



**ELECTRIC  
SPECIFICATION  
DRAWINGS**



**ELECTRIC SPECIFICATION DRAWINGS**

DRAWING NUMBER	TITLE	REVISED
EG-010	Customer-Owned Generation Interconnection	8/21
EG-011	Customer-Owned Generation Interconnection With Island Capable Battery Backup	8/21
EG-012	DER Interconnection Other Than 200 Amp Single Phase At Shared Transformer	8/21
EG-013	DER Interconnection Other Than 200 Amp Single Phase At Dedicated Transformer	8/21
EG-014	Island-Capable, Paralleling Microgrid Interconnection	8/21
EG-015	Island-Capable, Paralleling Service Entrance Microgrid Interconnection	8/21
EG-016	Customer-Owned Back-up Generation Interconnection	8/21
EG-020	Underground Residential Generation Interconnection With Intermediate Tap Enclosure	4/22
EG-025	Underground Residential Generation Interconnection With Ganged Meter Module	4/22
EG-035	Overhead Residential Generation Interconnection With Intermediate Tap Enclosure	4/22
EG-040	Overhead Residential Generation Interconnection With Ganged Meter Module	12/20
EG-045	Overhead Residential Backup Generator Service On a Pole	12/22
EG-050	Underground Residential Backup Generator Service on Building	12/22
EH-010	Metering Assembly Mast Through Roof, 100 Amp - 200 Amp	8/24
EH-015	Metering Assembly Mast On Building, 100 Amp - 200 Amp	2/24
EH-020	Metering Assembly On Pole, 100 Amp - 200 Amp	2/24
EH-025	Metering Assembly Overhead Service on Pole, 320 Amp	2/24
EH-030	Metering Assembly Two Meter Loops On Pole	2/24
EH-035	Main Disconnect/Panel Assembly On Pole, 400 Amps And Above	2/24



**ELECTRIC SPECIFICATION DRAWINGS**

EH-045	Metering Assembly Multiple Meters, Overhead Services	12/20
EH-050	Metering Assembly Overhead Service On Building 320 Amp	2/24
EH-055	Metering Assembly Overhead Two Meter Loops With Tap Enclosure (Option 1)	2/24
EH-060	Metering Assembly Overhead Two Meter Loops With Ganged Meter Module (Option 2)	2/24
EH-110	Metering Assembly 1Ø Temporary Overhead Service	2/24
EH-115	Overhead Service – Multiple Occupancy Building 200 AMP – 320AMP	2/24
EU-010	Metering Assembly Underground Service On Building 100 Amp - 200 Amp	2/24
EU-015	Metering Assembly Underground Service Pedestal, 100 Amp, 200 Amp, 320 Amp	12/20
EU-020	Metering Assembly Underground Service On Rack, 100 Amp - 200 Amp	8/24
EU-025	Metering Assembly Underground Service On Rack, 320 Amp	8/24
EU-030	Underground Service On Rack Multiple Meter Loops With Tap Enclosure, 200 Amp – 320 Amp	2/24
EU-035	Metering Assembly Underground Service On Building, 320 Amp	2/24
EU-045	Metering Assembly Multiple Meters, Underground Services	12/20
EU-055	Metering Assembly Underground Two Meter Loops With Tap Enclosure (Option 1)	2/24
EU-060	Metering Assembly Underground Two Meter Loops With Ganged Meter Module (Option 2)	2/24
EU-070	Metering Assembly, CT Rack	2/24
EU-075	Metering Assembly, CT Rack Built In With Transformer Pad	2/24
EU-110	Metering Assembly 1Ø Temporary Underground Service	2/24
EU-115	Underground Service – Multiple Occupancy Building, 200 Amp – 320 Amp	4/22

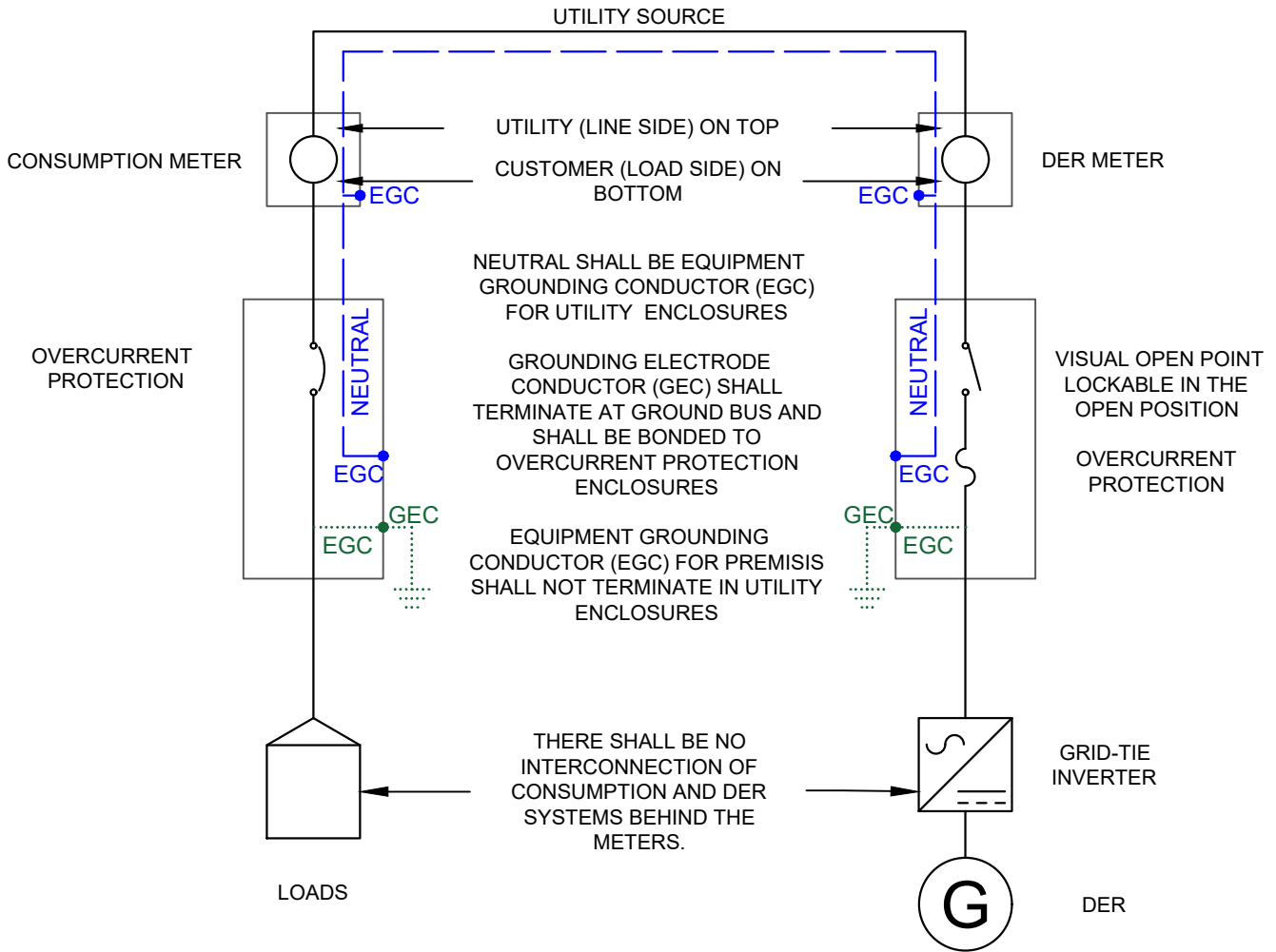


**ELECTRIC SPECIFICATION DRAWINGS**

EU-120	Trans-Socket Metering On Rack	2/24
EU-210	Secondary Enclosure	12/22
EU-310	Three Phase 4 Place 200 Amp, Primary Enclosure Pad	8/24
EU-315	Three Phase 3 Place 200 Amp, Primary Enclosure Pad	8/24
EU-320	Three Phase 4 Place 600 Amp, Primary Enclosure Pad	8/24
EU-325	Three Phase 3 Place 600 Amp, Primary Enclosure Pad	8/24
EU-330	Single Phase, Primary Enclosure Pad	8/24
EU-410	Standard Light Foundation	4/21
EU-500	Padmount Equipment Barrier Clearances	10/18
EU-501	Minimum Clearances From Padmount Equipment Pads	10/18
EU-505	Equipment Protection Bollard	8/24
EU-510	Three Phase Transformer Pad, 75 - 300 KVA	12/22
EU-515	Three Phase Transformer Pad, 75 - 2500 KVA	12/22
EU-520	Three Phase Transformer Pad, 500 - 2500 KVA	12/22
EU-530	Single Phase Transformer Pad	04/21
EU-710	Electrical Placement, Typical Easement, Option 1	03/19
EU-715	Electrical Placement, Typical Easement, Option 1.1	03/19
EU-720	Electrical Placement, Zero Lot Line Easement, Option 2	03/19
EU-730	Electrical Placement, Zero Lot Line Easement, Option 3	03/19
EU-735	Electrical Placement, Zero Lot Line Easement, Option 3.1	03/19
EU-740	Electrical Placement, Zero Lot Line Easement, Option 4	03/19
EU-745	Electrical Placement, Zero Lot Line Easement, Option 4.1	03/19
EU-800	Riser Pole Stub Out	12/20
EU-910	Underground Conduit Installation (Electric Only)	11/22
EU-915	Underground Conduit Installation (Common Trench)	11/22

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. METER LOCATION IS DETERMINED BY NBU. ALL CUSTOMER INSTALLATIONS REQUIRE INSPECTION BY NBU.

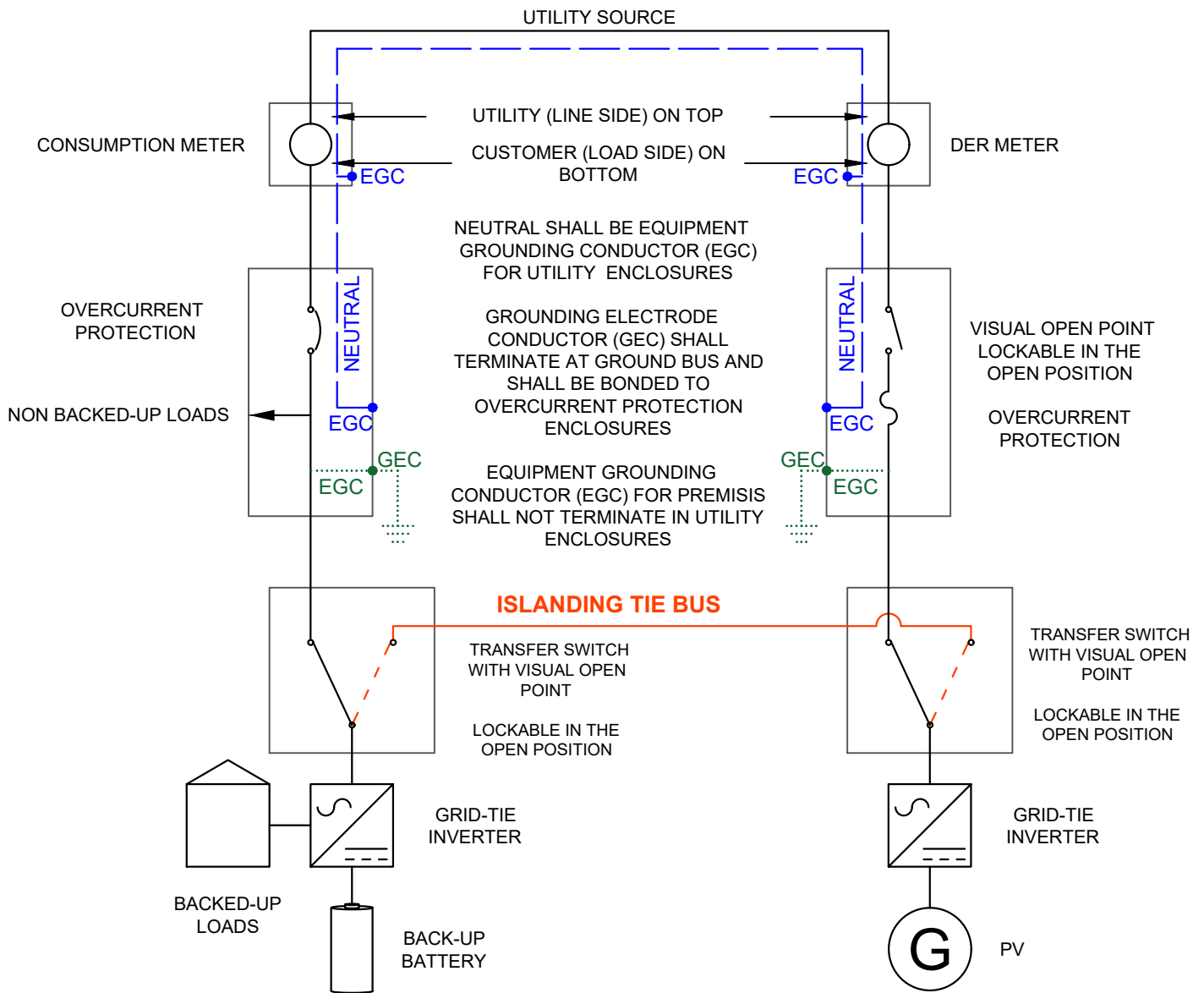
Under no circumstances may loads be served through the DER Meter. Parasitic energy use by DER-required electronics is the only allowable exception.  
Under no circumstances may the Consumption meter be subjected to power flow from the customer premises toward the utility source.



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CUSTOMER-OWNED GENERATION INTERCONNECTION		
ISSUED	SCALE	DRAWING NUMBER
8/21	NTS	EG-010

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. METER LOCATION IS DETERMINED BY NBU. ALL CUSTOMER INSTALLATIONS REQUIRE INSPECTION BY NBU. Under no circumstances may loads be served through the DER Meter. Parasitic energy use by DER-required electronics is the only allowable exception. Islanding Tie Bus shall be connected using approved manually-operated, open transition, double throw transfer switches. Switching to island configuration must disconnect from each Utility Source before connecting to the Islanding Tie Bus. Under no circumstances may the Consumption meter be subjected to power flow from the customer premises toward the utility source. There shall be no interconnection of Consumption and DER systems behind the meters while either meter is connected to Utility Source.



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**CUSTOMER-OWNED GENERATION INTERCONNECTION  
 WITH ISLAND CAPABLE BATTERY BACKUP**

ISSUED

8/21

SCALE

NTS

DRAWING NUMBER

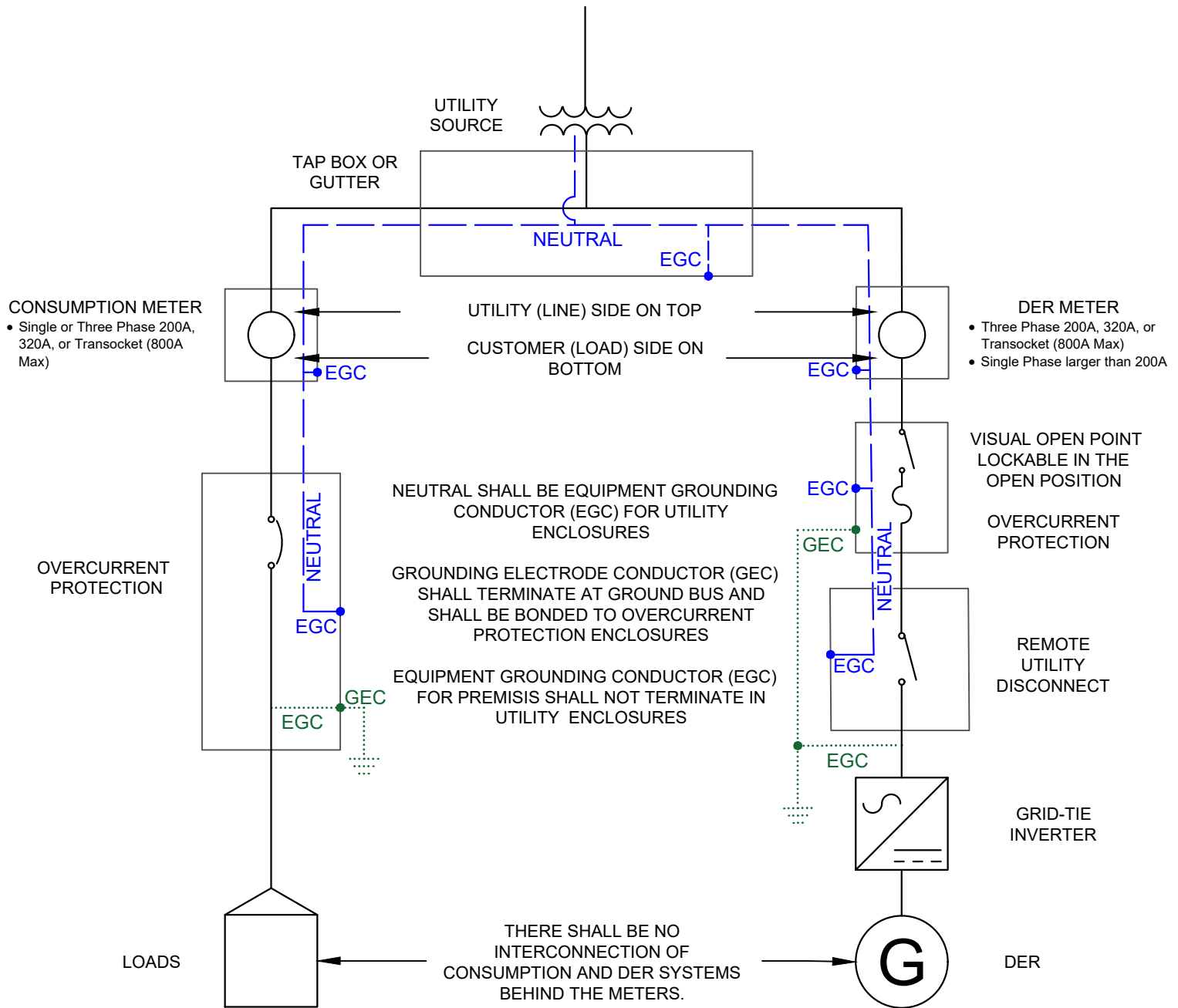
EG-011

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

METER LOCATION IS DETERMINED BY NBU. ALL CUSTOMER INSTALLATIONS REQUIRE INSPECTION BY NBU.

Under no circumstances may loads be served through the DER Meter. Parasitic energy use by DER-required electronics is the only allowable exception.

Under no circumstances may the Consumption meter be subjected to power flow from the customer premises toward the utility source.



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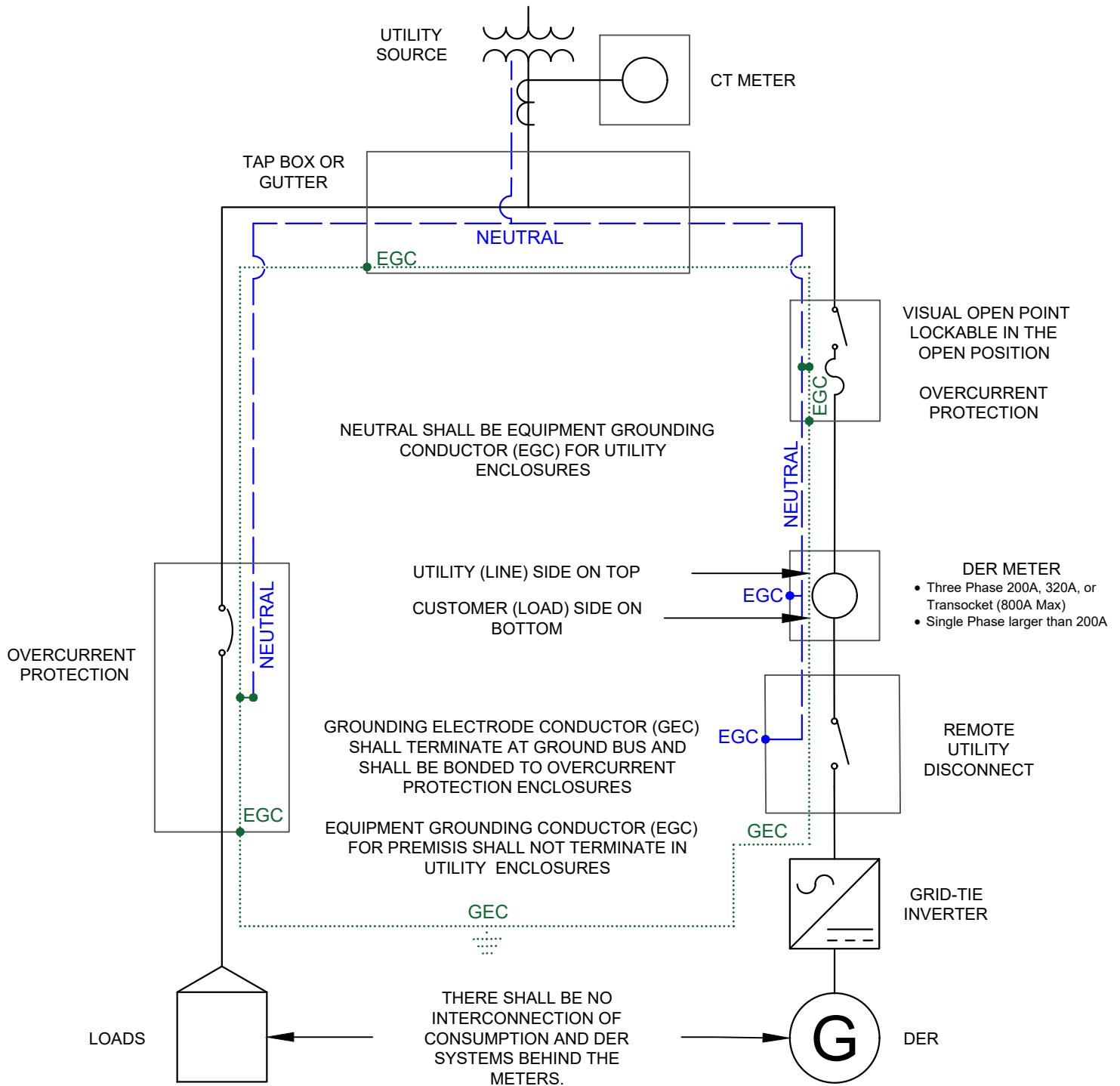
DER INTERCONNECTION OTHER THAN 200 AMP SINGLE PHASE AT SHARED TRANSFORMER

ISSUED	SCALE	DRAWING NUMBER
8/21	NTS	EG-012

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

**METER LOCATION IS DETERMINED BY NBU. ALL CUSTOMER INSTALLATIONS REQUIRE INSPECTION BY NBU.**

Under no circumstances may loads be served through the DER Meter. Parasitic energy use by DER-required electronics is the only allowable exception.



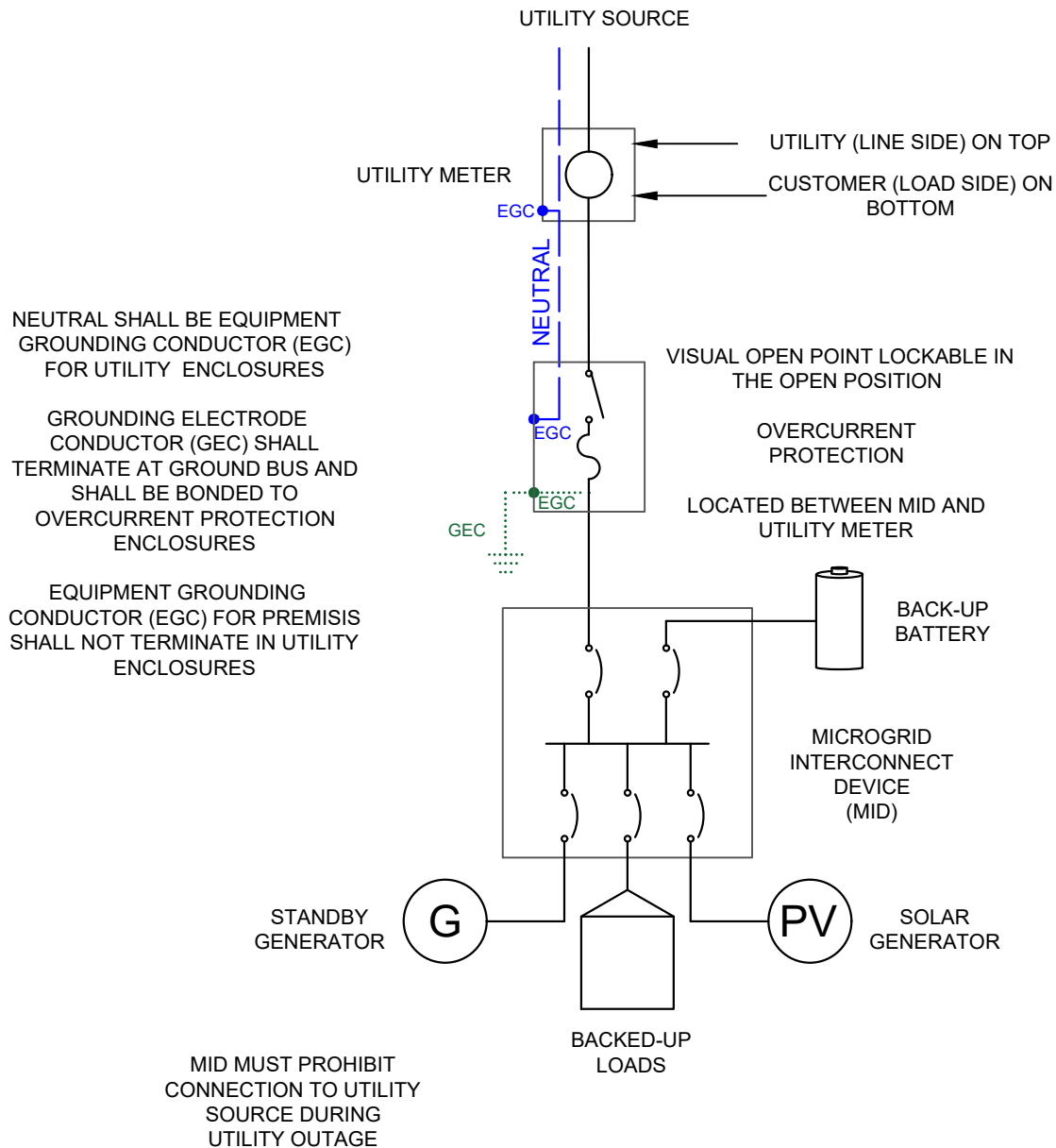
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DER INTERCONNECTION OTHER THAN 200 AMP SINGLE PHASE AT DEDICATED TRANSFORMER

ISSUED	SCALE	DRAWING NUMBER
8/21	NTS	EG-013



This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. METER LOCATION IS DETERMINED BY NBU. ALL CUSTOMER INSTALLATIONS REQUIRE INSPECTION BY NBU. An approved double throw switch, either manually or automatically operated, must be provided in the service entrance equipment of the customer. This switch shall break the initial position before making the next position (open transition). In addition, no collar control device may be installed between a meter socket and NBU's meter. Such device installation is considered meter tampering. SYSTEMS SHALL COMPLY WITH NEC ARTICLE 705



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ISLAND-CAPABLE, PARALLELING  
 MICROGRID INTERCONNECTION

ISSUED

8/21

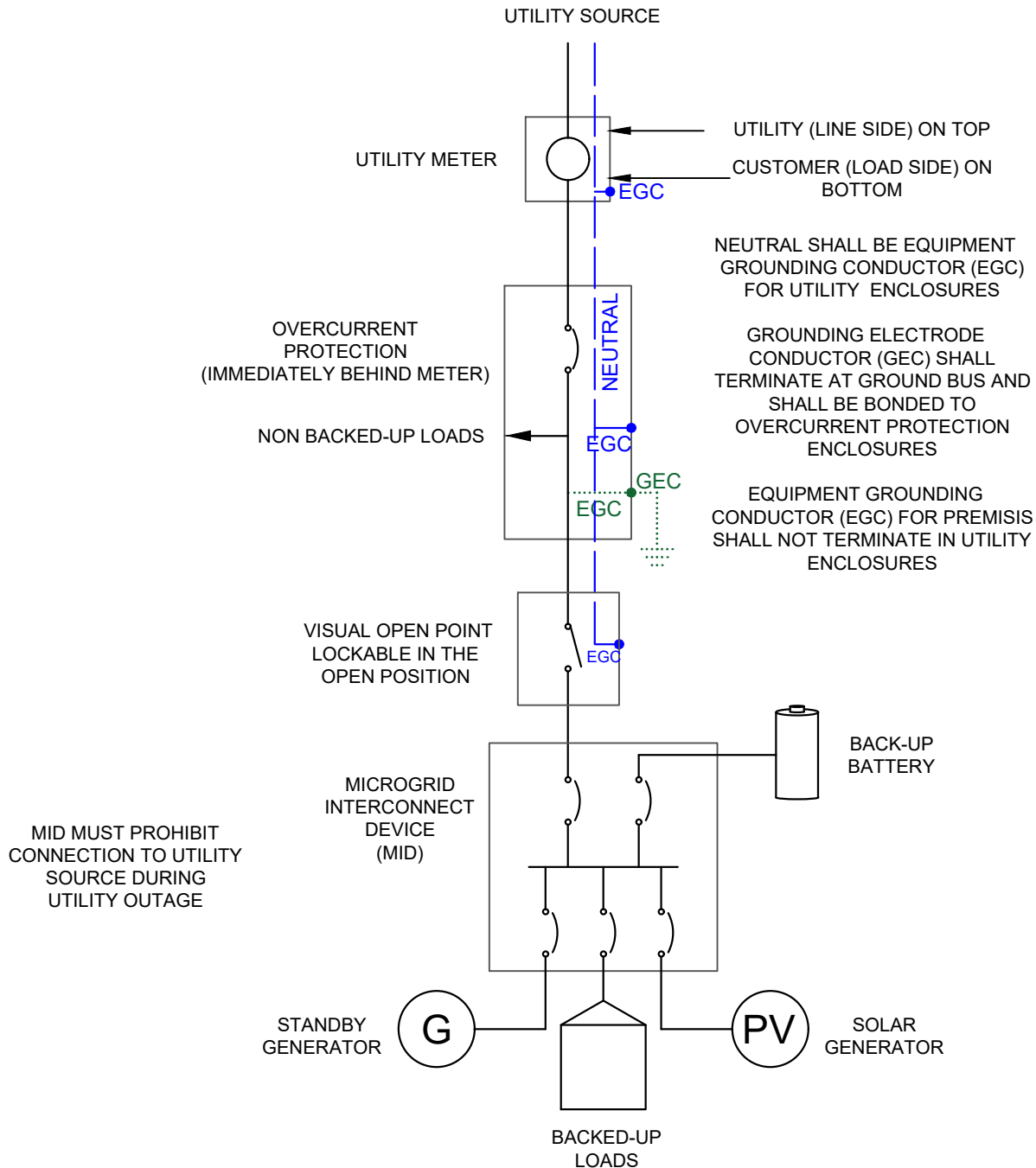
SCALE

NTS

DRAWING NUMBER

EG-014

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. METER LOCATION IS DETERMINED BY NBU. ALL CUSTOMER INSTALLATIONS REQUIRE INSPECTION BY NBU. An approved double throw switch, either manually or automatically operated, must be provided in the service entrance equipment of the customer. This switch shall break the initial position before making the next position (open transition). In addition, no collar control device may be installed between a meter socket and NBU's meter. Such device installation is considered meter tampering.  
 SYSTEMS SHALL COMPLY WITH NEC ARTICLE 705



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ISLAND-CAPABLE, PARALLELING  
 SERVICE ENTRANCE MICROGRID INTERCONNECTION

ISSUED

8/21

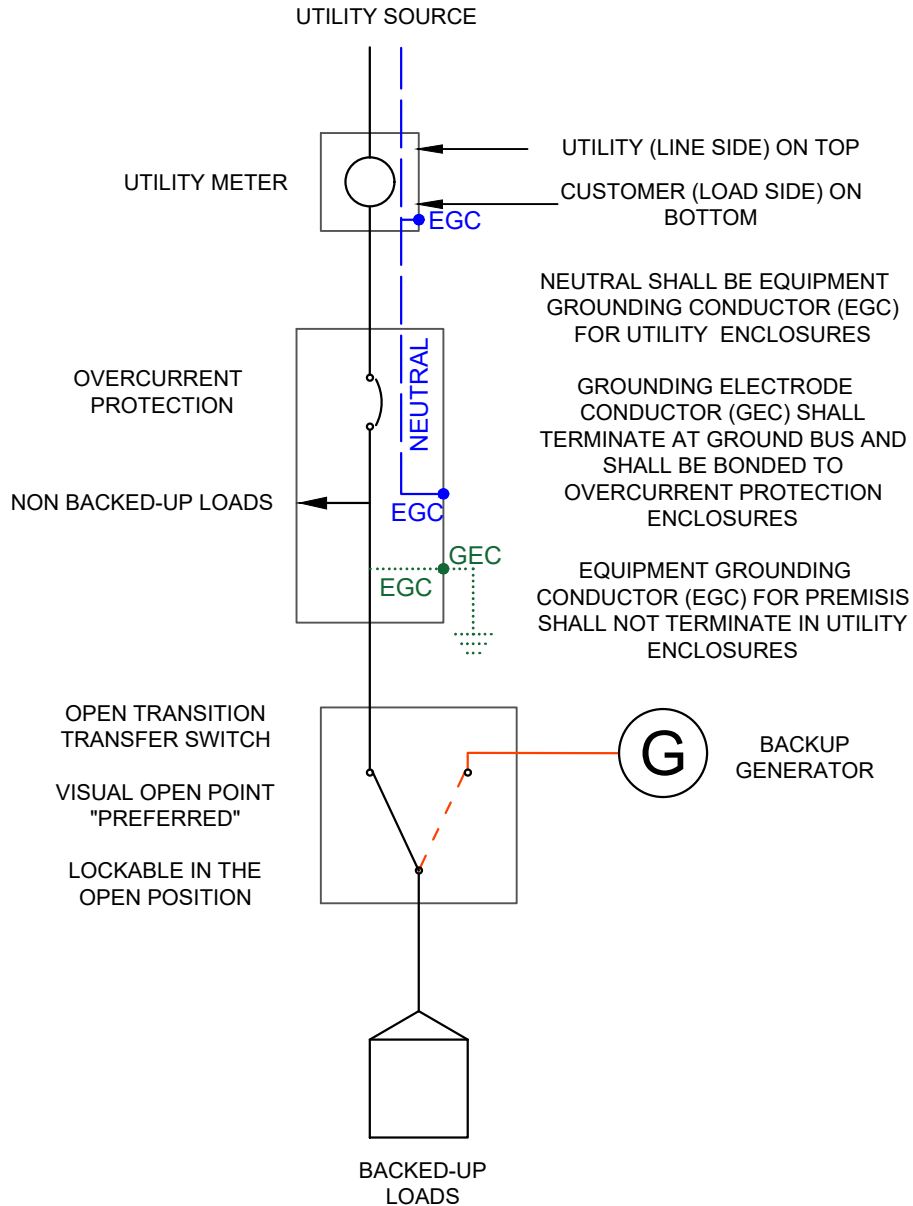
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NTS

DRAWING NUMBER

EG-015

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. METER LOCATION IS DETERMINED BY NBU. ALL CUSTOMER INSTALLATIONS REQUIRE INSPECTION BY NBU. Under no circumstances may the utility meter be subjected to power flow from the customer premises toward the utility source. An approved double throw switch, either manually or automatically operated, must be provided in the service entrance equipment of the customer. This switch shall break the initial position before making the next position (open transition). In addition, no collar control device may be installed between a meter socket and NBU's meter. Such device installation is considered meter tampering.  
**SYSTEMS SHALL COMPLY WITH NEC ARTICLE 702**



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**CUSTOMER-OWNED BACK-UP  
 GENERATION INTERCONNECTION**

ISSUED

8/21

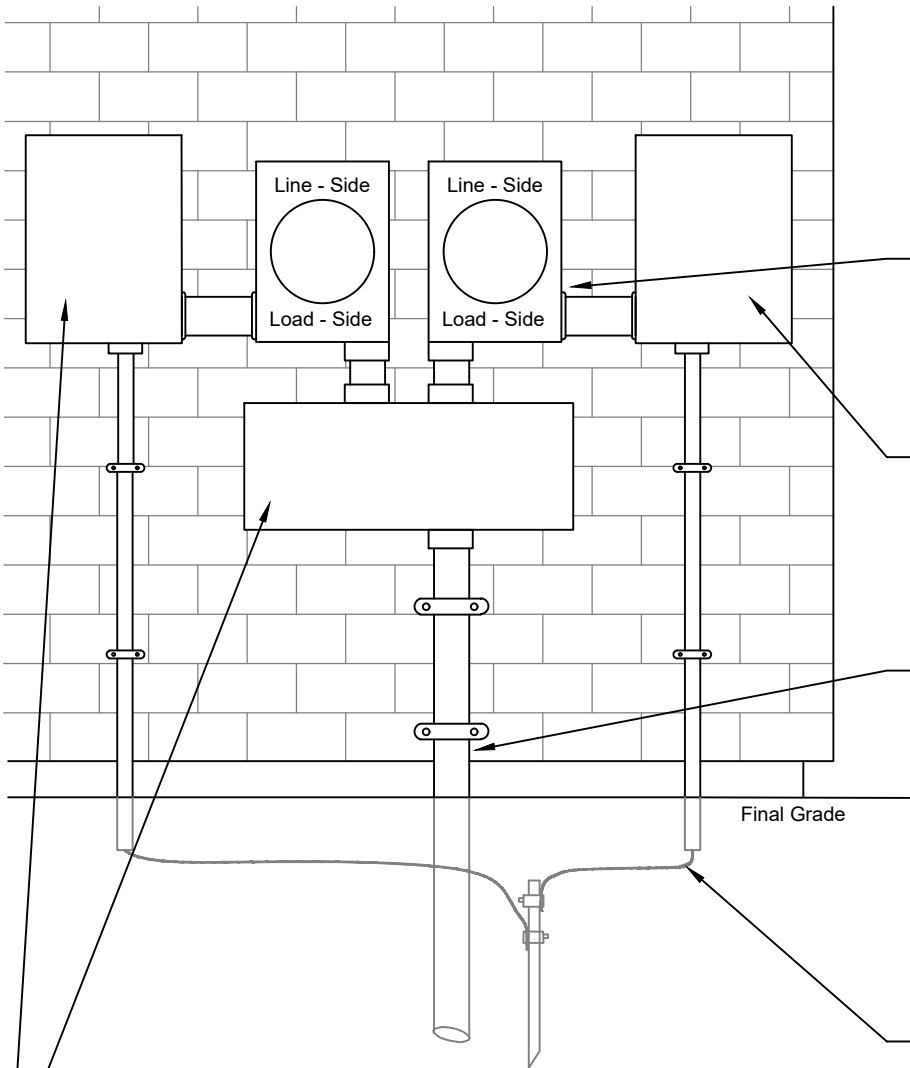
SCALE

NTS

DRAWING NUMBER

EG-016

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.



Minimum 3' unobstructed clearance in front of all utility service equipment. All enclosures shall be electrically connected to line-side grounded neutral conductor and to load-side grounded neutral conductor. Neutral conductors to be marked with white tape inside all enclosures.

Generation and Consumption Meter Sockets: 4' minimum and 6' maximum from center of socket to final ground grade, when measured 3' in front of socket. Electrical equipment must be secured at 4 points.

Weatherproof Main Disconnect: Located adjacent to Consumption Meter Socket. Distribution panel may be located adjacent to main disconnect or inside building (not inside a closet). Overcurrent Protection is required as close to the utility source as feasible.

Utility Conduit: **To be sized by NBU.** Conduit should be secured with two 2-hole straps, sized to fit conduit and attached with galvanized anchors appropriate for the mounting surface. Conduit straps to be placed at a distance from each end equal to 25% of the length of exposed conduit. Customer-owned pipes, conduits, or other equipment may not be installed in front of, behind, or otherwise interfere with access to utility conduits.

All exposed conduit above ground shall be Schedule 80 PVC. All PVC will meet NEMA TC-2-1998 for electrical use.

Grounding electrode conductor: Minimum #6 copper, connected to main disconnect neutral bar (NEC 250.24(A)(1)). Shall be installed in one continuous length without a splice to grounding electrode. Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to wall with two appropriately spaced straps, sized to fit conduit, and attached with galvanized lag screws. Install appropriate Intersystem Bond as per NEC 250.94 if installed on GEC then GEC must remain continuous and PVC protection must be maintained. Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade.

Weatherproof Tap Enclosure: Must open toward the front. Opening height must be at least two times the depth dimension. Enclosure must be lockable by NBU. Secure at four corners to sturdy structure. Enclosure to be located such that existing utility service conductors may be re-used. End of utility service conduit may not extend higher than 6' above final ground grade. Enclosure shall meet requirements of NEC Article 314.

Weatherproof Generator Disconnect: Located adjacent to Generation Meter Socket. Generation Disconnect must provide visible open point, and be lockable in the open position. Overcurrent Protection is required as close to the utility source as feasible. Refer to NEC Articles 690 and 694 for labeling and other requirements.



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UNDERGROUND RESIDENTIAL GENERATION  
INTERCONNECTION WITH INTERMEDIATE TAP ENCLOSURE

ISSUED

2/22

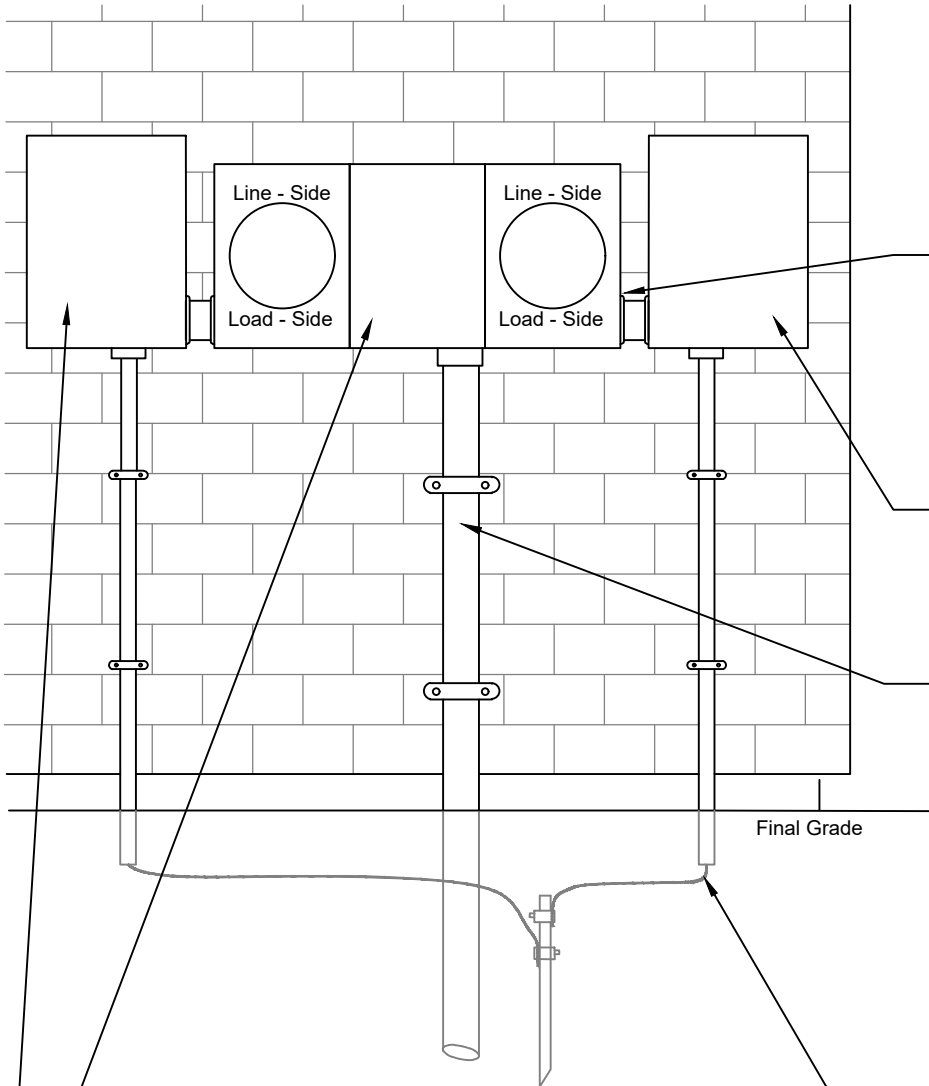
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NTS

DRAWING NUMBER

EG-020

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Minimum 3' unobstructed clearance in front of all utility service equipment. All enclosures shall be electrically connected to line-side grounded neutral conductor and to load-side grounded neutral conductor. Neutral conductors to be marked with white tape inside all enclosures.

Generation and Consumption Meter Sockets: 4' minimum and 6' maximum from center of sockets to final ground grade, when measured 3' in front of socket. Electrical equipment must be secured at 4 points.

Weatherproof Main Disconnect: Located adjacent to Consumption Meter Socket. Distribution panel may be located adjacent to main disconnect or inside building (not inside a closet). Overcurrent Protection is required as close to the utility source as feasible.

Utility Conduit: **To be sized by NBU.** Conduit should be secured with two 2-hole straps, sized to fit conduit and attached with galvanized anchors appropriate for the mounting surface. Conduit straps to be placed at a distance from each end equal to 25% of the length of exposed conduit. All exposed conduit above ground shall be Schedule 80 PVC. All PVC will meet NEMA TC-2-1998 for electrical use. Customer-owned pipes, conduits, or other equipment may not be installed in front of, behind, or otherwise interfere with access to utility conduits.

Grounding electrode conductor: Minimum #6 copper, connected to main disconnect neutral bar (NEC 250.24(A)(1)). Shall be installed in one continuous length without a splice to grounding electrode. Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to wall with two appropriately spaced straps, sized to fit conduit, and attached with galvanized lag screws. Install appropriate Intersystem Bond as per NEC 250.94 if installed on GEC then GEC must remain continuous and PVC protection must be maintained. Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade.

Ganged Meter Module: Must open toward the front and have a single point of connection to a common bus for both meter sockets. Utility Enclosure must be lockable by NBU. Secure Module at a minimum of four corners to sturdy structure. Module to be located such that existing utility service conductors may be re-used. End of utility service conduit may not extend higher than 6' above final ground grade. (Milbank Model U1252 or similar)

Weatherproof Generator Disconnect: Located adjacent to Generation Meter Socket. Disconnect must provide visible open point, and be lockable in the open position. Overcurrent Protection is required as close to the utility source as feasible. Refer to NEC Articles 690 or 694 for labeling and other requirements.

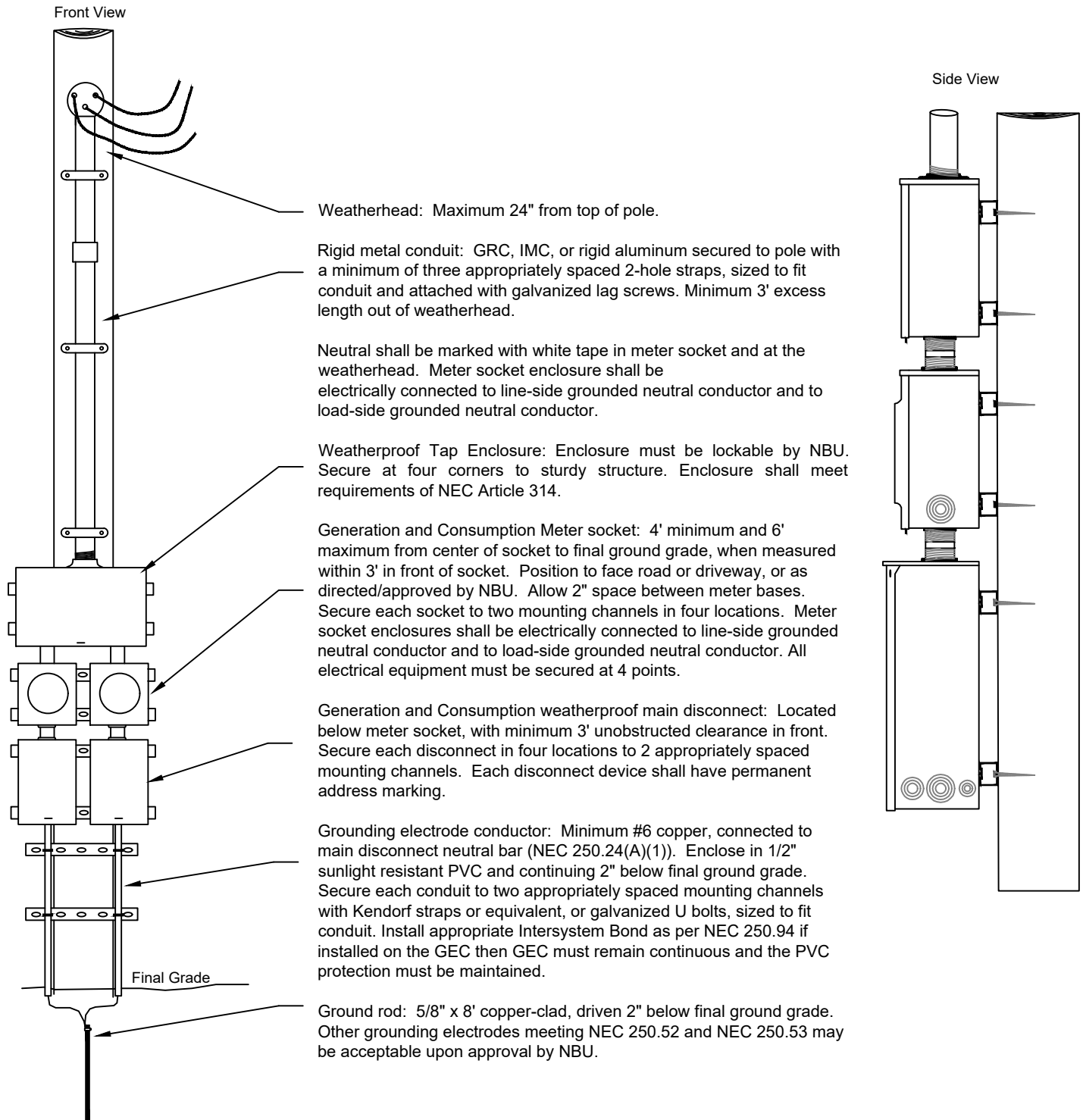


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UNDERGROUND RESIDENTIAL GENERATION INTERCONNECTION WITH GANGED METER MODULE

ISSUED	SCALE	DRAWING NUMBER
2/22	NTS	EG-025

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.



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**OVERHEAD RESIDENTIAL GENERATION INTERCONNECTION  
 WITH INTERMEDIATE TAP ENCLOSURE ON POLE**

ISSUED

12/22

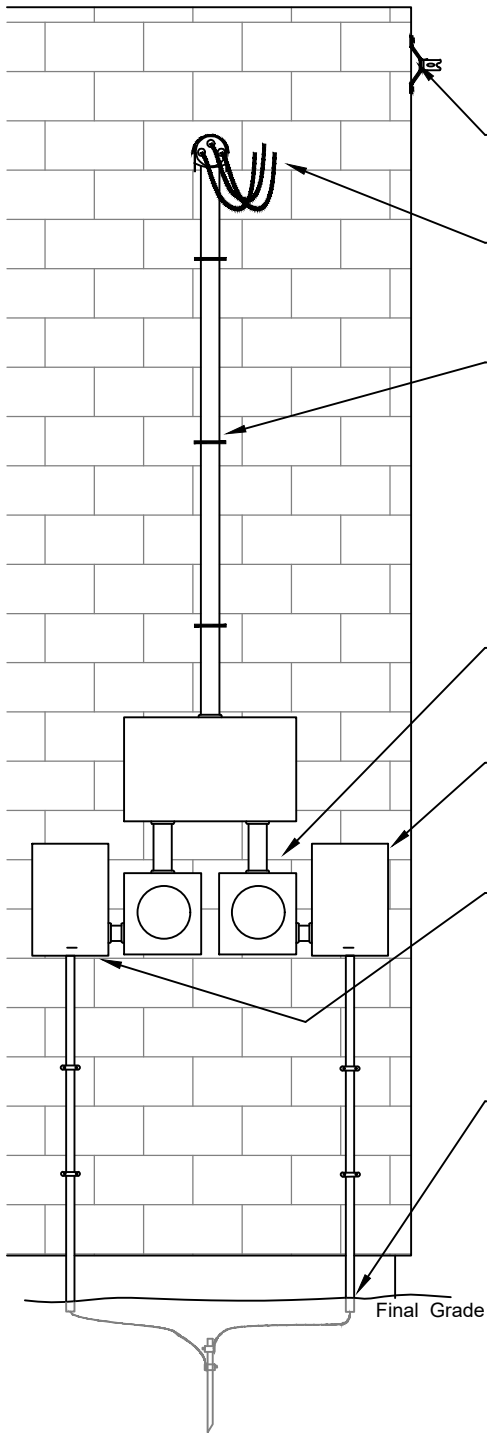
SCALE

NTS

DRAWING NUMBER

EG-030

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.



Minimum 3' unobstructed clearance in front of all utility service equipment. All enclosures shall be electrically connected to line-side grounded neutral conductor and to load-side grounded neutral conductor. Neutral conductors to be marked with white tape inside all enclosures and at the weatherhead.

Point of attachment: 17' above final ground grade recommended; minimum 12'-6". Shall not be more than 24" above bottom of weatherhead. Must be capable of withstanding a pull of 300 lbs. Attachment part Blackburn 6912 or equivalent.

Weatherhead: Final ground grade to bottom of weatherhead 12' minimum. Drip loop shall have 10'-6" minimum clearance to final ground grade. Minimum 3' excess length out of weatherhead.

Rigid metal conduit: Minimum 2" GRC, IMC, or rigid aluminum secured to wall with a minimum of three appropriately spaced 2-hole straps, sized to fit conduit and attached with galvanized lag screws.

Allowable Single Phase Dwelling Services per NEC 310-15 (B)(7)(1)

Weatherproof Tap Enclosure: Enclosure must be lockable by NBU. Secure at four corners to sturdy structure. Enclosure shall meet requirements of NEC Article 314.

Generation and Consumption Meter Sockets: 4' minimum and 6' maximum from center of socket to final ground grade, when measured 3' in front of socket. All electrical equipment must be secured at 4 points.

Weatherproof Main Disconnect: Located next to Consumption Meter Socket. Distribution panel may be located adjacent to main disconnect or inside building (not inside a closet). Overcurrent Protection is required as close to the utility source as feasible.

Weatherproof Generator Disconnect: Located next to Generation Meter Socket. Generation Disconnect must provide visible open point, and be lockable in the open position. Overcurrent Protection is required as close to the utility source as feasible. Refer to NEC Articles 690 and 694 for labeling and other requirements.

Grounding electrode conductor: Minimum #6 copper, connected to main disconnect neutral bar (NEC 250.24(A)(1)). Shall be installed in one continuous length without a splice to grounding electrode. Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to wall with two appropriately spaced straps, sized to fit conduit, and attached with galvanized lag screws. Install appropriate Intersystem Bond as per NEC 250.94 if installed on GEC then GEC must remain continuous and PVC protection must be maintained. Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade.



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OVERHEAD RESIDENTIAL GENERATION INTERCONNECTION WITH INTERMEDIATE TAP ENCLOSURE

ISSUED	SCALE	DRAWING NUMBER
6/22	NTS	EG-035

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.

Minimum 3' unobstructed clearance in front of all utility service equipment. All enclosures shall be electrically connected to line-side grounded neutral conductor and to load-side grounded neutral conductor. Neutral conductors to be marked with white tape inside all enclosures and at the weatherhead.

Point of attachment: 17' above final ground grade recommended; minimum 12'-6". Shall not be more than 24" above bottom of weatherhead. Must be capable of withstanding a pull of 300 lbs. Attachment part Blackburn 6912 or equivalent.

Weatherhead: Final ground grade to bottom of weatherhead 12' minimum. Drip loop shall have 10'-6" minimum clearance to final ground grade. Minimum 3' excess length out of weatherhead.

Rigid metal conduit: Minimum 2" GRC, IMC, or rigid aluminum secured to wall with a minimum of three appropriately spaced 2-hole straps, sized to fit conduit and attached with galvanized lag screws.

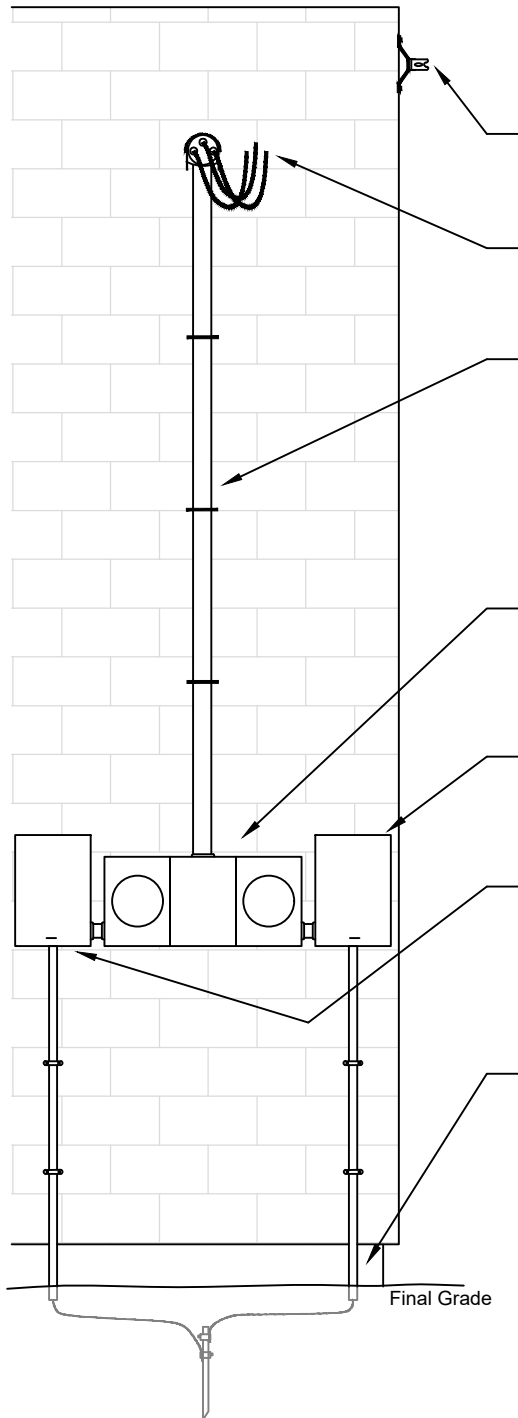
Allowable Single Phase Dwelling Services per NEC 310-15 (B)(7)(1)

Ganged Meter Module: Must open toward the front and have a single point of connection to a common bus for both meter sockets. Utility Enclosure must be lockable by NBU. Secure Module at a minimum of four corners to sturdy structure. Module to be located such that existing utility service conductors may be re-used. End of utility service conduit may not extend higher than 6' above final ground grade. (Milbank Model U1252 or similar). All electrical equipment must be secured at 4 points.

Weatherproof Main Disconnect: Located next to Consumption Meter Socket. Distribution panel may be located adjacent to main disconnect or inside building (not inside a closet). Overcurrent Protection is required as close to the utility source as feasible.

Weatherproof Generator Disconnect: Located next to Generation Meter Socket. Generation Disconnect must provide visible open point, and be lockable in the open position. Overcurrent Protection is required as close to the utility source as feasible. Refer to NEC Articles 690 and 694 for labeling and other requirements.

Grounding electrode conductor: Minimum #6 copper, connected to main disconnect neutral bar (NEC 250.24(A)(1)). Shall be installed in one continuous length without a splice to grounding electrode. Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to wall with two appropriately spaced straps, sized to fit conduit, and attached with galvanized lag screws. Install appropriate Intersystem Bond as per NEC 250.94 if installed on GEC then GEC must remain continuous and PVC protection must be maintained. Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade.



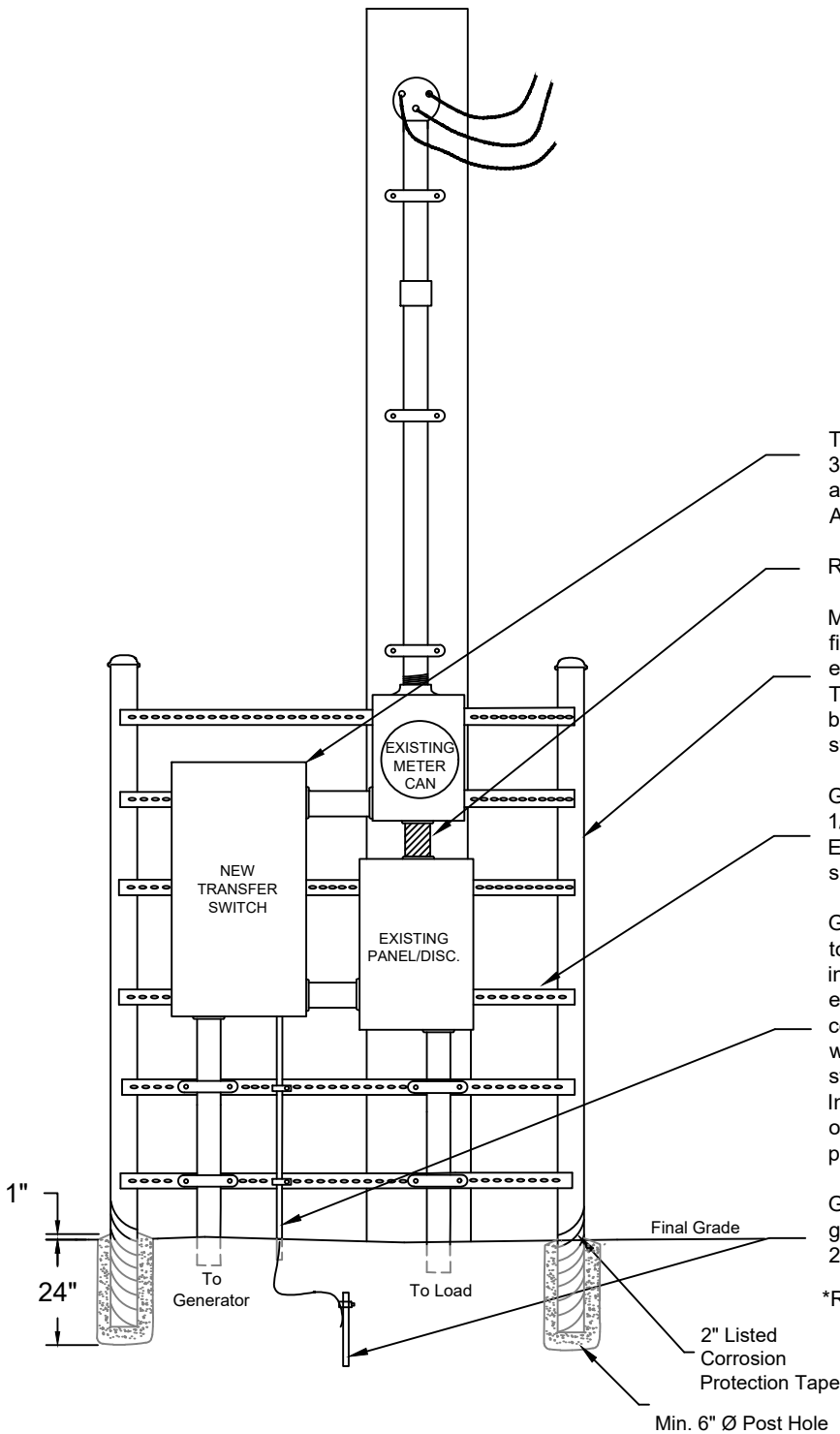
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OVERHEAD RESIDENTIAL GENERATION INTERCONNECTION  
 WITH GANGED METER MODULE

ISSUED	SCALE	DRAWING NUMBER
6/22	NTS	EG-040



This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. All customer installations require inspection by NBU. GEC and OCPD shall be in first enclosure after the meter.



Transfer switch: Located adjacent to meter socket, with minimum 3' unobstructed clearance in front. Transfer switch will need to be a double throw switch, either manually or automatically operated. All electrical equipment must be secured at 4 points.

Remove and cap between the meter can and panel/disc.

Meter rack: 2" GRC, or IMC, continuing a minimum of 2' below final ground grade with listed corrosion protection tape or polywrap extending 2" above and encased in concrete, 4 sack mix minimum. Top of pipe to have rain proof cap. NBU inspection required before concrete encasement. Pole cannot be used as support system.

Galvanized mounting channel, Kendorf or equivalent, 1 1/2" x 1 1/2": Welded or bolted to stand with galvanized bolts. All Electrical Equipment must be secured at four points to two appropriately spaced mounting channels.

Grounding electrode conductor: Minimum #6 copper, connected to transfer switch neutral bar (NEC 250.24(A)(1)). Shall be installed in one continuous length without a splice to grounding electrode. Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure conduit to rack with two appropriately spaced mounting channels with Kendork straps or equivalent, or galvanized U bolts, sized to fit conduit. Install appropriate Intersystem Bond as per NEC 250.94 if installed on the GEC then GEC must remain continuous and PVC protection must be maintained.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade. Other grounding electrodes meeting NEC 250.52 and NEC 250.53 may be acceptable upon approval by NBU.

\*Remove Ground wire from existing panel/disconnect\*



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OVERHEAD RESIDENTIAL BACKUP  
 GENERATOR SERVICE ON A POLE

ISSUED

12/22

SCALE

NTS

DRAWING NUMBER

EG-045

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Remove and cap between the meter can and panel/disc.

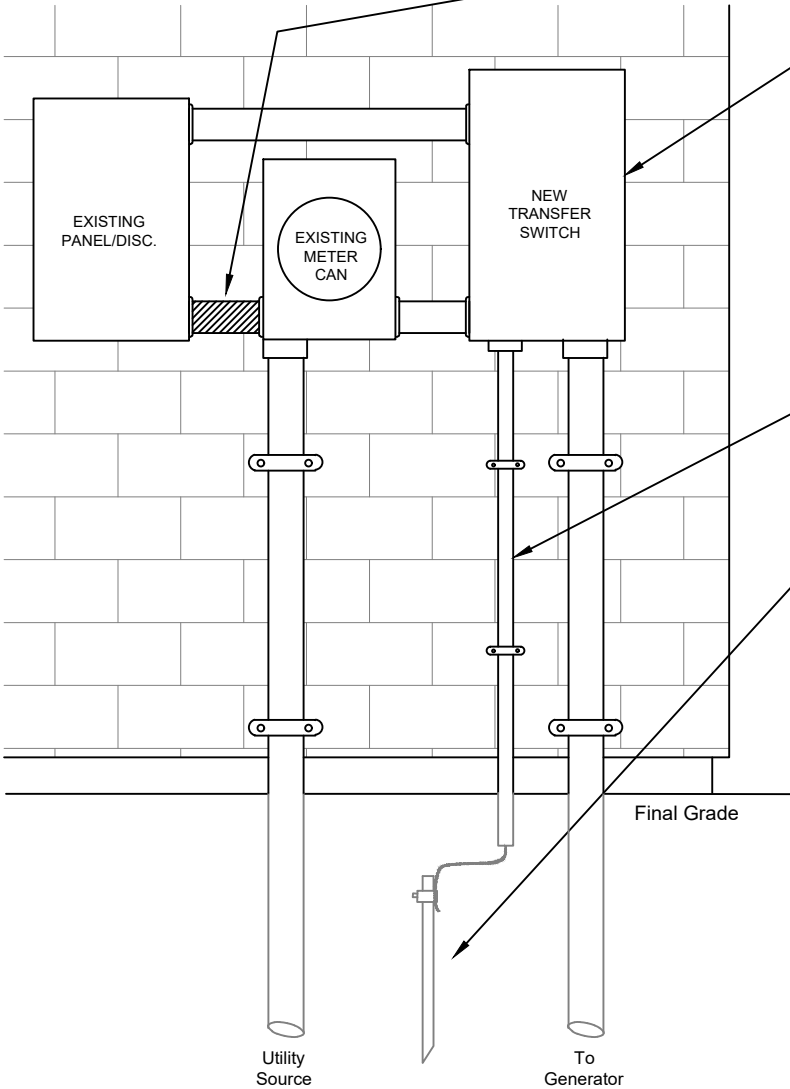
Transfer switch: Located adjacent to meter socket, with minimum 3' unobstructed clearance in front. Transfer switch will need to be a double throw switch, either manually or automatically operated. All electrical equipment must be secured at 4 points.

Schedule with NBU if source feeds from energized equipment. Customer-owned pipes, conduits, or other equipment may not be installed in front of, behind, or otherwise interfere with access to utility conduits.

Grounding electrode conductor: Minimum #6 copper, connected to main disconnect neutral bar (NEC 250.24 (A)(1)). Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to wall with two appropriately spaced straps sized to fit conduit and attached with galvanized lag screws. Install appropriate Intersystem Bond as per NEC 250.94 if installed on GEC then GEC must remain continuous and PVC protection must be maintained.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade.

\*Remove Ground wire from existing panel/disconnect\*



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UNDERGROUND RESIDENTIAL BACKUP  
 GENERATOR SERVICE ON BUILDING

ISSUED

12/22

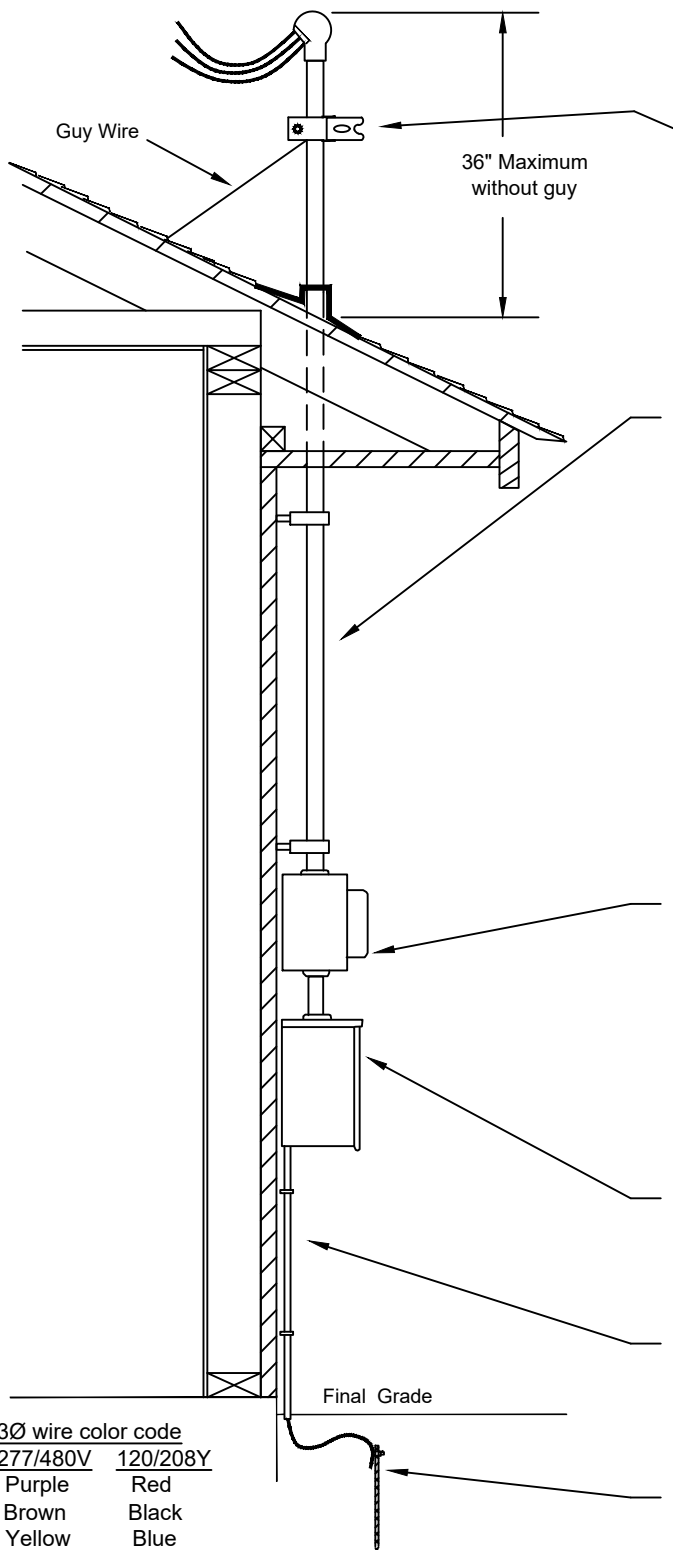
SCALE

NTS

DRAWING NUMBER

EG-050

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.



If NBU conductors cross more than 4 linear feet of roof, clearance must be increased from 18" to 36". If wires cross more than 6 linear feet of roof, clearance must be greater than 8'.

Point of attachment: 17' above final ground grade recommended; minimum 12'-6". Customer to install point of attachment 6" below and opposite weatherhead, facing toward NBU service lead. Attachment eye part Blackburn 6912 or equivalent.

Metal flashing: If metal roof, plastic may be substituted. Special roof problems shall be coordinated with NBU.

Rigid metal conduit: GRC, or IMC secured to wall with two evenly spaced 2-hole straps, sized to fit conduit, and attached with galvanized lag screws.  
 100 amp loop: 1 1/4" minimum, residential application only.  
 200 amp loop: 2" minimum, residential application only.  
 Minimum 3' excess length out of weatherhead.

(NEC Table 310.15(B)(16))

WIRE TYPE SERVICE MAIN RATING	ALUMINUM	COPPER
	75°C	75°C
100 Amp	#1	#3
125 Amp	#1	#2
200 Amp	4/0	2/0

Allowable Single Phase Dwelling Services per NEC 310-15 (B)(7)(1)

Neutral shall be marked with white tape in the meter socket and at the weatherhead.

Meter socket: 4' minimum and 6' maximum from center of socket to final ground grade, when measured within 3' in front of socket. Meter socket enclosure shall be electrically connected to line-side grounded neutral conductor and to load-side grounded neutral conductor. All electrical equipment must be secured at 4 points.

3Ø meter socket shall have plexiglass shield over meter jaws with lever bypass.

NBU approved 3Ø meter socket:  
 Milbank # U9701 = 200amp  
 Milbank # U2594 = 320amp

Substitution must be approved by NBU.

Weatherproof main disconnect: Located below or adjacent to meter socket, with minimum 3' unobstructed clearance in front.

Grounding electrode conductor: Minimum #6 copper, connected to main disconnect neutral bar (NEC 250.24(A)(1)). Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to wall with two appropriately spaced straps, sized to fit conduit, and attached with galvanized lag screws. Install appropriate Intersystem Bond as per NEC 250.94 if installed on GEC then the GEC must remain continuous and PVC protection must be maintained.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade. Other grounding electrodes meeting NEC 250.52 and NEC 250.53 may be acceptable upon approval by NBU.

3Ø wire color code  
 277/480V 120/208Y  
 AØ - Purple Red  
 BØ - Brown Black  
 CØ - Yellow Blue

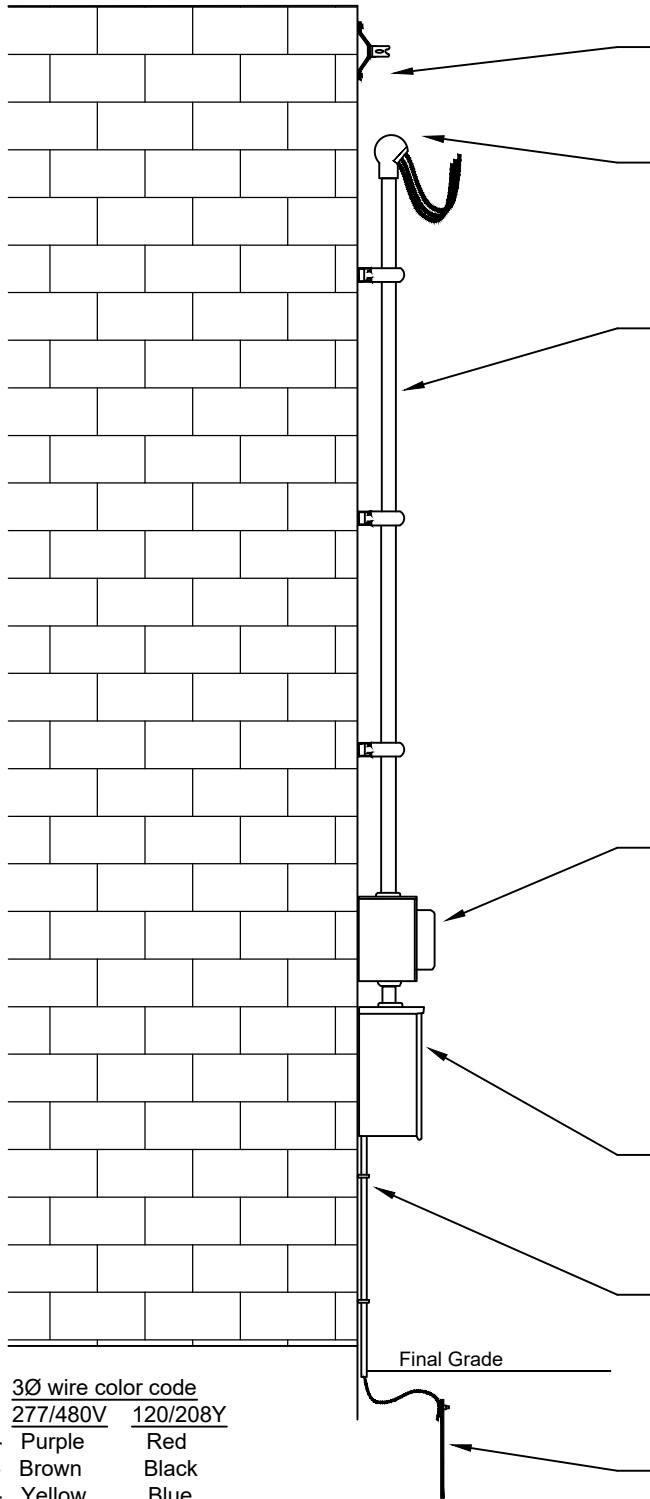


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METERING ASSEMBLY MAST THROUGH ROOF  
 100 AMP & 200 AMP

ISSUED	SCALE	DRAWING NUMBER
8/24	NTS	EH-010

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.



Point of attachment: 17' above final ground grade recommended; minimum 12'-6". Shall not be more than 24" above bottom of weatherhead. Must be capable of withstanding a pull of 300 lbs. Attachment part Blackburn 6912 or equivalent.

Weatherhead: Final ground grade to bottom of weatherhead 12' minimum. Drip loop shall have 10'-6" minimum clearance to final ground grade.

Rigid metal conduit: GRC, IMC, or rigid aluminum secured to wall with a minimum of three evenly spaced 2-hole straps, sized to fit conduit and attached with galvanized lag screws.

100 amp loop: 1 1/4" minimum, residential application only.

200 amp loop: 2" minimum, residential application only.

Minimum 3' excess length out of weatherhead.

(NEC Table 310.15(B)(16))

WIRE TYPE SERVICE MAIN RATING	ALUMINUM	COPPER
	75°C	75°C
100 Amp	#1	#3
125 Amp	#1	#2
200 Amp	4/0	2/0

Allowable Single Phase Dwelling Services per NEC 310-15 (B)(7)(1)

Neutral shall be marked with white tape in the meter socket and at the weatherhead.

Meter socket: 4' minimum and 6' maximum from center of socket to final ground grade, when measured within 3' in front of socket. Meter socket enclosure shall be electrically connected to line-side grounded neutral conductor and to load-side grounded neutral conductor. All electrical equipment must be secured at 4 points.

3Ø meter socket shall have plexiglass shield over meter jaws with lever bypass.

NBU approved 3Ø meter socket:

Milbank # U9701 = 200amp

Milbank # U2594 = 320amp

Substitution must be approved by NBU.

Weatherproof main disconnect: Located below or adjacent to meter socket, with minimum 3' unobstructed clearance in front.

Grounding electrode conductor: Minimum #6 copper, connected to main disconnect neutral bar (NEC 250.24(A)(1)). Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to wall with two appropriately spaced straps, sized to fit conduit, and attached with galvanized lag screws. Install appropriate Intersystem Bond as per NEC 250.94 if installed on GEC then GEC must remain continuous and PVC protection must be maintained.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade. Other grounding electrodes meeting NEC 250.52 and NEC 250.53 may be acceptable upon approval by NBU.

3Ø wire color code  
277/480V 120/208Y

AØ - Purple      Red  
BØ - Brown      Black  
CØ - Yellow      Blue



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METERING ASSEMBLY MAST ON BUILDING  
100 AMP & 200 AMP

ISSUED

2/24

SCALE

NTS

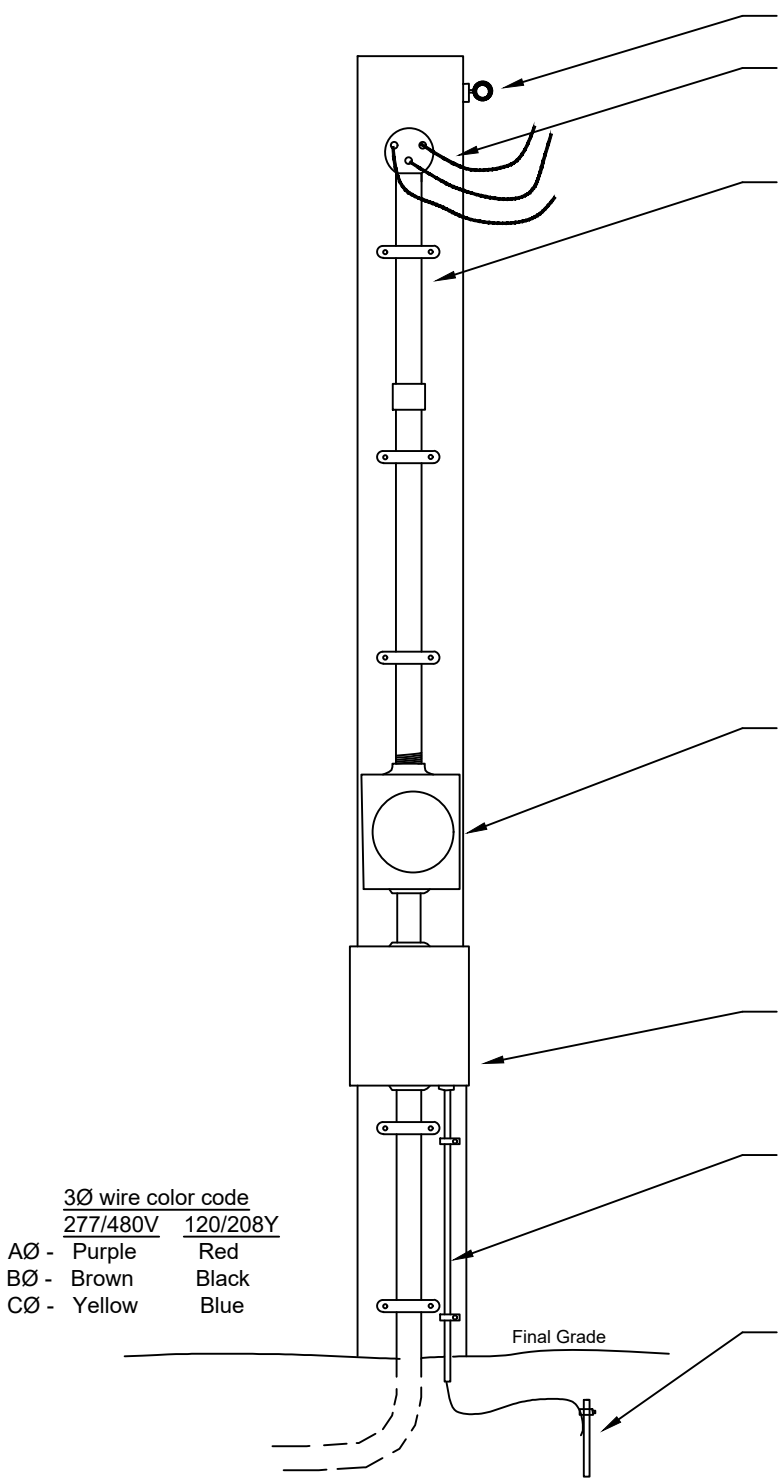
DRAWING NUMBER

EH-015

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements.

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

METER LOCATION IS DETERMINED BY NBU. ALL CUSTOMER INSTALLATIONS REQUIRE INSPECTION BY NBU.



Pole and point of attachment installed by NBU.

Weatherhead: Maximum 24" from top of pole.

Rigid metal conduit: GRC, IMC, or rigid aluminum secured to pole with a minimum of 3 evenly spaced 2-hole straps, sized to fit conduit, and attached with galvanized lag screws.

100 amp loop: 1 1/4" minimum, residential application only.

200 amp loop: 2" minimum, residential application only.

Minimum 3' excess length out of weatherhead.

(NEC Table 310.15(B)(16))

WIRE TYPE SERVICE MAIN RATING	ALUMINUM	COPPER
	75°C	75°C
100 Amp	#1	#3
125 Amp	#1	#2
200 Amp	4/0	2/0

Allowable Single Phase Dwelling Services per NEC 310-15 (B)(7)(1)

Neutral shall be marked with white tape in the meter socket and at the weatherhead.

Meter socket: 4' minimum and 6' maximum from center of socket to final ground grade, when measured within 3' in front of socket. Position to face road or driveway, or as directed/approved by NBU. Meter socket enclosure shall be electrically connected to line-side grounded neutral conductor and to load-side grounded neutral conductor. All electrical equipment must be secured at 4 points.

3Ø meter socket shall have plexiglass shield over meter jaws with lever bypass.

NBU approved 3Ø meter socket: Milbank # U9701 = 200amp Substitution must be approved by NBU.

Weatherproof main disconnect: Located below meter socket, with minimum 3' unobstructed clearance in front.

Grounding electrode conductor: Minimum #6 copper, connected to main disconnect neutral bar (NEC 250.24(A)(1)). Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to pole with two appropriately spaced straps, sized to fit conduit, and attached with galvanized lag screws. Install appropriate Intersystem Bond as per NEC 250.94 if installed on GEC then GEC must remain continuous and PVC protection must be maintained.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade. Other grounding electrodes meeting NEC 250.52 and NEC 250.53 may be acceptable upon approval by NBU.

3Ø wire color code  
277/480V 120/208Y

AØ - Purple      Red  
BØ - Brown      Black  
CØ - Yellow      Blue

Final Grade



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METERING ASSEMBLY ON POLE  
100 AMP & 200 AMP

ISSUED

2/24

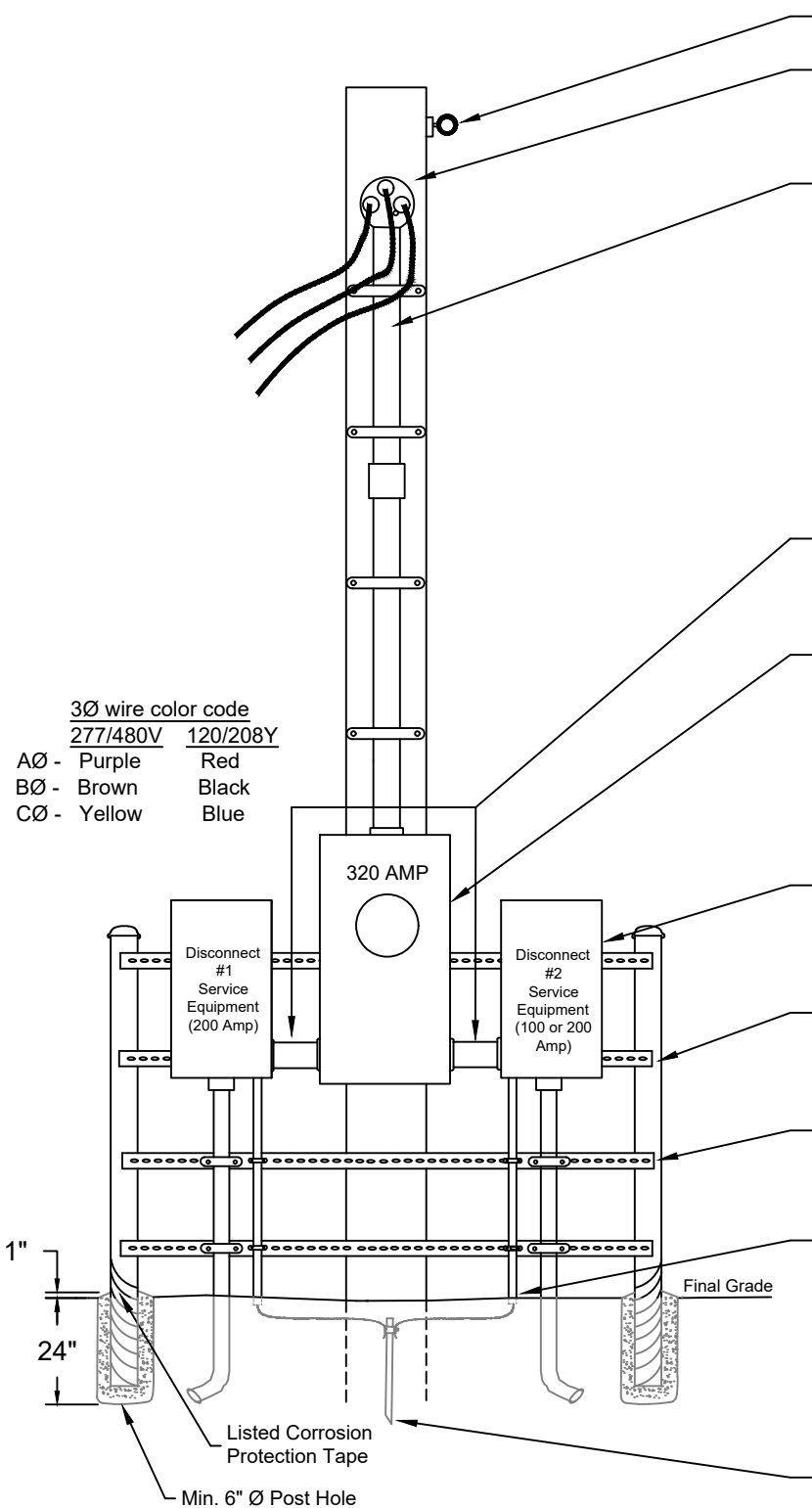
SCALE

NTS

DRAWING NUMBER

EH-020

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.



Pole and point of attachment installed by NBU.

Weatherhead: Maximum 24" from top of pole.

Rigid metal conduit: GRC, IMC, or Rigid Aluminum secured to pole with a minimum of 4 evenly spaced 2-hole straps, sized to fit conduit, and attached with galvanized lag screws.

320 amp loop: 3" minimum, residential application only.  
Minimum 3' excess length out of weatherhead.

(NEC Table 310-16)

WIRE TYPE SERVICE MAIN RATING	ALUMINUM	COPPER
	75°C	75°C
320 Amp	500	350

Allowable Single Phase Dwelling Services per NEC 310-15 (B)(7)(1)

Conductors to be un-spliced from weatherhead to meter socket, and then from meter socket to main disconnects. Neutral shall be marked with white tape in the meter socket and at the weatherhead. Enclosure bonding shall be in accordance with NEC 250.92.

Meter socket: 4' minimum and 6' maximum from center of socket to final ground grade when measured within 3' in front of meter. Secure at four points to two appropriately spaced mounting channels. All electrical equipment must be secured at 4 points.

3Ø meter socket shall have plexiglass shield over meter jaws with lever bypass.

NBU approved 3Ø meter socket: Milbank # U2594 = 320amp  
Substitution must be approved by NBU.

Weatherproof main disconnect(s): Located adjacent to meter socket, with minimum 3' unobstructed clearance in front. Secure at four points to two appropriately spaced mounting channels.

Meter rack: 2" GRC, or IMC, continuing a minimum of 2' below final ground grade with listed corrosion protection tape or polywrap extending 2" above and encased in concrete, 4 sack mix minimum. Top of pipe to have rain proof cap. NBU inspection required before concrete encasement.

Galvanized mounting channel, Kendorf or equivalent, 1 1/2" x 1 1/2":  
Welded or bolted to stand with galvanized bolts.

Grounding electrode conductor: Minimum #6 copper, connected to main disconnect neutral bar. Shall be installed in one continuous length without a splice to grounding electrode. Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to pole with two appropriately spaced straps, sized to fit conduit, and attached with galvanized lag screws. Install appropriate Intersystem Bond as per NEC 250.94 if installed on the GEC then GEC must remain continuous and PVC protection must be maintained.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade. Other grounding electrodes meeting NEC 250.52 and NEC 250.53 may be acceptable upon approval by NBU.

3Ø wire color code  
277/480V 120/208Y  
AØ - Purple Red  
BØ - Brown Black  
CØ - Yellow Blue

1"  
24"  
Final Grade  
Listed Corrosion Protection Tape  
Min. 6" Ø Post Hole

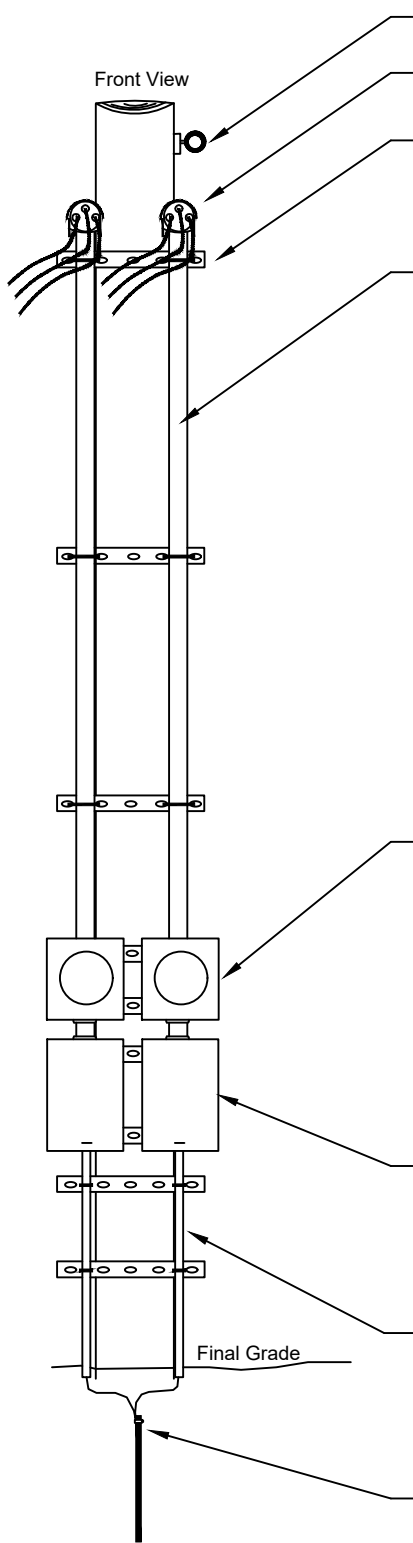


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METERING ASSEMBLY ON POLE  
320 AMP

ISSUED	SCALE	DRAWING NUMBER
2/24	NTS	EH-025

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.



Pole and point of attachment installed by NBU.

Weatherhead: Maximum 24" from top of pole.

Galvanized mounting channel(s), Kendorf or equivalent, 1 1/2" x 1 1/2":  
Secure to pole with 3/8" galvanized lag screws.

Rigid metal conduit: GRC, IMC, or rigid aluminum secured with Kendorf straps or equivalent, or galvanized U bolts, sized to fit conduit, to a minimum of 3 evenly spaced mounting channels.

100 amp loop: 1 1/4" minimum, residential application only.

200 amp loop: 2" minimum, residential application only.

Minimum 3' excess length out of weatherhead.

(NEC Table 310.15(B)(16))

**WIRE TYPE**

SERVICE MAIN RATING	ALUMINUM	COPPER
	75°C	75°C
100 Amp	#1	#3
125 Amp	#1	#2
200 Amp	4/0	2/0

Allowable Single Phase Dwelling Services per NEC 310-15 (B)(7)

Neutral shall be marked with white tape in meter socket and at the weatherhead. Meter socket enclosure shall be electrically connected to line-side grounded neutral conductor and to load-side grounded neutral conductor.

Meter socket: 4' minimum and 6' maximum from center of socket to final ground grade, when measured within 3' in front of socket. Position to face road or driveway, or as directed/approved by NBU. Allow 2" space between meter bases. Secure each socket to two mounting channels in four locations. Meter socket enclosures shall be electrically connected to line-side grounded neutral conductor and to load-side grounded neutral conductor. All electrical equipment must be secured at 4 points.

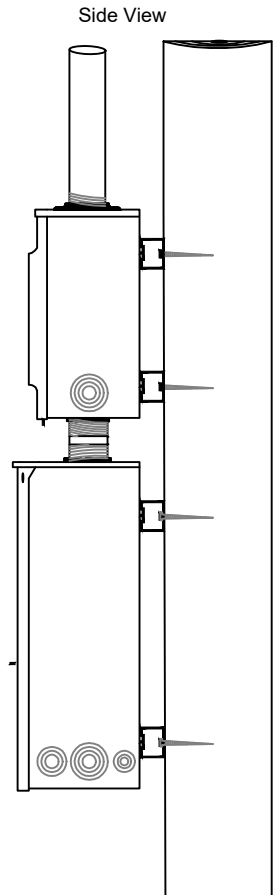
3Ø meter socket shall have plexiglass shield over meter jaws with lever bypass.

NBU approved 3Ø meter socket: Milbank # U9701 = 200amp  
Substitution must be approved by NBU.

Weatherproof main disconnect: Located below meter socket, with minimum 3' unobstructed clearance in front. Secure each disconnect in four locations to 2 appropriately spaced mounting channels. Each disconnect device shall have permanent address marking.

Grounding electrode conductor: Minimum #6 copper, connected to main disconnect neutral bar (NEC 250.24(A)(1)). Enclose in 1/2" sunlight resistant PVC and continuing 2" below final ground grade. Secure each conduit to two appropriately spaced mounting channels with Kendorf straps or equivalent, or galvanized U bolts, sized to fit conduit. Install appropriate Intersystem Bond as per NEC 250.94 if installed on the GEC then GEC must remain continuous and the PVC protection must be maintained.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade. Other grounding electrodes meeting NEC 250.52 and NEC 250.53 may be acceptable upon approval by NBU.



3Ø wire color code  
277/480V 120/208Y

AØ - Purple Red  
BØ - Brown Black  
CØ - Yellow Blue



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**METERING ASSEMBLY  
TWO METER LOOPS ON POLE**

ISSUED

2/22

SCALE

NTS

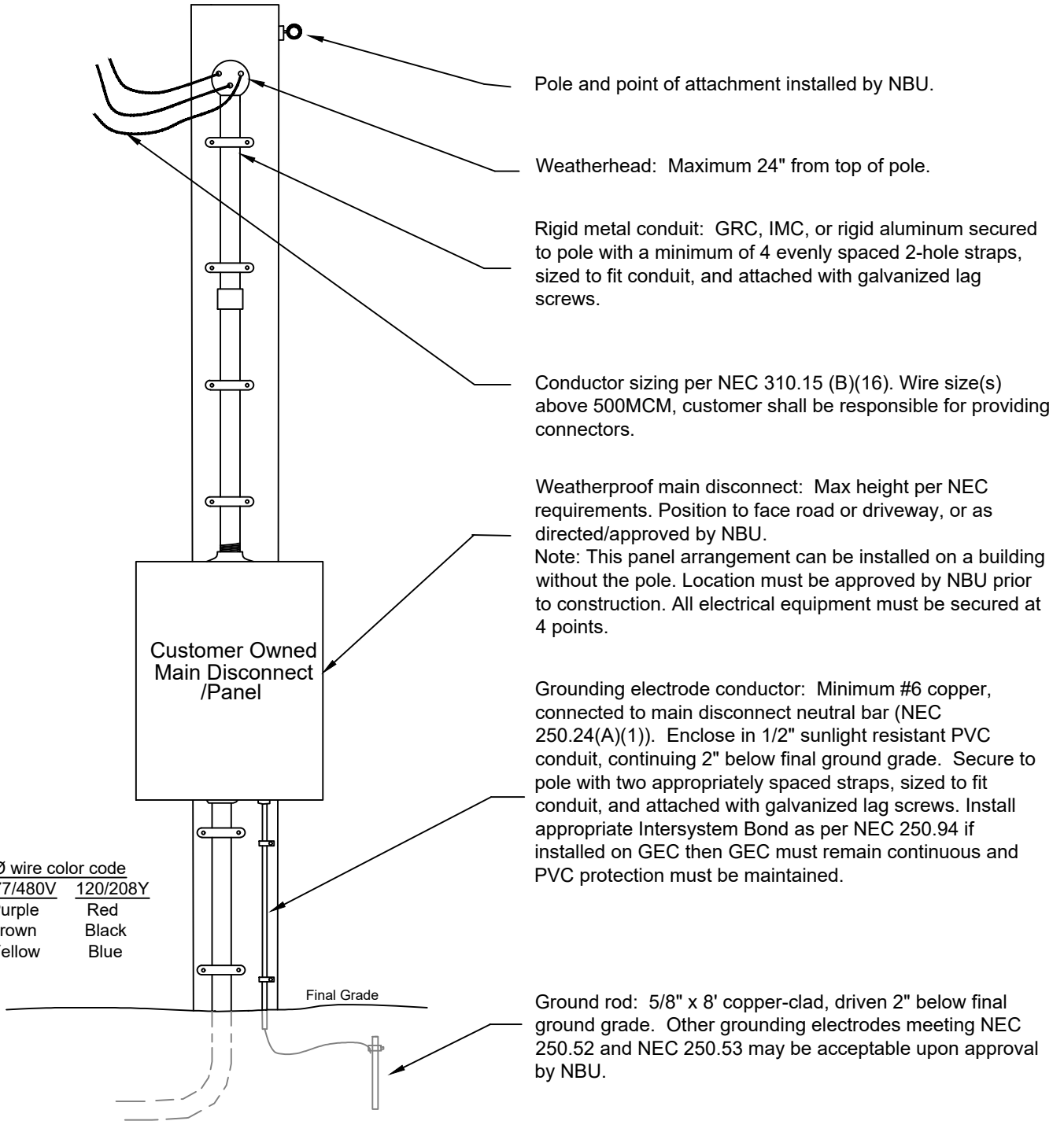
DRAWING NUMBER

EH-030

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements.

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

METER LOCATION IS DETERMINED BY NBU. ALL CUSTOMER INSTALLATIONS REQUIRE INSPECTION BY NBU.



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MAIN DISCONNECT/PANEL ASSEMBLY  
 ON POLE (400AMPS AND ABOVE)

ISSUED

2/24

SCALE

NTS

DRAWING NUMBER

EH-035



This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements.

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

METER LOCATION(S) DETERMINED BY NBU. ALL CUSTOMER INSTALLATIONS REQUIRE INSPECTION BY NBU.

**Up to 6 meters:** May be installed at one location without a main disconnect.

**More than 6 meters:** Installed at one location require a main disconnect furnished and installed by the customer.

Point of attachment, furnished and installed by customer, shall be properly sized and installed 17' above final ground grade recommended; minimum 12'-6".

Meter mounting equipment shall be commercially available horizontal gang or bussed gutter type. Proposed catalog numbers shall be submitted for approval. Any other design or equipment arrangement shall be submitted for approval. Meter mounting equipment shall be installed such that the center of the highest meter socket will be 4' minimum and 6' maximum from final ground grade.

3Ø meter socket shall have plexiglass shield over meter jaws with lever bypass.

NBU approved 3Ø meter socket:

Milbank # U9701 = 200amp

Milbank # U2594 = 320amp

Substitution must be approved by NBU.

Each metered circuit shall have a weatherproof submain switch or circuit breaker.

Each disconnect device shall have permanent address marking. These markings by the customer should be plain and permanent, giving the street number to the door of the premise served, or the symbol appearing on the entrance door when this door does not carry a street number. The name of the customer will not suffice for identification. The meter sockets in multitenant buildings shall be clearly and durably marked.

Conductor to be sized according to NEC and local code requirements, and have minimum 3' excess length out of weatherhead with neutral marked with white tape. Conductor shall be enclosed in properly sized rigid metal conduit, secured to wall with 2 appropriately spaced straps, sized to fit conduit, and attached with galvanized lag screws.

Properly sized ground wire shall be enclosed in sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to wall with 2 appropriately spaced straps, sized to fit conduit, and attached with galvanized lag screws. Metal conduit acceptable, but must comply with NEC 250.92(b).

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade.



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### METERING ASSEMBLY MULTIPLE METERS

ISSUED

12/20

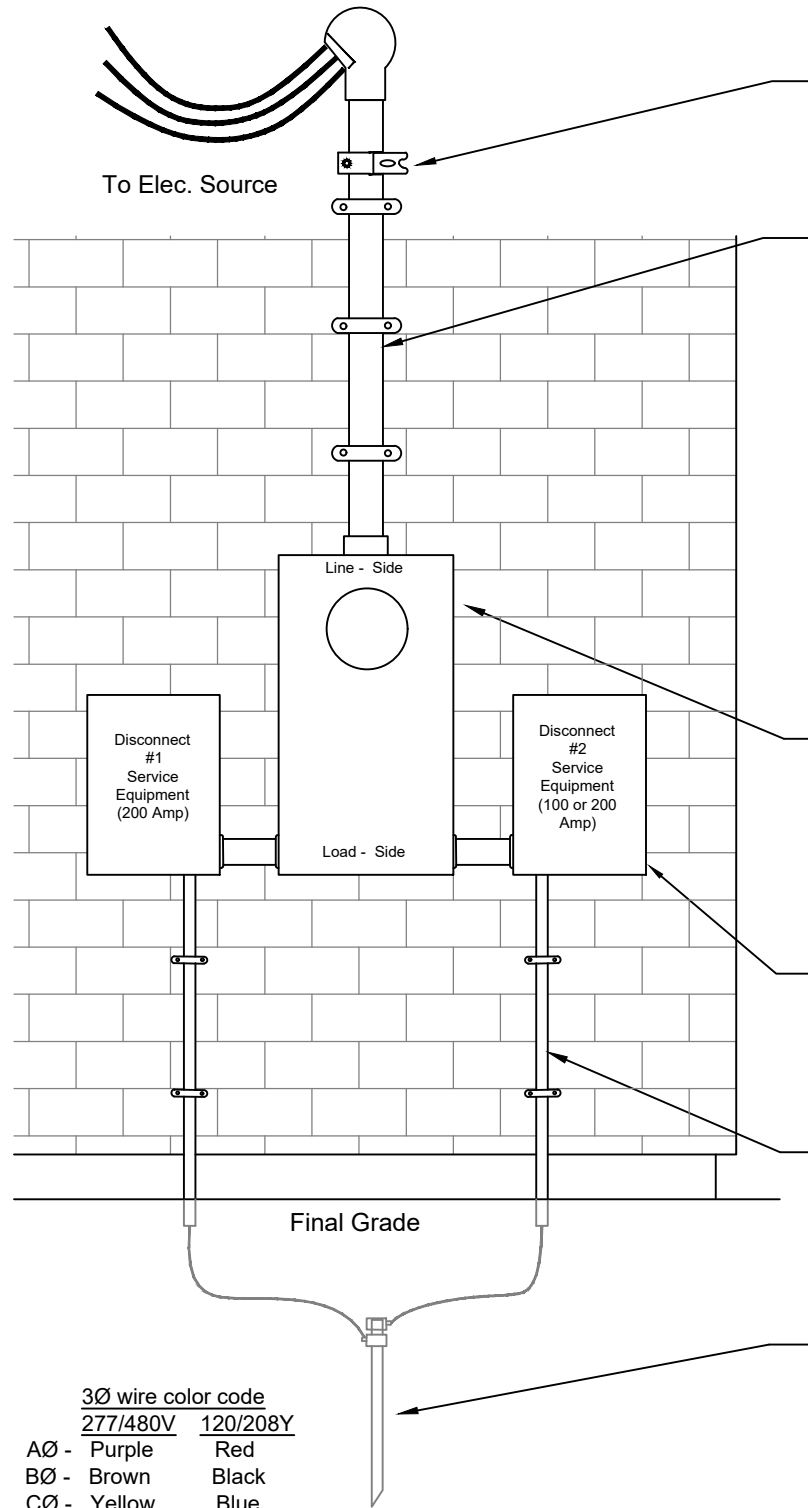
SCALE

NTS

DRAWING NUMBER

EH-045

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.



Point of attachment: 17' above final ground grade recommended; minimum 12'-6". Shall not be more than 24" above bottom of weatherhead. Must be capable of withstanding a pull of 300 lbs. Attachment part Blackburn 6912 or equivalent. (Can be mounted on wall)

Rigid metal conduit: GRC, IMC, or Rigid Aluminum secured to pole with a minimum of 3 evenly spaced 2-hole straps, sized to fit conduit, and attached with galvanized lag screws.  
320 amp loop: 3" minimum, residential application only.  
Minimum 3' excess length out of weatherhead.

(NEC Table 310-16)

WIRE TYPE SERVICE MAIN RATING	ALUMINUM	COPPER
	75°C	75°C
320 Amp	500	350

Allowable Single Phase Dwelling Services per NEC 310-15 (B)(7)(1)

Conductors to be un-spliced from weatherhead to meter socket, and then from meter socket to main disconnects. Neutral shall be marked with white tape in the meter socket and at the weatherhead. Enclosure bonding shall be in accordance with NEC 250.92.

Meter socket: 4' minimum and 6' maximum from center of socket to final ground grade when measured within 3' in front of meter. All electrical equipment must be secured at 4 points.

3Ø meter socket shall have plexiglass shield over meter jaws with lever bypass.  
NBU approved 3Ø meter socket: Milbank # U2594 = 320amp  
Substitution must be approved by NBU.

Weatherproof main disconnect(s): Located adjacent to meter socket, with minimum 3' unobstructed clearance in front. Secure at four points.

Grounding electrode conductor: Minimum #6 copper, connected to main disconnect neutral bar. Shall be installed in one continuous length without a splice to grounding electrode. Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to pole with two appropriately spaced straps, sized to fit conduit, and attached with galvanized lag screws. Install appropriate Intersystem Bond as per NEC 250.94 if installed on the GEC then GEC must remain continuous and PVC protection must be maintained.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade. Other grounding electrodes meeting NEC 250.52 and NEC 250.53 may be acceptable upon approval by NBU.

3Ø wire color code  
277/480V    120/208Y  
 AØ - Purple    Red  
 BØ - Brown    Black  
 CØ - Yellow    Blue

Allowable Single Phase Dwelling Services NEC 310.15 (B)(7)(1)

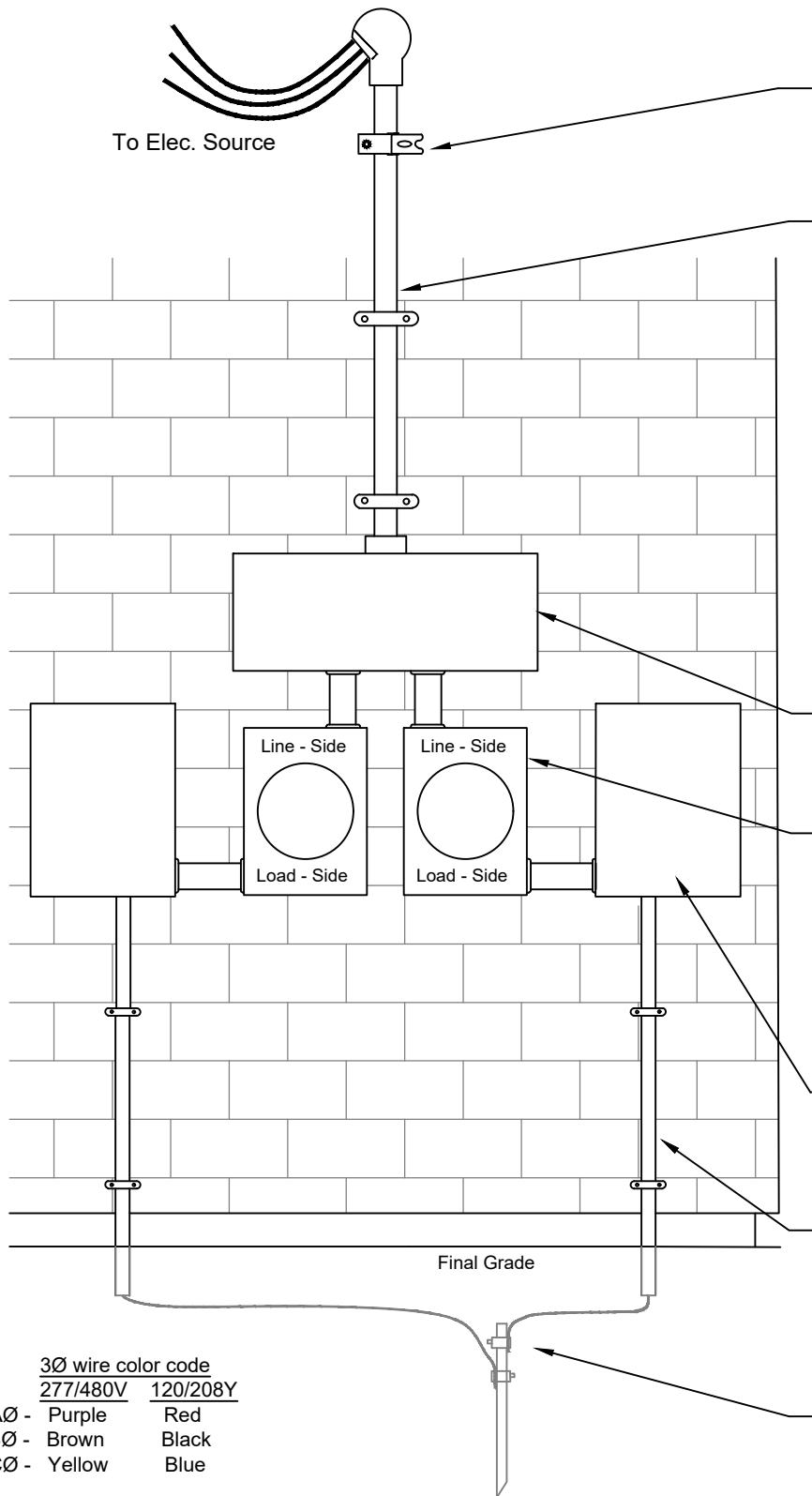


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METERING ASSEMBLY MAST ON BUILDING  
 320 AMP

ISSUED	SCALE	DRAWING NUMBER
2/24	NTS	EH-050

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.



Point of attachment: 17' above final ground grade recommended; minimum 12'-6". Shall not be more than 24" above bottom of weatherhead. Must be capable of withstanding a pull of 300 lbs. Attachment part Blackburn 6912 or equivalent. (Can be mounted on wall)

Rigid metal conduit: GRC, IMC, or rigid aluminum secured to wall with a minimum of 3 evenly spaced 2-hole straps, sized to fit conduit and attached with galvanized lag screws.

100 amp loop: 1 1/4" minimum, residential application only.

200 amp loop: 2" minimum, residential application only.

Minimum 3' excess length out of weatherhead.

(NEC Table 310.15(B)(16))

WIRE TYPE SERVICE MAIN RATING	ALUMINUM	COPPER
	75°C	75°C
100 Amp	#1	#3
125 Amp	#1	#2
200 Amp	4/0	2/0

Allowable Single Phase Dwelling Services per NEC 310-15 (B)(7)(1)

Neutral shall be marked with white tape in the meter socket and at the weatherhead.

Weatherproof Tap Enclosure: Enclosure must be lockable by NBU. Secure at four corners to sturdy structure. Enclosure shall meet requirements of NEC Article 314.

Meter socket: 4' minimum and 6' maximum from center of socket to final ground grade, when measured within 3' in front of socket. Meter socket enclosure shall be electrically connected to line-side grounded neutral conductor and to load-side grounded neutral conductor. All electrical equipment must be secured at 4 points.

3Ø meter socket shall have plexiglass shield over meter jaws with lever bypass.

NBU approved 3Ø meter socket: Milbank # U9701 = 200amp Substitution must be approved by NBU.

Weatherproof Main Disconnects: Located adjacent to Meter Socket, with 3' unobstructed clearance in front.

Grounding electrode conductor: Minimum #6 copper, connected to main disconnect neutral bar (NEC 250.24(A)(1)). Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to wall with two appropriately spaced straps, sized to fit conduit, and attached with galvanized lag screws. Install appropriate Intersystem Bond as per NEC 250.94 if installed on GEC then GEC must remain continuous and PVC protection must be maintained.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade. Other grounding electrodes meeting NEC 250.52 and NEC 250.53 may be acceptable upon approval by NBU.

3Ø wire color code  
277/480V 120/208Y

AØ - Purple      Red  
BØ - Brown      Black  
CØ - Yellow      Blue



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METERING ASSEMBLY OVERHEAD TWO METER LOOPS  
WITH TAP ENCLOSURE (OPTION 1)

ISSUED

2/24

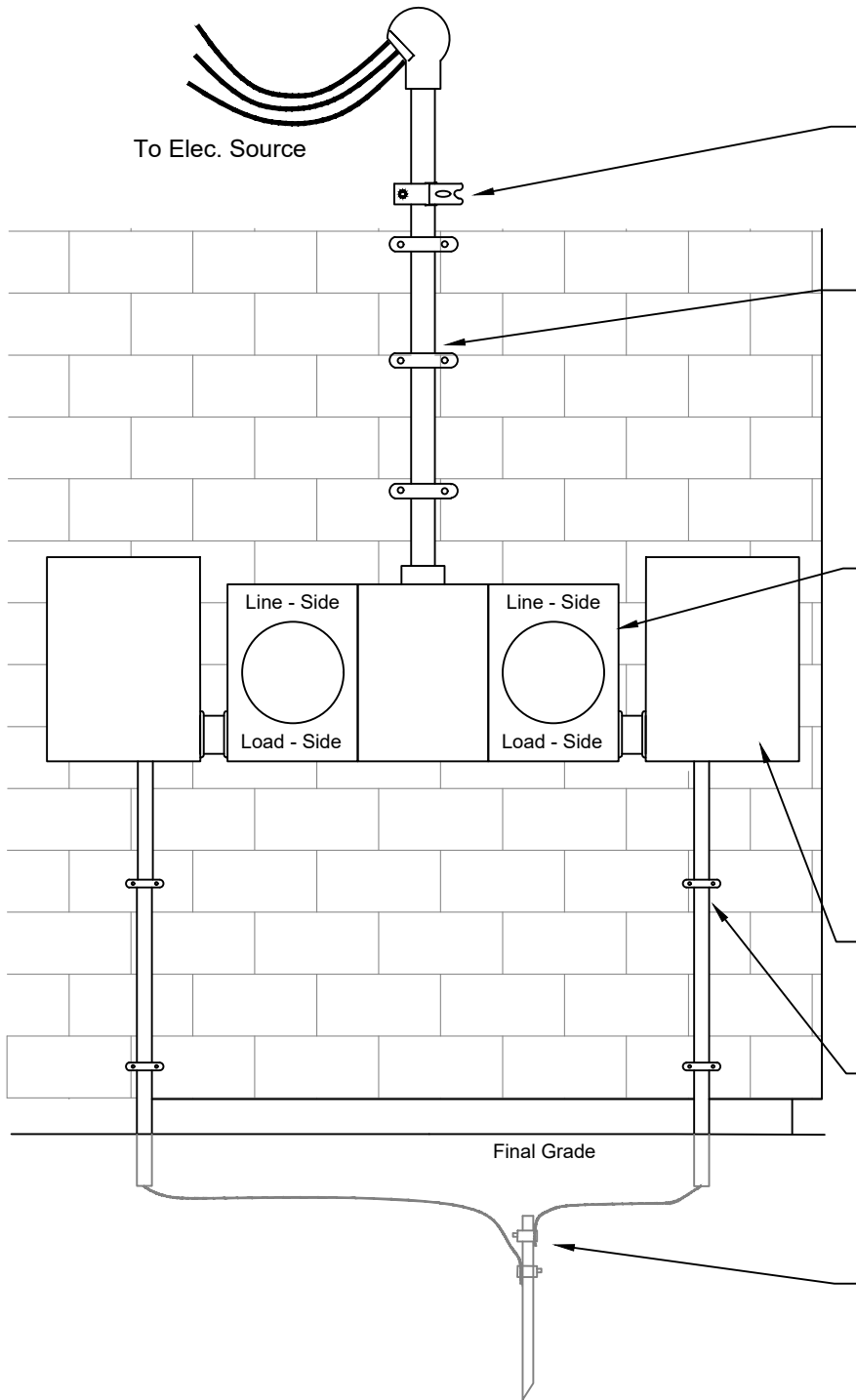
SCALE

NTS

DRAWING NUMBER

EH-055

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.



Point of attachment: 17' above final ground grade recommended; minimum 12'-6". Shall not be more than 24" above bottom of weatherhead. Must be capable of withstanding a pull of 300 lbs. Attachment part Blackburn 6912 or equivalent. (Can be mounted on wall)

Rigid metal conduit: GRC, IMC, or rigid aluminum secured to wall with a minimum of 3 evenly spaced 2-hole straps, sized to fit conduit and attached with galvanized lag screws.

100 amp loop: 1 1/4" minimum, residential application only.

200 amp loop: 2" minimum, residential application only.

Minimum 3' excess length out of weatherhead.

Neutral shall be marked with white tape in the meter socket and at the weatherhead.

Meter socket: 4' minimum and 6' maximum from center of socket to final ground grade, when measured within 3' in front of socket. Meter socket enclosure shall be electrically connected to line-side grounded neutral conductor and to load-side grounded neutral conductor. All electrical equipment must be secured at 4 points.

Ganged Meter Module: Must open toward the front and have a single point of connection to a common bus for both meter sockets. Utility Enclosure must be lockable by NBU. Secure Module at a minimum of four corners to sturdy structure. Module to be located such that existing utility service conductors may be re-used. End of utility service conduit may not extend higher than 6' above final ground grade. (Milbank Model U1252 or similar)

Weatherproof Main Disconnects: Located adjacent to Meter Socket, with 3' unobstructed clearance in front.

Grounding electrode conductor: Minimum #6 copper, connected to main disconnect neutral bar (NEC 250.24(A)(1)). Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to wall with two appropriately spaced straps, sized to fit conduit, and attached with galvanized lag screws. Install appropriate Intersystem Bond as per NEC 250.94 if installed on GEC then GEC must remain continuous and PVC protection must be maintained.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade. Other grounding electrodes meeting NEC 250.52 and NEC 250.53 may be acceptable upon approval by NBU.

3Ø wire color code  
277/480V 120/208Y

AØ - Purple Red  
BØ - Brown Black  
CØ - Yellow Blue



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METERING ASSEMBLY OVERHEAD TWO METER LOOPS WITH GANGED METER MODULE (OPTION 2)

ISSUED

2/24

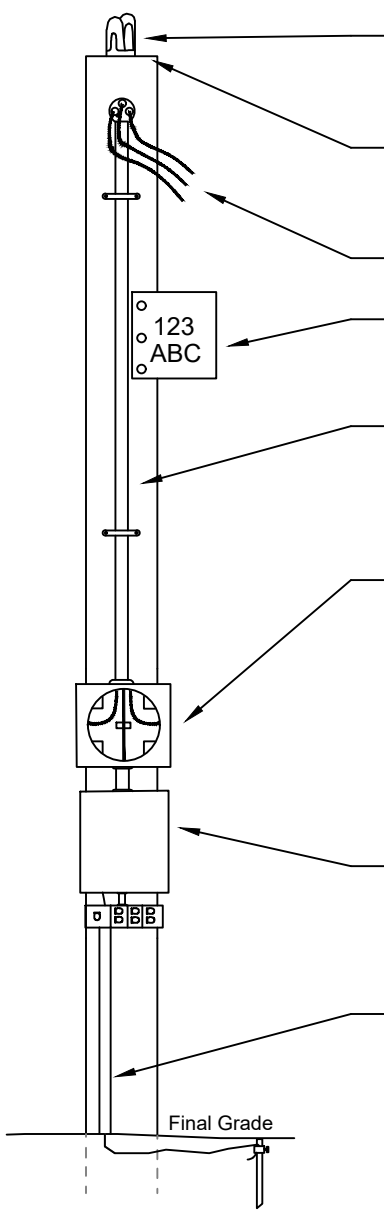
SCALE

NTS

DRAWING NUMBER

EH-060

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.



- Point of attachment: One pointer or eye type screw, Blackman SW 33 B or equivalent, furnished and installed by customer.
- Treated 4" x 4" post: Minimum length 14'. Final height above final ground grade shall be 12'; minimum below ground of 2'. Four wood braces required, minimum 2" x 4", secured with 2" x 4" stakes or 3/4" metal rods, driven securely into ground. Braces shall not be attached to trees, other NBU poles, etc.
- Drip loop: Minimum 10' from final ground grade.
- Site Address: Marked with 3" lettering.
- Rigid conduit: GRC, AL, IMC, EMT or Schedule 40 PVC. Secure to post with two evenly spaced straps, sized to fit conduit, and attached with lag screws.
  - 100 amp loop: 1 1/4" minimum.
  - 200 amp loop: 2" minimum.
- Meter socket: 4' minimum and 6' maximum from center of socket to final ground grade and positioned to face road or driveway, or as directed/approved by NBU. Meter socket enclosure shall be electrically connected to line-side grounded neutral conductor and to load-side grounded neutral conductor.
- Conductors to be installed by customer from weatherhead, with minimum 3' excess length, to meter socket and from meter socket to main disconnect per table below. Neutral to be marked with white tape in meter socket and at weatherhead.
- Approved disconnect device(s) in exterior enclosure. Receptacles shall be in weatherproof enclosure per NEC requirements. Circuit shall have minimum of one 240V, 20 amp GFCI receptacle.
- Grounding electrode conductor: Minimum #6 soft drawn copper, 1/2" PVC, and Straps; 5/8" x 8' copper-clad ground rod, driven 2" below final ground grade, or a grounding plate at 30" below ground grade per NEC code. Other grounding electrodes meeting NEC 250.52 and NEC 250.53 may be acceptable upon approval by NBU.

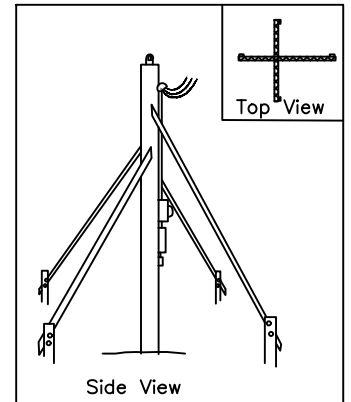
(NEC Table 310.15(B)(16))

WIRE TYPE SERVICE MAIN RATING	ALUMINUM	COPPER
	75°C	75°C
100 Amp	#1	#3
125 Amp	#1	#2
200 Amp	4/0	2/0

Note: Other service rating shall be submitted to NBU Electric Engineering for approval.  
Allowable Single Phase Dwelling Services per NEC 310.15 (B)(7)(1)

3Ø wire color code  
277/480V 120/208Y

AØ - Purple	Red
BØ - Brown	Black
CØ - Yellow	Blue



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METERING ASSEMBLY  
1Ø TEMPORARY OVERHEAD SERVICE

ISSUED

2/24

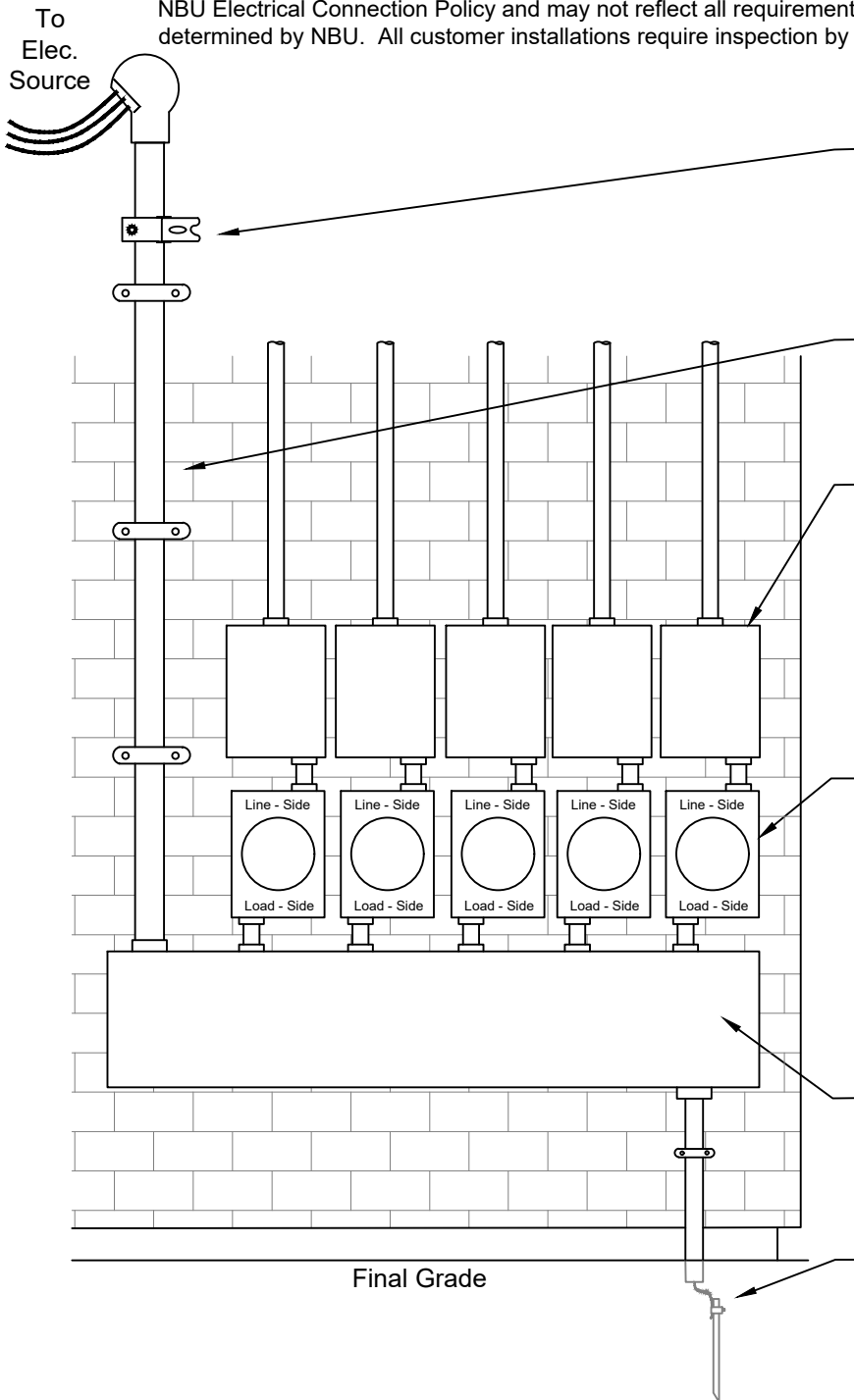
SCALE

NTS

DRAWING NUMBER

EH-110

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.



3Ø wire color code  
277/480V    120/208Y

AØ - Purple      Red  
 BØ - Brown      Black  
 CØ - Yellow      Blue

Point of attachment: 17' above final ground grade recommended; minimum 12'-6". Shall not be more than 24" above bottom of weatherhead. Must be capable of withstanding a pull of 300 lbs. Attachment part Blackburn 6912 or equivalent. (Can be mounted on wall)

Conductor to be sized according to NEC and local code requirements, and have minimum 3' excess length out of weatherhead with neutral marked with white tap. Conductor shall be enclosed in properly sized rigid metal conduit: GRC or IMC secured to wall with 3 evenly spaced straps, sized to fit conduit, and attached with galvanized lag screws.

Weatherproof main disconnect: Located adjacent to meter socket, with minimum 3' unobstructed clearance in front.

Each metered circuit shall have a weatherproof submain switch or circuit breaker.

More than 6 meters installed at one location shall require a main disconnect furnished and installed by the customer.

Meter socket: 4' minimum and 6' maximum from center of socket to final ground grade, when measured within 3' in front of socket. Meter socket enclosure shall be electrically connected to line-side grounded neutral conductor and to load-side grounded neutral conductor. All electrical equipment must be secured at 4 points.

3Ø meter socket shall have plexiglass shield over meter jaws with lever bypass.

NBU approved 3Ø meter socket:

Milbank # U9701 = 200amp

Milbank # U2594 = 320amp

Substitution must be approved by NBU.

Gutter must have a means to be lockable by NBU. (Gutter size shall be min. 18"H x 12"D x Length)

Grounding electrode conductor: Minimum #6 copper, connected to main disconnect neutral bar (NEC 250.24 (A) (1)), enclosed in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade and secured to two mounting channels with Kendorf straps or equivalent, or galvanized U bolts, sized to fit conduit.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade.

Each disconnect device shall have permanent address marking. These markings by the customer should be plain and permanent, giving the street number to the door of the premise served, or the symbol appearing on the entrance door when this door does not carry a street number. The name of the customer will not suffice for identification. The meter sockets in multitenant buildings shall be clearly and durably marked.

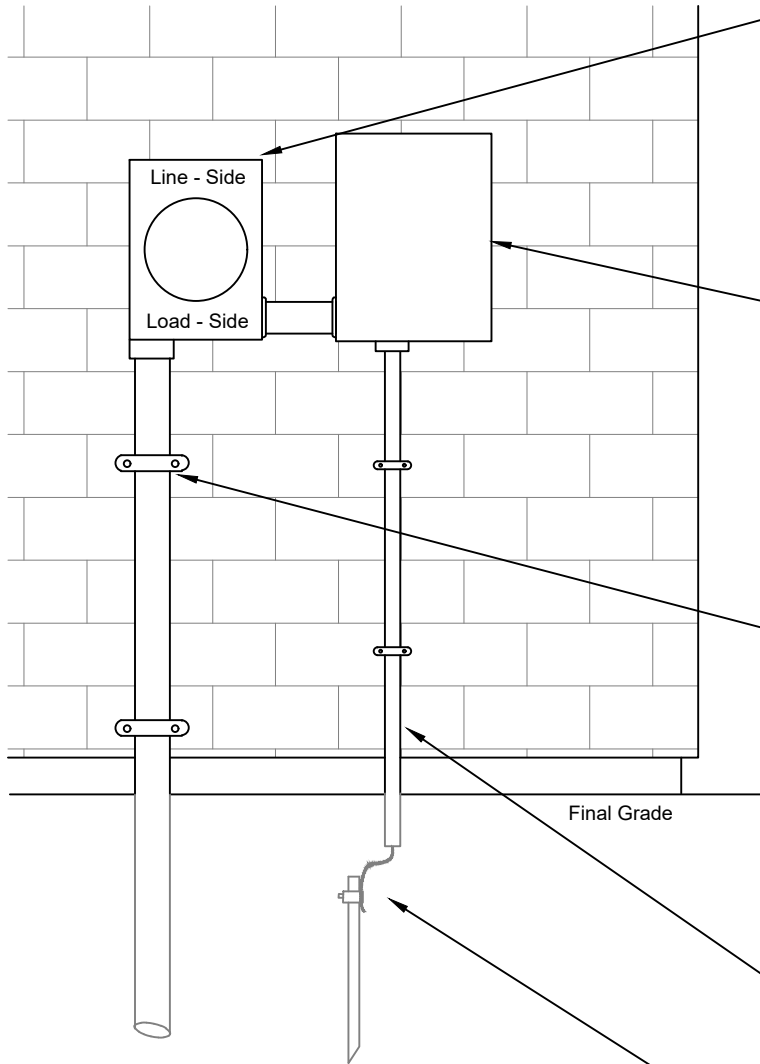


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OVERHEAD SERVICE - MULTIPLE OCCUPANCY BUILDING  
 200 AMP - 320 AMP

ISSUED	SCALE	DRAWING NUMBER
2/24	NTS	EH- 115

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.



Meter socket: 4' minimum and 6' maximum from center of socket to final ground grade, when measured within 3' in front of socket. Meter socket enclosure shall be electrically connected to line-side grounded neutral conductor and to load-side grounded neutral conductor.

3Ø meter socket shall have plexiglass shield over meter jaws with lever bypass.  
NBU approved 3Ø meter socket: Milbank # U9701 = 200amp  
Substitution must be approved by NBU.

Weatherproof main disconnect: Located adjacent to meter socket, with minimum 3' unobstructed clearance in front. House panel may be located adjacent to main disconnect or inside building (not inside a closet). All electrical equipment must be secured at 4 points.

Neutral to be marked with white tape in meter socket.

Conduit: **To be sized by NBU.** Conduit should be placed on the opposite side of meter socket from main disconnect. Secure conduit with 2 evenly spaced 2-hole straps, sized to fit conduit and attached with galvanized lag screws. When required, a reducer supplied by NBU shall be installed at the meter socket. Underground conduit installed according to NBU specification EU-910. Customer shall connect to NBU installed conduit stub. Pull string to be installed in conduit by customer. Schedule with NBU if source feeds from energized equipment. All exposed conduit above ground shall be Schedule 80 PVC. All PVC will meet NEMA TC-2-1998 for electrical use. Customer-owned pipes, conduits, or other equipment may not be installed in front of, behind, or otherwise interfere with access to utility conduits.

Grounding electrode conductor: Minimum #6 copper, connected to main disconnect neutral bar (NEC 250.24 (A)(1)). Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to wall with two appropriately spaced straps sized to fit conduit and attached with galvanized lag screws. Install appropriate Intersystem Bond as per NEC 250.94 if installed on GEC then GEC must remain continuous and PVC protection must be maintained.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade.

SERVICE MAIN RATING	WIRE TYPE	
	ALUMINUM 75°C	COPPER 75°C
100 Amp	#1	#3
125 Amp	#1	#2
200 Amp	4/0	2/0

Note: Other service rating shall be submitted to NBU Electric Engineering for approval.  
Allowable Single Phase Dwelling Services NEC 310.15 (B)(7)(1)

3Ø wire color code  
277/480V    120/208Y

AØ - Purple    Red  
BØ - Brown    Black  
CØ - Yellow    Blue



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METERING ASSEMBLY UNDERGROUND  
SERVICE ON BUILDING  
100 AMP - 200 AMP

ISSUED

2/24

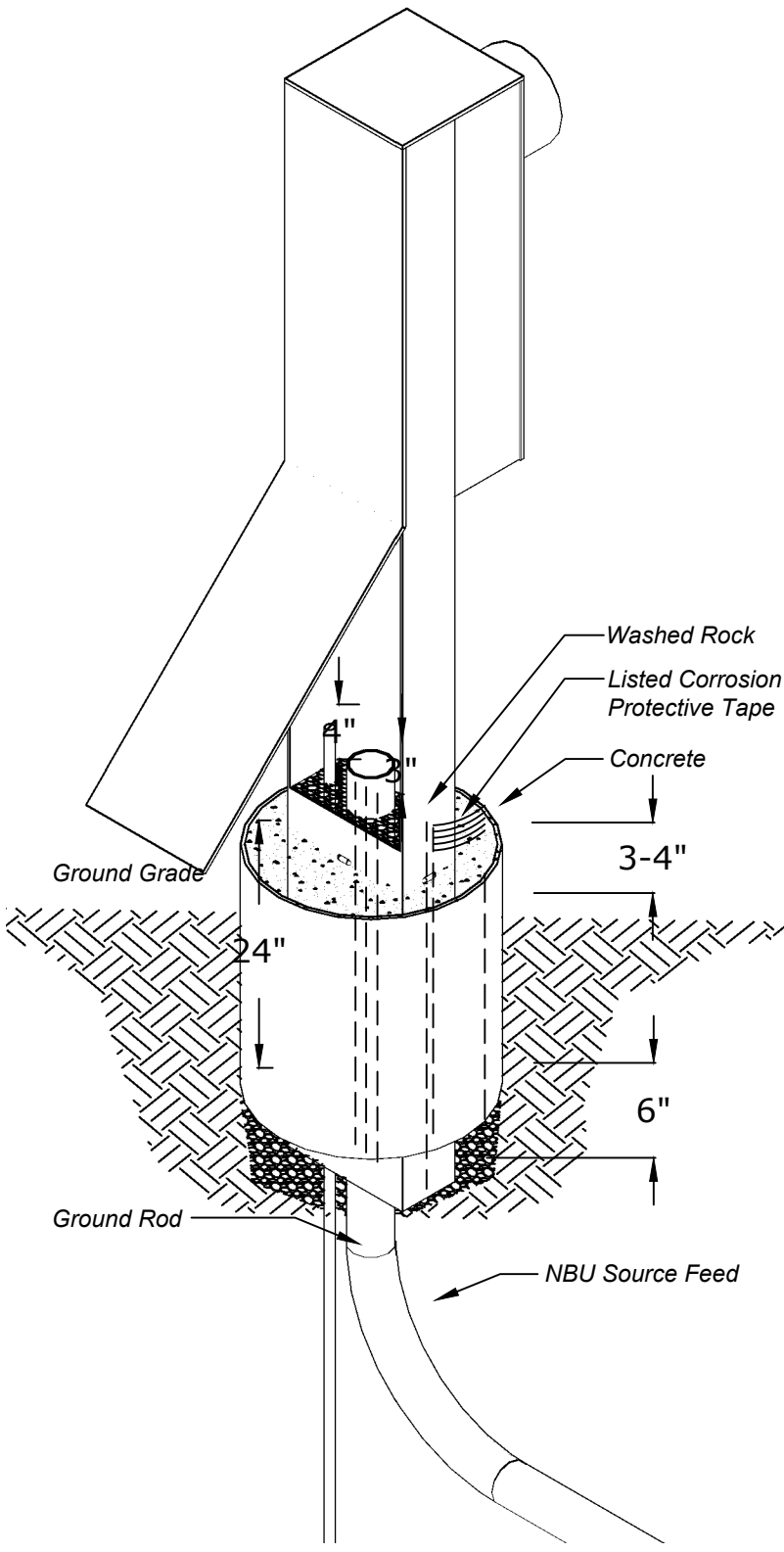
SCALE

NTS

DRAWING NUMBER

EU-010

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.



**Approved Meter Pedestals:**

Milbank U5136 - 0 - 100 100 AMP  
 Milbank U5136 - 0 - 200 200 AMP

Milbank U5059-X-2/200 320 AMP\*  
 \*EPI Enclosures NEMA 3R Pedestal

Other manufacturers are accepted but must be approved by NBU. Meter height shall be 50" above final ground grade. Meter should face street or driveway. Mark with address number if not otherwise posted on property.

Meter shall have a minimum 3' unobstructed clearance in front.

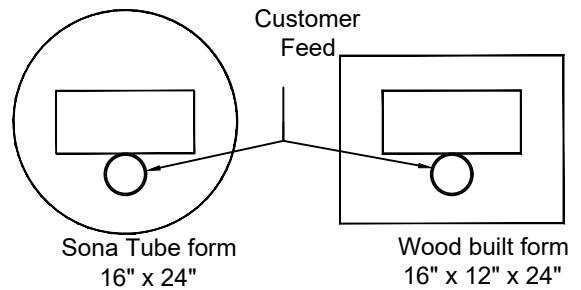
Conduit: To be sized by NBU and installed by customer. The source feed conduit will be inside enclosure 3" above opening. Underground conduit installed according to NBU specification EU-910. Customer shall connect to NBU installed conduit stub.

Ground rod: 5/8" x 8' copper-clad, installed inside enclosure 4" above opening. Minimum # 6 copper, connected to neutral lug or neutral bar.

Forms: 16" Sona Tube or 16" x 12" wood form. Protective tar tape, polywrap tape or rubber spray paint from 2" above encased concrete to the bottom of enclosure. All forms must be removed after concrete poured.

Fill inside cavity of pedestal with washed rock up to ground grade to restrict conduit movement.

Pullstring: To be installed in conduit by customer. Schedule with NBU if source feeds from energized equipment.



Pedestal centered inside form.



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**METERING ASSEMBLY UNDERGROUND SERVICE PEDESTAL,  
 100 AMP, 200 AMP, 320 AMP**

ISSUED	SCALE	DRAWING NUMBER
12/20	NTS	EU-015



This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.

Meter stand: 2" GRC, or IMC, continuing a minimum of **24 inches** below final ground grade with listed corrosion protection tape or polywrap extending 2" above and encased in concrete, 4 sack mix minimum. Top of pipe to have rain proof cap. As an alternative, a commercially available meter/disconnect pedestal will be acceptable. Proposed catalog numbers with complete description shall be submitted for approval.

Galvanized mounting channel, Kendorf or equivalent, 1 1/2" x 1 1/2": Welded or bolted to stand with galvanized bolts.

Meter socket: 4' minimum and 6' maximum from center of socket to final ground grade when measured within 3' in front of meter. All electrical equipment must be secure at four points to two appropriately spaced mounting channels. Meter socket enclosure shall be electrically connected to line-side grounded neutral conductor and to load-side grounded neutral conductor.

Neutral to be marked with white tape in meter socket.

3Ø meter socket shall have plexiglass shield over meter jaws with lever bypass.

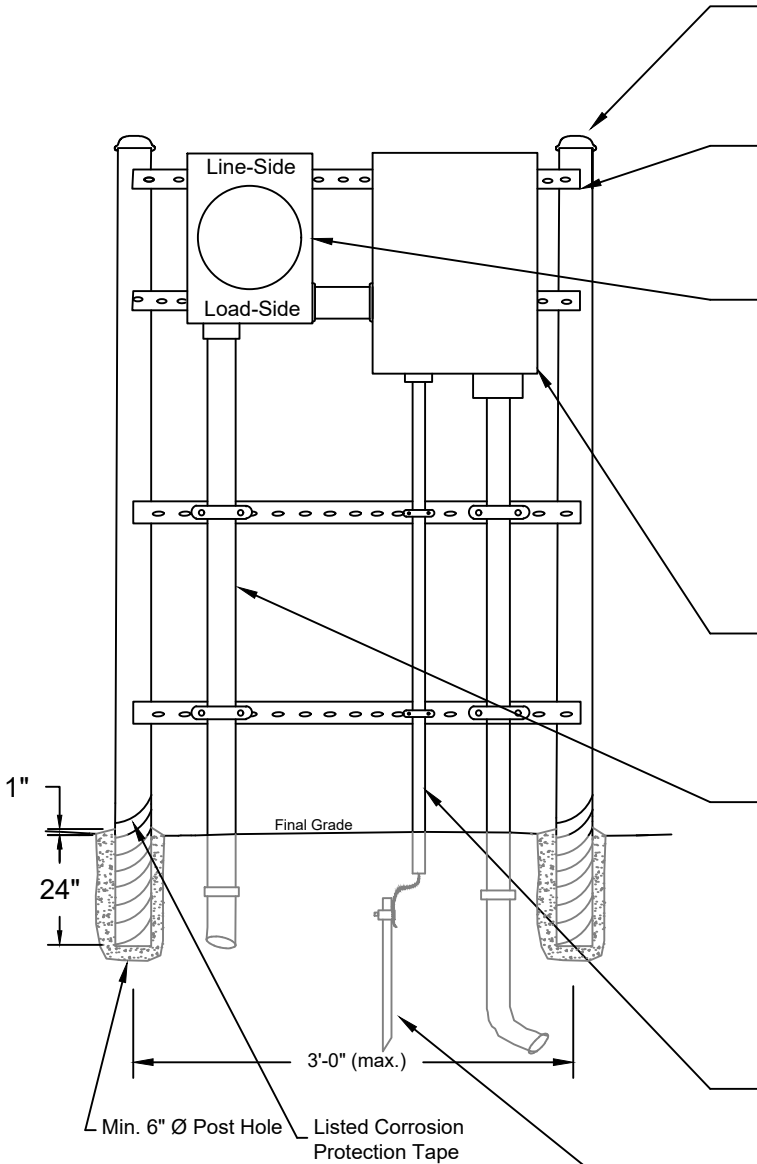
NBU approved 3Ø meter socket: Milbank # U9701 = 200amp  
Substitution must be approved by NBU.

Weatherproof main disconnect: Located adjacent to meter socket, with minimum 3' unobstructed clearance in front. Secure at four points to two appropriately spaced mounting channels.

Conduit: **To be sized by NBU.** Install conduit to meter socket bottom knockout with greatest distance from main disconnect. Secure conduit to 2 evenly spaced mounting channels with Kendorf strap or equivalent, or galvanized U bolt sized to fit conduit. When required, a reducer supplied by NBU shall be installed at the meter socket. All exposed conduit above ground shall be Schedule 80 PVC. All PVC will meet NEMA TC-2-1998 for electrical use. Install underground conduit and pull string according to NBU specification EU-910. Connect to NBU installed conduit stub.

Grounding electrode conductor: Minimum #6 copper. Connect to main disconnect/panel neutral bar (NEC 250.24 (A)(1)). Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade and secure to two mounting channels with Kendorf straps or equivalent, or galvanized U bolts, sized to fit conduit. If required, install appropriate Intersystem Bond as per NEC 250.94 if installed one the GEC then the GEC must remain continuous and PVC protection must be maintained.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade.



SERVICE MAIN RATING	WIRE TYPE	
	ALUMINUM 75°C	COPPER 75°C
100 Amp	#1	#3
125 Amp	#1	#2
200 Amp	4/0	2/0

Note: Other service rating shall be submitted to NBU Electric Engineering for approval.  
Allowable single phase dwelling services, NEC 310-15 (B)(7)(1)

3Ø wire color code	
277/480V	120/208Y
AØ - Purple	Red
BØ - Brown	Black
CØ - Yellow	Blue



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METERING ASSEMBLY UNDERGROUND  
SERVICE ON RACK  
100AMP - 200 AMP

ISSUED	SCALE	DRAWING NUMBER
08/24	NTS	EU-020

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.

Meter socket: 4' minimum and 6' maximum from center of socket to final ground grade when measured within 3' in front of meter. All electrical equipment must be secure at four points to two appropriately spaced mounting channels.

3Ø meter socket shall have plexiglass shield over meter jaws with lever bypass.

NBU approved 3Ø meter socket: Milbank # U2594 = 320amp  
Substitution must be approved by NBU.

Weatherproof main disconnect(s): Located adjacent to meter socket, with minimum 3' unobstructed clearance in front. Secure at four points to two appropriately spaced mounting channels.

Meter stand: 2" GRC, or IMC, continuing a minimum of 24" below final ground grade with listed corrosion protection tape or polywrap extending 2" above and encased in concrete, 4 sack mix minimum. Top of pipe to have rain proof cap. NBU inspection required before concrete encasement.

Galvanized mounting channel(s): Kendorf or equivalent, 1 1/2" x 1 1/2", welded or bolted to stand with galvanized bolts.

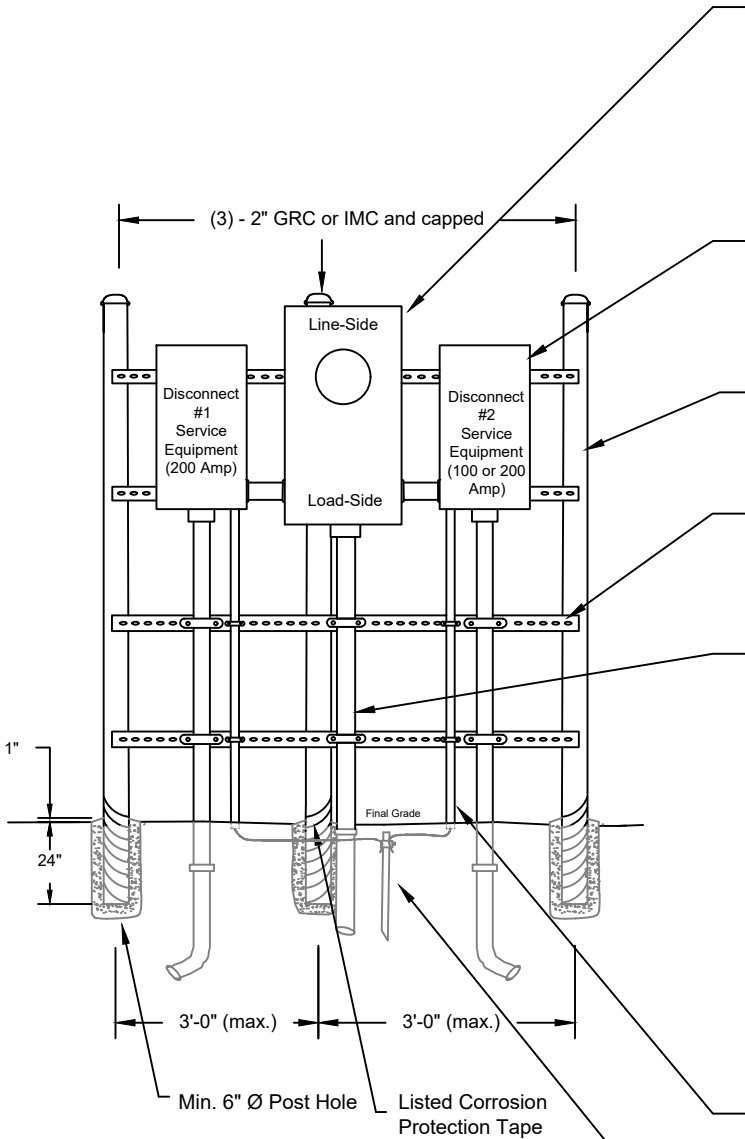
Conduit: **To be sized by NBU.** Secure conduit to 2 evenly spaced mounting channels with Kendorf strap or equivalent, or galvanized U bolt sized to fit conduit.

All exposed conduit above ground shall be Schedule 80 PVC. All PVC will meet NEMA TC-2-1998 for electrical use. Underground conduit installed according to NBU specification EU-910. Customer shall connect to NBU installed conduit stub. Pull string to be installed in conduit by customer. Schedule with NBU if source feeds from energized equipment.

Customer to install conductors from disconnect to meter socket per NEC specifications. Neutral to be marked with white tape in meter socket. Conductors to comply with 310-16 N.E.C. from load side of meter socket to line side of disconnects. Minimum #6 copper bonding shall be provided where necessary (all non-current carrying parts) to ensure electrical continuity.

Grounding electrode conductor: Minimum #6 copper, connected to main disconnect/panel neutral bar (NEC 250.24 (A)(1)). Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure conduit to mounting channel with Kendorf strap or equivalent, or galvanized U bolt, sized to fit conduit. If required, install appropriate Intersystem Bond as per NEC 250.94 if installed on the GEC then the GEC must remain continuous and PVC protection must be maintained.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade.



(NEC Table 310-16)

WIRE TYPE	ALUMINUM	COPPER
SERVICE MAIN	75°C	75°C
RATING	500	350
320 Amp		

Note: Other service rating shall be submitted to NBU Electric Engineering for approval.  
Allowable single phase dwelling services, NEC Table 310-15 (B)(7)(1)

3Ø wire color code  
277/480V 120/208Y

AØ - Purple Red  
BØ - Brown Black  
CØ - Yellow Blue



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METERING ASSEMBLY UNDERGROUND  
SERVICE ON RACK  
320 AMP

ISSUED

08/24

SCALE

NTS

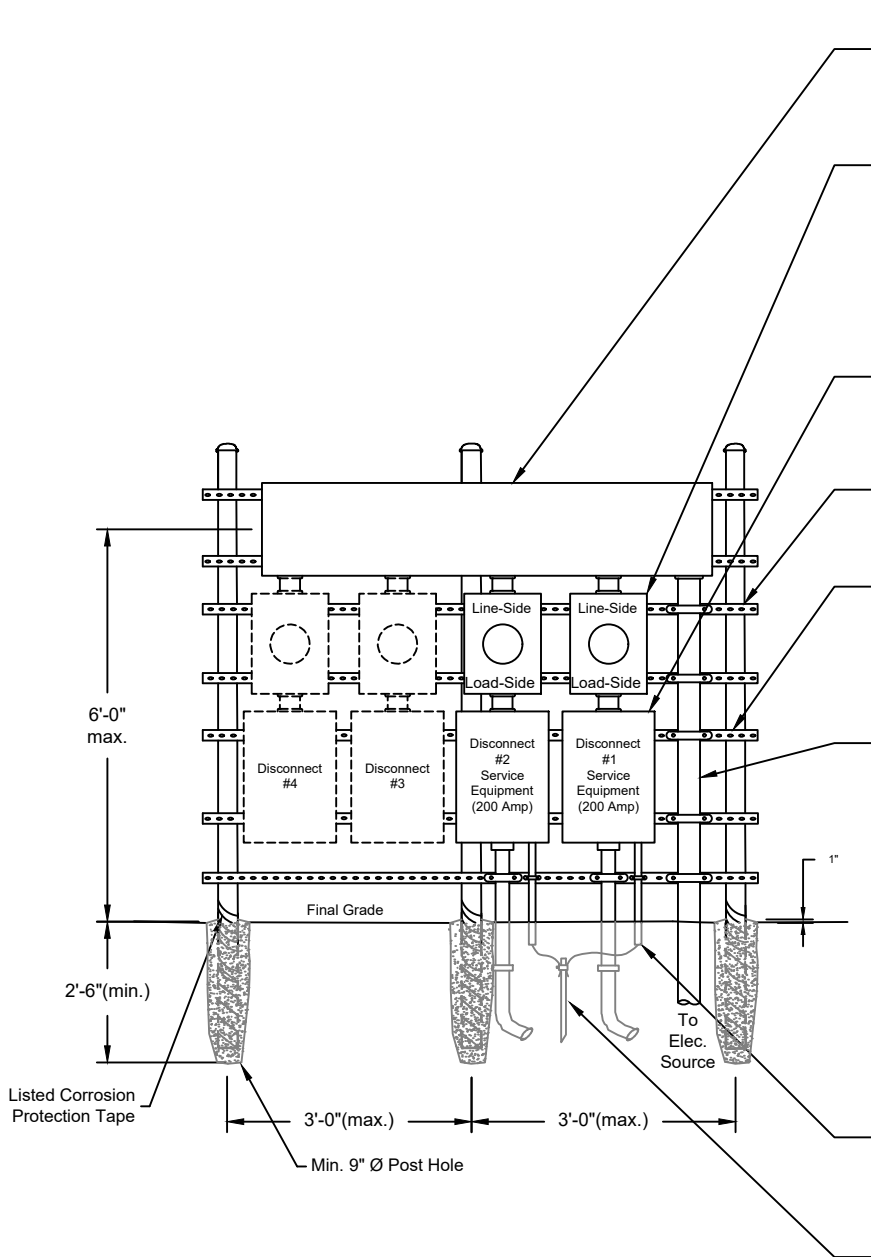
DRAWING NUMBER

EU-025

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements.

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

METER LOCATION IS DETERMINED BY NBU. ALL CUSTOMER INSTALLATIONS REQUIRE INSPECTION BY NBU.



Gutter: minimum size of 12"D x 12"H x 60"L for residential and for commercial to be approved by NBU. It must have a means to lock or secure by NBU. Secure at four points to 2 evenly spaced mounting channels.

Meter socket: 3'-0" minimum and 6'-0" maximum from center of socket to final ground grade when measured within 3' in front of meter. All electrical equipment must be secure at four points to 2 evenly spaced mounting channels.

3Ø meter socket shall have plexiglass shield over meter jaws with lever bypass.  
 NBU approved 3Ø meter socket: Milbank # U2594 = 320amp  
 Substitution must be approved by NBU.

Weatherproof main disconnect(s): Located adjacent to meter socket, with minimum 3' unobstructed clearance in front. Secure at four points to 2 evenly spaced mounting channels.

Meter stand: (3)-3" GRC, or IMC, continuing a minimum of 2'-6" below final ground grade with listed corrosion protection tape or polywrap extending 2" above and encased in concrete, post shall be set in concrete, 3,000 psi min. Top of pipe to have rain proof cap. NBU inspection required before concrete encasement.

Galvanized mounting channel(s): Kendorf or equivalent, 1 1/2" x 1 1/2", welded or bolted to stand with galvanized bolts.

Conduit: **To be sized by NBU.** Secure conduit to four appropriately spaced mounting channels with Kendorf strap or equivalent, or galvanized U bolt sized to fit conduit. All exposed conduit above ground shall be Schedule 80 PVC. All PVC will meet NEMA TC-2-1998 for electrical use. Underground conduit installed according to NBU specification EU-910. Customer shall connect to NBU installed conduit stub. Pull string to be installed in conduit by customer. Schedule with NBU if source feeds from energized equipment.

Customer to install conductors from gutter to meter socket and meter socket to disconnect per NEC specifications. Neutral to be marked with white tape in meter socket. Conductors to comply with 310-16 N.E.C. from load side of meter socket to line side of disconnects. Minimum #6 copper bonding shall be provided where necessary (all non-current carrying parts) to ensure electrical continuity.

Grounding electrode conductor: Minimum #6 copper, connected to main disconnect/panel neutral bar (NEC 250.24 (A)(1)). Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure conduit to mounting channel with Kendorf strap or equivalent, or galvanized U bolt, sized to fit conduit. If required, install appropriate Intersystem Bond as per NEC 250.94 if installed on the GEC then the GEC must remain continuous and PVC protection must be maintained.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade.

**3Ø wire color code**

<u>277/480V</u>	<u>120/208Y</u>
AØ - Purple	Red
BØ - Brown	Black
CØ - Yellow	Blue

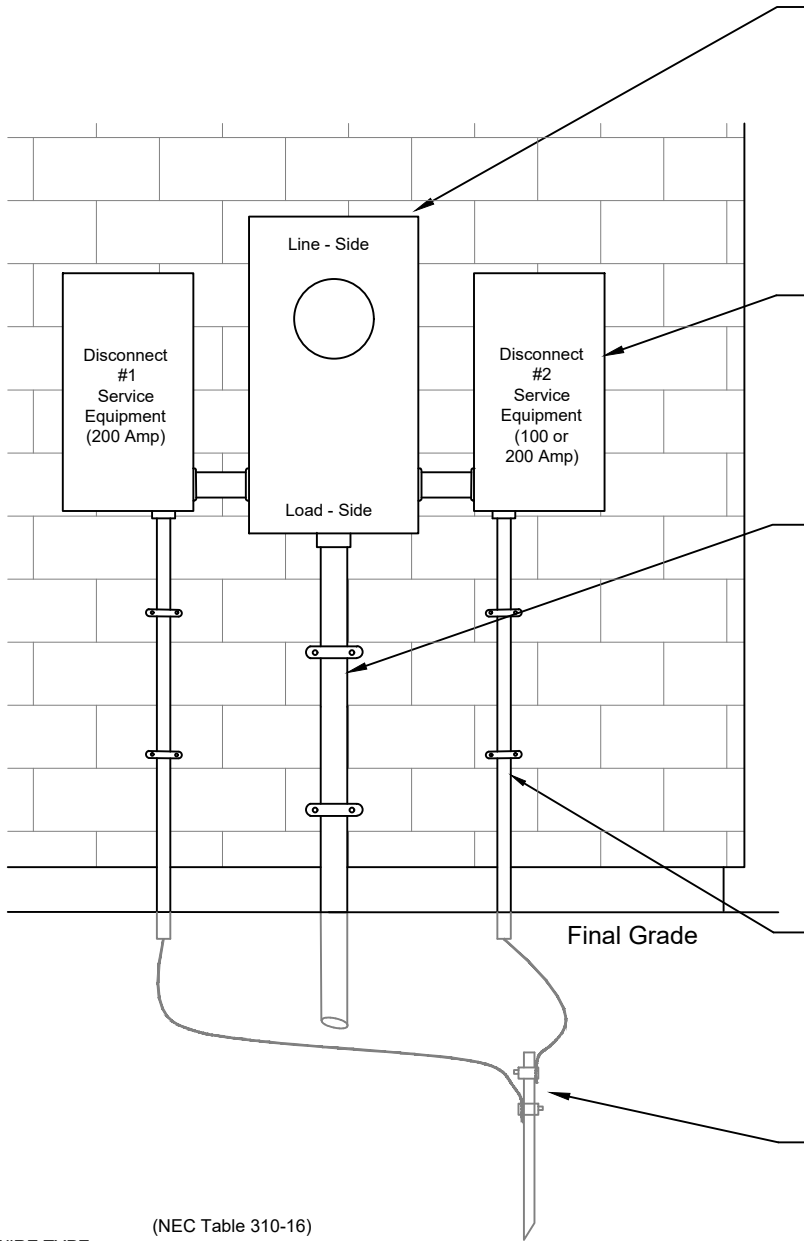


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**UNDERGROUND SERVICE ON A RACK  
 MULTIPLE METER LOOPS WITH TAP ENCLOSURE  
 200 AMP - 320 AMP**

ISSUED	SCALE	DRAWING NUMBER
2/24	NTS	EU-030

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.



Meter socket: 4' minimum and 6' maximum from center of socket to final ground grade, when measured within 3' in front of socket. Meter socket enclosure shall be electrically connected to line-side grounded neutral conductor and to load-side grounded neutral conductor. All electrical equipment must be secured at 4 points.

3Ø meter socket shall have plexiglass shield over meter jaws with lever bypass.  
 NBU approved 3Ø meter socket: Milbank # U2594 = 320amp  
 Substitution must be approved by NBU.

Weatherproof main disconnect: Located adjacent to meter socket, with minimum 3' unobstructed clearance in front.

Neutral to be marked with white tape in meter socket.

Conduit: **To be sized by NBU.** Conduit should be placed on the opposite side of meter socket from main disconnect. Secure conduit with 2 evenly spaced 2-hole straps, sized to fit conduit and attached with galvanized lag screws. Underground conduit installed according to NBU specification EU-910. Pull string to be installed in conduit by customer. Schedule with NBU if source feeds from energized equipment. Customer-owned pipes, conduits, or other equipment may not be installed in front of, behind, or otherwise interfere with access to utility conduits.

All exposed conduit above ground shall be Schedule 80 PVC. All PVC will meet NEMA TC-2-1998 for electrical use.

Grounding electrode conductor: Minimum #6 copper, connected to main disconnect neutral bar (NEC 250.24 (A)(1)). Shall be installed in one continuous length without a splice to grounding electrode. Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to wall with two appropriately spaced straps sized to fit conduit and attached with galvanized lag screws. Install appropriate Intersystem Bond as per NEC 250.94 if installed on GEC then GEC must remain continuous and PVC protection must be maintained.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade.

(NEC Table 310-16)

WIRE TYPE SERVICE MAIN RATING	ALUMINUM	COPPER
	75°C	75°C
320 Amp	500	350

Note: Other service rating shall be submitted to NBU Electric Engineering for approval.  
 Allowable single phase dwelling services, NEC Table 310-15 (B)(7)(1)

3Ø wire color code

277/480V	120/208Y
AØ - Purple	Red
BØ - Brown	Black
CØ - Yellow	Blue



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METERING ASSEMBLY UNDERGROUND  
 SERVICE ON BUILDING  
 320 AMP

ISSUED	SCALE	DRAWING NUMBER
2/24	NTS	EU-035

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements.

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

METER LOCATION IS DETERMINED BY NBU. ALL CUSTOMER INSTALLATIONS REQUIRE INSPECTION BY NBU.

**Up to 6 meters:** May be installed at one location without a main disconnect.

**More than 6 meters:** Installed at one location require a main disconnect furnished and installed by the customer.

Meter mounting equipment shall be commercially available horizontal gang or bussed gutter type. Proposed catalog numbers and complete description shall be submitted for approval. Any other design or equipment arrangement shall be submitted for approval. Meter mounting equipment shall be installed such that the center of the highest meter will be 4' minimum and 6' maximum from final ground grade.

3Ø meter socket shall have plexiglass shield over meter jaws with lever bypass.

NBU approved 3Ø meter socket:

Milbank # U9701 = 200amp

Milbank # U2594 = 320amp

Substitution must be approved by NBU.

Each metered circuit shall have a weatherproof submain switch or circuit breaker.

Each disconnect device shall have permanent address marking. These markings by the customer should be plain and permanent, giving the street number to the door of the premise served, or the symbol appearing on the entrance door when this door does not carry a street number. The name of the customer will not suffice for identification. The meter sockets in multitenant buildings shall be clearly and durably marked.

Conductor to be sized according to NEC and local code requirements. Conductor shall be enclosed in properly sized conduit, secured to wall with 2 appropriately spaced straps, sized to fit conduit, and attached with galvanized lag screws.

All exposed conduit above ground shall be Schedule 80 PVC. All PVC will meet NEMA TC-2 for electrical use.

Underground conduit: Installed according to NBU specification EU-910. Customer shall connect to NBU installed conduit stub. Pull string to be installed in conduit by customer.

Where a separate conduit is required for the ground wire, a properly sized ground wire shall be enclosed in sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to wall with 2 appropriately spaced straps, sized to fit conduit, and attached with galvanized lag screws. Metal conduit acceptable, but must comply with NEC 250.92(b).

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade.



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METERING ASSEMBLY MULTIPLE METERS  
UNDERGROUND SERVICES

ISSUED

12/20

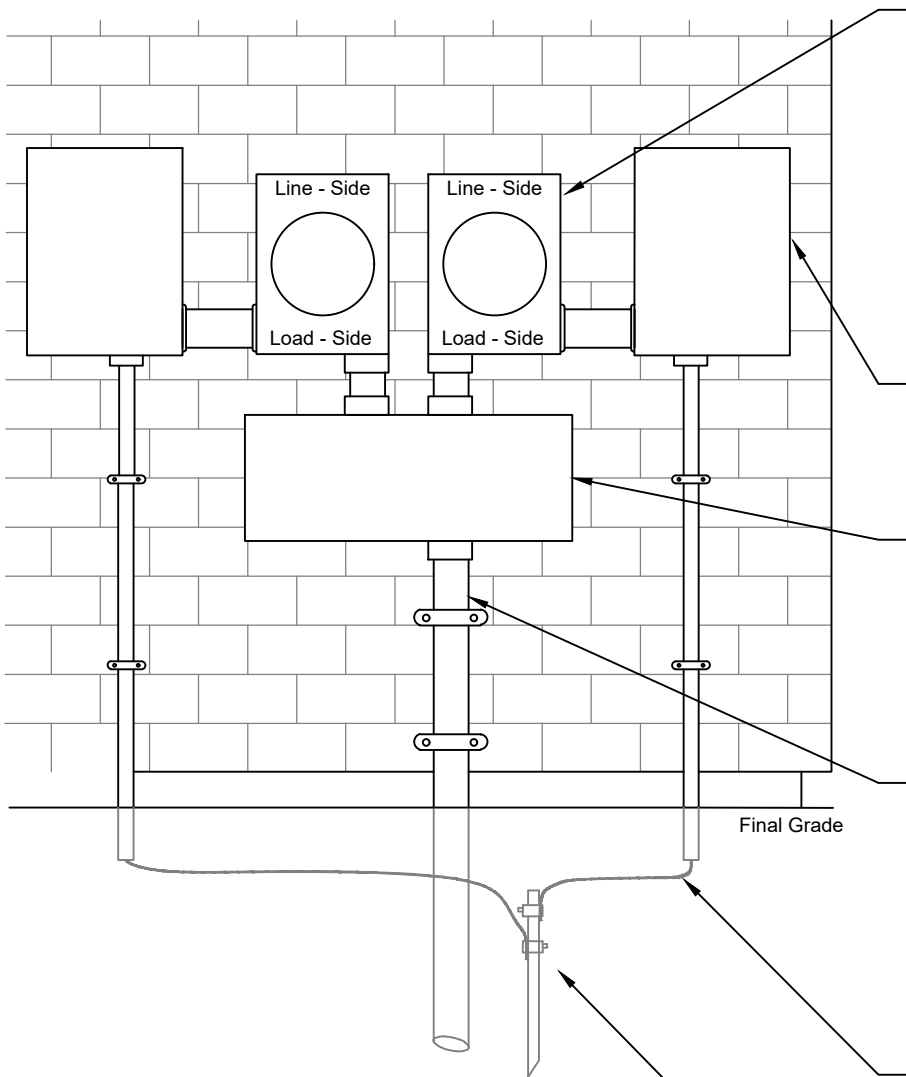
SCALE

NTS

DRAWING NUMBER

EU-045

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.



Meter Sockets: 4' minimum and 6' maximum from center of socket to final ground grade, when measured within 3' in front of socket. Meter socket enclosure shall be electrically connected to line-side grounded neutral conductor and to load-side grounded neutral conductor. All electrical equipment must be secured at 4 points.

Neutral conductors to be marked with white tape inside all enclosures.

3Ø meter socket shall have plexiglass shield over meter jaws with lever bypass.

NBU approved 3Ø meter socket: Milbank # U9701 = 200amp

NBU approved 3Ø meter socket: Milbank # U2594 = 320amp

Substitution must be approved by NBU.

Weatherproof Main Disconnects: Located adjacent to Meter Socket, with 3' unobstructed clearance in front.

Weatherproof Tap Enclosure: Must open toward the front. Opening height must be at least two times the depth dimension. Enclosure must be lockable by NBU. Secure at four corners to sturdy structure. Enclosure to be located such that existing utility service conductors may be re-used. End of utility service conduit may not extend higher than 6' above final ground grade. Enclosure shall meet requirements of NEC Article 314.

Conduit: **To be sized by NBU.** Secure conduit with 2 evenly spaced 2-hole straps, sized to fit conduit and attached with galvanized lag screws. Underground conduit installed according to NBU specification EU-910. Customer shall connect to NBU installed conduit stub. Pull string to be installed in conduit by customer. Schedule with NBU if source feeds from energized equipment. All exposed conduit above ground shall be Schedule 80 PVC. All PVC will meet NEMA TC-2-1998 for electrical use. Customer-owned pipes, conduits, or other equipment may not be installed in front of, behind, or otherwise interfere with access to utility conduits.

Grounding electrode conductor: Minimum #6 copper, connected to main disconnect neutral bar (NEC 250.24(A)(1)). Shall be installed in one continuous length without a splice to grounding electrode. Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to wall with two appropriately spaced straps, sized to fit conduit, and attached with galvanized lag screws. Install appropriate Intersystem Bond as per NEC 250.94 if installed on GEC then GEC must remain continuous and PVC protection must be maintained.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade.

<u>3Ø wire color code</u>	
<u>277/480V</u>	<u>120/208Y</u>
AØ - Purple	Red
BØ - Brown	Black
CØ - Yellow	Blue



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METERING ASSEMBLY UNDERGROUND TWO METER LOOPS  
WITH TAP ENCLOSURE (OPTION 1)

ISSUED

2/24

SCALE

NTS

DRAWING NUMBER

EU-055

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.

Meter Sockets: 4' minimum and 6' maximum from center of socket to final ground grade, when measured within 3' in front of socket. Meter socket enclosure shall be electrically connected to line-side grounded neutral conductor and to load-side grounded neutral conductor. All electrical equipment must be secured at 4 points.

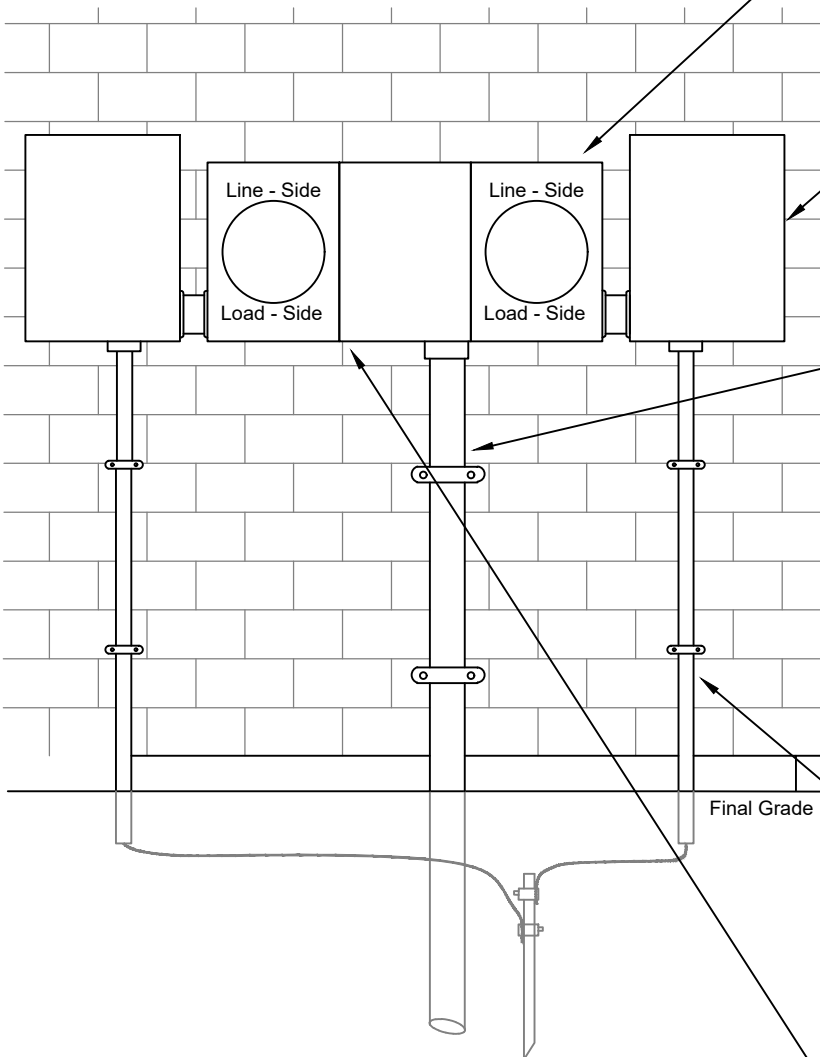
Neutral conductors to be marked with white tape inside all enclosures.

Weatherproof Main Disconnects: Located adjacent to Meter Socket, with 3' unobstructed clearance in front.

Conduit: **To be sized by NBU.** Secure conduit with 2 evenly spaced 2-hole straps, sized to fit conduit and attached with galvanized lag screws. Underground conduit installed according to NBU specification EU-910. Customer shall connect to NBU installed conduit stub. Pull string to be installed in conduit by customer. Schedule with NBU if source feeds from energized equipment. All exposed conduit above ground shall be Schedule 80 PVC. All PVC will meet NEMA TC-2-1998 for electrical use. Customer-owned pipes, conduits, or other equipment may not be installed in front of, behind, or otherwise interfere with access to utility conduits.

Grounding electrode conductor: Minimum #6 copper, connected to main disconnect neutral bar (NEC 250.24(A)(1)). Shall be installed in one continuous length without a splice to grounding electrode. Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to wall with two appropriately spaced straps, sized to fit conduit, and attached with galvanized lag screws. Install appropriate Intersystem Bond as per NEC 250.94 if installed on GEC then GEC must remain continuous and PVC protection must be maintained. Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade.

Ganged Meter Module: Must open toward the front and have a single point of connection to a common bus for both meter sockets. Utility Enclosure must be lockable by NBU. Secure Module at a minimum of four corners to sturdy structure. Module to be located such that existing utility service conductors may be re-used. End of utility service conduit may not extend higher than 6' above final ground grade. (Milbank Model U1252 or similar)



3Ø wire color code  
277/480V 120/208Y

AØ - Purple	Red
BØ - Brown	Black
CØ - Yellow	Blue



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METERING ASSEMBLY UNDERGROUND TWO METER LOOPS WITH GANGED METER MODULE (OPTION 2)

ISSUED

SCALE

DRAWING NUMBER

2/24

NTS

EU-060

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.

This meter stand is used when metering PT's and CT's are located within the secondary compartment of the padmount transformer.

Meter assembly stand must be positioned 4' to the side of the transformer pad. Meter **CANNOT** be located in front of the transformer pad due to hot stick access requirements.

Meter stand: 2" GRC or IMC, continuing a minimum of 2' below final ground grade with listed corrosion protection tape or polywrap extending 2" above and encased in concrete, 4 sack mix minimum. Top of pipe to have rain proof cap.

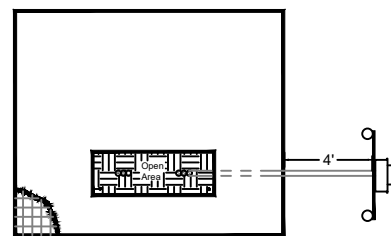
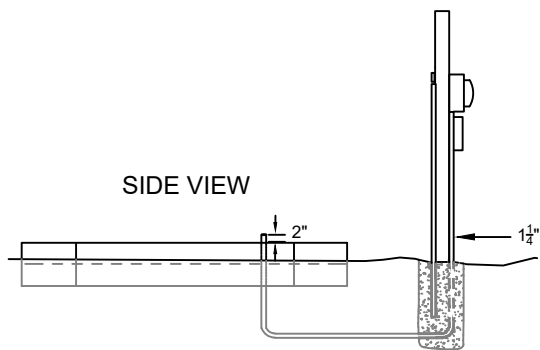
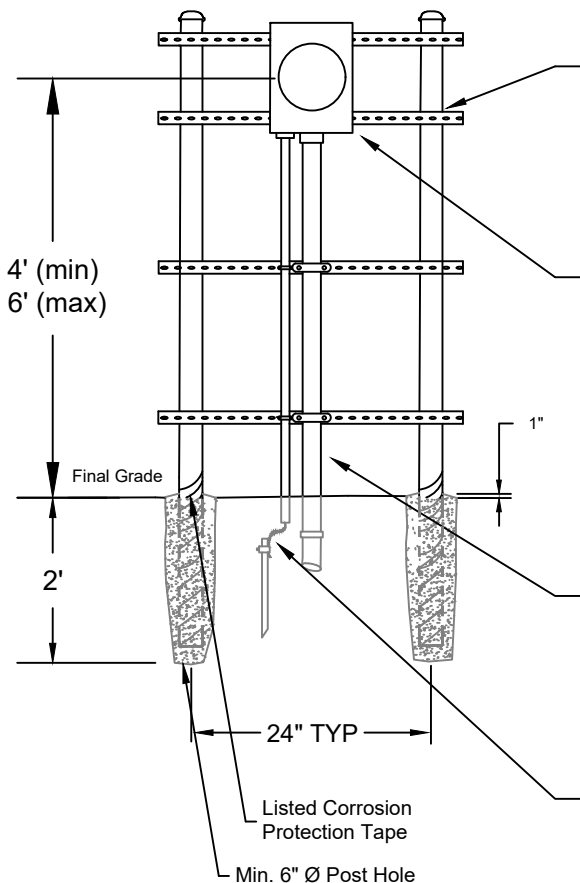
Galvanized mounting channel: Kendorf or equivalent, 1 1/2" x 1 1/2", welded or bolted to stand with galvanized bolts.

Meter socket: 4' minimum and 6' maximum from center of socket to final ground grade when measured 3' in front of meter. Secure at four points to two appropriately spaced mounting channels.

All exposed conduit to be 1 1/4" sunlight resistant Schedule 80 PVC. All PVC will meet NEMA TC-2-1998 for electrical use. Secure conduit to 2 evenly spaced mounting channels with Kendorf straps or equivalent, or galvanized U bolts, sized to fit conduit. Pull string to be installed in conduit by customer.

Grounding electrode conductor: Minimum #6 copper, connected to neutral lug in meter socket or neutral bar (NEC 250.24 (A) (1)), enclosed in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade and secured to two mounting channels with Kendorf straps or equivalent, or galvanized U bolts, sized to fit conduit. Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade.

CT Meter socket may be mounted on a structure exterior, within 20 ft. to the front of the transformer, and with prior approval of NBU.



FRONT VIEW



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METERING ASSEMBLY  
 CT RACK

ISSUED

2/24

SCALE

NTS

DRAWING NUMBER

EU-070



This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.

This meter stand is used when metering PT's and CT's are located within the secondary compartment of the padmount transformer.

Meter stand: (2) - 2" GRC or IMC, continuing a minimum of 2' below final ground grade with listed corrosion protection tape or polywrap extending 2" above and encased in concrete, 4 sack mix minimum. Top of pipe to have rain proof cap.

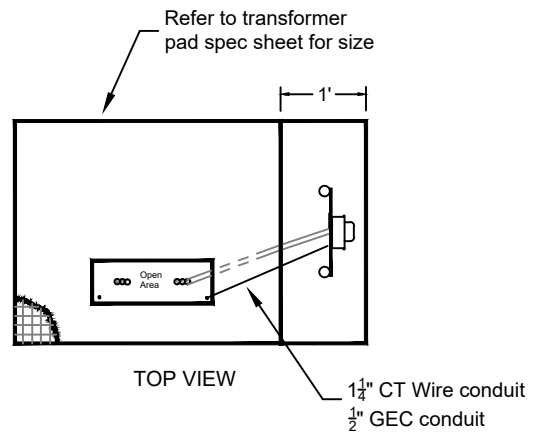
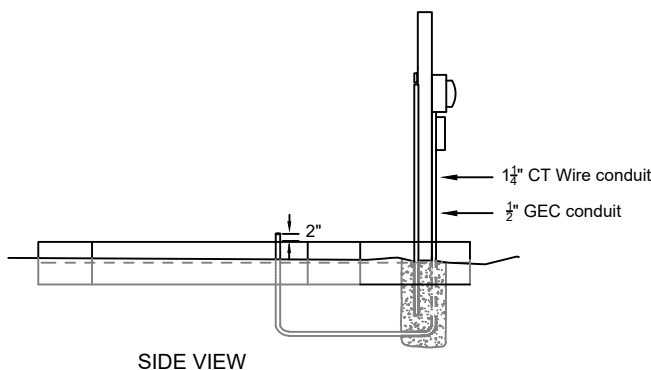
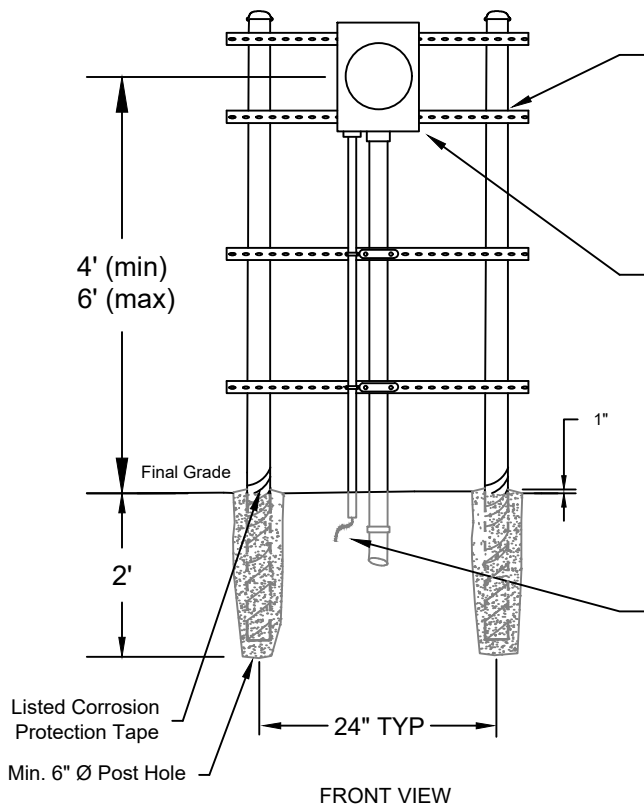
Galvanized mounting channel: Kendorf or equivalent, 1 1/2" x 1 1/2", welded or bolted to stand with galvanized bolts.

Meter socket: 4' minimum and 6' maximum from center of socket to final ground grade when measured 3' in front of meter. Secure at four points to 2 evenly spaced mounting channels.

All exposed conduit to be 1 1/4" sunlight resistant Schedule 80 PVC. All PVC will meet NEMA TC-2-1998 for electrical use. Secure conduit to 2 evenly spaced mounting channels with Kendorf straps or equivalent, or galvanized U bolts, sized to fit conduit. Pull string to be installed in conduit by customer.

Grounding electrode conductor: Minimum #6 copper, connected to neutral lug in meter socket or neutral bar (NEC 250.24 (A) (1)), enclosed in 1/2" sunlight resistant PVC conduit, continuing to transformer ground rod 24" below final ground grade and secured to two mounting channels with Kendorf straps or equivalent, or galvanized U bolts, sized to fit conduit.

Note: Final location of CT rack maybe relocated at the discretion of NBU Electric Inspector.



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METERING ASSEMBLY  
CT RACK BUILT IN WITH TRANSFORMER PAD

ISSUED

2/24

SCALE

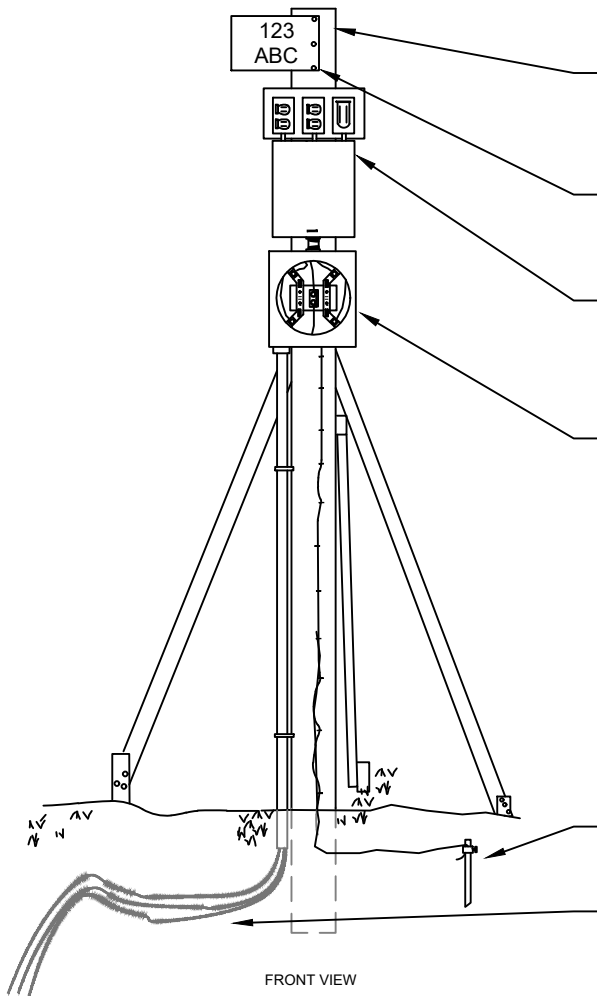
NTS

DRAWING NUMBER

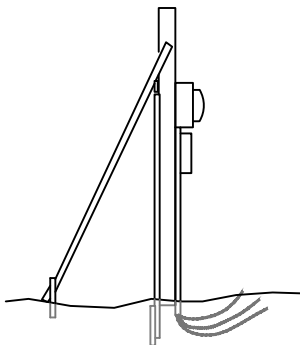
EU-075

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements.

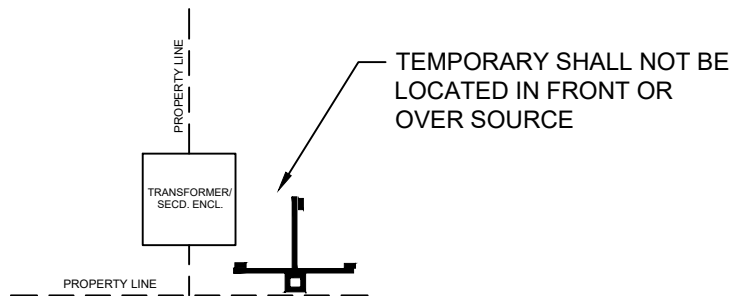
This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.



FRONT VIEW



SIDE VIEW



TOP VIEW

Treated 4" x 4" post: Height above final ground grade shall be 7' and a minimum below ground of 2'. Three wood braces required, minimum 2" x 4", secured with 2" x 4" stakes driven securely into ground. Braces shall not be attached to trees or other structures. Temp should be placed towards front corner of transformer or secondary box to avoid stub outs.

Site Address: Marked on 1' x 1' exterior (painted) or marine plywood.

Approved disconnect device(s) in exterior enclosure. Receptacles shall be in weatherproof enclosure per NEC requirements. Circuits shall have GFCI protection. Customer to install a minimum of one 120V, 20 amp receptacle and one 240V, 20 amp receptacle, as required

Meter socket: 4' minimum and 6' maximum from center of socket to final ground grade and positioned to face road or driveway, or as directed/approved by NBU. Source connections shall be made on top side of meter socket.

Conductors: Service lateral conductors shall be sized according to the table below, as a minimum, based upon the main bus rating of the disconnect device; unless otherwise approved by NBU. Conductor insulation shall be rated for direct burial (wet locations). Neutral to be marked with white tape in meter socket. minimum #6 copper bonding shall be provided where necessary (all non-current carrying parts) to ensure electrical continuity.

Grounding electrode conductor: minimum #6 soft drawn copper, stapled to post; 5/8" x 8' copper-clad ground rod, driven 2" below final ground grade, or a grounding plate at 30" below ground grade per NEC code.

Conductor shall be buried from post to within 6" of service equipment, at a minimum depth of 18" and have 10' leads at service equipment.



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METERING ASSEMBLY  
 1Ø TEMPORARY UNDERGROUND SERVICE

ISSUED

2/24

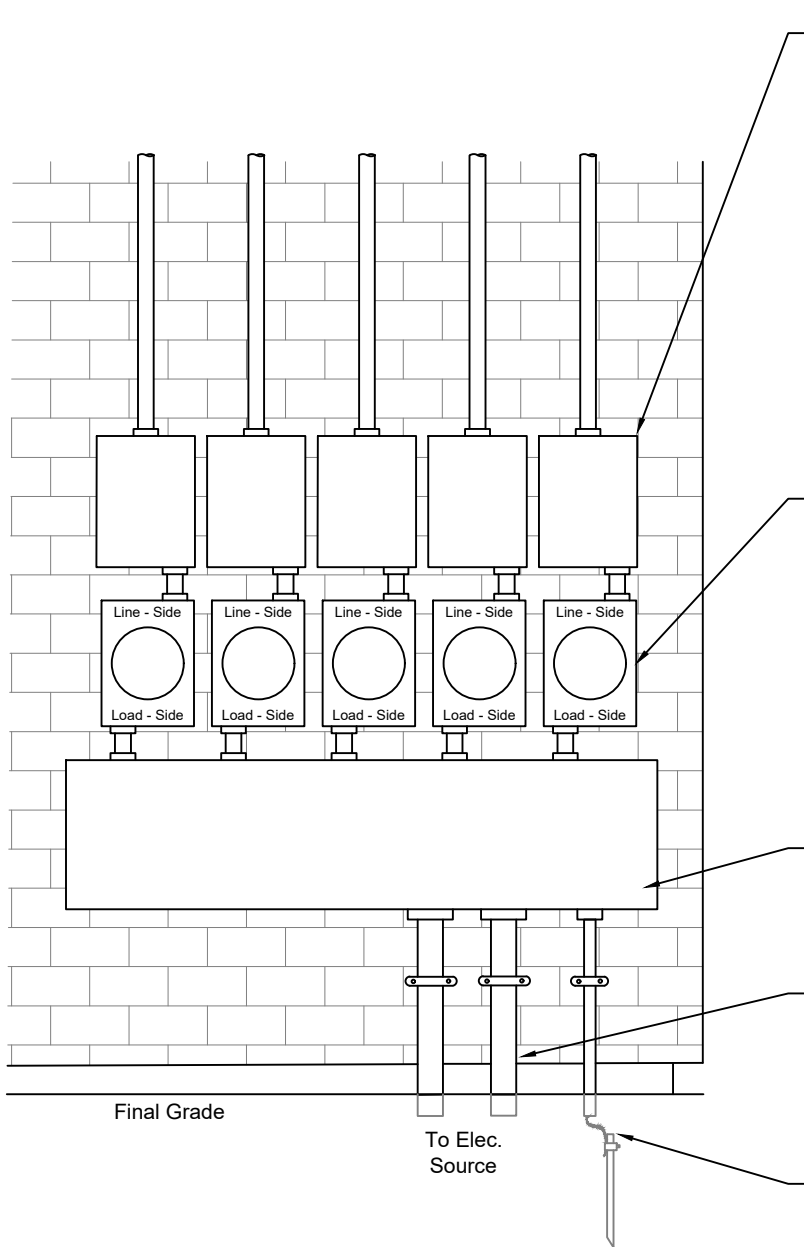
SCALE

NTS

DRAWING NUMBER

EU-110

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements. This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation. Meter location is determined by NBU. All customer installations require inspection by NBU.



Weatherproof main disconnect: Located adjacent to meter socket, with minimum 3' unobstructed clearance in front.

Each metered circuit shall have a weatherproof submain switch or circuit breaker.

More than 6 meters installed at one location shall require a main disconnect furnished and installed by the customer.

Each disconnect device shall have permanent address marking. These markings by the customer should be plain and permanent, giving the street number to the door of the premise served, or the symbol appearing on the entrance door when this door does not carry a street number. The name of the customer will not suffice for identification. The meter sockets in multitenant buildings shall be clearly and durably marked.

Meter socket: 4' minimum and 6' maximum from center of socket to final ground grade, when measured within 3' in front of socket. Meter socket enclosure shall be electrically connected to line-side grounded neutral conductor and to load-side grounded neutral conductor. All electrical equipment must be secured at 4 points.

Neutral conductors to be marked with white tape inside all enclosures.

3Ø meter socket shall have plexiglass shield over meter jaws with lever bypass.

NBU approved 3Ø meter socket: Milbank # U9701 = 200amp  
 NBU approved 3Ø meter socket: Milbank # U2594 = 320amp  
 Substitution must be approved by NBU.

Gutter: It must have a means to lock or secure by NBU. Secure at four points to two appropriately spaced mounting channels. (Gutter size shall be min. 18" H x 12"D x Length)

Underground conduit: Installed according to NBU specification EU-910. Pull string to be installed in conduit by customer. Conduit/conductor shall be sized by NBU. All exposed conduit above ground shall be Schedule 80 PVC. All PVC will meet NEMA TC-2-1998 for electrical use. Customer-owned pipes, conduits, or other equipment may not be installed in front of, behind, or otherwise interfere with access to utility conduits.

Grounding electrode conductor: Minimum #6 copper, connected to main disconnect/panel neutral bar (NEC 250.24 (A) (1)), enclosed in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade and secured to two mounting channels with Kendorf straps or equivalent, or galvanized U bolts, sized to fit conduit.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade.

3Ø wire color code

277/480V    120/208Y

AØ - Purple    Red  
 BØ - Brown    Black  
 CØ - Yellow    Blue



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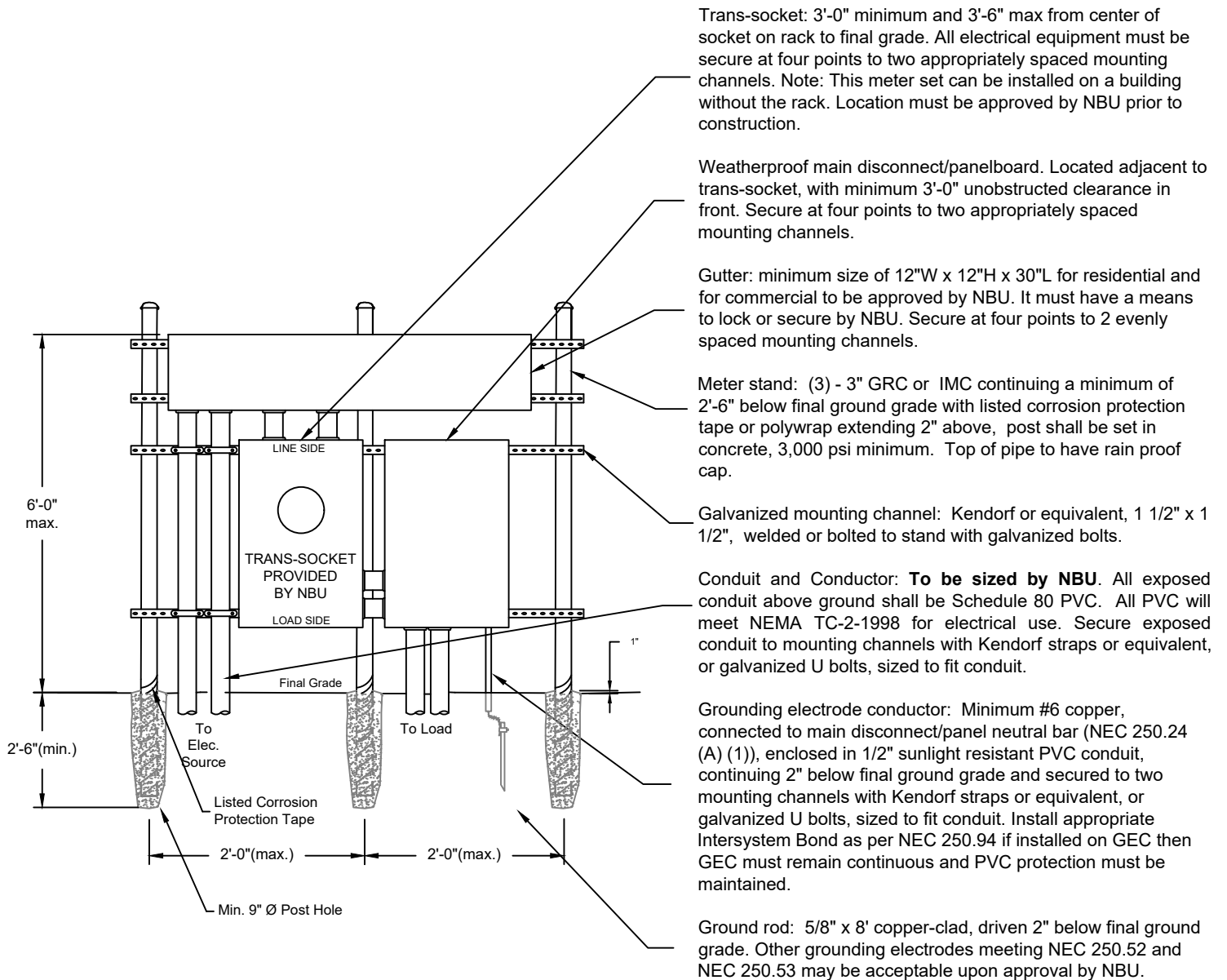
UNDERGROUND SERVICE - MULTIPLE OCCUPANCY BUILDING  
 200 AMP - 320 AMP

ISSUED	SCALE	DRAWING NUMBER
4/22	NTS	EU- 115

This specification does not necessarily meet all requirements of local Building Departments. The contractor is responsible to ensure that the installation meets all AHJ requirements.

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

METER LOCATION IS DETERMINED BY NBU. ALL CUSTOMER INSTALLATIONS REQUIRE INSPECTION BY NBU.



Trans-socket: 3'-0" minimum and 3'-6" max from center of socket on rack to final grade. All electrical equipment must be secure at four points to two appropriately spaced mounting channels. Note: This meter set can be installed on a building without the rack. Location must be approved by NBU prior to construction.

Weatherproof main disconnect/panelboard. Located adjacent to trans-socket, with minimum 3'-0" unobstructed clearance in front. Secure at four points to two appropriately spaced mounting channels.

Gutter: minimum size of 12"W x 12"H x 30"L for residential and for commercial to be approved by NBU. It must have a means to lock or secure by NBU. Secure at four points to 2 evenly spaced mounting channels.

Meter stand: (3) - 3" GRC or IMC continuing a minimum of 2'-6" below final ground grade with listed corrosion protection tape or polywrap extending 2" above, post shall be set in concrete, 3,000 psi minimum. Top of pipe to have rain proof cap.

Galvanized mounting channel: Kendorf or equivalent, 1 1/2" x 1 1/2", welded or bolted to stand with galvanized bolts.

Conduit and Conductor: **To be sized by NBU.** All exposed conduit above ground shall be Schedule 80 PVC. All PVC will meet NEMA TC-2-1998 for electrical use. Secure exposed conduit to mounting channels with Kendorf straps or equivalent, or galvanized U bolts, sized to fit conduit.

Grounding electrode conductor: Minimum #6 copper, connected to main disconnect/panel neutral bar (NEC 250.24 (A) (1)), enclosed in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade and secured to two mounting channels with Kendorf straps or equivalent, or galvanized U bolts, sized to fit conduit. Install appropriate Intersystem Bond as per NEC 250.94 if installed on GEC then GEC must remain continuous and PVC protection must be maintained.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade. Other grounding electrodes meeting NEC 250.52 and NEC 250.53 may be acceptable upon approval by NBU.

3Ø wire color code

<u>277/480V</u>	<u>120/208Y</u>
AØ - Purple	Red
BØ - Brown	Black
CØ - Yellow	Blue



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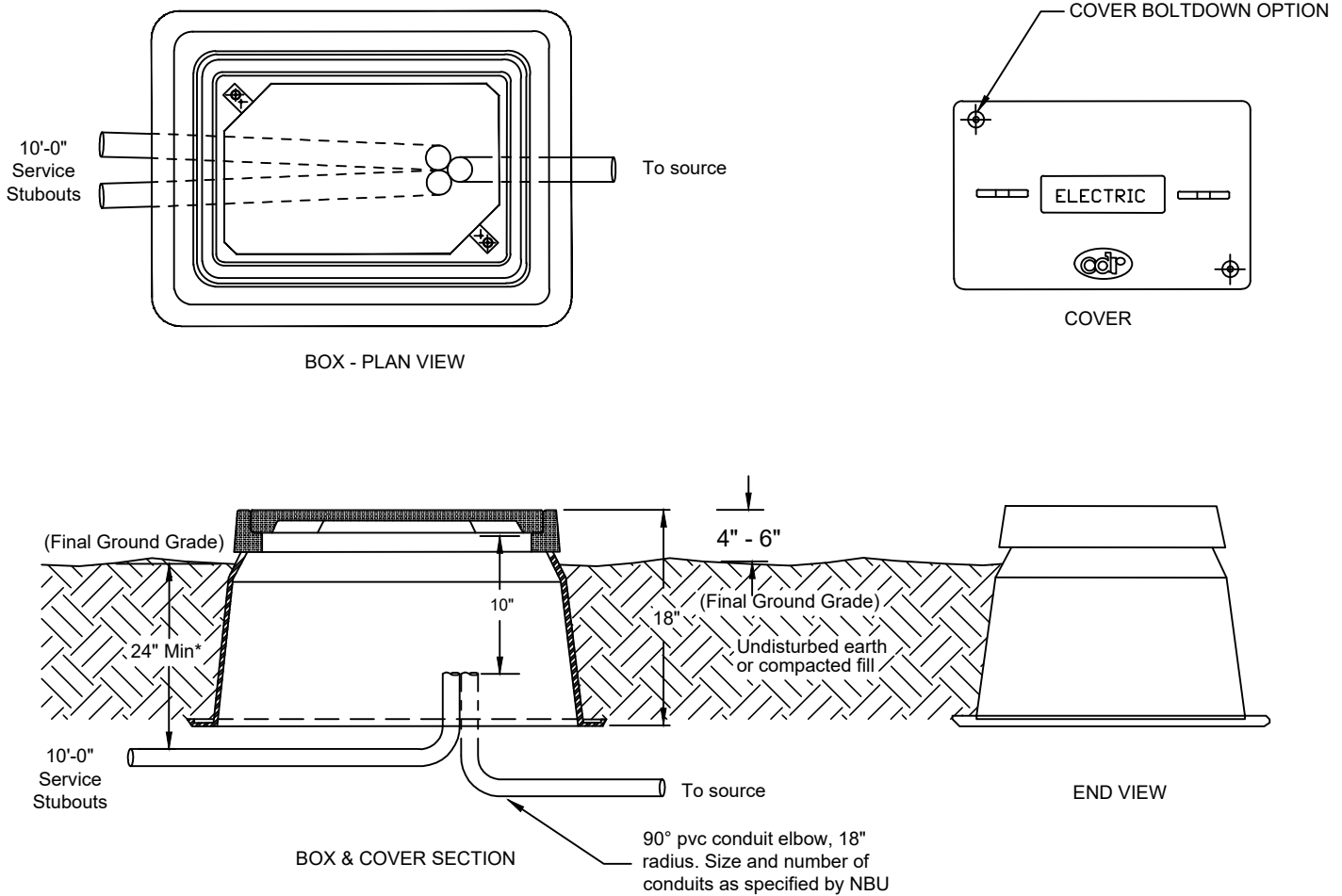
TRANS-SOCKET METERING ON RACK

ISSUED	SCALE	DRAWING NUMBER
2/24	NTS	EU-120

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

The electric system layout design, to include secondary enclosure locations, is determined by NBU.

\*Additional depth maybe required at the discretion of a NBU Electric Inspector.



Enclosure furnished and installed by customer/developer.  
 Enclosure shall be manufactured by CDR Systems Corporation.  
 Box = B10132418A Cover = C10132402A017

If installed in street, alley, or driveway.  
 Box = B12132418A Cover = C12132402A017

Note: Size of enclosure shall be determined by NBU.  
 Make sure that conduit is not located under lip of box.  
 Secondary stubouts shall be determined by NBU



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SECONDARY ENCLOSURE

ISSUED

12/22

SCALE

NTS

DRAWING NUMBER

EU-210

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

Locations are determined by NBU. All customer installations require inspection by NBU.

A, B, C = Conductor phase; Phase orientation shall be verified prior to installation.

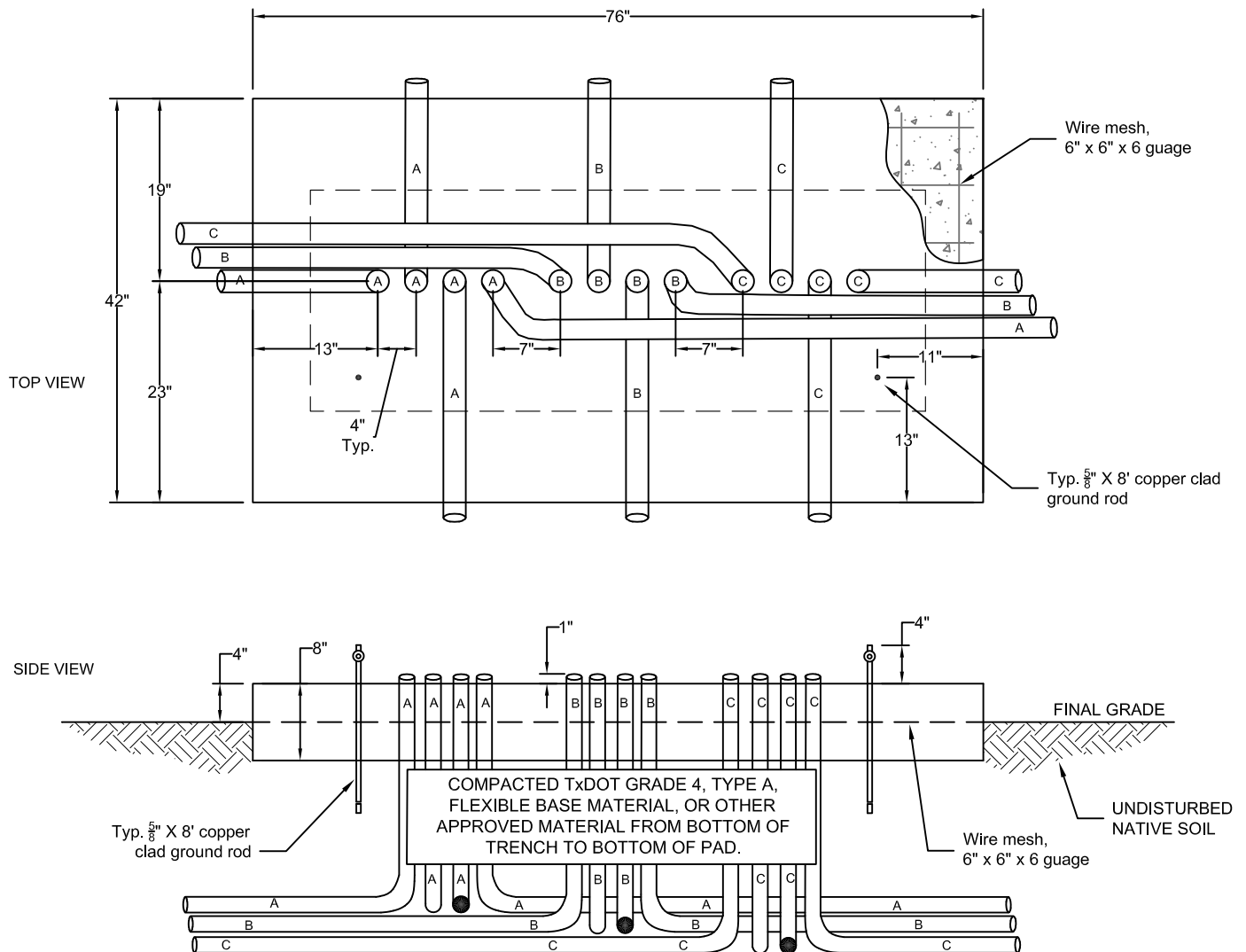
Underground conduit to be installed according to NBU specification EU-910. **Conduit to be sized by NBU** and have 1" projection above concrete, 36" radius, 90° sweeps. Pull string to be installed by customer.

Copper-clad ground rods, 5/8" x 8', 2 required, to have 4" projection above top on concrete.

Concrete shall be 3000 PSI minimum.

All primary shall be 5' minimum.

Conduit positions, concrete forms, re-bar, and trench compaction to be approved by NBU before concrete is poured



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THREE PHASE 4 PLACE,  
 200AMP PRIMARY ENCLOSURE PAD

ISSUED	SCALE	DRAWING NUMBER
2/24	NTS	EU-310

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

Locations are determined by NBU. All customer installations require inspection by NBU.

A, B, C = Conductor phase; Phase orientation shall be verified prior to installation.

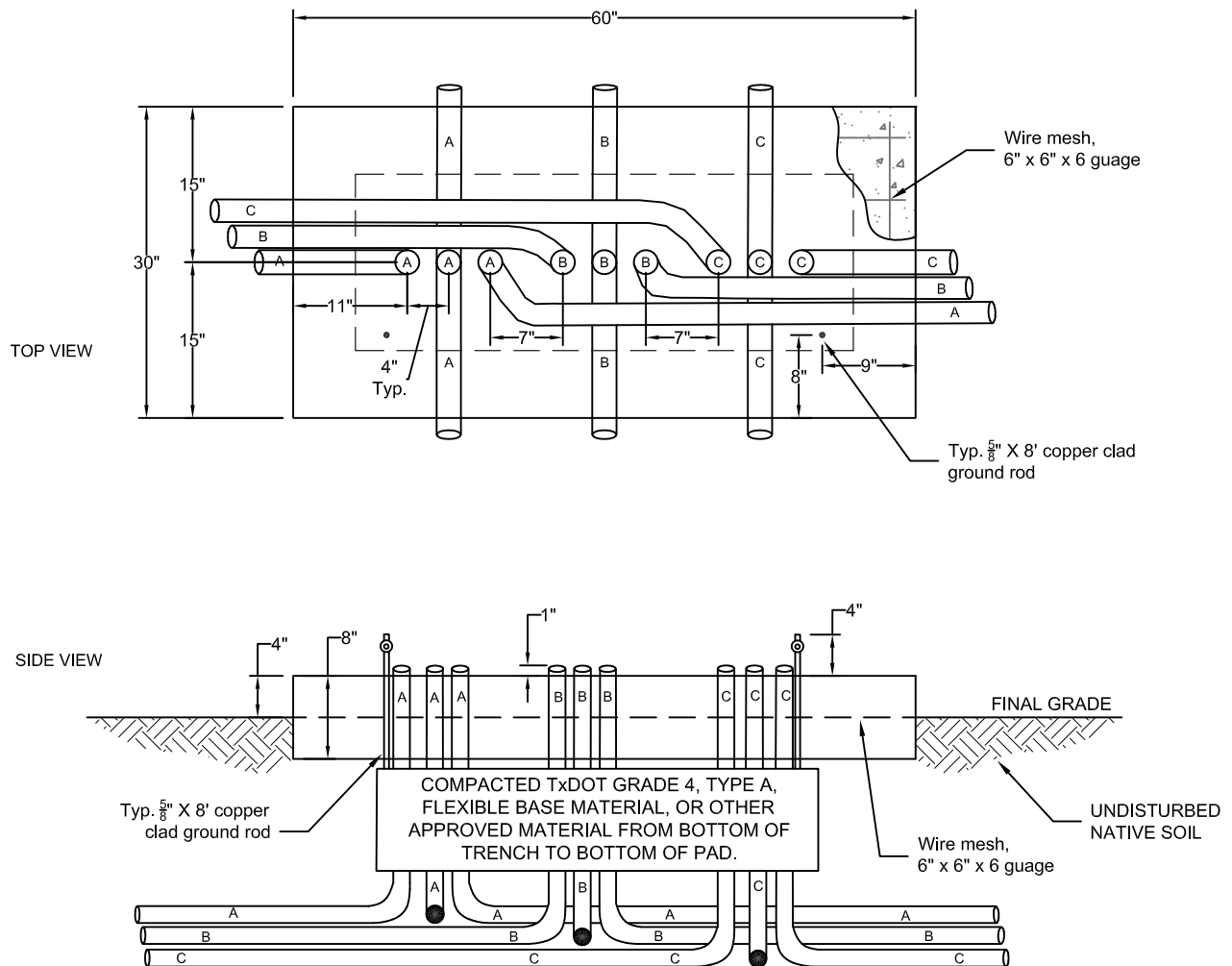
Underground conduit to be installed according to NBU specification EU-910. **Conduit to be sized by NBU** and have 1" projection above concrete, 36" radius, 90° sweeps. Pull string to be installed by customer.

Copper-clad ground rods, 5/8" x 8', 2 required, to have 4" projection above top on concrete.

Concrete shall be 3000 PSI minimum.

All primary shall be 5' minimum.

Conduit positions, concrete forms, re-bar, and trench compaction to be approved by NBU before concrete is poured



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THREE PHASE 3 PLACE,  
 200AMP PRIMARY ENCLOSURE PAD

ISSUED	SCALE	DRAWING NUMBER
2/24	NTS	EU-315

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

Locations are determined by NBU. All customer installations require inspection by NBU.

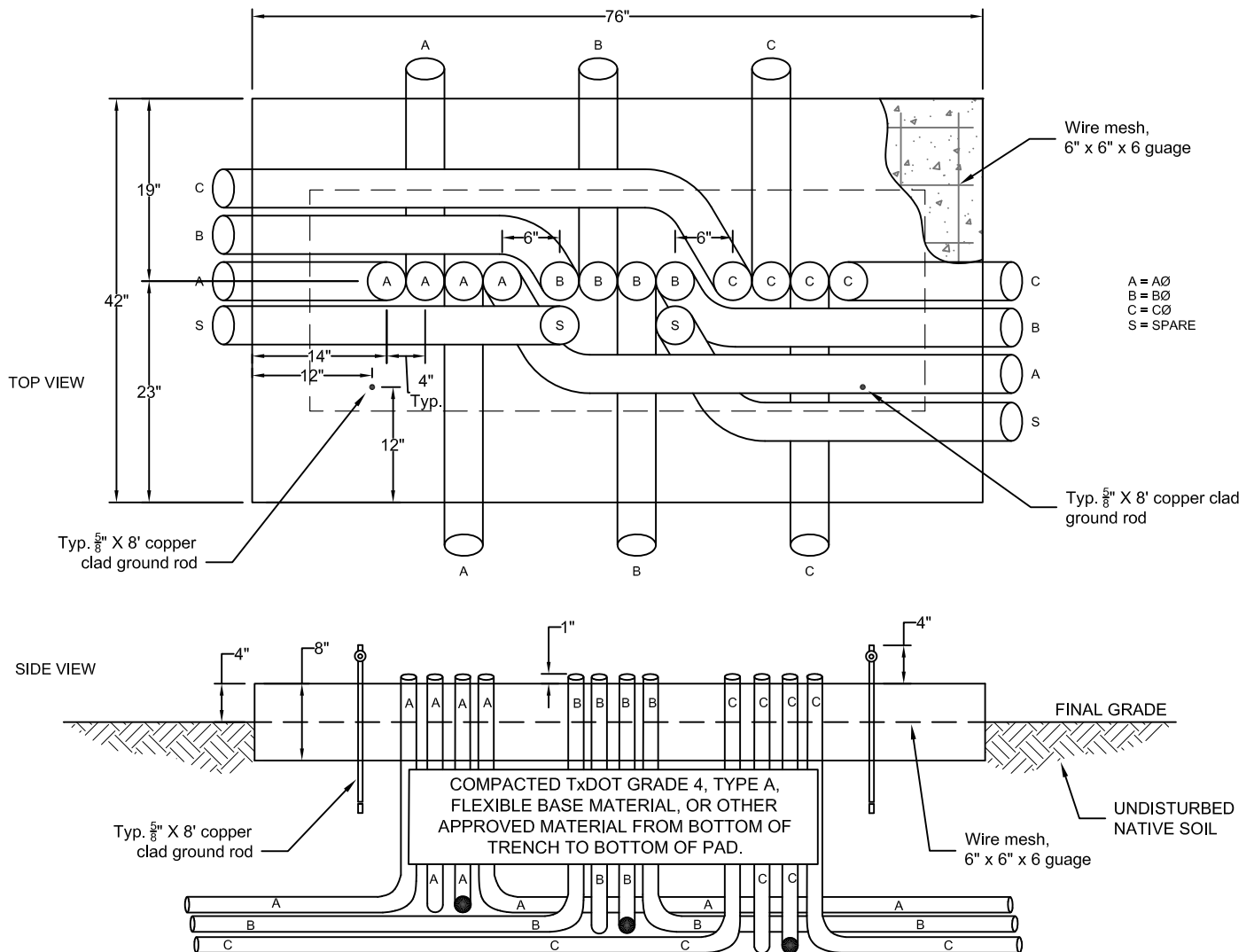
A, B, C = Conductor phase; Phase orientation shall be verified prior to installation.

Underground conduit to be installed according to NBU specification EU-910. **Conduit to be sized by NBU** and have 1" projection above concrete, 36" radius, 90° sweeps. Pull string to be installed by customer.

Copper-clad ground rods, 5/8" x 8', 2 required, to have 4" projection above top on concrete.

Concrete shall be 3000 PSI minimum.

Conduit positions, concrete forms, re-bar, and trench compaction to be approved by NBU before concrete is poured



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THREE PHASE 4 PLACE,  
 600AMP PRIMARY ENCLOSURE PAD

ISSUED	SCALE	DRAWING NUMBER
8/24	NTS	EU-320



This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

Locations are determined by NBU. All customer installations require inspection by NBU.

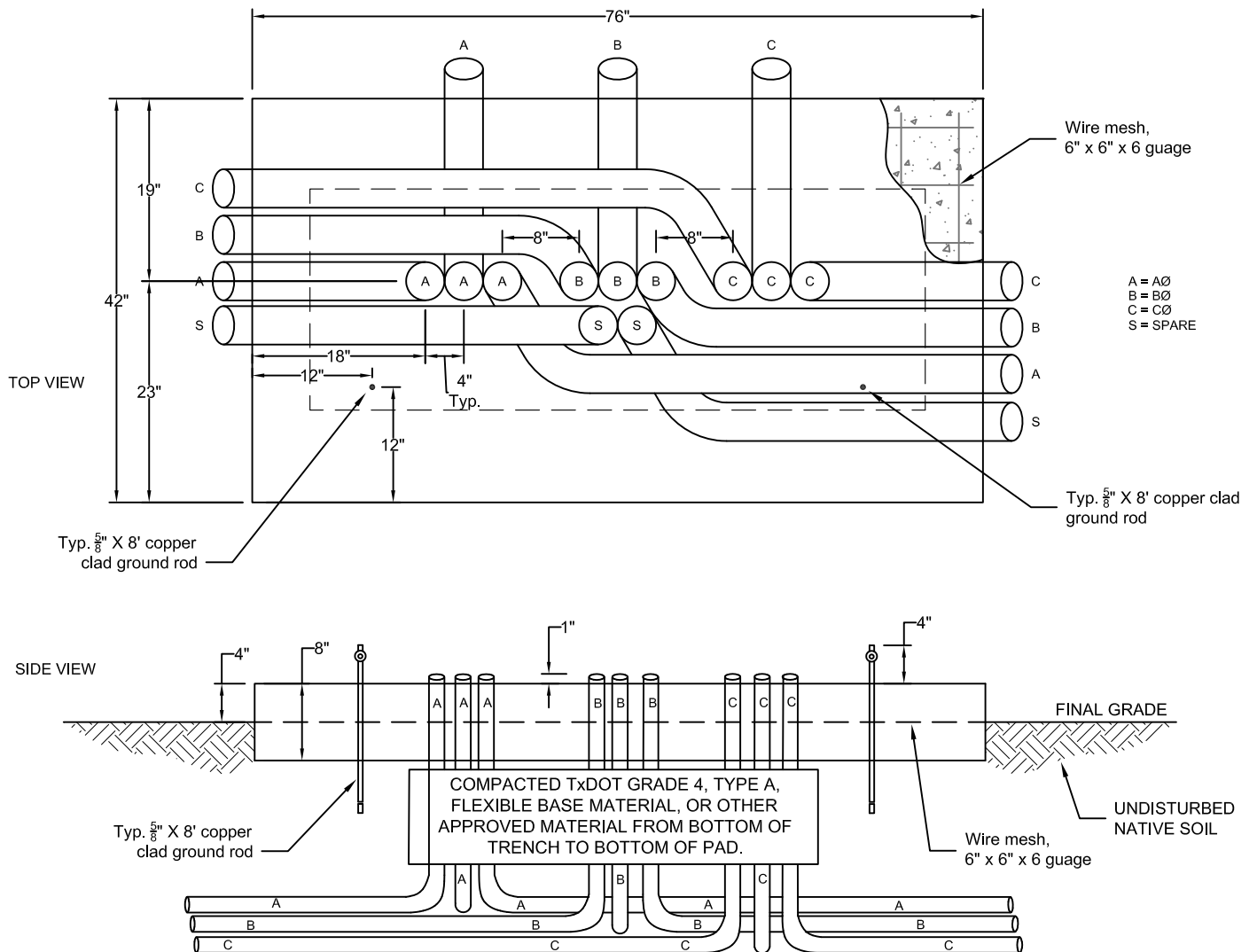
A, B, C = Conductor phase; Phase orientation shall be verified prior to installation.

Underground conduit to be installed according to NBU specification EU-910. **Conduit to be sized by NBU** and have 1" projection above concrete, 36" radius, 90° sweeps. Pull string to be installed by customer.

Copper-clad ground rods, 5/8" x 8', 2 required, to have 4" projection above top on concrete.

Concrete shall be 3000 PSI minimum.

Conduit positions, concrete forms, re-bar, and trench compaction to be approved by NBU before concrete is poured



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THREE PHASE 3 PLACE,  
600AMP PRIMARY ENCLOSURE PAD

ISSUED	SCALE	DRAWING NUMBER
8/24	NTS	EU-325

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

Locations are determined by NBU. All customer installations require inspection by NBU.

A, B, C = Conductor phase; Phase orientation shall be verified prior to installation.

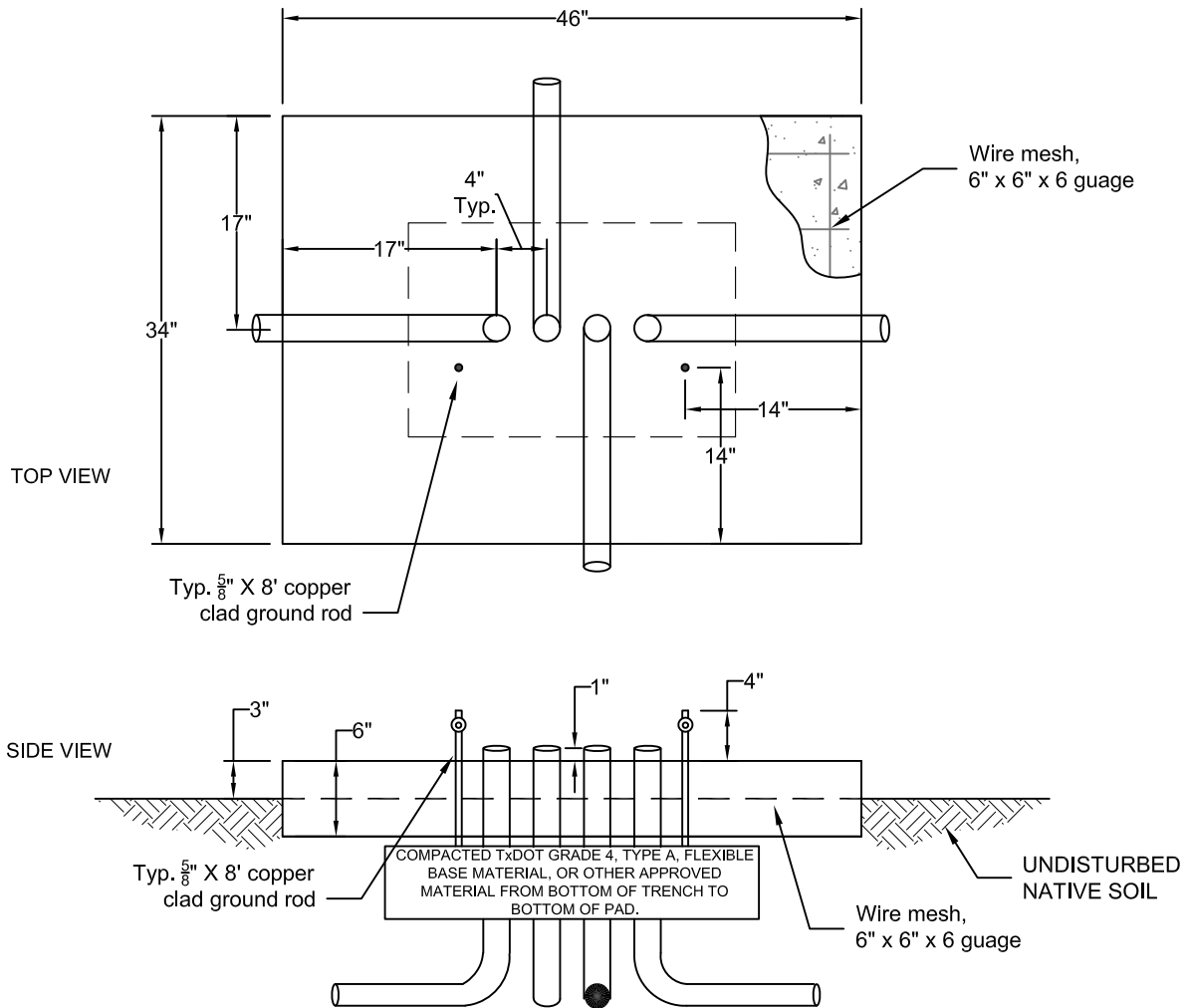
Underground conduit to be installed according to NBU specification EU-910. **Conduit to be sized by NBU** and have 1" projection above concrete, 36" radius, 90° sweeps. Pull string to be installed by customer.

Copper-clad ground rods, 5/8" x 8', 2 required, to have 4" projection above top on concrete.

Concrete shall be 3000 PSI minimum.

All primary shall be 5' minimum.

Conduit positions, concrete forms, re-bar, and trench compaction to be approved by NBU before concrete is poured



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SINGLE PHASE  
PRIMARY ENCLOSURE PAD

ISSUED

2/24

SCALE

NTS

DRAWING NUMBER

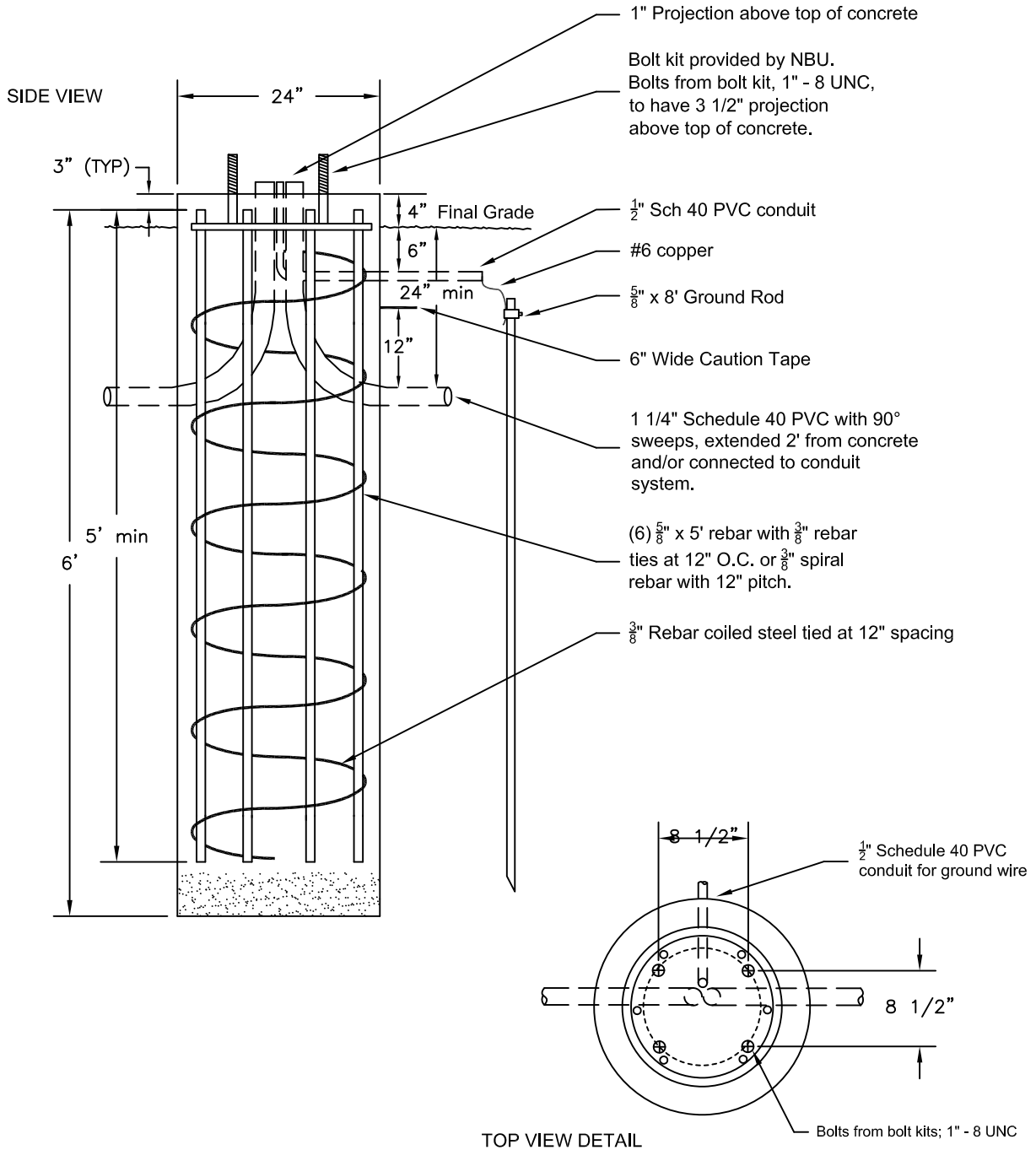
EU-330

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

Locations are determined by NBU.

Conduit positions, concrete forms, re-bar, and trench compaction to be approved by NBU before concrete is poured.

Concrete to be 3000 PSI with a 4" tooled radius on edge.



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**STANDARD LIGHT FOUNDATION**

ISSUED

SCALE

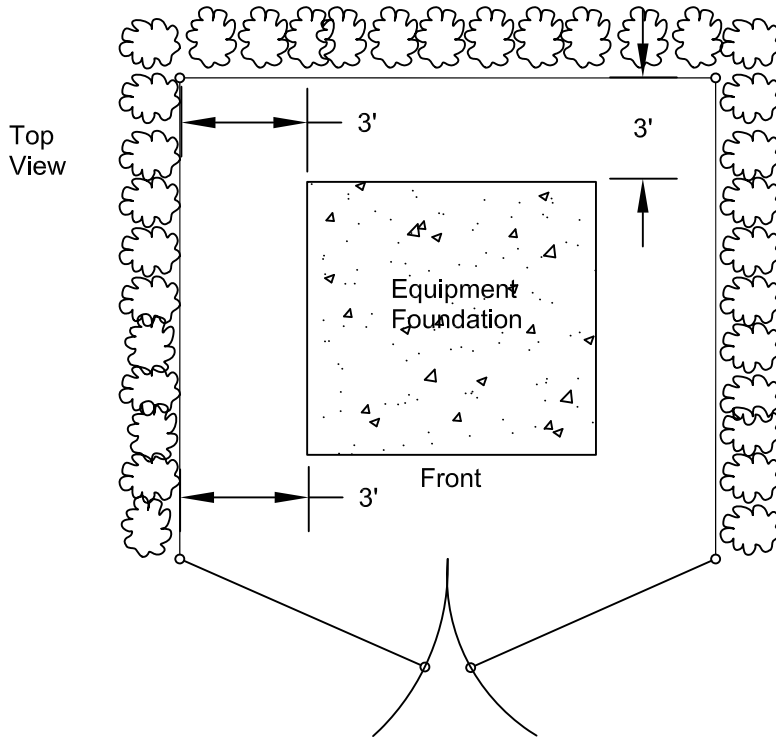
DRAWING NUMBER

04/21

NTS

EU-410

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

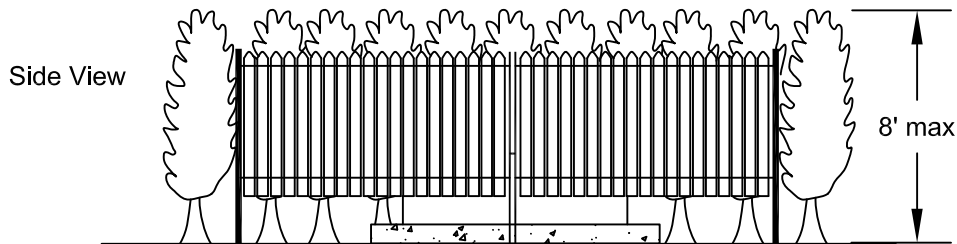


Transformer or pullbox location must be accessible at all times. Clearance around NBU equipment to any barrier shall be 3' minimum.

Any installation that would enclose any metering/disconnect assemble within the barrier shall be approved by NBU.

Barrier can be vegetation, chain link, wood, concrete block, or appropriate material. Fencing/gate material shall be designed to allow for adequate air circulation around equipment and is subject to NBU approval.

Site grading within the front 10' of a foundation shall not exceed a 7:1 slope. Access infrastructure, if necessary, shall be built as permanent structures, and shall meet requirements of any applicable right-of-way owner.



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PADMOUNT EQUIPMENT BARRIER CLEARANCES

ISSUED

SCALE

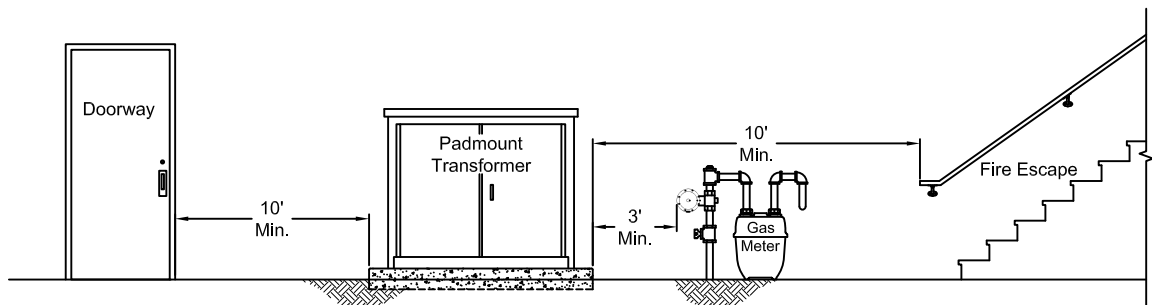
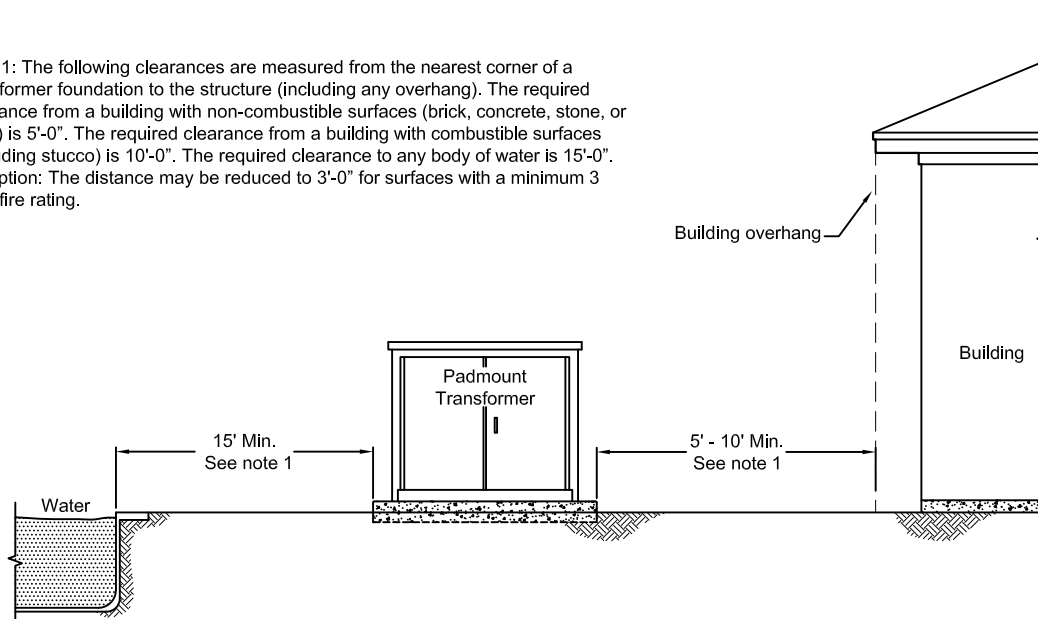
DRAWING NUMBER

10/18

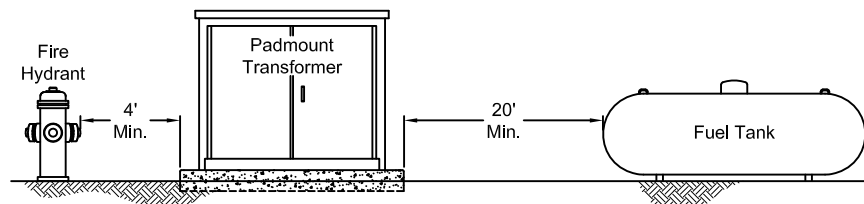
NTS

EU-500

Note 1: The following clearances are measured from the nearest corner of a transformer foundation to the structure (including any overhang). The required clearance from a building with non-combustible surfaces (brick, concrete, stone, or steel) is 5'-0". The required clearance from a building with combustible surfaces (including stucco) is 10'-0". The required clearance to any body of water is 15'-0". Exception: The distance may be reduced to 3'-0" for surfaces with a minimum 3 hour fire rating.



Note 2: Per the National Electric Safety Code rule 380D padmounted equipment and other above ground electrical equipment should be located not less than 4'-0" from fire hydrants. Exception: Where conditions do not permit a clearance of 4'-0", a clearance of not less than 3'-0" is allowed.



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MINIMUM CLEARANCES FROM  
 PADMOUNT EQUIPMENT PADS

ISSUED

10/18

SCALE

NTS

DRAWING NUMBER

EU-501

Location of Bollards shall be determined by NBU Electric Engineering

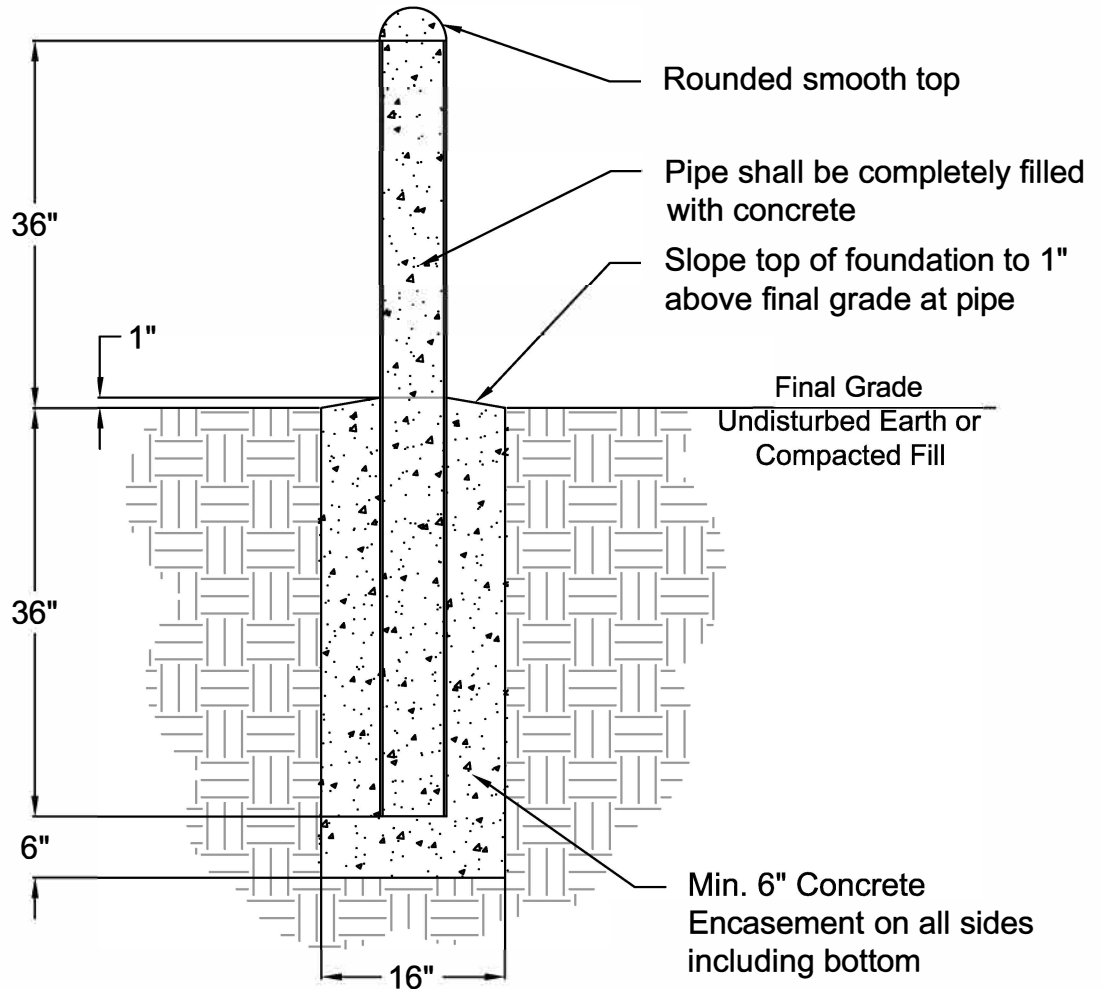
Bollards shall be 4" Diameter Schedule 40 Galvanized Steel Pipe

Concrete shall be minimum 3000 PSI

Exposed portions of Bollards shall be finished with one coat of rust inhibitive primer and two coats of epoxy paint (Safety Yellow)

Bollard foundation shall be 16" Diameter and 42" deep measured from final grade

Bollards shall be required where NBU equipment pads are within 6' to the front face of curb and/or 6' to a readily drivable surface (including driveways).



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EQUIPMENT PROTECTION BOLLARD

ISSUED

8/24

SCALE

NTS

DRAWING NUMBER

EU-505

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

Locations are determined by NBU. All customer installations require inspection by NBU.

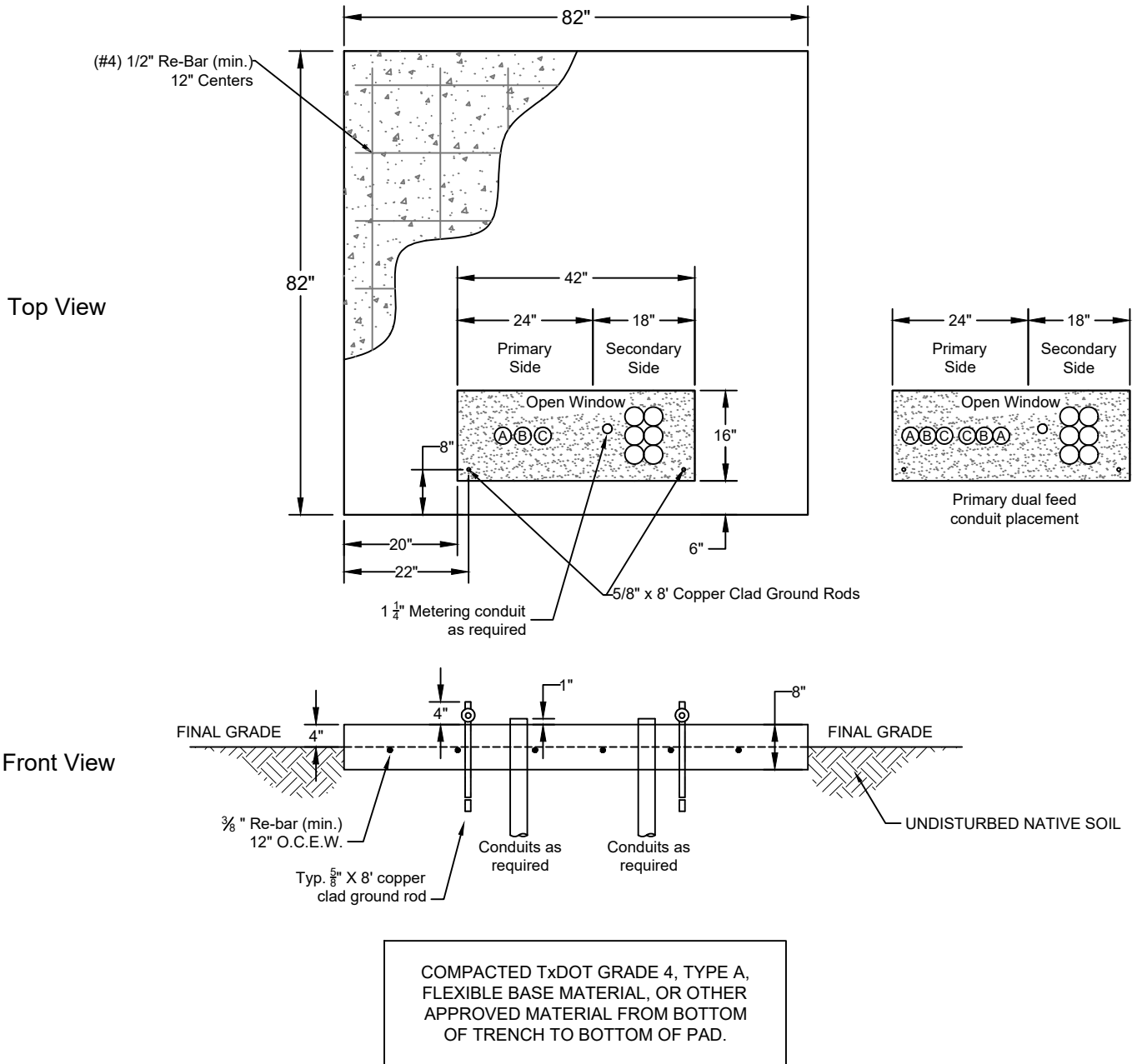
Underground conduit to be installed according to NBU specification EU-910. **Conduit to be sized by NBU** and have 1" projection above concrete, 36" radius, 90° sweeps. Pull string to be installed by customer.

Copper-clad ground rods, 5/8" x 8', 2 required, to have 4" projection above top on concrete.

Concrete shall be 3000 PSI minimum.

All primary and secondary stub outs shall be 10'-0" minimum.

Conduit positions, concrete forms, re-bar, and trench compaction to be approved by NBU before concrete is poured



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**THREE PHASE TRANSFORMER PAD  
 75 - 300 kVA**

ISSUED

12/22

SCALE

NTS

DRAWING NUMBER

EU-510

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

Locations are determined by NBU. All customer installations require inspection by NBU.

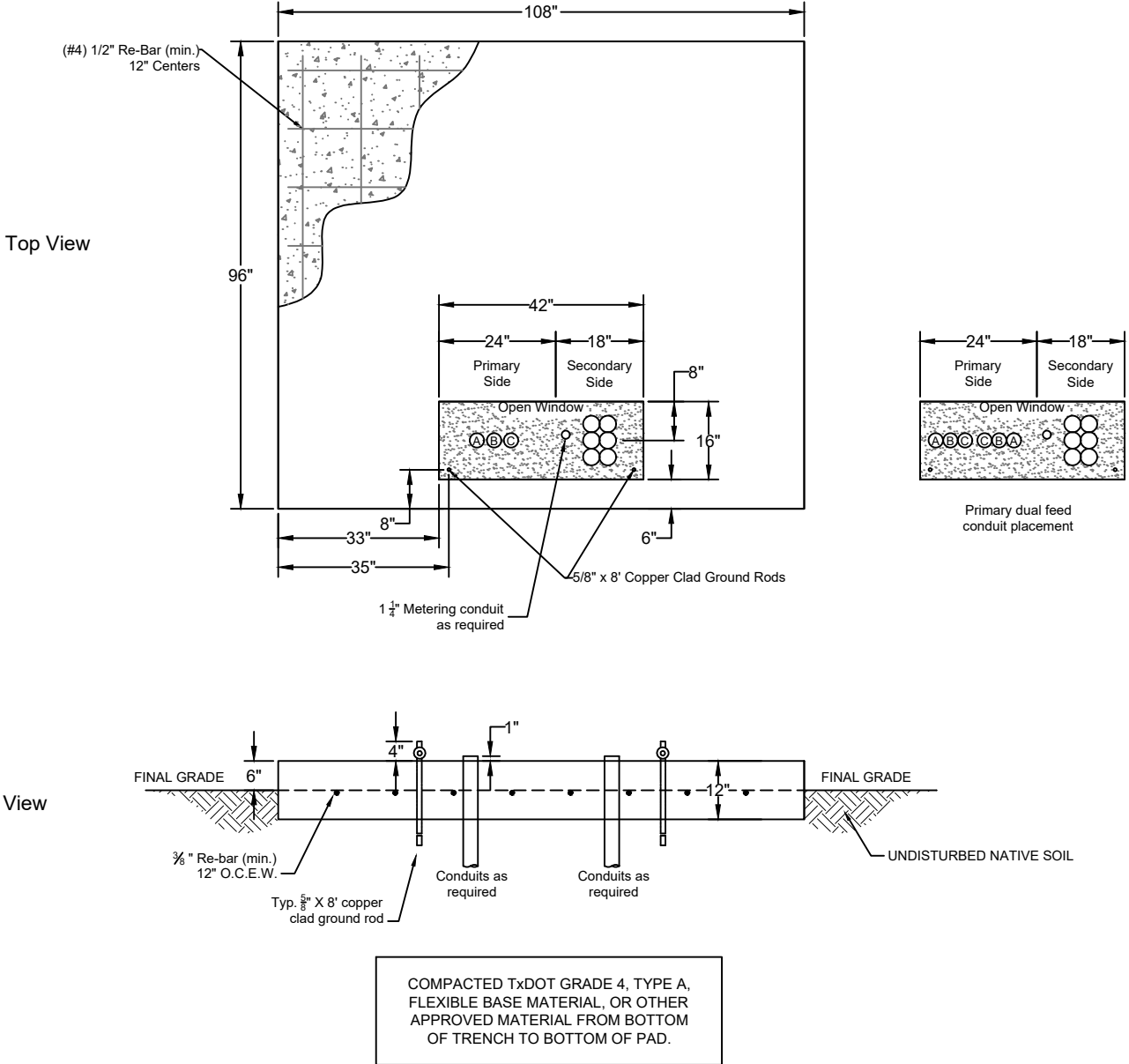
Underground conduit to be installed according to NBU specification EU-910. **Conduit to be sized by NBU** and have 1" projection above concrete, 36" radius, 90° sweeps. Pull string to be installed by customer.

Copper-clad ground rods, 5/8" x 8', 2 required, to have 4" projection above top on concrete.

Concrete shall be 3000 PSI minimum.

All primary and secondary stub outs shall be 10'-0" minimum.

Conduit positions, concrete forms, re-bar, and trench compaction to be approved by NBU before concrete is poured



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**THREE PHASE TRANSFORMER PAD  
 75 - 2500 KVA**

ISSUED

12/22

SCALE

NTS

DRAWING NUMBER

EU-515



This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

Locations are determined by NBU. All customer installations require inspection by NBU.

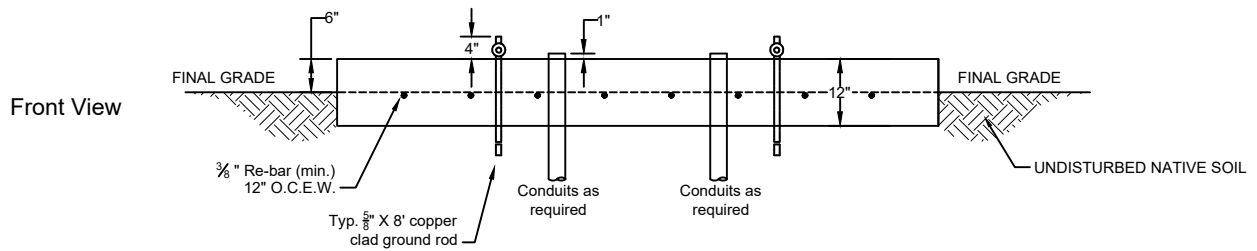
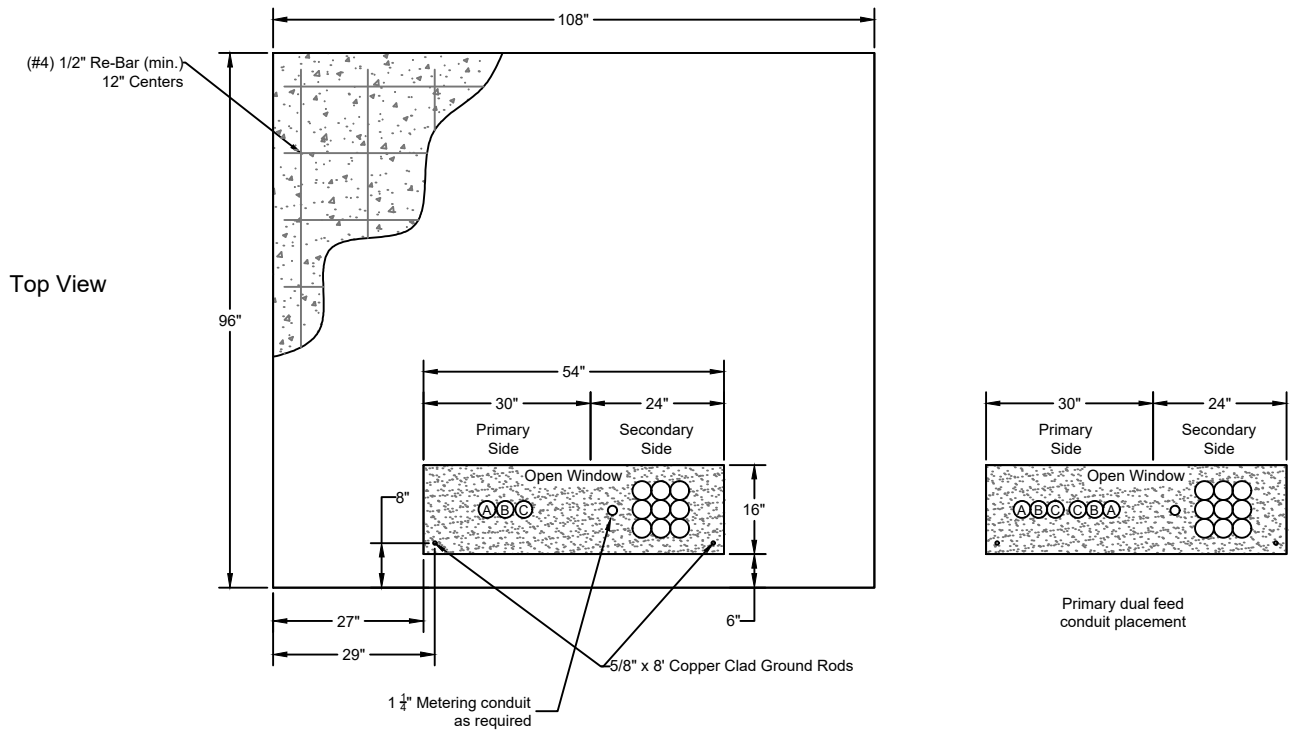
Underground conduit to be installed according to NBU specification EU-910. **Conduit to be sized by NBU** and have 1" projection above concrete, 36" radius, 90° sweeps. Pull string to be installed by customer.

Copper-clad ground rods, 5/8" x 8', 2 required, to have 4" projection above top on concrete.

Concrete shall be 3000 PSI minimum.

All primary and secondary stub outs shall be 10'-0" minimum.

Conduit positions, concrete forms, re-bar, and trench compaction to be approved by NBU before concrete is poured



COMPACTED TxDOT GRADE 4, TYPE A, FLEXIBLE BASE MATERIAL, OR OTHER APPROVED MATERIAL FROM BOTTOM OF TRENCH TO BOTTOM OF PAD.



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THREE PHASE TRANSFORMER FOUNDATION  
 500 - 2500 kVA

ISSUED	SCALE	DRAWING NUMBER
12/22	NTS	EU-520

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

Locations are determined by NBU Electrical Engineering. All customer installations require inspection by NBU.

Underground conduit installed according to NBU specification EU-910. **Conduit to be sized by NBU** and have 1" projection above top of concrete. Pull string to be installed by customer in each conduit.

Install #6 copper inside 1/2" conduit. Connect #6 copper to ground rod and leave 5' coil buried outside of slab at 12" depth.

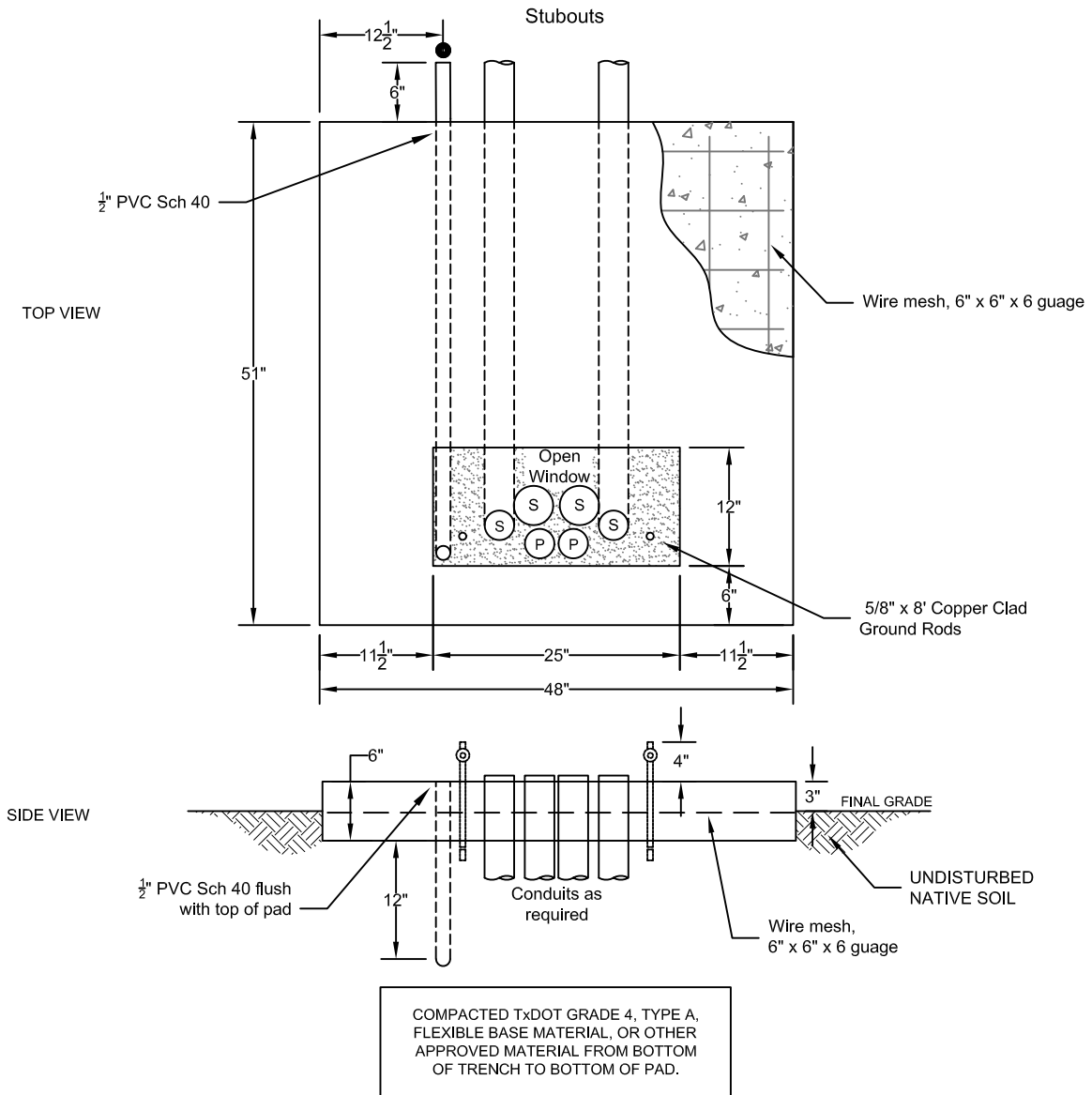
Copper-clad ground rods, 5/8" x 8", 2 required, to have 4" projection above top of concrete.

Concrete shall be 3000 PSI minimum.

All primary and secondary stub outs shall be 10'-0" minimum.

Conduit positions, concrete forms, re-bar, and trench compaction to be approved by NBU before concrete is poured

DiversiTech Part # F4851-62CL1225 suitable substitute for poured-in-place.



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SINGLE PHASE TRANSFORMER PAD

ISSUED

04/21

SCALE

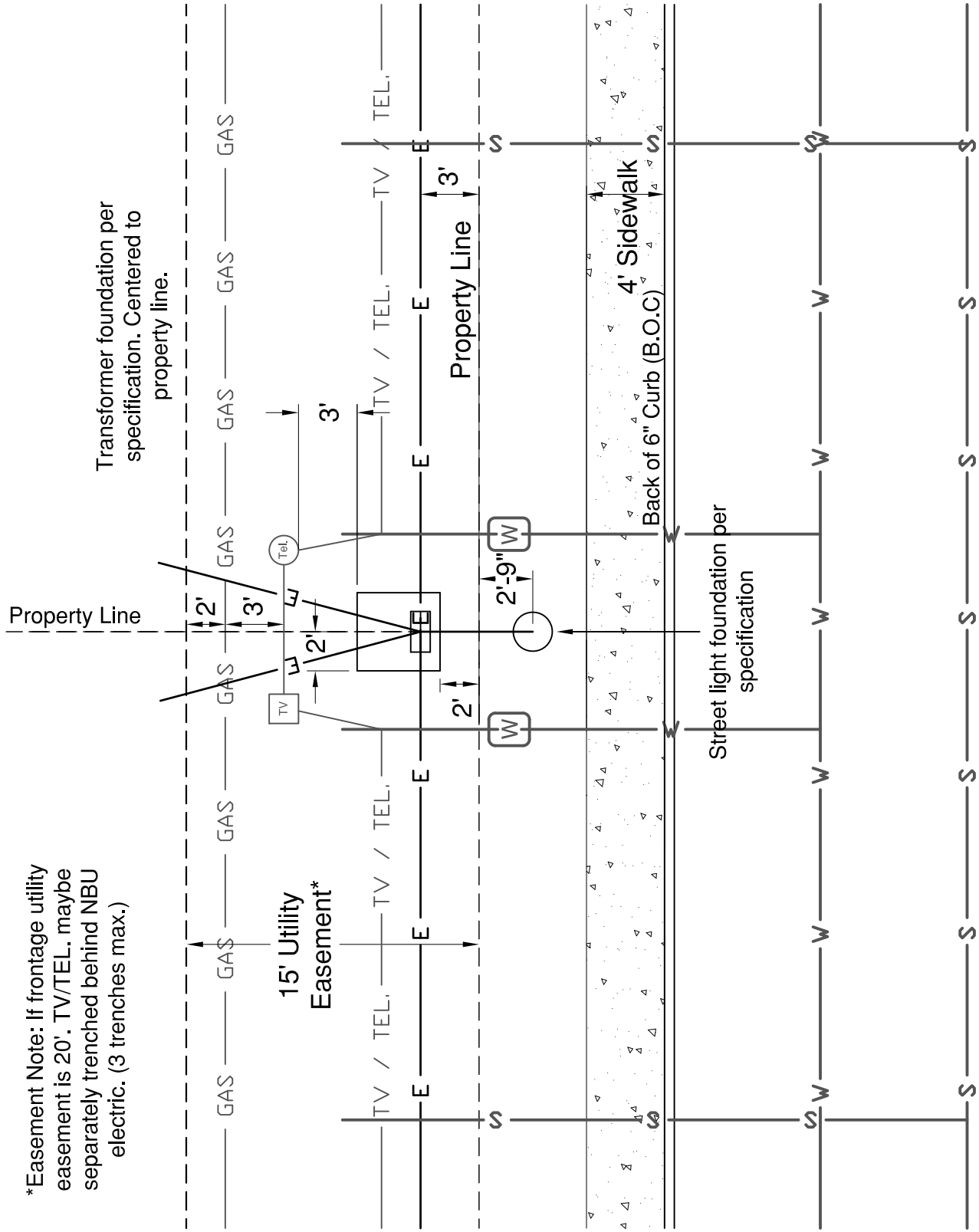
NTS

DRAWING NUMBER

EU-530

\*Easement Note: If frontage utility easement is 20'. TV/TEL. maybe separately trenched behind NBU electric. (3 trenches max.)

Transformer foundation per specification. Centered to property line.



Note: Water/sewer must be a min. of 5ft from the property line



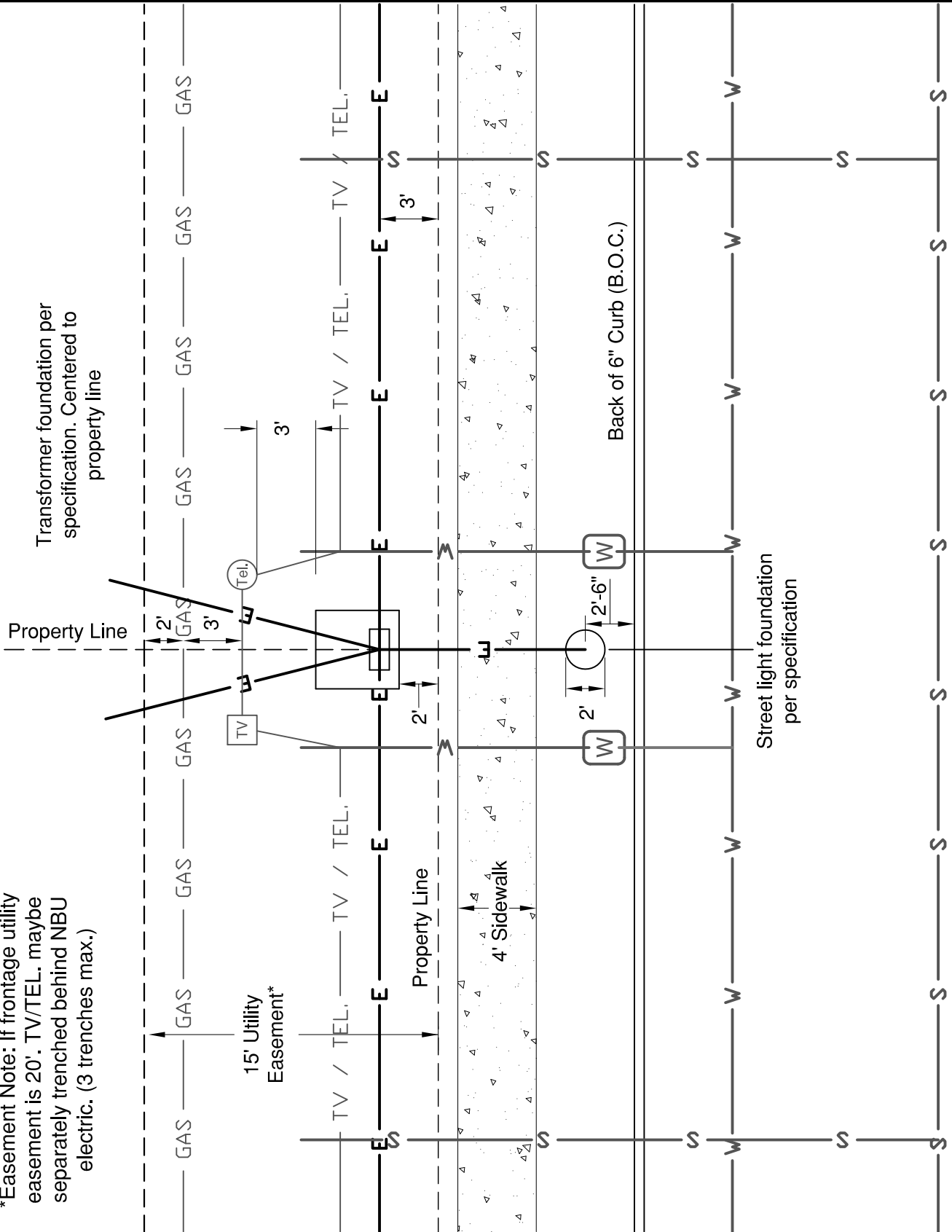
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ELECTRIC PLACEMENT TYPICAL EASEMENT  
 OPTION 1

ISSUED	SCALE	DRAWING NUMBER
03/19	NTS	EU-710

\*Easement Note: If frontage utility easement is 20'. TV/TEL. may be separately trenched behind NBU electric. (3 trenches max.)

Transformer foundation per specification. Centered to property line



Note: Water/sewer must be a min. of 5ft from the property line



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ELECTRIC PLACEMENT TYPICAL EASEMENT  
 OPTION 1.1

ISSUED

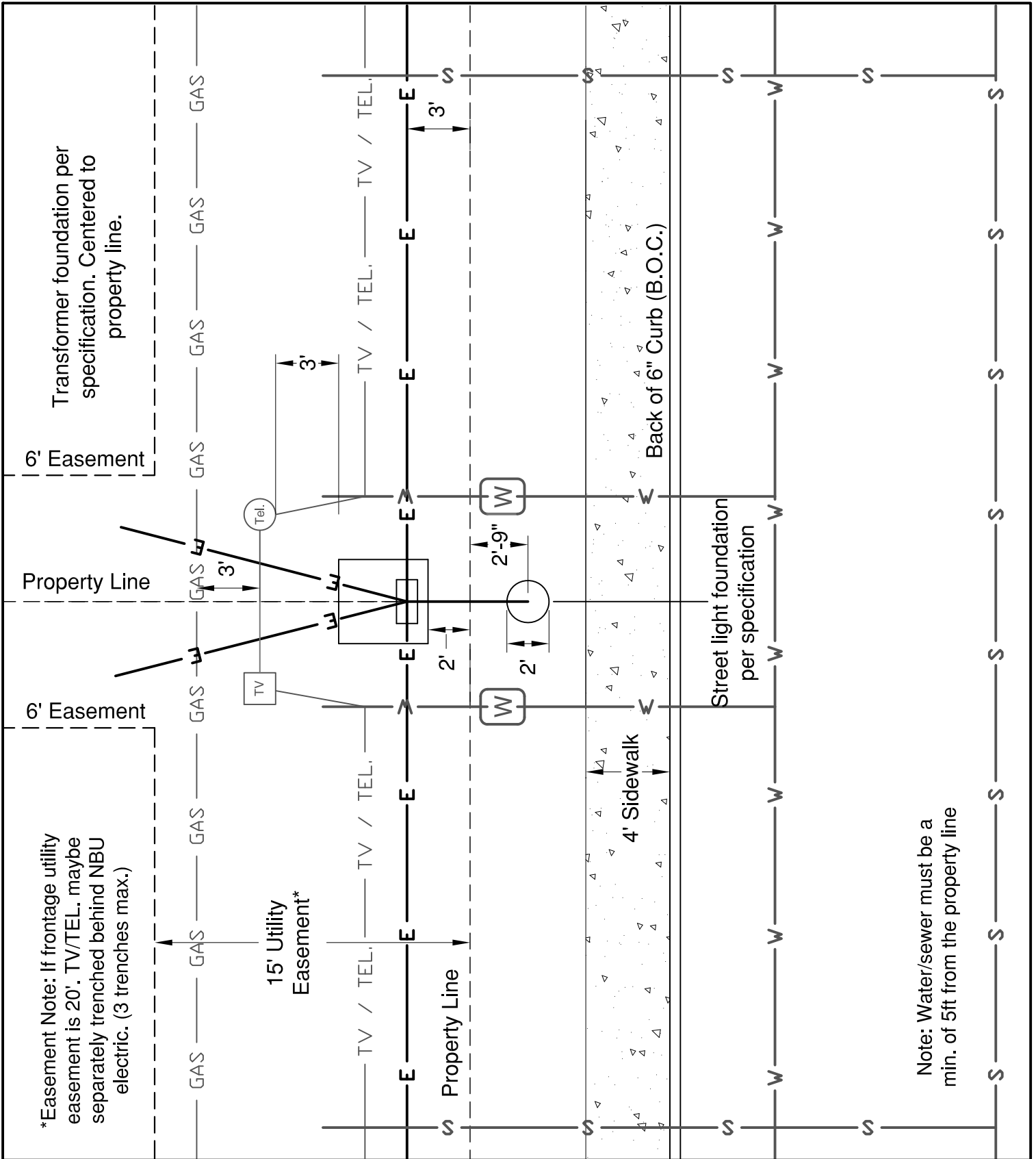
03/19

SCALE

NTS


DRAWING NUMBER

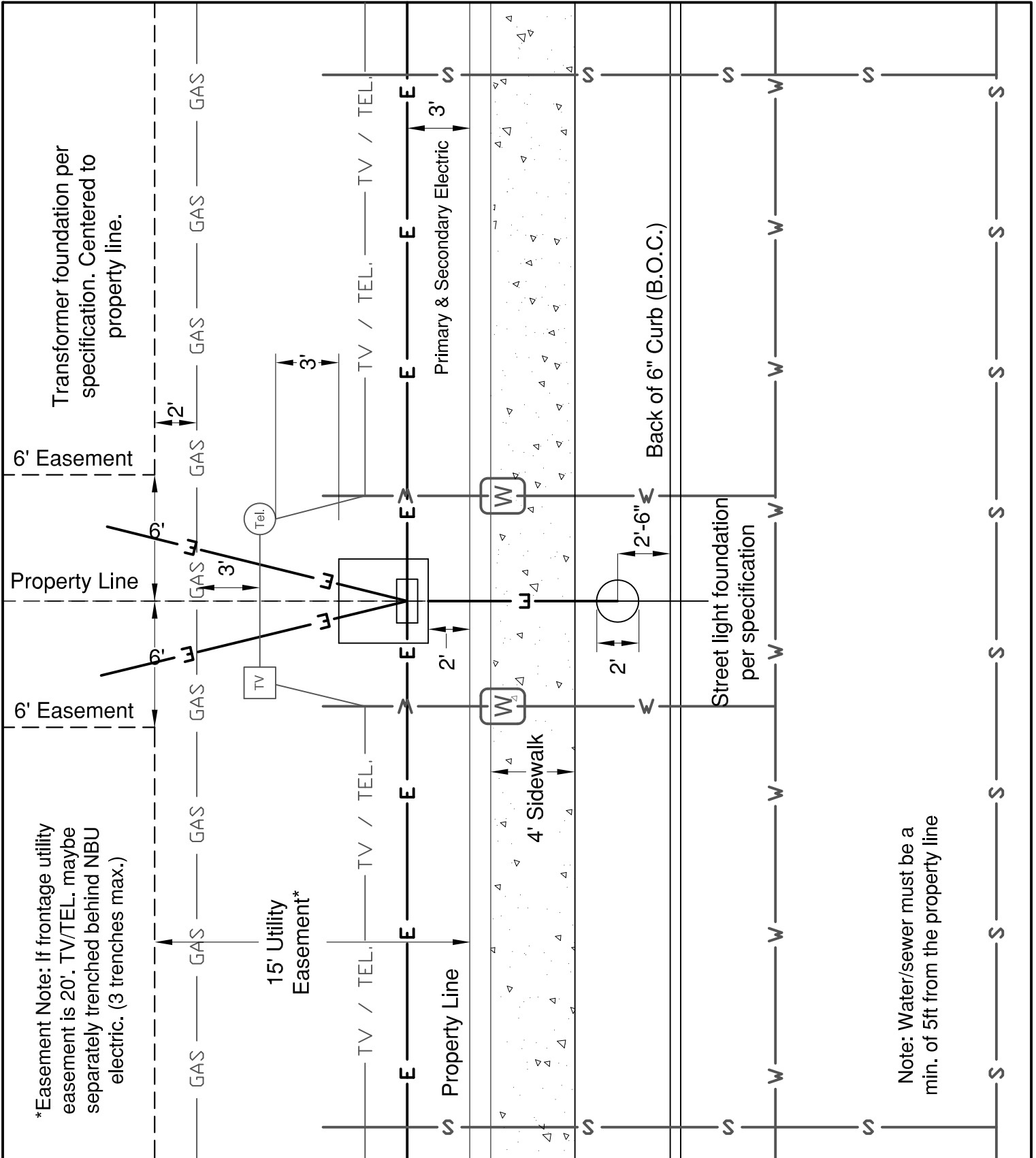
EU-715



\*Easement Note: If frontage utility easement is 20'. TV/TEL. may be separately trenched behind NBU electric. (3 trenches max.)

Note: Water/sewer must be a min. of 5ft from the property line

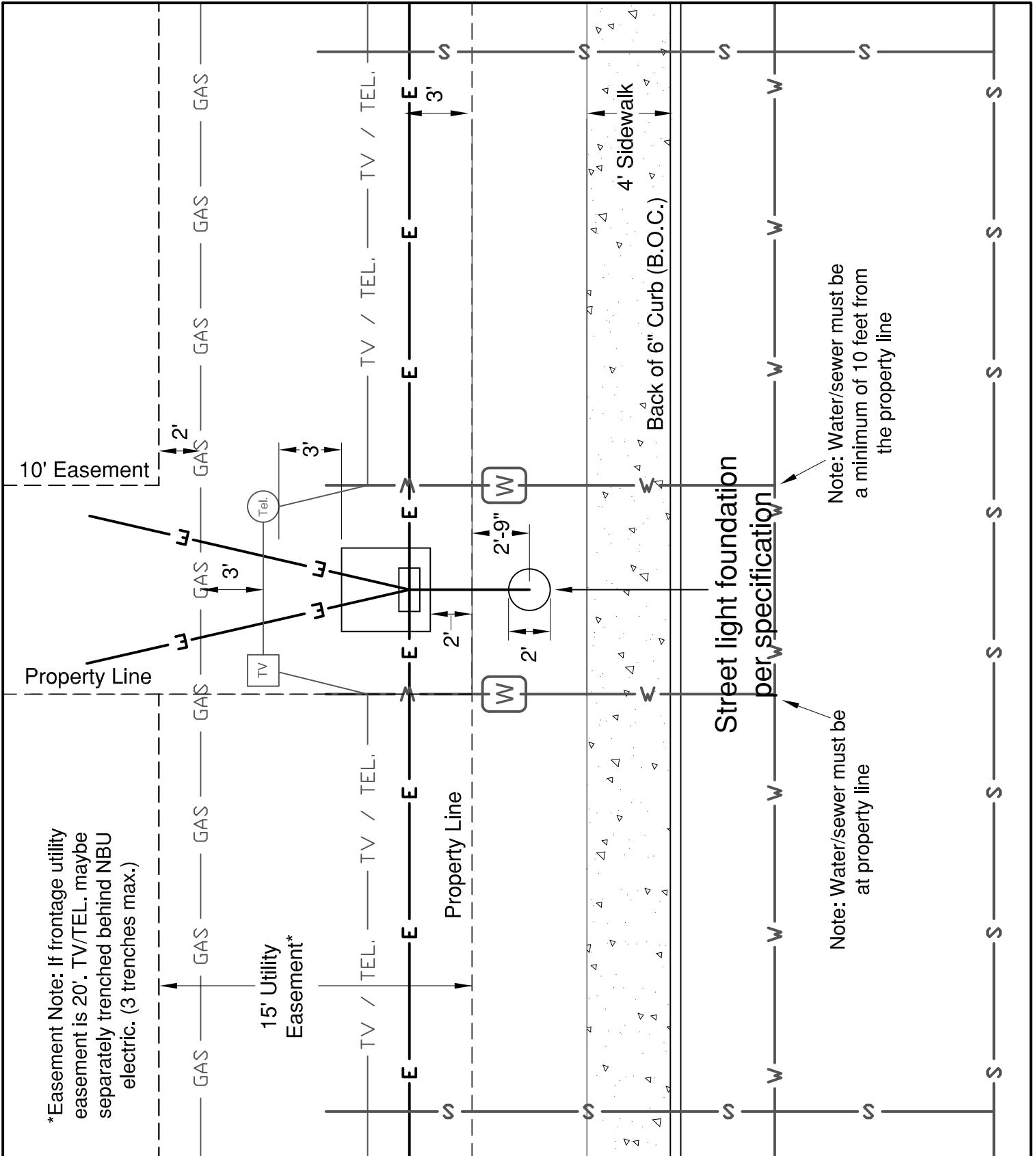
	Electric Engineering 355 FM 306 PO Box 310289 New Braunfels, TX 78131-0289 830-608-8951	<b>ELECTRIC PLACEMENT          ZERO LOT LINE EASEMENT          OPTION 2</b>		
		ISSUED 03/19	SCALE NTS	DRAWING NUMBER EU-720



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**ELECTRIC PLACEMENT  
 ZERO LOT LINE EASEMENT  
 OPTION 2.1**

ISSUED	SCALE	DRAWING NUMBER
03/19	NTS	EU-725



\*Easement Note: If frontage utility easement is 20'. TV/TEL. maybe separately trenched behind NBU electric. (3 trenches max.)

15' Utility Easement\*

Note: Water/sewer must be a minimum of 10 feet from the property line

Note: Water/sewer must be at property line

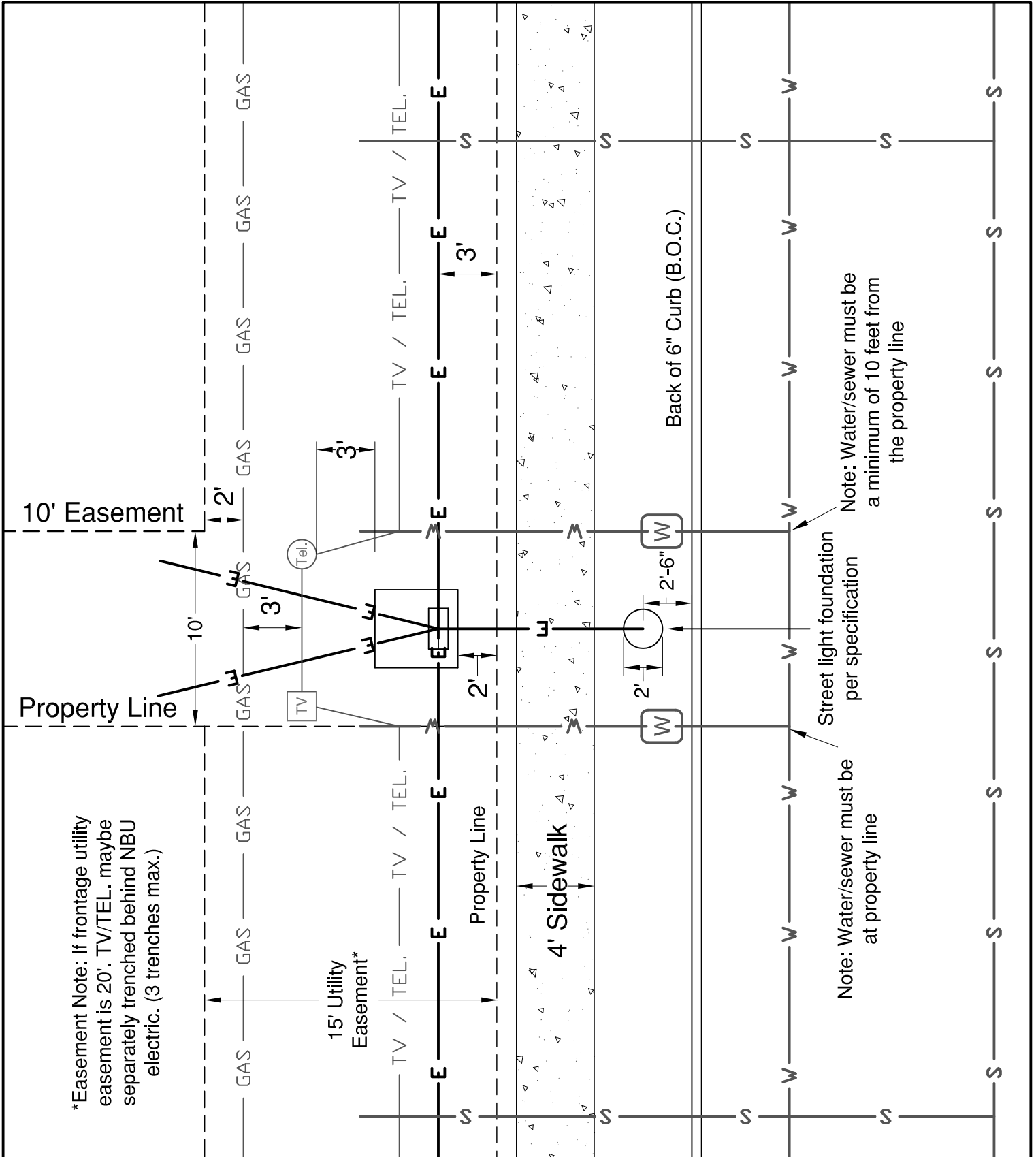
Street light foundation per specification



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ELECTRIC PLACEMENT  
 ZERO LOT LINE EASEMENT  
 OPTION 3

ISSUED	SCALE	DRAWING NUMBER
03/19	NTS	EU-730

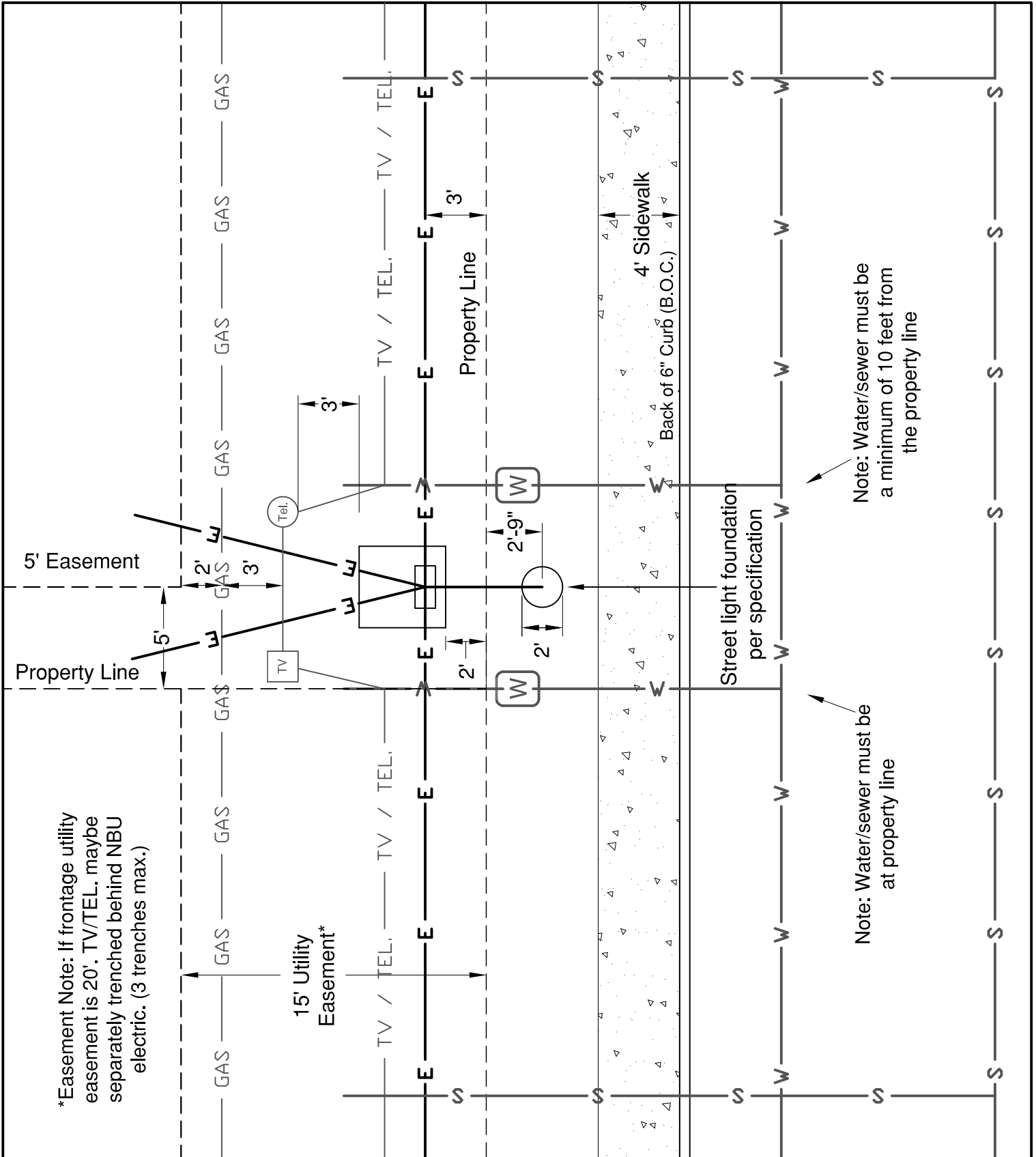


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**ELECTRIC PLACEMENT ZERO LOT LINE EASEMENT  
 OPTION 3.1**

ISSUED	SCALE	DRAWING NUMBER
03/19	NTS	EU-735





Note: Water/sewer must be a minimum of 10 feet from the property line

Note: Water/sewer must be at property line

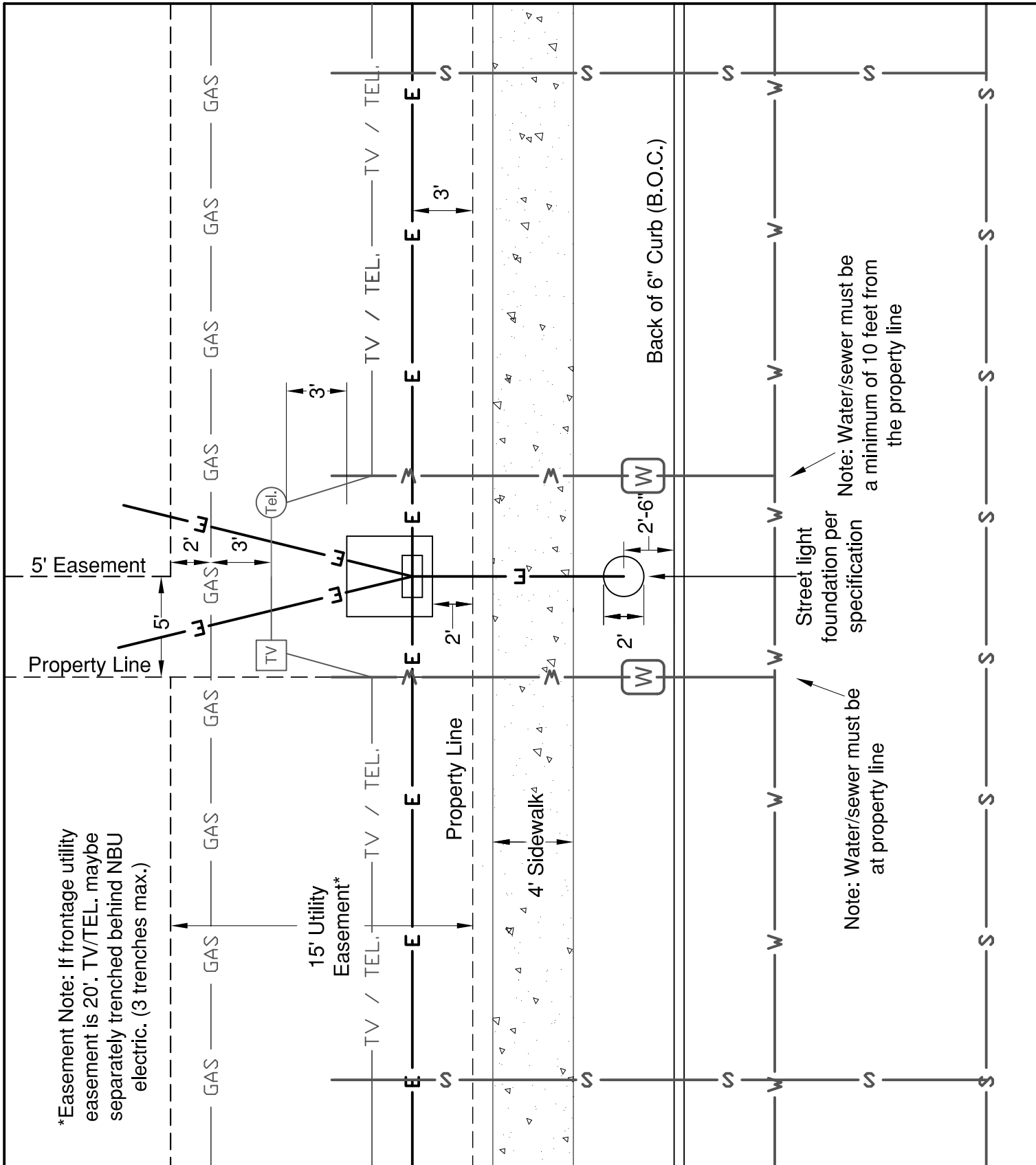
\*Easement Note: If frontage utility easement is 20', TV/TEL. may be separately trenched behind NBU electric. (3 trenches max.)



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**ELECTRIC PLACEMENT ZERO LOT LINE EASEMENT  
 OPTION 4**

ISSUED	SCALE	DRAWING NUMBER
03/19	NTS	EU-740



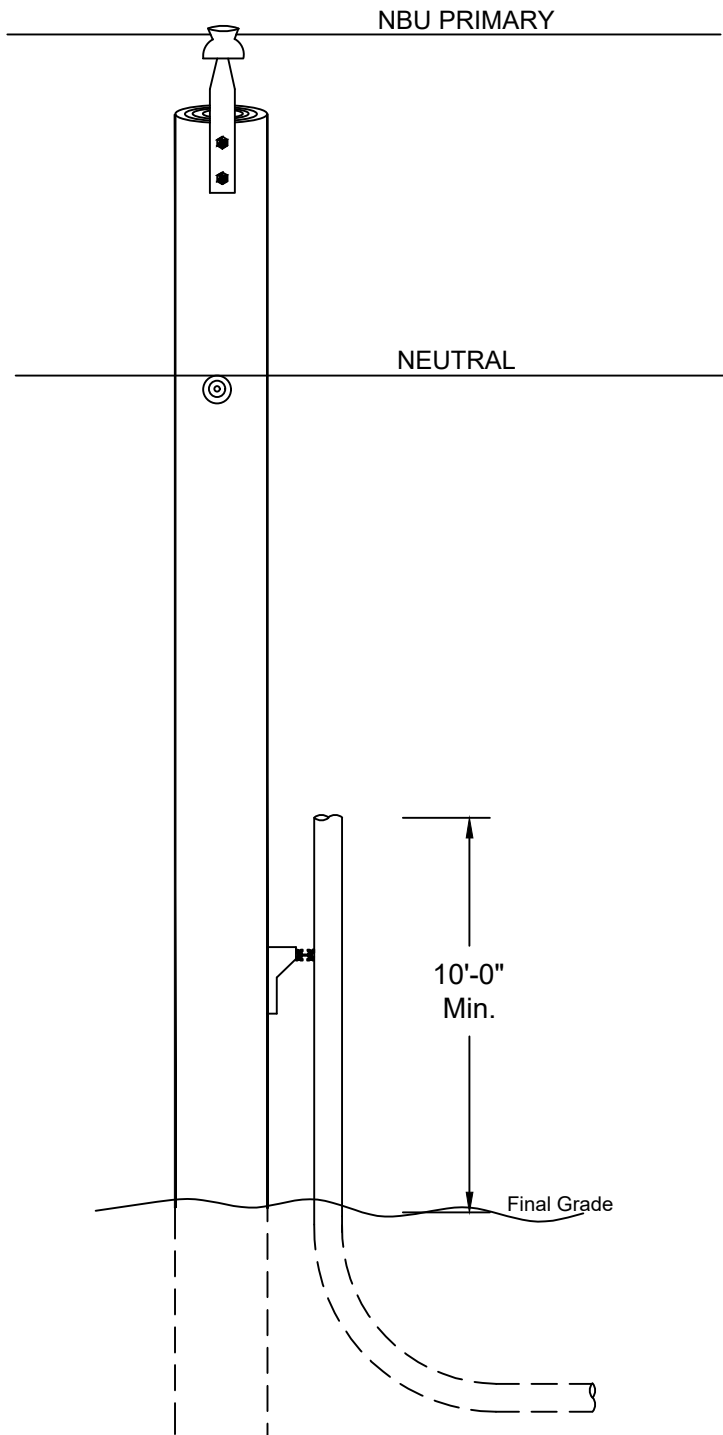
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ELECTRIC PLACEMENT ZERO LOT LINE EASEMENT  
 OPTION 4.1

ISSUED	SCALE	DRAWING NUMBER
03/19	NTS	EU-745

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific installation.

Locations are determined by NBU. All customer installations require inspection by NBU.



Pole and bracket installed by NBU. Call 830-608-8800 when ready for bracket installation. Stub out (to NBU installed riser) must be plumb with pole and attached to bracket by temporary means (taped, wired, etc.)

Offset from pole to center of conduit shall be 7 1/2". Extend conduit 10'-0" min. above final ground grade.

Schedule 80 PVC shall be used for all exposed conduit above ground. Underground conduit, including stub out, is sized by NBU and installed according to specification EU-910. Call 830-608-8951 to verify conduit size.



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RISER POLE STUB OUT

ISSUED

12/20

SCALE

NTS

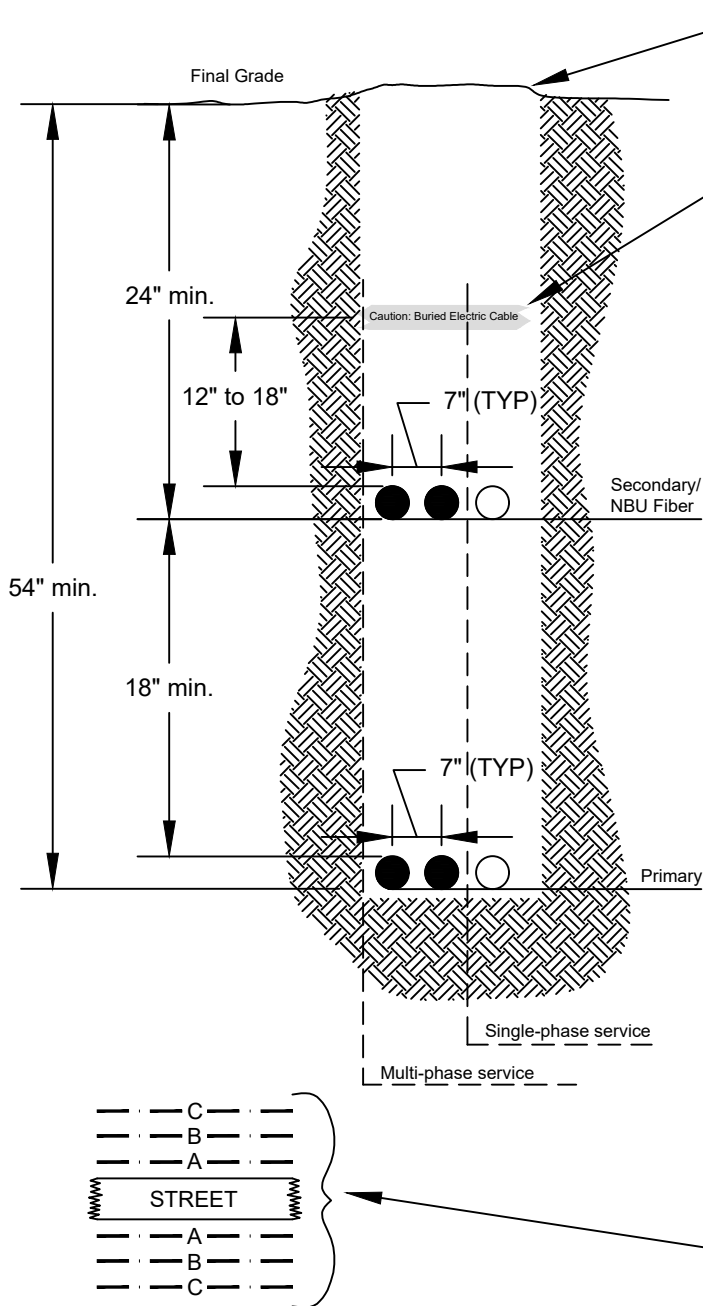
DRAWING NUMBER

EU-800

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific job.

Locations are determined by NBU. All customer installations require inspection by NBU.

All Primary and Secondary stubouts shall be 5' minimum.



Mound earth 3" to 4" above final ground grade.

A 6" wide plastic caution tape, red or yellow in color with black lettering reading, "Caution: Buried Electric Cable Below", will be placed in the trench 12" to 18" above electrical conduit but below any communication cables. For more than 2 conduits horizontally in trench, 2 tapes shall be installed.

Customer shall excavate trench to proper depth and install PVC Schedule 40 Electrical Conduit NEMA TC 2. Conduit elbows (sweeps) for primary shall have 36" minimum radius. Conduit elbows for secondary shall have 18" minimum radius.

**CONDUIT SHALL BE SIZED BY NBU.**

Conduit installations shall have a 3" minimum sand bed below and beside conduit and 12" minimum above.

Where electrical equipment foundations (for transformers, junctions boxes, switchgear) lie on top of trench line, the foundation area shall be back filled with approved compacted base material for the entire depth of the trench.

Trenches which cross or will be under streets, commercial driveways, or parking lots shall be back filled with approved compacted base material.

Customer to furnish and install pull string.

No pipe, gas, or water line shall be closer than 36" horizontally from any underground electrical conduit (parallel construction). No pipe, gas, or water line shall be closer than 12" vertically from any underground electrical conduit (perpendicular crossing).

At no time shall any electric line, primary or secondary, be connected for service if found to cross under any building foundation.

**Additional depth maybe required at the discretion of a NBU Electric Inspector.**

For multi-phase service, conductor phase orientation shall be as shown unless approved otherwise by NBU.



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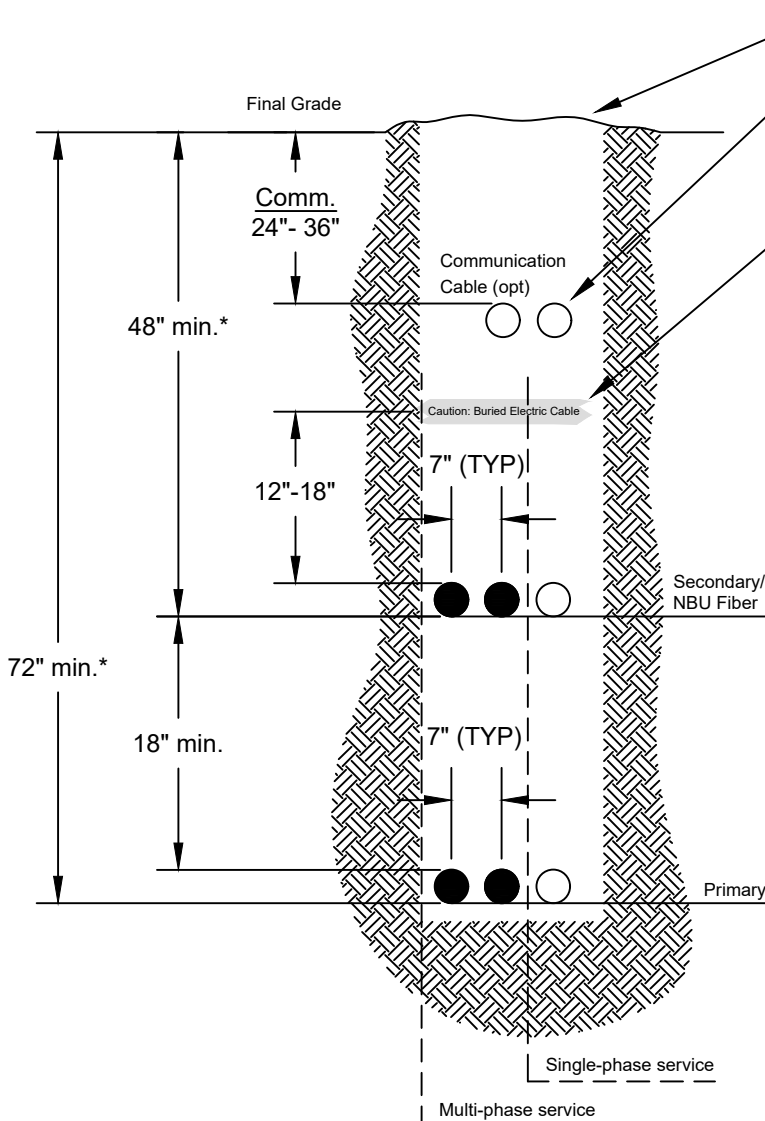
**UNDERGROUND CONDUIT INSTALLATION  
 (ELECTRIC ONLY)**

ISSUED	SCALE	DRAWING NUMBER
11/22	NTS	EU-910

This specification shall be used only in conjunction with the NBU Electrical Connection Policy and may not reflect all requirements of a specific job.

Locations are determined by NBU. All customer installations require inspection by NBU.

All Primary and Secondary stubouts shall be 5' minimum.



Mound earth 3" to 4" above final ground grade.

Communication cable/conduit shall be installed above all electrical conduit(s) and caution tape. All communication cable(s) shall be pulled through conduit, no direct burial.

A 6" wide plastic caution tape, red or yellow in color with black lettering reading, "Caution: Buried Electric Cable Below", will be placed in the trench 12" to 18" above electrical conduit but below any communication cables. For more than 2 conduits horizontally in trench, 2 tapes shall be installed.

Customer shall excavate trench to proper depth and install PVC Schedule 40 Electrical Conduit NEMA TC 2. Conduit elbows (sweeps) for primary shall have 36" minimum radius. Conduit elbows for secondary shall have 18" minimum radius.

**CONDUIT SHALL BE SIZED BY NBU.**

Where trenches consist of rock, conduit installations shall have a 3" minimum sand bed below and beside conduit and 12" minimum above. NBU Electric Inspector reserves the right to determine backfill material.

Where electrical equipment foundations (for transformers, junctions boxes, switchgear) lie on top of trench line, the foundation area shall be back filled with approved compacted base material for the entire depth of the trench.

Trenches which cross or will be under streets, commercial driveways, or parking lots shall be back filled with approved compacted base material.

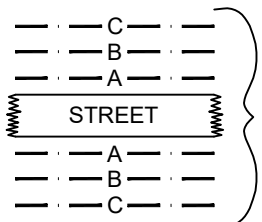
Customer to furnish and install pull string.

No pipe, gas, or water line shall be closer than 36" horizontally from any underground electrical conduit (parallel construction). No pipe, gas, or water line shall be closer than 12" vertically from any underground electrical conduit (perpendicular crossing).

At no time shall any electric line, primary or secondary, be connected for service if found to cross under any building foundation.

**\*Service conduits from meter back to source shall be installed at 24" min. Additional depth maybe required at the discretion of a NBU Electric Inspector.**

For multi-phase service, conductor phase orientation shall be as shown unless approved otherwise by NBU.



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**UNDERGROUND CONDUIT INSTALLATION  
 (COMMON TRENCH)**

ISSUED	SCALE	DRAWING NUMBER
11/22	NTS	EU-915