



## **BUSINESS OFFICE AND CUSTOMER SERVICE TELEPHONE NUMBERS**

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### **Customer Service Phone Number.**

570-819-4844 or Toll-Free 1-800-962-1212. Staff is available Monday through Friday from 7:30 a.m. to 4:00 p.m.

### **Customer Service Office.**

One UGI Center (Bldg. A-2)  
Wilkes-Barre, PA 18711-0600  
Open Mon. through Fri., 7:30 a.m.- 4:00 p.m.

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**UGI** This page last modified: 07 August 2009 (individual sections indicate last date modified)

## FORWARD

This manual covers the general conditions that apply to the furnishing of electricity on the UGI Corporation system, and must be adhered to in all respects by those customers receiving electric service from the Company.

Changes and additions to these rules will be required from time to time. Revisions will be mailed to those persons on record as having a copy of this manual.

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## INTRODUCTION

This manual presents the electric service requirements of the Company relative to service entrances, metering, and the installation of certain utilization equipment. The information given is not a complete set of rules governing the installation of electric wiring or apparatus. It covers only those points in which the customer, the architect, the engineer, the electrical contractor, and the Company are mutually interested, and the knowledge of which will serve to prevent unnecessary delays or expense in furnishing service. Nothing contained herein is intended in any way to conflict with the requirements of the National Electric Code or with any municipal ordinance applying to electrical installations.

Special conditions may arise which would be impracticable to cover in a book of this type, and to such cases the Company will be pleased to give attention on request.

The information herein must not be construed to conflict, in any way, with the "Electric Service Tariff," issued by the Company.

## DEFINITIONS

**COMPANY**--UGI Corporation, Electric Utility Division.

**CUSTOMER**--The corporation, municipality, governmental agency, association, partnership or individual served by or using electric service supplied by the Company.

**VOLTAGE**--Numerical voltages mentioned are to be construed as nominal values.

**SERVICE**--As used herein refers to the supply of the Company's product "electric energy" to the customer.

**COMPANY POLE**--A Company-owned pole or a pole owned by another utility company with whom the Company has an agreement or understanding for joint use of poles.

**SERVICE INSTALLATION**--The connection between the Company's distribution system and the customer's service equipment is a service installation and is commonly referred to as "a service." This generally consists of:

**Service Drop or Service Wires**--That portion of an overhead service installation supplied by the Company between its pole or aerial support and the point of connection to the customer's service entrance conductors.

**Service Lateral**--That portion of an underground service installation supplied by the Company between its overhead or underground distribution mains and the point of connection to the customer's service equipment.

**Service Entrance Conductors**--That portion of an overhead or underground service installation supplied by the customer between the Company's service drop or service lateral and the customer's service equipment.

**POINT OF DELIVERY**--The point in or on a premises where the Company's overhead service drop or underground service lateral connects to the customer's service entrance conductors. The location is designated by the Company.

**PREMISES**--A building, group of buildings and/or contiguous parcels of land under the control of a customer and devoted to the conduct of a single business. A building is one premises even though occupied by two or more customers. Adjoining buildings under one roof but separated completely from each other by vertical fire walls are considered as separate premises.

**NATIONAL ELECTRICAL CODE**--The standard as recommended by the National Fire Protection Association and adopted by the American National Standards Institute in effect at any given time for electrical wiring and apparatus.

**NATIONAL ELECTRICAL SAFETY CODE**--The rules published by the Institute of Electrical and Electronics Engineers applying to grounding, installation, maintenance and operation of electric supply, communication, utilization equipment, lines and facilities which have been adopted as standard by the American National Standards Institute.

**COMPANY OFFICE**--The Business Office at 247 Wyoming Avenue, Kingston, Pennsylvania.

## SECTION 2 - GENERAL

A. Initial Inquiry - In order to avoid additional expense and minimize delays, UGI should be contacted before work has started on any electric service installation. An authorized Company representative will specify the service location and obtain information necessary to properly supply the service and apply the provisions of the Company's tariff. The Company may refuse to commence service when, in the Company's opinion, the Customer's installation does not conform to UGI's tariff. Furthermore, the Customer is responsible for changes in the service installation required by the Company before service is supplied.

B. Services Available - The Company supplies alternating current only, at a nominal frequency of 60 hertz. The minimum service size normally accepted by the Company is 100 amp, single-phase, three wire. (Single-phase, two wire service is available for limited loads, such as, traffic signals, small signs, telephone booths, etc.) Available voltages are as specified in the Company's tariff. However, not all service voltages are available in all areas. Before purchasing electrical equipment or proceeding with any wiring, information regarding the type of service available should be obtained from the Company.

### C. Customer Responsibility

1. Application for Service - The Customer must notify the Company well in advance of the date service is desired. It may be necessary to complete an application for service at the Company office and in some cases deposits are required. (Note: The receipt of a Fire Underwriter's inspection at the Company office does not constitute an application for service.) The following information must be supplied before service will be rendered: Customer account number (if not a new installation), Customer name, Customer

phone number(s), service and mailing address, nearest UGI pole number (10-digit), load data, and type of dwelling or business.

2. Right-of-Way - Where necessary, the Customer shall provide an adequate right-of-way for UGI to supply service to his premises. An adequate right-of-way will consist of a strip of land as specified by the Company which must remain open and accessible so that the Company can perform line improvements, clearance, and maintenance as may be from time to time required.

3. Tree Trimming - If tree trimming is required to accommodate the installation of any power lines on private property, it will be the Customer's responsibility to provide the initial trimming as directed by the Company. The Company will perform subsequent trimming as it considers necessary to maintain adequate clearance to its facilities.

4. Inspections - The wiring and appliances on the premises of the Customer must be installed in accordance with and conform to the latest rules and requirements of the National Electrical Code, and other such state or municipal regulations as may be applicable. It will be the Customer's responsibility to obtain all necessary electrical inspections prior to connection by the Company. Furthermore, the Company shall have the right, but shall not be obligated, to examine the Customer's installation at the time service is first supplied or at a later time. If at any time, the Company finds the wiring, fixtures, or appliances of the Customer to be defective or dangerous, the Customer will be informed and service may be refused or discontinued unless the condition is corrected. The Company's responsibility extends only to the supply of service at the point of delivery.

5. Metering Devices and Equipment - The Customer shall provide, without charge, a suitable location for the meter or meters, transformer or transformers, or other equipment of the Company along with an adequate point

of attachment for the service drop. The location of these items will be specified by the Company and must be of convenient access to meter readers or inspectors. Meters must be located between four (4) and six (6) feet above final grade.

Tampering, interferring with, or breaking of seals on meters, switches, or other equipment of the Company installed on the Customer's premises is prohibited. Offenders will be prosecuted to the full extent of the law.

6. Connection of Multiple Conductors - When a Customer installs a service entrance consisting of two or more conductors per phase, it is the Customer's responsibility to install, own, and maintain the necessary equipment to bring all conductors for each phase and the neutral to a common single connection. For specific information regarding situations of this nature the Company should be contacted.

7. Change of Connected Load - When a Customer's service is connected to the Company's system, arrangements are made for meters, transformers, and other equipment to supply the load at that time. It is essential that Customers notify the Company of any material increase or decrease in load. It is also advisable that the Customer consult the Company regarding equipment so that the proper type will be obtained. The Company will hold the Customer liable for any damages caused by increases in load added to its system without permission.

8. Change or Relocation of Company Facilities - Any alterations or changes in service connections, or relocation of service connections, or Company's facilities supplying individual Customers shall be at the expense of the Customer when any of said contingencies are requested by the Customer (and are for the Customers benefit).

9. Upgrading or Replacement of Service - If existing service entrance equipment is upgraded or replaced, the Customer shall provide a safe means of maintaining electrical service until the required inspections are obtained and the Company permanently connects the new entrance equipment to its lines. Under no circumstances will the Company allow two meters to be installed for the purpose of allowing the Customer to transfer load from one panel to another. The Company will make only one (1) trip to a premises for upgrading or replacing of service equipment.

10. Liability for Damages - The Company assumes no responsibility for any damage done by, or resulting from any defect in the wiring, fixtures, or appliances of the Customer. In the event that any loss or damage to property of the Company, or any accident or injury to persons is caused by or results from the negligence or wrongful act of the Customer, his agents or employees, the cost of the necessary repairs or replacement or injury shall be paid by the Customer to the Company; and, any liability otherwise resulting shall be the responsibility of the Customer.

D. Company Responsibility - The Company will supply electric service of the highest quality consistent with reasonable cost. However, the Company cannot guarantee continuous uninterrupted service to any Customer and will not assume responsibility for damages resulting from its interruption.

1. Company Installation - The Company will provide the necessary equipment for service up to the point of delivery along with necessary metering devices, after the Customer's responsibilities have been met. Only one source of supply to a premises at a single point of delivery will be allowed in most cases. The point of delivery on overhead service is the point of connection to the Customer's service entrance conductors. On

underground residential service, installed by UGI, the point of delivery is normally the line side of the Customer's meter trough. (UGI will not install underground services to commercial or industrial Customers.) The point of delivery for any Customer installed underground is at the point of connection to the Company's supply system.

Overhead service is normally supplied at no charge to Customers within 100 feet of existing Company facilities. If the Customer requires an unusually long service, more than 100 feet from Company facilities, or desires underground service, minimum monthly bills and/or aid to construction charges may apply. The Company should be contacted for information regarding these situations.

Connection of Company facilities and Customer equipment shall be made only by authorized UGI employees. Every reasonable effort will be made to coordinate work with the Customer on both new and upgraded installations.

2. Company Owned Services - In the late 1960's and early 1970's the Company purchased new service installations from many Customers. The Company agreed to maintain the following equipment on these installations: weatherhead, service cable and/or conduit, meter trough, grounding, main panel box, and the main circuit breaker. The Customer is responsible for all branch breakers and the wire fed from them.

These installations are identified by a sticker, which reads "Property of UGI Corporation," placed on the main panel box or the meter trough. A record is also kept by UGI, at the Kingston office, of all "Company Owned Services."

The Customer forfeits all maintenance privileges when he alters, relocates, or upgrades one of these services.

3. Service to Motors - The Company reserves the right to determine the method of supply and/or to prescribe restrictions on the method of operation, when necessary, of loads which may cause flicker on the service of its Customers. Anyone intending to install such a load must notify the Company prior to its proposed addition. Service will not be supplied to fluctuating loads of appreciable size without a comprehensive review by the Company.

4. Customer Information - The Company does not accept responsibility for any information given to a Customer or applicant for service unless such information is furnished by the assigned authorized representative and, when requested, confirmed in writing.

5. Identification - Employees of the Company are furnished I.D. cards and/or badges. All Customers should refuse admission to their property of any persons not having the proper identification.

E. Rate Information - All rate schedules are available at the UGI office. For information regarding rates, available voltages, and any other rules covered in the Electric Service Tariff, the UGI Consumer Relations Department should be contacted.

### SECTION 3 - TEMPORARY SERVICE

The installation of Company equipment for any Customer service of limited duration, is considered temporary. Temporary services are available for both overhead and underground installations.

The Customer must secure from an authorized Company representative, a location for any temporary service structure. (If applicable, the permanent service location will also be given at this time.)

The Company will connect the temporary service only after the Customer has provided the following:

1. Payment for the installation and removal of all temporary equipment. (In the case of special installations requiring poles, transformers, and other Company equipment the estimated cost of installation and removal will be utilized.)
2. An electrical inspection from a qualified Fire Underwriter's inspection agency and/or local municipal inspection agency.
3. Size and type of temporary service required.
4. Proper application for service.

When underground service is requested in other than an underground development and the Company intends to supply the temporary service by installing what will eventually be the permanent service wire, the Customer must pay the temporary service charge and the underground service charge prior to commencement of any related work.

In the case of an overhead temporary service where the Company representative determines the temporary service wire will eventually be used as the permanent service, the location of the temporary structure will be appropriately designated. In this situation the wire installed by the Company will be of sufficient size and length to be used for the permanent service, with any excess looped and hung near the top of the temporary structure.

The Customer's temporary service entrance equipment must meet all requirements of the National Electrical Code and, for the normal 100 or 200 amp single-phase service, the structure must conform to the Company's Sketches No. 1 or No. 2. Temporary service entrance equipment attached to a building or tree will not be accepted.

Any structure determined to be unsafe by the Company will not be accepted and service will not be connected until corrective action is taken by the Customer.

SECTION 4 - RESIDENTIAL SERVICE - OVERHEAD

A. The Company will install its service wires from the Company's distribution system, usually located on a pole, to the Customer's service entrance conductors on a building or service support. Normally, only one service drop per premises will be provided by the Company.

B. The Customer's service location will be designated by an authorized Company representative. This point will be the most practical and accessible from the Company's existing facilities and will provide an adequate area for the connection of the Customer's service entrance conductors by use of a ladder placed on the ground.

C. The Customer will install the necessary attachment anchor as supplied by the Company to the building or service support. If the structure does not provide an area for satisfactory anchor attachment, the Customer must install additional reinforcement for this purpose.

D. The Customer will install the attachment anchor at a point on the building or service support 12" below the service head and such that the minimum vertical and horizontal clearances indicated below are met. However, the attachment anchor must never be installed more than 25 feet above ground level. (See Sketches No. 3 and No. 4.)

<u>Vertical:</u>	<u>Clearance (Feet)</u>
a. Roads, streets, alleys, and parking lots subject to truck traffic.	18'
(Note: Service drops cannot cross limited access highways.)	

Vertical:

Clearance  
(Feet)

- |   |              |
|---|--------------|
| b. Lands traversed by agricultural vehicles.  | 18'          |
| c. Signs, chimneys, antennas, tanks, etc.<br>(The 5' clearance may be reduced to 3' if the structure does not require maintenance where the person passes between the service and the structure.) | 3'*<br>5'**  |
| d. Communication conductors, cables, and messengers.  | 2'           |
| e. Residential driveways and commercial areas not subject to truck traffic.   | 12'          |
| f. Spaces accessible to pedestrians only.   | 12'          |
| g. Above or below balconies and roofs accessible to pedestrians.  | 8'*<br>12'** |
| h. Above or below roofs or projections not accessible to pedestrians.   | 3'*<br>10'** |
| i. Roofs accessible to vehicular traffic.   | 18'          |

Horizontal:

- |   |             |
|---|-------------|
| j. Clearance to building openings such as windows, doors, porches, fire escapes or similar openings. (The 5' clearance may be reduced to 3' if the structure does not require maintenance where the person passes between the service and the structure <u>or</u> where space is not adequate provided the conductors are | 3'*<br>5'** |
|---|-------------|

- insulated to provide sufficient dielectric to prevent a short circuit in case of a momentary contact.)
- k. Telephone or television service drop. 2'
- l. Rainspout, gutter, vent pipes, etc. 1'

NOTES: \* Cable services supported by grounded bare messenger.

\*\*Open service conductors.

For special situations or those not covered above, the National Electrical Safety Code will normally prevail. However, the Company should be contacted regarding these instances.

E. When a building is of insufficient height to provide adequate clearances, it will be necessary for the Customer to furnish, install, and maintain a support of sufficient height and strength to obtain the required clearance. This will normally be in the form of a rigid galvanized steel conduit mast as shown in Sketch No. 5.

F. The service drop attachment may be made on a Customer owned service and/or meter pole if desired by the Customer. (See Sketches No. 6 and No. 7.) The pole must be of sufficient height to provide necessary clearances as specified under paragraph D above. The Customer will own, install, and maintain the pole and if necessary provide guying to offset the pull of the Company's service drop. Any installation determined to be unsafe by the Company will not be connected.

G. The Customer must provide adequate space on his property and right-of-way, if necessary, from the Company's nearest distribution line to the point of delivery. This is necessary for the Company to install and maintain required facilities (poles, transformers, etc.) with the intent of not exceeding the approximate service drop lengths as indicated in the following

<u>Service Size</u>	<u>Maximum Length</u>
#2 Triplex Aluminum	100'
2/0 Triplex Aluminum	75'
Open 3 Wire, 4/0 or 350 MCM Aluminum	50'

H. Parallel service drops will be permitted only upon Company approval and when installed all drops must be served from only one transformer or transformer bank. Normally the following will be the determining circumstances.

1. On a multiple dwelling when one tenant desires a larger service and the existing service drop is not capable of carrying the new service and the existing service or services. Also when a new larger service drop is not large enough to carry the new service and existing service or services.

2. When capacity requirements make parallel service drops advisable.

I. The Company will supply new services under a residential rate schedule with 3 wire, 120/208 or 120/240 volt service only. The minimum service size accepted by the Company is 100 amp.

SECTION 5 - COMMERCIAL AND INDUSTRIAL SERVICE - OVERHEAD

Will be completed at a future date.

## SECTION 6 - RESIDENTIAL SERVICE - UNDERGROUND

### A. General Information

1. The Customer's service location will be designated by an authorized Company representative. This point will be the most practical and accessible from the Company's existing or planned facilities. Normally, only one service lateral per premises will be provided by the Company. (See Section 4H.)

2. When underground service is being considered or in areas where it may be required (underground developments), the Customer should contact the Company before beginning any electrical work. There may be charges involved for the excess cost of underground service over normal overhead service. Construction will not begin until the Customer pays to the Company these charges as estimated by the Company.

3. It will be the responsibility of the Customer to provide satisfactory easements, as specified by the Company, for any required Company facilities. Since installation and maintenance of Company equipment requires ready access, no structure, of any type, will be allowed on Company easements. If the Customer requests the Company to alter its facilities as originally installed and the Company agrees to do so, it will be at the expense of the Customer.

4. The Customer is responsible for piercing and sealing walls whenever conduits enter a building. (See Sketch No. 11.)

5. The Company will supply underground services under a residential rate schedule with 3 wire, 120/208 or 120/240 volt service only. The minimum service size accepted by the Company is 100 amp.

### B. Underground Developments

1. For residential developments covered under the Pennsylvania Public Utility Order I.D. No. 99, the underground installation will be made

in accordance with the Company's Electric Service Tariff Rule No. 18. Before finalizing plans for the development of property as residential dwellings, the Customer should contact the Company.

In general, all distribution, service, and street lighting lines installed in a development covered by Rule No. 18 shall be installed underground and shall be owned and maintained by the Company. The installation may be performed by the Company or by such other entity as the Company may authorize.

2. All service entrance equipment shall be furnished, installed, and maintained by the Customer as specified on the appropriate Sketch No. 8, No. 9, or No. 11. In the special cases indicated on Sketch No. 11 the Company will supply the current transformer and meter trough for installation by the Customer.

3. When the Company elects to install direct burial cable and the Customer plans to install a sidewalk, driveway, or patio in the area where the underground service is to be located, it will be the Customer's responsibility to install conduit as specified by the Company for protection and ease of maintenance of the service wire. Acceptable conduits are electrical grade PVC Schedule 40, threaded galvanized rigid and intermediate steel. Ownership of all such conduits installed by the Customer on the line side of the point of delivery and not located in, on or under buildings shall vest in the Company free-of-charge. The Company will thereafter maintain these facilities.

4. Various agreements are utilized with developers of residential areas for trenching and backfilling. A Customer should contact the Company if any doubt exists as to where this responsibility lies.

C. Underground Service from Overhead Secondary Facilities - Company Installed

If a Customer who would normally be supplied from the Company's overhead distribution system, desires the service wires across his property to be installed underground, the Company will install, own, and maintain an underground service lateral from a Company pole on or adjacent to the Customer's property to the point of delivery. The following conditions will apply.

1. The Customer must pay to the Company its estimated excess cost of underground service over the estimated cost of normal overhead construction, plus any right-of-way or permit fees incurred by the Company.

2. Trenching and backfilling must be performed by the Customer in accordance with Company specifications. (See Sketch No. 12.)

3. Service entrance requirements, conduit specifications, and related items will be as covered under Section 6-B-2, 3, and 4 above and Sketches No. 8, No. 9, and No. 11.

D. Underground Service from Overhead Secondary Facilities - Customer Installed

As an alternative to Company installed facilities, the Customer may furnish, install, and maintain his own underground service. The service conduit may be installed on a pole or support belonging to the Customer or a Company owned pole. (Service entrance equipment, meter trough, disconnect, etc., will not be permitted on a Company pole.)

When a Customer pole or service support is utilized, the Company will attach its overhead service drop to this structure and make the connection to the Customer's service conductors at this point. The Company's facilities are then a standard overhead service.

If the Customer elects to utilize an accessible Company pole, he must first obtain permission from an authorized Company representative. Upon receiving permission, the Customer may install his service conduit on the designated pole. The conduit should be terminated with the proper weather-head approximately one foot from the Company's existing secondary conductors or as specified by the Company. A minimum of three feet of conductor must extend from the conduit for connection by the Company.

In all cases of Customer installed underground, the Customer is responsible for all facilities, excluding the meter, beyond the Company's point of attachment.

The following are general specifications which can be used in planning a Customer installed underground service. For additional information see Sketches No. 10, No. 11, and No. 12.

1. The location of a Customer owned service pole or support will be designated by the Company and must provide adequate clearances as specified by the National Electric Safety Code. It shall be located not less than six feet nor more than the appropriate maximum service lengths as tabulated in Section 4-G from the Company's source of supply. Sufficient space must be available for the connection of the Customer's conductors to the Company service drop by use of a ladder placed on the ground. If the pole or service support must be guyed to offset the pull of the Company's service drop, it will be furnished, installed and maintained by the Customer.

2. If the Customer's underground service is to be terminated on a pole or service support owned by a third party and to which the Company has no attachment rights, the Customer must secure, at his expense, the necessary permission in writing and construction specifications, if available. The Company will not attach its conductors to such a support until evidence of the required permission is presented by the Customer.

3. The Customer's underground service conductors must be continuous without joints or splices from the weatherhead to the metering equipment.

4. It is recommended that the Customer's underground service conductors be buried at least thirty inches below finished grade. The conductors may be an approved direct burial cable or installed in conduit as specified by the National Electric Code. When the Customer's conduit is installed on a Company pole, only threaded galvanized rigid steel will be accepted. When direct burial cable is used, it is recommended that select fill be utilized for protection of the wire and that conduits be placed beneath driveways, sidewalks, etc.

5. When the Customer's underground service extends beneath a public road, it must be installed in threaded galvanized rigid steel conduit at a minimum depth of 30" (36" when beneath a state highway). Any necessary permits from the governing body having jurisdiction, must be obtained by the Customer.

6. After all required inspections have been received by the Company, arrangements will be made for connection of the Customer's service conductors. However, only underground services which the Company accepts as properly installed and maintained by the Customer will be connected or be permitted to remain connected to the distribution system of the Company.

E. Underground Service from Overhead Facilities - Company Installed Conductors and Customer Installed Conduit

An option to totally installed and owned Company facilities is the installation of underground service conduit by the Customer. By doing so and allowing the Company to install its conductors at a later date the Customer

may reduce his costs and also ease coordination problems associated with opening and backfilling a trench. The conduit must extend from a Company owned pole to the point of delivery. (Service entrance equipment, meter trough, disconnect, etc., will not be permitted on a Company pole.)

Following are the requirements and conditions under which this type of service will be permitted.

1. The Customer must pay to the Company its estimated excess cost of underground service over the estimated cost of normal overhead construction, plus any right-of-way or permit fees incurred by the Company.

2. The Customer's service location and service pole shall be designated by an authorized Company representative.

3. Trenching and backfilling shall be performed by the Customer in accordance with Company specifications. (See Sketch No. 12.) All service entrance equipment, including the conduit, shall be furnished and installed by the Customer. (See Sketch No. 26.) Acceptable conduits are electrical grade PVC Schedule 40 and threaded galvanized rigid steel. (When steel conduit is utilized the Customer must install an adapter at the service pole which will accept PVC Schedule 40.) Only two 90 degree bends, which must be a minimum 13" radius, will be permitted. Approval by an authorized Company representative will be required for any additional angles in the conduit installation. The Customer shall also install a pull line in the conduit for use by the Company. No wires, other than those required for electrical service, will be permitted in the conduit installed for Company use.

4. When the conduit extends beneath a public road, it must be threaded galvanized rigid steel at a minimum depth of 30" (36" when

beneath a state highway). Any necessary permits from the governing body having jurisdiction, must be obtained by the Customer.

5. After the conduit has been installed and prior to backfilling the trench, a Company representative shall check the installation for compliance with Company specifications.

6. Upon receipt of all required electrical inspections by the Company, arrangements will be made for installation of the service conductors. However, only installations which the Company accepts as properly installed by the Customer will be connected or be permitted to remain connected to the distribution system of the Company.

7. Upon completion of the service installation, ownership of all conduit installed by the Customer on the line side of the point of delivery and not located in, on or under buildings shall vest in the Company free-of-charge. The Company will thereafter maintain these facilities.

F. Underground Service to Isolated Residential Customers

Service to single family residences located alone or in a development of four unoccupied lots or less are not addressed under the Company's Electric Service Tariff Rule No. 18 (see B. above). They will also not be covered in C., D. and E. above if service cannot be supplied from the Company's existing secondary facilities.

A primary extension may be required for these situations, therefore, the Company should be contacted well in advance of the date service is desired so that all options, requirements, and associated charges for service may be considered.

SECTION 7 - COMMERCIAL AND INDUSTRIAL SERVICE - UNDERGROUND

Will be completed at a future date.

## SECTION 8 - MOBILE HOME SERVICES

A. The Company will supply either overhead or underground service to a permanently sited mobile home through the Customer's service entrance equipment, mounted adjacent to the mobile home. The service entrance equipment cannot be mounted on the mobile home or its foundation. Double wide units, assembled and placed on a permanent foundation, which have metal floor joists, are also considered mobile homes and must have the service entrance equipment mounted adjacent to the structure. Sketches No. 13 and No. 14 represent typical mobile home installations. As with any service, the location will be given by an authorized Company representative.

B. A mobile home is considered permanent if a permanent foundation, or pillars, are used to support the mobile home, permanent water and sanitary facilities are installed, and the occupant of the mobile home owns the property on which it is located. If a mobile home is determined by the Company to be permanent, service will be extended as to any permanent dwelling with the exception of the location of the service entrance equipment as discussed in paragraph A above.

C. If a mobile home is determined by the Company to be temporary, service will be extended overhead a maximum of 100 feet. Company installed underground facilities are not available in this situation.

D. When the Customer's mobile home is located within a mobile home park, the park owner is usually responsible for contacting the Company regarding the extension of facilities for service. If an extension is to be made to five or more lots in a mobile home park, underground service will be installed in accordance with Rule No. 18 of the Company's Electric Service Tariff. The park owner should contact the Company regarding the location of facilities and charges associated with the underground installation. (See Section 6-A of this manual for more information.)

E. The grounding conductor and service entrance equipment shall be grounded in accordance with the latest edition of the National Electrical Code.

SECTION 9 - METERING - GENERAL

A. The Customer shall provide, without charge to the Company, space to accommodate the Company's meters and associated equipment at the point of delivery or nearest suitable location designated by an authorized Company representative. The area chosen shall be readily accessible to Company personnel at all reasonable times for reading, testing, and replacement of equipment.

B. The capacity and type of meter installation needed to accommodate the Customer's load and type of service shall be determined by the Company.

C. The Customer must install the meter trough or panel at the designated location approximately 4' to 6' above finished ground or floor level. It shall be installed level and plumb and securely fastened to the structure or other support not subject to vibration. Locations will be chosen so that the meter is protected from mechanical damage and does not interfere with pedestrian or vehicular traffic.

D. Meters shall be installed, removed, and/or relocated only by authorized employees of the Company.

E. Metered and unmetered conductors are not to be installed in the same conduit or raceway.

F. Meter troughs, transformer cabinets or other metering equipment are not to be used as junction boxes.

G. The Company's standard practice is to locate all meters outdoors. Indoor locations will be permitted only when approval, in writing, is obtained from the Company. An approved indoor location must be readily accessible and not located where excessive heat or moisture may develop, acid fumes are present, or unusual amounts of dust exist.

H. A 4' minimum clearance, measured from the wall on which the meter trough and/or instrument transformer cabinet are mounted, must be provided directly in front of these devices. The installation must also not interfere with the opening of doors or windows.

SECTION 10 - METERING - SELF-CONTAINED INSTALLATIONS

A. The Customer is responsible for installing and maintaining a Company approved meter trough whenever the metering specified by the Company is self-contained. The Company uses self-contained metering as specified in the following list and also on larger services where the demand is not expected to exceed one-half the meter capacity.

<u>Voltage</u>	<u>Type Service</u>	<u>Capacity (Amps)</u>
120	1 phase - 2 wire	Maximum 100
120/240	1 phase - 3 wire	Maximum 400*
120/208	3 wire Network	Maximum 200
120/208	3 phase - 4 wire	Maximum 200
120/240	3 phase - 4 wire	Maximum 200
240	3 phase - 3 wire	Maximum 200

\*When a Customer is to be placed on Rate RFU, 300 and 400 amp service cannot be metered with self-contained equipment.

Current transformers are required.

Tables 1, 2, 3, 4, 5, 6, 7, 8 and 9 list meter troughs which have been approved by the Company. Sketch #16 shows typical meter trough connections.

B. The meter trough must be installed on the line side of all service protective equipment except where a main service disconnect is required by the National Electrical Code.

C. Approved manual by-pass facilities are required on all meter troughs except all-in-one or stacked (gangable) multi-meter assemblies. Manual by-passes are not permitted on these types of multiple meter troughs.

SECTION 11 - METERING - INSTRUMENT TRANSFORMER INSTALLATIONS (UNDER 600 V)

A. The Company will furnish the metering transformers, including mounting devices, and an appropriate meter trough when instrument transformer metering is specified.

B. The Company requires transformer type metering for single-phase services which exceed 400 amp capacity (200 amp capacity for those Customers who will be supplied under Rate RTU), polyphase services which exceed the capacity of self-contained metering and for all services where the voltage between phases is 480 volts or greater.

C. The location of the metering transformers and meter trough shall be specified by an authorized Company representative. The meter trough will normally be located outdoors. The metering transformers may be located outdoors or indoors, upon approval of the Company. When installed outdoors on a service rack located on a building or other Customer structure, it is the Customer's responsibility to install all metering equipment including a 1½" rigid galvanized steel conduit, which will be owned and maintained by the Customer, for the Company's metering wires. The conduit must run from the metering transformers to the meter trough, a distance which should not exceed 50 feet.

When approval for an indoor installation is obtained, the Customer is also responsible for furnishing, installing, and maintaining a Company approved instrument transformer cabinet. The cabinet must be constructed of minimum #16 gauge steel, have double hinged doors, and a latching hasp capable of accepting a Company lock. The minimum acceptable size is 36" x 36" x 10", however, larger sizes may be required. The Company should be contacted before the Customer purchases any metering equipment.

D. If the metering transformers and meter trough are to be installed on a Company owned pole or structure, the Company will furnish, install and maintain all metering equipment.

E. When a three-phase padmounted type transformer is utilized to serve a Customer, the metering transformers are normally installed, by the Company, in the secondary compartment of the transformer. The Customer is responsible for installing the meter trough at the specified location. It is also the Customer's responsibility to furnish, install and maintain a 1½" rigid galvanized steel conduit from the meter trough to the secondary compartment of the padmount transformer.

F. Metering transformers must be installed on the line side of all service protective equipment in the manner specified by the Company unless the location of the meters mutually agreed upon is remote from the service entrance and/or where the National Electrical Code requires the installation of a main service disconnect ahead of the metering equipment.

G. Sketches 11, 17, 18, 19, 20, 21, 22, 23, 24 and 25 illustrate typical instrument transformer installations.

## SECTION 12 - METERING - MULTI-METER INSTALLATIONS

A. Meters for all Customers in a multiple occupancy building must be grouped at one location which is readily accessible. In large buildings it may be desirable to establish several metering points and group meters for Customers by floors or sections of the building. In this situation, the Customer is responsible for installing a common service entrance for the building with an individual main from the service protective equipment to each group metering point. The meter installation at each location is the same as any other group installation. (See Sketch No. 15 and Section 10-C above.)

B. The meter trough and sub-service disconnecting equipment for each Customer in a multi-meter installation shall be clearly and permanently marked by the owner designating the apartment numbers, lot number, etc., that it supplies.

C. Meter troughs for multi-meter installations may be installed either as horizontal multiple meter troughs with built-in bussing (Sketch No. 15) or as individual meter troughs preceded by a sealable horizontal wire trough. Where a wire trough is installed, all taps from the common service entrance conductors to the metering equipment for each sub-service shall be made in the wire trough by the Customer.

Approved factory assembled multiple meter trough units are listed in Tables 3, 4, 5, and 6.

# Tables

TABLE 1

JAWS	AMPERES	ANCHOR	CROUSE-HINDS	LANDIS & GYR	GENERAL ELECTRIC	DURHAM	MILBANK	SUPERIOR
4	100	URS1004XB	RJ192AX RJ192CXJ	UAS111-OPZ	741X11G214	1004162	R7487RL-KK	P-100
5	100	URS1004XB W/8855-1	RJ192AX W/RX012	UAS111-OPZ W/659-0121	741X11G215	1004162 W/902478	R7487RL-KK W/5T8K	P-100-X
4	200	URS1804B	RS-172AX RS-192AX RS-192CXJ	UAS317-OPZ	743X1G121	1004161 1004159	U7021RL-KK U9319-XL	P-200
5	200	URS1804B W/8855-1	RS172AX RS192AX W/RX012	UAS317-OPZ W/659-0121	743X1G121 W/9688886G7	1004161 W/902478 1004159 W/902478	U7021RL-KK W/5T8K U9319-XL	P-200-X
4	300 and 400	U44542	--	44704-82	--	1004984	S-1797-X	RPU557SA- MS8807

NOTE: 5th Terminal -- Devices for use on 120/208, 3-wire services must have 5th terminal installed. Specify when ordering.

NOTE: Only the basic catalog references shown in these columns are necessary for acceptance. Alphabetical and/or numerical suffixes denote hub size or other features. When aluminum conductors are used, the electrical contractor shall apply the corrosion inhibiting compound recommended by and in the manner prescribed by the cable manufacturer.

Rev. 3-17-92

**UGI**  
CORPORATION

ELECTRIC UTILITY DIVISION  
247 Wyoming Ave. P.O. Box 1389, Kingston, Pa. 18704

APPROVED METER SERVICE DEVICES  
SINGLE-PHASE OVERHEAD SINGLE POSITION

DRAWN BY *(Signature)* DATE 8-24-88  
 APPROVED BY *(Signature)* DATE 1-5-89  
 DRAWING NO. SCALE

TABLE 2

# JAWS	AMPERES	ANCHOR	LANDIS & GYR	DURHAM	MILBANK	SUPERIOR		
4	200	1URS1804B	UAS817-PPZA UAS877-PPZA	1004884	U3126-0-KK	M-200-U-SW		
5	200	1URS1804B W/8855-1	UAS817-PPZA UAS877-PPZA W/659-0121	1004884 W/902478	U3126-0-KN W/5T8K	M-200-U-SW		
4	300 and 400	U 44542	44704-82	1004984	S1797-X	RPU557SA/ MS8807		

NOTE: 5th Terminal -- Devices for use on 120/208, 3-wire services must have 5th terminal installed. Specify when ordering.

NOTE: Only the basic catalog references shown in these columns are necessary for acceptance. Alphabetical and/or numerical suffixes denote hub size or other features. When aluminum conductors are used, the electrical contractor shall apply the corrosion inhibiting compound recommended by and in the manner prescribed by the cable manufacturer.

**UGI**  
CORPORATION  
ELECTRIC UTILITY DIVISION  
247 Wyoming Ave. P.O. Box 1389, Kingston, Pa. 18704

APPROVED METER SERVICE DEVICES  
SINGLE-PHASE UNDERGROUND SINGLE POSITION

DRAWN BY *ED DONHAM* DATE *8-24-88*  
 APPROVED BY *L.F. [Signature]* DATE *1-5-89*  
 DRAWING NO. \_\_\_\_\_ SCALE \_\_\_\_\_

TABLE 3

# OF TERMINALS	AMPERES	# OF POSITIONS	ANCHOR	DURHAM	MILBANK	SUPERIOR SWITCHBOARD
4	1 0 0	2	2URS251B-2 **2URSV-1504LB	1004400	S9392-XL-KK	P-102
		3	3URS251B-2	1004402	S9393-XL-KK	P-103
		4	4URS241B-2	1004405	S9394-XL-KK	P-104
4	2 0 0	2			S9402-X-KK *S2143-XL-KK	P-202 *RLO-458C-A
		3			S9403-X-KK	P-203
5	----	4			S9404-X-KK	P-204
		----	9955-2		9959	X

NOTE: 5th Terminal: Devices for use on 120-208, 3-wire service must have 5th terminal installed. Specify when ordering.  
 NOTE: Only the basic catalog references shown in these columns are necessary for acceptance. Alphabetical and/or numerical suffixes denote hub size or other features. When aluminum conductors are used, the electrical conductor shall apply the corrosion inhibiting compound recommended by and in the manner prescribed by the cable manufacturer.  
 \* Left position 200 Amp; Right position 100 Amp.  
 \*\* Vertical trough--overhead only.

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 ELECTRIC UTILITY DIVISION  
 247 Wyoming Ave. P.O. Box 1389, Kingston, Pa. 18704

APPROVED METER SERVICES DEVICES  
 SINGLE-PHASE OVERHEAD AND UNDERGROUND  
 MULTI-POSITION WITH END WIRING COMPARTMENT

DRAWN BY *EDP/monum* DATE *5-24-88*  
 APPROVED BY *R. F. P. P. P.* DATE *1-5-89*  
 DRAWING NO. SCALE

TABLE 4

# OF TERMINALS	AMPERES	# OF POSITION	ANCHOR	DURHAM	MILBANK	SUPERIOR SWITCHBOARD	LANDIS & CYR
4	1 5 0	2	2URS1504-LB	1004431	U-9212XL-KK	CP-152	
		3	3URS1504-LB	1004432	U-9213XL-KK	CP-153	
		4	4URS-1504-LB	1004433	S-9214XL-KK	CP-154	
		5	5URS-1504-LB	1004434	S-9215XL-KK	CP-155	
		6	6URS-1504-LB	1004435	S-9216XL-KK	CP-156	
4	2 0 0	2	2URS-1804B-C600 2URS-1804B-C350	1004401 *1004122	U-1252-X-KK	CP-202	UA2717-YPZ
		3	3URS-1804B-C600	1004404	U-1253-X-KK	CP-203	UA3717-YPE
		4	4URS-1804B-C600	1004438	U-1254-X-KK	CP-204	UA4717-YPZ
		5	5URS-1804B-C600	1004439	S-1255-X-KK	CP-205	UA5719-KPZ
		6	6URS-1804B-C600	1004440	S-1256-X-KK	CP-206	UA6719-KPZ
5			9955-2	902478	9959	X	

NOTE: 5th Terminal: Devices for use on 120-208, 3-wire services must have 5th terminal installed. Specify when ordering.  
 NOTE: Only the basic catalog references shown in these columns are necessary for acceptance. Alphabetical and/or numerical suffixes denote hub size or other features. When aluminum conductors are used, the electrical conductor shall apply the corrosion inhibiting compound recommended by and in the manner prescribed by the cable manufacturer.  
 \* Left position 200 Amp; Right position 100 Amp

**UGI CORPORATION**  
 ELECTRIC UTILITY DIVISION  
 247 Wyoming Ave. P.O. Box 1389, Kingston, Pa. 18704

APPROVED METER SERVICES DEVICES  
 1Ø OVERHEAD AND UNDERGROUND  
 MULTIPOSITION WITH CENTER WIRING COMPARTMENT

DRAWN BY *[Signature]* DATE 8-24-88  
 APPROVED BY *[Signature]* DATE 1-5-89  
 DRAWING NO. \_\_\_\_\_ SCALE \_\_\_\_\_

TABLE 5

TERMINALS	ANCHOR	CROUSE-HINDS	CUTLER-HAMMER	GENERAL ELECTRIC	ITE	SQUARE D	CHALLENGER (SYLVANIA)	BRYANT	MIDWEST
4 Or 5	M-211R M-411RB	UM Series AM Series	CG-4 and CG-5 Series	TMM Series	PAK and WPAK Series	MP Series	MP Series	QP-2 to QP-6	MM Series

**SPECIFICATIONS:**

1. The catalog number must be stamped on the outside of the device so that it will be visible after the device is installed.
2. MATERIAL: Aluminum, galvanized steel or equivalent.
3. MOUNTING: Horizontal or vertical.
  - (a) The center of the bottom meter must be a minimum of 30" above the floor.
  - (b) The center of the top meter must not be more than 84" above the floor or ground.
  - (c) There shall be a clearance of 4 foot free space in front of the meter.
  - (d) On outdoor installations, if the center line of the bottom meter is 60" above ground, no barriers are required. If the center line of the bottom meter is between 60" and no less than 44" above ground, barriers are required around the meters - for example, a fence, shrubbery, etc.
4. BY-PASSES: Ringless - manual type required; ring - none permitted.
5. METER GUIDES: Ringless - manual type required; ring - none permitted.
6. BARRIERS: Required on ringless devices.
7. BUSSING: Required between (1) compartments, (2) metered and un-metered cables.
8. 5TH TERMINAL: Devices for use on 120/208 volt, 3-wire. Network services must have 5th terminal installed. Specify when ordering.

**NOTE:** Only the basic catalog references shown in these columns are necessary for acceptance. Alphabetical and/or numerical suffixes denote hub size or other features. When aluminum conductors are used, the electrical contractor shall apply the corrosion inhibiting compound recommended by and in the manner prescribed by the cable manufacturer. (8 1/2", 9" or 10" center spacings are acceptable.)



**ELECTRIC UTILITY DIVISION**  
247 Wyoming Ave. P.O. Box 1389, Kingston, Pa. 18704

APPROVED METER SERVICE DEVICES  
SINGLE-PHASE ALL IN ONE  
MULTIPLE METER TROUGHS

DRAWN BY *SPENGLAM* DATE 8-24-88  
 APPROVED BY *R.T. Macdonald* DATE 1-5-89  
 DRAWING NO. SCALE

TABLE 6

TERMINALS	ANCHOR	BRYANT	CROUSE-HINDS	CUTLER-HAMMER	GE	ITE	SUPERIOR	SQUARE D	CHALLENGER
4 Or 5	VMS: M12 to M15 and M32 to M35 Series	QS-2 to QS-6 and QS-2R to QS-5R Series	UA UE RY AG Series	CG-2 Series CG-3 Series	TMP Series	MM and WMM Series	U and CCU Series	EZM Series and M3M Series M35M Series	MM and M3M Series M35M Series

**SPECIFICATIONS:**

1. The catalog number must be stamped on the outside of the device so that it will be visible after the device is installed.
2. **MATERIAL:** Aluminum, galvanized steel or equivalent.
3. **MOUNTING:** Horizontal or vertical.
  - (a) The center of the bottom meter must be a minimum of 30" above the floor.
  - (b) The center of the top meter must not be more than 84" above the floor or ground.
  - (c) There shall be a clearance of 4 foot free space in front of the meter.
  - (d) On outdoor installations, if the center line of the bottom meter is 60" above ground, no barriers are required. If the center line of the bottom meter is between 60" and no less than 44" above ground, barriers are required around the meters - for example, a fence, shrubbery, etc.
4. **BY-PASSES:** Ringless - manual type required, ring - none permitted.
5. **METER GUIDES:** Required on ringless devices.
6. **BARRIERS:** Required between (1) Compartments, (2) Metered and un-metered cables.
7. **BUSSING:** Factory bussing required.
8. **5TH TERMINAL:** Devices for use on 120/208 volt 3-wire. Network services must have 5th terminal installed. Specify when ordering.

**NOTE:** Only the basic catalog references shown in the columns are necessary for acceptance. Alphabetical and/or numerical suffixes denote hub size or other features. When aluminum conductors are used, the electrical contractor shall apply the corrosion inhibiting compound recommended by and in the manner prescribed by the cable manufacturer. (8½", 9" or 10" center spacings are acceptable.)



**ELECTRIC UTILITY DIVISION**  
247 Wyoming Ave. P.O. Box 1388; Kingston, Pa. 18704

APPROVED METER SERVICE DEVICES  
SINGLE-PHASE METER STACKS (GANGABLE)  
MULTI-METER TROUGHS

DRAWN BY *E. J. Pankovick* DATE *8-24-88*  
 APPROVED BY *E. J. Pankovick* DATE *1-5-89*  
 DRAWING NO. \_\_\_\_\_ SCALE \_\_\_\_\_

TABLE 7

NUMBER OF TERMINALS	ANCHOR	MIDWEST MFG. COMPANY	SQUARE D	SUPERIOR SWITCHBOARD
4	MPP202 2MPP202	R-200 M-200 Series with FBEM9	HNP-200 HNP-54P5FC	MP-200

**NOTE: ALL METER PEDESTALS MUST BE FIRMLY ANCHORED WITH A CONCRETE FOOTER OR APPROVED STABILIZING FOOT. EACH INSTALLATION IS SUBJECT TO UGI APPROVAL.**

**SPECIFICATIONS:**

1. The catalog number must be stamped on the outside of the device so that it will be visible after the device is installed.
2. MATERIAL: Galvannealed steel or equivalent.
3. BY-PASSES: Ringless - manual type required, ring - none permitted.
4. METER GUIDES: Required on ringless devices.
5. NEUTRAL: Approved double ended bus type.
6. LINE TERMINALS:
  - (a) The meter pedestal or meter terminals must have approved bus type suitable for 2/0, 4/0 or 350 MCM aluminum cable for single-phase underground service.
  - (b) When wire trough pedestals are used, double line terminals shall be provided.
7. MAXIMUM AND MINIMUM DIMENSIONS:
  - (a) Minimum buried depth: The minimum buried depth of the meter pedestal shall be 28" from the ground line to the base.
  - (b) Minimum distance - Lowest Meter: The minimum distance from the ground line to the center line of the lowest meter shall be 48".
  - (c) Maximum distance - Highest Meter: The maximum distance from the ground line to the center line of the highest meter shall be 84".
8. STABILIZING FOOT: Required on all pedestals.
9. CONDUIT SUPPORT: Where conduit is required for the service lateral, a conduit support approximately 3' below the meter base shall be provided to meet NEC requirement.

**NOTE:** When aluminum conductors are used, the electrical contractor shall apply the corrosion inhibiting compound recommended by and in the manner prescribed by the cable manufacturer. The breaker at the pedestal must have an interrupting capacity which meets code requirements. The base of the pedestal must be factory coated on the inside and outside of the pedestal to 2" above ground level with bitumastic or equivalent.

**UGI**  
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ELECTRIC UTILITY DIVISION  
247 Wyoming Ave. P.O. Box 1369, Kingston, Pa. 18704

APPROVED METER SERVICE DEVICES  
MOBILE HOME METER PEDESTALS FOR 3-WIRE,  
1Ø, 120/208 OR 120/240 VOLT, 200A, UNDERGROUND

DRAWN BY GEN. P. PA DATE 8.24.88  
APPROVED BY R.F. Casanova DATE 1-5-89  
DRAWING NO. SCALE

TABLE 8

#Jaws	Amperes	Entry	Anchor	Crouse-Hinds	Landis & Gyr	Durham	Milbank	Superior
7	100	OH	---	---	40507-01	---	U-7573	
7	200	OH	---	---	40307-01	1004138 1004398	U-7421	BP-400-7 BP-200-7U
7	200	UG	---	---	40607-05 42507-9001	1004139	U-7423 S-1493	
7	200	OH/UG	U-22572-ML S003032- UG-H10	RH173GR RH173GRJ	42707-8	---	S-7000	BP-200-7USW

NOTE: When aluminum conductors are used, the electrical contractor shall apply corrosion inhibiting compound as recommended by and in the manner prescribed by the cable manufacturer.



ELECTRIC UTILITY DIVISION  
247 Wyoming Ave. P.O. Box 1389, Kingston, Pa. 18704

APPROVED METER SERVICE DEVICES  
POLYPHASE 208 VOLT WYE OR 240 VOLT DELTA  
SINGLE POSITION

DRAWN BY *S.A.P. Durham* DATE *3-24-88*  
 APPROVED BY *R.F. P... ..* DATE *1-5-89*  
 DRAWING NO. \_\_\_\_\_ SCALE \_\_\_\_\_

TABLE 9

<u>MFG.</u>	<u>CAT. NO.</u>	<u>NO. OF TERMINALS</u>	<u>NO. OF POSITIONS</u>	<u>WIRING COMPT. LOCATION</u>
Millbank	S-9098	7	2	Center

**UGI**  
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ELECTRIC UTILITY DIVISION  
247 Wyoming Ave. P.O. Box 1389, Kingston, Pa. 18704

REVISIONS

NO.	DATE

MULTI-POSITION METER SERVICE DEVICES  
30 OVERHEAD AND UNDERGROUND

DRAWN BY *HJE* DATE *9-26-84*

APPROVED BY *Robert J. B... ..* DATE *3-6-85*

DRAWING NO. SCALE

TABLE 10

<u>Terminals</u>	<u>Bryant</u>	<u>Crouse-Hinds</u>	<u>Cutler Hammer</u>	<u>General Electric</u>	<u>Square D</u>	<u>Challenger (Sylvania)</u>
7	QS-3CL1BR QS-3CL2BR QS-3CL3BR	RY Series	CC-7 Series	TMP TMPR Series	EZM Series	SCMM Series & M37M Series

SPECIFICATIONS:

- The catalog number must be stamped on the outside of the device so that it will be visible after the device is installed.
- MATERIAL: Galvannealed Steel of Equivalent Horizontal or Vertical
- MOUNTING:
  - The center of the bottom meter must be a minimum of 30 inches above the floor for indoor installations and 44 inches above the ground for outdoor installations.
  - The center of the top meter must not be more than 72 inches above the floor or ground.
  - There shall be a clearance of 3 feet free space in front of the meter.
  - On outdoor installations, if the center line of the bottom meter is 60 inches above ground, no barriers are required. If the center line of the bottom meter is between 60 inches and 44 inches above ground, barriers are required around the meters - for example, a fence, shrubbery, etc.
- BY-PASSES: Ringless-Lever type requires, Ring-None permitted.
- METER GUIDES: Required on ringless devices.
- BARRIERS: Required between (1) compartments (2) metered and un-metered cables.
- BUSSING: Factory bussing required.

NOTES:

- When aluminum conductors are used, the electrical contractor shall apply the corrosion inhibiting compound recommended by and in the manner prescribed by the cable manufacturer.
- 8.5 inch, 9 inch or 10 inch center spacings are acceptable.


 <p><b>UGI CORPORATION</b> ELECTRIC UTILITY DIVISION 247 Wyoming Ave. P.O. Box 1389, Kingston, Pa 18704</p>	<p>Approved Meter Service Devices 30 Meter Stacks (Gangable) Multi-Meter Troughs</p>
	<p>DRAWN BY <u>ED PERHAM</u> DATE <u>8-24-88</u>          APPROVED BY <u>R.F. Rasmussen</u> DATE <u>1-5-89</u>          DRAWING NO. _____ SCALE _____</p>

TABLE 11

# JAWS	AMPERES	ENTRY	ANCHOR	BRYANT	MIDWEST				
4'	100	OH			R-100C W/MSBN1				
5'	100	OH			R-100C W/MSBN1 MS5				
4'	200	OH			RS-250C M-281C W/MSBN2				
5'	200	OH			RS-250C M-281C W/MSBN2 & MS5				
4'	200	OH/UG	MP202UG	UNBL20RO					
5'	200	OH/UG	MP202UG W/8855-1	UNBL20RO W/MMSJK					



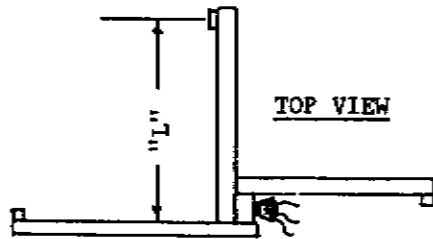
ELECTRIC UTILITY DIVISION  
247 Wyoming Ave. P.O. Box 1389, Kingston, Pa 18704

Approved Meter Service Devices  
Meter Trough / Load Center  
Single Phase 120/240 or 120/208 Volt,  
100 or 200 Amp  
Overhead & Underground Entrance

DRAWN BY *S. P. Dale* DATE 5-24-88  
 APPROVED BY *R. F. Anderson* DATE 1-5-89  
 DRAWING NO. SCALE

# Sketches

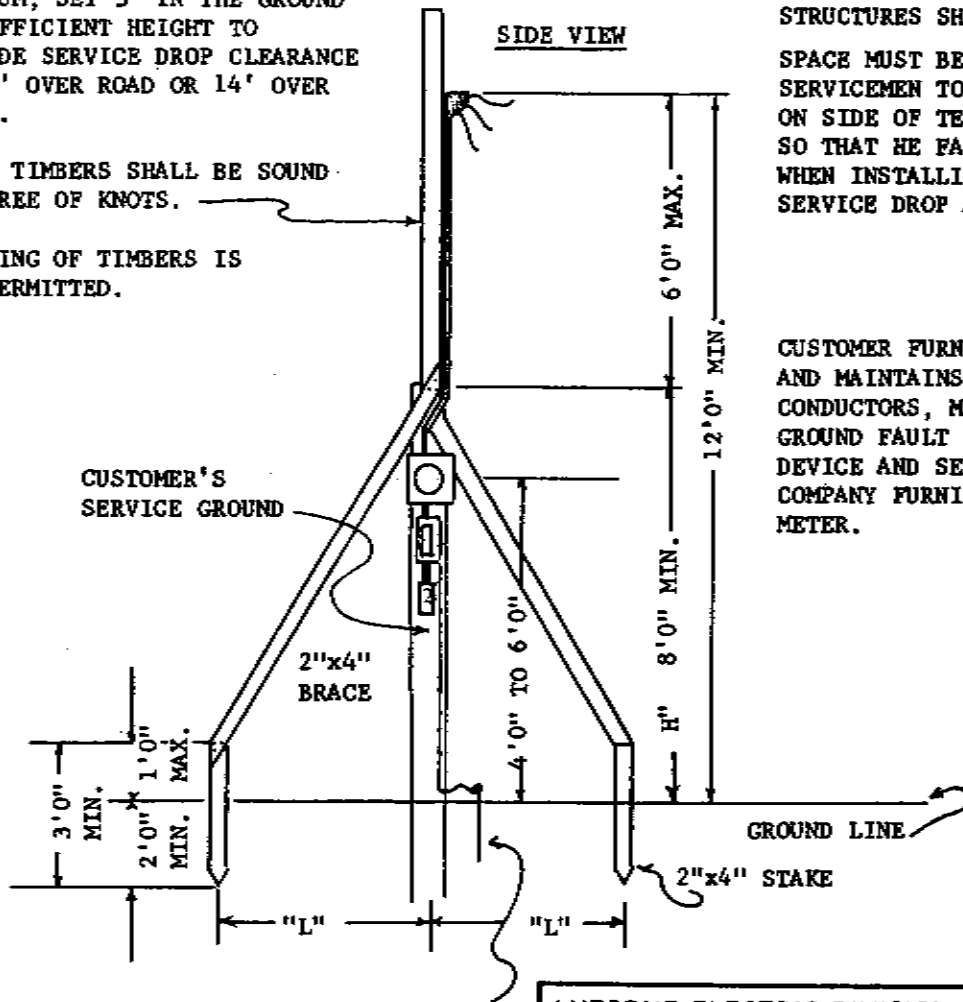
SKETCH NO. 1



STRUCTURE OF 2-2"x4" TIMBERS SET 2' IN GROUND, FIRMLY SET AND BRACED, OR CLASS 5 POLE, MINIMUM, SET 5' IN THE GROUND OF SUFFICIENT HEIGHT TO PROVIDE SERVICE DROP CLEARANCE OF 18' OVER ROAD OR 14' OVER DRIVE.

2"x4" TIMBERS SHALL BE SOUND AND FREE OF KNOTS.

SPLICING OF TIMBERS IS NOT PERMITTED.



NOTES:

THE LOCATION OF THE TEMPORARY STRUCTURE WILL BE DETERMINED BY AN AUTHORIZED COMPANY REPRESENTATIVE.

REFER TO TABLE # 1 FOR ACCEPTABLE METER TROUGHS.

DIMENSION "L" SHALL NOT BE LESS THAN 1/2 OF DIMENSION "H" NOR GREATER THAN "H".

NAILS USED IN MAKING TEMPORARY STRUCTURES SHALL BE 20d OR LARGER.

SPACE MUST BE PROVIDED FOR SERVICEMEN TO PLACE LADDER ON SIDE OF TEMPORARY SUPPORT SO THAT HE FACES SERVICE POLE WHEN INSTALLING OR REMOVING SERVICE DROP ATTACHMENT.

CUSTOMER FURNISHES, INSTALLS AND MAINTAINS SERVICE ENTRANCE CONDUCTORS, METER TROUGH, GROUND FAULT SERVICE DISCONNECT DEVICE AND SERVICE GROUND. COMPANY FURNISHES AND INSTALLS METER.

CUSTOMER'S GROUND ROD (FULLY DRIVEN)

LUZERNE ELECTRIC DIVISION - UGI CORPORATION  
247 WYOMING AVENUE  
KINGSTON, PA.

TYPICAL 3-WIRE  
TEMPORARY  
OVERHEAD SERVICE STRUCTURE

REVISIONS	
No.	DATE

DRAWN BY J.C. HAUCK DATE 11/25/80  
APPROVED BY *[Signature]* DATE 12-31-81  
DRAWING NO. SCALE None

SKETCH NO. 2

NOTES:

THE LOCATION OF THE TEMPORARY STRUCTURE WILL BE DETERMINED BY AN AUTHORIZED COMPANY REPRESENTATIVE.

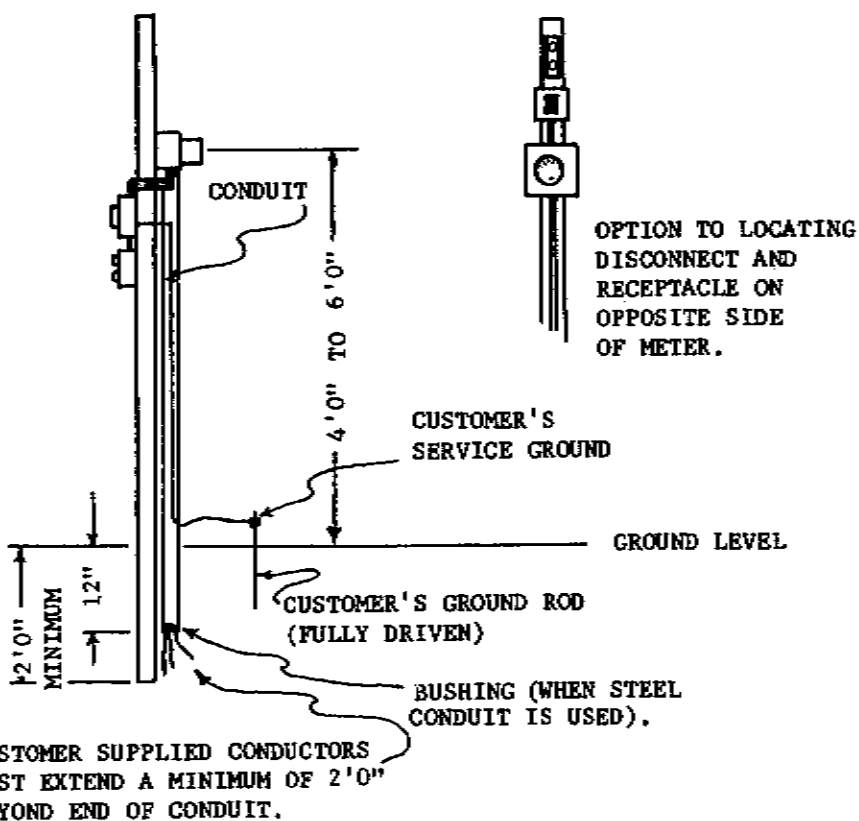
THE TEMPORARY STRUCTURE DESCRIBED IN THIS SKETCH IS SUITABLE FOR UNDERGROUND TEMPORARY SERVICE IF THE METER BASE AND SERVICE CONDUCTORS ARE INSTALLED IN ACCORDANCE WITH THE DETAILS ON THIS SKETCH.

STRUCTURE OF 2"x4" TIMBERS, SET 2'0" IN GROUND, MUST BE OF SUFFICIENT HEIGHT TO ALLOW METER TROUGH TO BE PLACED 4'0" TO 6'0" ABOVE GROUND.

CUSTOMER'S SERVICE DISCONNECT DEVICE AND RECEPTACLE MOUNTED ON FRONT OR REAR OF STRUCTURE.

CUSTOMER FURNISHES, INSTALLS AND MAINTAINS METER TROUGH, GROUND FAULT SERVICE DISCONNECT DEVICE, AND SERVICE CONDUCTORS SUITABLE FOR DIRECT BURIAL AND SERVICE GROUND. COMPANY FURNISHES AND INSTALLS METER.

CUSTOMER FURNISHES, INSTALLS, AND MAINTAINS THREADED GALV. RIGID OR INTERMEDIATE STEEL CONDUIT AND BUSHING OR PVC SCHEDULE 40 CONDUIT EXTENDING 12" BELOW GRADE.



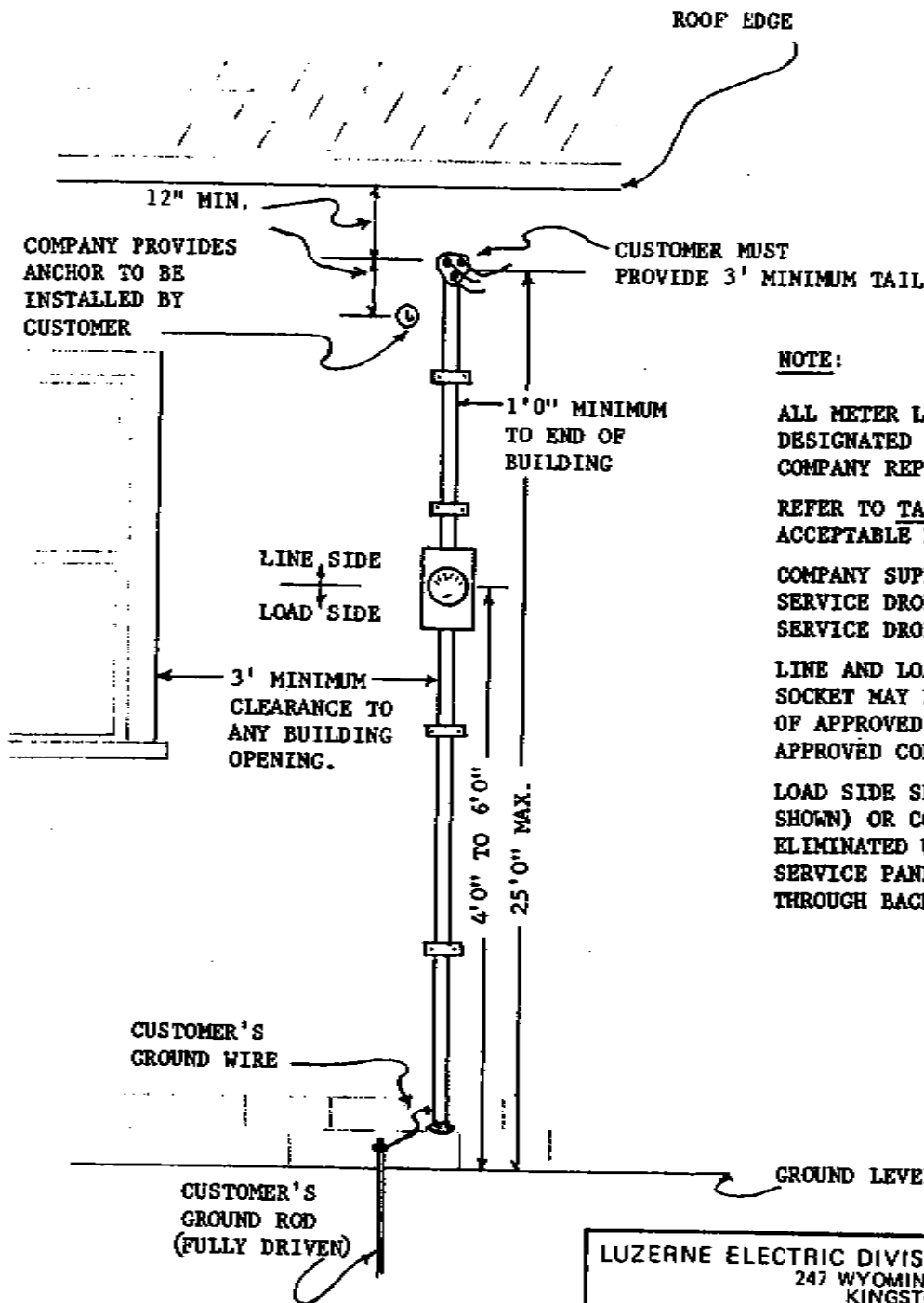
LUZERNE ELECTRIC DIVISION - UGI CORPORATION  
247 WYOMING AVENUE  
KINGSTON, PA.

TYPICAL TEMPORARY  
UNDERGROUND SERVICE

REVISIONS	
No.	DATE

DRAWN BY J.C. HAUCK DATE 11/25/80  
APPROVED BY *H.R. Jones* DATE 12-31-81  
DRAWING NO. SCALE None

SKETCH NO. 3



**NOTE:**

ALL METER LOCATIONS MUST BE DESIGNATED BY AN AUTHORIZED COMPANY REPRESENTATIVE.

REFER TO TABLE #1 FOR ACCEPTABLE METER TROUGHS.

COMPANY SUPPLIES METER, SERVICE DROP ANCHOR AND SERVICE DROP.

LINE AND LOAD SIDES OF METER SOCKET MAY BE ANY COMBINATION OF APPROVED SERVICE CABLE OR APPROVED CONDUIT.

LOAD SIDE SERVICE CABLE (AS SHOWN) OR CONDUIT CAN BE ELIMINATED WHEN ENTRANCE TO SERVICE PANEL IS MADE THROUGH BACK OF METER SOCKET.

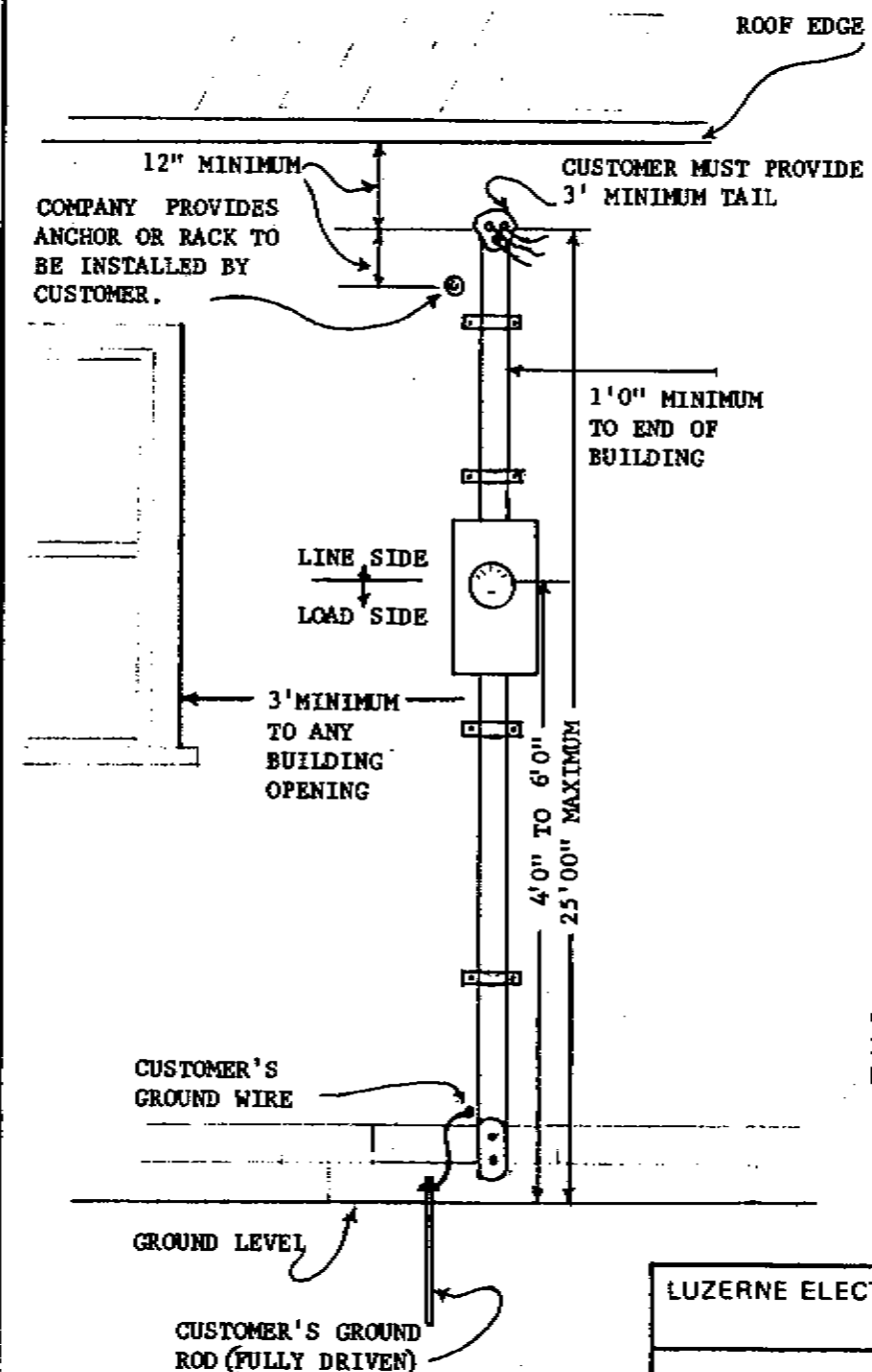
LUZERNE ELECTRIC DIVISION - UGI CORPORATION  
247 WYOMING AVENUE  
KINGSTON, PA.

TYPICAL OVERHEAD SERVICE  
100 AMP & 200 AMP

REVISIONS	
No.	DATE
1	9-21-82

DRAWN BY	J.C. HAUCK	DATE	1/23/81
APPROVED BY	<i>H.R. Gray</i>	DATE	12-31-81
DRAWING NO.		SCALE	None

SKETCH NO. 4



**NOTE:**

ALL METER LOCATIONS MUST BE DESIGNATED BY AN AUTHORIZED COMPANY REPRESENTATIVE.

REFER TO TABLE # 1 FOR ACCEPTABLE METER TROUGHS.

LOAD SIDE FEED TO SERVICE PANELS MAY ALSO BE APPROVED INDIVIDUAL SERVICE CABLES.

300 AMP (1-200A + 1-100A)  
400 AMP (2-200A)

LOAD SIDE CONDUIT (AS SHOWN) OR SERVICE CABLES CAN BE ELIMINATED WHEN ENTRANCE TO SERVICE PANELS IS MADE THROUGH BACK OF METER SOCKET.

COMPANY SUPPLIES METER, SERVICE DROP ANCHOR OR RACK, AND SERVICE DROP.

LUZERNE ELECTRIC DIVISION - UGI CORPORATION  
247 WYOMING AVENUE  
KINGSTON, PA.

TYPICAL OVERHEAD SERVICE  
300 AMP & 400 AMP

REVISIONS	
No.	DATE

DRAWN BY	J. C. HAUCK	DATE	12/1/80
APPROVED BY	<i>J. R. Young</i>	DATE	12-31-81
DRAWING NO.		SCALE	None

SKETCH NO. 5

NOTES:

ALL METER LOCATIONS MUST BE DESIGNATED BY AN AUTHORIZED COMPANY REPRESENTATIVE.

REFER TO TABLE #1 FOR ACCEPTABLE METER TROUGHS.

COMPANY SUPPLIES METER, ATTACHMENT SUPPORT AND SERVICE DROP.

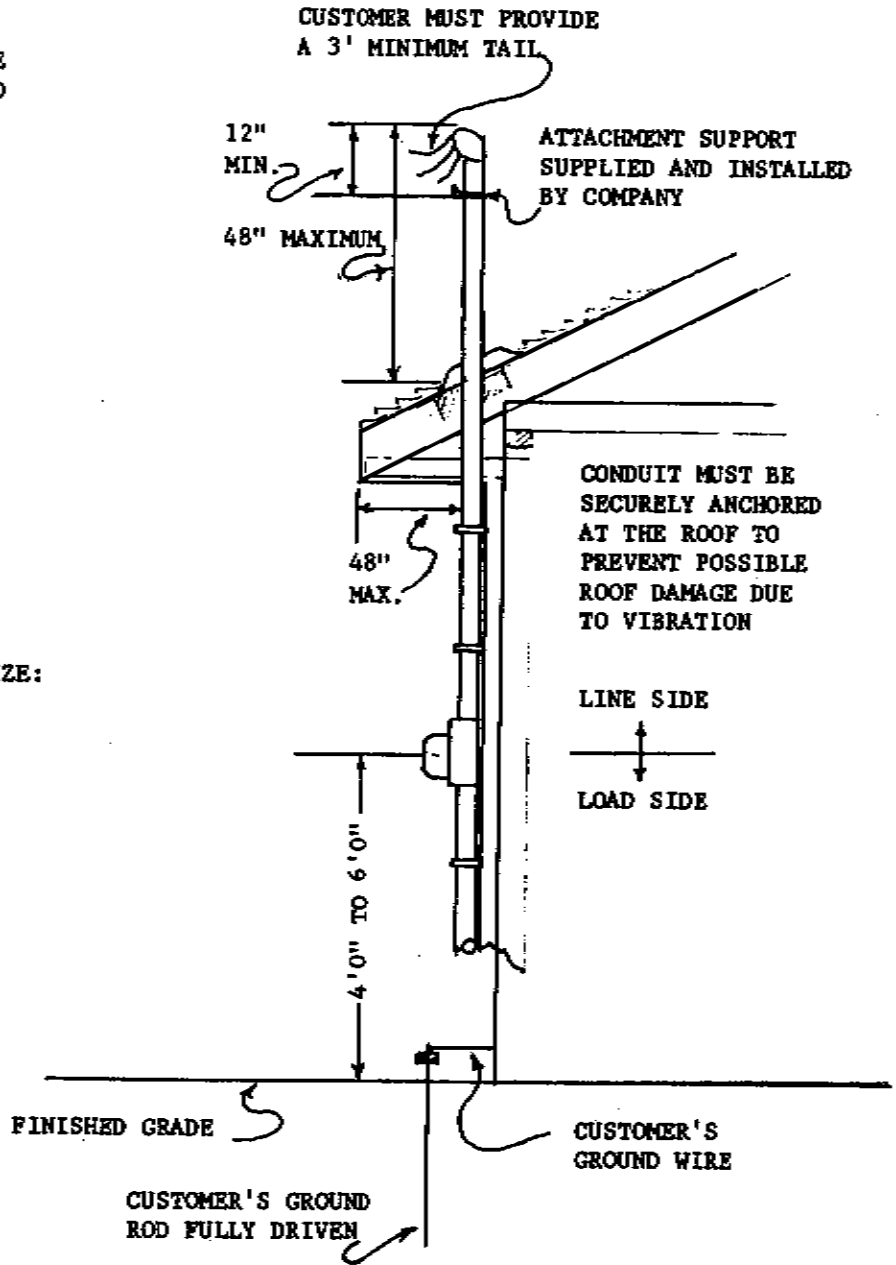
SERVICE CONDUIT ABOVE THE ROOF LINE CANNOT HAVE ANY COUPLINGS.

MAST HEIGHT OVER 48" ABOVE ROOF LINE REQUIRES A GUY WIRE FIRMLY SECURED TO THE ROOF.

LOAD SIDE OF METER SOCKET MAY ALSO BE SERVICE CABLE.

GALVANIZED RIGID STEEL CONDUIT SIZE PER SERVICE SIZE:

- 2½" - 100 AMP
- 2" - 200 AMP
- 3" - 300 AMP
- 3½" - 400 AMP



LUZERNE ELECTRIC DIVISION - UGI CORPORATION  
247 WYOMING AVENUE  
KINGSTON, PA.

TYPICAL MAST SERVICE

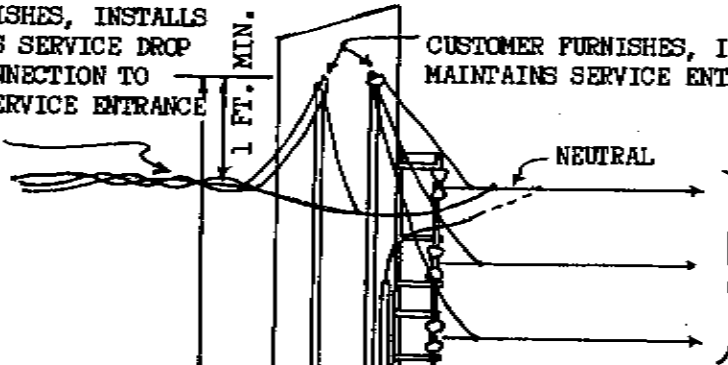
REVISIONS	
No.	DATE
1	9-21-82

DRAWN BY	J.C. HAUCK	DATE	12/1/80
APPROVED BY	<i>J.R. Jony</i>	DATE	12-31-81
DRAWING NO.		SCALE	None

SKETCH NO. 6

COMPANY FURNISHES, INSTALLS AND MAINTAINS SERVICE DROP AND MAKES CONNECTION TO CUSTOMER'S SERVICE ENTRANCE CONDUCTORS.

CUSTOMER FURNISHES, INSTALLS AND MAINTAINS SERVICE ENTRANCE CONDUCTORS.



CUSTOMER'S OVERHEAD DISTRIBUTION, SINGLE CONDUCTORS, TRIPLEX, QUADRUPLIX OR CABLE OPTIONAL.

CUSTOMER FURNISHES, INSTALLS AND MAINTAINS A WOOD POLE (CLASS 5 MIN.) FULL LENGTH OF POLE MUST BE TREATED BY A PRESSURE PROCESS TO PREVENT PREMATURE DETERIORATION.

NOTE: WHEN POLE MUST BE GUYED TO OFFSET PULL OF COMPANY'S SERVICE DROP OR CUSTOMER'S OVERHEAD DISTRIBUTION WIRES, CUSTOMER FURNISHES, INSTALLS AND MAINTAINS THE GUY(S).

25 FT. MAXIMUM

CUSTOMER FURNISHES, INSTALLS AND MAINTAINS METER TROUGH, SEE TABLES FOR LIST OF APPROVED DEVICES. COMPANY FURNISHES AND INSTALLS METER.

4-6'

FINISHED GRADE

CUSTOMER'S SERVICE GROUND.

CUSTOMER'S GROUND ROD (FULLY DRIVEN).

DEPTH 5' MINIMUM

LUZERNE ELECTRIC DIVISION - UGI CORPORATION  
247 WYOMING AVENUE  
KINGSTON, PA.

SERVICE DROP ATTACHMENT TO CUSTOMER-OWNED SERVICE AND METER POLE OVERHEAD SERVICE TO OVERHEAD DISTRIBUTION

REVISIONS	
No.	DATE

DRAWN BY J. C. HAUCK DATE 12/1/80  
APPROVED BY *H. R. Jurg* DATE 12-31-81  
DRAWING NO. SCALE NONE

SKETCH NO. 7

CUSTOMER FURNISHES, INSTALLS AND MAINTAINS SERVICE ENTRANCE CONDUCTORS.

CUSTOMER FURNISHES, INSTALLS AND MAINTAINS A WOOD POLE (CLASS 5 MIN.) FULL LENGTH OF POLE MUST BE TREATED BY A PRESSURE PROCESS TO PREVENT PREMATURE DETERIORATION.

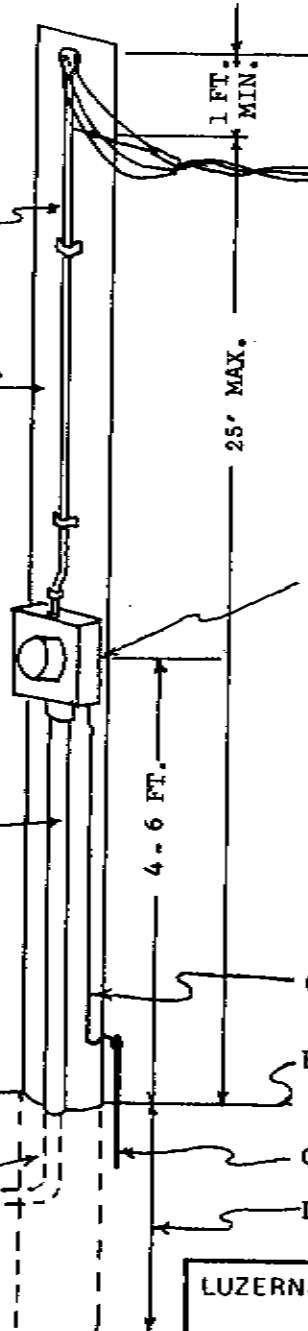
THREADED GALVANIZED RIGID OR INTERMEDIATE STEEL CONDUIT OR PVC SCHEDULE 40 CONDUIT.

CUSTOMER'S UNDERGROUND SERVICE ENTRANCE CONDUCTORS IN RIGID OR INTERMEDIATE GALVANIZED STEEL CONDUIT, PVC SCHEDULE 40 CONDUIT, OR DIRECTLY BURIED USING CABLE SUITABLE FOR THAT PURPOSE.

COMPANY FURNISHES, INSTALLS AND MAINTAINS SERVICE DROP AND MAKES CONNECTION TO CUSTOMER'S SERVICE ENTRANCE CONDUCTORS.

NOTE: WHEN POLE MUST BE GUYED TO OFFSET PULL OF COMPANY'S SERVICE DROP, CUSTOMER FURNISHES, INSTALLS, AND MAINTAINS THE GUY(S).

CUSTOMER FURNISHES, INSTALLS AND MAINTAINS METER TROUGH, SEE TABLES FOR LIST OF APPROVED DEVICES, COMPANY FURNISHES AND INSTALLS METER.



CUSTOMER'S SERVICE GROUND

FINISHED GRADE

CUSTOMER'S GROUND ROD (FULLY DRIVEN)

DEPTH 5 FT. MINIMUM

LUZERNE ELECTRIC DIVISION - UGI CORPORATION  
247 WYOMING AVENUE  
KINGSTON, PA.

REVISIONS	
No.	DATE

SERVICE DROP ATTACHMENT TO CUSTOMER-OWNED SERVICE AND METER POLE OVERHEAD SERVICE TO UNDERGROUND DISTRIBUTION

DRAWN BY J.C. HAUCK DATE 4/15/81

APPROVED BY *X.R. Young* DATE 12-31-81

DRAWING NO. SCALE None

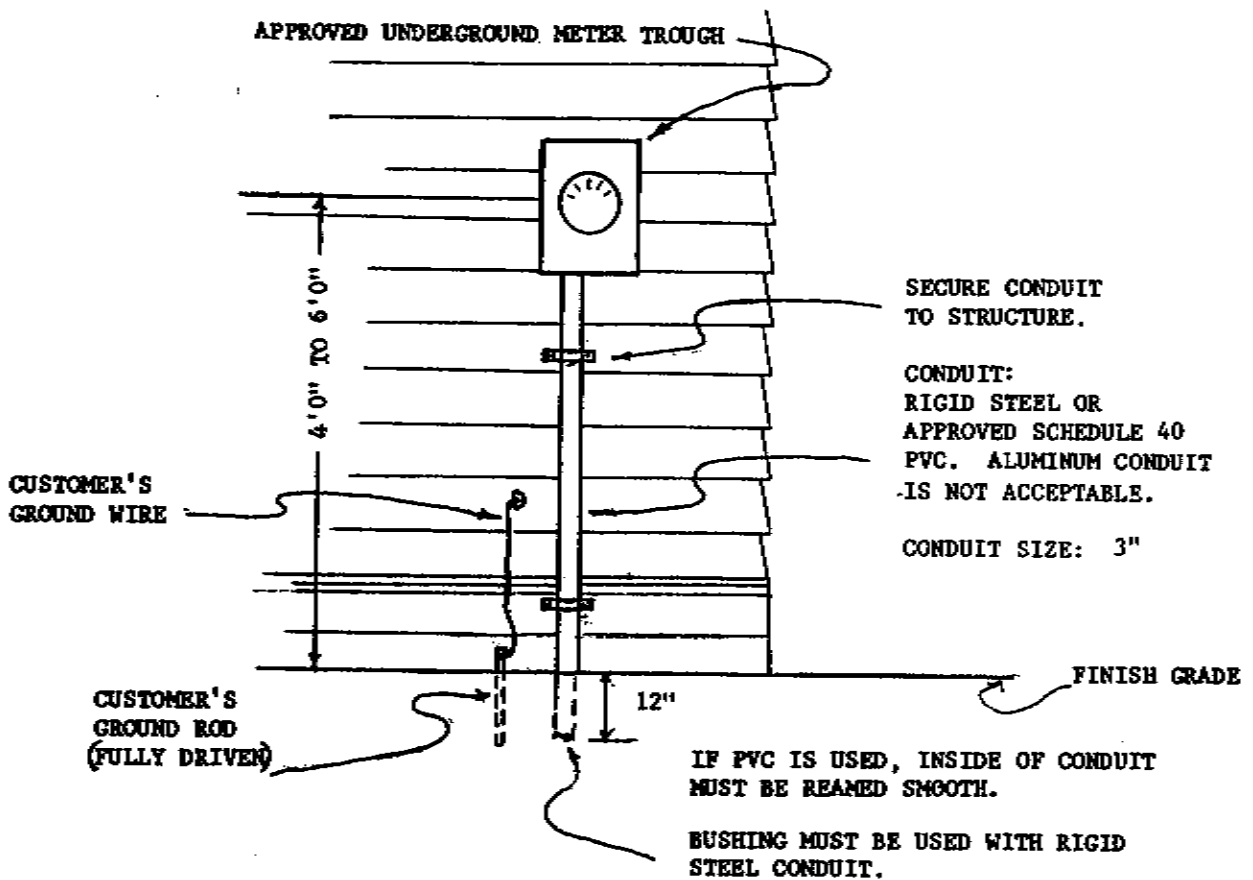
SKETCH NO. 8

NOTE:

ALL METER LOCATIONS MUST BE DESIGNATED BY AN AUTHORIZED COMPANY REPRESENTATIVE.

REFER TO TABLE NO. 2 FOR ACCEPTABLE METER TROUGHS.

ELECTRICAL GRADE SCHEDULE 40 PVC MAY BE USED IN LOCATIONS APPROVED BY AN AUTHORIZED COMPANY REPRESENTATIVE.



LUZERNE ELECTRIC DIVISION - UGI CORPORATION  
247 WYOMING AVENUE  
KINGSTON, PA.

SPECIFICATIONS FOR  
CUSTOMER ENTRANCE EQUIPMENT  
100 AMP & 200 AMP RESIDENTIAL  
UNDERGROUND SERVICE

REVISIONS	
No.	DATE
1	1-6-89

DRAWN BY	J.C. HAUCK	DATE	1/29/81
APPROVED BY	<i>E.R. Young</i>	DATE	12-31-81
DRAWING NO.		SCALE	NONE

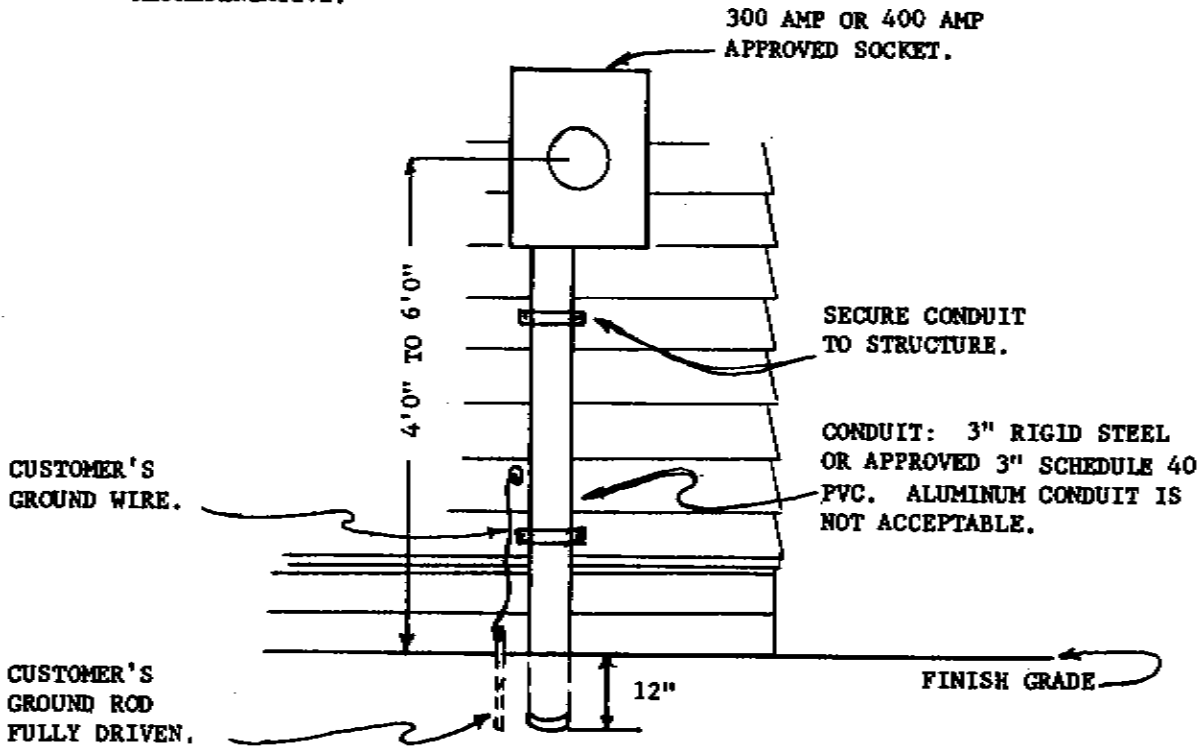
SKETCH NO. 9

NOTE:

ALL METER LOCATIONS MUST BE DESIGNATED BY AN AUTHORIZED COMPANY REPRESENTATIVE.

REFER TO TABLE # 2 FOR ACCEPTABLE METER TROUGHS.

SCHEDULE 40 PVC MAY BE USED IN CERTAIN LOCATIONS APPROVED BY AN AUTHORIZED COMPANY REPRESENTATIVE.



IF PVC IS USED, INSIDE OF CONDUIT MUST BE REAMED SMOOTH.

PLASTIC BUSHING MUST BE USED WITH RIGID STEEL CONDUIT.

LUZERNE ELECTRIC DIVISION - UGI CORPORATION  
247 WYOMING AVENUE  
KINGSTON, PA.

CUSTOMER ENTRANCE EQUIPMENT:  
300 AMP & 400 AMP UNDERGROUND SERVICE

REVISIONS	
NO.	DATE

DRAWN BY	J.C. HAUCK	DATE	1/29/81
APPROVED BY	<i>J.R. Jung</i>	DATE	12-31-81
DRAWING NO.		SCALE	None

SKETCH NO. 10

NOTE: ALL METER LOCATIONS MUST BE DESIGNATED BY AN AUTHORIZED COMPANY REPRESENTATIVE.

REFER TO TABLE NO. 2 FOR ACCEPTABLE METER TROUGHS.

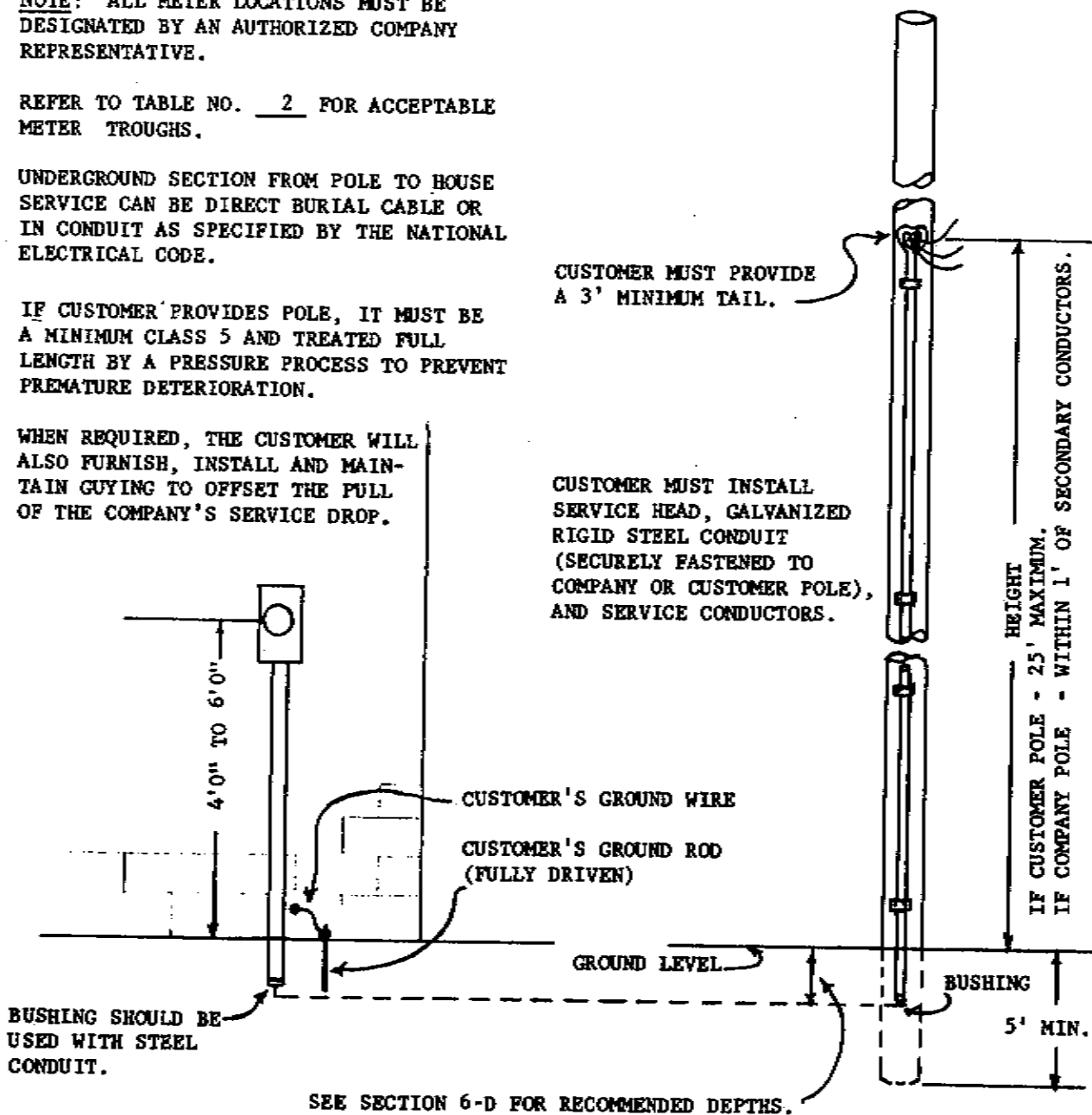
UNDERGROUND SECTION FROM POLE TO HOUSE SERVICE CAN BE DIRECT BURIAL CABLE OR IN CONDUIT AS SPECIFIED BY THE NATIONAL ELECTRICAL CODE.

IF CUSTOMER PROVIDES POLE, IT MUST BE A MINIMUM CLASS 5 AND TREATED FULL LENGTH BY A PRESSURE PROCESS TO PREVENT PREMATURE DETERIORATION.

WHEN REQUIRED, THE CUSTOMER WILL ALSO FURNISH, INSTALL AND MAINTAIN GUYING TO OFFSET THE PULL OF THE COMPANY'S SERVICE DROP.

CUSTOMER MUST PROVIDE A 3' MINIMUM TAIL.

CUSTOMER MUST INSTALL SERVICE HEAD, GALVANIZED RIGID STEEL CONDUIT (SECURELY FASTENED TO COMPANY OR CUSTOMER POLE), AND SERVICE CONDUCTORS.



SEE SECTION 6-D FOR RECOMMENDED DEPTHS.

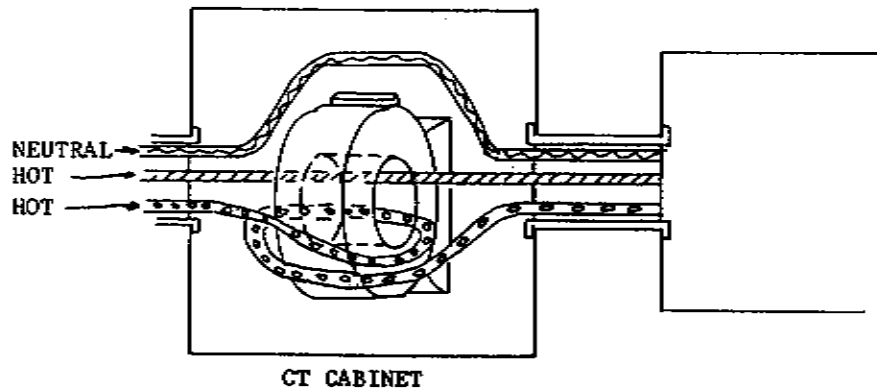
LUZERNE ELECTRIC DIVISION - UGI CORPORATION  
247 WYOMING AVENUE  
KINGSTON, PA.

TYPICAL CUSTOMER INSTALLED  
UNDERGROUND

REVISIONS	
NO.	DATE

DRAWN BY	J.C. HAUCK	DATE	12/3/80
APPROVED BY	<i>S.R. Young</i>	DATE	12-31-81
DRAWING NO.		SCALE	None

SKETCH NO. 11



NOTES:

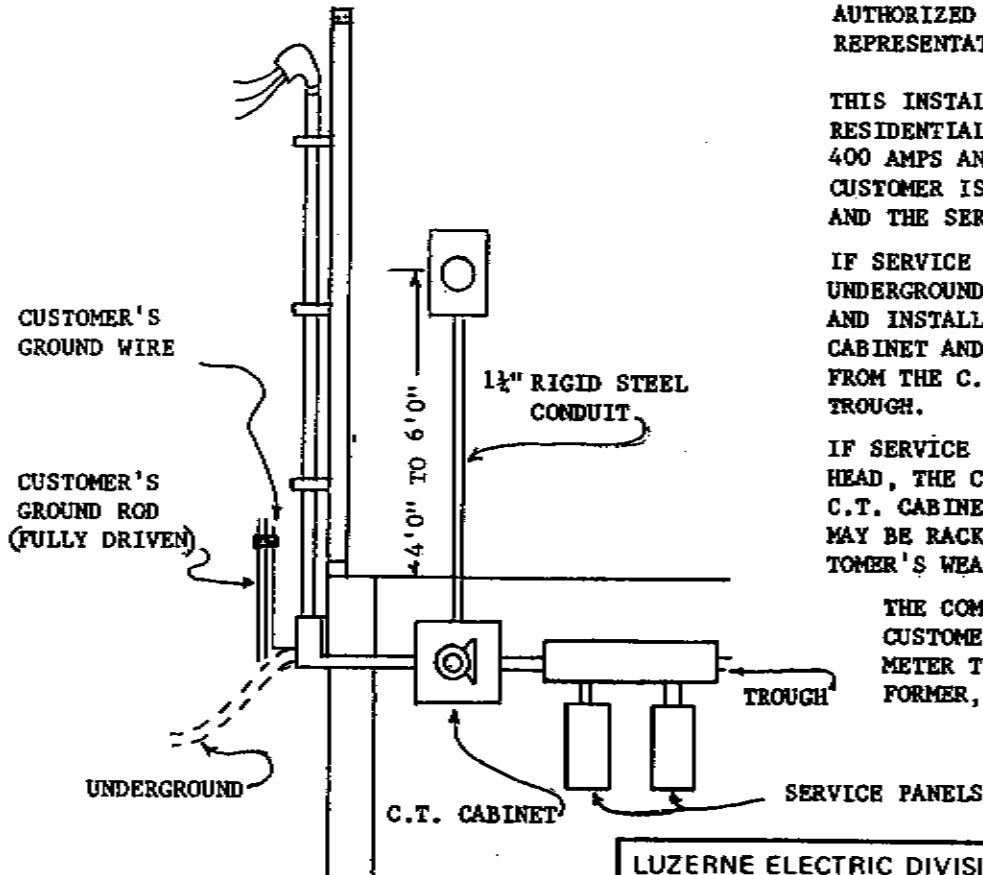
ALL METER LOCATIONS MUST BE DESIGNATED BY AN AUTHORIZED COMPANY REPRESENTATIVE.

THIS INSTALLATION TO BE USED FOR RESIDENTIAL SERVICE EXCEEDING 400 AMPS AND WHEN RESIDENTIAL CUSTOMER IS BILLED UNDER RATE RTU AND THE SERVICE EXCEEDS 200 AMPS.

IF SERVICE IS TO BE SUPPLIED UNDERGROUND, THE CUSTOMER SUPPLIES AND INSTALLS A 36"X36"X10" C.T. CABINET AND A 1 1/2" RIGID CONDUIT FROM THE C.T. CABINET TO THE METER TROUGH.

IF SERVICE IS TO BE SUPPLIED OVERHEAD, THE CUSTOMER MAY UTILIZE A C.T. CABINET AS ABOVE OR THE C.T. MAY BE RACK MOUNTED AT THE CUSTOMER'S WEATHERHEAD.

THE COMPANY SUPPLIES TO THE CUSTOMER FOR INSTALLATION THE METER TROUGH, CURRENT TRANSFORMER, AND RACK, IF REQUIRED.



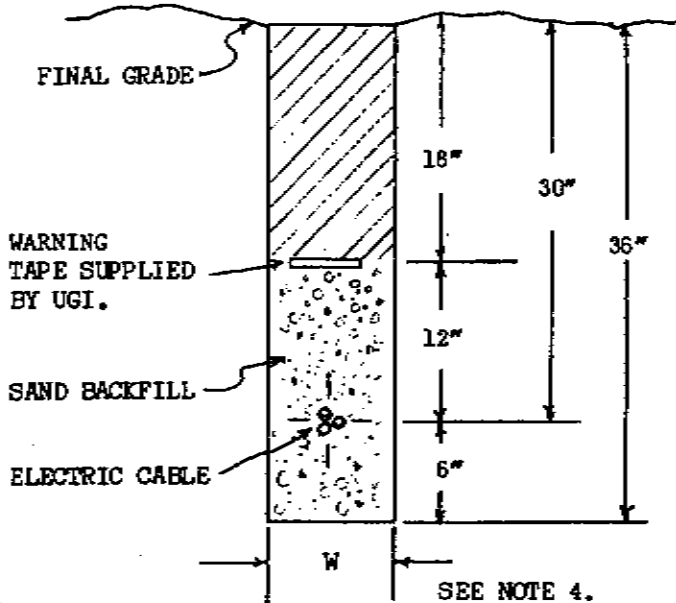
LUZERNE ELECTRIC DIVISION - UGI CORPORATION  
247 WYOMING AVENUE  
KINGSTON, PA.

WIRING DIAGRAM FOR SINGLE PHASE  
TRANSFORMER RATED METER,  
OVERHEAD OR UNDERGROUND SERVICE

REVISIONS	
No.	DATE

DRAWN BY	J.C. HAUCK	DATE	1/22/81
APPROVED BY	<i>J.R. Jones</i>	DATE	12-31-81
DRAWING NO.		SCALE	None

SKETCH NO. 12



**NOTES:**

1. Cable or conduit depth shall be 30" below final grade as shown above.
2. Sand backfill will be required on all sides of electric cable and facilities as shown above. (The Company may prefer to utilize conduit as an alternate to sand backfill.)
3. The remainder of the trench may be backfilled with the excavated earth except that no frozen lumps, large stones, rubbish, debris, ashes, coal refuse or cinders may be used.
- \*4. All trenches shall be at least six inches wide. However, joint use of a trench by the Telephone Company or other parties may change the specifications of the trenching and backfilling. Mutual agreement between parties occupying a trench must be obtained before any work is started.
5. All trenches shall be backfilled the same day that they are opened where practicable. Open trenches shall be properly guarded to prevent injury to persons or damage to property. Work which should normally be done in advance of the cable installation date, such as street conduit crossing, pipe pushing or augering shall be scheduled and completed. Power equipment shall not be used within 24 inches of any existing buried cable.
6. The customer and/or contractor is responsible for any and all liability resulting from the trenching and backfilling operation and shall save UGI Corporation harmless from any and all claims.

LUZERNE ELECTRIC DIVISION - UGI CORPORATION  
 247 WYOMING AVENUE  
 KINGSTON, PA.

SPECIFICATION FOR TRENCHING  
 AND BACKFILLING

REVISIONS	
No.	DATE
1	1-6-89

DRAWN BY J.G. HAUCK DATE 4/15/81  
 APPROVED BY *J.R. Young* DATE 12-31-81  
 DRAWING NO. SCALE None

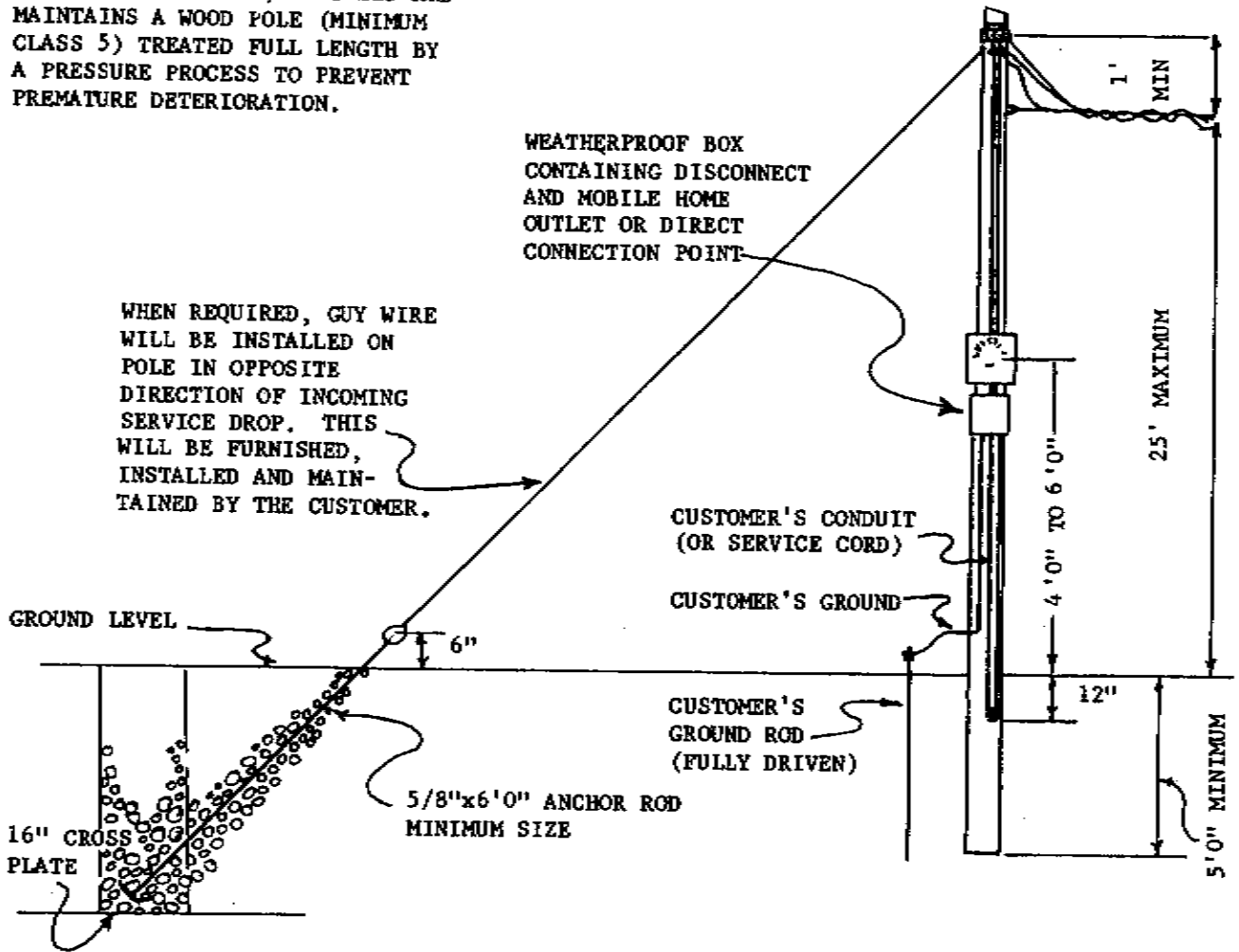
SKETCH NO. 13

NOTES:

THE RECEPTACLE CORD CONNECTION BETWEEN DISCONNECT BOX AND SERVICE PANEL MUST REMAIN ABOVE GROUND. WHEN DIRECT BURIAL CABLE IS USED AS AN UNDERGROUND FEED IT MUST BE DIRECTLY WIRED AT THE DISCONNECT BOX.

CUSTOMER FURNISHES, INSTALLS AND MAINTAINS A WOOD POLE (MINIMUM CLASS 5) TREATED FULL LENGTH BY A PRESSURE PROCESS TO PREVENT PREMATURE DETERIORATION.

WHEN REQUIRED, GUY WIRE WILL BE INSTALLED ON POLE IN OPPOSITE DIRECTION OF INCOMING SERVICE DROP. THIS WILL BE FURNISHED, INSTALLED AND MAINTAINED BY THE CUSTOMER.



LUZERNE ELECTRIC DIVISION - UGI CORPORATION  
247 WYOMING AVENUE  
KINGSTON, PA.

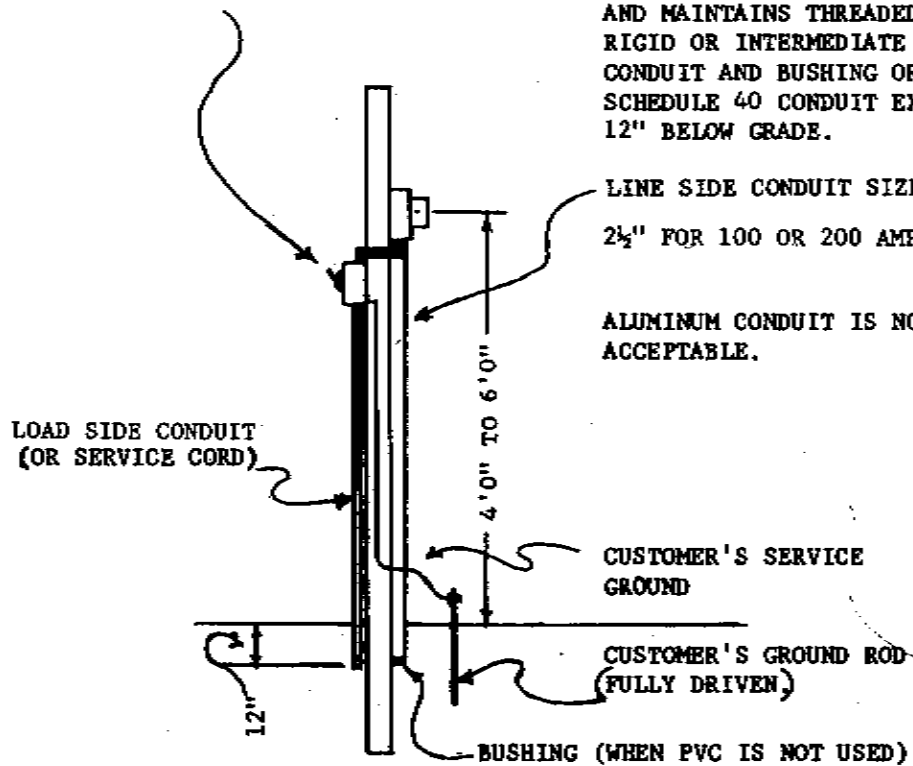
TYPICAL INDIVIDUAL OVERHEAD  
MOBILE HOME POLE SERVICE

REVISIONS	
No.	DATE

DRAWN BY	J.C. HAUCK	DATE	12/1/80
APPROVED BY	<i>H.R. Jones</i>	DATE	12-31-81
DRAWING NO.		SCALE	None

SKETCH NO. 14

WEATHERPROOF BOX CONTAINS DISCONNECT AND MOBILE HOME OUTLET OR DIRECT CONNECTION POINT.



**NOTES:**

THE RECEPTACLE CORD CONNECTION BETWEEN DISCONNECT BOX AND SERVICE PANEL MUST REMAIN ABOVE GROUND. WHEN DIRECT BURIAL CABLE IS USED AS AN UNDERGROUND FEED IT MUST BE DIRECTLY WIRED AT THE DISCONNECT BOX.

THE SKETCH BELOW CAN BE REPLACED WITH A STANDARD PREFAB "UNDERGROUND MOBILE HOME PEDESTAL." (SEE TABLE 7.)

CUSTOMER FURNISHES, INSTALLS AND MAINTAINS THREADED GALVANIZED RIGID OR INTERMEDIATE STEEL CONDUIT AND BUSHING OR PVC SCHEDULE 40 CONDUIT EXTENDING 12" BELOW GRADE.

LINE SIDE CONDUIT SIZE:  
2½" FOR 100 OR 200 AMP SERVICE.

ALUMINUM CONDUIT IS NOT ACCEPTABLE.

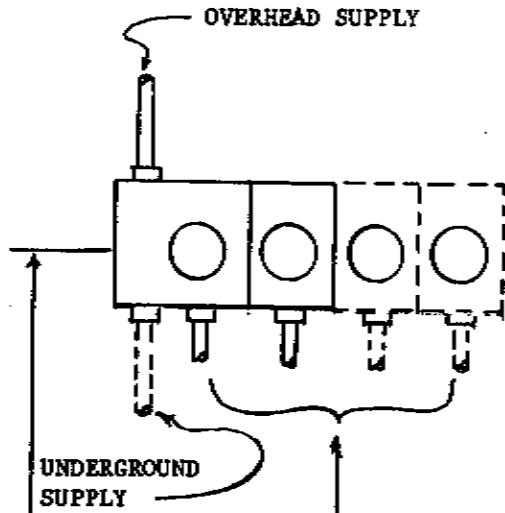
LUZERNE ELECTRIC DIVISION - UGI CORPORATION  
247 WYOMING AVENUE  
KINGSTON, PA.

TYPICAL INDIVIDUAL UNDERGROUND  
MOBILE HOME POLE SERVICE

REVISIONS	
NO.	DATE

DRAWN BY	J.C. HAUCK	DATE	1/27/81
APPROVED BY	<i>J.R. Jones</i>	DATE	12-31-81
DRAWING NO.		SCALE	None

SKETCH NO. 15



4'0" TO 6'0"  
ABOVE FINISH  
GRADE

SECONDARY LOAD SIDE  
MAY BE CONDUIT OR  
SERVICE CABLE.

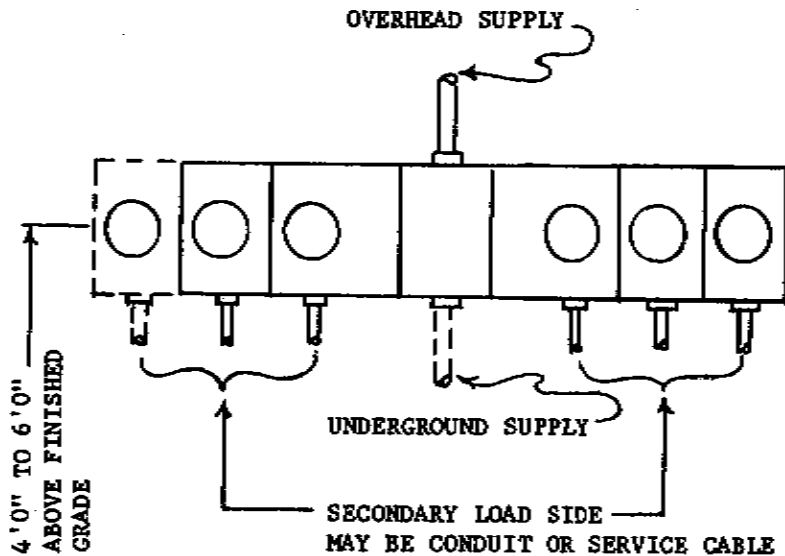
NOTES:

ALL METER LOCATIONS MUST BE DESIGNATED BY AN AUTHORIZED COMPANY REPRESENTATIVE.

REFER TO TABLE # 3 AND 4 FOR ACCEPTABLE METER TROUGHS.

LINE SIDE SUPPLY MAY BE CONDUIT OR SERVICE CABLE. SERVICE CABLE USED AS THE SUPPLY, WILL BE LIMITED, BASED ON NUMBER OF SOCKETS.

IF A MULTI-METER INSTALLATION IS TO BE SUPPLIED BY COMPANY INSTALLED UNDERGROUND FACILITIES, SUPPLY SIDE CONDUIT(S) MUST BE MINIMUM 3" RIGID STEEL OR APPROVED SCHEDULE 40 PVC. PARALLEL CONDUITS MAY BE REQUIRED IF THE LOAD, AS DETERMINED BY THE COMPANY, IS OF SUFFICIENT SIZE.



4'0" TO 6'0"  
ABOVE FINISHED  
GRADE

SECONDARY LOAD SIDE  
MAY BE CONDUIT OR SERVICE CABLE

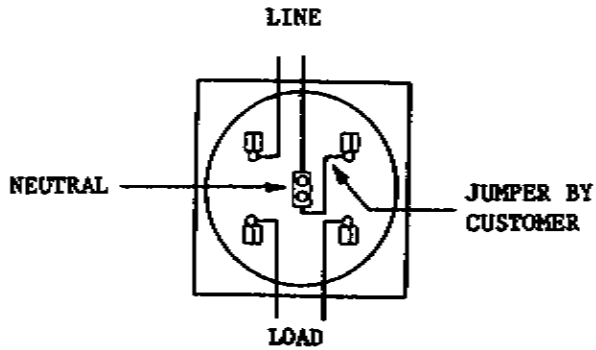
LUZERNE ELECTRIC DIVISION - UGI CORPORATION  
247 WYOMING AVENUE  
KINGSTON, PA.

MULTI-METER INSTALLATION

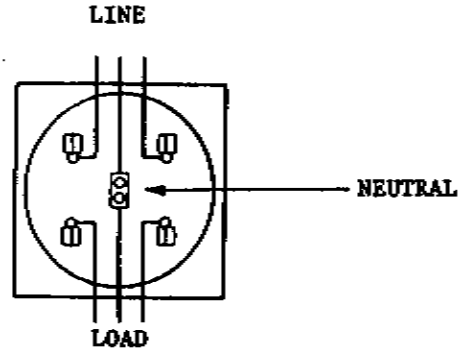
REVISIONS	
No.	DATE
1	9-21-82

DRAWN BY	J.C. HAUCK	DATE	12/1/80
APPROVED BY	<i>H.R. Jany</i>	DATE	12-31-81
DRAWING NO.		SCALE	None

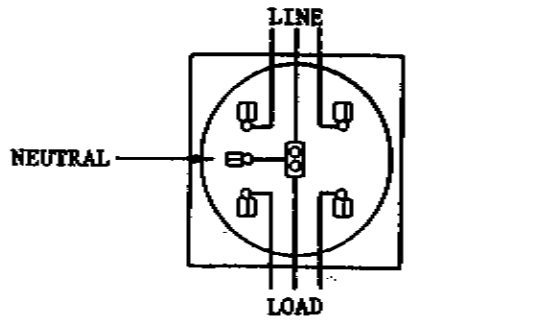
SKETCH NO. 16



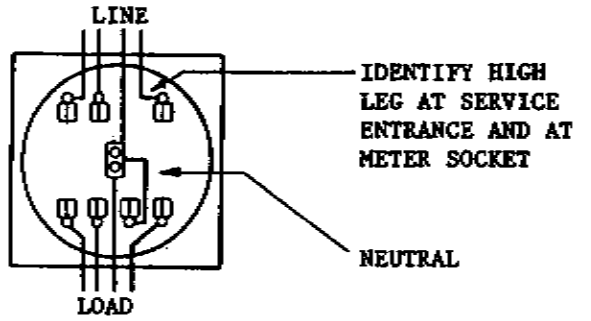
2 WIRE, 1 PHASE 120 VOLTS



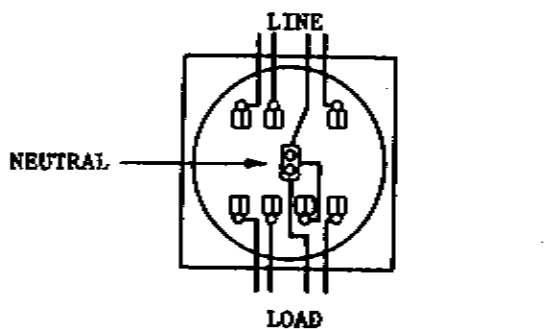
3 WIRE, 1 PHASE 120/240 VOLTS



3 WIRE, 1 PHASE 120/208 VOLTS



4 WIRE, 3 PHASE 120/240 VOLTS



4 WIRE, 3 PHASE 208Y/120 VOLTS

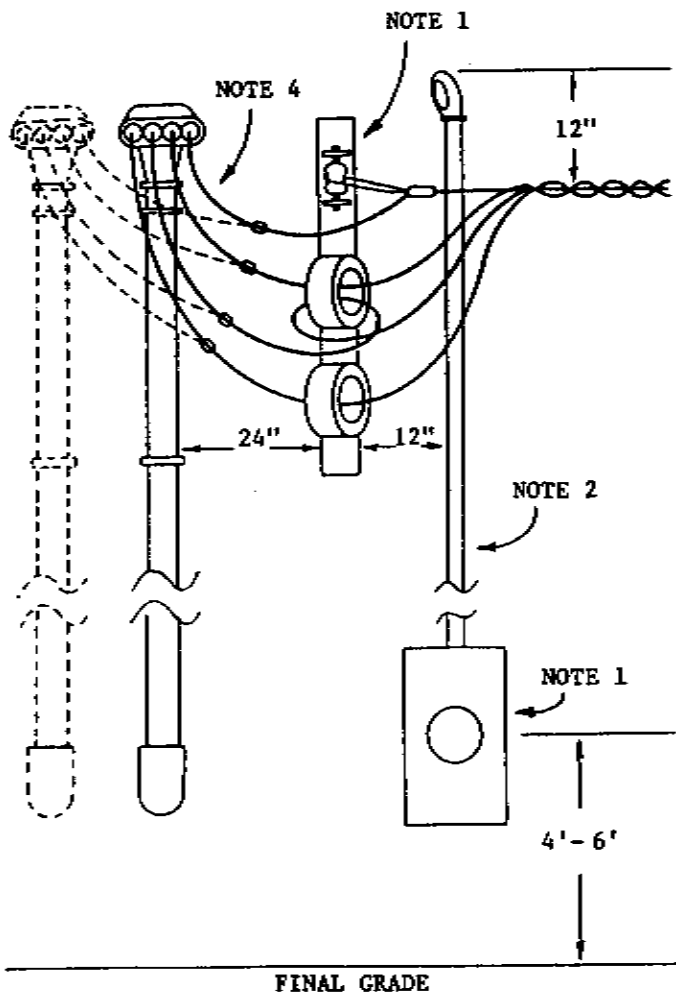
LUZERNE ELECTRIC DIVISION - UGI CORPORATION  
247 WYOMING AVENUE  
KINGSTON, PA.

METER TROUGH CONNECTIONS FOR  
SELF-CONTAINED METERS

REVISIONS	
NO.	DATE

DRAWN BY *KEVIN BONHAM* DATE *4-23-84*  
APPROVED BY *R.F. Paulonis* DATE *7-11-84*  
DRAWING NO. *370-0-A-1170* SCALE *NONE*

SKETCH NO. 17



NOTES:

1. METER TROUGH AND FIVE POSITION RACK SUPPLIED BY COMPANY AND INSTALLED BY CUSTOMER.
2. 1½" RIGID STEEL METERING CONDUIT SUPPLIED AND INSTALLED BY CUSTOMER.
3. COMPANY FURNISHES AND INSTALLS INSTRUMENT TRANSFORMERS AND WIRING BETWEEN INSTRUMENT TRANSFORMERS AND METER.
4. CUSTOMER MUST PROVIDE 3' MINIMUM TAILS - COLOR CODED PER NATIONAL ELECTRIC CODE.
5. CLEARANCES PER MINIMUM NATIONAL ELECTRIC SAFETY CODE REQUIREMENTS.

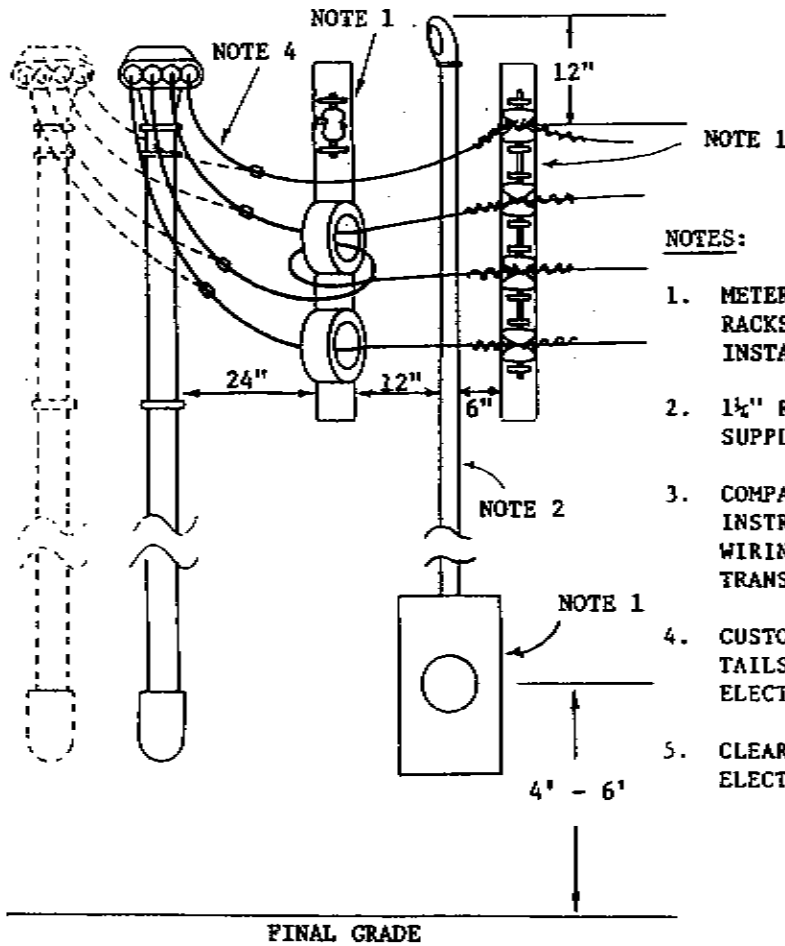
LUZERNE ELECTRIC DIVISION · UGI CORPORATION  
247 WYOMING AVENUE · KINGSTON, PA.

WIRING DIAGRAM FOR THREE-PHASE SERVICE, 120/240 VOLT, INSTRUMENT TRANSFORMER METERING AND QUADRAPLEX SERVICE WIRE

REVISIONS	
NO.	DATE

DRAWN BY *KEVIN BONHAM* DATE *4-18-84*  
APPROVED BY *R. F. Paulina* DATE *4-18-84*  
DRAWING NO. *365-O-A-116401* SCALE *NONE*

SKETCH NO. 18



NOTES:

1. METER TROUGH AND SEVEN POSITION RACKS SUPPLIED BY COMPANY AND INSTALLED BY CUSTOMER.
2. 1 1/2" RIGID STEEL METERING CONDUIT SUPPLIED AND INSTALLED BY CUSTOMER.
3. COMPANY FURNISHES AND INSTALLS INSTRUMENT TRANSFORMERS AND WIRING BETWEEN INSTRUMENT TRANSFORMERS AND METER.
4. CUSTOMER MUST PROVIDE 3' MINIMUM TAILS - COLOR CODED PER NATIONAL ELECTRIC CODE.
5. CLEARANCES PER MINIMUM NATIONAL ELECTRIC SAFETY CODE REQUIREMENTS.

FINAL GRADE

**UGI**  
CORPORATION

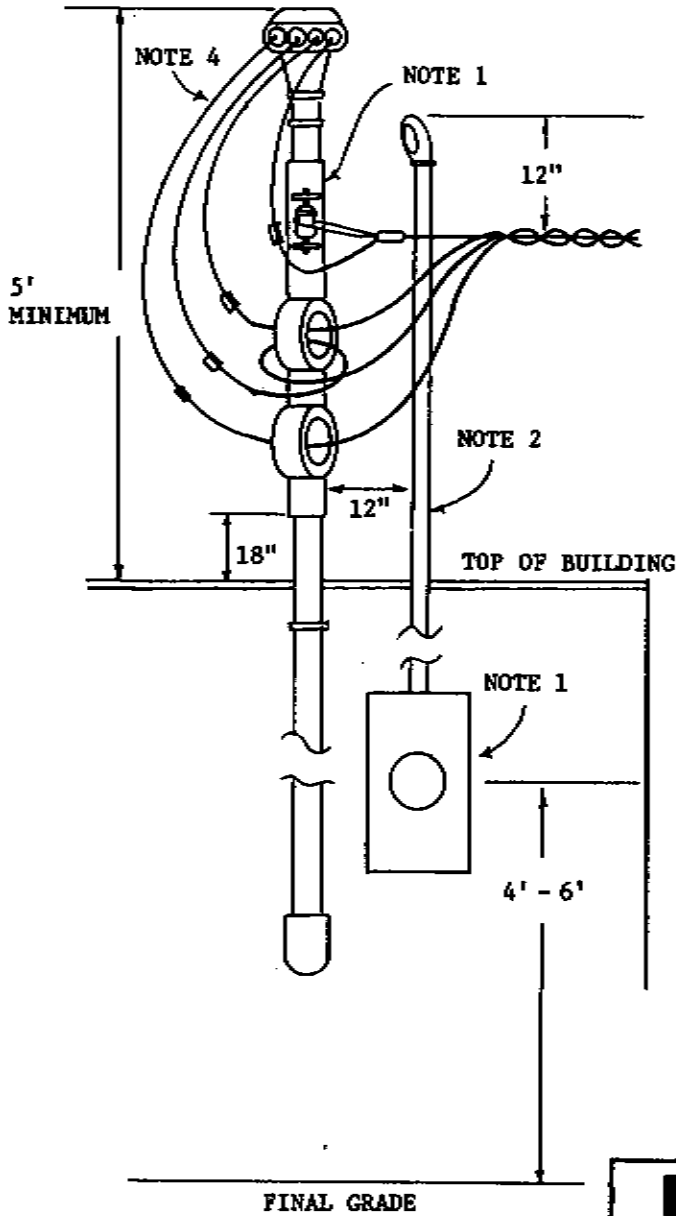
ELECTRIC UTILITY DIVISION  
247 Wyoming Ave P.O. Box 1389, Kingston, Pa. 18704

WIRING DIAGRAM FOR THREE-PHASE SERVICE,  
120/240 VOLT, INSTRUMENT TRANSFORMER  
METERING AND OPEN WIRE SERVICE

REVISIONS	
No.	DATE

DRAWN BY *J.C. Rodda* DATE *6-26-84*  
 APPROVED BY *R.F. Penderin* DATE *7-11-84*  
 DRAWING NO. *365-0-A-1161-2* SCALE *N-3*

SKETCH NO. 19



NOTES:

1. METER TROUGH AND FIVE POSITION RACK SUPPLIED BY COMPANY AND INSTALLED BY CUSTOMER.
2. 1 1/2" RIGID STEEL METERING CONDUIT SUPPLIED AND INSTALLED BY CUSTOMER.
3. COMPANY FURNISHES AND INSTALLS INSTRUMENT TRANSFORMERS AND WIRING BETWEEN INSTRUMENT TRANSFORMERS AND METER.
4. CUSTOMER MUST PROVIDE 3' MINIMUM TAILS - COLOR CODED PER NATIONAL ELECTRIC CODE.
5. CLEARANCES PER MINIMUM NATIONAL ELECTRIC SAFETY CODE REQUIREMENTS.

**UGI**  
CORPORATION

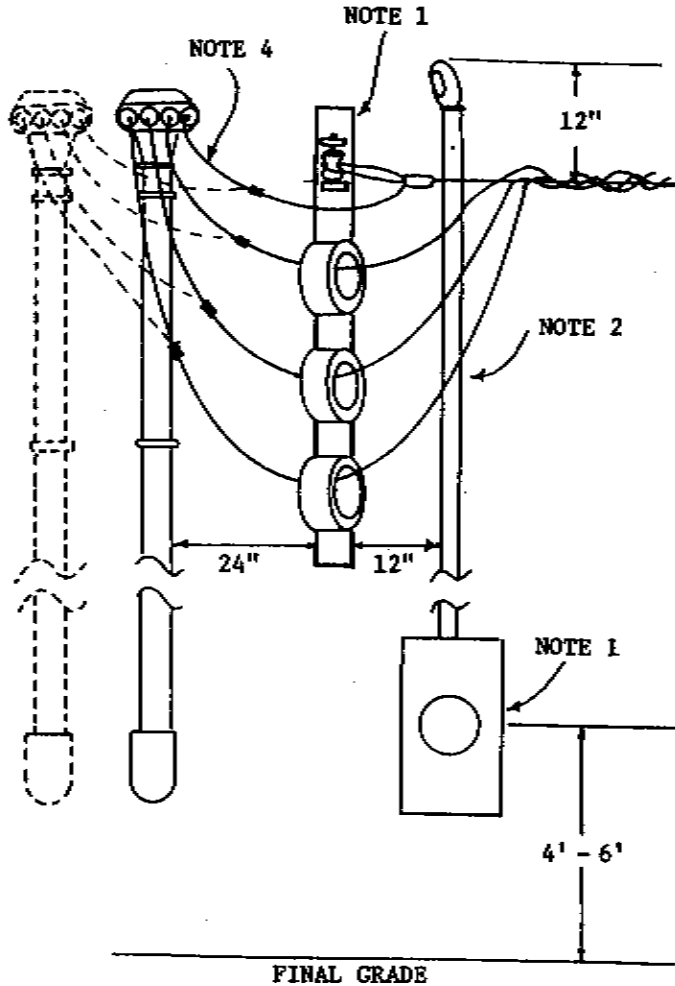
ELECTRIC UTILITY DIVISION  
247 Wyoming Ave. P.O. Box 1389, Kingston, Pa 18704

WIRING DIAGRAM FOR THREE-PHASE  
MAST SERVICE, 120/240 VOLT INSTRUMENT  
TRANSFORMER METERING AND QUADRAPLEX  
SERVICE WIRE

REVISIONS	
No.	DATE

DRAWN BY *JC RODA* DATE *6-26-84*  
 APPROVED BY *R.F. Parolonia* DATE *7-11-84*  
 DRAWING NO. *365-0-A-1164-3* SCALE *H-5*

SKETCH NO. 20



NOTES:

1. METER TROUGH AND SEVEN POSITION RACK SUPPLIED BY COMPANY AND INSTALLED BY CUSTOMER.
2. 1 1/2" RIGID STEEL METERING CONDUIT SUPPLIED AND INSTALLED BY CUSTOMER.
3. COMPANY FURNISHES AND INSTALLS INSTRUMENT TRANSFORMERS AND WIRING BETWEEN INSTRUMENT TRANSFORMERS AND METER.
4. CUSTOMER MUST PROVIDE 3' MINIMUM TAILS - COLOR CODED PER NATIONAL ELECTRIC CODE.
5. CLEARANCES PER MINIMUM NATIONAL ELECTRIC SAFETY CODE REQUIREMENTS.

**UGI**  
CORPORATION

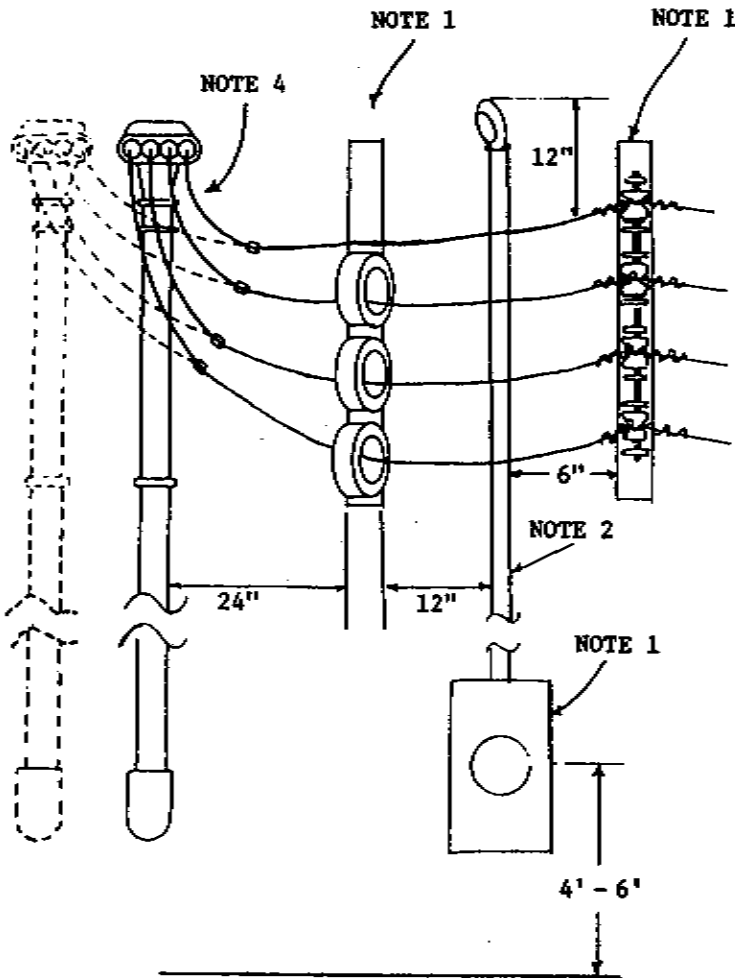
ELECTRIC UTILITY DIVISION  
247 Wyoming Ave. P.O. Box 1389, Kingston, Pa. 18704

WIRING DIAGRAM FOR THREE-PHASE SERVICE,  
120/208 VOLT, INSTRUMENT TRANSFORMER METERING,  
AND QUADRAPLEX SERVICE WIRE

REVISIONS	
No.	DATE

DRAWN BY *JCR/DDA* DATE *6-26-84*  
 APPROVED BY *R.F. Pambolis* DATE *7-11-84*  
 DRAWING NO. *365-0-A-1164-4* SCALE *N/S*

SKETCH NO. 21



NOTES:

1. METER TROUGH AND SEVEN POSITION RACKS SUPPLIED BY COMPANY AND INSTALLED BY CUSTOMER.
2. 1 1/2" RIGID STEEL METERING CONDUIT SUPPLIED AND INSTALLED BY CUSTOMER.
3. COMPANY FURNISHES AND INSTALLS INSTRUMENT TRANSFORMERS AND WIRING BETWEEN INSTRUMENT TRANSFORMERS AND METER.
4. CUSTOMER MUST PROVIDE 3' MINIMUM TAILS - COLOR CODED PER NATIONAL ELECTRIC CODE.
5. CLEARANCES PER MINIMUM NATIONAL ELECTRIC SAFETY CODE REQUIREMENTS.

FINAL GRADE

**UGI**  
CORPORATION

ELECTRIC UTILITY DIVISION  
247 Wyoming Ave P.O. Box 1389, Kingston, Pa 18704

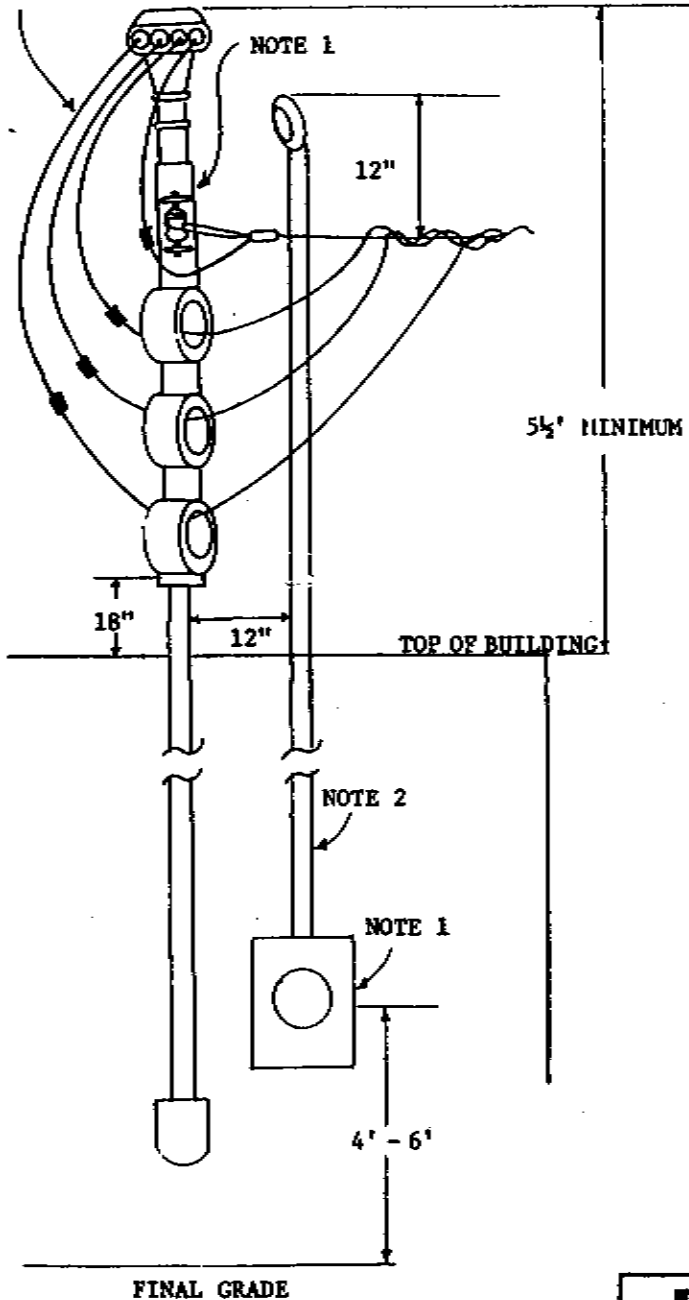
WIRING DIAGRAM FOR THREE-PHASE SERVICE,  
120/208 VOLT, INSTRUMENT TRANSFORMER METERING  
AND OPEN WIRE SERVICE

REVISIONS	
No.	DATE

DRAWN BY *JOBODDA* DATE *6-26-84*  
 APPROVED BY *R.F. Parolonia* DATE *7-11-84*  
 DRAWING NO. *365-0-A-1164-5* SCALE *N/S*

SKETCH NO. 22

NOTE 4



NOTES:

1. METER TROUGH AND SEVEN POSITION RACK SUPPLIED BY COMPANY AND INSTALLED BY CUSTOMER.
2. 1 1/2" RIGID STEEL METERING CONDUIT SUPPLIED AND INSTALLED BY CUSTOMER.
3. COMPANY FURNISHES AND INSTALLS INSTRUMENT TRANSFORMERS AND WIRING BETWEEN INSTRUMENT TRANSFORMERS AND METER.
4. CUSTOMER MUST PROVIDE 3' MINIMUM TAILS - COLOR CODED PER NATIONAL ELECTRIC CODE.
5. CLEARANCES PER MINIMUM NATIONAL ELECTRIC SAFETY CODE REQUIREMENTS.

FINAL GRADE

**UGI**  
CORPORATION

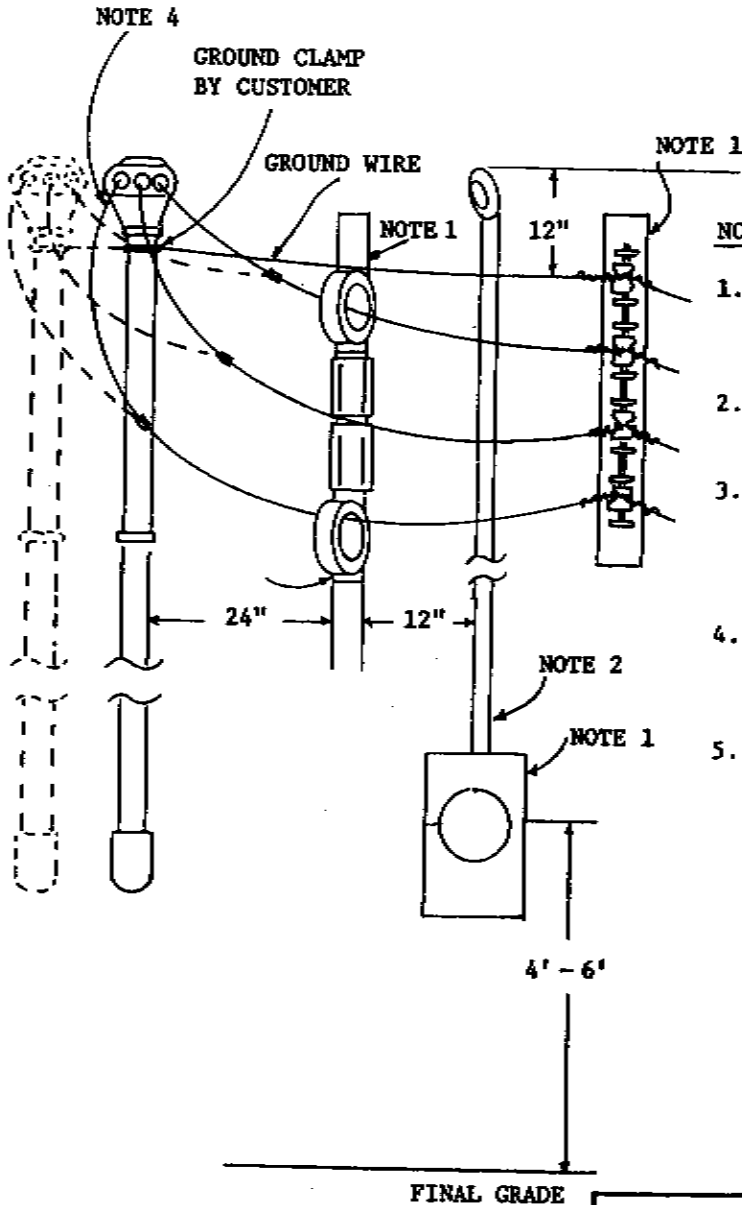
ELECTRIC UTILITY DIVISION  
247 Wyoming Ave P.O. Box 1389, Kingston Pa. 18704

WIRING DIAGRAM FOR THREE-PHASE  
MAST SERVICE, 120/208 VOLT, INSTRUMENT  
TRANSFORMER METERING AND  
QUADRAPLEX SERVICE WIRE

REVISIONS	
No.	DATE

DRAWN BY *J. CRONDA* DATE *6-26-84*  
 APPROVED BY *R. F. Pardonis* DATE *7-11-84*  
 DRAWING NO. *365-0-A-11646* SCALE *H/S*

SKETCH NO. 23



NOTES:

1. METER TROUGH AND SEVEN POSITION RACKS SUPPLIED BY COMPANY AND INSTALLED BY CUSTOMER.
2. 1½" RIGID STEEL METERING CONDUIT SUPPLIED AND INSTALLED BY CUSTOMER.
3. COMPANY FURNISHES AND INSTALLS INSTRUMENT TRANSFORMERS AND WIRING BETWEEN INSTRUMENT TRANSFORMERS AND METER.
4. CUSTOMER MUST PROVIDE 3' MINIMUM TAILS - COLOR CODED PER NATIONAL ELECTRIC CODE.
5. CLEARANCES PER MINIMUM NATIONAL ELECTRIC SAFETY CODE REQUIREMENTS.

FINAL GRADE

LUZERNE ELECTRIC DIVISION - UGI CORPORATION  
247 WYOMING AVENUE  
KINGSTON, PA.

WIRING DIAGRAM FOR THREE-PHASE,  
THREE-WIRE SERVICE, 480 VOLT, INSTRUMENT  
TRANSFORMER METERING AND  
OPEN WIRE SERVICE

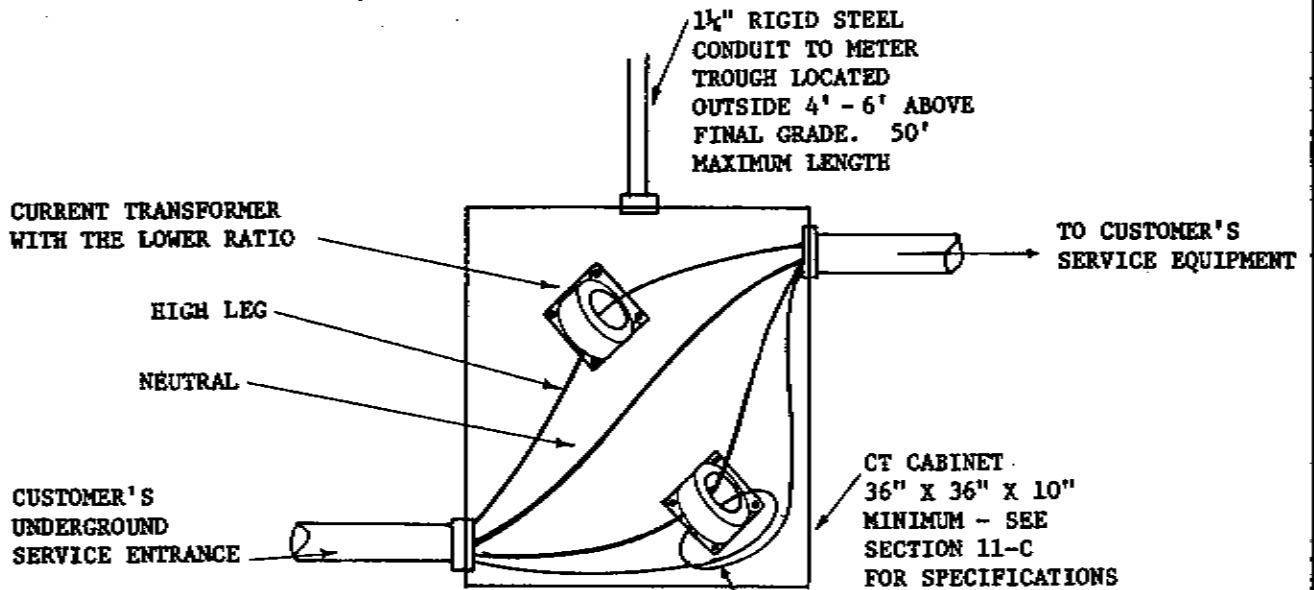
REVISIONS	
No.	DATE

DRAWN BY *JC RODDA* DATE *6-26-84*

APPROVED BY *R.T. Pavalonis* DATE *7-11-84*

DRAWING NO. *365-0-A-1164-7* SCALE *1/8"*

SKETCH NO. 24



**NOTES:**

1. METER TROUGH AND INSTRUMENT TRANSFORMERS SUPPLIED BY COMPANY AND INSTALLED BY CUSTOMER.
2. 1½" RIGID STEEL CONDUIT AND CT CABINET SUPPLIED AND INSTALLED BY CUSTOMER.
3. COMPANY FURNISHES AND INSTALLS WIRING BETWEEN INSTRUMENT TRANSFORMERS AND METER.

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CORPORATION

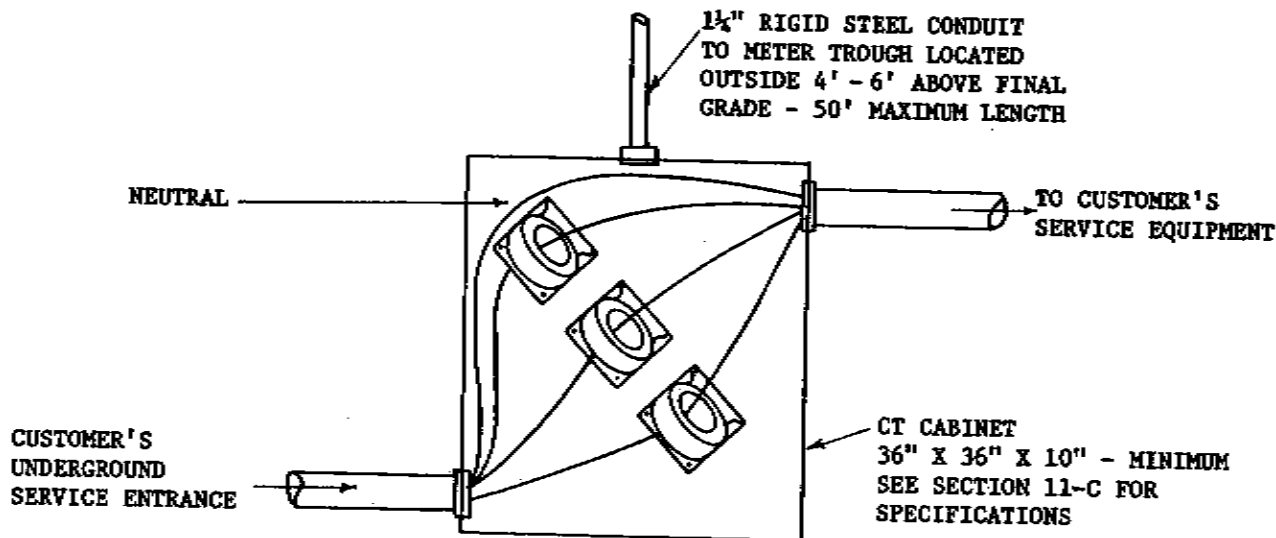
ELECTRIC UTILITY DIVISION  
247 Wyoming Ave. P.O. Box 1389, Kingston Pa. 18704

WIRING DIAGRAM FOR THREE-PHASE SERVICE,  
120/240 VOLT, INSTRUMENT TRANSFORMER  
METERING, UNDERGROUND SERVICE

REVISIONS	
No.	DATE

DRAWN BY *Y. CRODDA* DATE *6-20-84*  
 APPROVED BY *R. F. Paulovic* DATE *7-11-84*  
 DRAWING NO. *365-0-A1164-8* SCALE *N/S*

SKETCH NO. 25



NOTES:

1. METER TROUGH AND INSTRUMENT TRANSFORMERS SUPPLIED BY COMPANY AND INSTALLED BY CUSTOMER.
2. 1 1/2" RIGID STEEL CONDUIT AND CT CABINET SUPPLIED AND INSTALLED BY CUSTOMER.
3. COMPANY FURNISHES AND INSTALLS WIRING BETWEEN INSTRUMENT TRANSFORMERS AND METER.

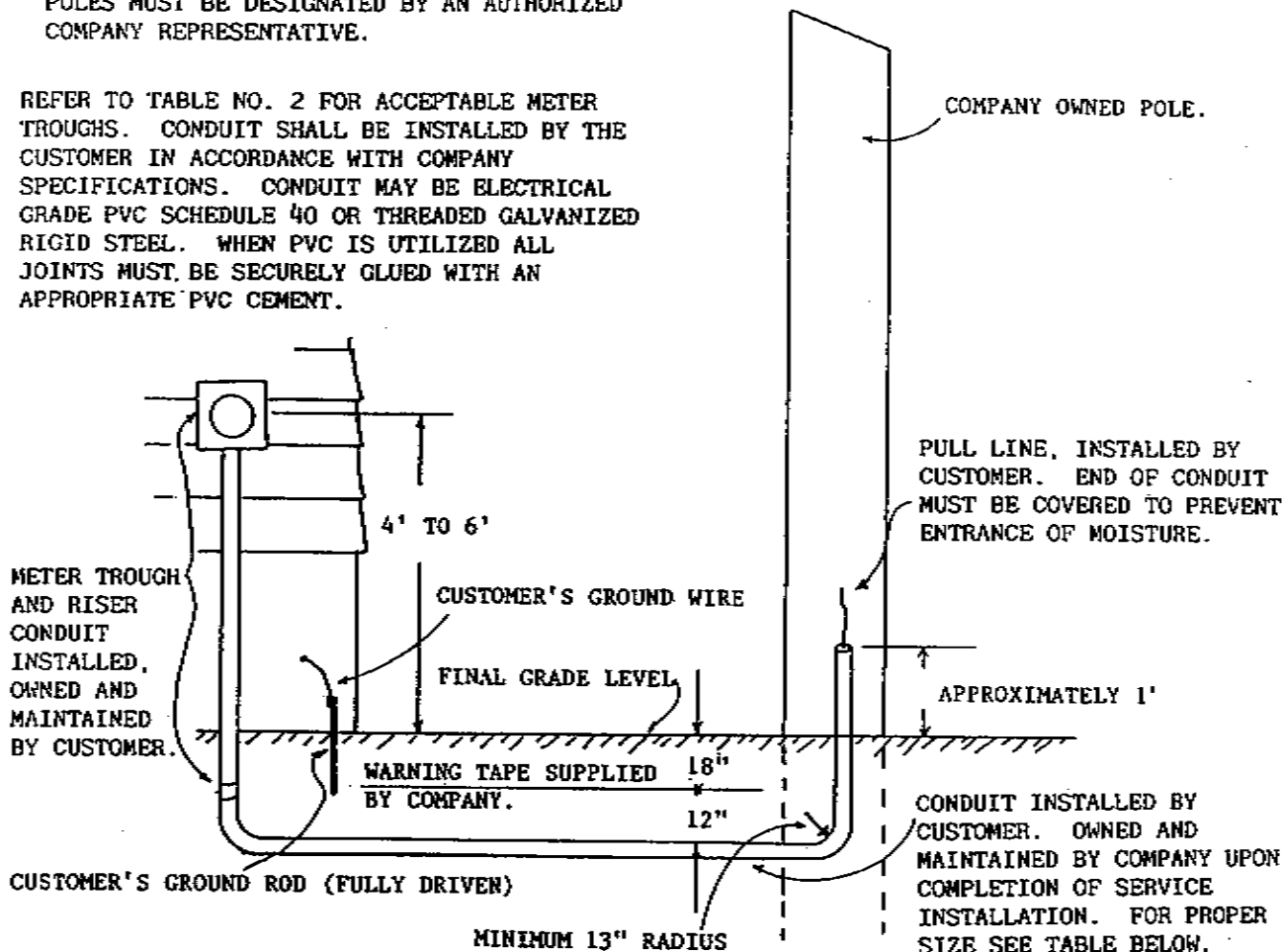
<b>UGI</b>		ELECTRIC UTILITY DIVISION
CORPORATION		247 Wyoming Ave. P.O. Box 1389, Kingston, Pa. 18704
WIRING DIAGRAM FOR THREE-PHASE SERVICE, 120/208 VOLT, INSTRUMENT TRANSFORMER METERING, UNDERGROUND SERVICE		
DRAWN BY	V. RODDA	DATE 6-26-84
APPROVED BY	R. F. Penderin	DATE 7-11-84
DRAWING NO.	365-B-A-1164-9	SCALE N/S

REVISIONS	
No.	DATE

SKETCH NO. 26

NOTE: ALL METER LOCATIONS AND TERMINAL POLES MUST BE DESIGNATED BY AN AUTHORIZED COMPANY REPRESENTATIVE.

REFER TO TABLE NO. 2 FOR ACCEPTABLE METER TROUGHS. CONDUIT SHALL BE INSTALLED BY THE CUSTOMER IN ACCORDANCE WITH COMPANY SPECIFICATIONS. CONDUIT MAY BE ELECTRICAL GRADE PVC SCHEDULE 40 OR THREADED GALVANIZED RIGID STEEL. WHEN PVC IS UTILIZED ALL JOINTS MUST BE SECURELY GLUED WITH AN APPROPRIATE PVC CEMENT.



SERVICE SIZE	CONDUIT SIZE	MAXIMUM LENGTH
100 AMP	3"	LENGTH OF SERVICE IS DEPENDENT UPON MAXIMUM ALLOWABLE PULLING TENSIONS AND VOLTAGE DROP. THE COMPANY MUST BE CONTACTED BEFORE CONDUIT IS INSTALLED.
200 AMP	3"	
300 AMP	3"	
400 AMP	3"	

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247 Wyoming Ave. P.O. Box 1389, Kingston, Pa. 18704

TYPICAL CUSTOMER INSTALLED UNDERGROUND CONDUIT - COMPANY INSTALLED SERVICE CONDUCTORS

REVISIONS	
No.	DATE

DRAWN BY *J.P.* DATE 1-12-89  
 APPROVED BY *S.R.F.* DATE 1-13-89  
 DRAWING NO. SCALE NONE