

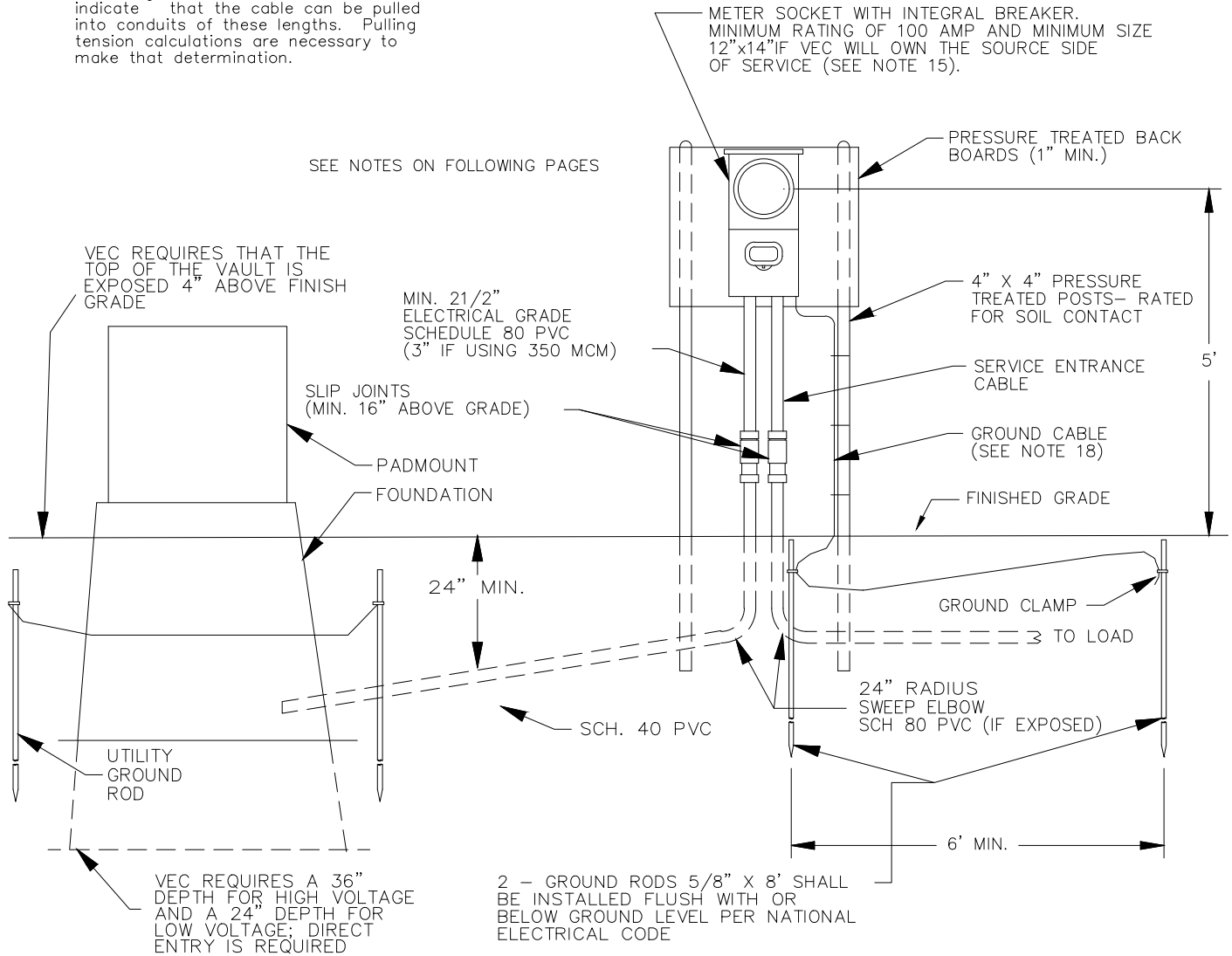
# TYPICAL METER PEDESTAL

RESIDENTIAL 120/240 VOLT SERVICES ONLY			
RATING	CABLE LENGTH*	TRIPLEX SIZE	CONDUIT
100A	0-210 FT.	1/0	2 1/2"
	211-410 FT.	4/0	2 1/2"
	411-650 FT.	350 MCM	3"
150 A	176-275 FT.	4/0	2 1/2"
	276-435 FT.	350 MCM	3"
200A	0-205 FT.	4/0	2 1/2"
	206-325 FT.	350 MCM	3"
300A	0-220 FT.	350 MCM	3"


IF THE TRANSFORMER IS IN CLOSE PROXIMITY TO THE METER/DISCONNECT, CONFIRM THAT THE BREAKER IS RATED FOR THE AVAILABLE FAULT CURRENT.

\* Cable Length is the total of trench and riser lengths. This chart does not indicate that the cable can be pulled into conduits of these lengths. Pulling tension calculations are necessary to make that determination.

SEE NOTES ON FOLLOWING PAGES



REV	DATE	REVISION DESCRIPTION	DRN	CKD

 <small>the co-op advantage</small>	VERMONT ELECTRIC COOPERATIVE INC.	
	JOHNSON, VT	
TYPICAL METER PEDESTAL		
DES:      DRN: CB	DWG. NO.      204 Page 2	
CKD:      SCALE: NONE	DATE: 07/10/2017	
		REV <span style="border: 1px solid black; padding: 2px;">1</span>

# Typical Meter Pedestal

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## Notes:

1. All wiring and materials shall conform to the requirements of the National Electric Code (NEC) and to any applicable local codes. Where conflict exists the more stringent code will apply. For member owned equipment, any requirements in excess of code specified minimums, are recommended not required.
2. This specification covers residential services. Commercial service equipment is under the jurisdiction of the electrical inspector. The cable sizes shown in the chart may not apply to commercial services.
3. The location of the meter pedestal and conduit risers and the meter socket will be designated by the utility representative. There shall be no more than three ninety-degree bends in the conduit, including one at the pole/pad and another at the meter pedestal. Any relocation shall be approved by a VEC representative.
4. Locate the riser conduit on the quarter of the pole away from normal traffic.
5. The pedestal shall be a minimum of 10 feet from the pole or padmount transformer, and, 5 feet from the mobile home.
6. All gas valves shall be a minimum of 10 ft from electric meter equipment. For clearances less than 10 ft, see Drawing No. 401 in this manual or refer to NFPA 58.
7. The member shall supply and install the pedestal, conduit, meter socket/disconnect and grounding. A pull rope having a minimum pull strength of 500 lbs. is required to be installed in the conduit by the member if VEC supplies the cable. If the member supplies the cable, it shall be installed in the conduit, and connected to the meter socket.
8. The trench should be dug a minimum of 18 inches wide and 24 inches deep to the top of the conduit.
9. For primary depths shallower than 36" may be allowed where obstructions such as ledge are encountered. Any portion of conduit shallower than 24" shall be covered by a minimum 6" concrete cap. Contact VEC for additional requirements for conduit buried near underground facilities, under driveways or roadways, or, for depths shallower than 12".
10. For secondary, depths shall be a minimum of 24"
11. A marker tape shall be installed, above the conduit, 12 inches below grade. Type USE cable shall be listed or marked sunlight resistant.
12. Any steel conduit within 18" of the surface shall be bonded. Steel conduit is not required.
13. Any construction, at the pole, above ground level, shall be done by the utility company. Exception: The member may install that portion of their equipment that can be reached while standing on the ground. Any trench near the base of the pole shall be immediately backfilled and properly tamped.
14. The chart shows the acceptable total cable length for given service amp ratings and conductors. The chart is based on a maximum 3% voltage drop in an aluminum underground service cable for a 120/240 volt service. For other voltages, cables or multiple cables consult an electrician.
15. Residential 320 amp meter sockets, and all commercial meter sockets, shall have a manual bypass. The meter socket shall have a separate grounding electrode conductor connector. The connector shall be appropriately connected to the service neutral bus. The service neutral, and not the grounding electrode conductor, shall extend from the meter socket to the main disconnect in the building. An exception would occur if a breaker, under the meter socket, is the main disconnect for a mobile home. See the Meter Socket Specification (Dwg. 401) included in this manual.
16. A side bus bar meter socket and 3 inch conduit are required if 350 MCM cable or a double run of cable is used.
17. The Service Disconnecting Means for one and two family dwelling units per the NEC section 230.85 must be located in a readily accessible outdoor location and be marked per the NEC requirements.
18. A disconnect is required to be within 30 feet of a mobile home. Four wire services are required from the disconnect to the subpanel (in the mobile home). The breaker in the disconnect shall be sized to protect the feeder to the subpanel. Modular homes, rated by the manufacturer 'For Permanent Foundation', may

## Typical Meter Pedestal

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have the meter socket mounted directly on the structure.

19. The grounding electrode conductor, from the main disconnect, to a driven ground, shall be a minimum of #6 copper. The conductor shall be adequately protected. The driven grounds shown shall be a minimum of 5/8" in diameter and 8' long.
20. VEC requires that the member install an integral breaker/meter socket. The purpose of the breaker is to allow the member to maintain their underground service without an expensive linecrew visit.
21. Where subject to state or local electrical inspection, such inspection must be made prior to energizing.
22. The drawing pictures two 4x4 pressure treated posts comprising the support for the meter pedestal. The posts are labeled 'rated for soil contact'. That description, or more completely, 'Ground Contact and Fresh Water Use' is from the wood preservative treatment standard AWPA C2. 'Ground Contact' rated posts are acceptable. A lesser level of treatment, 'Above Ground', which is not intended to be in contact with soil, are not acceptable. A higher level of treatment 'Permanent Wood Foundation,' is preferred, because the timbers will have the longest life. There are several types of preservative chemicals referenced in this standard. Generally, this Manual does not specify which types of treatment may be used; however, posts treated with creosote, are strongly discouraged.
23. Currently available copper-based preservatives are very corrosive to steel items embedded in, and in contact with, the treated timber. Use stainless steel fasteners, and place a permanent barrier between the meter socket and the post.
24. Other factors, affecting the durability of a pedestal installation, are the depth of burial, the surface area of the post exposed to the soil, the type of backfill material, and the compression of the backfill material. Increasing the quality of these factors will result in a pedestal that is less likely to be overturned, by forces experienced in the environment.
25. For services with any elevation change, VEC may require a service enclosure located no more than 10' from meter mounting device.
26. Supports of descriptions, other than two 4x4 pressure treated posts (rated for soil contact) and buried 48" (min.) depth, are allowed by VEC. The alternative supports, listed below, are examples. The Member/Contractor may suggest other alternative methods; however, VEC retains the right to make a determination of acceptability.
  - Larger dimension pressure treated wood (PTW) posts
  - Posts with a greater burial depth
    - Two 4"x4" PTW Posts set 48" deep
    - Two 6"x6" PTW Posts set 48" deep
  - Single posts supporting, at most, two sockets, on opposite sides of post
    - One 4"x12" PTW Posts set 60" deep (2 sockets max.)
    - One 8"x8" PTW Posts set 60" deep (2 sockets max.)
  - Concrete posts
  - Structural fiberglass, plastic, or plastic/wood posts
  - Rigid hot-dipped galvanized steel conduit (RGSC) (minimum 2" dia.) posts. Individual conduit supports shall not be used as both a support and as a wire conduit. The two posts shall be embedded in 8" diameter- 48" depth (minimum) concrete footings. The socket's neutral bus (and the socket) shall be connected to grounding electrodes and the posts shall be bonded to the socket, by metal Unistrut socket supports. The two posts shall be capped.
  - Manufactured metal meter pedestals, direct embedded or mounted on concrete slab
  - Socket support of pressure treated boards, or metal Unistrut, between the two posts