



Current Revision: May 1, 2024

# Metering Standards

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## 1.0 Temporary Power for Construction

In underground distribution areas, when the temporary power pole is within ten (10) feet of the transformer or secondary pedestal, the service wires shall be in flexible, non-metallic liquid tight conduit. This can be above ground or buried at a depth of twelve (12) inches. It is the responsibility of the electrical contractor to dig and install the flexible non-metallic liquid tight conduit including wire under the secondary pedestal. Grand Island Utilities Department (GIUD) shall make the electrical connections at the transformer or secondary terminal. If the temporary power pole is more than ten (10) feet from the padmount transformer or secondary pedestal, the service wire to the temporary power pole may be direct buried at a depth of eighteen (18) inches. The direct buried wire used for the temporary service shall be type UF, USE, or equal to, as specified by the National Electrical Code (NEC). All wire and trenching and/or digging to and under the padmount transformer or secondary pedestal shall be the responsibility of the electrician.

The permanent underground electric service wires can be used for the temporary service if the service wires at the temporary pole are in conduit. Any termination in open air shall be at least twelve (12) feet above ground.

Temporary power poles fed from an overhead power supply and within six (6) feet of the utility pole shall be at least twelve (12) feet high at the point of attachment. If the temporary power pole is more than six (6) feet from the utility pole, the service pole must be of sufficient height to maintain eighteen (18) feet of clearance on the wire at midspan. The overhead service wire shall be installed by GIUD.

All receptacle outlets on temporary power poles shall be protected with ground-fault interrupter for personnel safety. Refer to NEC Article 590.6.

Connection of temporary power at construction sites will normally occur within two working days after electrical inspection of the temporary power pole and equipment is complete.

## 2.0 Electrical Meter Releases and Installation

Upon successful completion of a final inspection by the Building Department, a meter release is given to GIUD. GIUD shall install the meter within one working day. The customer may request the meter be installed after normal business hours. This will result in an overtime charge. If a specific hookup time is needed, an appointment should be made only after the final inspection has been completed.

When the electrical meter is installed, the Service Crew will make sure there is electricity to the main breaker but shall leave it in the OFF position. If the customer is present, they may request the Service Crew to check other locations.

If an appointment is called for and the service is not ready, or the final inspection has not been completed, a service fee will be charged.

Arrangements should always be made with both the Utilities Customer Service office and the Building Department prior to contacting the Service Crew. Appointments can be made with the Electric Distribution Supervisor at 308-385-5471.

## 3.0 Padmount Transformers

The following are general guidelines addressing locations fed by padmount transformers:

1. When planning any work involving a new service or meter, prior to starting the job, check with GIUD on what voltages are available and the location of the power source for the service in question.

2. Normally, in new residential subdivisions, a secondary pedestal shall be provided for the electrician to stub the service conduit (s) in to.
3. Secondary transformer lugs and bolts for all transformers and secondary pedestals shall be provided by GIUD.

## 4.0 Customer Electric Service Data Form

CITY OF GRAND ISLAND, NEBRASKA

UTILITIES DEPARTMENT

PHONE: (308) 385-5471

### CUSTOMER ELECTRIC SERVICE DATA

DATE \_\_\_\_\_

CONTRACTOR \_\_\_\_\_

BUSINESS OWNER \_\_\_\_\_

LOCATION OF BUILDING \_\_\_\_\_

Single Phase 120/240 Volt or 120/208	3 wire, lighting and/or single phase power. One or two meters. 010 Residential lighting rate and/or 030 Single Phase Commercial rate.
Three Phase 120/208 Volt	4 wire lighting and power. One meter. 050 Three Phase Commercial rate.
Three Phase 277/480 Volt	4 wire. One meter. 050 Three Phase Commercial rate or 100 Optional Power rate or 104 Large light and power service (1500 KW Minimum)

MAIN SIZE \_\_\_\_\_ CALCULATED LOAD \_\_\_\_\_ (AMPS OR KVA)

SIZE OF WIRE STUBBED OUT FOR SERVICE \_\_\_\_\_

NUMBER OF CONDUCTORS PER PHASE \_\_\_\_\_

Copper

Aluminum

LIGHTING KW \_\_\_\_\_

TOTAL CONNECTED HP \_\_\_\_\_

LARGEST SINGLE CONNECTED MOTOR HP \_\_\_\_\_

NUMBER OF THREE PHASE A/C UNITS \_\_\_\_\_

SIZE OF A/C UNIT (TON OF EACH UNIT) \_\_\_\_\_

BREAKER SIZE OF EACH A/C UNIT \_\_\_\_\_

ELECTRIC HEAT:

HOW MANY UNITS AND WHAT SIZE (KW) \_\_\_\_\_

**MUST BE SUBMITTED BEFORE TRANSFORMER IS SET.**

## 5.0 Self-Contained Meter Applications

**When planning any work involving a new service or meter, and before starting the job, check with the GIUD on what voltages are available, and the power source for the service in question.**

### 5.1 Single Phase

120/240 Volt, three wire 200 amps or less:

A four (4) terminal socket meter compartment shall be used. The socket compartment current rating shall be equal to or greater than the main disconnect rating.

120/240 Volt, three wire, above 200 amps.

A four (4) terminal socket and lever bypass shall be used. Approved lever bypasses are: Square D, Landis & GYR HQ, and the Milbank lever bypass (jaw clamping). The socket compartment current rating shall be equal to or greater than the main disconnect rating. For services over 400 amps, current transformers shall be used. Refer to Requirements for Instrument Metering, section 6.0.

120/208 Volt, three wire, 200 amps or less:

This is a network installation, consisting of a standard four terminal socket meter compartment with a movable 5<sup>th</sup> terminal installed on the left side. A # 12 solid copper wire tapped from the neutral to the 5<sup>th</sup> terminal is required. Services over 200 amps shall be a 120/208, four wire, three phase service.

### 5.2 Three Phase

120/208 Volt or 277/480 Volt, four wire Wye, 400 amps or less:

For both 120/208V and 277/480V services, a seven terminal socket meter compartment with a neutral wire installed on the third terminal from the left on the bottom terminal row shall be required.

120/208 Volt or 277/480 Volt, four wire Wye, over 200 amp and up to 400 amps.

A seven (7) terminal three phase meter socket with approved lever bypass shall be used. Approved lever bypasses are: Square D, Landis GYR HQ, or Milbank lever bypass (jaw clamping type). For services over 400 amps, current transformers shall be used. Refer to Requirements for Instrument Metering, section 6.0.

### 5.3 Irrigation Wells

Any new and upgraded irrigation wells may use a UL approved factory manufactured meter pedestal with a breaker provided the pedestal is adequately protected from damage by protective bollards. GIUD shall install stand-off brackets on the pole if they are required. All new or upgraded irrigation wells shall require a fused disconnect to be installed after the meter socket. See Drawings EX-9 and EX-9A.

### 5.4 General Requirements Meter Enclosures

Unless specifically waived by GIUD, meter sockets shall be mounted on the outside of a building or structure and shall be at the centerline height of five (5) to six (6) feet above finished grade (see Drawing EX-3) with exception to meter packs. All meter compartments shall be grounded according to the NEC Table 250-66. All masts above the roof shall be two (2) inch rigid steel. All meter enclosures shall be "ring type" or approved equivalent including single phase and three phase meter

enclosures rated at 200 amps or less, as well as meter packs, and meter pedestals. All newly built temporary structures shall follow these guidelines. Existing temporary meter structures built before 2016 shall be excluded. Meter locking rings or other locking means shall be supplied by GIUD.

Any customer's electric service over 200 amps shall be an underground electric service to a padmount transformer, secondary pedestal or a utility pole.

### *5.5 Point of Attachment*

The service drop point of attachment shall be twelve (12) feet minimum at the house/building while maintaining service drop clearances per NEC article 230.24.

### *5.6 Damage to Meter Loop*

Any electrical service/meter loop that is repaired or replaced shall comply with these metering standards, current NEC and City Code including meter height, point of attachment height, ground rod, etc. unless exception is given by GIUD.

### *5.7 Meter location*

See City Code 15-6.

### *5.8 Trailer Houses*

All new, upgraded and repaired services for trailer homes shall be required to use a factory manufactured meter pedestal, UL approved.

### *5.9 Meter Pedestals*

Meter pedestals can be used on residential or commercial services but shall be factory manufactured pedestals, UL approved. Meter pedestals shall not be located in utility easements unless prior approval by GIUD.

### *5.10 Height of Weather Head*

The weather head shall be twelve (12) inches from open secondary wires in a rack or triplex dead-ended on a J hook or twelve (12) inches below the bottom of the transformer (see Drawing EX-9). In all of these situations, the length of the wire coming out of the weather head shall have at least two (2) feet for a drip loop, plus sufficient wire length to reach the termination point. If there are any questions on the height of weather head or the length of wire for termination, call GIUD before starting the job.

### *5.11 Secondary Standoff Brackets and Pedestals*

Any conduits installed on a utility pole shall be on standoff brackets, unless prior approval is granted. Refer to Drawing EX-9. Stand-off bracket and hardware shall be furnished and installed by GIUD. In areas where the power is supplied by overhead power lines and the customer desires an underground electric service, GIUD shall determine if there will be a secondary pedestal installed at the base of the pole or if the electrical contractor will be required to install the customer electric service up the pole. Where the customer underground electric service is required to go up a main line pole (pole with primary voltage), GIUD shall determine if the clearances are sufficient for safe working by the



electrical contractor. If not, GIUD will assist the contractor above the first ten (10) feet of schedule 40 GRC conduit installed. If clearances are adequate for the contractor to install the entire conduit and wire up the pole, GIUD shall install stand-off brackets with a two (2) working day notice.

### *5.12 Padmount Transformer Secondary Lugs and Bolts*

GIUD shall supply all secondary transformer lugs and half inch bolts on all padmount transformers. GIUD shall terminate all secondary wires in padmount transformers and secondary pedestals. On three phase services with parallel wires, the contractor shall be present when secondary wires are terminated for assisting and verification of phase wire markings.

### *5.13 Residential Electric Furnace*

When installing wiring for an electric furnace in a new house or replacement of a gas furnace with an electric furnace, please notify GIUD of the customer's address and furnace size. Any electric furnace larger than 10 KW should have the heating elements come on in stages, a minimum of twenty (20) seconds between stages. This helps prevent nuisance flickering of lights and/or any associated voltage problems that may occur when the electric furnace turns on.

### *5.14 KYZ Pulses*

KYZ pulses are available to customers for load management. The customer shall supply and install an isolation relay within five foot of the electric meter.

## **6.0 Requirement for Instrument Metering (services over 400 amps.)**

**When planning any work involving metering on a new service or a service upgrade, check with GIUD on what voltages and hook-ups are available before starting the job.**

### *6.1 CT Cabinets*

Current Transformer (CT) cabinets, compartments or pedestals shall be used for metering any service over 400 amps and be factory manufactured and installed ahead of the main disconnect unless prior approval by GIUD. The exception to this is the use a of Multi Metering compartment of 277/480 volt. (see section 7.0). All CT cabinets or compartments shall have hinged doors with a latching mechanism and provision for a padlock. The CT cabinet shall have a NEMA-3R rating for weather protection.

The CT cabinet or pedestal shall accept a bar CT as follows:

- 400 A to 1600 A – 12" bar CT as per Drawing EX-1
- Greater than 1600 A – 14 ½" bar CT as per Drawing EX-2

### *6.2 CT Cabinet Location*

The CT cabinet can be mounted on the outside of a building or structure (see Drawing EX-3). The appropriate size CT cabinet will be needed, so it must be determined if the CT cabinet needed is a bottom feed-bottom exit, or a bottom feed-top exit. The CT cabinet shall be grounded from the electric panel per NEC table 250.66. The bottom of the wall mounted CT cabinet shall be a minimum of eighteen (18) inches above finished grade. If the wall mounted CT cabinet receives a conduit or

conduits from a GIUD transformer, expansion couplings shall be used at the CT cabinet (see Drawing EX-3).

### *6.3 CT Cabinets in Switchgear*

The CT compartment can be an integral part of the switchgear (Drawings EX-4 and Ex-4A) on the outside of the building or structure. The switchgear/CT compartment can be located inside the building or structure with prior approval from GIUD. With any interior installation, the meter socket shall be on the outside of the building or structure and within twelve (12) feet (wire pulling distance) of the CT compartment with a one (1) inch conduit connecting them. There shall be an opening through the wall of the building or structure for future meter testing leads. This opening can be a window, a door or a four (4) inch conduit. The maximum distance through the wall opening and between the CT cabinet and meter socket for the future test leads shall be no more than twelve (12) feet. If a four (4) inch conduit is used for the future test leads, there shall be caps on both ends of the conduit that can be easily removed. When the CT compartment is an integral part of the switchgear, a doughnut type CT shall be installed on the switchgear's bus bar. The bus bar shall be bolted together so the CT's can be easily installed and removed. For this application there shall be a horizontal platform of non-metallic, high dielectric fiberglass board, for the doughnut CT to lie on. The bus bar in the CT compartment shall have termination provisions for connecting the potential and neutral wires for the electric meter.

### *6.4 Padmount CT Cabinets*

A padmount CT pedestal can be located adjacent to the GIUD transformer (see Drawing EX-5A or EX-5B), with a concrete pad (see Drawing EX-5C). A standard concrete GIUD transformer pad can be extended for a padmount CT pedestal (see Drawings EX-6 and EX-6A). With both of these applications, the location of the padmount CT pedestal will require prior approval from GIUD. The padmount CT pedestal shall be anchored to a concrete slab. The padmount CT pedestal shall have a ground rod at the pedestal and bonding jumper from the neutral bar to the pedestal cabinet. The bonding jumper shall be sized per NEC table 250.66. With a padmount CT pedestal, the meter socket/test switch enclosure can be mounted to one end of the CT pedestal (see Drawing EX-5A or Ex-6). This meter socket/test switch enclosure shall be purchased from GIUD.

### *6.5 Pedestal CT Cabinets*

A direct buried pedestal with a combination meter socket, test switch, and CT compartment can be used (see Drawings EX-7 and EX-8). The meter socket, test switch, and CT's shall be factory wired per GIUD wire color code. This type of pedestal comes with factory installed CT's. GIUD will pay for the CT's through the supplier. The meter socket for a single-phase three wire service shall be an eight (8) terminal socket with a seven (7) pole test switch (Milbank # TS07-0106 or approved equal). The meter socket for a three phase, four wire service shall be a thirteen (13) terminal meter socket with a ten (10) pole test switch (Milbank # TS10-0110 or approved equal). For both installations, the potential switches shall be inverted and red in color. The current switches shall be black in color.

### *6.6 Meter Sockets / Test Switches*

Instrument rated meter socket/test switch shall be purchased from GIUD with the exception of a combination meter socket, test switch, CT pedestal. The electrician shall install the meter socket, test switch enclosure, and CT's. The meter socket/test switch shall be connected to the CT cabinet with a one (1) inch conduit and shall be grounded with a grounding conductor. The meter socket / test switch shall be installed within twelve (12) feet (wire pulling length) of the CT cabinet. The CT's and electric meter shall be furnished by GIUD.

## *6.7 Meter Socket Location*

See section 5.4.

## *6.8 Secondary Wiring*

The secondary wiring for the meter socket/test switch shall be performed by GIUD with exception to a combination pedestal.

GIUD shall supply the secondary lugs and half-inch diameter bolts for all padmount transformers. GIUD shall terminate all secondary wires in padmount transformers and secondary pedestals. On three phase services with parallel wires, the electrical contractor shall be present when secondary wires are terminated for assisting and verification of phase wire markings.

## *6.9 KYZ Pulses*

See section 5.14.

## *6.10 Primary Metering*

Primary metering shall be installed by GIUD. The customer will be billed for all labor and material.

# 7.0 Requirements for Commercial Multi-Meter 277/480V Services

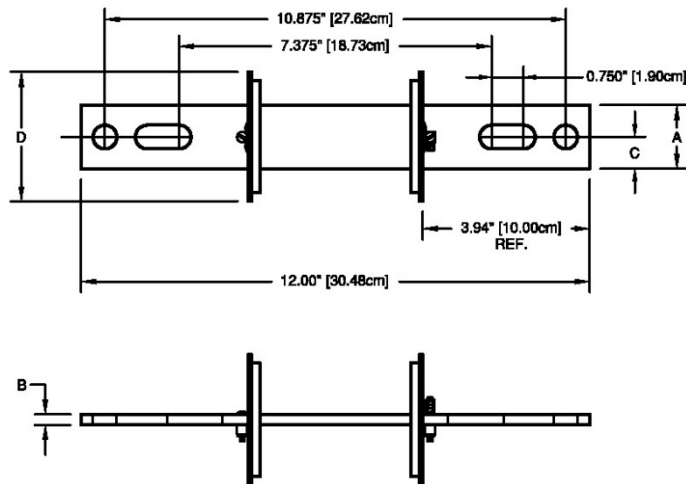
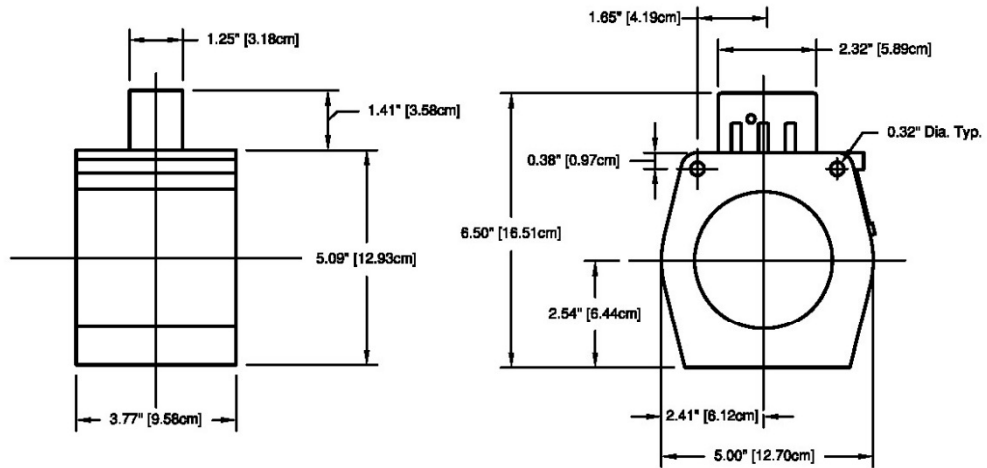
For Safety reasons, the following requirements have been established for 277/480 volt commercial metering with more than one meter per building or equipment room on the same 277/480 volt electric service. This service shall be a factory manufactured meter pack with cold sequence metering. The cold sequence meter pack shall have a main breaker, followed by a service disconnect and then to the meter socket. A 400 amp service can be a self-contained meter socket with lever by pass. A service rated above 400 amps shall be metered with CT's and shall be integral to the meter pack. A doughnut CT shall be used in a lockable compartment with a horizontal platform of non-metallic, high dielectric fiberglass board for the CT to mount on. The meter socket shall be a thirteen (13) terminal socket, purchased from GIUD and shall be mounted within twelve (12) feet (wire pulling distance) of the CT compartment. This shall be required in a new installation or an improvement of an old service.

# 8.0 Questions

For questions regarding these metering standards, please contact the Electric Distribution Supervisor at (308)385-5471 (office) or (308) 390-5212 (cell).

For questions regarding padmount transformers, please contact the Underground Superintendent at 308-385-5470 (office) or 308-390-5213 (cell).

## 9.0 Drawings

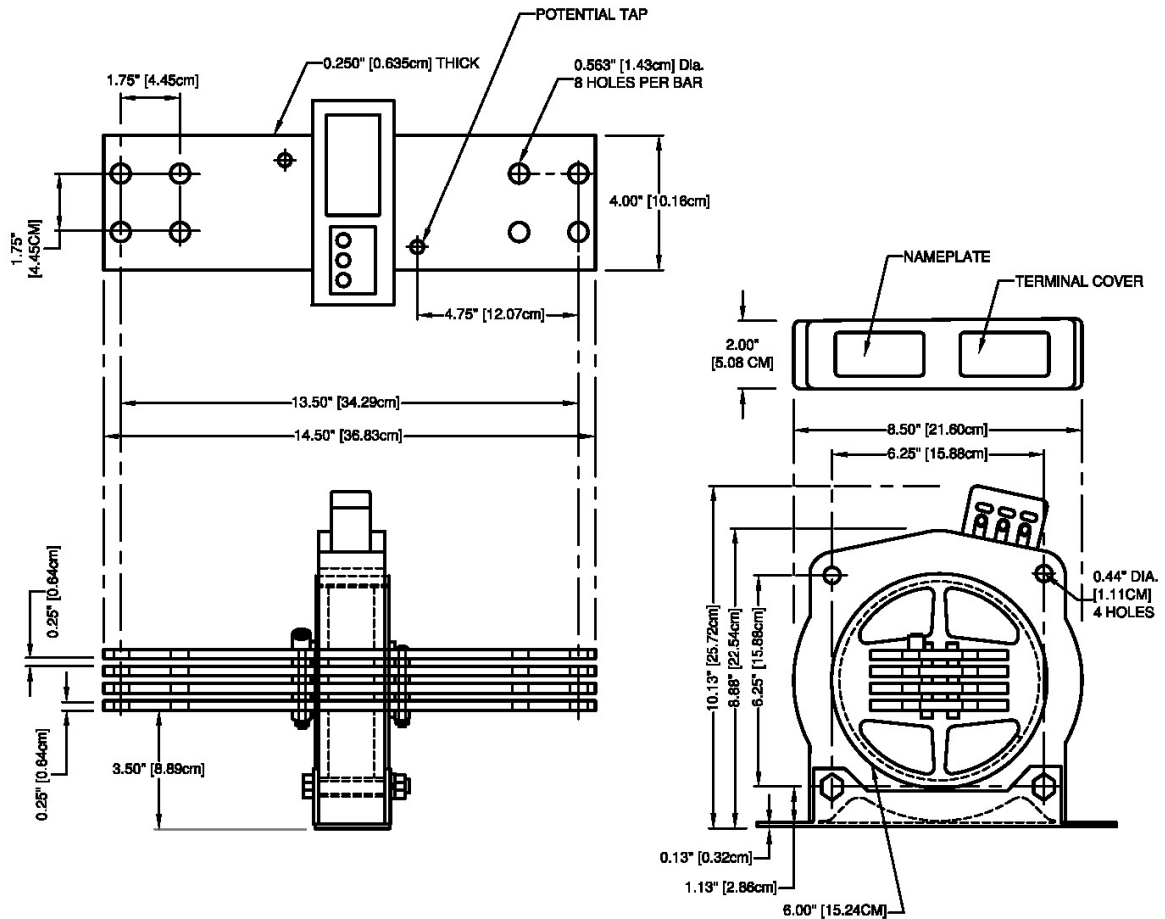


BAR KIT	DIM "A"	DIM "B"	DIM "C"	DIM "D"
1	1.50" (3.81cm)	0.25" (0.64cm)	0.75" (1.91cm)	3.07" (7.80cm)
2	2.25" (5.72 cm)	0.38" (0.95cm)	1.13" (2.86cm)	3.69" (9.37cm)

<p>CITY OF <b>GRAND ISLAND</b> UTILITIES DEPARTMENT</p>	<p>DATE: 2/7/2008 DRAWN BY: P.F.G. CHECKED BY: T.W.B.</p>	<p>BAR C.T.'S ON SERVICES OVER 400 AMP AND UP TO 1,600 AMP</p>	<p>PLAN EX - 1</p>
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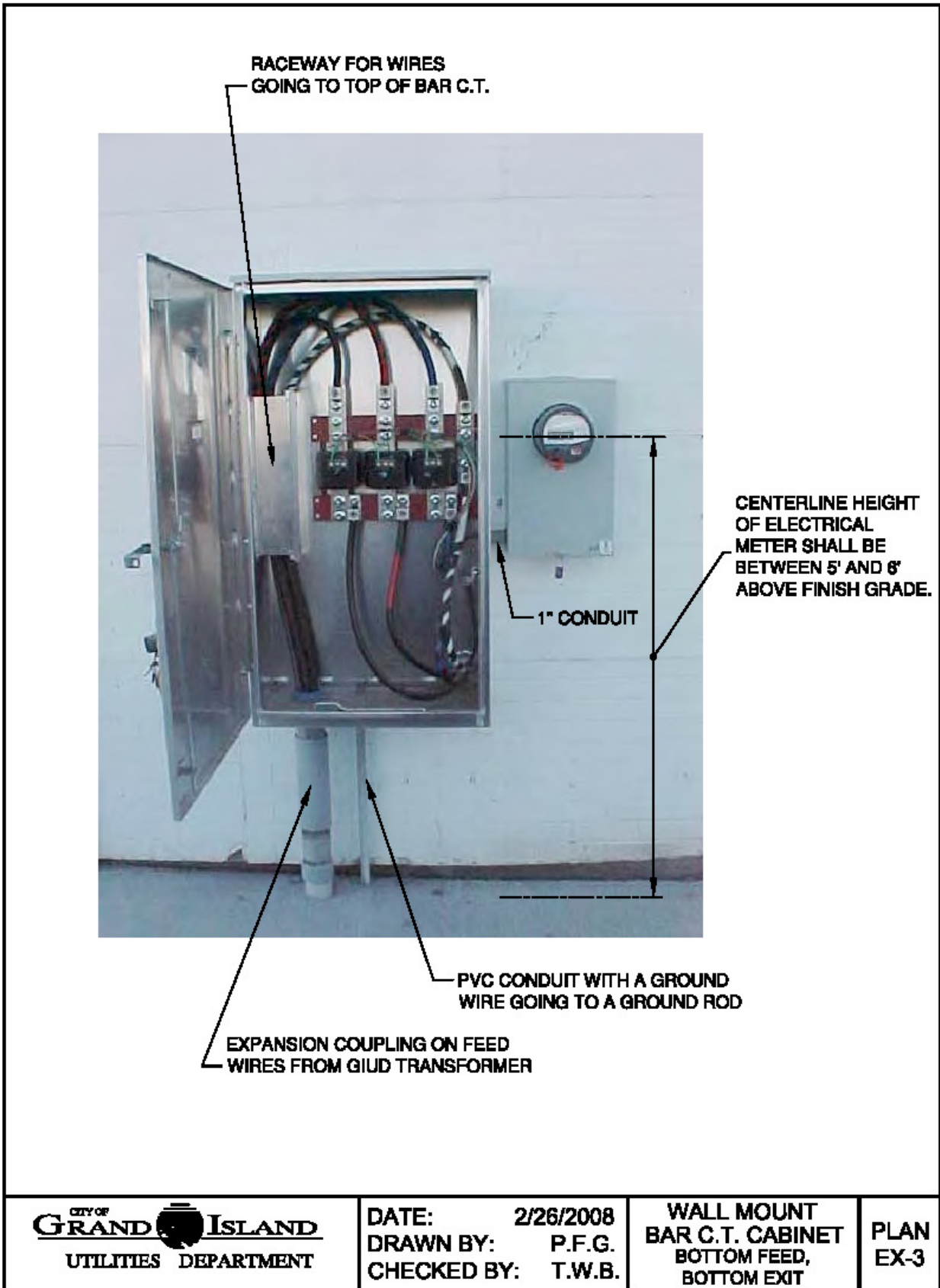
BARS USED ARE 0.250 INCH THICK BY 4 INCHES WIDE. ON MULTI-BAR ASSEMBLIES THERE IS A 0.250 INCH SPACING BETWEEN BARS. ASSEMBLY CAN BE MOUNTED WITH BARS HORIZONTAL OR VERTICAL.

ONE BAR REQUIRED PER 1,000 AMPS OF SERVICE.



TYPE R6L

<p>CITY OF <b>GRAND ISLAND</b> UTILITIES DEPARTMENT</p>	<p>DATE: 2/7/2008 DRAWN BY: P.F.G. CHECKED BY: T.W.B.</p>	<p>BAR C.T.'S ON SERVICES OVER 1,600 AMP</p>	<p>PLAN EX - 2</p>
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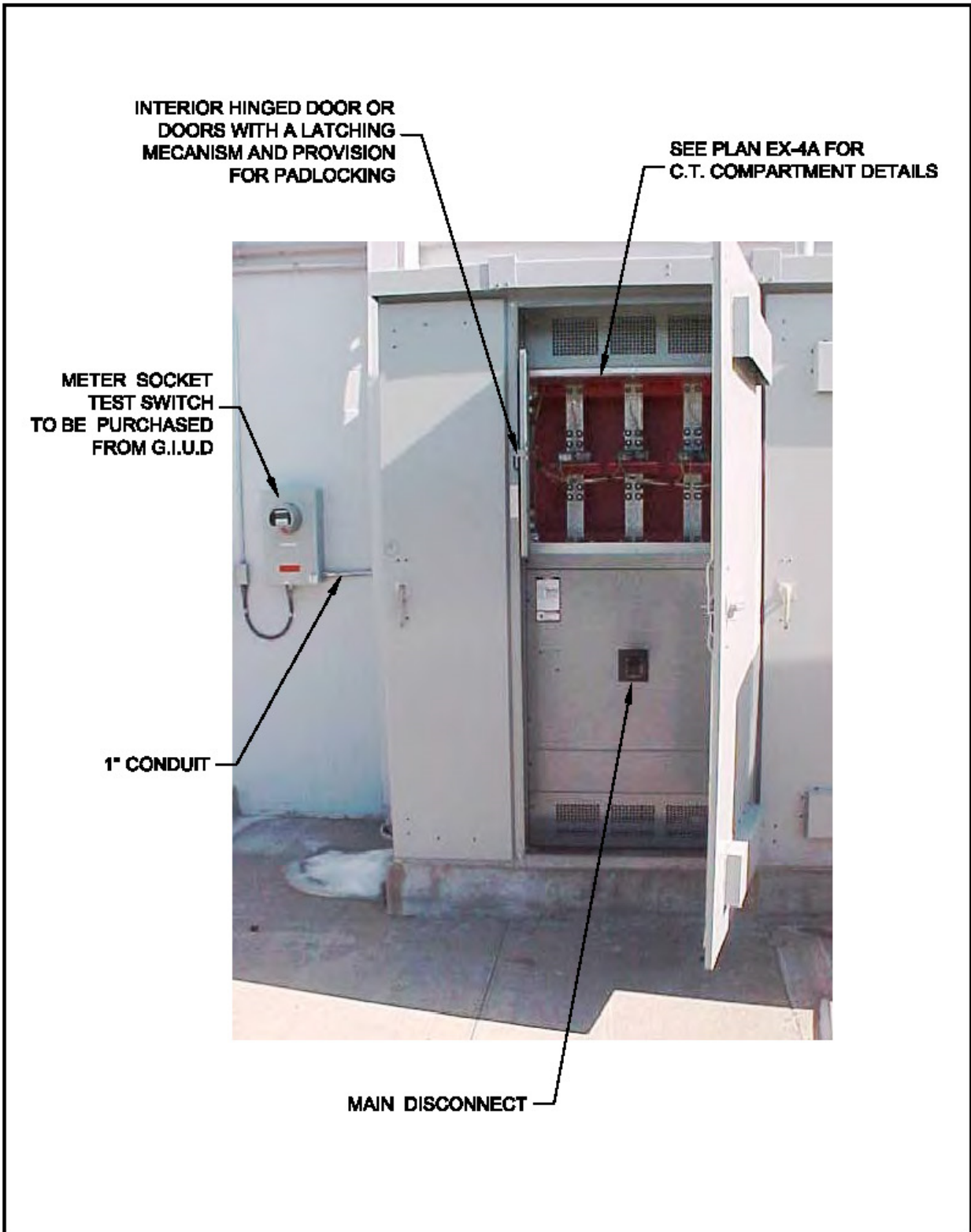


**CITY OF GRAND ISLAND**  
UTILITIES DEPARTMENT

DATE: 2/26/2008  
DRAWN BY: P.F.G.  
CHECKED BY: T.W.B.

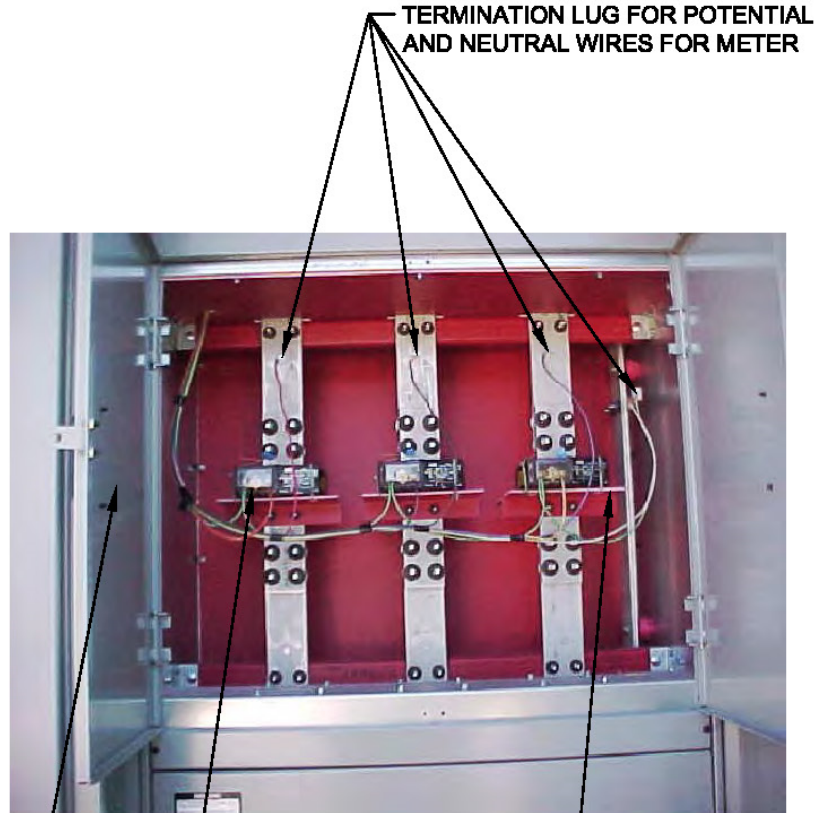
WALL MOUNT  
BAR C.T. CABINET  
BOTTOM FEED,  
BOTTOM EXIT

PLAN  
EX-3



<p><b>CITY OF GRAND ISLAND</b> UTILITIES DEPARTMENT</p>	<p>DATE: 2/29/2008 DRAWN BY: PFG CHECKED BY: T.W.B.</p>	<p>C.T. COMPARTMENT BUILT INTO SWITCH-GEAR CABINET</p>	<p>PLAN EX - 4</p>
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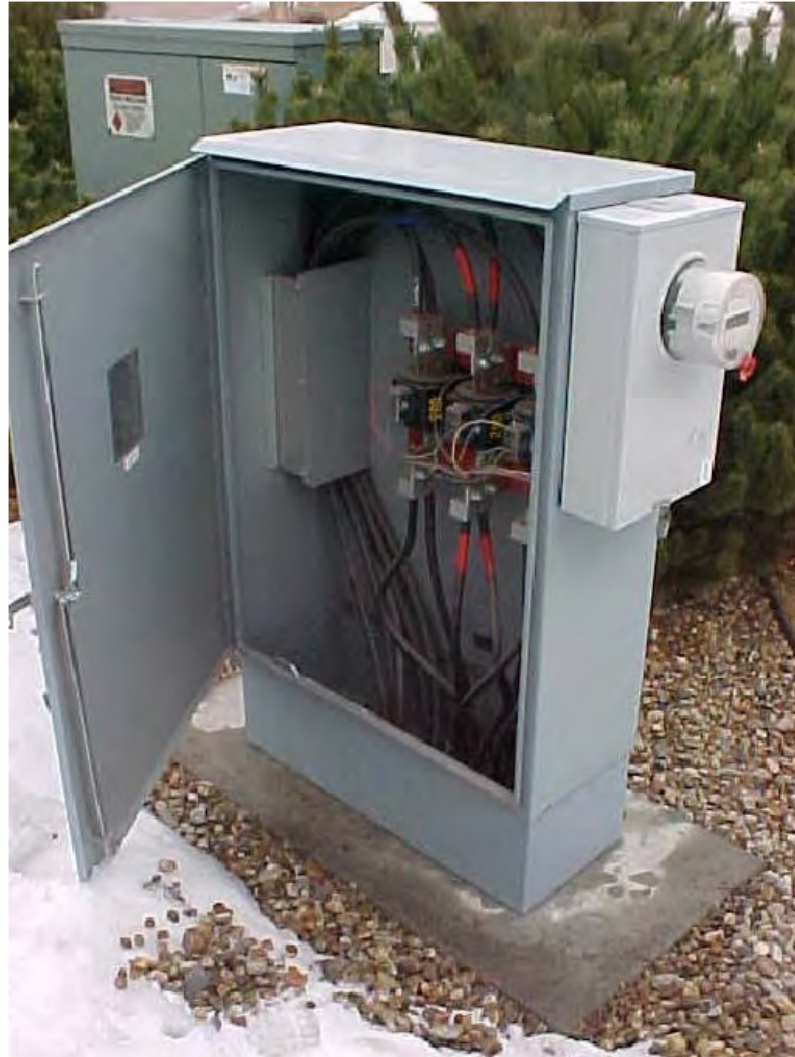
TERMINATION LUG FOR POTENTIAL AND NEUTRAL WIRES FOR METER

DOUGHNUT C.T.

C.T.PLATFORM OF NON-METALLIC, HIGH DIELECTRIC FIBERGLASS BOARD

INTERIOR HINGED DOOR OR DOORS WITH A LATCHING MECHANISM AND PROVISION FOR PADALOCKING

<p>CITY OF <b>GRAND ISLAND</b> UTILITIES DEPARTMENT</p>	<p>DATE: 2/29/2008 DRAWN BY: PFG CHECKED BY: T.W.B.</p>	<p>C.T. COMPARTMENT BUILT INTO SWITCH-GEAR CABINET DETAILS</p>	<p>PLAN EX - 4A</p>
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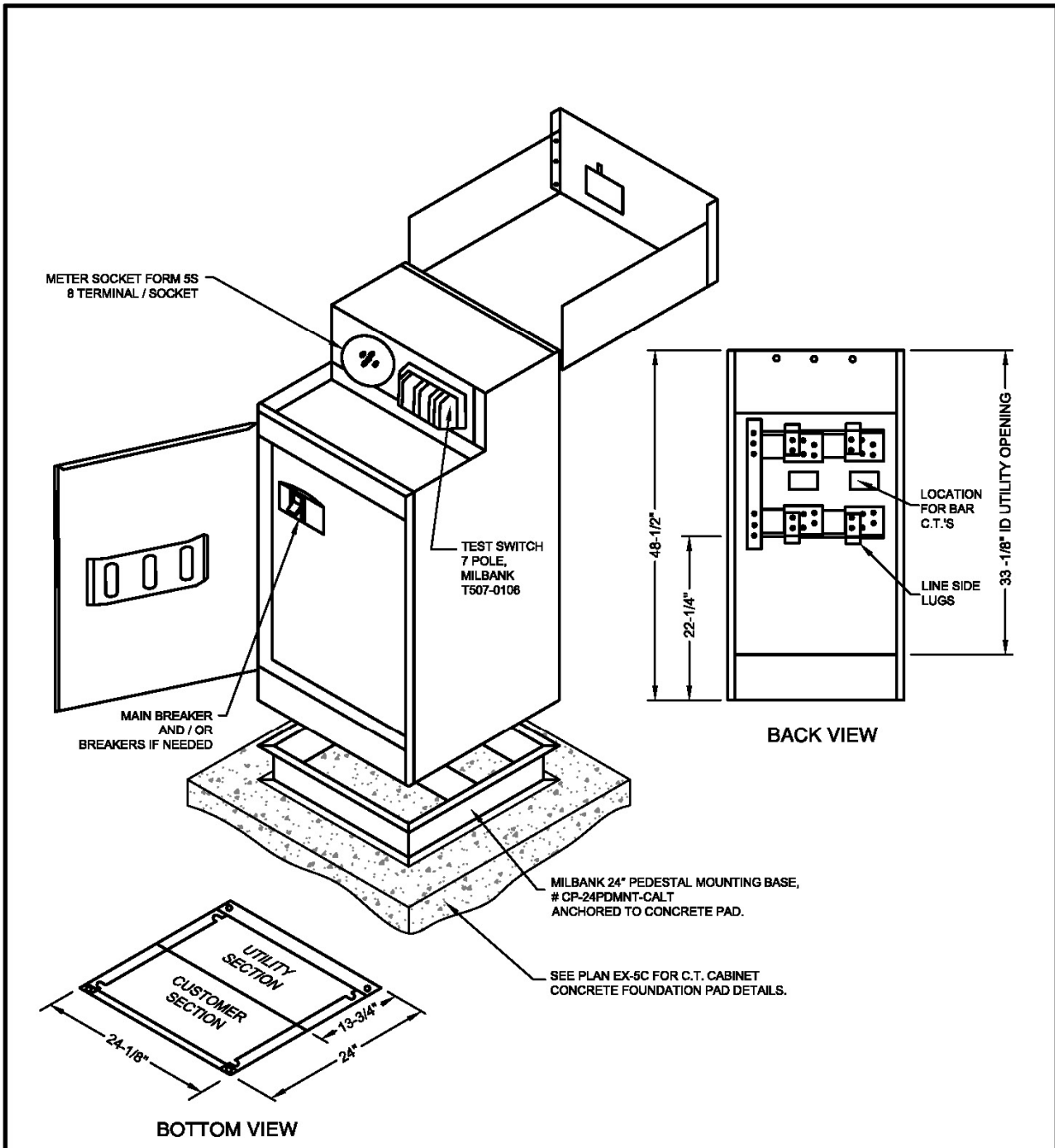


**GALVA-CLOSURE, C.T. CABINET**

**SEE PLAN EX-5C FOR C.T. CABINET CONCRETE FOUNDATION PAD DETAILS.**

**ALL MATERIALS SHALL BE AS LISTED, OR AN APPROVED EQUAL. THE USE OF A BRAND NAME IS FOR THE PURPOSE OF DESCRIBING A STANDARD QUALITY, PERFORMANCE, AND CHARACTERISTIC DESIRED, AND IS NOT INTENDED TO LIMIT OR RESTRICT COMPETITION.**

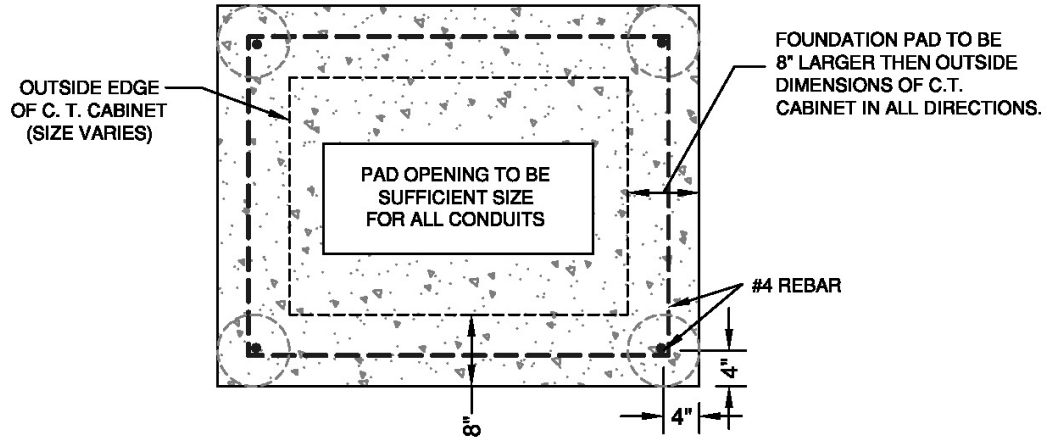
<p><b>CITY OF GRAND ISLAND</b> UTILITIES DEPARTMENT</p>	<p><b>DATE: 2/07/2008</b> <b>DRAWN BY: P.F.G.</b> <b>CHECKED BY: T.W.B.</b></p>	<p><b>FREE STANDING C.T. CABINET</b></p>	<p><b>PLAN EX-5A</b></p>
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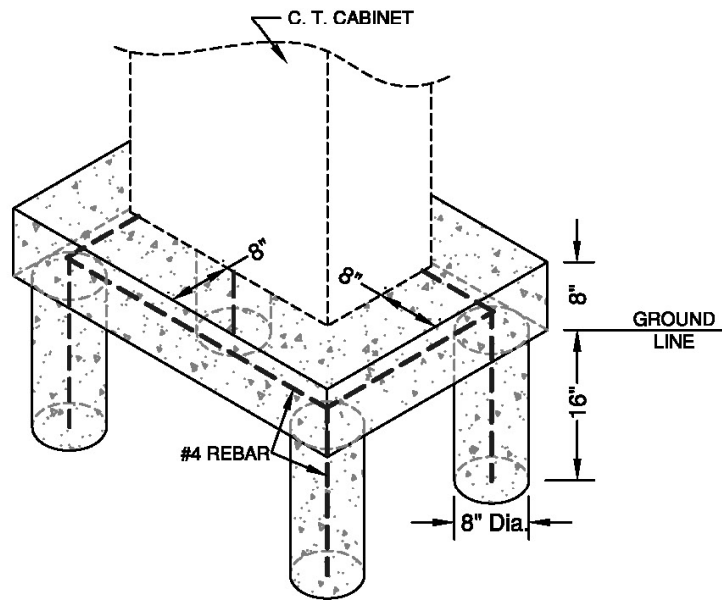
**MILBANK MODEL CP3B-CT**

ALL MATERIALS SHALL BE AS LISTED, OR AN APPROVED EQUAL. THE USE OF A BRAND NAME IS FOR THE PURPOSE OF DESCRIBING A STANDARD QUALITY, PERFORMANCE, AND CHARACTERISTIC DESIRED, AND IS NOT INTENDED TO LIMIT OR RESTRICT COMPETITION.

<p>CITY OF <b>GRAND ISLAND</b> UTILITIES DEPARTMENT</p>	<p>DATE: 3/6/2008 DRAWN BY: P.F.G. CHECKED BY: T.W.B.</p>	<p>PADMOUNT METER / C.T. CABINET</p>	<p>PLAN EX-5B</p>
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C. T. CABINET PAD



REVISED : 2/12/2008 PFG

CITY OF  
**GRAND ISLAND**  
UTILITIES DEPARTMENT

DATE: 1/16/2006  
DRAWN BY: P.F.G.  
CHECKED BY: T.W.B.

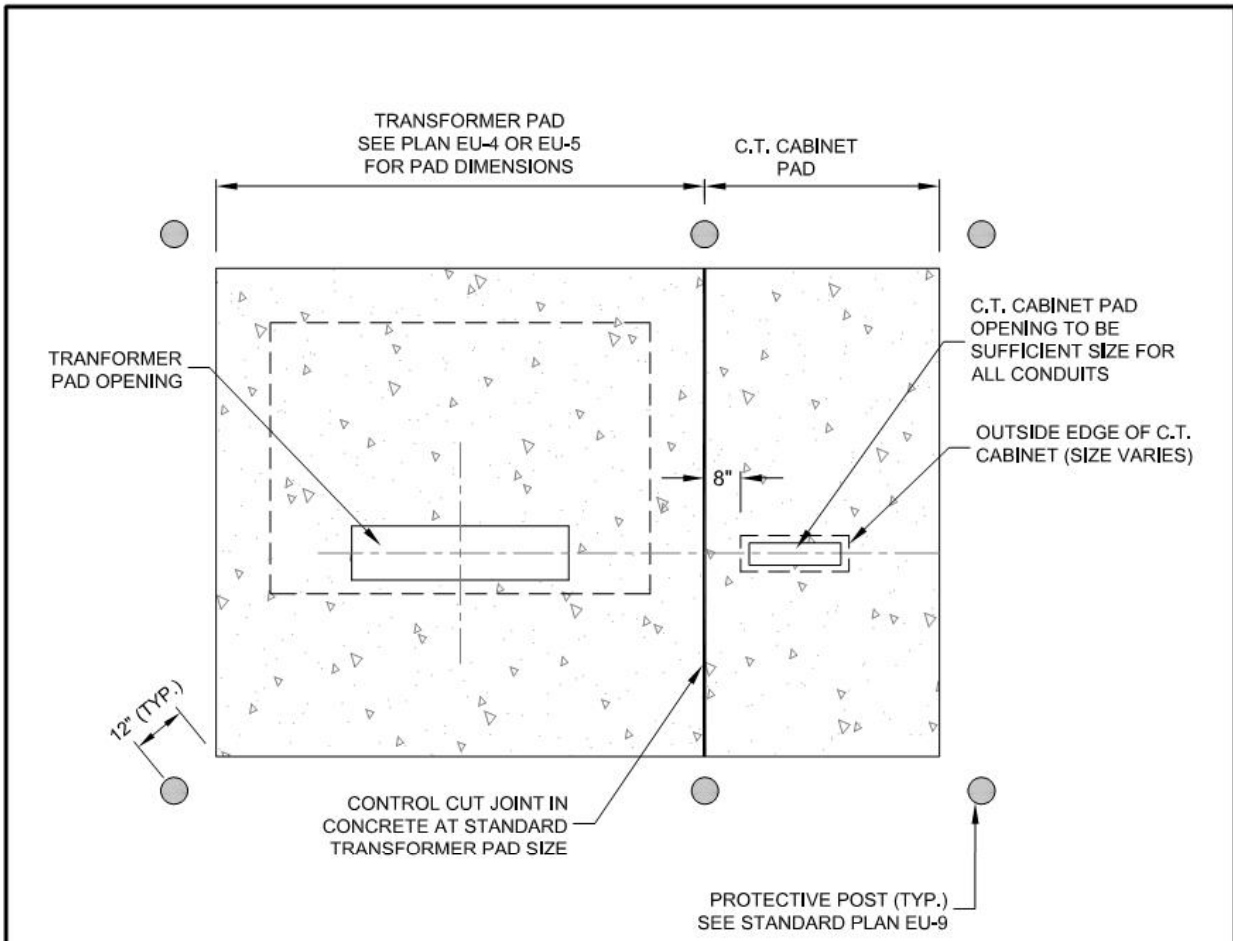
C. T. CABINET  
FOUNDATION PAD

PLAN  
EX - 5C



1. USE OF COMBINATION TRANSFORMER PAD - C.T. CABINET PAD EXTENSION REQUIRES PRIOR APPROVAL OF GRAND ISLAND UTILITIES DEPARTMENT.
2. SEE STANDARD PLAN EX-8A FOR FOUNDATION PAD DETAILS.

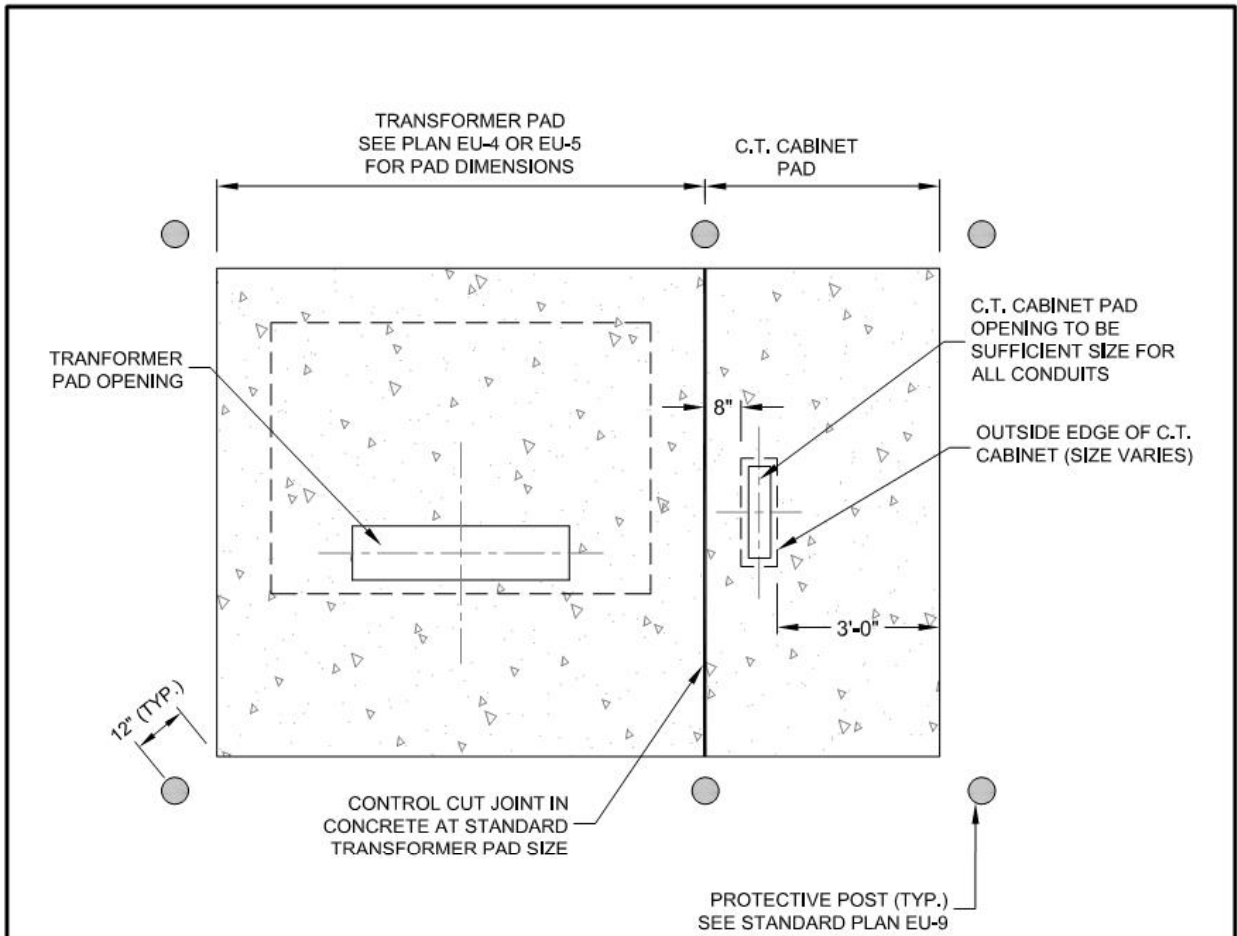
<p><b>CITY OF GRAND ISLAND</b> UTILITIES DEPARTMENT</p>	<p>DATE: 2/12/2008 DRAWN BY: P.F.G. CHECKED BY: T.W.B.</p>	<p>TRANSFORMER PAD WITH C.T. CABINET FOUNDATION PAD</p>	<p>PLAN EX-6</p>
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1. USE OF A TRANSFORMER PAD WITH A C.T. CABINET PAD EXTENSION REQUIRES PRIOR APPROVAL OF GRAND ISLAND UTILITIES DEPARTMENT.
2. PAD SHALL BE TYPE 47-B MODIFIED CONCRETE AS PER CITY SPECIFICATIONS SECTION 2, DIVISION 2. THE ENTIRE PAD SHALL BE 12" THICK, REINFORCED WITH 6"x6"-6 GAUGE WIRE MESH. TOP OF PAD TO BE 6" ABOVE FINISHED GRADE. ALL FORMS AND REINFORCING SHALL BE INSPECTED BY CITY ELECTRIC DEPARTMENT PRIOR TO PLACEMENT OF CONCRETE.
3. ELECTRICAL CONTRACTOR SHALL INSTALL CONCRETE FILLED PROTECTIVE POSTS AT EACH CORNER OF THE PAD AND ADDITION POSTS OPPOSITE THE CONTROL CUT JOINT. PROTECTIVE POSTS SHALL BE 3'-8" ABOVE AND 3 FEET BELOW FINISHED GRADE. PROTECTIVE POSTS ARE TO PROTECT EQUIPMENT FROM TRAFFIC AND SHALL NOT INTERFERE WITH DOOR OPENINGS.
4. A MINIMUM OF 10 FEET SHALL BE MAINTAINED BETWEEN THE PAD AND ANY STRUCTURE.

REVISED: 8/30/2021

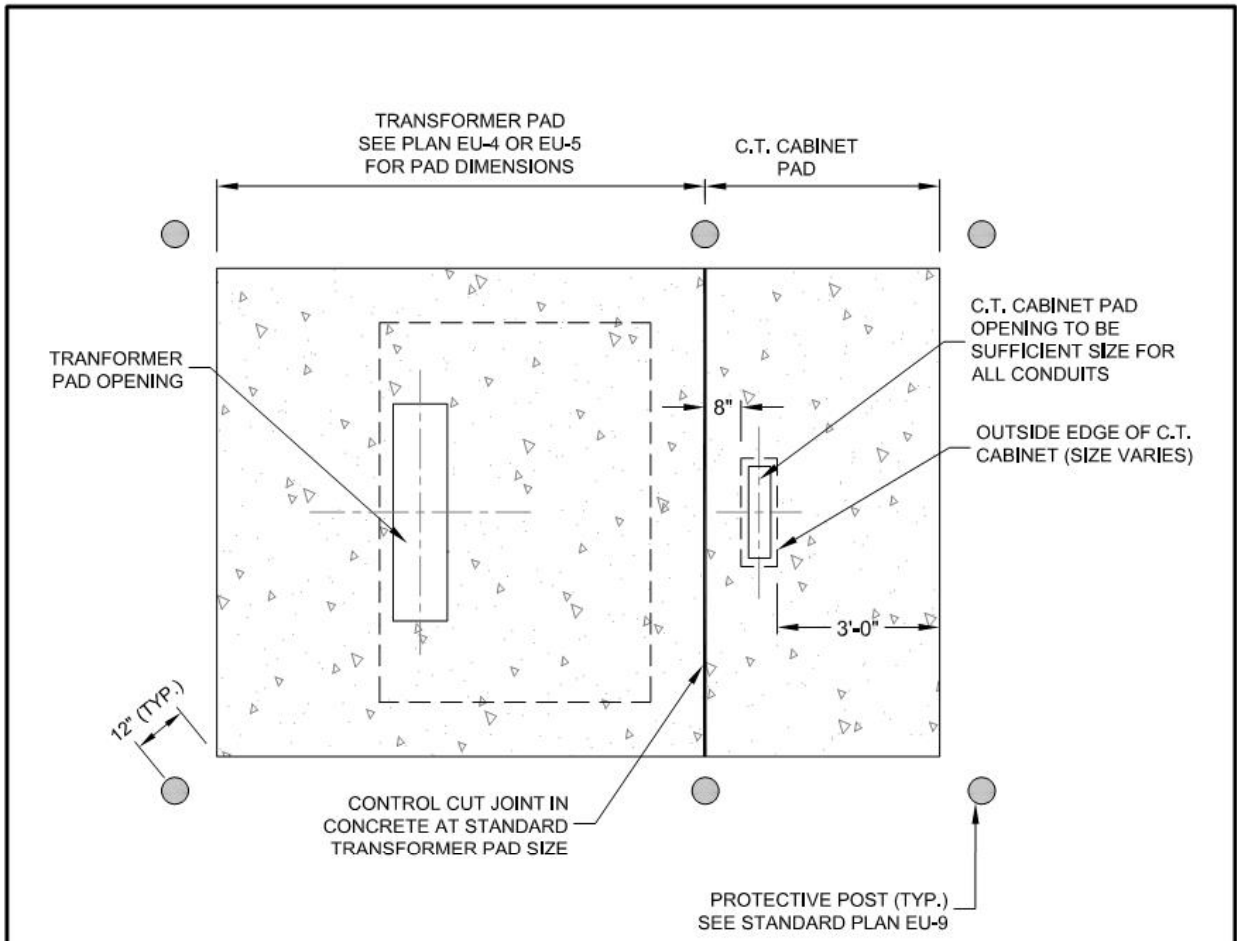
	<p>DATE: 2/13/2008                  DRAWN BY: P.F.G.                  CHECKED BY: T.W.B.</p>	<p>TRANSFORMER PAD                  WITH C.T. CABINET                  FOUNDATION PAD                  DETAILS - PARALLEL</p>	<p>PLAN                  EX-6A</p>
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1. USE OF A TRANSFORMER PAD WITH A C.T. CABINET PAD EXTENSION REQUIRES PRIOR APPROVAL OF GRAND ISLAND UTILITIES DEPARTMENT.
2. PAD SHALL BE TYPE 47-B MODIFIED CONCRETE AS PER CITY SPECIFICATIONS SECTION 2, DIVISION 2. THE ENTIRE PAD SHALL BE 12" THICK, REINFORCED WITH 6"x6"-6 GAUGE WIRE MESH. TOP OF PAD TO BE 6" ABOVE FINISHED GRADE. ALL FORMS AND REINFORCING SHALL BE INSPECTED BY CITY ELECTRIC DEPARTMENT PRIOR TO PLACEMENT OF CONCRETE.
3. ELECTRICAL CONTRACTOR SHALL INSTALL CONCRETE FILLED PROTECTIVE POSTS AT EACH CORNER OF THE PAD AND ADDITION POSTS OPPOSITE THE CONTROL CUT JOINT. PROTECTIVE POSTS SHALL BE 3'-8" ABOVE AND 3 FEET BELOW FINISHED GRADE. PROTECTIVE POSTS ARE TO PROTECT EQUIPMENT FROM TRAFFIC AND SHALL NOT INTERFERE WITH DOOR OPENINGS.
4. A MINIMUM OF 10 FEET SHALL BE MAINTAINED BETWEEN THE PAD AND ANY STRUCTURE.

REVISED: 8/30/2021

<p>CITY OF <b>GRAND ISLAND</b> UTILITIES DEPARTMENT</p>	<p>DATE: 2/13/2008 DRAWN BY: P.F.G. CHECKED BY: T.W.B.</p>	<p>TRANSFORMER PAD WITH C.T. CABINET FOUNDATION PAD DETAILS - PERPENDICULAR</p>	<p>PLAN EX-6B</p>
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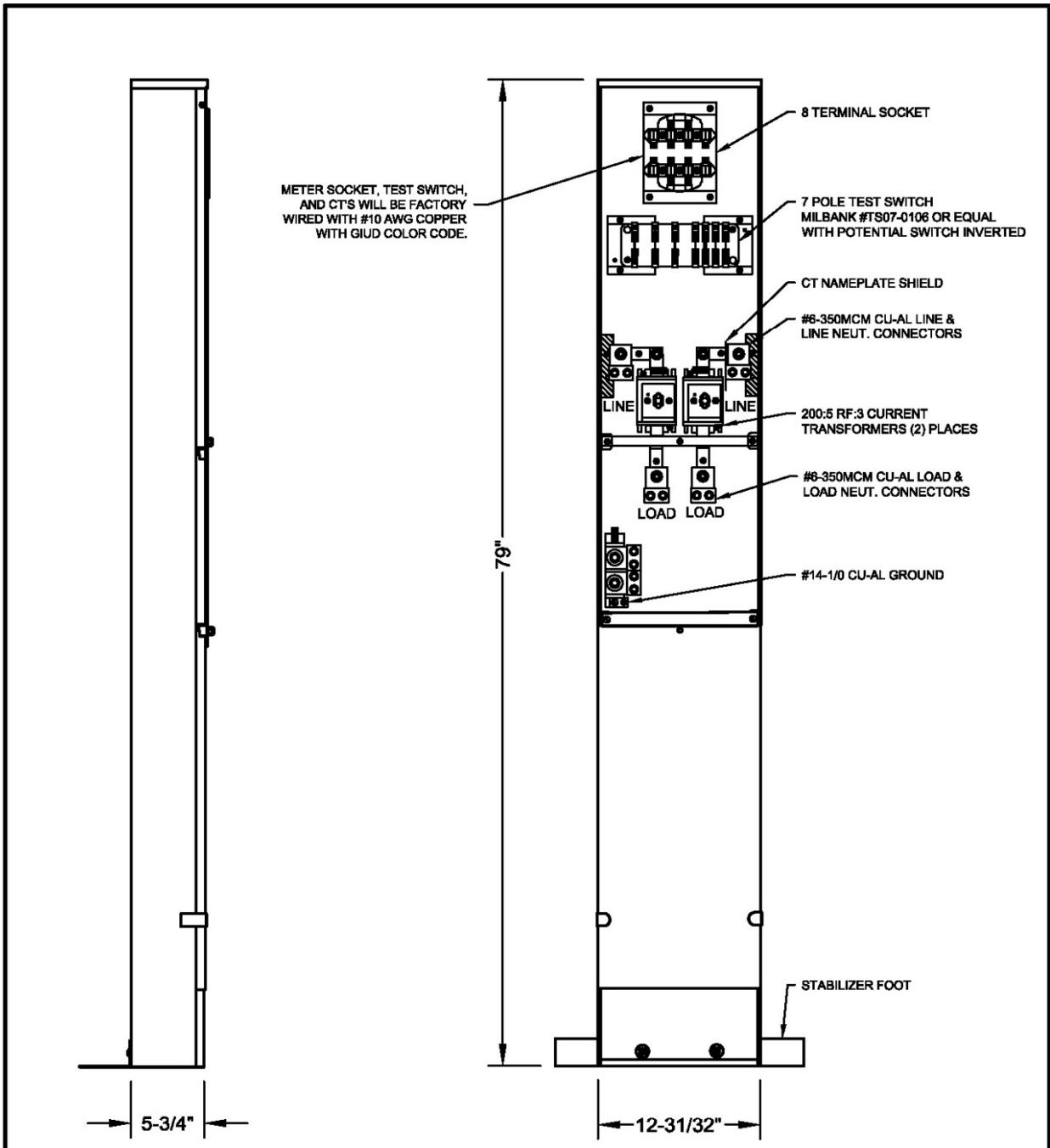


1. USE OF A TRANSFORMER PAD WITH A C.T. CABINET PAD EXTENSION REQUIRES PRIOR APPROVAL OF GRAND ISLAND UTILITIES DEPARTMENT.
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REVISED: 8/30/2021

<p>CITY OF <b>GRAND ISLAND</b> UTILITIES DEPARTMENT</p>	<p>DATE: 2/13/2008 DRAWN BY: P.F.G. CHECKED BY: T.W.B.</p>	<p>TRANSFORMER PAD WITH C.T. CABINET FOUNDATION PAD DETAILS- BACK MOUNTED</p>	<p>PLAN EX-6C</p>
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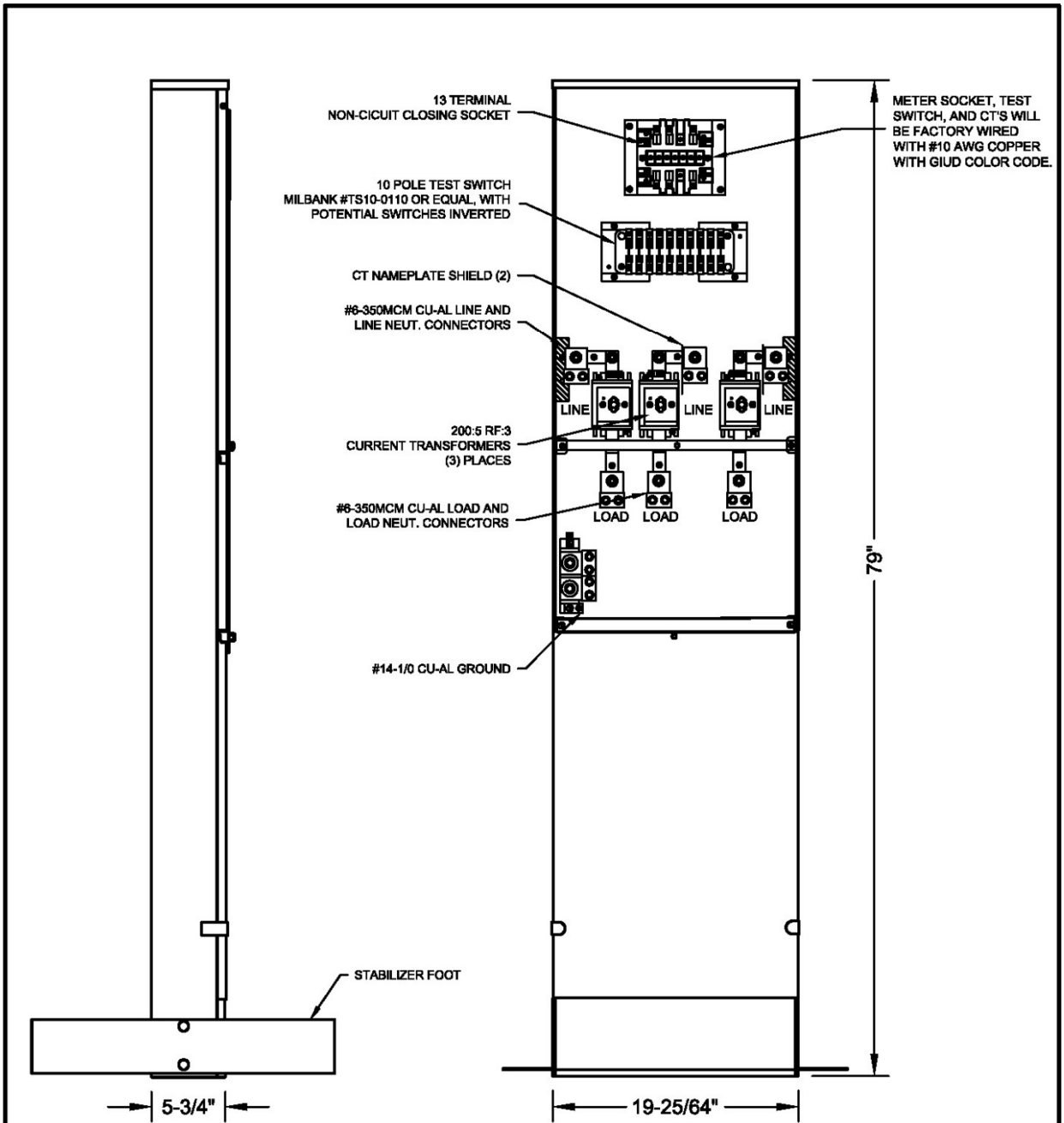




**DURHAM COMPANY COMBINATION METER SOCKET, TEST SWITCH, C.T. PEDESTAL**

ALL MATERIALS SHALL BE AS LISTED, OR AN APPROVED EQUAL. THE USE OF A BRAND NAME IS FOR THE PURPOSE OF DESCRIBING A STANDARD QUALITY, PERFORMANCE, AND CHARACTERISTIC DESIRED, AND IS NOT INTENDED TO LIMIT OR RESTRICT COMPETITION.

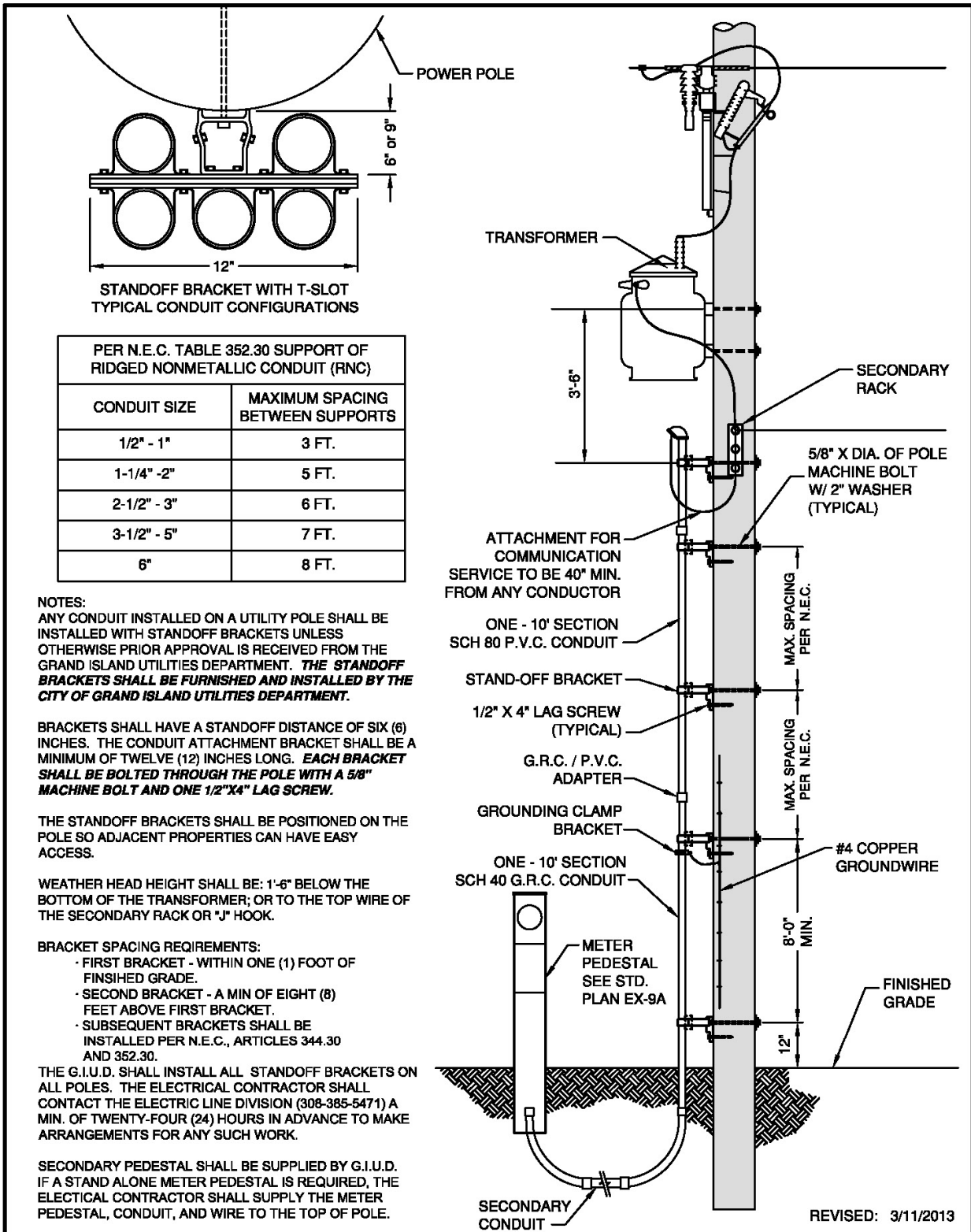
<p>CITY OF <b>GRAND ISLAND</b> UTILITIES DEPARTMENT</p>	<p>DATE: 2/15/2008 DRAWN BY: PFG CHECKED BY: T.W.B.</p>	<p>METER / C.T. CABINET 1Ø, THREE WIRE, FORM 5S</p>	<p>PLAN EX - 7</p>
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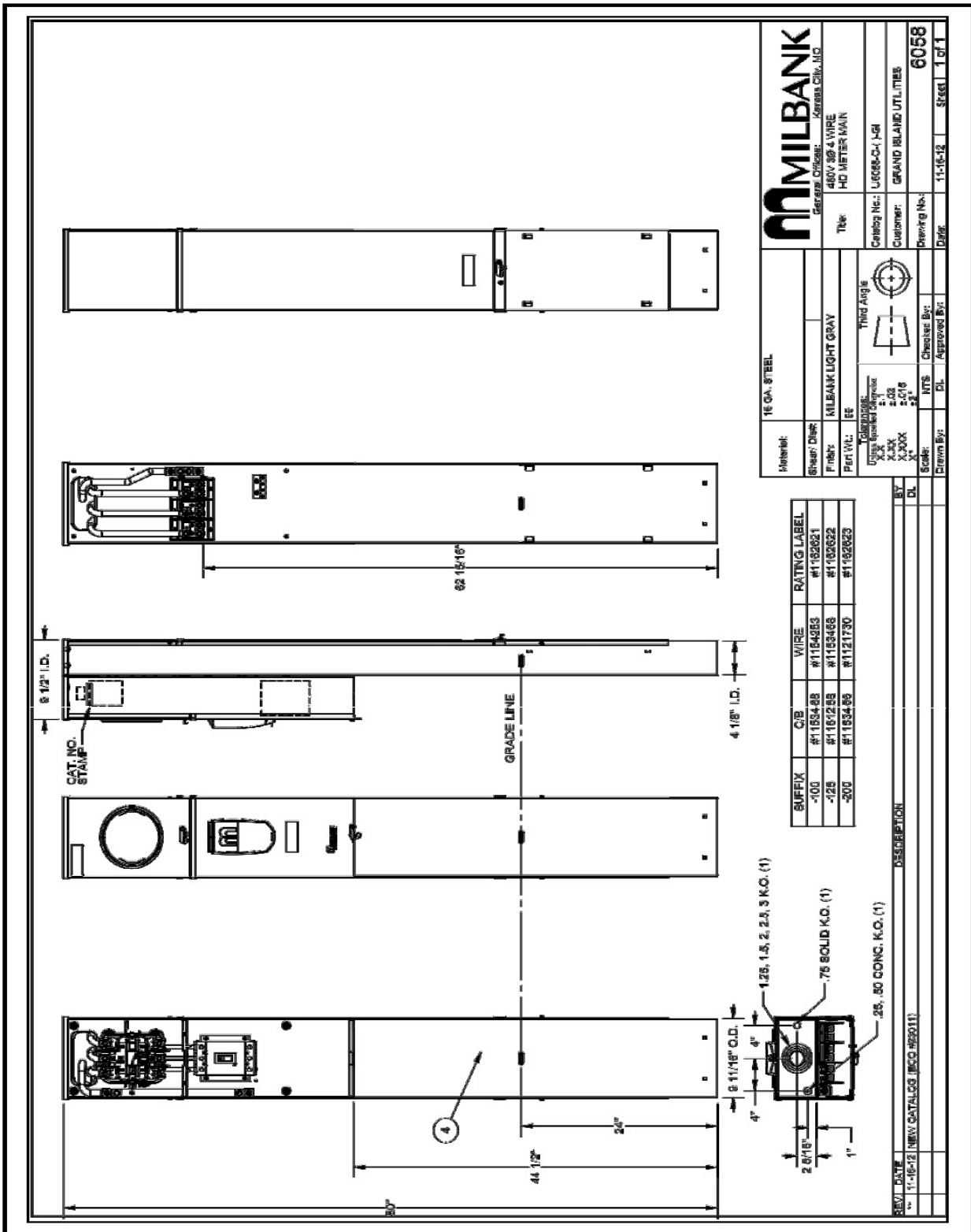
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ALL MATERIALS SHALL BE AS LISTED, OR AN APPROVED EQUAL. THE USE OF A BRAND NAME IS FOR THE PURPOSE OF DESCRIBING A STANDARD QUALITY, PERFORMANCE, AND CHARACTERISTIC DESIRED, AND IS NOT INTENDED TO LIMIT OR RESTRICT COMPETITION.

<p>CITY OF <b>GRAND ISLAND</b> UTILITIES DEPARTMENT</p>	<p>DATE: 2/7/2008 DRAWN BY: PFG CHECKED BY: T.W.B.</p>	<p>METER / C.T. CABINET 3Ø, FOUR WIRE, FORM 9S</p>	<p>PLAN EX - 8</p>
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<p>CITY OF <b>Grand Island</b> UTILITIES DEPARTMENT</p>	<p>DATE: 3/11/2013</p> <p>DRAWN BY: K.J.M.</p> <p>CHECKED BY: T.W.B.</p>	<p><b>SECONDARY STAND-OFF BRACKET WITH METER PEDESTAL</b></p>	<p><b>PLAN EX-9</b></p>
	<p>REVISED: 3/11/2013</p>		



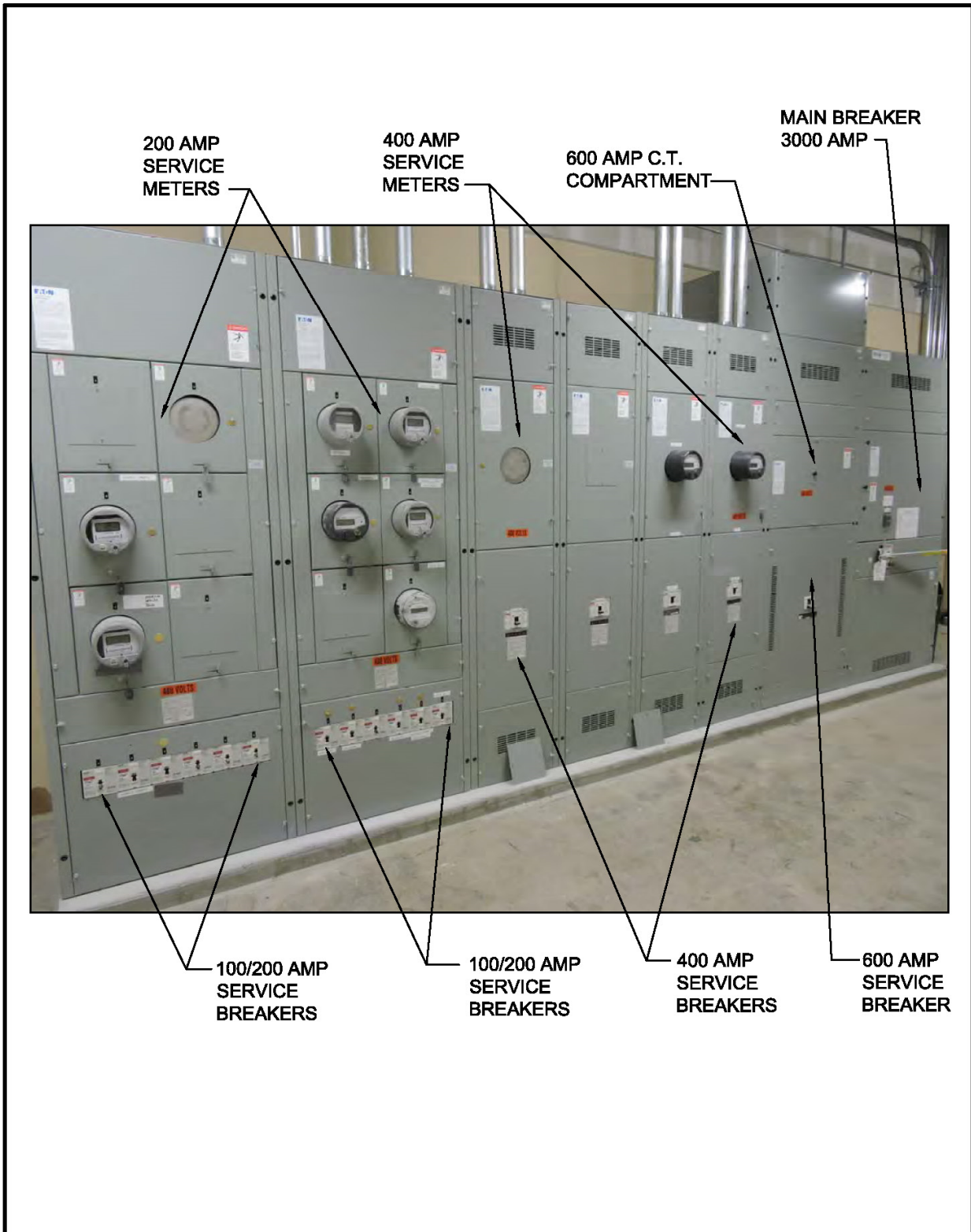
**MILBANK**  
 General Offices: Kansas City, MO  
 The: 460V 3Ø 4 WIRE  
 HO METERS MAIN

Material: 16 GA. STEEL  
 Shear/Dir: MILBANK LIGHT GRAY  
 Part No.: EE  
 Catalogue: X, XX, XXX, XXXX, XXXX, X+  
 Scale: RT5  
 Drawing No.: 6058  
 Date: 11-16-12 Sheet 1 of 1

SUFFIX	C/B	WIRE	RATING LABEL
-100	#11534-2B	#11542B3	#1192621
-12B	#115212B	#115346B	#1192622
-200	#11534-5B	#1121730	#1192623

REV	DATE	DESCRIPTION
1	11-16-12	NEW CATALOG (MCO #55011)

<p>CITY OF <b>GRAND ISLAND</b> UTILITIES DEPARTMENT</p>	DATE: 3/11/2013	<p><b>METER PEDESTAL (MILBANK)</b></p>	<p>PLAN EX -9A</p>
	DRAWN BY: K.J.M.		
	CHECKED BY: T.W.B.		



<p>CITY OF <b>GRAND ISLAND</b> UTILITIES DEPARTMENT</p>	<p>DATE: 4/7/2015 DRAWN BY: K.J.M. CHECKED BY: T.W.B.</p>	<p>COMMERCIAL 277/480 VOLT MULTIPLE METER SERVICE (TYPICAL)</p>	<p>PLAN EX-11</p>
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NOTE: METERS MAY EITHER BE 1 PHASE OR 3 PHASE.

<b>AMERICAN MIDWEST POWER</b> MINNEAPOLIS, MN www.ammpg.com 1-800-326-8858		<b>WARNING</b> DEVICES INSTALLED IN THIS EQUIPMENT MUST BE NEW, NOT USED, OF IDENTICAL TYPE, QUALITY, MANUFACTURE AS THOSE INSTALLED BY AMERICAN MIDWEST POWER OR THE EQUIPMENT MAY BE MADE DANGEROUS FOR ITS INTENDED USE.	
TYPE	FMUR		
FILE	13-61147	ENCL	TYPE 3R
VOLTS	208Y/120	SYSTEM	3PH 4W
AMPS-SUPPLY	600	SECTION	600
<small>MAXIMUM 80 PERCENT CONTINUOUS LOAD EXCEPT MATCH LOADS AND SOME TYPES OF TRANSFORMERS</small>		<small>THE MAXIMUM SHORT CIRCUIT CURRENT RATING OF THIS EQUIPMENT IS AS SHOWN BELOW BUT THE RATING IS LIMITED TO THE LOWEST RATED RATING CAPACITY OF ANY DEVICE INSTALLED.</small>	<small>RMS SYM. AMPS</small> 85,000 <small>VOLTS</small>
<small>INCLUDES UTILITY SUPPLY DESIGN AND IS SUITABLE ONLY FOR USE AS SERVICE ENTRANCE EQUIPMENT</small>		<small>SECTION NO.</small> 1 <small>OF</small> 1 <small>HZ</small>	
<b>DANGER</b> HAZARD OF ELECTRICAL SHOCK OR BURN. TURN OFF POWER SUPPLYING THIS EQUIPMENT BEFORE WORKING INSIDE.			

	DATE: 9/20/2023 DRAWN BY: K.J.M. CHECKED BY: T.B.	TYPICAL METER PACK CABINET FOR CELL TOWERS	PLAN EX-13
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