

**CITY**

**OF**

**SEGUIN**

**UNDERGROUND**

**POLICY**

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FEE'S AND SPECIFICATION DRAWINGS

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CITY OF SEGUIN ELECTRICAL CONNECTION POLICY  
UNDERGROUND SERVICE

***UNDERGROUND SERVICE***

**A. CONSTRUCTION STANDARDS**

- 1) Refer to TABLE OF UNDERGROUND SPECIFICATION DRAWINGS for appropriate metering assembly specification.
- 2) Other conditions, as contained in this policy, may apply.
- 3) Underground service can be provided from both overhead and underground primary facilities. All loads more than 100 kVA single-phase and 300 kVA three-phase must be served from pad-mounted transformers. Due to the many clearance and meter location problems, it is imperative that the City of Seguin be contacted before designing this service.
- 4) It is the responsibility of the customer to furnish and install, at their expense, conduit that meets all specifications of city ordinances, the NEC, and the City of Seguin. The City of Seguin shall provide and install all risers to be placed on the City of Seguin poles, wire, and cable at such cost to the customer as is specifically indicated herein.
- 5) The customer shall install conduits in accordance with the City of Seguin specification EU-910. All conduit depths are minimum and shall be designed such that they are maintained permanently. Special consideration is given to conduits installed in rock. Contact the City of Seguin regarding each of these installations. The City of Seguin will assume ownership of conduit and trench only after the City of Seguin has approved the conduit installation and successfully installed the primary conductors.

- 6) Single-phase riser and conduit from transformers and/or secondary boxes shall have a conduit size of 2" for meter loops up to 200 amps if the total length of the run is less than 100 feet. A 2" conduit can be used where the total length is less than 150 feet and there is one (1) 90-degree sweep and/or one (1) 45-degree sweep in the horizontal run. Conduit runs exceeding the above limitations shall require a minimum size of 3" conduit. Meter loops over 200 amp shall have a minimum conduit size of 3" or larger. Additional runs of conduit may be required. The customer shall furnish a reducing bushing for the 200 amp meter sockets where 3" conduit is utilized. This is to accommodate a 2" knockout. Sweeps shall have a minimum of 18" radius, or as approved by the City of Seguin.
- 7) Three-phase risers and conduit from transformers and/or secondary boxes shall have a minimum conduit size of 3" for meter loops. The customer shall furnish a reducing bushing for the 200 amp meter sockets where 3" conduit is utilized. This is to accommodate a 2" knockout. Additional runs of conduit may be required for larger loads. Sweeps shall have a minimum of 18" radius.
- 8) CT metered services shall have a minimum of 1" conduit at a maximum distance of 30' between the pad mounted transformer and the meter socket. **Contact the City of Seguin Electric Department for other approved methods for CT meter installations.**
- 9) Streetlight service conduit shall be a minimum of 1".
- 10) All exposed secondary conduit to be GRC (Galvanize Rigid Conduit), IMC(Intermediate Metal Conduit), Rigid Aluminum, or Schedule 40 PVC only per the following specifications. Schedule 80 PVC may be required in what's considered a hazardous area. See the National Electric Safety Code (NESC) and National Electric Code (NEC) for a description of Hazardous areas.

- 11) All exposed primary conduit will be GRC (Galvanize Rigid Conduit), IMC, (Intermediate Metal Conduit), or Rigid Aluminum and all sweeps will be of GRC (Galvanize Rigid Conduit), IMC (Intermediate Metal Conduit), or Rigid Aluminum with a minimum of 24" radius. **No exposed PVC conduit will be accepted on primary installations.**
- 12) At the discretion of the City of Seguin concrete encasement or special backfill may be required for any conduit at any depth carrying a primary and/or secondary line extension to ensure the longevity and integrity of the circuit and the safety of customers and personnel. Concrete encasement so required shall be furnished and installed by the customer. All concrete encasement must meet the City of Seguin specifications.
- 13) The customer shall furnish and install, at his expense, a pull string of a minimum 1000# test, whose length is at least 10' longer than the conduit run where possible without entering or working on any City of Seguin equipment. The pull string will remain the property of the customer at the conclusion of its use by the City of Seguin.
- 14) Plastic identification tape, red or yellow in color and with black lettering reading, "CAUTION: BURIED ELECTRIC CABLE BELOW", shall be placed in the cable trench at a depth of 12" to 18" above electric conduit and below any communication cable or conduit. The customer shall supply this tape. In the event that the tape is inadvertently cut, notify the City of Seguin so that replacement may be made, if necessary.
- 15) Customer shall obtain and install all meter troughs for permanent underground service according to the City of Seguin specifications as illustrated herein.
- 16) Installation of the above is subject to inspection and approval by the City of Seguin.
- 17) In no case shall installation requirements be less than those called for in the NEC or NESC.

- 18) All primary conduit installations shall be not less than 42 inches to the top of the conduit and may be reduced due to soil conditions to a lesser depth with written approval by the City of Seguin.
- 19) The customer will be required to install one (10) ten foot joint of GRC, (Galvanize Rigid Conduit), IMC(Intermediate Metal Conduit), or Rigid Aluminum at pole risers per specification EU-800 for each pipe installed. To a depth of 18" below grade per 300-5(d) NEC code.
- 20) All customers must furnish and install, at their expense, all appropriate conduit, pull strings, tape and pads in accordance with other appropriate sections of this policy.
- 21) Single Phase Pads will be furnished by the City of Seguin for a residential customer installation only. Commercial/Developer customers will be required to pour their transformer pad.

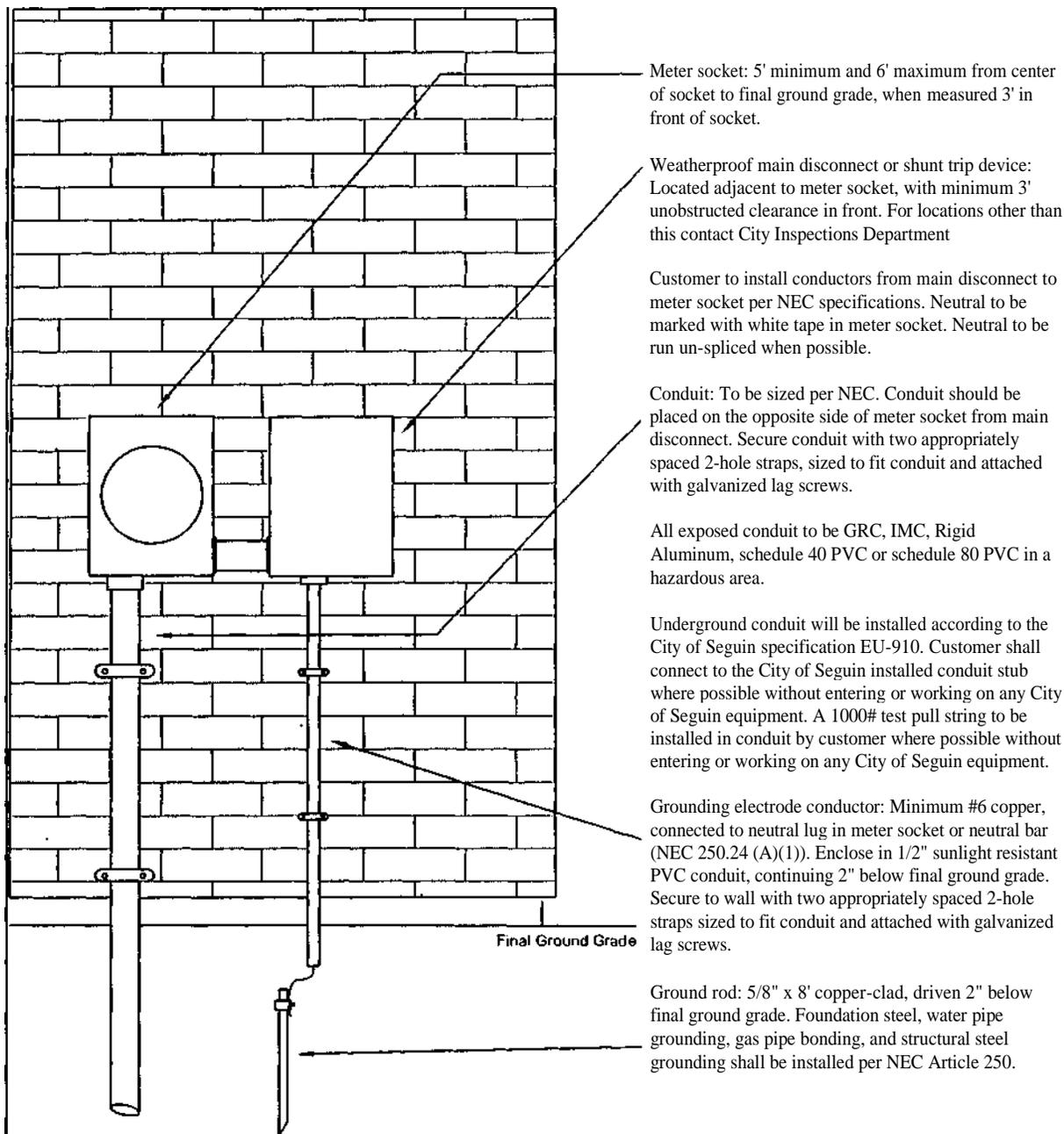
Revision Date: May 11, 2006

B. FEES

Revision Date: May 11, 2006

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

METER LOCATION IS DETERMINED BY THE CITY OF SEGUIN. ALL CUSTOMER INSTALLATIONS REQUIRE INSPECTION BY THE CITY OF SEGUIN.



Meter socket: 5' minimum and 6' maximum from center of socket to final ground grade, when measured 3' in front of socket.

Weatherproof main disconnect or shunt trip device: Located adjacent to meter socket, with minimum 3' unobstructed clearance in front. For locations other than this contact City Inspections Department

Customer to install conductors from main disconnect to meter socket per NEC specifications. Neutral to be marked with white tape in meter socket. Neutral to be run un-spliced when possible.

Conduit: To be sized per NEC. Conduit should be placed on the opposite side of meter socket from main disconnect. Secure conduit with two appropriately spaced 2-hole straps, sized to fit conduit and attached with galvanized lag screws.

All exposed conduit to be GRC, IMC, Rigid Aluminum, schedule 40 PVC or schedule 80 PVC in a hazardous area.

Underground conduit will be installed according to the City of Seguin specification EU-910. Customer shall connect to the City of Seguin installed conduit stub where possible without entering or working on any City of Seguin equipment. A 1000# test pull string to be installed in conduit by customer where possible without entering or working on any City of Seguin equipment.

Grounding electrode conductor: Minimum #6 copper, connected to neutral lug in meter socket or neutral bar (NEC 250.24 (A)(1)). Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to wall with two appropriately spaced 2-hole straps sized to fit conduit and attached with galvanized lag screws.

Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade. Foundation steel, water pipe grounding, gas pipe bonding, and structural steel grounding shall be installed per NEC Article 250.

DATE ISSUED		
REV.	DATE	BY

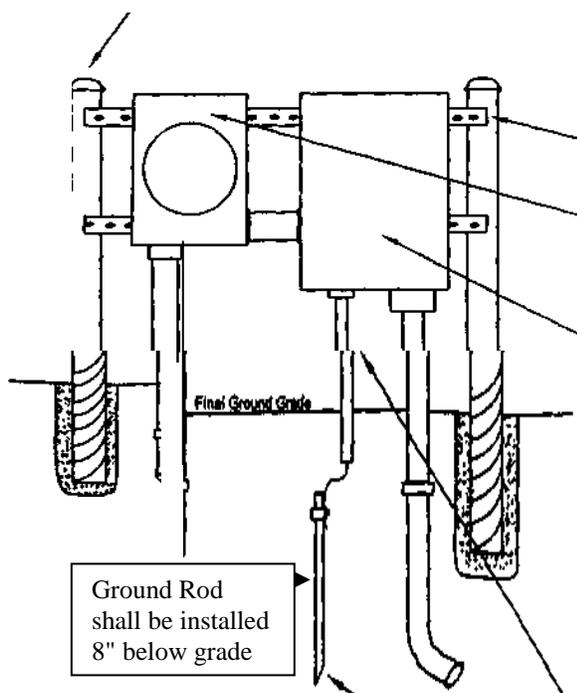
TITLE METERING ASSEMBLY UNDERGROUND SERVICE
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	8-8-03	WB		
			SCALENTS	DRAWING NO. EU-010

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

**METER LOCATION IS DETERMINED BY THE CITY OF SEGUIN. ALL CUSTOMER INSTALLATIONS REQUIRE INSPECTION BY THE CITY OF SEGUIN.**

Meter stand: 2" GRC, or IMC, continuing a minimum of 2' below final ground grade with protective tar tape or polywrap extending 2" above and encased in concrete, 4 sack mix 300PSI minimum. Top of pipe to have rainproof cap. As an alternative, a commercially available meter/disconnect pedestal will be acceptable. Proposed catalog numbers with complete description shall be submitted for approval.  
Galvanized mounting channel, Kendorf or equivalent, 1 1/2" x 1 1/2": Welded or bolted to stand with galvanized bolts.



Meter socket: 5' minimum and 6' maximum from center of socket to final ground grade when measured 3' in front of meter. Secure at four points to two appropriately spaced mounting channels.

-Weatherproof main disconnect or shunt trip device: Located adjacent to meter socket, with minimum 3' unobstructed clearance in front. Secure at four points to two appropriately spaced mounting channels. For locations other than this installation contact City Inspections Department.

Conduit: To be sized per NEC. Conduit should be placed on the opposite side of meter socket from main disconnect. Secure conduit to one appropriately spaced mounting channel with Kendorf strap or equivalent, or galvanized U bolt sized to fit conduit.

All exposed conduit to be GRC, IMC, Rigid Aluminum, schedule 40 PVC or schedule 80 PVC in a hazardous area.

Customer to install conductors from disconnect to meter socket per NEC specifications. Neutral to be marked with white tape in meter socket. Neutral to be un-spliced when possible.

Underground conduit will be installed according to the City of Seguin specification EU-910. Customer shall connect to the City of Seguin installed conduit stub where possible without entering or working on any City of Seguin equipment. A 1000# test pull string is to be installed in conduit by customer where possible without entering or working on any City of Seguin equipment.

Grounding electrode conductor. Minimum #6 copper, connected to neutral lug in meter socket or neutral bar (NEC 250.24 (A)(1)). Enclose in 1/2" sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure conduit to mounting channel with Kendorf strap or equivalent, or galvanized U bolt, sized to fit conduit.

All grounding and bonding to be to NEC Article 250 requirements.

SERVICE MAIN RATING	WIRE TYPE			
	ALUMINUM 75°C	ALUMINUM 90°C	COPPER 75°C	COPPER 90°C
60 Amp 70 Amp 100 Amp	#4 #3 #1 1/0	#6 #4 <	#6 #4 #3 #1	#6 #6 #3
Amp 125 Amp 150 Amp	3/0 250 MCM	1/0 2/0 4/0	1/0 3/0	#2 #1 2/0
Amp 200 Amp				

(NEC Table 310-16)  
Note: Other service rating shall be submitted to City of Seguin Electric for approval.

<b>CITY OF SEGUIN</b> 816 FRED BYRD DRIVE SEGUIN TEXAS, 78155	DATE ISSUED			TITLE METERING ASSEMBLY UNDERGROUND SERVICE ON STAND
	REV.	DATE	BY	
		8-8-03	WB	
			SCALE NTS	DRAWING NO. EU-020

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

METER LOCATION IS DETERMINED BY THE CITY OF SEGUIN. ALL CUSTOMER INSTALLATIONS REQUIRE INSPECTION BY THE CITY OF SEGUIN.

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

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

Meter mounting equipment shall be commercially available horizontal gang or bussed gutter type. Proposed catalog numbers and complete description shall be submitted for approval. Any other design or equipment arrangement shall be submitted for approval. Meter mounting equipment shall be installed such that the center of the highest meter will be 5' minimum and 6' maximum from final ground grade.

Each metered circuit shall have a weatherproof sub main switch, circuit breaker, fuse, shunt trip device or a combination of the above.

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

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

All exposed conduit to be GRC, IMC, Rigid Aluminum, schedule 40 PVC or schedule 80 PVC in a hazardous area. See article 300 of the NEC.

Underground conduit: Installed according to the City of Seguin specification EU-910. Customer shall connect to City of Seguin installed conduit stub where possible without entering or working on any City of Seguin equipment. A 1000# test pull string is to be installed in conduit by customer where possible without entering or working on any City of Seguin equipment.

Where a separate conduit is required for the ground wire, a properly sized ground wire shall be enclosed in 1/2" or larger sunlight resistant PVC conduit, continuing 2" below final ground grade. Secure to wall with 2 or more appropriately spaced straps, sized to fit conduit, and attached with galvanized lag screws. Metal conduit acceptable, but must comply with NEC 250.64(e).

See 250 (c) of NEC for grounding electrode system and grounding electrode conductor.

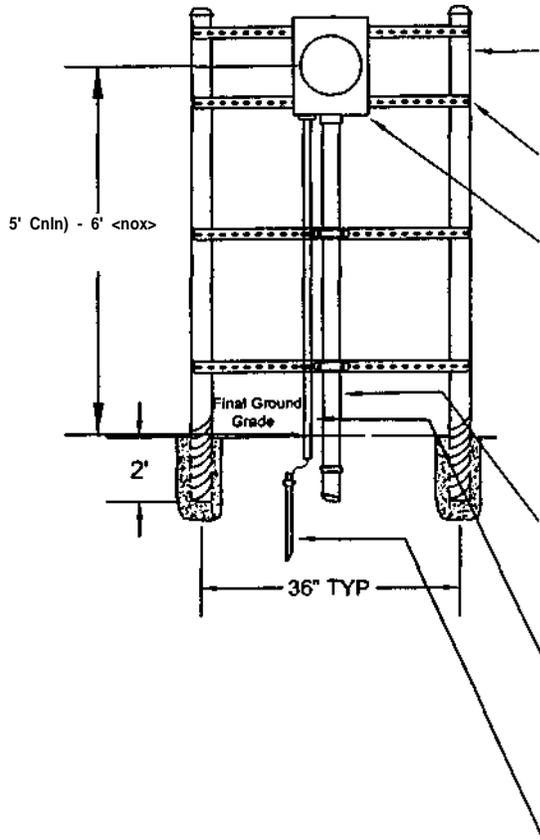
<b>CITY OF SEGUIN</b> 816 FRED BYRD DRIVE SEGUIN TEXAS, 78155	DATE ISSUED			TITLE	
	REV.	DATE	BY	METERING ASSEMBLY MULTIPLE METERS UNDERGROUND SERVICE	
		8-8-03	WB		
				SCALE NTS	DRAWING ND. EU-045

This specification shall be used only in conjunction with the City of Seguin Electrical Connection Policy and may not reflect all requirements of a specific installation. ***This installation is not the only method for metering if the CT's and PT's are mounted within the secondary compartment of the transformer. For other methods contact the City of Seguin Electric Department***

METER LOCATION IS DETERMINED BY THE CITY OF SEGUIN. ALL CUSTOMER INSTALLATIONS REQUIRE INSPECTION BY THE CITY OF SEGUIN.

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

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



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

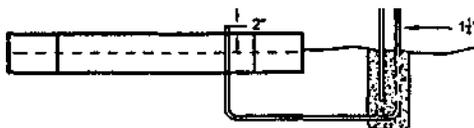
Galvanized mounting channel: Kendorf or equivalent, 1 1/2" x 1 1/2", welded or bolted to stand with galvanized bolts.  
 Meter socket: 5" minimum and 6" maximum from center of socket to final ground grade when measured 3' in front of meter. Secure at four points to two appropriately spaced mounting channels.

All exposed conduit to be 1" GRC, IMC, or rigid aluminum. Secure conduit to two appropriately spaced mounting channels with Kendorf straps or equivalent, or galvanized U bolts, sized to fit conduit.

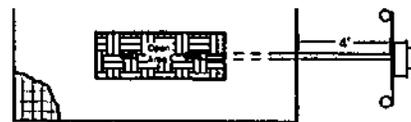
Underground conduit: 1" Schedule 40 PVC, installed according to the City of Seguin specification EU-910. Customer shall connect to the City of Seguin installed conduit stub where possible without entering or working on any City of Seguin equipment. A 1000# test pull string is to be installed in conduit by customer where possible without entering or working on any City of Seguin equipment.

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

At least one Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade. See NEC Article 250-56



SIDE VIEW

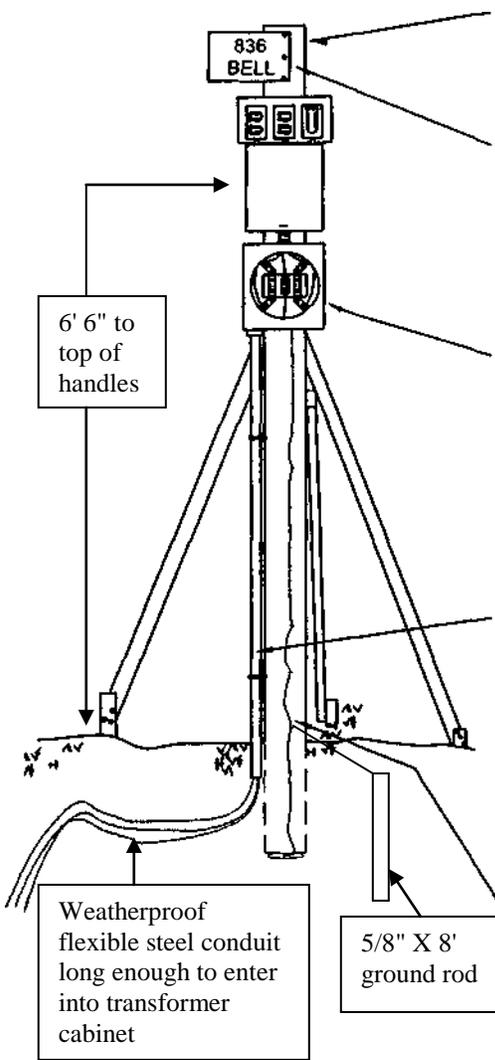


FRONT VIEW

<b>CITY OF SEGUIN</b> 815 NELDA STREET SEGUIN TEXAS, 78155	DATE ISSUED 4/98		TITLE METERING ASSEMBLY CT STAND	
	REV.	DATE	BY	
		5-11-06	WB	
			SCALE NTS	DRAWING NO. EU-070

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

METER LOCATION IS DETERMINED BY THE CITY OF SEGUIN. ALL CUSTOMER INSTALLATIONS REQUIRE INSPECTION BY THE CITY OF SEGUIN.



Treated 4" x 4" post: Height above final ground grade shall be 7' and a minimum below ground of 2'. Three wood braces required, minimum 2" x 4", secured with 2" x 4" stakes driven securely into ground. Braces shall not be attached to trees or other structures. Site Address: Marked on 1' x 1' exterior (painted) or marine plywood.

Conductors: Service lateral conductors shall be sized according to the table below, as a minimum, based upon the main bus rating of the disconnect device; unless otherwise approved by the City of Seguin. Conductor insulation shall be rated for direct burial (wet locations).

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

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

Electrical conduit for service lateral conductors shall be GRC, IMC, rigid aluminum, or a minimum of schedule 40 PVC.  
 100 amp loop: 1 1/4" minimum; 200 amp: 2" minimum. The conduit shall extend 6" below ground grade at temporary post. Conduit shall be secured to post with 2 appropriately spaced straps, sized to fit conduit, and attached with lag screws.

Conductor shall be buried from post to within 6" of service equipment; at a minimum depth of 24" and have 5' leads at service equipment.

At least one Ground rod: 5/8" x 8' copper-clad, driven 2" below final ground grade. See NEC Article 250-56

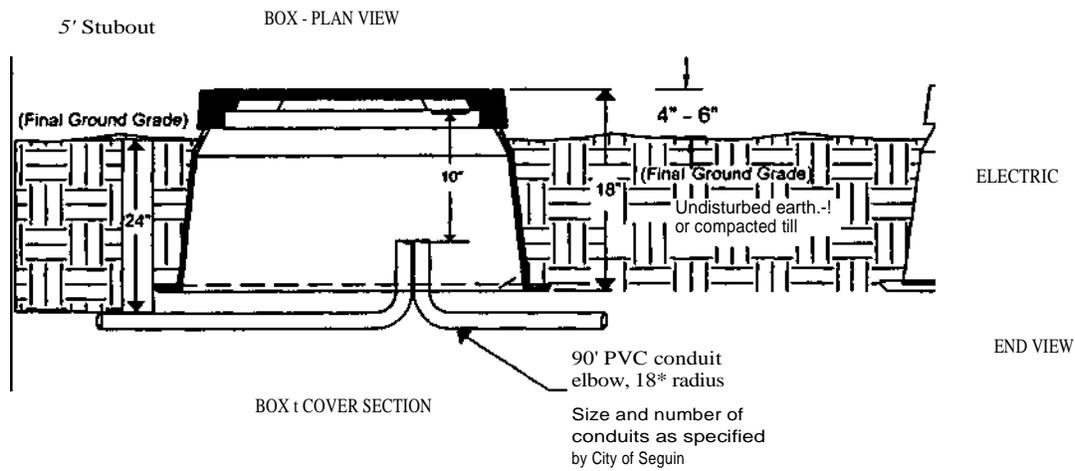
SERVICE MAIN RATING	WIRE ALUMINUM		TYPE COPPER	
	75°C		75°C	
60 Amp 70 Amp	*4 #3	#1 1/0	#6 #4	#3
100 Amp 125 Amp	3/0	250 MCM	#1 1/0	3/0
150 Amp 200 Amp				

(NEC Table 310-16)  
 Note: Other service rating shall be submitted to the City of Seguin Planning and Coding Dept. for approval.

<b>CITY OF SEGUIN</b> 816 FRED BYRD DRIVE SEGUIN TEXAS, 78155	DATE ISSUED			TITLE	
	REV.	DATE	BY	METERING ASSEMBLY	
		08-08-03	WB	UNDERGROUND TEMPORARY	
				SCALE	DRAWING NO.
			NTS	EU-110	

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

The electric system layout design, to include secondary enclosure locations, is determined by the City of Seguin. Phase tape or color for voltage required.



Enclosure furnished by City of Seguin and installed by customer.

Note: Size of enclosure shall be determined by the City of Seguin.

Make sure that conduit is not located under lip of box. Primary and Secondary stub outs shall be 5' minimum.

<b>CITY OF SEGUIN</b> 816 FRED BYRD DRIVE SEGUIN TEXAS, 78155	DATE ISSUED			TITLE	
	REV.	DATE	BY	SECONDARY ENCLOSURE	
		08-08-03	WB		
			SCALE	DRAWING NO.	
			NTS	EU-210	

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

Locations are determined by the City of Seguin. All customer installations require inspection by the City of Seguin.

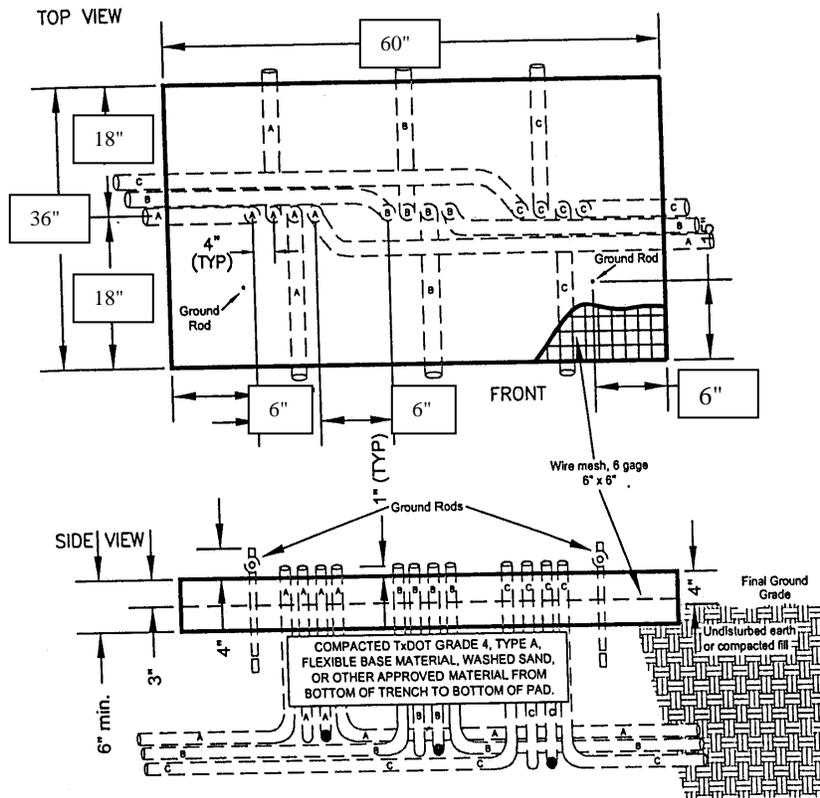
A, B, C = Conductor phase; phase orientation shall be verified prior to installation.

Underground conduit to be installed according to the City of Seguin specification EU-910. Conduit to be sized by the City of Seguin and have 1" projection above concrete, a minimum of 24" radius, 90° sweeps and be of GRC, IMC, or Rigid Aluminum. 1000# test pull string to be installed in each conduit by the customer where possible without entering or working on any City of Seguin equipment.

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

All primary stub outs shall be 5' minimum.

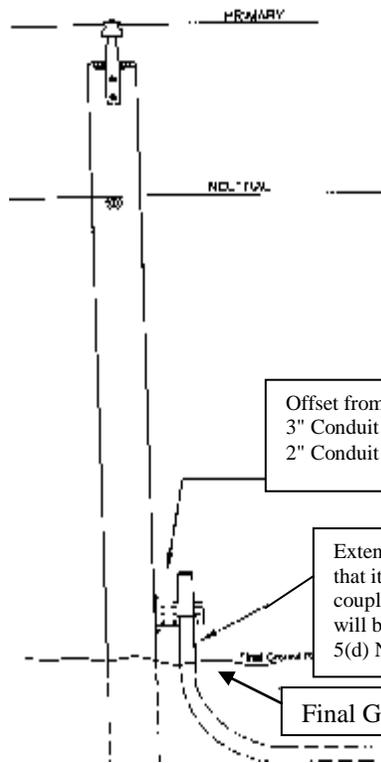
Pull Box to be furnished by the City of Seguin and installed by the customer.



<b>CITY OF SEGUIN</b> 816 FRED BYRD DRIVE SEGUIN TEXAS, 78155	DATE ISSUED			TITLE	
	REV.	DATE	BY	PRIMARY URD PULL BOX	
		08-08-03	WB	SCALE	DRAWING NO.
			NTS	EU-310	

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

Locations are determined by the City of Seguin. All customer installations require inspection by the City of Seguin.



Poles and brackets installed by the City of Seguin.

Conduit size will be specified by the City of Seguin for each project.

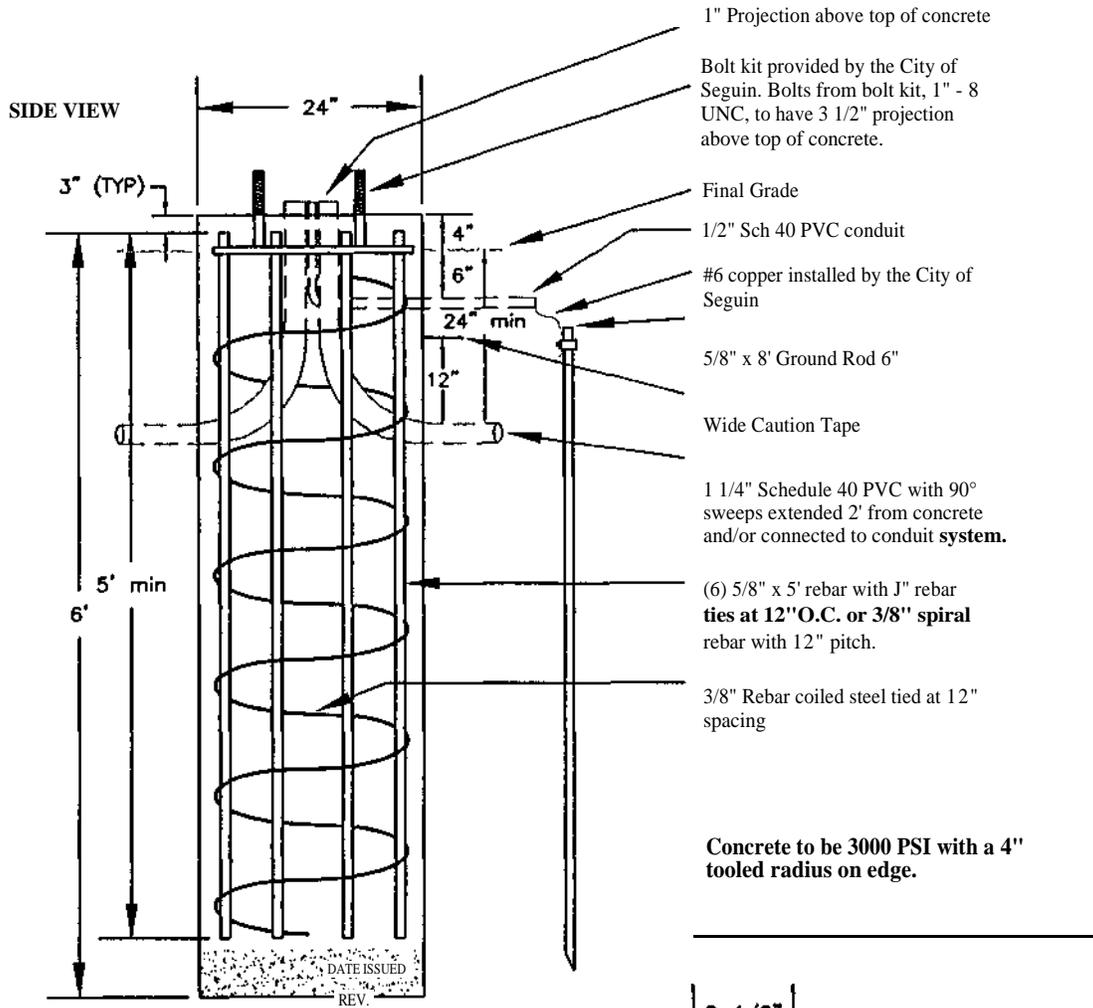
Riser must be plumb with pole and attached to a stand off bracket.

Underground conduit installed according to the City of Seguin specification EU-910. Conduit to be sized by the City of Seguin. Conduit sweep to be a minimum of 24" radius and be GRC, IMC, Schedule 80 PVC or Rigid Aluminum. A 1000# test pull string is to be installed by customer where possible without entering or working on any City of Seguin equipment.

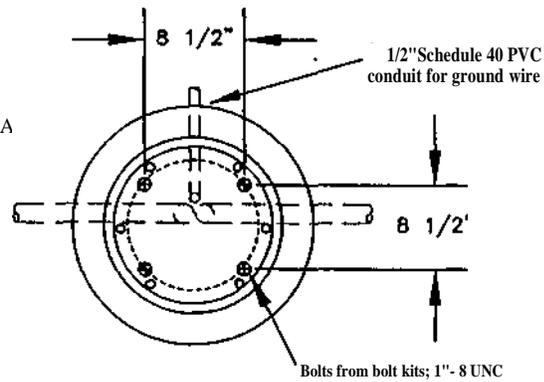
<b>CITY OF SEGUIN</b> 816 FRED BYRD DRIVE SEGUIN TEXAS, 78155	DATE ISSUED			TITLE	
	REV.	DATE	BY	STUB OUT ON POLE RISER	
		08-08-03	WB	SCALE	DRAWING NO.
			NTS	EU-800	

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

Locations are determined by the City of Seguin. All customer installations require inspection by the City of Seguin.



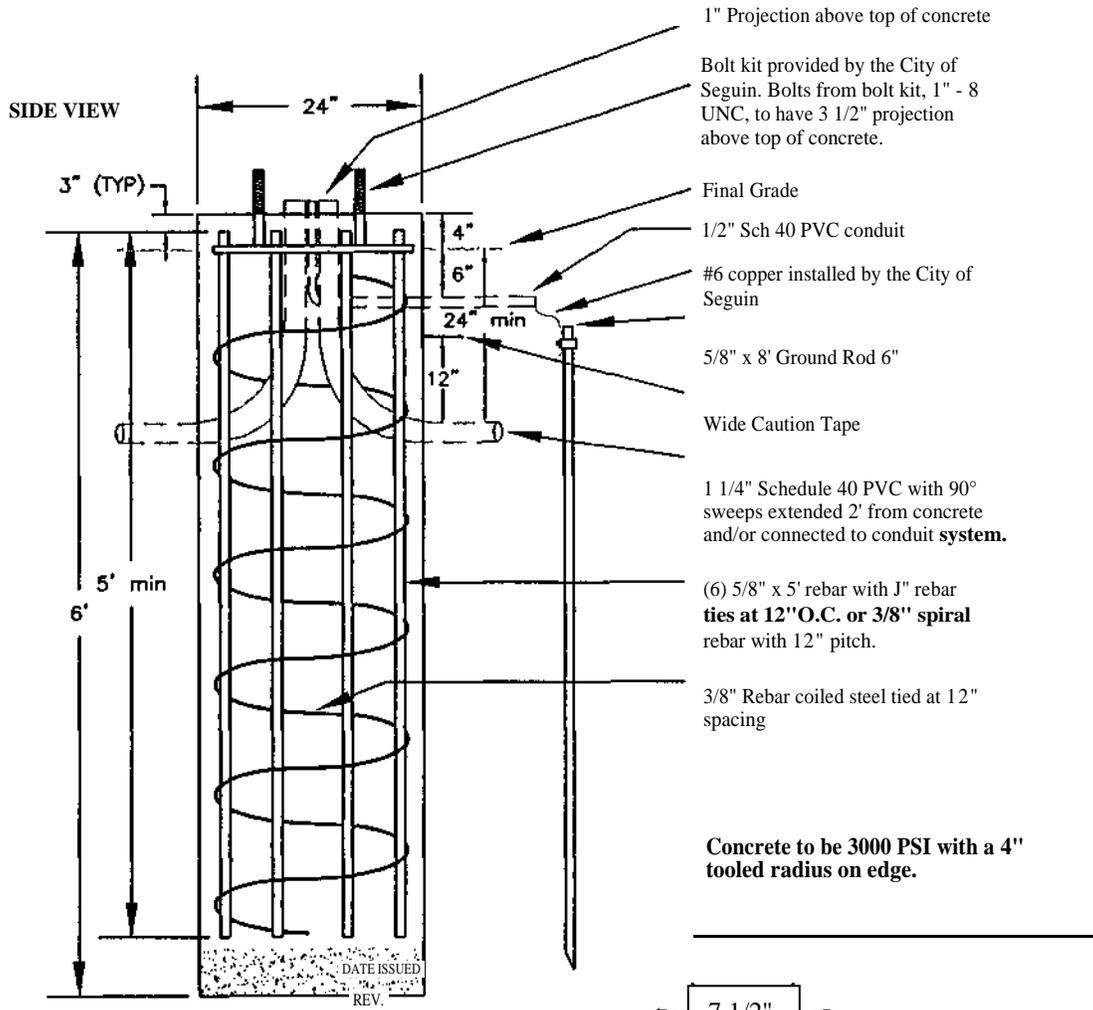
TOP VIEW DETA



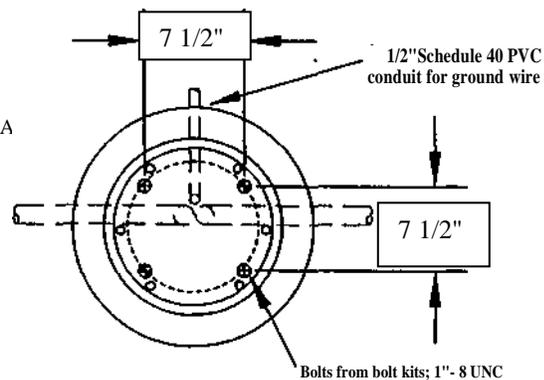
<b>CITY OF SEGUIN</b> 816 FRED BYRD DRIVE SEGUIN TEXAS, 78155	DATE ISSUED			TITLE	
	REV.	DATE	BY	Standard Antique Pole Light Foundation	
		08-08-03	WB		
				SCALE	DRAWING NO.
			NTS	EU-410	

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

Locations are determined by the City of Seguin. All customer installations require inspection by the City of Seguin.



TOP VIEW DETA

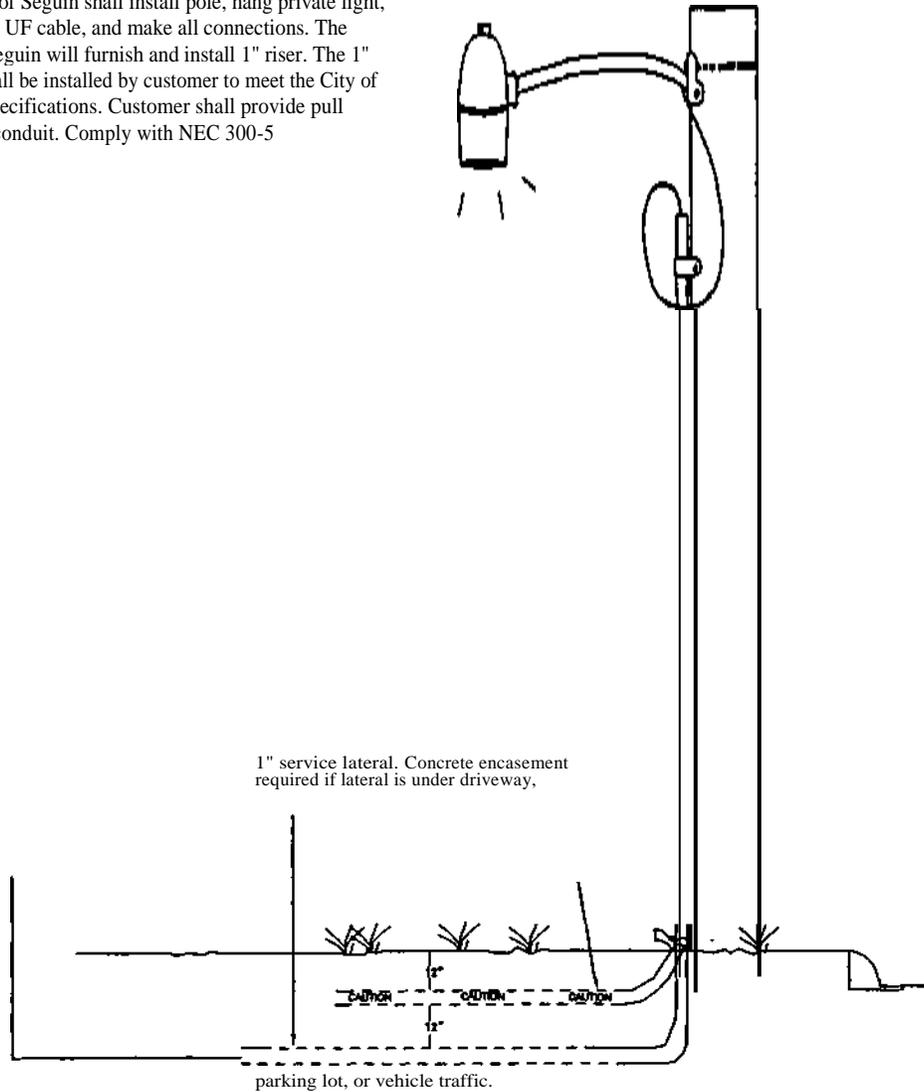


<b>CITY OF SEGUIN</b> 816 FRED BYRD DRIVE SEGUIN TEXAS, 78155	DATE ISSUED			TITLE	
	REV.	DATE	BY	Standard Aluminum Pole Light Foundation	
		08-08-03	WB		
				SCALE	DRAWING NO.
			NTS	EU-410	

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

Locations are determined by the City of Seguin. All customer installations require inspection by the City of Seguin.

The City of Seguin shall install pole, hang private light, pull Type UF cable, and make all connections. The City of Seguin will furnish and install 1" riser. The 1" lateral shall be installed by customer to meet the City of Seguin specifications. Customer shall provide pull string in conduit. Comply with NEC 300-5

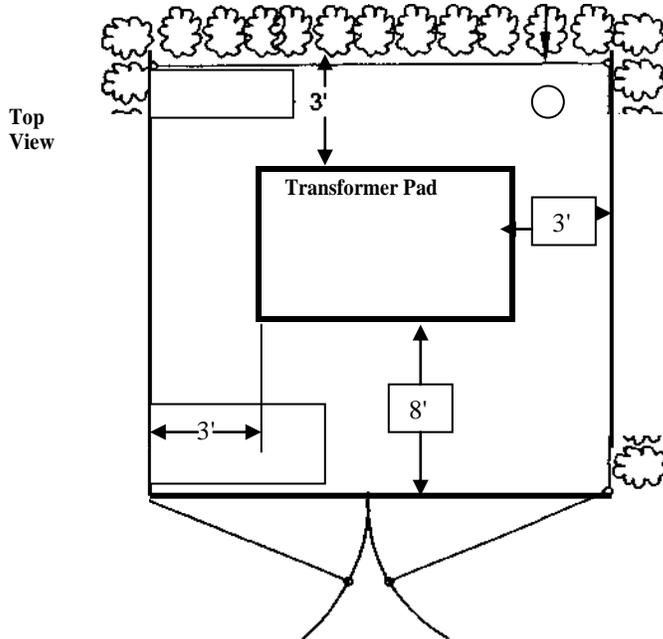


To pad-mount transformer, secondary pull box, trough, or overhead source.

Caution tape 12" above service lateral

<b>CITY OF SEGUIN</b> 816 FRED BYRD DRIVE SEGUIN TEXAS, 78155	DATE ISSUED			TITLE	
	REV.	DATE	BY	Security light	
		08-08-03	WB	Underground Service	
				SCALE	DRAWING NO.
			NTS	EU-420	

This specification shall be used only in conjunction with the City of Seguin Electrical Connection Policy and may not reflect all requirements of a specific installation. The fencing or bushes are not required. The measurements are only intended to show distance requirements should fencing and bushes be used to hide transformer.

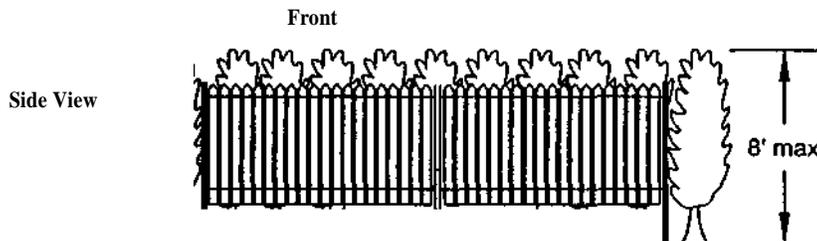


Transformer location must be accessible at all times. Clearance around the City of Seguin equipment to any barrier shall be 3' minimum.

Any installation that would enclose any metering/disconnect assembly within the barrier shall be assessable by some means like a gate and be approved by the City of Seguin.

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

The front of the City of Seguin transformer shall have a minimum 10' of clearance due to hot stick access requirements.



<b>CITY OF SEGUIN</b> 816 FRED BYRD DRIVE SEGUIN TEXAS, 78155	DATE ISSUED			TITLE	
	REV.	DATE	BY	PAD MOUNT TRANSFORMER CLEARANCES	
		08-08-03	WB		
				SCALE	DRAWING NO.
			NTS	EU-500	

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

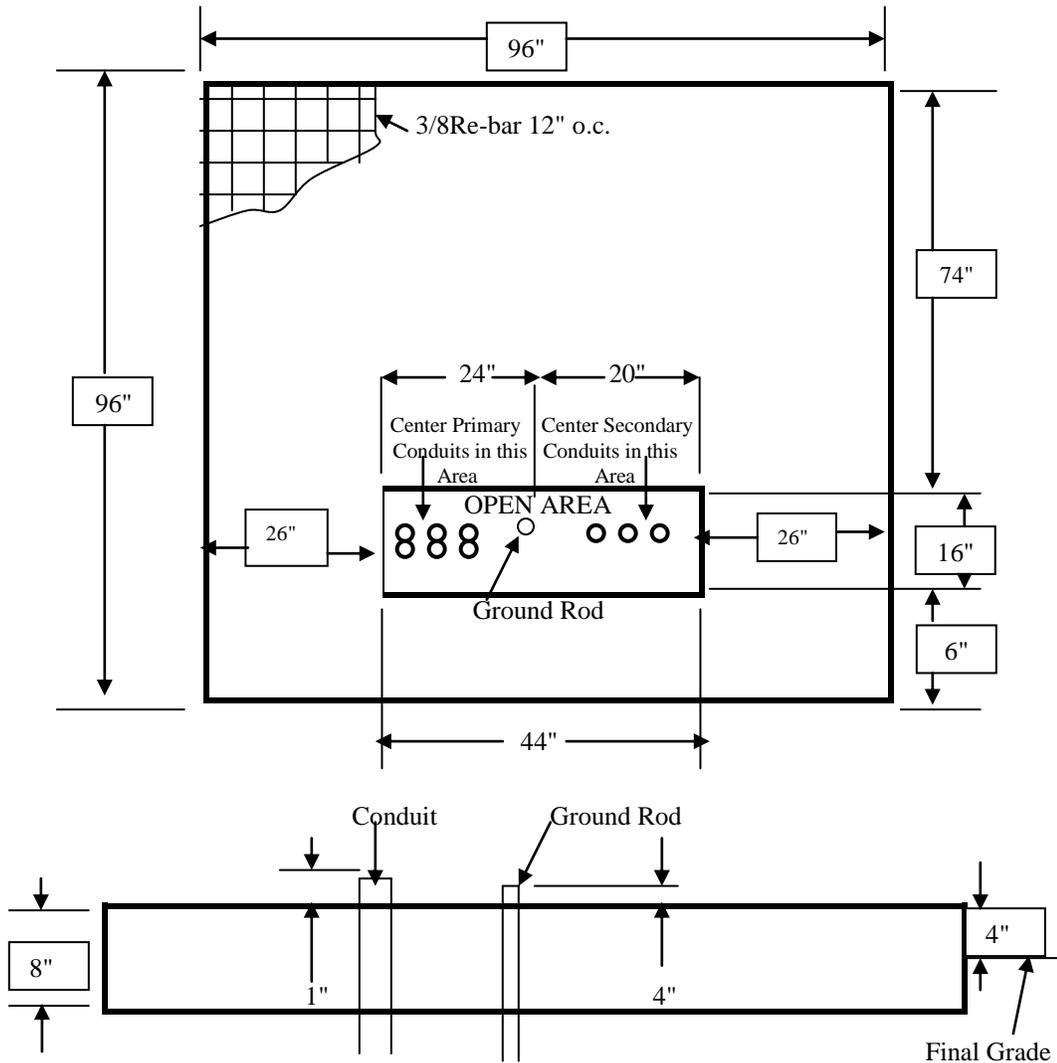
Locations are determined by the City of Seguin. All customer installations require inspection by the City of Seguin.

Underground conduit to be installed according to the City of Seguin specification EU-910. Conduit to be sized by City of Seguin and have 1" projection above concrete, 36" radius, 90° sweeps. A 1000# test pull string is to be installed by customer where possible without entering or working on any City of Seguin equipment.

Copper-clad ground rod, 5/8" x 8', 1 required, to have 4" projection above top on concrete.

Transformer Pad shall be a minimum of 8" thick from top to bottom.

All primary and secondary stub cuts shall be 5" minimum.



<b>CITY OF SEGUIN</b> 816 FRED BYRD DRIVE SEGUIN TEXAS, 78155	DATE ISSUED			TITLE	
	REV.	DATE	BY	Transformer Pad	
		08-08-03	WB	Three Phase for 2000 KVA and Smaller	
			SCALE	DRAWING NO.	
			NTS	EU-510	

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

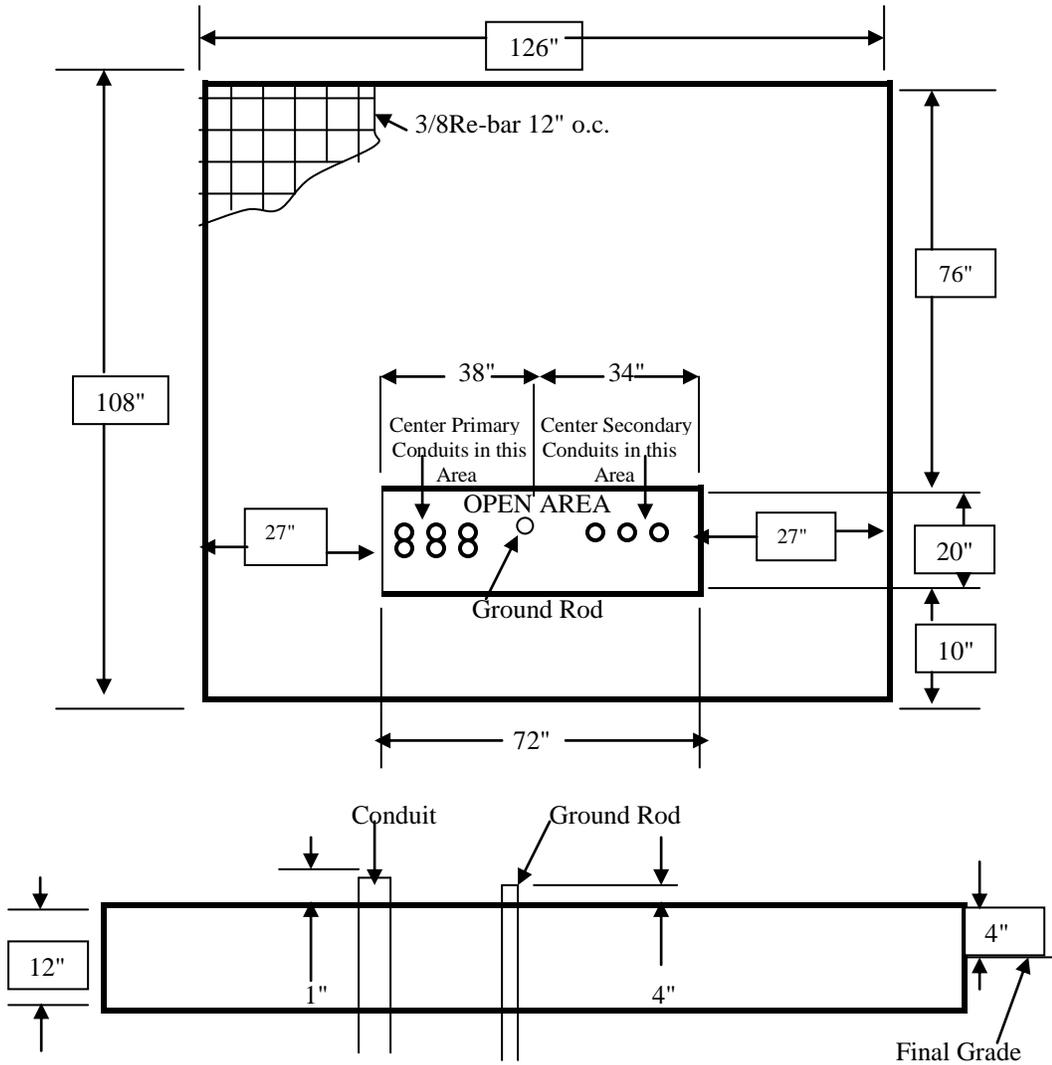
Locations are determined by the City of Seguin. All customer installations require inspection by the City of Seguin.

Underground conduit to be installed according to the City of Seguin specification EU-910. Conduit to be sized by City of Seguin and have 1" projection above concrete, 36" radius, 90' sweeps. A 1000# test pull string is to be installed by customer where possible without entering or working on any City of Seguin equipment.

Copper-clad ground rod, 5/8" x 8', 1 required, to have 4" projection above top on concrete.

Transformer Pad shall be a minimum of 12" thick from top to bottom.

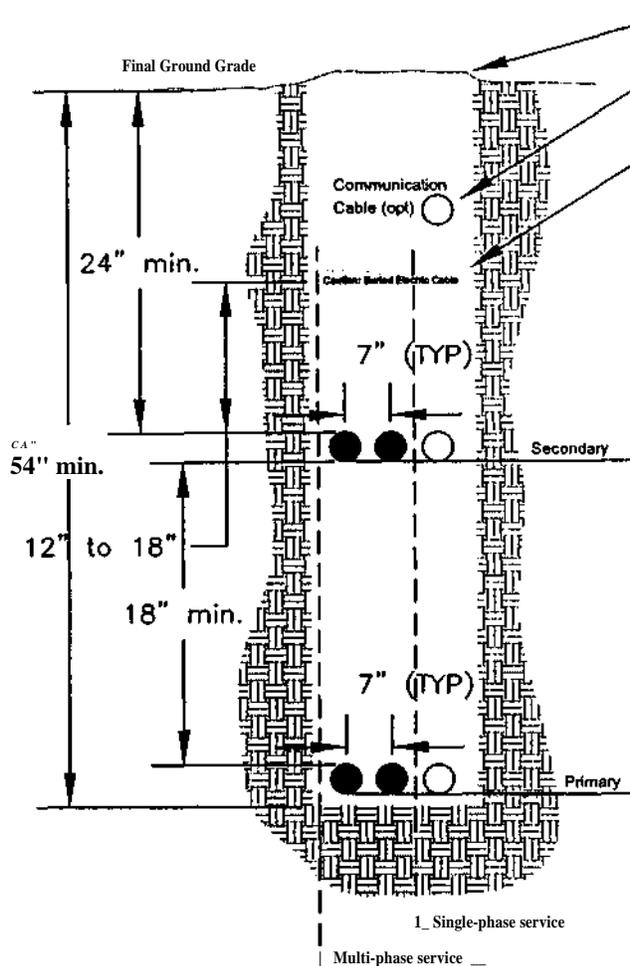
All primary and secondary stub cuts shall be 5" minimum.



<b>CITY OF SEGUIN</b> 816 FRED BYRD DRIVE SEGUIN TEXAS, 78155	DATE ISSUED			TITLE	
	REV.	DATE	BY	Transformer Pad	
		08-08-03	WB	Three Phase Larger than 2000 KVA	
				SCALE	DRAWING NO.
			NTS	EU-511	

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

Locations are determined by the City of Seguin. All customer installations require inspection by the City of Seguin. All Primary and Secondary stub outs shall be 5' minimum.



Mound earth 3" to 4" above final ground grade. Communication cable/conduit shall be installed above all electrical conduit(s) and caution tape. If Communication company requires their conduit to have more than 12" of cover the customer will have to dig the trench 12" deeper than show here to accommodate for communication conduit, secondary conduit, and primary conduit. The minimum separation between communication conduit and primary conduit shall be 30". A 6" wide plastic caution tape, red or yellow in color with black lettering reading, "Caution: Buried Electric Cable Below", will be placed in the trench 12" to 18" above electrical conduit but below any communication cables. For more than 2 conduits horizontally in trench, 2 tapes shall be installed. Customer shall excavate trench to proper depth and install PVC Schedule 40 Electrical Conduit NEMA TC 2. Conduit elbows (sweeps) for primary shall have a minimum of 24" radius and be of GRC, IMC, or Rigid Aluminum. City maintained conduit elbows for secondary shall have a minimum of 18" radius and be of GRC, IMC, or Rigid Aluminum. Conduit shall be sized by the City of Seguin. Where electrical equipment foundations (for transformers, junction boxes, switchgear) lie on top of trench line, the foundation area shall be back filled with compacted base for the entire depth of the trench. Trenches, which cross or will be under streets, commercial driveways, or parking lots, shall be back filled with Flow able Fill.

Customer to furnish and install a 1000# test pull string where possible without entering or working on any City of Seguin equipment.

No pipe, gas, or water line shall be closer than 36" vertically or horizontally from any underground electrical conductor.

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

<b>CITY OF SEGUIN</b> 816 FRED BYRD DRIVE SEGUIN TEXAS, 78155	DATE ISSUED			TITLE	
				Underground Conduit Installation	
	REV.	DATE	BY		
		08-08-03	WB		
			SCALE	DRAWING NO.	
			NTS	EU-910	

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

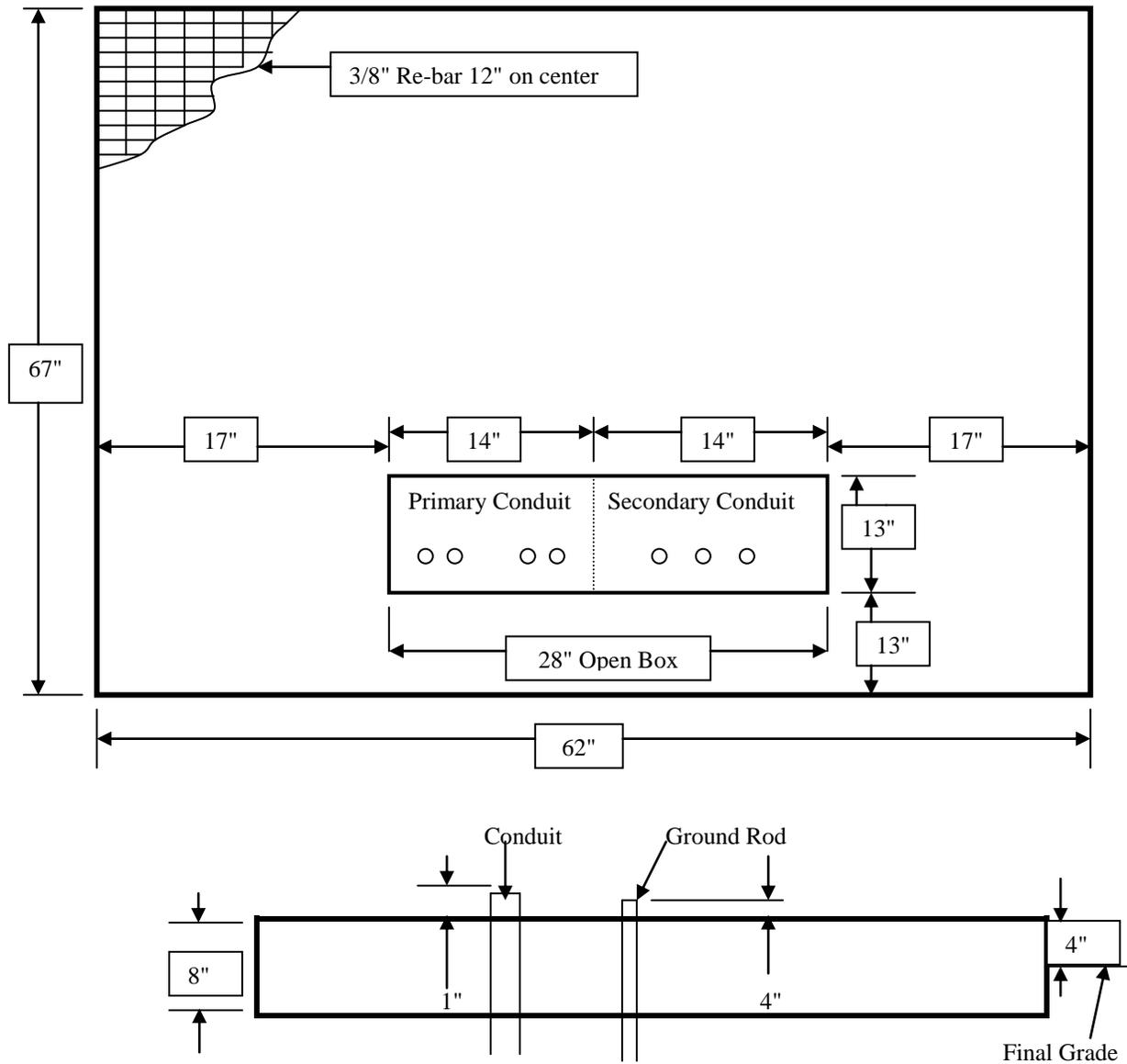
Locations are determined by the City of Seguin. All customer installations require inspection by the City of Seguin.

Underground conduit to be installed according to the City of Seguin specification EU-910. Conduit to be sized by City of Seguin and have 1" projection above concrete, 36" radius, 90° sweeps. A 1000# test pull string is to be installed by customer where possible without entering or working on any City of Seguin equipment.

Copper-clad ground rod, 5/8" x 8', 1 required, to have 4" projection above top on concrete.

Transformer Pad shall be a minimum of 8" thick from top to bottom.

All primary and secondary stub cuts shall be 5" minimum.



<b>CITY OF SEGUIN</b> 816 FRED BYRD DRIVE SEGUIN TEXAS, 78155	DATE ISSUED			TITLE	
	REV.	DATE	BY	Single Phase Transformer Pad	
		9-22-05	WB		
				SCALE	DRAWING NO.
			NTS	EU-520	

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

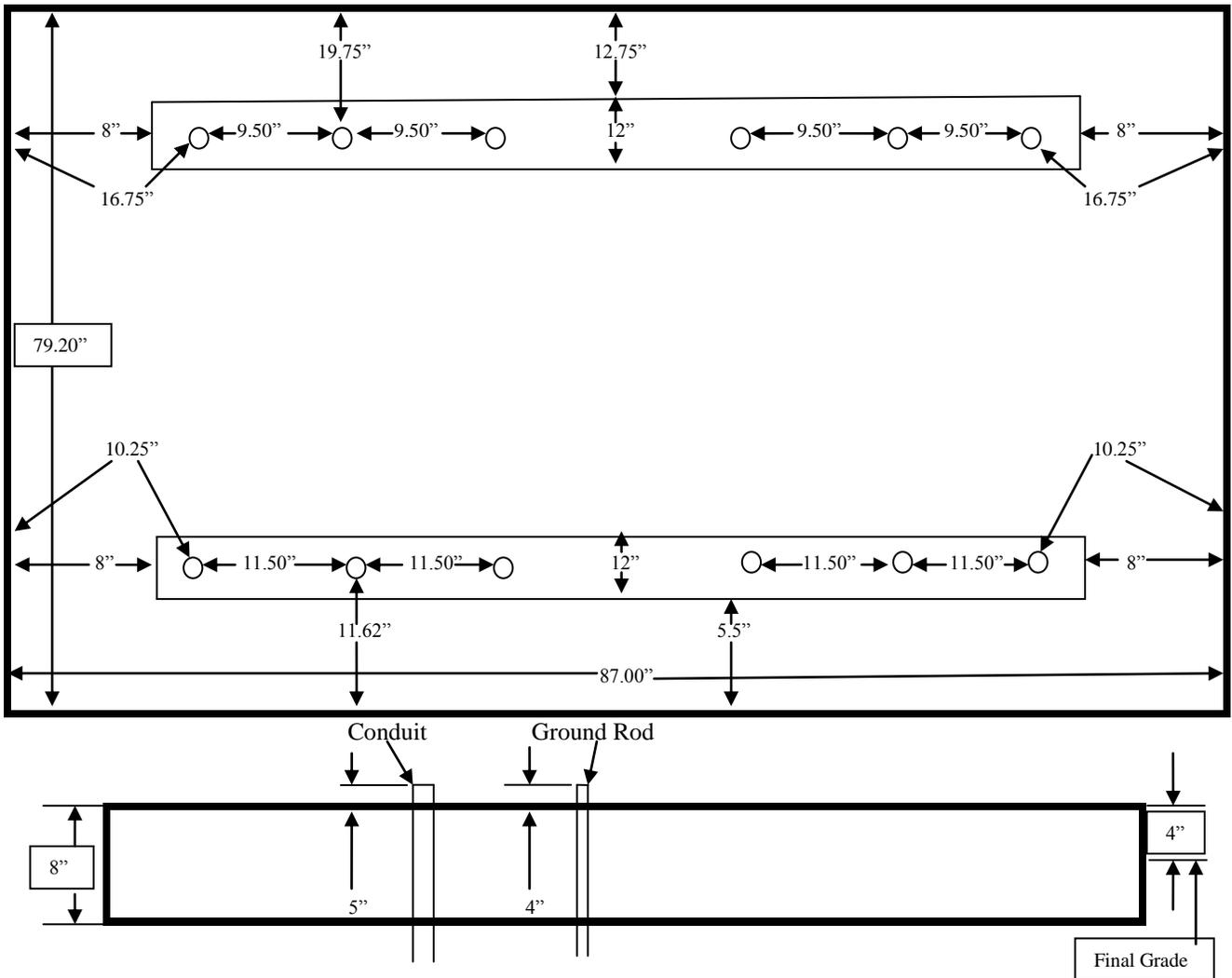
Locations are determined by the City of Seguin. All customer installations require inspection by the City of Seguin.

Underground conduit to be installed according to the City of Seguin specification EU-910. Conduit to be sized by City of Seguin and have a 5" projection above concrete, 36" radius, 90° sweeps. A 1000# test pull string is to be installed by customer where possible without entering or working on any City of Seguin equipment.

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

Switch Cabinet Pad shall be a minimum of 8" thick from top to bottom.

All primary and secondary stub cuts shall be 5" minimum.



CITY OF SEGUIN 816 FRED BYRD DRIVE SEGUIN TEXAS, 78155	DATE ISSUED			TITLE	
	REV.	DATE	BY	AIS-9 Switch Cabinet Concrete Pad	
		07-26-10	WB		
				SCALE	DRAWING NO.
			NTS	EU-530	