



ELECTRIC DEPARTMENT CONSTRUCTION STANDARDS  
FOR RESIDENTIAL SERVICE INSTALLATION

***LOCATION OF METER MUST BE APPROVED PRIOR TO INSTALLATION  
CALL 975-8730 FOR LOCATION***

8<sup>TH</sup> & MAIN STREET, P.O. BOX 159  
NORTH LITTLE ROCK, ARKANSAS 72115

Revised May 2008

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## NLR ELECTRIC DISTRIBUTION DESIGN SUPPORT DEPARTMENT

Contact any member of our Design Department with questions or problems regarding these standards.

<u>Designer</u>	<u>Phone Number</u>
Scott Springer	975-8761
Jonathan Caudle	975-8736
Greg Woodward	975-8773
Paul Brown	975-8766

### **For Ditch Inspection - Call for appointment (24 hour notice required)**

Emory Reed 975-8759

### **INSPECTION AND INSTALLATION ORDER**

Two inspections are required before service wire is installed:

1. An inspection of the installed meter can, ditch, conduit, warning tape, and pull string must be completed By NLRED Engineering personnel. This is an entirely separate inspection from the one conducted by the City Electrical Inspector. It is required by the Electric Department to insure that the installation of all service components is in compliance with these standards. Anytime after this inspection is completed, the service may be installed
2. The service may only be connected after the final electrical inspection for the structure has been performed by the City Electrical Inspector, and an installation order has been completed and in the hands of the NLRED crew

For questions or problems regarding electric code enforcement contact:

### **NLR Code Enforcement:**

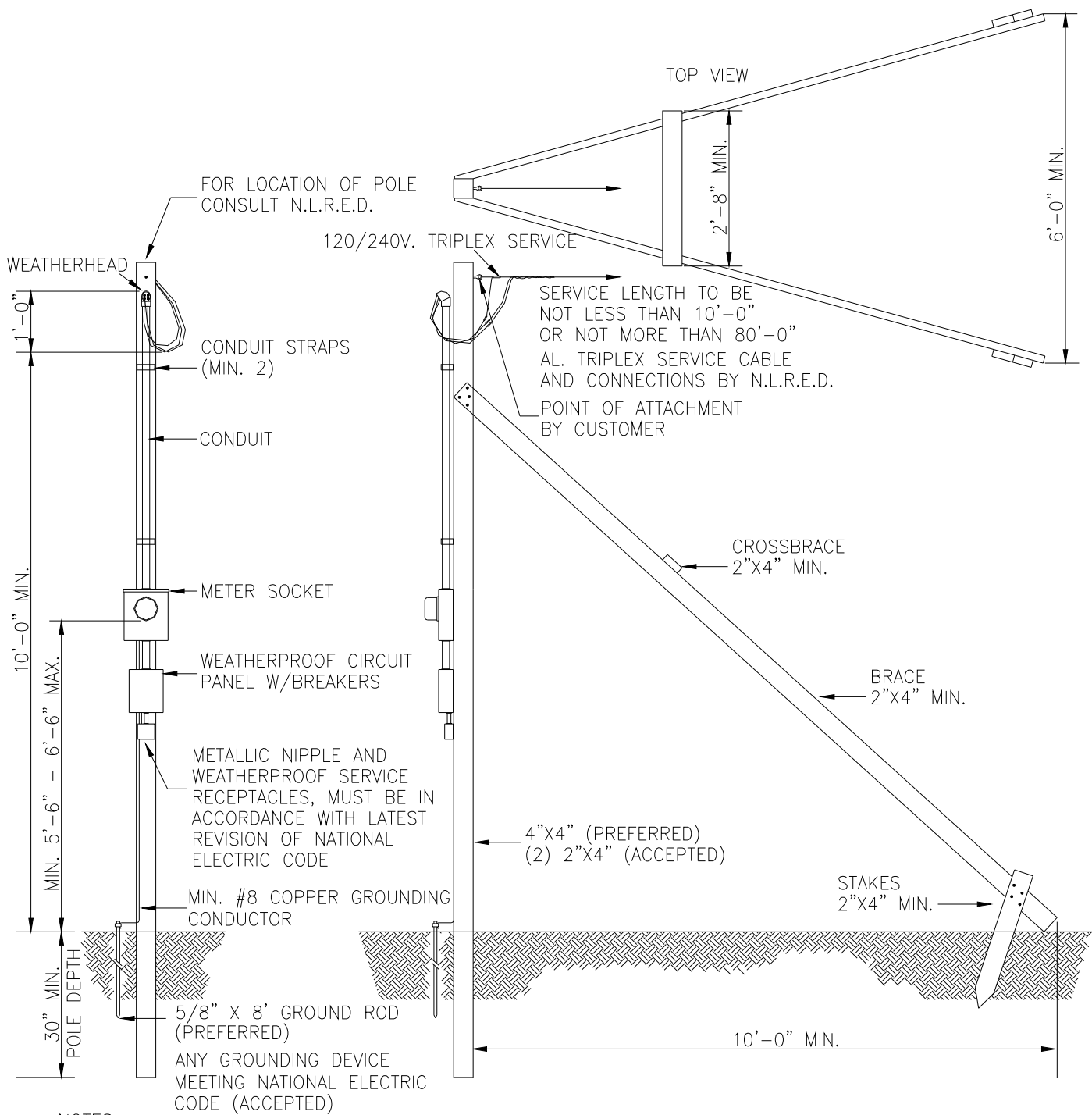
Office	975-8835
Electrical Inspector's Office	975-8868

### **Sherwood Code Enforcement:**

Office	835-4753
Electrical Inspector's Office	835-4753

For access to NLRED pad mounted transformers, underground secondary pedestals, etc. contact (24 hours in advance):

Cory Tate	975-8764
Jeff Ellison	975-8751
Chad Riggan	975-8749



NOTES:

1. ALL NON-CURRENT CARRYING METALLIC PARTS TO BE EFFECTIVELY GROUNDED
2. N.L.R.E.D. TO SUPPLY OVERHEAD SERVICE, CONNECTORS, SERVICE DEADEND AND METER ONLY
3. ALL OTHER MATERIAL TO BE SUPPLIED BY AND INSTALLED BY CUSTOMER
4. ALL WORK TO BE IN ACCORDANCE WITH LATEST VERSION OF NATIONAL ELECTRIC CODE OR CITY OF N.L.R. ELECTRIC CODE OR CITY OF SHERWOOD ELECTRIC CODE. DEPENDING UPON LOCATION
5. ALL WORK TO BE INSPECTED.
6. ADDITIONAL POLE HEIGHT MAY BE REQUIRED IF SERVICE CROSSES STREET, ALLEY OR DRIVEWAY TO MAINTAIN PROPER CLEARANCE PER N.E.C. CLEARANCES.

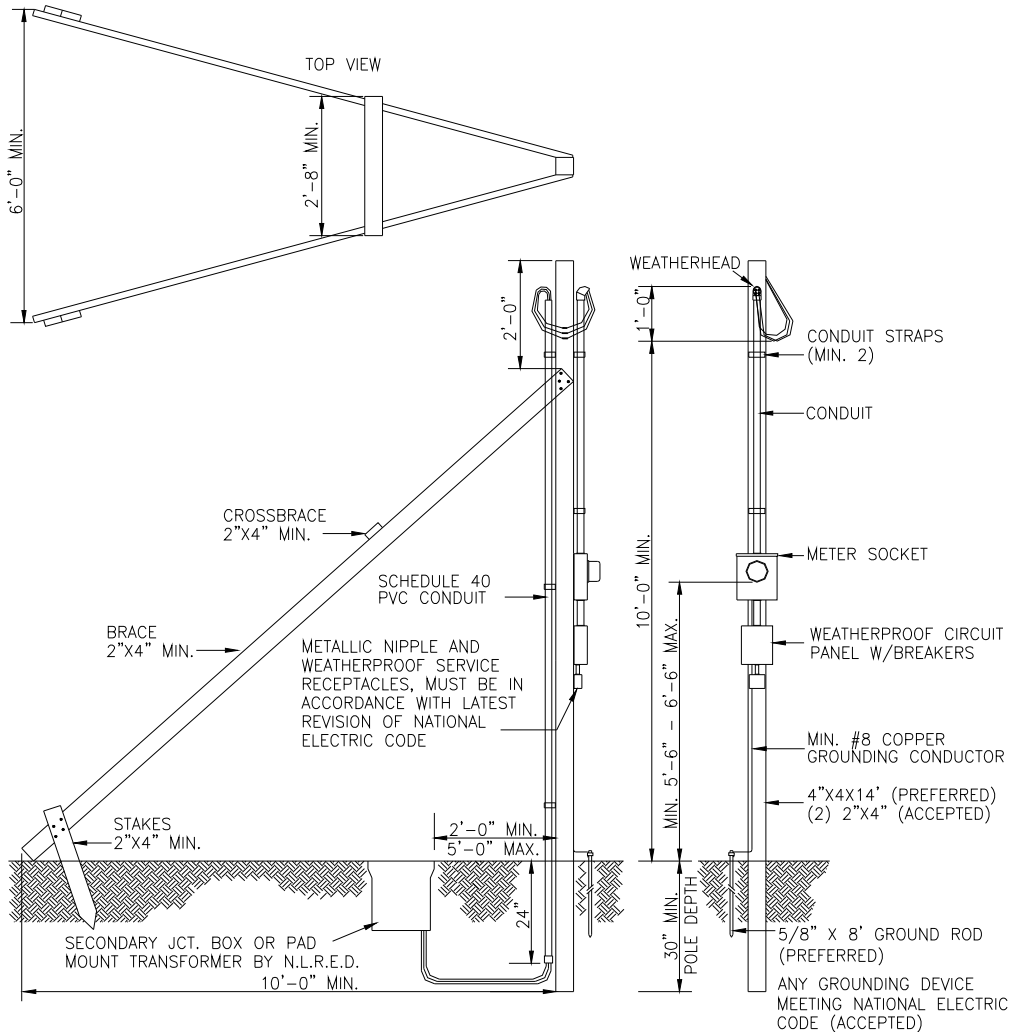
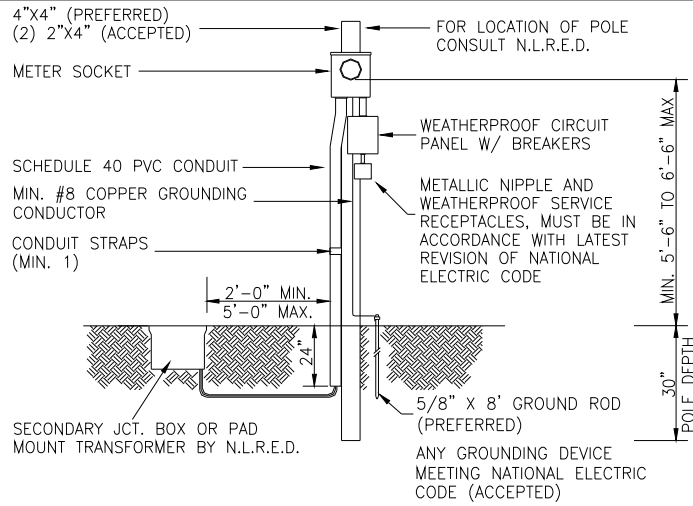
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NORTH LITTLE ROCK ELECTRIC CONSTRUCTION STANDARDS  
 TYPICAL  
 TEMPORARY O.H. SERVICE METER INSTALLATION  
 120/240 VOLTS SINGLE PHASE

DATE: 10-27-98	REVISION 1
SHT No.: 1	
CONSTRUCTION STANDARD No.	S-1

CADD FILE: NLR8001



NOTES:

1. ALL NON-CURRENT CARRYING METALLIC PARTS TO BE EFFECTIVELY GROUND
2. ALL MATERIAL TO BE FURNISHED AND INSTALLED BY CUSTOMER UNLESS OTHERWISE NOTED
3. ALL WORK TO BE IN ACCORDANCE WITH LATEST VERSION OF NATIONAL ELECTRIC CODE  
OR CITY OF N.L.R. ELECTRIC CODE OR CITY OF SHERWOOD ELECTRIC CODE. DEPENDING UPON LOCATION
4. ALL WORK TO BE INSPECTED.



NORTH LITTLE ROCK ELECTRIC CONSTRUCTION STANDARDS  
TYPICAL  
TEMPORARY SERVICE FROM  
AN UNDERGROUND SOURCE

DATE: 10-27-98

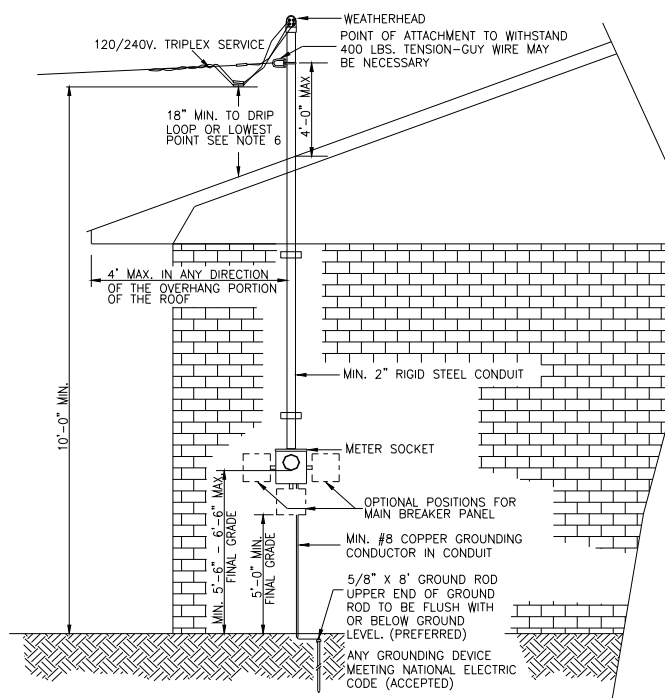
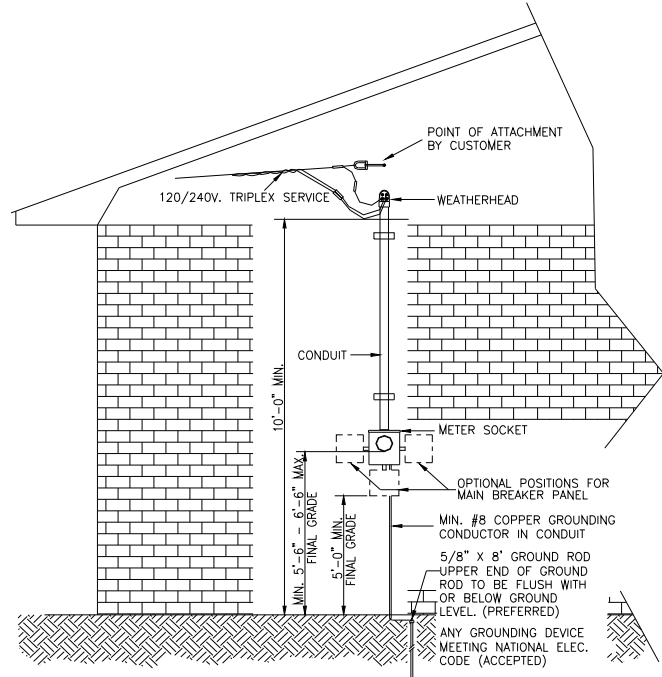
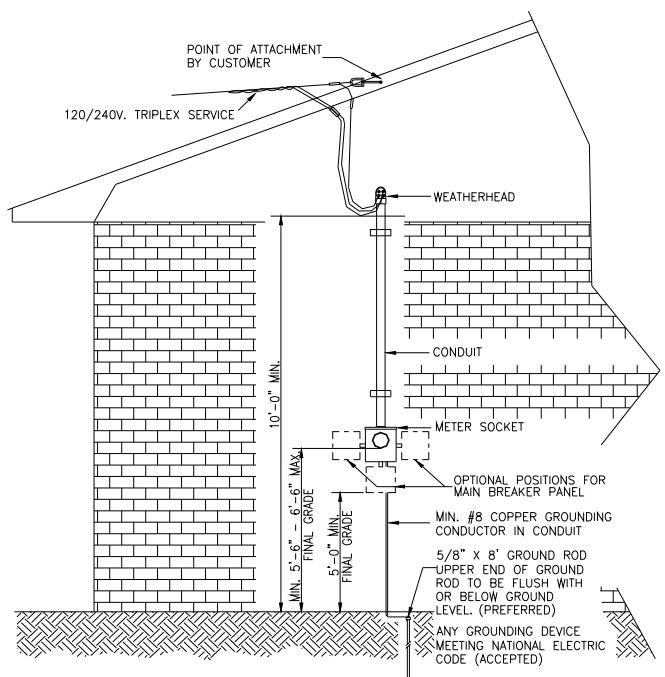
SHT No.: 1

CONSTRUCTION  
STANDARD No.

REVISION

1

S-2



NOTES:

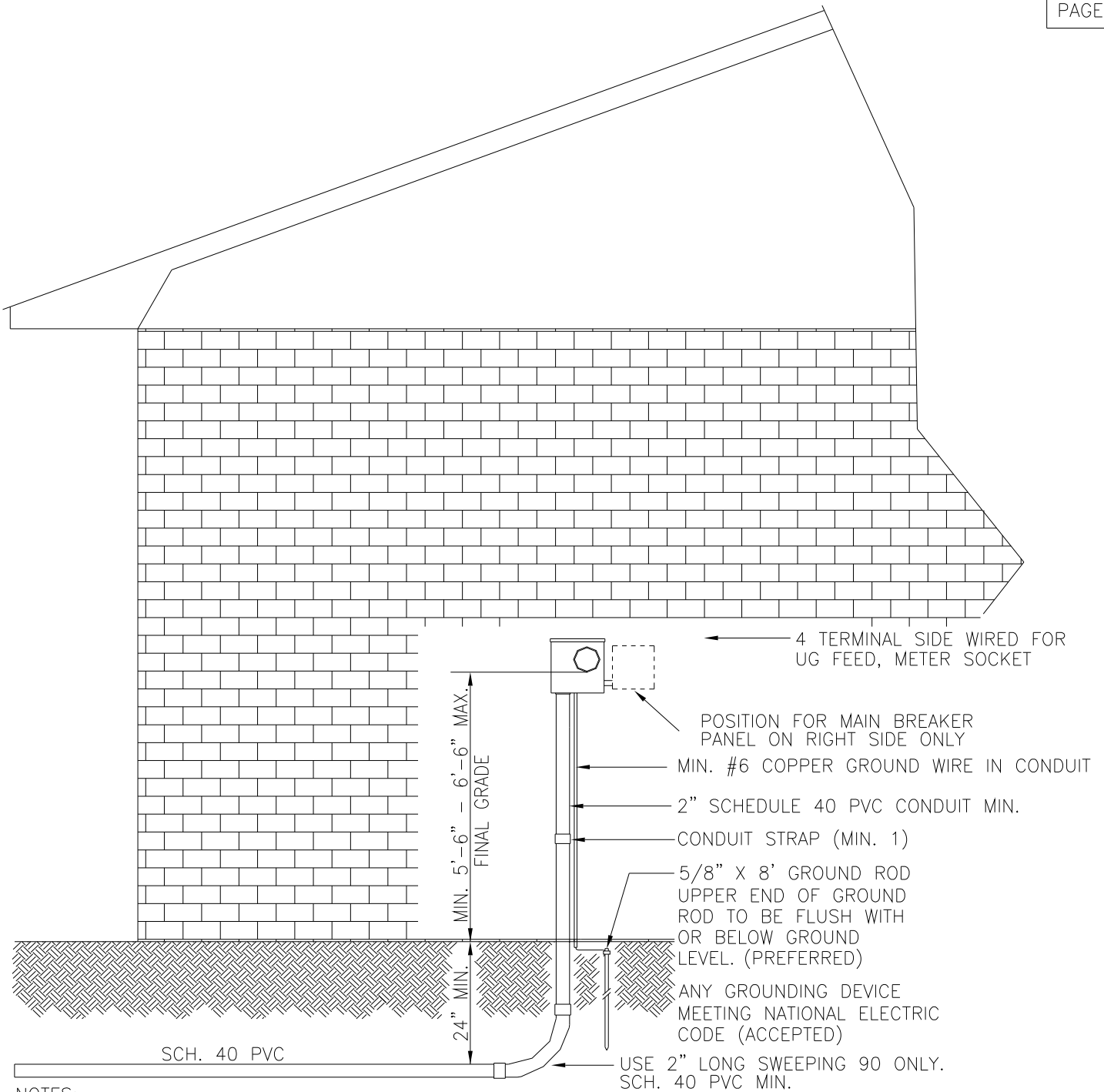
1. ALL NON-CURRENT CARRYING METALLIC PARTS TO BE EFFECTIVELY GROUNDING
2. N.L.R.E.D. TO SUPPLY OVERHEAD SERVICE, CONNECTORS, SERVICE DEADEND AND METER ONLY
3. ALL OTHER MATERIAL TO BE SUPPLIED BY AND INSTALLED BY CUSTOMER
4. ALL WORK TO BE IN ACCORDANCE WITH LATEST VERSION OF NATIONAL ELECTRIC CODE OR CITY OF N.L.R. ELECTRIC CODE OR CITY OF SHERWOOD ELECTRIC CODE. DEPENDING UPON LOCATION
5. ALL WORK TO BE INSPECTED BY CITY OF N.L.R. OR CITY OF SHERWOOD ELECTRICAL INSPECTOR
6. POINT OF ATTACHEMENT TO WITHSTAND 400 LBS. TENSION

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NORTH LITTLE ROCK ELECTRIC CONSTRUCTION STANDARDS  
 TYPICAL  
 OVERHEAD SERVICE METER INSTALLATION  
 120/240 VOLTS SINGLE PHASE

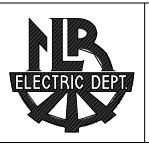
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SHT No.: 1	1
CONSTRUCTION STANDARD No.	S-3



NOTES:

1. SERVICE TO BE MOUNTED ON SIDE OF HOUSE.
2. ALL NON-CURRENT CARRYING METALLIC PARTS TO BE EFFECTIVELY GROUNDED.
3. CUSTOMER TO PROVIDE AND INSTALL ALL CONDUIT AND PULL STRING INSIDE N.L.R.E.D. SECONDARY JUNCTION BOX OR 7 INCHES FROM POLE.
4. **N.L.R.E.D. TO INSTALL ALL UNDERGROUND SERVICE WIRE.**
5. SERVICE TRENCH TO BE INSPECTED BY N.L.R.E.D. BEFORE BACK FILLING.
6. CONDUIT SIZE MIN. 2" FOR 200 AMP, 3" FOR 320 AMP AND 4" FOR 400 AMP.
7. ALL WORK TO BE IN ACCORDANCE WITH LATEST VERSION OF NATIONAL ELECTRIC CODE OR CITY OF N.L.R. ELECTRIC CODE OR CITY OF SHERWOOD ELECTRIC CODE. DEPENDING UPON LOCATION.

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NORTH LITTLE ROCK ELECTRIC CONSTRUCTION STANDARDS  
 TYPICAL  
 UNDERGROUND SERVICE METER INSTALLATION  
 120/240 VOLTS SINGLE PHASE

DATE: 10-27-98	REVISION 1
SHT No.: 1	
CONSTRUCTION STANDARD No.	S-4

## **UNDERGROUND RESIDENTIAL SERVICE SPECIFICATIONS**

**NLRED WILL INSTALL AND MAINTAIN THE UNDERGROUND SERVICE WIRE AS LONG AS THE ELECTRICAL CONTRACTOR FOLLOWS THESE SPECIFICATIONS FOR CONDUIT AND METER CAN INSTALLATION.**

**Contractor charge for underground service installation:**

<b><u>SERVICE SIZE</u></b>	<b><u>CHARGE</u></b>
200 amp	\$ 200.00
320 amp	\$ 200.00
400 amp	\$ 200.00

These charges and requirements offset the cost difference between an overhead service, which the department provides at no charge to the contractor, and the cost of an underground service at the same amp rating.

**ALL SPECIFICATIONS UNDER THIS HEADING MUST BE FOLLOWED TO THE LETTER!!!**

### **1. CONTACT**

Contact the Engineering Department at North Little Rock Electric Department (NLRED), before any work is started on underground service.

### **2. ELECTRICIAN**

A licensed electrician shall do all work.

### **3. METER CAN**

**THE METER CAN IS TO BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.**

The electrical contractor may use a meter can that has been approved by NLRED. **ALL OTHERS MAY BE SUBJECT TO THE SCRUTINY OF NLRED AND MAY BE REFUSED!** If a meter can other than those listed is considered for use it is strongly recommended that it be approved by a member of NLRED Engineering Department before installation.

**WITHOUT EXCEPTION – ALL METER CANS USED IN THE NORTH LITTLE ROCK SERVICE AREA MUST BE RINGLESS!**

**APPROVED METER CANS**

<b><u>MANUFACTURE</u></b>	<b><u>AMP RATING</u></b>	<b><u>CATALOG NO.</u></b>
Midwest	200	KS1DS1AT KS1DS1*T
Milbank		U1980-O U4258-O
Siemens		SUAS877-PPZA MC2040B1200R
Cutler Hammer		UTRS223ACH
Landis & GYR		AS877XG
<hr/>		
Midwest	320	RS45500C RS45508C KUIFIEMT
Milbank		U2448-X U4257-X
General Electric		RS 45508C
Siemens		S48704-82GP MM0404L1400RLM <sup>EM 5-18-05</sup>
Square D		RU3040D400CL
Landis & GYR		44704-02
Cutler Hammer		UTH43369UCH
Landis & GYR	400	Type K-4    9809-8416

**Note:** Lugs for LINE SIDE of 320 and 400 amp meter cans are to be supplied by electrical contractor.

<b><u>AMP RATING</u></b>	<b><u>LINE SIDE LUG SIZE</u></b>	<b><u>NEUTRAL</u></b>
320	1ea. - 350	1ea. - 4/0
400	1ea. - 350	1ea. - 4/0

**TRENCH**

The trench is to be no less than thirty (30) inches in depth with a minimum width of four (4) inches.

**ROCKY TERRAIN**

If terrain is rocky, the minimum depth may be changed to sixteen (16) inches with four (4) inches of concrete cover.

**ANY TRENCH USING CONCRETE AS A BACK FILL, MUST BE INSPECTED AND APPROVED BY NLRED, BEFORE POURING CONCRETE.**

**4. CONDUIT**

**CONDUIT IS TO BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.**

<u>MAIN SIZE</u>	<u>CONDUIT SIZE</u>	<u>SCHEDULE</u>
200 amp	2 inch	40
320 amp	3 inch	40
400 amp	4 inch	40

**NOTE:** There are to be no more than 2 (two) long sweeping 90 degree elbows in any one service. No service is to be longer than one hundred (100) feet in length. Service is to run in a straight line from customer's structure to NLRED facilities.

A nylon string shall be installed in the conduit by the electrical contractor for pulling service wire.

Conduit shall be clear of any internal obstructions and if NLRED is unable to pull service wire due to obstructions the **ELECTRICAL CONTRACTOR SHALL BE HELD RESPONSIBLE.**

If the conduit runs down hill from NLRED facilities to the structure, there shall be three (3) one-quarter (1/4) inch holes drilled in the conduit, eighteen (18) inches above ground level at structure.

**5. BACK FILL**

Back fill must be free of large rocks or other material that could damage the conduit.

**ALL TRENCHES MUST BE INSPECTED BY NLRED BEFORE BEING BACK FILLED. NLRED WILL REQUIRE THAT ANY TRENCH BACK FILLED BEFORE INSPECTION TO BE UNCOVERED.**

**Important:** The electrical contractor is required to inform NLRED a minimum of one (1) full working day that the trench is ready for inspection.

**6. WARNING TAPE**

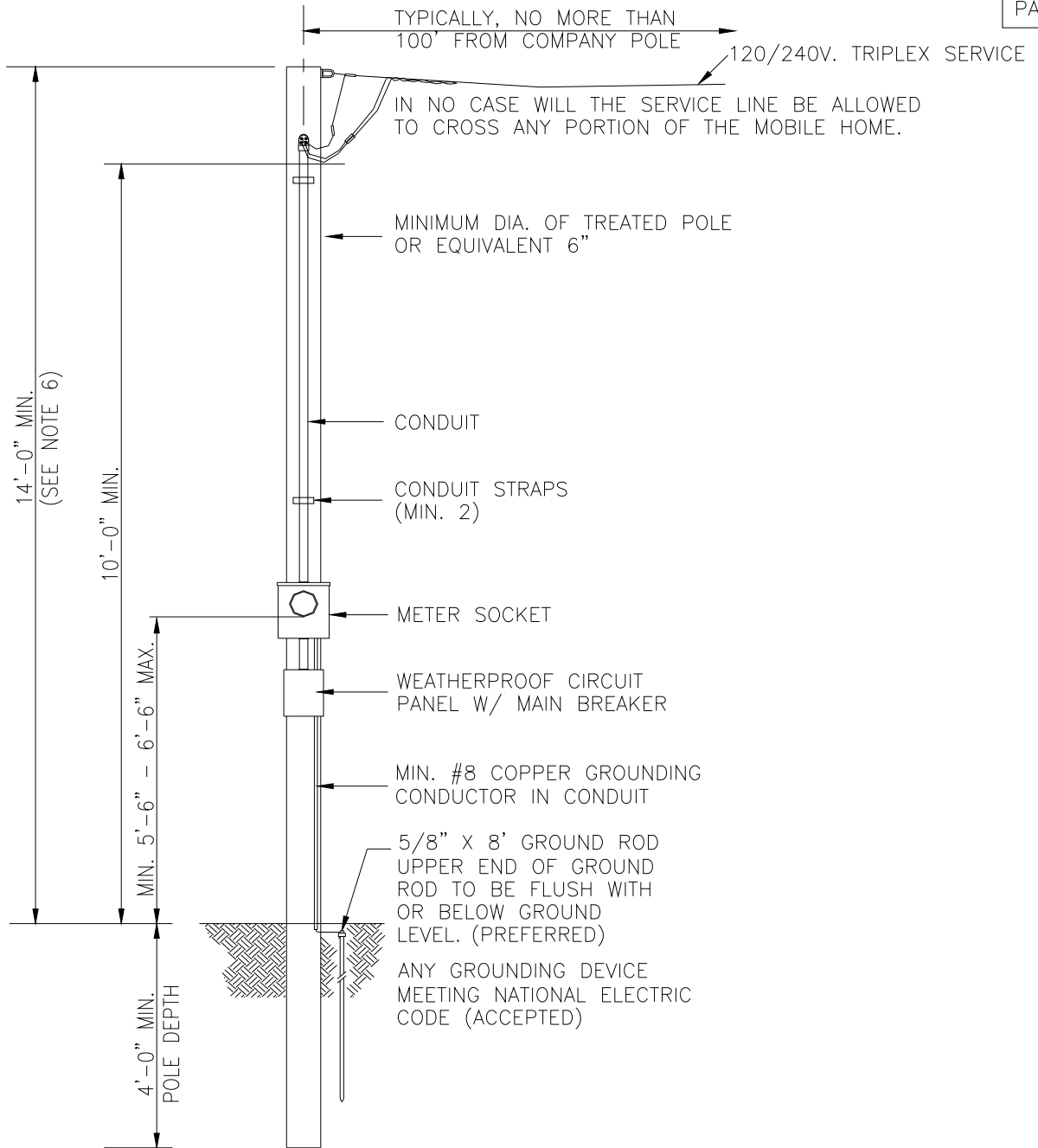
Warning tape shall be installed by electrical contractor, six (6) inches below finished grade. Warning tape will be supplied by NLRED at time of trench inspection.

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NORTH LITTLE ROCK ELECTRIC CONSTRUCTION STANDARDS  
 TYPICAL  
 PERMANENT SERVICE TO A MOBILE HOME FROM AN OVERHEAD SOURCE

DATE: 10-27-98	REVISION
SHT No.: 1	1
CONSTRUCTION STANDARD No.	S-8

CADD FILE: NLR007