



COMMERCIAL SERVICE REQUIREMENTS

January 17, 2024

Engineering Service Specifications

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Commercial Service Requirements - Cross Reference Table

Amps	Transformer	Service	Voltage	Metering	POC	DWG /Page	Customer	SLEMCO	Pages
Commercial UG CT Metering Requirements for a 3-Phase Customer Served from a New UG Padmount Transformer									
Available ONLY by pre-approval from SLEMCO prior to construction									
> 200	UG, 3-Phase, Padmount, (New)	UG, 3-Phase, One Customer	120/208	CT Metering	Padmount	15/52	<p><u>Primary</u></p> <ul style="list-style-type: none"> Transformer pad and associated grounding Primary conduit (<i>source to padmount</i>) <p><u>Secondary</u></p> <ul style="list-style-type: none"> Secondary conductors Terminate secondary conductors Secondary conduit (<i>padmount to disconnect switch</i>) Metering conduit (<i>padmount to meter base</i>) Disconnect switch Install SLEMCO furnished meter base Conduit between equipment Metering and main ground wires and ground rods Customer conductors (<i>from load side of disconnect switch to main disconnects</i>) Terminate customer conductors Main disconnects (<i>service panels</i>) 	<p><u>Primary</u></p> <ul style="list-style-type: none"> Primary conductors Terminate primary conductors at padmount Padmount transformer Switch cans (<i>if required</i>) Install CTs in padmount Terminate metering conductors to CTs in padmount 	<p><u>Primary</u> 45-47</p> <p><u>Secondary</u> 48-51</p>
> 200	UG, 3-Phase, Padmount, (New)	UG, 3-Phase, One Customer	277/480	CT Metering with VT Pack	Padmount	15/52	<p><u>Primary</u></p> <ul style="list-style-type: none"> Transformer pad and associated grounding Primary conduit (<i>source to padmount</i>) <p><u>Secondary</u></p> <ul style="list-style-type: none"> Secondary conductors Terminate secondary conductors Secondary conduit (<i>padmount to disconnect switch</i>) Terminate metering conductors in meter base Metering conduit (<i>padmount to meter base</i>) Disconnect switch Install SLEMCO furnished meter base Conduit between equipment Metering and main ground wires and ground rods Customer conductors (<i>from load side of disconnect switch to main disconnects</i>) Terminate customer conductors Main disconnects (<i>service panels</i>) 	<p><u>Primary</u></p> <ul style="list-style-type: none"> Primary conductors Terminate primary conductors at padmount Padmount transformer Switch cans (<i>if required</i>) Install CTs and VT Pack in padmount Terminate metering conductors to CTs and VT Pack in padmount 	<p><u>Primary</u> 45-47</p> <p><u>Secondary</u> 48-51</p>

Commercial Service Requirements - Cross Reference Table

Amps	Transformer	Service	Voltage	Metering	POC	DWG /Page	Customer	SLEMCO	Pages
Commercial UG CT Metering Requirements for a Customer Served from a New UG Padmount Transformer									
> 200	UG, 3-Phase, Padmount, (New)	UG, 3-Phase	120/208	CT Metering	Padmount	16/57	<p><u>Primary</u></p> <ul style="list-style-type: none"> Transformer pad and associated grounding Primary conduit (<i>source to padmount</i>) <p><u>Secondary</u></p> <ul style="list-style-type: none"> Secondary conductors Terminate secondary conductors Secondary conduit (<i>padmount to CT enclosure</i>) CT Enclosure (<i>install SLEMCO furnished CTs</i>) Disconnect switch Install SLEMCO furnished meter base Conduit between equipment Metering and main ground wires and ground rods Customer conductors (<i>from load side of disconnect switch to main disconnects</i>) Terminate customer conductors Main disconnects (<i>service panels</i>) 	<p><u>Primary</u></p> <ul style="list-style-type: none"> Primary conductors Terminate primary conductors at padmount Padmount transformer Switch cans (<i>if required</i>) 	<p><u>Primary</u> 45-47</p> <p><u>Secondary</u> 53-56</p>
> 200	UG, 3-Phase, Padmount, (New)	UG, 3-Phase	277/480	CT Metering with VT Pack	Padmount	16/57	<p><u>Primary</u></p> <ul style="list-style-type: none"> Transformer pad and associated grounding Primary conduit (<i>source to padmount</i>) <p><u>Secondary</u></p> <ul style="list-style-type: none"> Secondary conductors Terminate secondary conductors Secondary conduit (<i>padmount to CT enclosure</i>) CT Enclosure (<i>install SLEMCO furnished CTs</i>) Disconnect switch Install SLEMCO furnished meter base with VT Pack Conduit between equipment Metering and main ground wires and ground rods Customer conductors (<i>from load side of disconnect switch to main disconnects</i>) Terminate customer conductors Main disconnects (<i>service panels</i>) 	<p><u>Primary</u></p> <ul style="list-style-type: none"> Primary conductors Terminate primary conductors at padmount Padmount transformer Switch cans (<i>if required</i>) 	<p><u>Primary</u> 45-47</p> <p><u>Secondary</u> 53-56</p>

Commercial Service Requirements - Cross Reference Table									
Amps	Transformer	Service	Voltage	Metering	POC	DWG /Page	Customer	SLEMCO	Pages
Commercial UG CT Metering Requirements for a Customer Served from an Existing UG Padmount Transformer									
> 200	UG, 3-Phase, Padmount, (Existing)	UG, 3-Phase	120/208	CT Metering	Padmount	17/62	<u>Secondary</u> <ul style="list-style-type: none"> • Secondary conductors • Terminate secondary conductors • Secondary conduit (<i>padmount to CT enclosure</i>) • CT Enclosure (<i>install SLEMCO furnished CTs</i>) • Disconnect switch • Install SLEMCO furnished meter base • Conduit between equipment • Metering and main ground wires and ground rods • Customer conductors (<i>from load side of disconnect switch to main disconnects</i>) • Terminate customer conductors • Main disconnects (<i>service panels</i>) 		58-61
> 200	UG, 3-Phase, Padmount, (Existing)	UG, 3-Phase	277/480	CT Metering with VT Pack	Padmount	17/62	<u>Secondary</u> <ul style="list-style-type: none"> • Secondary conductors • Terminate secondary conductors • Secondary conduit (<i>padmount to CT enclosure</i>) • CT Enclosure (<i>install SLEMCO furnished CTs</i>) • Disconnect switch • Install SLEMCO furnished meter base with VT Pack • Conduit between equipment • Metering and main ground wires and ground rods • Customer conductors (<i>from load side of disconnect switch to main disconnects</i>) • Terminate customer conductors • Main disconnects (<i>service panels</i>) 		58-61

Commercial Service Requirements - Cross Reference Table

Amps	Transformer	Service	Voltage	Metering	POC	DWG /Page	Customer	SLEMCO	Pages
Commercial UG CT Metering Requirements for a 3-Phase Customer Served from an Existing OH Transformer Bank									
> 200 <=400	OH, 3-Phase	UG, 3-Phase	120/208 120/240	CT Metering	Disconnect Switch	18/67	<u>Secondary</u> <ul style="list-style-type: none"> • Secondary conduit (<i>weather head to CT enclosure</i>) • CT Enclosure (<i>install SLEMCO furnished CTs</i>) • Disconnect switch • Install SLEMCO furnished meter base • Conduit between equipment • Metering and main ground wires and ground rods • Customer conductors (<i>from load side of disconnect switch to main disconnects</i>) • Terminate customer conductors • Main disconnects (<i>service panels</i>) 	<u>Secondary</u> <ul style="list-style-type: none"> • Secondary conductors • Terminate secondary conductors 	63-66
> 200 <=400	OH, 3-Phase	UG, 3-Phase	277/480 480	CT Metering with VT Pack	Disconnect Switch	18/67	<u>Secondary</u> <ul style="list-style-type: none"> • Secondary conduit (<i>weather head to CT enclosure</i>) • CT Enclosure (<i>install SLEMCO furnished CTs</i>) • Disconnect switch • Install SLEMCO furnished meter base with VT Pack • Conduit between equipment • Metering and main ground wires and ground rods • Customer conductors (<i>from load side of disconnect switch to main disconnects</i>) • Terminate customer conductors • Main disconnects (<i>service panels</i>) 	<u>Secondary</u> <ul style="list-style-type: none"> • Secondary conductors • Terminate secondary conductors 	63-66
> 400	OH, 3-Phase	UG, 3-Phase	120/208 120/240	CT Metering	Weather Head	18/67	<u>Secondary</u> <ul style="list-style-type: none"> • Secondary conductors (<i>beyond weather head</i>) • Terminate secondary conductors at load side disconnect switch • Secondary conduit (<i>weather head to CT enclosure</i>) • CT Enclosure (<i>install SLEMCO furnished CTs</i>) • Disconnect switch • Install SLEMCO furnished meter base • Conduit between equipment • Metering and main ground wires and ground rods • Customer conductors (<i>from load side of disconnect switch to main disconnects</i>) • Terminate customer conductors • Main disconnects (<i>service panels</i>) 	<u>Secondary</u> <ul style="list-style-type: none"> • Service cable (<i>up to weather head</i>) • Terminate service cable 	63-66
> 400	OH, 3-Phase	UG, 3-Phase	277/480 480	CT Metering with VT Pack	Weather Head	18/67	<u>Secondary</u> <ul style="list-style-type: none"> • Secondary conductors (<i>beyond weather head</i>) • Terminate secondary conductors at load side disconnect switch • Secondary conduit (<i>weather head to CT enclosure</i>) • CT Enclosure (<i>install SLEMCO furnished CTs</i>) • Disconnect switch • Install SLEMCO furnished meter base with VT Pack • Conduit between equipment • Metering and main ground wires and ground rods • Customer conductors (<i>from load side of disconnect switch to main disconnects</i>) • Terminate customer conductors • Main disconnects (<i>service panels</i>) 	<u>Secondary</u> <ul style="list-style-type: none"> • Service cable (<i>up to weather head</i>) • Terminate service cable 	63-66

Commercial Service Requirements - Cross Reference Table

Amps	Transformer	Service	Voltage	Metering	POC	DWG /Page	Customer	SLEMCO	Pages
Commercial Overhead CT Metering Requirements for a 3-Phase Customer									
> 200	OH, 3-Phase	OH, 3-Phase	120/208 120/240	CT Metering	Weather Head	19/72	<u>Secondary</u> <ul style="list-style-type: none"> • Service Mast • Service entrance conductors (<i>beyond weather head</i>) • Terminate service entrance conductors at source side disconnect switch • CT Enclosure (<i>install SLEMCO furnished CTs</i>) • Disconnect switch • Install SLEMCO furnished meter base • Conduit between equipment • Metering and main ground wires and ground rods • Customer conductors (<i>from load side of disconnect switch to main disconnects</i>) • Terminate customer conductors • Main disconnects (<i>service panels</i>) 	<u>Secondary</u> <ul style="list-style-type: none"> • Service cable (<i>up to weather head</i>) • Terminate service cable 	68-71
> 200	OH, 3-Phase	OH, 3-Phase	277/480 480	CT Metering with VT Pack	Weather Head	19/72	<u>Secondary</u> <ul style="list-style-type: none"> • Service Mast • Service entrance conductors (<i>beyond weather head</i>) • Terminate service entrance conductors at source side disconnect switch • CT Enclosure (<i>install SLEMCO furnished CTs</i>) • Disconnect switch • Install SLEMCO furnished meter base with VT Pack • Conduit between equipment • Metering and main ground wires and ground rods • Customer conductors (<i>from load side of disconnect switch to main disconnects</i>) • Terminate customer conductors • Main disconnects (<i>service panels</i>) 	<u>Secondary</u> <ul style="list-style-type: none"> • Service cable (<i>up to weather head</i>) • Terminate service cable 	68-71

Commercial Service Requirements - Cross Reference Table

Amps	Transformer	Service	Voltage	Metering	POC	DWG /Page	Customer	SLEMCO	Pages
Commercial UG CT Metering Requirements for Multiple 1-Phase Customers Served from an Existing UG Padmount Transformer									
> 200 <=400	UG, 1-Phase, Padmount, (Existing)	UG, 1-Phase	120/240	CT Metering	Disconnect Switch	9/78	<u>Secondary</u> <ul style="list-style-type: none"> • Secondary conduit (padmount to CT enclosure) • CT Enclosure (install SLEMCO furnished CT) • Disconnect switch • Install SLEMCO furnished meter base • Conduit between equipment • Metering and main ground wires and ground rods • Customer conductors (from load side of disconnect switch to main disconnects) • Terminate customer conductors • Main disconnects (service panels) 	<u>Secondary</u> <ul style="list-style-type: none"> • Secondary conductors • Terminate secondary conductors 	73-77
> 400	UG, 1-Phase, Padmount, (Existing)	UG, 1-Phase	120/240	CT Metering	Padmount	9/78	<u>Secondary</u> <ul style="list-style-type: none"> • Secondary conductors • Terminate secondary conductors • Secondary conduit (padmount to CT enclosure) • CT Enclosure (install SLEMCO furnished CT) • Disconnect switch • Install SLEMCO furnished meter base • Conduit between equipment • Metering and main ground wires and ground rods • Customer conductors (from load side of disconnect switch to main disconnects) • Terminate customer conductors • Main disconnects (service panels) 		73-77
Commercial UG CT Metering Requirements for Multiple 1-Phase Customers Served from a New UG Padmount Transformer									
> 200 <=400	UG, 1-Phase, Padmount, (New)	UG, 1-Phase	120/240	CT Metering	Disconnect Switch	10/79	<u>Primary</u> <ul style="list-style-type: none"> • Primary conduit (source to padmount) <u>Secondary</u> <ul style="list-style-type: none"> • Secondary conduit (padmount to CT enclosure) • CT Enclosure (install SLEMCO furnished CT) • Disconnect switch • Install SLEMCO furnished meter base • Conduit between equipment • Metering and main ground wires and ground rods • Customer conductors (from load side of disconnect switch to main disconnects) • Terminate customer conductors • Main disconnects (service panels) 	<u>Primary</u> <ul style="list-style-type: none"> • Primary conductors • Terminate primary conductors at padmount • Padmount transformer (associated pad and grounding) • Switch cans (if required) <u>Secondary</u> <ul style="list-style-type: none"> • Secondary conductors • Terminate secondary conductors 	<u>Primary</u> 45-47 <u>Secondary</u> 73-77
> 400	UG, 1-Phase, Padmount, (New)	UG, 1-Phase	120/240	CT Metering	Padmount	10/79	<u>Primary</u> <ul style="list-style-type: none"> • Primary conduit (source to padmount) <u>Secondary</u> <ul style="list-style-type: none"> • Secondary conductors • Terminate secondary conductors • Secondary conduit (padmount to CT enclosure) • CT Enclosure (install SLEMCO furnished CT) • Disconnect switch • Install SLEMCO furnished meter base • Conduit between equipment • Metering and main ground wires and ground rods • Customer conductors (from load side of disconnect switch to main disconnects) • Terminate customer conductors • Main disconnects (service panels) 	<u>Primary</u> <ul style="list-style-type: none"> • Primary conductors • Terminate primary conductors at padmount • Padmount transformer (associated pad and grounding) • Switch cans (if required) 	<u>Primary</u> 45-47 <u>Secondary</u> 73-77

Commercial Service Requirements - Cross Reference Table

Amps	Transformer	Service	Voltage	Metering	POC	DWG /Page	Customer	SLEMCO	Pages
Commercial UG CT Metering Requirements for a 1-Phase Customer Served from an Existing OH Transformer Bank									
> 200 <=400	OH, 1-Phase	UG, 1-Phase	120/240	CT Metering	Disconnect Switch	11/80	<u>Secondary</u> <ul style="list-style-type: none"> • Secondary conduit (<i>weather head to CT enclosure</i>) • CT Enclosure (<i>install SLEMCO furnished CT</i>) • Disconnect switch • Install SLEMCO furnished meter base • Conduit between equipment • Metering and main ground wires and ground rods • Customer conductors (<i>from load side of disconnect switch to main disconnects</i>) • Terminate customer conductors • Main disconnects (<i>service panels</i>) 	<u>Secondary</u> <ul style="list-style-type: none"> • Secondary conductors • Terminate secondary conductors 	73-77
> 400	OH, 1-Phase	UG, 1-Phase	120/240	CT Metering	Weather head	11/80	<u>Secondary</u> <ul style="list-style-type: none"> • Secondary conductors (<i>beyond weather head</i>) • Terminate secondary conductors at load side disconnect switch • Secondary conduit (<i>weather head to CT enclosure</i>) • CT Enclosure (<i>install SLEMCO furnished CT</i>) • Disconnect switch • Install SLEMCO furnished meter base • Conduit between equipment • Metering and main ground wires and ground rods • Customer conductors (<i>from load side of disconnect switch to main disconnects</i>) • Terminate customer conductors • Main disconnects (<i>service panels</i>) 	<u>Secondary</u> <ul style="list-style-type: none"> • Service cable (<i>up to weather head</i>) • Terminate service cable 	73-77
Commercial Overhead CT Metering Requirements for a 1-Phase Customer									
> 200	OH, 1-Phase	OH, 1-Phase	120/240	CT Metering	Weather head	12/84	<u>Secondary</u> <ul style="list-style-type: none"> • Service Mast • Service entrance conductors (<i>beyond weather head</i>) • Terminate service entrance conductors at load side disconnect switch • CT Enclosure (<i>install SLEMCO furnished CT</i>) • Disconnect switch • Install SLEMCO furnished meter base • Conduit between equipment • Metering and main ground wires and ground rods • Customer conductors (<i>from load side of disconnect switch to main disconnects</i>) • Terminate customer conductors • Main disconnects (<i>service panels</i>) 	<u>Secondary</u> <ul style="list-style-type: none"> • Service cable (<i>up to weather head</i>) • Terminate service cable 	81-83

Commercial Service Requirements - Cross Reference Table									
Amps	Transformer	Service	Voltage	Metering	POC	DWG /Page	Customer	SLEMCO	Pages
Commercial UG Metering Requirements for Multiple 3-Phase Customers Served from a New UG Padmount Transformer									
200	UG, 3-Phase, Padmount, (New)	UG, 3-Phase	120/208	Self Enclosed	Padmount	20/88	<u>Primary</u> <ul style="list-style-type: none"> Transformer pad and associated grounding Primary conduit (<i>source to padmount</i>) <u>Secondary</u> <ul style="list-style-type: none"> Secondary conductors Terminate secondary conductors Secondary conduit (<i>padmount/pedestal to meter base</i>) Install SLEMCO furnished meter base Meter base ground wire and ground rod Main disconnect (<i>service panel</i>) Customer conductors (<i>from load side of meter base to main disconnect</i>) Terminate customer conductors 	<u>Primary</u> <ul style="list-style-type: none"> Primary conductors Terminate primary conductors at padmount Padmount transformer Switch cans (<i>if required</i>) 	<u>Primary</u> 45-47 <u>Secondary</u> 85-87
Commercial UG Metering Requirements for Multiple 3-Phase Customers Served from an Existing UG Padmount Transformer									
200	UG, 3-Phase, Padmount, (Existing)	UG, 3-Phase	120/208	Self Enclosed	Padmount	21/89	<u>Secondary</u> <ul style="list-style-type: none"> Secondary conductors Terminate secondary conductors Secondary conduit (<i>padmount to meter base</i>) Install SLEMCO furnished meter base Meter base ground wire and ground rod Main disconnect (<i>service panel</i>) Customer conductors (<i>from load side of meter base to main disconnect</i>) Terminate customer conductors 		85-87
Commercial UG Metering Requirements for a 3-Phase Customer Served from an Existing OH Transformer									
200	OH, 3-Phase	UG, 3-Phase	120/208 120/240	Self Enclosed	Meter base	22/90	<u>Secondary</u> <ul style="list-style-type: none"> Secondary conduit (<i>weather head to meter base</i>) Install SLEMCO furnished meter base Meter base ground wire and ground rod Main disconnect (<i>service panel</i>) Customer conductors (<i>from load side of meter base to main disconnect</i>) Terminate customer conductors 	<u>Secondary</u> <ul style="list-style-type: none"> Secondary conductors Terminate secondary conductors 	85-87
Commercial Overhead Metering Requirements									
200	OH, 1-Phase or OH, 3-Phase	OH, 1-Phase or OH, 3-Phase	120/240 or 120/240 120/208	Self Enclosed	Weather head	23/93	<u>Secondary</u> <ul style="list-style-type: none"> Service Mast Service entrance conductors (<i>beyond weather head</i>) Terminate service entrance conductors at source side of meter base Install SLEMCO furnished meter base Meter base ground wire and ground rod Main disconnect (<i>service panel</i>) Customer conductors (<i>from load side of meter base to main disconnect</i>) Terminate customer conductors 	<u>Secondary</u> <ul style="list-style-type: none"> Service cable (<i>up to weather head</i>) Terminate service cable 	91-92

Commercial Service Requirements - Cross Reference Table

Amps	Transformer	Service	Voltage	Metering	POC	DWG /Page	Customer	SLEMCO	Pages
Commercial UG Metering Requirements for Multiple 1-Phase Customers Served from an Existing UG Padmount Transformer									
200	UG, 1-Phase, Padmount (Existing)	UG, 1-Phase	120/240	Self Enclosed	Meter base	2/97	<u>Secondary</u> <ul style="list-style-type: none"> • Secondary conduit (<i>padmount to meter base</i>) • Meter base • Meter base ground wire and ground rod • Main disconnect (<i>service panel</i>) • Customer conductors (<i>from load side of meter base to main disconnect</i>) • Terminate customer conductors 	<u>Secondary</u> <ul style="list-style-type: none"> • Secondary conductors • Terminate secondary conductors 	94-96
Commercial UG Metering Requirements for Multiple 1-Phase Customers Served from a New UG Padmount Transformer									
200	UG, 1-Phase, Padmount, (New)	UG, 1-Phase	120/240	Self Enclosed	Meter base	3/98	<u>Primary</u> <ul style="list-style-type: none"> • Primary conduit (<i>source to padmount</i>) <u>Secondary</u> <ul style="list-style-type: none"> • Secondary conduit (<i>padmount to meter base</i>) • Meter base • Meter base ground wire and ground rod • Main disconnect (<i>service panel</i>) • Customer conductors (<i>from load side of meter base to main disconnect</i>) • Terminate customer conductors 	<u>Primary</u> <ul style="list-style-type: none"> • Primary conductors • Terminate primary conductors at padmount • Padmount transformer (<i>associated pad and grounding</i>) • Switch cans (<i>if required</i>) <u>Secondary</u> <ul style="list-style-type: none"> • Secondary conductors • Terminate secondary conductors 	<u>Primary</u> 45-47 <u>Secondary</u> 94-96
Commercial UG Metering Requirements for a 1-Phase Customer Served from an Existing OH Transformer									
200	OH, 1-Phase	UG, 1-Phase	120/240	Self Enclosed	Meter base	4/99	<u>Secondary</u> <ul style="list-style-type: none"> • Secondary conduit (<i>weather head to meter base</i>) • Meter base • Meter base ground wire and ground rod • Main disconnect (<i>service panel</i>) • Customer conductors (<i>from load side of meter base to main disconnect</i>) • Terminate customer conductors 	<u>Secondary</u> <ul style="list-style-type: none"> • Secondary conductors • Terminate secondary conductors 	94-96

Commercial Service Requirements - Cross Reference Table

Amps	Transformer	Service	Voltage	Metering	POC	DWG /Page	Customer	SLEMCO	Pages
Three-Phase Commercial Service Requirements for Multiple Occupancy Buildings									
> 200	UG, 3-Phase, Padmount, (New)	UG, 3-Phase, Multiple Customers, Multiple Occupancy Building	120/208	CT Metering	Padmount	16/57 24/105	<u>Primary</u> <ul style="list-style-type: none"> • Transformer pad and associated grounding • Primary conduit (<i>source to padmount</i>) <u>Secondary</u> <ul style="list-style-type: none"> • Secondary conductors • Terminate secondary conductors • Secondary conduit (<i>padmount to CT enclosure</i>) • CT Enclosure (<i>install SLEMCO furnished CTs</i>) • Disconnect switch • Install SLEMCO furnished meter base • Conduit between equipment • Metering and main ground wires and ground rods • Customer conductors (<i>from load side of disconnect switch to main disconnects</i>) • Terminate customer conductors • Main disconnects (<i>service panels</i>) 	<u>Primary</u> <ul style="list-style-type: none"> • Primary conductors • Terminate primary conductors at padmount • Padmount transformer • Switch cans (<i>if required</i>) 	<u>Primary</u> 45-47 <u>Secondary</u> 100-104
200	UG, 3-Phase, Padmount, (New)	UG, 3-Phase, Multiple Customers, Multiple Occupancy Building	120/208	Self Enclosed	Padmount	20/88 24/105	<u>Primary</u> <ul style="list-style-type: none"> • Transformer pad and associated grounding • Primary conduit (<i>source to padmount</i>) <u>Secondary</u> <ul style="list-style-type: none"> • Secondary conductors • Terminate secondary conductors • Secondary conduit (<i>padmount/pedestal to meter base</i>) • Install SLEMCO furnished meter base • Meter base ground wire and ground rod • Main disconnect (<i>service panel</i>) • Customer conductors (<i>from load side of meter base to main disconnect</i>) • Terminate customer conductors 	<u>Primary</u> <ul style="list-style-type: none"> • Primary conductors • Terminate primary conductors at padmount • Padmount transformer • Switch cans (<i>if required</i>) 	<u>Primary</u> 45-47 <u>Secondary</u> 100-104

Commercial Service Requirements - Cross Reference Table

Amps	Transformer	Service	Voltage	Metering	POC	DWG /Page	Customer	SLEMCO	Pages
Single-Phase Commercial Service Requirements for Multiple Occupancy Buildings									
> 200 <=400	UG, 1-Phase, Padmount, (New)	UG, 1-Phase, Multiple Customers, Multiple Occupancy Building	120/240	CT Metering	Disconnect Switch	10/79 25/112	<u>Primary</u> <ul style="list-style-type: none"> • Primary conduit (<i>source to padmount</i>) <u>Secondary</u> <ul style="list-style-type: none"> • Secondary conduit (<i>padmount to CT enclosure</i>) • CT Enclosure (<i>install SLEMCO furnished CT</i>) • Disconnect switch • Install SLEMCO furnished meter base • Conduit between equipment • Metering and main ground wires and ground rods • Customer conductors (<i>from load side of disconnect switch to main disconnects</i>) • Terminate customer conductors • Main disconnects (<i>service panels</i>) 	<u>Primary</u> <ul style="list-style-type: none"> • Primary conductors • Terminate primary conductors at padmount • Padmount transformer (<i>associated pad and grounding</i>) • Switch cans (<i>if required</i>) <u>Secondary</u> <ul style="list-style-type: none"> • Secondary conductors • Terminate secondary conductors 	<u>Primary</u> 45-47 <u>Secondary</u> 106-111
> 400	UG, 1-Phase, Padmount, (New)	UG, 1-Phase, Multiple Customers, Multiple Occupancy Building	120/240	CT Metering	Padmount	10/79 25/112	<u>Primary</u> <ul style="list-style-type: none"> • Primary conduit (<i>source to padmount</i>) <u>Secondary</u> <ul style="list-style-type: none"> • Secondary conductors • Terminate secondary conductors • Secondary conduit (<i>padmount to CT enclosure</i>) • CT Enclosure (<i>install SLEMCO furnished CT</i>) • Disconnect switch • Install SLEMCO furnished meter base • Conduit between equipment • Metering and main ground wires and ground rods • Customer conductors (<i>from load side of disconnect switch to main disconnects</i>) • Terminate customer conductors • Main disconnects (<i>service panels</i>) 	<u>Primary</u> <ul style="list-style-type: none"> • Primary conductors • Terminate primary conductors at padmount • Padmount transformer (<i>associated pad and grounding</i>) • Switch cans (<i>if required</i>) 	<u>Primary</u> 45-47 <u>Secondary</u> 106-111
200	UG, 1-Phase, Padmount, (New)	UG, 1-Phase, Multiple Customers, Multiple Occupancy Building	120/240	Self Enclosed	Meter base	3/98 25/112	<u>Primary</u> <ul style="list-style-type: none"> • Primary conduit (<i>source to padmount</i>) <u>Secondary</u> <ul style="list-style-type: none"> • Secondary conduit (<i>padmount to meter base</i>) • Meter base • Meter base ground wire and ground rod • Main disconnect (<i>service panel</i>) • Customer conductors (<i>from load side of meter base to main disconnect</i>) • Terminate customer conductors 	<u>Primary</u> <ul style="list-style-type: none"> • Primary conductors • Terminate primary conductors at padmount • Padmount transformer (<i>associated pad and grounding</i>) • Switch cans (<i>if required</i>) <u>Secondary</u> <ul style="list-style-type: none"> • Secondary conductors • Terminate secondary conductors 	<u>Primary</u> 45-47 <u>Secondary</u> 106-111

SLEMCO

Commercial 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 Commercial 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 Commercial Service Requirements.
3. Where a customer asks that the service be disconnected in order to make repairs to the existing commercial establishment, new specifications do not apply. New specifications apply any time the meter location is changed.
4. SLEMCO will replace the underground secondary conductors should a failure occur. SLEMCO does not stock underground secondary conductor greater than 350 kcmil. Therefore, any failed service that will require secondary conductors greater than 350 kcmil will have to be provided by customer.

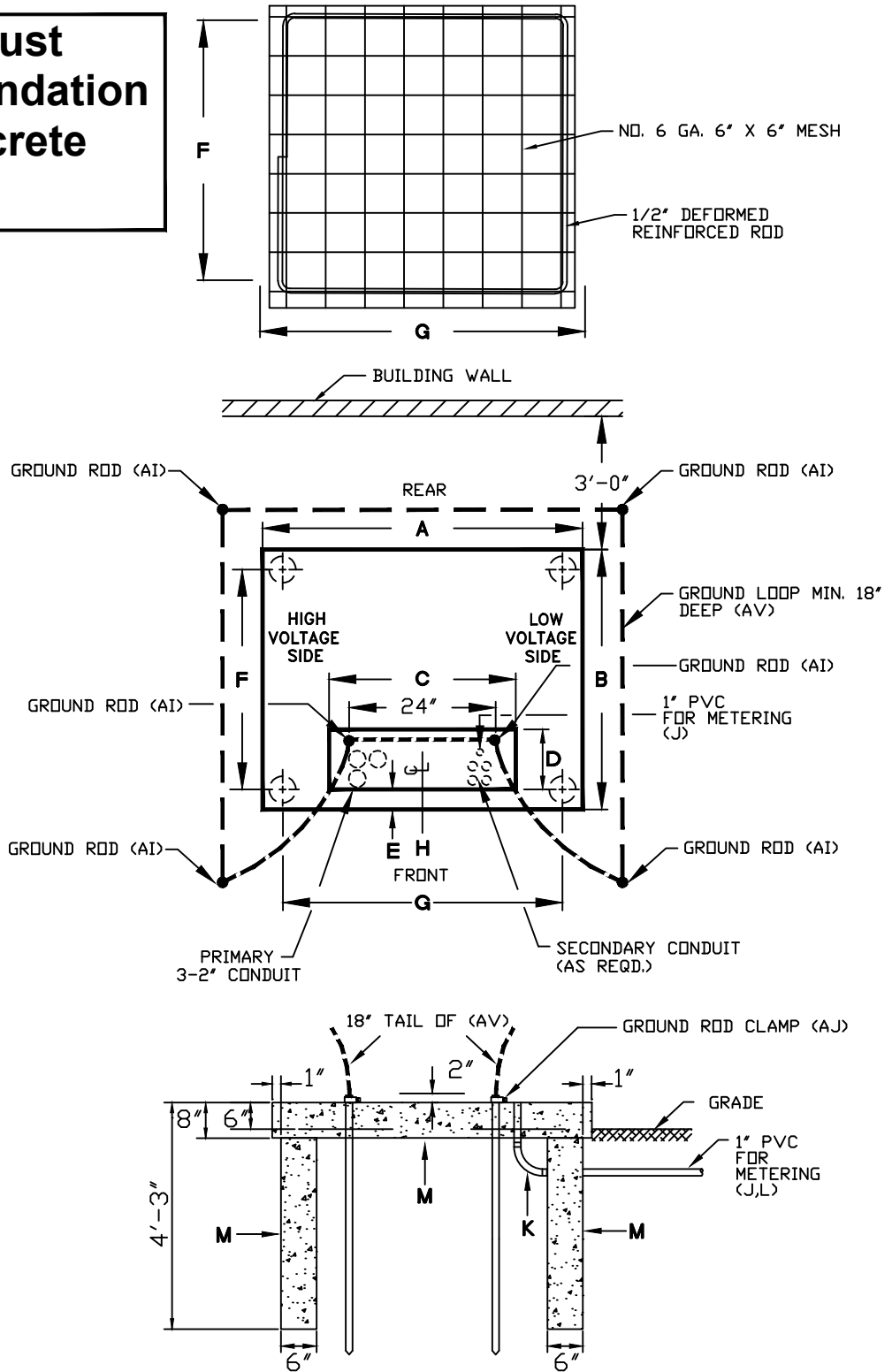
SLEMCO

Commercial-Overhead Service Entrance Conductor Table		
Description	Specifications	Ampacity
Aluminum		
#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
Copper		
#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
Notes		
<ol style="list-style-type: none"> 1. 750 MCM is largest conductor that will be allowed for OH service entrances. 2. Maximum number of runs (conductors per phase) is four (4). 3. Every run requires a separate weather head and associated service mast. 4. Service entrance conductors must be covered, stranded, and rated for 600V. 5. The neutral conductor shall be sized no smaller than two sizes less than phase conductor. 6. Diesel Locomotive (DLO) conductor is prohibited. 		

Commercial-Underground Secondary Conductor Table		
Description	Specifications	Ampacity
Aluminum		
#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
600 MCM COVERED STRANDED (AL)	DUKE URD	410
700 MCM COVERED STRANDED (AL)	FURMAN URD	440
750 MCM COVERED STRANDED (AL)	SEWANEE URD	470
1000 MCM COVERED STRANDED (AL)	FORDHAM URD	545
Notes		
<ol style="list-style-type: none"> 1. 1000 MCM is largest conductor that will be allowed for UG secondary. 2. Maximum number of runs (conductors per phase) is six (6). 3. Every run requires a separate conduit. 4. Secondary conductors must be covered, stranded, URD, and rated for 600V. 5. The neutral conductor shall be sized no smaller than two sizes less than phase conductor. 6. Diesel Locomotive (DLO) conductor is prohibited. 		

Engineering Service Specifications
Commercial Transformer Foundation Details

SLEMCO must inspect foundation before concrete is poured.



NOTE: THE DIMENSIONS AND ITEMS CAN BE FOUND ON THE MATERIAL LISTS FOR UM1-14A & UM1-14B

SLEMCO	SOUTHWEST LOUISIANA ELECTRIC MEMBERSHIP CORPORATION LOUISIANA 9 LAFAYETTE				
	THREE-PHASE PADMOUNT TRANSFORMER FOUNDATION				
DRAWN BY:		CREATED ON: 1/16/97	SCALE: N.T.S.		
REVISIONS	REVISED BY	DATE	REV.	DRAWING NO.	REV.
	L. A. M.	02/15/97	1	14	4
	J. C. D.	10/13/99	2		
	J. C. D.	10/18/06	3		
ENHANCEMENT TO DRAWINGS & SPECIFICATIONS	L. MECHE	02/03/16	4		

SLEMCO ELECTRICAL STANDARDS

APPROVED:	DATE:	PAGE NUMBER:
		43

Material List

UM1-14A and UM1-14B

Item	RUS	Description	Quantity									
			UM1-14A				UM1-14B					
			75 KVA	150 KVA	225 KVA	300 KVA	500 KVA	750 KVA	1000 KVA	2500 KVA		
	A	SIDE OF FOUNDATION FORM	108"	108"	108"	108"	108"	108"	108"	108"	108"	108"
	B	SIDE OF FOUNDATION FORM	108"	108"	108"	108"	108"	108"	108"	108"	108"	108"
	C	SIDE OF WINDOW	44"	44"	44"	44"	44"	44"	44"	60"	60"	
	D	SIDE OF WINDOW	13"	13"	13"	13"	13"	13"	13"	20"	20"	
	E	DISTANCE FROM EDGE OF FORM	6"	6"	6"	6"	6"	6"	6"	14"	14"	
	F	SIDE OF REINFORCED FRAME	100"	100"	100"	100"	100"	100"	100"	100"	100"	100"
	G	SIDE OF REINFORCED FRAME	100"	100"	100"	100"	100"	100"	100"	100"	100"	100"
	H	CENTERLINE OF WINDOW	54"	54"	54"	54"	54"	54"	54"	54"	54"	54"
	P	CONNECTOR AS REQUIRED	6	6	6	6	6	6	6	6	6	6
16522013	AV	2/0-19 STR. BARE COPPER --FEET	45	45	45	45						
16524013	AV	4/0-19 STR. BARE COPPER --FEET					45	45	45	45		
17312000	AJ	5/8" GRD ROD CLAMP **EX**	6	6	6	6	6	6	6	6	6	6
53818508	AI	5/8IN X 8FT GROUND ROD	6	6	6	6	6	6	6	6	6	6
76001940	J	1" PVC CONDUIT	10	10	10	10	10	10	10	10	10	10
76211008	K	1" 90 DEG PVC ELBOW **EX**	1	1	1	1	1	1	1	1	1	1
76401010	L	1" PVC COUPLING **EX**	2	2	2	2	2	2	2	2	2	2
78400040	M	CONCRETE -CU. YARD- EX	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25

NOTE: SLEMCO's Field Engineer may vary the dimensions of the foundation based on the size of the transformer and site conditions.

CPR Account	CPR Description *	CPR Quantity	
M36810040	TRANSFORMER PAD 3 PH CONCRETE	1	1

Valid Assembly (*Construction*) Units

UM1-14A, UM1-14B

Valid Assembly (*Retirement*) Units

UM1-14A, UM1-14B

Design Parameters	 3-PHASE 75, 150, 25, 300, 500, 750, 1000, & 2500 KVA PADMOUNT TRANSFORMER FOUNDATION	UM1-14A UM1-14B	
		Approved	Date

Engineering Service Specifications
Commercial Underground Primary Requirements

SLEMCO

Specifications for Commercial 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 ③ ⑩ ⑮ ⑯ ⑳ 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*
- ⑮ Drawing No.15 – *Three-Phase Current Transformer Metering Requirements from a New Padmount Transformer for a Single Customer*
- ⑯ Drawing No.16 – *Three-Phase Current Transformer Metering Requirements from a New Padmount Transformer*
- ⑳ Drawing No.20 – *Three-Phase Service Requirements from a New Padmount Transformer*

1.
 - 1.1 Single-Phase Underground Primary: When it is determined that underground primary will be necessary, SLEMCO will provide up to 300' of primary conductors ③ ⑩, a padmount transformer ③ ⑩, 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*.
 - 1.2 Three-Phase Underground Primary: When it is determined that underground primary will be necessary, SLEMCO will provide up to 300' of primary conductors and a padmount transformer at no additional cost to the customer ⑮ ⑯ ⑳. Padmount transformer foundation constructed and grounded by customer according to *Drawing No. 14 - Three-Phase 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.
 - 2.1 Single-Phase Underground Primary: For distances beyond 300', there will be a \$1.00 per foot charge for underground primary conductors in excess of 300'.
 - 2.2 Three-Phase Underground Primary: For distances beyond 300', there will be a \$3.00 per foot charge (*\$1.00/phase/foot*) 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. ③ ⑩ ⑮ ⑯ ⑳
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. ③ ⑩ ⑮ ⑯ ⑳

SLEMCO

Specifications for Commercial Underground Primary Requirements

Items marked with ③ ⑩ ⑮ ⑯ ⑳ 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*
- ⑮ Drawing No.15 – *Three-Phase Current Transformer Metering Requirements from a New Padmount Transformer for a Single Customer*
- ⑯ Drawing No.16 – *Three-Phase Current Transformer Metering Requirements from a New Padmount Transformer*
- ⑳ Drawing No.20 – *Three-Phase Service Requirements from a New Padmount Transformer*

6. The customer will stub up at the SLEMCO pole 36" above ground with 2" electrical schedule 80 pipe. ⑮ ⑯ ⑳
 - 6.1 Single-Phase Underground Primary: 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.
 - 6.2 Three-Phase Underground Primary: The customer will also be required to leave nine (9) joints (*3 per phase*) 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. ③ ⑩ ⑮ ⑯ ⑳
8. 8.1 Single-Phase Underground Primary: The customer shall stub up the secondary and primary electrical conduit next to each other at the location of new padmount transformer. ③ ⑩
 - 8.2 Three-Phase Underground Primary: The customer shall stub up the primary electrical conduit as indicated on *Drawing No. 14 - Three-Phase Padmount Transformer Foundation* at the location of new padmount transformer.
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 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.
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. ③ ⑩ ⑮ ⑯ ⑳

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Specifications for Commercial Underground Primary Requirements

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**

Engineering Service Specifications

Commercial Three-Phase Current Transformer Metering Schemes

SLEMCO
Specifications for Commercial Underground Current Transformer
Metering Requirements for a Single Three-Phase Customer
Served from a New Underground Padmount Transformer

Available ONLY by pre-approval from SLEMCO prior to construction.

Applicable to a commercial service requiring greater than 200 Amps and will be the only service receiving three-phase power at 120/208 volts (V) from a new underground padmount transformer. Also applicable to a commercial service that will be the only service receiving three-phase power at 277/480V from a new underground padmount transformer. Current transformers (CTs) and Voltage Transformers (VT Pack) are enclosed within the padmount transformer with metering conductors run through conduit between the padmount transformer and meter base. The meter base will be attached to building requiring service. The service conductors run through underground conduit from the padmount transformer to disconnect switch and to optional wire trough. These requirements can also be applied to a standalone structure such as a panel board adjacent to the padmount transformer. A VT Pack (2.5:1) is only required for 277/480V services.

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 ⑮ are indicated on Drawing No.15 – *Three-Phase Current Transformer Metering Requirements from a New Padmount Transformer for a Single Customer.*

- A. Secondary conductors from transformer (*Point of Connection*) to disconnect switch furnished and installed by customer. ⑮ The secondary conductors shall be sized according to the load, as required by the NEC or Governing Authority. Diesel Locomotive (DLO) conductors are prohibited. The neutral of the secondary conductors shall be sized no smaller than two sizes less than the other conductors. 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. An extension of at least 48" of secondary conductor is required to be left out of conduit at padmount transformer location. Termination of conductors in padmount transformer (*Point of Connection*) performed by customer.
- B. Secondary conduit furnished and installed by customer. The customer is required to trench and install one (1) electrical conduit (3" *minimum*) per conductor run. Electrical schedule 40 pipe is acceptable for below ground use. ⑮
- 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. ⑮

SLEMCO
Specifications for Commercial Underground Current Transformer
Metering Requirements for a Single Three-Phase Customer
Served from a New Underground Padmount Transformer

Items marked with ⑮ are indicated on Drawing No.15 – *Three-Phase Current Transformer Metering Requirements from a New Padmount Transformer for a Single Customer.*

- 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. ⑮
- E. Customer must maintain a depth of 36" when installing electrical conduit for secondary conductors. ⑮
- F. The customer shall furnish, trench, and install one 1" metering conduit from meter base to the location of new padmount transformer. This metering conduit must be continuous electrical schedule 40 pipe and inaccessible. ⑮ Therefore, if elbows are required then PVC elbows shall be used. LB elbows and flex conduit cannot be used. Metering conductors furnished and installed by SLEMCO.
- G. Customer must maintain a depth of 18" when installing electrical conduit for metering conductors. ⑮
- H. Padmount transformer foundation constructed and grounded by customer according to *Drawing No. 14 - Three-Phase Padmount Transformer Foundation*. SLEMCO must inspect foundation before concrete is poured. Padmount transformer furnished and installed by SLEMCO. ⑮
- I. The customer shall stub up the secondary and metering electrical conduit as indicated on *Drawing No. 14 - Three-Phase Padmount Transformer Foundation* at the location of new padmount transformer.
- J. After trenching, all trenches may be backfilled and covered by customer.
- K. 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. ⑮ 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.
- L. CTs and VT Pack furnished by SLEMCO and installed by SLEMCO in the secondary compartment of the padmount transformer. A VT Pack (2.5:1) is only required for 277/480V services. ⑮

SLEMCO
Specifications for Commercial Underground Current Transformer
Metering Requirements for a Single Three-Phase Customer
Served from a New Underground Padmount Transformer

Items marked with ⑮ are indicated on Drawing No.15 – *Three-Phase Current Transformer Metering Requirements from a New Padmount Transformer for a Single Customer.*

- 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 disconnect switch to the optional wire trough. This metering ground wire must be continuous and installed in electrical conduit between the meter base, disconnect switch, and optional wire trough. The metering ground wire must be connected to the ground lugs in the meter base, 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. ⑮ This is the minimum required by SLEMCO. Additional grounding may be required by the NEC or Governing Authority.
- N. Main ground wire shall be furnished and installed by customer. 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. ⑮ The main ground wire shall be sized according to the load, as required by the NEC or Governing Authority.
- 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. ⑮ This is the minimum required by SLEMCO. Additional grounding may be required by the NEC or Governing Authority.
- P. **Disconnect switch is optional.** 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 three pole, be non-fused or fused with properly sized slugged (*dummy/neutral*) fuse, have a voltage rating of at least 240V (*120/208V service*) or 600V (*277/480V service*), 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. ⑮ 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.

SLEMCO
Specifications for Commercial Underground Current Transformer
Metering Requirements for a Single Three-Phase Customer
Served from a New Underground Padmount Transformer

Items marked with ⑮ are indicated on Drawing No.15 – *Three-Phase Current Transformer Metering Requirements from a New Padmount Transformer for a Single Customer.*

- Q. Main disconnects (*service panels*) and optional wire trough shall be furnished and installed by customer as required by the NEC or Governing Authority. ⑮ All terminations will be made in optional wire trough or to main disconnects by customer.
- 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. ⑮
- 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.

SLEMCO
Specifications for Commercial Underground Current Transformer
Metering Requirements for a Three-Phase Customer
Served from a New Underground Padmount Transformer

Applicable to a commercial service requiring greater than 200 Amps receiving three-phase power at 120/208 volts (V) from a new underground padmount transformer. Also applicable to a commercial service receiving three-phase power at 277/480V from a new underground padmount transformer. Current transformers (CTs) are enclosed within the applicable metering equipment (*meter base and CT enclosure*) that will be attached to building requiring service. The service conductors run through underground conduit from the padmount transformer to CT enclosure. The meter base will contain three (2.5:1) potential transformers (PTs) for 277/480V services. These requirements can also be applied to a standalone structure such as a panel board adjacent to the padmount transformer.

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 ⑩ are indicated on Drawing No.16 – *Three-Phase Current Transformer Metering Requirements from a New Padmount Transformer.*

- A. Secondary conductors from transformer (*Point of Connection*) to disconnect switch furnished and installed by customer. ⑩ The secondary conductors shall be sized according to the load, as required by the NEC or Governing Authority. Diesel Locomotive (DLO) conductors are prohibited. The neutral of the secondary conductors shall be sized no smaller than two sizes less than the other conductors. 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. An extension of at least 48" of secondary conductor is required to be left out of conduit at padmount transformer location. Termination of conductors in padmount transformer (*Point of Connection*) performed by customer.
- B. Secondary conduit furnished and installed by customer. The customer is required to trench and install one (1) electrical conduit (3" *minimum*) per conductor run. Electrical schedule 40 pipe is acceptable for below ground use. ⑩
- 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. ⑩

SLEMCO
Specifications for Commercial Underground Current Transformer
Metering Requirements for a Three-Phase Customer
Served from a New Underground Padmount Transformer

Items marked with ⑩ are indicated on Drawing No.16 – *Three-Phase Current Transformer Metering Requirements from a New Padmount Transformer.*

- 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. ⑩
- E. Customer must maintain a depth of 36" when installing electrical conduit for secondary conductors. ⑩
- F. Padmount transformer foundation constructed and grounded by customer according to *Drawing No. 14 - Three-Phase Padmount Transformer Foundation*. SLEMCO must inspect foundation before concrete is poured. Padmount transformer furnished and installed by SLEMCO. ⑩
- G. The customer shall stub up the secondary electrical conduit as indicated on *Drawing No. 14 - Three-Phase Padmount Transformer Foundation* at the location of new padmount transformer.
- H. After trenching, all trenches may be backfilled and covered by customer.
- I. Meter base furnished by SLEMCO and installed by customer. The meter base will contain three PTs (2.5:1) for 277/480V services. 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. ⑩ 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.
- J. CTs furnished by SLEMCO. Must be mounted to back of CT enclosure by customer. ⑩
- K. CT enclosure is to be supplied by customer and must be a minimum of 30" x 36" 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. ⑩
- L. The electrical conduit from CT enclosure to meter base shall be 1" electrical schedule 40 pipe. ⑩ 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. A ground lug will be installed by customer in the CT enclosure and must be attached with a nut and bolt. ⑩ This is the minimum required by SLEMCO. Additional grounding may be required by the NEC or Governing Authority.

SLEMCO
Specifications for Commercial Underground Current Transformer
Metering Requirements for a Three-Phase Customer
Served from a New Underground Padmount Transformer

Items marked with ⑩ are indicated on Drawing No.16 – *Three-Phase Current Transformer Metering Requirements from a New Padmount Transformer.*

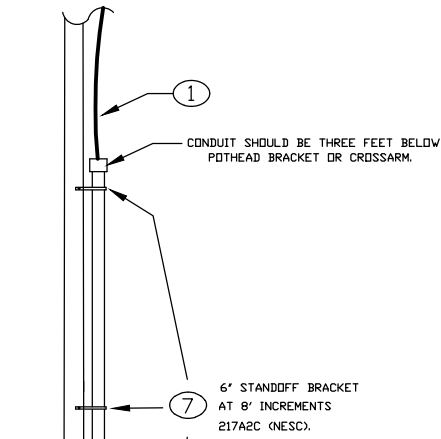
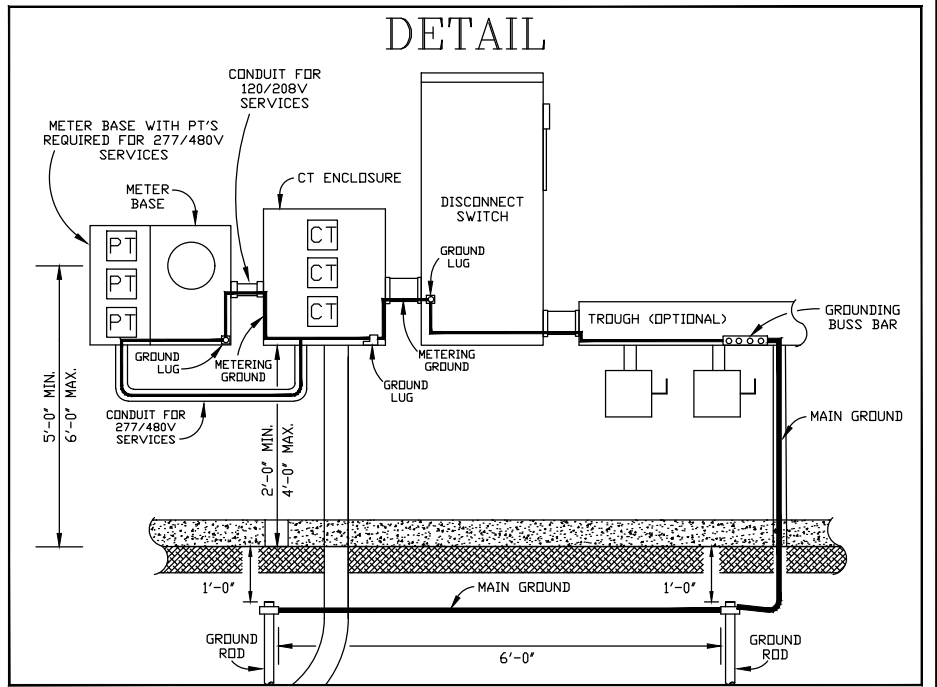
- N. The customer will be responsible to furnish a metering ground wire (*minimum #6 soft drawn copper or #6 insulated copper*) and install this wire from the meter base through CT enclosure and disconnect switch to the optional wire trough. This metering ground wire must be continuous and installed 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. ⑩ This is the minimum required by SLEMCO. Additional grounding may be required by the NEC or Governing Authority.
- O. 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. ⑩ The main ground wire shall be sized according to the load, as required by the NEC or Governing Authority.
- P. 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. ⑩ This is the minimum required by SLEMCO. Additional grounding may be required by the NEC or Governing Authority.
- Q. 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 three pole, be non-fused or fused with properly sized slugged (*dummy/neutral*) fuse, have a voltage rating of at least 240V (*120/208V service*) or 600V (*277/480V service*), 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. ⑩ 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.

SLEMCO
Specifications for Commercial Underground Current Transformer
Metering Requirements for a Three-Phase Customer
Served from a New Underground Padmount Transformer

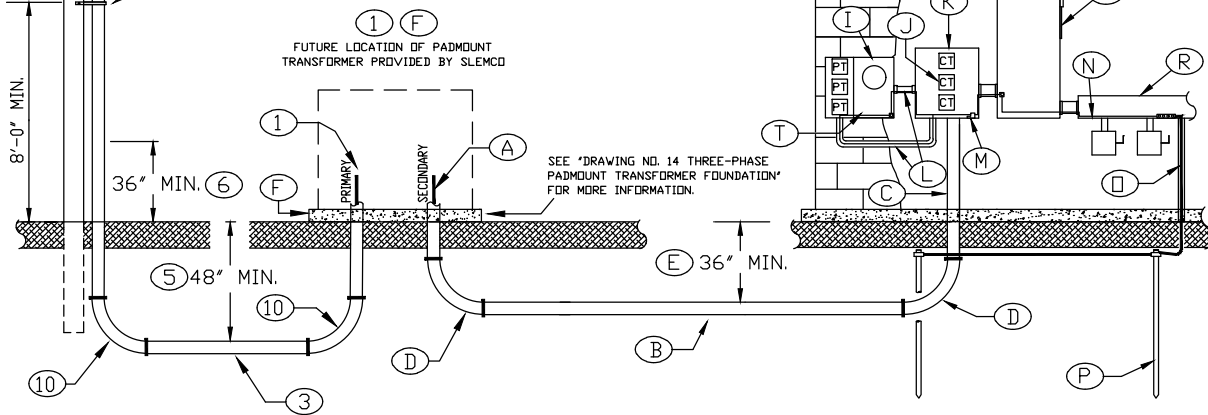
Items marked with ⑩ are indicated on Drawing No.16 – *Three-Phase Current Transformer Metering Requirements from a New Padmount Transformer*.

The requirement of this disconnect switch for service to an agricultural customer when customer is only service on transformer can be waived only by pre-approval from SLEMCO prior to construction.

- R. Main disconnects (*service panels*) and optional wire trough shall be furnished and installed by customer as required by the NEC or Governing Authority. ⑩ All terminations will be made in optional wire trough or to main disconnects by customer.
- S. 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.
- T. If a Governing Authority requires inspection, inspection tag must be in place and marked approved before SLEMCO will connect service. ⑩
- U. 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.
- V. SLEMCO does not allow any applicable metering equipment (*meter base and CT enclosure*) to be mounted on the side of an underground padmount transformer.



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



SEE "SLEMCO - SPECIFICATIONS FOR COMMERCIAL UNDERGROUND CURRENT TRANSFORMER METERING REQUIREMENTS FOR
THREE-PHASE CUSTOMERS SERVED FROM A NEW UNDERGROUND PADMOUNT TRANSFORMER" FOR MORE INFORMATION.

	SOUTHWEST LOUISIANA ELECTRIC MEMBERSHIP CORPORATION <small>LOUISIANA 9 LAFAYETTE</small>				
	THREE-PHASE CURRENT TRANSFORMER METERING REQUIREMENTS FROM A NEW PADMOUNT TRANSFORMER				
DRAWN BY:	CREATED ON: 09/08/89	SCALE: N.T.S.			
REVISIONS	REVISED BY	DATE	REV.	DRAWING NO.	REV.
ENHANCEMENT TO DRAWINGS & SPECIFICATIONS	L. MECHE	07/20/10	4	16	7
ADDED DISCONNECT SWITCH	D. C.	01/26/16	5		
REMOVED MULTIPLE CUSTOMERS FROM TITLE	H.HUGHES	02/11/19	6		
		10/31/22	7		

SLEMCO ELECTRICAL STANDARDS

APPROVED:	DATE:	PAGE NUMBER: 57
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SLEMCO
Specifications for Commercial Underground Current Transformer
Metering Requirements for a Three-Phase Customer
Served from an Existing Underground Padmount Transformer

Applicable to a commercial service requiring greater than 200 Amps receiving three-phase power at 120/208 volts (V) from an existing underground padmount transformer. Also applicable to a commercial service receiving three-phase power at 277/480V from an existing underground padmount transformer. Current transformers (CTs) are enclosed within the applicable metering equipment (*meter base and CT enclosure*) that will be attached to building requiring service. The service conductors run through underground conduit from the padmount transformer to CT enclosure. The meter base will contain three (2.5:1) potential transformers (PTs) for 277/480V services. These requirements can also be applied to a standalone structure such as a panel board adjacent to the padmount transformer.

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 ⑰ are indicated on Drawing No.17 – *Three-Phase Current Transformer Metering Requirements from an Existing Padmount Transformer.*

- A. Secondary conductors from transformer (*Point of Connection*) to disconnect switch furnished and installed by customer. ⑰ The secondary conductors shall be sized according to the load, as required by the NEC or Governing Authority. Diesel Locomotive (DLO) conductors are prohibited. The neutral of the secondary conductors shall be sized no smaller than two sizes less than the other conductors. 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. An extension of at least 48" of secondary conductor is required to be left out of conduit in secondary compartment of padmount transformer. Termination of conductors in padmount transformer (*Point of Connection*) performed by customer.
- B. Secondary conduit furnished and installed by customer. The customer is required to trench and install one (1) electrical conduit (3" *minimum*) per conductor run. Electrical schedule 40 pipe is acceptable for below ground use. ⑰
- 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. ⑰
- 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. ⑰

SLEMCO
Specifications for Commercial Underground Current Transformer
Metering Requirements for a Three-Phase Customer
Served from an Existing Underground Padmount Transformer

Items marked with ⑰ are indicated on Drawing No.17 – *Three-Phase Current Transformer Metering Requirements from an Existing Padmount Transformer.*

- E. Customer must maintain a depth of 36" when installing electrical conduit for secondary conductors. ⑰
- F. The customer shall stub up the secondary electrical conduit adjacent to existing secondary electrical conduit within the existing padmount transformer. Prior to this, a SLEMCO serviceman must be present to de-energize the padmount transformer. The customer must notify the Lafayette Service Department by calling (337) 896-5551 and schedule a serviceman.
- G. After trenching, all trenches may be backfilled and covered by customer.
- H. Meter base furnished by SLEMCO and installed by customer. The meter base will contain three PTs (2.5:1) for 277/480V services. 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. ⑰ 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. CTs furnished by SLEMCO. Must be mounted to back of CT enclosure by customer. ⑰
- J. CT enclosure is to be supplied by customer and must be a minimum of 30" x 36" 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. ⑰
- K. The electrical conduit from CT enclosure to meter base shall be 1" electrical schedule 40 pipe. ⑰ 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. ⑰ 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. ⑰ This is the minimum required by SLEMCO. Additional grounding may be required by the NEC or Governing Authority.
- N. 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

SLEMCO
Specifications for Commercial Underground Current Transformer
Metering Requirements for a Three-Phase Customer
Served from an Existing Underground Padmount Transformer

Items marked with ⑰ are indicated on Drawing No.17 – *Three-Phase Current Transformer Metering Requirements from an Existing Padmount Transformer.*

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. ⑰ The main ground wire shall be sized according to the load, as required by the NEC or Governing Authority.

- 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. ⑰ 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 three pole, be non-fused or fused with properly sized slugged (*dummy/neutral*) fuse, have a voltage rating of at least 240V (*120/208V service*) or 600V (*277/480V service*), 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. ⑰ 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.

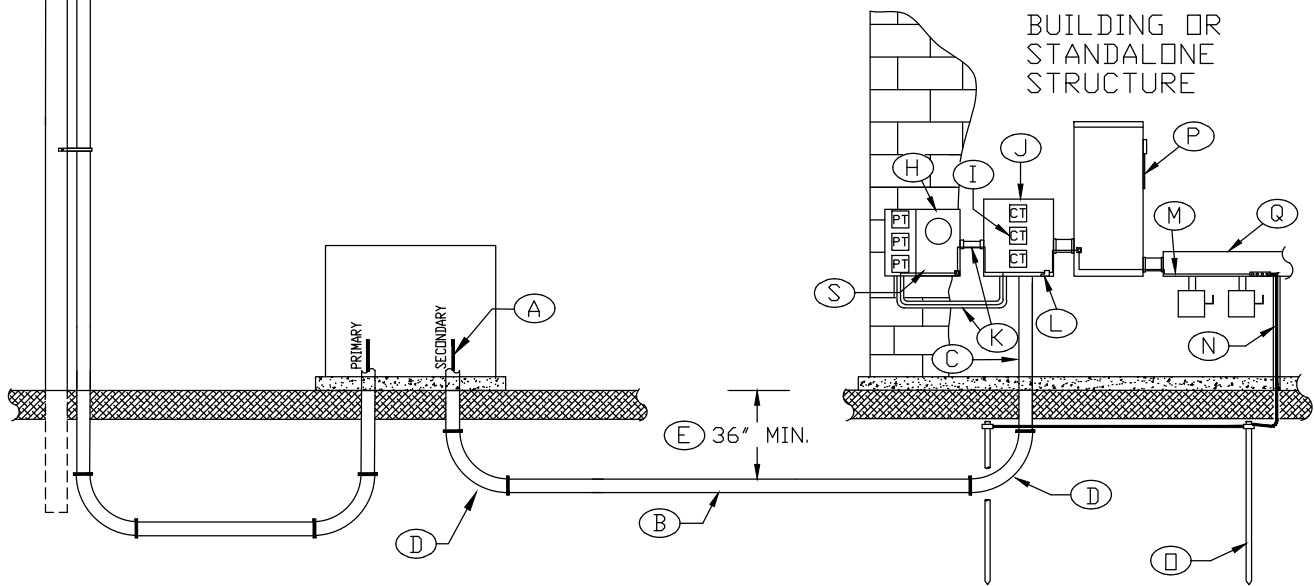
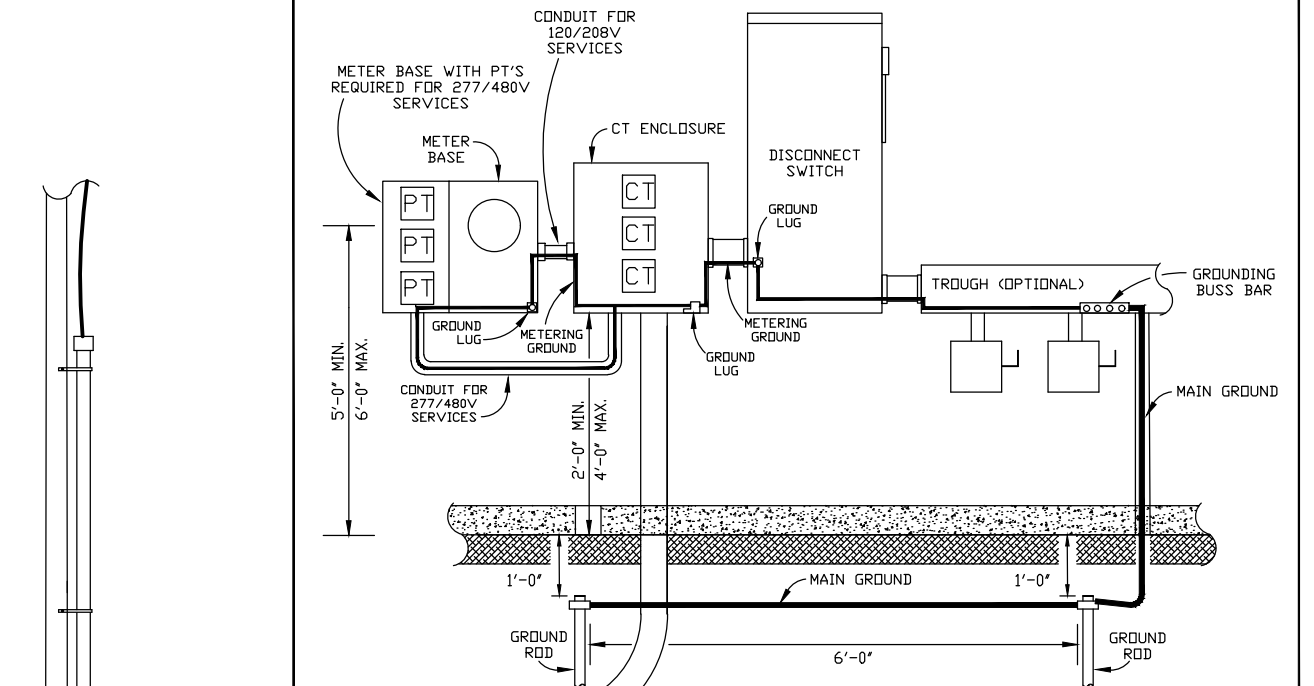
The requirement of this disconnect switch for service to an agricultural customer when customer is only service on transformer can be waived only by pre-approval from SLEMCO prior to construction.

- Q. Main disconnects (*service panels*) and optional wire trough shall be furnished and installed by customer as required by the NEC or Governing Authority. ⑰ All terminations will be made in optional wire trough or to main disconnects by customer.
- 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. ⑰


SLEMCO
Specifications for Commercial Underground Current Transformer
Metering Requirements for a Three-Phase Customer
Served from an Existing Underground Padmount Transformer

- 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.

DETAIL



SEE "SLEMCO - SPECIFICATIONS FOR COMMERCIAL UNDERGROUND CURRENT TRANSFORMER METERING REQUIREMENTS FOR THREE-PHASE CUSTOMERS SERVED FROM AN EXISTING UNDERGROUND PADMOUNT TRANSFORMER" FOR MORE INFORMATION.

	SOUTHWEST LOUISIANA ELECTRIC MEMBERSHIP CORPORATION LOUISIANA 9 LAFAYETTE				
	THREE-PHASE CURRENT TRANSFORMER METERING REQUIREMENTS FROM AN EXISTING PADMOUNT TRANSFORMER				
DRAWN BY: L. MECHE		CREATED ON: 01/27/16			SCALE: N.T.S.
REVISIONS	REVISED BY	DATE	REV.	DRAWING. NO.	REV.
ADDED DISCONNECT SWITCH	D. C.	02/11/19	1	17	2
REMOVED MULTIPLE CUSTOMERS FROM TITLE	H.HUGHES	10/31/22	2		

SLEMCO ELECTRICAL STANDARDS

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SLEMCO
Specifications for Commercial Underground Current Transformer
Metering Requirements for a Three-Phase Customer
Served from an Overhead Transformer Bank

Applicable to a commercial service requiring greater than 200 Amps receiving three-phase power at 120/208 or 120/240 volts (V) from an overhead transformer bank. Also applicable to a commercial service receiving three-phase power at 277/480V or 480V from an overhead transformer bank. Current transformers (CTs) are enclosed within the applicable metering equipment (*meter base and CT enclosure*) that will be attached to building requiring service. The service conductors run through underground conduit from the overhead transformer bank to CT enclosure. The meter base will contain three (2.5:1) potential transformers (PTs) for 277/480V services or two (4:1) potential transformers (PTs) for 480V services. 120/208V and 120/240V services will not require PTs. These requirements can also be applied to a standalone structure such as a panel board.

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 ⑱ are indicated on Drawing No.18 – *Three-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. ⑱
- A2 Services greater than 400A:** Secondary conductors from weather head (*Point of Connection*) to disconnect switch furnished and installed by customer. ⑱ The secondary conductors shall be sized according to the service load size (*ampacity*) and **Commercial-Underground Secondary Conductor Table**. 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. An extension of at least fifty feet (50') of secondary conductor is required to be left out of conduit at base of SLEMCO pole. 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.
- B. Secondary conduit furnished and installed by customer. The customer is required to trench and install one (1) electrical conduit (3" *minimum*) per conductor run. Electrical schedule 40 pipe is acceptable for below ground use. ⑱ After trenching, all trenches may be backfilled and covered by customer.

SLEMCO
Specifications for Commercial Underground Current Transformer
Metering Requirements for a Three-Phase Customer
Served from an Overhead Transformer Bank

Items marked with ⑱ are indicated on Drawing No.18 – *Three-Phase Current Transformer Metering Requirements from an Overhead Source.*

- 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. ⑱
- 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. ⑱
- E. Customer must maintain a depth of 36" when installing electrical conduit for secondary conductors. ⑱ 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. The customer will furnish and install the riser (*conduit*) up the SLEMCO pole. The first 36" of riser above ground must be electrical schedule 80 pipe (*3" minimum*) and the remaining riser can be electrical schedule 40 pipe (*3" minimum*). The customer will also furnish and install a weather head (*3" minimum*) at the top of the riser. The installation height of the riser will be such that connection of the weather head on the riser is even with neutral or bottom of transformer bank. 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.
- G. Standoff brackets furnished and installed by customer. ⑱
- H. Meter base furnished by SLEMCO and installed by customer. The meter base will contain three PTs (2.5:1) for 277/480V services or two PTs (4:1) for 480V services. 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. ⑱ 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. CTs furnished by SLEMCO. Must be mounted to back of CT enclosure by customer. ⑱
- J. CT enclosure is to be supplied by customer and must be a minimum of 30" x 36" 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. ⑱

SLEMCO
Specifications for Commercial Underground Current Transformer
Metering Requirements for a Three-Phase Customer
Served from an Overhead Transformer Bank

Items marked with ⑱ are indicated on Drawing No.18 – *Three-Phase Current Transformer Metering Requirements from an Overhead Source.*

- K. The electrical conduit from CT enclosure to meter base shall be 1" electrical schedule 40 pipe. ⑱ 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. ⑱ 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. ⑱ This is the minimum required by SLEMCO. Additional grounding may be required by the NEC or Governing Authority.
- N. 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. ⑱ The main ground wire shall be sized according to the load, as required by the NEC or Governing Authority.
- 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. ⑱ This is the minimum required by SLEMCO. Additional grounding may be required by the NEC or Governing Authority.

SLEMCO
Specifications for Commercial Underground Current Transformer
Metering Requirements for a Three-Phase Customer
Served from an Overhead Transformer Bank

Items marked with ⑮ are indicated on Drawing No.18 – *Three-Phase Current Transformer Metering Requirements from an Overhead Source.*

- 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 three pole, be non-fused or fused with properly sized slugged (*dummy/neutral*) fuse, have a voltage rating of at least 240V (*120/208V or 120/240V services*) or 600V (*277/480V or 480V services*), 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. ⑮ 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.

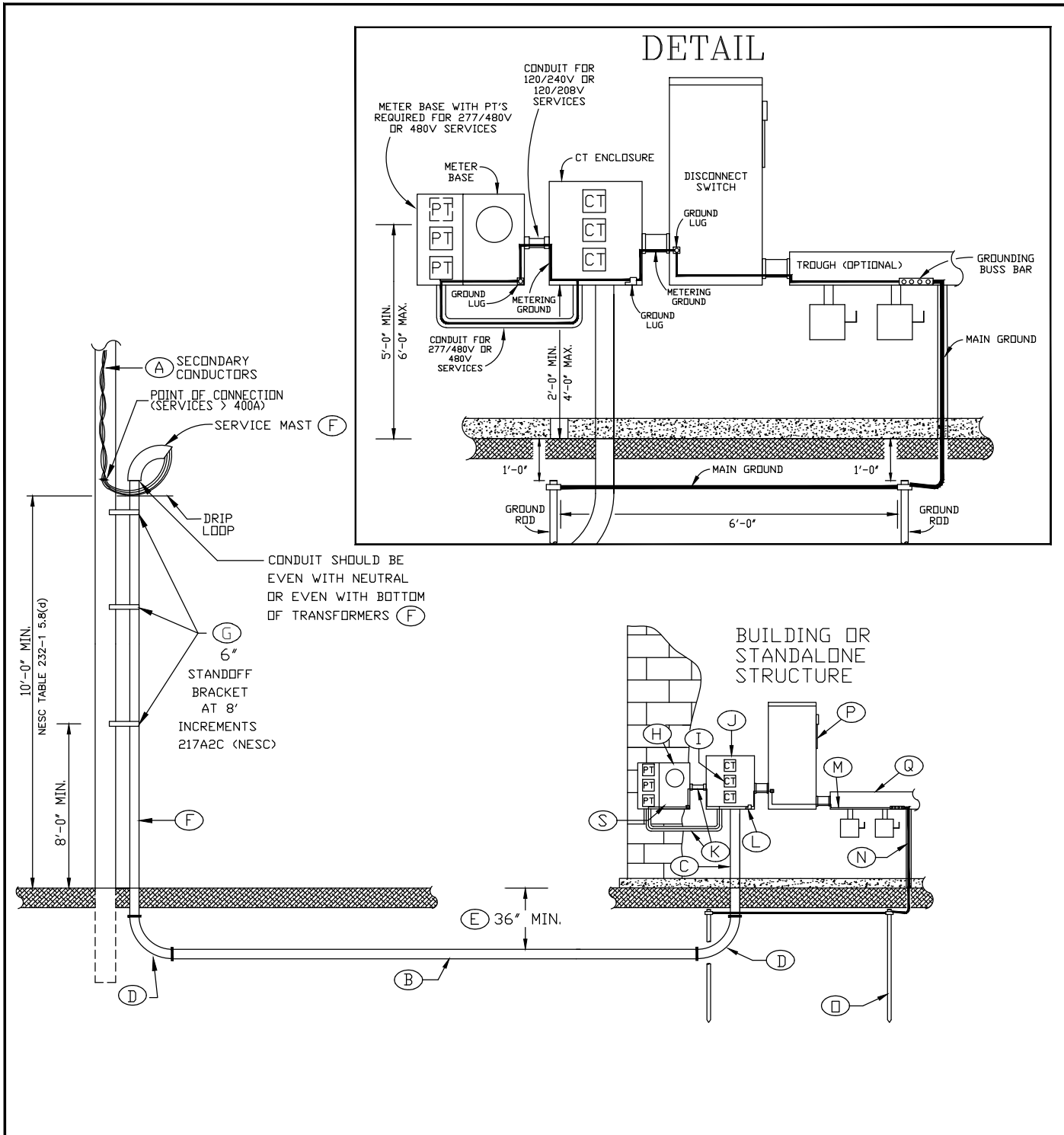
Any multi-conductor connections to a single pole made within the disconnect switch must include a multi-conductor lug. More than one conductor connected within a single lug will not be allowed.

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.

The requirement of this disconnect switch for service to an agricultural customer when customer is only service on transformer can be waived only by pre-approval from SLEMCO prior to construction. In the case where no disconnect switch is required, the *Point of Connection* will be the wire trough or main disconnect for services up to 400A.

- Q. Main disconnects (*service panels*) and optional wire trough shall be furnished and installed by customer as required by the NEC or Governing Authority. ⑮ All terminations will be made in optional wire trough or to main disconnect by customer.
- 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. ⑮
- 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.



SEE "SLEMCO - SPECIFICATIONS FOR COMMERCIAL UNDERGROUND CURRENT TRANSFORMER METERING REQUIREMENTS FOR A THREE-PHASE CUSTOMER SERVED FROM AN OVERHEAD TRANSFORMER BANK" FOR MORE INFORMATION.

	SOUTHWEST LOUISIANA ELECTRIC MEMBERSHIP CORPORATION <small>LOUISIANA 9 LAFAYETTE</small>					
	THREE-PHASE CURRENT TRANSFORMER METERING REQUIREMENTS FROM AN OVERHEAD SOURCE					
DRAWN BY:		CREATED ON: 09/08/89		SCALE: N.T.S.		
REVISIONS		REVISED BY	DATE	REV.	DRAWING NO.	REV.
ENHANCEMENT TO DRAWINGS & SPECIFICATIONS		L. MECHE	04/21/16	4	18	7
ADDED LABELING TO DRAWING		L. MECHE	10/11/16	5		
ADDED DISCONNECT SWITCH		D. C.	02/11/19	6		
ADDED POC FOR SERVICES > 400A		H. HUGHES.	08/18/23	7		

SLEMCO ELECTRICAL STANDARDS		
APPROVED:	DATE:	PAGE NUMBER:
		67

SLEMCO

Specifications for Commercial Overhead Current Transformer Metering Requirements

Applicable to a commercial service requiring greater than 200 Amps receiving three-phase power at 120/208 or 120/240 volts (V) from an overhead transformer bank. Also applicable to a commercial service receiving three-phase power at 277/480V or 480V from an overhead transformer bank. Current transformers (CTs) are enclosed within the applicable metering equipment (*meter base and CT enclosure*) that will be attached to building requiring service. The service conductors run through underground conduit from the overhead transformer bank to CT enclosure. The meter base will contain three (2.5:1) potential transformers (PTs) for 277/480V services or two (4:1) potential transformers (PTs) for 480V services. 120/208V and 120/240V services will not require PTs. These requirements can also be applied to a standalone structure such as a panel board.

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 ① are indicated on Drawing No.19 – *Three-Phase Overhead Current Transformer Metering Requirements*.

- A. Service cable from transformer bank 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. ①

- B. Service entrance conductors from the weather head (*Point of Connection*) to the disconnect switch 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. ① The service entrance conductors shall be sized according to the service load size (*ampacity*) and **Commercial-Underground Secondary 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.

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

SLEMCO
Specifications for Commercial Overhead
Current Transformer Metering Requirements

Items marked with ① are indicated on Drawing No.19 – *Three-Phase Overhead Current Transformer Metering Requirements*.

- 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 electrical schedule 80 pipe or galvanized metal rigid conduit. 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. ①
- D. Meter base furnished by SLEMCO and installed by customer. The meter base will contain three PTs (2.5:1) for 277/480V services or two PTs (4:1) for 480V services. 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. ① 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. CTs furnished by SLEMCO. Must be mounted to back of CT enclosure by customer. ①
- F. CT enclosure is to be supplied by customer and must be a minimum of 30" x 36" 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. ①
- G. The electrical conduit from CT enclosure to meter base shall be 1" electrical schedule 40 pipe. ① 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. ① 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. ① This is the minimum required by SLEMCO. Additional grounding may be required by the NEC or Governing Authority.

SLEMCO
Specifications for Commercial Overhead
Current Transformer Metering Requirements

Items marked with ⑩ are indicated on Drawing No.19 – *Three-Phase Overhead Current Transformer Metering Requirements*.

- J. Main ground wire shall be furnished and installed by customer. 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. ⑩ The main ground wire shall be sized according to the load, as required by the NEC or Governing Authority.
- 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. ⑩ 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 three pole, be non-fused or fused with properly sized slugged (*dummy/neutral*) fuse, have a voltage rating of at least 240V (*120/208V or 120/240V services*) or 600V (*277/480V or 480V services*), 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. ⑩ 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.

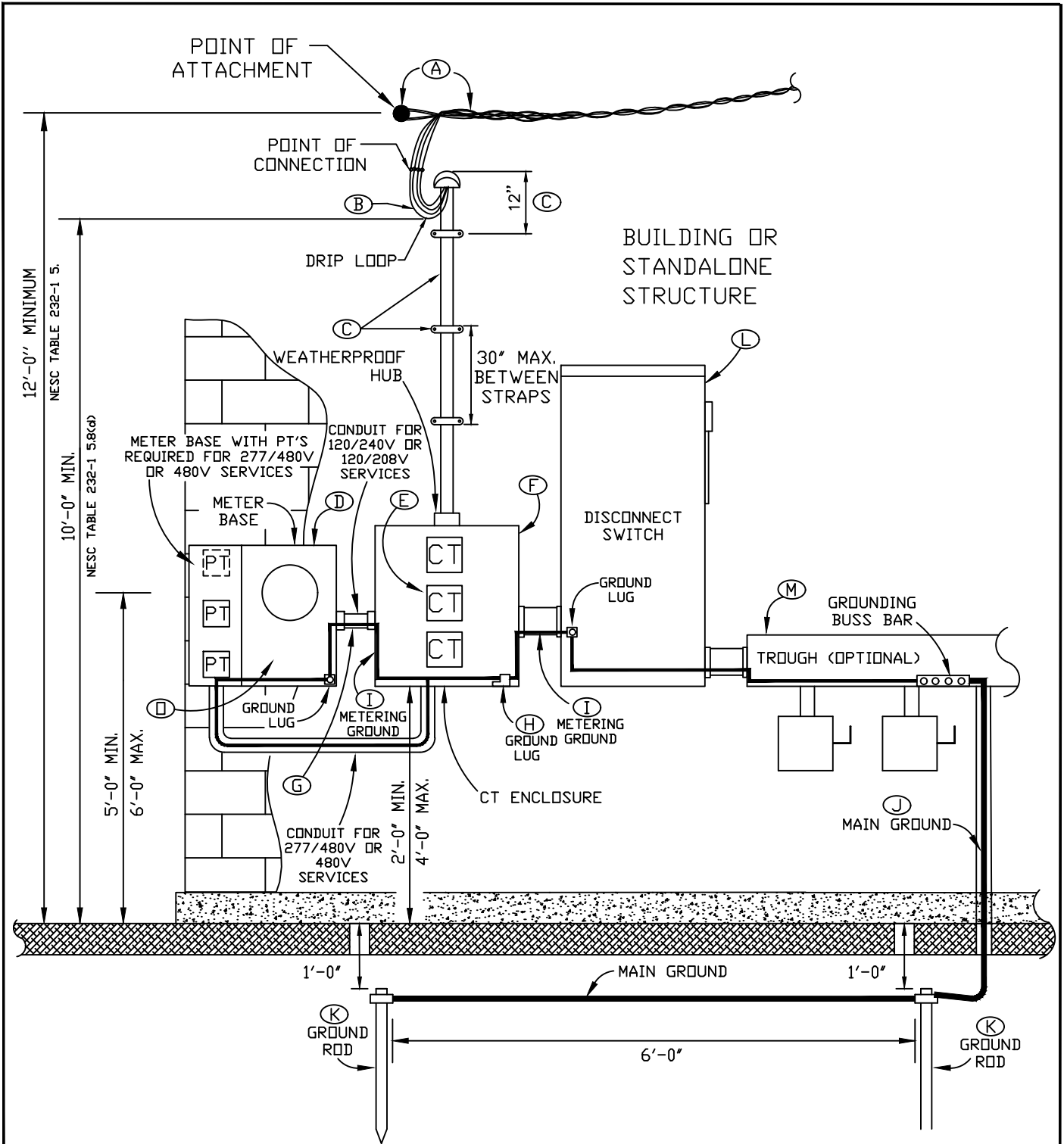
The requirement of this disconnect switch for service to an agricultural customer when customer is only service on transformer can be waived only by pre-approval from SLEMCO prior to construction.

- M. Main disconnects (*service panels*) and optional wire trough shall be furnished and installed by customer as required by the NEC or Governing Authority. ⑩ All terminations will be made in optional wire trough or to main disconnect by customer.


SLEMCO
Specifications for Commercial Overhead
Current Transformer Metering Requirements

Items marked with ①⁹ are indicated on Drawing No.19 – *Three-Phase Overhead Current Transformer Metering Requirements*.

- 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. ①⁹
- 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.



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

	SOUTHWEST LOUISIANA ELECTRIC MEMBERSHIP CORPORATION LOUISIANA 9 LAFAYETTE				
	THREE-PHASE OVERHEAD CURRENT TRANSFORMER METERING REQUIREMENTS				
DRAWN BY:		CREATED ON: 09/08/89		SCALE: N.T.S.	
REVISIONS		REVISED BY	DATE	REV.	DRAWING NO.
			02/25/97	2	19
			07/20/10	3	
			04/20/16	4	
ENHANCEMENT TO DRAWINGS & SPECIFICATIONS		L. MECHE	04/20/16	4	5
ADDED DISCONNECT SWITCH		D. C.	02/11/19	5	

SLEMCO ELECTRICAL STANDARDS		
APPROVED:	DATE:	PAGE NUMBER:
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Engineering Service Specifications

Commercial Single-Phase Current Transformer Metering Schemes

SLEMCO

Specifications for Commercial Underground Current Transformer Metering Requirements for a Single-Phase Customer

Applicable to commercial 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 **Commercial-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 Commercial Underground Current Transformer Metering Requirements for a Single-Phase Customer

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 Commercial Underground Current Transformer Metering Requirements for a Single-Phase Customer

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 Commercial Underground Current Transformer Metering Requirements for a Single-Phase Customer

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 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. ⑨⑩⑪ The main ground wire shall be sized according to the load, as required by the NEC or Governing Authority.
- 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 disconnect by customer.

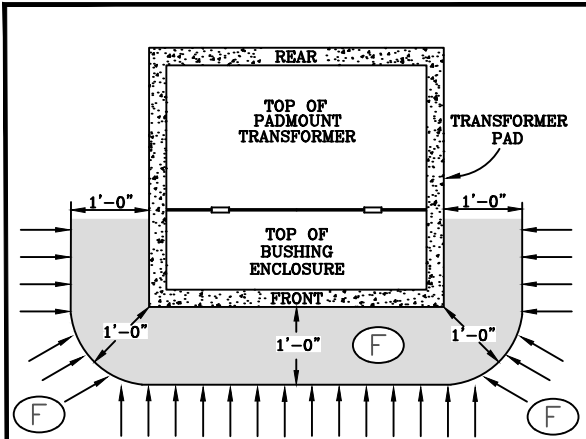
SLEMCO
Specifications for Commercial Underground Current Transformer
Metering Requirements for a Single-Phase Customer

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*

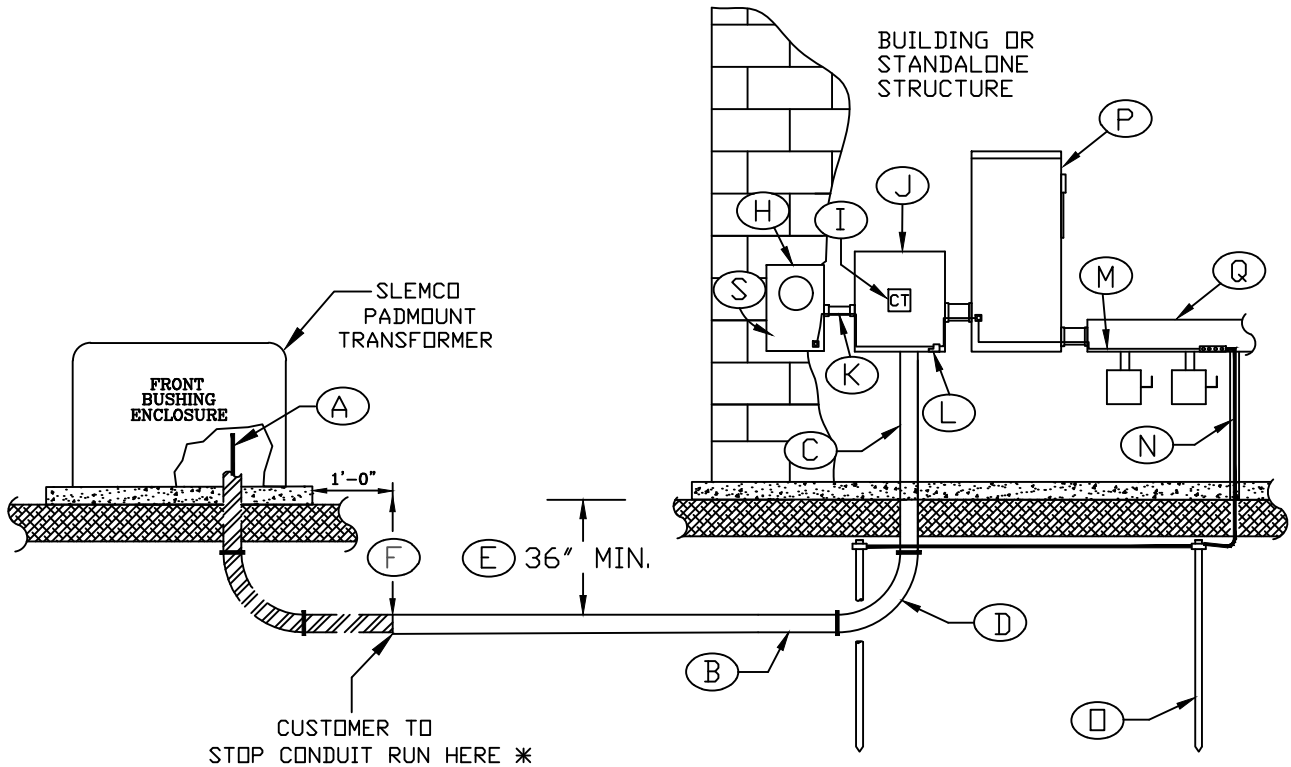
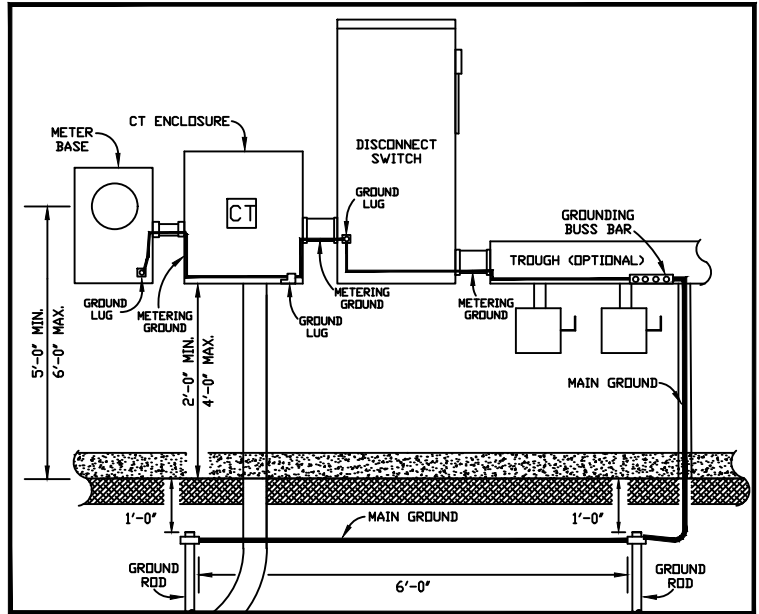
- R. Variations of this design may be considered equal as long as NEC requirements are met. To assure acceptability where variations arise, contact SLEMCO prior to installation.
- S. If a Governing Authority requires inspection, inspection tag must be in place and marked approved before SLEMCO will connect 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

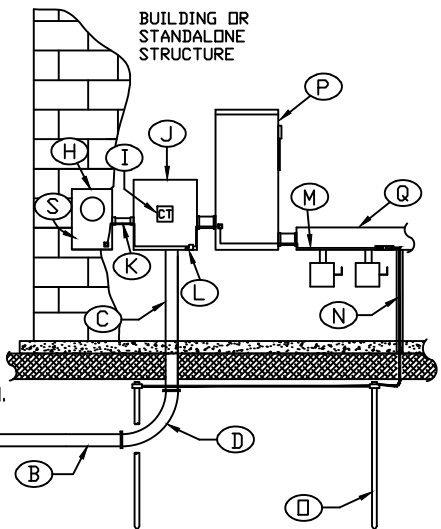
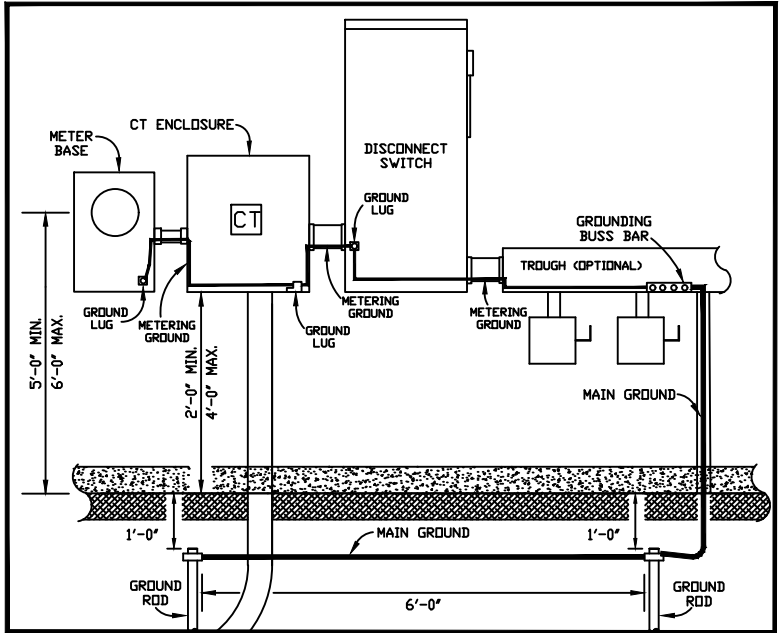
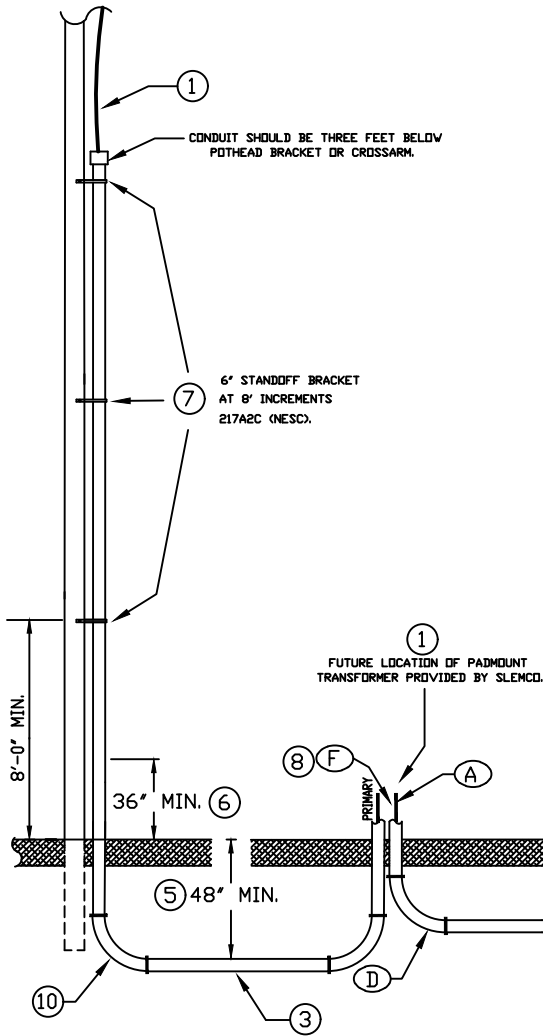
SINGLE-PHASE CURRENT TRANSFORMER METERING REQUIREMENTS FROM AN EXISTING PADMOUNT TRANSFORMER

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:
		78

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

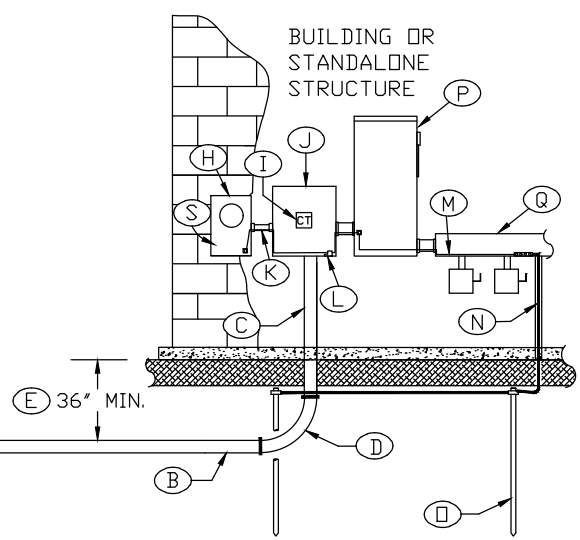
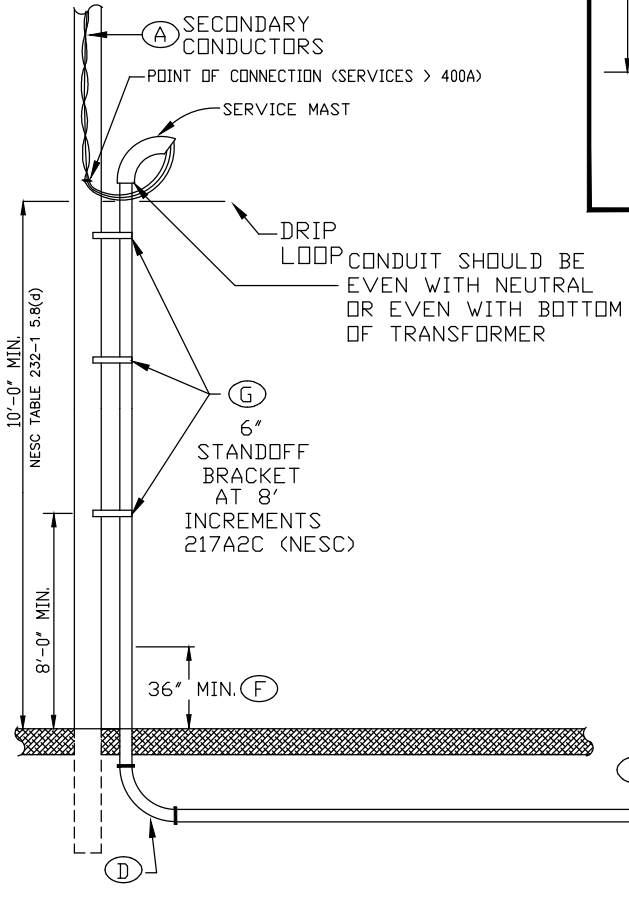
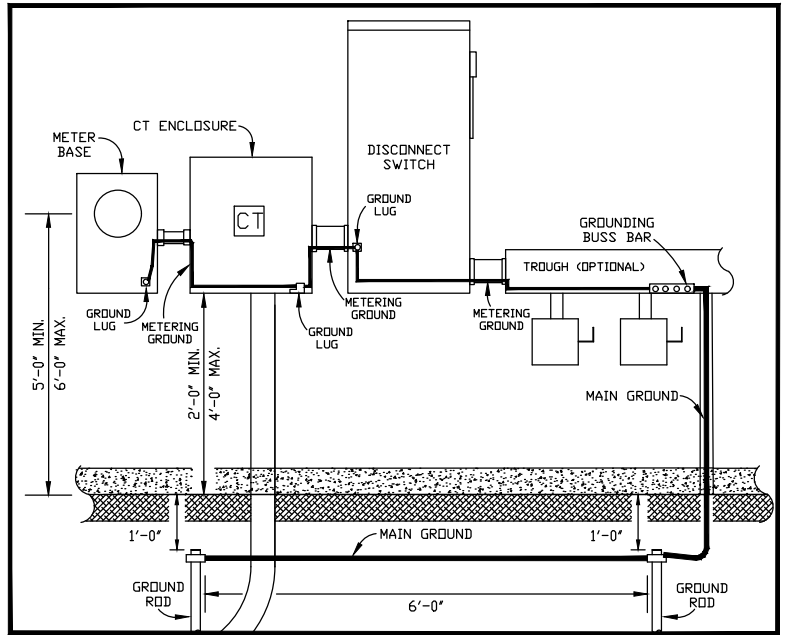
1. SEE "SLEMCO - SPECIFICATIONS FOR COMMERCIAL UNDERGROUND CURRENT TRANSFORMER METERING REQUIREMENTS FOR A SINGLE-PHASE CUSTOMER" FOR MORE INFORMATION ON ALPHA IDENTIFIERS.
2. SEE "SLEMCO - SPECIFICATIONS FOR COMMERCIAL UNDERGROUND PRIMARY REQUIREMENTS FOR A SINGLE-PHASE CUSTOMER" FOR MORE INFORMATION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

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

SLEMCO ELECTRICAL STANDARDS

APPROVED:	DATE:	PAGE NUMBER:
		79

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					
	SINGLE-PHASE CURRENT TRANSFORMER METERING REQUIREMENTS FROM AN OVERHEAD SOURCE					
DRAWN BY: L. A. G.		CREATED ON: 09/08/89		SCALE: N.T.S.		
REVISIONS		REVISED BY	DATE	REV.	DRAWING NO.	REV.
			07/20/10	3	11	6
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 Commercial Overhead Current Transformer Metering Requirements

Applicable to commercial 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 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. ⑫ The service entrance conductors shall be sized according to the service load size (*ampacity*) and **Commercial-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. The neutral of the service entrance conductors shall be identified with gray or white tape at the weather head and in the CT enclosure.
- 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 electrical schedule 80 pipe or galvanized metal rigid conduit. 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 Commercial Overhead
Current Transformer Metering Requirements

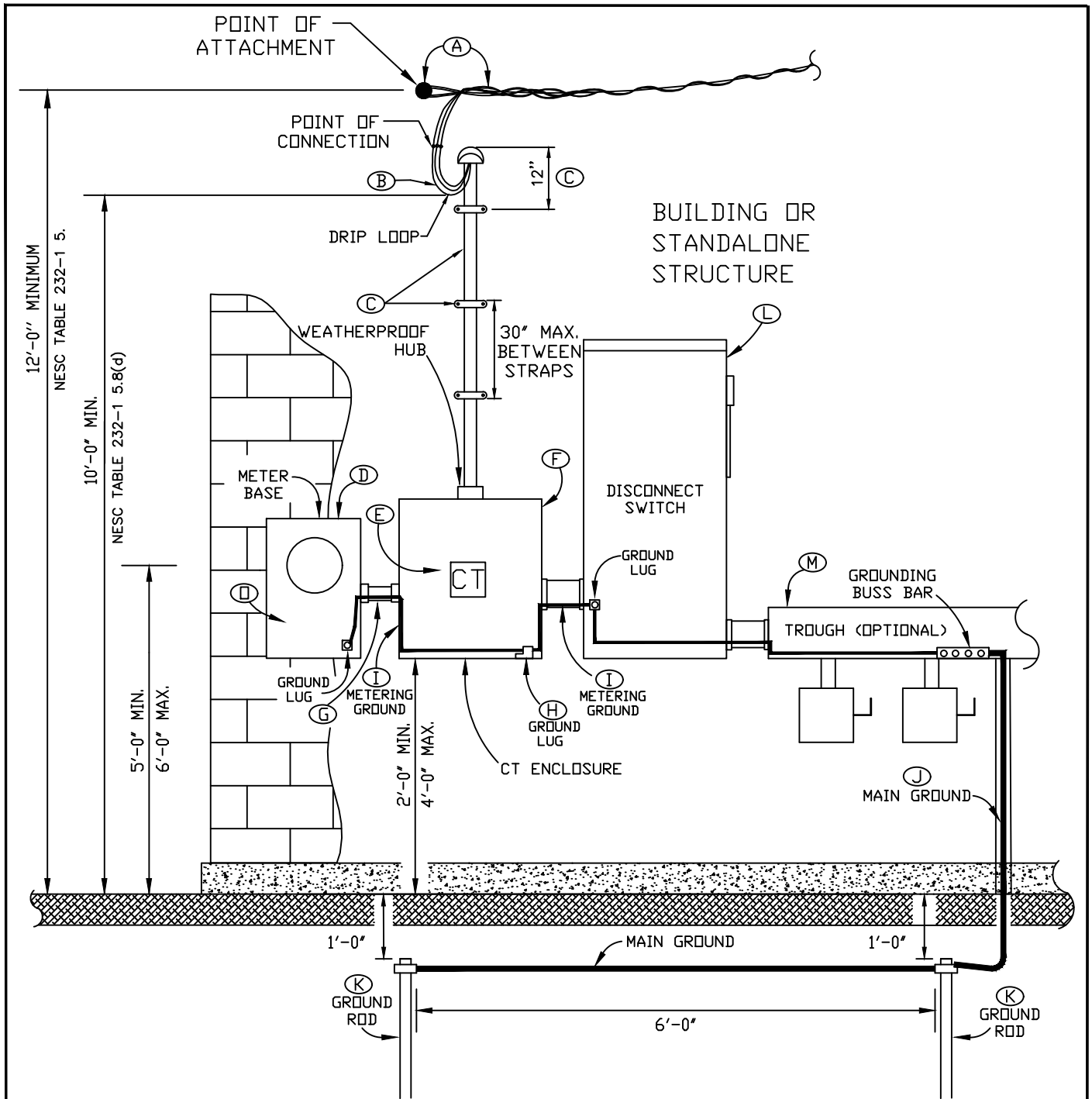
Items marked with ⑫ are indicated on Drawing No.12 – *Single-Phase Overhead Current Transformer Metering Requirements*.

- 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 Commercial 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 disconnect 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:		
			84		

SLEMCO ELECTRICAL STANDARDS

APPROVED:	DATE:	PAGE NUMBER:
		84

12 1

Engineering Service Specifications

Commercial Three-Phase Metering Schemes (*Self-contained meter base no CTs required*)

SLEMCO

Specifications for Commercial Underground Secondary Requirements for Three-Phase Customers

Applicable to commercial services receiving three-phase power at 120/240 or 120/208 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 ⑳㉑㉒ are indicated on the following drawings:

⑳ Drawing No.20 – Three-Phase Underground Service Requirements from a New Padmount Transformer

㉑ Drawing No.21 – Three -Phase Underground Service Requirements from an Existing Padmount Transformer

㉒ Drawing No.22 – Three-Phase Underground Service Requirements from an Overhead Source

- A. **A1** If the customer is getting power from a padmount transformer (*Point of Connection*), then secondary conductors from transformer (*Point of Connection*) to meter base furnished and installed by customer. ⑳㉑ The secondary conductors shall be sized according to the load, as required by the NEC or Governing Authority. Diesel Locomotive (*DLO*) conductors are prohibited. The neutral of the secondary conductors shall be sized no smaller than two sizes less than the other conductors. Termination of conductors must be made in meter base by customer. An extension of at least 48" of secondary conductor is required to be left out of conduit at padmount transformer location. Termination of conductors in padmount transformer (*Point of Connection*) performed by customer.
- A2** If the customer is getting power from an overhead source, then secondary conductors from transformer to meter base furnished and installed by SLEMCO. ㉒ Customer will install a polypropylene pull string (*minimum strength of 210 lbs.*) in all electrical conduit that will require SLEMCO to install secondary conductors. Termination of conductors will be made to source side of meter base (*Point of Connection*) by SLEMCO.
- B. Secondary conduit furnished and installed by customer. The customer is required to trench and install one (1) electrical conduit (3" *minimum*) per conductor run. Electrical schedule 40 pipe is acceptable for below ground use. ⑳㉑㉒ After trenching, all trenches may be backfilled and covered by customer.
- C. Above ground riser conduit must be 3" electrical schedule 80 pipe. If elbows are required, then PVC elbows shall be used. LB elbows and flex conduit cannot be used. ⑳㉑㉒

SLEMCO
Specifications for Commercial Underground Secondary Requirements
for Three-Phase Customers

Items marked with ⑳㉑㉒ are indicated on the following drawings:

⑳ Drawing No.20 – *Three-Phase Underground Service Requirements from a New Padmount Transformer*

㉑ Drawing No.21 – *Three -Phase Underground Service Requirements from an Existing Padmount Transformer*

㉒ Drawing No.22 – *Three-Phase Underground Service Requirements from an Overhead Source*

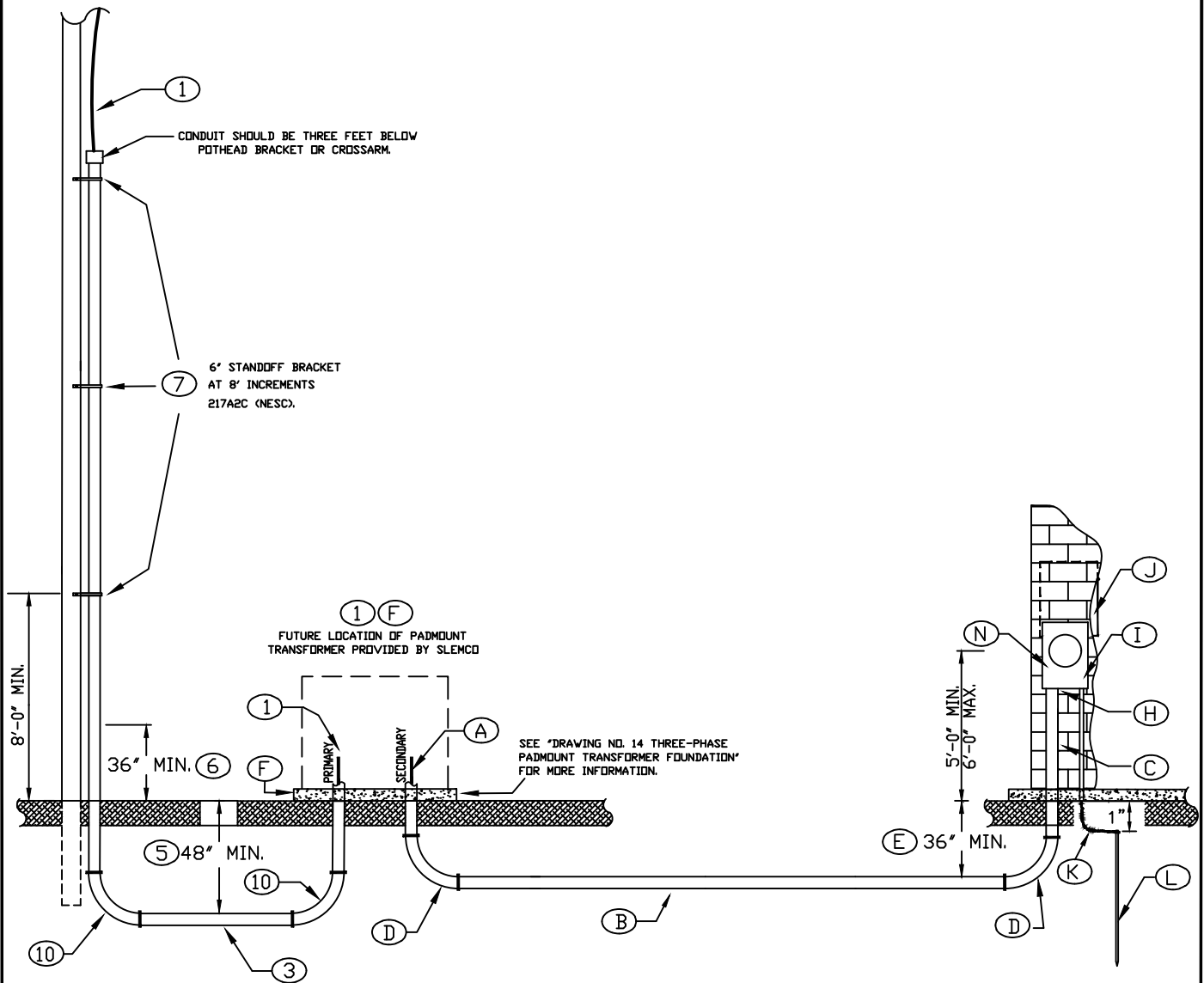
- D. Any underground service that requires three 90° (*degree*) turns or is further than 150', the customer must use standard steel 90° elbows with an 18" turn. A maximum of three 90° turns are allowed. Any underground service which is less than 150' with two or less 90° turns, the customer is allowed to use PVC long radius 90° elbows with a 36" turn. ⑳㉑㉒
- E. Customer must maintain a depth of 36" when installing electrical conduit for secondary conductors. ⑳㉑㉒
- F. **F1** If the customer is getting power from an overhead source, then the customer will furnish and install the riser (*conduit*) up the SLEMCO pole. ㉒ The first 36" of riser above ground must be electrical schedule 80 pipe (3" *minimum*) and the remaining riser can be electrical schedule 40 pipe (3" *minimum*). The customer will also furnish and install a weather head (3" *minimum*) at the top of the riser. The installation height of the riser will be such that connection of the weather head on the riser is even with neutral or bottom of transformer bank. 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.
- F2** If the customer is getting power from an existing padmount transformer, then the customer shall stub up the secondary electrical conduit adjacent to existing secondary electrical conduit within the existing padmount transformer. Prior to this, a SLEMCO serviceman must be present to de-energize the padmount transformer. The customer must notify the Lafayette Service Department by calling (337) 896-5551 and schedule a serviceman.
- F3** If the customer is getting power from a new padmount transformer, then the padmount transformer foundation constructed and grounded by customer according to *Drawing No. 14 - Three-Phase Padmount Transformer Foundation*. SLEMCO must inspect foundation before concrete is poured. Padmount transformer furnished and installed by SLEMCO. The customer shall stub up the secondary electrical conduit as indicated on *Drawing No. 14 - Three-Phase Padmount Transformer Foundation* at the location of new padmount transformer. ㉒
- G. Standoff brackets furnished and installed by SLEMCO. ㉒
- H. Customer will complete installation of electrical conduit into bottom left side of meter base using 3" 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. ⑳㉑㉒

SLEMCO
Specifications for Commercial Underground Secondary Requirements
for Three-Phase Customers


Items marked with ⑳㉑㉒ are indicated on the following drawings:

- ㉑ Drawing No.20 – *Three-Phase Underground Service Requirements from a New Padmount Transformer*
- ㉑ Drawing No.21 – *Three -Phase Underground Service Requirements from an Existing Padmount Transformer*
- ㉑ Drawing No.22 – *Three-Phase Underground Service Requirements from an Overhead Source*

- I. 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. ⑳㉑㉒
- J. 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. ⑳㉑㉒
- K. 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. ⑳㉑㉒
- L. 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. ⑳㉑㉒ This is the minimum required by SLEMCO. Additional grounding may be required by the NEC or Governing Authority.
- M. 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.
- N. If a Governing Authority requires inspection, inspection tag must be in place and marked approved before SLEMCO will connect service. ⑳㉑㉒
- O. 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.

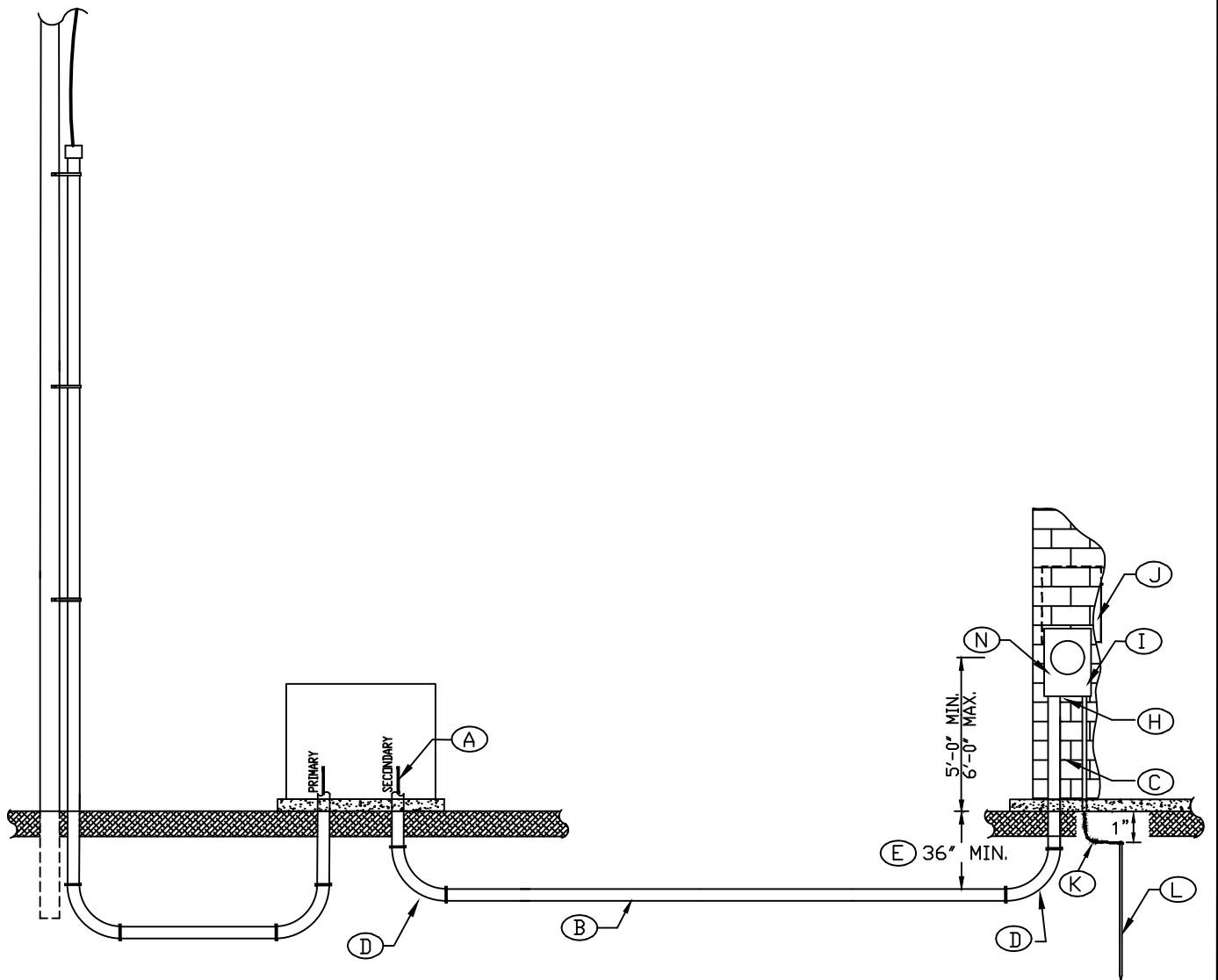


1. SEE "SLEMCO - SPECIFICATIONS FOR COMMERCIAL UNDERGROUND SECONDARY REQUIREMENTS FOR THREE-PHASE CUSTOMERS" FOR MORE INFORMATION ON ALPHA IDENTIFIERS.
2. SEE "SLEMCO - SPECIFICATIONS FOR COMMERCIAL UNDERGROUND PRIMARY REQUIREMENTS FOR A THREE-PHASE CUSTOMER" FOR MORE INFORMATION ON NUMERICAL IDENTIFIERS.


	SOUTHWEST LOUISIANA ELECTRIC MEMBERSHIP CORPORATION <small>LOUISIANA 9 LAFAYETTE</small>				
	THREE-PHASE UNDERGROUND SERVICE REQUIREMENTS FROM A NEW PADMOUNT TRANSFORMER				
DRAWN BY: D. CHRISTOPHE JR.		CREATED ON: 03/26/19	SCALE: N.T.S.		
REVISIONS	REVISED BY	DATE	REV.	DRAWING NO.	REV.
				20	0

SLEMCO ELECTRICAL STANDARDS

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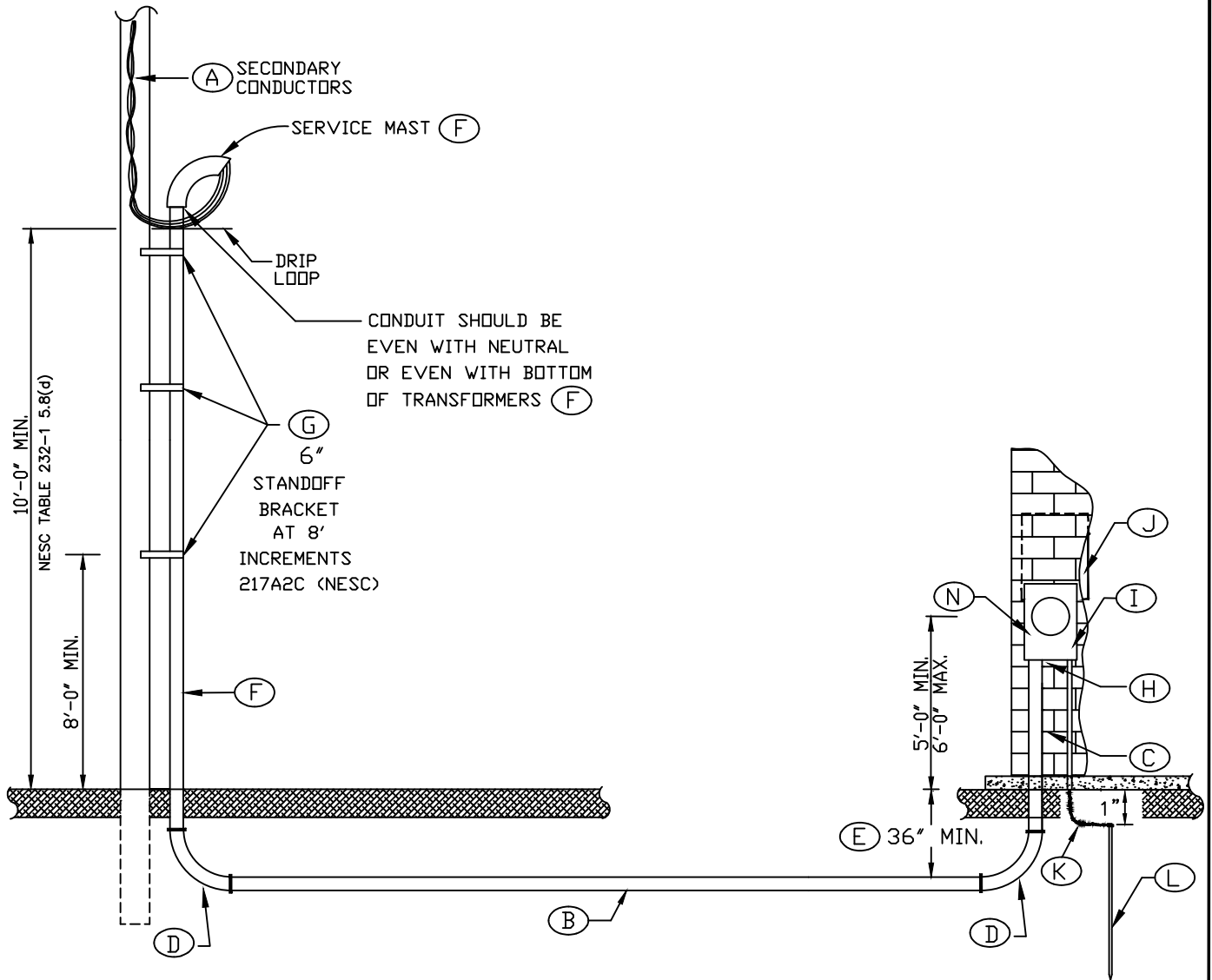


SEE 'SLEMCO - SPECIFICATIONS FOR COMMERCIAL UNDERGROUND SECONDARY REQUIREMENTS FOR THREE-PHASE CUSTOMERS' FOR MORE INFORMATION.


	SOUTHWEST LOUISIANA ELECTRIC MEMBERSHIP CORPORATION LOUISIANA 9 LAFAYETTE				
	THREE-PHASE UNDERGROUND SERVICE REQUIREMENTS FROM AN EXISTING PADMOUNT				
DRAWN BY: D. CHRISTOPHE JR.		CREATED ON: 03/26/19			SCALE: N.T.S.
REVISIONS	REVISED BY	DATE	REV.	DRAWING NO.	REV.
				21	0

SLEMCO ELECTRICAL STANDARDS

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		89



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

	SOUTHWEST LOUISIANA ELECTRIC MEMBERSHIP CORPORATION LOUISIANA 9 LAFAYETTE					
	THREE-PHASE UNDERGROUND SERVICE REQUIREMENTS FROM AN OVERHEAD SOURCE					
DRAWN BY: D. CHRISTOPHE JR.		CREATED ON: 03/26/19		SCALE: N.T.S.		
REVISIONS		REVISED BY	DATE	REV.	DRAWING NO.	REV.
					22	0

SLEMCO ELECTRICAL STANDARDS		
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SLEMCO

Specifications for Commercial Overhead Service Requirements

Applicable to commercial services receiving three-phase power at 120/208 or 120/240 volts through a 200 Amp (*or less*) meter base attached to building requiring service. Also applicable to commercial 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 a weather head from an overhead source. These requirements can also be used attached 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 ⑬ are indicated on Drawing No.23 – *Three-Phase Overhead Service Requirements*.

- A. Service cable from transformers 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. ⑬
- B. Service entrance conductors from the weather head (*Point of Connection*) to the meter base are furnished and installed by customer. ⑬ The service entrance conductors shall be sized according to the service load size (*ampacity*) and **Commercial-Overhead Service Entrance Conductor Table**. Termination of conductors at the weather head (*Point of Connection*) performed by SLEMCO.

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. ⑬

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

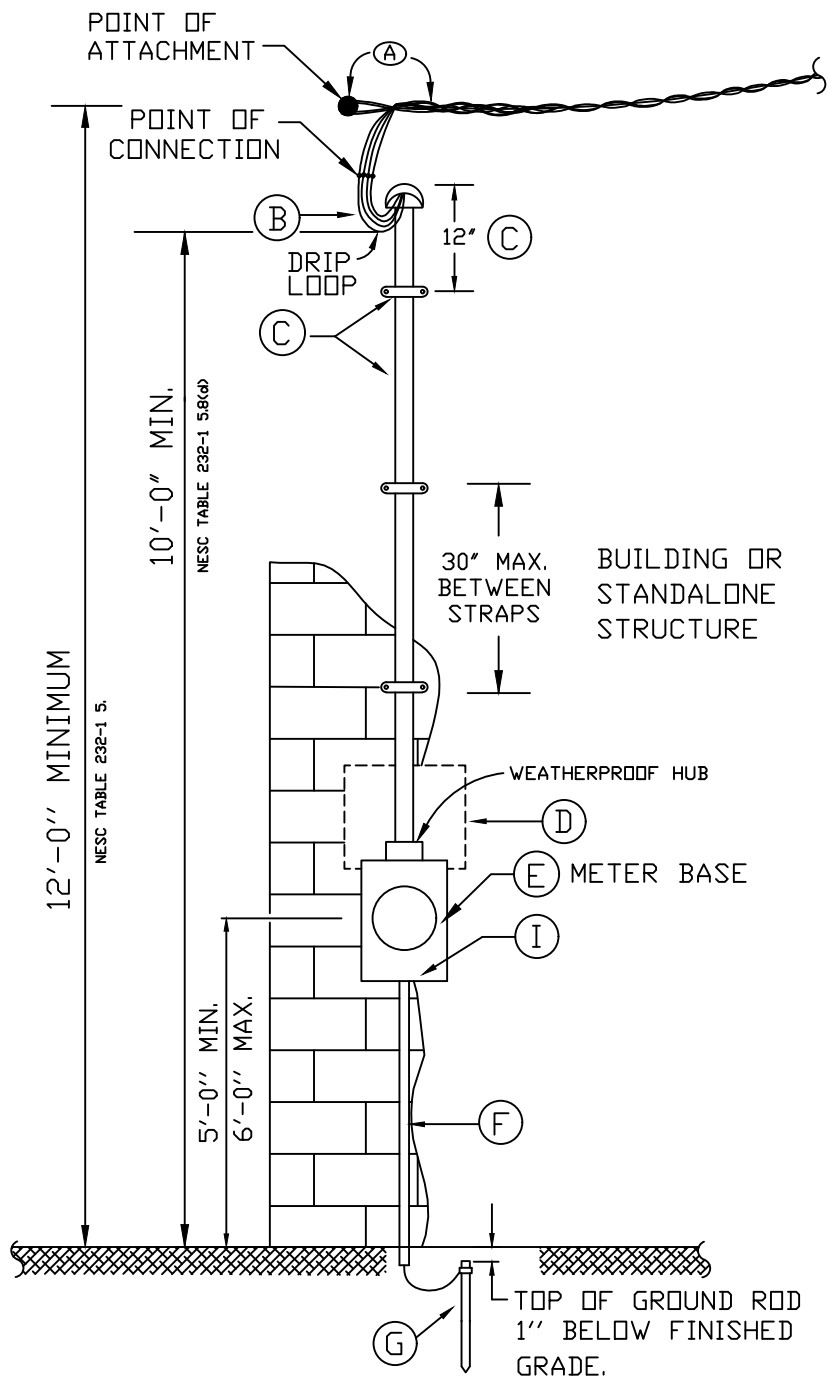
- C. The service mast and associated weather head are furnished and installed by customer. The service mast conduit shall be securely mounted with a minimum of three (3) conduit straps with a maximum of 30" (*NEC 230.51A*) apart. One (1) strap will be required installed no more than 12" (*NEC 230.51A*) 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. ⑬

SLEMCO


Specifications for Commercial Overhead Service Requirements

Items marked with ⑬ are indicated on Drawing No.23 – *Three-Phase Overhead Service Requirements*.

- D. 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. ⑬
- E. 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. ⑬
- F. 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. ⑬
- G. 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. ⑬ This is the minimum required by SLEMCO. Additional grounding may be required by the NEC or Governing Authority.
- H. 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.
- I. If a Governing Authority requires inspection, inspection tag must be in place and marked approved before SLEMCO will connect service. ⑬
- J. 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.



SEE "SLEMCO - SPECIFICATIONS FOR COMMERCIAL OVERHEAD SERVICE REQUIREMENTS" FOR MORE INFORMATION.

	SOUTHWEST LOUISIANA ELECTRIC MEMBERSHIP CORPORATION <small>LOUISIANA 9 LAFAYETTE</small>				
	THREE-PHASE OVERHEAD SERVICE REQUIREMENTS				
DRAWN BY:		CREATED ON: 09/08/89	SCALE: N.T.S.		
REVISIONS		REVISED BY	DATE	REV.	DRAWING NO.
			12/17/96	1	23
			02/25/97	2	
			04/20/16	3	
ENHANCEMENT TO DRAWINGS & SPECIFICATIONS		L. MECHE	04/20/16	3	4
DRAWING NUMBER FROM 20 TO 23		H. HUGHES	03/26/19	4	

SLEMCO ELECTRICAL STANDARDS		
APPROVED:	DATE:	PAGE NUMBER:
		93

Engineering Service Specifications

Commercial Single-Phase Metering Schemes (*Self-contained meter base no CTs required*)

SLEMCO

Specifications for Commercial Underground Secondary Requirements

Applicable to commercial 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 Commercial 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

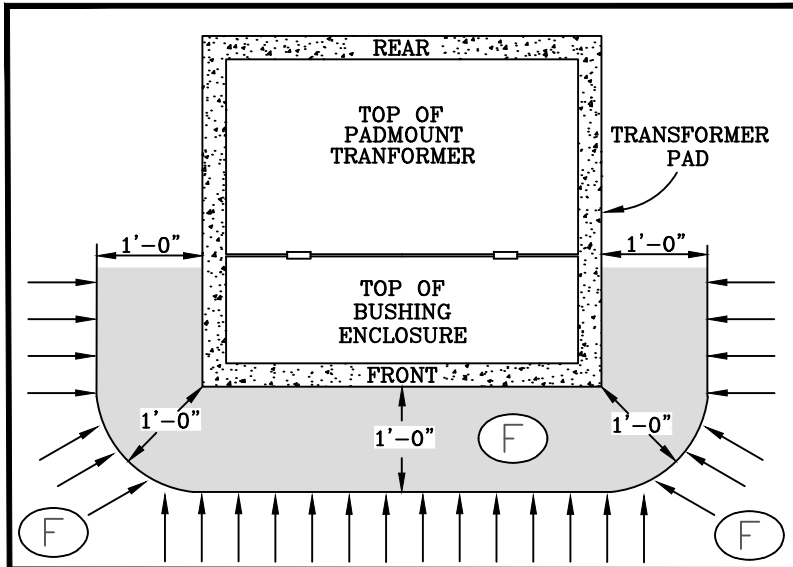
Specifications for Commercial Underground Secondary Requirements

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

TOP VIEW

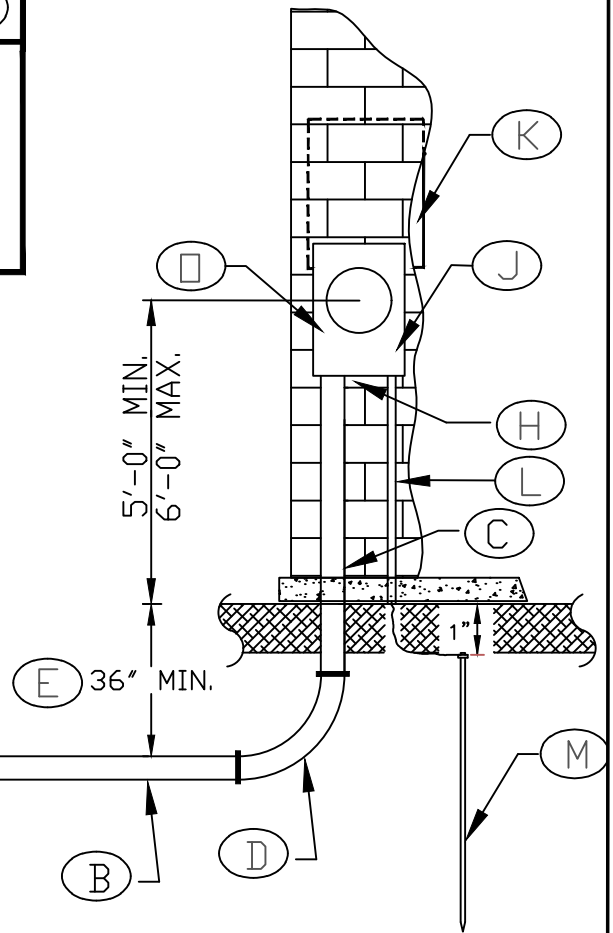
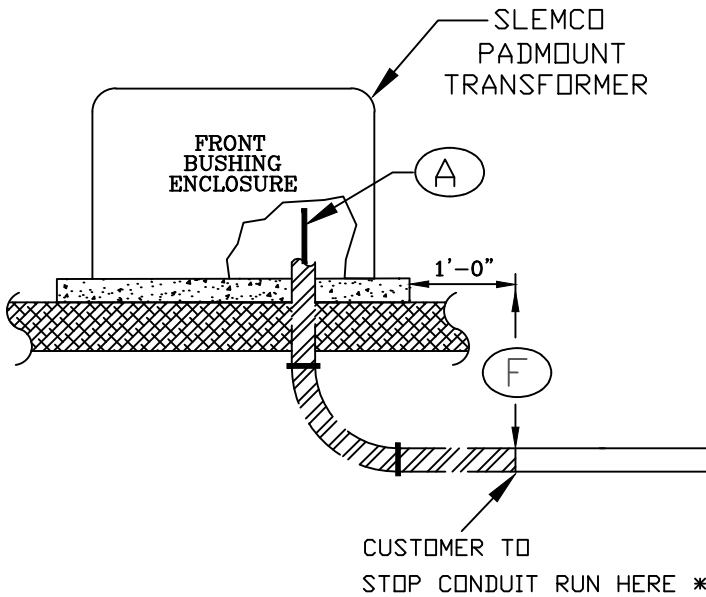




CUSTOMER CONDUIT MUST BE INSTALLED PERPENDICULAR (IN DIRECTION OF ARROWS) TO THE AREA (SHOWN IN GRAY) MARKED AS ONE FOOT FROM EDGE OF PAD SURROUNDING THE BUSHING ENCLOSURE OF THE PADMOUNT TRANSFORMER.

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. 2
			REV. 5

SLEMCO ELECTRICAL STANDARDS

APPROVED:	DATE:	PAGE NUMBER: 97
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NOTE: APPLICABLE TO BOTH RESIDENTIAL AND COMMERCIAL SERVICES.

RESIDENTIAL

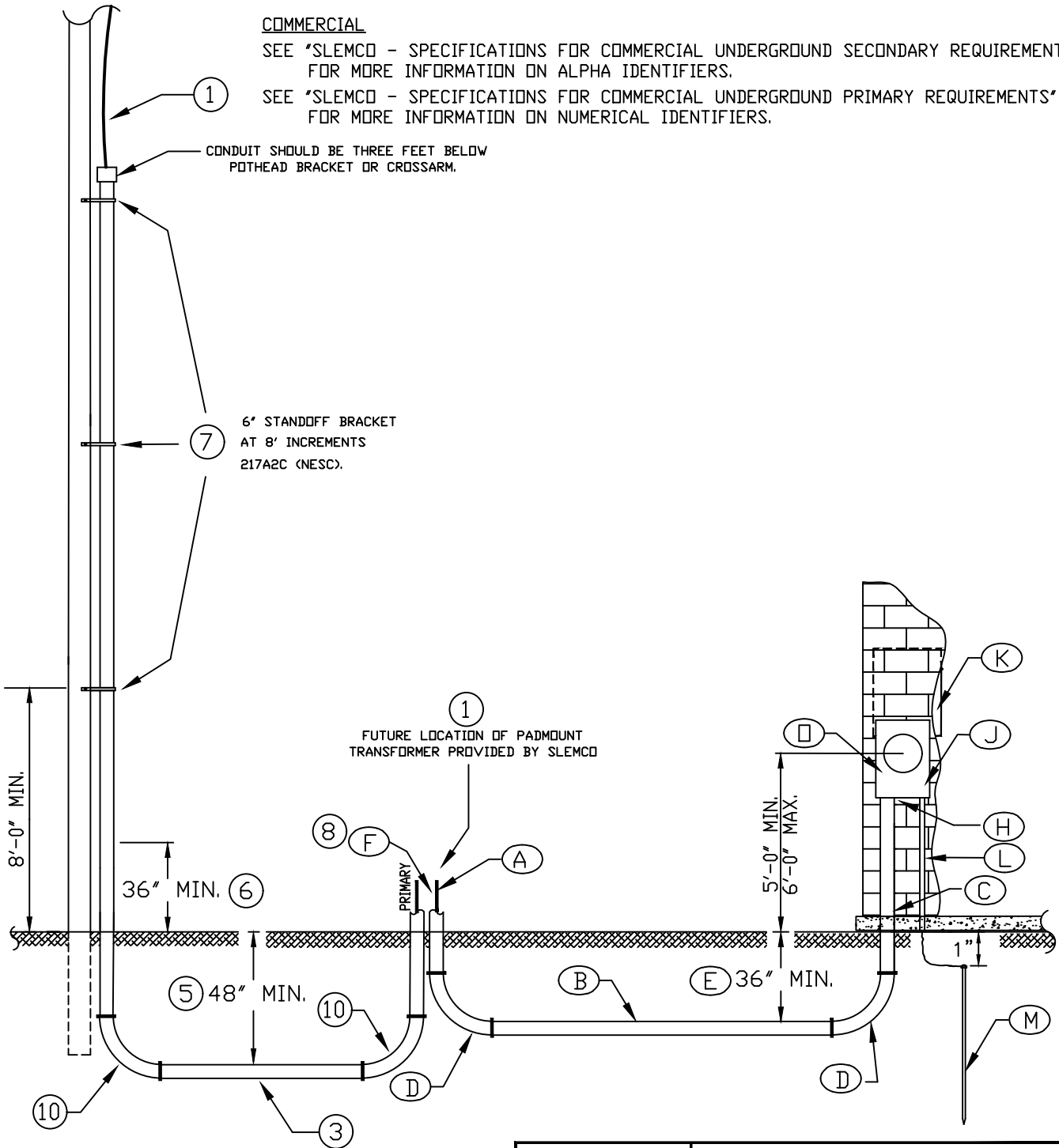
SEE "SLEMCO - SPECIFICATIONS FOR RESIDENTIAL UNDERGROUND SECONDARY REQUIREMENTS" FOR MORE INFORMATION ON ALPHA IDENTIFIERS.


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

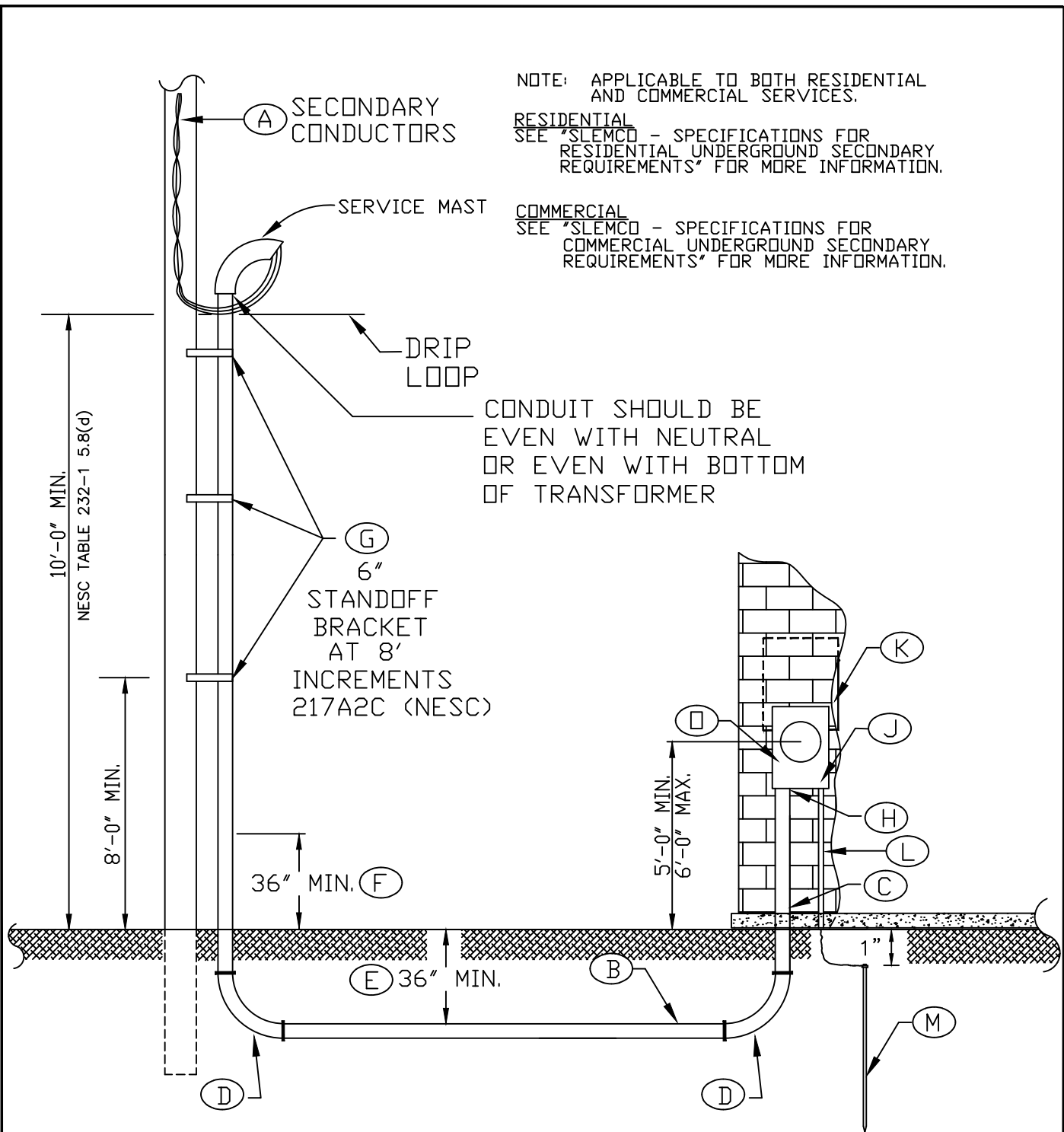
COMMERCIAL

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			
		SINGLE-PHASE UNDERGROUND SERVICE REQUIREMENTS FROM A NEW PADMOUNT TRANSFORMER			
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:		
			98		




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				
		SINGLE-PHASE UNDERGROUND SERVICE REQUIREMENTS FROM AN OVERHEAD SOURCE				
DRAWN BY:		CREATED ON: 01/15/97	SCALE: N.T.S.			
REVISIONS		REVISED BY	DATE	REV.	DRAWING NO.	REV.
SPLIT UNDERGROUND/OVERHEAD DRAWINGS		L. A. M.	09/05/99	2	4	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:
		99

Engineering Service Specifications

**Commercial Service Requirements
for Multiple Occupancy Buildings**

SLEMCO
Specifications for Commercial Metering Requirements for Three-Phase
Customers within Multiple Occupancy Building
Served from a New Underground Padmount Transformer

Applicable to an Owner requiring commercial services receiving three-phase power at 120/208 volts (V) from a new underground padmount transformer to a multiple occupancy building. Applicable to commercial services receiving three-phase power through a 200 Amp (A) meter base attached to building requiring services with service conductors entering through an underground conduit from the padmount transformer to bottom of meter base. Also applicable to commercial services requiring greater than 200A through applicable metering equipment (*meter base and CT enclosure*) that will be attached to building requiring services with service conductors entering through an underground conduit from the padmount transformer to bottom of CT enclosure. Current transformers (CTs) are enclosed within the CT enclosure. Drawing No. 24 illustrates a basic three-phase configuration of a multiple occupancy building.

The maximum SLEMCO allowable load that a new underground padmount transformer can serve is 1200A. Therefore, the maximum number of commercial services receiving three-phase power through a 200A meter base from a new underground padmount transformer is six (6). Furthermore, the combination of commercial services receiving three-phase power through a 200A meter base and requiring greater than 200A through applicable metering equipment must not exceed 1200A.

The party responsible for the multiple occupancy building is referred to as the Owner. All commercial services will provide power to customers within sections of the multiple occupancy building that are divided by firewalls approved by Governing Authorities. Each of these customers will require an independent commercial service from the transformer. There will be no multiple metered customers from one service allowed.

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 Owner 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 16 20 are indicated on the following drawings:

16 Drawing No.16 – *Three-Phase Current Transformer Metering Requirements from a New Padmount Transformer*

20 Drawing No.20 – *Three-Phase Underground Service Requirements from a New Padmount Transformer*

Letters in parentheses are indicated on drawings. Example: 16(A) Drawing No. 16 item A.

1. Secondary conductors furnished and installed by Owner. 16(A) 20(A) The secondary conductors shall be sized according to the load, as required by the NEC or Governing Authority. Diesel Locomotive (DLO) conductors are prohibited. The neutral of the secondary conductors shall be sized no smaller than two sizes less than the other conductors. An extension of at least 48" of secondary conductor is required to be left out of conduit at padmount transformer location. Termination of conductors in padmount transformer (*Point of Connection*) performed by Owner.

SLEMCO
**Specifications for Commercial Metering Requirements for Three-Phase
Customers within Multiple Occupancy Building
Served from a New Underground Padmount Transformer**

Items marked with **16** **20** are indicated on the following drawings:

16 Drawing No.16 – *Three-Phase Current Transformer Metering Requirements from a New Padmount Transformer*

20 Drawing No.20 – *Three-Phase Underground Service Requirements from a New Padmount Transformer*

Letters in parentheses are indicated on drawings. Example: **16**^(A) Drawing No. 16 item A.

- 1.1 Commercial Services greater than 200A: Secondary conductors from transformer (*Point of Connection*) to disconnect switch will be terminated in disconnect switch by Owner. 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.
- 1.2 200A Commercial Services: Secondary conductors from transformer (*Point of Connection*) to meter base will be terminated in meter by Owner.
2. Secondary conduit furnished and installed by Owner. The Owner is required to trench and install one (1) electrical conduit (3" *minimum*) per conductor run. Electrical schedule 40 pipe is acceptable for below ground use. **16**^(B) **20**^(B)
3. 3.1 Commercial Services greater than 200A: Above ground riser conduit must be a minimum of a 3" electrical schedule 80 pipe. **16**^(C) If elbows are required, then PVC elbows shall be used. LB elbows and flex conduit cannot be used.
3.2 200A Commercial Services: Owner will complete installation of above ground riser conduit into bottom left side of meter base using a minimum of a 3" electrical schedule 80 pipe. **20**^{(C)(H)} If elbows are required, then PVC elbows shall be used. LB elbows and flex conduit cannot be used.
4. 4.1 Commercial Services greater than 200A: 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 Owner 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 Owner is allowed to use PVC long radius 90° elbows with a 36" turn. **16**^(D)
4.2 200A Commercial Services: Any underground service that requires three 90° turns or is further than 150', the Owner 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 Owner is allowed to use PVC long radius 90° elbows with a 36" turn. **20**^(D)
5. Owner must maintain a depth of 36" when installing electrical conduit for secondary conductors. **16**^(E) **20**^(E)

SLEMCO
Specifications for Commercial Metering Requirements for Three-Phase
Customers within Multiple Occupancy Building
Served from a New Underground Padmount Transformer

Items marked with 16 20 are indicated on the following drawings:

16 Drawing No.16 – *Three-Phase Current Transformer Metering Requirements from a New Padmount Transformer*

20 Drawing No.20 – *Three-Phase Underground Service Requirements from a New Padmount Transformer*

Letters in parentheses are indicated on drawings. Example: 16(A) Drawing No. 16 item A.

6. Padmount transformer foundation constructed and grounded by Owner according to *Drawing No. 14 - Three-Phase Padmount Transformer Foundation*. SLEMCO must inspect foundation before concrete is poured. Padmount transformer furnished and installed by SLEMCO. 16(F) 20(F)
7. The Owner shall stub up the primary and secondary electrical conduit as indicated on *Drawing No. 14 - Three-Phase Padmount Transformer Foundation* at the location of new padmount transformer.
8. After trenching, all trenches may be backfilled and covered by Owner.
9. Meter base furnished by SLEMCO and installed by Owner. 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. 16(I) 20(I)
10. Commercial Services greater than 200A: CTs furnished by SLEMCO. Must be mounted to back of CT enclosure by Owner. 16(J)
11. Commercial Services greater than 200A: CT enclosure is to be supplied by Owner and must be a minimum of 30" x 36" x 10". The CT enclosure must have a way to secure the door with a SLEMCO padlock. When installed by Owner, the bottom of the CT enclosure should be at a height of 2' to 4' above finished grade. 16(K)
12. Commercial Services greater than 200A: The electrical conduit from CT enclosure to meter base shall be 1" electrical schedule 40 pipe. 16(L) This conduit will be furnished and installed by Owner. If elbows are required, then PVC elbows shall be used. LB elbows and flex conduit cannot be used.
13. Commercial Services greater than 200A: A ground lug will be installed by Owner in the CT enclosure and must be attached with a nut and bolt. 16(M) This is the minimum required by SLEMCO. Additional grounding may be required by the NEC or Governing Authority.

SLEMCO
Specifications for Commercial Metering Requirements for Three-Phase
Customers within Multiple Occupancy Building
Served from a New Underground Padmount Transformer

Items marked with 16 20 are indicated on the following drawings:

16 Drawing No.16 – *Three-Phase Current Transformer Metering Requirements from a New Padmount Transformer*

20 Drawing No.20 – *Three-Phase Underground Service Requirements from a New Padmount Transformer*

Letters in parentheses are indicated on drawings. Example: 16(A) Drawing No. 16 item A.

14. **14.1 Commercial Services greater than 200A:** The Owner 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. 16(N) This is the minimum required by SLEMCO. Additional grounding may be required by the NEC or Governing Authority.
- 14.2 200A Commercial Services:** The Owner 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. 20(K)
15. **Commercial Services greater than 200A:** Main ground wire shall be furnished and installed by Owner. 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. 16(O) The main ground wire shall be sized according to the load, as required by the NEC or Governing Authority.
16. **16.1 Commercial Services greater than 200A:** Ground rods, minimum of two 5/8" x 8' copperweld or 1/2" x 8' copper, furnished and installed by Owner. 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. 16(P) This is the minimum required by SLEMCO. Additional grounding may be required by the NEC or Governing Authority.
- 16.2 200A Commercial Services:** Ground rod, minimum 5/8" x 8' copperweld or 1/2" x 8' copper, furnished and installed by Owner. Ground rod is to be set 1" below finished grade. 20(L) This is the minimum required by SLEMCO. Additional grounding may be required by the NEC or Governing Authority.

SLEMCO
Specifications for Commercial Metering Requirements for Three-Phase
Customers within Multiple Occupancy Building
Served from a New Underground Padmount Transformer

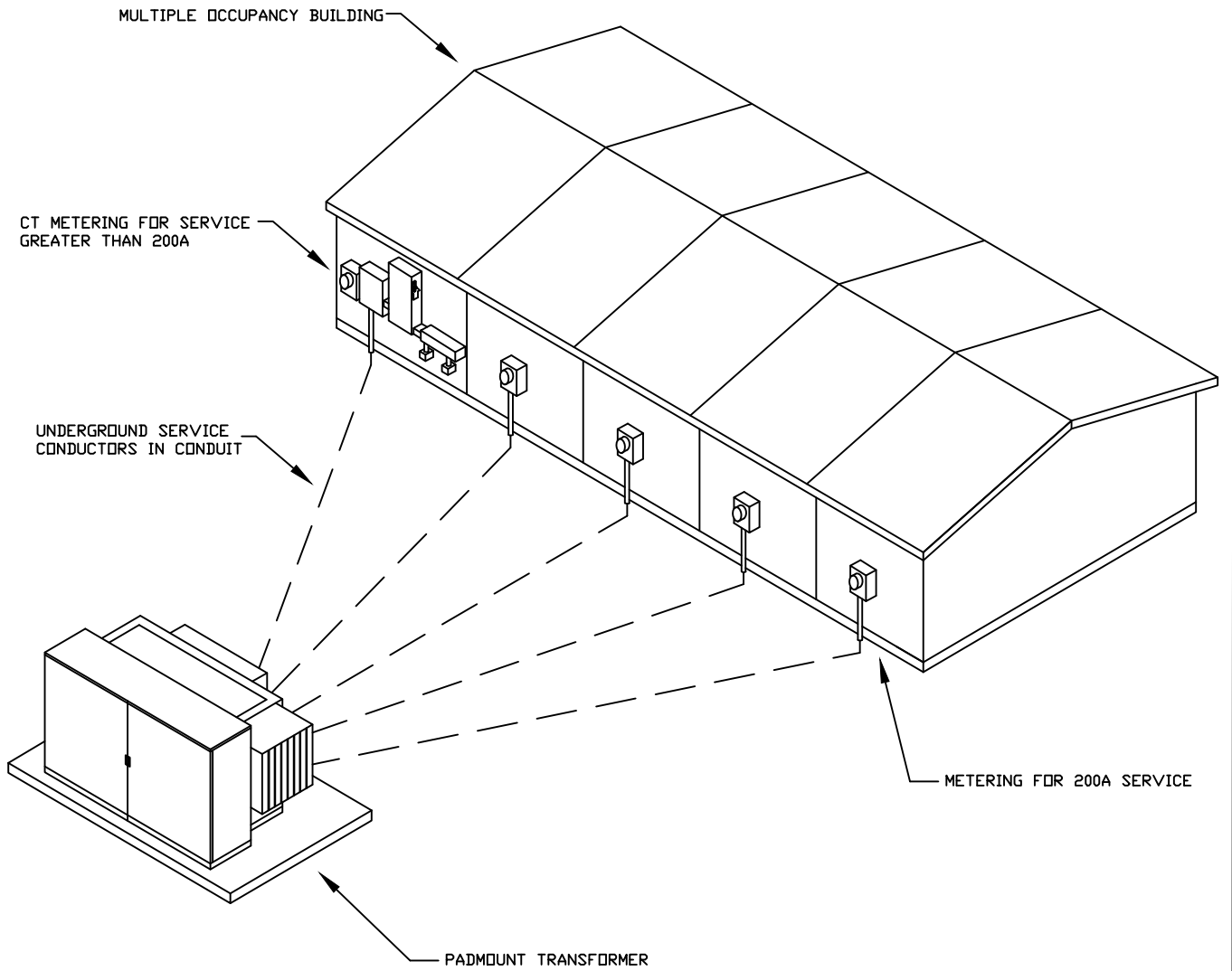
Items marked with **16** **20** are indicated on the following drawings:


16 Drawing No.16 – *Three-Phase Current Transformer Metering Requirements from a New Padmount Transformer*

20 Drawing No.20 – *Three-Phase Underground Service Requirements from a New Padmount Transformer*

Letters in parentheses are indicated on drawings. Example: **16**(A) Drawing No. 16 item A.

17. **Commercial Services greater than 200A:** Disconnect switch isolates power from services connected. Disconnect switch furnished and installed by Owner 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 three pole, be non-fused or fused with properly sized slugged (*dummy/neutral*) fuse, have a voltage rating of at least 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. **16**(Q) All terminations within disconnect switch will be made by Owner. 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 Owner. If elbows are required, then PVC elbows shall be used. LB elbows and flex conduit cannot be used.
18. **18.1 Commercial Services greater than 200A:** Main disconnects (*service panels*) and optional wire trough shall be furnished and installed by customer as required by the NEC or Governing Authority. **16**(R) All terminations will be made in optional wire trough or to main disconnect by Owner.
- 18.2 200A Commercial Services:** The main disconnect (*service panel*) and customer conductors (*from the meter base to the main disconnect*) are furnished and installed by Owner. 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. **20**(J)
19. 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.
20. If a Governing Authority requires inspection, inspection tag must be in place and marked approved before SLEMCO will connect service. **16**(T) **20**(N)
21. 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.



	SOUTHWEST LOUISIANA ELECTRIC MEMBERSHIP CORPORATION LOUISIANA 9 LAFAYETTE				
	SAMPLE CONFIGURATION OF CUSTOMERS WITHIN A MULTIPLE OCCUPANCY BUILDING SERVED FROM 3-PHASE PADMOUNT TRANSFORMER				
DRAWN BY: DATIS CHRISTOPHE JR.		CREATED ON: 02/06/19	SCALE: N.T.S.		
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SLEMCO ELECTRICAL STANDARDS

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SLEMCO
Specifications for Commercial Metering Requirements for Single-Phase
Customers within Multiple Occupancy Building
Served from a New Underground Padmount Transformer

Applicable to an Owner requiring commercial services receiving single-phase power at 120/240 volts (V) from a new underground padmount transformer to a multiple occupancy building. Applicable to commercial services receiving single-phase power through a 200 Amp (A) meter base attached to building requiring services with service conductors entering through an underground conduit from the padmount transformer to bottom of meter base. Also applicable to commercial services requiring greater than 200A through applicable metering equipment (*meter base and CT enclosure*) that will be attached to building requiring services with service conductors entering through an underground conduit from the padmount transformer to bottom of CT enclosure. Current transformers (CTs) are enclosed within the CT enclosure. Drawing No. 25 illustrates a basic single-phase configuration of a multiple occupancy building.

The maximum SLEMCO allowable load that a new underground padmount transformer can serve is 800A. Therefore, the maximum number of commercial services receiving power through a 200A meter base from a new underground padmount transformer is four (4). Furthermore, the combination of commercial services receiving phase power through a 200A meter base and requiring greater than 200A through applicable metering equipment must not exceed 800A.

The party responsible for the multiple occupancy building is referred to as the Owner. All commercial services will provide power to customers within sections of the multiple occupancy building that are divided by firewalls approved by Governing Authorities. Each of these customers will require an independent commercial service from the transformer. There will be no multiple metered customers from one service allowed.

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 Owner 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 ⑩ are indicated on the Drawing No. 10 – *Single-Phase Current Transformer Metering Requirements from a new Padmount Transformer*

Letters in parentheses are indicated on drawings. Example: ⑩^(A) Drawing No. 10 item A.

1. **1.1 Commercial Services greater than 200A and up to 400A:** Secondary conductors furnished and installed by SLEMCO. ⑩^(A) Secondary conductors will be terminated by SLEMCO in transformer and at source side of the disconnect switch (*Point of Connection*).

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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*

Letters in parentheses are indicated on drawings. Example: ⑩^(A) Drawing No. 10 item A.

- 1.2 Commercial Services greater than 400A: Secondary conductors from transformer (*Point of Connection*) to disconnect switch furnished and installed by Owner. ⑩^(A) 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 must be made in disconnect switch by Owner. 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. An extension of at least 48" of secondary conductor is required to be left out of conduit at padmount transformer location. Termination of conductors in padmount transformer (*Point of Connection*) performed by Owner.
- 1.3 200A Commercial Services: Secondary conductors furnished and installed by SLEMCO. ③^(A) Secondary conductors will be terminated by SLEMCO in transformer and at source side of the meter base (*Point of Connection*).
2. Secondary conduit furnished and installed by Owner. 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. ③^(B)⑩^(B)
3. 3.1 Commercial Services greater than 200A: 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. ⑩^(C)
3.2 200A Commercial Services: Owner will complete installation of above ground riser conduit into bottom left side of meter base using a minimum of a 2" electrical schedule 80 pipe. If elbows are required, then PVC elbows shall be used. LB elbows and flex conduit cannot be used. ③^(C)
4. 4.1 Commercial Services greater than 200A: 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 Owner 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 Owner is allowed to use PVC long radius 90° elbows with a 36" turn. ⑩^(D)
4.2 200A Commercial Services: Any underground service that requires three 90° turns or is further than 150', the Owner 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 Owner is allowed to use PVC long radius 90° elbows with a 36" turn. ③^(D)

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Letters in parentheses are indicated on drawings. Example: ⑩^(A) Drawing No. 10 item A.

5. Owner must maintain a depth of 36" when installing electrical conduit for secondary conductors. ③^(E)⑩^(E)
6. The Owner shall stub up the primary and secondary electrical conduit next to each other at the location of new padmount transformer. ③^(F)⑩^(F) See the next section entitled, *Specifications for Residential Underground Primary Requirements*, for details on primary installation.
7. After trenching, all trenches may be backfilled and covered by Owner.
8. Owner will install polypropylene pull string (*minimum strength of 210 lbs.*) in all electrical conduits that will require SLEMCO to install conductors.
9. **9.1 Commercial Services greater than 200A:** Meter base furnished by SLEMCO and installed by Owner. 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. ⑩^(H)
9.2 200A Commercial Services: Meter base furnished and installed by Owner. 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. ③^(J) When purchasing a meter base for underground service please specify hubless or underground meter base. 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.
10. **Commercial Services greater than 200A:** CTs furnished by SLEMCO. Must be mounted to back of CT enclosure by Owner. ⑩^(I)
11. **Commercial Services greater than 200A:** CT enclosure is to be supplied by Owner 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 Owner, the bottom of the CT enclosure should be at a height of 2' to 4' above finished grade. ⑩^(J)
12. **Commercial Services greater than 200A:** The electrical conduit from CT enclosure to meter base shall be 1" electrical schedule 40 pipe. ⑩^(K) This conduit will be furnished and installed by Owner. If elbows are required, then PVC elbows shall be used. LB elbows and flex conduit cannot be used.
13. **Commercial Services greater than 200A:** A ground lug will be installed by Owner in the CT enclosure and must be attached with a nut and bolt. ⑩^(L) This is the minimum required by SLEMCO. Additional grounding may be required by the NEC or Governing Authority.

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Letters in parentheses are indicated on drawings. Example: ⑩^(A) Drawing No. 10 item A.

14. **14.1 Commercial Services greater than 200A:** The Owner 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. ⑩^(M) This is the minimum required by SLEMCO. Additional grounding may be required by the NEC or Governing Authority.
- 14.2 200A Commercial Services:** The Owner 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. ③^(L)
15. **Commercial Services greater than 200A:** Main ground wire shall be furnished and installed by Owner. 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. ⑩^(N) The main ground wire shall be sized according to the load, as required by the NEC or Governing Authority.
16. **16.1 Commercial Services greater than 200A:** Ground rods, minimum of two 5/8" x 8' copperweld or 1/2" x 8' copper, furnished and installed by Owner. 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. ⑩^(O) This is the minimum required by SLEMCO. Additional grounding may be required by the NEC or Governing Authority.
- 16.2 200A Commercial Services:** Ground rod, minimum 5/8" x 8' copperweld or 1/2" x 8' copper, furnished and installed by Owner. Ground rod is to be set 1" below finished grade. ③^(M) This is the minimum required by SLEMCO. Additional grounding may be required by the NEC or Governing Authority.

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17. Commercial Services greater than 200A: Disconnect switch isolates power from services connected. Disconnect switch furnished and installed by Owner 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. ⑩^(P) 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.

17.1 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.

17.2 Services greater than 400A: Customer will be responsible for all terminations in the disconnect switch.

18. **18.1** Commercial Services greater than 200A: Main disconnects (*service panels*) and optional wire trough shall be furnished and installed by customer as required by the NEC or Governing Authority. ⑩^(Q) All terminations will be made in optional wire trough or to main disconnect by Owner.

18.2 200A Commercial Services: The main disconnect (*service panel*) and customer conductors (*from the meter base to the main disconnect*) are furnished and installed by Owner. 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. ③^(K)

19. 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.

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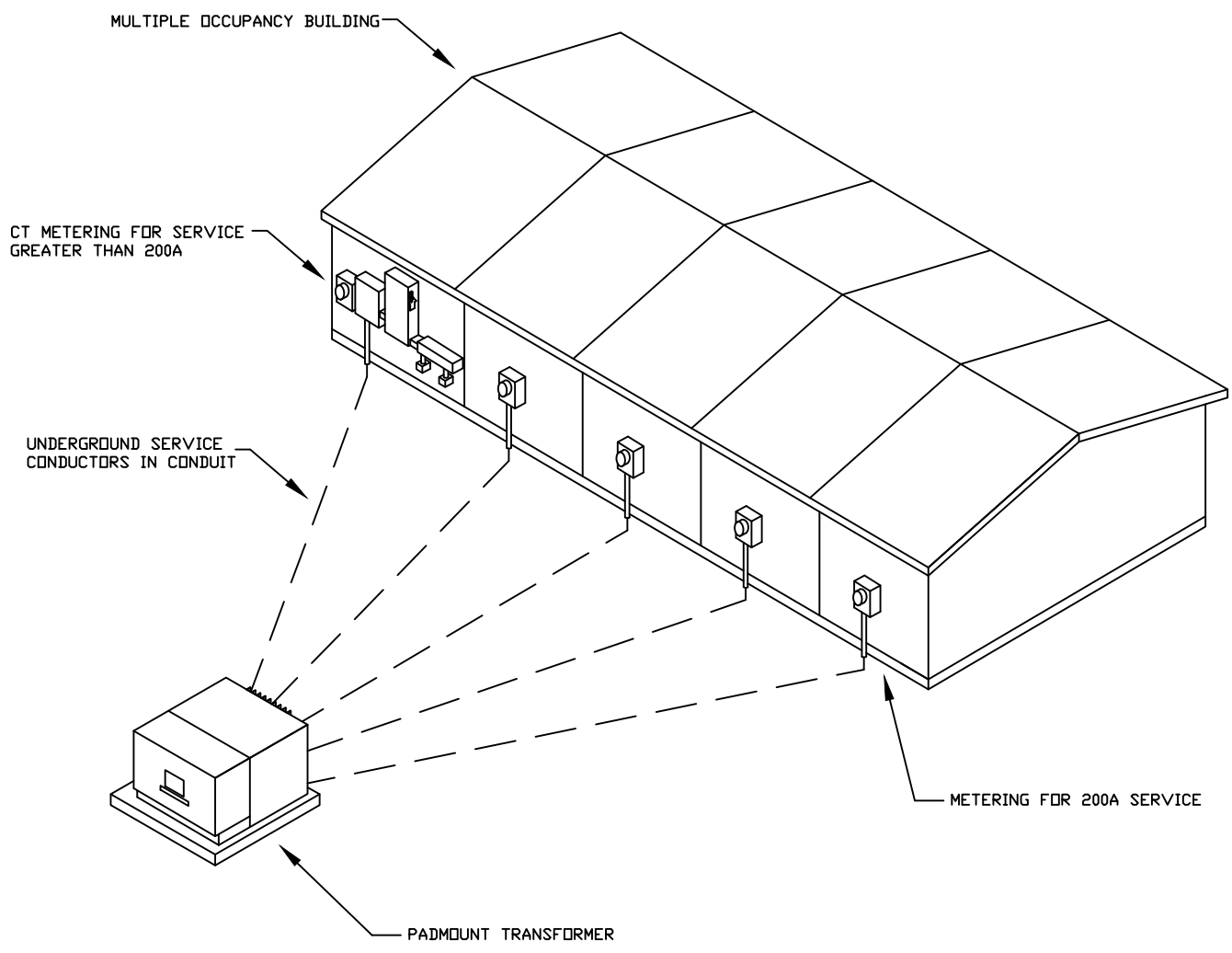
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20. If a Governing Authority requires inspection, inspection tag must be in place and marked approved before SLEMCO will connect service. ③^(O)⑩^(S)

21. 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.



	SOUTHWEST LOUISIANA ELECTRIC MEMBERSHIP CORPORATION <small>LOUISIANA 9 LAFAYETTE</small>				
	SAMPLE CONFIGURATION OF CUSTOMERS WITHIN A MULTIPLE OCCUPANCY BUILDING SERVED FROM 1-PHASE PADMOUNT TRANSFORMER				
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