material attached to pole and should be visible from street. (See sections 1-3, 3, 4)

Shall meet requirements of drawings D4-4, D9-2 and D9-4.



NOTES:
1. Customer facilities shall comply with Company Standards, the NEC, and authorities having jurisdiction.
2. The pole shall be a minimum diameter of 6" round or 6" X 6" square.
3. Additional pole height may be required to maintain proper clearance per Section 7.3.
4. For 277/480 volt service, Customer shall furnish and install a Company approved Company lockable, non fused disconnect switch on the supply side of the meter base and a separate load side disconnect with overcurrent protection within 2 ft. of the meter.
Company shall control the supply side disconnect and it shall be available to Company 24 hours a day without notice.
5. Customer furnishes and installs pole, conduits, conductors sized per NEC, bonding, grounds, neutrals, attachments, and weatherproof service entrance equipment.
6. Customer installed minimum 1/2" galvanized eye bolt with 2" x 2" square washer recommended or other suitable attachment.
7. If the conduit between the meter socket and the main disconnect is not metal, a bonding ground is required.
8. Point of attachment shall be either accessible to Company's bucket truck or have enough surface (such as wall or building structure) and sufficient ground space on same Customer's property to safely support a ladder.
9. Physical location of pole and any additional guying or bracing will be approved by the Company. See drawing D2-1.

Call 1–888–258–0808
48 Hours Before You Dig

In locations with underground facilities, the Customer shall notify One Call and shall have One Call locate all underground facilities before digging. It shall be the responsibility of the Customer to stay clear of all underground facilities.

Maximum Recommended Distance

Amps	Length
100	100'
200	75'
320	40'

ENTERGY SERVICES, INC.

TYPICAL OVERHEAD SELF-CONTAINED 277V/480V INSTALLATION (POLE)

(320 AMPS OR LESS)

APPROVED BY:	GB	DATE:	02/20/13
CHECKED BY:	EB	SCALE:	NONE
DRAWN BY:	krich95		

entergy

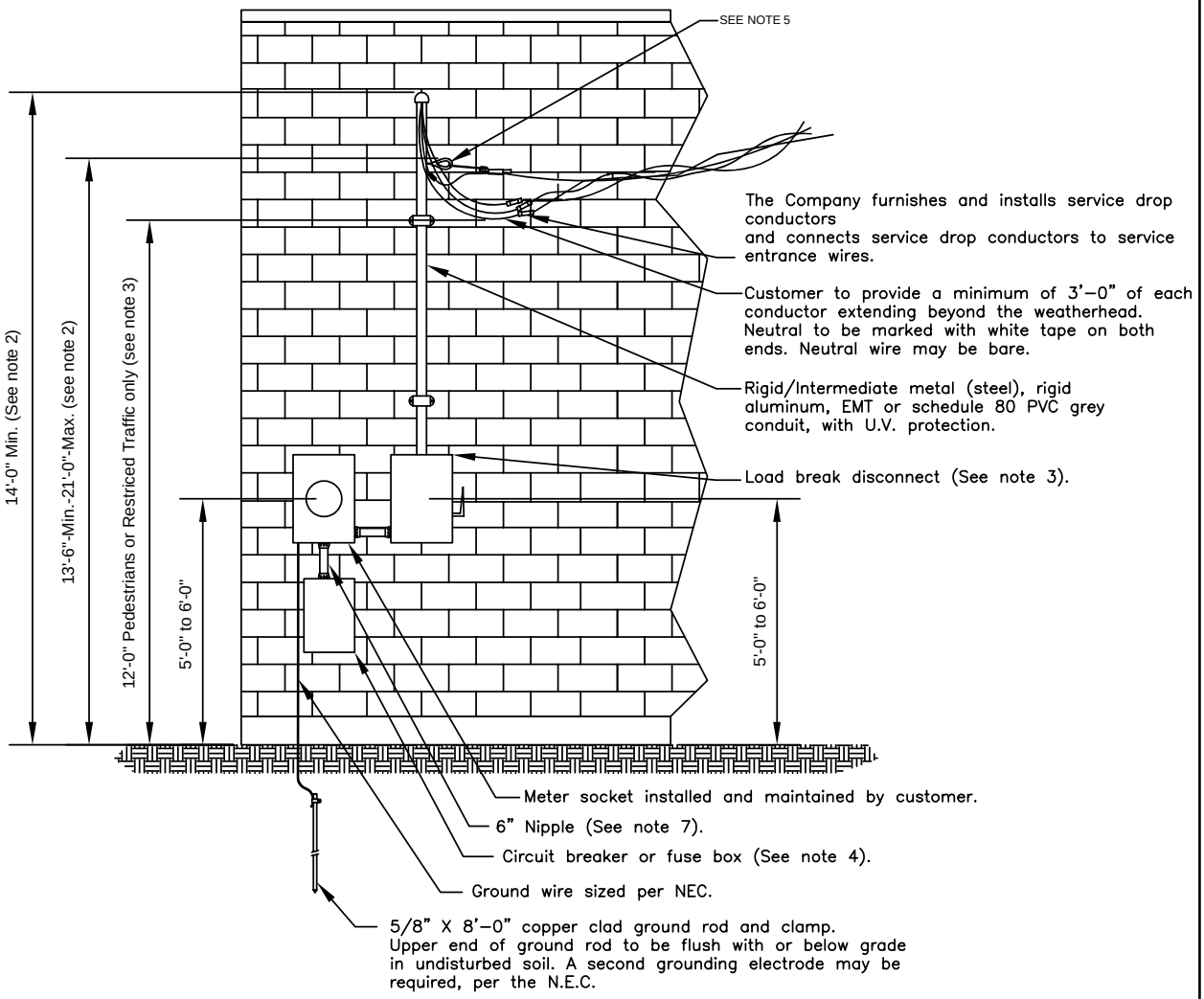
No. D7-4

PLOT 1=1 SH. 1 OF 1

NO.	DATE:	REVISION	BY:	APPR:
3	11–3–25	REVISED PER CUSTOMER INSTALLATIONS 2025	ERG	EB
2	7/17	Supply Side Disconnect Relocated to the Opposite Side of Pole from Meter	ERG	
1	02/13	REVISION OF DRAWING SS7.7–1	JED	

911 address shall be a minimum 3" lettering marked on meter enclosure and shall be visible from street. (See sections 1-3, 3, 4)

Shall meet requirements of drawings D9-2 and D9-4.



NOTES:
1. Customer facilities shall comply with Company Standards, the NEC, and authorities having jurisdiction.
2. Additional height may be required to maintain proper clearance per Section 7.3.
3. For 277/480 volt service, Customer shall furnish and install a Company approved Company lockable, non fused disconnect switch on the supply side of the meter base and a separate load side disconnect with overcurrent protection within 2 ft. of the meter.
Company shall control the supply side disconnect and it shall be available to Company 24 hours a day without notice.
4. Customer furnishes and installs conduits, conductors sized per NEC, bonding, grounds, neutrals, attachments, and weatherproof service entrance equipment.
5. Customer installed minimum 1/2" galvanized eye bolt with 2" x 2" square washer recommended or other suitable attachment.
6. If the conduit between the meter socket and the main disconnect is not metal, a bonding ground is required.
7. Point of attachment shall be either accessible to Company's bucket truck or have enough surface (such as wall or building structure) and sufficient ground space.

Maximum Recommended Distance

Amps	Length
100	100'
200	75'
320	40'

NO.	DATE:	REVISION	BY:	APPR:
2	11–3–25	REVISED PER CUSTOMER INSTALLATIONS 2025	ERG	EB
1	7/2017	New Drawing	ERG	

ENTERGY SERVICES, INC.

TYPICAL OVERHEAD SELF-CONTAINED 277V/480V INSTALLATION (Building)

(320 AMPS OR LESS)

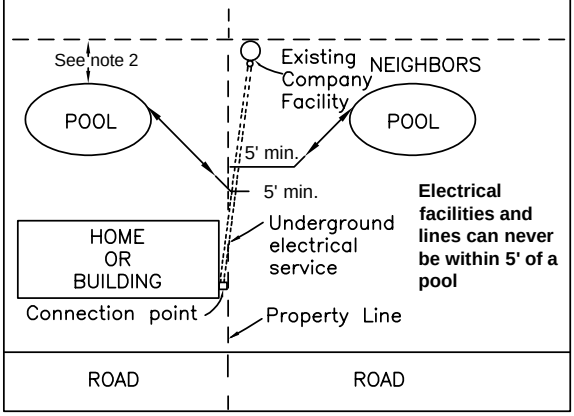
APPROVED BY:	GB	DATE:	07/07/17
CHECKED BY:	EB	SCALE:	NONE
DRAWN BY:	ERG		

entergy

No. D7-4A

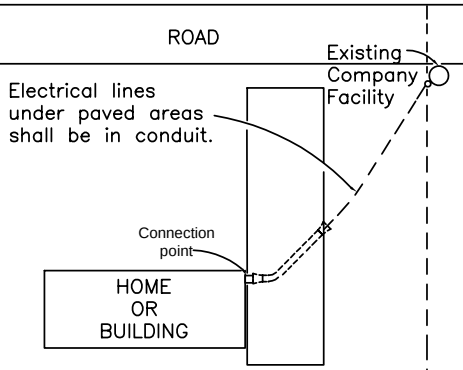
PLOT 1=1 SH. 1 OF 1

UNDERGROUND CLEARANCE FOR SWIMMING POOL



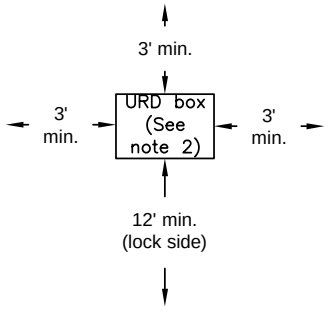
Electrical facilities and lines can never be within 5' of a pool

UNDERGROUND REQUIREMENTS FOR PAVED AREAS

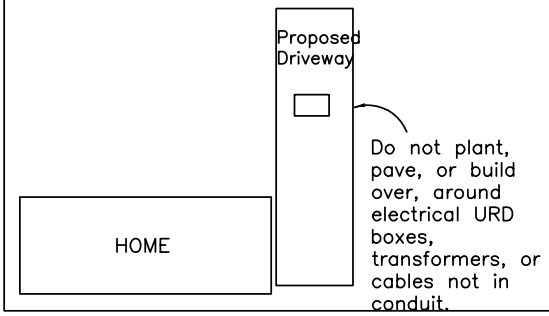


UNDERGROUND FACILITIES CLEARANCES

From shrubs, trees, buildings, fences, decks etc.



DO NOT BLOCK ACCESS TO ELECTRICAL FACILITIES



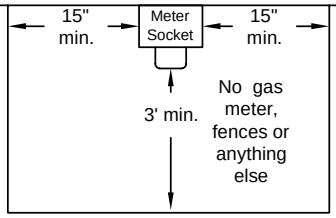
SERVICE CABLE IS NOT ALLOWED BELOW A BUILDING.

Minimum Customer Wiring Size - Residence Single Phase **				
METER SIZE	CONDUIT SIZE	Current carrying & neutral wire size (per NEC)		GROUND WIRE SIZE
		COPPER	ALUMINUM	
100 Amp	2"	#4	#2	#6
200 Amp	2.5" *	2/0	4/0	#4
320 Amp	3"	350	500	#2

* Arkansas locations only allows 2"
** For 3Ø, consult the Company, Commercial/Industrial wire sizes are typically larger.

METER CLEARANCES & LOCATION

HOUSE



CAUTION: No gas meters within a 3' radius of meter enclosure.

For residential service, the meter is to be located on the outside of the building on the side of the residence within three feet of the front wall and outside of the fences on the side most economical to reach the company's facilities.

CALL 811 TWO BUSINESS DAYS BEFORE YOU DIG

In locations with underground facilities, the Customer shall notify One Call and shall have One Call locate all underground facilities before digging. It shall be the responsibility of the Customer to stay clear of all underground facilities.

Notes:

1. The Customer is responsible for clearing and maintaining all right of way.
2. **NEVER** build structures under or over existing electrical lines or facilities. Check with the Company for clearances.
3. ***Contact Company for clearances prior to pool construction.***
4. Connection point shall be pre-approved by the Company.
5. Transformers must meet requirements of drawing D10-1.
6. The Customer shall bear the cost of conduit and its installation.
7. Underground service/conduit should be installed separated by not less 24" of well tamped earth from other utilities.
8. Conduit color shall be electrical gray or black with red stripes (for continuous below ground conduit). Conduits above the ground and transition elbow or conduit from underground to above ground, shall be schedule 80 PVC or equivalent. Generally, non-metallic conduit installed totally below grade shall be at least Schedule 40 PVC or equivalent. In certain cases, concrete encasement may be required according to Drawings D8-2 and D8-7. All conduits, elbows, fittings, etc. shall be UL approved with an U. L. label.

NO.	DATE:	REVISION	BY:	APPR:
3	11–3–25	REVISED PER CUSTOMER INSTALLATIONS 2025	ERG	EB
2	06/15/17	Revised notes as needed	ERG	
1	10/12	REVISION OF DRAWING SS8.6–6.	JED	

ENTERGY SERVICES, INC.

UNDERGROUND SERVICE INSTALLATION DETAILS & CLEARANCES

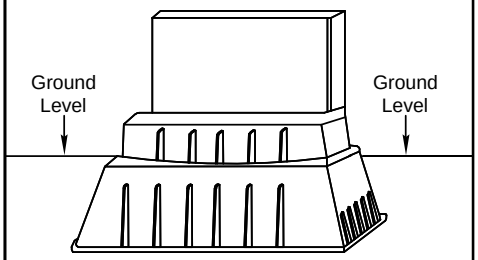
APPROVED BY: GB	DATE: 10/24/2012
CHECKED BY: EB	SCALE: None
DRAWN BY: krich95	

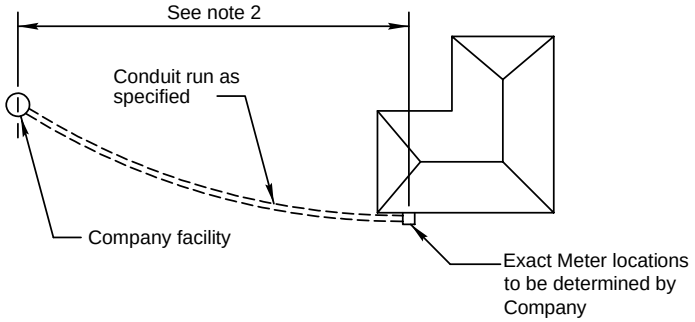
entergy

No. D8-1

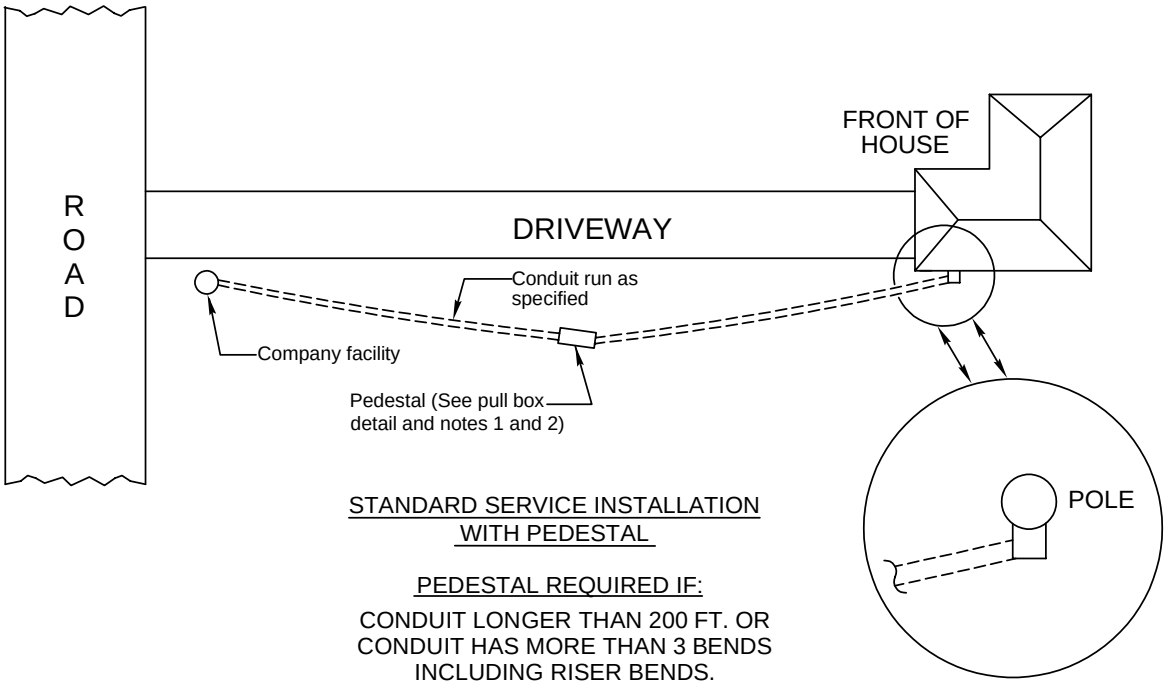
PLOT 1=1 SH. 1 OF 1

TYPICAL PULL BOX PEDESTAL





STANDARD SERVICE INSTALLATION



STANDARD SERVICE INSTALLATION WITH PEDESTAL

PEDESTAL REQUIRED IF:

CONDUIT LONGER THAN 200 FT. OR CONDUIT HAS MORE THAN 3 BENDS INCLUDING RISER BENDS.

CALL 811 TWO BUSINESS DAYS BEFORE YOU DIG

In locations with underground facilities, the Customer shall notify One Call and shall have One Call locate all underground facilities before digging. It shall be the responsibility of the Customer to stay clear of all underground facilities.

Notes:
1. Customer shall consult with Company for location and type of pedestal.
2. The Customer shall bear the cost of entire conduit system and its installation.

NO.	DATE:	REVISION	BY:	APPR:
3	11-3-25	REVISED PER CUSTOMER INSTALLATIONS 2025	ERG	EB
2	11-3-25	REVISION OF DRAWING SS8.6-1	ERG	EB
1	10/12	REVISION OF DRAWING SS8.6-1	JED	

ENTERGY SERVICES, INC.

TYPICAL CONDUIT SYSTEM REQUIREMENTS FOR SECONDARY PHASE CUSTOMER UNDERGROUND SERVICE

APPROVED BY:	GB	DATE:	10/31/2012
CHECKED BY:	EB	SCALE:	NONE
DRAWN BY:	krich95		

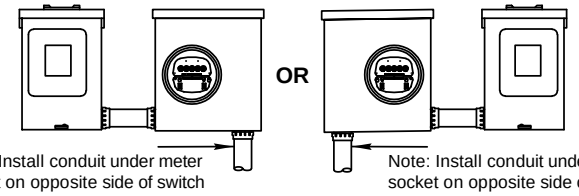
entergy

No. D8-2

PLOT 1=1 SH. 1 OF 1

CONDUIT PLACEMENT

Meter socket shall be designed for underground service installed and maintained by Customer. Main breaker should be within 2'-0" of the meter. Outside wall recommended.



Note: Install conduit under meter socket on opposite side of switch

Note: Install conduit under meter socket on opposite side of switch

SEE DRAWING D9-3 WIRING DIAGRAM CONNECTIONS FOR UNDERGROUND SELF CONTAINED METERS

Shall meet requirements of drawings D8-1, D8-2 and D9-3.

CALL 811 TWO BUSINESS DAYS BEFORE YOU DIG

In locations with underground facilities, the Customer shall notify One Call and shall have One Call locate all underground facilities before digging. It shall be the responsibility of the Customer to stay clear of all underground facilities.

NOTES:

1. Customer facilities shall comply with Company Standards, the National Electrical Code, and authorities having jurisdiction.
2. Meter socket shall be installed and maintained by the Customer.
3. The customer shall install 80lb test non–metallic (manila or grass) pull line in the conduit. Conductor normally supplied by Company.
4. Bends and turns in the conduit to fit the contour of the wall or slab are not permitted. Cable binding may occur in bent conduit, causing failures. Any turns or bends shall have a minimum radius of 3'–0".
5. Spacing material, such as treated wood or metal, to be rigidly and securely attached to structure at a sufficient thickness to keep the conduit to the meter free of bends .
6. Concrete encasing on elbow is required where soil subsidence is possible, consult with Company.
7. Conduit color shall be electrical gray or black with red stripes (for continuous below ground conduit). Conduits above the ground and transition elbow or conduit from underground to above ground, shall be schedule 80 PVC or equivalent. Generally, non–metallic conduit installed totally below grade shall be at least Schedule 40 PVC or equivalent. In certain cases, concrete encasement may be required according to Drawings D8–2 and D8–7. All conduits, elbows, fittings, etc. shall be UL approved with an U. L. label.
8. Conduit shall be flush with wall. The foundation may be required to have blocked out area for conduit in order for conduit to be flush with wall when installed. Conduit is not allowed behind the wall.
9. Upper end of ground rod to be flush with or below grade.
10. Conduit required in restricted access or paved areas. (See section 8.10)
11. Main breaker should be within 2'–0" of the meter. Outside wall recommended.
12. Consult a Company Representative for required system in your area.

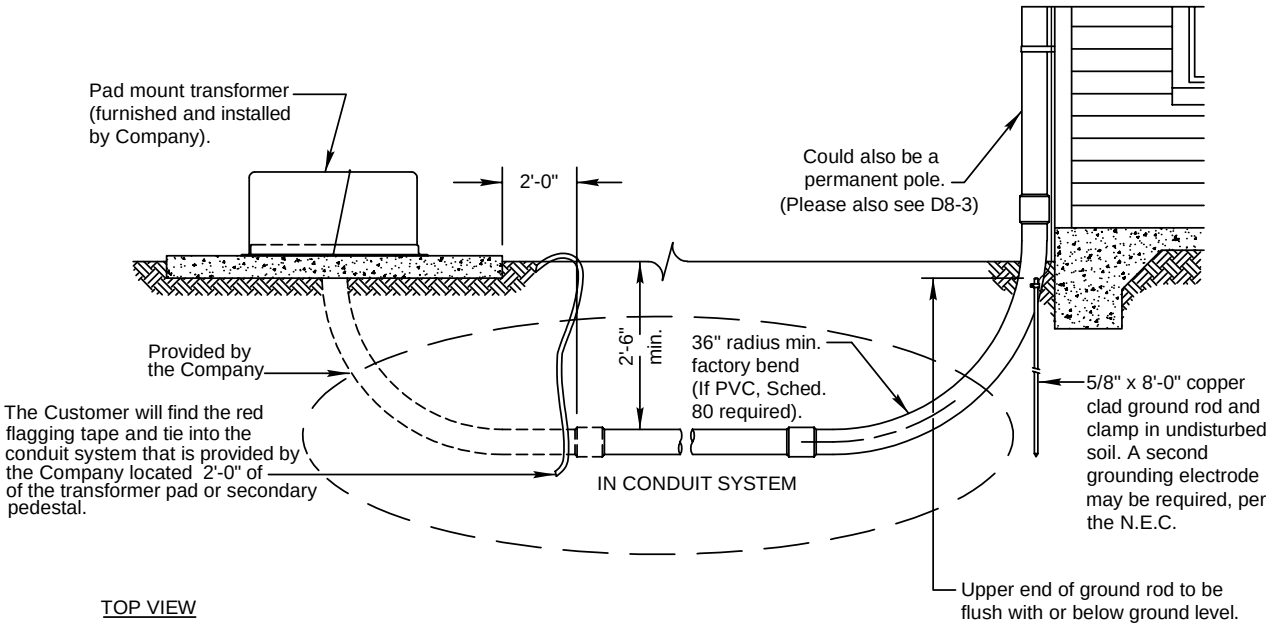
NO.	DATE:	REVISION	BY:	APPR:
3	11–3–25	REVISED PER CUSTOMER INSTALLATIONS 2025	ERG	EB
2	06/15/17	Updated Meter Enclosure Diagram	ERG	
1	10/12	REVISION OF DRAWING SS8.6–4	JED	

ENTERGY SERVICES, INC.

DETAILS FOR TYPICAL UNDERGROUND SERVICE AT HOUSE OR BUILDING

APPROVED BY:	GB	DATE:	11/06/2012
CHECKED BY:	EB	SCALE:	NONE
DRAWN BY:	krich95		
entergy		No.	D8-3
		PLOT 1=1	SH. 1 OF 1

Shall meet requirements of drawing D10-1.

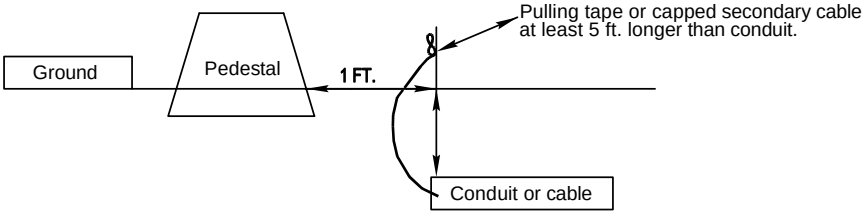


TOP VIEW

Pedestal

Street Side

Bring cable or conduit to one foot from the center of the pedestal buried at 30" below the ground.



For Customer installed and supplied conduit, pulling tape must be long enough to reach pedestal (at least 5 extra feet) and the elbow to enter the pedestal is supplied by the Customer and installed by the Company.

CALL 811 TWO BUSINESS DAYS
BEFORE YOU DIG

In locations with underground facilities, the Customer shall notify One Call and shall have One Call locate all underground facilities before digging. It shall be the responsibility of the Customer to stay clear of all underground facilities.

Notes:
1. Contact Company for local area requirements.

NO.	DATE:	REVISION	BY:	APPR:
3	11–3–25	REVISED PER CUSTOMER INSTALLATIONS 2025	ERG	EB
2	06/15/17	Revised drawing as needed.	ERG	
1	10/12	REVISION OF DRAWING SS8.6–2	JED	

ENTERGY SERVICES, INC.

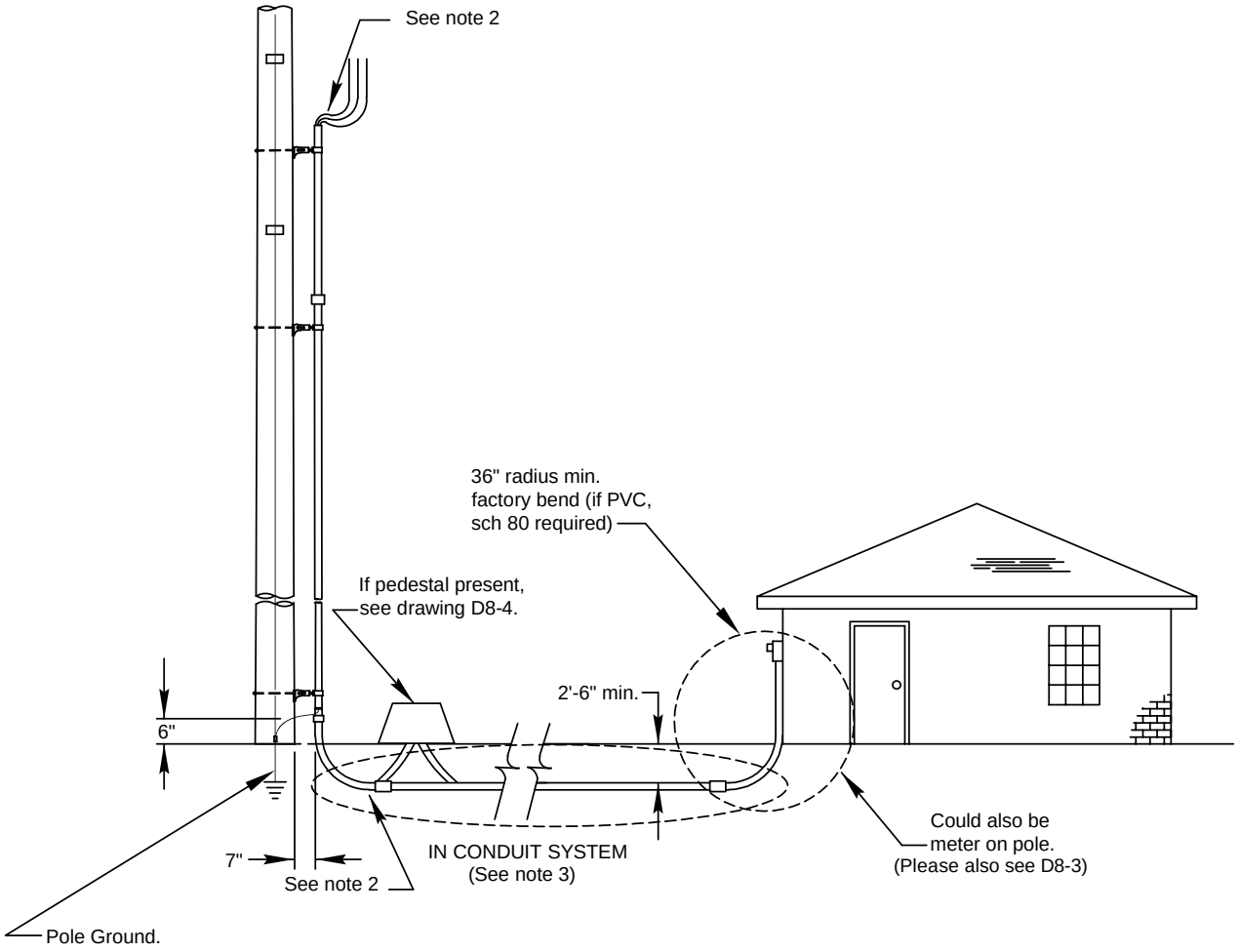
PADMOUNT TRANSFORMER OR SECONDARY PEDESTAL SERVING A CUSTOMER

APPROVED BY:	GB	DATE:	11/06/2012
CHECKED BY:	EB	SCALE:	3/8"=1'-0"
DRAWN BY:	krich95		

entergy

No. D8-4

PLOT 1=1 SH. 1 OF 1



Notes:

1. If one conduit installation is already on the pole, Contact the Company to (at its option) install a pedestal at the base of the pole.
2. Customer shall install the conduit to 7" from the pole. The Company will install the Customer supplied riser material up the pole. The Customer shall supply enough conduit to extend up the pole to a point 50" above the Telephone Co.'s and/or cable. When these minimum conditions cannot be satisfied, the Customer shall consult the Company. The Customer shall secure the riser material at the meter entrance for installation by the Company. (EXCEPTION: In Arkansas and Mississippi the conduit for the riser is supplied by the Company).
3. Contact Company for local area requirements.

CALL 811 TWO BUSINESS DAYS BEFORE YOU DIG

In locations with underground facilities, the Customer shall notify One Call and shall have One Call locate all underground facilities before digging. It shall be the responsibility of the Customer to stay clear of all underground facilities.

NO.	DATE:	REVISION	BY:	APPR:
2	11–3–25	REVISED PER CUSTOMER INSTALLATIONS 2025	ERG	EB
1	02/13	REVISION OF DRAWING SS8.6–3	JED	

ENTERGY SERVICES, INC.

TYPICAL UNDERGROUND SERVICE FROM OVERHEAD SOURCE

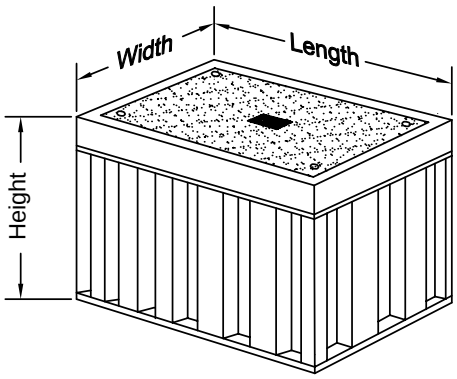
APPROVED BY:	GB	DATE:	02/26/2013
CHECKED BY:	EB	SCALE:	NONE
DRAWN BY:	krich95		

entergy

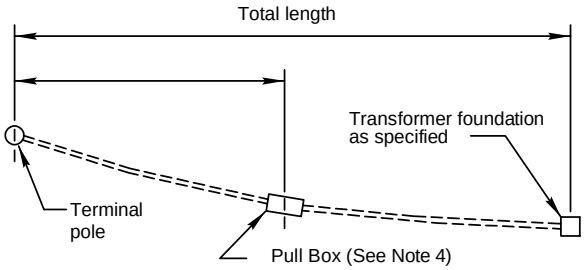
No. D8-5

PLOT 1=1 SH. 1 OF 1

PULL BOX FOR PRIMARY SYSTEM



Consult the Company for requirements before specifying or purchasing any pull box.

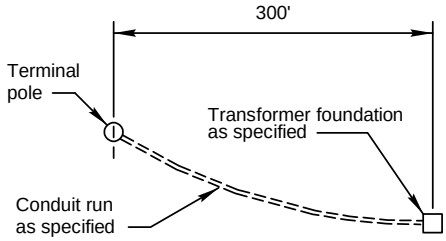


INSTALLATION WITH PULL BOX

SERVICE CABLE SHALL BE INSTALLED IN ENTERGY RIGHT OF WAY. SERVICE CABLE SHALL NOT BE ALLOWED BELOW A BUILDING.

NOTES:

1. Customer facilities shall comply with Company Standards, the National Electrical Code, and authorities having jurisdiction.
2. The Customer shall contact the Company prior to the installation of the conduit system or the transformer foundation. The number and location of pull boxes and the total length of conduit run to be installed and number of runs including spare runs, shall be approved by the Company. A spare set of conduits is always recommended.
3. The Customer shall typically bear the cost of conduit and other material and the installation from the terminal pole to the transformer foundation.
4. If more than two 90° bends are required, including riser bends, or run exceeds 300' an approved pull box may be required.
5. The Customer shall install Company approved minimum 80 lb. non–metallic (manilla or grass) pull line or bull tape in the Customer's conduit. Conductor normally supplied by Company.
6. Conduit below grade shall be separated from telephone cable, water or gas facilities by not less 24"of well tamped earth.
7. Cement encased Rigid steel elbows may be required see drawing D8–7. Consult the Company for details.
8. Conduit color shall be electrical gray or black with red stripes (for continuous below ground conduit). Conduits above the ground and transition elbow or conduit from underground to above ground, shall be schedule 80 PVC or equivalent. Generally, non–metallic conduit installed totally below grade shall be at least Schedule 40 PVC or equivalent. In certain cases, concrete encasement may be required according to drawing D8–7. All conduits, elbows, fittings, etc. shall be UL approved with an U. L. label.



STANDARD INSTALLATION

CALL 811 TWO BUSINESS DAYS BEFORE YOU DIG

In locations with underground facilities, the Customer shall notify One Call and shall have One Call locate all underground facilities before digging. It shall be the responsibility of the Customer to stay clear of all underground facilities.

NO.	DATE:	REVISION	BY:	APPR:
3	11–3–25	REVISED PER CUSTOMER INSTALLATIONS 2025	ERG	EB
2	06/15/14	Revised drawing as needed	ERG	
1	02/13	REVISION OF DRAWING SS8.7–1	JED	

ENTERGY SERVICES, INC.

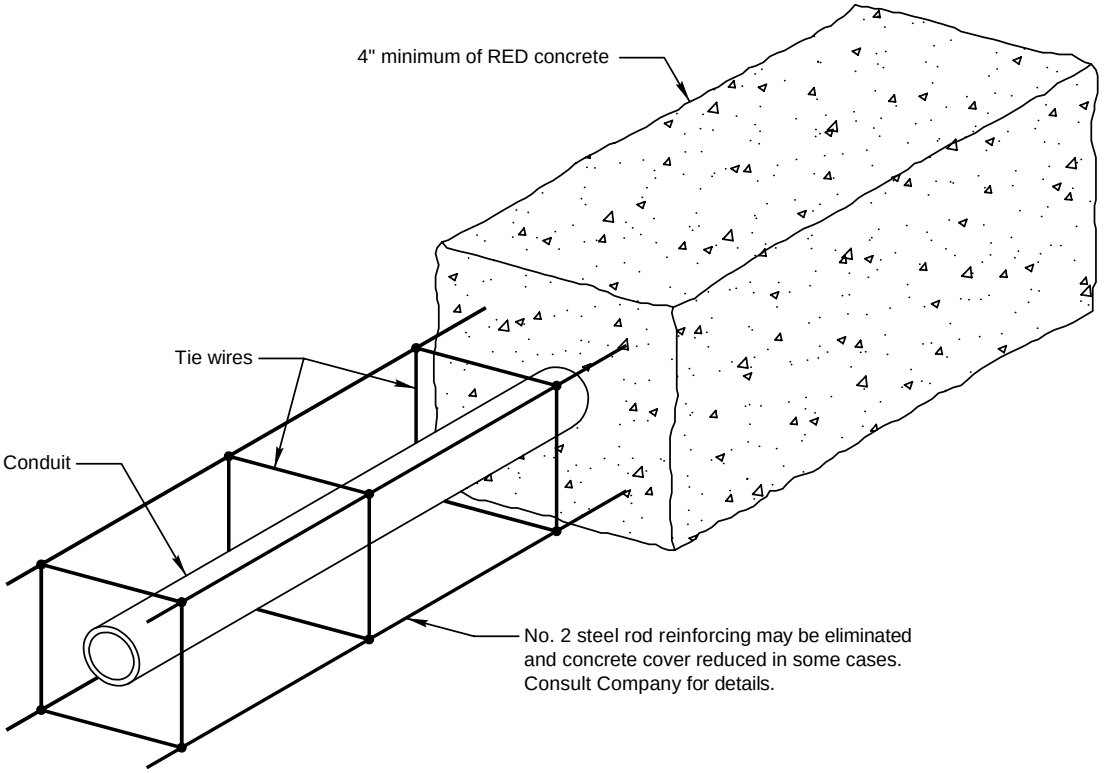
TYPICAL PRIMARY SERVICE TO SINGLE PADMOUNT TRANSFORMER SERVING CUSTOMER

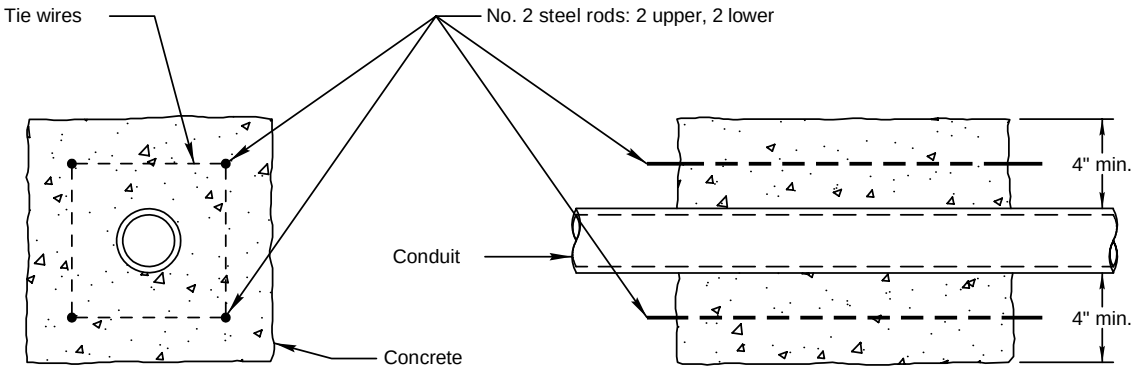
APPROVED BY:	GB	DATE:	02/05/2013
CHECKED BY:	EB	SCALE:	NONE
DRAWN BY:	kprich95		

entergy

No. D8-6

PLOT 1=1 SH. 1 OF 1





END VIEW

SECTION VIEW

CALL 811 TWO BUSINESS DAYS
BEFORE YOU DIG

In locations with underground facilities, the Customer shall notify One Call and shall have One Call locate all underground facilities before digging. It shall be the responsibility of the Customer to stay clear of all underground facilities.

NO.	DATE:	REVISION	BY:	APPR:
2	11-3-25	REVISED PER CUSTOMER INSTALLATIONS 2025	ERG	EB
1	01/13	REVISION OF DRAWING SS8.6-5	JED	

ENTERGY SERVICES, INC.

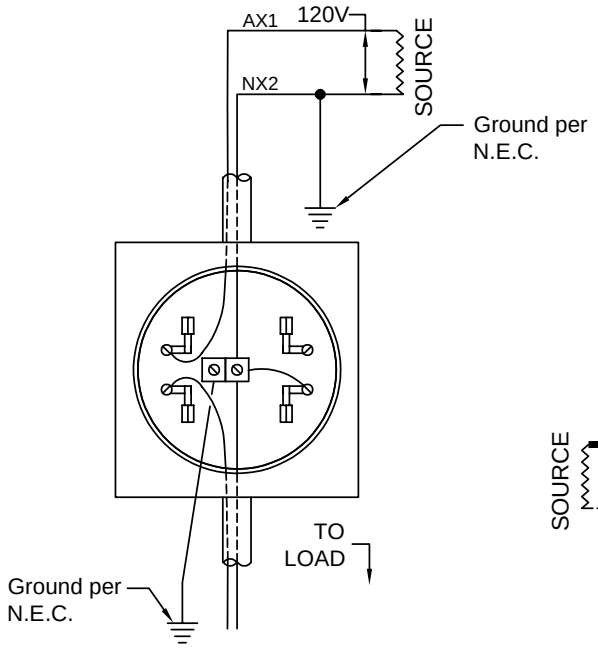
TYPICAL DETAIL OF METAL CONDUIT ENCASED IN CONCRETE

APPROVED BY:	GB	DATE:	01/10/2013
CHECKED BY:	EB	SCALE:	1 1/2"=1'-0"
DRAWN BY:	krich95		

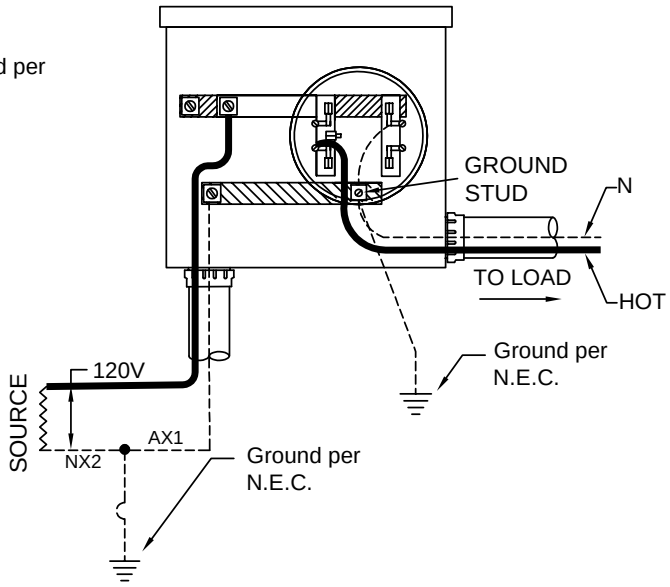
entergy

No. D8-7

PLOT 1=1 SH. 1 OF 1



TYPE S
2 WIRE SINGLE PHASE 120 VOLTS



TYPE S
2 WIRE SINGLE PHASE 120 VOLTS

FOR REFERENCE ONLY:

REQUIRES PRIOR COMPANY APPROVAL

NOTES:
1. LOAD AND SUPPLY WIRES SHALL NOT CROSS IN THE METER SOCKET.
2. 100 AMPS ONLY.

NO.	DATE:	REVISION	BY:	APPR:
3	11-3-25	REVISED PER CUSTOMER INSTALLATIONS 2025	ERG	EB
2	06/15/17	Updated title as needed	ERG	
1	04/13	NEW DRAWING	JED	

ENTERGY SERVICES, INC.

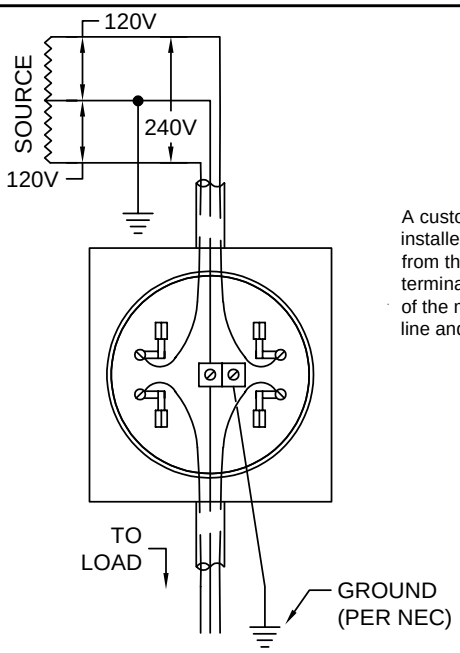
WIRING DIAGRAM CONNECTIONS
FOR 120V (TWO WIRE)
SELF CONTAINED METERS

APPROVED BY:	GB	DATE:	04/03/2013
CHECKED BY:	EB	SCALE:	NONE
DRAWN BY:	krich95		

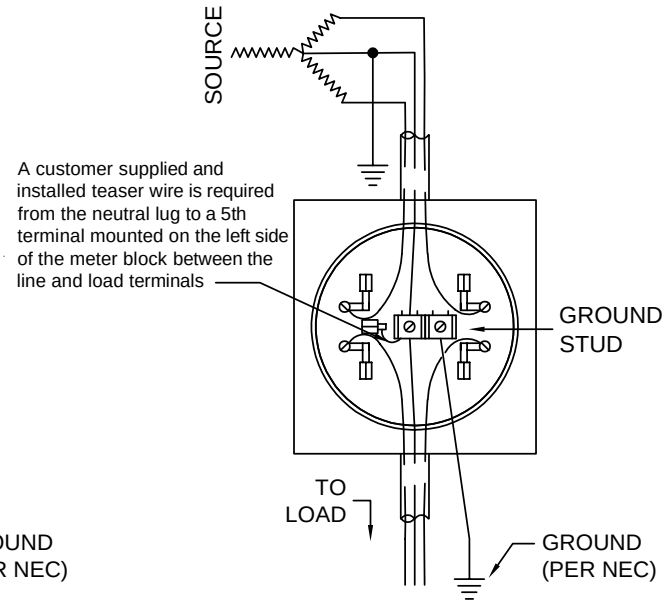
entergy

No. D9-1

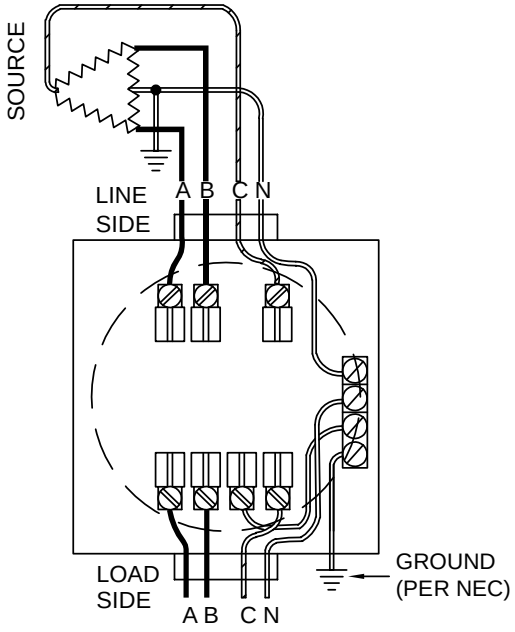
PLOT 1=1 SH. 1 OF 1



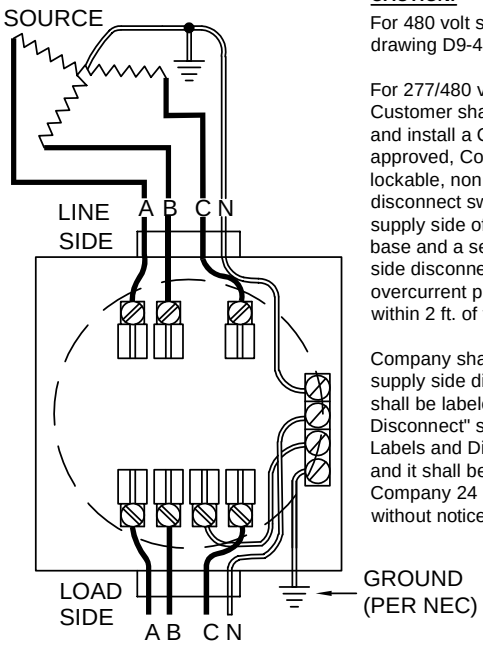
TYPE S
3 WIRE SINGLE PHASE 120/240 VOLTS



TYPE S
3 WIRE SINGLE PHASE 120/208 WYE VOLTS



THREE PHASE 4 WIRE DELTA
120 / 240 VOLTS



THREE PHASE 4 WIRE WYE
120 / 208 or 277/480 VOLTS

CAUTION:

For 480 volt service, see drawing D9-4.

For 277/480 volt service, Customer shall furnish and install a Company approved, Company lockable, non fused disconnect switch on the supply side of the meter base and a separate load side disconnect with overcurrent protection within 2 ft. of the meter.

Company shall control the supply side disconnect. It shall be labeled "Utility Disconnect" see §1.5 Labels and Disconnects and it shall be available to Company 24 hours a day without notice.

NOTES:
1. Ungrounded Conductor with the Higher Voltage to Ground (Phase marked C) must be marked orange.
2. All sockets, except residential single phase less than 320 Amps, shall have a manual mechanical gang operated bypass switch.
3. Load and supply wires shall not cross in the meter socket.

NO.	DATE:	REVISION	BY:	APPR:
3	11–3–25	REVISED PER CUSTOMER INSTALLATIONS 2025	ERG	EB
2	06/15/17	Revised notes as needed.	ERG	
1	01/13	REVISION OF DRAWING SS11.8–1	JED	

ENTERGY SERVICES, INC.

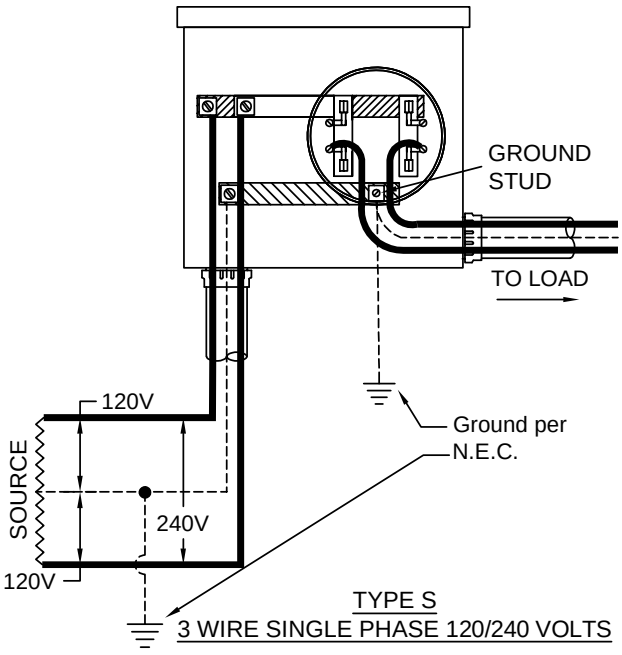
WIRING DIAGRAM CONNECTIONS FOR OVERHEAD SELF CONTAINED METERS

APPROVED BY:	GB	DATE:	01/14/2013
CHECKED BY:	EB	SCALE:	NONE
DRAWN BY:	krich95		

entergy

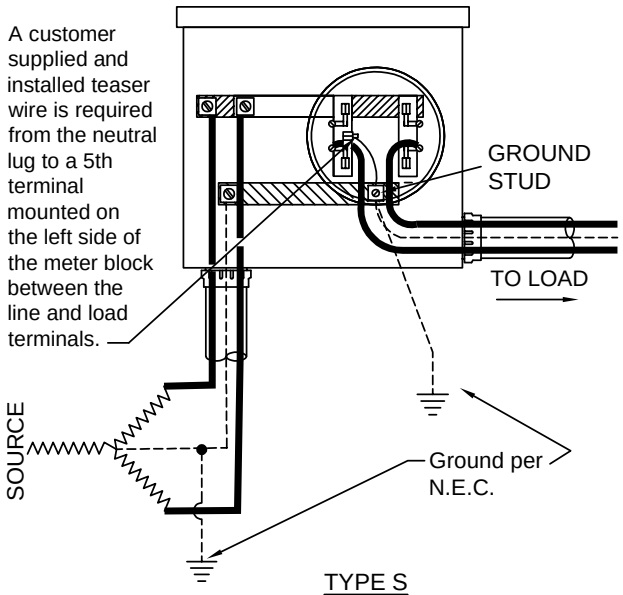
No. D9-2

PLOT 1=1 SH. 1 OF 2

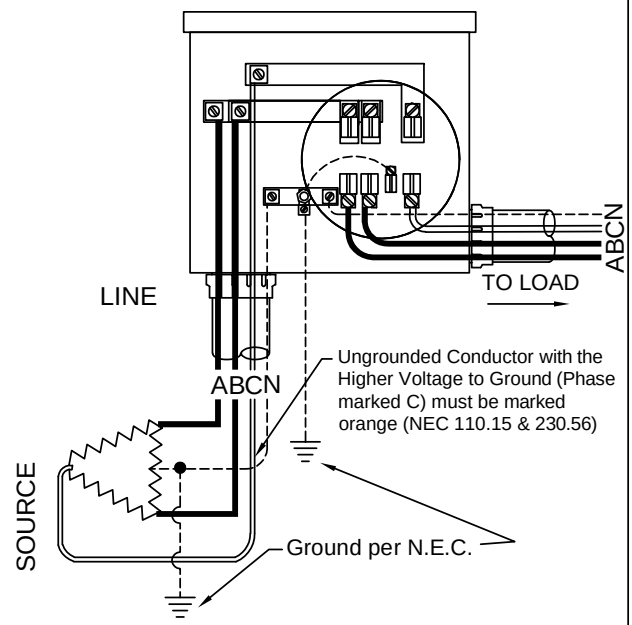


TYPE S
3 WIRE SINGLE PHASE 120/240 VOLTS

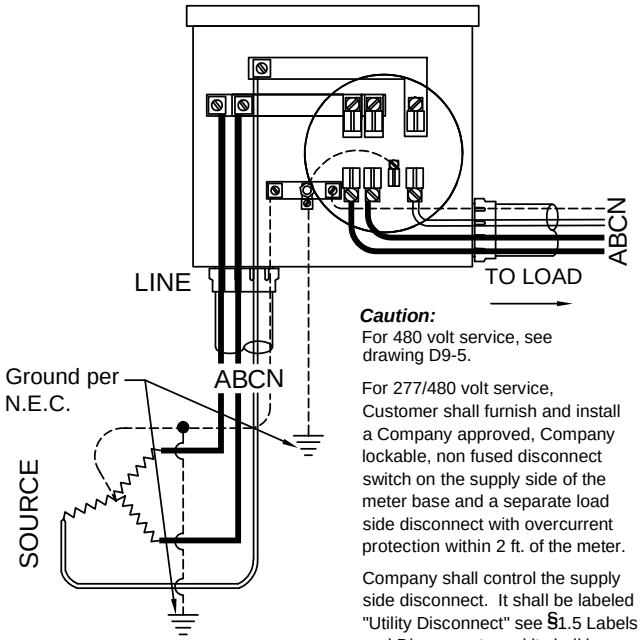
A customer supplied and installed teaser wire is required from the neutral lug to a 5th terminal mounted on the left side of the meter block between the line and load terminals.



TYPE S
3 WIRE SINGLE PHASE 120/208 WYE VOLTS



THREE PHASE 4 WIRE DELTA
120 / 240 VOLTS



THREE PHASE 4 WIRE WYE
120 / 208 or 277/480 VOLTS

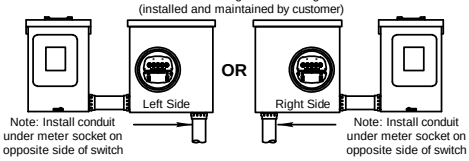
Caution:
For 480 volt service, see drawing D9-5.

For 277/480 volt service, Customer shall furnish and install a Company approved, Company lockable, non fused disconnect switch on the supply side of the meter base and a separate load side disconnect with overcurrent protection within 2 ft. of the meter.

Company shall control the supply side disconnect. It shall be labeled "Utility Disconnect" see §1.5 Labels and Disconnects and it shall be available to Company 24 hours a day without notice.

Notes:
1. All diagrams on this drawing show connections when the switch is installed on the right side (see Right Side below) of the meter socket. If the switch is installed on the left side of the meter socket you will need to mirror this diagram (see Left Side below).
2. All sockets, except residential single phase less than 320 Amps, shall have a manual mechanical gang operated bypass switch.
3. Load and supply wires shall not cross in the meter socket.

CONDUIT PLACEMENT
Meter socket shall be designed for underground service (installed and maintained by customer)



NO.	DATE:	REVISION	BY:	APPR:
3	11–3–25	REVISED PER CUSTOMER INSTALLATIONS 2025	ERG	EB
2	06/15/17	Updated Meter Enclosure Diagram	ERG	
1	01/13	REVISION OF DRAWING SS11.8–2	JED	

ENTERGY SERVICES, INC.

WIRING DIAGRAM CONNECTIONS FOR UNDERGROUND SELF CONTAINED METERS

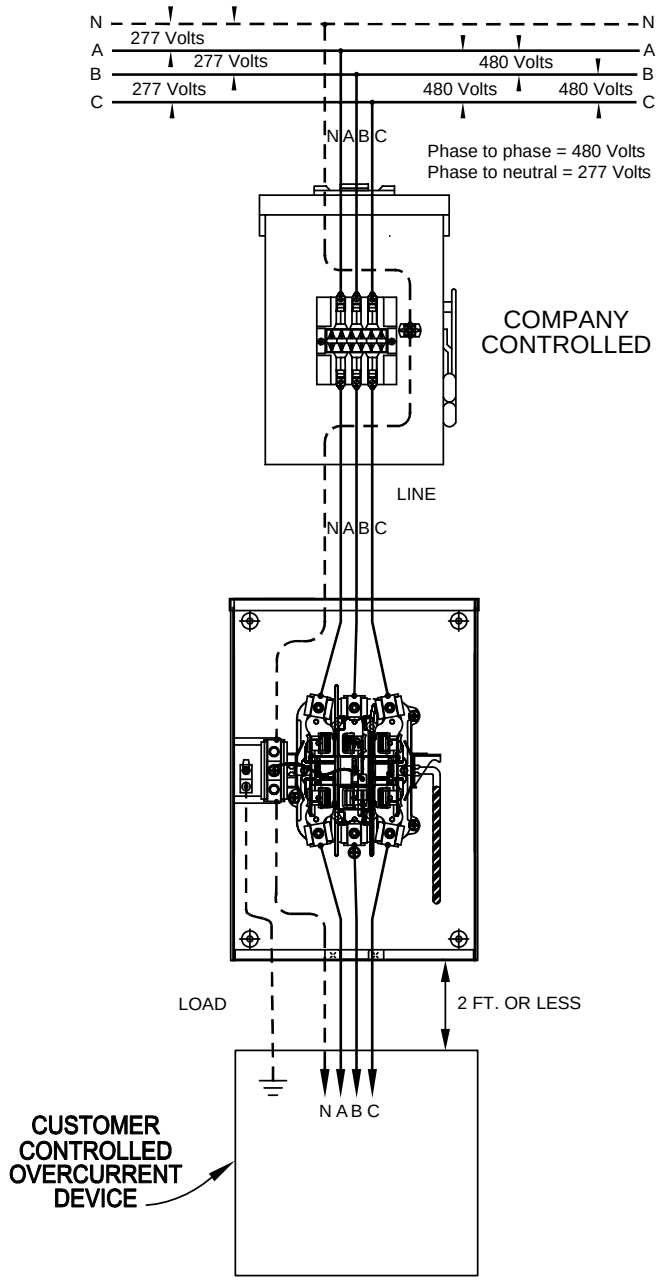
APPROVED BY:	GB	DATE:	01/10/2013
CHECKED BY:	EB	SCALE:	NONE
DRAWN BY:	krich95		

entergy

No. D9-3

PLOT 1=1 SH. 2 OF 2

OVERHEAD



Caution:
For 480 volt service, see drawing D9-2.

For 277/480 volt service, Customer shall furnish and install a Company approved, Company lockable, non fused disconnect switch on the supply side of the meter base and a separate load side disconnect with overcurrent protection within 2 ft. of the meter.

Company shall control the supply side disconnect. It shall be labeled "Utility Disconnect" see SS1.5 Labels and Disconnects and it shall be available to Company 24 hours a day without notice.

NO.	DATE:	REVISION	BY:	APPR:
2	11–3–25	REVISED PER CUSTOMER INSTALLATIONS 2025	ERG	EB
1	01/13	REVISION OF DRAWING SS11.8–4	JED	

ENTERGY SERVICES, INC.

TYPICAL OVERHEAD 3ø 4 WIRE 277/480 INSTALLATION

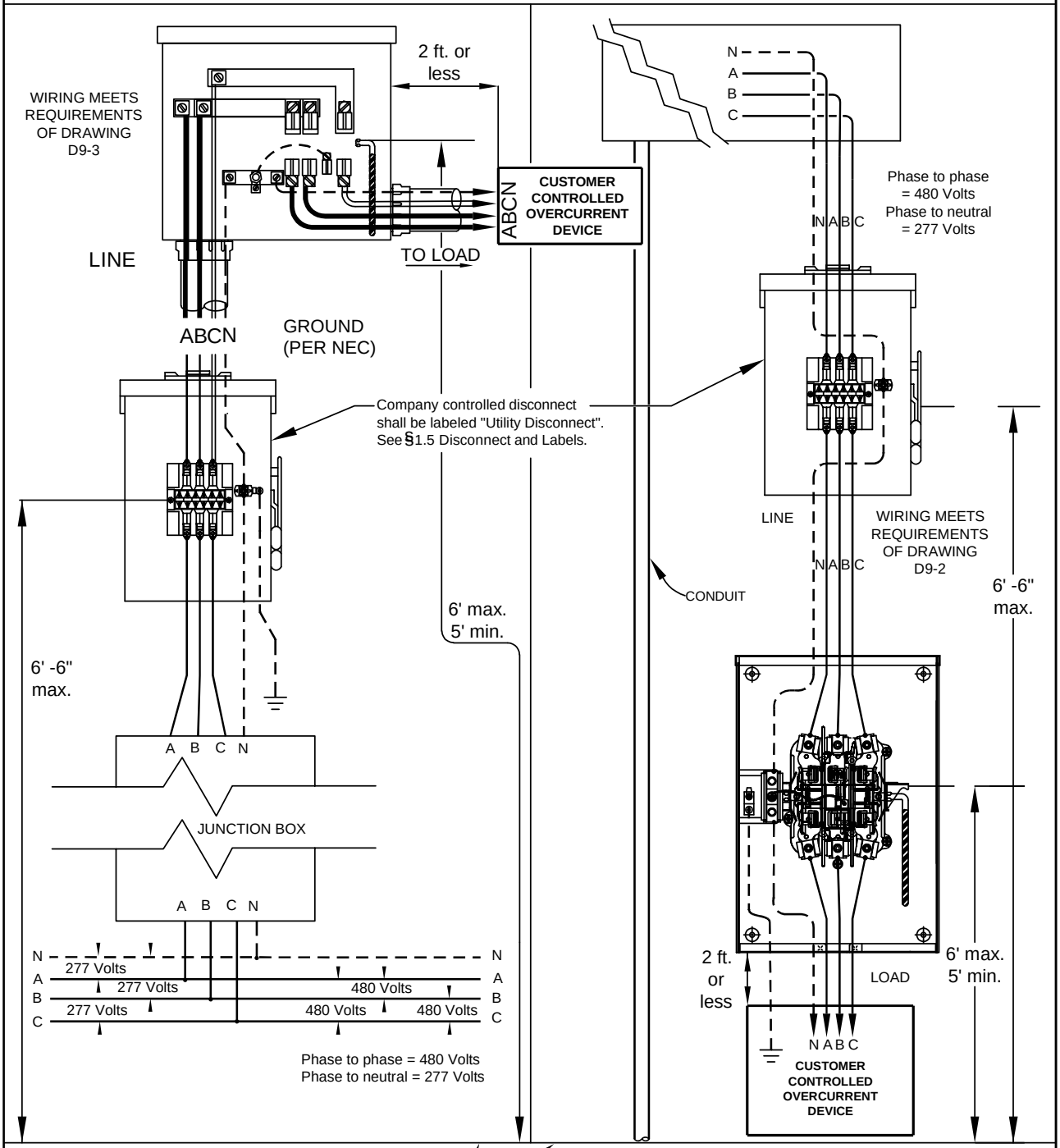
APPROVED BY: GB	DATE: 01/14/2013
CHECKED BY: EB	SCALE: NONE
DRAWN BY: krich95	CEA NO.

entergy

No. D9-4

PLOT 1=1 | SH. 1 OF 1

UNDERGROUND



NOTES:
1. See section 8.5 for junction box sizing and Customer supplied connectors.
2. All 480 volt applications required to be available for Company personnel 24 hours a day without notice.
3. Consult the Company.

ENTERGY SERVICES, INC.

TYPICAL UNDERGROUND 3Ø 4 WIRE 277/480 INSTALLATIONS

APPROVED BY:	GB	DATE:	01/15/2013
CHECKED BY:	EB	SCALE:	NONE
DRAWN BY:	krich95	CEA NO.	

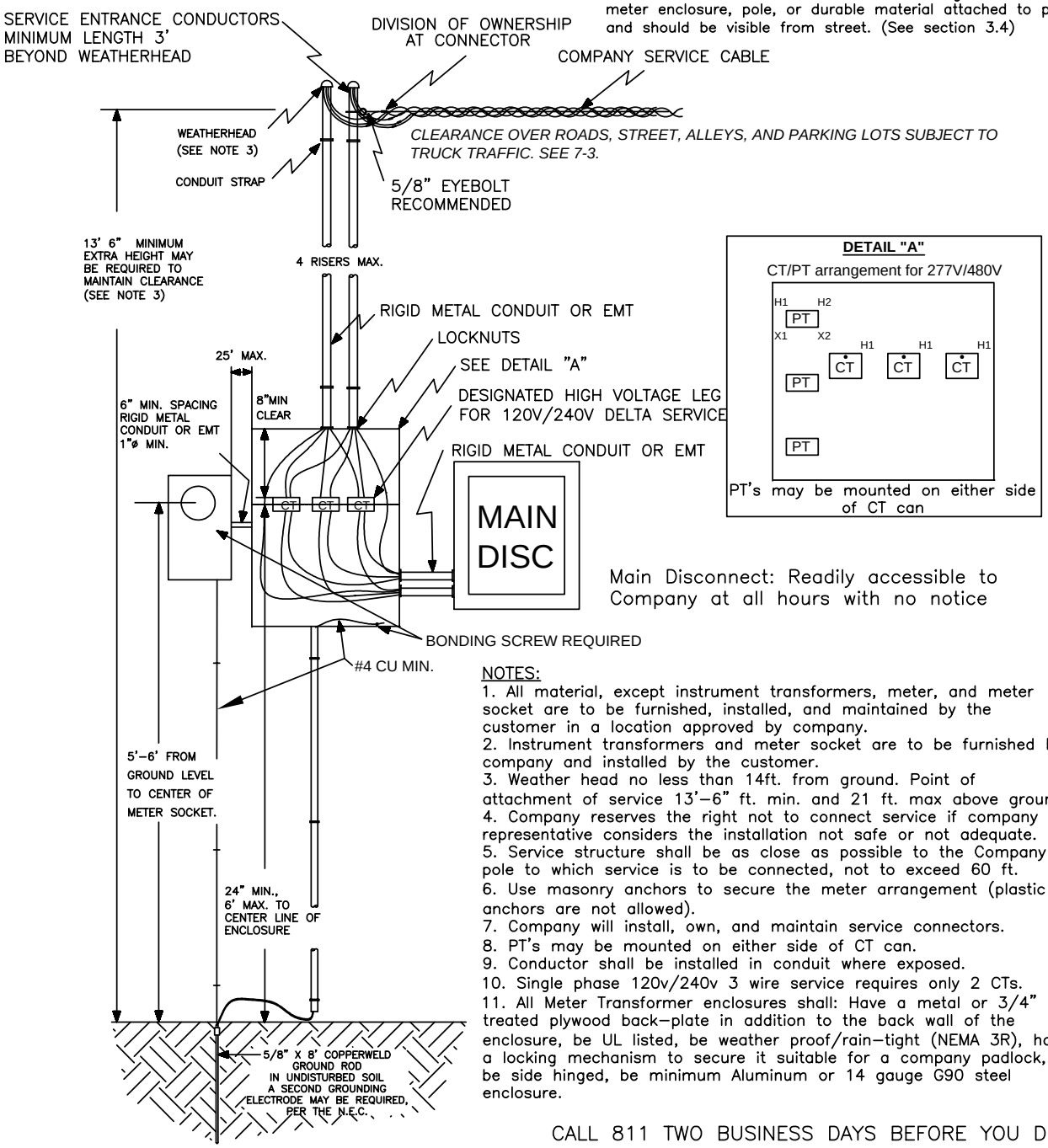
NO.	DATE:	REVISION	BY:	APPR:
2	11–3–25	REVISED PER CUSTOMER INSTALLATIONS 2025	ERG	EB
1	01/13	REVISION OF DRAWING SS11.8–5	JED	

entergy

No. D9-5

PLOT 1=1 SH. 1 OF 1

911 address shall be a minimum 3" lettering marked on meter enclosure, pole, or durable material attached to pole and should be visible from street. (See section 3.4)



Main Disconnect: Readily accessible to Company at all hours with no notice

NOTES:

1. All material, except instrument transformers, meter, and meter socket are to be furnished, installed, and maintained by the customer in a location approved by company.
2. Instrument transformers and meter socket are to be furnished by company and installed by the customer.
3. Weather head no less than 14ft. from ground. Point of attachment of service 13'-6" ft. min. and 21 ft. max above ground.
4. Company reserves the right not to connect service if company representative considers the installation not safe or not adequate.
5. Service structure shall be as close as possible to the Company pole to which service is to be connected, not to exceed 60 ft.
6. Use masonry anchors to secure the meter arrangement (plastic anchors are not allowed).
7. Company will install, own, and maintain service connectors.
8. PT's may be mounted on either side of CT can.
9. Conductor shall be installed in conduit where exposed.
10. Single phase 120v/240v 3 wire service requires only 2 CTs.
11. All Meter Transformer enclosures shall: Have a metal or 3/4" treated plywood back-plate in addition to the back wall of the enclosure, be UL listed, be weather proof/rain-tight (NEMA 3R), have a locking mechanism to secure it suitable for a company padlock, be side hinged, be minimum Aluminum or 14 gauge G90 steel enclosure.

TABLE 9.1.3: GUIDELINE FOR METER TRANSFORMER ENCLOSURE WITH MULTIPLE CIRCUITS

Total Customer Conduits (4" min)	Maximum Conductor Size	Minimum Dimensions		
		Depth	Width	Height
Up to 4	600 kcmil	14"	32"	40"
Up to 6	500 kcmil	14"	32"	54"

CTs will be placed at center. Customer Conduit spaced evenly.
Service connections shall not be made in an instrument transformer enclosure.
For larger sizes, consult the Company.

CALL 811 TWO BUSINESS DAYS BEFORE YOU DIG

In locations with underground facilities, the Customer shall notify One Call and shall have One Call locate all underground facilities before digging. It shall be the responsibility of the Customer to stay clear of all underground facilities.

NO.	DATE:	REVISION	BY:	APPR:
3	11-3-25	REVISED PER CUSTOMER INSTALLATIONS 2025	ERG	EB
2	06/15/17	Revised drawing and notes as needed.	ERG	
1	10/12	REVISION OF DRAWING SS11.8-3	JED	

ENTERGY SERVICES, INC.

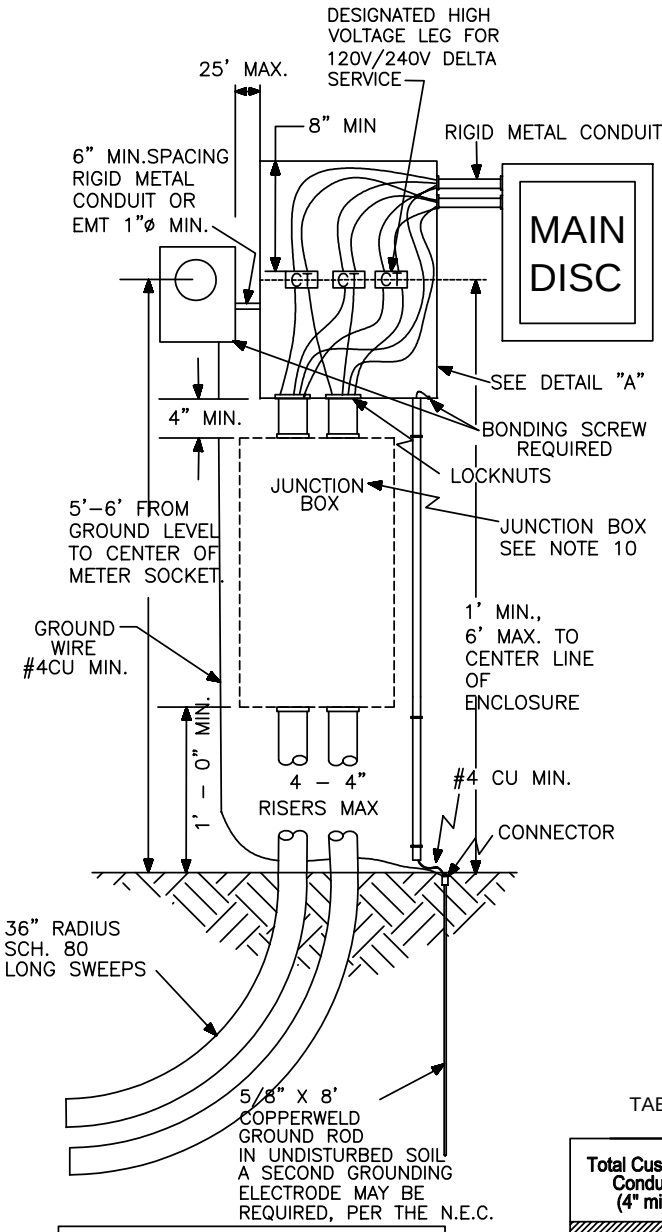
CURRENT INSTRUMENT TRANSFORMER FOR OVERHEAD SERVICE

APPROVED BY:	JRH	DATE:	11/15/2012
CHECKED BY:	JED	SCALE:	NONE
DRAWN BY: krich95		CEA NO.	
entergy		No.	D9-6
		PLOT 1=1	SH. 1 OF 1

911 address shall be a minimum 3" lettering marked on meter enclosure, pole, or durable material attached to pole and should be visible from street. (See section 3.4)

CALL 811 TWO BUSINESS DAYS BEFORE YOU DIG

In locations with underground facilities, the Customer shall notify One Call and shall have One Call locate all underground facilities before digging. It shall be the responsibility of the Customer to stay clear of all underground facilities.



MAIN MAY BE DIRECTLY ABOVE OR ON EITHER SIDE OF CT ENCLOSURE

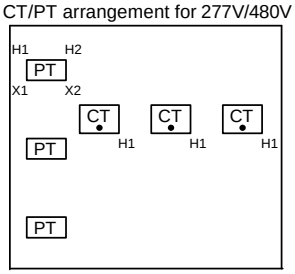
Main Disconnect: Readily accessible to Company at all hours with no notice

NOTES:

1. All material, except instrument transformers, meter, and meter enclosure are to be furnished, installed, and maintained by the Customer in a location approved by the Company.
2. Instrument transformers and meter enclosure are to be furnished by Company and installed by the Customer.
3. Company reserves the right not to connect service if Company representative considers the installation not safe or not adequate.
4. Service structure shall be as close as possible to the Company source to which the service is to be connected, not to exceed 150 ft.
5. Use masonry anchors to secure the meter arrangement (plastic anchors are not allowed).
6. Conductor shall be installed in conduit where exposed.
7. PT's may be mounted on either side of CT can.
8. Single phase 120v/240v 3 wire service requires only 2 CTs.
9. More than two conductors may require larger size enclosures. Consult the Company.
10. When the Customer provides, owns, installs, and maintains the cable to the Company's transformer, a junction box is not required. Consult the Company. See section 8.5 for junction box sizing and Customer supplied connectors.
11. All Meter Transformer enclosures shall: Have a metal or 3/4" treated plywood back–plate in addition to the back wall of the enclosure, be UL listed, be weather proof/rain–tight (NEMA 3 r), have a locking mechanism to secure it suitable for a company padlock, be side hinged and be minimum Aluminum or 14 gauge G90 steel enclosure.

DETAIL "A"

CT/PT arrangement for 277V/480V



PT's may be mounted on either side of CT can

TABLE 9.1.3: GUIDELINE FOR METER TRANSFORMER ENCLOSURE WITH MULTIPLE CIRCUITS

Total Customer Conduits (4" min)	Maximum Conductor Size	Minimum Dimensions		
		Depth	Width	Height
Up to 4	600 kcmil	14"	32"	40"
Up to 6	500 kcmil	14"	32"	54"

CTs will be placed at center. Customer Conduit spaced evenly.
Service connections shall not be made in an instrument transformer enclosure.
For larger sizes, consult the Company.

NO.	DATE:	REVISION	BY:	APPR:
3	11–3–25	REVISED PER CUSTOMER INSTALLATIONS 2025	ERG	EB
2	06/15/17	Revised drawing and notes as needed.	ERG	
1	02/13	REVISION OF DRAWING SS11.8–4	JED	

ENTERGY SERVICES, INC.

CURRENT INSTRUMENT TRANSFORMER FOR UNDERGROUND SERVICE

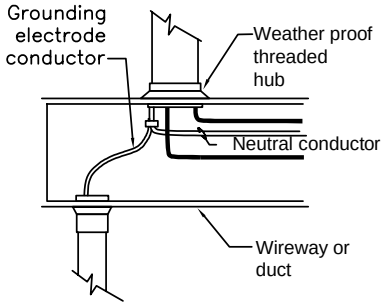
APPROVED BY:	GB	DATE:	02/26/2013
CHECKED BY:	EB	SCALE:	NONE
DRAWN BY: krich95		CEA NO.	

entergy

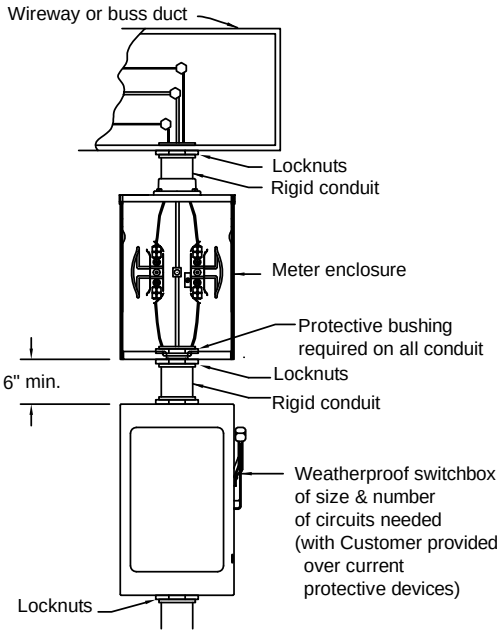
No. D9-7

PLOT 1=1 SH. 1 OF 1

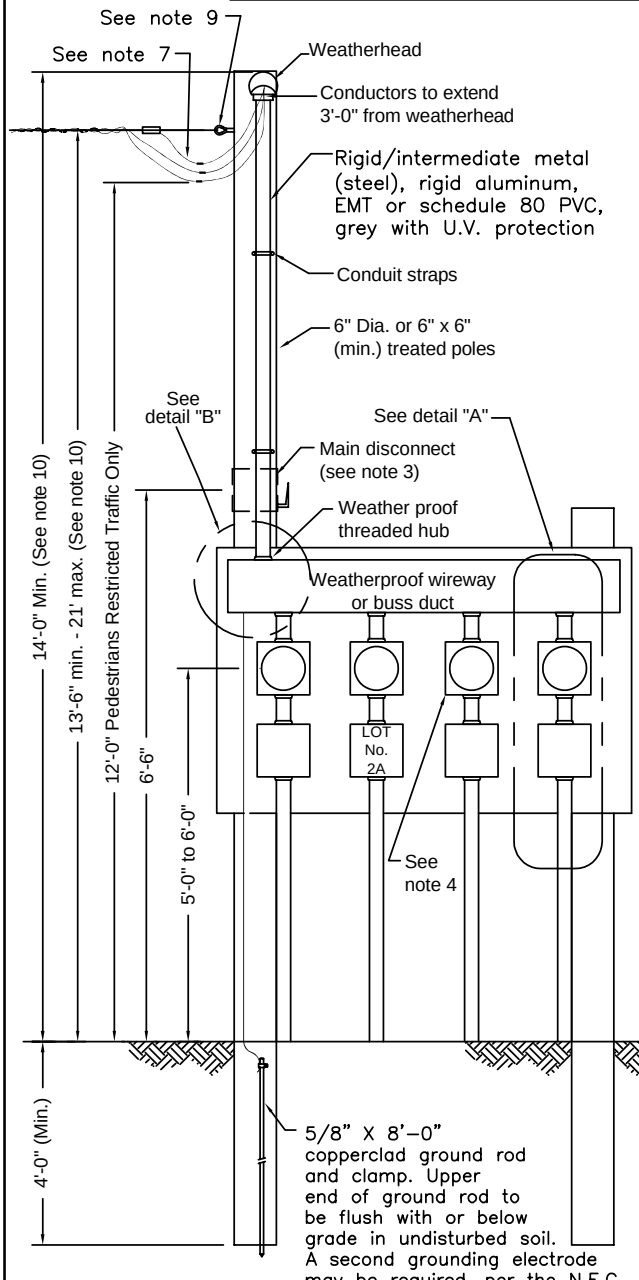
911 address shall be a minimum 3" lettering marked on meter enclosure, pole, or durable material attached to pole and should be visible from street. (See section 3.4)



DETAIL "B"



DETAIL "A"



NOTES:

1. Customer facilities shall comply with Company Standards, the National Electrical Code, and authorities having jurisdiction. All material shall be suitable for outdoor use. Equipment to be installed at a location designated by the Company.
2. This installation applies to two (2) or more meters at one location.
3. A main disconnect is required for seven or more disconnects (NEC). A main disconnect is recommended in all cases for isolation of this disconnect/meter group from any other groups served by the same Company transformer.
4. For identification purposes, all meter enclosures will be plainly and permanently labeled to designate the particular apartment or office served. Each meter should have a separate cover that can be removed for repairs without disturbing other meters.
5. Consult Company in design phase to learn what Conductors Company will furnish.
6. Company installs, owns, and maintains service and service connectors.
   Neutral shall be marked with white tape on both ends and may be bare wire.
7. Company shall make connection at top of weatherhead only.
8. Customer installed minimum ½" galvanized eye bolt with 2" x 2" square washer recommended.
9. If a current transformer (CT) installation in required, see drawing D9–6.
10. Additional height may be required to maintain proper clearance per Section 7.3 clearances.

CALL 811 TWO BUSINESS DAYS BEFORE YOU DIG

In locations with underground facilities, the Customer shall notify One Call and shall have One Call locate all underground facilities before digging. It shall be the responsibility of the Customer to stay clear of all underground facilities.

NO.	DATE:	REVISION	BY:	APPR:
3	11–3–25	REVISED PER CUSTOMER INSTALLATIONS 2025	ERG	EB
2	06/15/17	Revised drawing and notes as needed.	ERG	
1	01/13	REVISION FOR DRAWING SS11.6–1	JED	

ENTERGY SERVICES, INC.

CUSTOMER OWNED MULTIPLE METER

(FIELD ASSEMBLED)

OVERHEAD SERVICE

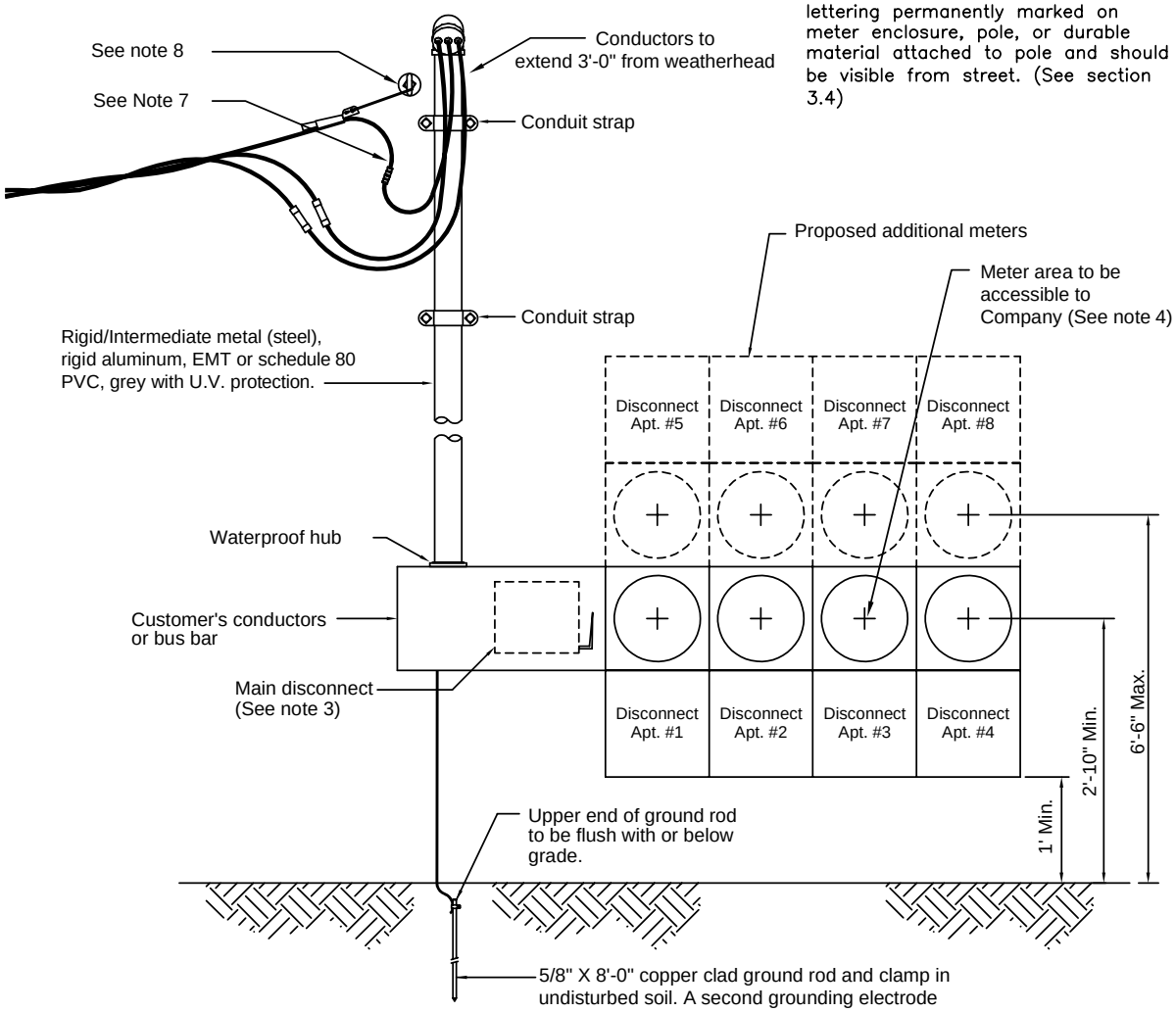
APPROVED BY: EB	DATE: 01/15/2013
CHECKED BY: GB	SCALE: NONE
DRAWN BY: krich95	

entergy

No. D9-8

PLOT 1=1 | SH. 1 OF 1

911 address shall be a minimum 3" lettering permanently marked on meter enclosure, pole, or durable material attached to pole and should be visible from street. (See section 3.4)



NOTES:
1. Customer facilities shall comply with Company Standards, the National Electrical Code, and authorities having jurisdiction. All material shall be suitable for outdoor use. Equipment to be installed at a location designated by the Company.
2. This installation applies to two (2) or more meters at one location.
3. A main disconnect is required for seven or more disconnects (NEC). A main disconnect is recommended in all cases for isolation of this disconnect/meter group from any other groups served by the same Company transformer.
4. For identification purposes all meter enclosures will be plainly and permanently labeled to designate the particular apartment or office served. Each meter should have a separate cover that can be removed for repairs without disturbing other meters.
5. Consult Company in design phase to learn what Conductors Company will furnish.
6. Company installs, owns, and maintains service and service connectors. Neutral shall be marked with white tape on both ends and may be bare wire.
7. Company shall make connection at top of weatherhead only.
8. Customer installed minimum 1/2" galvanized eye bolt with 2" x 2" square washer recommended.
9. If a current transformer (CT) installation is required, see drawing D9-6.

CALL 811 TWO BUSINESS DAYS BEFORE YOU DIG

In locations with underground facilities, the Customer shall notify One Call and shall have One Call locate all underground facilities before digging. It shall be the responsibility of the Customer to stay clear of all underground facilities.

NO.	DATE:	REVISION	BY:	APPR:
3	11-3-25	REVISED PER CUSTOMER INSTALLATIONS 2025	ERG	EB
2	06/15/17	Revised notes as needed	ERG	
1	01/13	REVISION FOR DRAWING SS11.6-2	JED	

ENTERGY SERVICES, INC.

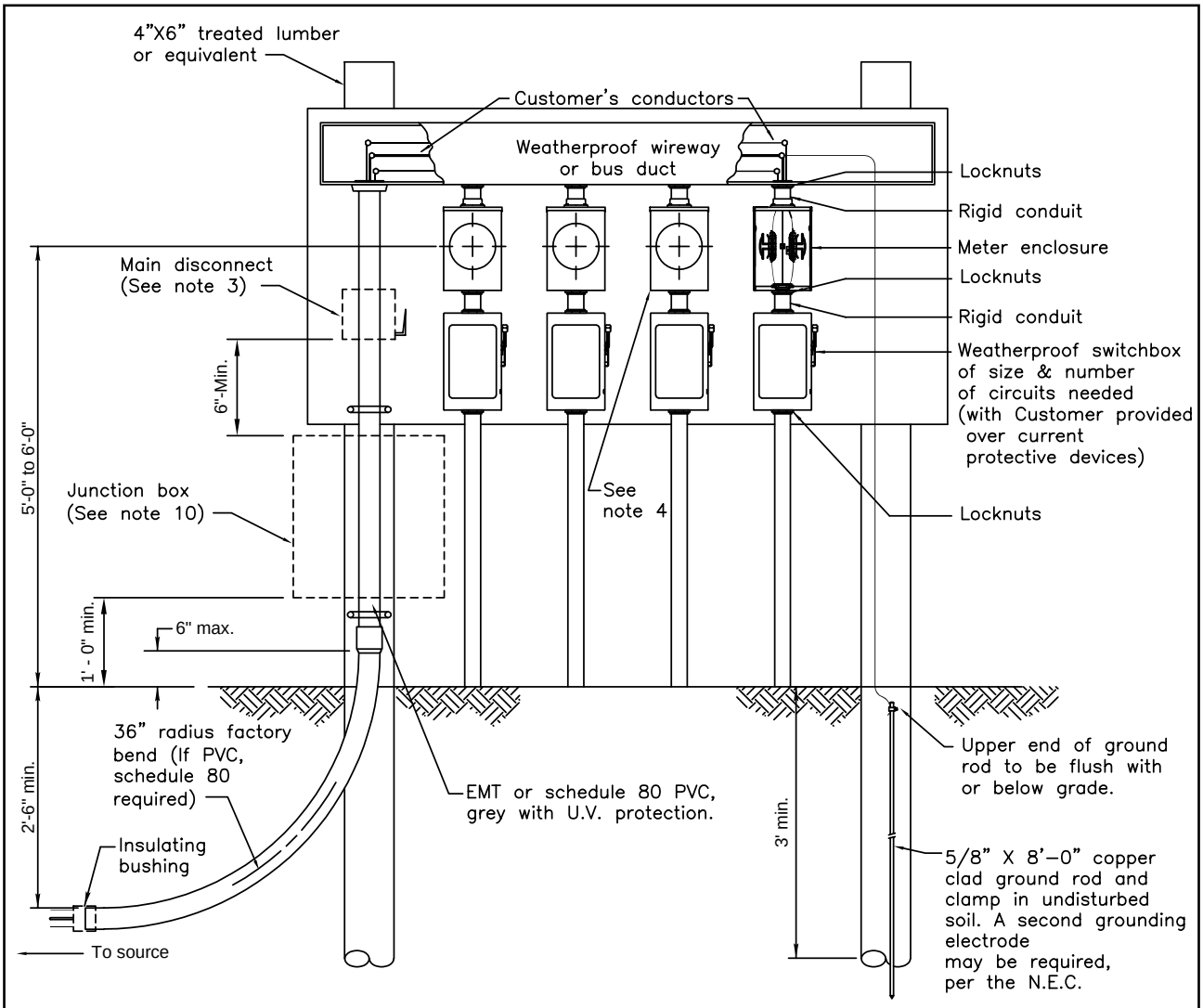
CUSTOMER OWNED MULTIPLE METER
(PRE-ASSEMBLED)
OVERHEAD SERVICE

APPROVED BY: GB	DATE: 01/15/2013
CHECKED BY: EB	SCALE: NONE
DRAWN BY: krich95	

entergy

No. D9-9

PLOT 1=1 | SH. 1 OF 1



NOTES:

1. Customer facilities shall comply with Company Standards, the National Electrical Code, and authorities having jurisdiction. All material shall be suitable for outdoor use. Equipment to be installed at a location designated by the Company.
2. This installation applies to two (2) or more meters at one location.
3. A main disconnect is required for seven or more disconnects (NEC). A main disconnect is recommended in all cases for isolation of this disconnect/meter group from any other groups served by the same Company transformer.
4. For identification purposes, all meter enclosures will be plainly and permanently labeled to designate the particular apartment or office served. Each meter should have a separate cover that can be removed for repairs without disturbing other meters.
5. Consult Company in design phase to learn what conductors Company will furnish. Size of conduit determined by Company.
6. Company installs, owns, and maintains service and service connectors. Neutral shall be marked with white tape on both ends and may be bare wire.
7. Company shall make connections in Junction box (when applicable).
8. If a current transformer (CT) installation is required, see drawing D9–7.
9. Customer shall install 80 lb. test non–metallic (manila or grass) pull line or bull tape in the conduit.
10. See section 8.5 for junction box sizing and Customer supplied connectors.

911 address shall be a minimum 3" lettering marked on meter enclosure, pole, or durable material attached to pole and should be visible from street. (See section 3.4)

CALL 811 TWO BUSINESS DAYS BEFORE YOU DIG

In locations with underground facilities, the Customer shall notify One Call and shall have One Call locate all underground facilities before digging. It shall be the responsibility of the Customer to stay clear of all underground facilities.

NO.	DATE:	REVISION	BY:	APPR:
3	11–3–25	REVISED PER CUSTOMER INSTALLATIONS 2025	ERG	EB
2	06/15/17	Revised dimension and notes as needed.	ERG	
1	04/13	REVISION OF DRAWING SS11.6–3	JED	

ENTERGY SERVICES, INC.

CUSTOMER OWNED MULTIPLE METER

(FIELD ASSEMBLED)

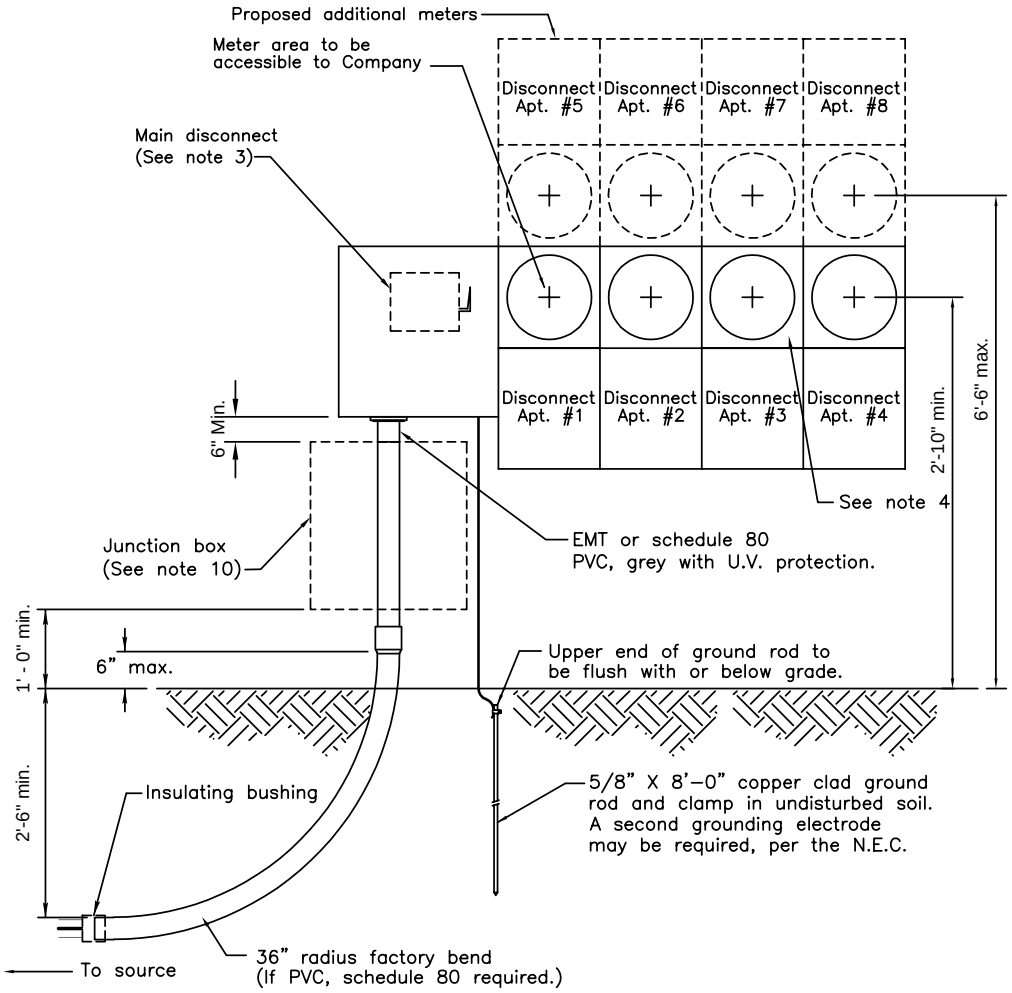
UNDERGROUND SERVICE

APPROVED BY:	GB	DATE:	04/03/2013
CHECKED BY:	EB	SCALE:	NONE
DRAWN BY:	krich95		

entergy

No. D9-10

PLOT 1=1 SH. 1 OF 1



NOTES:

1. Customer facilities shall comply with Company Standards, the National Electrical Code, and authorities having jurisdiction. All material shall be suitable for outdoor use. Equipment to be installed at a location designated by the Company.
2. This installation applies to two (2) or more meters at one location.
3. A main disconnect is required for seven or more disconnects (NEC). A main disconnect is recommended in all cases for isolation of this disconnect/meter group from any other groups served by the same Company transformer.
4. For identification purposes, all meter enclosures will be plainly and permanently labeled to designate the particular apartment or office served. Each meter should have a separate cover that can be removed for repairs without disturbing other meters.
5. Consult Company in design phase to learn what conductors Company will furnish. Size of conduit determined by Company.
6. Company installs, owns, and maintains service and service connectors. Neutral shall be marked with white tape on both ends and may be bare wire.
7. Company shall make connections in Junction box (when applicable).
8. If a current transformer (CT) installation is required, see drawing D9-7.
9. Customer shall install 80 lb. test non-metallic (manila or grass) pull line or bull tape in the conduit.
10. See section 8.5 for junction box sizing and Customer supplied connectors.

911 address shall be a minimum 3" lettering marked on meter enclosure, pole, or durable material attached to pole and should be visible from street. (See section 3.4)

CALL 811 TWO BUSINESS DAYS BEFORE YOU DIG

In locations with underground facilities, the Customer shall notify One Call and shall have One Call locate all underground facilities before digging. It shall be the responsibility of the Customer to stay clear of all underground facilities.

NO.	DATE:	REVISION	BY:	APPR:
3	11-3-25	REVISED PER CUSTOMER INSTALLATIONS 2025	ERG	EB
2	06/15/17	Revised drawing and notes as needed.	ERG	
1	04/13	REVISION FOR DRAWING SS11.6-4	JED	

ENTERGY SERVICES, INC.

CUSTOMER OWNED MULTIPLE METER

(PRE- ASSEMBLED)

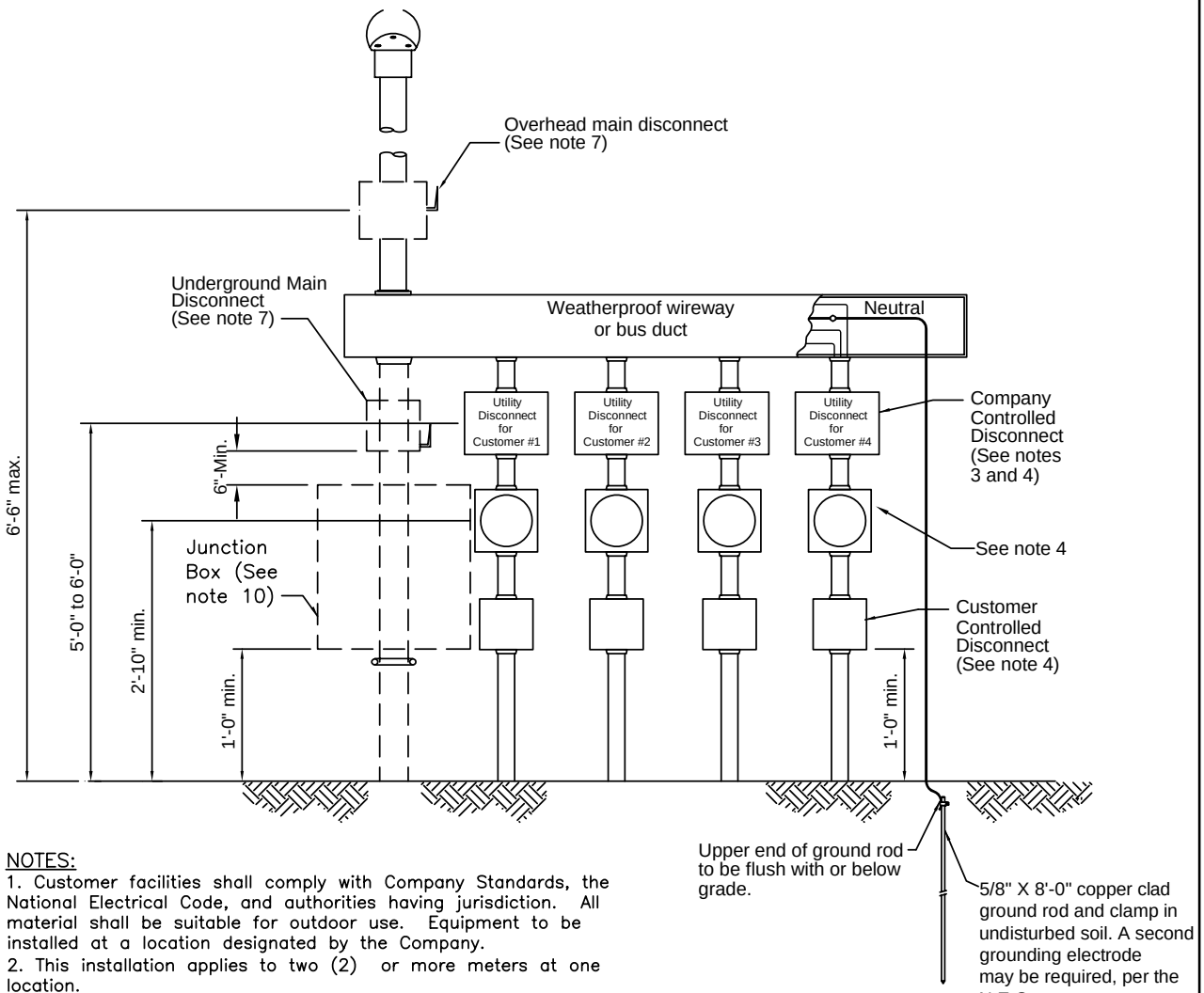
UNDERGROUND SERVICE

APPROVED BY: EB	DATE: 04/04/2013
CHECKED BY: GB	SCALE: NONE
DRAWN BY: krich95	

entergy

No. D9-11

PLOT 1=1 | SH. 1 OF 1



NOTES:

1. Customer facilities shall comply with Company Standards, the National Electrical Code, and authorities having jurisdiction. All material shall be suitable for outdoor use. Equipment to be installed at a location designated by the Company.
2. This installation applies to two (2) or more meters at one location.
3. Customer shall furnish and install a Company approved, lockable, non–fused disconnect switch on the supply side of the meter. The Company shall control the supply side disconnect and it shall be available 24 hours a day without notice.
4. For identification purposes, all meter sockets and utility disconnects will be plainly and permanently labeled to designate the particular apartment or office served. Each meter should have a separate cover that can be removed for repairs without disturbing other meters. See label 1–5.
5. This installation applies to two (2) or more meters at one location.
6. This installation can be adapted for underground (see D9–5) or overhead (D9–4) service.
7. A main disconnect is required for seven or more disconnects – (NEC). A main disconnect is recommended in all cases for isolation of this disconnect/meter group from any other groups served by the same transformer. Utility connection shall be made on the line side of main disconnect or junction box.
8. When installed as an underground service, the Customer shall install 80 lb non–metallic (manila or grass) pull line or bull tape in the conduit.
9. If a current transformer (CT) installation is required, see drawings D9–6 and D9–7.
10. See section 8.5 for junction box sizing and Customer supplied connectors.

911 address shall be a minimum 3" lettering marked on meter enclosure, pole, or durable material attached to pole and should be visible from street. (See section 3.4)

CALL 811 TWO BUSINESS DAYS BEFORE YOU DIG

In locations with underground facilities, the Customer shall notify One Call and shall have One Call locate all underground facilities before digging. It shall be the responsibility of the Customer to stay clear of all underground facilities.

NO.	DATE:	REVISION	BY:	APPR:
3	11-3-25	REVISED PER CUSTOMER INSTALLATIONS 2025	ERG	EB
2	06/15/17	Updated title, notes and added dimensions as needed.	ERG	
1	01/13	REVISION FOR DRAWING SS11.6-5	JED	

ENTERGY SERVICES, INC.

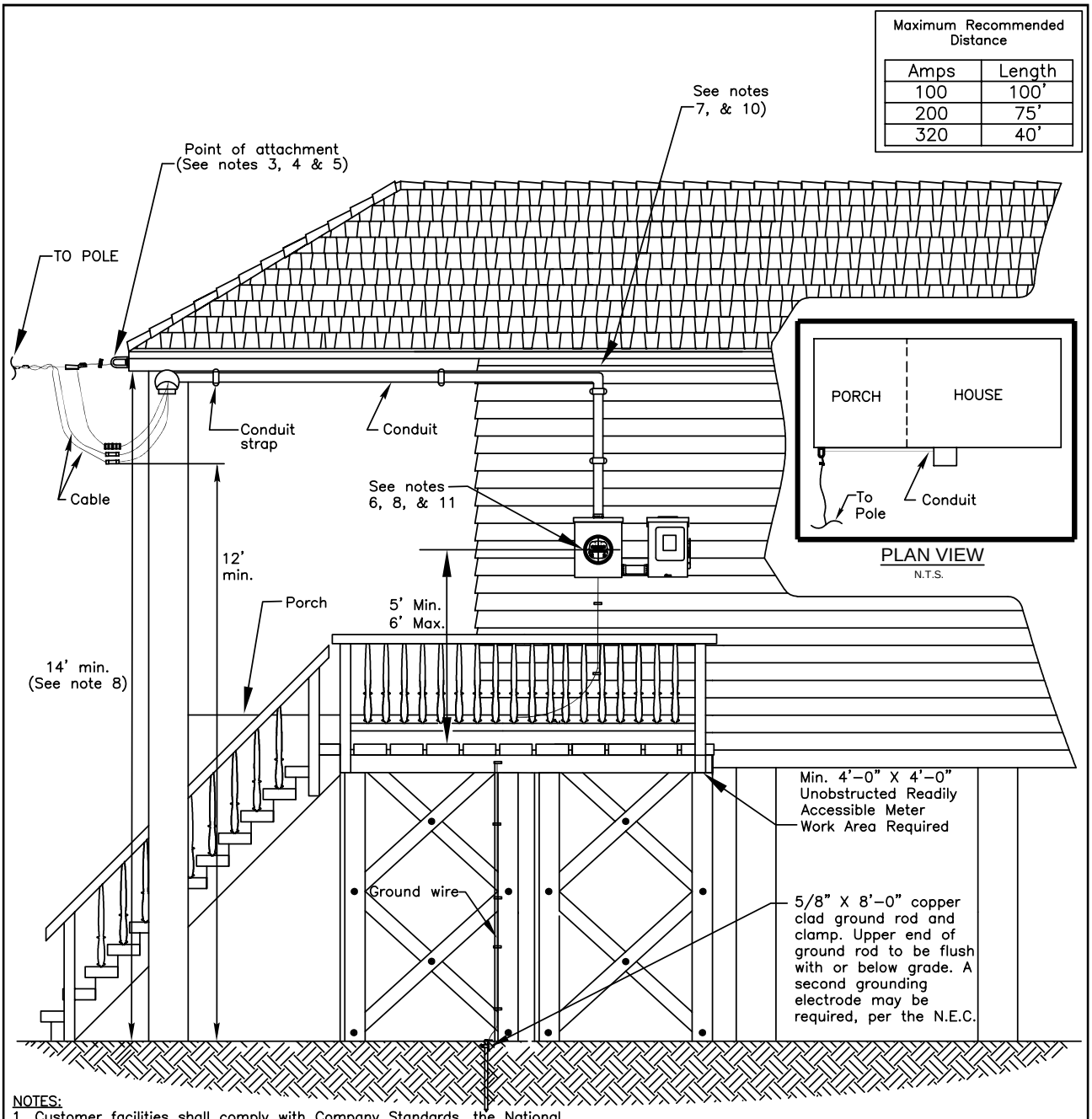
CUSTOMER OWNED MULTIPLE METER 3ø
277WYE/480 VOLTS
SELF CONTAINED METER ARRANGEMENT

APPROVED BY:	GB	DATE:	01/15/2013
CHECKED BY:	EG	SCALE:	NONE
DRAWN BY:	krich95		

entergy

No. D9-12

PLOT 1=1 | SH. 1 OF 1



NOTES:
1. Customer facilities shall comply with Company Standards, the National Electrical Code, and authorities having jurisdiction.
2. Buildings or other facilities shall not be constructed under existing company supply lines, nor shall any company supply lines pass over existing buildings or facilities.
3. Customer installed minimum 1/2" galvanized eye bolt with 2" x 2" square washer recommended or other suitable attachment.
4. A minimum of 3'–0" of each conductor shall extend from the top of the service mast. The neutral shall be labeled with white tape at both ends. Neutral can be bare.
5. Customer shall supply and install point of attachment.
6. Main breaker should be within 2'–0" of meter. Outside wall is recommended.
7. Customer shall install meter enclosure.
8. Additional height may be required to maintain clearance. Point of attachment can be no higher than 21'. If higher, see drawing D9–14 or contact the Company.
9. No telephone or cable attachment allowed on mast. (NEC)
10. Minimum 3 ft. clearance between electric meter and gas meter..
11. Any Service greater than 200 amps, consult the Company.

CALL 811 TWO BUSINESS DAYS BEFORE YOU DIG

In locations with underground facilities, the Customer shall notify One Call and shall have One Call locate all underground facilities before digging. It shall be the responsibility of the Customer to stay clear of all underground facilities.

NO.	DATE:	REVISION	BY:	APPR:
3	11–3–25	REVISED PER CUSTOMER INSTALLATIONS 2025	ERG	EB
2	06/15/17	Revised notes as needed.	ERG	
1	10/12	REVISION FOR DRAWING SS11.7–2	JED	

ENTERGY SERVICES, INC.

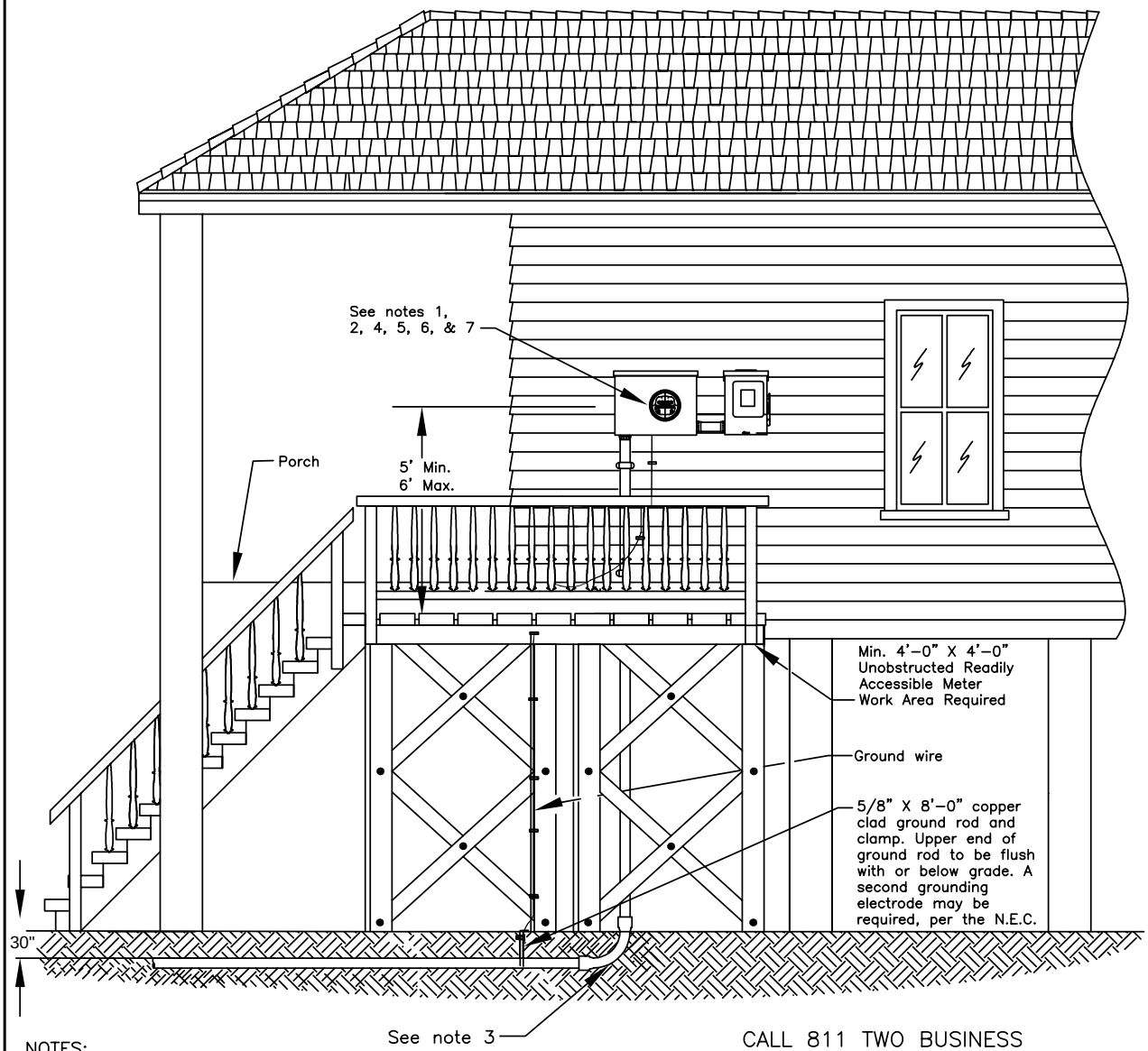
TYPICAL SINGLE PHASE RESIDENTIAL FLOOD OVERHEAD PLAN RAISED FOUNDATION METER ACCESS REQUIREMENTS

APPROVED BY:	GB	DATE:	11/09/2012
CHECKED BY:	EB	SCALE:	NONE
DRAWN BY:	krich95		

entergy

No. D9-13

PLOT 1=1 | SH. 1 OF 1



NOTES:

1. Customer facilities shall comply with Company Standards, the National Electrical Code, and authorities having jurisdiction.
2. Buildings or other facilities shall not be constructed over existing company supply lines, nor shall any company supply lines pass under existing buildings or facilities.
3. Schedule 80 PVC for elbows and above ground facilities are required.
4. Main breaker should be within 2'–0" of meter. Outside wall is recommended.
5. Customer shall install meter enclosure.
6. Minimum 3 ft. clearance between electric meter and gas meter.
7. Any Service greater than 200 amps, consult the Company.

CALL 811 TWO BUSINESS DAYS BEFORE YOU DIG

In locations with underground facilities, the Customer shall notify One Call and shall have One Call locate all underground facilities before digging. It shall be the responsibility of the Customer to stay clear of all underground facilities.

NO.	DATE:	REVISION	BY:	APPR:
2	11–3–25	REVISED PER CUSTOMER INSTALLATIONS 2025	ERG	EB
1	10/12	REVISION FOR DRAWING SS11.7–1	JED	

ENTERGY SERVICES, INC.

TYPICAL SINGLE PHASE RESIDENTIAL FLOOD PLAN RAISED FOUNDATION METER ACCESS REQUIREMENTS FOR UNDERGROUND FACILITIES

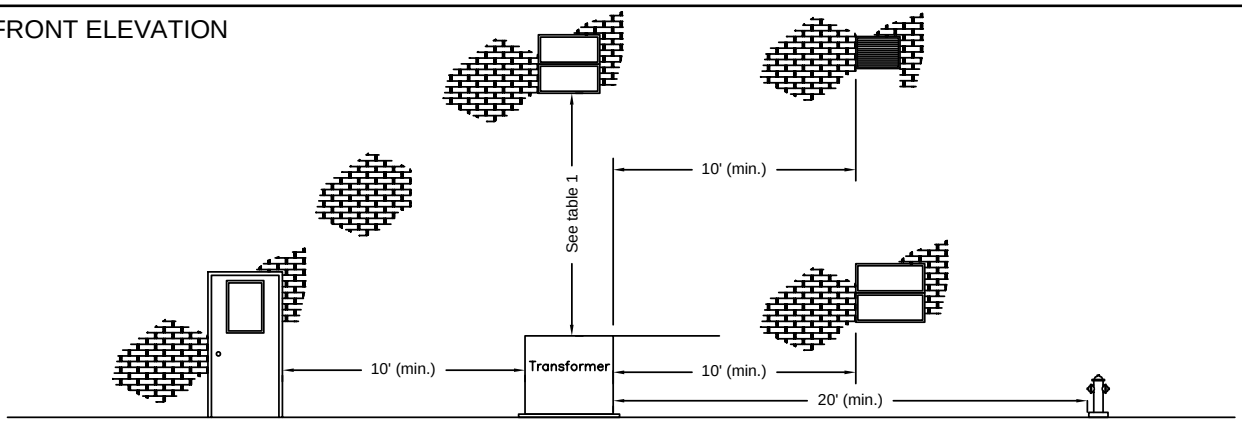
APPROVED BY:	GB	DATE:	11/07/2012
CHECKED BY:	EG	SCALE:	NONE
DRAWN BY:	krich95		

entergy

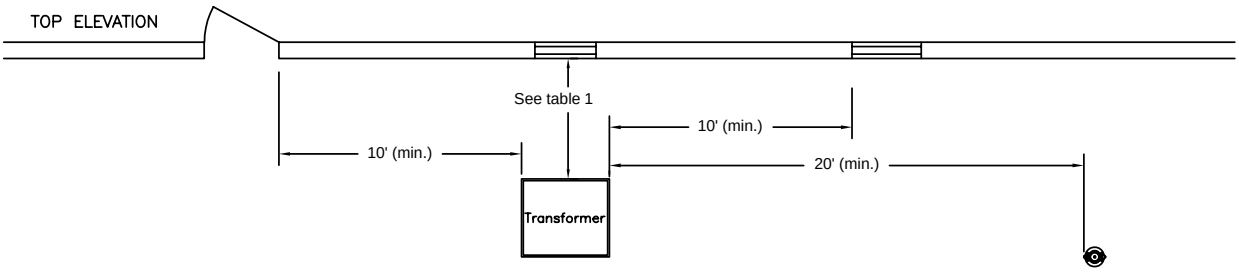
No. D9-14

PLOT 1=1 SH. 1 OF 1

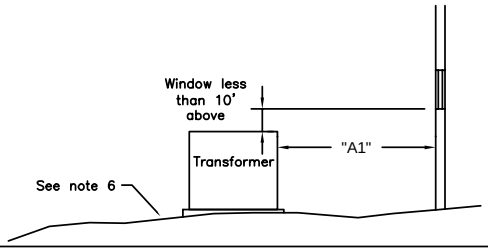
FRONT ELEVATION



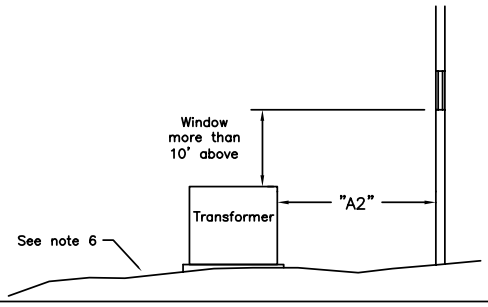
TOP ELEVATION



SIDE ELEVATION
OPTION "A1" in Table 1



SIDE ELEVATION
OPTION "A2" in Table 1



NOTES:
1. The transformer shall be installed so that the front of the unit does not face the building.
2. Adequate passageways to accommodate line trucks or other necessary lifting and hauling equipment shall be provided to allow for maintenance, operation or replacement.
3. No portion of the the building shall extend over the transformer.
4. Recommend 20' minimum dimension to the fire hydrant also applies to fire escapes and fuel storage tanks.
5. The 10' minimum dimension to the doorway also applies to open stairways and garage doors.
6. Drainage of the area surrounding the transformer shall be away from the building.
7. There shall be no above ground obstructions such as cooling towers, shrubs, plants, or fences, within 12' of the front of the transformer pad or within 3' of the sides or back of the transformer pad.
8. It shall be the customer's responsibility to comply with any insurance regulations, building codes, and local ordinances affecting the installation.

TABLE 1

STRUCTURES	"A1"	"A2"
STEEL OR MASONRY	10'	3'
WOOD	10'	10'

NO.	DATE:	REVISION	BY:	APPR:
5	11-3-25	REVISED PER CUSTOMER INSTALLATIONS 2025	ERG	EB
4	06/15/17	Updated notes as needed.	ERG	
3	5/23/06	ADDED NOTE 9	DAT	
2	8/17/99	REFERENCE DRAWING TO DAS01281	DAT	
1	11/29/12	REFERENCE DRAWING UG1004011	JED	

ENTERGY SERVICES, INC.

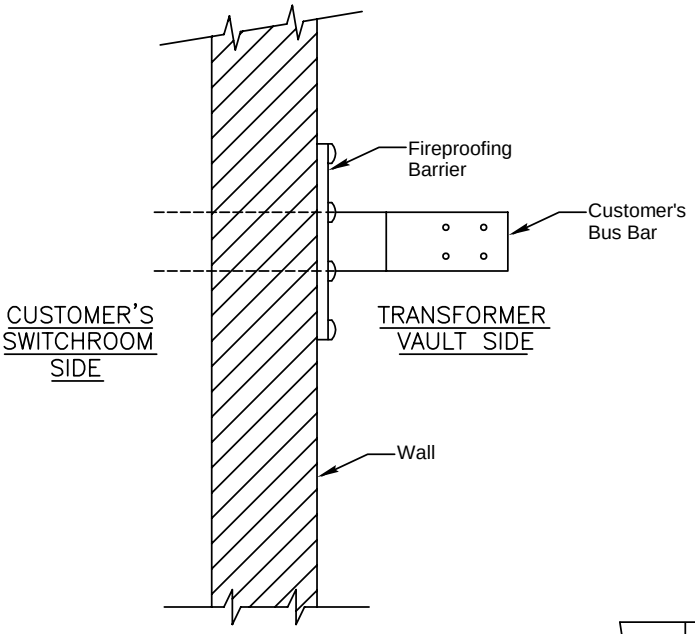
LOCATION OF TRANSFORMERS AND OTHER OIL FILLED EQUIPMENT

APPROVED BY:	GB	DATE:	11/29/2012
CHECKED BY:	EB	SCALE:	NONE
DRAWN BY:	krich95		

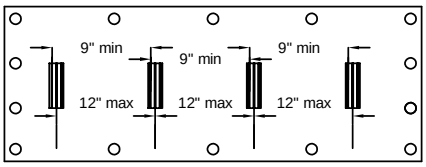
entergy

No. D10-1

PLOT 1=1 SH. 1 OF 1

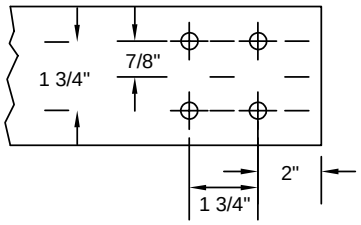


ELEVATION

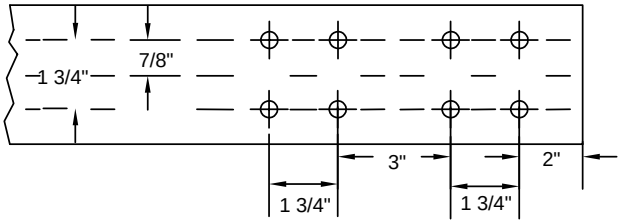


SECTION "A" – "A"

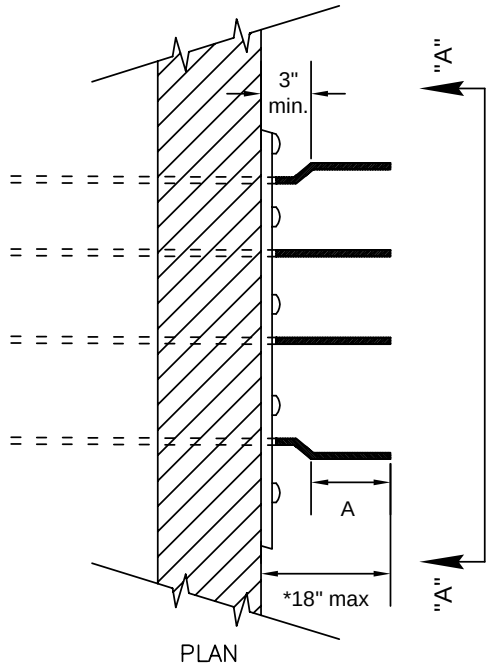
BUS BAR DRILLING – for 0 – 2000 ampere bus rating



BUS BAR DRILLING – for above 2000 ampere bus rating



DRILLING NOTE: Consult with Entergy for drilling details on bus bars rated 7000 ampere and above.



PLAN

AMPERE RATING OF BUS	STRAIGHT RUN "A" MIN.
0 – 2000	6"
OVER 2000	12"

* Consult with Entergy before ordering equipment if 18" dimension must be exceeded.

NOTES:

FOR COPPER BUS (PREFERRED):

1. Bus bars to be drilled as shown for 1/2". Entergy will furnish necessary cable lugs.

FOR ALUMINUM BUS:

1. Customer to furnish cable lugs suitable for connecting copper cables.
2. Exact number and size of cable lugs to be specified by Entergy.
3. Lugs to be 2–hole type with 1 ¾" X 1 ¾" spacing for ½" bolts.
4. Lugs to be installed per manufacturer's specifications.

WHEN TRANSFORMER VAULT IS SUBJECT TO FLOODING:

1. Customer to seal and waterproof bus entrance in addition to fireproofing.

NOTES:
Final electrical plans incorporating these requirements are to be submitted to Entergy for approval prior to ordering equipment.

NO.	DATE:	REVISION	BY:	APPR:
3	11–3–25	REVISED PER CUSTOMER INSTALLATIONS 2025	ERG	EB
2	5/11/17	Revised notes and changes dimensions	ERG	
1	09/24	REVISION OF DRAWING U–S–4000	JED	

ENTERGY SERVICES, INC.

REQUIREMENTS FOR TERMINATING ELECTRIC SERVICE

CONNECTIONS IN TRANSFORMER VAULTS

APPROVED BY:	GB	DATE:	09/24/2012
CHECKED BY:	EB	SCALE:	None
DRAWN BY:	krich95		

entergy

No. D10-2

PLOT 1=1 SH. 1 OF 1

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