

WIRE & CONDUIT SIZES FOR RESIDENTIAL ONLY

| AMP | CONDUCTOR | NEUTRAL | GROUND | CONDUIT |
|-----|-----------|---------|--------|---------|
| 100 | #2 | #2 | #4 | 2" |
| 200 | 2/0 | #1 | #4 | 2" |
| 225 | 3/0 | 1/0 | #4 | 2" |
| 400 | 400 MCM | 400 MCM | #4 | 3" |

ALL WIRE SIZES GIVEN ARE FOR COPPER WIRE
ALL CONDUIT SIZES GIVEN ARE PVC SCH 80

NOTE: ALL EQUIPMENT & WIRING FROM THE WEATHERHEAD ON, SHALL BE INSTALLED TO THE NATIONAL ELECTRIC CODE.

MATERIALS
FURNISHED
BY DES
see 2-1

UNSPliced
GROUND
WIRE
see 2-7

MIN OF 3
CONNECTION
POINTS
see 2-7

GUY STRAND
and ANCHOR
see 2-9

WEATHERHEAD
see 2-3

SERVICE
RACEWAY
see 2-4

METER POLE
see 2-2

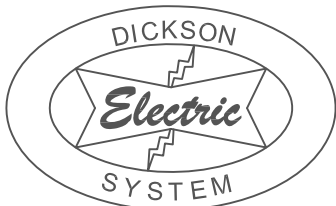
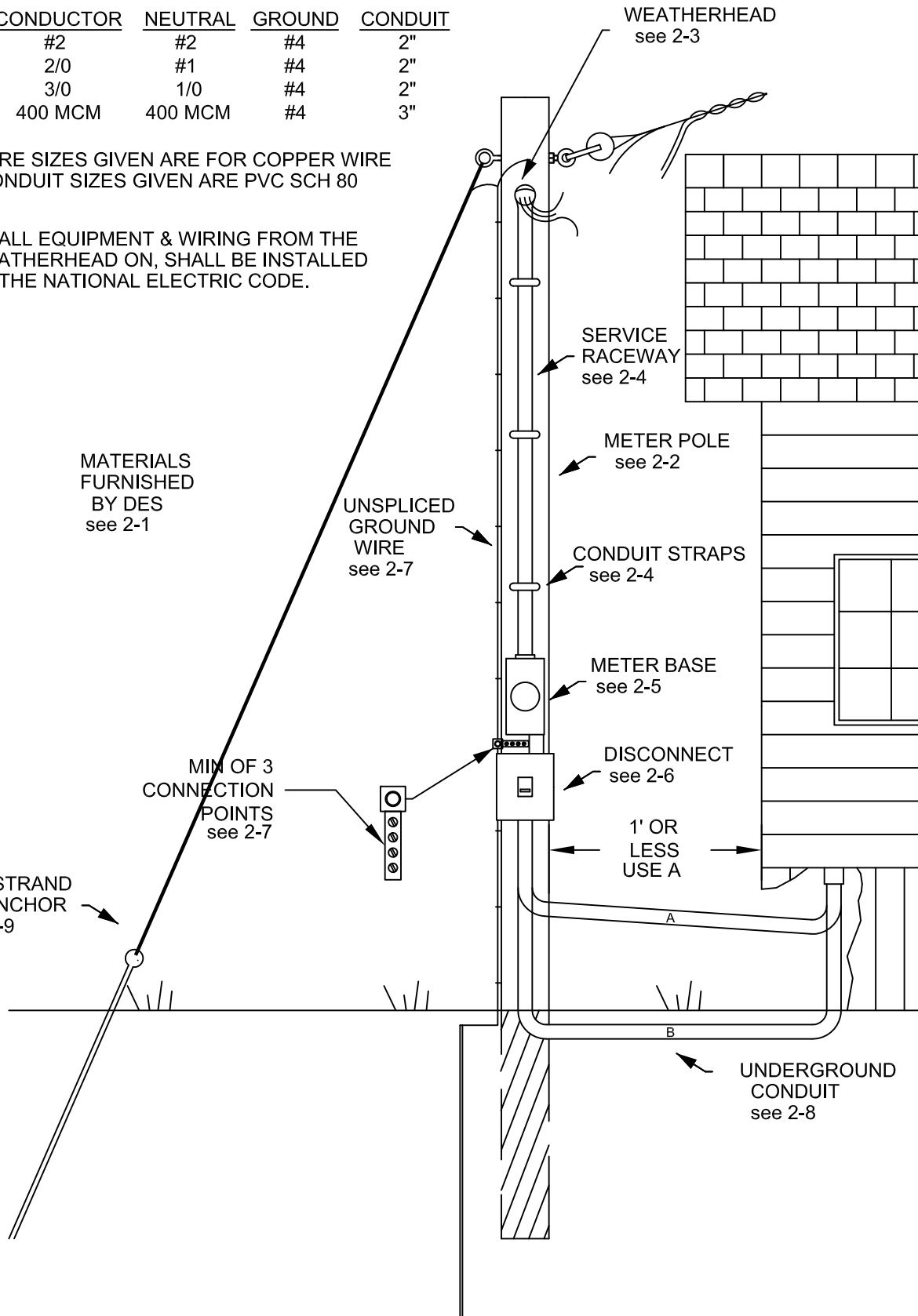
CONDUIT STRAPS
see 2-4

METER BASE
see 2-5

DISCONNECT
see 2-6

1' OR
LESS
USE A

UNDERGROUND
CONDUIT
see 2-8



OVERHEAD RESIDENTIAL METER POLE SERVICE

DATE:

5/17/2016

FIGURE NO:

2

SCALE:

NONE

- 2-1. Where meter service will be located on customer's pole DES will furnish and install service drop conductor from service pole to customer's pole. DES will furnish and the customer must install the eyebolt for the service drop conductor. Eyebolt can be obtained from the DES metering department where meter bases are picked up. The eyebolt is a galvanized 5/8 inch by required length for purpose being used.
- 2-2. Location and height of customer's pole determined by DES engineer. Customer's pole will be a treated utility pole and will be set a minimum depth of 4 ft. to 6 ft. depending on size of pole. Standard size pole is 25' set 5' in ground. Some circumstances might require/allow this to be changed.
- 2-3. Eyebolt shall be located within 12 inches of top of pole. Weather head must be located within 2 feet of the eyebolt. Use type W wire for conductors.
- 2-4. Rigid conduit, IMC, EMT, Schedule 80 electrical PVC with rain-tight couplings and connectors, may be used as service entrance conductor raceway. Service entrance raceways should be fastened to the pole within 12 inches of service head and meter base and then at 30 inch intervals in between.
- 2-5. A meter base and hub, of proper size and type, will be furnished and installed by the customer. Meter base will be located between 5 and 6 ft. above grade.
- 2-6. A weatherproof, U.L. listed, multi-circuit disconnect will be located within 30 ft. of manufactured home. Whether located below meter base on customer's pole or on stub, in no case will disconnect be less than 2 ft. above grade. If spacer block is necessary behind meter base or disconnect, use treated wood, metal brackets, or struts.
- 2-7. A ground wire of No. 4 bare copper or larger shall be run from the meter base to a driven ground rod. An 8 ft. driven ground rod bonded to ground wire with clamp suitable for direct soil burial will be installed below final grade. If rebar is used in a concrete foundation the rebar shall be stubbed out of the concrete at the service entrance. The ground wire will be attached to the rebar using a suitable clamp then run to the ground rod and then to the meter base unspliced (use tear drop clamp both locations). Install an intersystem bonding terminal below the meter base with a minimum of three additional termination points on the exposed bare ground wire.
- 2-8. If condition "A" the conduit may be strapped with electrical straps to the bottom of the mobile home. If condition "B" the conduit must be a minimum of 18" deep outside of the mobile home perimeter. Once under the mobile home the depth may be reduced to 1" fill over top of conduit. No more than three turns or elbows may be used from the base of the meter pole to service entrance of the mobile home.
- 2-9. If the distance from the last DES pole to the meter pole is greater than fifty feet (50 ft.), the meter pole must be guyed according to the following specifications:
 - (A) The anchor should be buried a minimum of 12 ft. from the meter pole at a depth of 4 1/2 ft. in line with the pull of the electric service wires.
 - (B) Minimum guying material shall be
 1. 6000# Anchor plate
 2. 1/4" Guy strand
 3. 5/8" x 5' Thimble eye anchor rod

NOTE: Purple set up sticker needs to be on mobile home panel door and smoke detector needs to be up at final inspection.