



# **RESIDENTIAL SERVICE REQUIREMENTS**

***March 25, 2024***

# Engineering Service Specifications

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200	UG, 1-Phase, Padmount, (Existing)	UG, 1-Phase, Meter Pole	120/240	Self Enclosed	Meter base	5/19	<u>Secondary</u> <ul style="list-style-type: none"> <li>• UG Meter pole</li> <li>• Secondary conduit (<i>padmount to meter base</i>)</li> <li>• Meter base</li> <li>• Meter base ground wire and ground rod</li> <li>• Main disconnect (<i>service panel</i>)</li> <li>• Customer conductors (<i>from load side of meter base to main disconnect</i>)</li> <li>• Terminate customer conductors</li> </ul>	<u>Secondary</u> <ul style="list-style-type: none"> <li>• Secondary conductors</li> <li>• Terminate secondary conductors</li> </ul>	15-18

Residential Service Requirements - Cross Reference Table									
Amps	Transformer	Service	Voltage	Metering	POC	DWG /Page	Customer	SLEMCO	Pages
<b>Residential Overhead Meter Pole Requirements</b>									
200	OH, 1-Phase	OH, 1-Phase, Meter Pole	120/240	Self Enclosed	Weather head	6/23	<u>Secondary</u> <ul style="list-style-type: none"> <li>• OH Meter pole (<i>guying if required</i>)</li> <li>• Service Mast</li> <li>• Service entrance conductors (<i>beyond weather head</i>)</li> <li>• Terminate service entrance conductors at source side of meter base</li> <li>• Meter base</li> <li>• Meter base ground wire and ground rod</li> <li>• Pole ground</li> <li>• Main disconnect (<i>service panel</i>)</li> <li>• Customer conductors (<i>from load side of meter base to main disconnect</i>)</li> <li>• Terminate customer conductors</li> </ul>	<u>Secondary</u> <ul style="list-style-type: none"> <li>• Service cable (<i>up to weather head</i>)</li> <li>• Terminate service cable</li> </ul>	20-22
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> 200 <=400	UG, 1-Phase, Padmount, (Existing)	UG, 1-Phase	120/240	CT Metering	Disconnect Switch	9/31	<u>Secondary</u> <ul style="list-style-type: none"> <li>• Secondary conduit (<i>padmount to CT enclosure</i>)</li> <li>• CT Enclosure (<i>install SLEMCO furnished CT</i>)</li> <li>• Disconnect switch</li> <li>• Install SLEMCO furnished meter base</li> <li>• Conduit between equipment</li> <li>• Metering and main ground wires and ground rods</li> <li>• Customer conductors (<i>from load side of disconnect switch to main disconnects</i>)</li> <li>• Terminate customer conductors</li> <li>• Main disconnects (<i>service panels</i>)</li> </ul>	<u>Secondary</u> <ul style="list-style-type: none"> <li>• Secondary conductors</li> <li>• Terminate secondary conductors</li> </ul>	26-30
> 400	UG, 1-Phase, Padmount, (Existing)	UG, 1-Phase	120/240	CT Metering	Padmount	9/31	<u>Secondary</u> <ul style="list-style-type: none"> <li>• Secondary conductors</li> <li>• Terminate secondary conductors</li> <li>• Secondary conduit (<i>padmount to CT enclosure</i>)</li> <li>• CT Enclosure (<i>install SLEMCO furnished CT</i>)</li> <li>• Disconnect switch</li> <li>• Install SLEMCO furnished meter base</li> <li>• Conduit between equipment</li> <li>• Metering and main ground wires and ground rods</li> <li>• Customer conductors (<i>from load side of disconnect switch to main disconnects</i>)</li> <li>• Terminate customer conductors</li> <li>• Main disconnects (<i>service panels</i>)</li> </ul>		26-30

## Residential Service Requirements - Cross Reference Table

Amps	Transformer	Service	Voltage	Metering	POC	DWG /Page	Customer	SLEMCO	Pages
<b>Residential UG CT Metering Requirements for Multiple 1-Phase Customers Served from a New UG Padmount Transformer</b>									
> 200 <=400	UG, 1-Phase, Padmount, (New)	UG, 1-Phase	120/240	CT Metering	Disconnect Switch	10/32	<u>Primary</u> <ul style="list-style-type: none"> <li>• Primary conduit (<i>source to padmount</i>)</li> </ul> <u>Secondary</u> <ul style="list-style-type: none"> <li>• Secondary conduit (<i>padmount to CT enclosure</i>)</li> <li>• CT Enclosure (<i>install SLEMCO furnished CT</i>)</li> <li>• Disconnect switch</li> <li>• Install SLEMCO furnished meter base</li> <li>• Conduit between equipment</li> <li>• Metering and main ground wires and ground rods</li> <li>• Customer conductors (<i>from load side of disconnect switch to main disconnects</i>)</li> <li>• Terminate customer conductors</li> <li>• Main disconnects (<i>service panels</i>)</li> </ul>	<u>Primary</u> <ul style="list-style-type: none"> <li>• Primary conductors</li> <li>• Terminate primary conductors at padmount</li> <li>• Padmount transformer (<i>associated pad and grounding</i>)</li> <li>• Switch cans (<i>if required</i>)</li> </ul> <u>Secondary</u> <ul style="list-style-type: none"> <li>• Secondary conductors</li> <li>• Terminate secondary conductors</li> </ul>	<u>Primary</u> 10-11  <u>Secondary</u> 26-30
> 400	UG, 1-Phase, Padmount, (New)	UG, 1-Phase	120/240	CT Metering	Padmount	10/32	<u>Primary</u> <ul style="list-style-type: none"> <li>• Primary conduit (<i>source to padmount</i>)</li> </ul> <u>Secondary</u> <ul style="list-style-type: none"> <li>• Secondary conductors</li> <li>• Terminate secondary conductors</li> <li>• Secondary conduit (<i>padmount to CT enclosure</i>)</li> <li>• CT Enclosure (<i>install SLEMCO furnished CT</i>)</li> <li>• Disconnect switch</li> <li>• Install SLEMCO furnished meter base</li> <li>• Conduit between equipment</li> <li>• Metering and main ground wires and ground rods</li> <li>• Customer conductors (<i>from load side of disconnect switch to main disconnects</i>)</li> <li>• Terminate customer conductors</li> <li>• Main disconnects (<i>service panels</i>)</li> </ul>	<u>Primary</u> <ul style="list-style-type: none"> <li>• Primary conductors</li> <li>• Terminate primary conductors at padmount</li> <li>• Padmount transformer (<i>associated pad and grounding</i>)</li> <li>• Switch cans (<i>if required</i>)</li> </ul>	<u>Primary</u> 10-11  <u>Secondary</u> 26-30

Residential Service Requirements - Cross Reference Table									
Amps	Transformer	Service	Voltage	Metering	POC	DWG /Page	Customer	SLEMCO	Pages
<b>Residential UG CT Metering Requirements for a 1-Phase Customer Served from an Existing OH Transformer Bank</b>									
> 200 <=400	OH, 1-Phase	UG, 1-Phase	120/240	CT Metering	Disconnect Switch	11/33	<u>Secondary</u> <ul style="list-style-type: none"> <li>• Secondary conduit (<i>weather head to CT enclosure</i>)</li> <li>• CT Enclosure (<i>install SLEMCO furnished CT</i>)</li> <li>• Disconnect switch</li> <li>• Install SLEMCO furnished meter base</li> <li>• Conduit between equipment</li> <li>• Metering and main ground wires and ground rods</li> <li>• Customer conductors (<i>from load side of disconnect switch to main disconnects</i>)</li> <li>• Terminate customer conductors</li> <li>• Main disconnects (<i>service panels</i>)</li> </ul>	<u>Secondary</u> <ul style="list-style-type: none"> <li>• Secondary conductors</li> <li>• Terminate secondary conductors</li> </ul>	26-30
> 400	OH, 1-Phase	UG, 1-Phase	120/240	CT Metering	Weather head	11/33	<u>Secondary</u> <ul style="list-style-type: none"> <li>• Secondary conductors (<i>beyond weather head</i>)</li> <li>• Terminate secondary conductors at load side disconnect switch</li> <li>• Secondary conduit (<i>weather head to CT enclosure</i>)</li> <li>• CT Enclosure (<i>install SLEMCO furnished CT</i>)</li> <li>• Disconnect switch</li> <li>• Install SLEMCO furnished meter base</li> <li>• Conduit between equipment</li> <li>• Metering and main ground wires and ground rods</li> <li>• Customer conductors (<i>from load side of disconnect switch to main disconnects</i>)</li> <li>• Terminate customer conductors</li> <li>• Main disconnects (<i>service panels</i>)</li> </ul>	<u>Secondary</u> <ul style="list-style-type: none"> <li>• Service cable (<i>up to weather head</i>)</li> <li>• Terminate service cable</li> </ul>	26-30
<b>Residential Overhead CT Metering Requirements for a 1-Phase Customer</b>									
> 200	OH, 1-Phase	OH, 1-Phase	120/240	CT Metering	Weather head	12/37	<u>Secondary</u> <ul style="list-style-type: none"> <li>• Service Mast</li> <li>• Service entrance conductors (<i>beyond weather head</i>)</li> <li>• Terminate service entrance conductors at load side disconnect switch</li> <li>• CT Enclosure (<i>install SLEMCO furnished CT</i>)</li> <li>• Disconnect switch</li> <li>• Install SLEMCO furnished meter base</li> <li>• Conduit between equipment</li> <li>• Metering and main ground wires and ground rods</li> <li>• Customer conductors (<i>from load side of disconnect switch to main disconnects</i>)</li> <li>• Terminate customer conductors</li> <li>• Main disconnects (<i>service panels</i>)</li> </ul>	<u>Secondary</u> <ul style="list-style-type: none"> <li>• Service cable (<i>up to weather head</i>)</li> <li>• Terminate service cable</li> </ul>	34-36

## **SLEMCO**

### **Residential Service Order Procedure**

1. SLEMCO customers can request service by doing the following:
  - a. Contact SLEMCO's main service department at **(337) 896-5551**
  - b. Contact one of the three SLEMCO service centers:
    - i. **Kaplan** service center **(337) 643-6565**
    - ii. **Crowley** service center **(337) 783-7714**
    - iii. **Washington** service center **(337) 826-7911**
  - c. Apply for service in person at the main SLEMCO office and ask to see someone in new accounts.
2. When a request for service is made a service order will be written by a SLEMCO customer service representative.
3. Usually the next working day a SLEMCO field representative will contact you concerning your request for service. He or she will make an appointment to meet with you and discuss your service needs.
4. The SLEMCO field representative will answer all questions concerning providing you with electrical service. He or she will quote any cost associated with your request and provide any specifications involved with your request.
5. Any payment for construction or meter deposits must be paid in the office, by mail, or by phone. **No Payments will be collected by field personnel.**
6. **Before any digging is done on your property LA One Call must be notified by calling 811 or 1-800-272-3020.** No work can begin until 48 hours after LA One Call has been notified. *Special Note: Vermillion, Iberia, and Cameron Parishes require 96 hours before any digging can take place.*
7. All parishes along with some municipalities in SLEMCO's service area require some sort of permit. Before beginning any wiring on your service contact your local Governing Authority in order to obtain the local regulations concerning obtaining electrical service. **SLEMCO will not install a meter for service unless the service has a permit from the local Governing Authority.**
8. SLEMCO will proceed with construction of your job even if no permit has been issued, **but will not install a meter before the permit has been obtained.**
9. If at the time of construction you are wired and inspected, SLEMCO will install the meter under the standard **\$50.00** service charge. If at the time of construction you are not wired and inspected there will be an additional **\$15.00** service charge for a serviceman to return later to install the meter.
10. **When it is required that SLEMCO supply the material that the electrician will install, the times that this material will be issued by SLEMCO is 9:00AM-12:00PM, 1:00PM-3:00PM during a SLEMCO normal business day.**

## **Applicability of SLEMCO's Residential Service Entrance Requirements**

1. The service entrance must be located on the outside wall of the structure, making the meter accessible at all times, enabling SLEMCO to make the necessary service connections without having the service wires crossing over any large portion of the roof. The inside walls of an open carport area are not considered as outside walls of the structure.
2. Anytime a service entrance is changed due to inadequacy, the new service entrance must meet SLEMCO's Residential Service Requirements.
3. Houses moved from one location to another, where no changes are made in the wiring system, will be connected, providing the service entrance conductors are in accordance with the National Electrical Code (*NEC*) and any Governing Authority. Houses moved into an area that is governed by a Governing Authority must also meet the requirements set by that Authority.
4. Where a customer asks that the service be disconnected in order to make repairs to the house, new specifications do not apply. New specifications apply any time the meter location is changed.
5. Specifications for small water pumps, cane derricks for lights only, small chicken houses, barns, yard lights and any other connections out or the realm of Residential or Commercial shall be sized in accordance with the National Electrical Code (*NEC*) and any Governing Authority.



## SLEMCO

<b>Residential-Overhead Service Entrance Conductor Table</b>		
Description	Specifications	Ampacity
<b>Aluminum</b>		
#4 COVERED STRANDED (AL)	RHW-2, THWN-2, XHHW-2	75
#2 COVERED STRANDED (AL)	RHW-2, THWN-2, XHHW-2	100
#1/0 COVERED STRANDED (AL)	RHW-2, THWN-2, XHHW-2	135
#2/0 COVERED STRANDED (AL)	RHW-2, THWN-2, XHHW-2	150
#3/0 COVERED STRANDED (AL)	RHW-2, THWN-2, XHHW-2	175
#4/0 COVERED STRANDED (AL)	RHW-2, THWN-2, XHHW-2	205
250 MCM COVERED STRANDED (AL)	RHW-2, THWN-2, XHHW-2	230
300 MCM COVERED STRANDED (AL)	RHW-2, THWN-2, XHHW-2	260
350 MCM COVERED STRANDED (AL)	RHW-2, THWN-2, XHHW-2	280
400 MCM COVERED STRANDED (AL)	RHW-2, THWN-2, XHHW-2	305
500 MCM COVERED STRANDED (AL)	RHW-2, THWN-2, XHHW-2	350
600 MCM COVERED STRANDED (AL)	RHW-2, THWN-2, XHHW-2	385
700 MCM COVERED STRANDED (AL)	RHW-2, THWN-2, XHHW-2	425
750 MCM COVERED STRANDED (AL)	RHW-2, THWN-2, XHHW-2	435
<b>Copper</b>		
#6 COVERED STRANDED (CU)	RHW-2, THWN-2, XHHW-2	75
#4 COVERED STRANDED (CU)	RHW-2, THWN-2, XHHW-2	95
#2 COVERED STRANDED (CU)	RHW-2, THWN-2, XHHW-2	130
#1/0 COVERED STRANDED (CU)	RHW-2, THWN-2, XHHW-2	170
#2/0 COVERED STRANDED (CU)	RHW-2, THWN-2, XHHW-2	195
#3/0 COVERED STRANDED (CU)	RHW-2, THWN-2, XHHW-2	225
#4/0 COVERED STRANDED (CU)	RHW-2, THWN-2, XHHW-2	260
250 MCM COVERED STRANDED (CU)	RHW-2, THWN-2, XHHW-2	290
300 MCM COVERED STRANDED (CU)	RHW-2, THWN-2, XHHW-2	320
350 MCM COVERED STRANDED (CU)	RHW-2, THWN-2, XHHW-2	350
500 MCM COVERED STRANDED (CU)	RHW-2, THWN-2, XHHW-2	430
750 MCM COVERED STRANDED (CU)	RHW-2, THWN-2, XHHW-2	520
<b>Notes</b>		
<ol style="list-style-type: none"> <li>1. 750 MCM is largest conductor that will be allowed for OH service entrances.</li> <li>2. Maximum number of runs (conductors per phase) is four (4).</li> <li>3. Every run requires a separate weather head and associated service mast.</li> <li>4. Service entrance conductors must be covered, stranded, and rated for 600V.</li> <li>5. The neutral conductor shall be sized no smaller than two sizes less than phase conductor.</li> <li>6. Diesel Locomotive (DLO) conductor is prohibited.</li> </ol>		

<b>Residential-Underground Secondary Conductor Table</b>		
Description	Specifications	Ampacity
<b>Aluminum</b>		
#4/0 COVERED STRANDED (AL)	BELOIT URD	225
250 MCM COVERED STRANDED (AL)	HOFSTRA URD	250
300 MCM COVERED STRANDED (AL)	GONZOGA URD	280
350 MCM COVERED STRANDED (AL)	RUTGERS URD	305
400 MCM COVERED STRANDED (AL)	DARTMOUTH URD	325
500 MCM COVERED STRANDED (AL)	EMORY URD	370
<b>Notes</b>		
<ol style="list-style-type: none"> <li>1. 500 MCM is largest conductor that will be allowed for UG secondary.</li> <li>2. Maximum number of runs (conductors per phase) is four (4).</li> <li>3. Every run requires a separate conduit.</li> <li>4. Secondary conductors must be covered, stranded, URD, and rated for 600V.</li> <li>5. The neutral conductor shall be sized no smaller than two sizes less than phase conductor.</li> <li>6. Diesel Locomotive (DLO) conductor is prohibited.</li> </ol>		

## SLEMCO

### Specifications for Residential Overhead Service Requirements

Applicable to residential and small noncommercial services receiving single-phase power at 120/240 volts through a 200 Amp (*or less*) meter base attached to building requiring service. The meter base service conductors enter through a weather head from an overhead source.

The *Point of Connection* is the point of demarcation between SLEMCO and the customer. It shall be the customer's responsibility for compliance with the National Electrical Code (*NEC*) and any Governing Authority for all equipment beyond the *Point of Connection*. The customer is advised to use the services of a qualified electrician to assure compliance with all codes and regulations. According to National Electric Safety Code (*NESC*) Table 232-1, Item 5., Note 8(d), the lowest point of the service conductor (*drip loop*) must be at least 10' above final grade. A sufficient drip loop shall be present to prevent water ingress.

*It should be noted that electrical pipe is the gray pipe and white water pipe is not acceptable. Therefore, schedule 40 or 80 electrical pipe discussed in this section is approved electrical conduit.*

Items marked with ❶ are indicated on Drawing No.1 – *Single-Phase Overhead Service Requirements*.

- A. Service cable from transformer to weather head (*Point of Connection*) are furnished and installed by SLEMCO. ❶
- B. Service entrance conductors from the weather head (*Point of Connection*) to the meter base are furnished and installed by customer. The service entrance conductors shall be sized according to the service load size (*ampacity*) and **Residential-Overhead Service Entrance Conductor Table**. Termination of conductors at the weather head (*Point of Connection*) performed by SLEMCO. ❶

All service entrance conductors into and out of a self-contained meter base shall be single conductors. Parallel conductors are not allowed. An extension of at least 18" of service entrance conductors is required at the weather head. ❶

The neutral of the service entrance conductors shall be identified with gray or white tape at the weather head and in the meter base.

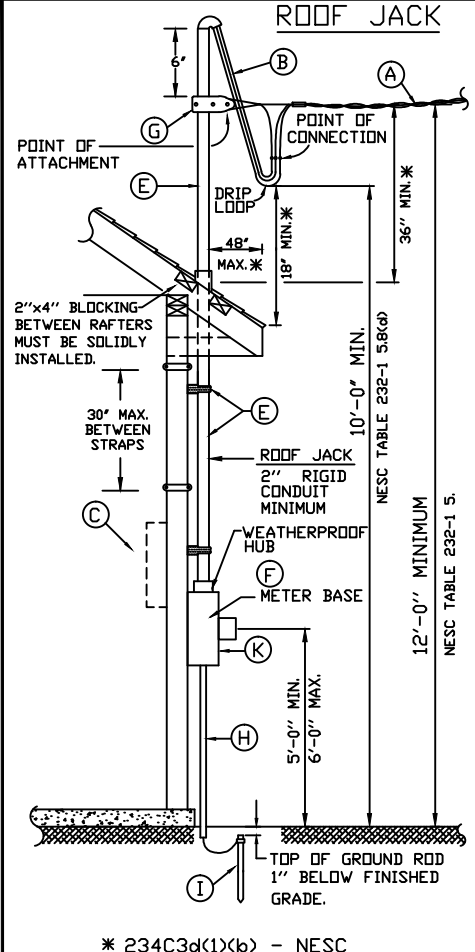
- C. The main disconnect (*service panel*) and customer conductors (*from the meter base to the main disconnect*) are furnished and installed by customer. The main disconnect shall be sized for 200 amps and located within 3' of the meter base. The customer conductors shall be sized for 200 Amps of load, as required by the *NEC* or Governing Authority. The main disconnect and or other electrical equipment may be mounted on the outside of the building. However, it must be of weather proof and watertight design to be mounted on the outside. ❶
- D. If the Service Mast installation is utilized, then the Service Mast and associated weather head are furnished and installed by customer. The Service Mast conduit shall be securely mounted with a minimum of three (3) conduit straps with a maximum of 30" (*NEC 230.51A*) apart. One (1) strap will be required installed no more than 12" (*NEC 230.51A*) from the weather head. The Service Mast conduit shall be galvanized metal rigid conduit or electrical schedule 40 pipe. If elbows are required, then PVC elbows shall be used. LB elbows and flex conduit cannot be used. ❶

## SLEMCO

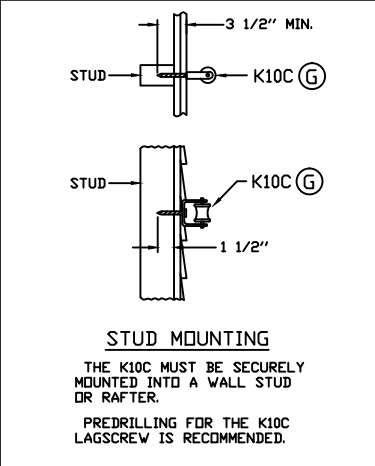
### Specifications for Residential Overhead Service Requirements

Items marked with ❶ are indicated on Drawing No.1 – *Single-Phase Overhead Service Requirements*.

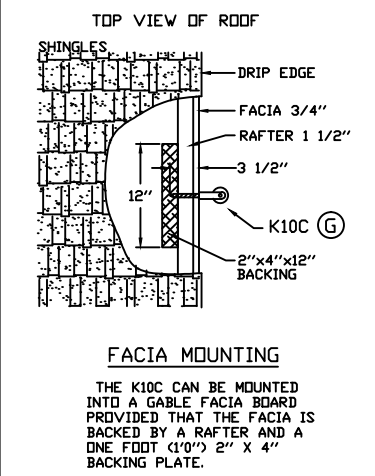
- E. If the Roof Jack installation is utilized, then the Roof Jack and associated weather head are furnished and installed by customer. The conduit shall be mounted galvanized metal rigid conduit. The conduit shall be securely mounted with conduit straps with a maximum of 30" (*NEC 230.51A*) apart. It will be the customer's responsibility to provide, adequate strength in, or support to, the Roof Jack to safely withstand the strain imposed by the service conductors. ❶
- F. The meter base is furnished and installed by customer. The meter base shall be mounted on the outside of the building such that the center of the meter socket window is between 5' and 6' above finished grade. ❶ The meter base shall conform to SLEMCO's standards and shall be compatible with SLEMCO metering and include a weatherproof hub. The meter base shall be rated for 200 Amps.
- G. If the Service Mast installation is utilized, then the K10C is furnished and installed by customer. The K10C shall be mounted at a minimum height of 12' (*NESC Table 232-1, Item 5*) above finished grade. ❶ Pre-drilling a pilot hole for the K10C is recommended.
- If the Roof Jack installation is utilized, then the Point of Attachment shall be at 6" below the weather head, a minimum of 36" (*NESC 234C3d(1)(b)*) above the roof line, and a minimum height of 12' (*NESC Table 232-1, Item 5*) above finished grade. The Roof Jack must be installed no more than 48" (*NESC 234C3d(1)(b)*) from edge of the roof. The service conductor (*drip loop*) must be at least 18" above the roof. ❶
- H. The customer will be responsible to furnish the meter base ground wire (*minimum #6 soft drawn copper*) and install this wire in electrical conduit from the meter base to the ground rod. If elbows are required, then PVC elbows shall be used. LB elbows and flex conduit cannot be used. The meter base ground wire shall be connected in the ground wire lug, where provided, and not in the service neutral lug. ❶
- I. Ground rod, minimum 5/8" x 8' copperweld or 1/2" x 8' copper, furnished and installed by customer. Ground rod is to be set 1" below finished grade. ❶ This is the minimum required by SLEMCO. Additional grounding may be required by the NEC or Governing Authority.
- J. Variations of this design may be considered equal as long as NEC requirements are met. To assure acceptability where variations arise, contact SLEMCO prior to installation.
- K. If a Governing Authority requires inspection, inspection tag must be in place and marked approved before SLEMCO will connect service. ❶



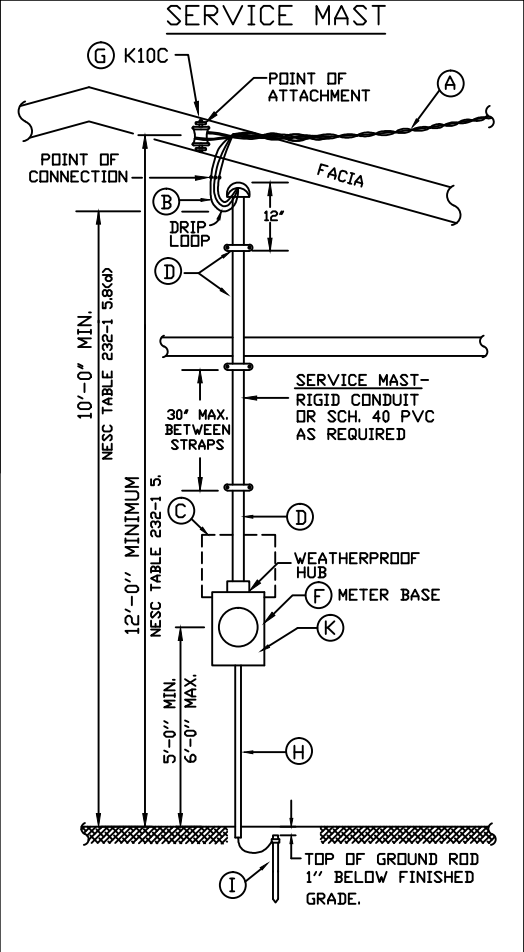
\* 234C3d(1)(b) - NES



**STUD MOUNTING**  
 THE K10C MUST BE SECURELY MOUNTED INTO A WALL STUD OR RAFTER.  
 PREDRILLING FOR THE K10C LAGSCREW IS RECOMMENDED.



**FACIA MOUNTING**  
 THE K10C CAN BE MOUNTED INTO A GABLE FACIA BOARD PROVIDED THAT THE FACIA IS BACKED BY A RAFTER AND A ONE FOOT (1'0\") 2\"/>



SEE 'SLEMCO - SPECIFICATIONS FOR RESIDENTIAL OVERHEAD SERVICE REQUIREMENTS' FOR MORE INFORMATION.

	<b>SOUTHWEST LOUISIANA ELECTRIC</b> <b>MEMBERSHIP CORPORATION</b> LOUISIANA 9 LAFAYETTE		
	<b>SINGLE-PHASE OVERHEAD</b> <b>SERVICE REQUIREMENTS</b>		

DRAWN BY:		CREATED ON:		SCALE: N.T.S.	
REVISIONS	REVISED BY	DATE	REV.	DRAWING NO.	REV.
ROOF JACK/SERVICE MAST COMBINE		02/25/97	3	1	6
		10/01/99	4		
		03/16/00	5		
ENHANCEMENT TO DRAWINGS & SPECIFICATIONS	L. MECHE	04/20/16	6		

<b>SLEMCO ELECTRICAL STANDARDS</b>		
APPROVED:	DATE:	PAGE NUMBER:
		6

# SLEMCO

## Specifications for Residential Underground Secondary Requirements

Applicable to residential and small noncommercial services receiving single-phase power at 120/240 volts through a 200 Amp meter base attached to building requiring service. The meter base service conductors enter through an underground conduit from either an underground or overhead source.

The *Point of Connection* is the point of demarcation between SLEMCO and the customer. It will be the customer's responsibility for compliance with the National Electrical Code (NEC) and any governing authority for all equipment beyond the *Point of Connection*. The customer is advised to use the services of a qualified electrician to assure compliance with all codes and regulations.

*It should be noted that electrical pipe is the gray pipe and white water pipe is not acceptable. Therefore, schedule 40 or 80 electrical pipe discussed in this section is approved electrical conduit.*

Items marked with ②③④ are indicated on the following drawings:

② Drawing No.2 – Single-Phase Underground Service Requirements from an Existing Padmount Transformer

③ Drawing No.3 – Single-Phase Underground Service Requirements from a new Padmount Transformer

④ Drawing No.4 – Single-Phase Underground Service Requirements from an Overhead Source

- A. Secondary conductors from transformer to meter base are furnished and installed by SLEMCO. ②③④ Secondary conductors will be terminated by SLEMCO to source side of the meter base (*Point of Connection*).
- B. Secondary conduit furnished and installed by customer. After trenching, the trench may be backfilled and covered. Conduit must be 2" electrical conduit. Electrical schedule 40 pipe is acceptable for below ground use. ②③④
- C. Above ground riser conduit must be 2" electrical schedule 80 pipe. If elbows are required, then PVC elbows shall be used. LB elbows and flex conduit cannot be used. ②③④
- D. Any underground service that requires three 90° (*degree*) turns or is further than 150', the customer must use standard steel 90° elbows with an 18" turn. A maximum of three 90° turns are allowed. Any underground service which is less than 150' with two or less 90° turns, the customer is allowed to use PVC long radius 90° elbows with a 36" turn. ②③④
- E. Customer must maintain a depth of 36" when installing electrical conduit for secondary conductors. ②③④
- F. **F1** If the customer is getting power from an overhead source, then the customer will stub up at the SLEMCO pole 36" above finished grade with 2" electrical schedule 80 pipe. ④ The customer will also be required to leave three (3) joints of 2" electrical schedule 40 pipe near the pole to be used by SLEMCO to install the riser up the pole even with neutral or bottom of transformer. The customer will also provide a 2" weather head along with the electrical schedule 40 pipe. According to National Electric Safety Code (NESC) Table 232-1, Item 5., Note 8(d), the lowest point of the service conductor (*drip loop*) must be at least 10' above final grade.

# SLEMCO

## Specifications for Residential Underground Secondary Requirements

Items marked with ②③④ are indicated on the following drawings:

- ② Drawing No.2 – *Single-Phase Underground Service Requirements from an Existing Padmount Transformer*
- ③ Drawing No.3 – *Single-Phase Underground Service Requirements from a new Padmount Transformer*
- ④ Drawing No.4 – *Single-Phase Underground Service Requirements from an Overhead Source*

**F2** If the customer is getting power from an existing padmount transformer, then the customer must stop the electrical conduit 1' short of the transformer pad. The customer conduit must be installed perpendicular (*in direction of arrows*) to the area (*shown in gray*) marked as 1' from edge of transformer pad surrounding the bushing enclosure of the padmount transformer. ② Unacceptable installations include installing conduit from the rear of the transformer or installing conduit that is not perpendicular to the bushing enclosure of the padmount transformer. SLEMCO will install and provide the PVC long radius 90° elbow and electrical conduit into the transformer.

**F3** If the customer is getting power from an existing pedestal, then the customer must stop the electrical conduit 1' short of the pedestal's edge.

**F4** If the customer is getting power from a new padmount transformer, then the customer must stub up the secondary and primary electrical conduit next to each other at the location of new padmount transformer. ③ See the next section entitled, *Specifications for Residential Underground Primary Requirements*, for details on primary installation.

G. Standoff brackets furnished and installed by SLEMCO. ④

H. Customer will complete installation of electrical conduit into bottom left side of meter base using 2" electrical schedule 80 pipe for section above finished grade into meter base. If elbows are required, then PVC elbows shall be used. LB elbows and flex conduit cannot be used. ②③④

I. Customer will install a polypropylene pull string (*minimum strength of 210 lbs.*) in all electrical conduit that will require SLEMCO to install secondary conductors.

J. Meter base furnished and installed by customer. When purchasing a meter base for underground service please specify hubless or underground meter base. The meter base shall be mounted on the outside of the building such that the center of the meter socket window is between 5' and 6' above finished grade. ②③④ The meter base shall conform to SLEMCO's standards and shall be compatible with SLEMCO metering. The meter base shall be rated for 200 Amps.

K. The main disconnect (*service panel*) and customer conductors (*from load side of the meter base to the main disconnect*) are furnished and installed by customer. The main disconnect shall be sized for 200 amps and located within 3' of the meter base. The customer conductors shall be sized for 200 Amps of load, as required by the NEC or Governing Authority. The main disconnect and or other electrical equipment may be mounted on the outside of the building. However, it must be of weather proof and watertight design to be mounted on the outside. ②③④

## SLEMCO

### Specifications for Residential Underground Secondary Requirements

Items marked with ②③④ are indicated on the following drawings:

② Drawing No.2 – *Single-Phase Underground Service Requirements from an Existing Padmount Transformer*

③ Drawing No.3 – *Single-Phase Underground Service Requirements from a new Padmount Transformer*

④ Drawing No.4 – *Single-Phase Underground Service Requirements from an Overhead Source*

- L. The customer will be responsible to furnish the meter base ground wire (*minimum #6 soft drawn copper*) and install this wire in electrical conduit from the meter base to the ground rod. The meter base ground wire shall be connected in the ground wire lug, where provided, and not in the service neutral lug. ②③④
- M. Ground rod, minimum 5/8" x 8' copperweld or 1/2" x 8' copper, furnished and installed by customer. Ground rod is to be set 1" below finished grade. ②③④ This is the minimum required by SLEMCO. Additional grounding may be required by the NEC or Governing Authority.
- N. Variations of this design may be considered equal as long as NEC requirements are met. To assure acceptability where variations arise, contact SLEMCO prior to installation.
- O. If a Governing Authority requires inspection, inspection tag must be in place and marked approved before SLEMCO will connect service. ②③④

# SLEMCO

## Specifications for Residential Underground Primary Requirements

*It should be noted that electrical pipe is the gray pipe and white water pipe is not acceptable. Therefore, schedule 40 or 80 electrical pipe discussed in this section is approved electrical conduit.*

Items marked with ③⑩ are indicated on the following drawings:

③ Drawing No.3 – *Single-Phase Underground Service Requirements from a new Padmount Transformer*

⑩ Drawing No.10 – *Single-Phase Current Transformer Metering Requirements from a new Padmount Transformer*

1. When it is determined that underground primary will be necessary, SLEMCO will provide up to 300' of primary conductors ③⑩, a padmount transformer ③⑩, and associated transformer pad (*slab*) at no additional cost to the customer. Padmount transformer foundation (*slab*) constructed and grounded by SLEMCO according to *Drawing No. 8 - Single-Phase Switch Can or Padmount Transformer Foundation*. The Customer is required to trench and install all electrical conduit. After trenching, the trench may be backfilled and covered. The primary conductors shall be installed and terminated in padmount transformer by SLEMCO.
2. For distances beyond 300', there will be a \$1.00 per foot charge for underground primary conductors in excess of 300'.
3. Primary conduit furnished and installed by customer. Conduit must be 2" electrical conduit. Schedule 40 pipe is acceptable for below ground use. ③⑩
4. Customer will install a polypropylene pull string (*minimum strength of 210 lbs.*) in all electrical conduit that will require SLEMCO to install primary conductors.
5. Customer must maintain a depth of 48" when installing electrical conduit for primary conductors. ③⑩
6. The customer will stub up at the SLEMCO pole 36" above ground with 2" electrical schedule 80 pipe. ③⑩ The customer will also be required to leave three (3) joints of 2" electrical schedule 40 pipe near the pole to be used by SLEMCO to install the riser up the pole three (3) feet below pothead bracket or crossarm.
7. Standoff brackets furnished and installed by SLEMCO. ③⑩
8. The customer shall stub up the secondary and primary electrical conduit next to each other at the location of new padmount transformer. ③⑩
9. A maximum distance of 700' will be allowed before a switch can is required. The SLEMCO Engineering department field engineer will advise the customer in the event a switch can is required. If switch cans are required, then the customer must stub up the primary electrical conduits next to each other at each switch can location. Switch cans are furnished and installed by SLEMCO.



# SLEMCO

## Specifications for Residential Underground Primary Requirements

Items marked with ③⑩ are indicated on the following drawings:

③ Drawing No.3 – *Single-Phase Underground Service Requirements from a new Padmount Transformer*

⑩ Drawing No.10 – *Single-Phase Current Transformer Metering Requirements from a new Padmount Transformer*

10. A maximum of three (3) 90° (*degree*) elbows will be allowed in a primary conduit run before a switch can is required. If switch cans are required, then the customer must stub up the primary electrical conduits next to each other at each switch can location. Switch cans are furnished and installed by SLEMCO. Below are conditions for 90° elbows within a primary conduit run. ③⑩

10.1 Conditions:

Number of 90° turns: **3**

Length of Conduit Run: **any length**

Conductor size: **smaller than 350 MCM**

Customer Responsibility: **use standard steel 90° elbows with an 18” turn radius**

10.2 Conditions:

Number of 90° turns: **1-2**

Length of Conduit Run: **300’ or more**

Conductor size: **smaller than 350 MCM**

Customer Responsibility: **use standard steel 90° elbows with an 18” turn radius**

10.3 Conditions:

Number of 90° turns: **1-2**

Length of Conduit Run: **less than 300’**

Conductor size: **smaller than 350 MCM**

Customer Responsibility: **use PVC long radius 90° elbows with a 36” turn radius**

10.4 Conditions:

Number of 90° turns: **1-3**

Length of Conduit Run: **less than 500’**

Conductor size: **350 MCM or larger**

Customer Responsibility: **use PVC long radius 90° elbows with a 36” turn radius**

10.5 Conditions:

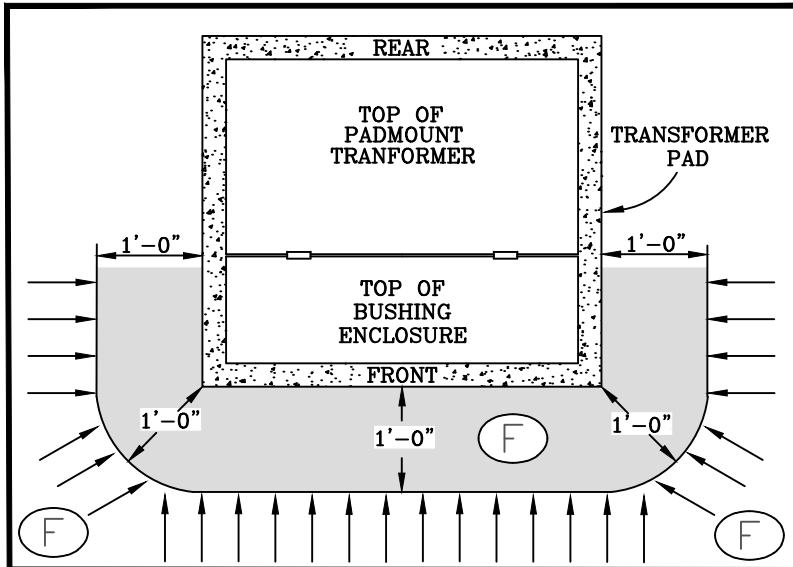
Number of 90° turns: **1-3**

Length of Conduit Run: **500’ or more**

Conductor size: **350 MCM or larger**

Customer Responsibility: **use PVC long radius 90° elbows with a 48” turn radius**

TOP VIEW

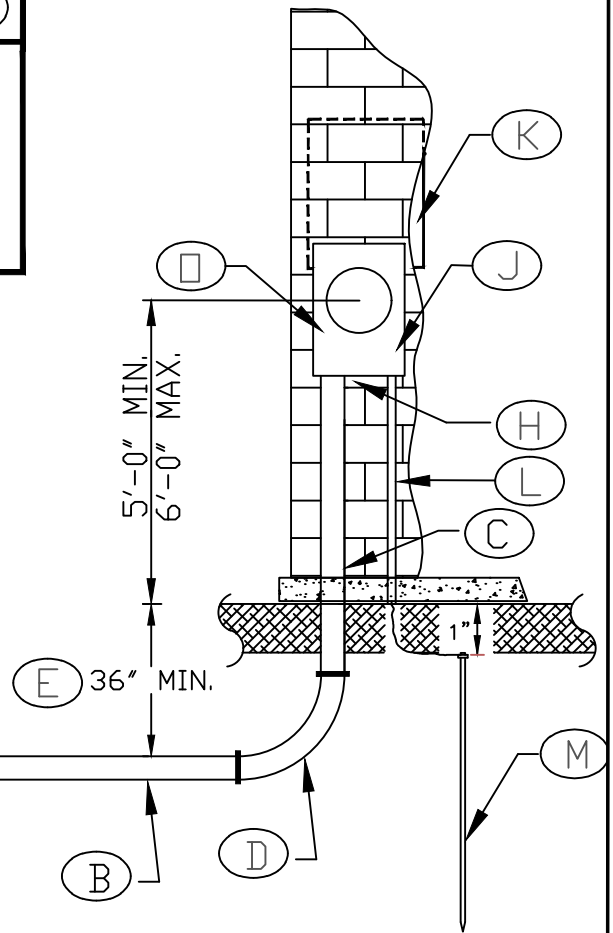
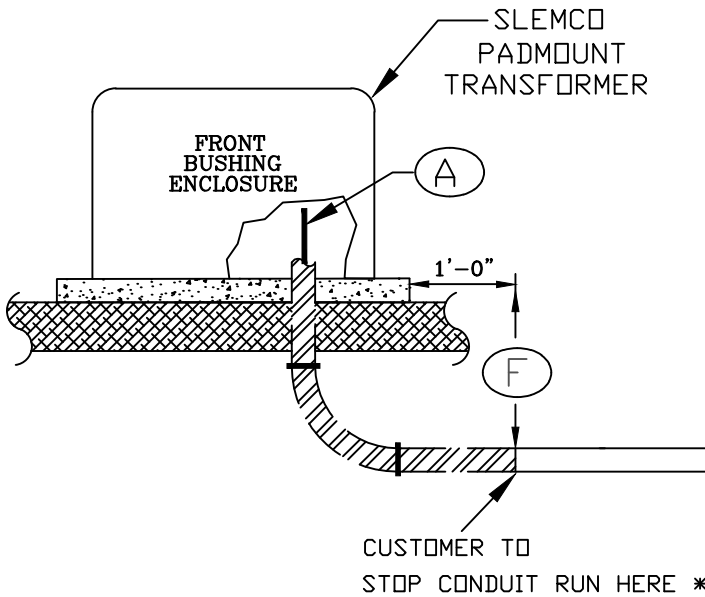


CUSTOMER CONDUIT MUST BE INSTALLED PERPENDICULAR (IN DIRECTION OF ARROWS) TO THE AREA (SHOWN IN GRAY) MARKED AS ONE FOOT FROM EDGE OF PAD SURROUNDING THE BUSHING ENCLOSURE OF THE PADMOUNT TRANSFORMER.

NOTE: APPLICABLE TO BOTH RESIDENTIAL AND COMMERCIAL SERVICES.

**RESIDENTIAL**  
SEE "SLEMCO - SPECIFICATIONS FOR RESIDENTIAL UNDERGROUND SECONDARY REQUIREMENTS" FOR MORE INFORMATION.

**COMMERCIAL**  
SEE "SLEMCO - SPECIFICATIONS FOR COMMERCIAL UNDERGROUND SECONDARY REQUIREMENTS" FOR MORE INFORMATION.



- INSTALLED BY SLEMCO
- INSTALLED BY CUSTOMER

\* STOP CONDUIT RUN 1'-0" FROM PADMOUNT TRANSFORMER PAD OR PEDESTAL EDGE



SOUTHWEST LOUISIANA ELECTRIC  
MEMBERSHIP CORPORATION  
LOUISIANA 9 LAFAYETTE

**SINGLE-PHASE  
UNDERGROUND SERVICE REQUIREMENTS  
FROM AN EXISTING PADMOUNT TRANSFORMER**

DRAWN BY:		CREATED ON: 11/15/97	SCALE: N.T.S.
REVISIONS	REVISED BY	DATE	REV.
SPLIT OVERHEAD/UNDERGROUND SERVICE DRAWINGS	L. A. M.	09/28/99	2
	J. C. D.	03/01/11	3
ENHANCEMENT TO DRAWINGS & SPECIFICATIONS ADDED DETAILS FROM PAD	L. MECHE	02/12/15	4
MADE APPLICABLE TO RESIDENTIAL AND COMMERCIAL	H. H. H	03/29/19	5
			DRAWING NO. <b>2</b>
			REV. <b>5</b>

SLEMCO ELECTRICAL STANDARDS

APPROVED:	DATE:	PAGE NUMBER: 12
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NOTE: APPLICABLE TO BOTH RESIDENTIAL AND COMMERCIAL SERVICES.

RESIDENTIAL

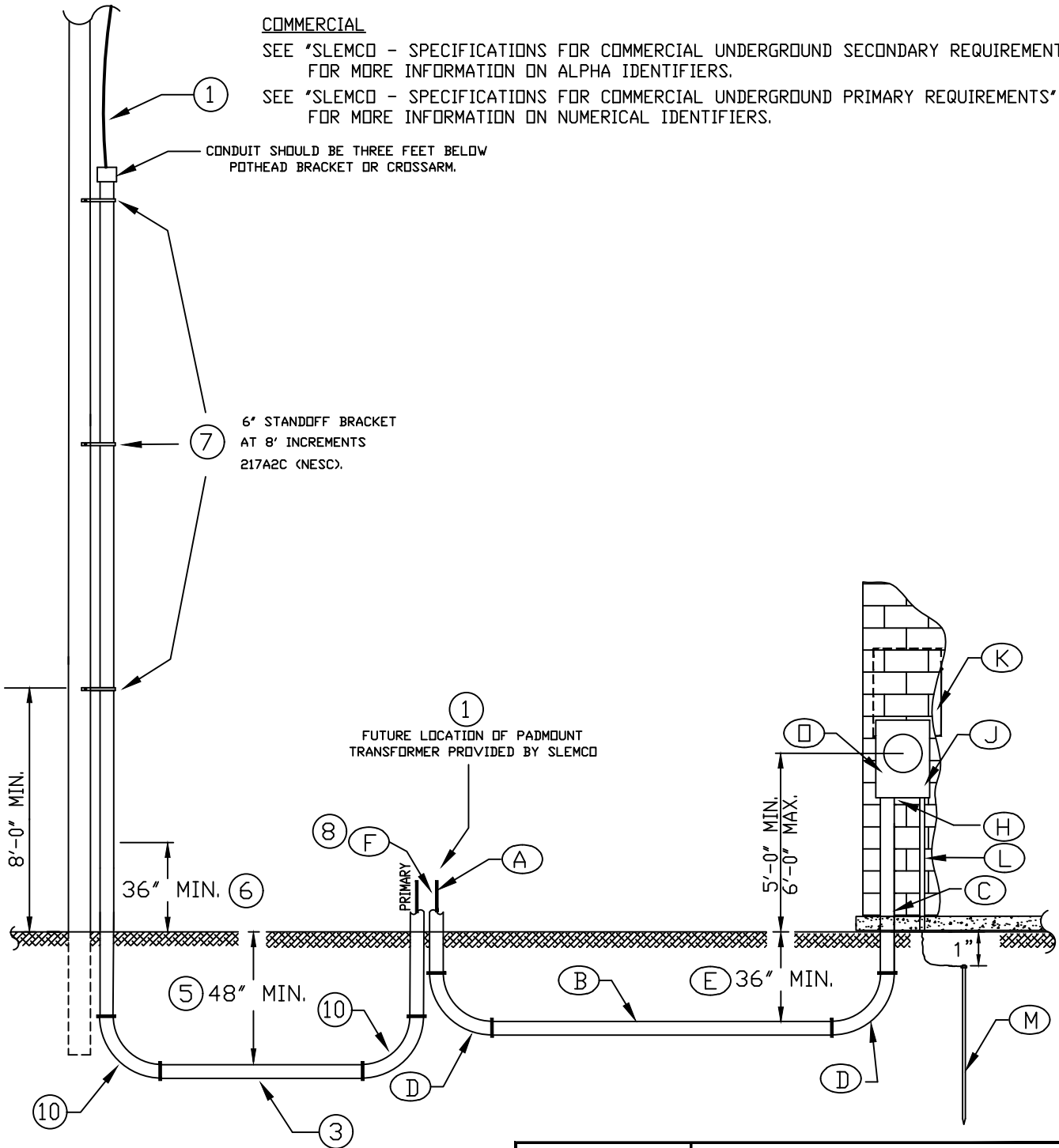
SEE "SLEMCO - SPECIFICATIONS FOR RESIDENTIAL UNDERGROUND SECONDARY REQUIREMENTS" FOR MORE INFORMATION ON ALPHA IDENTIFIERS.


SEE "SLEMCO - SPECIFICATIONS FOR RESIDENTIAL UNDERGROUND PRIMARY REQUIREMENTS" FOR MORE INFORMATION ON NUMERICAL IDENTIFIERS.

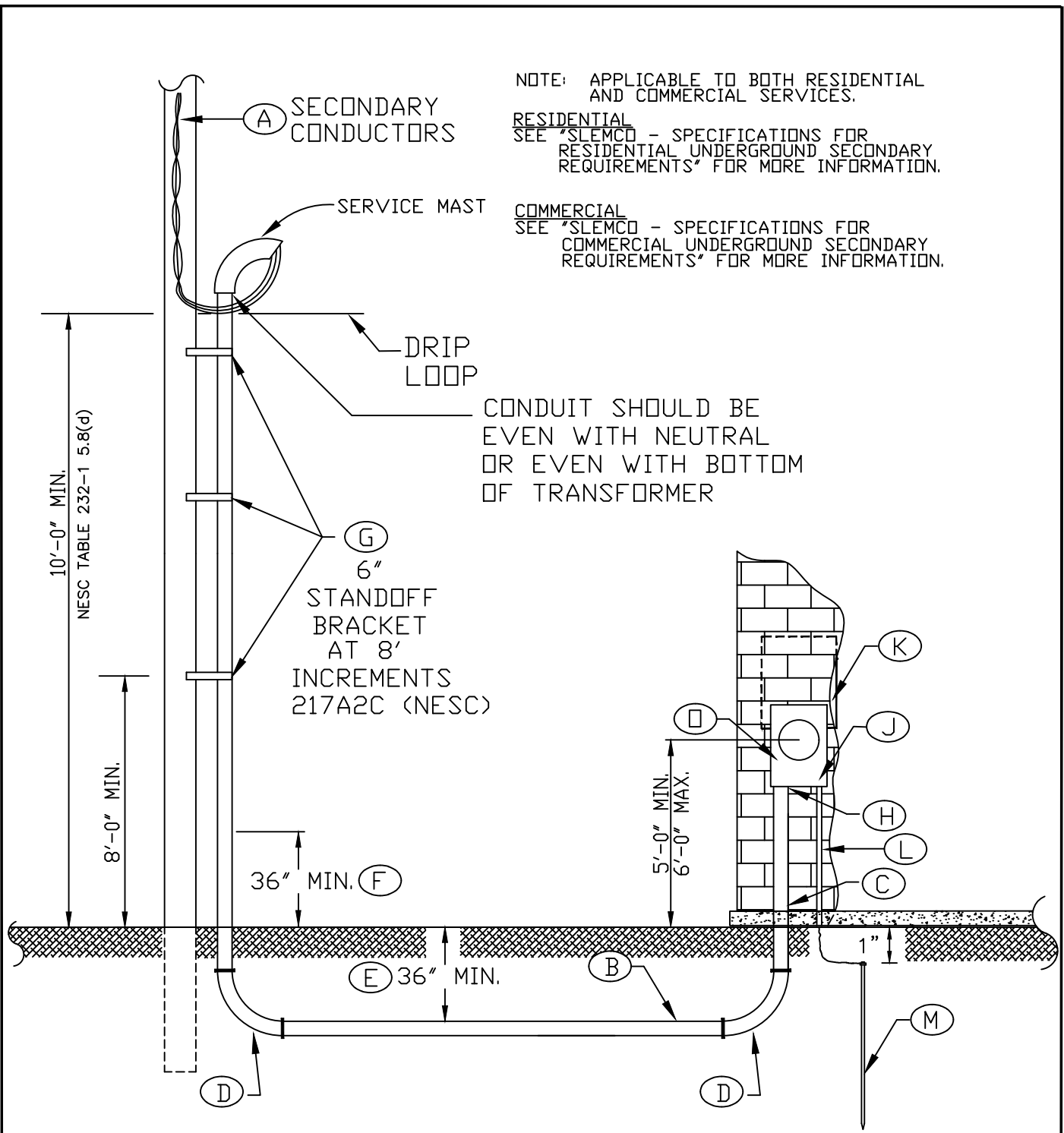
COMMERCIAL

SEE "SLEMCO - SPECIFICATIONS FOR COMMERCIAL UNDERGROUND SECONDARY REQUIREMENTS" FOR MORE INFORMATION ON ALPHA IDENTIFIERS.

SEE "SLEMCO - SPECIFICATIONS FOR COMMERCIAL UNDERGROUND PRIMARY REQUIREMENTS" FOR MORE INFORMATION ON NUMERICAL IDENTIFIERS.



		SOUTHWEST LOUISIANA ELECTRIC MEMBERSHIP CORPORATION LOUISIANA 9 LAFAYETTE			
		<b>SINGLE-PHASE                  UNDERGROUND SERVICE REQUIREMENTS                  FROM A NEW PADMOUNT TRANSFORMER</b>			
DRAWN BY: L. MECHE		CREATED ON: 10/22/14	SCALE: N.T.S.		
REVISIONS		REVISED BY	DATE	REV.	DRAWING NO.
MADE APPLICABLE TO RESIDENTIAL AND COMMERCIAL		H.H.H	03/29/19	1	3
APPROVED:		DATE:	PAGE NUMBER:		1
			13		



NOTE: APPLICABLE TO BOTH RESIDENTIAL AND COMMERCIAL SERVICES.

RESIDENTIAL  
SEE "SLEMCO - SPECIFICATIONS FOR RESIDENTIAL UNDERGROUND SECONDARY REQUIREMENTS" FOR MORE INFORMATION.

COMMERCIAL  
SEE "SLEMCO - SPECIFICATIONS FOR COMMERCIAL UNDERGROUND SECONDARY REQUIREMENTS" FOR MORE INFORMATION.

CONDUIT SHOULD BE EVEN WITH NEUTRAL OR EVEN WITH BOTTOM OF TRANSFORMER

		SOUTHWEST LOUISIANA ELECTRIC MEMBERSHIP CORPORATION LOUISIANA 9 LAFAYETTE			
		<b>SINGLE-PHASE          UNDERGROUND SERVICE REQUIREMENTS          FROM AN OVERHEAD SOURCE</b>			
DRAWN BY:		CREATED ON: 01/15/97	SCALE: N.T.S.		
REVISIONS		REVISED BY	DATE	REV.	DRAWING NO.
SPLIT UNDERGROUND/OVERHEAD DRAWINGS		L. A. M.	09/05/99	2	4
		J. C. D.	03/01/11	3	
ENHANCEMENT TO DRAWINGS & SPECIFICATIONS		L. MECHE	04/21/16	4	
MADE APPLICABLE TO RESIDENTIAL AND COMMERCIAL		H. H. H	03/29/19	5	

SLEMCO ELECTRICAL STANDARDS		
APPROVED:	DATE:	PAGE NUMBER:
		14

## SLEMCO

### Specifications for Residential Underground Meter Pole Requirements

Applicable to residential and small noncommercial services receiving single-phase power at 120/240 volts through a 200 Amp meter base attached to a meter pole. The meter base service conductors enter through an underground conduit from either an underground or overhead source. In the event the customer requires larger than a 200 Amp service, special applications will be necessary and they are specified within these requirements.

The *Point of Connection* is the point of demarcation between SLEMCO and the customer. It shall be the customer's responsibility for compliance with the National Electrical Code (*NEC*) and any Governing Authority for all equipment beyond the *Point of Connection*. The customer is advised to use the services of a qualified electrician to assure compliance with all codes and regulations.

*It should be noted that electrical pipe is the gray pipe and white water pipe is not acceptable. Therefore, schedule 40 or 80 electrical pipe discussed in this section is approved electrical conduit.*

Items marked with ⑤ are indicated on Drawing No.5 – *Single-Phase Underground Meter Pole Requirements*.

- A. The meter pole is furnished and installed by customer. The meter pole shall be 3" thick by 12" wide of pressure treated lumber or equal self-supporting structure. The meter pole shall be installed a minimum of 36" below finished grade. The meter pole height above grade should be a minimum of 6' above finished grade and high enough such that the center of the meter base socket window can be installed between 5' and 6' above finished grade. ⑤
- B. Secondary conductors from transformer to meter base are furnished and installed by SLEMCO and paid for by customer. ⑤ Secondary conductors will be terminated by SLEMCO to source side of the meter base (*Point of Connection*).
- C. Secondary conduit furnished and installed by customer. After trenching, the trench may be backfilled and covered. Conduit must be 2" electrical conduit for a 200 Amp service. Electrical schedule 40 pipe is acceptable for below ground use. ⑤

In the event the customer requires larger than a 200 Amp service, this will require a current transformer (*CT*) metering installation. This will now require a minimum of a 3" electrical conduit. Please refer to the section entitled, *Residential Current Transformer Metering Schemes*, for details on typical installation.

- D. The above ground riser conduit furnished and installed by customer. This conduit must be 2" electrical schedule 80 pipe for a 200 Amp service and shall be securely mounted with a minimum of three (3) conduit straps with a maximum of 30" (*NEC 230.51A*) apart. If elbows are required, then PVC elbows shall be used. LB elbows and flex conduit cannot be used. ⑤

In the event the customer requires larger than a 200 Amp service, this will require a CT metering installation. This will now require a minimum of a 3" electrical conduit. Please refer to the section entitled, *Residential Current Transformer Metering Schemes*, for details on typical installation.

# SLEMCO

## Specifications for Residential Underground Meter Pole Requirements

Items marked with ②③④⑤ are indicated on the following drawings:

- ② Drawing No.2 – *Single-Phase Underground Service Requirements from an Existing Padmount Transformer*
- ③ Drawing No.3 – *Single-Phase Underground Service Requirements from a new Padmount Transformer*
- ④ Drawing No.4 – *Single-Phase Underground Service Requirements from an Overhead Source*
- ⑤ Drawing No.5 – *Single-Phase Underground Meter Pole Requirements*

- E. Customer will install a polypropylene pull string (*minimum strength of 210 lbs.*) in all electrical conduit that will require SLEMCO to install secondary conductors.
- F. Any underground service that requires three 90° (*degree*) turns or is further than 150', the customer must use standard steel 90° elbows with an 18" turn. A maximum of three 90° turns are allowed. Any underground service which is less than 150' with two or less 90° turns, the customer is allowed to use PVC long radius 90° elbows with a 36" turn. ⑤
- G. Customer must maintain a depth of 36" when installing electrical conduit for secondary conductors. ⑤
- H. **H1** If the customer is getting power from an overhead source, then the customer will stub up at the SLEMCO pole 36" above ground with electrical schedule 80 pipe. ④ The customer will also be required to leave three (3) joints of electrical schedule 40 pipe near the pole to be used by SLEMCO to install the riser up the pole even with neutral or bottom of transformer. The customer will also provide a 2" weather head along with the electrical schedule 40 pipe. According to NEC 230.24B1, the lowest point of the service conductor (*drip loop*) must be at least 10' above final grade.  
**H2** If the customer is getting power from an existing padmount transformer, then the customer must stop the electrical conduit 1' short of the transformer pad on the opposite side of the underground transformer from where the primary conductors enter. ② The front of the underground transformer is where the bushings are located and the rear behind that. The sides of the underground transformer are adjacent the front. The electrical conduit must be installed such that its direction is perpendicular to the side of the underground transformer. SLEMCO will install and provide the PVC long radius 90° elbow and conduit into the transformer.  
**H3** If the customer is getting power from an existing pedestal, then the customer must stop the electrical conduit 1' short of the pedestal's edge.  
**H4** If the customer is getting power from a new padmount transformer, then the customer must stub up the secondary and primary electrical conduits next to each other at the location of new padmount transformer. ③ See the section entitled, *Specifications for Residential Underground Primary Requirements*, for details on primary installation.
- I. Customer will complete installation of conduit into bottom left side of meter base using electrical schedule 80 pipe for section above ground into meter base. ⑤

# SLEMCO

## Specifications for Residential Underground Meter Pole Requirements

Items marked with ⑤ are indicated on Drawing No.5 – *Single-Phase Underground Meter Pole Requirements*.

- J. Meter base furnished and installed by customer. When purchasing a meter base for underground service please specify hubless or underground meter base. The meter base shall be mounted such that the center of the meter socket window is between 5' and 6' above finished grade. ⑤ The meter base shall conform to SLEMCO's standards and shall be compatible with SLEMCO metering. The meter base shall be rated for 200 Amps.

In the event the customer requires larger than a 200 Amp service, this will require a CT metering installation. The equipment (*CT enclosure, disconnect switch, etc.*) necessary for CT metering will require an adjacent standalone structure or rack with suitable bracing for installation. Please refer to the section entitled, *Residential Current Transformer Metering Schemes*, for typical equipment configuration details.

- K. The main disconnect (*service panel*) and customer conductors (*from load side of the meter base to the main disconnect*) are furnished and installed by customer. If the service is 200 Amps, then the main disconnect within the service panel shall be sized for 200 amps. If the service is less than 200 Amps (*60/100 Amp*) and will serve loads such as service gates, campers, pond aerators, water sprinkler systems, etc., then a main disconnect will not be required within the service panel. The customer conductors shall be sized for 60/100/200 Amps of load, as required by the NEC or Governing Authority. The service panel must be of weatherproof and watertight design. ⑤

- L. The customer conductors exiting the main disconnect (*service panel*) is furnished and installed by customer and shall be sized according to the NEC or Governing Authority. These customer conductors shall be installed in electrical schedule 80 pipe above finished grade and electrical schedule 40 pipe underground. ⑤

- M. The customer will be responsible to furnish the meter base ground wire (*minimum #6 soft drawn copper*) and install this wire on the meter pole from the meter base to the ground rod. The meter base ground wire shall be connected in the ground wire lug, where provided, and not in the service neutral lug. The meter base ground wire must be stapled every 6". ⑤

- N. Ground rod, minimum 5/8" x 8' copperweld or 1/2" x 8' copper, furnished and installed by customer. Ground rod is to be set 1" below finished grade. ⑤ This is the minimum required by SLEMCO. Additional grounding may be required by the NEC or Governing Authority.

In the event the customer requires larger than a 200 Amp service, this will require a CT metering installation. This will now require one ground rod per every 200 Amps of service. Please refer to the section entitled, *Residential Current Transformer Metering Schemes*, for details on typical installation.

- O. This design may be used as a temporary meter pole for temporary service. If used as a temporary meter pole, the customer shall supply the service conductors long enough to reach the SLEMCO service connection point.

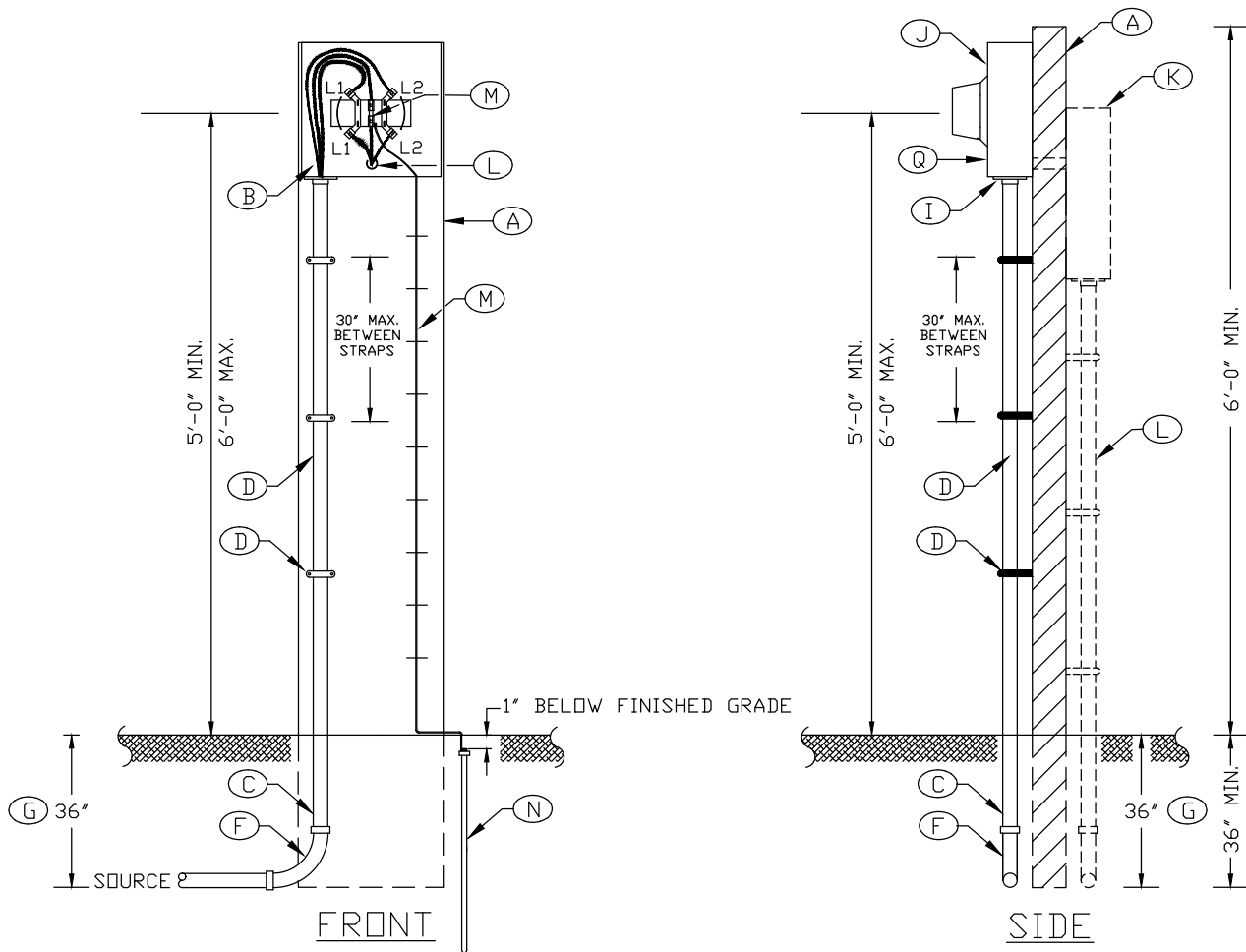
## SLEMCO

### Specifications for Residential Underground Meter Pole Requirements

Items marked with ⑤ are indicated on Drawing No.5 – *Single-Phase Underground Meter Pole Requirements*.

- P. Variations of this design may be considered equal as long as NEC requirements are met. To assure acceptability where variations arise, contact SLEMCO prior to installation.
  
- Q. If a Governing Authority requires inspection, inspection tag must be in place and marked approved before SLEMCO will connect service. ⑤
  
- R. Important: the meter pole must be installed such that it is extremely sturdy before SLEMCO will connect service.





SEE "SLEMCO - SPECIFICATIONS FOR RESIDENTIAL UNDERGROUND METER POLE REQUIREMENTS" FOR MORE INFORMATION.

THIS DESIGN MAY BE USED AS A TEMPORARY METER POLE FOR TEMPORARY SERVICE

SOURCE

1. SEE DRAWING NO. 2 IF SOURCE IS FROM AN EXISTING PADMOUNT TRANSFORMER.
2. SEE DRAWING NO. 3 IF SOURCE IS FROM A NEW PADMOUNT TRANSFORMER.
3. SEE DRAWING NO. 4 IF SOURCE IS FROM AN OVERHEAD TRANSFORMER.

<b>SLEMCO</b>	SOUTHWEST LOUISIANA ELECTRIC MEMBERSHIP CORPORATION LOUISIANA 9 LAFAYETTE
<b>SINGLE-PHASE          UNDERGROUND METER          POLE REQUIREMENTS</b>	
DRAWN BY:	CREATED ON: 01/15/97 SCALE: N.T.S.
REVISIONS	REVISED BY DATE REV. DRAWING NO. REV.
ENHANCEMENT TO DRAWINGS & SPECIFICATIONS	L. MECHE 01/13/15 2
ADDED NOTE MAY BE USED AS TEMPORARY POLE	H. HUGHES 08/17/23 3

<b>SLEMCO ELECTRICAL STANDARDS</b>		
APPROVED:	DATE:	PAGE NUMBER:
		<b>19</b>

## SLEMCO

### Specifications for Residential Overhead Meter Pole Requirements

Applicable to residential and small noncommercial services receiving single-phase power at 120/240 volts through a 200 Amp meter base attached to a meter pole. The meter base service conductors enter through a weather head from an overhead source. In the event the customer requires larger than a 200 Amp service or two 200 Amp services, special applications will be necessary and they are specified within these requirements.

The *Point of Connection* is the point of demarcation between SLEMCO and the customer. It shall be the customer's responsibility for compliance with the National Electrical Code (*NEC*) and any Governing Authority for all equipment beyond the *Point of Connection*. The customer is advised to use the services of a qualified electrician to assure compliance with all codes and regulations. According to National Electric Safety Code (*NESC*) Table 232-1, Item 5., Note 8(d), the lowest point of the service conductor (*drip loop*) must be at least 10' above final grade. A sufficient drip loop shall be present to prevent water ingress.

*It should be noted that electrical pipe is the gray pipe and white water pipe is not acceptable. Therefore, schedule 40 or 80 electrical pipe discussed in this section is approved electrical conduit.*

Items marked with ⑥ ⑦ are indicated on the following drawings:

⑥ Drawing No.6 – *Single-Phase Overhead Meter Pole Requirements*

⑦ Drawing No.7 – *Meter Pole Guying*

A. Descriptions:

**Permanent** - Mobile homes, camps, water wells, and any other connection not considered temporary.

**Temporary** - Construction, special events, etc.

B. The meter poles are furnished and installed by customer. Specifications shown on the drawing and described here shall be considered minimum requirements.

C. **Permanent:** meter poles must be a minimum of 15' above final grade and installed at least 5' below finished grade. The lowest point of the service conductor (*drip loop*) will be at least 10' above final grade (*NESC Table 232-1, Item 5., Note 8(d)*) and the point of attachment is 6" below top of pole. A sufficient drip loop shall be present to prevent water ingress. A permanent meter pole must be a pressure treated round pole with a minimum top diameter of 5" or a pressure treated 6" x 6" pole. ⑥ A permanent meter pole with service conductors length of 75' or greater will require guying. ⑦

It will be the responsibility of the customer to secure the pole in a vertical position. If the ground is not adequate to support the pole, a guy will have to be installed by the customer. ⑦

# SLEMCO

## Specifications for Residential Overhead Meter Pole Requirements

Items marked with ⑥ are indicated on Drawing No.6 – *Single-Phase Overhead Meter Pole Requirements*.

- D. **Temporary:** meter poles must be long enough such that once complete the lowest point of the service conductor (*drip loop*) will be at least 10' above final grade (*NESC Table 232-1, Item 5., Note 8(d)*), the point of the attachment is at least 12' above final grade (*NESC Table 232-1, Item 5*), and the meter pole can be installed 4' below finished grade. A sufficient drip loop shall be present to prevent water ingress. A temporary meter pole must be a treated pole with a minimum size of 4" x 6". A temporary meter pole with service conductors of length of 75' or greater must be braced with at least two (2) pieces of 2" x 4" pressure treated lumber. ⑥
- E. The conduit shall be securely mounted with a minimum of three (3) conduit straps with a maximum of 30" (*NEC 230.51A*) apart. One (1) strap will be required installed no more than 12" (*NEC 230.51A*) from the weather head. The Service Mast conduit shall be galvanized metal rigid conduit or electrical schedule 40 pipe. If elbows are required, then PVC elbows shall be used. LB elbows and flex conduit cannot be used. ⑥
- F. Service entrance conductors from the weather head (*Point of Connection*) to the meter base are furnished and installed by customer. Service entrance conductors shall be sized according to the service load size (*ampacity*) and **Residential-Overhead Service Entrance Conductor Table**. Termination of conductors at the weather head (*Point of Connection*) performed by SLEMCO. ⑥

All service entrance conductors into and out of a self-contained meter base shall be single conductors. Parallel conductors are not allowed. An extension of at least 18" of service entrance conductors is required at the weather head. ⑥

The neutral of the service entrance conductors shall be identified with gray or white tape at the weather head and in the meter base.

- G. The main disconnect (*service panel*) and customer conductors (*from load side of the meter base to the main disconnect*) are furnished and installed by customer. If the service is 200 Amps, then the main disconnect within the service panel shall be sized for 200 amps. If the service is less than 200 Amps (*60/100 Amp*) and will serve loads such as service gates, campers, pond aerators, water sprinkler systems, etc., then a main disconnect will not be required within the service panel. The customer conductors shall be sized for 60/100/200 Amps of load, as required by the NEC or Governing Authority. The service panel must be of weatherproof and watertight design. ⑥
- H. The meter base is furnished and installed by customer. The meter base shall be mounted such that the center of the meter socket window is between 5' and 6' above finished grade. ⑥ The meter base shall conform to SLEMCO's standards and shall be compatible with SLEMCO metering and include a weatherproof hub. The meter base shall be rated for 200 Amps.

## SLEMCO

### Specifications for Residential Overhead Meter Pole Requirements

Items marked with ⑥ ⑦ are indicated on the following drawings:

- ⑥ Drawing No.6 – *Single-Phase Overhead Meter Pole Requirements*
- ⑦ Drawing No.7 – *Meter Pole Guying*

In the event the customer requires larger than a 200 Amp service, this will require a current transformer (CT) metering installation. The equipment (CT enclosure, disconnect switch, etc.) necessary for CT metering will require an adjacent standalone structure or rack with suitable bracing for installation. Please refer to the section entitled, *Residential Current Transformer Metering Schemes*, for typical equipment configuration details.

If the customer requires larger than a 200 Amp service or two 200 Amp services on same pole, the meter pole will require guying. ⑦

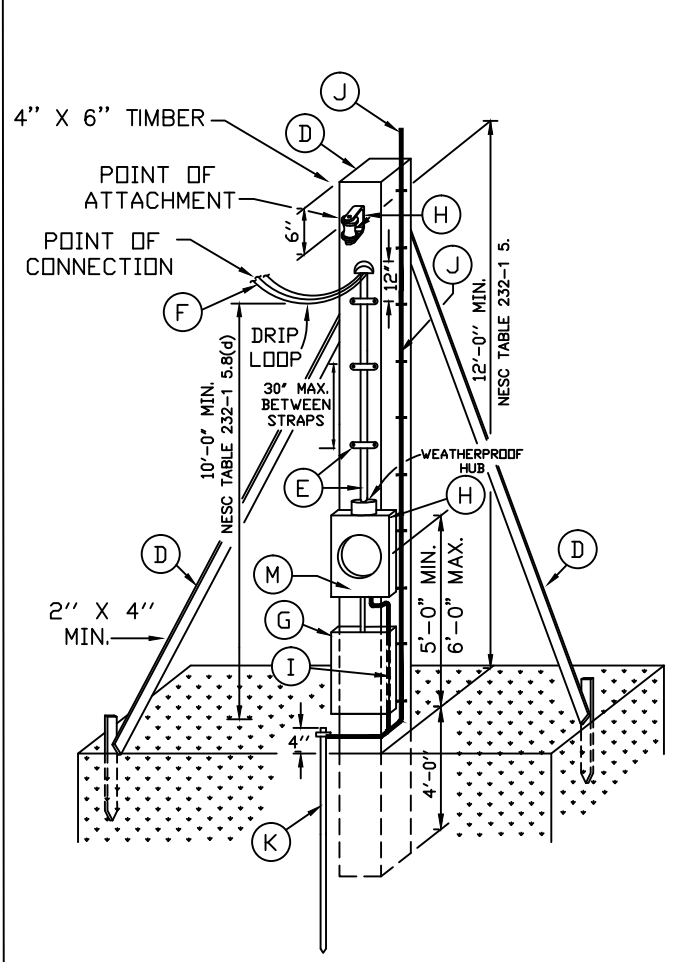
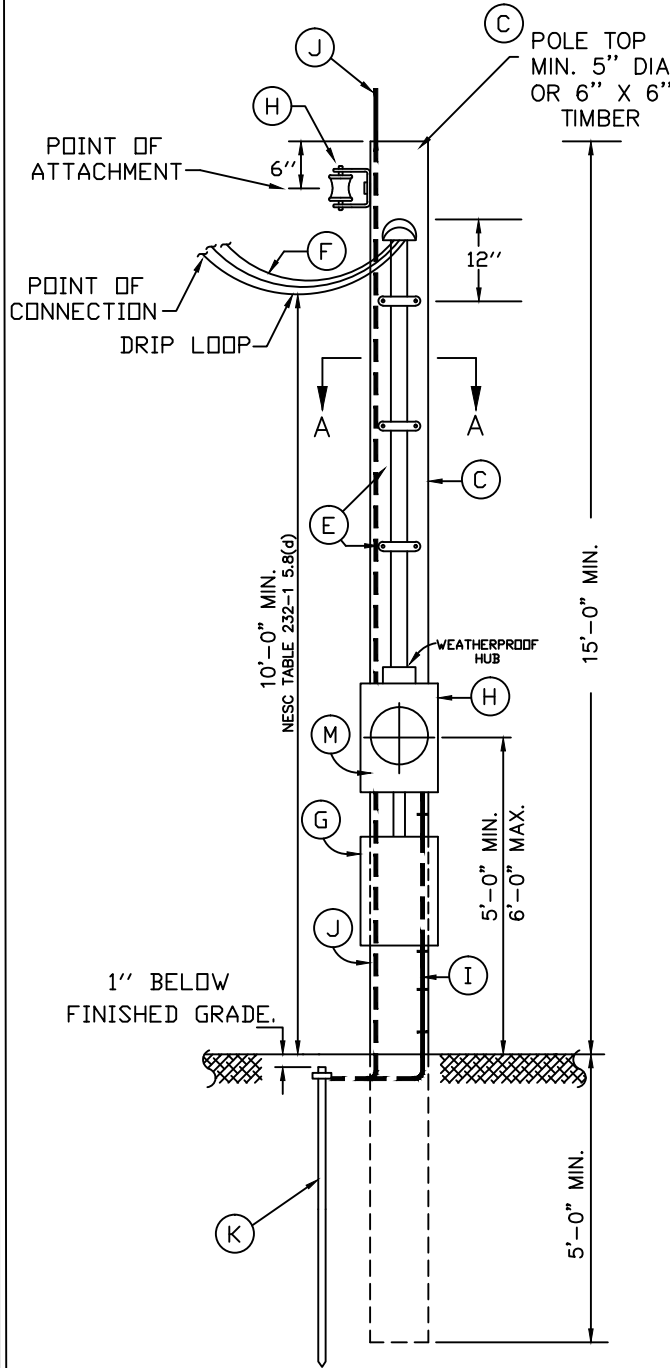
The K10C service holder is furnished and installed by customer and shall conform to SLEMCO's standards. The K10C shall be mounted 6" from the top of the meter pole in the direction of the SLEMCO service conductor. Pre-drilling a pilot hole for the K10C is recommended. ⑥

- I. The customer will be responsible to furnish the meter base ground wire (*minimum #6 soft drawn copper*) and install this wire on the meter pole from the meter base to the ground rod. The meter base ground wire shall be connected in the ground wire lug, where provided, and not in the service neutral lug. The meter base ground wire must be stapled every 6". ⑥
- J. The customer will be responsible to furnish the pole grounding conductor (*minimum #6 soft drawn copper*) and install this conductor on the meter pole. The pole grounding conductor will extend from 6" above the top of the meter pole to the ground rod. It is installed at least 90° (*degrees*) around the pole from the service entrance conduit (*See Section A-A*). The pole grounding conductor must be stapled, starting from the top of the pole at 2' intervals until a point 6' above finished grade is reached, then stapled every 6". ⑥
- K. Ground rod, minimum 5/8" x 8' copperweld or 1/2" x 8' copper, furnished and installed by customer. Ground rod is to be set 1" below finished grade. ⑥ This is the minimum required by SLEMCO. Additional grounding may be required by the NEC or Governing Authority.

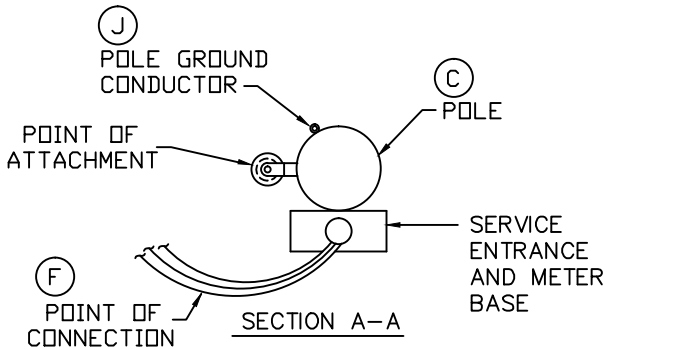
Temporary meter pole ground rods can be set 4" above finished grade. ⑥

In the event the customer requires larger than a 200 Amp service, this will require a CT metering installation. This will now require one ground rod per every 200 Amps of service. Please refer to the section entitled, *Residential Current Transformer Metering Schemes*, for details on typical installation.

- L. All unused or open holes in the meter base, main disconnect shall be plugged with watertight plugs.
- M. If a Governing Authority requires inspection, inspection tag must be in place and marked approved before SLEMCO will connect service. ⑥
- N. Important: the meter pole must be installed such that it is extremely sturdy before SLEMCO will connect service.



TEMPORARY METER POLE



PERMANENT METER POLE

SEE "SLEMCO - SPECIFICATIONS FOR RESIDENTIAL OVERHEAD METER POLE REQUIREMENTS" FOR MORE INFORMATION.

	<b>SOUTHWEST LOUISIANA ELECTRIC MEMBERSHIP CORPORATION</b> LOUISIANA 9 LAFAYETTE			
	<b>SINGLE-PHASE OVERHEAD METER POLE REQUIREMENTS</b>			
DRAWN BY:	CREATED ON:	SCALE: N.T.S.		
REVISIONS	REVISED BY:	DATE	REV.	DRAWING NO.
		01/15/97	2	6
		03/04/97	3	
	L. A. M.	10/01/99	4	
	L. MECHE	05/03/16	5	
<b>ENHANCEMENT TO DRAWINGS &amp; SPECIFICATIONS</b>				

SLEMCO ELECTRICAL STANDARDS

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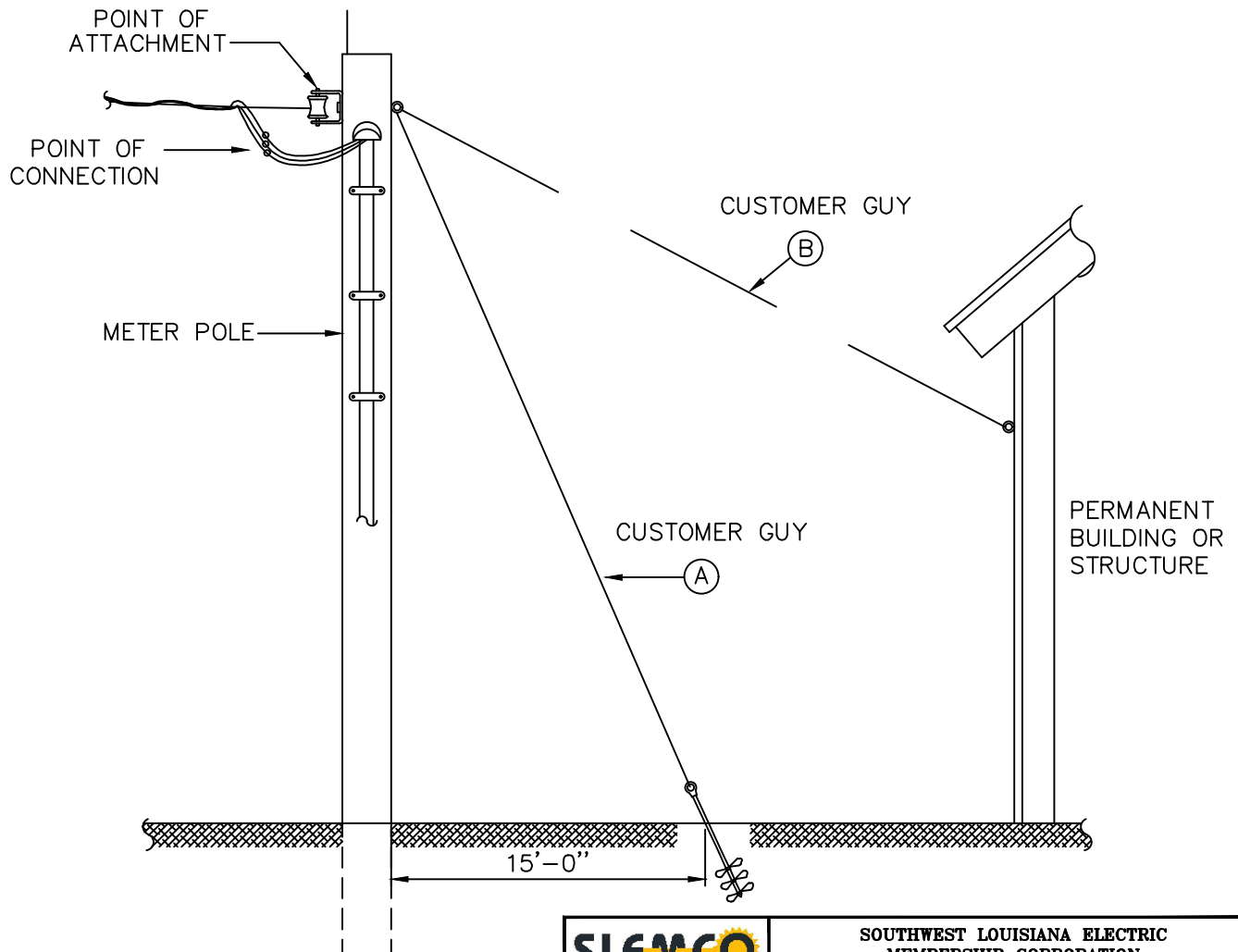
# METER POLE GUYING PERMANENT ONLY

GUYING IS REQUIRED FOR ANY OF THE FOLLOWING CONDITIONS:

1. MAIN DISCONNECT IS GREATER THAN 200 AMPS.
2. TWO (2) 200 AMP MAIN DISCONNECTS ON SAME POLE.
3. A SERVICE CONDUCTOR LENGTH GREATER THAN 75'.

GUYING AS FOLLOWS:

- A. CUSTOMER SHALL BE REQUIRED TO INSTALL A GUY ON THE METER POLE OPPOSING THE PULL OF THE SLEMCO SERVICE CONDUCTOR TO THE GROUND.
- B. AN ACCEPTABLE SUBSTITUTE WILL BE TO INSTALL A GUY ON THE METER POLE OPPOSING THE PULL OF THE SLEMCO SERVICE CONDUCTOR TO A PERMANENT BUILDING OR STRUCTURE.

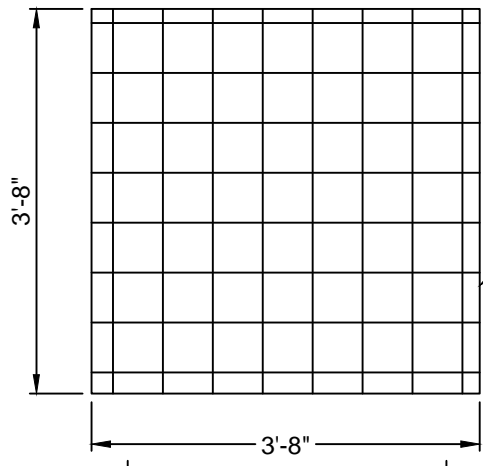


<b>SLEMCO</b>	SOUTHWEST LOUISIANA ELECTRIC MEMBERSHIP CORPORATION LOUISIANA 9 LAFAYETTE				
<b>METER POLE GUYING</b>					
DRAWN BY:	CREATED ON:	SCALE: N.T.S.			
REVISIONS	REVISED BY	DATE	REV.	DRAWING NO.	REV.
		01/15/97	2	7	5
		02/24/97	3		
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	L. MECHE	10/22/14	5		
ENHANCEMENT TO DRAWINGS & SPECIFICATIONS					

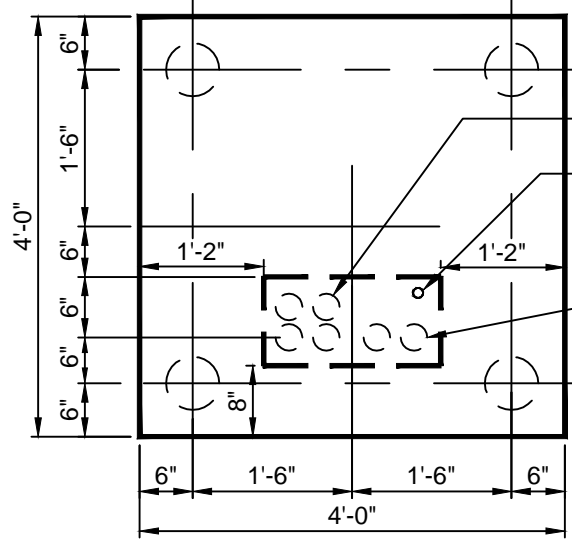
**SLEMCO ELECTRICAL STANDARDS**

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**Engineering Service Specifications**  
**Residential Transformer Foundation Details**



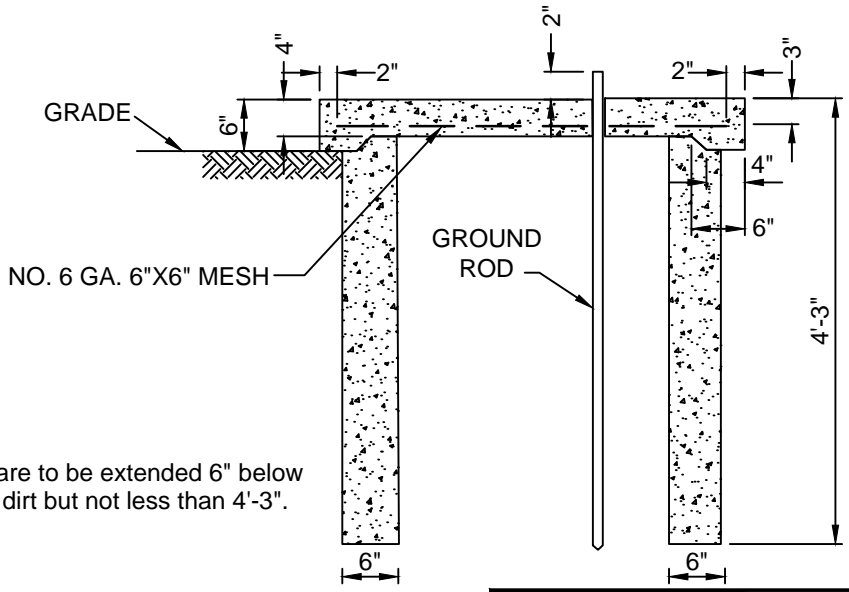
NO. 6 GA. 6"X6" MESH



OPEN SPACE WITH 3" SECONDARY CONDUIT

GROUND ROD

OPEN SPACE WITH 2" PRIMARY CONDUIT



**NOTE:**  
Footings are to be extended 6" below disturbed dirt but not less than 4'-3".

	<b>SOUTHWEST LOUISIANA ELECTRIC MEMBERSHIP CORPORATION</b> <small>LOUISIANA 9 LAFAYETTE</small>		
	<b>SINGLE-PHASE SWITCH CAN OR PADMOUNT TRANSFORMER FOUNDATION</b>		

DRAWN BY:		CREATED ON: 01/16/97	SCALE: N.T.S.
REVISIONS		REVISED BY	DATE

<b>SLEMCO ELECTRICAL STANDARDS</b>		
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L. A. M.	10/13/99	2		
L. MECHE	10/22/14	3		



**Engineering Service Specifications**  
**Residential Current Transformer Metering Schemes**

# SLEMCO

## Specifications for Residential Underground Current Transformer Metering Requirements

Applicable to residential and small noncommercial services greater than 200 Amps receiving single-phase power at 120/240 volts. **The maximum SLEMCO allowable service size of this type is 800 Amps.** Applicable metering equipment will be attached to building requiring service. The service conductors run through underground conduit from either an underground or overhead source to current transformer (CT) enclosure. These requirements can also be applied to a standalone structure or rack accompanying an underground meter pole installation.

The *Point of Connection* is the point of demarcation between SLEMCO and the customer. It shall be the customer's responsibility for compliance with the National Electrical Code (NEC) and any Governing Authority for all equipment beyond the *Point of Connection*. The customer is advised to use the services of a qualified electrician to assure compliance with all codes and regulations.

*It should be noted that electrical pipe is the gray pipe and white water pipe is not acceptable. Therefore, schedule 40 or 80 electrical pipe discussed in this section is approved electrical conduit.*

Items marked with ⑨⑩⑪ are indicated on the following drawings:

- ⑨ Drawing No.9 – Single-Phase Current Transformer Metering Requirements from an Existing Padmount Transformer
- ⑩ Drawing No.10 – Single-Phase Current Transformer Metering Requirements from a new Padmount Transformer
- ⑪ Drawing No.11 – Single-Phase Current Transformer Metering Requirements from an Overhead Source

- A. **A1 Services up to 400A:** Secondary conductors from transformer to disconnect switch furnished and installed by SLEMCO. Termination of conductors will be made to source side of disconnect switch (*Point of Connection*) by SLEMCO. ⑨⑩⑪
- A2 Services greater than 400A:** Termination of secondary conductors must be made in disconnect switch by customer. Wire trough is optional. Each pole of the disconnect switch will only be allowed one lug attachment. Therefore, multi-conductor connections to a single pole made within the disconnect switch must include a multi-conductor lug. More than one conductor connected within a single lug will not be allowed. ⑨⑩⑪
- A2.1** If the customer is getting power from an overhead source, then secondary conductors from weather head (*Point of Connection*) to disconnect switch furnished and installed by customer and an extension of at least fifty feet (50') of secondary conductors is required to be left out of conduit at base of SLEMCO pole. The secondary conductors shall be sized according to the service load size (*ampacity*) and **Residential-Underground Secondary Conductor Table**. The neutral of the secondary conductors shall be identified with gray or white tape at the weather head and in the meter base. Service cable from transformer to weather head (*Point of Connection*) are furnished and installed by SLEMCO. Termination of conductors at weather head (*Point of Connection*) performed by SLEMCO. ⑪

# SLEMCO

## Specifications for Residential Underground Current Transformer Metering Requirements

Items marked with ⑨⑩⑪ are indicated on the following drawings:

⑨ Drawing No.9 – Single-Phase Current Transformer Metering Requirements from an Existing Padmount Transformer

⑩ Drawing No.10 – Single-Phase Current Transformer Metering Requirements from a new Padmount Transformer

⑪ Drawing No.11 – Single-Phase Current Transformer Metering Requirements from an Overhead Source

**A2.2** If the customer is getting power from a new or existing padmount transformer (*Point of Connection*), then secondary conductors from transformer (*Point of Connection*) to disconnect switch furnished and installed by customer and an extension of at least 48” of secondary conductor is required to be left out of conduit at padmount transformer location. The secondary conductors shall be sized according to the load, as required by the NEC or Governing Authority. Diesel Locomotive (*DLO*) conductors are prohibited. Termination of conductors in padmount transformer (*Point of Connection*) performed by customer. ⑨⑩

- B. Secondary conduit furnished and installed by customer. After trenching, the trench may be backfilled and covered. Conduit must be a minimum of a 3” electrical conduit. Electrical schedule 40 pipe is acceptable for below ground use. ⑨⑩⑪
- C. Above ground riser conduit must be a minimum of a 3” electrical schedule 80 pipe. If elbows are required, then PVC elbows shall be used. LB elbows and flex conduit cannot be used. ⑨⑩⑪
- D. No standard steel 90° elbows are allowed since conduit will house conductors carrying greater than 200 Amps. Therefore, any underground service that requires three 90° turns or is further than 150’, the customer must use PVC long radius 90° elbows with a 48” turn. A maximum of three 90° turns are allowed. Any underground service which is less than 150’ with two or less 90° turns, the customer is allowed to use PVC long radius 90° elbows with a 36” turn. ⑨⑩⑪
- E. Customer must maintain a depth of 36” when installing electrical conduit for secondary conductors. ⑨⑩⑪ Customer will install a polypropylene pull string (*minimum strength of 210 lbs.*) in all electrical conduit that will require SLEMCO to install secondary conductors.
- F. **F1** If the customer is getting power from an overhead source, then the customer will stub up at the SLEMCO pole 36” above finished grade with electrical schedule 80 pipe (3” *minimum*). ⑪ The customer will also be required to leave three (3) joints of electrical schedule 40 pipe (3” *minimum*) near the pole to be used by SLEMCO to install the riser up the pole even with neutral or bottom of transformer. The customer will also provide a weather head (3” *minimum*) along with the electrical schedule 40 pipe. According to National Electric Safety Code (*NES*C) Table 232-1, Item 5., Note 8(d), the lowest point of the service conductor (*drip loop*) must be at least 10’ above final grade.
- F2** If the customer is getting power from an existing padmount transformer, then the customer must stop the electrical conduit 1’ short of the transformer pad. The customer conduit must be installed perpendicular (*in direction of arrows*) to the area (*shown in gray*) marked as 1’ from edge of transformer pad surrounding the bushing enclosure of the padmount transformer. ⑨ Unacceptable installations include installing conduit from the rear of the transformer or installing conduit that is not perpendicular to the bushing enclosure of the padmount transformer. SLEMCO will install and provide the PVC long radius 90° elbow and electrical conduit into the transformer.

# SLEMCO

## Specifications for Residential Underground Current Transformer Metering Requirements

Items marked with ⑨⑩⑪ are indicated on the following drawings:

⑨ Drawing No.9 – *Single-Phase Current Transformer Metering Requirements from an Existing Padmount Transformer*

⑩ Drawing No.10 – *Single-Phase Current Transformer Metering Requirements from a new Padmount Transformer*

⑪ Drawing No.11 – *Single-Phase Current Transformer Metering Requirements from an Overhead Source*

- F3** If the customer is getting power from an existing pedestal, then the customer must stop the electrical conduit 1' short of the pedestal's edge.
- F4** If the customer is getting power from a new padmount transformer, then the customer must stub up the secondary and primary electrical conduit next to each other at the location of new padmount transformer. ⑩ See the section entitled, *Specifications for Residential Underground Primary Requirements*, for details on primary installation.
- G. Standoff brackets furnished and installed by SLEMCO. ⑪
- H. Meter base furnished by SLEMCO and installed by customer. The meter base shall be mounted on the outside of the building such that the center of the meter socket window is between 5' and 6' above finished grade. ⑨⑩⑪ Meter base cannot be mounted to the siding of a metal building unless additional support is used behind the meter base. The top hole of meter base must be plugged with 1" plug.
- I. CT furnished by SLEMCO. Must be mounted to back of CT enclosure by customer. ⑨⑩⑪
- J. CT enclosure is to be supplied by customer and must be a minimum of 24" x 24" x 10". The CT enclosure must have a way to secure the door with a SLEMCO padlock. When installed by customer, the bottom of the CT enclosure should be at a height of 2' to 4' above finished grade. ⑨⑩⑪
- K. The electrical conduit from CT enclosure to meter base shall be 1" electrical schedule 40 pipe. ⑨⑩⑪ This conduit will be furnished and installed by customer. If elbows are required, then PVC elbows shall be used. LB elbows and flex conduit cannot be used.
- L. A ground lug will be installed by customer in the CT enclosure and must be attached with a nut and bolt. ⑨⑩⑪ This is the minimum required by SLEMCO. Additional grounding may be required by the NEC or Governing Authority.
- M. The customer will be responsible to furnish a metering ground wire (*minimum #6 soft drawn copper or #6 insulated copper*) and install this wire from the meter base through CT enclosure and disconnect switch to the optional wire trough. This metering ground wire must be continuous and installed in electrical conduit between the meter base, CT enclosure, disconnect switch, and optional wire trough. The metering ground wire must be connected to the ground lugs in the meter base, CT enclosure, disconnect switch, and the grounding buss bar inside of the optional wire trough. If optional wire trough is omitted, the metering ground wire would end in the disconnect switch. ⑨⑩⑪ This is the minimum required by SLEMCO. Additional grounding may be required by the NEC or Governing Authority.

# SLEMCO

## Specifications for Residential Underground Current Transformer Metering Requirements

Items marked with ⑨⑩⑪ are indicated on the following drawings:

- ⑨ Drawing No.9 – *Single-Phase Current Transformer Metering Requirements from an Existing Padmount Transformer*
- ⑩ Drawing No.10 – *Single-Phase Current Transformer Metering Requirements from a new Padmount Transformer*
- ⑪ Drawing No.11 – *Single-Phase Current Transformer Metering Requirements from an Overhead Source*

- N. The main ground wire must be continuous and installed in ½” electrical conduit between optional wire trough and the first ground rod. The continuous main ground wire must be connected to the grounding buss bar inside of the optional wire trough and each of the ground rods. If the optional wire trough is omitted, then the main ground wire must be continuous and installed in ½” electrical conduit between disconnect switch and the first ground rod. The continuous main ground wire must be connected to the grounding buss bar inside of the disconnect switch and each of the ground rods, if the optional wire trough is omitted. ⑨⑩⑪ The main ground wire shall be sized according to the load, as required by the NEC or Governing Authority and may need to be increased to 1/0, 4/0 or larger if needed.
- O. Ground rods, minimum of two 5/8" x 8' copperweld or 1/2" x 8' copper, furnished and installed by customer. Must have one ground rod for every 200 Amps of service. Ground rods shall be installed 6’ apart. Ground rods must be set 1" below finished grade. ⑨⑩⑪ This is the minimum required by SLEMCO. Additional grounding may be required by the NEC or Governing Authority.
- P. Disconnect switch isolates power from services connected. Disconnect switch furnished and installed by customer between the CT Enclosure and services connected (*wire trough optional*). Disconnect switch is for SLEMCO use only and shall be locked and sealed open or closed by use of SLEMCO padlock. Disconnect switch shall be a double pole, be non-fused or fused with properly sized slugged (*dummy/neutral*) fuse, have a voltage rating of at least 120/240V, and have an ampacity rating no less than the total of the amp ratings of all connected services. Enclosure for disconnect switch shall be UL listed, be weather proof and rain tight (*NEMA 3R*), have a locking mechanism to secure it in the open or close position with a SLEMCO padlock. ⑨⑩⑪ The electrical conduit from CT enclosure to disconnect switch shall be a minimum of 3” electrical schedule 40 pipe. This conduit will be furnished and installed by customer. If elbows are required, then PVC elbows shall be used. LB elbows and flex conduit cannot be used.
- Any multi-conductor connections to a single pole made within the disconnect switch must include a multi-conductor lug. More than one conductor connected within a single lug will not be allowed.
- P1 Services up to 400A:** SLEMCO will be responsible for terminations to the source side of the disconnect switch. Customer will be responsible for terminations to the load side of the disconnect switch.
- P2 Services greater than 400A:** Customer will be responsible for all terminations in the disconnect switch.
- Q. Main disconnects (*service panels*) and optional wire trough shall be furnished and installed by customer as required by the NEC or Governing Authority. ⑨⑩⑪ All terminations will be made in optional wire trough or to main disconnects by customer.

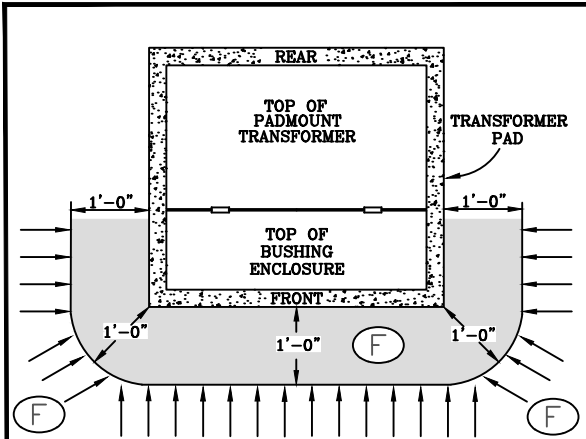
**SLEMCO**  
**Specifications for Residential Underground**  
**Current Transformer Metering Requirements**

Items marked with ⑨⑩⑪ are indicated on the following drawings:

- ⑨ Drawing No.9 – *Single-Phase Current Transformer Metering Requirements from an Existing Padmount Transformer*
- ⑩ Drawing No.10 – *Single-Phase Current Transformer Metering Requirements from a new Padmount Transformer*
- ⑪ Drawing No.11 – *Single-Phase Current Transformer Metering Requirements from an Overhead Source*

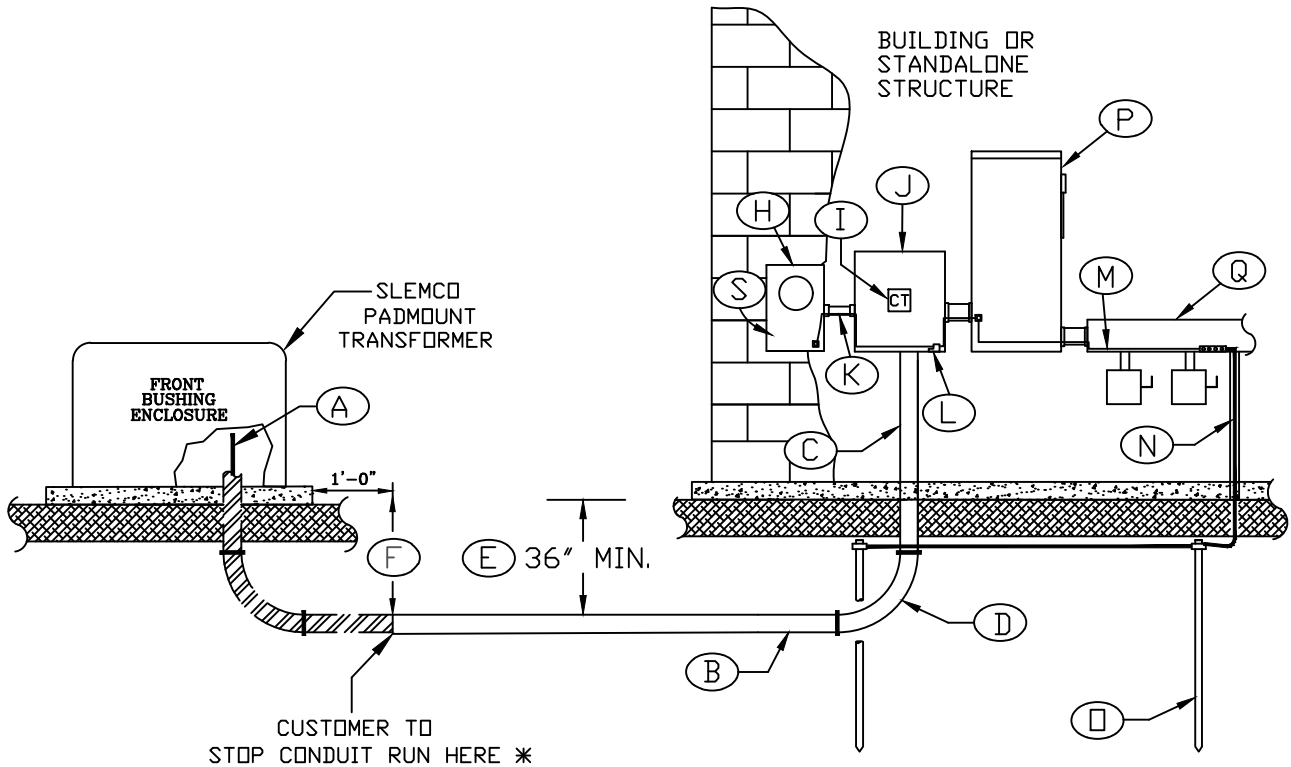
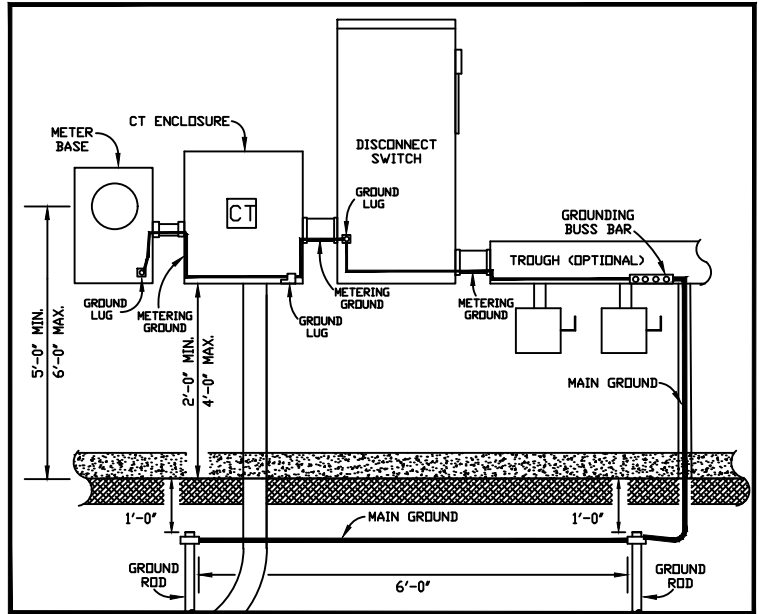
- R. Variations of this design may be considered equal as long as NEC requirements are met. To assure acceptability where variations arise, contact SLEMCO prior to installation.
- S. If a Governing Authority requires inspection, inspection tag must be in place and marked approved before SLEMCO will connect service. ⑨⑩⑪
- T. Prior to secondary service connection and meter installation, a SLEMCO serviceman must inspect the total job for readiness. When ready for this inspection, notify the Lafayette Service Department by calling (337) 896-5551.
- U. SLEMCO does not allow any applicable metering equipment (*meter base and CT enclosure*) to be mounted on the side of an underground padmount transformer.

# TOP VIEW



CUSTOMER CONDUIT MUST BE INSTALLED PERPENDICULAR (IN DIRECTION OF ARROWS) TO THE AREA (SHOWN IN GRAY) MARKED AS ONE FOOT FROM EDGE OF PAD SURROUNDING THE BUSHING ENCLOSURE OF THE PADMOUNT TRANSFORMER.

# DETAIL



NOTE: APPLICABLE TO BOTH RESIDENTIAL AND COMMERCIAL SERVICES.

### RESIDENTIAL

SEE "SLEMCO - SPECIFICATIONS FOR RESIDENTIAL UNDERGROUND CURRENT TRANSFORMER METERING REQUIREMENTS" FOR MORE INFORMATION.

### COMMERCIAL

SEE "SLEMCO - SPECIFICATIONS FOR COMMERCIAL UNDERGROUND CURRENT TRANSFORMER METERING REQUIREMENTS FOR A SINGLE-PHASE CUSTOMER" FOR MORE INFORMATION.

- INSTALLED BY SLEMCO
- INSTALLED BY CUSTOMER
- \* STOP CONDUIT RUN 1'-0" FROM PADMOUNT TRANSFORMER PAD OR PEDESTAL EDGE



SOUTHWEST LOUISIANA ELECTRIC  
MEMBERSHIP CORPORATION  
LOUISIANA 9 LAFAYETTE

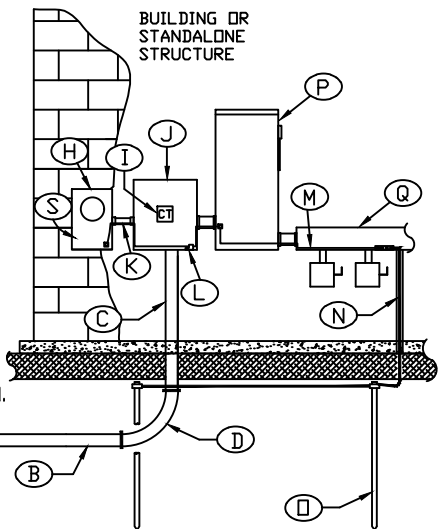
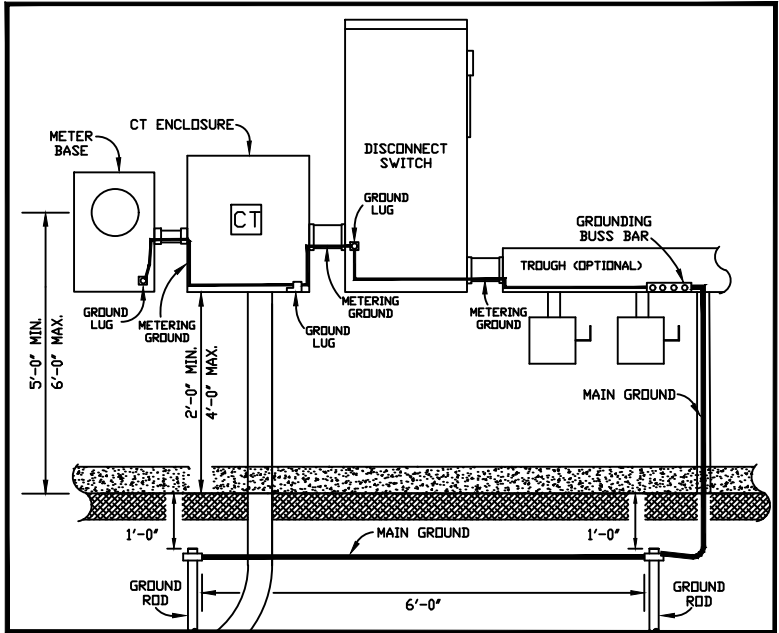
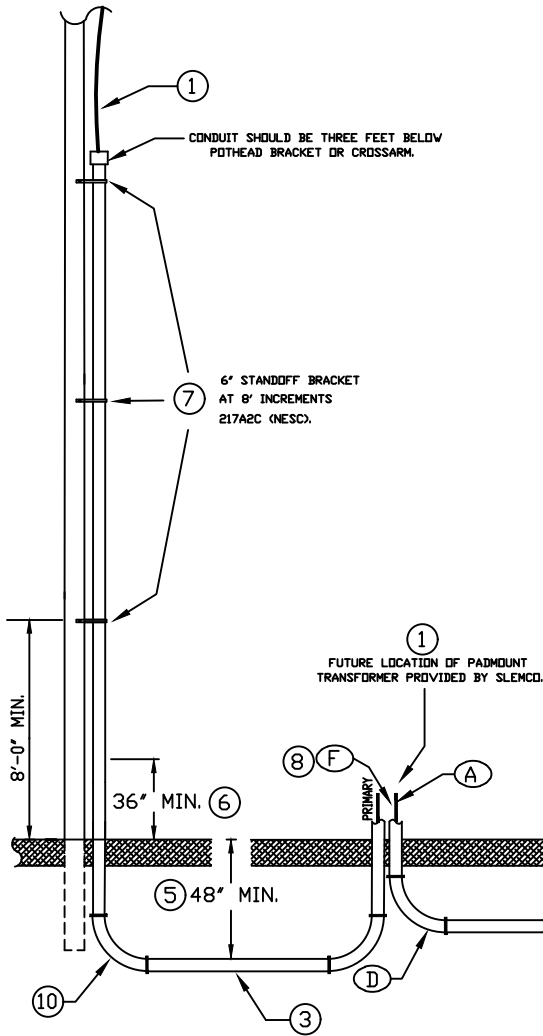
## SINGLE-PHASE CURRENT TRANSFORMER METERING REQUIREMENTS FROM AN EXISTING PADMOUNT TRANSFORMER

DRAWN BY: L. A. G.		CREATED ON: 09/09/89		SCALE: N.T.S.	
REVISIONS	REVISED BY	DATE	REV.	DRAWING NO.	REV.
ENHANCEMENT TO DRAWINGS & SPECIFICATIONS ADDED DETAILS FROM PAD	L. MECHE	07/20/10	1	9	3
ADDED DISCONNECT SWITCH	D. C.	01/26/16	2		
		02/11/19	3		

### SLEMCO ELECTRICAL STANDARDS

APPROVED:	DATE:	PAGE NUMBER:
		31

# DETAIL



NOTE: APPLICABLE TO BOTH RESIDENTIAL AND COMMERCIAL SERVICES.

**RESIDENTIAL**

1. SEE "SLEMCO - SPECIFICATIONS FOR RESIDENTIAL UNDERGROUND CURRENT TRANSFORMER METERING REQUIREMENTS" FOR MORE INFORMATION ON ALPHA IDENTIFIERS.
2. SEE "SLEMCO - SPECIFICATIONS FOR RESIDENTIAL UNDERGROUND PRIMARY REQUIREMENTS" FOR MORE INFORMATION ON NUMERICAL IDENTIFIERS.

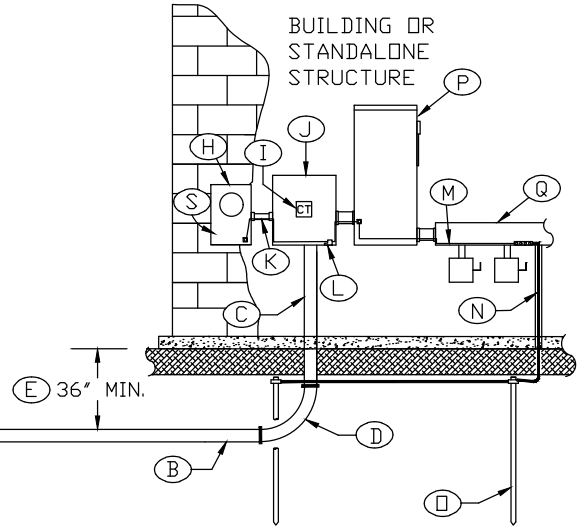
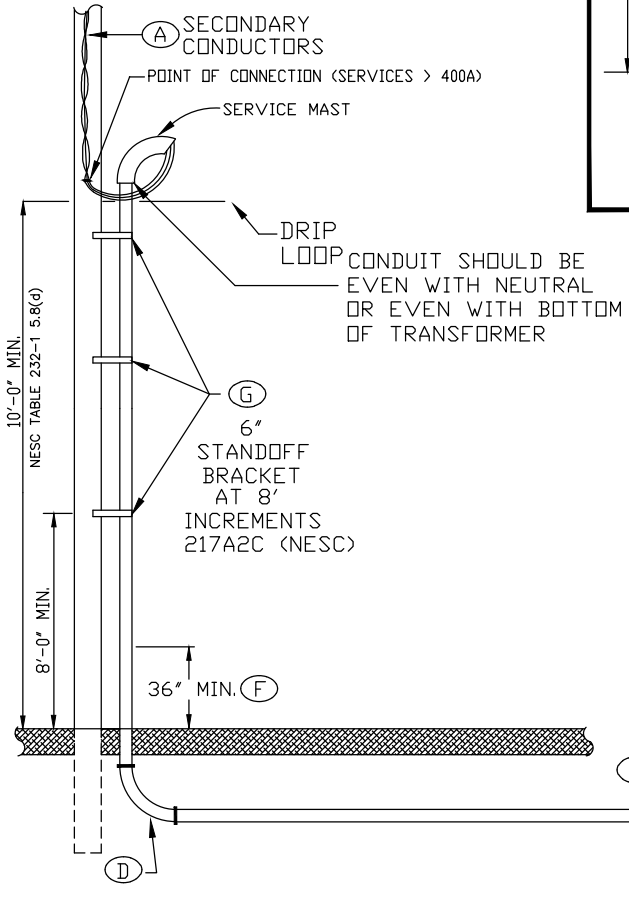
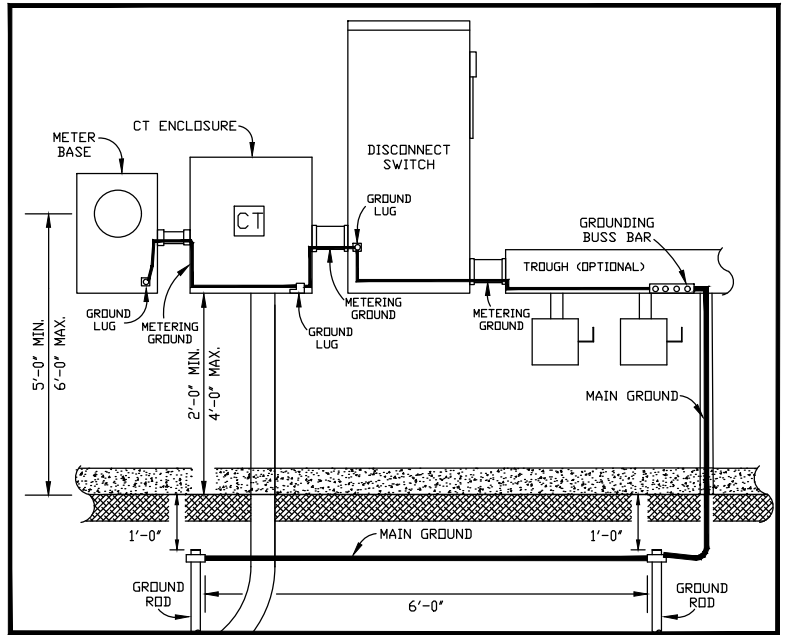
**COMMERCIAL**

1. SEE "SLEMCO - SPECIFICATIONS FOR COMMERCIAL UNDERGROUND CURRENT TRANSFORMER METERING REQUIREMENTS FOR A SINGLE-PHASE CUSTOMER" FOR MORE INFORMATION ON ALPHA IDENTIFIERS.
2. SEE "SLEMCO - SPECIFICATIONS FOR COMMERCIAL UNDERGROUND PRIMARY REQUIREMENTS FOR A SINGLE-PHASE CUSTOMER" FOR MORE INFORMATION ON NUMERICAL IDENTIFIERS.

	SOUTHWEST LOUISIANA ELECTRIC MEMBERSHIP CORPORATION LOUISIANA 9 LAFAYETTE				
	<b>SINGLE-PHASE CURRENT TRANSFORMER                  METERING REQUIREMENTS FROM A                  NEW PADMOUNT TRANSFORMER</b>				
DRAWN BY:		CREATED ON: 07/20/10		SCALE: N.T.S.	
REVISIONS		REVISED BY	DATE	REV.	DRAWING NO.
ENHANCEMENT TO DRAWINGS & SPECIFICATIONS		L. MECHE	01/26/16	1	10
ADDED DISCONNECT SWITCH		D. C.	02/11/19	2	
APPROVED:		DATE:	PAGE NUMBER:		
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				2	



# DETAIL



NOTE: APPLICABLE TO BOTH RESIDENTIAL AND COMMERCIAL SERVICES.

**RESIDENTIAL**  
SEE "SLEMCO - SPECIFICATIONS FOR RESIDENTIAL UNDERGROUND CURRENT TRANSFORMER METERING REQUIREMENTS" FOR MORE INFORMATION.

**COMMERCIAL**  
SEE "SLEMCO - SPECIFICATIONS FOR COMMERCIAL UNDERGROUND CURRENT TRANSFORMER METERING REQUIREMENTS FOR A SINGLE-PHASE CUSTOMER" FOR MORE INFORMATION.

	SOUTHWEST LOUISIANA ELECTRIC MEMBERSHIP CORPORATION LOUISIANA 9 LAFAYETTE				
	<b>SINGLE-PHASE CURRENT TRANSFORMER                  METERING REQUIREMENTS FROM AN                  OVERHEAD SOURCE</b>				
DRAWN BY: L. A. G.		CREATED ON: 09/08/89		SCALE: N.T.S.	
REVISIONS		REVISED BY	DATE	REV.	DRAWING. NO.
			07/20/10	3	<span style="font-size: 2em;">11</span>
ENHANCEMENT TO DRAWINGS & SPECIFICATIONS		L. MECHE	04/21/16	4	
ADDED DISCONNECT SWITCH		D. C.	02/11/19	5	
ADDED POC FOR SERVICES > 400A		H. HUGHES.	08/18/23	6	

SLEMCO ELECTRICAL STANDARDS		
APPROVED:	DATE:	PAGE NUMBER:
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## SLEMCO

### **Specifications for Residential Overhead Current Transformer Metering Requirements**

Applicable to residential and small noncommercial services greater than 200 Amps receiving single-phase power at 120/240 volts. **The maximum SLEMCO allowable service size of this type is 800 Amps.** Applicable metering equipment will be attached to building requiring service. The service conductors run through a weather head from an overhead source to current transformer (CT) enclosure. These requirements can also be applied to a standalone structure or rack accompanying an overhead meter pole installation.

The *Point of Connection* is the point of demarcation between SLEMCO and the customer. It shall be the customer's responsibility for compliance with the National Electrical Code (NEC) and any Governing Authority for all equipment beyond the *Point of Connection*. The customer is advised to use the services of a qualified electrician to assure compliance with all codes and regulations. According to National Electric Safety Code (NESC) Table 232-1, Item 5., Note 8(d), the lowest point of the service conductor (*drip loop*) must be at least 10' above final grade. A sufficient drip loop shall be present to prevent water ingress.

*It should be noted that electrical pipe is the gray pipe and white water pipe is not acceptable. Therefore, schedule 40 or 80 electrical pipe discussed in this section is approved electrical conduit.*

Items marked with ⑫ are indicated on Drawing No.12 – *Single-Phase Overhead Current Transformer Metering Requirements.*

- A. Service cable from transformer to weather head (*Point of Connection*) are furnished and installed by SLEMCO. The Point of Attachment (*eye bolt, clevis bolt, etc.*) is furnished and installed by customer and shall be mounted at a minimum height of 12' (*NESC Table 232-1, Item 5*) above finished grade. ⑫
  
- B. Service entrance conductors from the weather head (*Point of Connection*) to the disconnect switch are furnished and installed by customer. Termination of conductors must be made in disconnect switch by customer. Wire trough is optional. Each pole of the disconnect switch will only be allowed one lug attachment. Therefore, multi-conductor connections to a single pole made within the disconnect switch must include a multi-conductor lug. More than one conductor connected within a single lug will not be allowed. The service entrance conductors shall be sized according to the service load size (*ampacity*) and **Residential-Overhead Service Entrance Conductor Table**. An extension of at least 18" of service entrance conductor is required at the weather head (*Point of Connection*). Termination of conductors at weather head (*Point of Connection*) performed by SLEMCO. ⑫

The neutral of the service entrance conductors shall be identified with gray or white tape at the weather head and in the meter base.

- C. The service mast and associated weather head are furnished and installed by customer. The service mast conduit shall be securely mounted with a minimum of three (3) conduit straps with a maximum of 30" (*NEC 230.51A*) apart. One (1) strap will be required installed no more than 12" (*NEC 230.51A*) from the weather head. The Service Mast conduit shall be galvanized metal rigid conduit or electrical schedule 80 pipe. If elbows are required, then PVC elbows shall be used. LB elbows and flex conduit cannot be used. ⑫

**SLEMCO**  
**Specifications for Residential Overhead**  
**Current Transformer Metering Requirements**

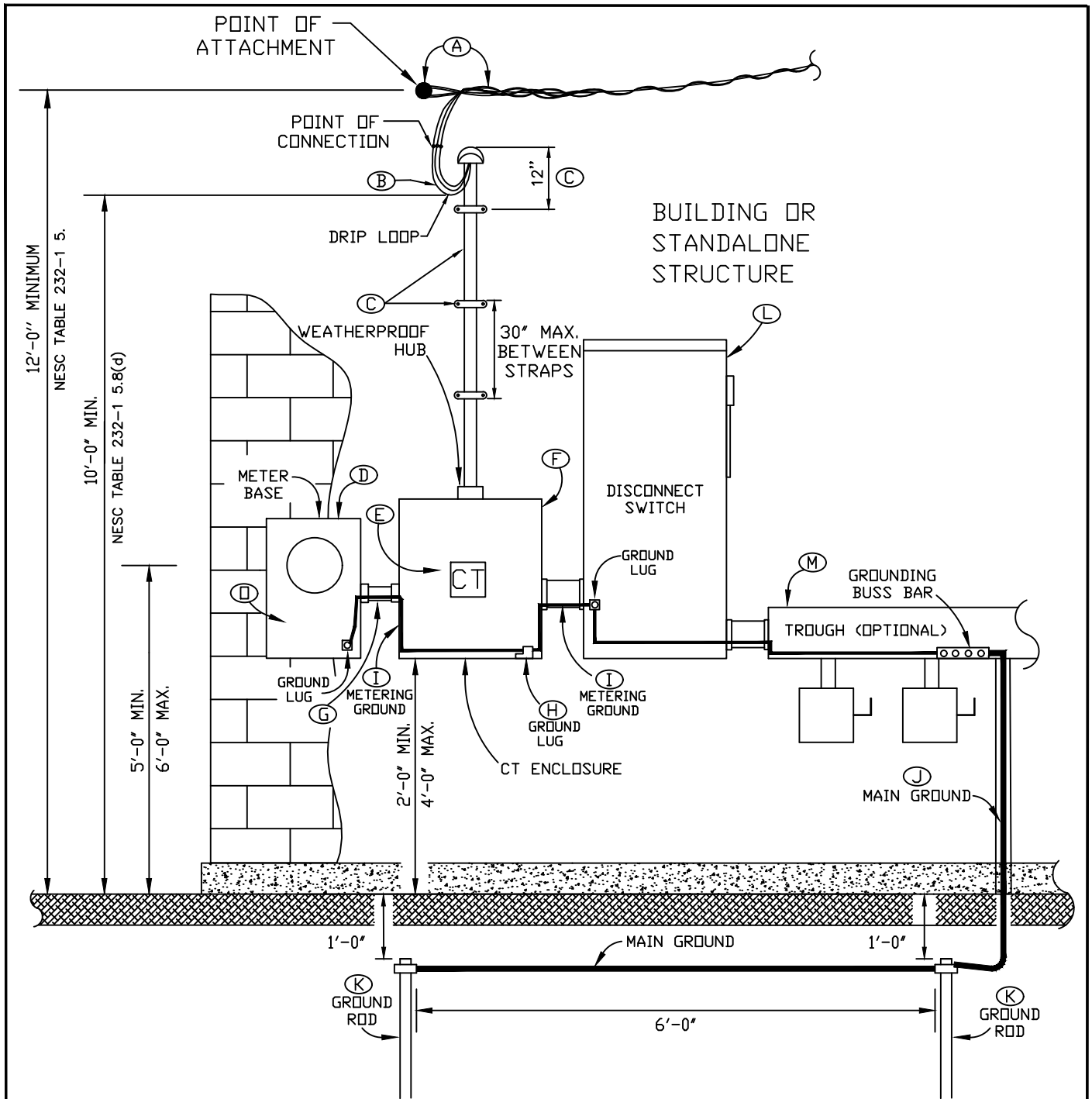
Items marked with ⑫ are indicated on Drawing No.12 – *Single-Phase Overhead Current Transformer Metering Requirements*.

- D. Meter base furnished by SLEMCO and installed by customer. The meter base shall be mounted on the outside of the building such that the center of the meter socket window is between 5' and 6' above finished grade. ⑫ Meter base cannot be mounted to the siding of a metal building unless additional support is used behind the meter base. The top hole of meter base must be plugged with 1" plug.
- E. CT furnished by SLEMCO. Must be mounted to back of CT enclosure by customer. ⑫
- F. CT enclosure is to be supplied by customer and must be a minimum of 24" x 24" x 10" and include a weatherproof hub. The CT enclosure must have a way to secure the door with a SLEMCO padlock. When installed by customer, the bottom of the CT enclosure should be at a height of 2' to 4' above finished grade. ⑫
- G. The electrical conduit from CT enclosure to meter base shall be 1" electrical schedule 40 pipe. ⑫ This conduit will be furnished and installed by customer. If elbows are required, then PVC elbows shall be used. LB elbows and flex conduit cannot be used.
- H. A ground lug will be installed by customer in the CT enclosure and must be attached with a nut and bolt. ⑫ This is the minimum required by SLEMCO. Additional grounding may be required by the NEC or Governing Authority.
- I. The customer will be responsible to furnish a metering ground wire (*minimum #6 soft drawn copper or #6 insulated copper*) and install this wire from the meter base through CT enclosure and disconnect switch to the optional wire trough. This metering ground wire must be continuous and installed in electrical conduit between the meter base, CT enclosure, disconnect switch, and optional wire trough. The metering ground wire must be connected to the ground lugs in the meter base, CT enclosure, disconnect switch, and the grounding buss bar inside of the optional wire trough. If optional wire trough is omitted, the metering ground wire would end in the disconnect switch. ⑫ This is the minimum required by SLEMCO. Additional grounding may be required by the NEC or Governing Authority.
- J. Main ground wire shall be furnished and installed by customer. The main ground wire must be continuous and installed in 1/2" electrical conduit between optional wire trough and the first ground rod. The continuous main ground wire must be connected to the grounding buss bar inside of the optional wire trough and each of the ground rods. If the optional wire trough is omitted, then the main ground wire must be continuous and installed in 1/2" electrical conduit between disconnect switch and the first ground rod. The continuous main ground wire must be connected to the grounding buss bar inside of the disconnect switch and each of the ground rods, if the optional wire trough is omitted. ⑫ The main ground wire shall be sized according to the load, as required by the NEC or Governing Authority.

**SLEMCO**  
**Specifications for Residential Overhead**  
**Current Transformer Metering Requirements**

Items marked with ⑫ are indicated on Drawing No.12 – *Single-Phase Overhead Current Transformer Metering Requirements*.

- K. Ground rods, minimum of two 5/8" x 8' copperweld or 1/2" x 8' copper, furnished and installed by customer. Must have one ground rod for every 200 Amps of service. Ground rods shall be installed 6' apart. Ground rods must be set 1" below finished grade. ⑫ This is the minimum required by SLEMCO. Additional grounding may be required by the NEC or Governing Authority.
- L. Disconnect switch isolates power from services connected. Disconnect switch furnished and installed by customer between the CT Enclosure and services connected (*wire trough optional*). Disconnect switch is for SLEMCO use only and shall be locked and sealed open or closed by use of SLEMCO padlock. Disconnect switch shall be a double pole, be non-fused or fused with properly sized slugged (*dummy/neutral*) fuse, have a voltage rating of at least 120/240V, and have an ampacity rating no less than the total of the amp ratings of all connected services. Enclosure for disconnect switch shall be UL listed, be weather proof and rain tight (*NEMA 3R*), have a locking mechanism to secure it in the open or close position with a SLEMCO padlock. ⑫ All terminations within disconnect switch will be made by customer. Any multi-conductor connections to a single pole made within the disconnect switch must include a multi-conductor lug. More than one conductor connected within a single lug will not be allowed. The electrical conduit from CT enclosure to disconnect switch shall be a minimum of 3" electrical schedule 40 pipe. This conduit will be furnished and installed by customer. If elbows are required, then PVC elbows shall be used. LB elbows and flex conduit cannot be used.
- M. Main disconnects (*service panels*) and optional wire trough shall be furnished and installed by customer as required by the NEC or Governing Authority. ⑫ All terminations will be made in optional wire trough or to main disconnects by customer.
- N. Variations of this design may be considered equal as long as NEC requirements are met. To assure acceptability where variations arise, contact SLEMCO prior to installation.
- O. If a Governing Authority requires inspection, inspection tag must be in place and marked approved before SLEMCO will connect service. ⑫
- P. Prior to secondary service connection and meter installation, a SLEMCO serviceman must inspect the total job for readiness. When ready for this inspection, notify the Lafayette Service Department by calling (337) 896-5551.



NOTE: APPLICABLE TO BOTH RESIDENTIAL AND COMMERCIAL SERVICES.

**RESIDENTIAL**

SEE "SLEMCO - SPECIFICATIONS FOR RESIDENTIAL OVERHEAD CURRENT TRANSFORMER METERING REQUIREMENTS" FOR MORE INFORMATION.

**COMMERCIAL**

SEE "SLEMCO - SPECIFICATIONS FOR COMMERCIAL OVERHEAD CURRENT TRANSFORMER METERING REQUIREMENTS FOR A SINGLE-PHASE CUSTOMER" FOR MORE INFORMATION.



**SOUTHWEST LOUISIANA ELECTRIC  
MEMBERSHIP CORPORATION**  
LOUISIANA 9 LAFAYETTE

**SINGLE-PHASE OVERHEAD  
CURRENT TRANSFORMER  
METERING REQUIREMENTS**

DRAWN BY: L. MECHE		CREATED ON: 10/23/14		SCALE: N.T.S.	
REVISIONS		REVISED BY	DATE	REV.	DRAWING NO.
ADDED DISCONNECT SWITCH		D. C.	02/11/19	1	12
APPROVED:		DATE:	PAGE NUMBER:		
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**SLEMCO ELECTRICAL STANDARDS**

**Engineering Service Specifications**  
**Residential Emergency / Standby Generator Guide**

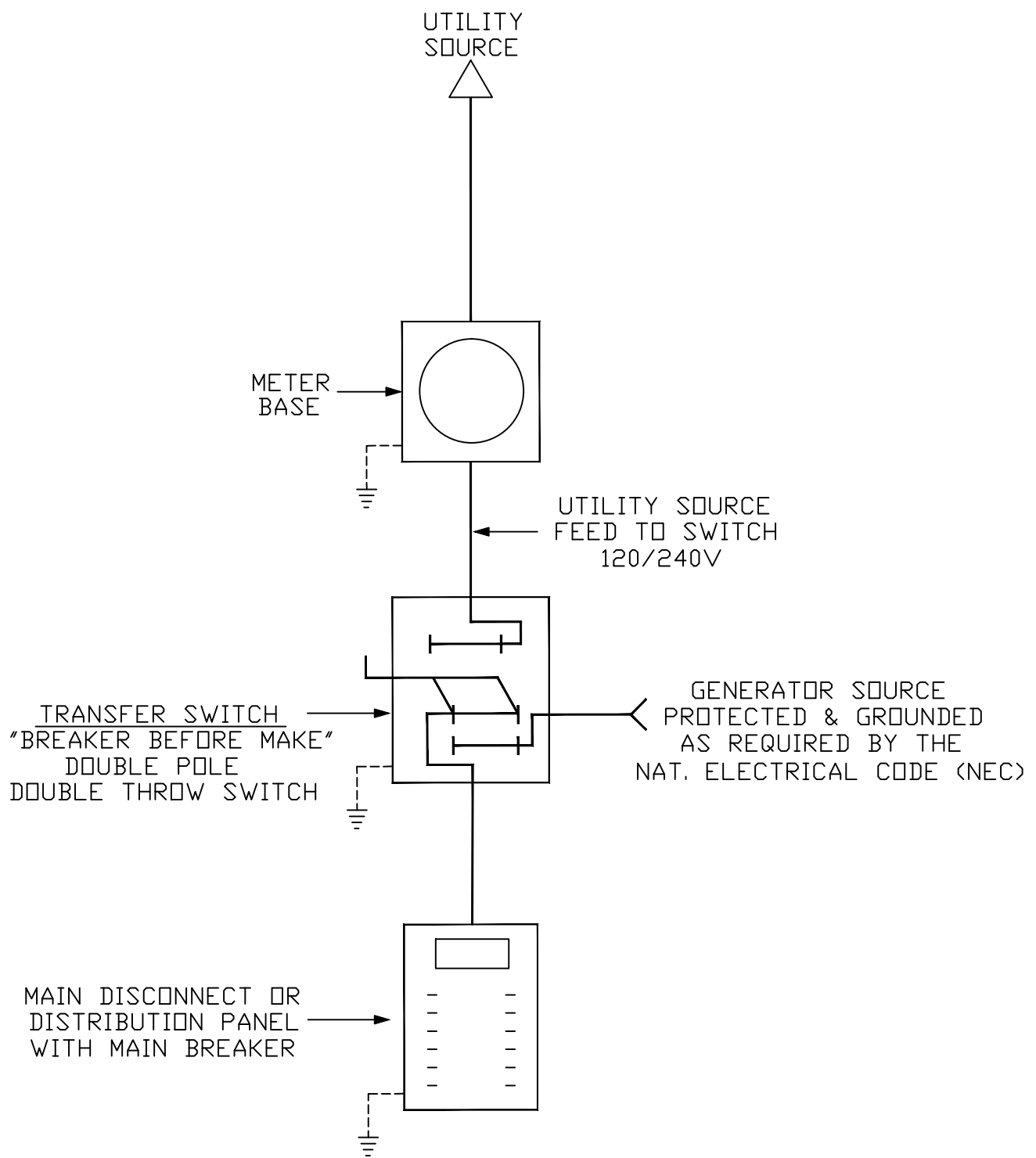
## **SLEMCO**

### **Residential Emergency / Standby Generator Guide**

It shall be the customer's responsibility for compliance with the National Electrical Code (*NEC*) and any Governing Authority for all equipment beyond the *Point of Connection*. The *Point of Connection* is the point of demarcation between SLEMCO and the customer. The customer is advised to use the services of a qualified electrician to assure compliance with all codes and regulations.

Please refer to Drawing No.13, *Emergency / Standby Generator One Line Diagram*, following this section for illustration of generator connection.

- A. The use of a "Break before Make" Double-Pole Double-Throw (*D-P D-T*) Transfer Switch with an Emergency/Standby Generator is to prevent the power of the generator from feeding back into SLEMCO's lines and endangering the lives of the lineman that are working to restore power.
- B. The same D-P D-T Transfer Switch also prevents the accidental reenergizing of the customers system and consequent burnout of the generator when SLEMCO service is restored.
- C. It shall be the customer's responsibility for compliance with the National Electrical Code (*NEC*) and any Governing Authority for installation of the D-P D-T Transfer Switch and generator. The customer is advised to use the services of a qualified electrician to assure compliance with all codes and regulations.
- D. The D-P D-T Transfer Switch is furnished and installed by customer.
- E. All equipment that is located outside shall be of weatherproof and watertight design.
- F. The generator should be set up in a safe, dry location, and near the D-P D-T Transfer Switch, preferably within sight.
- G. If a Governing Authority requires inspection, inspection tag must be in place and marked approved before SLEMCO will connect service.



	<b>SOUTHWEST LOUISIANA ELECTRIC MEMBERSHIP CORPORATION</b> LOUISIANA 9 LAFAYETTE		
	<b>EMERGENCY/STANDBY GENERATOR ONE LINE DIAGRAM</b>		

DRAWN BY:		CREATED ON: 11/02/94	SCALE: N.T.S.
REVISIONS	REVISED BY	DATE	REV.

<b>SLEMCO ELECTRICAL STANDARDS</b>		
APPROVED:	DATE:	PAGE NUMBER:
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ADDED TO RESIDENTIAL SPECIFICATIONS		01/16/97	1	13	2
		10/22/14	2		