

# UNDERGROUND ELECTRIC TEMPORARY SERVICE PANELS

## 1.0 INDEX

- 1.0 INDEX
- 2.0 PURPOSE
- 3.0 CUSTOMER RESPONSIBILITY FOR TEMPORARY SERVICE
- 4.0 CUSTOMER RESPONSIBILITY FOR TEMPORARY SERVICE  
IN PERMANENT LOCATION
- 5.0 NVE RESPONSIBILITIES
- 6.0 GROUNDING

## 2.0 PURPOSE

This standard outlines the minimum requirements for a customer owned electric service panel from an underground source for installation of temporary service for building construction or temporary sales location. This Standard also outlines the criteria for installing a temporary service where the permanent service panel and meter will be installed.


Local ordinances may include requirements in addition to those outlined in this standard. Consult local authorities for city and/or county requirements and permits. Inspection and approval by the city/county is required before service can be connected.

**The local NVE office must be consulted prior to construction if the service is larger than 200 amps or three phase service is desired. When temporary service is to be established at the permanent meter location, prior NVE authorization is required.**

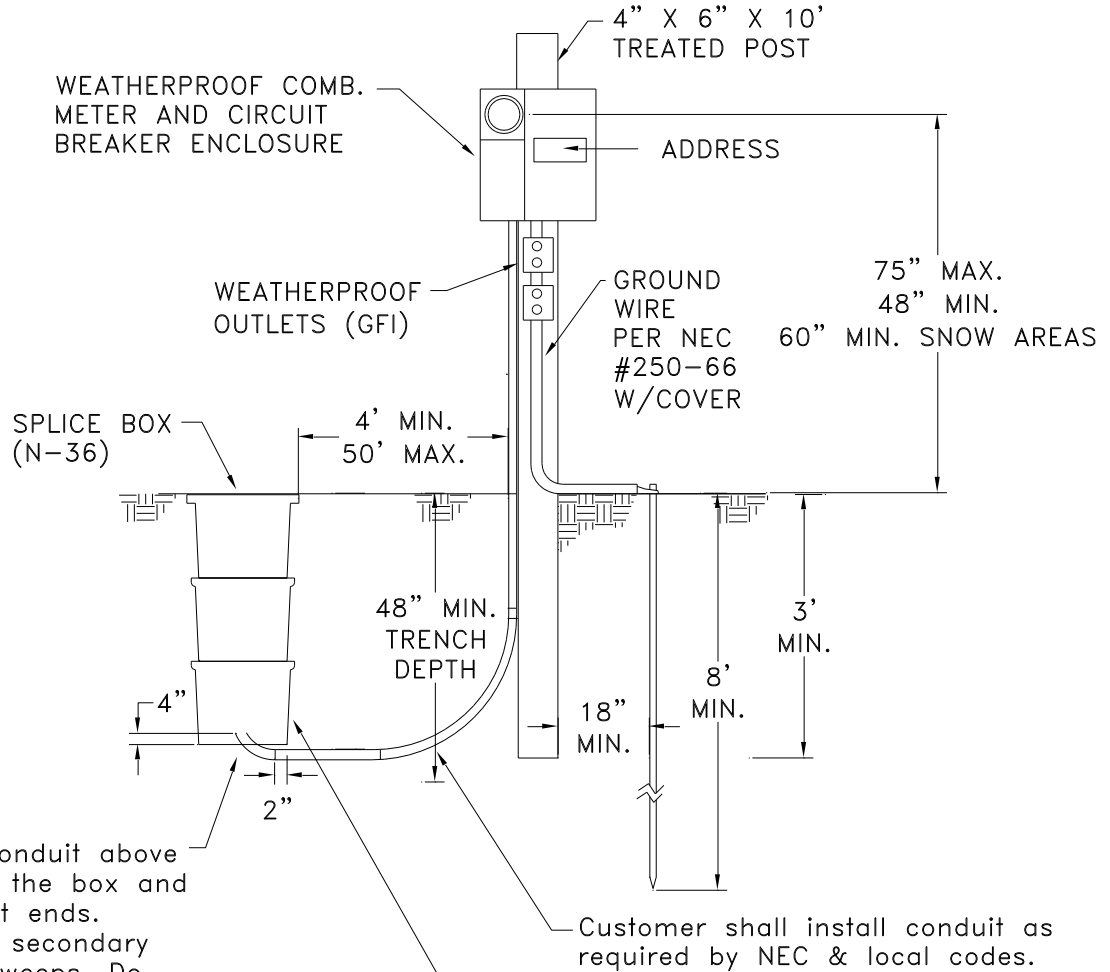
Service is considered temporary when the installation is expected to remain in service for 18 months or less.

## 3.0 CUSTOMER RESPONSIBILITY FOR TEMPORARY SERVICE

The customer, at his expense, shall furnish, install and maintain the service trench, backfill, conduit, wood service post, grounding, weatherproof combination meter and circuit breaker enclosure, and any other materials required for this service beyond the point of attachment to NVE's secondary bus. The customer must install all the facilities per NEC, Article 527 and as shown in Figure 1. Post installations shall be located out of the way of any vehicular traffic. An address must be provided for the structure. Customer must provide an identification sign or tag securely attached to the post/panel with street address.

	VOLUME 17 – ENGINEERING & CONSTRUCTION STANDARD	UT0001M								
	<b>UNDERGROUND ELECTRIC TEMPORARY SERVICE PANEL</b>	Revision: 9								
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Drawn:</td> <td style="width: 25%;">Eng:</td> <td style="width: 25%;">Appr:</td> <td style="width: 25%;">Date:</td> </tr> <tr> <td>JL</td> <td>NP</td> <td>DA</td> <td>08/19</td> </tr> </table>	Drawn:	Eng:	Appr:	Date:	JL	NP	DA	08/19		Page 1 of 6
Drawn:	Eng:	Appr:	Date:							
JL	NP	DA	08/19							


NVE will furnish and install the service cable and connectors from the source to load cables, at the expense of the customer. Arrangements for this service should be made, prior to construction, at the local NVE office.



Leave 4" of conduit above the bottom of the box and cap all conduit ends. When entering secondary box use 90° sweeps. Do not cut sweeps. All conduit shall be placed at the same end of box a minimum 2" from box side wall.

Customer shall install conduit as required by NEC & local codes.  
NVE secondary splice box normally located adjacent to sidewalk. Consult NVE for correct location.

**Figure 1**  
**Temporary Service Detail**


	VOLUME 17 – ENGINEERING & CONSTRUCTION STANDARD			UT0001M
	UNDERGROUND ELECTRIC TEMPORARY SERVICE PANEL			
Drawn:	Eng:	Appr:	Date:	Revision: 9
JL	NP	DA	08/19	Page 2 of 6

**4.0 CUSTOMER RESPONSIBILITY FOR TEMPORARY SERVICE IN PERMANENT LOCATION**

The customer, at his expense, shall furnish and install the service trench, backfill, conduit, panel mounting hardware, grounding, weatherproof combination meter and circuit breaker enclosure, and any other materials required for this service. The customer must install all the facilities per NVE requirements and as shown in Figures 2 thru 6. An address must be provided for the structure. Customer must provide an identification sign or tag securely attached to the post or panel with street address, if not on structure or building.

**SURFACE MOUNT PANELS-** (Page 4) - Surface mount panels shall be equipped with swing out mounting brackets attached to the back side of the panel. Attach the panel to 2"x4" stud framing on each side of the panel using the mounting brackets as shown in Figure 2. Secure the brackets to the framing using four 3/4" (max.) screws. Wood studs are to be attached to the concrete foundation wall and rim joist with a minimum of six concrete nails. Studs shall extend below grade a minimum of 24" to provide stability to panel. Secure service conduit to rim joist using conduit U-Strap to match conduit size, Figure 3.

**SEMIFLUSH PANELS-** (Page 5) - Semiflush mounted panels are to be attached to the flanged edges on each side of the panel. Attach the panel to 2"x4" stud framing using a minimum of four 3/4" (max.) screws. Wood studs are to be attached to the concrete foundation wall and rim joist with a minimum of six concrete nails. Studs shall extend below grade a minimum of 24" to provide stability to panel. Refer to Figures 5 and 6, for details.

				VOLUME 17 – ENGINEERING & CONSTRUCTION STANDARD		UT0001M
				UNDERGROUND ELECTRIC TEMPORARY SERVICE PANEL		
Drawn:	Eng:	Appr:	Date:	Revision: 9		Page 3 of 6
JL	NP	DA	08/19			

**SURFACE MOUNT PANEL INSTALLATION REQUIREMENTS**



**Figure 2**  
**Surface Mount Panel**  
**w/ 2"x4" Stud Framing**


Extend bracing a minimum of 24" below grade to provide stability to panel during construction.



**Figure 3**  
**Panel Back Showing Swing Out**  
**Mounting Brackets Attached**  
**To 2"x4" Stud Framing**



**Figure 4**  
**Conduit Support Strap**  
**Attached To Sill Plate**

				VOLUME 17 – ENGINEERING & CONSTRUCTION STANDARD		UT0001M
				UNDERGROUND ELECTRIC TEMPORARY SERVICE PANEL		
Drawn:	Eng:	Appr:	Date:			Page 4 of 6
JL	NP	DA	08/19			



**SEMIFLUSH MOUNT PANEL INSTALLATION REQUIREMENTS**




**Figure 5**  
Semiflush Panel Mounting  
Using 2"x4" Stud Framing



**Figure 6**  
Foundation Wall Attachment  
Using Concrete Nails  
(Typical All Installations)

Extend bracing a minimum of 24" below grade to provide stability to panel during construction.


				VOLUME 17 – ENGINEERING & CONSTRUCTION STANDARD		UT0001M
				UNDERGROUND ELECTRIC TEMPORARY SERVICE PANEL		
Drawn:	Eng:	Appr:	Date:			Page 5 of 6
JL	NP	DA	08/19			

**5.0 NVE RESPONSIBILITIES**

NVE, upon final inspection and approval of local authorities, will provide the service cable, make the secondary cable connections and set the meter.

**6.0 GROUNDING**

The customer shall be responsible for bonding and grounding all exposed non-current carrying metal parts in accordance with applicable electric codes and local requirements. Refer to NEC and NVE Standard US0002M, Service Entrance Grounding, for more details.

				VOLUME 17 – ENGINEERING & CONSTRUCTION STANDARD		UT0001M
				UNDERGROUND ELECTRIC TEMPORARY SERVICE PANEL		
Drawn:	Eng:	Appr:	Date:			Page 6 of 6
JL	NP	DA	08/19			