

REQUIREMENTS FOR ELECTRIC SERVICE AND METER INSTALLATIONS

**GREER, SC
COMMISSION OF PUBLIC WORKS**



NOVEMBER 2024

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WATER	ELECTRIC	WASTEWATER	GAS
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INTRODUCTION

THE INFORMATION CONTAINED IN THIS DOCUMENT HAS BEEN PREPARED TO ASSIST BOTH GREER CPW PERSONNEL AND GREER CPW CUSTOMERS IN THE APPLICATION, INSTALLATION, AND CONSTRUCTION OF ELECTRIC LINES. THIS INFORMATION IS REFLECTIVE OF THE CURRENT GREER CPW ELECTRIC EXTENSION POLICY AND IS INTENDED TO PROVIDE CLEAR DISTINCTIONS BETWEEN THE RESPONSIBILITIES OF GREER CPW AND OF THE CUSTOMER. HOWEVER, IN ALL CASES, IT IS CRITICAL TO MAINTAIN AN OPEN DIALOG BETWEEN GREER CPW AND THE CUSTOMER REGARDING CONDUCTOR QUANTITIES, CONDUIT SIZES AND LOCATIONS, CONNECTIONS, AND ELECTRICAL LOAD REQUIREMENTS. THIS WILL ENSURE THAT THE PROPER STANDARDS, ARE UTILIZED TO MEET THE CUSTOMER'S AND GREER CPW'S NEEDS.

GENERAL NOTES:

- AS OF OCTOBER 28, 2024, ALL NEW ELECTRIC SERVICES SHALL BE INSTALLED UNDERGROUND.
- ANY APARTMENT BUILDING OR COMPLEX WHERE A STRUCTURE HAS >50 UNITS, SHALL FALL UNDER THE THREE RESIDENTIAL CUSTOMER REQUIREMENTS.
- PROJECT COST(S) SHALL BILLED TO THE CUSTOMER PER THE CURRENT GREER CPW EXTENSION POLICY.
- MIXED USE DEVELOPMENTS (COMMERCIAL AND RESIDENTIAL UNITS WITHIN A SITE) SHALL FALL UNDER THE THE APPLICABLE RESIDENTIAL POLICY.

SINGLE PHASE RESIDENTIAL SERVICES - GREER CPW RESPONSIBILITIES

- PROVIDE AND INSTALL ALL ELECTRIC INFRASTRUCTURE UP TO THE LINE SIDE TERMINALS OF THE METER ENCLOSURE.

THREE PHASE RESIDENTIAL SERVICES - GREER CPW RESPONSIBILITIES

- PROVIDE AND INSTALL THE ELECTRIC PRIMARY CABLES, SWITCHGEAR, SWITCHGEAR PADS, AND TRANSFORMERS WITHIN THE SITE OR PROPERTY BEING DEVELOPED.
- PROVIDE AN INSTALL ALL ELECTRIC INFRASTRUCTURE EXTERNAL TO THE DEVELOPMENT SITE.
- PROVIDE AND INSTALL ELECTRIC WATT-HOUR METERS.

COMMERCIAL SERVICES - GREER CPW RESPONSIBILITIES

- PROVIDE AND INSTALL THE ELECTRIC PRIMARY CABLES, SWITCHGEAR, SWITCHGEAR PADS, AND TRANSFORMERS WITHIN THE SITE OR PROPERTY BEING DEVELOPED.
- PROVIDE AN INSTALL ALL ELECTRIC INFRASTRUCTURE EXTERNAL TO THE DEVELOPMENT SITE.
- PROVIDE AND INSTALL ELECTRIC WATT-HOUR METERS.
- PROVIDE CT METER ENCLOSURE (ONLY).

SINGLE PHASE RESIDENTIAL SERVICES - CUSTOMER/DEVELOPER RESPONSIBILITIES

- PROVIDE AND INSTALL ELECTRIC METER ENCLOSURE
- PROVIDE AND INSTALL ROAD SLEEVES AT ALL ROAD CROSSINGS. LOCATION OF SLEEVES TO BE DETERMINED BY GCPW.
- RISER CONDUIT FROM BELOW GRADE TO METER ENCLOSURE, SIZE MAY VARY DEPENDING ON METER ENCLOSURE SIZE AND ELECTRICAL LOADS REQUIRED BY THE CUSTOMER. CONTACT GCPW WITH QUESTIONS ON SIZING.

THREE PHASE RESIDENTIAL SERVICES - CUSTOMER/DEVELOPER RESPONSIBILITIES

- PROVIDE AND INSTALL CONDUIT FOR GCPW PRIMARY ELECTRIC FACILITIES THROUGHOUT THE SITE IN THE ROUTE AND MANNER AS DETERMINED BY GCPW.
- PROVIDE AND INSTALL ALL TRANSFORMER PADS TO GCPW SPECIFICATIONS.
- PROVIDE AND INSTALL ALL SECONDARY AND SERVICE CONDUCTORS FROM GCPW DESIGNATED POINT OF DELIVERY TO METER ENCLOSURE OR MAIN DISCONNECT.
- PROVIDE AND INSTALL ALL METER ENCLOSURES.

COMMERCIAL SERVICES - CUSTOMER/DEVELOPER RESPONSIBILITIES

- PROVIDE AND INSTALL CONDUIT FOR GCPW PRIMARY ELECTRIC FACILITIES THROUGHOUT THE SITE IN THE ROUTE AND MANNER AS DETERMINED BY GCPW.
- PROVIDE AND INSTALL ALL TRANSFORMER PADS TO GCPW SPECIFICATIONS.
- PROVIDE AND INSTALL ALL SECONDARY AND SERVICE CONDUCTORS FROM GCPW DESIGNATED POINT OF DELIVERY TO METER ENCLOSURE, CT CABINET, WIRING TROUGH OR MAIN DISCONNECT.
- PROVIDE AND INSTALL ALL METER ENCLOSURES, EXCEPT CT METER ENCLOSURES.
- PROVIDE AND INSTALL CT CABINET, IF SERVICE IS TO BE CT'D.

CUSTOMER/DEVELOPER RESPONSIBILITIES OF NOTIFICATION

THE CUSTOMER IS RESPONSIBLE FOR CONTACTING A GREER CPW REPRESENTATIVE TO INSPECT AND APPROVE THE THREE PHASE TRANSFORMER PAD TO BE USED. IF USING A FIBERGLASS PAD, CONTACT THE GREER CPW REPRESENTATIVE AFTER INSTALLATION SO THAT THE CORRECT PAD CAN BE CONFIRMED AND VERIFIED THAT IT IS IN THE CORRECT LOCATION AND LEVEL. IF CONSTRUCTING THE PAD ON-SITE, THE GREER REPRESENTATIVE MUST BE CONTACTED TO INSPECT THE FORM OF THE PAD, INCLUDING REBAR, PRIOR TO POURING THE CONCRETE.

ALL PRIMARY ELECTRIC CONDUIT INSTALLED BY DEVELOPER MUST BE INSPECTED AND APPROVED PRIOR COVERING OF THE CONDUIT.



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INTRODUCTION, REQUIREMENTS AND RESPONSIBILITIES

WATER	ELECTRIC	WASTEWATER	GAS
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THREE PHASE TRANSFORMER PAD TYPE REQUIREMENTS

THE "PIT PAD" SHALL BE USED FOR ALL THREE-PHASE PAD-MOUNTED TRANSFORMER INSTALLATIONS. THE CUSTOMER MAY ELECT TO PURCHASE AND INSTALL A FIBERGLASS PIT PAD INSTEAD OF POURING A PAD IN PLACE. THE SPECIFICATIONS FOR SMALL FIBERGLASS PIT PAD FOUND ON PAGE#EE-19. THE SPECIFICATIONS FOR A LARGE FIBERGLASS PIT PAD FOUND ON PAGE#EE-20.

THREE PHASE TRANSFORMER PAD SIZE REQUIREMENTS

THERE ARE TWO DIFFERENT SIZE PADS FOR THREE-PHASE PAD-MOUNTED TRANSFORMERS. THE PAD SIZE SHALL BE DETERMINED BASED ON THE PARAMETERS SPECIFIED IN THE TABLE BELOW.

TRANSFORMER SIZE	TRANSFORMER PRIMARY VOLTAGE CLASS	PAD SIZE	PIT PAD DWG.
750KVA AND BELOW	15 KV AND BELOW	SMALL	PAGE EE-4
1000KVA - 2500KVA	15 KV AND BELOW	LARGE	PAGE EE-5

ALLOWABLE CONDUCTOR REQUIREMENTS PER 3 PHASE TRANSFORMER:

MAXIMUM NUMBER OF CONDUCTORS ALLOWED (PER PHASE): 8
 MAXIMUM CONDUCTOR SIZE: 750 kCM

SECONDARY BUS ENCLOSURE REQUIREMENTS

A SEPARATE SECONDARY BUS ENCLOSURE IS REQUIRED WHENEVER THE CUSTOMER IS INSTALLING MORE THAN THE MAXIMUM ALLOWABLE NUMBER OF SECONDARY CONDUCTORS PER PHASE.

ALLOWABLE CONDUCTOR REQUIREMENTS PER 1 PHASE TRANSFORMER:

MAXIMUM NUMBER OF CONDUCTORS ALLOWED (PER PHASE): 6
 MAXIMUM CONDUCTOR SIZE: 500 kCM

ELECTRIC PRIMARY CONDUIT REQUIREMENTS:

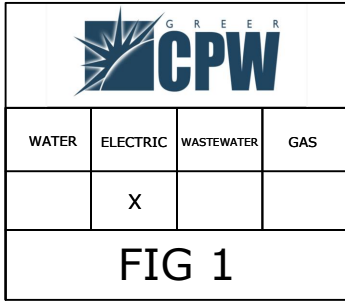
SCHEDULE 40 GRAY PVC ELECTRICAL CONDUIT
 DEGREE RATING 90° C
 STANDARD SIZE: 3 INCH
 DEVELOPER TO VERIFY CONDUIT SIZE WITH GREER CPW REPRESENTATIVE PRIOR TO PURCHASE.



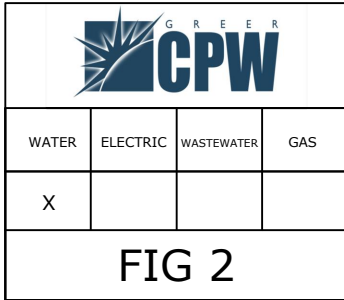
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INTRODUCTION, REQUIREMENTS AND RESPONSIBILITIES CONT'D

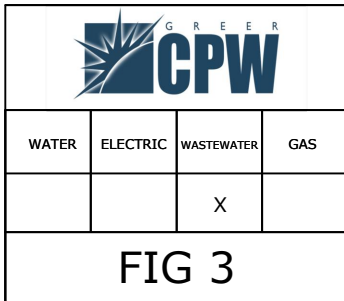
WATER	ELECTRIC	WASTEWATER	GAS
	X		
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THE INFORMATION IN THIS FIGURE WOULD BE APPLICABLE TO ELECTRICAL CONNECTION REQUESTS.



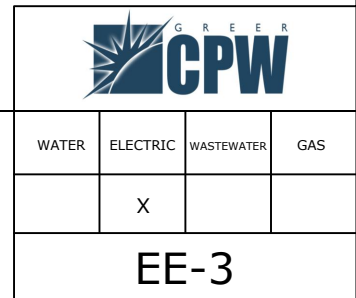
THE INFORMATION IN THIS FIGURE WOULD BE APPLICABLE TO WATER CONNECTION REQUESTS.



THE INFORMATION IN THIS FIGURE WOULD BE APPLICABLE TO WASTEWATER CONNECTION REQUESTS.

NOTES:

1. THE IMAGES SHOWN ABOVE APPEAR IN THE LOWER RIGHT-HAND CORNER OF ALL FIGURES IN THIS MANUAL.



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**SERVICE REQUIREMENTS FIGURES
HOW TO APPLY THESE DRAWINGS**

CONDUIT SPECIFICATIONS

CONDUIT FOR GREER CPW PRIMARY CABLES SHALL BE SPECIFIED BY A GREER CPW REPRESENTATIVE TO BE 3-INCH DIAMETER AND INSTALLED BY THE CUSTOMER PRIOR TO POURING/INSTALLING THE CONCRETE PAD. THERE SHALL BE EIGHT PRIMARY CONDUITS INSTALLED [ONE FOR EACH PHASE PRIMARY CABLES PLUS A SPARE]. THE CONDUITS INSTALLED IN THE PRIMARY CONDUIT WINDOW SHALL BE A SCHEDULE 40 ELBOW WITH A MINIMUM 36-INCH BEND RADIUS. A GREER CPW REPRESENTATIVE MAY SPECIFY A HIGHER BEND RADIUS, DEPENDING ON THE SIZE OF THE PRIMARY CABLE.

INSTALL CONDUIT END BELLS WHERE CABLES EXIT CONDUITS IN THE PRIMARY AND SECONDARY COMPARTMENTS OF THE TRANSFORMER TO MINIMIZE DAMAGE TO THE CABLES DURING INSTALLATION.

CUSTOMER SHALL INSTALL THE CONDUIT FOR THE PRIMARY CONDUCTORS AS CLOSE TO THE CENTER OF THE DESIGNATED PRIMARY SIDE OF THE WINDOW OF THE PAD AS PRACTICAL.

CUSTOMER'S SERVICE CONDUITS SHALL NOT CROSS OR INTERFERE WITH THE PRIMARY CONDUITS. THE SERVICE CONDUITS CAN EXIT THE SECONDARY SIDE OF THE PAD FROM THE FRONT, REAR OR RIGHT SIDE. THE SERVICE CONDUITS SHALL NOT EXTEND OUTSIDE THE DESIGNATED SECONDARY SIDE OF THE WINDOW OF THE PAD.

CONCRETE SPECIFICATIONS (IF CUSTOMER CONSTRUCTS PAD)

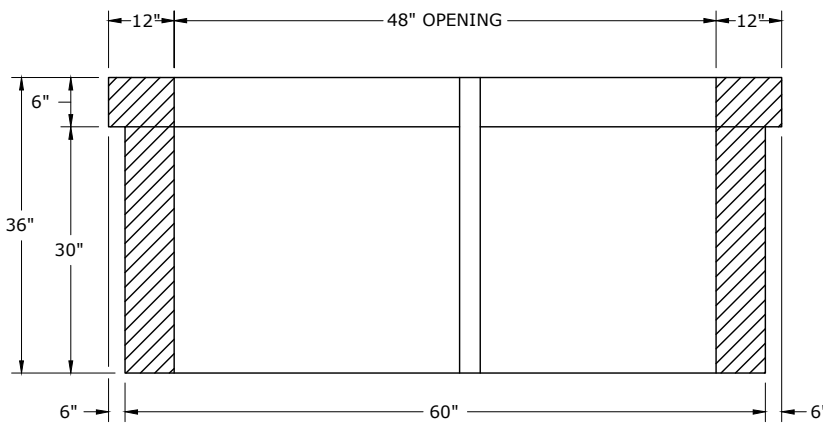
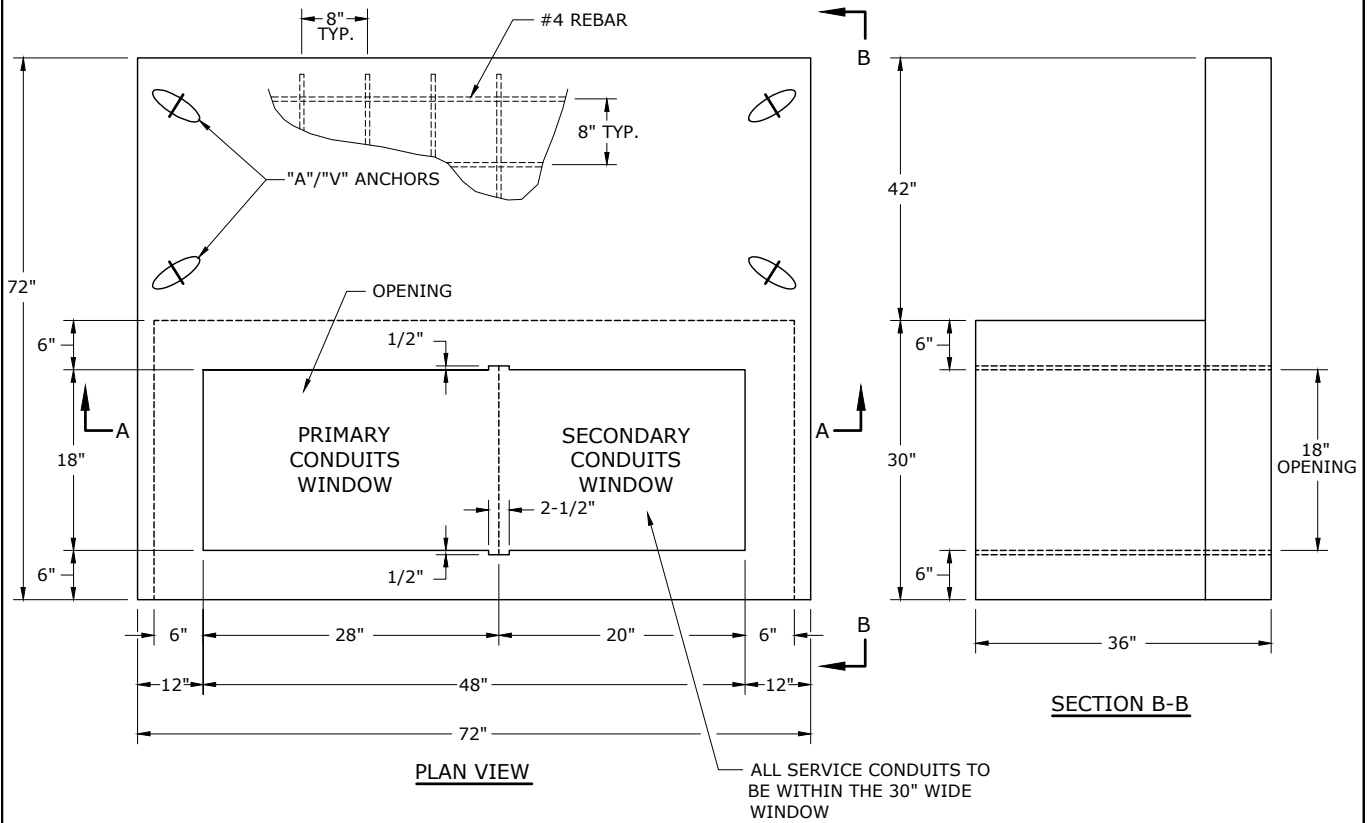
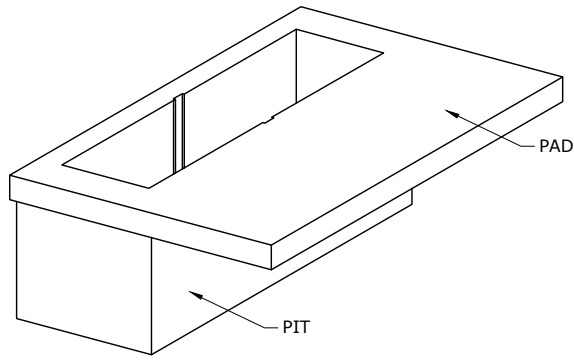
1. CONCRETE MIX USED FOR TRANSFORMER PADS SHALL MEET THE FOLLOWING REQUIREMENTS:
 - MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,000 PSI
 - MAXIMUM WATER/CEMENT RATIO OF 0.50
 - MAXIMUM SLUMP OF 4 INCHES
 - AIR-ENTRAINMENT CONTENT BETWEEN 4 AND 8 PERCENT
2. CONCRETE SHALL BE AFFORDED ADEQUATE CURE FOR A MINIMUM OF:
 - FIVE (5) DAYS IF THE AMBIENT TEMPERATURE IS OVER 70 DEGREES F OR
 - SEVEN (7) DAYS IF THE AMBIENT AVERAGE TEMPERATURE IS BELOW 70 DEGREES F.
3. ADEQUATE CURE CAN BE PERFORMED BY ANY OF THE FOLLOWING METHODS:
 - WATERPROOF MEMBRANES
 - SPRINKLING OR SOAKING
 - CURING COMPOUNDS
4. PAD SHALL BE SUPPORTED ON A SUB-BASE OF SAND, GRAVEL OR CRUSHED STONE. THE GRANULAR SUB-BASE IS TO BE A MINIMUM OF FOUR (4) INCHES THICK AND SHALL BE COMPACTED WITH A VIBRATORY COMPACTOR.
5. DAMPEN THE SUB-BASE PRIOR TO CONCRETE PLACEMENT. AT THE TIME OF PLACEMENT, THE SUB-BASE SHALL NOT CONTAIN STANDING WATER.
6. THE TOP OF THE CONCRETE PAD MUST BE STEEL TROWELED AND COMPLETELY SMOOTH AND LEVEL TO PREVENT "GAPS" BETWEEN THE TRANSFORMER AND THE SURFACE OF THE CONCRETE PAD.



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CONDUIT AND CONCRETE SPECIFICATIONS
FOR 3 PHASE TRANSFORMER PADS

WATER	ELECTRIC	WASTEWATER	GAS
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EE-4			

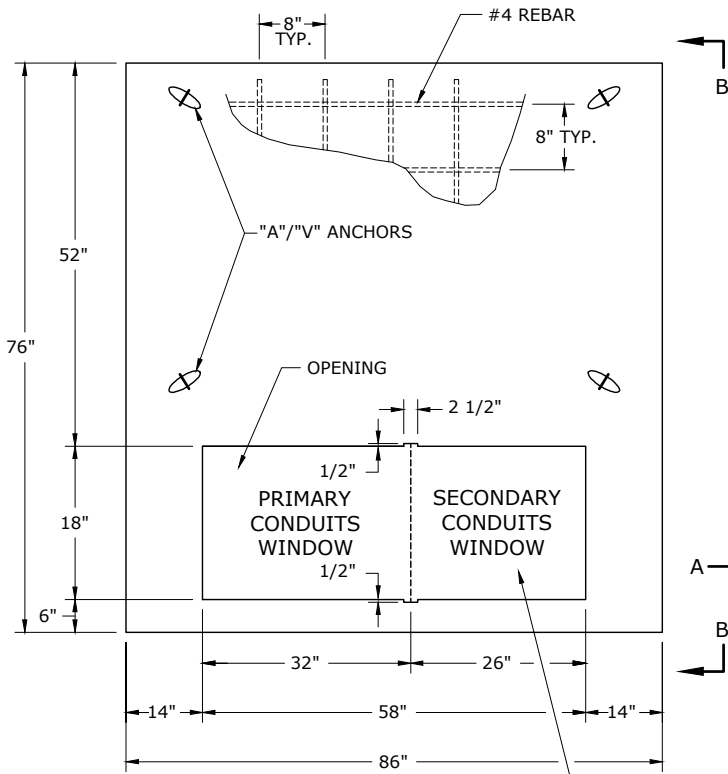
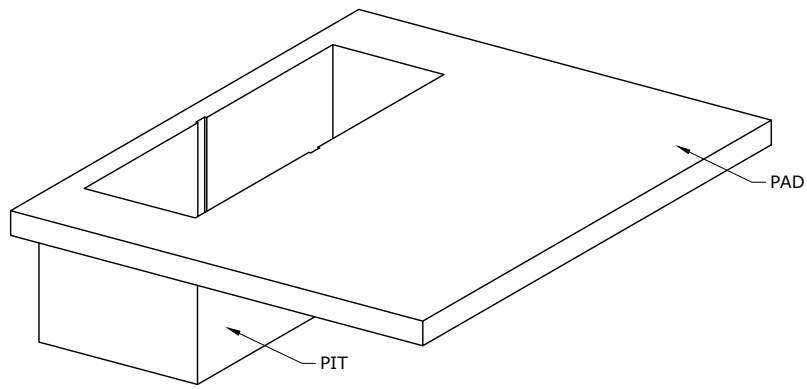


NOTE: FOR INSTALLATIONS OF 750KVA OR LESS

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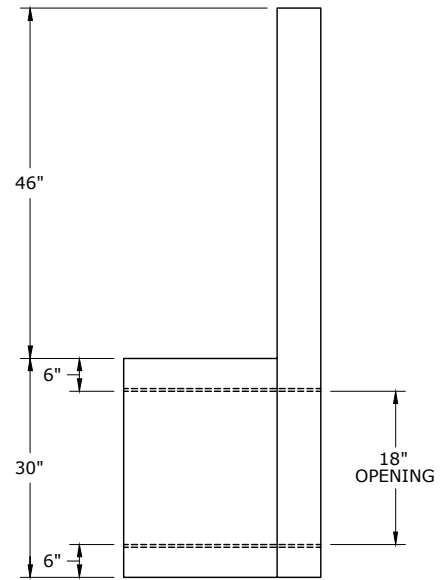
SMALL PIT PAD SPECIFICATIONS

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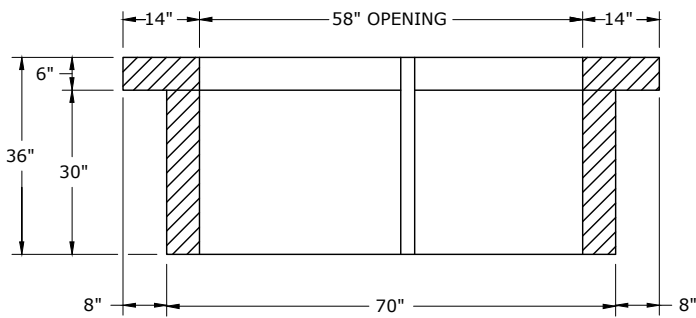


PLAN VIEW

ALL SERVICE CONDUITS TO BE WITHIN THE 26" WIDE WINDOW



SECTION B-B



SECTION A-A

NOTE: FOR INSTALLATIONS OF 1000KVA OR MORE



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LARGE PIT PAD SPECIFICATIONS

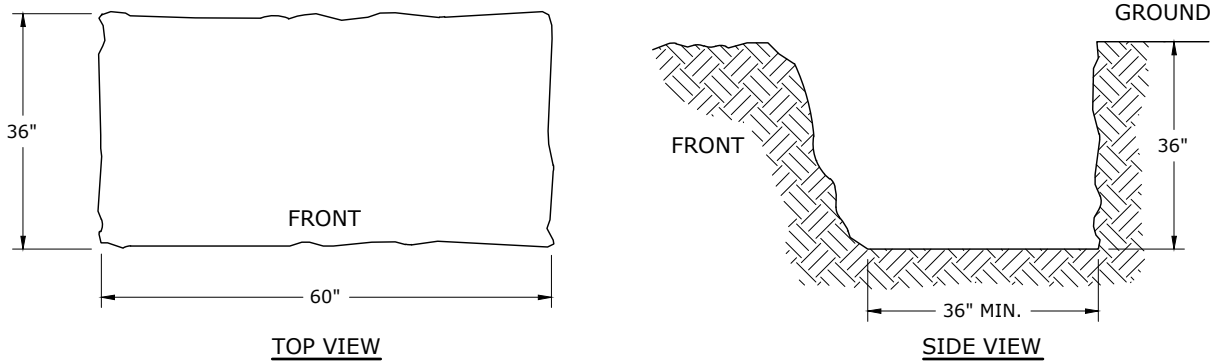
WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-6			

BUILDING A SMALL PIT PAD

STEP 1:

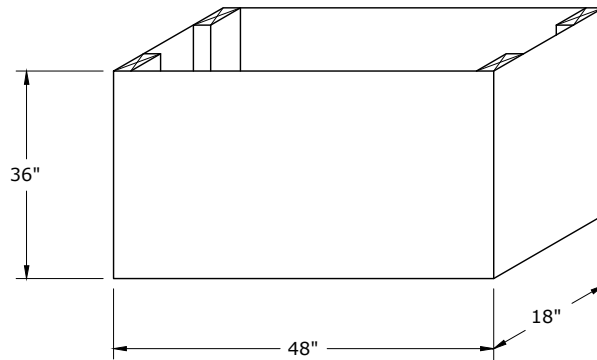
DIG A RECTANGULAR SHAPED HOLE APPROXIMATELY 36 INCHES BY 60 INCHES AND 36 INCHES DEEP FOR THE PIT. (SEE BELOW)

NOTE: THE HOLE INDICATES THE FRONT OF THE TRANSFORMER PAD. THE PAD SHOULD BE LOCATED SO THAT A MINIMUM OF 10 FEET OF CLEARANCE CAN BE MAINTAINED IN FRONT OF THE TRANSFORMER AND A MINIMUM OF 3 FEET OF CLEARANCE ON ALL OTHER SIDES.



STEP 2:

BUILD A RECTANGULAR SHAPED BOX, OPEN AT THE TOP AND BOTTOM, FROM 2-INCH BY 4-INCH BOARDS AND PLYWOOD. THE PLYWOOD SIDES OF THE BOX SHOULD BE 36 INCHES TALL.




WINDOW OPENING FOR THE SMALL 72-INCH BY 72-INCH "PIT" PAD

STEP 3:

SET THE BOX IN THE HOLE AND POSITION IT SO THAT A MINIMUM OF 6 INCHES OF SPACE EXISTS BETWEEN THE SIDES AND BACK OF THE BOX AND THE EDGE OF THE HOLE. (THE SPACE BETWEEN THE BOX AND FRONT EDGE OF HOLE WILL BE APPROXIMATELY 12 INCHES.) TRACE A LINE AROUND THE BOTTOM OUTSIDE EDGE OF THE BOX IN DIRT AND THEN REMOVE THE BOX. INSTALL EIGHT (8) CONDUIT ELBOWS IN THE BOTTOM OF THE HOLE FOR THE PRIMARY CONDUCTORS AS SPECIFIED BY GREER CPW ENTERING FROM THE FRONT OF HOLE AND PLACED SO THEY WILL COME UP IN THE CENTER OF THE PRIMARY SIDE OF THE OUTLINE OF THE BOX. TAPE BOTH ENDS OF CONDUITS COMPLETELY CLOSED.

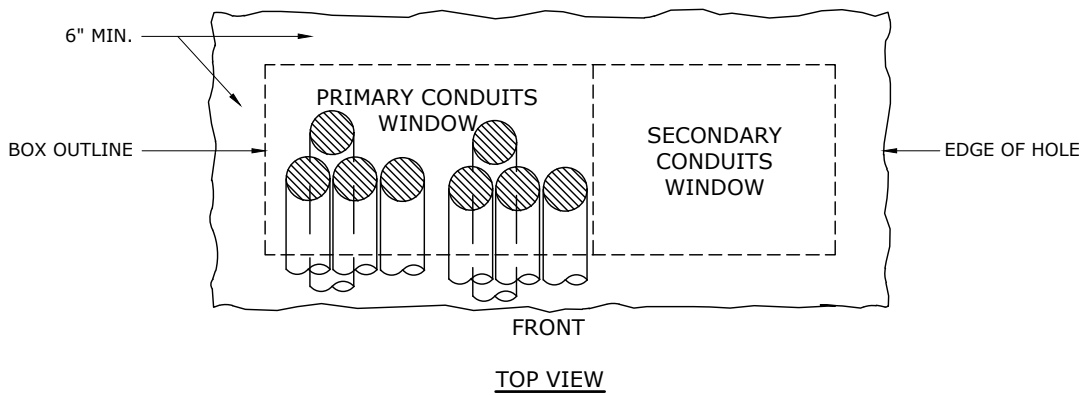
NOTE: THE CUSTOMER'S SECONDARY CONDUITS SHOULD BE INSTALLED AT THIS TIME. THE CUSTOMER IS PROVIDING THE SERVICE CONDUCTORS TO THE TRANSFORMER, THEY MAY ELECT TO ENTER THE SECONDARY SIDE OF THE PIT FROM THE FRONT, REAR OR RIGHT SIDE.



WATER	ELECTRIC	WASTEWATER	GAS
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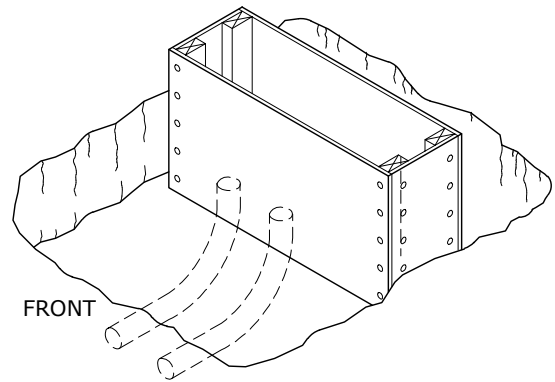
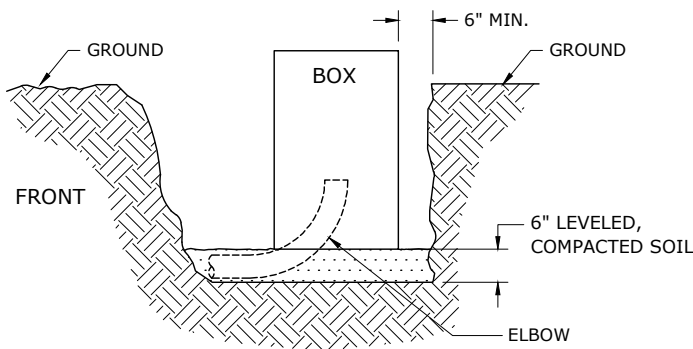
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BUILD A SMALL PIT PAD



STEP 4:

FILL APPROXIMATELY 6 INCHES OF LEVELED, COMPACTED SOIL IN THE HOLE TO SUPPORT THE CONDUIT ELBOWS. PLACE THE BOX BACK IN THE HOLE OVER CONDUITS, POSITIONING BOX AGAIN SO A MINIMUM OF 6 INCHES OF SPACE EXISTS BETWEEN THE BACK AND SIDES OF THE HOLE AND BOX. THE BOX SHOULD STICK OUT FROM THE TOP OF THE HOLE APPROXIMATELY 6 INCHES (OR THE WIDTH OF A STANDARD 2-INCH BY 6-INCH BOARD). MAKE SURE THE CONDUITS ENTER CORRECTLY IN THE PRIMARY AND SECONDARY SIDE OF THE PIT.

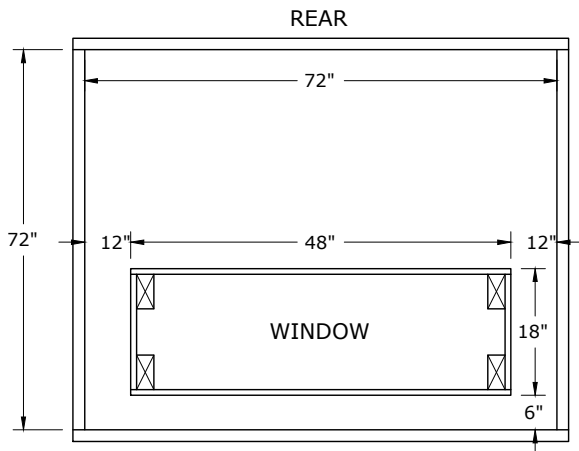


SIDE VIEW

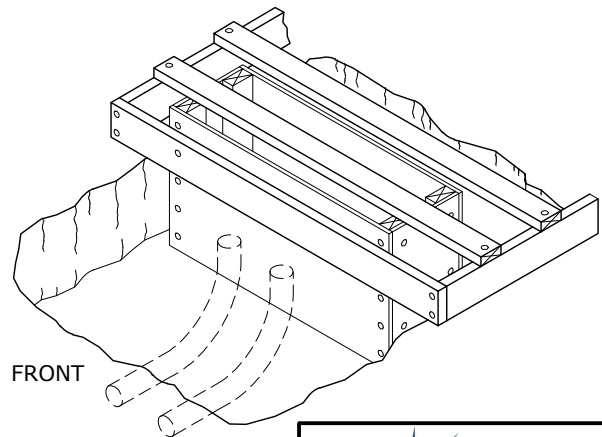
STEP 5:

FORM THE TOP PART OF THE PAD USING 2-INCH BY 6-INCH BOARDS USING THE DIMENSIONS AS INDICATED BELOW.

NOTE: IT MAY BE EASIER TO "LEVEL" THE BOX WITH THE SIDES IF YOU LAY TWO 2-INCH BY 4-INCH BOARDS ON THE TOP OF THE SIDE BOARDS SO THAT THEY CROSS OVER TOP OF BOX AS SHOWN BELOW. TACK THESE BOARDS ONTO THE TOP OF THE BOX TO ENSURE SIDES ARE THE SAME HEIGHT AS THE BOX.



SMALL 72-INCH BY 72-INCH PAD



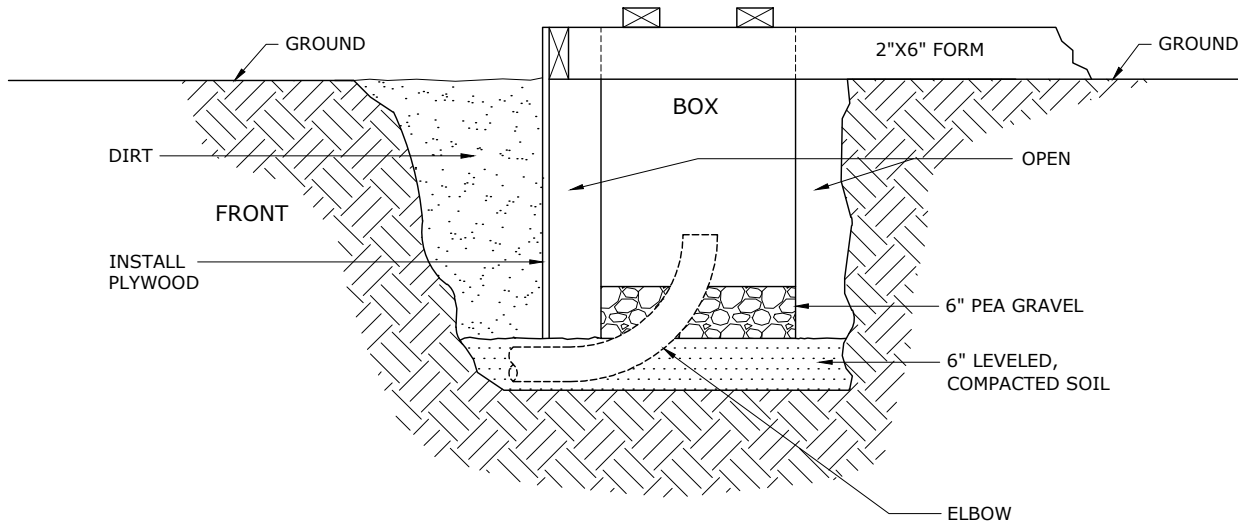
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BUILD A SMALL PIT PAD

WATER	ELECTRIC	WASTEWATER	GAS
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EE-8			

STEP 6:

INSTALL A PIECE OF PLYWOOD INSIDE THE HOLE LONG ENOUGH TO REACH FROM ONE SIDE OF THE HOLE TO THE OTHER AND WIDE ENOUGH TO REACH FROM THE TOP OF THE FRONT 2-INCH BY 6-INCH FORM TO THE BOTTOM OF THE HOLE. (THESE DIMENSIONS SHOULD BE APPROXIMATELY 60 INCHES X 36 INCHES.) TACK THE PLYWOOD TO THE FRONT OF THE 2-INCH BY 6-INCH BOARD AND LET THE BOTTOM OF THE BOARD REST ON THE GROUND. PLYWOOD MUST BE THICK ENOUGH SO IT WON'T GIVE AT BOTTOM OF HOLE WHEN THE CONCRETE IS POURED. SEE BELOW.



SIDE VIEW

STEP 7:

FILL IN THE AREA BETWEEN THE PLYWOOD AND THE FRONT OF THE HOLE WITH DIRT. BE CAREFUL THAT PLYWOOD DOESN'T "PUSH IN" AT BOTTOM. FILL THE BOTTOM OF THE BOX WITH 6 INCHES OF PEA GRAVEL. SEE ABOVE.

STEP 8:

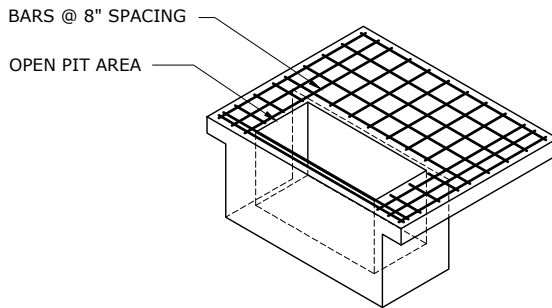
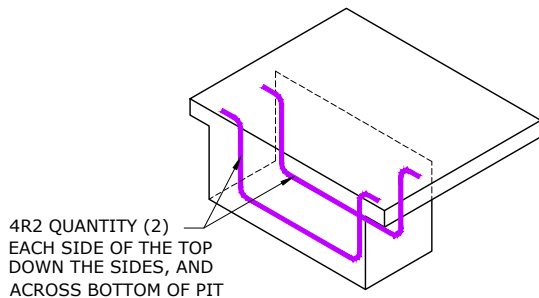
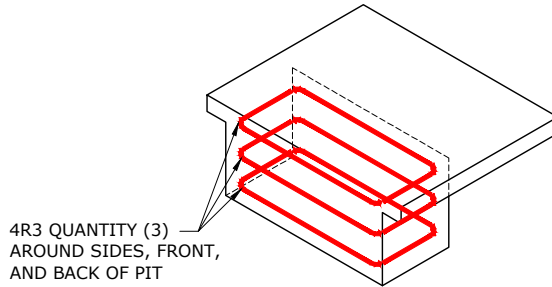
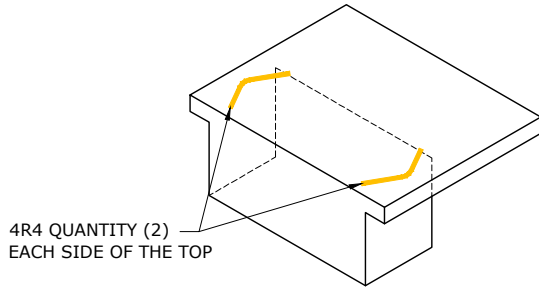
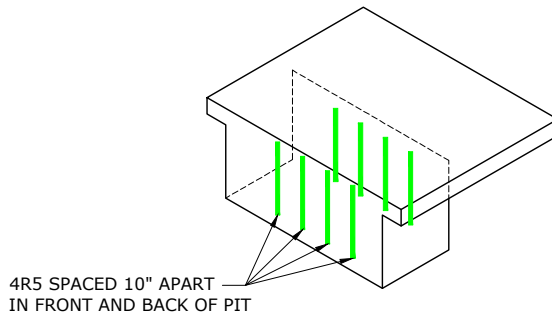
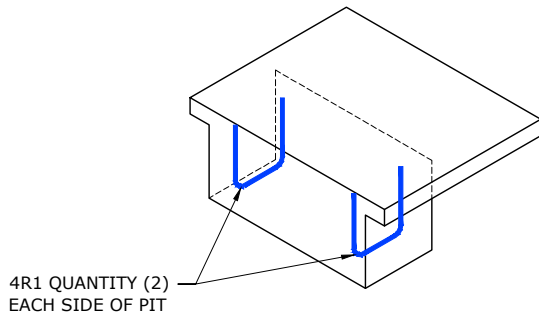
INSTALL AND TIE TOGETHER THE REINFORCING BARS AROUND THE BOX IN THE "PIT AREA" AND "PAD AREA" TO REINFORCE ENTIRE PIT PAD. CONTACT YOUR GREER CPW REPRESENTATIVE TO INSPECT THE PAD BEFORE POURING CONCRETE.



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0	5/29/24	CRAWFORD	CRUM	FARR
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BUILD A SMALL PIT PAD

WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-9			



ALL BARS #4 GRADE 60 DEFORMED

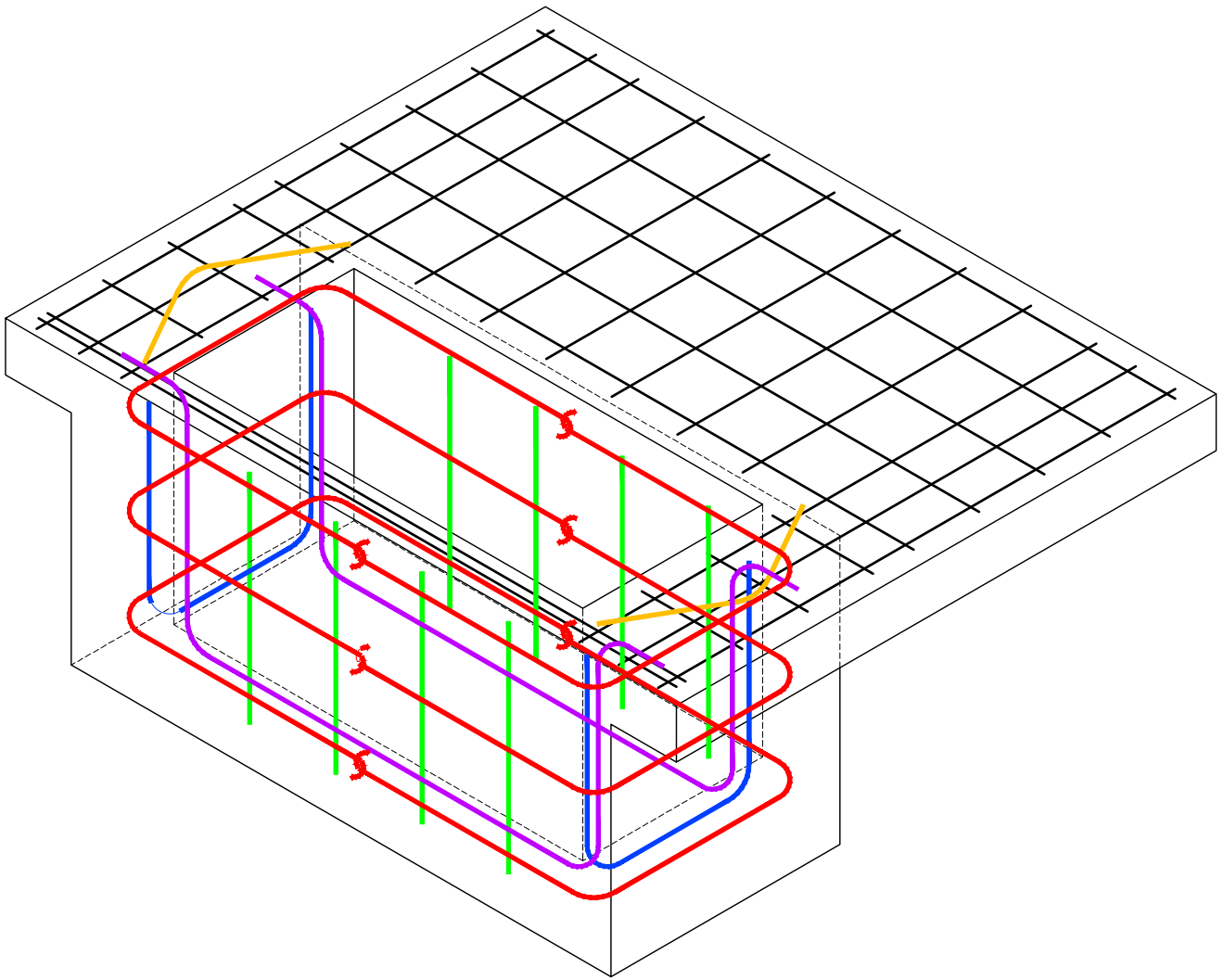
SHAPE DETAIL	SYMBOL	MARK	QTY	DESCRIPTION
		4R1	2	CENTER BARS IN "PIT BOX" SIDE WALLS. PROVIDE 3" CLEARANCE FROM WALL BOTTOM AND 2" CLEARANCE FROM TOP SURFACE OF PAD.
		4R2	2	CENTER BARS IN "PIT BOX" END WALLS. PROVIDE 3" CLEARANCE FROM WALL BOTTOM AND 2" CLEARANCE FROM TOP SURFACE OF PAD. TERMINATE BAR ENDS 2" FROM PAD EDGES.
		4R3	4	CENTER BARS IN "PIT BOX" END AND SIDE WALLS. PLACE BOTTOM BAR 3" FROM PIT BOTTOM. PLACE TOP BAR 2" FROM TOP SURFACE. MAXIMUM BAR SPACING IS 12".
		4R4	2	PLACE BARS IN APPROXIMATE LOCATIONS SHOWN TO PROVIDE CORNER CRACK CONTROL. PROVIDE 2" CLEARANCE FROM TOP SURFACE AND ANY CONCRETE EDGE.
		4R5	8	CENTER IN END WALLS OF "PIT BOX". TERMINATE BARS 3" FROM BOTTOM SURFACE AND 2" FROM TOP SURFACE. MAXIMUM BAR SPACING IS 12".
-	-	WWF	-	PROVIDE 2" CLEARANCE FROM TOP SURFACE. TERMINATE 2" FROM PAD EDGES.



3				
2				
1				
0	11/8/24	SHERER	CRAWFORD	FARR
REVISED	BY	CHK'D	APPR.	

BUILDING A SMALL PIT PAD
REINFORCEMENT SPECIFICATIONS

WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-10			



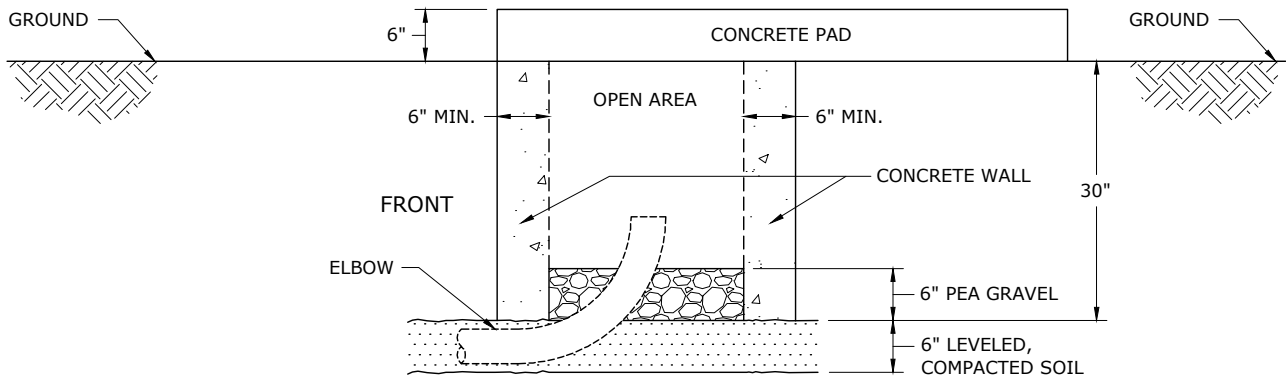
ALL BARS #4 GRADE 60 DEFORMED		
SHAPE DETAIL	SYMBOL	MARK
		4R1
		4R2
		4R3
		4R4
		4R5



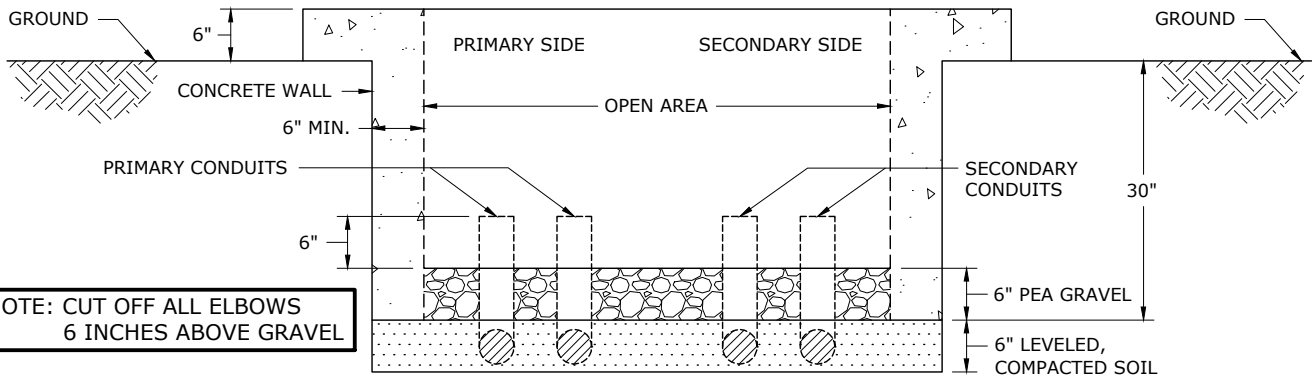
3				
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0	11/8/24	SHERER	CRAWFORD	FARR
REVISED	BY	CHK'D	APPR.	

BUILDING A SMALL PIT PAD
 CONCRETE PIT PAD - COMPLETE CONSTRUCTION

WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-11			



SIDE VIEW



**NOTE: CUT OFF ALL ELBOWS
6 INCHES ABOVE GRAVEL**

FRONT VIEW

STEP 9:

POUR CONCRETE AROUND THE BOX AND WITHIN THE 2-INCH BY 6-INCH FORMS. SEE PAGE 2 FOR CONCRETE MIX SPECIFICATIONS.

STEP 10:

ALLOW CONCRETE TO SET UP, THEN REMOVE 2-INCH BY 6-INCH FORMS AND BOX.



3				
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0	11/8/24	SHERER	CRAWFORD	FARR
REVISED	BY	CHK'D	APPR.	

BUILDING A SMALL PIT PAD

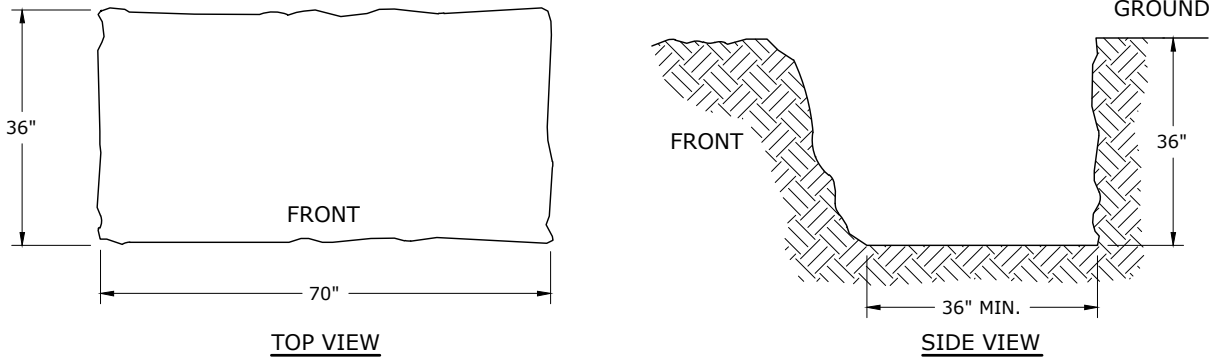
WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-12			

BUILDING A LARGE PIT PAD

STEP 1:

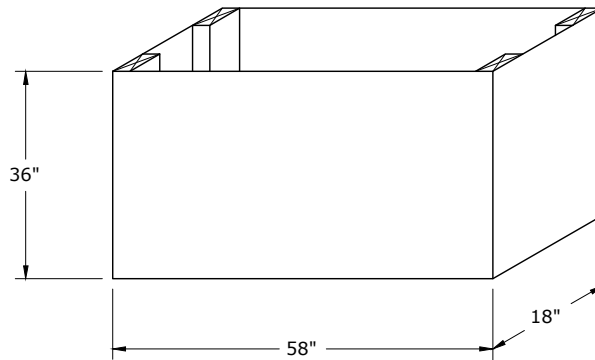
DIG A RECTANGULAR SHAPED HOLE APPROXIMATELY 36 INCHES BY 70 INCHES AND 36 INCHES DEEP FOR THE PIT. (SEE BELOW)

NOTE: THE HOLE INDICATES THE FRONT OF THE TRANSFORMER PAD. THE PAD SHOULD BE LOCATED SO THAT A MINIMUM OF 10 FEET OF CLEARANCE CAN BE MAINTAINED IN FRONT OF THE TRANSFORMER AND A MINIMUM OF 3 FEET OF CLEARANCE ON ALL OTHER SIDES.



STEP 2:

BUILD A RECTANGULAR SHAPED BOX, OPEN AT THE TOP AND BOTTOM, FROM 2-INCH BY 4-INCH BOARDS AND PLYWOOD. THE PLYWOOD SIDES OF THE BOX SHOULD BE 36 INCHES TALL.



WINDOW OPENING FOR THE LARGE 86-INCH BY 76-INCH "PIT" PAD

STEP 3:

SET THE BOX IN THE HOLE AND POSITION IT SO THAT A MINIMUM OF 6 INCHES OF SPACE EXISTS BETWEEN THE SIDES AND BACK OF THE BOX AND THE EDGE OF THE HOLE. (THE SPACE BETWEEN THE BOX AND FRONT EDGE OF HOLE WILL BE APPROXIMATELY 12 INCHES.) TRACE A LINE AROUND THE BOTTOM OUTSIDE EDGE OF THE BOX IN DIRT AND THEN REMOVE THE BOX. INSTALL EIGHT (8) CONDUIT ELBOWS IN THE BOTTOM OF THE HOLE FOR THE PRIMARY CONDUCTORS AS SPECIFIED BY GREER CPW ENTERING FROM THE FRONT OF HOLE AND PLACED SO THEY WILL COME UP IN THE CENTER OF THE PRIMARY SIDE OF THE OUTLINE OF THE BOX. TAPE BOTH ENDS OF CONDUITS COMPLETELY CLOSED.

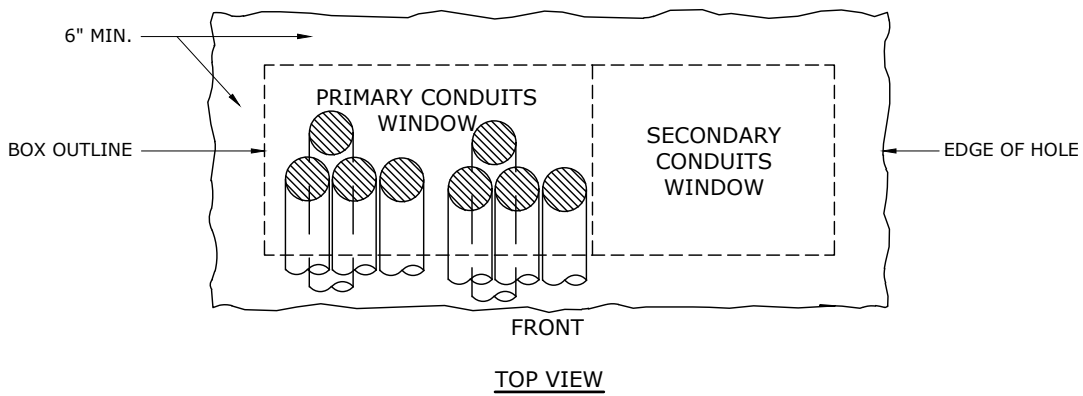
NOTE: THE CUSTOMER'S SECONDARY CONDUITS SHOULD BE INSTALLED AT THIS TIME. THE CUSTOMER IS PROVIDING THE SERVICE CONDUCTORS TO THE TRANSFORMER, THEY MAY ELECT TO ENTER THE SECONDARY SIDE OF THE PIT FROM THE FRONT, REAR OR RIGHT SIDE.



3				
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0	11/8/24	SHERER	CRAWFORD	FARR
REVISED	BY	CHK'D	APPR.	

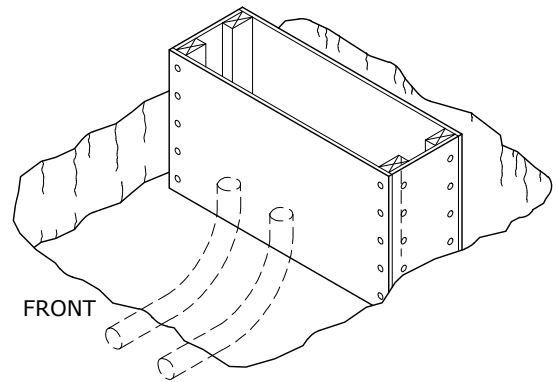
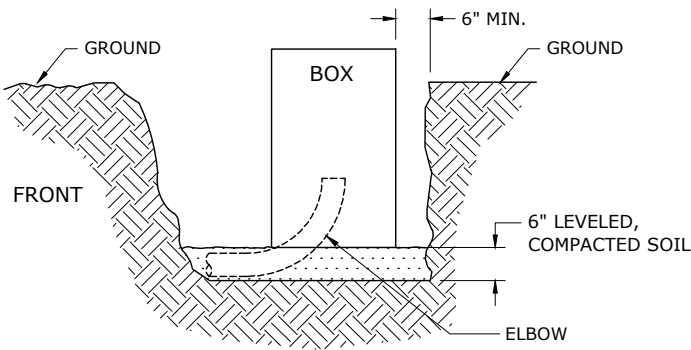
BUILDING A LARGE PIT PAD

WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-13			



STEP 4:

FILL APPROXIMATELY 6 INCHES OF LEVELED, COMPACTED SOIL IN THE HOLE TO SUPPORT THE CONDUIT ELBOWS. PLACE THE BOX BACK IN THE HOLE OVER CONDUITS, POSITIONING BOX AGAIN SO A MINIMUM OF 6 INCHES OF SPACE EXISTS BETWEEN THE BACK AND SIDES OF THE HOLE AND BOX. THE BOX SHOULD STICK OUT FROM THE TOP OF THE HOLE APPROXIMATELY 6 INCHES (OR THE WIDTH OF A STANDARD 2-INCH BY 6-INCH BOARD). MAKE SURE THE CONDUITS ENTER CORRECTLY IN THE PRIMARY AND SECONDARY SIDE OF THE PIT.

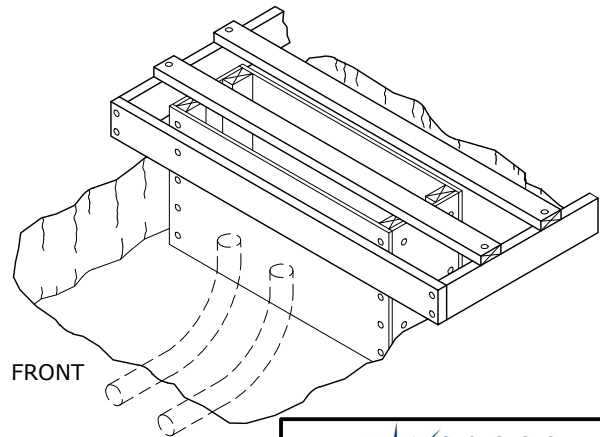
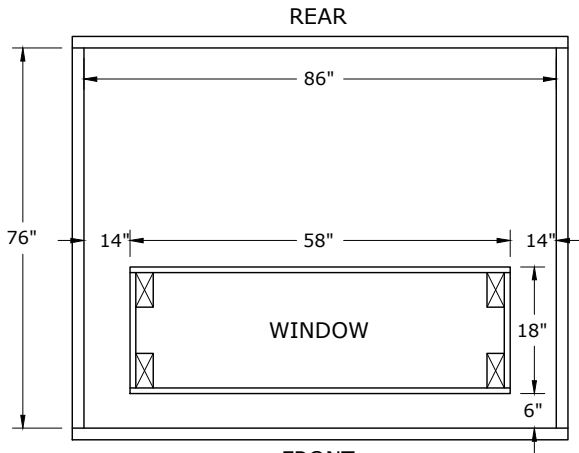


SIDE VIEW

STEP 5:

FORM THE TOP PART OF THE PAD USING 2-INCH BY 6-INCH BOARDS USING THE DIMENSIONS AS INDICATED BELOW.


NOTE: IT MAY BE EASIER TO "LEVEL" THE BOX WITH THE SIDES IF YOU LAY TWO 2-INCH BY 4-INCH BOARDS ON THE TOP OF THE SIDE BOARDS SO THAT THEY CROSS OVER TOP OF BOX AS SHOWN BELOW. TACK THESE BOARDS ONTO THE TOP OF THE BOX TO ENSURE SIDES ARE THE SAME HEIGHT AS THE BOX.



LARGE 86-INCH BY 76-INCH PAD

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0	11/8/24	SHERER	CRAWFORD	FARR
REVISED	BY	CHK'D	APPR.	

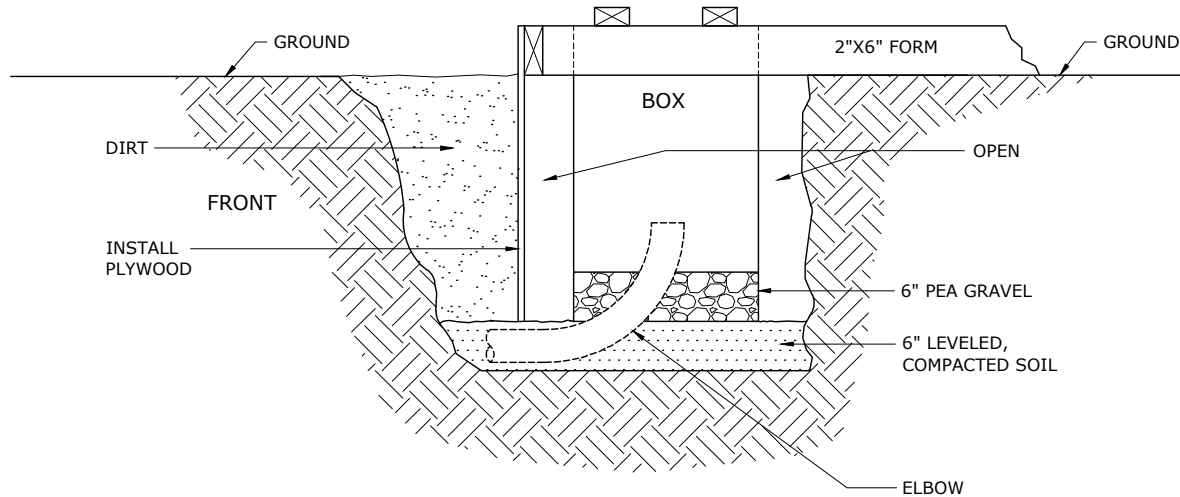
BUILDING A LARGE PIT PAD



WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-14			

STEP 6:

INSTALL A PIECE OF PLYWOOD INSIDE THE HOLE LONG ENOUGH TO REACH FROM ONE SIDE OF THE HOLE TO THE OTHER AND WIDE ENOUGH TO REACH FROM THE TOP OF THE FRONT 2-INCH BY 6-INCH FORM TO THE BOTTOM OF THE HOLE. (THESE DIMENSIONS SHOULD BE APPROXIMATELY 60 INCHES X 36 INCHES.) TACK THE PLYWOOD TO THE FRONT OF THE 2-INCH BY 6-INCH BOARD AND LET THE BOTTOM OF THE BOARD REST ON THE GROUND. PLYWOOD MUST BE THICK ENOUGH SO IT WON'T GIVE AT BOTTOM OF HOLE WHEN THE CONCRETE IS POURED. SEE BELOW.



SIDE VIEW

STEP 7:

FILL IN THE AREA BETWEEN THE PLYWOOD AND THE FRONT OF THE HOLE WITH DIRT. BE CAREFUL THAT PLYWOOD DOESN'T "PUSH IN" AT BOTTOM. FILL THE BOTTOM OF THE BOX WITH 6 INCHES OF PEA GRAVEL. SEE ABOVE.

STEP 8:

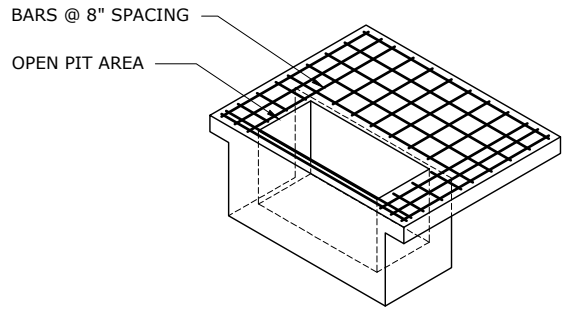
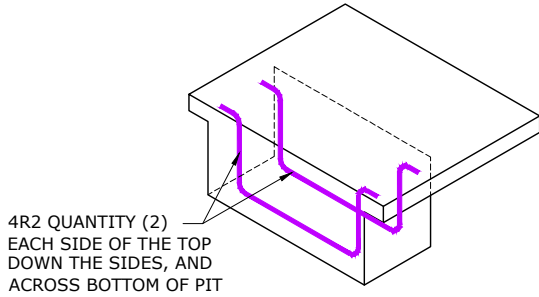
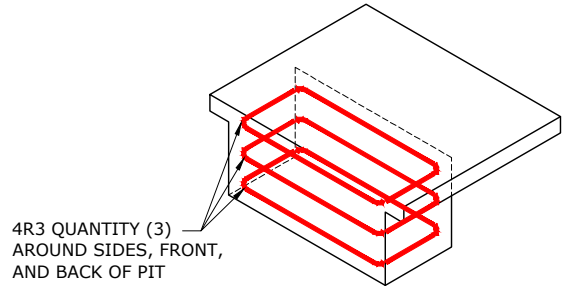
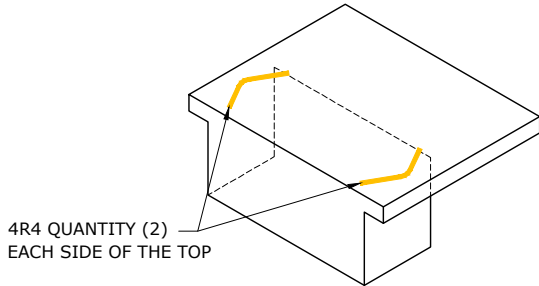
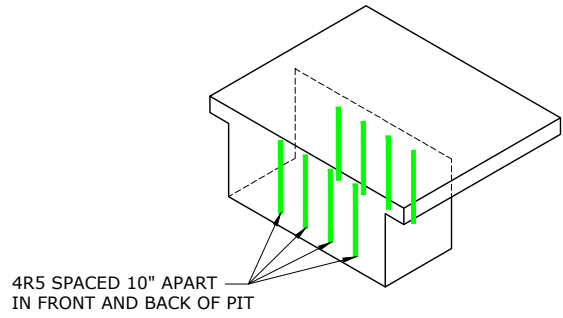
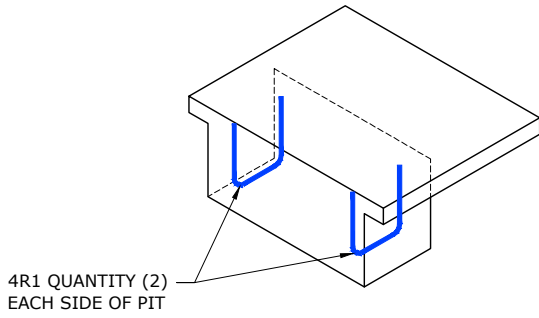
INSTALL AND TIE TOGETHER THE REINFORCING BARS AROUND THE BOX IN THE "PIT AREA" AND "PAD AREA" TO REINFORCE ENTIRE PIT PAD. CONTACT YOUR GREER CPW REPRESENTATIVE TO INSPECT BEFORE POURING CONCRETE.



3				
2				
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0	11/8/24	SHERER	CRAWFORD	FARR
REVISED	BY	CHK'D	APPR.	

BUILDING A LARGE PIT PAD

WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-15			



ALL BARS #4 GRADE 60 DEFORMED

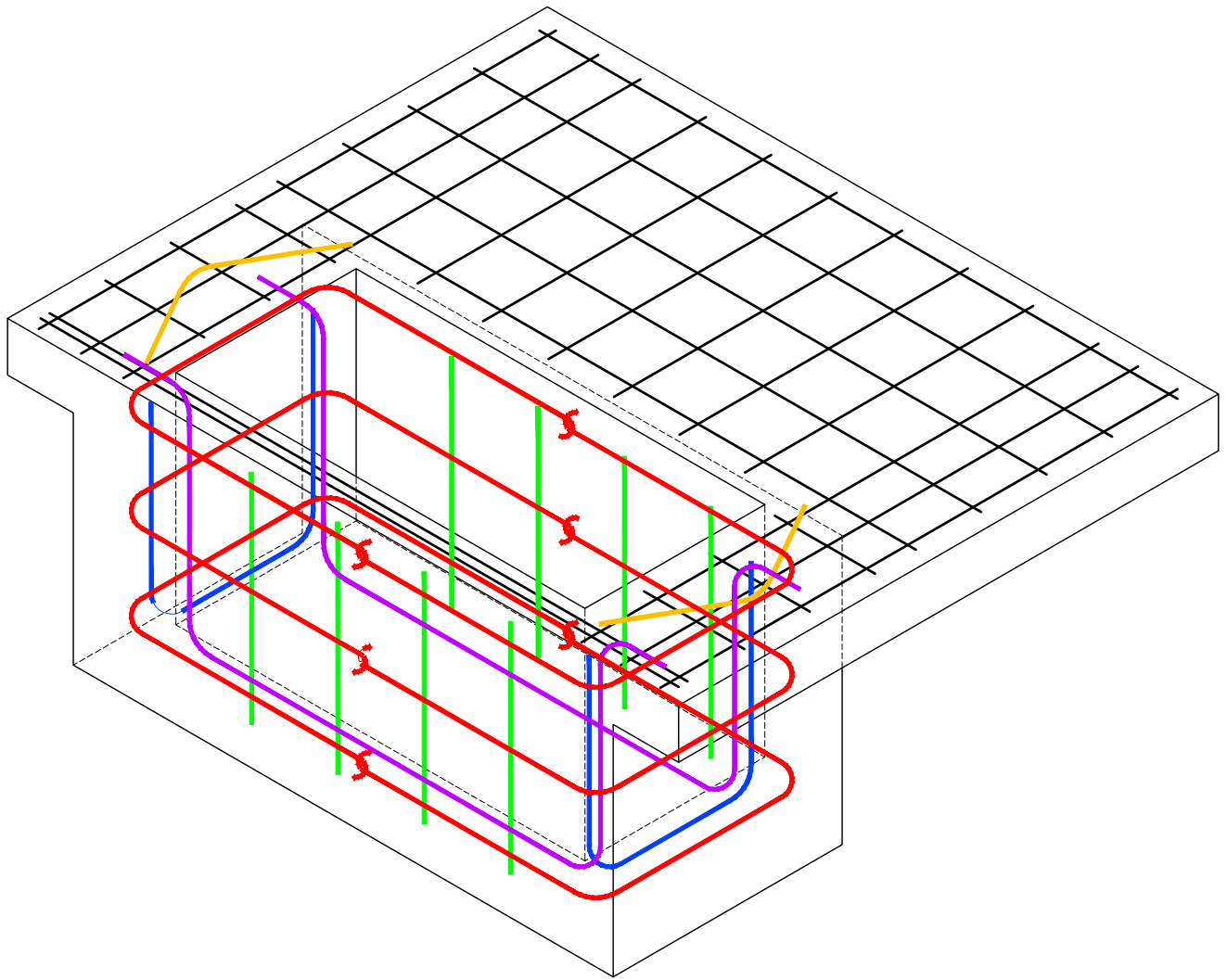
SHAPE DETAIL	SYMBOL	MARK	QTY	DESCRIPTION
		4R1	2	CENTER BARS IN "PIT BOX" SIDE WALLS. PROVIDE 3" CLEARANCE FROM WALL BOTTOM AND 2" CLEARANCE FROM TOP SURFACE OF PAD.
		4R2	2	CENTER BARS IN "PIT BOX" END WALLS. PROVIDE 3" CLEARANCE FROM WALL BOTTOM AND 2" CLEARANCE FROM TOP SURFACE OF PAD. TERMINATE BAR ENDS 2" FROM PAD EDGES.
		4R3	4	CENTER BARS IN "PIT BOX" END AND SIDE WALLS. PLACE BOTTOM BAR 3" FROM PIT BOTTOM. PLACE TOP BAR 2" FROM TOP SURFACE. MAXIMUM BAR SPACING IS 12".
		4R4	2	PLACE BARS IN APPROXIMATE LOCATIONS SHOWN TO PROVIDE CORNER CRACK CONTROL. PROVIDE 2" CLEARANCE FROM TOP SURFACE AND ANY CONCRETE EDGE.
		4R5	8	CENTER IN END WALLS OF "PIT BOX". TERMINATE BARS 3" FROM BOTTOM SURFACE AND 2" FROM TOP SURFACE. MAXIMUM BAR SPACING IS 12".
-	-	WWF	-	PROVIDE 2" CLEARANCE FROM TOP SURFACE. TERMINATE 2" FROM PAD EDGES.

WATER	ELECTRIC	WASTEWATER	GAS
	X		

EE-16

3				
2				
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0	11/8/24	SHERER	CRAWFORD	FARR
REVISED	BY	CHK'D	APPR.	

BUILDING A LARGE PIT PAD
REINFORCEMENT SPECIFICATIONS



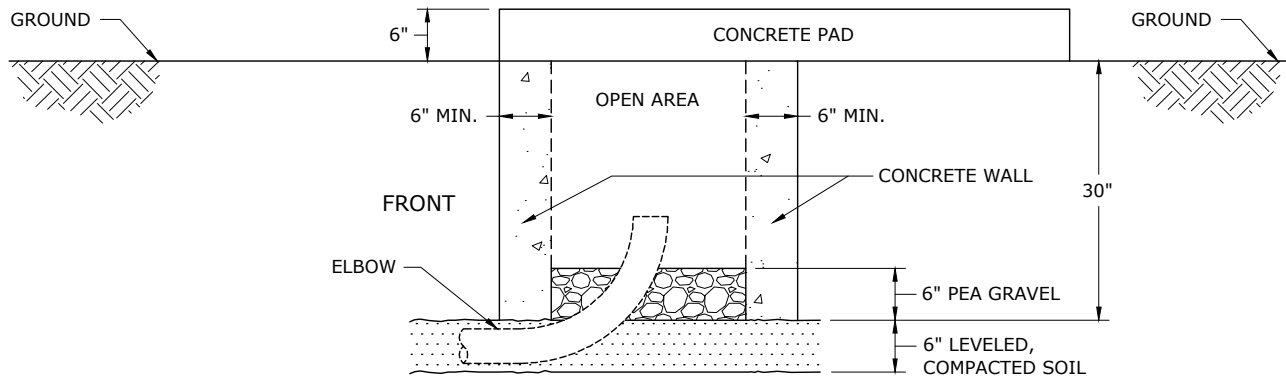
ALL BARS #4 GRADE 60 DEFORMED		
SHAPE DETAIL	SYMBOL	MARK
		4R1
		4R2
		4R3
		4R4
		4R5



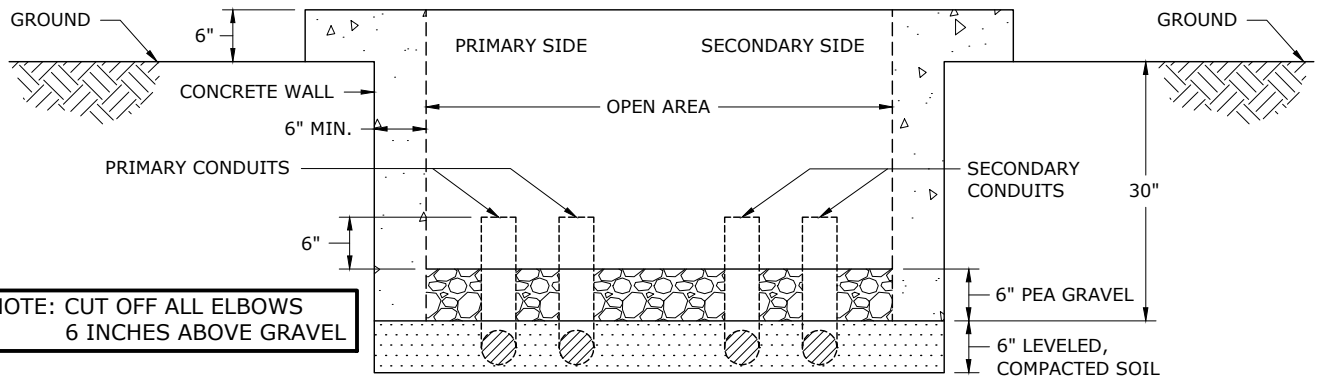
3				
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0	5/29/24	CRAWFORD	CRUM	FARR
REVISED	BY	CHK'D	APPR.	

BUILDING A LARGE PIT PAD
REINFORCEMENT SPECIFICATIONS

WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-17			



SIDE VIEW



**NOTE: CUT OFF ALL ELBOWS
6 INCHES ABOVE GRAVEL**

FRONT VIEW

STEP 9:

POUR CONCRETE AROUND THE BOX AND WITHIN THE 2-INCH BY 6-INCH FORMS. SEE PAGE 2 FOR CONCRETE MIX SPECIFICATIONS.

STEP 10:

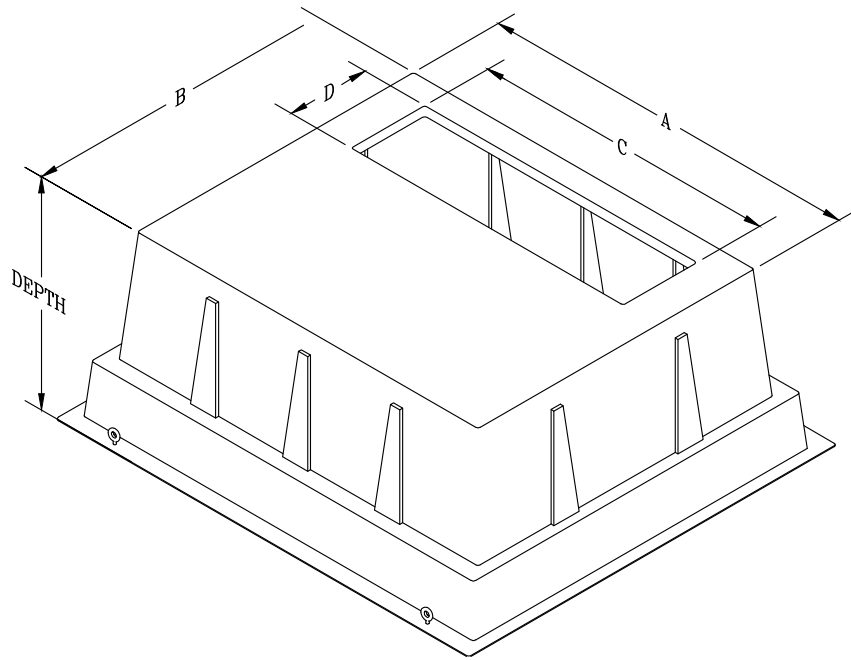
ALLOW CONCRETE TO SET UP, THEN REMOVE 2-INCH BY 6-INCH FORMS AND BOX.



3				
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0	11/8/24	SHERER	CRAWFORD	FARR
REVISED	BY	CHK'D	APPR.	

BUILDING A LARGE PIT PAD

WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-18			



DIMENSIONS:

A: 72"
 B: 72"
 C: 18"
 D: 48"
 DEPTH: 32"
 BURIAL DEPTH: 28"

MANUFACTURER INFORMATION

MFR: HUBBELL
 PART NO.: BB7272321848A00
 PRODUCT BROCHURE LINK: https://hubbellcdn.com/catalogfull/HPS_ENCL_UTL_AboveGround2022_CAT_EN.pdf

DISTRIBUTOR INFORMATION

DISTRIBUTOR: SHEALY ELECTRICAL WHOLESALERS
 CONTACT NAME: JEREMY HOWARD
 EMAIL: JHOWARD@BORDERSTATES.COM
 CELL PHONE: 864-915-9365

DISTRIBUTOR INFORMATION

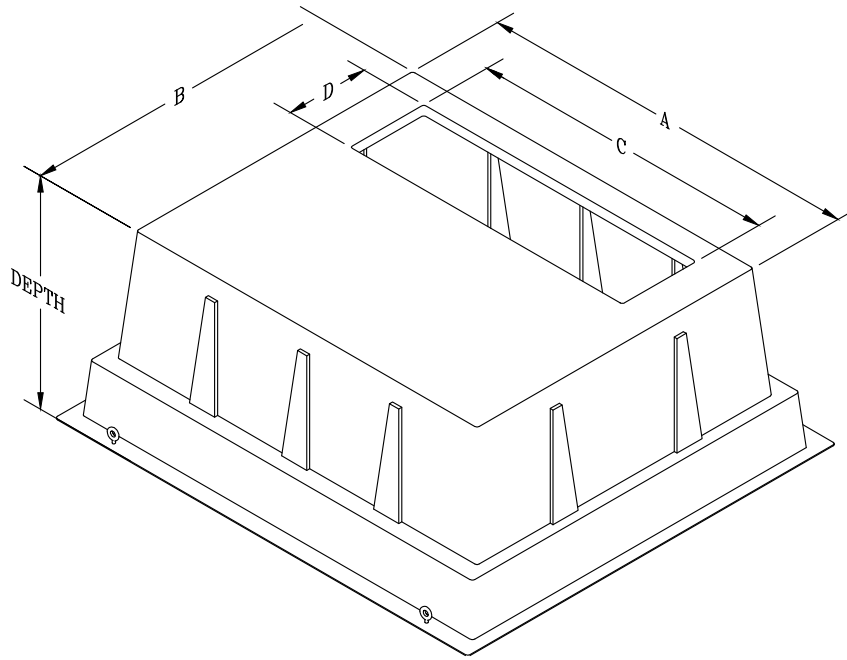
DISTRIBUTOR: WESCO
 CONTACT NAME: LYNETTE
 EMAIL: LCANADA@WESCO.COM
 CELL PHONE: 803-739-5471



3				
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0	11/8/24	SHERER	CRAWFORD	FARR
REVISED	BY	CHK'D	APPR.	

SMALL FIBERGLASS PIT PAD SLEEVE

WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-19			



DIMENSIONS:

A: 73"
 B: 75"
 C: 16"
 D: 58"
 DEPTH: 36"
 BURIAL DEPTH: 32"

MANUFACTURER INFORMATION

MFR: HUBBELL
 PART NO.: BB7375361658A00
 PRODUCT BROCHURE LINK: https://hubbellcdn.com/catalogfull/HPS_ENCL_UTL_AboveGround2022_CAT_EN.pdf

DISTRIBUTOR INFORMATION

DISTRIBUTOR: SHEALY ELECTRICAL WHOLESALERS
 CONTACT NAME: JEREMY HOWARD
 EMAIL: JHOWARD@BORDERSTATES.COM
 CELL PHONE: 864-915-9365

DISTRIBUTOR INFORMATION

DISTRIBUTOR: WESCO
 CONTACT NAME: LYNETTE
 EMAIL: LCANADA@WESCO.COM
 CELL PHONE: 803-739-5471

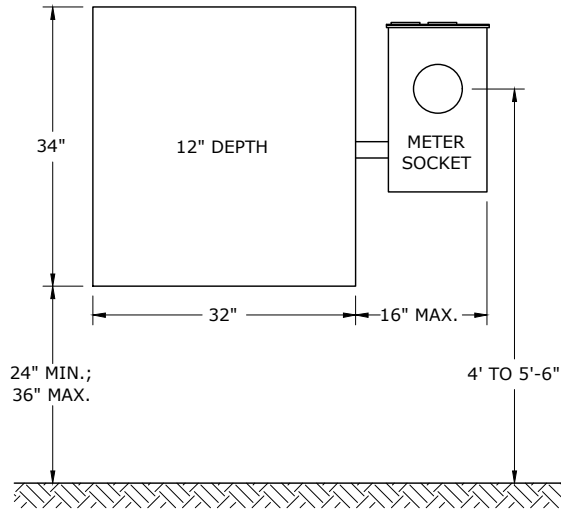


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0	11/8/24	SHERER	CRAWFORD	FARR
REVISED	BY	CHK'D	APPR.	

LARGE FIBERGLASS PIT PAD SLEEVE

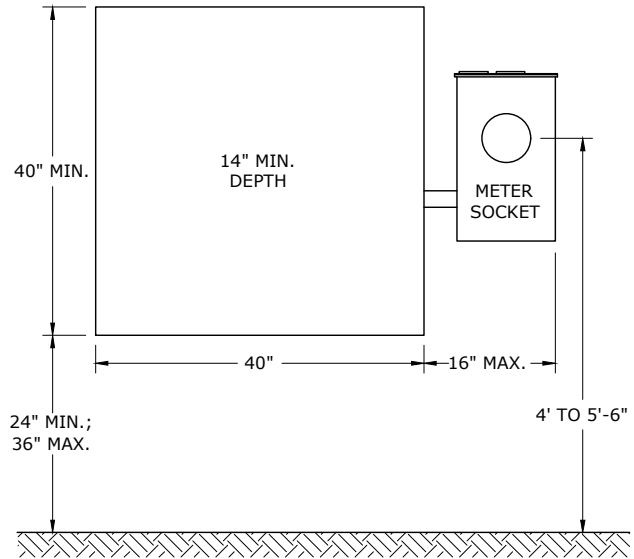
WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-20			

CT CABINET 1



WIRE SIZE LIMITS MAXIMUM SERVICE EQUIPMENT SIZE = 600 AMP		
CUSTOMER WIRE SIZE	MAX. NUMBER OF CUSTOMER CONDUCTORS PER PHASE	MAX. TOTAL CONDUCTORS
500 AND SMALLER	2	16
600	1	12

CT CABINET 2



WIRE SIZE LIMITS MAXIMUM SERVICE EQUIPMENT SIZE = 1200 AMP		
CUSTOMER WIRE SIZE	MAX. NUMBER OF CUSTOMER CONDUCTORS PER PHASE	MAX. TOTAL CONDUCTORS
350 AND SMALLER	4	24
400 - 600	3	20
700 - 750	2	16

CT CABINET 1:

- (1) DIMENSIONS: 32"W X 34"H X 12"D, ALUMINUM, PAINTED GALVANIZED STEEL OR STAINLESS STEEL.
- (2) MAXIMUM SERVICE EQUIPMENT SIZE = 600 AMPS.
- (3) CABINET MUST BE UL LISTED.

CT CABINET 2:

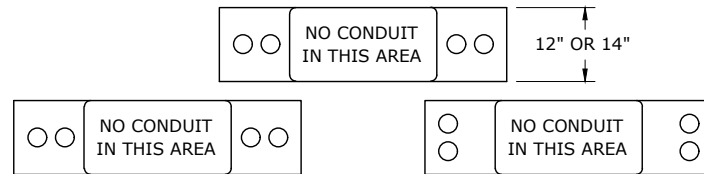
- (1) DIMENSIONS: 40"W X 40"H X 14"D, ALUMINUM, PAINTED GALVANIZED STEEL OR STAINLESS STEEL.
- (2) MAXIMUM SERVICE EQUIPMENT SIZE = 1200 AMPS.
- (3) CABINET MUST BE UL LISTED.

NOTES:

- 1. CUSTOMER SHALL CUT HOLE FOR CUSTOMER RISER FOR UNDERGROUND SERVICE. HOLE SHALL BE POSITIONED AT OPPOSITE END OF CABINET FROM CUSTOMER CONDUCTORS AND SIZED PER CHART.

CONDUIT RISER SIZING	
CONDUCTOR SIZE	CONDUIT RISER SIZE
2/0	2"
4/0 OR 350	2.5"
2 - 4/0	4"
2 - 350	6"
1 - 500	4"
2 - 500	6"

BOTTOM VIEW POSSIBLE CONDUIT CONFIGURATIONS



PREFERRED IF USING 2 CONDUITS

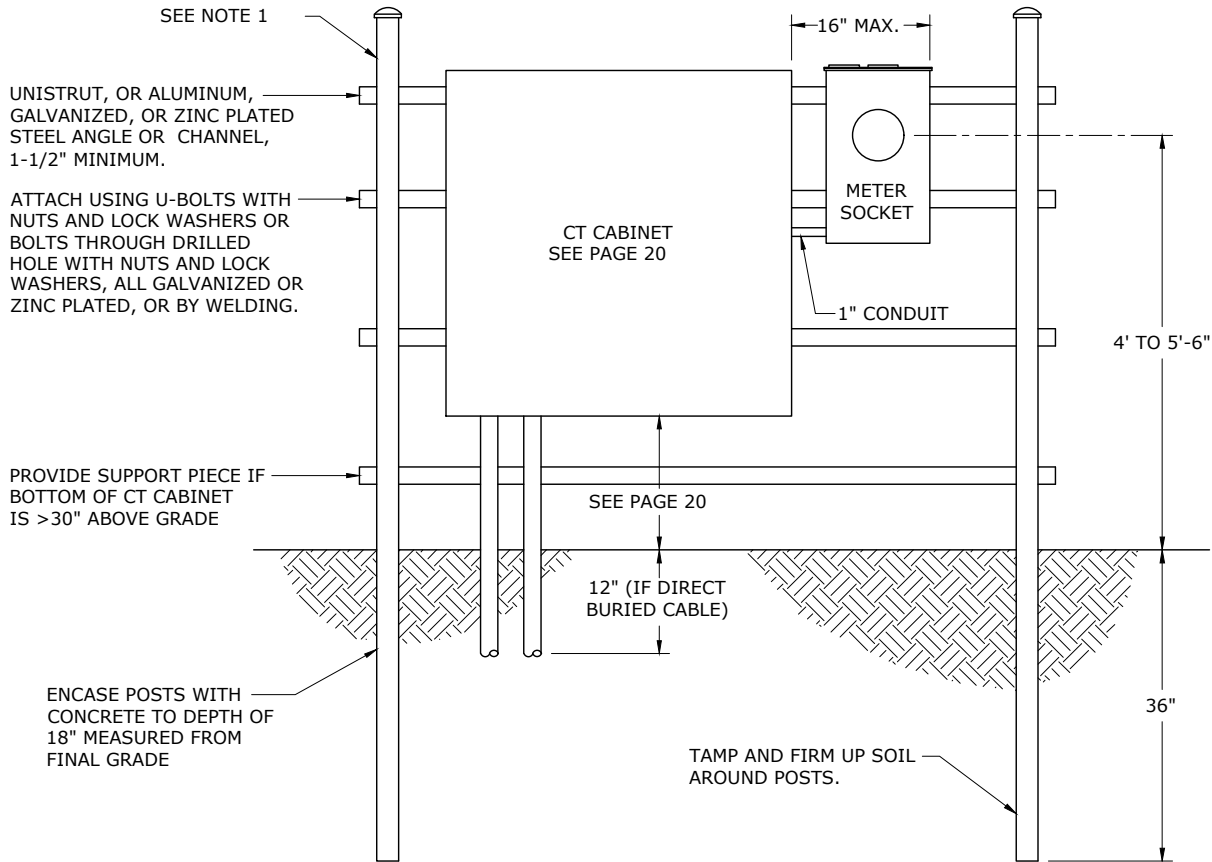
- 2. SIDE ENTRY ALLOWED IN LOWER 1/3 OF SIDES.
- 3. CUSTOMER LOAD-SIDE CONDUCTORS SHALL ENTER THE CT CABINET THROUGH ONE SIDE ONLY.
- 4. GREER CPW WILL COMPLETE ALL CONNECTIONS BETWEEN CUSTOMER AND GREER CPW CONDUCTORS.
- 5. METER SOCKET PROVIDED BY GREER CPW. CONTACT GREER CPW AT 864-848-5500 TO PICK UP METER SOCKET AND WILL INSTALLED BY CUSTOMER/BUILDER UNLESS OTHERWISE NOTED.
- 6. A CT CABINET SHALL NOT BE USED AS A JUNCTION BOX TO SERVE MULTIPLE ACCOUNTS.
- 7. WHEN THE SERVICE EXCEEDS 1200 AMPS OR THE NUMBER/SIZE OF CONDUCTORS EXCEEDS THE LIMITS OF CT CABINET 2, THE CUSTOMER SHALL, AT HIS EXPENSE, PROVIDE AND INSTALL A BUS BAR CABINET OF SUITABLE SIZE, MATERIAL, AND CONSTRUCTION APPROVED BY GREER CPW REPRESENTATIVE.
- 8. CUSTOMER-OWNED EQUIPMENT, OTHER THAN CONDUCTOR, IS NOT ALLOWED WITHIN THE CT CABINET.
- 9. CUSTOMER IS TO PROVIDE AND INSTALL PLYWOOD BACKER ON THE INSIDE REAR WALL OF CT CABINET.



3				
2				
1				
0	11/8/24	SHERER	CRAWFORD	FARR
REVISED	BY	CHK'D	APPR.	

CT CABINET SELECTION AND INSTALLATION

WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-21			



NOTES:

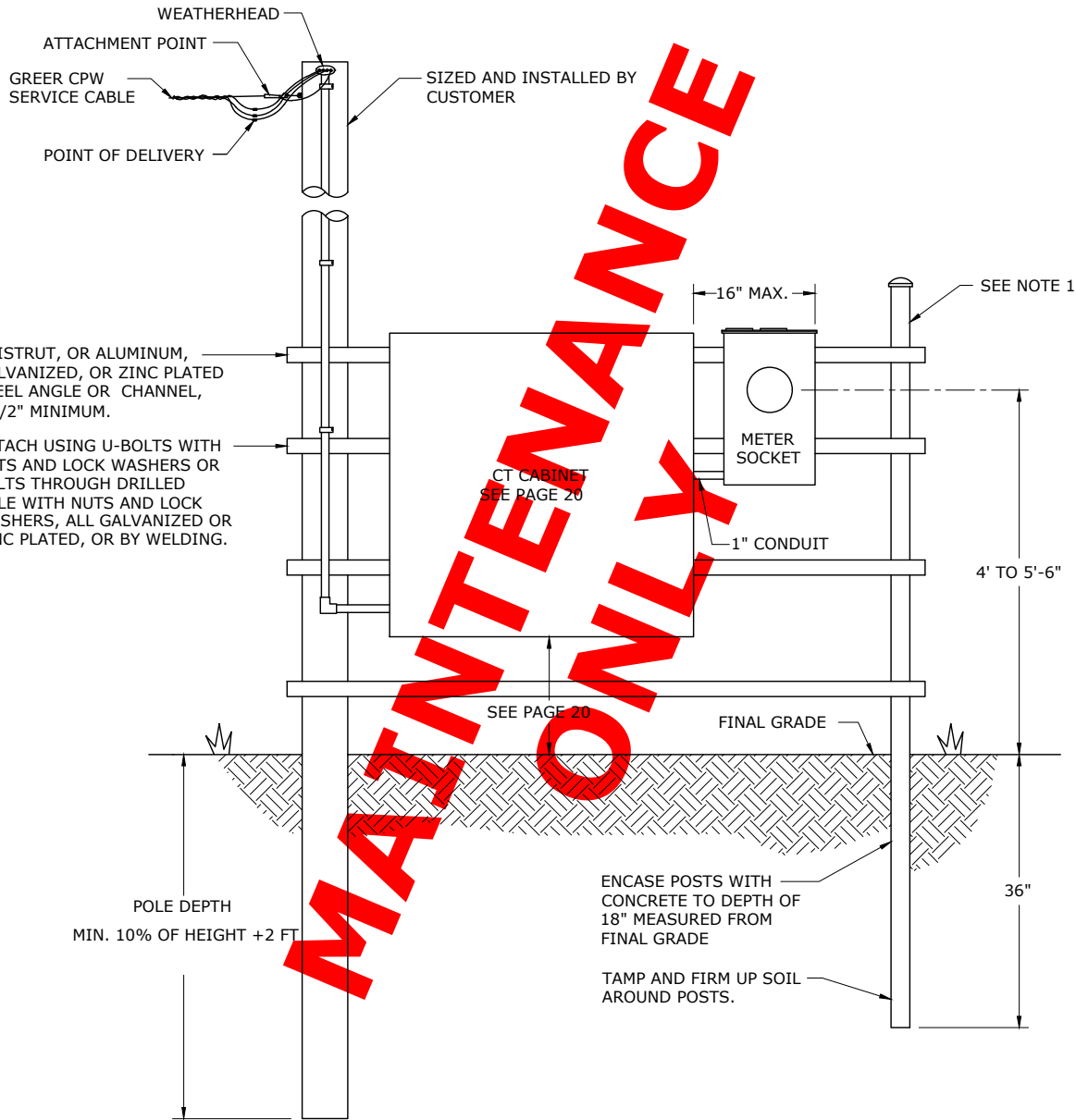
1. H FRAME STRUCTURE PROVIDED AND INSTALLED BY CUSTOMER. POSTS SHALL BE 2-3/8" PIPE OR LARGER WITH END CAPS, 2" (OD) OR LARGER TUBING WITH END CAPS, OR 2" OR LARGER CHANNEL, OR EQUIVALENT, ALL GALVANIZED, ZINC PLATED, OR ALUMINUM.
2. CT CABINET SIZING AND MOUNTING HEIGHT DETERMINED BY PAGE EE-21.
3. METER SOCKET PROVIDED BY GREER CPW AND INSTALLED BY CUSTOMER.
4. GROUND IN ACCORDANCE WITH PAGE EE-24.
5. GREER CPW WILL PROVIDE AND INSTALL ALL INSTRUMENT TRANSFORMERS AND WIRING FROM CT CABINET TO THE METER SOCKET.



3				
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0	11/8/24	SHERER	CRAWFORD	FARR
REVISED	BY	CHK'D	APPR.	

CT CABINET SELECTION AND INSTALLATION
UNDERGROUND SERVICE NOT ATTACHED TO A
PERMANENT STRUCTURE

WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-22			



NOTES:

1. H FRAME STRUCTURE PROVIDED AND INSTALLED BY CUSTOMER. POSTS SHALL BE 2-3/8" PIPE OR LARGER WITH DEAD END CAPS, 2" (OD) OR LARGER TUBING WITH END CAPS, OR 2" OR LARGER CHANNEL, OR EQUIVALENT, ALL GALVANIZED, ZINC PLATED, OR ALUMINUM.
2. WOOD POLE SIZED AND INSTALLED BY CUSTOMER
3. CT CABINET SIZING AND MOUNTING HEIGHT DETERMINED BY PAGE 20.
4. METER SOCKET PROVIDED BY GREER CPW AND INSTALLED BY CUSTOMER.
5. CT CABINET PROVIDED AND INSTALLED BY CUSTOMER.
6. GROUND IN ACCORDANCE WITH PAGE 23.
7. GREER CPW WILL PROVIDE AND INSTALL SERVICE CABLE IN ACCORDANCE WITH ITS STANDARD PRACTICES. UP TO POINT OF DELIVERY.
9. CONDUCTORS WITHIN CT CABINET AND WITHIN RISER UP TO POINT OF DELIVERY PROVIDED AND INSTALLED BY CUSTOMER.
10. CUSTOMER SHALL ENSURE THAT LIKE PHASES FROM EACH CONDUCTOR SET GO THROUGH EACH INDIVIDUAL CT. CONDUCTORS AND CONNECTIONS MUST BE ARRANGED SO AS NOT TO CREATE A HAZARD WHEN CABINET IS OPENED IN THE FUTURE. EITHER OF THE FOLLOWING ARE ACCEPTABLE:
 - CONTINUOUS UNSPLICED RUNS FROM PANEL THROUGH CT'S IN CABINET TO WEATHERHEAD. CUSTOMER SHALL MAKE ARRANGEMENTS WITH COMPANY TO HAVE CT'S INSTALLED IN CABINET BEFORE WIRE IS PULLED.
 - SEPARATE RUNS INSTALLED FROM PANEL TO CABINET AND CABINET TO WEATHERHEAD. THE CUSTOMER IS RESPONSIBLE FOR MAKING CONNECTIONS IN THE CABINET.

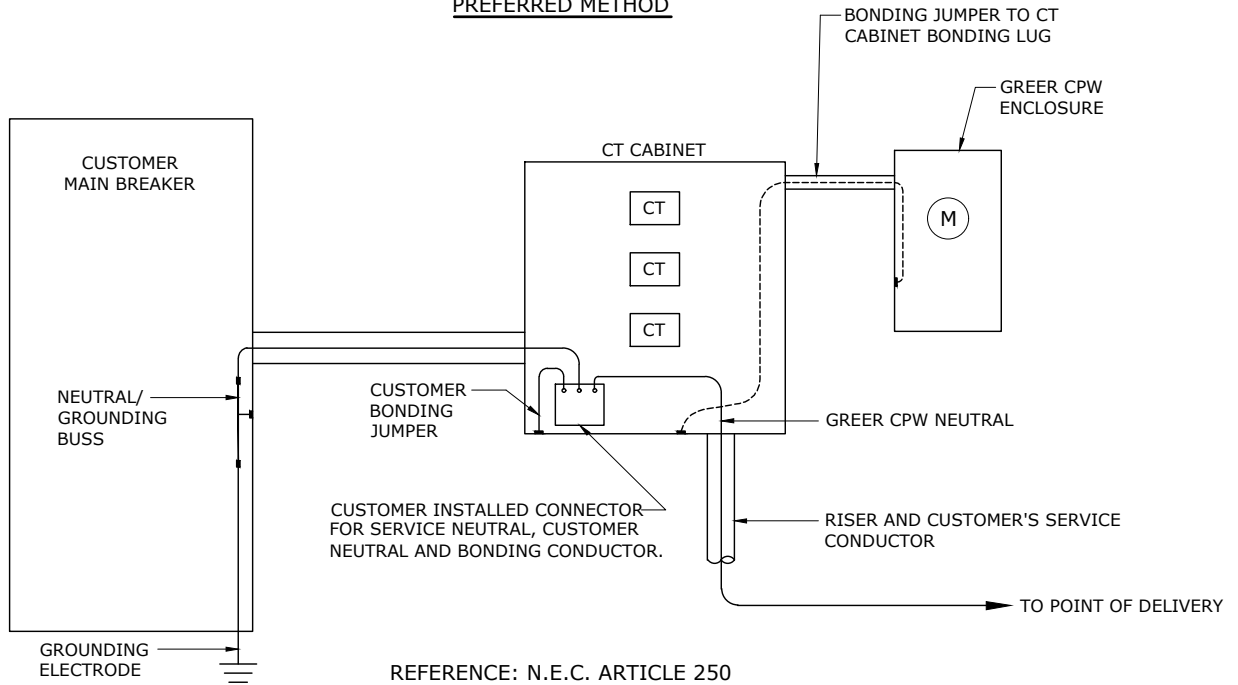


3				
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0	11/8/24	SHERER	CRAWFORD	FARR
REVISED	BY	CHK'D	APPR.	

CT CABINET SELECTION AND INSTALLATION
UNDERGROUND SERVICE NOT ATTACHED TO A
PERMANENT STRUCTURE

WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-23			

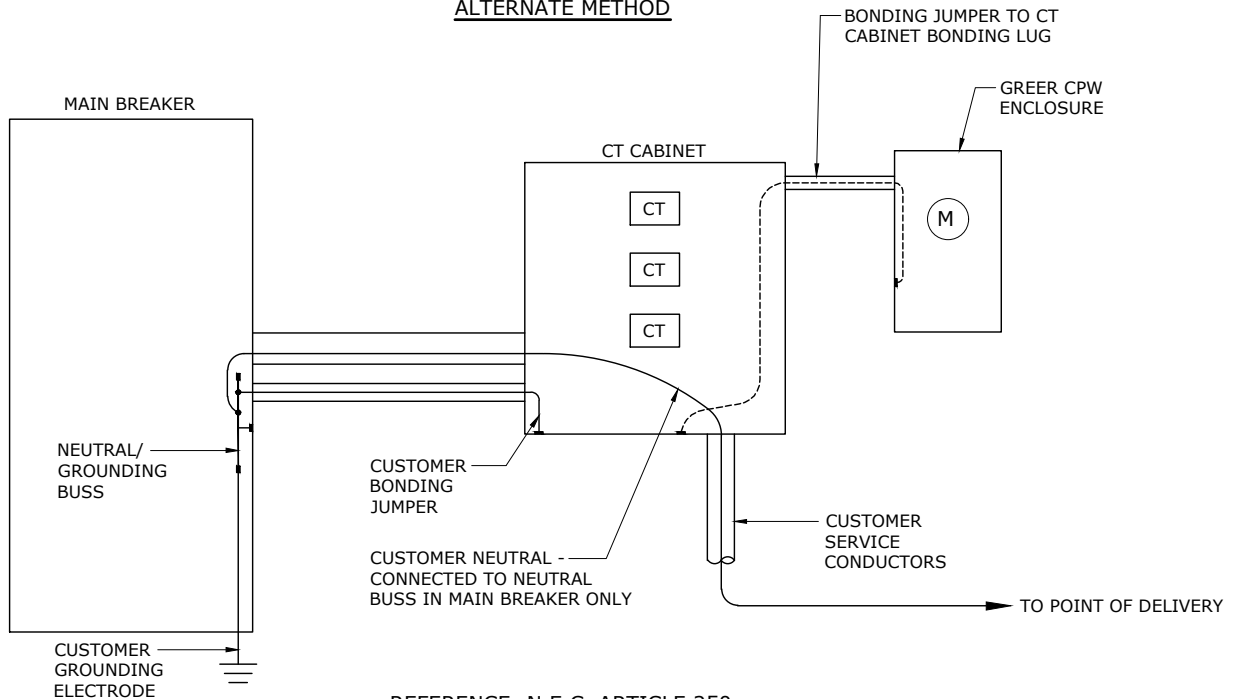
**CT CABINET INSTALLATION
PREFERRED METHOD**



REFERENCE: N.E.C. ARTICLE 250

NOTE: ONLY NEUTRAL CONDUCTOR SHOWN FOR CLARITY.

**CT CABINET INSTALLATION
ALTERNATE METHOD**



REFERENCE: N.E.C. ARTICLE 250

NOTES:

1. CT CABINET MUST BE BONDED TO THE CUSTOMER'S SERVICE EQUIPMENT BY THE GROUNDED NEUTRAL CONDUCTOR (PREFERRED) OR A DEDICATED BONDING CONDUCTOR (ALTERNATE). CUSTOMER IS RESPONSIBLE FOR PROVIDING/INSTALLING THE BONDING CONDUCTOR/JUMPER SIZED PER NEC ARTICLE 250 IN BOTH CASES. IF THE CT CABINET IS NOT FURNISHED WITH A BONDING LUG, THE CUSTOMER IS RESPONSIBLE FOR PROVIDING/ INSTALLING.



3				
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0	11/8/24	SHERER	CRAWFORD	FARR
REVISED	BY	CHK'D	APPR.	

ALLOWABLE LOCATIONS OF CONNECTIONS OF GROUNDED (NEUTRAL) CONDUCTOR AND GROUNDING ELECTRODE CONDUCTOR

WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-24			

ALL CONDUIT MUST BE INSTALLED AT THE PROPER DEPTH AND WITH PROPER SEPARATION AS SHOWN BELOW

TABLE 1: MINIMUM CONDUIT COVER		
CABLE OR APPLICATION	MINIMUM COVER (X)	SPECIFIC NOTES
SECONDARY / SERVICE	30"	SEE NOTE 2
PRIMARY (1Ø OR 3Ø)	36"	SEE NOTE 2
ROAD CROSSINGS (ANY VOLTAGE)	36"	
PARKING LOT CROSSINGS (ANY VOLTAGE)	36"	SEE NOTE 2

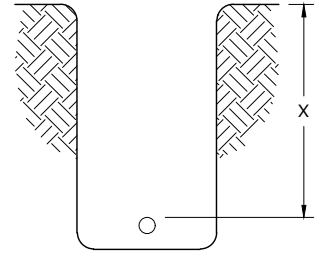
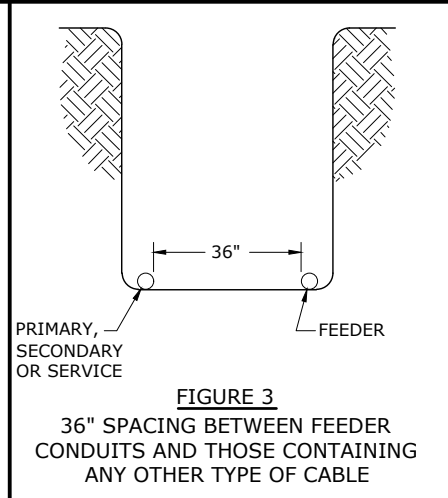
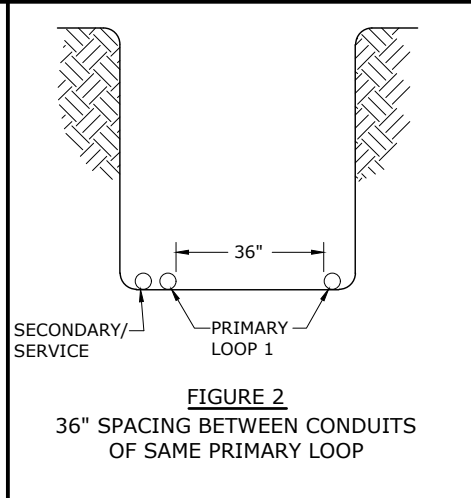
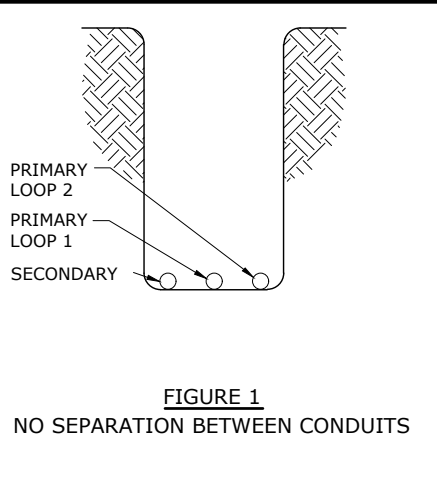
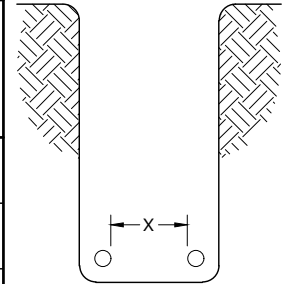


TABLE 2: REQUIRED MINIMUM HORIZONTAL SEPARATION BETWEEN CONDUITS.					
COLUMN 1	MINIMUM HORIZONTAL SEPARATION FROM CABLES IN COLUMN 1 (X)				
CABLE	SECONDARY / SERVICE	PRIMARY, 200A (1Ø OR 3Ø)	PRIMARY, 200A (1Ø OR 3Ø) WHEN BOTH CABLES ARE NOT PART OF THE SAME LOOP	PRIMARY, 200A (1Ø OR 3Ø) WHEN BOTH CABLES ARE PART OF THE SAME LOOP	FEEDER (>200A)
SECONDARY / SERVICE	NO REQUIRED SEPARATION SEE FIGURE 1	NO REQUIRED SEPARATION SEE FIGURE 1			36" SEE FIGURE 3
PRIMARY, 200A (1Ø OR 3Ø)	NO REQUIRED SEPARATION SEE FIGURE 1		NO REQUIRED SEPARATION SEE FIGURE 1	36" SEE FIGURE 2	36" SEE FIGURE 3
FEEDER (>200A)	36" SEE FIGURE 3	36" SEE FIGURE 3			36" SEE FIGURE 3



NOTES:

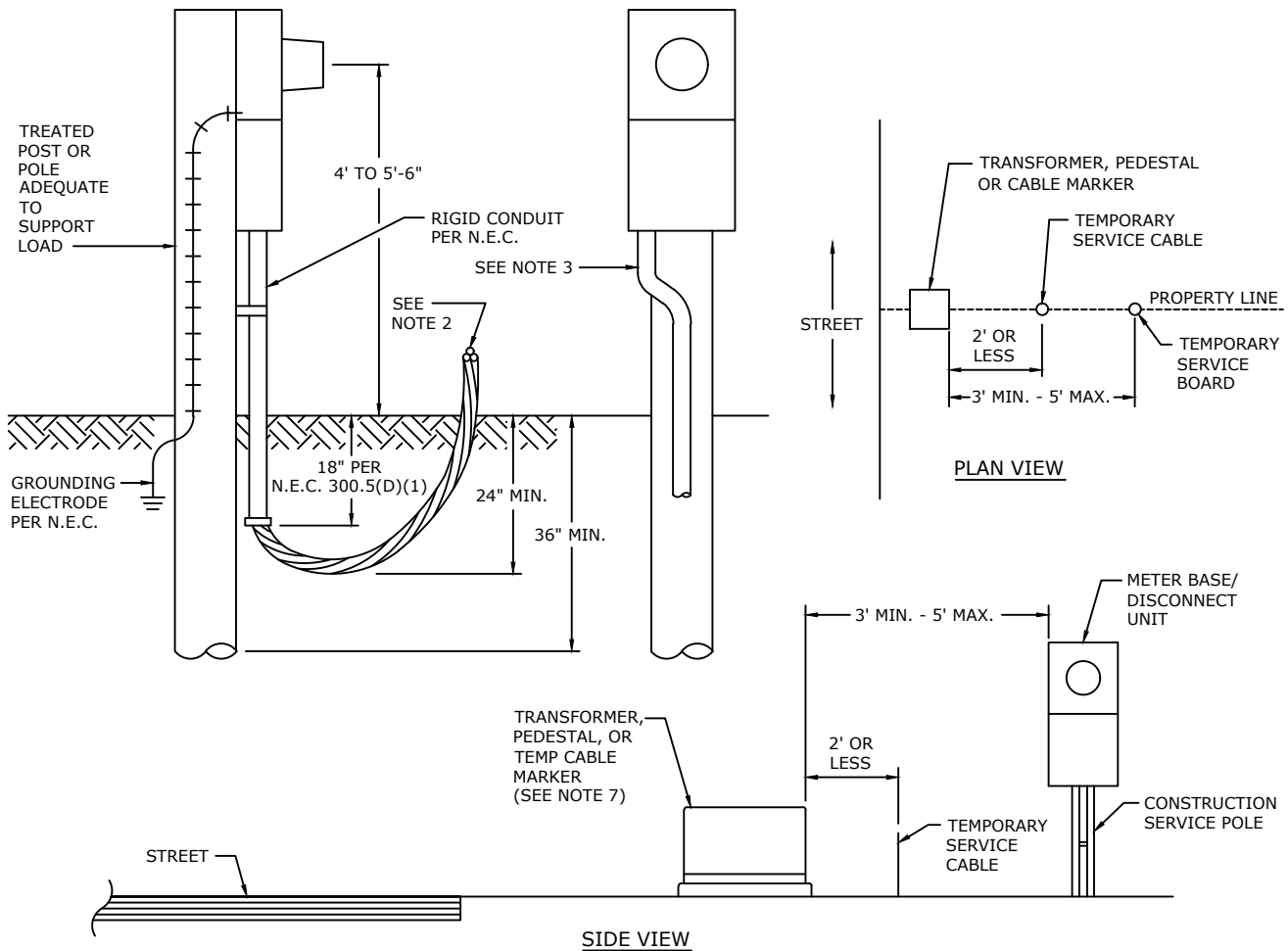
- DISTANCES ARE MEASURED TO THE SURFACE OF THE CONDUIT.
- PRIMARY CONDUIT LESS THAN 30" DEEP OR SECONDARY CONDUIT LESS THAN 24" DEEP MUST BE INSTALLED IN MINIMUM SCHEDULE 40 CONDUIT WITH A MINIMUM OF TWO (2) INCHES OF CONCRETE ABOVE AND BESIDE THE CONDUIT AND A MINIMUM OF SIX (6) INCHES OF COVER.
- FEEDER (>200A) CONDUITS MUST BE SEPARATED HORIZONTALLY FROM CONDUITS CONTAINING ANY OTHER TYPE OF CABLE BY 36".
- EITHER ONE WIDE TRENCH OR TWO NARROW TRENCHES MAY BE USED, BASED ON ECONOMICS, TO OBTAIN REQUIRED HORIZONTAL SEPARATION.



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0	11/8/24	SHERER	CRAWFORD	FARR
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TRENCHING & BURIAL REQUIREMENTS

WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-25			



NOTES:

1. CUSTOMER FURNISHES AND INSTALLS ALL ITEMS EXCEPT METER. INSTALLATION IS TO BE MADE BY ELECTRICIAN TO MEET N.E.C. AND LOCAL ORDINANCES.
2. CUSTOMER'S ELECTRICIAN TO SUPPLY SUITABLE CONDUCTORS (SEPARATE CONDUCTORS - NO SHEATHED CABLES!) FROM SOURCE SIDE LUGS OF METER BASE TO 10' MINIMUM BEYOND END OF CONDUIT RISER. OVERALL, A TOTAL OF APPROXIMATELY 20' OF CONDUCTOR IS NEEDED FROM THE METER BASE LUGS TO THE SOURCE (TRANSFORMER SPADES, PEDESTAL CONNECTOR, ETC.). CONDUCTOR ENDS TO BE CAPPED TO PREVENT WATER ENTRY.
3. CONDUIT TO BE INSTALLED IN DESIGNATED SPACE IN PANEL AS REQUIRED BY N.E.C. 230.6.
4. TYPICAL SERVICE IS 120/240V SINGLE-PHASE 10KW MAXIMUM.
5. CUSTOMERS WILL BE ALLOWED TO HAVE THE FOLLOWING NUMBER OF STANDARD TEMPORARY CONSTRUCTION SERVICES (OVERHEAD OR UNDERGROUND) - ONE PER HOUSE CONDOMINIUM, TOWNHOUSE, OR APARTMENT COMPLEX - ONE PER BUILDING MALLS - ONE TO EACH MAJOR TENANT AND ONE TO THE MALL INDUSTRIAL OR OTHER COMMERCIAL STRUCTURES - ONE PER BUILDING
6. CHARGES WILL APPLY TO ANY NON-STANDARD TEMPORARY SERVICE. PLEASE CONSULT THE GREER CPW ENGINEERING DEPARTMENT FOR INSTALLATION DETAILS AND CHARGES.
7. IN INSTANCES WHERE MORE THAN ONE POWER SOURCE IS AVAILABLE (SUCH AS A PAD-MOUNTED TRANSFORMER OR ABOVE-GROUND PEDESTAL AND A TEMPORARY CABLE MARKER), THE SERVICE POST SHALL BE INSTALLED BESIDE OF THE TRANSFORMER OR PEDESTAL.
8. IN THOSE CASES WHERE THE SOURCE IS A PAD-MOUNTED TRANSFORMER, THE SERVICE POST SHALL BE INSTALLED TO EITHER SIDE OF THE TRANSFORMER, NOT IN FRONT OF OR DIRECTLY BEHIND IT. THE FRONT OF THE TRANSFORMER IS THE SIDE WITH THE COMPANY PADLOCK.



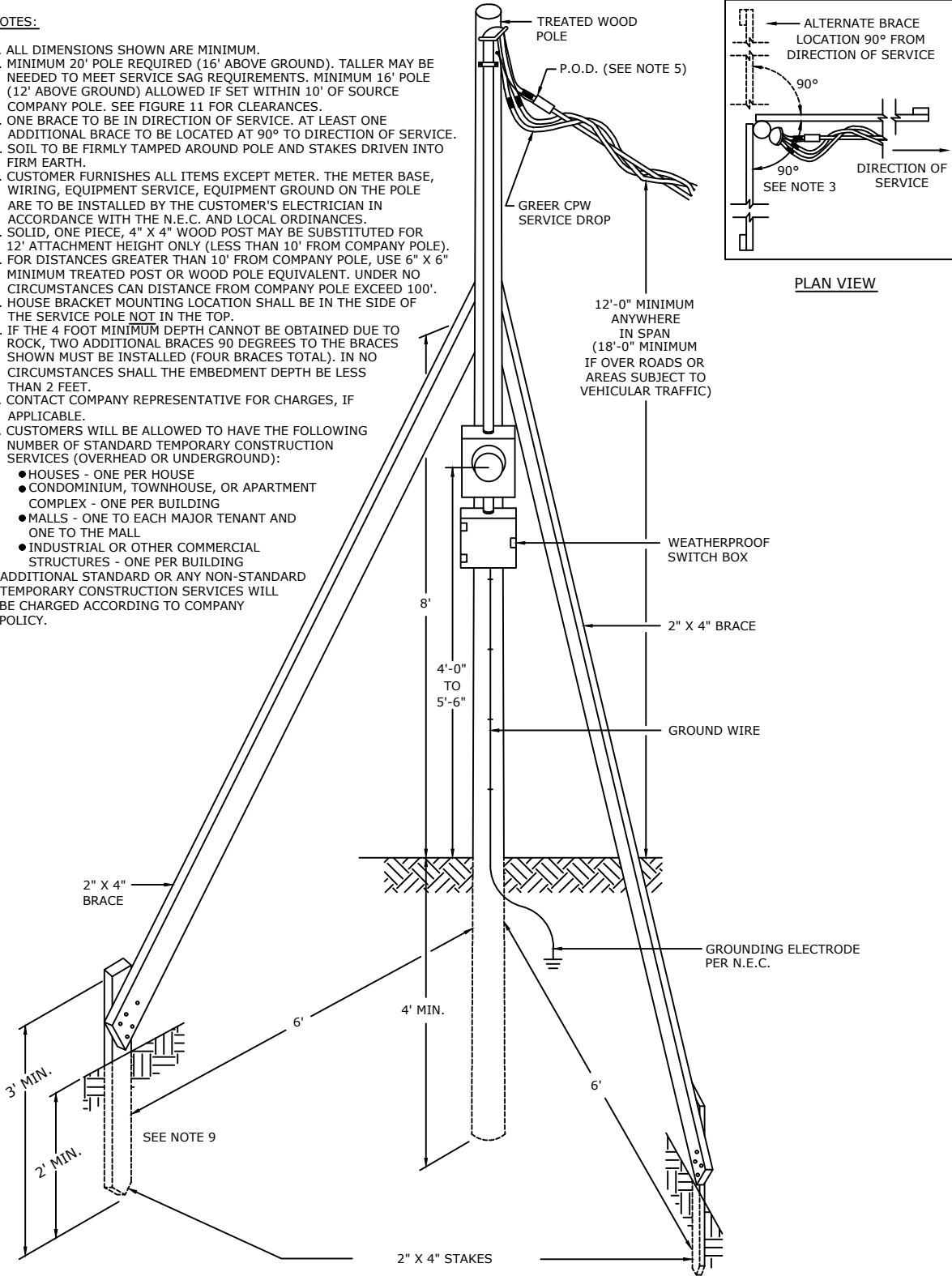
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0	11/8/24	SHERER	CRAWFORD	FARR
REVISED	BY	CHK'D	APPR.	


**UNDERGROUND TEMPORARY SERVICE
CONSTRUCTION POST**

WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-26			

NOTES:

1. ALL DIMENSIONS SHOWN ARE MINIMUM.
2. MINIMUM 20' POLE REQUIRED (16' ABOVE GROUND). TALLER MAY BE NEEDED TO MEET SERVICE SAG REQUIREMENTS. MINIMUM 16' POLE (12' ABOVE GROUND) ALLOWED IF SET WITHIN 10' OF SOURCE COMPANY POLE. SEE FIGURE 11 FOR CLEARANCES.
3. ONE BRACE TO BE IN DIRECTION OF SERVICE. AT LEAST ONE ADDITIONAL BRACE TO BE LOCATED AT 90° TO DIRECTION OF SERVICE.
4. SOIL TO BE FIRMLY TAMPED AROUND POLE AND STAKES DRIVEN INTO FIRM EARTH.
5. CUSTOMER FURNISHES ALL ITEMS EXCEPT METER. THE METER BASE, WIRING, EQUIPMENT SERVICE, EQUIPMENT GROUND ON THE POLE ARE TO BE INSTALLED BY THE CUSTOMER'S ELECTRICIAN IN ACCORDANCE WITH THE N.E.C. AND LOCAL ORDINANCES.
6. SOLID, ONE PIECE, 4" X 4" WOOD POST MAY BE SUBSTITUTED FOR 12' ATTACHMENT HEIGHT ONLY (LESS THAN 10' FROM COMPANY POLE).
7. FOR DISTANCES GREATER THAN 10' FROM COMPANY POLE, USE 6" X 6" MINIMUM TREATED POST OR WOOD POLE EQUIVALENT. UNDER NO CIRCUMSTANCES CAN DISTANCE FROM COMPANY POLE EXCEED 100'.
8. HOUSE BRACKET MOUNTING LOCATION SHALL BE IN THE SIDE OF THE SERVICE POLE NOT IN THE TOP.
9. IF THE 4 FOOT MINIMUM DEPTH CANNOT BE OBTAINED DUE TO ROCK, TWO ADDITIONAL BRACES 90 DEGREES TO THE BRACES SHOWN MUST BE INSTALLED (FOUR BRACES TOTAL). IN NO CIRCUMSTANCES SHALL THE EMBEDMENT DEPTH BE LESS THAN 2 FEET.
10. CONTACT COMPANY REPRESENTATIVE FOR CHARGES, IF APPLICABLE.
11. CUSTOMERS WILL BE ALLOWED TO HAVE THE FOLLOWING NUMBER OF STANDARD TEMPORARY CONSTRUCTION SERVICES (OVERHEAD OR UNDERGROUND):
 - HOUSES - ONE PER HOUSE
 - CONDOMINIUM, TOWNHOUSE, OR APARTMENT COMPLEX - ONE PER BUILDING
 - MALLS - ONE TO EACH MAJOR TENANT AND ONE TO THE MALL
 - INDUSTRIAL OR OTHER COMMERCIAL STRUCTURES - ONE PER BUILDING
 ADDITIONAL STANDARD OR ANY NON-STANDARD TEMPORARY CONSTRUCTION SERVICES WILL BE CHARGED ACCORDING TO COMPANY POLICY.



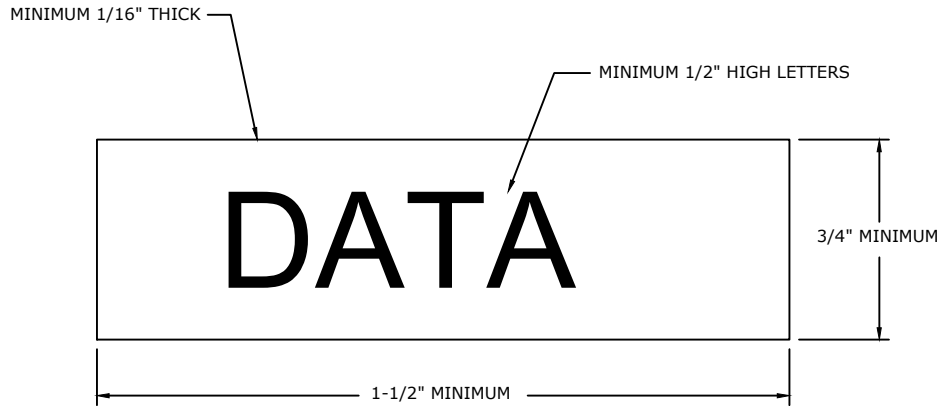


GREER CPW

WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-27			

3				
2				
1				
0	11/8/24	SHERER	CRAWFORD	FARR
REVISED	BY	CHK'D	APPR.	

OVERHEAD TEMPORARY CONSTRUCTION SERVICE POLE



NOTES:

1. ON INSTALLATIONS, REPAIRS, REPLACEMENTS OR UPGRADES OF ENCLOSURES INVOLVING MORE THAN ONE METER ON A SINGLE PREMISE, THE CUSTOMER SHALL CORRECTLY IDENTIFY EACH METER ENCLOSURE ON THE OUTSIDE BY A NONFERROUS METAL OR PLASTIC PLATE ENGRAVED OR STAMPED WITH THE APARTMENT NUMBER, OFFICE SUITE, LOT NUMBER, ETC.
2. THE SAME PLATE DESCRIBED IN NOTE 1 SHALL BE ATTACHED TO ANY INSTRUMENT TRANSFORMER ENCLOSURE (CT CABINET) WHEN MULTIPLE ENCLOSURES ARE USED TO SERVICE A SINGLE PREMISE.
3. THE PLATE SHALL BE PERMANENTLY ATTACHED TO THE ENCLOSURE UTILIZING AN INDUSTRIAL-STRENGTH ADHESIVE SUITABLE FOR EXTERIOR USE. TWO-SIDED TAPE IS NOT ACCEPTABLE.
4. THE INSIDE OF EACH ENCLOSURE SHALL BE CORRECTLY IDENTIFIED WITH A PLATE DESCRIBED ABOVE OR WITH A PERMANENT MARKER.
5. CUSTOMER CABLES USED IN MULTI-TENANT APPLICATIONS (APARTMENT COMPLEXES, TOWNHOMES, ETC) AND TERMINATING IN COMPANY EQUIPMENT SUCH AS TRANSFORMERS, PEDESTALS, OR CT CABINETS OR IN CUSTOMER EQUIPMENT SUCH AS TROUGHS, METER CENTERS ETC, SHALL BE CLEARLY AND SPECIFICALLY MARKED FOR PHASE AND LABELED WITH A TAG TO IDENTIFY THE LOCATION OF THE SOURCE AND LOAD ENDS OF THE CABLE. THE LOAD END OF EACH CABLE SHALL BE LABELED TO IDENTIFY THE SOURCE. EACH SOURCE END SHALL BE LABELED TO IDENTIFY THE LOCATION OF THE LOAD END OF THE CABLE (TROUGH NUMBER, PANEL NUMBER, ETC).



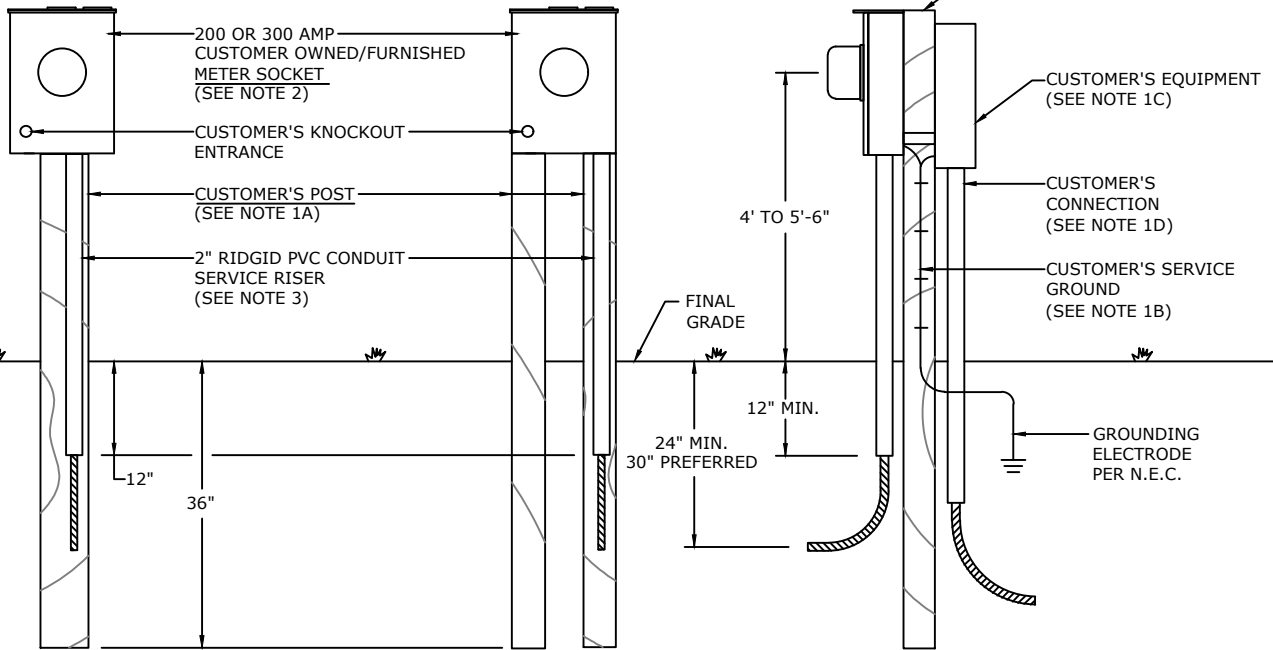
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0	11/8/24	SHERER	CRAWFORD	FARR
REVISED	BY	CHK'D	APPR.	

**METERING/ INSTRUMENT
TRANSFORMER ENCLOSURE LABELING
ON A SINGLE PREMISE**

WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-28			

SINGLE POST OPTION

TWO POST OPTION



CUSTOMER INSTALLATION

1. CUSTOMER WILL FURNISH AND INSTALL:
 - (A) ONE 4" X 6", 6" X 6" OR TWO 4" X 4" TREATED POSTS SUITABLE TO COMPANY AND AUTHORITY HAVING JURISDICTION.
 - (B) SERVICE GROUND IN ACCORDANCE WITH N.E.C. (C) ALL EQUIPMENT, MOUNTING HEIGHTS, AND CLEARANCES BEYOND THE METER SOCKET IN ACCORDANCE WITH N.E.C.
 - (D) ALL CONNECTIONS IN ACCORDANCE WITH N.E.C.
 - (E) MOBILE HOME SERVICES - POST SHALL BE INSTALLED 18" MIN. FROM THE MOBILE HOME FOR MOUNTING THE SERVICE RISER, METER SOCKET, AND SERVICE EQUIPMENT. METERING EQUIPMENT SHALL FACE AWAY FROM MOBILE HOME SUCH THAT METER IS EASILY READABLE AND ACCESSIBLE. OTHER CONSTRUCTION IS PERMISSIBLE WITH LOCAL ENGINEER'S APPROVAL.
2. CUSTOMER WILL FURNISH, INSTALL, AND OWN METER SOCKET. TOP OF SOCKET MUST BE LEVEL FRONT TO TO BACK AND SIDE TO SIDE.

COMPANY INSTALLATION

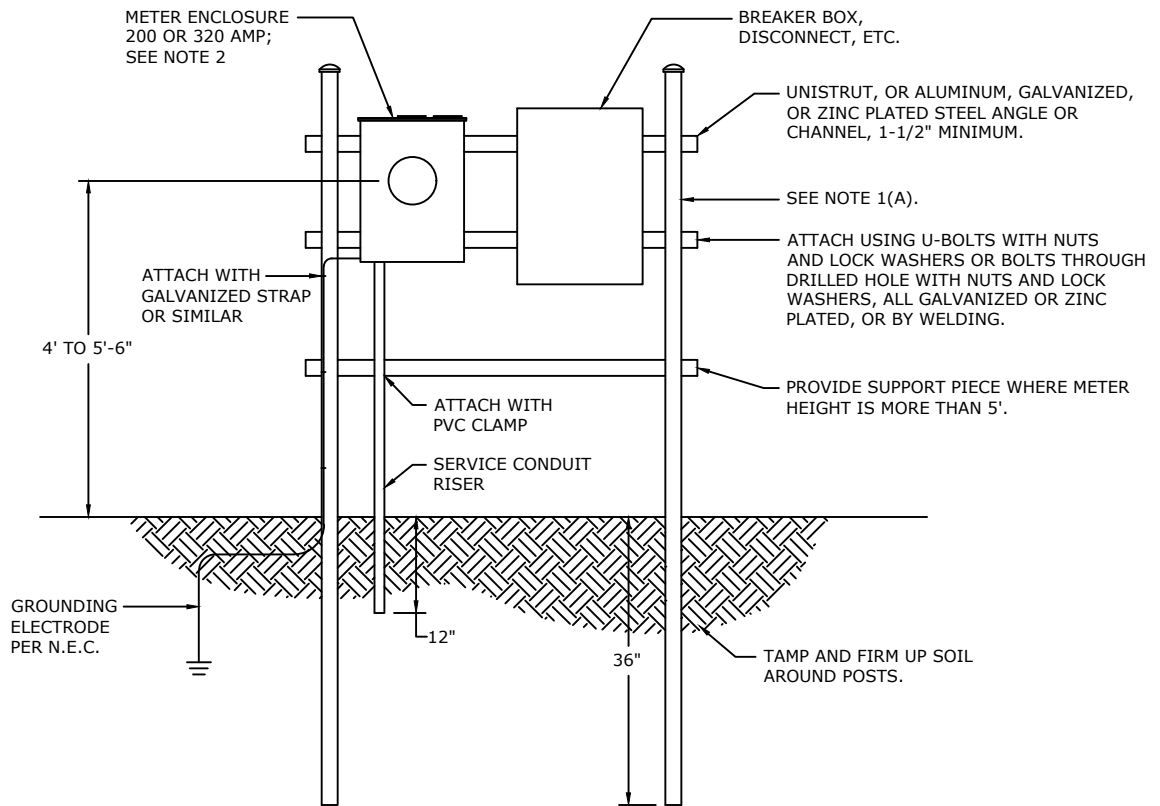
3. COMPANY WILL PROVIDE AND INSTALL THE UNDERGROUND SERVICE LATERAL ACCORDING TO COMPANY'S STANDARD PRACTICES.
4. BOTTOM OF TRENCH MUST BE FIRMLY TAMPED NEAR H-FRAME. CABLE MUST BE POSITIONED FIRMLY AGAINST TAMPED EARTH DURING BACKFILLING. BEFORE CABLE IS CUT AFTER BACK-FILLING, PUSH CABLE DOWN IN CONDUIT TO PROVIDE AS MUCH SLACK AS POSSIBLE. THIS IS NECESSARY TO PREVENT SETTLING OF EARTH FROM PULLING ON CABLE AND DAMAGING METER BASE TERMINALS.
5. POINT OF DELIVERY IS WHERE COMPANY'S CONDUCTORS ATTACH TO METER SOCKET.



3				
2				
1				
0	11/8/24	SHERER	CRAWFORD	FARR
REVISED	BY	CHK'D	APPR.	

UNDERGROUND PERMANENT SERVICE
POST MOUNTED

WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-29			




CUSTOMER INSTALLATION

1. CUSTOMER WILL FURNISH AND INSTALL:
 - (A) H FRAME POSTS SHALL BE 2-3/8" PIPE OR LARGER WITH END CAPS, 2" (OD) OR LARGER TUBING WITH END CAPS, OR 2" OR LARGER CHANNEL, OR EQUIVALENT, ALL GALVANIZED, ZINC PLATED, OR ALUMINUM.
 - (B) SERVICE GROUND IN ACCORDANCE WITH N.E.C.
 - (C) ALL EQUIPMENT, MOUNTING HEIGHTS, AND CLEARANCES BEYOND THE METER SOCKET IN ACCORDANCE WITH N.E.C.
 - (D) ALL CONNECTIONS IN ACCORDANCE WITH N.E.C.
 - (E) MOBILE HOME SERVICES - H FRAME SHALL BE INSTALLED 18" MIN. FROM THE MOBILE HOME FOR MOUNTING THE SERVICE RISER, METER SOCKET, AND SERVICE EQUIPMENT. METERING EQUIPMENT SHALL FACE AWAY FROM MOBILE HOME SUCH THAT METER IS EASILY READABLE AND ACCESSIBLE. OTHER CONSTRUCTION IS PERMISSIBLE WITH LOCAL ENGINEER'S APPROVAL.
2. CUSTOMER WILL FURNISH, INSTALL, AND OWN METER SOCKET. TOP OF SOCKET MUST BE LEVEL FRONT TO FRONT TO BACK AND SIDE TO SIDE.

COMPANY INSTALLATION.

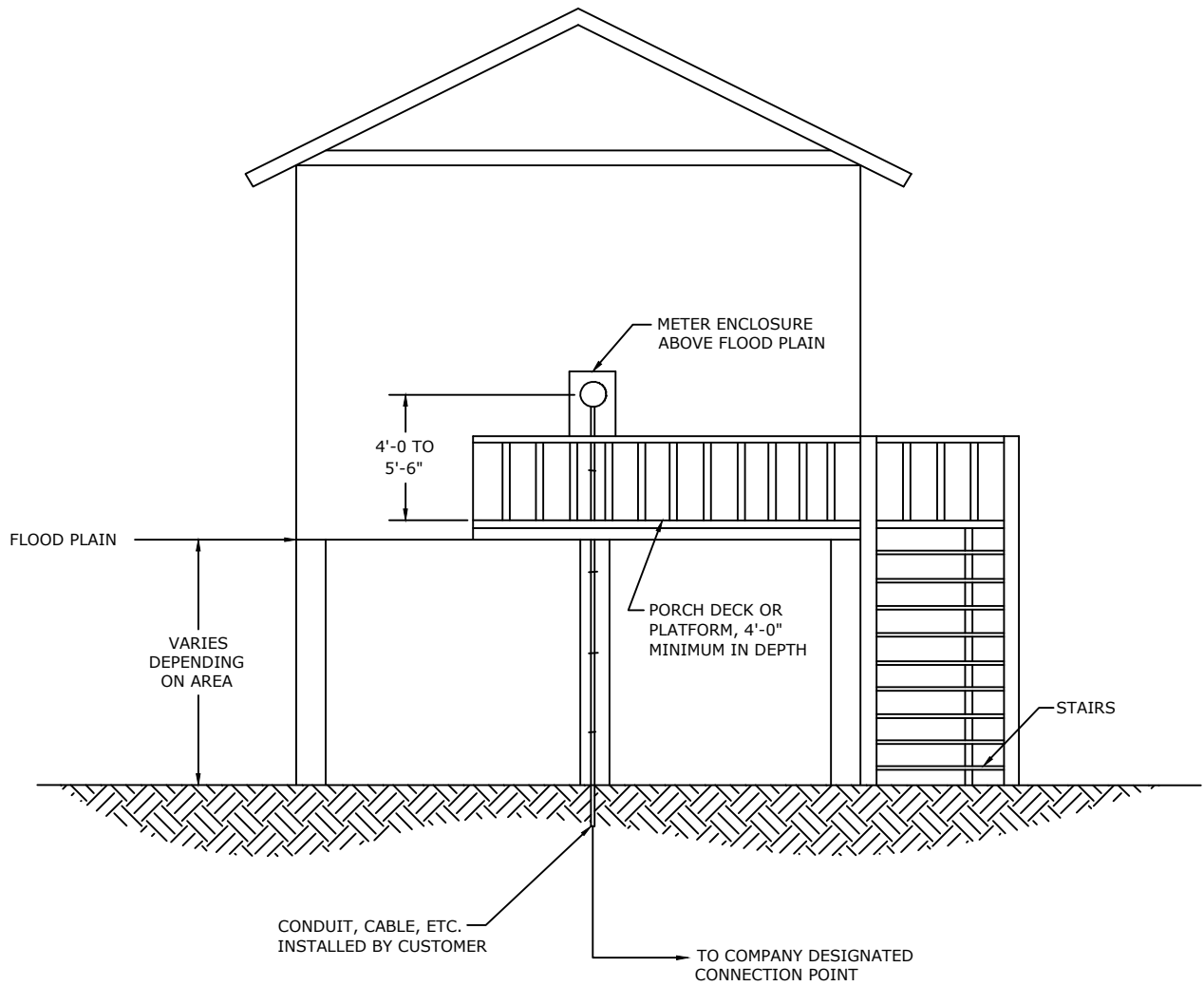
3. COMPANY WILL PROVIDE AND INSTALL THE UNDERGROUND SERVICE LATERAL FOR SINGLE PHASE RESIDENTIAL SERVICES ONLY. PER COMPANY'S STANDARD PRACTICES.
4. BOTTOM OF TRENCH MUST BE FIRMLY TAMPED NEAR H-FRAME. CABLE MUST BE POSITIONED FIRMLY AGAINST TAMPED EARTH DURING BACKFILLING. BEFORE CABLE IS CUT AFTER BACK-FILLING, PUSH CABLE DOWN IN CONDUIT TO PROVIDE AS MUCH SLACK AS POSSIBLE. THIS IS NECESSARY TO PREVENT SETTLING OF EARTH FROM PULLING ON CABLE AND DAMAGING METER BASE TERMINALS.



WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-30			

3					
2					
1					
0	11/8/24	SHERER	CRAWFORD	FARR	
REVISED	BY	CHK'D	APPR.		

**UNDERGROUND PERMANENT SERVICE
H FRAME STRUCTURE MOUNTED**



NOTES:

1. ELECTRICAL SERVICES IN FLOOD ZONES MUST BE ELEVATED ABOVE THE FLOOD PLAIN ELEVATION, AND ACCESS AND WORKING CLEARANCES MUST COMPLY WITH N.E.C. ARTICLE 110.
2. ALL PLATFORM AND STAIR CONSTRUCTION SHALL BE PROVIDED BY THE CUSTOMER AS REQUIRED BY COMPANY AND MUST MEET ALL APPLICABLE BUILDING CODES.
3. NO SHIPS LADDERS OR HOMEMADE LADDERS WILL BE APPROVED.
4. CONDUIT (SCHEDULE 40), SERVICE RISER, ATTACHMENT MEANS AND SERVICE CONDUCTORS ARE TO BE PROVIDED AND INSTALLED BY CUSTOMER.

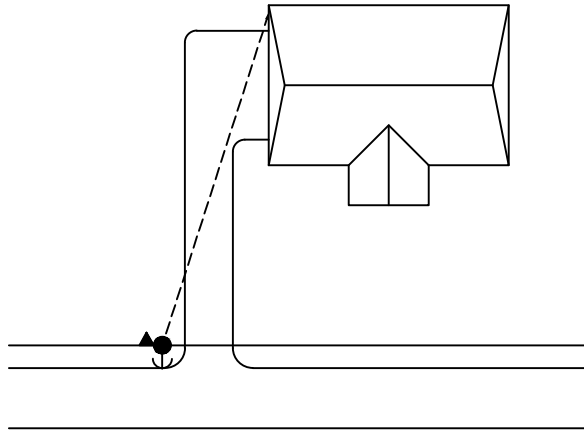


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0	11/8/24	SHERER	CRAWFORD	FARR
REVISED	BY	CHK'D	APPR.	

**METER ENCLOSURE INSTALLATIONS
IN FLOOD ZONES**

WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-31			

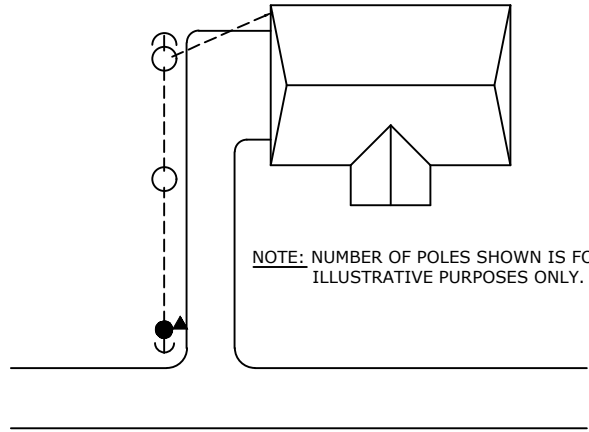
NORMAL POINT OF DELIVERY



NORMAL P.O.D.
NO CHARGE

NORMAL P.O.D. IS ON THE END OF THE BUILDING NEAREST THE OVERHEAD SOURCE.

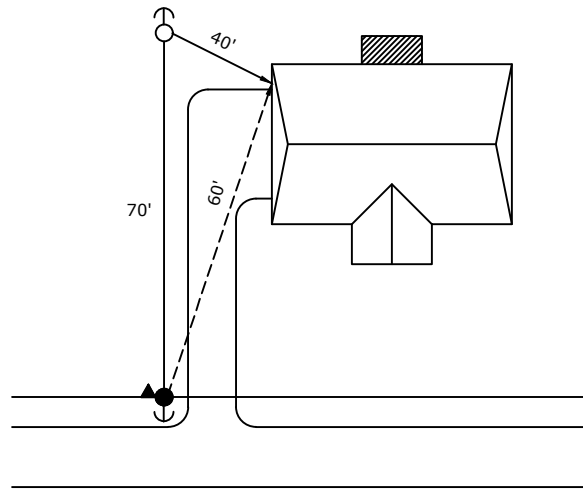
NORMAL POINT OF DELIVERY



NOTE: NUMBER OF POLES SHOWN IS FOR ILLUSTRATIVE PURPOSES ONLY.

NO EXTRA POLE CHARGE TO NORMAL P.O.D. USING OH SECONDARY LIFT POLES

WIRING BEYOND NORMAL POINT OF DELIVERY



NOTE: DIMENSIONS SHOWN ARE FOR ILLUSTRATIVE PURPOSES ONLY.

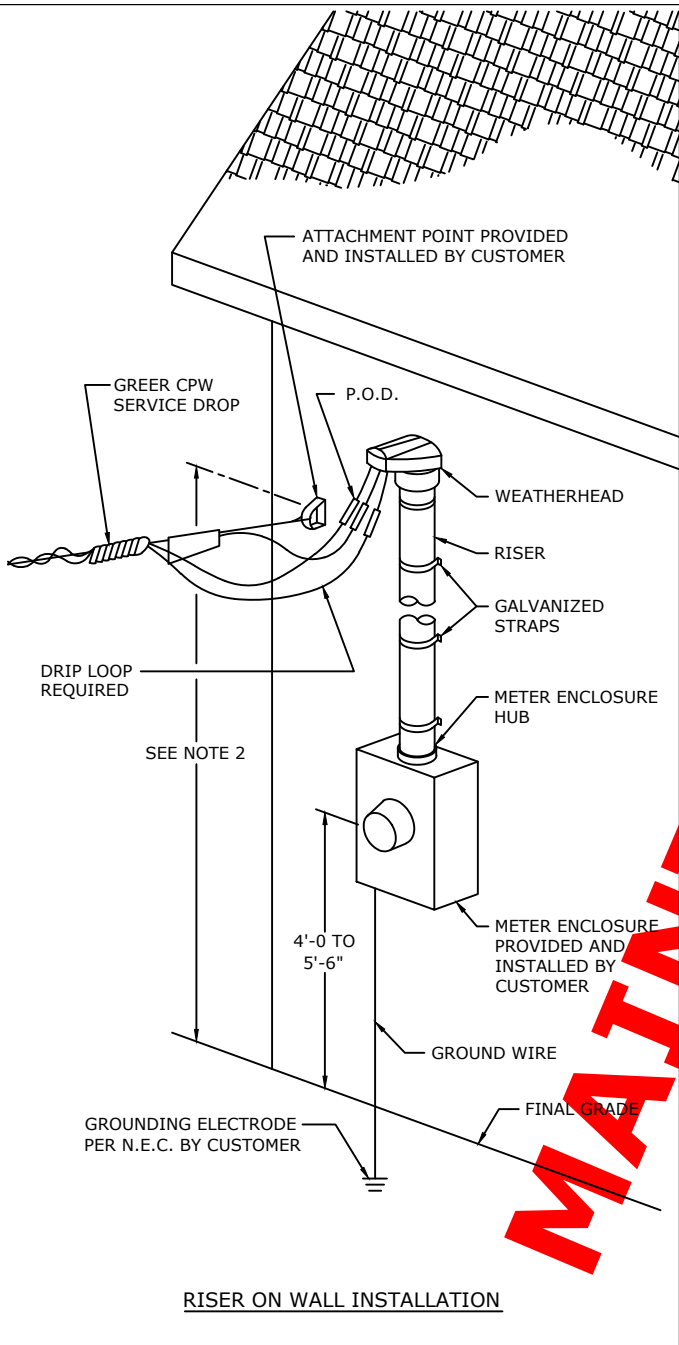
CUSTOMER WILL BE RESPONSIBLE FOR THE COST OF THE POLE AND THE ADDITIONAL CABLE COSTS. CONTACT THE COMPANY'S REPRESENTATIVE FOR COSTS.



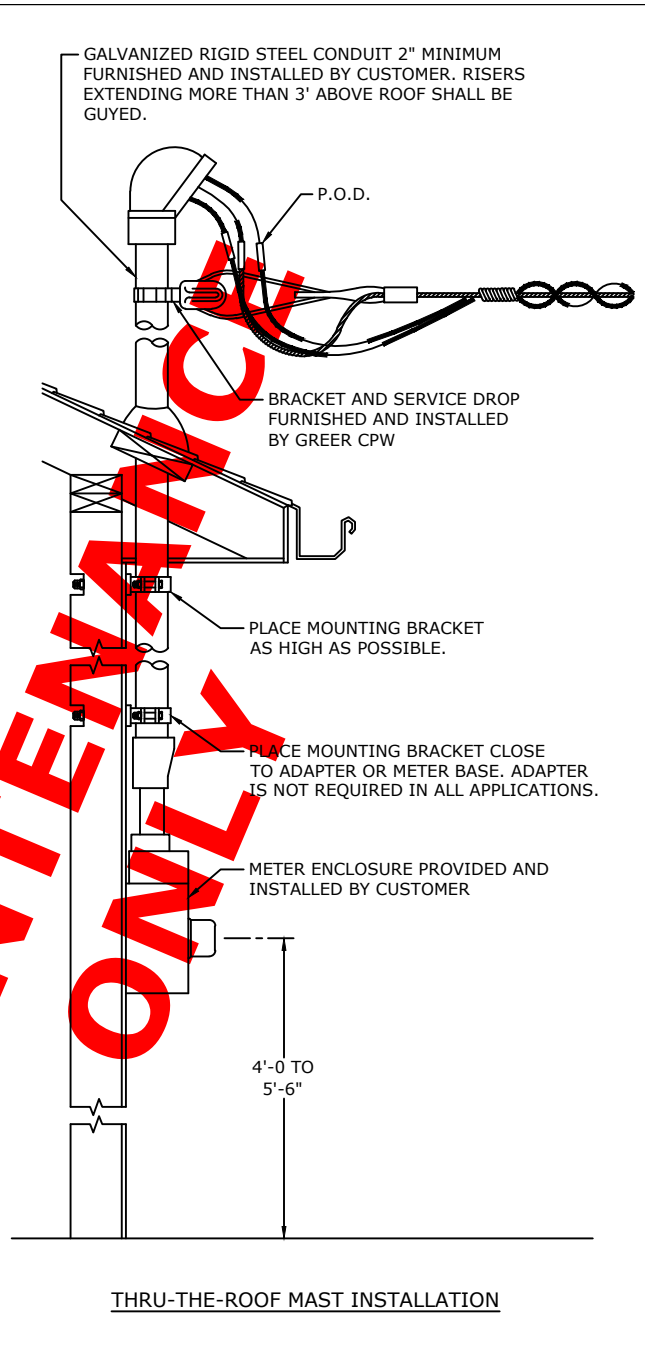
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0	11/8/24	SHERER	CRAWFORD	FARR
REVISED	BY	CHK'D	APPR.	

INDIVIDUAL 1 PHASE SECONDARY OVERHEAD LINE EXTENSIONS

WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-32			



RISER ON WALL INSTALLATION



THRU-THE-ROOF MAST INSTALLATION

MAINTENANCE ONLY

NOTES:

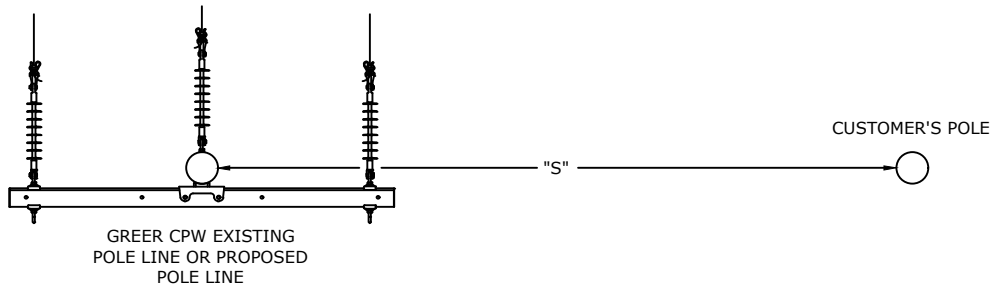
1. SEE FIGURE 14A FOR METER ENCLOSURE GROUNDING DETAILS.
2. SEE FIGURES 10 AND 11 FOR SERVICE DROP CLEARANCES.
3. CUSTOMER PROVIDES AND INSTALLS ALL ITEMS EXCEPT METER AND SERVICE DROP, EXCEPT AS NOTED ABOVE.
4. THRU-THE-ROOF RISERS MUST BE ACCESSIBLE TO A COMPANY BUCKET TRUCK OR A COMPANY EMPLOYEE ON AN EXTENSION LADDER NOT TO EXCEED 25' ABOVE GRADE.
5. RISERS IN EXCESS OF 72" ABOVE ROOF LINES SHALL BE ACCESSIBLE TO A COMPANY BUCKET TRUCK.
6. DISCONNECTS INSTALLED ON RESIDENTIAL SERVICES TO MEET THE NEC'S REQUIREMENTS FOR EMERGENCY DISCONNECTS SHALL BE LOCATED AFTER (DOWNSTREAM FROM) THE COMPANY'S METER.
7. METER ENCLOSURES SHALL NOT BE RECESSED IN ANY WAY THAT BLOCKS ACCESS, KNOCKOUTS OR DRAINAGE AND SHALL NOT BE MOUNTED ON RECESSED WALLS THAT REQUIRE ALTERATIONS TO THE COMPANY RISER.



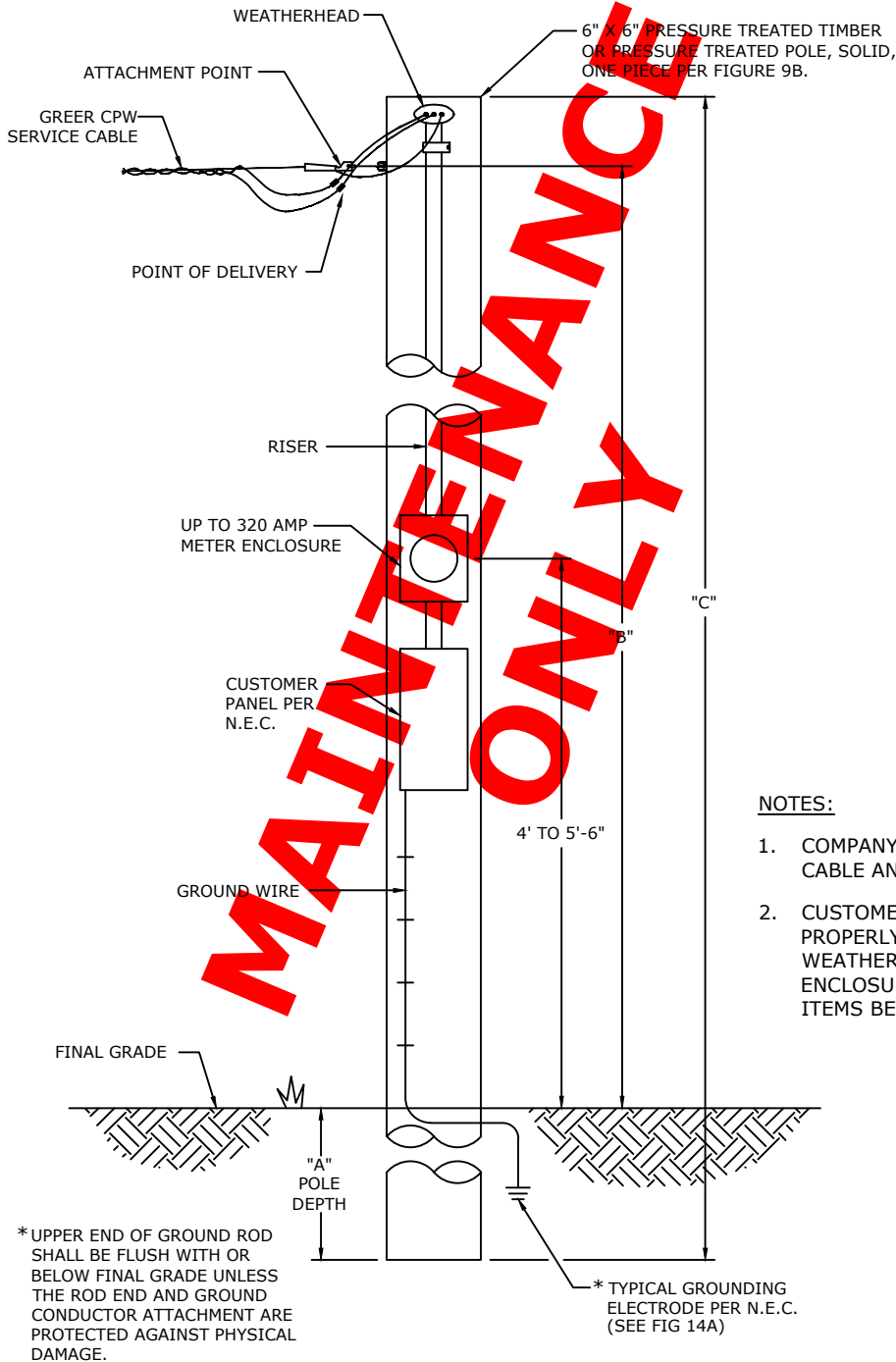
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REVISED	BY	CHK'D	APPR.	

RESIDENTIAL PERMANENT OVERHEAD

WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-33			



PLAN VIEW



MAINTENANCE ONLY

NOTES:

1. COMPANY FURNISHES AND INSTALLS SERVICE CABLE AND APPROPRIATE METER.
2. CUSTOMER FURNISHES AND INSTALLS PROPERLY SIZED TIMBER/POLE, RISER, WEATHERHEAD, ATTACHMENT POINT, METER ENCLOSURE, GROUNDING AND ALL OTHER ITEMS BEYOND POINT OF DELIVERY.



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0	11/8/24	SHERER	CRAWFORD	FARR
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PERMANENT OVERHEAD SERVICE POLE

WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-34			

TABLE 1 - CLEARANCES

"S" AREA FROM THE CUSTOMER'S POLE TO THE GREER CPW LINE	NESC CLEARANCES	"A" MINIMUM BURIAL DEPTH IN AVERAGE OR GOOD SOIL	"A" MINIMUM BURIAL DEPTH IN AVERAGE POOR SOIL	"B" MINIMUM ATTACHMENT HEIGHT ABOVE GROUND TO GREER CPW'S SERVICE CABLE	"C" MINIMUM POLE HEIGHT
SPACES OR WAYS SUBJECT TO PEDESTRIANS ONLY	12'	4'-0"	5'-0"	14'	20' C10
DRIVEWAYS, PARKING LOTS AND ALLEYS	16'	4'-6"	5'-6"	20'	25' C9
ROADS, STREETS AND OTHER AREAS SUBJECT TO TRUCK TRAFFIC	18'	4'-6"	5'-6"	20'	25' C9

NOTES:

1. THE MINIMUM BURIAL DEPTH IS BASED ON WELL-TAMPED AND COMPACTED BACKFILL. AVERAGE OR GOOD SOIL IS FIRM SAND, CLAY OR GRAVEL-TYPE SOIL. POOR SOIL IS SOFT OR WET CLAY, LOOSE SANDS OR SOFT CLAYISH SILT-TYPE SOIL.
2. THE 12', 16' AND 18' CLEARANCES AND POLE HEIGHTS, SIZES AND DEPTH ARE BASED ON THE NATIONAL ELECTRICAL SAFETY CODE (NESC) AND DEPARTMENT OF TRANSPORTATION (DOT). (SEE FIGURE 37.)



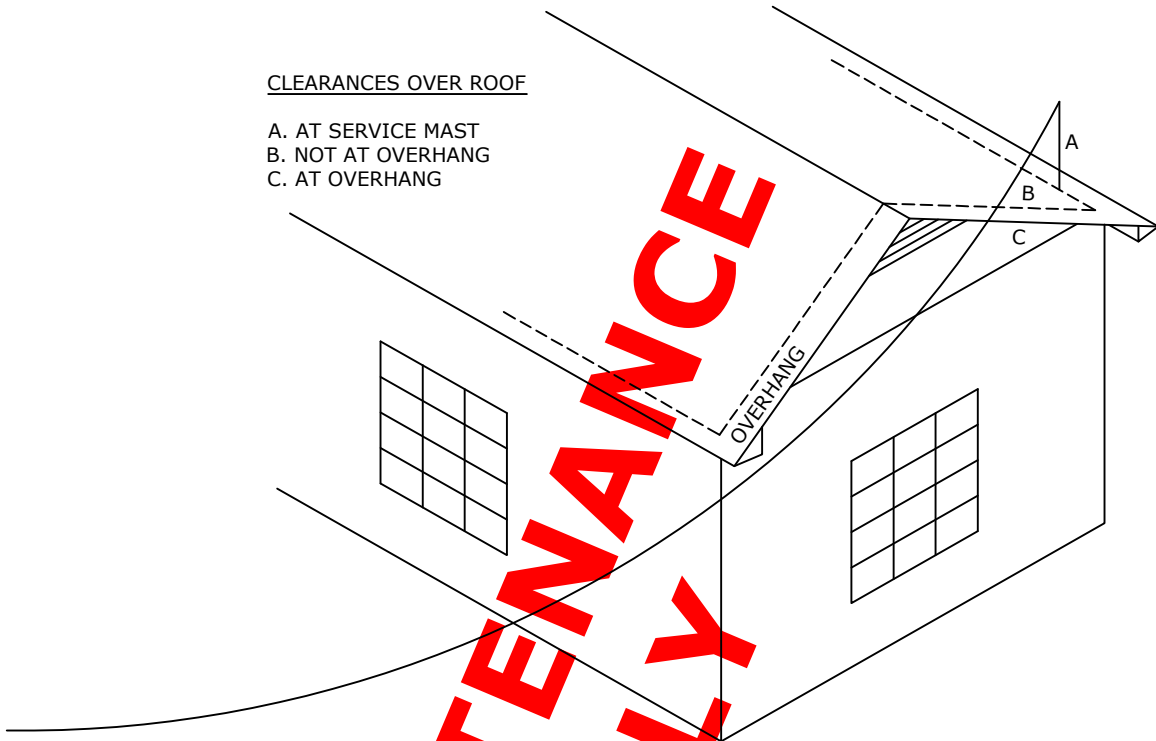
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0	11/8/24	SHERER	CRAWFORD	FARR
REVISED	BY	CHK'D	APPR.	

PERMANENT OVERHEAD SERVICE POLE

WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-35			

CLEARANCES OVER ROOF

- A. AT SERVICE MAST
- B. NOT AT OVERHANG
- C. AT OVERHANG



- VERTICAL CLEARANCES OF NEW SERVICES TO BUILDINGS AT LOCATIONS A, B, AND C AS SHOWN ABOVE MUST MEET THE FOLLOWING MINIMUM CLEARANCES FOR THE HIGHEST VOLTAGE BETWEEN ANY TWO CONDUCTORS.

CLEARANCES	LOCATION	MIN. AT 60° FINAL SAG	
		0-300 V	300-600 V
A OR B	OVER FLAT OR READILY ACCESSIBLE ROOF	10'	10'
A OR B	OVER SLOPED ROOF WHICH IS NOT READILY ACCESSIBLE	36"	10'
C	OVER OVERHANG PORTION OF ROOF (NO MORE THAN 4' OF CABLE)	18"	10'

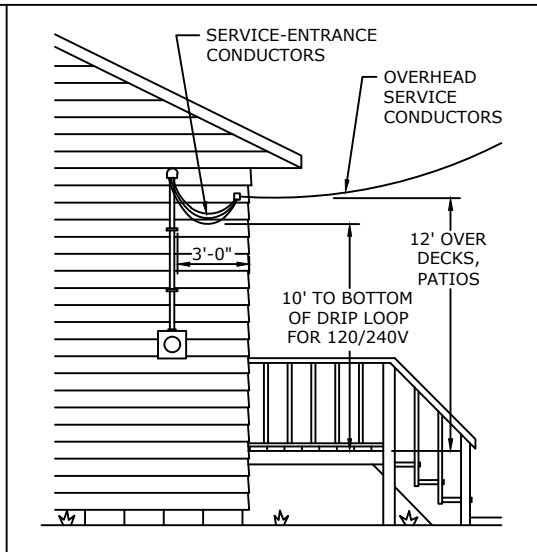
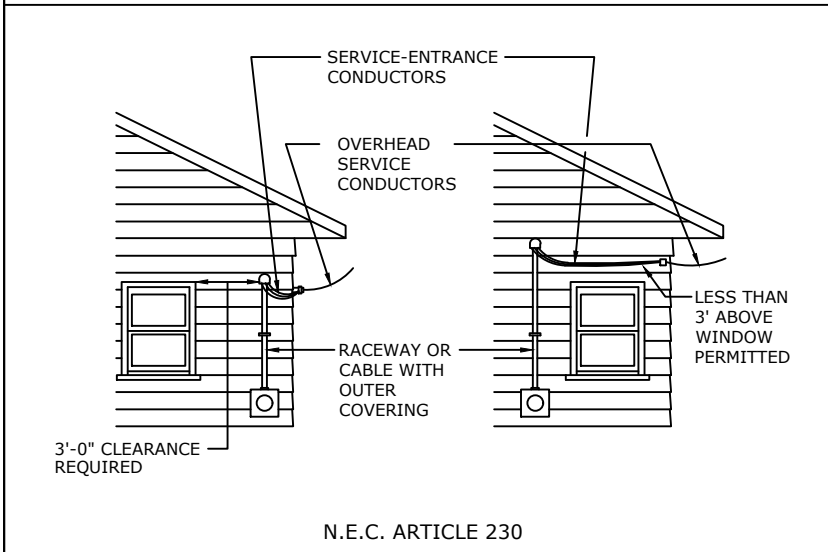
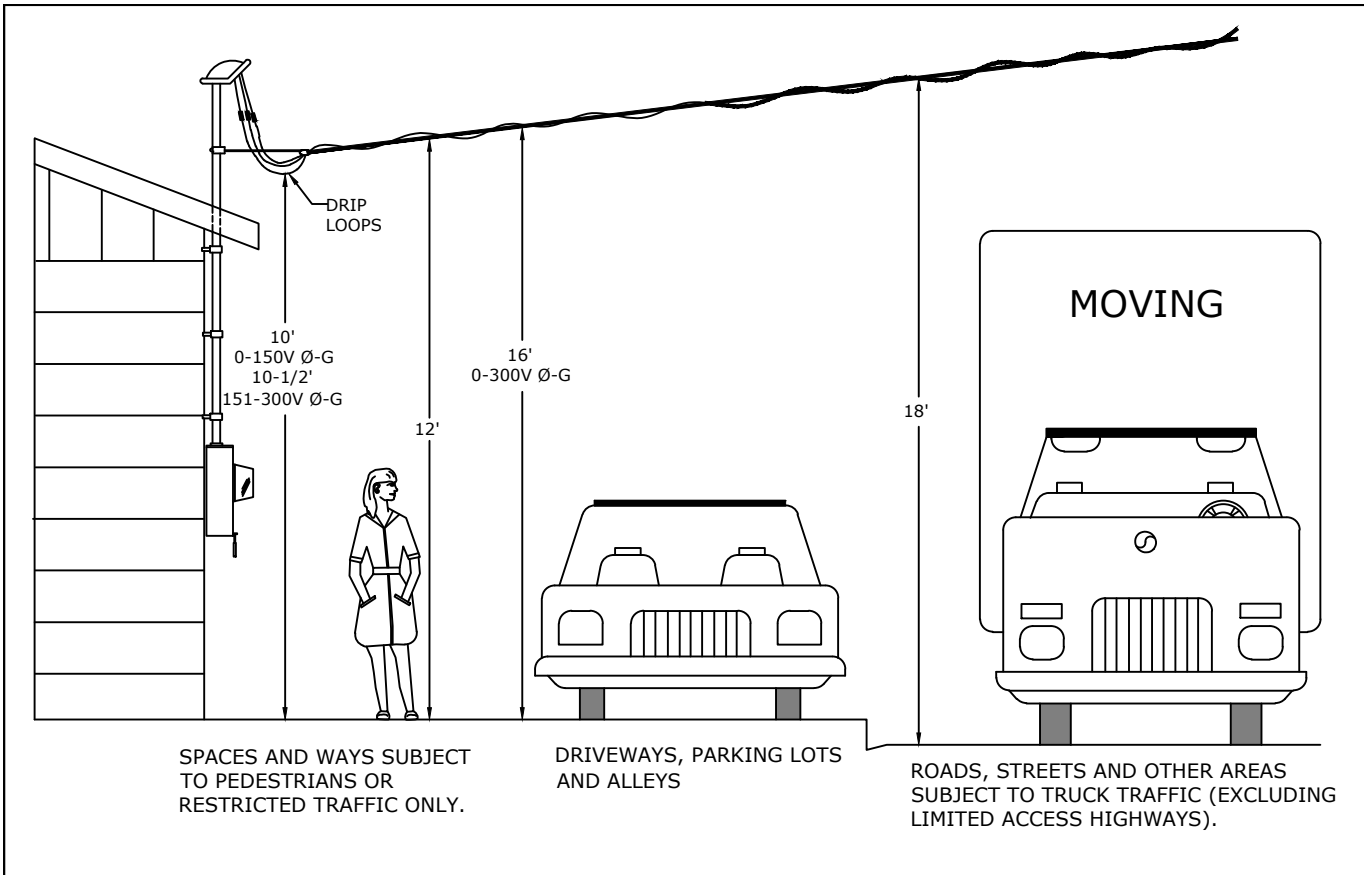
- A ROOF IS CONSIDERED READILY ACCESSIBLE WHEN ACCESS IS THRU A DOORWAY, RAMP, STAIRWAY, OR PERMANENTLY MOUNTED LADDER. A SLOPED ROOF IS ONE WHERE ROOF RISES 4" OR MORE IN 12" OF HORIZONTAL DISTANCE.
- SERVICES MUST NOT BE INSTALLED WITHOUT SPECIFICATION CLEARANCES. FOR INSTALLATIONS SIMILAR TO SKETCH, SERVICE MAST SHOULD BE TALLER AND STRONGER, OR LOCATED NEAR CORNER. IF PRACTICAL, SERVICE SHOULD BE ATTACHED ON SIDE OF BUILDING WHERE IT DOES NOT CROSS THE ROOF.
- SERVICES SHALL ALSO HAVE 3' CLEARANCE IN ANY DIRECTION FROM WINDOWS, DOORS, PORCHES, OR SIMILAR LOCATIONS. THIS DOES NOT APPLY TO MULTIPLEX CONDUCTORS ABOVE THE TOP LEVEL OF A WINDOW OR TO WINDOWS NOT DESIGNED TO OPEN. PER N.E.S.C. RULE 234.
- POINT OF ATTACHMENT OF SERVICE TO BUILDING SHALL BE HIGH ENOUGH TO PROVIDE THE GROUND CLEARANCES PER FIGURE 11, BUT SHALL NOT EXCEED 25' ABOVE GRADE AT TIME OF INSTALLATION AND SHALL NOT REQUIRE THE USE OF A LADDER ON CARPORT OR OTHER ROOF.



3				
2				
1				
0	11/8/24	SHERER	CRAWFORD	FARR
REVISED	BY	CHK'D	APPR.	

SERVICE DROP MINIMUM CLEARANCE -
THRU-THE-ROOF SERVICE MAST

WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-36			



NOTES:

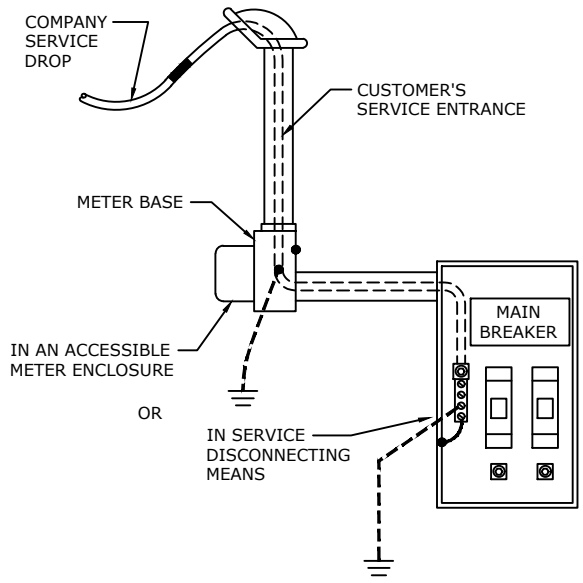
1. THE ABOVE ILLUSTRATIONS GIVE REQUIRED MINIMUM INSTALLATION HEIGHTS. THESE INSTALLATION HEIGHTS ARE APPLICABLE TO SERVICE DROP MULTIPLEX CABLES.
2. POINT OF ATTACHMENT OF SERVICE DROP AT BOTH BUILDING AND POLE MUST BE AT A HEIGHT SUFFICIENT TO ACHIEVE N.E.S.C. REQUIRED MINIMUM CLEARANCES.
3. SERVICE HEAD SHALL BE LOCATED ABOVE THE POINT OF ATTACHMENT OF THE SERVICE DROP CONDUCTORS TO THE STRUCTURE. EXCEPTION: WHEN THIS IS NOT PRACTICABLE, IT MAY BE LOCATED NOT OVER 24" FROM POINT OF ATTACHMENT [SEE N.E.C. ARTICLE 230.54].
4. CUSTOMER WILL PROVIDE POINT OF ATTACHMENT AND OTHER ITEMS PER FIGURE 8.

WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-37			

3					
2					
1					
0	11/8/24	SHERER	CRAWFORD	FARR	
REVISED	BY	CHK'D	APPR.		

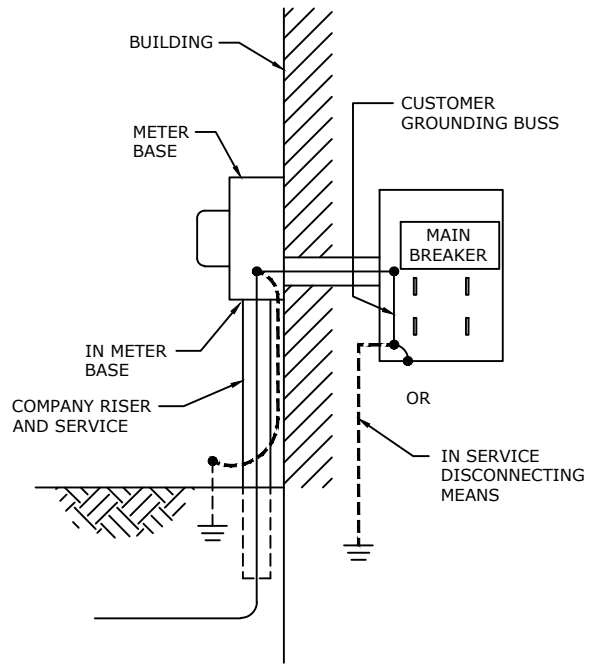
**SERVICE DROP MINIMUM CLEARANCES
MAST ON BUILDING WALL**

OVERHEAD - SELF-CONTAINED METER BASE
OR GANG BASE



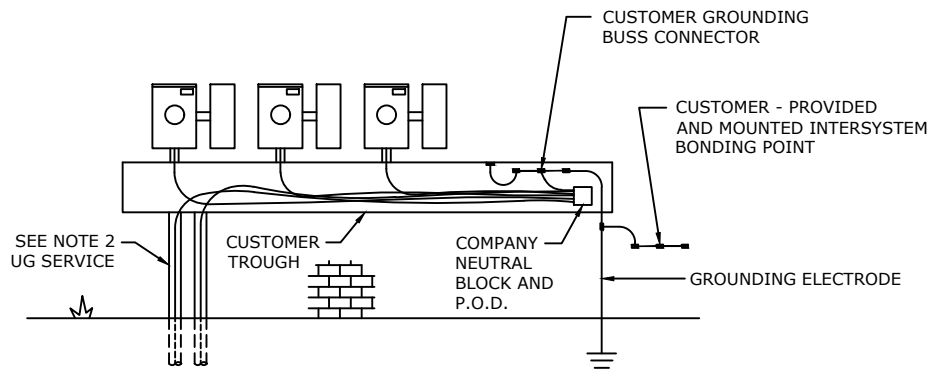
TWO OPTIONS FOR GROUNDING ELECTRODE LOCATION

UNDERGROUND - SELF-CONTAINED METER BASE
OR GANG BASE



TWO OPTIONS FOR GROUNDING ELECTRODE LOCATION

UNDERGROUND - TROUGH



NOTES:

1. CUSTOMER TO INSTALL METER SOCKETS AS SPECIFIED BY THE COMPANY. DISCONNECTS MUST BE GROUPED PER N.E.C. ARTICLES 230.71 AND 72 AND APPROVED BY THE LOCAL AHJ.
2. SERVICE CONDUCTORS FOR SINGLE PHASE RESIDENTIAL SERVICES OWNED BY GCPW. ALL THREE PHASE RESIDENTIAL AND COMMERCIAL SERVICES OWNED BY CUSTOMER.

REFERENCE: N.E.C. ARTICLE 250

NOTE: ONLY NEUTRAL CONDUCTOR SHOWN FOR CLARITY.



3				
2				
1				
0	11/8/24	SHERER	CRAWFORD	FARR
REVISED	BY	CHK'D	APPR.	

ALLOWABLE LOCATIONS OF CONNECTIONS OF GROUNDED (NEUTRAL) CONDUCTOR AND GROUNDING ELECTRODE CONDUCTOR

WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-38			

GCPW
METERED SERVICE VOLTAGES
SINGLE-PHASE
120V, 2-WIRE
120/208V, 3-WIRE *
120/240V, 3-WIRE
THREE-PHASE
208Y/220V, 4-WIRE
480V/277V, 4-WIRE
12470V/7200V, 4-WIRE**

- * NON-STANDARD VOLTAGES THAT MAY BE SUPPLIED UNDER CERTAIN CIRCUMSTANCES
- ** PRIMARY LEVEL VOLTAGES REQUIRE ENGINEERING AND OPERATIONS APPROVAL PRIOR TO BUILDING DESIGN AND PERMITTING.

NOTES:

1. SEE FIGURE 52 FOR CONNECTING ALL 4-WIRE Y-CONNECTED SERVICES.

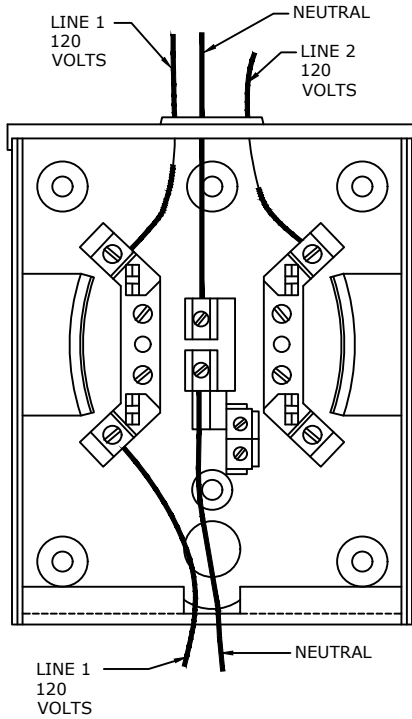


3				
2				
1				
0	11/8/24	SHERER	CRAWFORD	FARR
REVISED	BY	CHK'D	APPR.	

METERED SERVICE VOLTAGES			
--------------------------	--	--	--

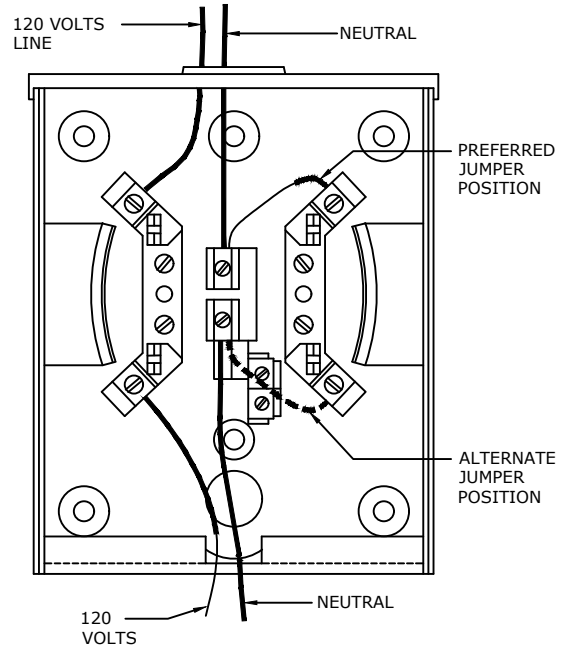
WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-39			

3 WIRE 120/240 VOLT SOURCE



REQUIRES FORM 2S METER
STANDARD 240-VOLT
"HOUSE-TYPE" METER

2 WIRE 120 VOLT SOURCE



REQUIRES FORM 1S METER
STANDARD 120-VOLT METER
 (SEE NOTE 2)

NOTES:

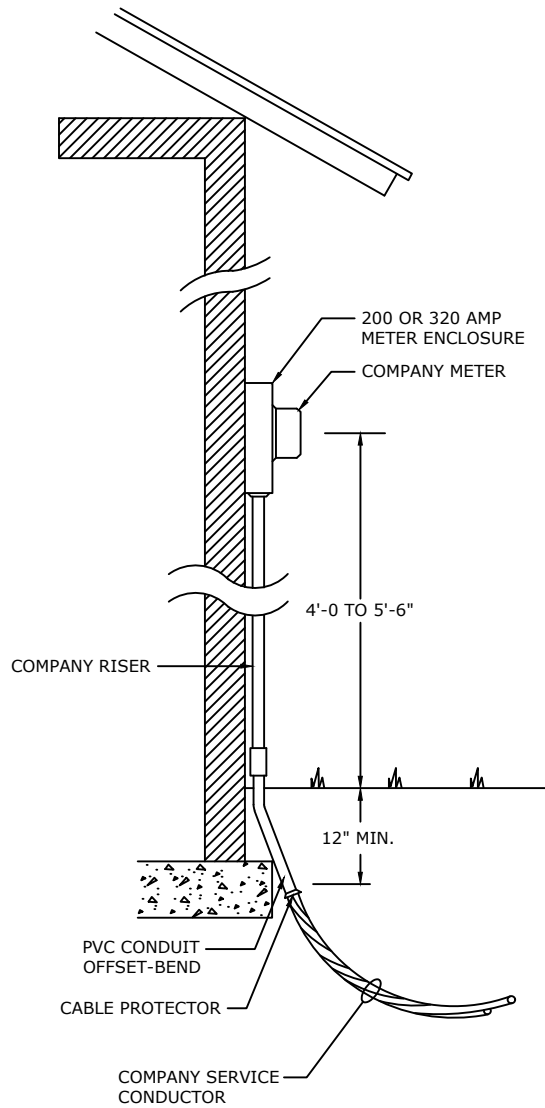
1. WHERE THE CUSTOMER'S METER BASE IS NOT WIRED AS SHOWN ON THIS DRAWING, AN ELECTRICAL CONTRACTOR SHALL REWIRE THE BASE AND THE COMPANY WILL INSTALL THE APPLICABLE METER.
2. INSTALLING A 2S METER IN A SOCKET WIRED FOR A 1S METER WILL RESULT IN APPROXIMATELY 50% METER REGISTRATION.
3. SEE FIG. 14A FOR GROUNDING DETAILS.



3				
2				
1				
0	11/8/24	SHERER	CRAWFORD	FARR
REVISED	BY	CHK'D	APPR.	

METERING, SINGLE-PHASE, 120 VOLTS, 2 WIRE

	WATER	ELECTRIC	WASTEWATER	GAS
		X		
EE-40				



NOTES:

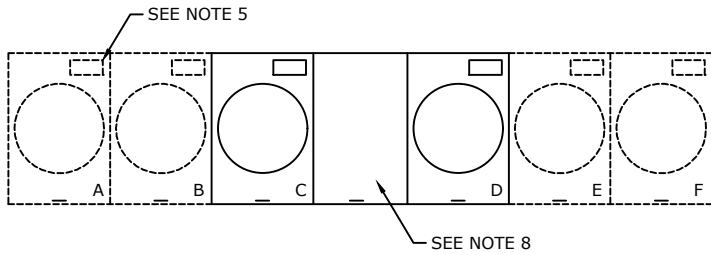
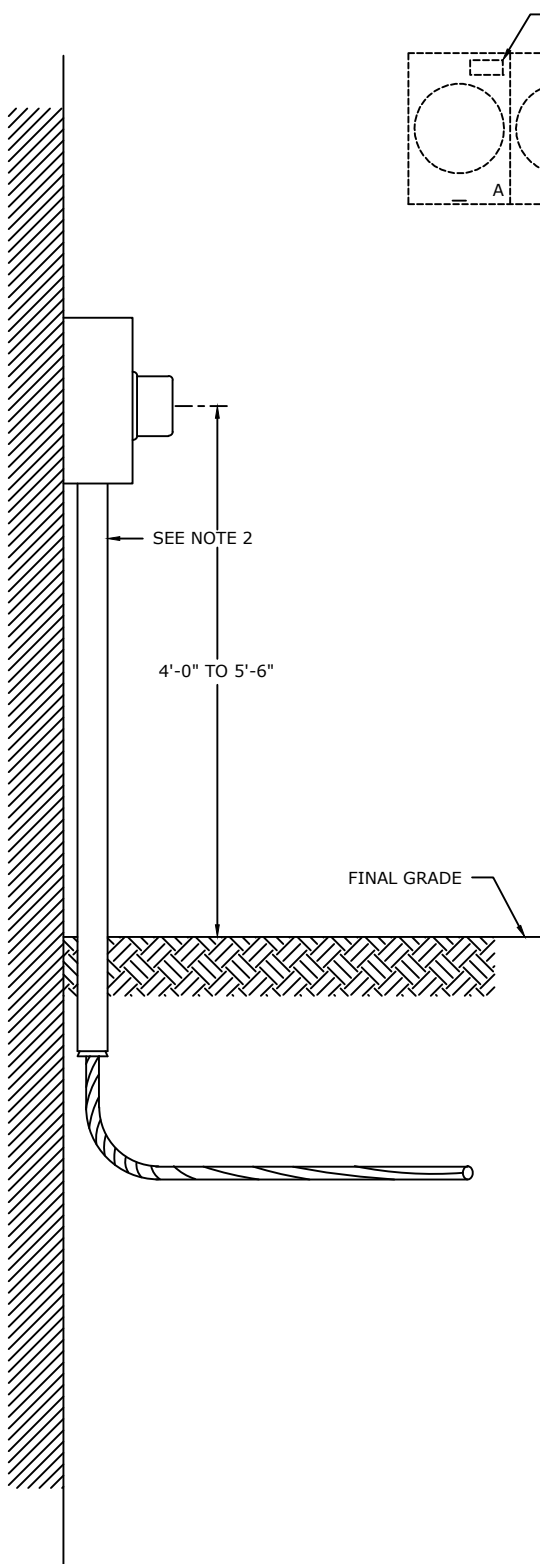
1. BOTTOM OF TRENCH MUST BE FIRMLY TAMPED NEAR BUILDING TO REDUCE SETTLING. CABLE MUST BE POSITIONED FIRMLY AGAINST BOTTOM OF TRENCH DURING BACKFILLING.
2. GROUND PER FIGURE 14A. UPPER END OF GROUND ROD SHALL BE FLUSH WITH OR BELOW FINAL GRADE, UNLESS THE ROD END AND GROUNDING CONDUCTOR ATTACHMENT ARE PROTECTED.
3. METERS MUST NOT BE LOCATED IN CARPORTS OR AREAS PLANNED FOR FUTURE EXPANSION.
4. POINT OF DELIVERY IS WHERE COMPANY RISER CONDUCTORS CONNECT TO THE LINE SIDE LUGS OF THE CUSTOMER OWNED METER BASE.
5. DISCONNECTS INSTALLED ON RESIDENTIAL SERVICES TO MEET THE NEC'S REQUIREMENTS FOR EMERGENCY DISCONNECTS SHALL BE LOCATED AFTER (DOWNSTREAM FROM) THE COMPANY'S METER.
6. METER ENCLOSURES SHALL NOT BE RECESSED IN ANY WAY THAT BLOCKS ACCESS, KNOCKOUTS OR DRAINAGE AND SHALL NOT BE MOUNTED ON RECESSED WALLS THAT REQUIRE ALTERATIONS TO THE COMPANY'S RISER.




3				
2				
1				
0	11/8/24	SHERER	CRAWFORD	FARR
REVISED	BY	CHK'D	APPR.	

TYPICAL UNDERGROUND SELF-CONTAINED SERVICE SINGLE

WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-41			



- NOTES:**
1. APPROVED GANGED METER SOCKETS TO BE FURNISHED AND OWNED BY CUSTOMER. ELECTRICAL CONTRACTOR TO INSTALL ON OUTSIDE OF BUILDING WALL AND TO BOND TO NEUTRAL.
 2. COMPANY TO INSTALL SERVICE RISER. KNOCKOUTS FOR RISER CONDUITS SHALL BE PROVIDED BY CUSTOMER.
 3. POINT OF DELIVERY IS WHERE COMPANY CONDUCTORS ATTACH TO GANGED TERMINAL LUGS.
 4. IF ANY OF THE INDIVIDUAL SERVICES REQUIRE A METER SOCKET GREATER THAN 200 AMP. CAPACITY, THEN A GANGED PANEL OF GREATER AMPACITY MUST BE USED.
 5. LABELING OF EACH METER ENCLOSURE SHALL MEET THE REQUIREMENTS OF FIGURE 3.
 6. SEE FIG. 14A FOR GROUNDING DETAILS.
 7. METER ENCLOSURES SHALL NOT BE RECESSED IN ANY WAY THAT BLOCKS ACCESS, KNOCKOUTS OR DRAINAGE AND SHALL NOT BE MOUNTED ON RECESSED WALLS THAT REQUIRE ALTERATIONS TO THE COMPANY'S RISER.
 8. IMAGES OF GANGED METER SOCKETS OR PANELS ARE REPRESENTATIVE ONLY AND SHALL NOT BE USED AS A BASIS FOR ORDERING MATERIAL. CONSULT WITH THE LOCAL AHJ FOR REQUIREMENTS REGARDING DISCONNECTS AND THEIR REQUIRED LOCATIONS.

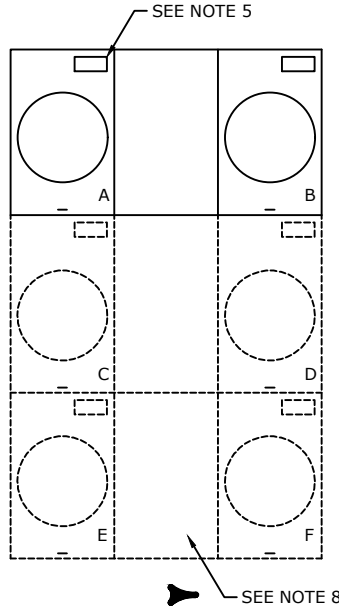
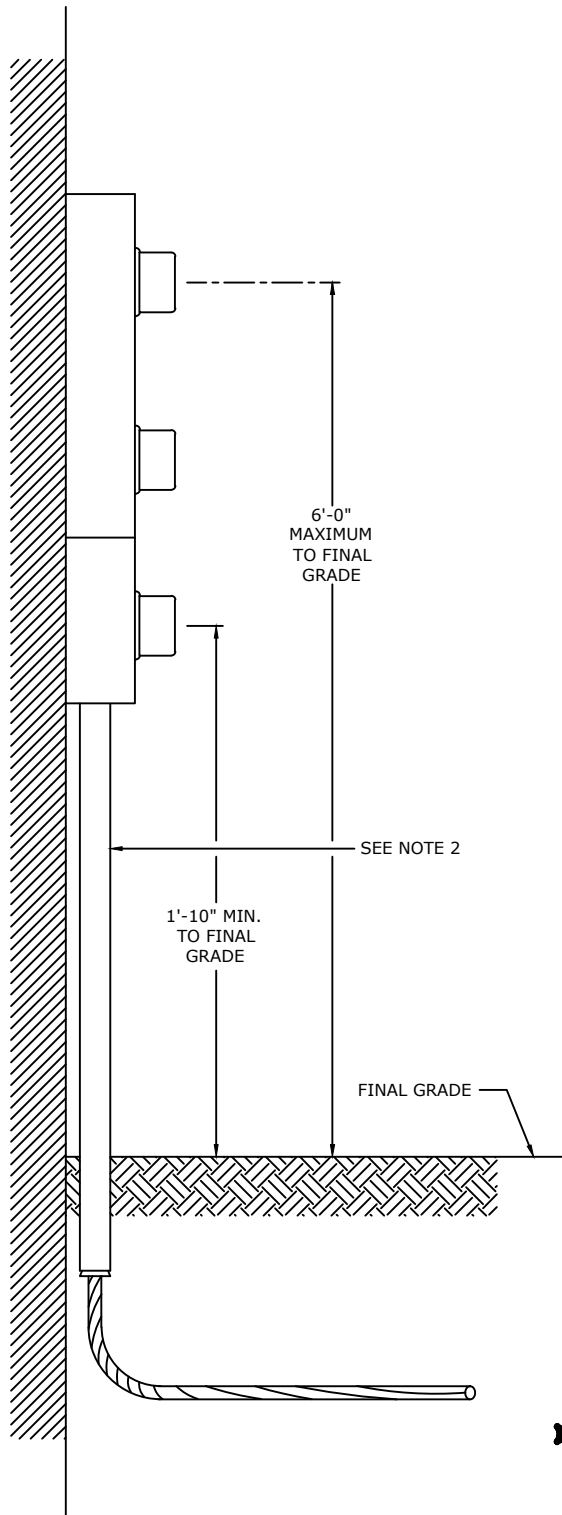


CPW

WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-42			

3					
2					
1					
0	11/8/24	SHERER	CRAWFORD	FARR	
REVISED	BY	CHK'D	APPR.		

**HORIZONTAL GANGED METERING
INSTALLATION (2 - 6 METERS) SINGLE-PHASE**



NOTES:

1. APPROVED METER SOCKETS TO BE FURNISHED AND OWNED BY THE CUSTOMER. ELECTRICAL CONTRACTOR TO INSTALL ON THE THE OUTSIDE OF THE BUILDING WALL AND TO BOND TO NEUTRAL.
2. COMPANY TO INSTALL SERVICE RISER. KNOCKOUTS FOR RISER CONDUITS SHALL BE PROVIDED BY CUSTOMER.
3. POINT OF DELIVERY IS WHERE COMPANY CONDUCTORS ATTACHED TO GANGED TERMINAL LUGS.
4. IF ANY OF THE INDIVIDUAL SERVICES REQUIRE A METER SOCKET GREATER THAN 200 AMP. CAPACITY, THEN A GANGED PANEL OF GREATER AMPACITY MUST BE USED.
5. LABELING OF EACH METER ENCLOSURE SHALL MEET THE REQUIREMENTS OF FIGURE 3.
6. SEE FIG. 14A FOR GROUNDING DETAILS.
7. METER ENCLOSURES SHALL NOT BE RECESSED IN ANY WAY THAT BLOCKS ACCESS, KNOCKOUTS OR DRAINAGE AND SHALL NOT BE MOUNTED ON RECESSED WALLS THAT REQUIRE ALTERATIONS TO THE COMPANY'S RISER.
8. IMAGES OF GANGED METER SOCKETS OR PANELS ARE REPRESENTATIVE ONLY AND SHALL NOT BE USED AS A BASIS FOR ORDERING MATERIAL. CONSULT WITH THE LOCAL AHJ FOR REQUIREMENTS REGARDING DISCONNECTS AND THEIR REQUIRED LOCATIONS.

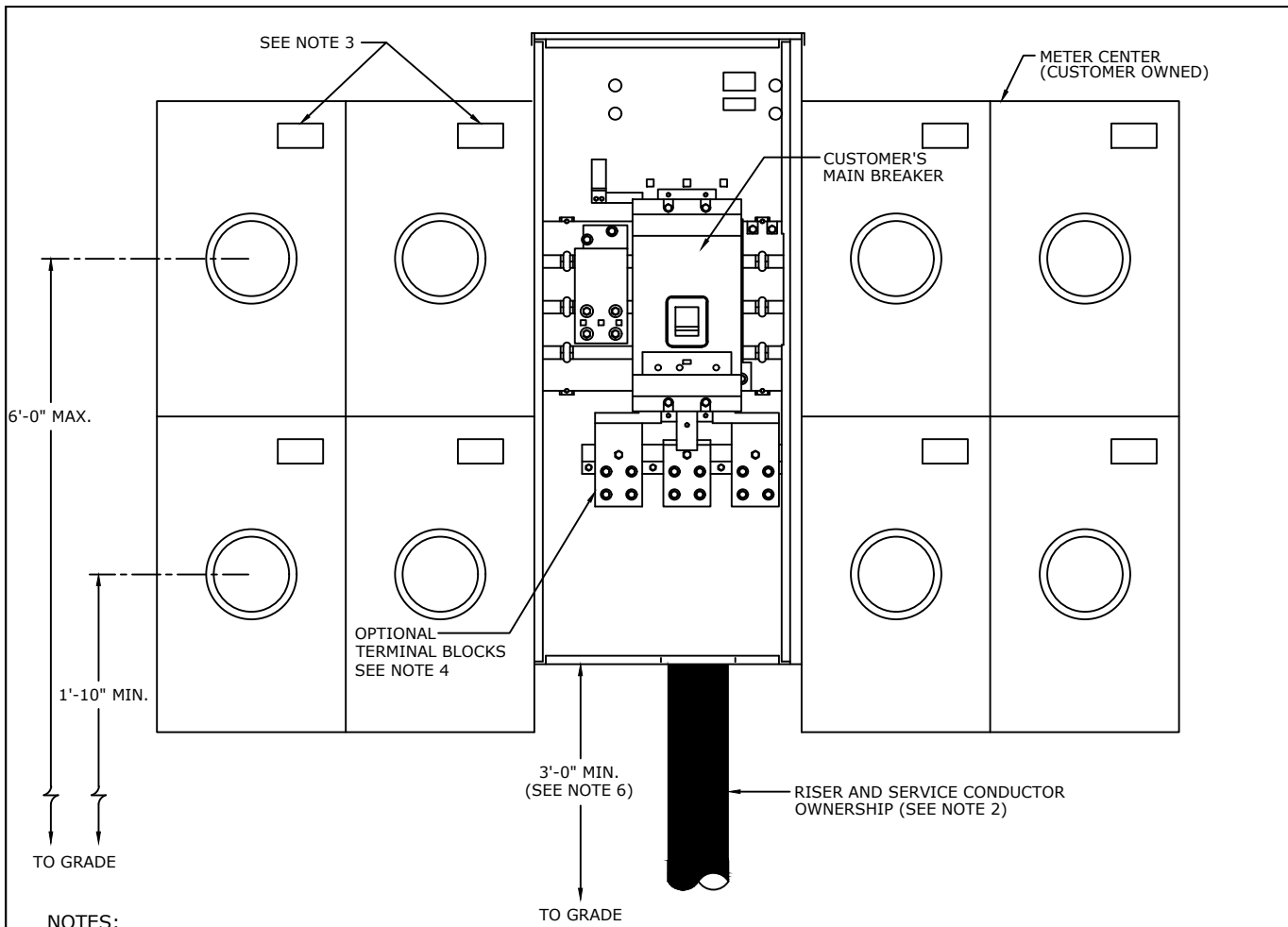
USE THIS PANEL ONLY WHEN MOUNTING SPACE PROHIBITS USE OF HORIZONTAL TYPE



3				
2				
1				
0	11/8/24	SHERER	CRAWFORD	FARR
REVISED	BY	CHK'D	APPR.	


**VERTICAL GANGED METERING INSTALLATION
(2 - 6 METERS) SINGLE-PHASE**

	WATER	ELECTRIC	WASTEWATER	GAS
		X		
EE-43				



NOTES:

1. U.L. LISTED METER CENTER TO BE FURNISHED AND OWNED BY THE CUSTOMER. ELECTRICAL CONTRACTOR TO INSTALL ON THE OUTSIDE OF THE BUILDING WALL AND TO BOND TO NEUTRAL. CUSTOMER MUST ENSURE THE TYPE OF METER CENTER (SINGLE OR THREE-PHASE, THREE OR FOUR WIRE) MATCHES THE SERVICE AVAILABLE FROM THE COMPANY. SINGLE-PHASE SERVICES SERVED FROM A THREE-PHASE SOURCE MUST UTILIZE A THREE-PHASE IN, SINGLE-PHASE OUT CONFIGURATION.
2. SERVICE RISER AND CONDUCTOR OWNERSHIP:
 - A. SINGLE-PHASE SERVICES: THE COMPANY
 - B. THREE-PHASE SERVICES: CONDUCTOR IS CUSTOMER OWNED.
3. LABEL EACH SOCKET COVER AS SHOWN IN FIGURE.
4. POINT OF DELIVERY (P.O.D.):
 - A. SINGLE-PHASE SERVICES: POINT OF DELIVERY WILL BE WHERE COMPANY CONDUCTORS ATTACH TO MAIN DISCONNECT. IF LOCAL INSPECTION AUTHORITY OBJECTS TO COMPANY CABLES IN UL RATED TERMINALS OF MAIN BREAKER, THE CUSTOMER WILL PROVIDE THE APPROPRIATE TERMINAL BLOCKS OFF THE BREAKER TO ATTACH COMPANY CABLES. TERMINAL BLOCKS MUST BE SIZED 3/0-500 KCMIL AL OR CU MINIMUM, DOUBLE LUGGED IF NECESSARY TO ACCOMMODATE COMPANY SERVICE.
 - B. THREE-PHASE SERVICES: FOR THE POINT OF DELIVERY, CONTACT THE COMPANY REPRESENTATIVE.
5. SEE FIG. 38 FOR GROUNDING DETAILS.
6. IF MINIMUM HEIGHT ABOVE GRADE CANNOT BE OBTAINED, LOWER HEIGHTS WILL BE ALLOWED WITH CERTAIN PROVISIONS. CUSTOMER MUST PROVIDE AND INSTALL SCHEDULE 40 PVC BENDS WITH A MINIMUM 36" RADIUS (QUANTITY AND SIZE DETERMINED BY COMPANY REPRESENTATIVE) AND A PULL STRING. APPROPRIATE METER HEIGHTS MUST STILL BE MAINTAINED IN ALL CASES. CONDUCTOR TERMINAL BLOCKS OR MAIN BREAKER MUST BE OF SUFFICIENT HEIGHT TO ALLOW FOR PROPER TRAINING OF CABLE.
7. METER ENCLOSURES SHALL NOT BE RECESSED IN ANY WAY THAT BLOCKS ACCESS, KNOCKOUTS OR DRAINAGE AND SHALL NOT BE MOUNTED ON RECESSED WALLS THAT REQUIRE ALTERATIONS TO THE COMPANY'S RISER.

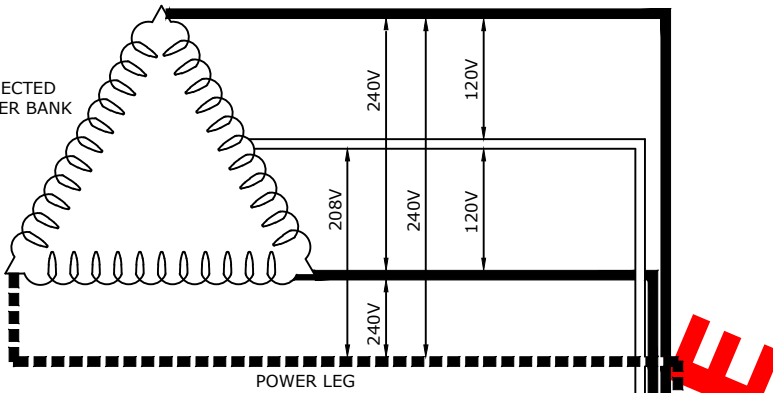


WATER	ELECTRIC	WASTEWATER	GAS
	X		
FIG 44			

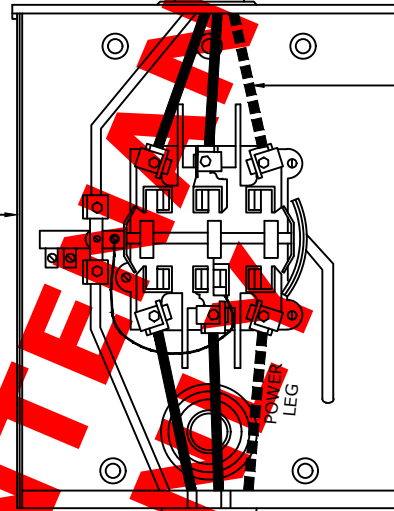
3				
2				
1				
0	11/8/24	SHERER	CRAWFORD	FARR
REVISED	BY	CHK'D	APPR.	

METER CENTER INSTALLATION
(MAIN DISCONNECT - GREATER THAN 6 METERS)
SINGLE AND THREE PHASE

DELTA CONNECTED
TRANSFORMER BANK



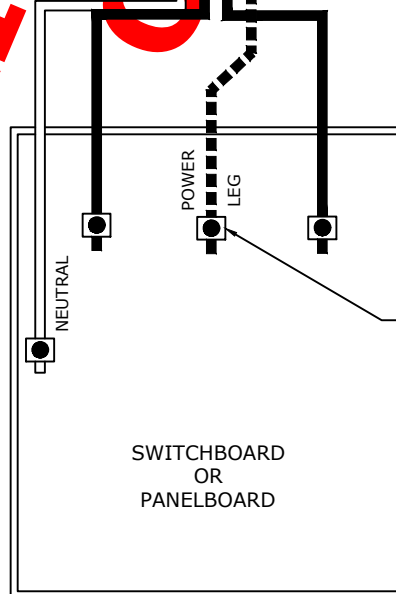
SELF-CONTAINED
METER SOCKET



MARK POWER LEG WITH ORANGE TAPE. POWER LEG MUST BE THE FAR RIGHT SIDE TERMINAL IN THE METER SOCKET FOR CORRECT METER REGISTRATION

NOTES:

1. INSTALL SOCKET WITH BY-PASS HANDLE IN THE DOWN OR OPEN POSITION.
2. THE BY-PASS HANDLE CAN BE PUT IN THE UP OR CLOSED POSITION FOR METER REMOVAL, TESTING, ETC.
3. THE COVER CAN BE ONLY INSTALLED AND SEALED WITH THE BY-PASS HANDLE IN THE DOWN POSITION.
4. THE BY-PASS HANDLES ARE A BENT TYPE OR AN OCTAGON SHAPED REMOVABLE SCREW TYPE. DO NOT CUT-OFF THESE BENT OR REMOVABLE BY-PASS HANDLES.
5. THIS SAME WIRING ARRANGEMENT SHALL BE USED IF A CUSTOMER HAS ONLY 240 VOLT THREE-PHASE LOAD. SECTION 250 OF THE N.E.C. REQUIRES THE GROUNDED CONDUCTOR TO BE RUN TO THE CUSTOMER'S PANELBOARD.
6. SEE FIG. 39 FOR GROUNDING DETAILS.



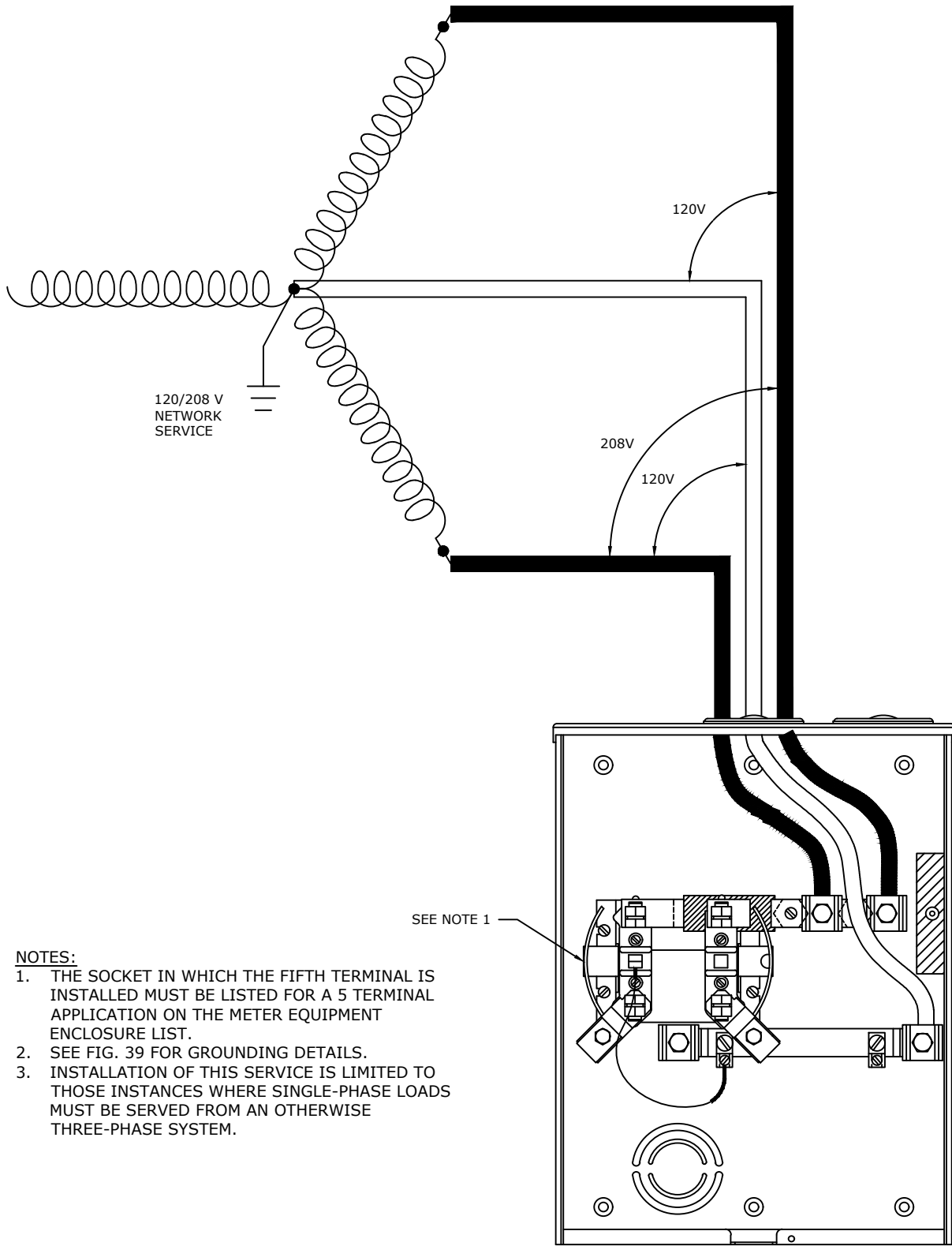
POWER LEG MUST BE "B" POSITION IN CUSTOMER'S SWITCHBOARD OR PANELBOARD TO COMPLY WITH SECTION 408.3(E) OF THE NATIONAL ELECTRICAL CODE.



3				
2				
1				
0	11/8/24	SHERER	CRAWFORD	FARR
REVISED	BY	CHK'D	APPR.	

240/120 VOLT THREE PHASE 4 WIRE
SELF-CONTAINED DELTA METERING

WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-45			



NOTES:

1. THE SOCKET IN WHICH THE FIFTH TERMINAL IS INSTALLED MUST BE LISTED FOR A 5 TERMINAL APPLICATION ON THE METER EQUIPMENT ENCLOSURE LIST.
2. SEE FIG. 39 FOR GROUNDING DETAILS.
3. INSTALLATION OF THIS SERVICE IS LIMITED TO THOSE INSTANCES WHERE SINGLE-PHASE LOADS MUST BE SERVED FROM AN OTHERWISE THREE-PHASE SYSTEM.

SEE NOTE 1



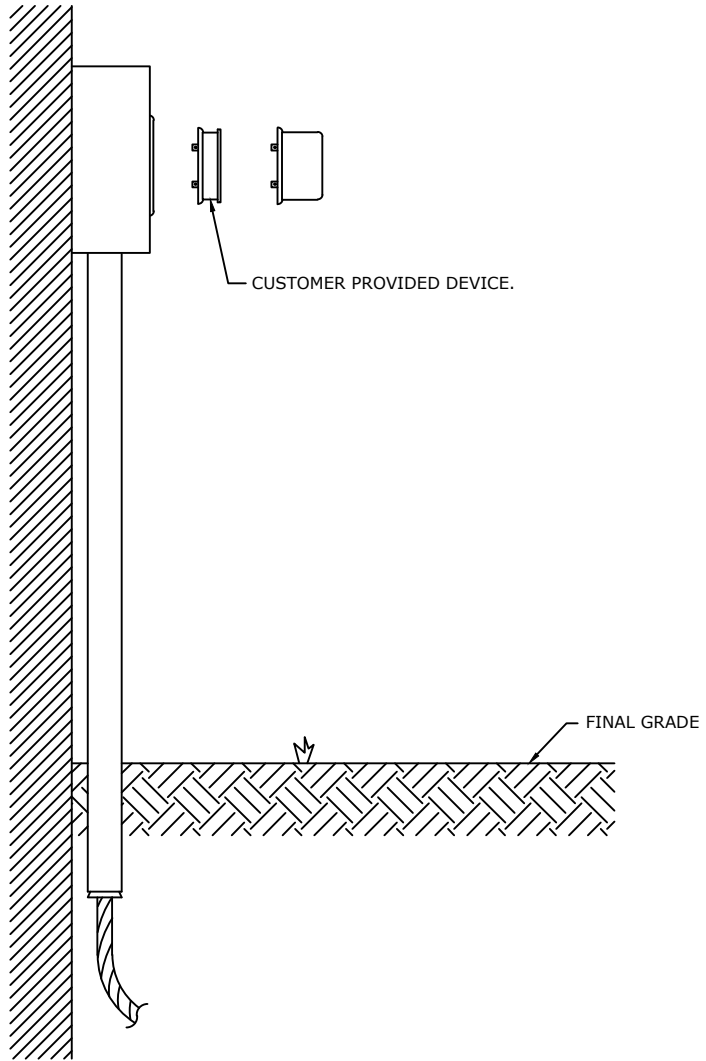
3				
2				
1				
0	11/8/24	SHERER	CRAWFORD	FARR
REVISED	BY	CHK'D	APPR.	

**208/120 - VOLT 3 WIRE NETWORK
SELF-CONTAINED METERING**

WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-46			

NOTES:

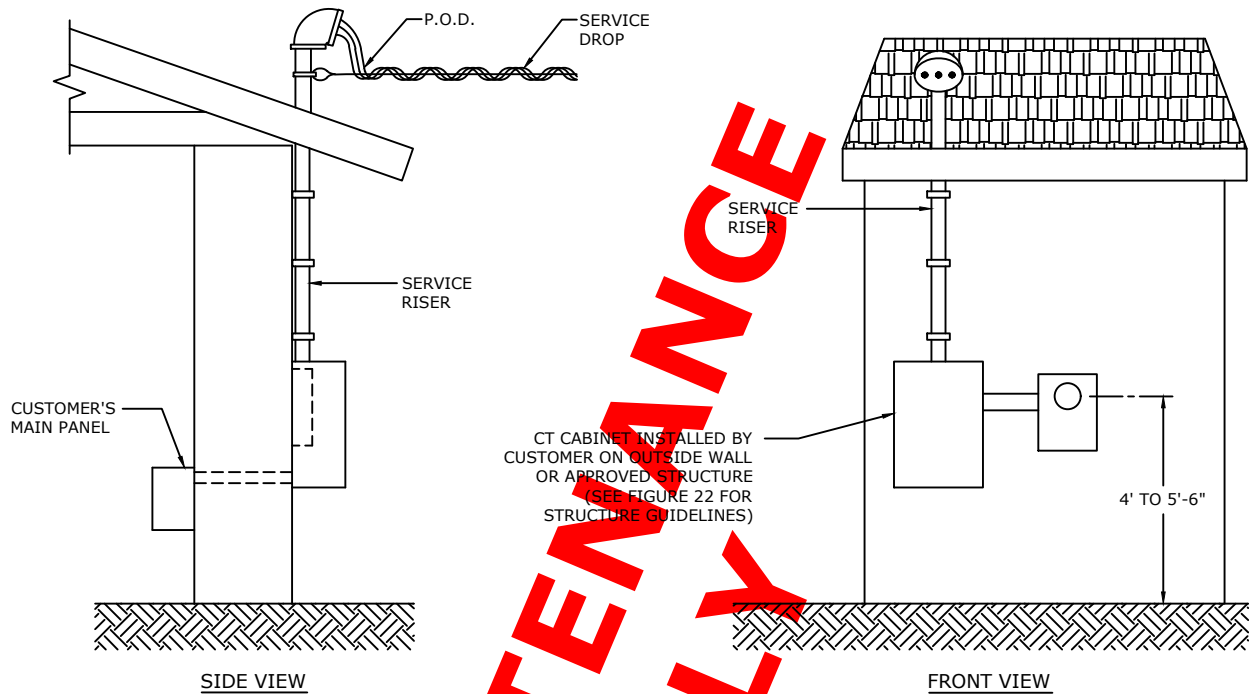
1. CUSTOMER OWNED DEVICES INSTALLED BETWEEN THE METER AND METER SOCKET OF ANY KIND MUST BE PROVIDED BY THE CUSTOMER AND INSTALLED BY GREER CPW.



3				
2				
1				
0	11/8/24	SHERER	CRAWFORD	FARR
REVISED	BY	CHK'D	APPR.	

DEVICES INSTALLED BETWEEN
THE METER AND THE METER SOCKET

WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-47			



NOTES:

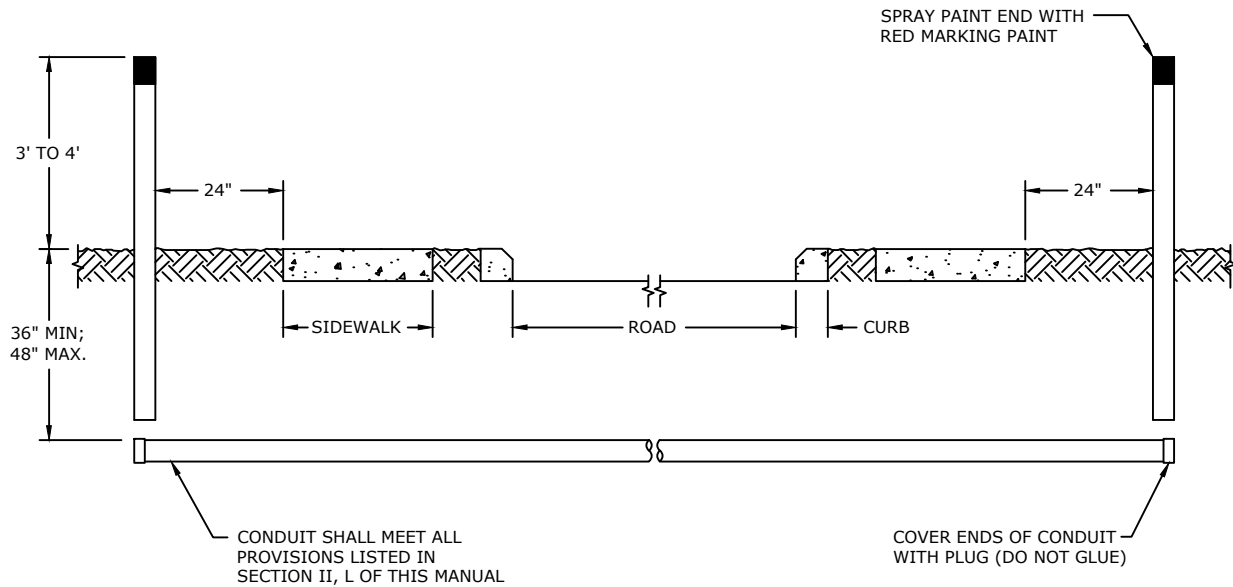
1. FOR INSTALLATIONS WITHIN DEC, CUSTOMER PROVIDES AND INSTALLS WEATHERHEAD, ATTACHMENT POINT, RISER, CONDUCTOR WITHIN RISER AND CT CABINET. COMPANY PROVIDES SERVICE DROP, INSTRUMENT TRANSFORMERS, METER AND METER ENCLOSURE. REFER TO FIGURE 20 FOR CUSTOMER WIRE SIZE GUIDELINES AND CABINET SIZING.
2. WEATHERHEAD SHOULD BE OF SUFFICIENT HEIGHT TO MAINTAIN SERVICE DROP CLEARANCES IN FIGURES 10 AND 11.
3. IF USED, THRU-THE-ROOF RISERS MUST BE ACCESSIBLE TO A COMPANY BUCKET TRUCK OR A COMPANY EMPLOYEE ON AN EXTENSION LADDER NOT TO EXCEED 25' ABOVE GRADE. RISERS EXTENDING MORE THAN 3' ABOVE ROOF SHALL BE GUYED.
4. RISERS IN EXCESS OF 72" ABOVE ROOF LINES SHALL BE ACCESSIBLE TO A COMPANY BUCKET TRUCK.
5. SERVICE RISER CONDUIT MAY ENTER THE CT CABINET ON TOP OR SIDE OF CABINET. USE WATERTIGHT SEALING METHOD.
6. CUSTOMER SHALL ENSURE THAT LIKE PHASES FROM EACH CONDUCTOR SET GO THROUGH EACH INDIVIDUAL CT. CONDUCTORS AND CONNECTIONS MUST BE ARRANGED SO AS NOT TO CREATE A HAZARD WHEN CABINET IS OPENED IN THE FUTURE. EITHER OF THE FOLLOWING ARE ACCEPTABLE:
 - CONTINUOUS UNSPLICED RUNS FROM PANEL THROUGH CT'S IN CABINET TO WEATHERHEAD. CUSTOMER SHALL MAKE ARRANGEMENTS WITH COMPANY TO HAVE CT'S INSTALLED IN CABINET BEFORE WIRE IS PULLED.
 - SEPARATE RUNS INSTALLED FROM PANEL TO CABINET AND CABINET TO WEATHERHEAD. THE CUSTOMER IS RESPONSIBLE FOR MAKING CONNECTIONS IN THE CABINET.



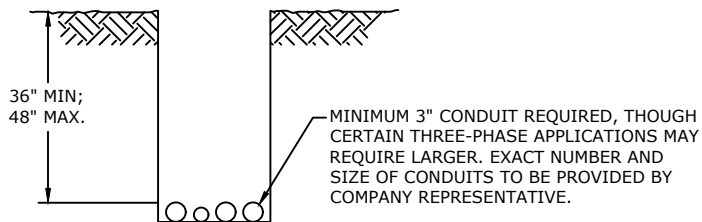
3				
2				
1				
0	11/8/24	SHERER	CRAWFORD	FARR
REVISED	BY	CHK'D	APPR.	

TYPICAL CURRENT TRANSFORMER CABINET AND METER ENCLOSURE INSTALLATION FOR OVERHEAD SERVICES

WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-48			




SIDE VIEW



END VIEW

NOTES:

1. MINIMUM COVER IS MEASURED TO TOP OF CONDUIT.
2. EXTEND CONDUIT BEYOND EDGES OF ROAD, SIDEWALK, CURB, ETC. BY MINIMUM OF 24" ON EITHER END. CONDUITS SHALL BE INSTALLED WITH PULL STRING INSIDE THE FULL LENGTH.
3. ALL CONDUIT SECTIONS INSTALLED FOR WIRE SHALL BE GLUED.
4. PLUG/SEAL BOTH CONDUIT ENDS (DO NOT GLUE).
5. MARK CONDUIT ENDS BY VERTICALLY PLACING A SCRAP PIECE OF CONDUIT OR 2" X 4" WOOD STUD AT EACH SEALED END FOR VISUAL IDENTIFICATION ABOVE GROUND. SPRAY PAINT THE END OF THESE WITH RED MARKING PAINT.



WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-49			

3					
2					
1					
0	11/8/24	SHERER	CRAWFORD	FARR	
REVISED	BY	CHK'D	APPR.		

CUSTOMER INSTALLED CONDUIT CROSSINGS

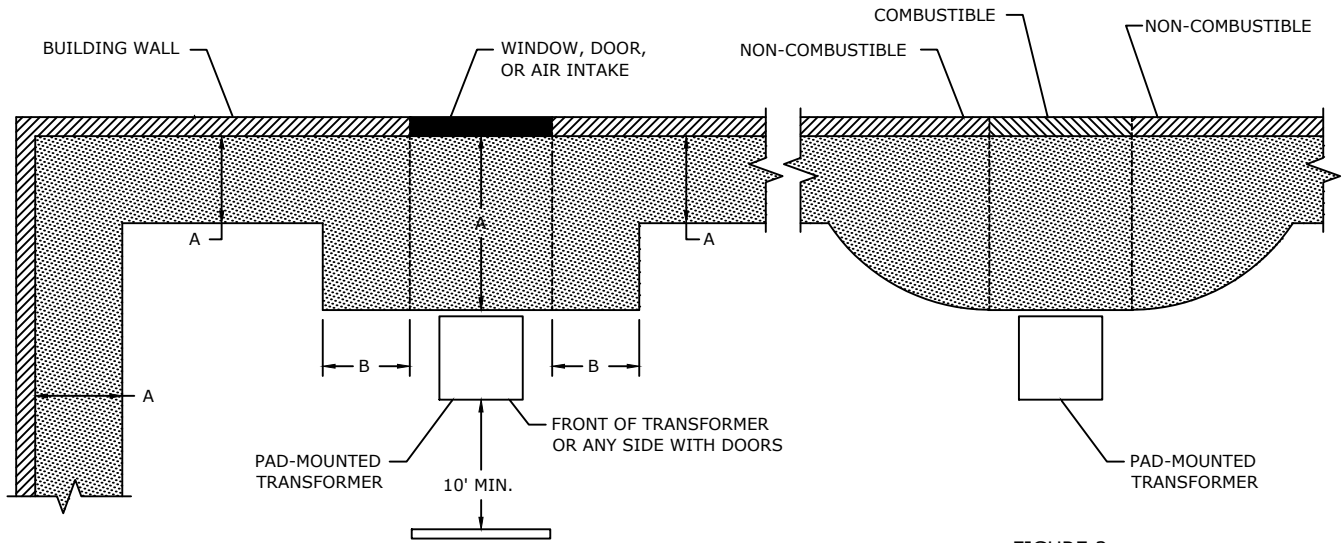


FIGURE 1
ALLOWABLE CLEARANCES

FIGURE 2
BUILDING CONSTRUCTION WITH
COMBUSTIBLE AND NON-COMBUSTIBLE
MATERIAL (SEE NOTE 5)

TYPE OF CONSTRUCTION	DIMENSION A: CLEARANCE EXTENDING OUT FROM BUILDING (FT)	DIMENSION B: SIDE CLEARANCE MEASURED FROM EDGE OF WINDOW, DOOR, ETC. (FT)
NON-COMBUSTIBLE WALLS	3	N/A
COMBUSTIBLE WALLS	10	N/A
DOORS	20	10
WINDOWS (FIRST STORY)	10	10
WINDOWS (SECOND STORY)	REFER TO WALL TYPE	REFER TO WALL TYPE
AIR INTAKES	10	10
FIRE ESCAPES	20	20

NOTES:

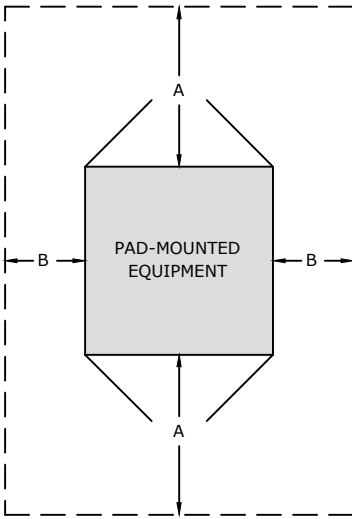
- ADEQUATE PASSAGEWAYS (UP TO AND INCLUDING A MAINTAINED GRAVEL ACCESS ROAD) TO ACCOMMODATE CRANES, LINE TRUCKS, OR OTHER NECESSARY LIFTING AND HAULING EQUIPMENT SHALL BE PROVIDED TO ALLOW FOR MAINTENANCE, OPERATION, OR REPLACEMENT.
- IF THE BUILDING HAS AN OVERHANG, THE DISTANCE IS MEASURED FROM THE OUTSIDE EDGE OF THE OVERHANG.
- OUTSIDE WALKWAYS OR STAIRS ATTACHED TO THE BUILDING SHALL BE CONSIDERED AS PART OF THE BUILDING.
- IF A BUILDING IS CONSTRUCTED OF BOTH COMBUSTIBLE AND NON-COMBUSTIBLE MATERIALS, NO PART OF THE PAD-MOUNTED TRANSFORMER CAN BE WITHIN THE ALLOWABLE DISTANCE FOR THE COMBUSTIBLE MATERIALS IN ANY DIRECTION.
- DISTANCES LESS THAN THOSE SPECIFIED MAY BE ALLOWED IF APPROVED BY THE APPROPRIATE CODE ENFORCEMENT AUTHORITY, BUT IN NO CASE SHALL DISTANCES TO A BUILDING BE LESS THAN 3 FT. THIS MAY REQUIRE ALTERNATE MEANS OF FIRE PROTECTION INCLUDING FIRE BARRIERS, FIRE RATED WALLS, OIL CONTAINMENT MEANS, OR OTHER APPROVED MEASURES.
- FIRE-RATED WALLS AROUND TRANSFORMERS MUST BE A MINIMUM OF 1'-0" ABOVE THE ANTICIPATED HEIGHT OF THE INSTALLED TRANSFORMER. NO WALL, WHETHER FOR FIRE PROTECTION OR AESTHETIC PURPOSES, CAN BE HIGH ENOUGH TO PREVENT GREER CPW'S INSTALLATION AND FUTURE MAINTENANCE OF THE TRANSFORMER WITH STANDARD EQUIPMENT AND LIFTING DEVICES AS DETERMINED BY GREER CPW.
- FINAL GRADE AT THE LOCATION OF THE PAD-MOUNTED TRANSFORMER SHALL PROVIDE FOR MINERAL OIL TO DRAIN FROM THE BUILDING. OTHERWISE, AN OIL CONTAINMENT MEANS IS REQUIRED.
- CLEARANCES LISTED ARE GREER CPW'S MINIMUM REQUIREMENTS. THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) MAY HAVE REQUIREMENTS THAT ARE MORE STRINGENT. IT SHALL BE THE CUSTOMER'S RESPONSIBILITY TO CONFORM TO ALL LOCAL BUILDING CODES, INSURANCE REGULATIONS, OR ORDINANCES AFFECTING THE TRANSFORMER LOCATION.
- ANY FENCING OR SCREENING (INCLUDING SHRUBBERY OR OTHER PLANTINGS) PLACED AROUND PAD-MOUNTED SURFACE EQUIPMENT MUST MAINTAIN THE PROPER CLEARANCES AND AT MINIMUM MUST MAINTAIN VISIBILITY OF THE EQUIPMENT FROM THE SIDE MOST CONDUCTIVE TO THE COMPANY FOR MAINTENANCE AND RESTORATION ACTIVITIES.
- AESTHETIC WRAPS ARE NOT ALLOWED ON PAD-MOUNTED TRANSFORMERS.
- REPAINTING OF PAD-MOUNTED TRANSFORMERS, OTHER THAN ITS ORIGINAL COLOR,
- IS NOT ALLOWED.



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**PAD-MOUNTED TRANSFORMER CLEARANCES
FROM BUILDINGS**

WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-50			



MINIMUM CLEAR WORKING SPACE AROUND PAD-MOUNTED EQUIPMENT		
TYPE OF PAD-MOUNTED EQUIPMENT	DIMENSION A: DOOR SIDES (FT)	DIMENSION B: (FT)
TRANSFORMERS (SEE NOTE 4)	10	3
SWITCHGEAR (SEE NOTE 3)	10	5
RECLOSERS, PRIMARY METERS, ETC.	10	3

MISCELLANEOUS CLEARANCES	
TYPE OF EQUIPMENT	CLEARANCE IN ANY DIRECTION (FT)
FUEL OR GAS DISPENSERS	20
CONTAINERS STORING FLAMMABLE LIQUID OR GAS	10
CUSTOMER-OWNED GENERATORS OR TRANSFORMERS	10
FIRE HYDRANTS	(SEE NOTE 7)
NATURAL GAS METERS	3

NOTES:

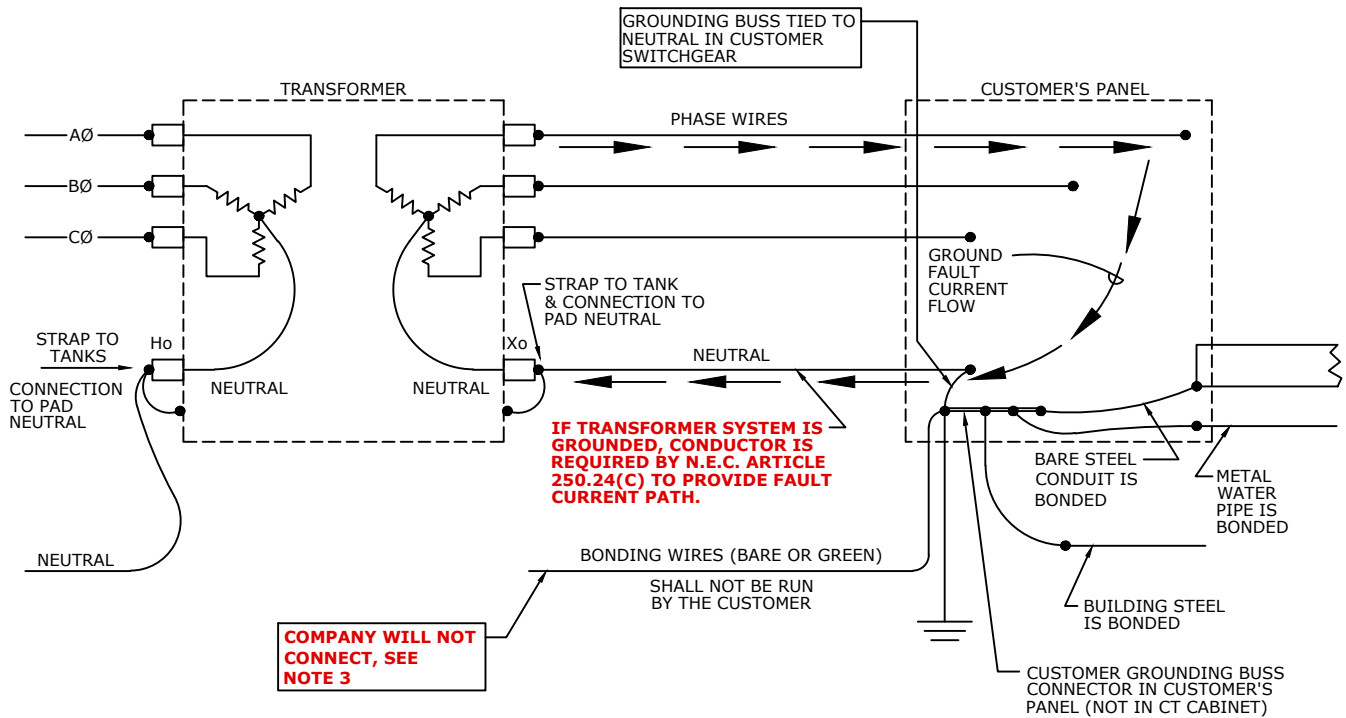
- ADEQUATE PASSAGeways (UP TO AND INCLUDING A MAINTAINED GRAVEL ACCESS ROAD) TO ACCOMMODATE CRANES, LINE TRUCKS, OR OTHER NECESSARY LIFTING AND HAULING EQUIPMENT SHALL BE PROVIDED TO ALLOW FOR MAINTENANCE, OPERATION, OR REPLACEMENT.
- DISTANCES ARE FROM THE PAD OR SURFACE MOUNTED EQUIPMENT, WHICHEVER IS CLOSER TO THE OBJECT IN QUESTION.
- A MINIMUM CLEAR WORKING SPACE OF 5 FT MUST BE MAINTAINED FROM EACH NON-DOOR SIDE OF THE EQUIPMENT (TO ACCOMMODATE CONTROL CABINETS, ETC.).
- WHERE A METER IS MOUNTED TO A TRANSFORMER, A CLEAR SPACE AROUND THE METER OF AT LEAST 3 FT WIDE, 4 FT DEEP, AND 8 FT HIGH MUST BE PROVIDED AND ALWAYS AVAILABLE FOR READING, INSPECTING, TESTING, AND MAINTENANCE OPERATIONS.
- DISTANCES LESS THAN THOSE SPECIFIED MAY BE ALLOWED IF APPROVED BY THE APPROPRIATE CODE ENFORCEMENT AUTHORITY. THIS MAY REQUIRE ALTERNATE MEANS OF FIRE PROTECTION INCLUDING FIRE BARRIERS, FIRE RATED WALLS, SPRINKLER SYSTEMS, OIL CONTAINMENT MEANS, OR OTHER APPROVED MEASURES.
- IT SHALL BE THE CUSTOMER'S RESPONSIBILITY TO CONFORM TO ALL LOCAL BUILDING CODES, INSURANCE REGULATIONS, OR ORDINANCES AFFECTING THE EQUIPMENT LOCATION.
- 4 FT, MAY BE REDUCED TO 3 FT BY AGREEMENT WITH LOCAL FIRE AUTHORITY.
- ANY FENCING OR SCREENING (INCLUDING SHRUBBERY OR OTHER PLANTINGS) PLACED AROUND PAD-MOUNTED SURFACE EQUIPMENT MUST MAINTAIN THE PROPER CLEARANCES STATED ABOVE AND AT MINIMUM MUST MAINTAIN VISIBILITY OF THE EQUIPMENT FROM THE SIDE MOST CONDUCTIVE TO THE COMPANY FOR MAINTENANCE AND RESTORATION ACTIVITIES.
- AESTHETIC WRAPS ARE NOT ALLOWED ON ANY PAD-MOUNTED EQUIPMENT.
- REPAINTING OF PAD-MOUNTED EQUIPMENT, OTHER THAN ITS ORIGINAL COLOR, IS NOT ALLOWED.



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**PAD-MOUNTED EQUIPMENT WORKING SPACE
AND MISCELLANEOUS CLEARANCES**

WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-51			



NOTES:

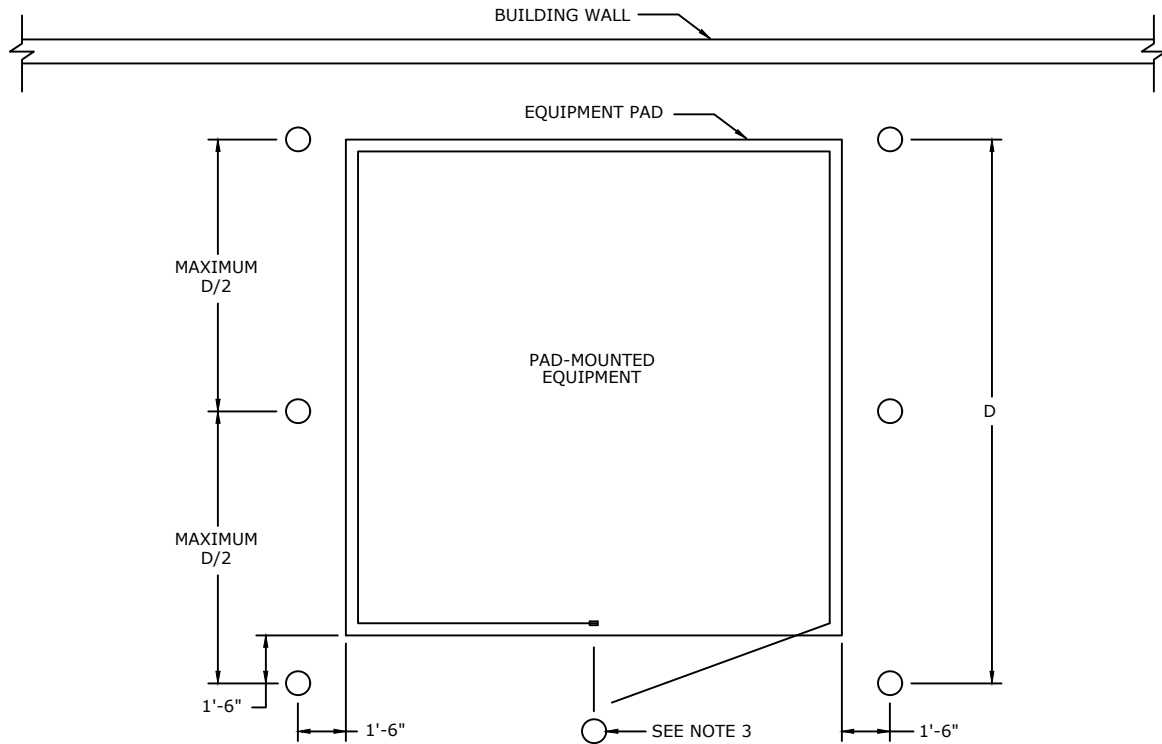
1. IF THE TRANSFORMER SECONDARY NEUTRAL IS GROUNDED, THE CUSTOMER MUST CONNECT A CONDUCTOR FROM THEIR PANEL TO THE TRANSFORMER. THIS NEUTRAL CONDUCTOR PROVIDES A PATH FOR GROUND FAULT CURRENT TO FLOW.
2. A TRANSFORMER CONNECTED FOR FOUR WIRE SERVICE (GROUNDED NEUTRAL) CANNOT SUPPLY THREE WIRE SERVICES.
3. A SEPARATE BONDING CONDUCTOR OR CONDUCTORS ARE NOT NECESSARY. ELECTRICIANS SHOULD BE ADVISED NOT TO RUN BONDING CONDUCTORS. IF THEY INSIST ON RUNNING BONDING CONDUCTORS, GREER CPW WILL NOT CONNECT THEM TO ANY COMPANY EQUIPMENT.



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4 WIRE SERVICES, GROUNDED WYE CONNECTION

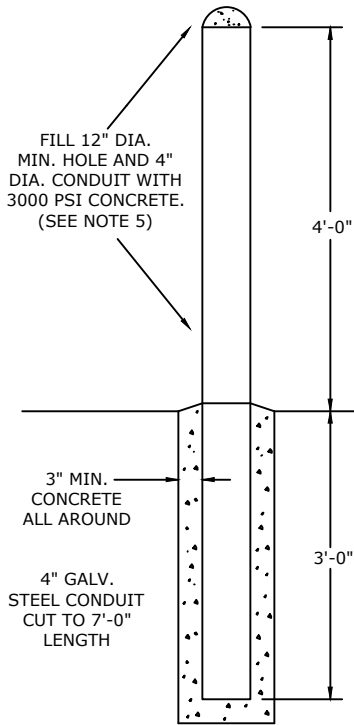
WATER	ELECTRIC	WASTEWATER	GAS
	X		
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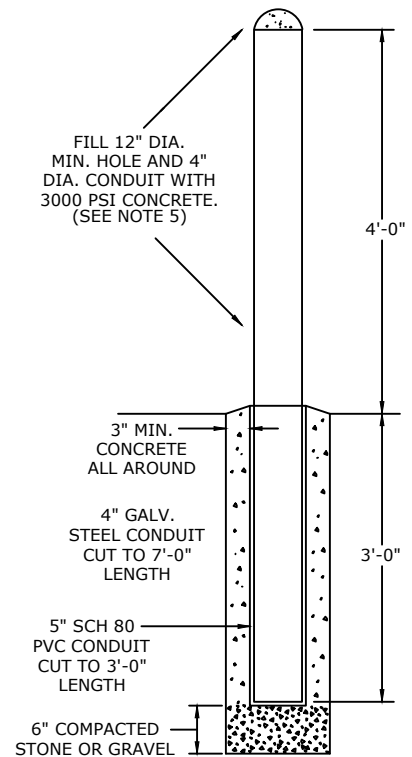
PLAN VIEW

NOTES:

1. PROTECTIVE POLES CAN BE INSTALLED ON ALL SIDES OF PAD-MOUNTED EQUIPMENT THAT ARE SUBJECT TO REGULAR VEHICLE TRAFFIC. THEIR USE IS AT THE DISCRETION OF LOCAL ENGINEERING AND WILL BE THE CUSTOMER'S RESPONSIBILITY TO PROVIDE AND INSTALL AFTER ALL REASONABLE EFFORTS TO LOCATE THE PAD-MOUNTED EQUIPMENT ELSEWHERE HAVE BEEN EXHAUSTED.
2. POLES SHALL BE EVENLY SPACED ALONG THE SIDES OF THE PAD-MOUNTED EQUIPMENT, NO WIDER THAN HALF THE DIMENSION OF THE SIDE THEY ARE PROTECTING. EXCEPTIONS TO THIS ALONG SIDES WITH DOORS ARE ALLOWED IN ORDER TO ACCOMMODATE NOTE 3.
3. ON ANY SIDE OF PAD-MOUNTED EQUIPMENT WITH DOORS, THIS POLE SHALL BE CENTRALLY LOCATED BETWEEN THE DOORS AND MUST ACCOMMODATE THE DOOR SWING OF THE EQUIPMENT. IT SHALL BE EITHER REMOVABLE OR COLLAPSIBLE. REMOVABLE OR COLLAPSIBLE DESIGNS OTHER THAN WHAT ARE SHOWN MUST BE APPROVED BY LOCAL ENGINEERING.
4. POLES LOCATED ON ANY SIDE OF PAD-MOUNTED EQUIPMENT SHALL NOT INTERFERE WITH THE SAFE OPERATION AND EXPECTED MAINTENANCE OR REPLACEMENT OF THAT EQUIPMENT.
5. POLES SHALL BE PAINTED YELLOW OR OUTFITTED WITH A YELLOW BOLLARD COVER OR POST SLEEVE.
6. ALL POLES SHALL HAVE A 2" REFLECTIVE TAPE APPLIED EITHER AROUND THE TOP OF THE BOLLARD OR EXTENDING VERTICALLY DOWN THE LENGTH OF THE BOLLARD FOR 24". VERTICAL APPLICATIONS MUST BE ON THE SIDE FACING ANY ANTICIPATED TRAFFIC.



STANDARD POLE



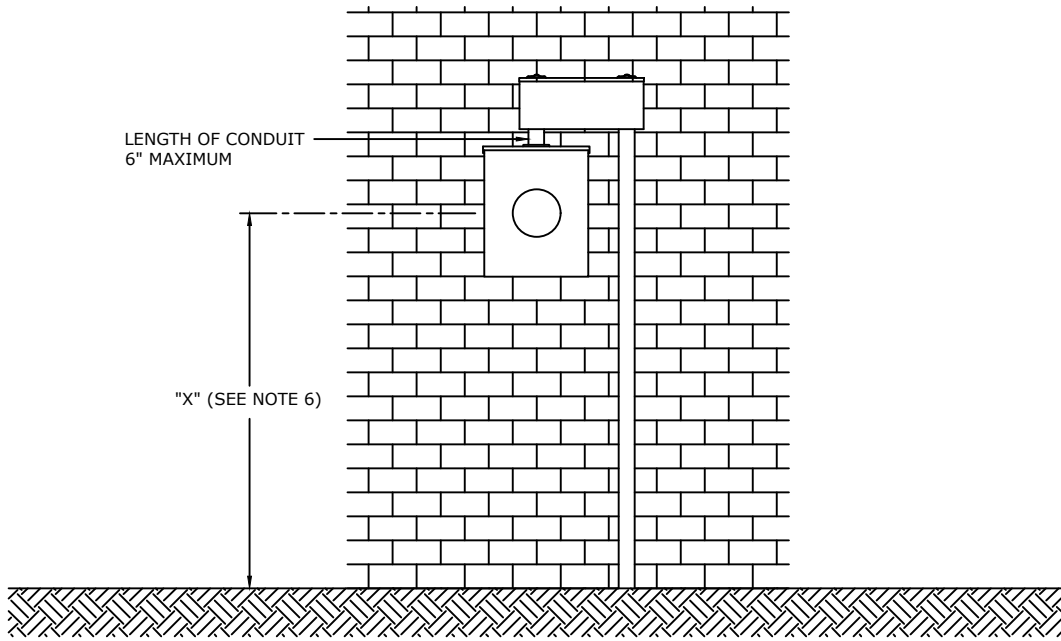
REMOVABLE POLE



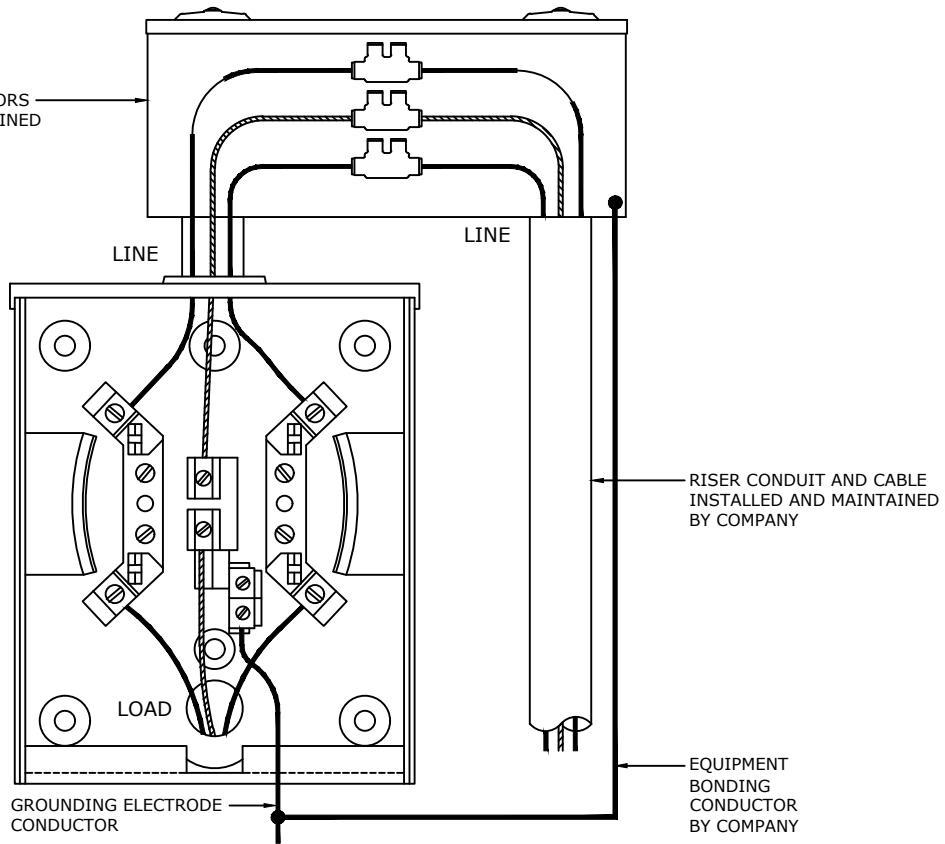
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PROTECTIVE POLES FOR PAD-MOUNTED EQUIPMENT

WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-53			



TROUGH AND CONNECTORS
INSTALLED AND MAINTAINED
BY COMPANY



NOTES:

1. THIS DESIGN IS FOR OVERHEAD TO UNDERGROUND CONVERSIONS ONLY AND NOT FOR NEW CONSTRUCTION.
2. METER ENCLOSURE SHALL BE BONDED TO GROUND AS REQUIRED BY THE N.E.C. OR AUTHORITY HAVING JURISDICTION.
3. METER ENCLOSURE PROVIDED AND INSTALLED BY CUSTOMER PER COMPANY APPROVED METER ENCLOSURE LIST.
4. MINIMUM WIRE SIZE #6.
5. TROUGH SHALL BE BONDED TO GROUND AS REQUIRED BY N.E.S.C.
6. SEE LOCAL REQUIREMENTS FOR RULES GOVERNING METER MOUNTING HEIGHT.



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UNDERGROUND CONFIGURATION -
TROUGH ABOVE METER DESIGN
200 AMP METER BASE MAXIMUM

WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-54			

CLEARANCES

SEPARATION MUST BE MAINTAINED BETWEEN CONDUITS INSTALLED FOR GREER CPW AND OTHER CABLES, PIPES OR STRUCTURES AS SHOWN IN THE FOLLOWING TABLE AND DRAWINGS.

PRIMARY OR SECONDARY CABLES IN A CONDUIT SYSTEM			
PARALLELING	HORIZONTAL SEPARATION (IN)	CROSSING	VERTICAL SEPARATION (IN) (SEE NOTE 2)
COMMUNICATION LINES	12	COMMUNICATION LINES	12
WATER LINES	36	WATER LINES	12
SEWER LINES	36	SEWER LINES	12
FUEL LINES	36	FUEL LINES	12
STEAM LINES	60	STEAM LINES	36
CUSTOMER-OWNED CABLES	36	CUSTOMER-OWNED CABLES	12
IN-GROUND SWIMMING POOL	60	IN-GROUND SWIMMING POOL	N/A

NOTES:

1. THE HORIZONTAL AND VERTICAL SEPARATION SHOULD BE ADEQUATE TO PERMIT ACCESS AND MAINTENANCE OF EITHER FACILITY TO LIMIT DAMAGE TO THE OTHER. THE DISTANCES SHOWN IN THE TABLE ABOVE HAVE BEEN FOUND TO MEET THESE CRITERIA.
2. VERTICAL SEPARATION MUST BE SUFFICIENT TO LIMIT THE LIKELIHOOD OF DETRIMENTAL LOAD BEING TRANSFERRED TO EITHER OF THE UTILITIES OR STRUCTURES INVOLVED. THE DISTANCES SHOWN IN THE ABOVE TABLE HAVE BEEN FOUND TO MEET THESE CRITERIA.
3. CONTACT GREER CPW WHEN DIMENSIONAL VARIANCES ARE REQUIRED.

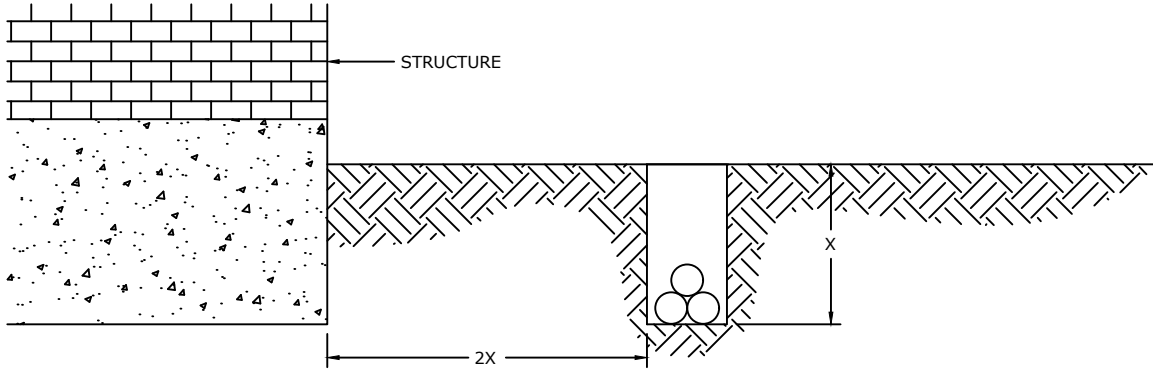


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CUSTOMER GUIDE FOR INSTALLING CONDUIT

WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-55			

INSTALLING UNDERGROUND CABLES PARALLEL TO STRUCTURES



NOTES:

1. WHEN INSTALLING UNDERGROUND CABLE PARALLEL TO EXISTING STRUCTURES, OR THOSE THAT ARE UNDER CONSTRUCTION, IT IS NECESSARY TO MAINTAIN ADEQUATE CLEARANCE FROM THOSE STRUCTURES. THIS CLEARANCE IS NECESSARY TO MAINTAIN THE INTEGRITY OF THE SOIL, AND THE SUPPORT PROVIDED BY THE SOIL, UNDER THE FOUNDATION OF THE STRUCTURE.
2. UNDERGROUND FACILITIES INSTALLED PARALLEL TO A STRUCTURE SHOULD BE LOCATED AT LEAST TWICE AS FAR AWAY FROM THE STRUCTURE AS THE DEPTH OF THE TRENCH THAT IS DUG. FOR EXAMPLE, IF A TRENCH IS TO BE TWO (2) FEET DEEP, THEN THE TRENCH MUST BE LOCATED AT LEAST FOUR (4) FEET AWAY FROM THE STRUCTURE.
3. THIS REQUIREMENT DOES NOT APPLY TO CABLE THAT IS NOT INSTALLED PARALLEL TO A STRUCTURE.
4. ON INSTALLATIONS WHERE THE CABLE CANNOT BE INSTALLED TWICE AS FAR FROM THE FOUNDATION AS THE CABLE IS DEEP, THE SOIL MUST BE COMPACTED THROUGHOUT THE ENTIRE TRENCH DEPTH TO 100% OF THE ORIGINAL SOIL DENSITY IN ALL AREAS WHERE ADEQUATE SEPARATION CANNOT BE OBTAINED FROM THE FOUNDATION.



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WATER	ELECTRIC	WASTEWATER	GAS
	X		
EE-56			

PURPOSE OF THIS DOCUMENT

THIS DOCUMENT PROVIDES INFORMATION AND REQUIREMENTS A CUSTOMER WILL NEED TO PROPERLY INSTALL CONDUIT IN BOTH RESIDENTIAL AND COMMERCIAL APPLICATIONS.

DEFINITIONS

SERVICE: 600-VOLT RATED UNDERGROUND CONDUCTORS BETWEEN THE UTILITY ELECTRIC SYSTEM AND THE CUSTOMERS ELECTRIC SYSTEM.

SERVICE POINT (POINT OF DELIVERY): THE POINT OF CONNECTION BETWEEN THE FACILITIES OF THE SERVING UTILITY AND THE PREMISE WIRING.

SECONDARY: 600-VOLT RATED CONDUCTOR BETWEEN PAD-MOUNTED TRANSFORMERS AND SECONDARY PEDESTALS OR BETWEEN SECONDARY PEDESTALS.

SECONDARY PEDESTAL (ALSO LISTED AS "PEDESTAL" IN THIS DOCUMENT): ABOVE-GROUND ENCLOSURE THAT ACTS AS A JUNCTION POINT FOR SECONDARY CONDUCTORS OR SECONDARY CONDUCTORS AND SERVICES.

PULL BOX: FLUSH-MOUNTED ENCLOSURE THAT ACTS AS A JUNCTION POINT FOR SECONDARY OR PRIMARY CONDUCTORS.

PAD-MOUNTED TRANSFORMER (ALSO LISTED AS "TRANSFORMER" IN THIS DOCUMENT): PAD-MOUNTED ABOVE-PULL GROUND STYLE TRANSFORMER MOUNTED IN A STEEL ENCLOSURE FOR CONVERTING MEDIUM VOLTAGE TO SERVICE/SECONDARY VOLTAGE LEVELS.

GROUND ROD: GROUNDING ELECTRODE FOR USE AS A DIRECT CONNECTION TO EARTH.

MINIMUM COVER: THE MINIMUM ALLOWABLE DISTANCE BETWEEN THE TOP OF A BURIED CONDUIT TO FINAL GRADE.

SWITCHGEAR: AN ABOVE-GROUND PAD-MOUNTED STEEL ENCLOSURE CONTAINING MEDIUM VOLTAGE SWITCHING EQUIPMENT.

RISER OR RISER POLE: THE POINT OF CONNECTION BETWEEN THE UTILITY OVERHEAD POWER SYSTEM AND AN UNDERGROUND SYSTEM.

THREE-PHASE (REFERENCE FOR PRIMARY VOLTAGE IN THIS DOCUMENT): A MULTI-PHASE SYSTEM CONSISTING OF THREE SEPARATE PHASE CONDUCTORS IN A BUNDLED OR TRIPLEXED CONFIGURATION.

SINGLE-PHASE (REFERENCE FOR PRIMARY VOLTAGE IN THIS DOCUMENT): A PRIMARY VOLTAGE SYSTEM CONSISTING OF ONE CONDUCTOR.

LIGHTING CABLE: 600-VOLT RATED CONDUCTORS SERVING A STREET LIGHT.

CABLE ENTRANCE ZONES: AREAS DEFINED WITHIN A PROPOSED TRANSFORMER, SWITCHGEAR, AND PEDESTAL FOR USE IN STUBBING UP ELECTRICAL CONDUITS.

PRIMARY: MEDIUM VOLTAGE CABLE TYPICALLY NOT EXCEEDING 1/0 AWG IN SIZE (TYPICALLY 7.2 KV TO 14.4 KV PHASE TO GROUND). CAN BE SINGLE-PHASE OR THREE-PHASE.

FEEDER: MEDIUM VOLTAGE CABLE GREATER THAN 1/0 AWG IN SIZE (TYPICALLY 7.2 KV TO 14.4 KV PHASE TO GROUND), THREE-PHASE ONLY.

LOOP: REFERS TO A CIRCUIT THAT CAN BE FED FROM REDUNDANT (2) SOURCES. IT IS CRITICAL FOR EACH CABLE ON THE SAME LOOP TO BE SEPARATED WITHIN A TRENCH.

MANDREL: CYLINDRICAL OBJECT PULLED THROUGH A CONDUIT SYSTEM TO VERIFY THE INTEGRITY OF THE SYSTEM AND THAT CABLE CAN BE SUCCESSFULLY PULLED THROUGH THE SYSTEM.



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CUSTOMER GUIDE FOR INSTALLING CONDUIT

WATER	ELECTRIC	WASTEWATER	GAS
	X		
APPENDIX A			