



METER LOOP

AND

WIRING SPECIFICATIONS

HILCO ELECTRIC COOPERATIVE, INC.
METER LOOP AND WIRING SPECIFICATIONS

** The following meter loop and wiring specifications are intended for residential and **
small non-residential services. Where service requirements exceed single-phase 120/240
voltage and/or 320 amps, please contact HILCO Electric Cooperative for any adjustments and
additional requirements.

****WARNING****

PLEASE CALL FOR UTILITY LOCATES BEFORE DIGGING
AT 1-800-DIGTESS or 811

HILCO Electric Cooperative shall require that the following conditions be met
before electric service will be provided:

1. The consumer is responsible for installing and maintaining the electrical facilities in accordance with HILCO requirements.
2. The consumer may not contact, attach or utilize HILCO's electric distribution facilities.
3. HILCO reserves the right to approve a consumer's complete electric system and to determine that all conditions of code, safety and the design of the facilities being served have no detrimental effects upon the utility service. **Where HILCO specifications exceed code they shall take precedence.**
4. Consumers will furnish the meter base, meter loop, and service entrance facilities. Poles and/or any material used for meter loops shall be the consumer's responsibility.
5. Poles and/or any material used for meter loops shall be made of sound material and appropriately treated to resist degradation from the environment. HILCO will not connect service to any type of pole that has been spliced or pieced together. (Refer to the appropriate specification for installation and size requirements.)
6. Temporary meter loops are the consumer's responsibility and are meant to be temporary installations used during construction. Temporary meter loops shall be a minimum distance of ten feet (10') from HILCO's overhead facilities and shall not exceed ninety feet (90'). For underground installations, temporary poles shall not exceed ten feet (10') from HILCO's underground facilities.

7. The consumer shall install the appropriate contact apparatus to accept HILCO's electric service. All mast risers (through the roof) shall be 2" galvanized rigid metal conduit (as a minimum) and of sufficient strength to support the service drop conductors.
8. All service contacts shall not be less than thirteen (13') feet from final grade and all weather heads shall not be less than twelve and a half (12' 6") feet from final grade. **HILCO Electric enforces the National Electric Safety Code Section 23 Rule 232 and takes precedence over this rule to ensure that adequate clearances are met and maintained.**
9. HILCO **will not** attach their electric service directly to any type of portable or mobile structure.
10. HILCO **will** attach their electric service directly to a manufactured home or structure, provided that any axles and tongue/hitches be removed, it is mounted on a permanent, poured-in-place, concrete foundation and/or piers.
11. The NEC, specifically Article 250, defines various types of grounding electrodes and methods for grounding. HILCO takes precedence over NEC and requires all ground rods to be driven at least 8 feet deep into the earth and shall be located outside the foundation and structure.
12. The meter base shall be the ringless, socket type, shall be located outside of buildings, must be able to accept a padlock by HILCO, and shall be accessible to HILCO employees at all times. Meter bases must be installed between five feet (5') and six feet (6') from grade. However, a minimum height of four feet (4') is permitted for underground temporary and permanent meter poles, pedestals and H-Frame installations.
13. HILCO Electric's specifications do not allow "double lugging" or the installation of multiple conductors under one lug inside the meter base. Specific meter bases may accept multiple conductors, if it has the ability to exchange the lugs to accommodate and also if space permits within the meter base.
14. Service equipment disconnecting means or a main breaker shall be provided and installed by the consumer. Its purpose shall be to provide a means of disconnecting all conductors in a building or other structure from the service-entrance conductors.
 - A. **Residential Installations** (NEC 230.85) For all one and two-family dwelling units, HILCO requires a clearly labeled Emergency Disconnect to be installed in a readily accessible **outdoor** location. This device must meet the requirements of NEC 230.85 to allow first responders to safely de-energize the property from the exterior.
 - The disconnect must be installed on the exterior of the dwelling or within sight of the meter base.
 - The enclosure must be marked with a permanent plaque as either "EMERGENCY DISCONNECT, SERVICE DISCONNECT".

B. Other Installations (NEC 230.70) For all non-residential installations (commercial, industrial, or agricultural), the location of the service disconnecting means shall be "readily accessible" per NEC 230.70. HILCO, as the electric provider, maintains the authority to enforce the specific placement of this equipment.

- HILCO states that all service equipment disconnecting means for these installations shall be installed within a distance of eight (8) circuit feet from the point of service entrance.
- If the distance of eight (8) circuit feet cannot be met, an outside main disconnect must be installed, or an alternative readily accessible location must be approved by HILCO engineering prior to installation.

15. Wire size shall be based according to load, amp rating of the main disconnect and rating of the meter base. To ensure proper coordination, the amp rating of wire should be equal to or greater than the main disconnect and the main disconnect shall not exceed the amp rating of the meter base.

A. The main disconnect shall have a rating not less than the calculated load to be carried.

B. Every service shall have a main disconnect. The NEC Article 230.71, changed in 2020, **no longer allows** a maximum of six breakers to be grouped in the place of a main disconnect.

16. Where service is supplied by more than one electric service to a single structure, a permanent plaque must be installed containing information describing all other electric services, their location and the area they serve.

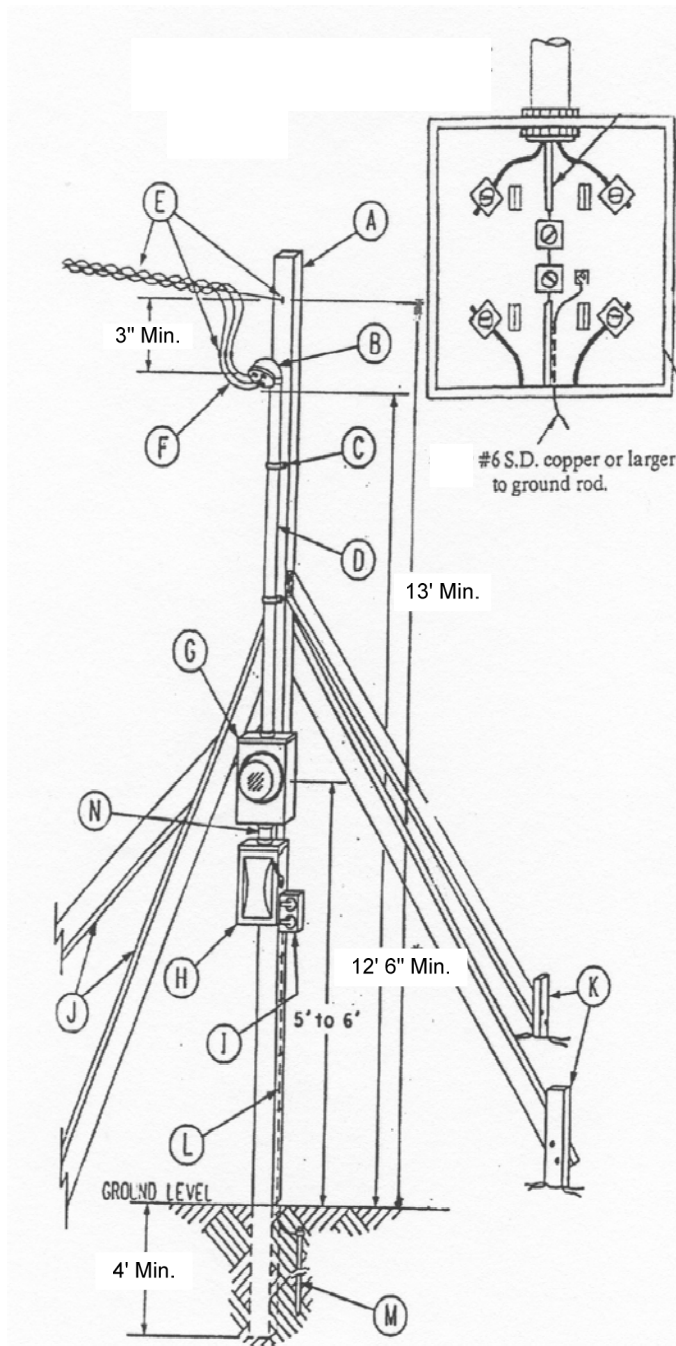
17. The meter loop will consist of three INSULATED COPPER or ALUMINUM wires, 100-amp capacity as a minimum for residential service and 60-amp capacity as a minimum for non-residential service. The neutral, as a minimum, cannot be smaller than two sizes below the conductor size. Allowable ampacities for residential dwellings and other non-residential applications.

18. NEC Code gives note, in Article 310.12, that residential dwellings shall have a minimum 100 amp and all other non-residential, in Article 230.79 (D), shall have a minimum 60 amp, utilizing the below wire ampacity tables:

	Residential	Non-Residential
Copper Wire (THW) Size and Ampacity	NEC Table 310.12 Residential Service Entrance	NEC Table 310.16 Non-Residential Service Entrance
# 6	-	65 amps
# 4	100 amps	85 amps
# 3	110 amps	100 amps
# 2	125 amps	115 amps
# 1	150 amps	130 amps
# 1/0	175 amps	150 amps
# 2/0	200 amps	175 amps
# 3/0	225 amps	200 amps
# 4/0	250 amps	230 amps
# 250	300 amps	255 amps
# 300	-	285 amps
# 350	350 amps	310 amps
# 400	400 amps	335 amps

	Residential	Non-Residential
Aluminum or Copper-Clad Aluminum Wire (THW) Size and Ampacity	NEC Table 310.12 Residential Service Entrance	NEC Table 310.16 Non-Residential Service Entrance
# 4	-	65 amps
# 3	-	75 amps
# 2	100 amps	90 amps
# 1	110 amps	100 amps
# 1/0	125 amps	120 amps
# 2/0	150 amps	135 amps
# 3/0	175 amps	155 amps
# 4/0	200 amps	180 amps
# 250	225 amps	205 amps
# 300	250 amps	230 amps
# 350	300 amps	250 amps
# 500	350 amps	270 amps
# 600	400 amps	310 amps

HILCO ELECTRIC COOPERATIVE, INC. **TEMPORARY METER INSTALLATION-OVERHEAD SERVICE**



**** Minimum 10' and Maximum 90' from **
HILCO's Facilities**

NOTE: CUSTOMER SHALL INSTALL AND MAINTAIN THIS FACILITY IN A SAFE CONDITION. IT CAN BE LEFT INTACT AND MOVED FROM JOB SITE TO JOB SITE. IT SHALL NOT BE MOVED WHILE ENERGIZED. INTENDED FOR TEMPORARY USE ONLY.

A - 4" X 4" X 17' WOODEN MAST MINIMUM.

B - DO NOT EXTEND WEATHERHEAD ABOVE TOP OF POLE. MUST BE MINIMUM 3" BELOW TOP OF POLE. (MINIMUM HEIGHT OF 12' 6" FROM FINAL GRADE)

C - METAL 2-HOLE CONDUIT STRAP SEPARATION SHALL BE NO GREATER THAN 30" WITH A MINIMUM OF 2 CONDUIT STRAPS.

D - SERVICE RISER SHALL BE FURNISHED AND INSTALLED BY CONSUMER. RISER SHALL BE GALVANIZED RIGID STEEL, I.M.C. OR SCH 80 ELECTRICAL PVC. (1 1/4" MIN)

E - SERVICE DROP CONDUCTORS, SERVICE ATTACHMENTS, AND CONNECTORS FURNISHED AND INSTALLED BY HILCO. (MINIMUM HEIGHT OF 13' FROM FINAL GRADE)

F - A MINIMUM OF 2' OF CONDUCTOR SHALL EXTEND FROM WEATHERHEAD TO FORM DRIP LOOP. CONSUMER SHALL MARK NEUTRAL WITH WHITE TAPE.

G - METER BASE FURNISHED, INSTALLED, AND WIRED BY CONSUMER. (MINIMUM 5' TO MAX 6' FROM GRADE) **SHALL NOT BE USED AS RACEWAY**

H - WEATHERPROOF BOX, WITH MAIN DISCONNECT. FURNISHED AND INSTALLED BY CONSUMER. (AMP RATING SHALL BE CONSISTENT WITH SERVICE CONDUCTOR AMPACITY)

I - ANY WEATHERPROOF RECEPTACLES SHALL HAVE GROUND FAULT PROTECTION.

J - 2" X 4" BRACES ATTACHED WITH LUG SCREWS OR 16 PENNY NAILS AT 90 FROM EACH OTHER. (FACED TOWARDS HILCO'S FACILITY)

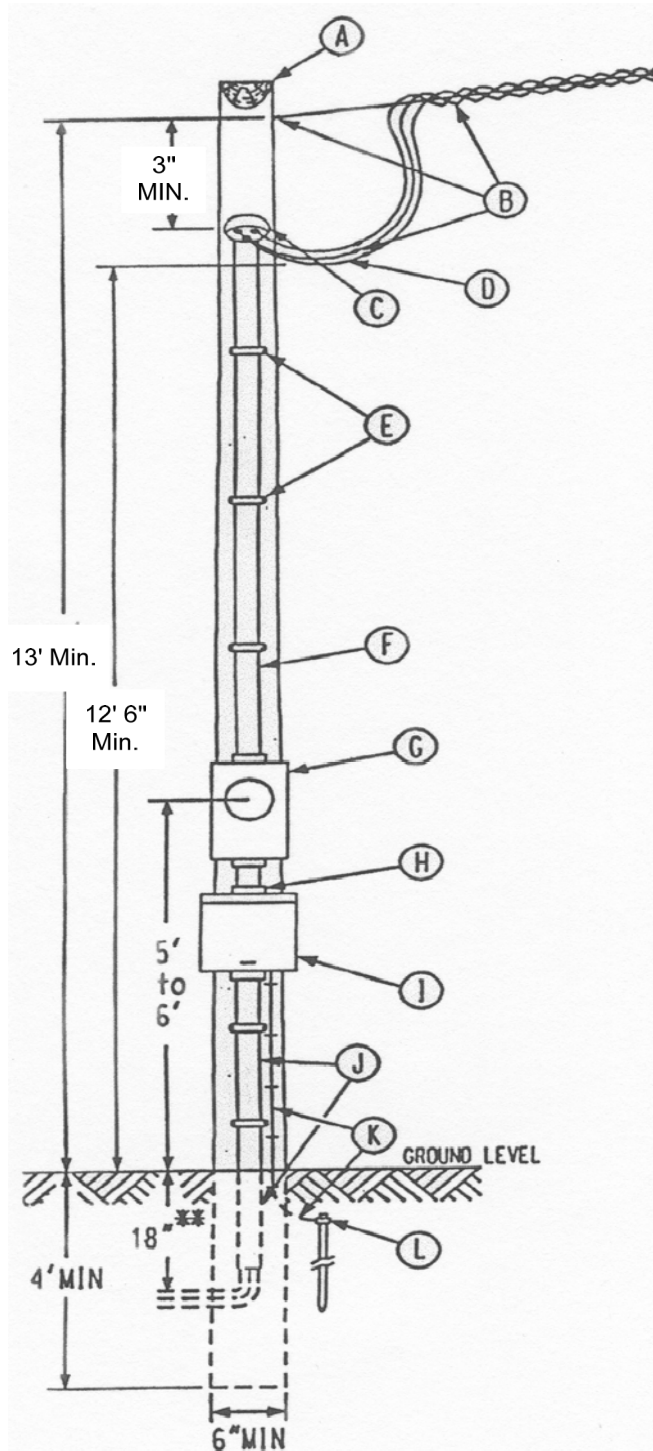
K - 2" X 4" STAKES.

L - COPPER GROUNDING ELECTRODE CONDUCTOR SIZED AND INSTALLED BY CONSUMER ACCORDING TO HILCO REQUIREMENTS. (#6 SOFT DRAWN BARE OR STRANDED COPPER MINIMUM.)

M - APPROVED GROUNDING ELECTRODE AND CLAMP, FURNISHED AND INSTALLED BY CONSUMER. (GROUND ROD SHALL BE 5/8" X 8' COPPER OR GALVANIZED.)

N - NIPPLE RACEWAY TO METER SOCKET SHALL BE RIGID METAL, I.M.C. OR SCH 80 ELECTRICAL PVC.

HILCO ELECTRIC COOPERATIVE, INC.
PERMANENT METER POLE



A – METER POLE INSTALLED BY CONSUMER. (POLE SHALL BE 6" X 6" X 17' MINIMUM)

B - SERVICE DROP CONDUCTORS. SERVICE ATTACHMENTS, AND CONNECTORS FURNISHED AND INSTALLED BY HILCO. (MINIMUM HEIGHT OF 13' FROM FINAL GRADE)

C - DO NOT EXTEND WEATHERHEAD ABOVE TOP OF POLE. MUST BE A MINIMUM 3" BELOW TOP OF POLE. (MINIMUM HEIGHT OF 12' 6" FROM FINAL GRADE)

D - A MINIMUM OF 2' OF CONDUCTOR SHALL EXTEND FROM WEATHERHEAD TO FORM DRIP LOOP. CONSUMER SHALL MARK NEUTRAL WITH WHITE TAPE.

E – METAL 2-HOLE CONDUIT STRAP SEPARATION SHALL BE NO GREATER THAN 30" WITH A MINIMUM OF 2 CONDUIT STRAPS.

F - SERVICE RISER WITH WEATHERHEAD, FURNISHED AND INSTALLED BY CONSUMER. SHALL BE GALVANIZED RIGID STEEL, I.M.C. OR SCH 80 ELECTRICAL PVC (1 1/4" MINIMUM).

G - METER BASE FURNISHED, INSTALLED, AND WIRED BY CONSUMER. (MINIMUM 5' TO MAX 6' FROM GRADE) **SHALL NOT BE USED AS RACEWAY**

H - ALL CONDUIT NIPPLE RACEWAYS SHALL BE RIGID METAL, I.M.C. OR SCH 80 ELECTRICAL PVC.

I - WEATHERPROOF BOX, WITH MAIN DISCONNECT. FURNISHED AND INSTALLED BY CONSUMER. (AMP RATING SHALL BE CONSISTENT WITH SERVICE CONDUCTOR AMPACITY.)

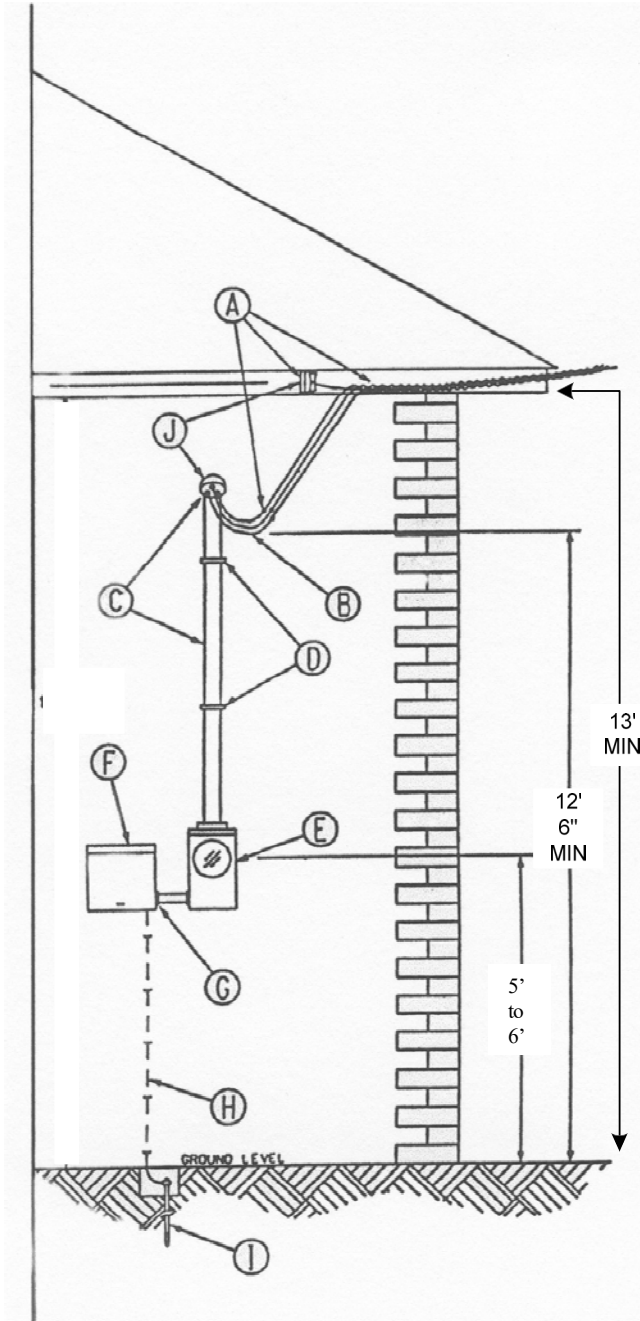
J - SERVICE RACEWAY SHALL BE GALVANIZED RIGID STEEL CONDUIT, I.M.C. OR SCH 80 ELECTRICAL PVC. FURNISHED AND INSTALLED BY CONSUMER TO A MINIMUM DEPTH OF 18 INCHES BELOW GROUND LEVEL.

K - COPPER GROUNDING ELECTRODE CONDUCTOR FURNISHED AND INSTALLED BY CONSUMER. (#6 -SOFT DRAWN BARE OR STRANDED COPPER MINIMUM.

L - APPROVED GROUNDING ELECTRODE AND CLAMP, FURNISHED AND INSTALLED BY CONSUMER. (GROUNDING ROD SHALL BE 5/8" X 8' COPPER OR GALVANIZED.

**** Minimum 10' and Maximum 75' from ****
HILCO's Facilities

HILCO ELECTRIC COOPERATIVE, INC.
OVERHEAD HOUSE METER SERVICE (UNDER EAVES)



A - SERVICE DROP CONDUCTORS, SERVICE ATTACHMENT, AND CONNECTORS FURNISHED AND INSTALLED BY HILCO.
(MINIMUM HEIGHT OF 13' FROM FINAL GRADE)

B - A MINIMUM OF 2' OF CONDUCTOR SHALL EXTEND FROM WEATHERHEAD TO FORM DRIP LOOP. CONSUMER SHALL MARK NEUTRAL WITH WHITE TAPE.

C - SERVICE RISER WITH WEATHERHEAD, FURNISHED AND INSTALLED BY CONSUMER, SHALL BE GALVANIZED RIGID STEEL, I.M.C. OR SCH 80 ELECTRICAL PVC. (1 ¼" MINIMUM)
(MINIMUM HEIGHT OF 12' 6" FROM FINAL GRADE)

D - METAL 2-HOLE CONDUIT STRAP
SEPARATION SHALL BE NO GREATER THAN 30" WITH A MINIMUM OF 2 CONDUIT STRAPS.

E - METER BASE FURNISHED, INSTALLED, AND WIRED BY CONSUMER. **SHALL NOT BE USED AS RACEWAY**

F - WEATHERPROOF BOX, WITH MAIN DISCONNECT. FURNISHED AND INSTALLED BY CONSUMER. THE ENCLOSURE SHALL BE WITHIN 8 CIRCUIT FEET OF THE METER (AMP RATING SHALL BE CONSISTANT WITH SERVICE CONDUCTOR AMPACITY)

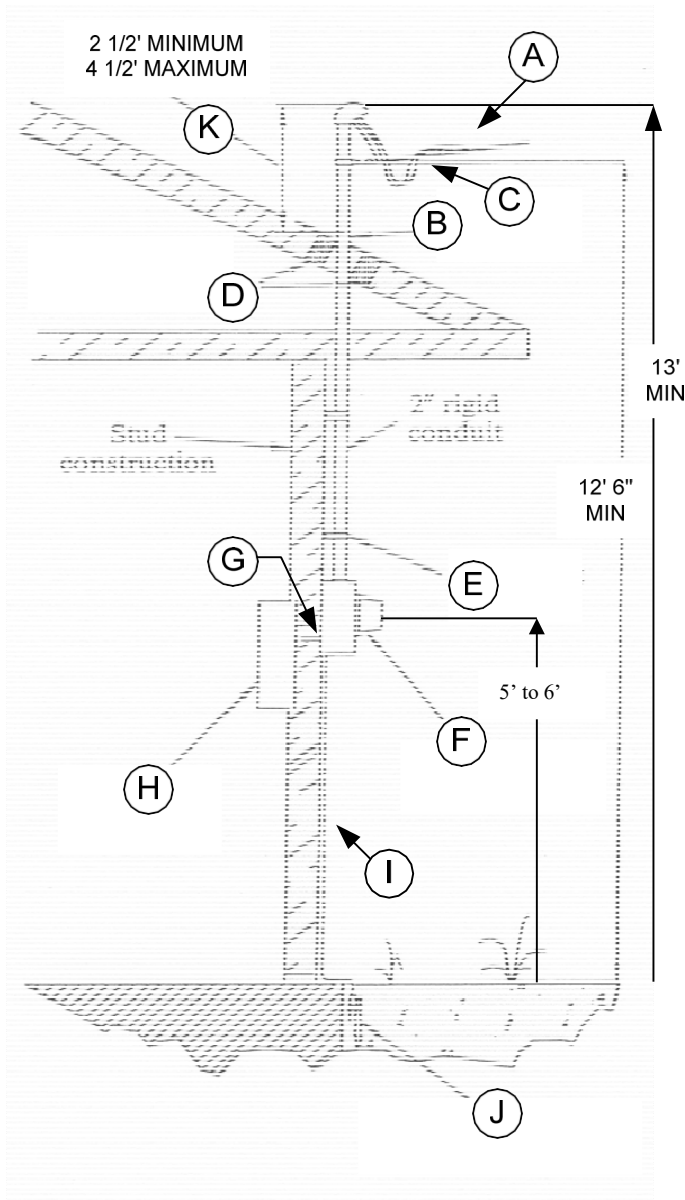
G - ALL CONDUIT NIPPLE RACEWAYS SHALL BE RIGID METAL, I.M.C. OR SCH 80 ELECTRICAL PVC.

H - COPPER GROUNDING ELECTRODE CONDUCTOR FURNISHED AND INSTALLED BY CONSUMER. (#6 SOFT DRAWN BARE OR STRANDED COPPER MINIMUM)

I - APPROVED GROUNDING ELECTRODE AND CLAMP, FURNISHED AND INSTALLED OUTSIDE THE STRUCTURE BY THE CONSUMER. (GROUND SHALL BE 5/8"X8' COPPER OR GALVANIZED.)

J - WEATHERHEAD SHALL BE WITHIN 24" OF POINT OF ATTACHMENT.

HILCO ELECTRIC COOPERATIVE, INC. **OVERHEAD HOUSE METER SERVICE (ABOVE ROOF)**



A - SERVICE DROP CONDUCTORS, SERVICE ATTACHMENT, AND CONNECTORS FURNISHED AND INSTALLED BY HILCO.
(MINIMUM HEIGHT OF 12' 6" FROM FINAL GRADE)

B - GALVANIZED RIGID 2" CONDUIT AS A MINIMUM WITH WEATHERHEAD FURNISHED AND INSTALLED BY CONSUMER. ENTIRE RISER SHALL BE VISIBLE.

C - A MINIMUM OF 2' OF CONDUCTOR SHALL EXTEND FROM WEATHERHEAD TO FORM DRIP LOOP. CONSUMER SHALL MARK NEUTRAL WITH WHITE TAPE.

D - USE 2" X 4" BRACING BETWEEN RAFTERS, AS A MINIMUM, TO SUPPORT SERVICE RACEWAY.

E - SERVICE MAST TO BE SUPPORTED WITH METAL 2-HOLE CONDUIT STRAPS AT 30" SEPARATION MAXIMUM.

F - METER BASE FURNISHED, INSTALLED, AND WIRED BY CONSUMER. **SHALL NOT BE USED AS RACEWAY**

G - ALL CONDUIT NIPPLE RACEWAYS SHALL BE RIGID METAL, I.M.C. OR SCH 80 ELECTRICAL PVC.

H - BREAKER BOX, WITH MAIN DISCONNECT. FURNISHED AND INSTALLED BY CONSUMER. THE ENCLOSURE SHALL BE WITHIN 8 CIRCUIT FEET OF THE METER. (AMP RATING SHALL BE CONSISTENT WITH SERVICE CONDUCTOR AMPACITY)

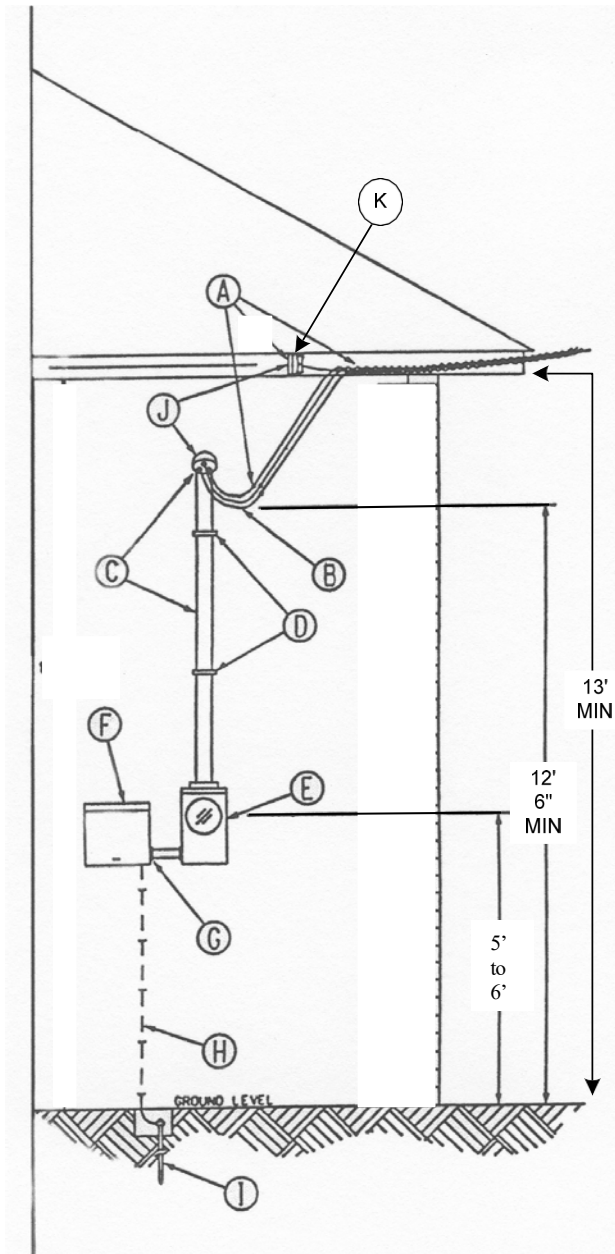
I - COPPER GROUNDING ELECTRODE CONDUCTOR FURNISHED AND INSTALLED BY CONSUMER. (#6 - SOFT DRAWN BARE OR STRANDED COPPER MINIMUM

J - APPROVED GROUNDING ELECTRODE AND CLAMP FURNISHED AND INSTALLED OUTSIDE THE STRUCTURE BY THE CONSUMER.
(GROUND ROD SHALL BE 5/8" X 8'. COPPER OR GALVANIZED.)

K - CLEARANCE OF SERVICE CONDUCTOR ABOVE ROOF, SHALL BE A MINIMUM HEIGHT OF 18" AND A DISTANCE OF 4' FROM WITHIN THE EDGE OF THE ROOF. IF DISTANCE IS FURTHER THAN 4' FROM EDGE, THEN CLEARANCE HEIGHT OVER ROOF SHALL BE INCREASED TO 3' MINIMUM. (MINIMUM HEIGHT OF 13' FROM FINAL GRADE)

**** Recommended, any through the roof installation needs anchor supports for riser and service conductors.**

HILCO ELECTRIC COOPERATIVE, INC.
OVERHEAD HOUSE METER SERVICE (METAL STRUCTURE)



A - SERVICE DROP CONDUCTORS AND CONNECTORS FURNISHED AND INSTALLED BY HILCO. (CONSUMER WILL NEED TO INSTALL EYE BOLT FOR HILCO'S WIRE ATTACHMENT) (MINIMUM HEIGHT OF 13' FROM FINAL GRADE)

B - A MINIMUM OF 2' OF CONDUCTOR SHALL EXTEND FROM WEATHERHEAD TO FORM DRIP LOOP. CONSUMER SHALL MARK NEUTRAL WITH WHITE TAPE.

C - SERVICE RISER WITH WEATHERHEAD, FURNISHED AND INSTALLED BY CONSUMER, SHALL BE GALVANIZED RIGID STEEL, I.M.C. OR SCH 80 ELECTRICAL PVC. (1 1/4" MINIMUM) (MINIMUM HEIGHT OF 12' 6" FROM FINAL GRADE)

D - METAL 2-HOLE CONDUIT STRAP SEPARATION SHALL BE NO GREATER THAN 30" WITH A MINIMUM OF 2 CONDUIT STRAPS.

E - METER BASE FURNISHED, INSTALLED, AND WIRED BY CONSUMER. **SHALL NOT BE USED AS RACEWAY**

F - WEATHERPROOF BOX, WITH MAIN DISCONNECT. FURNISHED AND INSTALLED BY CONSUMER. THE ENCLOSURE SHALL BE WITHIN 8 CIRCUIT FEET OF THE METER. (AMP RATING SHALL BE CONSISTENT WITH SERVICE CONDUCTOR AMPACITY)

G - ALL CONDUIT NIPPLE RACEWAYS SHALL BE RIGID METAL, I.M.C. OR SCH 80 ELECTRICAL PVC.

H - COPPER GROUNDING ELECTRODE CONDUCTOR FURNISHED AND INSTALLED BY CONSUMER. (#6 -SOFT DRAWN BARE OR STRANDED COPPER MINIMUM)

I - APPROVED GROUNDING ELECTRODE AND CLAMP, FURNISHED AND INSTALLED OUTSIDE THE STRUCTURE BY THE CONSUMER. (GROUND ROD SHALL BE 5/8" X 8' COPPER OR GALVANIZED.)

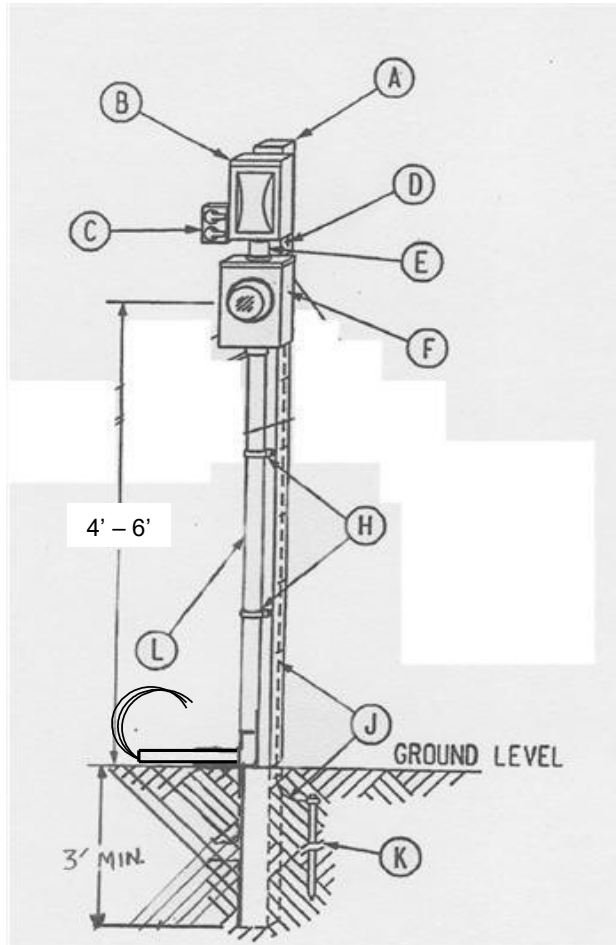
J - WEATHERHEAD SHALL BE WITHIN 24" OF POINT OF ATTACHMENT.

K - EYE BOLT FURNISHED AND INSTALLED BY CUSTOMER TO SUPPORT HILCO'S SERVICE WIRE.

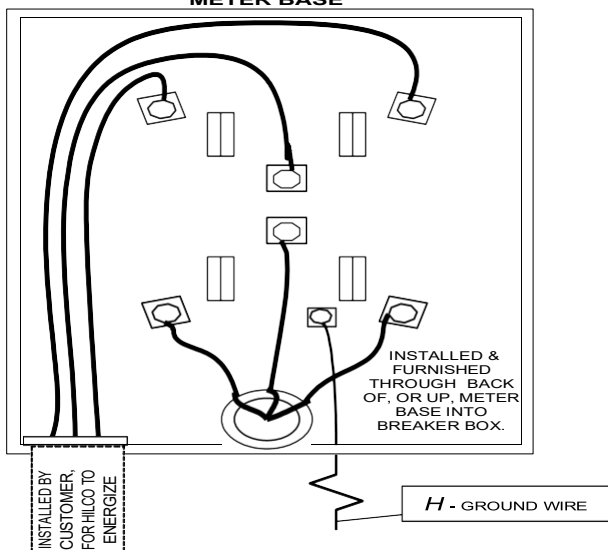
HILCO ELECTRIC COOPERATIVE, INC. TEMPORARY METER INSTALLATION-UNDERGROUND SERVICE

*** WARNING *** PLEASE CALL FOR UTILITY LOCATES BEFORE *** WARNING ***
DIGGING NEAR UNDERGROUND ELECTRIC FACILITIES
1 - 800 - DIGTESS

**** Service address must be marked on pole ****
**** Maximum 10' from HILCO's Facilities ****



**WIRING DIAGRAM OF INSIDE
UNDERGROUND TEMPORARY POLE
METER BASE**



NOTE: CUSTOMER SHALL INSTALL AND MAINTAIN THIS FACILITY IN A SAFE CONDITION. IT CAN BE LEFT INTACT AND MOVED FROM JOB SITE TO JOB SITE. IT SHALL NOT BE MOVED WHILE ENERGIZED. INTENDED FOR TEMPORARY USE ONLY.

A - 4" X 4" X 10' WOODEN MAST MINIMUM

B - WEATHERPROOF BOX WITH MAIN DISCONNECT. FURNISHED AND INSTALLED BY CUSTOMER. (AMP RATING SHALL BE CONSISTENT WITH SERVICE CONDUCTOR AMPACITY)

C - ANY WEATHERPROOF RECEPTACLES SHALL HAVE GROUND FAULT PROTECTION.

D - GROUNDING ELECTRODE CONDUCTOR ENTERS AND IS CONNECTED TO BREAKER EQUIPMENT.

E - NIPPLE RACEWAY TO METER SOCKET SHALL BE RIGID METAL, I.M.C., OR SCH 80 ELECTRICAL PVC.

F - METER BASE FURNISHED, INSTALLED, AND WIRED BY CONSUMER. (MINIMUM 4' TO MAX 6' FROM GRADE) **SHALL NOT BE USED AS RACEWAY**

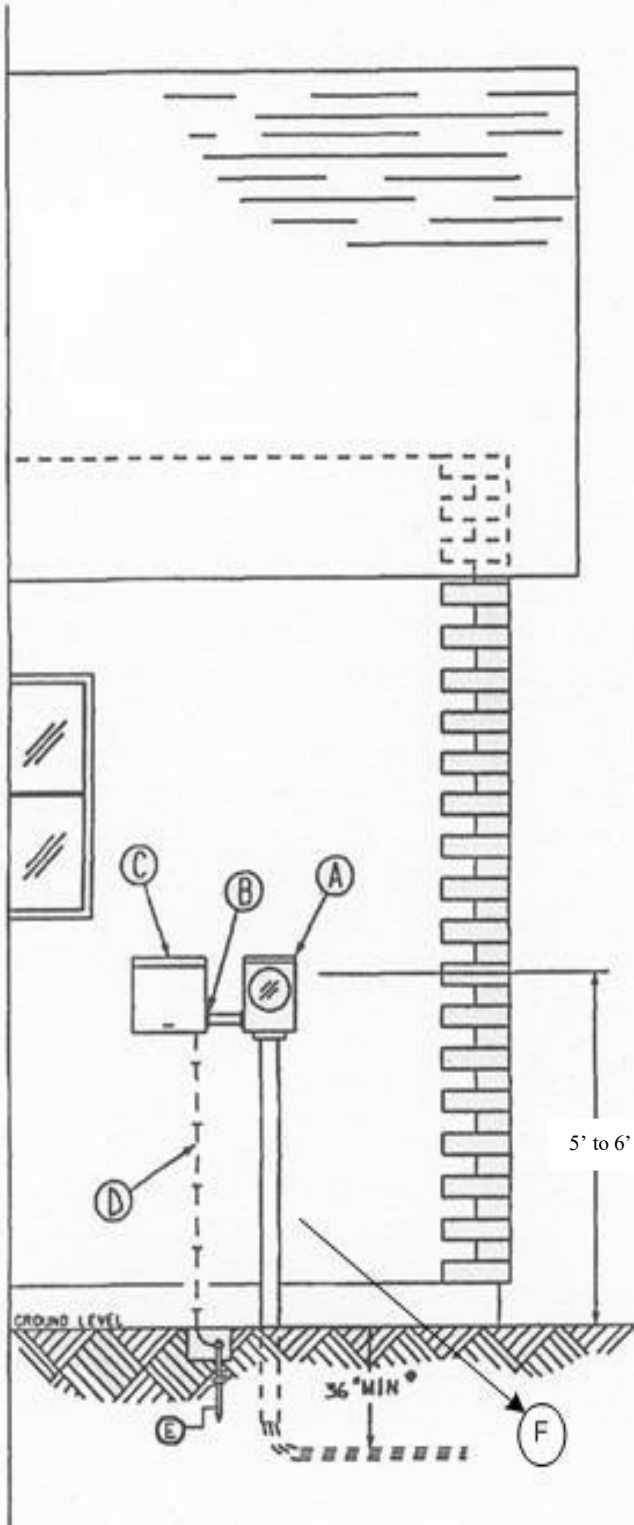
H - METAL 2-HOLE CONDUIT STRAP SEPARATION SHALL BE NO GREATER THAN 30" WITH A MINIMUM OF 2 CONDUIT STRAPS.

J - COPPER GROUNDING ELECTRODE CONDUCTOR SIZED AND INSTALLED BY CONSUMER. ACCORDING TO HILCO REQUIREMENTS. (#6 SOFT DRAWN BARE OR STRANDED COPPER MINIMUM.)

K - APPROVED GROUNDING ELECTRODE AND CLAMP, FURNISHED AND INSTALLED BY CUSTOMER. (GROUNDING ROD SHALL BE 5/8" X 8' COPPER OR GALVANIZED.)

L - MINIMUM 1 1/4" SERVICE RACEWAY CONSTRUCTED OUT OF FLEX CONDUIT. CONDUIT AND WIRE SHALL HAVE A MINIMUM 15' OF EXTENSION, FROM THE BASE OF THE TEMPORARY POLE. THIS WILL BECOME THE "PIG TAIL" FOR HILCO TO ENERGIZE. (FURNISHED BY CONSUMER.)

**HILCO ELECTRIC COOPERATIVE, INC.
UNDERGROUND HOUSE METER SERVICE**



A - METER BASE FURNISHED, INSTALLED AND WIRED BY CONSUMER. **SHALL NOT BE USED AS RACEWAY**

B - ALL CONDUIT NIPPLE RACEWAYS SHALL BE RIGID METAL, I.M.C. OR SCH 80 ELECTRICAL PVC.

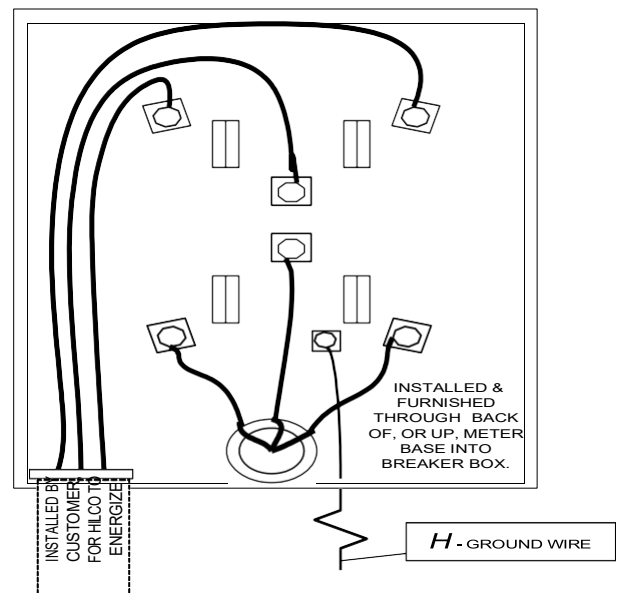
C - WEATHERPROOF BOX, WITH MAIN DISCONNECT. FURNISHED AND INSTALLED BY! CONSUMER. THE ENCLOSURE SHALL BE WITHIN 8 CIRCUIT FEET OF THE METER (AMP RATING SHALL BE CONSISTENT WITH SERVICE CONDUCTOR AMPACITY)

D - COPPER GROUNDING ELECTRODE CONDUCTOR SIZED AND INSTALLED BY CONSUMER ACCORDING TO HILCO REQUIREMENTS. (#6 SOFT DRAWN BARE OR STRANDED COPPER MINIMUM.)

E - APPROVED GROUNDING ELECTRODE AND CLAMP, FURNISHED AND INSTALLED OUTSIDE THE STRUCTURE BY THE CONSUMER. (GROUND ROD SHALL BE 5/8" X 8' COPPER OR GALVANIZED.)

F - CONDUIT, WIRE, AND TRENCH INSTALLED BY HILCO ELECTRIC. CONDUIT RISER SHALL HAVE NO OBSTRUCTIONS OR BENDS GOING INTO THE METER BASE. ENTIRE CONDUIT RISER SHALL BE VISIBLE AND REMAIN ON THE OUTSIDE OF THE STRUCTURE.

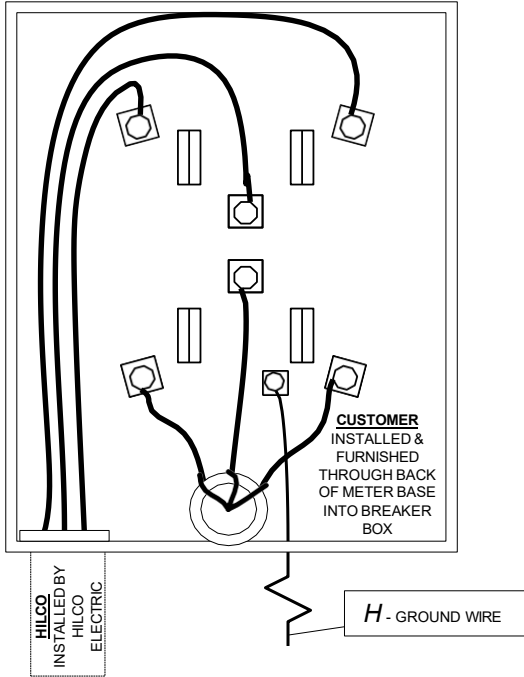
**WIRING DIAGRAM OF INSIDE
UNDERGROUND METER BASE**



HILCO ELECTRIC COOPERATIVE, INC.

PERMANENT UNDERGROUND METER POLE (OPTION #1)

**WIRING DIAGRAM OF INSIDE
UNDERGROUND METER BASE**



*** WARNING *** PLEASE CALL FOR UTILITY LOCATES BEFORE *** WARNING ***

DIGGING NEAR UNDERGROUND ELECTRIC FACILITIES

1 - 800 - DIGTESS

A - 4" X 6" X 10' MAST MINIMUM MADE OF STABLE METAL MATERIAL OR TREATED WOOD.

B - WEATHERPROOF BOX, WITH MAIN DISCONNECT. FURNISHED AND INSTALLED BY CONSUMER. (AMP RATING SHALL BE CONSISTENT WITH SERVICE CONDUCTOR AMPACITY)

C - ELECTRIC METER, CONDUIT, WIRE, AND TRENCH INSTALLED BY HILCO ELECTRIC.

D - GROUNDING ELECTRODE CONDUCTOR ENTERS AND IS CONNECTED TO EQUIPMENT.

E - NIPPLE RACEWAY TO METER SOCKET SHALL BE RIGID METAL, I.M.C. OR SCH 80 ELECTRICAL PVC AND SHALL BE INSTALLED THROUGH 4" X 6".

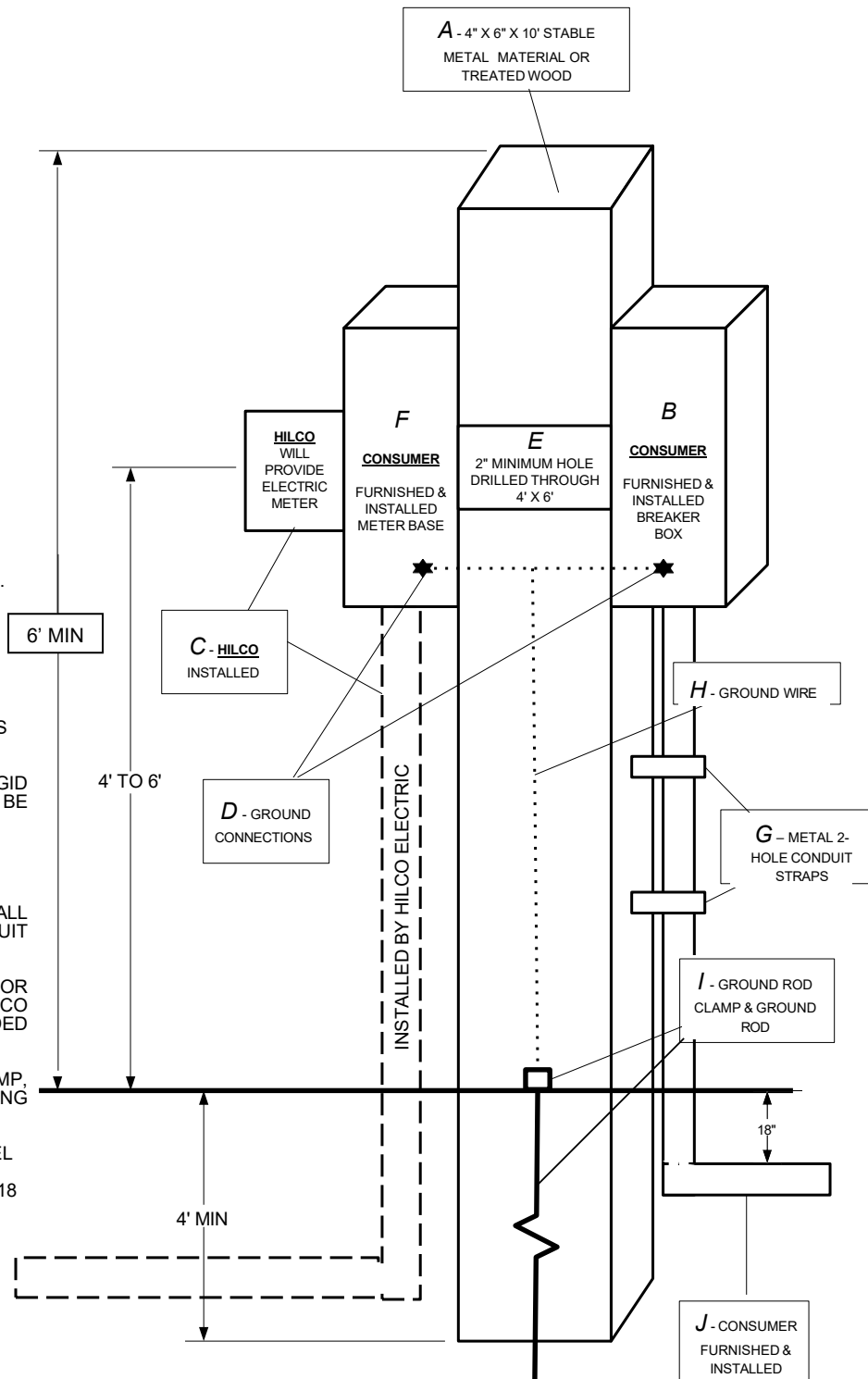
F - METER BASE FURNISHED, INSTALLED, AND WIRED BY CONSUMER. **SHALL NOT BE USED AS RACEWAY**

G - METAL 2-HOLE CONDUIT STRAP SEPARATION SHALL BE NO GREATER THAN 30" WITH A MINIMUM OF 2 CONDUIT STRAPS.

H - COPPER GROUNDING ELECTRODE CONDUCTOR SIZED AND INSTALLED BY CONSUMER ACCORDING TO HILCO REQUIREMENTS. (#6 SOFT DRAWN BARE OR STRANDED COPPER MINIMUM.)

I - APPROVED GROUNDING ELECTRODE AND CLAMP, FURNISHED AND INSTALLED BY CONSUMER. (GROUNDING ROD SHALL BE 5/8" X 8' COPPER OR GALVANIZED.)

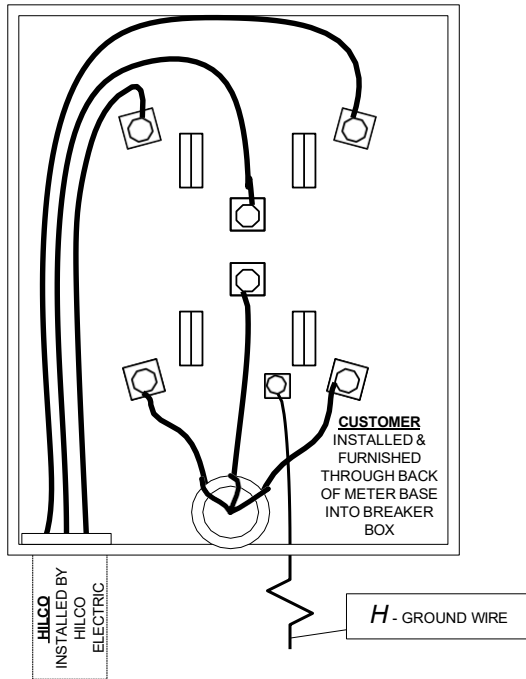
J - SERVICE RACEWAY SHALL BE GALVANIZED RIGID STEEL CONDUIT, I.M.C. OR SCH 80 ELECTRICAL PVC. FURNISHED AND INSTALLED BY CONSUMER TO A MINIMUM DEPTH OF 18 INCHES BELOW GROUND LEVEL.



HILCO ELECTRIC COOPERATIVE, INC.

PERMANENT UNDERGROUND METER POLE (OPTION #2)

**WIRING DIAGRAM OF INSIDE
UNDERGROUND METER BASE**



*** WARNING *** PLEASE CALL FOR UTILITY LOCATES BEFORE *** WARNING ***

DIGGING NEAR UNDERGROUND ELECTRIC FACILITIES

1 - 800 - DIGTESS

A - VERTICAL POSTS SHALL BE TREATED WOOD (4" X 4" MINIMUM) OR HEAVY-DUTY STRUCTURAL STEEL POSTS/TUBING. **UNISTRUT CHANNEL IS PROHIBITED FROM USE AS VERTICAL POSTS AND IS PERMITTED ONLY FOR HORIZONTAL CROSS-SUPPORTS.

B - WEATHERPROOF BOX, WITH MAIN DISCONNECT. FURNISHED AND INSTALLED BY THE CONSUMER. (AMP RATING SHALL BE CONSISTENT WITH SERVICE CONDUCTOR AMPACITY)

C - ELECTRIC METER, CONDUIT, WIRE, AND TRENCH INSTALLED BY HILCO ELECTRIC.

D - GROUNDING ELECTRODE CONDUCTOR ENTERS AND IS CONNECTED TO EQUIPMENT.

E - NIPPLE RACEWAY TO METER SOCKET SHALL BE RIGID METAL, I.M.C. OR SCH 80 ELECTRICAL PVC.

F - METER BASE FURNISHED, INSTALLED, AND WIRED BY CONSUMER. **SHALL NOT BE USED AS RACEWAY**

G - METAL 2-HOLE CONDUIT STRAP.

H - COPPER GROUNDING ELECTRODE CONDUCTOR SIZED AND INSTALLED BY CONSUMER ACCORDING TO HILCO REQUIREMENTS. (#6 SOFT DRAWN BARE OR STRANDED COPPER MINIMUM.)

I - APPROVED GROUNDING ELECTRODE AND CLAMP, FURNISHED AND INSTALLED BY CONSUMER. (GROUNDING ROD SHALL BE 5/8" X 8' COPPER OR GALVANIZED.)

J - SERVICE RACEWAY SHALL BE GALVANIZED RIGID STEEL CONDUIT, I.M.C. OR SCH 80 ELECTRICAL PVC. FURNISHED AND INSTALLED BY CONSUMER TO A

