

SOUTHEASTERN CONSULTING ENGINEERS, INC.
600 MINUET LANE
CHARLOTTE, NORTH CAROLINA 28217
LICENSE NO. F-0181

CONTRACT DOCUMENTS
FOR THE
FOUNDATION AND BELOW GRADE CONSTRUCTION OF
DELIVERY NO. 4 SUBSTATION

TOWN OF PINEVILLE
PINEVILLE, NORTH CAROLINA



Contract No. 24-40-BG

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**TOWN OF PINEVILLE, NORTH CAROLINA
REQUEST FOR PROPOSALS FOR
DELIVERY NO. 4 SUBSTATION
BELOW GRADE CONSTRUCTION**

WHEREAS, The Town of Pineville, North Carolina, Owner, wishes to contract with an independent contractor for the furnishing of all materials, equipment, labor and supervision necessary to provide the services outlined in **Exhibits A and B** which are attached hereto and made a part hereof for site construction for substation located on property owned by the Town of Pineville at 12499 Nations Ford Road, in Mecklenburg County, and

WHEREAS, The Town seeks a contractor whose staff is experienced and well qualified to provide the work required in this RFP in a professional, timely manner, and

WHEREAS, The Town requires the contractor to provide the aforesaid services pursuant to the terms and conditions contained herein,

NOW, THEREFORE, The Town of Pineville is soliciting proposals from qualified contractors to provide the equipment and to perform the work as described herein. Sealed proposals will be received on or before 2:00 PM, EST, Thursday, October 2, 2025, in the Conference room in Pineville Town Hall, located at 505 Main Street, Pineville, North Carolina 28134, at which time and place the proposals will be publicly opened and read.

Access to electronic proposal documents can be obtained from Town's consultant, Southeastern Consulting Engineers, Inc., by phone at 704-523-6045 or via email to lisa@scepower.com.

Proposals and all supporting documents required to be attached thereto must be submitted in a sealed envelope within the time allowed and addressed to Ms. Tammy Vachon, Pineville Town Hall, 505 Main Street, Pineville, North Carolina 28134. The name and address of the Bidder, and the date and hour of the receipt of bids must appear on the outside of the envelope in which the proposal is submitted. Proposals shall also be marked "Sealed Bid for Delivery No. 4 Substation Below Grade Construction". Bidders will be required to comply with all applicable statutes, regulations, licensing requirements, and those requirements as provided in the Contract Documents.

BID BOND

Each proposal must be accompanied by a cash deposit or certified check on a bank that is a member of the Federal Deposit Insurance Corporation, payable to the order of the Owner, or a Bidder's Bond on the form attached hereto, in an amount equal to five percent (5%) of the maximum amount of the Contractor's bid. If a proposal is not accepted or if a proposal or any part thereof is accepted and a Contract is executed, the check or Bidder's Bond will be returned

in each instance within a period of thirty (30) days to the Bidder furnishing same; except that each Bidder agrees, provided its proposal is one of the three low proposals, that, by filing its proposal together with such cash, check or Bidder's Bond in consideration of the Owner's receiving and considering such proposal, said proposal shall be firm and binding upon each such Bidder and such cash, check or Bidder's Bond shall be held by the Owner for a period not exceeding sixty (60) days from the date of the receipt of the proposals.

AGREEMENT

The successful Bidder will be required to enter into an Agreement with the Owner on the terms and on the Form of Contract which is included in the Contract Documents. The Form of Contract is not to be completed prior to the submittal of proposals, and is attached to provide information to Bidder(s) as to its contents and Bid requirements prior to preparation of Bid. Only the successful Bidder(s) will be required to execute the Form of Contract within ten (10) days after the date of acceptance by the Owner.

The contractor shall include in its proposal the following promises and mutual covenants to be included in a resulting Agreement from the Town's acceptance of the contractor's proposal.

PERFORMANCE AND PAYMENT BONDS

The successful Bidder will be required to furnish Performance and Payment Bonds on the forms attached hereto, in a penal sum not less than the contract price and with sureties satisfactory to the Town's Attorney.

TERM:

The Town hereby contracts with Contractor to provide the above referenced services as specified herein for a period beginning on the date stated in the Notice to Proceed and ending on satisfactory completion of the designated work.

The Town reserves the right to amend, modify or revise the scope of work as required by funding available and/or work requirements at time of project. The Town will be the sole judge as to what changes may be required.

NOTICE TO PROCEED

A Notice to Proceed letter will be issued after the Contractor has executed an Agreement with the Town and has provided his Performance Bond and his Insurance Certificate(s) or Endorsements.

The Contractor shall not deliver any equipment to the work site or commence work until he has received a written Notice to Proceed. Work will commence immediately after issuance of the Notice to Proceed.

SCOPE OF SERVICES

Contractor shall provide the services in accordance with the scope of service contained herein in the attached **Exhibits A and B**. Such services hereinafter shall be referred to as the Work Site Services.

Unless otherwise specified herein, the Contractor will furnish all materials, transport, equipment, labor and supervision, to complete the Work. All work shall be performed in a professional, timely manner. Contractor is not to proceed without coordinating the Work with the Electric System Manager or their authorized representative.

CONTRACTOR'S WARRANTIES AND REPRESENTATIONS

Contractor must represent that its staff is knowledgeable and experienced about such services and must warrant that it will use its best efforts to provide above-described services in a professional, timely manner and in accordance with the applicable specifications set forth herein, or if none, with the standards either by law or regulations, or industry practice. Contractor shall provide evidence of its knowledge and experience by attaching a list of its most recent five (5) projects where it performed similar services with a general description of the services provided.

The Contractor shall further warrant and represent the following:

That it has become fully acquainted with the conditions, facts and circumstances relating to providing the services required under the Agreement. The failure or omission of Contractor to acquaint itself with existing conditions, facts and circumstances shall in no way relieve it of any obligation with respect to the Agreement. Contractor may make an appointment to visit the work site by contacting the Town's Engineer, Telephone (704) 523-6045.

COMPENSATION AND PAYMENT TERMS

Contractor shall be compensated upon completion of all services contained herein based on the proposal attached hereto and made a part hereof. Contractor shall submit an itemized invoice to the Town's Engineer. Said invoice will be paid within 30 days by the Town unless any items thereon are questioned, in which event payment will be withheld pending verification of the amount claimed, validity of the claim and verification that work performed meets Owner's requirements. Contractor shall provide complete cooperation during any such investigation.

INSURANCE REQUIREMENTS

Contractor shall, at all times during the term of the Agreement, carry insurance as required in **Exhibit 1** which is attached hereto and incorporated by reference. The Town shall not issue a Notice to Proceed until Contractor has submitted acceptable certificate(s) or endorsement(s), and which reflect that the required coverages are in place and that all premiums have been paid. Refusal or failure to submit such certificate(s) or endorsement(s) shall constitute grounds for the

Town to revoke the contract and award the contract to another contractor. The Town may contact the Contractor's insurer's or insurers' agent(s) directly at any time regarding Contractor's coverage's, coverage amounts, or other such relevant and reasonable issues related to this Agreement.

Contractor must advise the Town's Purchasing Agent, in writing, of any changes or cancellations to insurance coverage within five (5) days of any such change.

PERMITS AND LICENSE

The Contractor shall, without additional expense to the Town of Pineville, be responsible for obtaining any necessary licenses and permits required by the State, county, or the Town of Pineville.

INDEMNIFICATION

Except for expenses or liabilities arising from the negligence of the Town, the Contractor shall expressly agree to indemnify and hold the Town harmless against any and all expenses and liabilities arising out of the performance or default of this Contract as follows:

The Contractor expressly agrees to the extent that there is a causal relationship between its negligent, reckless or intentionally wrongful action or inaction, or the negligent, reckless or intentionally wrongful action or inaction of any of its employees or any person, firm, or corporation directly or indirectly employed by the Contractor, and any damage, liability, injury, loss or expense (whether in connection with bodily injury or death or property damage or loss) that is suffered by the Town and its employees or by any member of the public, to indemnify and save the Town and its employees harmless against any and all liabilities, penalties, demands, claims, lawsuits, losses, damages, costs, and expenses arising out of the performance or default of this Contract. Such costs are to include defense, settlement and reasonable attorneys' fees incurred by the Town and its employees. This promise to indemnify shall include bodily injuries or death occurring to Contractor's employees and any person directly or indirectly employed by Contractor (including without limitation any employee of any subcontractor), the Town's employees, the employees of any other independent contractors, or occurring to any member of the public. When the Town submits notice, Contractor shall promptly defend any aforementioned action. This obligation shall survive the suspension or termination of this Agreement. The limits of insurance coverage required herein shall not serve to limit this indemnity obligation. The recovery of costs and fees shall extend to those incurred in the enforcement of this indemnity.

PROTECTION OF WORK, PROPERTY, PERSONS AND PUBLIC

It is specifically understood and agreed that during the progress of the Work under this Agreement, the Contractor shall take the strongest precautions against the possibility of fire on

the work site and maintain adequate protection of the Work, adjacent property, structures and public, and shall be responsible for any damage or injury due to its act or neglect.

The Contractor shall be responsible at all times for the safety of the general public and for the protection of persons who may enter within the limits of his work and shall comply with all the laws of the State of North Carolina and the United States with all valid rules and regulations now in force or hereafter adopted pursuant thereto. For the purpose of this Section, "limits of his work" shall mean the area undergoing Work, and the area being used for the delivery of materials and transportation of workers. All areas closed for work shall be protected by effective barricades on which shall be placed acceptable warning and detour signs. The Contractor shall bear the entire expense and responsibility and shall not be reimbursed directly or separately by the Town for providing and maintaining all necessary or required barricades, warning lights, danger signals, signs or other precautions for the protection of the work and safety of the public.

INSPECTION AND ACCEPTANCE

All work (which term includes, but is not restricted to materials, workmanship) shall be subject to inspection and test by the Electric System Manager or their authorized representative at all reasonable times and places prior to acceptance. Any such inspection is for the sole benefit of the Town and shall not relieve the Contractor of the responsibility of providing quality control measures to assure that the work strictly complies with the contract requirements.

ASSIGNMENT

Contractor shall neither have the right to assign this Agreement nor to allow any individual to undertake any of the duties provided herein without the written permission of the Town's Purchasing Agent or their approved representative.

SUSPENSION FOR NONCOMPLIANCE WITH CONTRACT REQUIREMENTS

The Electric System Manager or their authorized representative may order suspension of the Work in whole or in part for such time as he/she deems necessary because of the failure of the Contractor to comply with any of the requirements of the Agreement.

When the Electric System Manager or their authorized representative orders any suspension of the Work under this Article, Contractor shall not be entitled to any compensation, costs or damages resulting from such suspension.

The rights and remedies of the Town provided here are in addition to any other rights and remedies provided by law or under the Agreement.

NON-DISCRIMINATION

The Contractor shall not discriminate against any individuals based upon age, sex, race, disability, or religion and shall abide by the requirements contained in Federal Executive Order Number 11246, as amended, including specifically the provisions of the equal opportunity clause.

NON-WAIVER

Any waiver of any default by either party to this Agreement shall not constitute waiver of any subsequent default, nor shall it operate to require either party to waive, or entitle either party to a waiver of, any subsequent default hereunder.

TYPE OF WORK SUPERVISION

The Contractor shall provide on-site supervision to assure competent performance of the work during all scheduled work hours. Also the Contractor or authorized agent will make sufficient routine inspections to ensure that the work is performed as required by the Contract.

STORAGE STAGING AREAS

If the project site is not sufficient, the Contractor is responsible for selecting an appropriate site as a staging area for storage of materials and equipment during work schedule. This site will become the responsibility of the Contractor and Contractor shall provide documentation that he will be financially responsible for this site.

The Contractor will restore the area to the Owner's satisfaction once the work is complete.

CONTRACTOR LICENSING

Consideration will be given only to bids of the Contractors licensed under the North Carolina "Act to Regulate the Practice of General Contracting." Contractors and subcontractors, in order to perform public work in the state of North Carolina, are required to hold State of North Carolina Contractor's licenses of the class required to perform the specified work. Contractor's license number shall be inserted in the appropriate place on the Proposal form, before Proposal will be considered. Evidence of subcontractor's compliance with the above shall be submitted to the Engineer before starting subcontract work on public work contracts.

OWNER EVALUATION RIGHTS

The Owner reserves the right to reject any and all bids and to accept any bid which appears to be in the best interest of the Owner.

The Owner reserves the right to waive minor deviations in any Proposal. Any such deviations so waived must be corrected on the Proposal in which they occur prior to the execution of any Contract which may be awarded thereon.

TAXES

Each Bidder shall include and shall be deemed to have included, in the price quoted in the Contractor's Proposal for each Bid Item, the amounts which it is estimated will be payable by the successful Bidder, or by the Owner on account of taxes imposed by any taxing authority upon the sale, purchase or use of materials, supplies or equipment incorporated in the Project as part of such Bid Item. All taxes of the foregoing descriptions shall be payable by the Bidder which shall be awarded the Contract for the construction of the Project.

ROAD CLOSURES

Traffic control, signage and barricades for road and lane closures and work inside the road rights-of-way shall be in accordance with applicable encroachment permits and the Federal Highway Administration's (FHWA), Manual on Uniform Traffic Control Devices.

Failure on the part of the Contractor to comply with the above provisions in a reasonable manner, in the opinion of the Engineer, shall be sufficient cause for the Engineer to order a temporary shut-down of the work until the provisions have been met.

CONTRACTOR'S PROPOSAL

TO: TOWN OF PINEVILLE

LABOR AND MATERIAL PROPOSAL

Section 1. The undersigned (hereinafter called the "Contractor") hereby proposes to receive and install such materials and equipment as may hereinafter be specified to be furnished by the Owner, and to furnish all other materials and equipment, all machinery, tools, labor, transportation, and other means required to construct an below grade improvements for an Electrical Substation for the Town of Pineville, North Carolina, in strict accordance with the Plans, Specifications, and Construction Drawings therefore, attached hereto and made a part hereof.

The quantity of work and the location of the work is to be in and around the Town of Pineville, North Carolina, and as directed by their Engineer. The Contractor will furnish all materials, labor, and services necessary therefor under the Labor and Material Proposal for the unit prices stated in this proposal.

	<u>No of Units</u>	<u>Unit Price</u>	<u>Price Labor and Materials</u>
I. Continued Maintenance and Closeout of Erosion and Sedimentation Control	Lump Sum		<u>\$ 8,432.00</u>
II. Foundations			
A. Structure:			
1. FD-1	2	<u>\$ 3,483.00</u>	<u>\$ 6,966.00</u>
2. FD-2	2	<u>3,573.00</u>	<u>7,146.00</u>
3. FD-3	10	<u>3,623.00</u>	<u>36,230.00</u>
4. FD-4	4	<u>3,541.00</u>	<u>14,146.00</u>

CONTRACTOR'S PROPOSAL (Continued)

	<u>No of Units</u>	<u>Unit Price</u>	<u>Price Labor and Materials</u>
II. Foundations (Con't)			
B. Circuit Switcher	2	\$ 3,617.00	\$ 7,234.00
C. Transformer	1	77,437.00	77,437.00
D. Equipment House	1	13,591.00	13,591.00
E. Circuit Breakers	4	3,183.00	12,732.00
III. Install Owner Furnished Grounding and Bonding System	Lump Sum		\$83,771.00
IV. Install Owner Furnished Cable Trench, and furnish and install Conduit, and Oil Containment System	Lump Sum		\$197,553.00
V. Furnish and install Staion Gravelling	Lump Sum		\$47,300.00
VI. Additional Site Clearing	Lump Sum		\$5,313.00
VII. Quality Control	Incidental to all other Units		\$0.00
Total			\$517,869.00

Additional Prices to be used on Owner Approved Changes:

Unit Adder for Additional Concrete \$ 1,000.00 /cu. yd.

Section 2. The Contract effected by acceptance of this proposal shall consist of the Request for Proposals, the Contractor's Proposal, the Scope of Work Site Services, the Construction Agreement, Performance and Payment Bonds, Construction Specifications, Construction Drawings, and Plans, all of which are incorporated herein.

Section 3. The Bidder has made a careful examination of the site of the Project to be constructed, and the Plans, Specifications, Construction Drawings, Description of Assembly Units and forms of the Construction Agreement and has become informed as to the location and nature of the proposed construction, the transportation facilities, the kind and character of soil and terrain to be encountered and the kind of facilities required before and during the construction of the Project, and has become acquainted with the labor conditions which would affect work on the proposed construction.

Section 4. The Bidder agrees to make changes in construction previously installed as required by the Owner and approved in writing by Owner prior to performing change for prices arrived at on the following basis:

The cost of labor shall be the reasonable cost thereof but in no event shall it exceed twice the cost of the labor for the units previously installed as quoted in the Proposal; Provided, however, that no payment shall be made to the Bidder for materials or labor involved in correcting mistakes or omissions on the part of the Bidder which result in construction not in accordance with the Plans and Specifications.

Section 5. The Bidder agrees that when it is necessary to construct units not shown in the Proposal but required by Owner and approved in writing prior to performing change, he will construct such units for a price arrived at on the following basis:

The Cost of materials shall be determined by the invoices.

The Cost of labor shall be determined by calculating the ratio of the total labor costs to the total material costs for the same type of units in the section of the Proposal involved, then multiplying the cost of materials for the unit in question by this ratio.

Section 6. This Proposal is made pursuant to the provisions of the Request for Proposals attached hereto and the Bidder agrees to the terms and conditions thereof.

Section 7. The Bidder warrants that this proposal is made in good faith and without collusion or connection with any other person or persons bidding for the same work.

Section 8. The Bidder agrees that in the event this Proposal is accepted he will execute a Contract and provide Performance and Payment Bond in the form on file with the Owner.

Section 9. The Bidder agrees to commence construction after the Engineer has given the undersigned written notice to commence construction, and further agrees to prosecute diligently

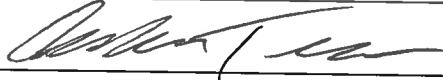
and to complete such construction to the satisfaction of the Owner within One Hundred Twenty (120) calendar days after the giving of such notice; Provided, however, that the Bidder will not be required to dig if there are more than six (6) inches of frost in the ground nor to perform any construction on such days when in the judgment of the Engineer, snow, rain, or wind, or the results of snow, rain, or frost make it impractical to perform any operation of construction and to the extent of the time lost due to the conditions described herein, the times for completion set out above will be extended.

Section 10. The price in the Contractor's Proposal include provisions for the payment of all monies which will be payable by the Bidder or the Owner in connection with the construction of the Project on account of taxes imposed by any taxing authority upon the sale, purchase or use of materials, supplies or equipment to be incorporated in the Project as part of such Assembly Units. The Bidder agrees to pay all such taxes and to furnish to the Owner and all appropriate taxing authorities all required information and reports pertaining thereto.

Section 11. All temporary work which the Bidder performs for his convenience in constructing the project shall be installed and removed at his own expense.

(Name of Bidder) Hux Contracting, LLC

(By) Andrew Tucker



(Title of Officer) Vice President

(Address of Bidder) P.O. Box 222156 Charlotte, NC 28222

(The Proposal must be signed with the full name of the Bidder. In the case of a partnership the Proposal must be signed in the firm name by each partner. In the case of a corporation the Proposal must be signed in the corporate name by a duly authorized officer and the corporate seal affixed and attested by the Secretary of the Corporation. A typewritten copy of all such names and signatures shall be appended.)



Secretary

STATE OF NORTH CAROLINA
TOWN OF PINEVILLE
COUNTY OF MECKLENBURG

AFFIDAVIT of COMPLIANCE
with N.C. E-Verify Statutes

I, Andrew Tucker (hereinafter the "Affiant"), duly authorized by and on behalf of Hux Contracting, LLC (hereinafter the "Employer") after being first duly sworn deposes and says as follows:

1. I am the Vice President (President, Manager, CEO, etc.) of the Employer and possess the full authority to speak for and on behalf of the Employer identified above.
2. Employer understands that "E-Verify" means the federal E-Verify program operated by the United States Dept. of Homeland Security and other federal agencies, or any successor or equivalent program used to verify the work authorization of newly hired employees pursuant to federal law.
3. Employer employs 25 or more employees in the State of North Carolina, and is in compliance with the provisions of N.C. Gen. Stat. §64-26. Employer has verified the work authorization of its employees through E-Verify and shall retain the records of verification for a period of at least one year.

Employer employs fewer than 25 Employees and is therefore not subject to the provisions of N.C. Gen. Stat. §64-26.
4. All subcontractors engaged by or to be engaged by Employer have or will have likewise complied with the provisions of N.C. Gen. Stat. §64-26.
5. Employer shall keep the Town of Pineville informed of any change in its status pursuant to Article 2 of Chapter 64 of the North Carolina General Statutes.

Further this affiant sayeth not.

This the 1st day of October, 2025

Andrew Tucker
Affiant

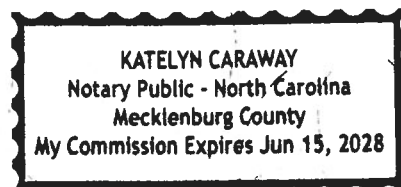
STATE OF NORTH CAROLINA
COUNTY OF MECKLENBURG

Sworn to and subscribed before me, this the 1st day of October, 2025

Notary Public: Katelyn Caraway

[SEAL]

My commission expires: June 15th, 2028



Name of Counterparty:

IRAN DIVESTMENT ACT AND COMPANIES THAT BOYCOTT ISRAEL CERTIFICATION

As of the date listed below, the entity listed above is not on list of restricted companies created by the State Treasurer pursuant to N.C.G.S. 147-86.58 or 147-86.81(a)(1).

The undersigned hereby certifies that he or she is authorized by the entity listed above to make the foregoing statement.



Signature

10/01/2025

Date

Andrew Tucker
Printed Name

Vice President
Title

EXTERNAL CONTRACT ADDENDUM

1. **Applicable Laws and Courts.** This contract shall be governed in all respects by the laws of the State of North Carolina. All matters, whether sounding in contract or tort relating to the validity, construction, interpretation, and enforcement of the Contract, shall be governed in all respects by the laws of the State of North Carolina and venue shall be proper only in a court of competent jurisdiction located in Mecklenburg County, North Carolina. The Contractor represents and warrants that it shall comply with all applicable federal, state, and local laws, regulations, and orders, including, not limited to, licensure requirements.
2. **Anti-Discrimination and Equal Employment.** During the performance of the Contract, Contractor shall comply with all federal and state requirements concerning fair and equal employment and shall not discriminate against or deny the Contract's benefits to any person on the basis of race, religion, color, creed, national origin, age, sex (including sexual orientation, gender identity, and pregnancy), disability or handicapping condition, or genetic information.
3. **Verification of Work Authorization.** Contractor shall comply with, and require all contractors and subcontractors to comply with, the requirements of Article 2 of Chapter 64 of the North Carolina General Statutes, "Verification of Work Authorization," sometimes known as E-verify, for all contractors and subcontractors.
4. **Iran Divestment List.** With the execution hereof, Contractor, certifies that they are not on the Iran Final Divestment List created by the N.C. State Treasurer pursuant to N.C.G.S. § 147-86.58, and will not contract with anyone on such List in performance of the work hereunder.
5. **Availability of Funds.** Any and all payments to the Contractor are dependent upon and subject to the availability of funds to the Town for the purpose set forth in this agreement.
6. **Severability.** If any provision of this Contract is found to be invalid or unlawful, then remainder of this Contract shall not be affected thereby, and each remaining provision shall be valid and enforced to the fullest extent permitted by law.
7. **Companies that Boycott Israel.** With the execution hereof, Contractor, certifies that they are not on the Companies that Boycott Israel List created by the N.C. State Treasurer pursuant to N.C.G.S. § 147-86.80, and will not contract with anyone on such List in performance of the work hereunder.
8. **Governmental Immunity.** Nothing contained in this Contract shall constitute a waiver of the Town's governmental immunity or of any limitation on liability or damages created by law.
9. **Priority of Terms.** The terms of this addendum shall supersede and take priority over any conflicting terms in the contract documents.

EXHIBIT 1

INSURANCE REQUIREMENTS

The Contractor shall not commence work until he has obtained all insurance required, and such insurance has been approved by the Town, nor shall the Contractor allow any subcontractor to commence work on his subcontract until all similar insurance required of the subcontractor has been obtained. The Contractor shall provide Certificate of Insurance as indicated, and with minimum limits as indicated below.

- a. The Contractor shall provide and maintain or insure during the life of the contract **Workmen's Compensation Insurance** for all employees employed at the site of the project under his contract or subcontracts in an amount meeting the statutory requirements of the State of North Carolina.
- b. The Contractor shall provide and maintain during the life of the contract **Automobile Bodily Injury and Property Damage Liability** covering all owned, non-owned and hired automobiles for limits of not less than \$1,000,000 bodily injury each person, each accident and \$1,000,000 property damage, or \$1,000,000 combined single limit-Bodily injury and property damage combined.
- c. The Contractor shall provide and maintain during the life of the contract **Comprehensive General Liability**. Bodily Injury and Property Damage Liability shall protect the contractor and any subcontractor performing work under this contract from claims of bodily injury or property damage which arise from operations of this contract whether such operations are performed by the contractor, any subcontractor or anyone directly or indirectly employed by either. The amounts of such insurance shall not be less than \$1,000,000 bodily injury each occurrence/aggregate and \$1,000,000 property damage each occurrence/aggregate or \$1,000,000 bodily injury and property damage combined single limits each occurrence/aggregate. This insurance shall include coverage for products/completed operations, personal injury liability and contractual liability assumed under the indemnity provision of this contract and broad form property damage, explosion, collapse and underground utility damage (XC&U); stating if policy is written on a claims made or occurrence basis.
- d. The Contractor shall furnish such additional insurance as may be required by statutory requirements of the State of North Carolina.
- e. Each Certificate of Insurance shall bear the provision that the policy cannot be canceled, reduced in the amount of coverage or coverage eliminated in less than thirty (30) days after mailing written notice to the insured and the Town of such alteration or cancellation, sent by registered mail.

- f. The Contractor shall furnish the Town with satisfactory proof of coverage of the insurance required before written approval is granted by the Town.
- g. Additional Insured shall be listed as the Town of Pineville, North Carolina and ElectriCities of North Carolina. Do not list an individual's name in that portion of the certificate. **An original copy of the additional insured Endorsement must be included with the Certificate of Insurance.**

CONTRACT FOR GOODS AND SERVICES

This Contract for Goods and Services ("Contract") is made and entered into _____ of _____, 2025 between The **Town of Pineville, North Carolina**, with a mailing address of P.O. Box 249, Pineville, NC 28134 ("Town") and _____ ("Contractor"). For and in consideration of the mutual promises set forth in this Contract, the parties do mutually agree as follows:

1. Obligations of Contractor. The Contractor agrees to provide the services, goods, materials, equipment, and/or software (the "Services" and/or "Goods," as appropriate) to fully, timely and properly complete **Electric Substation** Sitework Construction as more particularly described in the Scope of Work document attached hereto and incorporated herein by reference as Exhibits A and B.

The term of this Contract shall be **120 days after Notice to Proceed**.

This Contract does not grant the Contractor the right or the exclusive right to provide specified Services and/or Goods to TOWN. Similar Services and/or Goods may be obtained from sources other than the Contractor (or not at all) at the discretion of TOWN.

The Contractor shall begin work immediately upon issuance of a written notice to proceed. The Contractor agrees to perform the Services and supply the Goods or in a timely, complete, and professional manner and in accordance with the terms and conditions of this Contract. Furthermore, the Contractor represents and warrants that (i) it is duly qualified and, if required by law, licensed to provide the Services and/or Goods; (ii) it will provide the Services and/or Goods in a manner consistent with the level of care and skill ordinarily exercised by contractors providing similar Services and/or Goods under similar conditions; (iii) it possesses sufficient experience, personnel, and resources to provide the Services and/or Goods; (iv) it shall provide the Services and/or Goods in compliance with applicable laws, statutes, ordinances, codes, orders, rules and regulations; and (v) its reports, if any, shall be complete, accurate, and unambiguous.

2. Obligations of TOWN. TOWN hereby agrees to pay to the Contractor for the faithful performance of this Contract, and the Contractor hereby agrees to provide all of the Services and/or Goods, for the sum not to exceed \$_____ ("Contract Price") subject to adjustments as provided for in the Contract Documents:
3. Project Coordinator. **Tammy Vachon** is designated as the Project Coordinator for TOWN. The Project Coordinator shall be TOWN' representative in connection with the Contractor's performance under this Contract. TOWN has complete discretion in replacing the Project Coordinator with another person of its choosing.
4. Contractor Supervisor. _____ is designated as the Contractor Supervisor for the Contractor. The Contractor Supervisor is fully authorized to act on behalf of the Contractor in connection with this Contract.
5. Terms and Methods of Payment. TOWN will make payment after invoices are approved on a net 30-day basis. TOWN will not pay for services or materials in advance without the prior approval of the Finance Officer. Contractor to submit invoices on the following schedule: **End of Month**.
6. Standard Terms and Conditions: Contractor agrees to the Standard Terms and Conditions set forth as Attachment A attached hereto and incorporated herein by reference.
7. Counterpart Execution. This Contract may be executed and recorded in two or more counterparts, each of which shall be deemed an original and all of which, when taken together, shall constitute one and the same instrument.

Each party shall be entitled to rely upon executed copies of this Contract transmitted by facsimile or electronic "PDF" to the same and full extent as the originals.

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[SIGNATURES ON NEXT PAGE]

IN WITNESS WHEREOF, TOWN and the Service Provider have executed this Contract on the day and year first written above.

Service Provider Name

Signature of Authorized Representative

Date _____

Service Provider's Federal Identification #

[if Contract is with Organization or Social Security Number if individual]

Town of Pineville

Signature of Authorized Representative

Date _____

This instrument has been preaudited in the manner required by the Local Government Budget and Fiscal Control Act.

Signature of Authorized Finance Officer

Date _____

Attachment A

Standard Terms and Conditions

I. Standard Terms and Conditions for All Contracts

1. **Acceptance.** Contractor's execution of this Contract and/or acknowledgment of the terms of any applicable purchase order ("Purchase Order"), without timely express written objection, or Contractor's shipment or performance of any part of a Purchase Order, constitutes an agreement to (i) all terms and conditions set forth or referenced herein and on the face of a Purchase Order, (ii) on any attachments hereto, (iii) any applicable solicitation documentation related to hereto (including without limitation any request for proposals or invitation for bids or Contractor's response thereto), and (iv) any other terms and conditions of a written agreement signed by Contractor and TOWN that deals with the same subject matter (collectively, the "Contract Documents"). The terms and provisions set forth in the Contract Documents shall constitute the entire agreement between Contractor and TOWN with respect to the purchase by TOWN of the Services and/or Goods (the "Goods" and/or "Services," as appropriate) provided or work performed as described in the Contract Documents. The agreements set forth in the Contract Documents are sometimes referred to herein as the "Contract." In the event of any conflict between any terms and conditions of the Contract Documents, the terms and conditions most favorable to TOWN shall control. A Purchase Order constitutes an offer by TOWN and expressly limits acceptance to the terms and conditions stated therein. No additional or supplemental provision or provisions in variance herewith that may appear in Contractor's quotation, acknowledgment, invoice, or in any other communication from Contractor to TOWN shall be deemed accepted by or binding on TOWN. TOWN hereby expressly rejects all such provisions which supplement, modify or otherwise vary from the terms of the Contract Documents, and such provisions are superseded by the terms and conditions stated in the Contract Documents, unless and until TOWN's authorized representatives expressly assent, in writing, to such provisions. Stenographic and clerical errors and omissions by TOWN are subject to correction.
2. **Quantities.** Shipments must equal exact amounts ordered unless otherwise agreed in writing by TOWN. The award of a term contract neither implies nor guarantees any minimum or maximum purchases.
3. **Prices.** If Contractor's price or the regular market price of any of the Goods covered hereunder is lower than the price stated in the Contract Documents on the date of shipment of such Goods, Contractor agrees to give TOWN the benefit of such lower price on any such Goods. In no event shall Contractor's price be higher than the price last quoted or last charged to TOWN unless otherwise agreed in writing. No charges for transportation, boxing, crating, etc. are allowable unless such charges are included in the Contract Documents.
4. **Invoices.** It is understood and agreed that orders will be shipped at the established Contract prices in effect on dates orders are placed. Invoicing at variance with this provision may subject the Contract to cancellation. Applicable North Carolina sales tax shall be invoiced as a separate item. Invoices shall be sent to TOWN's accounts payable department with a copy to TOWN Project Coordinator.
5. **Freight on Board.** All shipments of Goods are FOB destination unless otherwise stated in the Contract Documents.
6. **Taxes.** Taxes are included in the Contract Price. Applicable taxes shall be invoiced as a separate item for TOWN's records.
7. **Payment Terms.** Payment terms are Net 30 days after receipt of correct invoice or acceptance of Goods, whichever is later.
8. **Condition and Packaging.** Unless otherwise provided by special terms and conditions or specifications, it is understood and agreed that any item offered or shipped has not been sold or used for any purpose and shall be in first class condition. All containers/packaging shall be suitable for handling, storage or shipment.
9. **Delays in Shipment.** Time and date of delivery are of the essence, except when delay is due to causes beyond Contractor's reasonable control and without Contractor's fault or negligence.
10. **Risk of Loss.** Contractor shall have the risk of loss of and damage to the Goods subject to the Contract Documents until such Goods are delivered to the destination and accepted by TOWN or its nominee.

11. Rejection. All Goods shall be received subject to TOWN' inspection. Goods that are defective in workmanship or material or otherwise not in conformity with the requirements of the Contract Documents may be rejected and returned at Contractor's expense or may be accepted at a reduced price. TOWN may require Contractor to promptly replace or correct any rejected Goods Services and, if Contractor fails to do so, TOWN may contract with a third party to replace such Goods Services and charge Contractor the additional cost.
12. Warranties. Contractor warrants that all Goods delivered hereunder will be free from defects in materials and workmanship and will conform strictly to the specifications, drawings, or samples specified or furnished. This warranty shall survive any inspection, delivery, acceptance or payment by TOWN of the Goods and shall run to TOWN and any user of the Goods. This express warranty is in addition to Contractor's implied warranties of merchantability and fitness for a particular purpose which shall not be disclaimed. In addition to any other rights available at law or equity, TOWN shall be entitled to all rights and remedies provided by the Uniform Commercial Code, Chapter 25 of the North Carolina General Statutes, for breach of express warranties and implied warranties of merchantability or fitness for a particular purpose, including but not limited to consequential and incidental damages.
13. Compliance with All Laws. Contractor warrants that all performance hereunder shall be in accordance with all applicable federal, state and local laws, regulations and orders. The right of Contractor to proceed may be terminated immediately by written notice if TOWN determines that Contractor, its agent or another representative, has violated any provision of law.
14. Use of Federal Funds. If the source of funds for this Contract is federal funds, the following federal provisions apply pursuant to 2 C.F.R. § 200.326 and 2 C.F.R. Part 200, Appendix II (as applicable): Equal Employment Opportunity (41 C.F.R. Part 60); Davis-Bacon Act (40 U.S.C. 3141-3148); Copeland "Anti-Kickback" Act (40 U.S.C. 3145); Contract Work Hours and Safety Standards Act (40 U.S.C. 3701-3708); Clean Air Act (42 U.S.C. 7401- 7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387); Debarment and Suspension (Executive Orders 12549 and 12689); Byrd Anti-Lobbying Amendment (31 U.S.C. 1352); Procurement of Recovered Materials (2 C.F.R. § 200.322); and Record Retention Requirements (2 CFR § 200.324)
15. Nondiscrimination. During the performance of the Contract, Contractor shall not discriminate against or deny the Contract's benefits to any person on the basis of sexual orientation, national origin, race, ethnic background, color, religion, gender, age or disability.
16. Conflict of Interest. Contractor represents and warrants that no member of TOWN or any of its employees or officers who may obtain a direct benefit, personal gain or advantage for themselves or a relative or associate as a result of the Contract, subcontract or other agreement related to the Contract is in a position to influence or has attempted to influence the making of the Contract, has been involved in making the Contract, or will be involved in administering the Contract. Contractor also represents and warrants that, if the Contract is funded by any amount of federal funds, no violation of 2 C.F.R. § 200.318(c) or any other applicable federal conflict of interest law has occurred or will occur. Contractor shall cause this paragraph to be included in all Contracts, subcontracts and other agreements related to the Contract.
17. Gratuities. Contractor represents and warrants that no member of TOWN or any of its employees has been or will be offered or given a gratuity to an official or employee of TOWN in violation of applicable law or policy.
18. Kickbacks to Contractor. Contractor shall not permit any kickbacks or gratuities to be provided, directly or indirectly, to itself, its employees, subcontractors or subcontractor employees for the purpose of improperly obtaining or rewarding favorable treatment in connection with a TOWN Contract or in connection with a subcontract relating to a TOWN Contract. When Contractor has grounds to believe that a violation of this clause may have occurred, Contractor shall promptly report to TOWN in writing the possible violation.
19. Iran Divestment Act. Contractor certifies that, as of the date listed below, it is not on the Final Divestment List, as created by the State Treasurer pursuant to N.C.G.S. § 143-6A-4, in violation of the Iran Divestment Act. In compliance with the requirements of the Iran Divestment Act and N.C.G.S. § 143C-6A-5(b), Contractor shall not utilize in the performance of the contract any subcontractor that is identified on the Final Divestment List. The Final Divestment List can be found on the State Treasurer's website at the address www.nctreasurer.com/Iran and should be updated every 180 days.
20. *Divestment from Companies that Boycott Israel*. The Contractor certifies that it has not been designated by the North Carolina State Treasurer as a company engaged in the boycott of Israel pursuant to N.C.G.S. 147-86.81. It is the responsibility of each vendor or contractor to monitor compliance with this restriction. Contracts valued at less than \$1,000.00 are exempt from this restriction.
21. E-Verification. Contractor shall comply with the requirements of Article 2 of Chapter 64 of the North Carolina General Statutes
22. Indemnification. Contractor shall indemnify and hold harmless TOWN, its officers, agents, employees

and assigns from and against all claims, losses, costs, damages, expenses, attorneys' fees and liability that any of them may sustain (a) arising out of Contractor's failure to comply with any applicable law, ordinance, regulation, or industry standard or (b) arising directly or indirectly out of Contractor's performance or lack of performance of the terms and conditions of the Contract. In the event that any Services and/or Goods sold and delivered or sold and performed under the Contract Documents shall be defective in any respect whatsoever, Contractor shall indemnify and save harmless TOWN, its officers, agents, employees and assigns from all loss or the payment of all sums of money by reason of all accidents, injuries or damages to persons or property that shall happen or occur in connection with the use or sale of such Services and/or Goods and are contributed to by said condition. In the event Contractor, its employees, agents, subcontractors and or lower- tier subcontractors enter premises occupied by or under the control of TOWN in the performance of the Contract Documents, Contractor agrees that it will indemnify and hold harmless TOWN, its officers, agents, employees and assigns, from any loss, costs, damage, expense or liability by reason of property damage or personal injury of whatsoever nature or kind arising out of, as a result of, or in connection with such entry.

23. Insurance. Unless such insurance requirements are waived or modified by the Town, Contractor certifies that it currently has and agrees to purchase and maintain during its performance under the Contract the following insurance from one or more insurance companies acceptable to TOWN and authorized to do business in the State of North Carolina: Automobile - Contractor shall maintain bodily injury and property damage liability insurance covering all owned, non-owned and hired automobiles. The policy limits of such insurance shall not be less than \$1,000,000 combined single limit each person/each occurrence. Commercial General Liability - Contractor shall maintain commercial general liability insurance that shall protect Contractor from claims of bodily injury or property damage which arise from performance under the Contract. This insurance shall include coverage for contractual liability. The policy limits of such insurance shall not be less than \$1,000,000 combined single limit each occurrence/annual aggregate. Worker's Compensation and Employers' Liability Insurance - If applicable to Contractor, Contractor shall meet the statutory requirements of the State of North Carolina for worker's compensation coverage and employers' liability insurance. Contractor shall also provide any other insurance or bonding specifically recommended in writing by the Town or required by applicable law. Certificates of such insurance shall be furnished by Contractor to TOWN and shall contain the provision that TOWN be given 30 days' written notice of any intent to amend or terminate by either Contractor or the insuring company. Failure to furnish insurance certificates or to maintain such insurance shall be a default under the Contract and shall be grounds for immediate termination of the Contract.
24. Termination for Convenience. In addition to all of the other rights which TOWN may have to cancel this Contract or an applicable Purchase Order, TOWN shall have the further right, without assigning any reason therefore, to terminate the Contract (or applicable Purchase Order), in whole or in part, at any time at its complete discretion by providing 10 days' notice in writing from TOWN to Contractor. If the Contract is terminated by TOWN in accordance with this paragraph, Contractor will be paid in an amount which bears the same ratio to the total compensation as does the Services and/or Goods actually delivered or performed to the total originally contemplated in the Contract. TOWN will not be liable to Contractor for any costs for completed Goods, Goods in process or materials acquired or contracted for if such costs were incurred prior to the date of this Contract or an applicable Purchase Order.
25. Termination for Default. TOWN may terminate the Contract, in whole or in part, immediately and without prior notice upon breach of the Contract by Contractor. In addition to any other remedies available to TOWN law or equity, TOWN may procure upon such terms as TOWN shall deem appropriate, Services and/or Goods substantially similar to those so terminated, in which case Contractor shall be liable to TOWN for any excess costs for such similar goods, supplies, or services and any expenses incurred in connection therewith.
26. Contract Funding. It is understood and agreed between Contractor and TOWN that TOWN' obligation under the Contract is contingent upon the availability of appropriated funds from which payment for Contract purposes can be made. No legal liability on the part of TOWN for any payment may arise until funds are made available to TOWN' Finance Officer and until Contractor receives notice of such availability. Should such funds not be appropriated or allocated, the Contract shall immediately be terminated. TOWN shall not be liable to Contractor for damages of any kind (general, special, consequential or exemplary) as a result of such termination.

27. Accounting Procedures. Contractor shall comply with any accounting and fiscal management procedures prescribed by TOWN to apply to the Contract and shall assure such fiscal control and accounting procedures as may be necessary for proper disbursement of and accounting for all project funds.
28. Improper Payments. Contractor shall assume all risks attendant to any improper expenditure of funds under the Contract. Contractor shall refund to TOWN any payment made pursuant to the Contract if it is subsequently determined by audit that such payment was improper under any applicable law, regulation or procedure. Contractor shall make such refunds within thirty (30) days after TOWN notifies Contractor in writing that a payment has been determined to be improper.
29. Contract Transfer. Contractor shall not assign, subcontract or otherwise transfer any interest in the Contract without the prior written approval of TOWN.
30. Contract Personnel. Contractor agrees that it has, or will secure at its own expense, all personnel required to provide the Services and/or Goods set forth in the Contract.
31. Key Personnel. Contractor shall not substitute for key personnel (defined as those individuals identified by name or title in the Contract Documents or in written communication from Contractor) assigned to the performance of the Contract without prior written approval from TOWN Project Coordinator (the individual at TOWN responsible for administering the Contract).
32. Contract Modifications. The Contract may be amended only by written amendment duly executed by both TOWN and Contractor.
33. Relationship of Parties. Contractor is an independent contractor and not an employee of TOWN. The conduct and control of the work will lie solely with Contractor. The Contract shall not be construed as establishing a joint venture, partnership or any principal-agent relationship for any purpose between Contractor and TOWN. Employees of Contractor shall remain subject to the exclusive control and supervision of Contractor, which is solely responsible for their compensation.
34. Advertisement. The Contract will not be used in connection with any advertising by Contractor without prior written approval by TOWN.
35. Monitoring and Evaluation. Contractor shall cooperate with TOWN, or with any other person or agency as directed by TOWN, in monitoring, inspecting, auditing or investigating activities related to the Contract. Contractor shall permit TOWN to evaluate all activities conducted under the Contract. TOWN has the right at its sole discretion to require that Contractor remove any employee of Contractor from TOWN Property and from providing Services and/or Goods under the Contract following provision of notice to Contractor of the reasons for TOWN's dissatisfaction with the Services and/or Goods of Contractor's employee.
36. Financial Responsibility. Contractor is financially solvent and able to perform under the Contract. If requested by TOWN, Contractor agrees to provide a copy of its latest audited annual financial statements or other financial statements as deemed acceptable by TOWN's Finance Officer. In the event of any proceedings, voluntary or involuntary, in bankruptcy or insolvency by or against Contractor, the inability of Contractor to meet its debts as they become due or in the event of the appointment, with or without Contractor's consent, of an assignee for the benefit of creditors or of a receiver, then TOWN shall be entitled, at its sole option, to cancel any unfilled part of the Contract without any liability whatsoever.
37. Governmental Restrictions. In the event any governmental restrictions are imposed which necessitate alteration of the material, quality, workmanship or performance of the items offered prior to their delivery, it shall be the responsibility of the Contractor to notify, in writing, the issuing purchasing office at once, indicating the specific regulation which required such alterations. TOWN reserves the right to accept any such alterations, including any price adjustments occasioned thereby, or to cancel the Contract.
38. Inspection at Contractor's Site. TOWN reserves the right to inspect, at a reasonable time, the equipment/item, plant or other facilities of a prospective contractor prior to Contract award, and during the Contract term as necessary for TOWN determination that such equipment/item, plant or other facilities conform with the specifications/requirements and are adequate and suitable for the proper and effective performance of the Contract.
39. Confidential Information. All information about TOWN provided to the Contractor or its officers, employees, agents, representatives and advisors (the "Contractor Representatives"), and all copies or other full or partial reproductions thereof and notes, memoranda or other writings related thereto created by Contractor or any Contractor Representative, regardless of whether provided before or after the date of the Contract and regardless of the manner or medium in which it is furnished, is referred to as "Confidential Information".

Confidential Information does not include any information that (a) is or becomes generally available to the public other than as a result of an impermissible disclosure by Contractor, (b) was known by or available on a nonconfidential basis to Contractor before it was disclosed by TOWN or (c) becomes available to Contractor on a nonconfidential basis from a third party whom Contractor does not know to be bound by a confidentiality agreement with, or have an obligation of secrecy to, TOWN. Except as and to the extent required by law or order or demand of any governmental or regulatory authority, Contractor and Contractor Representatives will (x) keep all Confidential Information confidential and (y) will only disclose or reveal any Confidential Information to Contractor Representatives who must have the information to fulfill Contractor's obligations under the Contract and who agree to observe the terms of this Section. Contractor and Contractor Representatives will not use the Confidential Information for any purpose other than fulfilling Contractor's obligations under the Contract. By way of example and not limitation, Contractor shall not sell, market, or commercialize Confidential Information, create derivative products or applications based on Confidential Information. If Contractor is requested or required, pursuant to applicable law or regulation or by legal process, to disclose any Confidential Information, Contractor will provide TOWN with prompt and timely notice of the requests or requirements so that TOWN can seek an appropriate protective order or other remedy and will not be prejudiced by delay. If TOWN does not obtain a protective order or other remedy, Contractor will only disclose that portion of the Confidential Information which Contractor's legal counsel determines Contractor is required to disclose. Upon termination of the Contract or otherwise upon TOWN' request, Contractor will promptly deliver to TOWN all Confidential Information in the possession of Contractor or the Contractor Representatives.

Employee Personnel Information: If, during the course of Contractor's performance of the Contract, Contractor should obtain any information pertaining to employees of TOWN' personnel records, Contractor agrees to keep any such information confidential and to not disclose or permit it to be disclosed, directly or indirectly, to any person or entity. This section will survive the termination of this Contract.

40. Intellectual Property. Contractor agrees, at its own expense, to indemnify, defend and save TOWN harmless from all liability, loss or expense, including costs of settlement and attorney's fees, resulting from any claim that TOWN' use, possession or sale of the Services and/or Goods infringes any copyright, patent or trademark or is a misappropriation of any trade secret.
41. No Pre-Judgment or Post-Judgment Interest. In the event of any action by Contractor for breach of contract in connection with the Contract, any amount awarded shall not bear interest either before or after any judgment, and Contractor specifically waives any claim for interest.
42. Background Checks. At the request of TOWN' Project Coordinator, Contractor (if an individual) or any individual employees of Contractor shall submit to TOWN criminal background check and drug testing procedures.
43. Mediation. If a dispute arises out of or relates to the Contract, or the breach of the Contract, and if the dispute cannot be settled through negotiation, the parties agree to try in good faith to settle the dispute by mediation administered by the American Arbitration Association under its Commercial Mediation Rules before resorting to litigation.
44. No Third-Party Benefits. The Contract shall not be considered by Contractor to create any benefits on behalf of any third party. Contractor shall include in all contracts, subcontracts or other agreements relating to the Contract an acknowledgment by the contracting parties that the Contract creates no third-party benefits.
45. Force Majeure. If TOWN is unable to perform its obligations or to accept the Services and/or Goods because of Force Majeure (as hereinafter defined), the time for such performance by TOWN or acceptance of Services and/or Goods will be equitably adjusted by allowing additional time for performance or acceptance of Services and/or Goods equal to any periods of Force Majeure. "Force Majeure" shall mean any delays caused by acts of God, riot, war, terrorism, inclement weather, labor strikes, material shortages and other causes beyond the reasonable control of TOWN.
46. Ownership of Documents; Work Product. All documents created pursuant to the Contract shall, unless expressly provided otherwise in writing, be owned by TOWN. Upon the termination or expiration of the Contract, any and all finished or unfinished documents and other materials produced by Contractor pursuant to the Contract shall, at the request of TOWN, be turned over to TOWN. Any technical knowledge or information of Contractor which Contractor shall have disclosed or may hereafter disclose to TOWN shall not, unless otherwise specifically agreed upon in writing by TOWN, be deemed to be confidential or proprietary information and shall be acquired by TOWN free from any restrictions as part of the consideration of the Contract.

47. Strict Compliance. TOWN may at any time insist upon strict compliance with these terms and conditions notwithstanding any previous course of dealing or course of performance between the parties to the contrary.
48. General Provisions. TOWN' remedies as set forth herein are not exclusive. Any delay or omission in exercising any right hereunder, or any waiver of any single breach or default hereunder, shall not be deemed to be a waiver of such right or of any other right, breach, or default. If action be instituted by Contractor hereunder, TOWN shall be entitled to recover costs and reasonable attorney's fees. Contractor may not assign, pledge, or in any manner encumber Contractor's rights under this Contract or applicable Purchase Order or delegate the performance of any of its obligations hereunder, without TOWN' prior, express written consent.
49. Contract Situs. All matters, whether sounding in contract or tort relating to the validity, construction, interpretation and enforcement of the Contract, will be determined in Mecklenburg County, North Carolina. North Carolina law will govern the interpretation and construction of the Contract.
50. Severability. Any provision of this Contract that is determined by any court of competent jurisdiction to be invalid or unenforceable will not affect the validity or enforceability of any other provision. Any provision of the Contract held invalid or unenforceable only in part or degree will remain in full force and effect to the extent not held invalid or unenforceable.

BID BOND INSTRUCTIONS

1. This form, for the protection of persons supplying labor and material, shall be used whenever a bid bond is required. There shall be no deviation from this form without approval by the Town Manager.
2. Insert the full legal name and business address of the Principal shall be inserted in the space designated "Principal" on the face of the form. The bond shall be signed by an authorized person. Where such person signing in a representative capacity (e.g., an attorney-in-fact), but is not a member of the firm, partnership, or joint venture, or an officer of the corporate involved, evidence of his authority must be furnished.
3. The bond may express penal sum as a percentage of the bid price. In these cases, the bond may state a maximum dollar limitation (e.g., 5% of the bid price but the amount not to exceed_____dollars).
4. Corporations executing the bond as sureties must be among those appearing on the U.S. Treasury Department's list of approved sureties and must be acting within the limitations set forth therein.
5. Corporate sureties must be licensed to do business in North Carolina.
6. In its application to negotiated contracts, the terms "bid" and "bidder" shall include "proposal" and "offeror".

BID BOND (See Instructions on reverse)				DATE BOND EXECUTED (Must be same or later than date of contract)		
PRINCIPAL (Legal name and business address)				TYPE OF ORGANIZATION ("X" one) <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <input type="checkbox"/> INDIVIDUAL <input type="checkbox"/> JOINT VENTURE </div> <div style="text-align: center;"> <input type="checkbox"/> PARTNERSHIP <input type="checkbox"/> CORPORATION </div> </div>		
SURETY (Name and business address)						
PERCENT OF BID PRICE	PENAL SUM OF BOND				BID IDENTIFICATION	
	AMOUNT NOT TO EXCEED				BID DATE	CONTRACT NO.
	MILLION(S)	THOUSAND(S)	HUNDRED(S)	CENTS	FOR (Construction Supplies or Services)	
<p>KNOW ALL MEN BY THESE PRESENTS, That we, the PRINCIPAL and SURETY above named are held and firmly bound unto the Town of Pineville, North Carolina, hereinafter called the Town, in the penal sum of the amount stated above, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.</p> <p>The condition of this obligation is such as to operate as a guarantee that the Principal will fully and promptly execute a contract and cause to be executed bonds acceptable to the Town, all as set forth in the proposal or bid, should the same be accepted, and that not longer than twenty (20) days after the receipt by the Principal of contract forms from the Town, he will execute a contract on the basis of the terms, conditions and unit prices set forth in his proposal or bid together with and accompanied by a Performance Bond satisfactory to the Town, in the total amount of said contract, and a Payment Bond in the total amount of the contract, and that failure to perform or comply with any or all the foregoing requirements, within the times set forth above, shall be just and adequate cause for the annulment of the award; and it is disposal of the Town, not as a penalty, but as an agreed liquidated damage. Should each and all of the foregoing conditions be fulfilled and Performance and Payment Bonds, as set forth in the proposal, be executed, bonds being satisfactory to the Town, this obligation shall be null and void; otherwise to remain in full force and effect.</p> <p>IN WITNESS WHEREOF, the above-bounden parties have executed this instrument under their several seals on the date indicated above, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.</p>						
In Presence of:				INDIVIDUAL OR PARTNERSHIP PRINCIPAL		
WITNESS (2)				<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: right;">(Seal)</div>		
1. <div style="border-bottom: 1px solid black; width: 100%;"></div>				<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: right;">(Seal)</div>		
2. <div style="border-bottom: 1px solid black; width: 100%;"></div>				<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: right;">(Seal)</div>		
ATTEST:				CORPORATE PRINCIPAL		
Corporate Secretary WITNESS (2)				<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: right;">AFFIX CORPORATE SEAL</div>		
1. <div style="border-bottom: 1px solid black; width: 100%;"></div>				BY <div style="border-bottom: 1px solid black; width: 100%;"></div>		
2. <div style="border-bottom: 1px solid black; width: 100%;"></div>				TITLE		
WITNESS (2)				CORPORATE SURETY		
1. <div style="border-bottom: 1px solid black; width: 100%;"></div>				<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: right;">AFFIX CORPORATE SEAL</div>		
2. <div style="border-bottom: 1px solid black; width: 100%;"></div>				BY <div style="border-bottom: 1px solid black; width: 100%;"></div>		
<div style="border-bottom: 1px solid black; width: 100%;"></div>				TITLE		
Countersigned By:				Address:		
Resident Agent				<div style="border-bottom: 1px solid black; width: 100%;"></div>		
<div style="border-bottom: 1px solid black; width: 100%;"></div>				<div style="border-bottom: 1px solid black; width: 100%;"></div>		
<div style="border-bottom: 1px solid black; width: 100%;"></div>				<div style="border-bottom: 1px solid black; width: 100%;"></div>		

PAYMENT BOND INSTRUCTIONS

1. This form, for the protection of persons supplying labor and material, shall be used whenever a payment bond is required. There shall be no deviation from this form without approval by the Town Manager.
2. The full legal name and business address of the Principal shall be inserted in the space designated "Principal" on the face of the form. The bond shall be signed by an authorized person. Where such person signing in a representative capacity (e.g., an attorney-in-fact), but is not a member of the firm, partnership, or joint venture, or an officer of the corporate involved, evidence of his authority must be furnished.
3. Corporations executing the bond as sureties must be among those appearing on the U.S. Treasury Department's list of approved sureties and must be acting within the limitations set forth therein.
4. Corporate sureties must be licensed to do business in North Carolina.

PAYMENT BOND (See Instructions on reverse)	DATE BOND EXECUTED (Must be same or later than date of contract)									
PRINCIPAL (Legal name and business address)	TYPE OF ORGANIZATION ("X" one) <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <input type="checkbox"/> INDIVIDUAL <input type="checkbox"/> JOINT VENTURE </div> <div style="text-align: center;"> <input type="checkbox"/> PARTNERSHIP <input type="checkbox"/> CORPORATION </div> </div> <hr/> STATE OF INCORPORATION									
SURETY (Name and business address)	<div style="text-align: center;"> PENAL SUM OF BOND </div> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%; text-align: center;">MILLION(S)</td> <td style="width: 25%; text-align: center;">THOUSAND(S)</td> <td style="width: 25%; text-align: center;">HUNDRED(S)</td> <td style="width: 25%; text-align: center;">CENTS</td> </tr> <tr> <td style="height: 30px;"></td> <td></td> <td></td> <td></td> </tr> </table> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 45%;">CONTRACT DATE</div> <div style="width: 45%;">CONTRACT NO.</div> </div>		MILLION(S)	THOUSAND(S)	HUNDRED(S)	CENTS				
MILLION(S)	THOUSAND(S)	HUNDRED(S)	CENTS							
<p>KNOW ALL MEN BY THESE PRESENTS, That we, the PRINCIPAL and SURETY above named are held and firmly bound unto the Town of Pineville, North Carolina, hereinafter called the Town, in the penal sum of the amount stated above, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.</p> <p>THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the principal entered into a certain contract with the Town, numbered and dated as shown and hereto attached:</p> <p>NOW, THEREFORE, if the Principal shall promptly make payment to all persons supplying labor and material in the prosecution of the work provided for in said contract, and any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the Surety being hereby waived, then the above obligation shall by void and of no effect.</p> <p>IN WITNESS WHEREOF, the above-bounden parties have executed this instrument under their several seals on the date indicated above, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.</p>										
In Presence of: <div style="text-align: center;">WITNESS (2)</div> <div style="margin-top: 10px;">1. _____</div> <div style="margin-top: 10px;">2. _____</div>	INDIVIDUAL OR PARTNERSHIP PRINCIPAL <div style="text-align: right; margin-right: 50px;">(Seal)</div> <div style="text-align: right; margin-right: 50px;">(Seal)</div>									
ATTEST: _____ <div style="text-align: center;">Corporate Secretary WITNESS (2)</div> <div style="margin-top: 10px;">1. _____</div> <div style="margin-top: 10px;">2. _____</div>	CORPORATE PRINCIPAL <div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> BY _____ TITLE </div> <div style="width: 35%; text-align: right;"> AFFIX CORPORATE SEAL </div> </div>									
<div style="text-align: center;">WITNESS (2)</div> <div style="margin-top: 10px;">1. _____</div> <div style="margin-top: 10px;">2. _____</div>	CORPORATE SURETY <div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> BY _____ TITLE </div> <div style="width: 35%; text-align: right;"> AFFIX CORPORATE SEAL </div> </div>									
Countersigned By: _____ <div style="text-align: center;">Resident Agent</div>	Address: _____ _____ _____									

PERFORMANCE BOND INSTRUCTIONS

1. This form, for the protection of persons supplying labor and material, shall be used whenever a performance bond is required. There shall be no deviation from this form without approval by the Town Manager.
2. The full legal name and business address of the Principal shall be inserted in the space designated "Principal" on the face of the form. The bond shall be signed by an authorized person. Where such person signing in a representative capacity (e.g., an attorney-in-fact), but is not a member of the firm, partnership, or joint venture, or an officer of the corporate involved, evidence of his authority must be furnished.
3. Corporations executing the bond as sureties must be among those appearing on the U.S. Treasury Department's list of approved sureties and must be acting within the limitations set forth therein.
4. Corporate sureties must be licensed to do business in North Carolina.

PERFORMANCE BOND (See Instructions on reverse)	DATE BOND EXECUTED (Must be same or later than date of contract)									
PRINCIPAL (Legal name and business address)	TYPE OF ORGANIZATION ("X" one) <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <input type="checkbox"/> INDIVIDUAL <input type="checkbox"/> JOINT VENTURE </div> <div style="text-align: center;"> <input type="checkbox"/> PARTNERSHIP <input type="checkbox"/> CORPORATION </div> </div> <hr/> STATE OF INCORPORATION									
SURETY (Name and business address)	<div style="text-align: center;"> PENAL SUM OF BOND </div> <table style="width: 100%; border: none;"> <tr> <td style="width: 25%; border: none;">MILLION(S)</td> <td style="width: 25%; border: none;">THOUSAND(S)</td> <td style="width: 25%; border: none;">HUNDRED(S)</td> <td style="width: 25%; border: none;">CENTS</td> </tr> <tr> <td style="border: none;"> </td> <td style="border: none;"> </td> <td style="border: none;"> </td> <td style="border: none;"> </td> </tr> </table> <div style="display: flex; justify-content: space-between; border-top: 1px solid black; margin-top: 5px;"> <div style="width: 45%;">CONTRACT DATE</div> <div style="width: 50%;">CONTRACT NO.</div> </div>		MILLION(S)	THOUSAND(S)	HUNDRED(S)	CENTS				
MILLION(S)	THOUSAND(S)	HUNDRED(S)	CENTS							
<p>KNOW ALL MEN BY THESE PRESENTS, That we, the PRINCIPAL and SURETY above named are held and firmly bound unto the Town of Pineville, North Carolina, hereinafter called the Town, in the penal sum of the amount stated above, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.</p> <p>THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the principal entered into a certain contract with the Town, numbered and dated as shown and hereto attached:</p> <p>NOW, THEREFORE, if the Principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of said contract during the original terms of said contract and any extensions thereof that may be granted by the Town with or without notice to the surety, and during the life of any guaranty required under the contract, and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the surety being hereby waived, then, this obligation to be void; otherwise to remain in full force and virtue.</p> <p>IN WITNESS WHEREOF, the above-bounden parties have executed this instrument under their several seals on the date indicated above, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.</p>										
In Presence of: <div style="text-align: center;">WITNESS (2)</div> 1. _____ 2. _____	INDIVIDUAL OR PARTNERSHIP PRINCIPAL <div style="text-align: right;">(Seal)</div> _____ <div style="text-align: right;">(Seal)</div> _____									
ATTEST: _____ <div style="text-align: center;">Corporate Secretary WITNESS (2)</div> 1. _____ 2. _____	CORPORATE PRINCIPAL <div style="display: flex; justify-content: space-between;"> <div> BY _____ TITLE </div> <div style="text-align: right;"> AFFIX CORPORATE SEAL </div> </div>									
<div style="text-align: center;">WITNESS (2)</div> 1. _____ 2. _____	CORPORATE SURETY <div style="display: flex; justify-content: space-between;"> <div> BY _____ TITLE </div> <div style="text-align: right;"> AFFIX CORPORATE SEAL </div> </div>									
Countersigned By: _____ <div style="text-align: center;">Resident Agent</div>	Address: _____ _____ _____									

EXHIBIT A2

SCOPE OF SERVICES **FOR** **CONSTRUCTION OF FOUNDATIONS, GROUNDING, AND WIREWAYS FOR** **ELECTRICAL SUBSTATION**

All bids are to be made on a per unit or lump sum basis. It is intended and should be understood by the Bidder that this contract includes all the work necessary for the complete construction of below grade components for an electrical substation to include the items in the descriptions below.

The components of the substation station to be installed or constructed by the Contractor are as follows:

Erosion and Sedimentation Control Measures
Foundations
Grounding and Bonding Systems
Cable Trench, Conduit, and Oil Containment System
Gravelling
Quality Control

The various components of the construction are described as follows:

1. **Erosion and Sedimentation Control**

Consists of continued maintenance during construction period, roadway preparation and site drainage, erosion, and sedimentation control measures, including temporary and permanent seeding and top soil, as indicated on Dewberry drawings for site construction of Pineville Substation Delivery #4. It also includes inspection, reporting, and repair of all erosion control measures and stabilization until acceptance by the Department of Environmental Quality and site is turned over to the Owner at the end of the project.

2. **Foundation Construction**

Consist of pouring in place rebar enforced concrete foundations as directed on the plans. Includes furnishing and installing oil containment drains in transformer pad.

3. Grounding and Bonding Systems

Consist of installing Owner Furnished ground grid materials below grade as instructed on the plans.

4. Cable Trench, Conduit, and Oil Containment System

Consists of furnishing, installing and connecting Conduits and installing Owner furnished cable trench as directed on drawings.

The oil containment system includes Contractor furnished and installed piping and oil sump with oil stop valve. System will allow storm water to convey off site to storm water system and contain any oil leaks.

5. Gravelling

Includes furnishing and placing the finish stone on the substation lot within the fenced area.

EXHIBIT B2

ITEM I. CONSTRUCTION SPECIFICATIONS FOR FOUNDATIONS

1.00 Foundations

1.01 General

This section covers the work necessary to furnish and install complete, ready for use all concrete foundations. Survey services to locate all foundations are to be furnished by Contractor.

American Concrete Institute "Standard Specification for Structural Concrete for Buildings", ACI 301-10, is hereby made a part of this specification to the same extent as if bound herein. ACI 301-10 shall be amended, supplemented, or deleted as required by the following paragraphs and as such constitutes the specification for this project.

The various classes of concrete shall be designated as follows:

<u>Class</u>	<u>Minimum 28-day Comp.</u> <u>Strength in p.s.i.</u>
A	4500 lb.
B	4000 lb.
C	3000 lb.
D	2500 lb.
E	2000 lb.

Unless otherwise specified, all concrete shall be Class "B".

1.02 Portland Cement

Portland cement shall comply with ASTM C-150.

1.03 Fine Aggregate

Fine aggregate shall comply with ASTM C-33, and shall consist of sand having clean, hard, durable, uncoated grains, free from deleterious substances.

1.04 Coarse Aggregate

Coarse aggregate shall comply with ASTM C-33 and shall consist of clean gravel or crushed stone free from soft or elongated pieces and deleterious substances.

In no case shall the maximum size be greater than 75% of the minimum clear spacing between the reinforcing bars of 20% or the narrowest dimension between the sides of forms.

1.05 Water

Water shall be clear, and free from injurious amounts of oil, acid, alkali, organic matter or other deleterious substances. Approval of the Engineer is required on any water source other than a public water supply intended for domestic consumption.

1.06 Forms

(a) Installation:

Forms shall conform to the shape, lines and dimensions of the members as called for on the Plans and shall be substantially free from surface defects.

They shall be properly braced or tied together so as to maintain position and shape before, during and after placing. The Contractor shall be fully responsible for the adequacy and safety of the forms.

All forms shall be built and maintained in an excellent condition, so that, when removed, the concrete will be left with a smooth, presentable surface, free from offsets, fins, ridges, and other unsightly defects. Forms shall be cleaned and a thin coat of form oil applied.

Forms for exposed concrete shall be given special attention to provide a smooth surface free from defects and form marks so that rubbing and finishing will be kept to a minimum.

Vertical and horizontal corners of exposed concrete shall be chamfered.

(b) Inspection:

Forms shall be inspected by the Engineer prior to concreting and notice shall be given twenty-four (24) hours in advance of the pour so that an inspection can be scheduled. No concreting may be done in the absence of the Engineer without written permission of the Engineer.

(c) Removal:

Care shall be exercised to prevent damage of concrete during the removal of forms. The following schedule shall be considered the minimum period under normal conditions when Type I cement is used; but its use shall not in any way relieve the Contractor of responsibility for the safety and appearance of the structure.

Temperatures		
Above 60 Degrees	50 - 60 Degrees	40 - 50 Degrees
24 Hrs.	36 Hrs.	72 Hrs.

When the temperature to which form or concrete surfaces are exposed drops below 40 degrees F. the forms shall remain in place an additional time equal to the time of the sub-40 degree exposure. If form insulation is used, concrete surface temperature shall apply.

1.07 Joints

(a) Expansion Joints:

Provide a bulkhead constructed to permit installation of required dowels and accessories at required expansion joint locations. After original concrete section has hardened, remove the bulkhead and place compressible filler strip of required thickness, and full width of the concrete section. Secure the strip against displacement during casting. Top of strip shall be parallel with the concrete surface and flush with it unless a recess for application of sealant is required. Form such recesses with removable temporary strips.

(b) Construction Joints:

Make and locate so as not to impair the strength of the structure and only at locations approved. Do not make additional construction joints without written approval. Provide appropriate keys as approved in all construction joints, whether horizontal or vertical.

1. Provide keyways at least 1½ inches deep in all construction joints in walls, slabs, and between walls and footings.
2. Place construction joints perpendicular to the main reinforcement. Continue all reinforcement across construction joints.

(c) Isolation Joints in Slabs on Grade:

Construct isolation joints in slabs on grade at all points of contact between slabs on ground and vertical surfaces, such as column pedestals, foundation walls, grade beams, and elsewhere as indicated.

(d) Control Joints in Slabs on Grade:

Construction control joints in slabs on grade to form panels of patterns as shown. Use inserts $\frac{1}{4}$ inch wide by $\frac{1}{5}$ to $\frac{1}{4}$ of the slab depth unless otherwise shown. Use bulkheads, wire supports or reinforcing bar to hold dowels in alignment at proper elevation perpendicular to control joint and parallel to each other.

1.08 Conveying and Depositing Concrete

(a) Conveying:

Concrete shall be conveyed by means that will prevent segregation and loss of mortar from the mix. Adequate manpower and equipment in the form of buckets, buggies, chutes, conveyors, pneumatic conveying equipment or other approved means shall be provided to insure continuous operation.

(b) Depositing:

Prior to the start of the concrete placement, the forms and reinforcing shall be cleaned and the subgrade or existing concrete shall be cleaned of shavings, chips, and other foreign matter. Concrete shall not be deposited in water, (unless so specifically intended) or on frozen areas.

Concrete shall be deposited as nearly as possible to its final position and shall not be moved by vibration. Segregation and overworking shall be kept to a minimum.

Concrete that is contaminated, that has been re-tempered or has taken its initial set shall not be used. The elapsed time between the introduction of the mixing water to the cement and aggregates and the disposition in the work shall, in no case, exceed one hour and this limit may be reduced by the Engineer, should the rate of hardening dictate.

Concreting shall be continuous to prevent cold joints and if horizontal joints are required, they shall be level to present a workmanlike job.

In a combination column-and-slab pour, the slab shall have taken its initial set before concreting is continued on the column.

(c) Vibration:

All concrete shall be thoroughly vibrated by qualified personnel, taking care to give complete coverage without causing undue bleeding or segregation. Vibrators shall be applied vertically and shall be removed when the first sheen of mortar appears on the surface.

(d) Placement Under Water:

No concrete shall be deposited under water without written permission of the Engineer and then only in accordance with his directions. Proper tremie equipment and techniques must be used, should the need arise.

(e) Flooding of Concrete:

No water shall be allowed to come in contact with the concrete surface for a minimum of twenty-four hours.

1.09 Placement of Conduits, Pipes and Sleeves

- a. All conduit, pipes, sleeves, and inserts required for drainage and electrical work will be furnished and installed by the contractor. The contractor shall be responsible for coordinating the location and maintaining these items plumb, in alignment and in place.
- b. Conduits, pipes and sleeves of any material not harmful to concrete and within limitations of this paragraph may be embedded in concrete with the approval of the Engineer after review of the placement drawings. Location of reinforcing steel and needs for concrete casting compaction shall have priority over the location of all conduit, pipes and sleeves. In case of conflicts between the reinforcing and conduit, pipes or sleeves the Contractor shall notify the Engineer immediately. If contractor fails to request interpretation all subsequent changes shall be made without additional cost to the Owner.
 1. Conduits and pipes with fittings embedded within a column shall not display more than 4 percent of the area of cross-section.
 2. Except when drawings for conduits and pipes are otherwise approved, embedded items shall satisfy the following:
 - a. Not be spaced closer than 3 diameter or widths on center of the largest conduit.
 - b. Have one inch or more of concrete cover and be placed above bottom reinforcing.

- c. Not be tied to parallel reinforcing steel.
- d. Provide necessary accessories and supports for conduits and pipes to ensure concrete cover over reinforcing steel.
- e. If the placement of conduit, pipes and sleeves cannot satisfy the above requirements, the contractor shall submit shop drawings of alternative to the Engineer for review.

1.10 Special Conditions

(a) Cold Weather Concreting:

Adequate equipment shall be provided for heating the concrete materials and protecting the concrete during freezing or near-freezing weather. No frozen materials nor materials containing ice shall be used. All concreting operations in cold weather, when temperatures are below 40 degrees or are expected to fall below 40 degrees shall conform to the requirements of ACI Standard 306. Special attention is drawn to the minimum required Placing-and curing Temperatures.

Calcium chloride or other chemicals shall not be used to prevent freezing. Concrete damage by freezing shall be removed and replaced at the Contractor's own expense.

(b) Hot Weather Concreting:

Care shall be taken to protect the concrete or schedule the operations to avoid problems incurred with flash set or too-rapid drying conditions. All concreting operations during hot weather shall conform to the requirements of ACI Standard 305.

During hot weather, consideration shall be given to maintaining the temperature of the cement, aggregates and mixing water, such that the temperature of the concrete at the time of delivery to the job site will be less than 90 degrees F.

1.11 Quality Assurance

(a) Supply all ready mixed concrete from an approved supplier whose plant has been inspected and found to comply with the requirements of the National Ready Mix Concrete Association.

(b) All concrete work which does not conform to the requirements of the contract documents, including strength, tolerances and finishing, must be replaced as directed by the Engineer at the Contractor's expense. The Contractor is responsible for the cost of replacing any other work affected by or resulting from replacement of the concrete work.

1.12 Submittals

- (a) Submit each design mix to Engineer for review.
- (b) Submit concrete test reports.
- (c) Submit proposed construction joint layout and concrete pour sequence to Engineer for approval.
- (d) Ready Mix Delivery Tickets:
 - 1. Maintain record at job site showing date, time and place of each pour of concrete, together with ready mix delivery tickets certifying contents of each batch.
 - 2. Make record available to Engineer for inspection upon request, and upon completion of the work deliver records to the Engineer.

1.13 Testing

- (a) Make a strength test, six cylinders from each mix design placed in any one day. Conform to ASTM C 172 and ASTM C 31.
- (b) Test two cylinders at seven days, two at 28 days and hold two in reserve. Testing to conform to ASTM C 39.
- (c) The strength level of the concrete will be considered satisfactory if the average of all sets of three consecutive strength test results equal or exceed the specified strength and no individual strength test results falls below the specified strength by more than 500 psi.

1.14 Repair of Defective Areas

- (a) Repair rather than replacement shall only be attempted with prior written approval of the Engineer.

2.00 Reinforcing Steel

2.01 General

This section covers the work necessary to furnish and install complete reinforcing steel. Reinforcing bars shall meet the requirements of ASTM Des: A615. Grade shall be as shown on the drawings but shall be grade 60 unless otherwise noted.

2.02 Protection of Bars

All bars shall be stored off the ground and shall, at all times, be protected from moisture and be kept free from dirt, oil, or injurious coatings. If concreting is delayed for any considerable number of days after the reinforcing is placed in position, it shall be protected by covering with canvas or other satisfactory covering, or, if directed, shall be painted with a coat of neat cement grout. Any bars or fabric having scaly rust shall be cleaned.

2.03 Fabrication and Placement

Metal reinforcing shall be properly fabricated, supported, and securely held in place so that it will be in the correct position after the concrete has been placed and compacted. Bars shall be bent in the shop to the shapes shown or required. Field bending shall be done only with the written approval of the Engineer.

Hooks and bends in reinforcing shall be fabricated in accordance with ACI 318.

All bars shall be bent cold.

The placing of reinforcement shall be completed before the commencement of concreting. In no case shall any reinforcement be covered with concrete until the amount and position of the reinforcement has been checked by the Engineer, and his permission given to proceed with the concreting.

Reinforcing steel shall be adequately secured in position by concrete or metal chairs or spacers. Bars shall be fastened together with annealed wire of not less than 18 gauge or other approved method.

3.00 Backfilling

Backfilling around structures shall not be commenced until directed by the Engineer. Backfill around structures may be placed by machine, provided the work shall be done carefully to prevent damage to the structure. In no case shall backfill materials be allowed to fall directly on a structure until at least 12 inches of hand placed material has been placed thereon and compacted.

Backfill around structures shall be deposited in horizontal layers not more than one foot in thickness and shall be compacted to prevent settlement.

All excavations shall be backfilled to the original surface of the ground to such other grades as may be shown, specified or directed. Backfilling shall be done with suitable excavated materials, approved by the Engineer, which can be satisfactorily compacted during refilling of the

excavation. In the event the excavated materials are not suitable, special backfill obtained from approved borrow pits shall be used for backfilling.

Stones or pieces of rock greater than one cubic foot in volume shall not be used in any portion of backfill and all stones shall be distributed and alternated with the earth filling in such manner that all interstices between them shall be filled with earth. Frozen earth shall not be used for backfilling.

Each layer of material shall be thoroughly tamped or rolled to the required degree of compaction by sheepsfoot or pneumatic rollers, mechanical tampers, or vibrators, unless a satisfactory compaction is obtained by the travel of trucks and earth moving machines. Successive layers shall not be placed until the layer under construction has been thoroughly compacted.

Where required, the Contractor shall, at his own expense, add sufficient water during rolling and tamping to assure complete consolidation of the fill material. If, due to rain or other causes, the material is too wet for satisfactory compaction, it shall be allowed to dry as required, before compaction.

Unless otherwise noted, each layer of fill and backfill and the top 12 inches of existing subgrade material in cuts shall be compacted by approved equipment as specified below. The degree of compaction and the density shall be determined by the Standard Proctor Test (ASTM D698).

	Min. Compaction of STD. Proctor <u>Maximum Dry Density</u>
All Earth Fill	95%
Top 12 inches of Subgrade or Roadway and Pad Areas	98%
Bituminous Pavement Base Course	90%
Bituminous Pavement Intermediate Course	95%
Bituminous Pavement Surface Course	95%

Material too dry for proper compaction shall be moistened by suitable watering devices, turned and harrowed to distribute moisture, and then properly compacted. When material is too wet for proper compaction, operations shall stop until such material has sufficiently dried.

4.00 Hauling Material on Streets

When it is necessary to haul material over the streets or pavements, the Contractor shall provide suitable tight vehicles so as to prevent deposits on the streets or pavements. In all cases where any materials are dropped from the vehicles, the Contractor shall clean up the same as often as directed and keep the crosswalks, streets and pavements clean and free from dirt, mud, stone, and other hauled material.

5.00 Spoil

In general, all spoil material shall be removed from the site, and the Contractor shall obtain a place to accommodate it.

6.00 Concrete Protection for Reinforcement

Unless noted on the drawings, minimum cover for reinforcing shall be in accordance with:

Slabs in contact with water	1"
Walls	2"
Any other concrete in contact with soil or water	2"

7.00 Oil Containment Piping

The Contractor shall furnish and install oil containment drain pipes and protective grates in transformer foundation.

8.00 Unauthorized Excavation

Whenever excavations are carried beyond or below the lines and grades shown on the plans, or as given or directed by the Engineer, all such excavated space shall be refilled with granular material, or other materials as the Engineer may direct. All material which slides, falls or caves into the established limits of excavations due to any cause whatsoever, shall be removed and disposed of at the Contractor's expense.

No extra compensation will be paid the Contractor for any materials ordered for refilling the void areas left by a slide, fall, cave-in, or any other unauthorized excavation.

9.00 Removal of Water

The Contractor shall at all times during construction, provide and maintain proper the satisfactory means and devices for the removal of all water entering the excavations, and shall

remove all such water as fast as it may collect, in such manner as shall not interfere with the prosecution of the work or the proper placing of sewers or masonry, or other work.

Removal of water includes the construction and removal of cofferdams, sheeting and bracing, the furnishing of materials and labor necessary therefore, excavation and maintenance of ditches and sluice-ways and the furnishing and operation of pumps, wellpoints, and appliances needed to maintain thorough drainage of the work in a satisfactory manner.

Water shall not be allowed to rise over or come in contact with any masonry, concrete or mortar, until at least 24 hours after placement, and no stream of water shall be allowed to flow over such work until such time as the Engineer may permit.

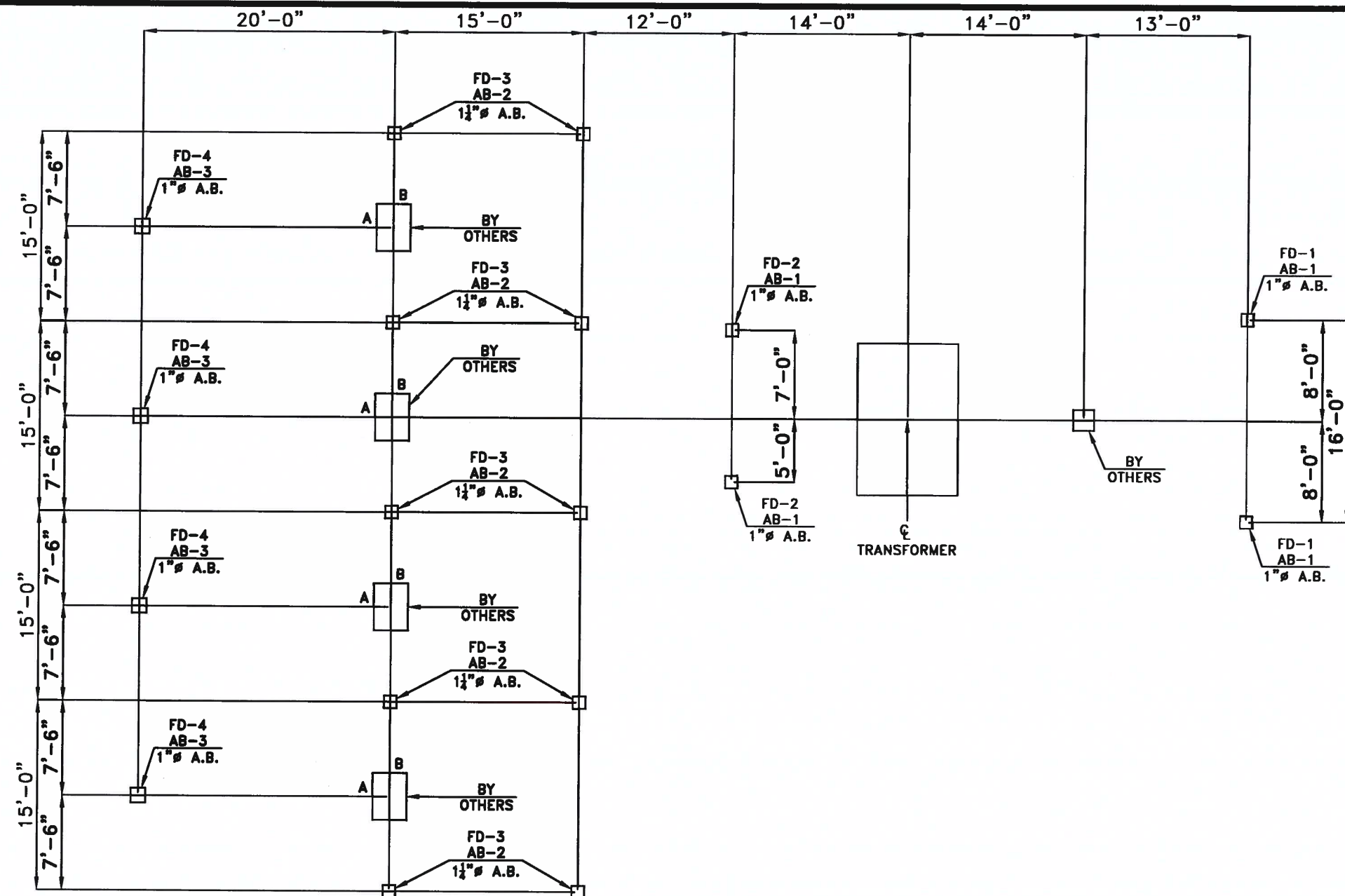
10.00 Storage of Material

Topsoil suitable for final grading shall be removed and stored on the site separately from other excavated material.

All excavated materials shall be stored in locations so as not to endanger the work, and so that easy access may be had at all times to all parts of the excavation. Stored materials shall be kept neatly piled and trimmed so as to cause little inconvenience as possible to public travel or to adjoining property holders.

11.00 Foundation Grating

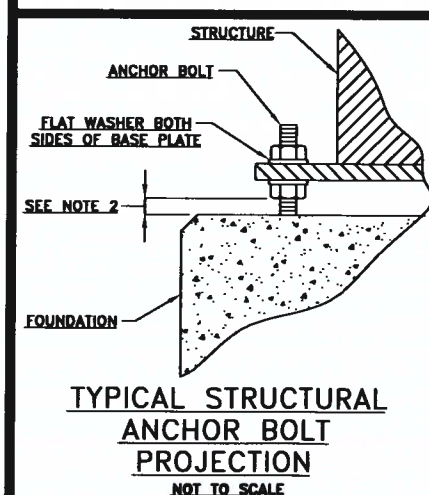
Contractor shall furnish and install a fiberglass grating system for personnel traffic across containment portion of transformer pad. Grating shall be 2" thick and have a 2" x 2" square grid, McNichols Cat. #F282111C4L or approved equal. Contractor shall furnish manufacturer's recommended galvanized steel support structures attached to concrete to achieve less than 1/2" deflection under load of 500 lbs/sf uniform.



ANCHOR BOLT PLAN

NOTES:

- 1) BASEPLATE EDGE DISTANCE IS 3" FOR 1-1/4" ANCHOR BOLTS AND UP. BASEPLATE EDGE DISTANCE IS 2" FOR 1" ANCHOR BOLTS AND BELOW.
- 2) STRUCTURES ARE DESIGNED TO BE INSTALLED ON LEVELING NUTS WITHOUT GROUT. THE BOTTOM NUT SHOULD BE INSTALLED NO HIGHER THAN ONE NUT THICKNESS ABOVE CONCRETE.
- 3) DO NOT PUT ANY LOAD ON ANCHOR BOLTS FOR AT LEAST 14 DAYS AFTER POURING CONCRETE.
- 4) ALL ANCHOR BOLT MATERIAL IS HOT DIPPED GALVANIZED F-1554 GR. 55 STEEL.
- 5) SEE SHEET AB2 FOR ANCHOR BOLT DETAILS.
- 6) SEE SHEETS FD1 - FD-4 FOR FOUNDATION DETAILS.



5	XX/XX	
4	XX/XX	
3	XX/XX	
2	XX/XX	
1	XX/XX	
REV	DATE	DESCRIPTION

Substation Enterprises, Inc.

145 Commercial Court, P.O. Box 2010
Alabaster, AL 35007
Phone: (205)685-2755, Fax: (205)685-2753

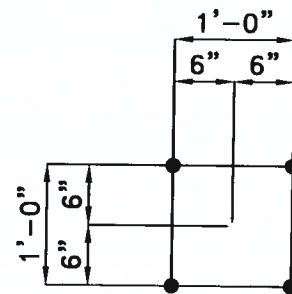
TOWN OF PINEVILLE

DELIVERY NO. 4 (46/15kV) SUBSTATION

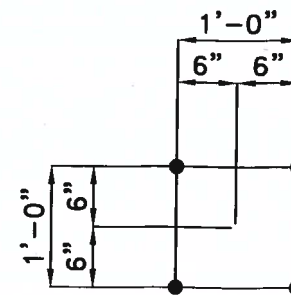
ANCHOR BOLT PLAN

DATE: 02-28-25 DRAWN BY: TB CHECKED BY: TB DRAWING NUMBER: HK-6855-AB1

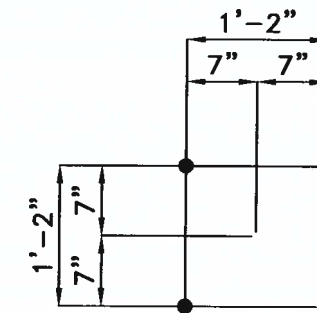
SCALE: 3/8"=1'-0" APPROVED BY:



AB-1 ~ (4) PATTERNS REQ'D
(16) 1"Ø A.B.



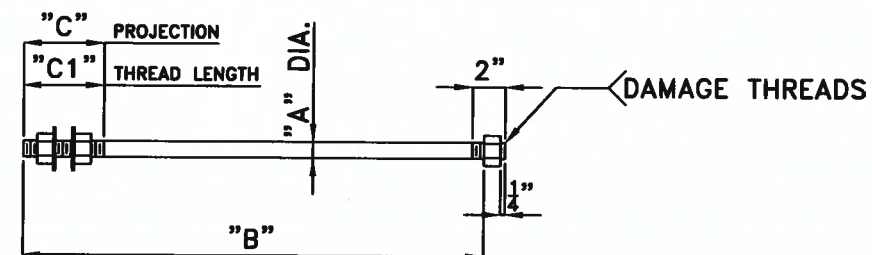
AB-2 ~ (10) PATTERNS REQ'D
(40) 1-1/4"Ø A.B.



AB-3 ~ (4) PATTERNS REQ'D
(16) 1"Ø A.B.

ITEM#	QTY.	"A"	"B"	"C"	"C1"	TOTAL
						LENGTH
AB-1	(16)	1"	2'-4 1/2"	4-1/2"	5"	2'-6"
AB-2	(40)	1-1/4"	3'-4 1/2"	5-1/2"	7"	3'-6"
AB-3	(16)	1"	2'-4 1/2"	4-1/2"	5"	2'-6"

PLEASE NOTE TOTAL LENGTH OF ANCHOR BOLT
IS LONGER THAN "B" DIMENSION, SEE "L"



5	XX/XX	
4	XX/XX	
3	XX/XX	
2	XX/XX	
1	XX/XX	
REV	DATE	DESCRIPTION

**Substation
Enterprises, Inc.**

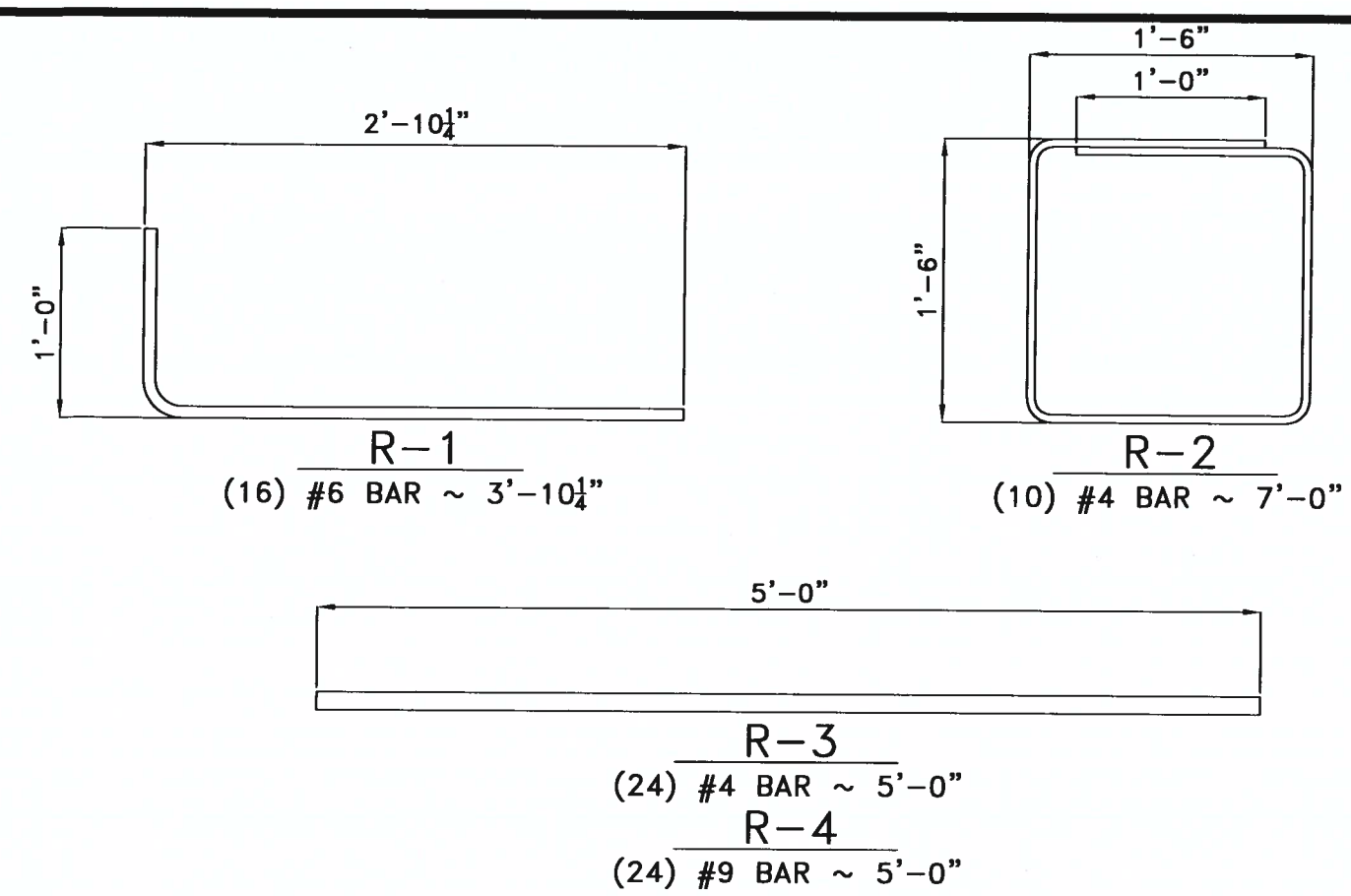
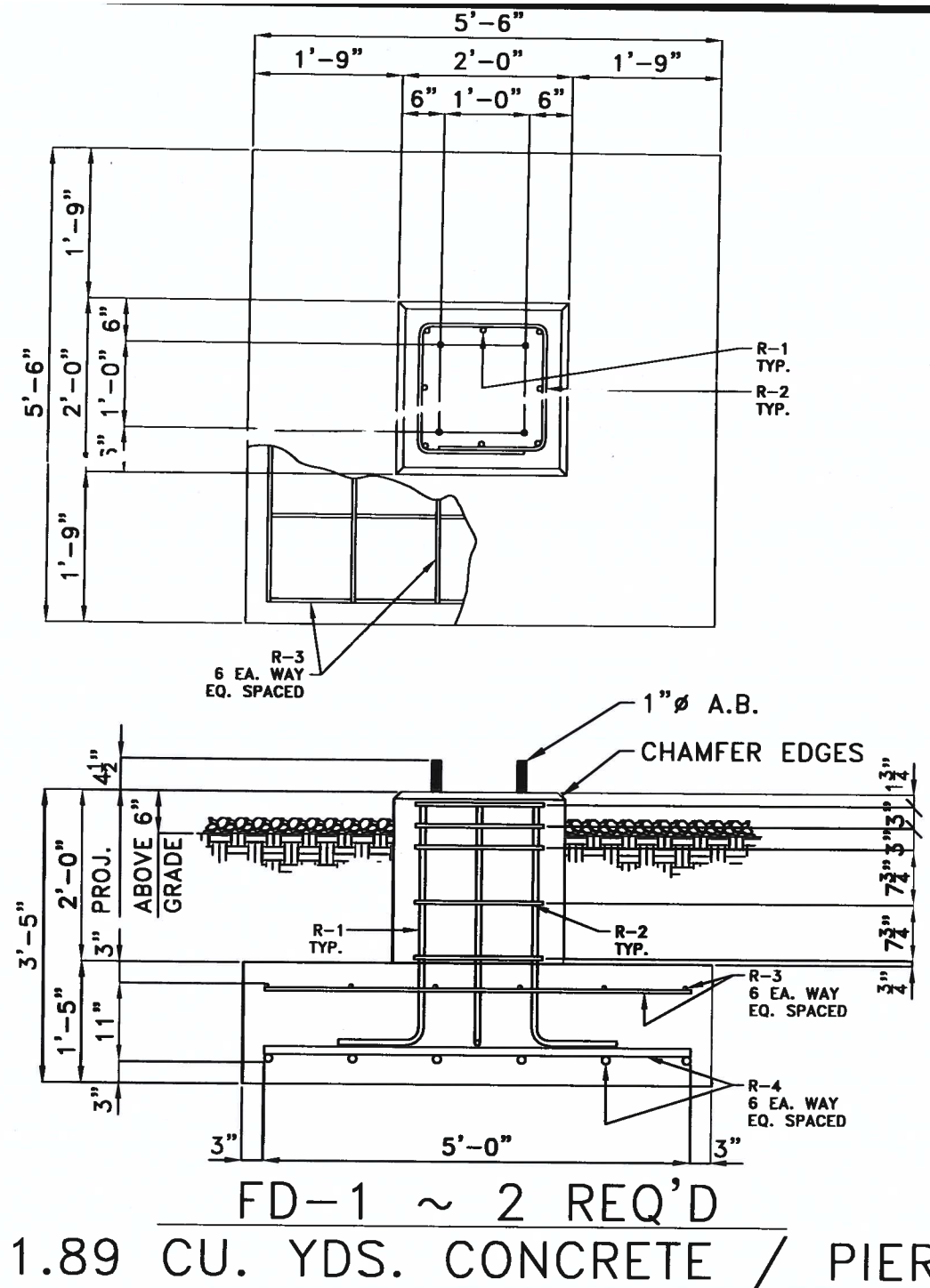
145 Commercial Court, P.O. Box 2010
Alabaster, AL 35007
Phone: (205)685-2755, Fax: (205)685-2753

TOWN OF PINEVILLE

DELIVERY NO. 4 (46/15kV) SUBSTATION

ANCHOR BOLT DETAILS

DATE: 02-28-25 DRAWN BY: TB CHECKED BY: TB DRAWING NUMBER:
SCALE: NONE APPROVED BY: HK-6855-AB2



- CONCRETE NOTES:**
1. FOUNDATION DESIGN BASED ON ALLOWABLE BEARING PRESSURE OF 5,000 PSF BASED ON SOIL REPORT INCLUDING BORING LOGS FROM S&ME REPORT NO. 24350375 DATED JUNE 25, 2024.
 2. CONCRETE TO DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI IN 28 DAYS FROM INITIAL PLACEMENT.
 3. CONCRETE TO BE PLACED PER ACI 318-14.
 4. ALL REBAR TO BE 60 KSI.
 5. DO NOT TACK WELD STEEL REINFORCEMENT.
 6. MINIMUM OF 3" OF CONCRETE COVER OVER STEEL REINFORCEMENT UNLESS NOTED OTHERWISE.
 7. STEEL REINFORCEMENT TO BE PLACED PER ACI-318-14.
 8. FORMWORK TO BE CONSTRUCTED PER ACI 318-14.
 9. TOP EDGES OF EXPOSED CONCRETE SHOULD BE CHAMFERED.

KURTISS C. EDWARDS
 3/5/25

REV	DATE	DESCRIPTION
5	XX/XX/XX	
4	XX/XX/XX	
3	XX/XX/XX	
2	XX/XX/XX	
1	XX/XX/XX	

Substation Enterprises, Inc.

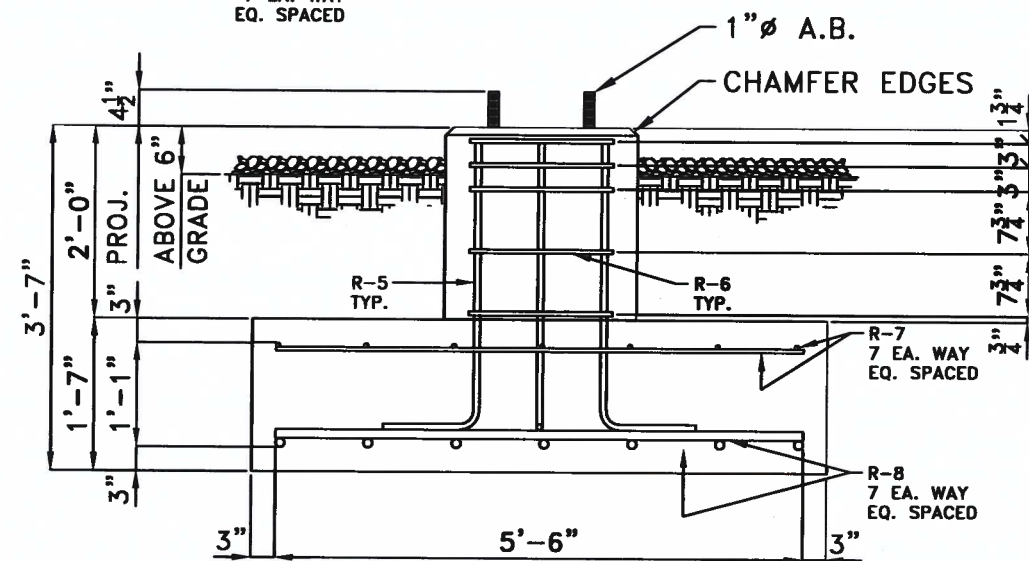
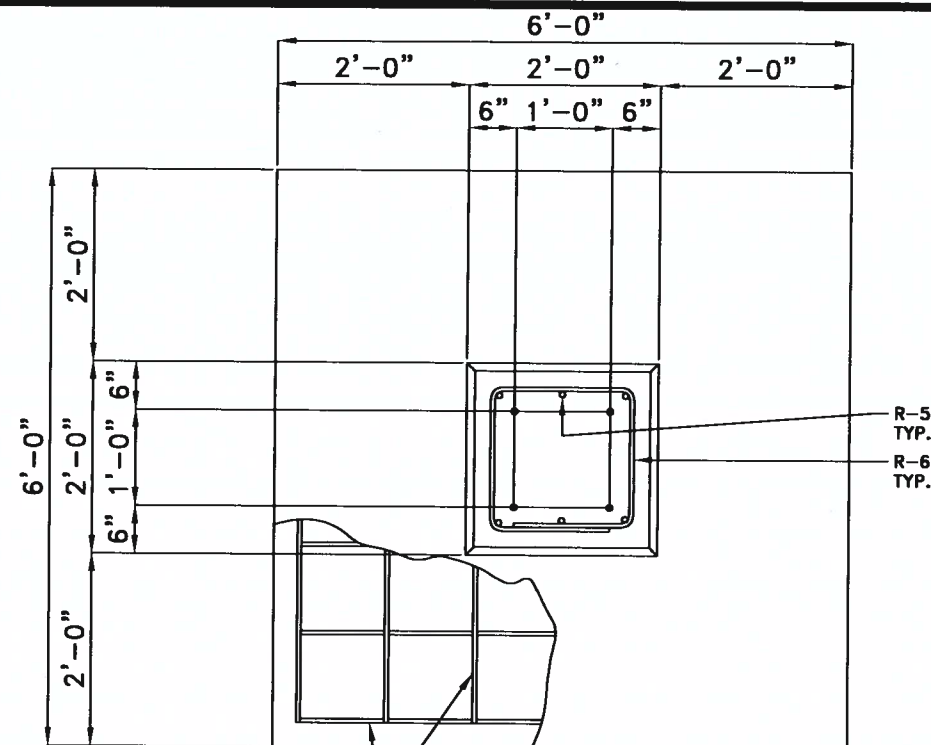
145 Commercial Court, P.O. Box 2010
 Alabaster, AL 35007
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TOWN OF PINEVILLE

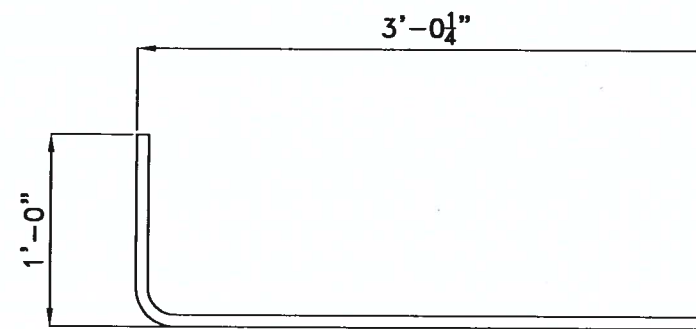
DELIVERY NO. 4 (46/15kV) SUBSTATION

FOUNDATION DETAILS

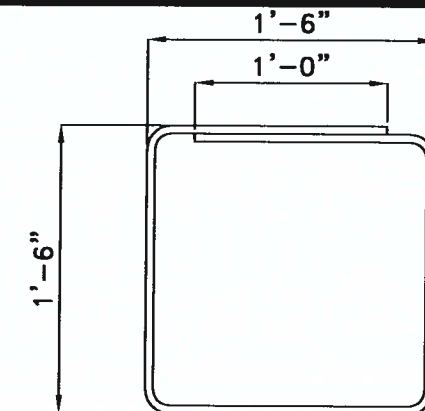
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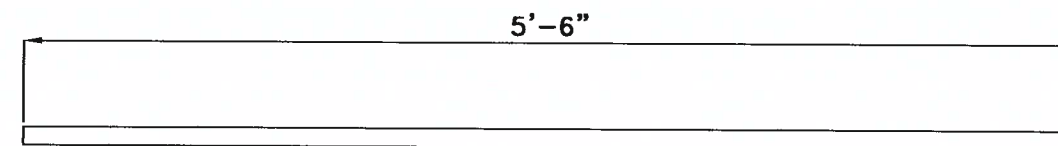
FD-2 ~ 2 REQ'D
2.41 CU. YDS. CONCRETE / PIER



R-5
(16) #6 BAR ~ 4'-0 1/4"

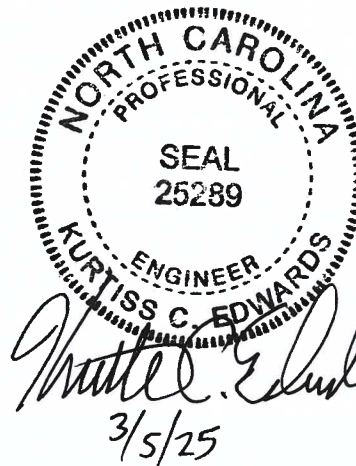


R-6
(10) #4 BAR ~ 7'-0"



R-7
(28) #4 BAR ~ 5'-6"

R-8
(28) #9 BAR ~ 5'-6"



CONCRETE NOTES:

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8. FORMWORK TO BE CONSTRUCTED PER ACI 318-14.
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STEEL NOTES:

1. ALL STEEL HOT-DIP GALVANIZED AFTER FABRICATION.
2. PIECE MARK STAMPED INTO METAL WITH NOT LESS THAN 3/8" INCH CHARACTERS BEFORE GALVANIZING.
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4. EDGE DISTANCE 1" UNLESS NOTED.
5. ALL STEEL SHAPES ASTM A36 UNLESS NOTED.

Substation Enterprises, Inc.

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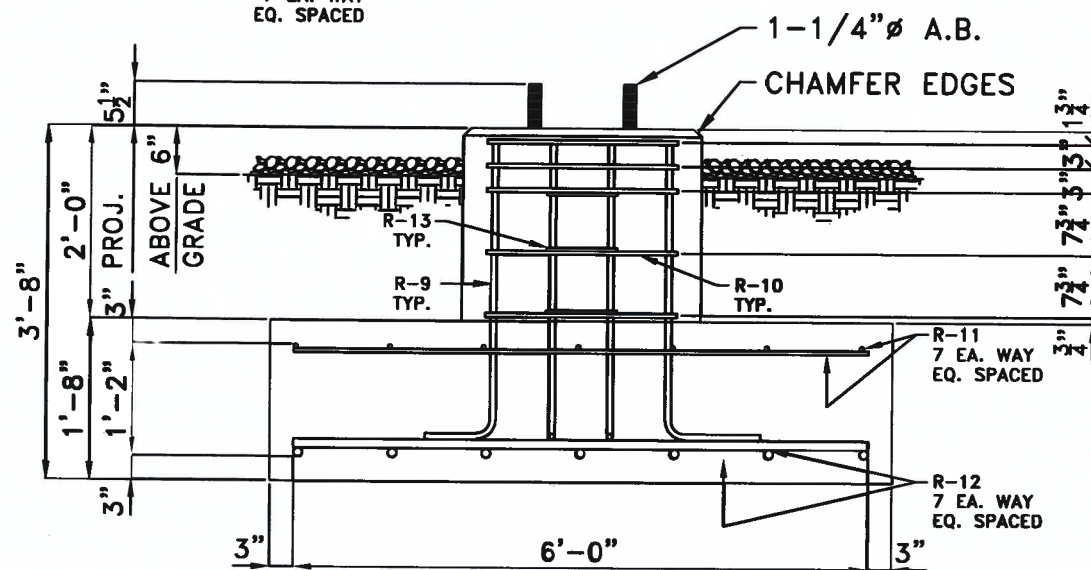
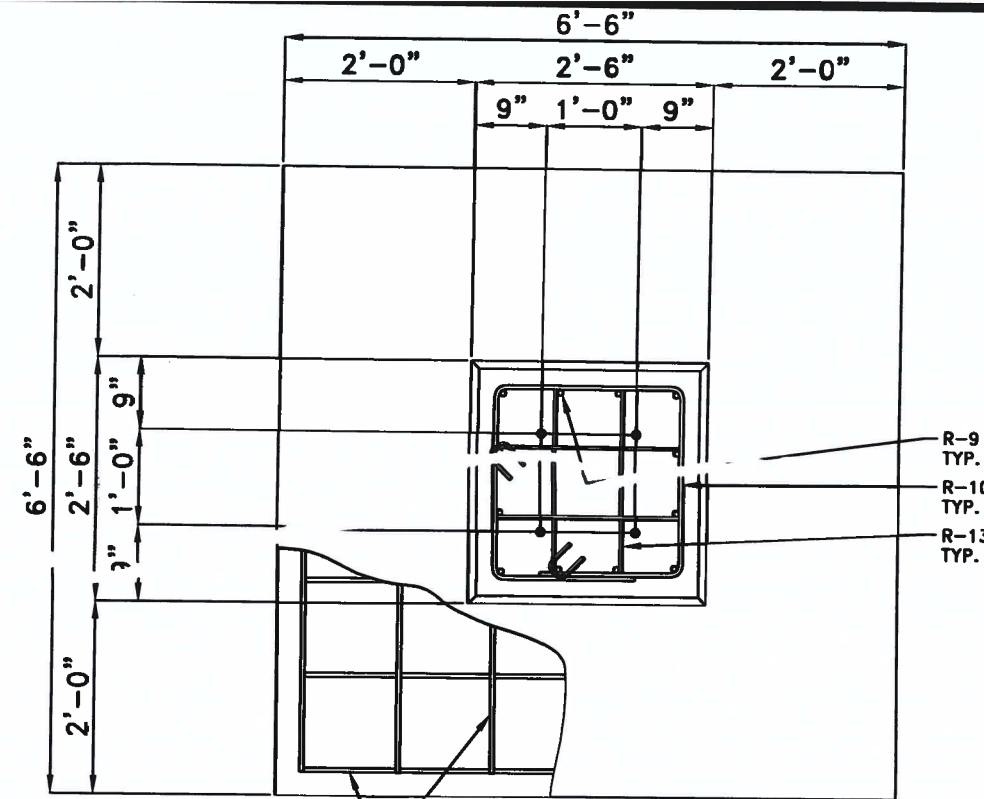
TOWN OF PINEVILLE

DELIVERY NO. 4 (46/15kV) SUBSTATION

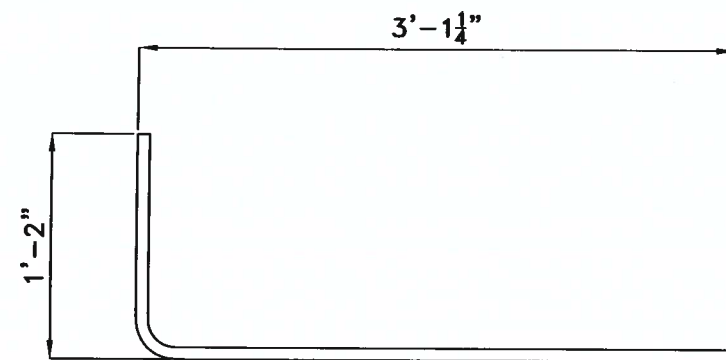
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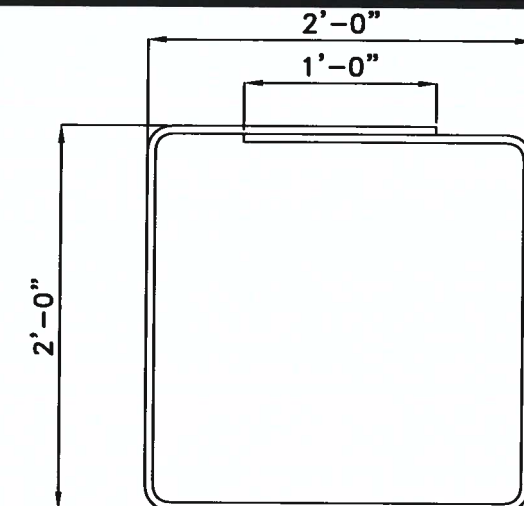
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1	XX/XX/XX	



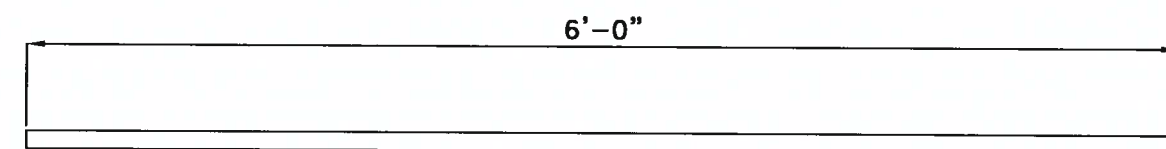
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3.07 CU. YDS. CONCRETE / PIER



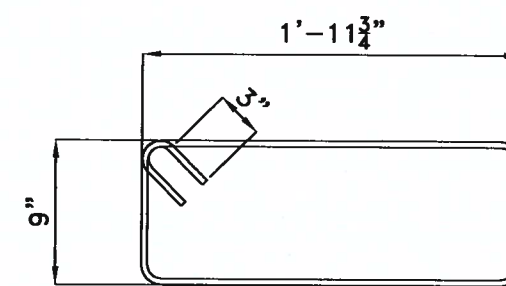
R-9
(120) #7 BAR ~ 4'-3 1/4"



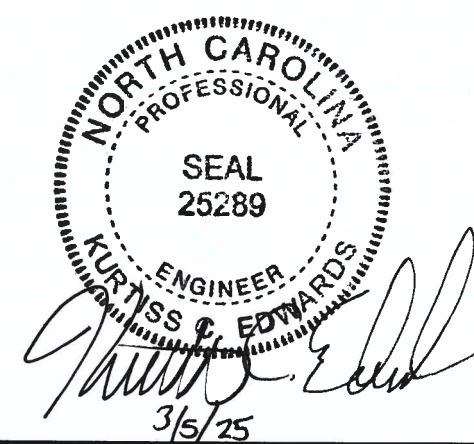
R-10
(50) #4 BAR ~ 9'-0"



R-11
(140) #4 BAR ~ 6'-0"
R-12
(140) #9 BAR ~ 6'-0"



R-13
(60) #3 BAR ~ 6'-2 3/8"



CONCRETE NOTES:

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- EDGE DISTANCE 1" UNLESS NOTED.
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REV	DATE	DESCRIPTION
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1	XX/XX/XX	

Substation Enterprises, Inc.

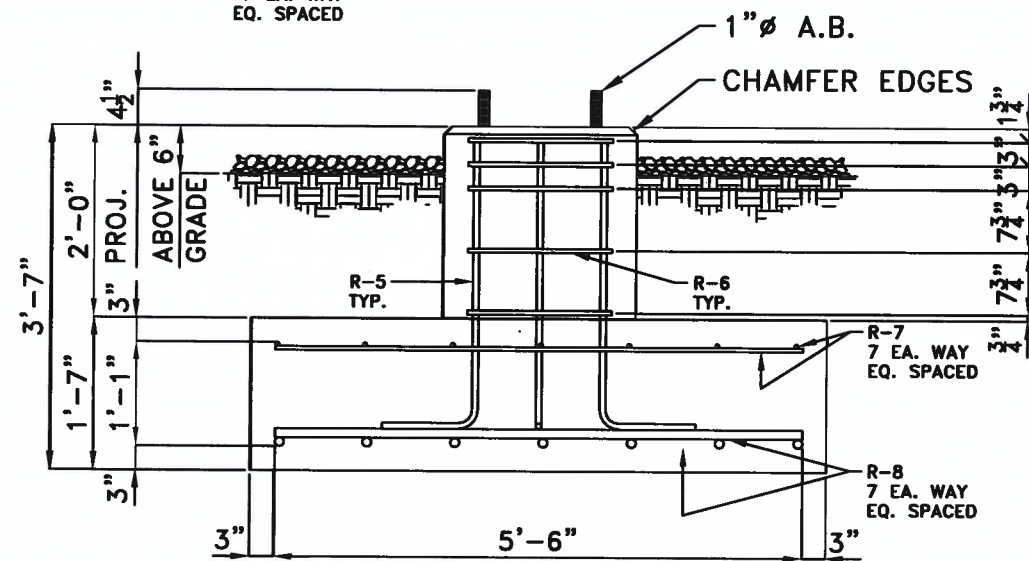
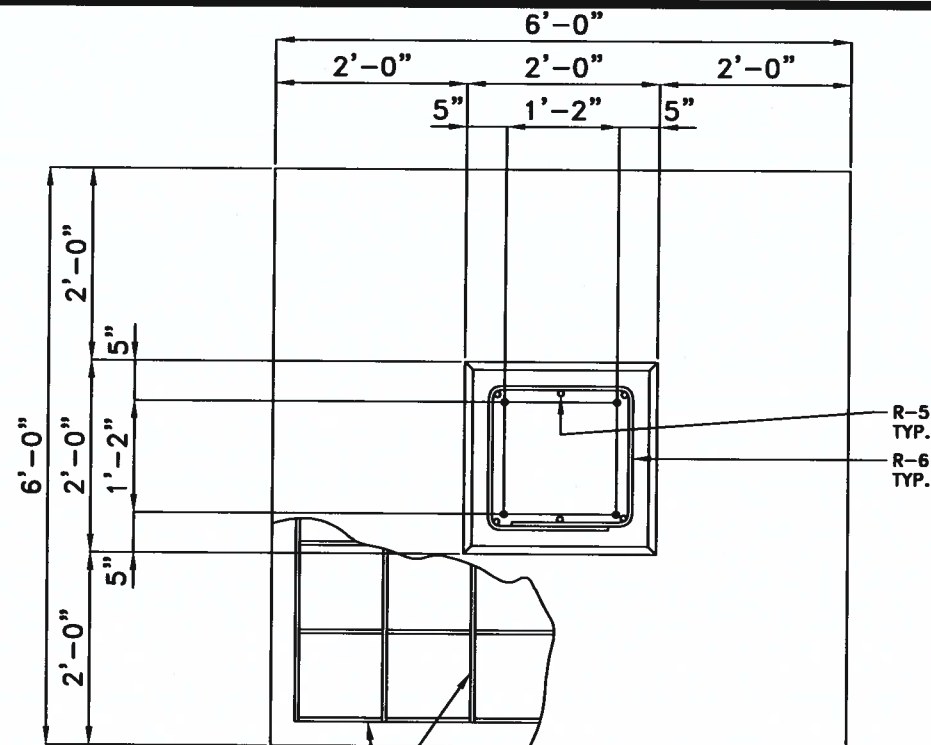
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TOWN OF PINEVILLE

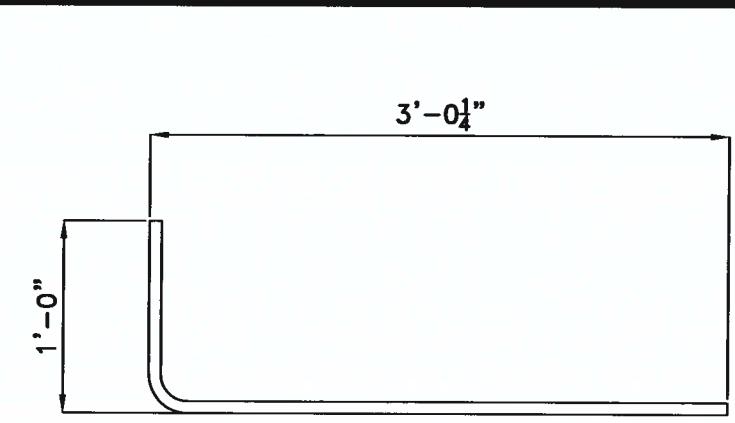
DELIVERY NO. 4 (46/15kV) SUBSTATION

FOUNDATION DETAILS

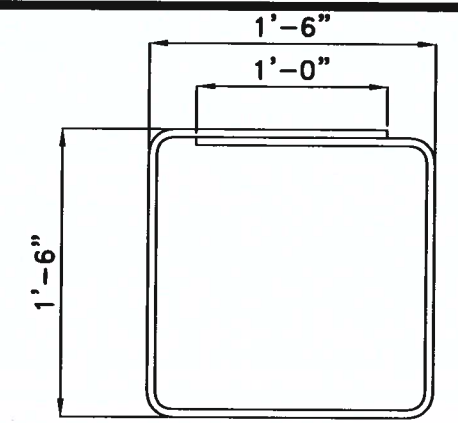
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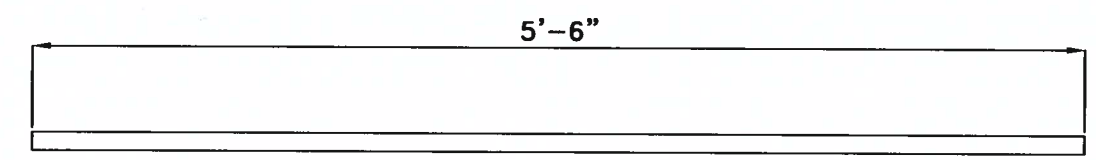
FD-4 ~ 4 REQ'D
2.41 CU. YDS. CONCRETE / PIER



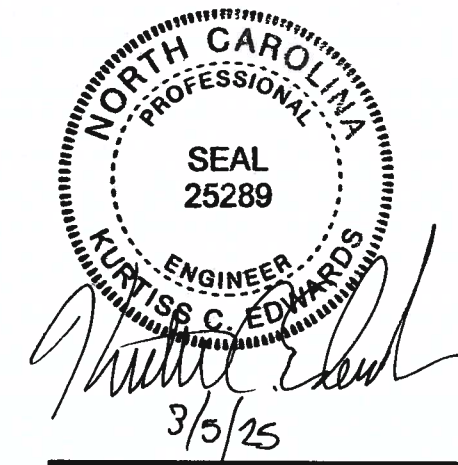
R-5
(32) #6 BAR ~ 4'-0 1/4"



R-6
(20) #4 BAR ~ 7'-0"



R-7
(56) #4 BAR ~ 5'-6"
R-8
(56) #9 BAR ~ 5'-6"



CONCRETE NOTES:

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TOWN OF PINEVILLE
DELIVERY NO. 4 (46/15kV) SUBSTATION

FOUNDATION DETAILS

REV	DATE	DESCRIPTION
5	XX/XX/XX	
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3	XX/XX/XX	
2	XX/XX/XX	
1	XX/XX/XX	

DATE: 03-03-25	DRAWN BY: TB	CHECKED BY: TB	DRAWING NUMBER:
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FOUNDATION NOTES:

A. CONCRETE:

1. ALL CONCRETE DESIGN AND CONSTRUCTION SHALL CONFORM TO THE 'SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS', (A.C.I. 301-10) AND 'BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, (A.C.I. 318-14).
2. ALL CONCRETE CONSTRUCTION SHALL CONFORM TO THE 'SPECIFICATIONS FOR TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS. (A.C.I. 117-10).
3. ALL CONCRETE SHALL BE READY-MIXED MEETING THE REQUIREMENTS OF ASTM C-94, 'SPECIFICATION FOR READY-MIXED CONCRETE'.
4. CONCRETE IS TO BE NORMAL WEIGHT AND MADE WITH TYPE 1 PORTLAND CEMENT CONFORMING TO ASTM C150 SPECIFICATION, "STANDARD SPECIFICATION FOR PORTLAND CEMENT".
5. CLASS F FLYASH IS PERMITTED TO BE USED IN CONCRETE MIXES. FLYASH IS TO BE LIMITED TO A MAXIMUM OF 20% OF TOTAL CEMENTITIOUS MATERIAL WEIGHT.
6. CONCRETE AGGREGATE GRADATION SHALL BE IN ACCORDANCE WITH ASTM C33 SPECIFICATION. "SPECIFICATION FOR CONCRETE AGGREGATE". FINE AGGREGATE SHALL CONSIST OF NATURAL SAND OR A COMBINATION THEREOF, WITH A FINENESS MODULUS BETWEEN 2.3 AND 3.1 COURSE AGGREGATE GRADATION SHALL HAVE A MINIMUM SIZE #57 STONE MIX PER ASTM C33. FINE AGGREGATE CONTENT IS TO BE BETWEEN 35% AND 45% BY WEIGHT OR VOLUME OF THE TOTAL AGGREGATE CONTENT.
7. A MID RANGE WATER REDUCING ADMIXTURE IN CONFORMANCE WITH AST, C494 TYPE 'A' MAY BE USED TO REDUCE WATER REQUIREMENTS. DOSAGE AMOUNT IS NOT TO EXCEED 5 OZ. PER 100 POUNDS OF CEMENTITIOUS MATERIAL.
8. CONCRETE MIX DESIGNS ARE TO BE PREPARED BY CONCRETE SUPPLIER AND SUBMITTED TO ENGINEER FOR APPROVAL A MINIMUM OF 14 DAYS PRIOR TO CONCRETE WORK COMMENCING. CONCRETE MIX DESIGNS ARE TO BE PROPORTIONED IN ACCORANCE WITH SECTION 5.3 OR 5.4 OF A.C.I. 318-14.
9. CONCRETE PLACEMENT IS TO CONFORM WITH ACI 305-10 HOT WEATHER CONCRETING AND ACI 306-10 COLD WEATHER CONCRETING. MINIMUM TEMPERATURE OF CONCRETE AT TIME OF PLACEMENT AND MAINTAINED DURING CURING IS 55 DEGREES FAHRENHEIT.
10. GROUT, IF REQUIRED, SHALL BE NON-METALLIC, NON-SHRINK AND SHALL BE A FACTORY PREPARED MIXTURE OF NON AIR-ENTRAINING PORTLAND CEMENT, WELL GRADED, SHARP SILICA SAND AND OTHER ADMIXTURES AS REQUIRED TO PRODUCE A NON SHRINK GROUT. GROUT SHALL BE CONFORMED TO ASTM C-1107 GRADE C.
11. FORMWORK SHALL BE DESIGNED AND CONSTRUCTED/INSTALLED IN ACCORDANCE WITH ACI 347, R-14. "GUIDE TO FORMWORK FOR CONCRETE".
12. CONCRETE SHALL BE TESTED IN ACCORDANCE WITH SECTION 5.6 OF ACI 318-14 (EVALUATION AND ACCEPTANCE OF CONCRETE). QUALIFIED FIELD TESTING TECHNICIANS SHALL PERFORM TESTS ON FRESH CONCRETE AT THE JOB SITE, PREPARE SPECIMENS REQUIRED FOR CURING UNDER FIELD CONDITIONS, PREPARE SPECIMENS REQUIRED FOR TESTING IN THE LABORATORY, AND RECORD THE TEMPERATURE OF THE FRESH CONCRETE WHEN PREPARING SPECIMENS FOR STRENGTH TESTS. QUALIFIED LABORATORY TECHNICIANS SHALL PERFORM ALL REQUIRED LABORATORY TESTS. SAMPLES FOR STRENGTH TESTS OF EACH CLASS OF CONCRETE PLACED EACH DAY SHALL BE TAKEN NOT LESS THAN ONCE FOR EACH 150 CUBIC YARDS OF CONCRETE, NOR LESS THAN ONCE FOR EACH 5000 SQUARE FEET OF SURFACE AREA FOR SLABS OR WALLS.
13. ALL CONCRETE IS TO HAVE A 5" MAX. SLUMP, TESTED IN ACCORDANCE WITH ASTM C143.
14. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (f'c) = 4000 PSI AT 28 DAYS.
15. ALL EXTERIOR CONCRETE IS TO BE AIR-ENTRAINED WITH TOTAL AIR CONTENT OF 5 PERCENT PLUS OR MINUS 1.5 PERCENT IN ACCORDANCE WITH ASTM C260. CONCRETE SHALL BE TESTED FOR TOTAL AIR CONTENT IN ACCORDANCE WITH ASTM C231.
16. ALL CONCRETE DEFECTS, INCLUDING JOINT DAMAGE, HONEYCOMBS, TIE HOLES, SPALLS, AND OTHER DEFECTS SHALL BE PROPERLY REPAIRED IMMEDIATELY IN ACCORDANCE WITH APPLICABLE REQUIREMENTS OF SECTION 5 OF ACI 301-10.
17. CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING FOUNDATION DURING CONSTRUCTION, IF REQUIRED.
18. OWNER TO FURNISH ANCHOR BOLTS FOR STRUCTURES FURNISHED BY SUBSTATION ENTERPRISES. ALL OTHER ANCHOR BOLTS TO BE FURNISHED BY CONTRACTOR.

B. REINFORCEMENT:

1. REINFORCING STEEL SHALL BE HIGH STRENGTH DEFORMED BARS CONFORMING TO ASTM A615, GRADE 60.
2. WELDED WIRE MESH SHALL CONFORM TO ASTM A185 AND SHALL BE LAPPED ONE FULL MESH AT END SPLICES AND BE WIRED TOGETHER.
3. REINFORCING STEEL DESIGN, DETAILING, FABRICATION AND ERECTION SHALL CONFORM TO C.R.S.I. "MANUAL OF STANDARD PRACTICE", 28TH EDITION, A.C.I. 318-14 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", AND ACI 315-11, "DETAILS AND DETAILING OF CONCRETE REINFORCING".
4. SPLICED BARS SHALL NOT BE SPACED TRANSVERSELY FARTHER APART THAN ONE-FIFTH THE REQUIRED LAP SPLICE LENGTH, NOR 6". MINIMUM SPLICE LAP LENGTH TO BE 30" FOR #5 BARS.
5. REINFORCEMENT PROTECTION SHALL BE:

CONCRETE POURED AGAINST EARTH3"

CONCRETE POURED IN FORMS EXPOSED TO WEATHER OR EARTH 2"

COLUMNS AND BEAMS (TIE BARS) 1 1/2"

SLABS AND WALL NOT EXPOSED TO WEATHER 3/4"
6. CONTRACTOR TO VERIFY QUANTITY AND LENGTH OF ALL REBARS.

C. FINISHING:

1. CONCRETE SURFACE IS TO HAVE A FLOATED FINISH AND SHALL BE FINISHED WITH A COMPOSITE FLATNESS (f'f)=20 AND A COMPOSITE LEVELNESS (f'l)=15 IN ACCORDANCE WITH ASTM E 1155, "STANDARD TEST METHOD FOR DETERMINING FLOOR FLATNESS AND LEVELNESS USING THE F-NUMBER SYSTEM".
2. EXPOSED FOUNDATION SURFACES TO RECEIVE (1) COAT OF 30% SOLIDS ACRYLIC CURE AND SEAL NOX-CRETE CURE & SEAL 300E AS MFG. BY NOX-CRETE, INC. OR EQUAL, CONFORMING TO ASTM C309. APPLICATION IS TO CONFORM TO MANUFACTURER'S SEPCIFICATIONS.
3. THE FOLLOWING INFORMATION IS TO BE RECORDED BY THE GENERAL CONTRACTOR DURING PLACEMENT OF THE SLAB CONCRETE AND SENT TO THE ENGINEER OF RECORD:

- AIR TEMPERATURE

- CONCRETE TEMPERATURE IN ACCORDANCE WITH ASTM C1064

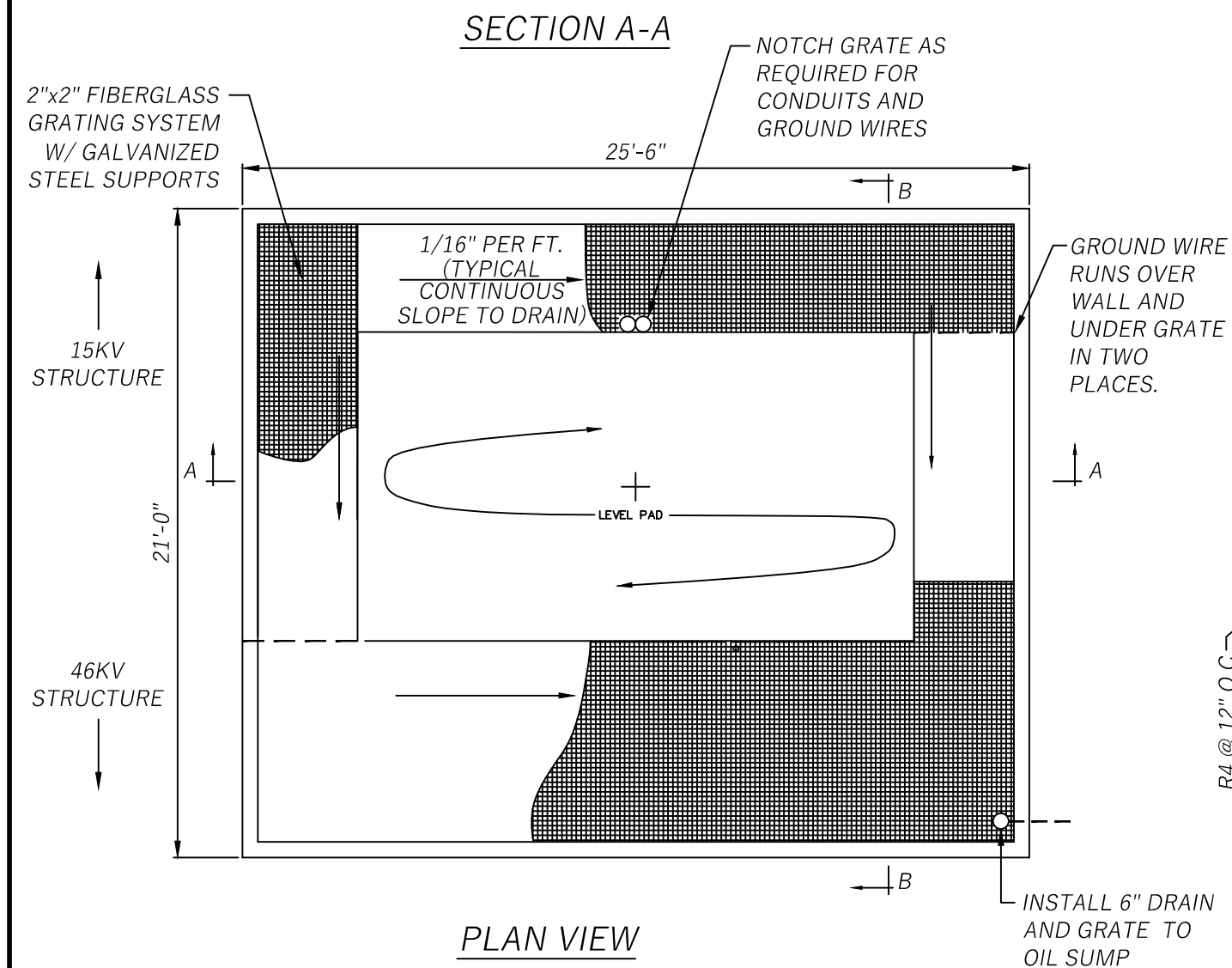
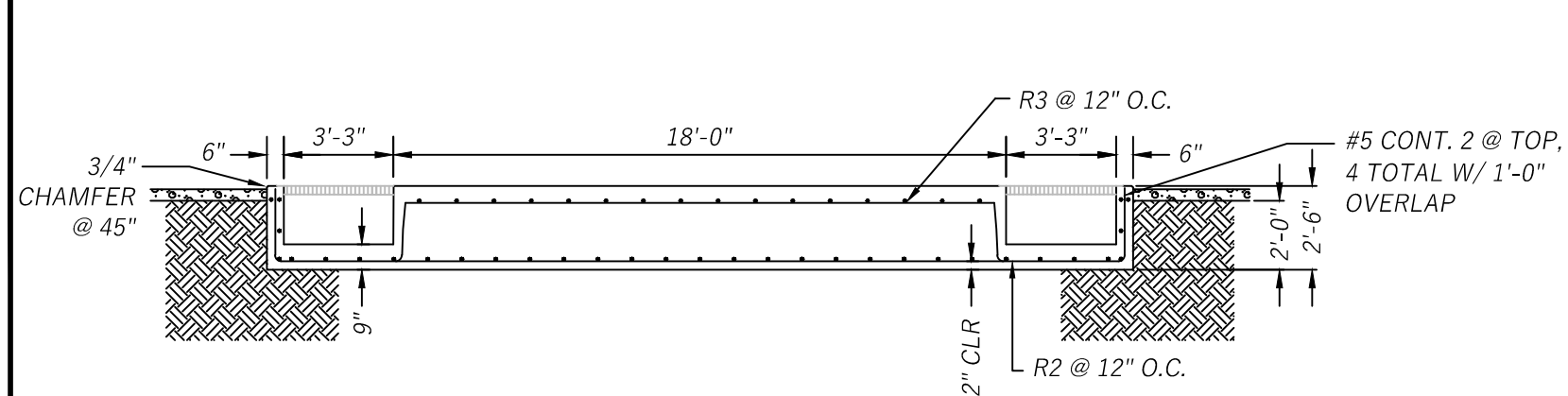
- GENERAL WEATHER CONDITIONS

- CONCRETE SLUMP

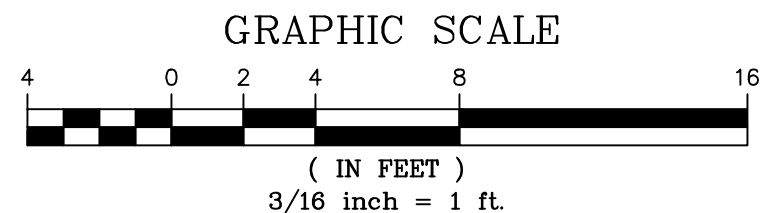
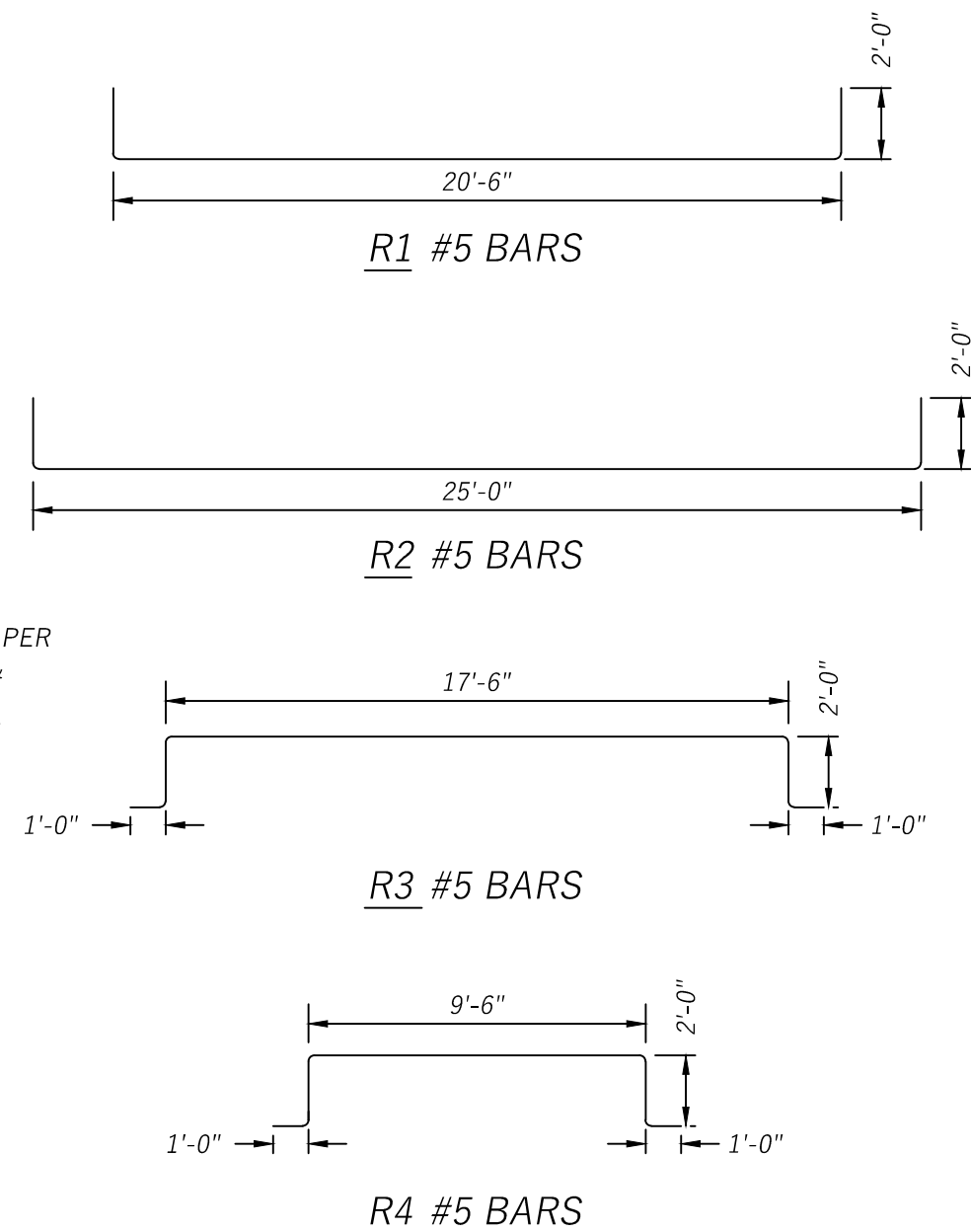
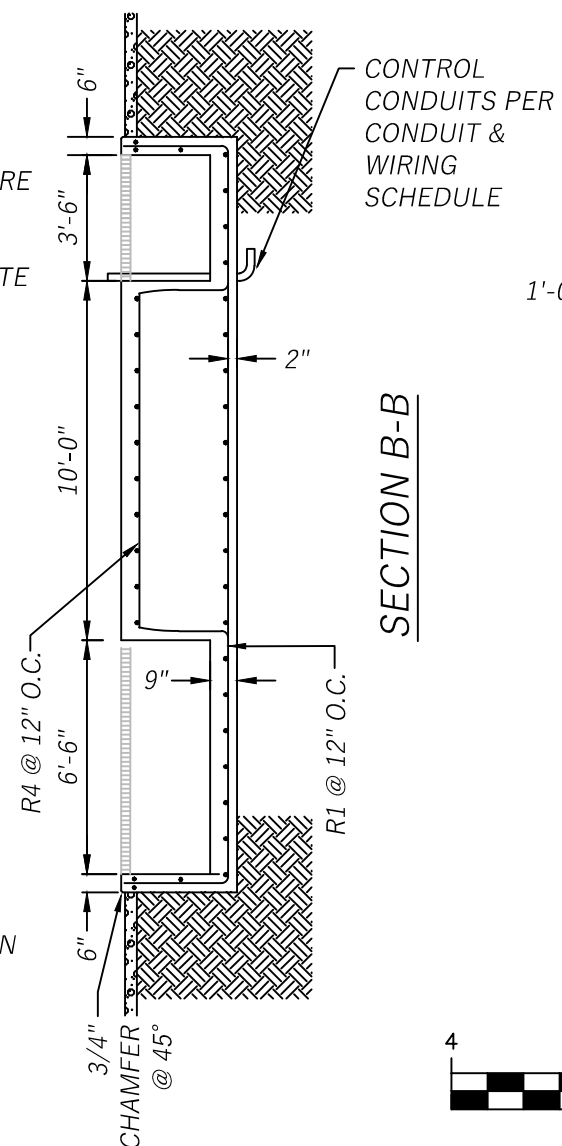
- AIR CONTENT
4. ALL EXTERNAL EDGES SHALL HAVE A 3/4" - 45 DEGREE CHAMFER.
5. BACKFILL AROUND THE SLAB OR TOP PORTION OF PIER USING EXCAVATED MATERIAL FREE FROM ROOTS, ORGANIC MATTER, TRASH, DEBRIS, AND ROCKS LARGER THAN 3-INCHES. PLACE MATERIAL IN MAXIMUM LOOSE LAYERS OF 6-INCHES, AND COMPACT EACH LAYER WITH A MINIMUM OF 3 PASSES OF VIBRATORY RAMMER



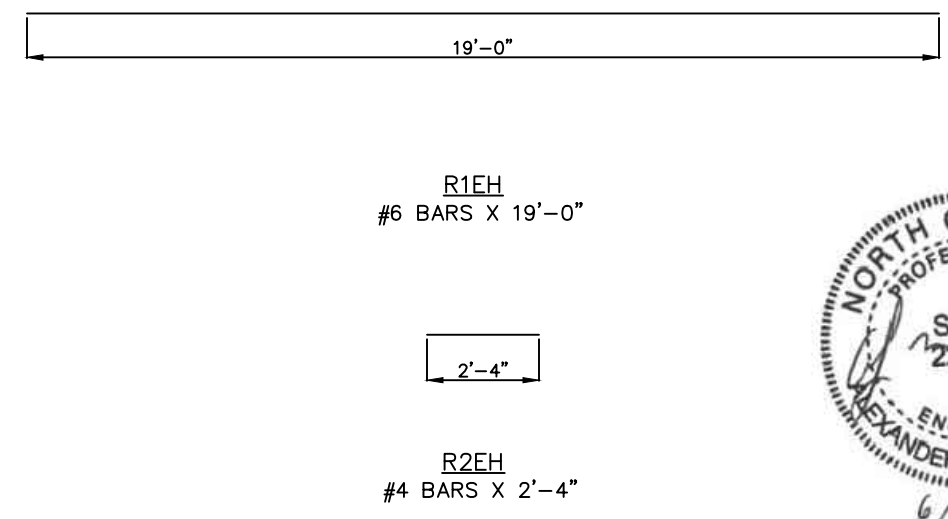
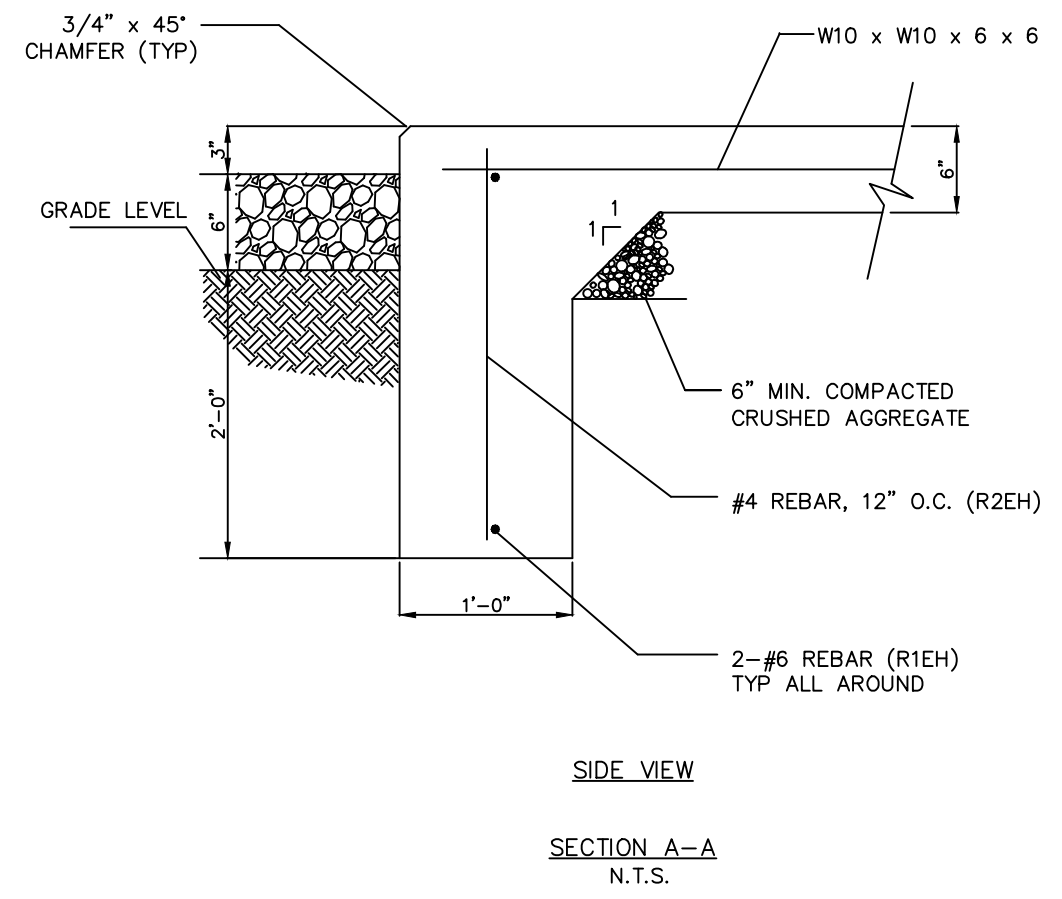
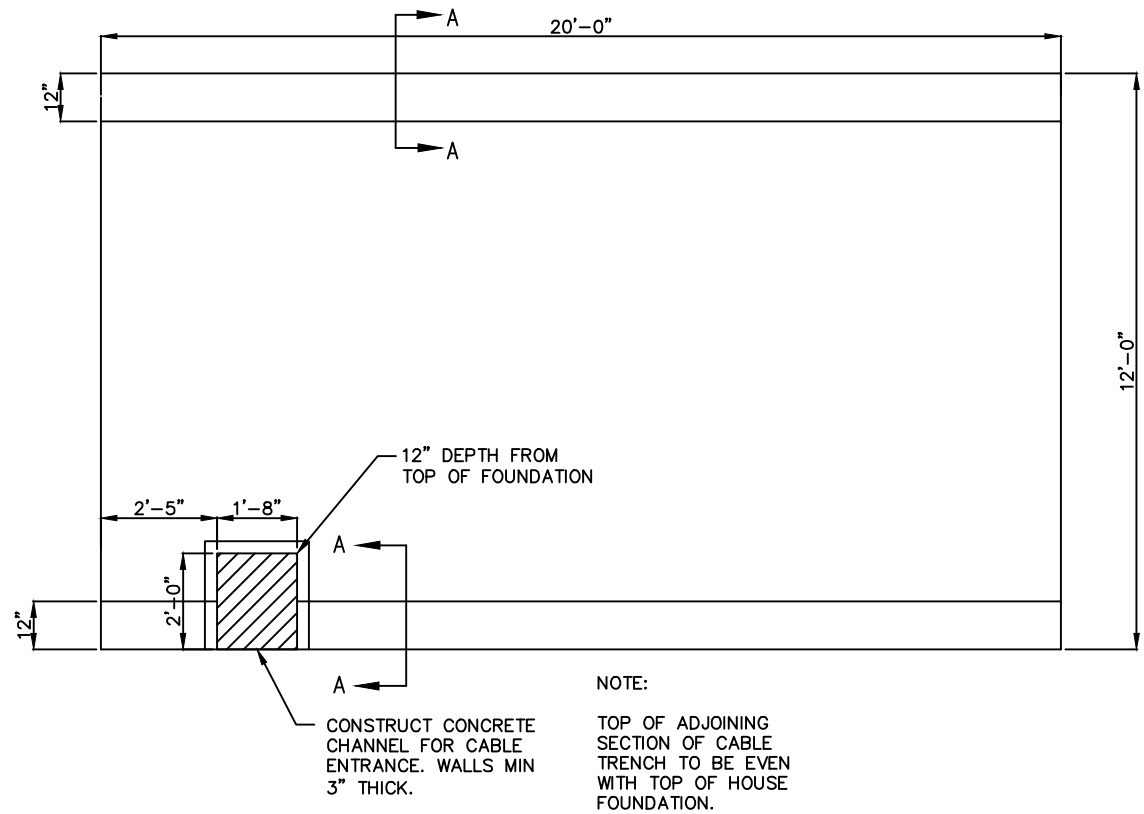
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NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION				PINEVILLE, NORTH CAROLINA		24-40-22
									DELIVERY NO. 4 SUBSTATION TRANSFORMER, CIRCUIT SWITCHER, CIRCUIT BREAKERS, AND EQUIPMENT BUILDING FOUNDATION NOTES		SHEET 1 OF 1



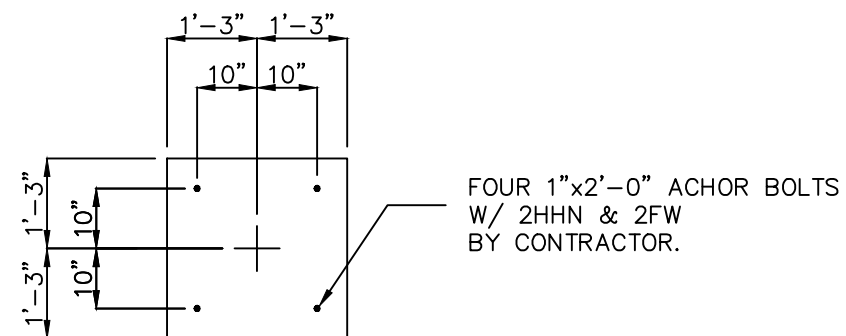
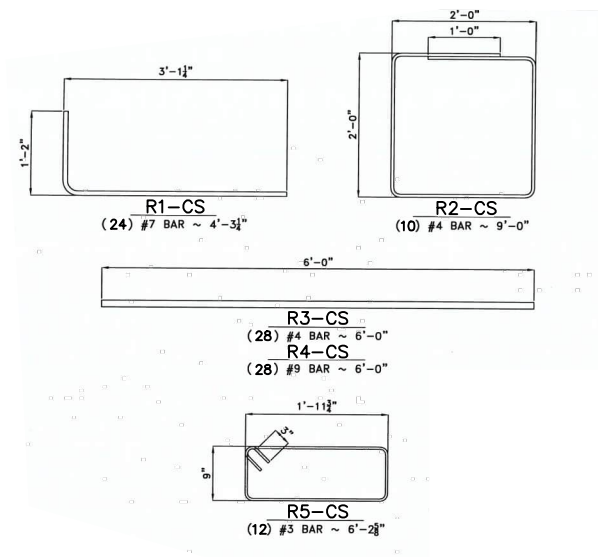
NOTE:
PROVIDE 3/4" CHAMFER ON PERIMETER EXPOSED EDGES.



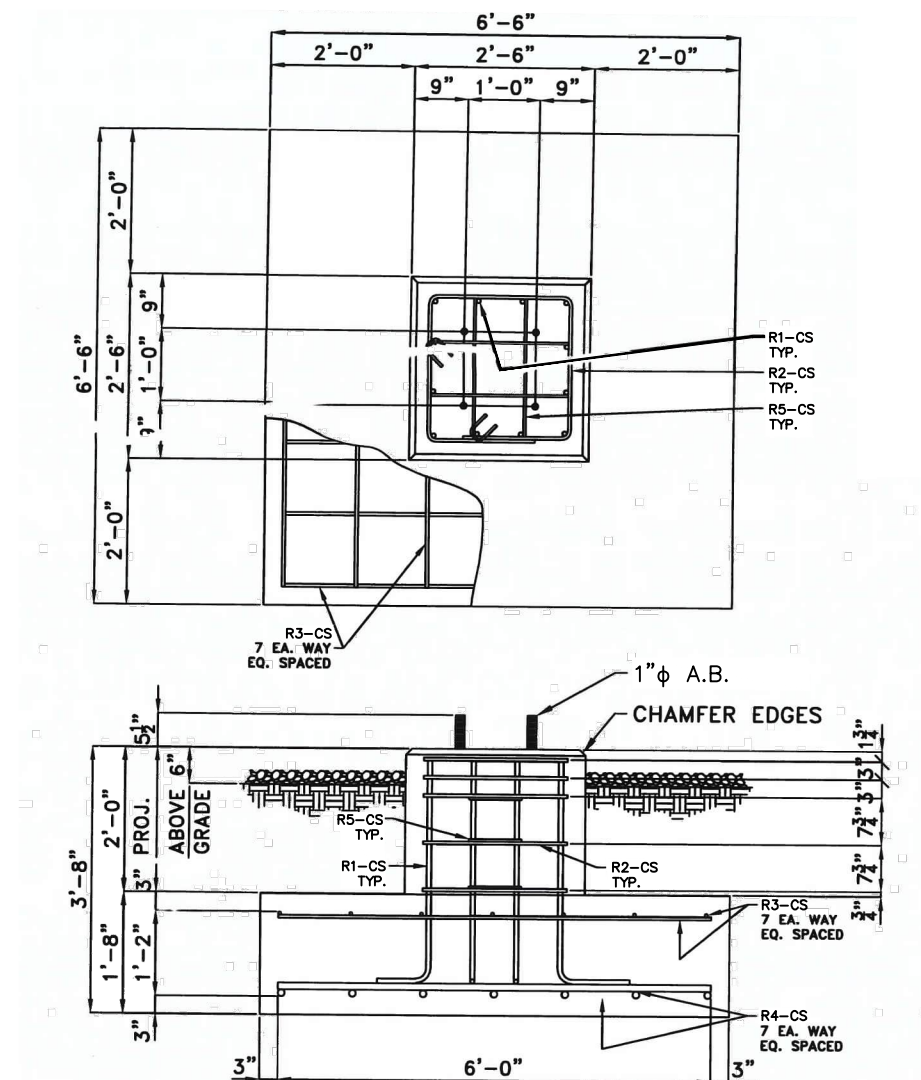
REVISIONS			REVISIONS			<div><div><div></div><div></div></div><div>Electric Transmission, Distribution, & Substations SCADA Systems; Load Management Peak Generation; Utility Rates GIS/Mapping</div><div><div>SOUTHEASTERN</div><div>Consulting Engineers, Inc.</div><div>600 Minuet Lane, P.O. Box 240436, Charlotte, NC 28224 TEL (704) 523-6045 FAX (704) 523-8317 License No.: F-0181</div></div></div>	TOWN OF PINEVILLE		DRAWING NO.:
NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION		PINEVILLE, NORTH CAROLINA		24-40-23



REVISIONS			REVISIONS			<div><div></div><div></div></div> <div>Electric Transmission, Distribution, & Substations SCADA Systems; Load Management Peak Generation; Utility Rates GIS/Mapping</div> <div>SOUTHEASTERN Consulting Engineers, Inc. 600 Minuet Lane, P.O. Box 240436, Charlotte, NC 28224 TEL (704) 523-6045 FAX (704) 523-8317 License No.: F-0181</div>	TOWN OF PINEVILLE PINEVILLE, NORTH CAROLINA	DRAWING NO.: 24-40-24
NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION			
1	5-13-24	ISSUED FOR CONSTRUCTION						
						SCALE: 1/4" = 1'-0"	DELIVERY NO. 4 SUBSTATION EQUIPMENT HOUSE FOUNDATION	SHEET 1 OF 1
						DATE ISSUED: 5-27-25		
						DESIGNED BY: A.J.M.		
						DRAWN BY: K.V.C.		
						CHECKED BY: A.J.M.		
						APPROVED BY: A.J.M.		



BASE & ANCHOR BOLT PLAN



REVISIONS			REVISIONS			<div><div></div><div></div></div> <div>Electric Transmission, Distribution, & Substations SCADA Systems; Load Management Peak Generation; Utility Rates GIS/Mapping</div> <div><div>SOUTHEASTERN</div><div>Consulting Engineers, Inc.</div><div>600 Minuet Lane, P.O. Box 240436, Charlotte, NC 28224 TEL (704) 523-8045 FAX (704) 523-8317</div></div>	TOWN OF PINEVILLE		DRAWING NO.:
NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION		PINEVILLE, NORTH CAROLINA		24-40-25
						DELIVERY NO. 4 SUBSTATION			
						CIRCUIT SWITCHER FOUNDATION DETAILS		SHEET 1 OF 2	

EXHIBIT B2

ITEM II. **CONSTRUCTION SPECIFICATIONS** **FOR** **GROUNDING AND BONDING SYSTEMS**

1.00 Grounding and Bonding Systems

1.01 General

This section covers the work necessary to furnish and install complete, ready for operation the grounding and bonding system. Grounding systems are intended to protect personnel and equipment from abnormal over-voltages and the effects of ground faults. Grounding conductors shall be placed as shown prior to backfill. All grounding material will be furnished by the Owner.

1.02 System and Equipment Grounding and Bonding

Grounding conductors shall be copper conductors as specified.

All buried connections shall be made with Owner furnished connectors.

The Contractor shall exercise care to insure good ground continuity, in particular between the conduit system and equipment frames and enclosures. Where necessary, bonding jumpers or grounding conductors shall be installed.

2.00 Ground Grid

Where shown on the Plans, the Contractor shall install a system of grounding conductors and driven electrodes which hereinafter is called the ground grid. The grid is intended to connect together the various grounding systems.

Grounding electrodes shall be copper-weld or equal rods of not less than 5/8 inch diameter and not less than 20 feet long, except as otherwise shown or specified. They shall be driven where shown on drawings.

The grounding grid conductors shall be bare copper conductors, and they shall be embedded in backfill material around the structures as shown. The grounding conductors shall be installed at sufficient depth to avoid conflicts with other underground obstructions, such as conduits, cable trench and drainage pipes, but in no case shall the depth be less than 2'-0".

All underground conductors shall be laid slack and where exposed to mechanical injury shall be protected by pipes or other substantial guards. If guards are iron pipe or other magnetic material, conductors shall be electrically connected to both ends of the guard to prevent the inductive choke effect.

2.01 Fence Grounding

Ground grid installation, also includes attaching conductors to substation fence as shown on grounding plan and details.

2.02 Future Equipment Leads

Where structures and equipment are to be installed in future the Contractor shall leave a 1/0 copper lead reaching three feet above grade taped in neat coils at nearest foundation. Two 4/0 copper leads shall be installed at transformer pad, be routed under grating, and reach an additional two feet above opposite corners of the supportive center pad.

BILL OF MATERIAL				
SUBSTATION ENTERPRISES				
145 Commercial Court			TOWN OF PINEVILLE	
P.O. Box 2010			DELIVERY NO. 4 SUBSTATION	
Alabaster, AL 35007				
Ph. 205-685-2755				
Fax. 205-685-2753			PROJECT NO:	IK-6855
ITEM	QTY	MFG	CAT. NO.	DESCRIPTION
1	26622	MID		STEEL STRUCTURES, HOT-DIPPED GALVANIZED AFTER FABRICATION AND ASSEMBLED WITHIN LIMITATIONS OF TRUCKING
2	40	UNI		ANCHOR BOLT: 1-1/4" WITH 2HHN,2FW
2A	32	UNI		ANCHOR BOLT: 1" WITH 2HHN,2FW
8	6	SEI		SWITCH OPERATOR GROUND PLATFORM, 3' X 4'
8A	24	SEF	GTC2-14	GROUND CONN
10	1	CLEAV-PRICE	V2-CA	SWITCH: 46 KV 1200 AMP GROUP OPERATED VERTICAL BREAK, ALUMINUM LIVE PARTS, COMPLETE WITH STANDARD ARCING HORNS, SWIND HANDLE OPERATOR, POSITION INDICATORS, WITH TR-214 INSULATORS
11	1	CLEAV-PRICE	V2-CA	SWITCH: 15 KV 2000 AMP GROUP OPERATED VERTICAL BREAK, VACUUM INTERRUPTERS, SWING HANDLE OPERATOR, AND TR-205 INSULATORS
12	4	CLEAV-PRICE	V2-CA	SWITCH: 15 KV 1200 AMP GROUP OPERATED VERTICAL BREAK, STANDARD ARCING HORNS, SWING HANDLE OPERATOR, AND TR-205 INSULATORS
15	36	CLEAV-PRICE	LCO-C	SWITCH: 15 KV 1200 AMP HOOKSTICK DISCONNECT WITH TINNED TERM PADS, AND TR-205 PORCELAIN INSULATORS
15	144	SEIB	GMB40058	BOLTS: 5/8" X 4" GMB W/HN,LW,WW
16	6	CLEAV-PRICE	LCO-C	SWITCH: 15 KV 2000 AMP HOOKSTICK DISCONNECT WITH TINNED TERM PADS, AND TR-205 PORCELAIN INSULATORS

ITEM	QTY	MFG	CAT. NO.	DESCRIPTION
16	24	SEIB	GMB17558	BOLTS: 5/8" X 1-3/4" GMB W/HN,LW
21	7	S&C	192222R2	FUSE DISCONNECT, 15 KV SMD-20 180 DEG OPENING, VERTICAL OFFSET STYLE, TR-205 INSULATORS
21	24	SEIB	GMB200	BOLTS: 1/2" X 2" GMB W/HN,LW,WW
21	4	SEIB	GMB175	BOLTS: 1/2" X 1-3/4" GMB W/HN,LW,FW
21A	2	S&C	612005	FUSE UNIT, 5E STANDARD SPEED, SMU-20
21B	12	S&C	702003	FUSE UNIT, 3K, SMU-20
21C	14	T&B	HTDE238012	CURRENT LIMITING FUSE
30	6	NGK	PS02510	INSULATOR: 46 KV STATION POST TR-214
30	24	SEIB	GCS100	BOLTS: 1/2" X 1" GCS W/LW,FW
31	65	NGK	PS01110	INSULATOR: 15 KV STATION POST TR-205
31	260	SEIB	GCS100	BOLTS: 1/2" X 1" GCS W/LW,FW
40	6	SIEMENS	3EL10271PE214YH 5	LIGHTNING ARRESTER, 22 KV MCOV STATION CLASS POLYMER
40	18	SEIB	GMB275	BOLTS: 1/2" X 2-3/4" GMB W/HN,LW,FW
41	12	SIEMENS	3EK81004EA4	LIGHTNING ARRESTER, 8.4 KV MCOV RISER POLE POLYMER
41	12	SEIB	GMB200	BOLTS: 1/2" X 2" GMB W/HN,LW
50	3	RITZ	VZF15-20	POTENTIAL TRANSFORMER, 15 KV, 60:1, 0.3 W,X,M,Y
50	12	SEIB	GMB15038	BOLTS: 3/8" X 1-1/2" GMB W/HN,LW
51	6	BY	OWNER	CURRENT TRANSFORMER
51	24	SEIB	GMB175	BOLTS: 1/2" X 1-3/4" GMB W/HN,LW
52	1	EATON		STATION SERVICE TRANSFORMER 25 KVA, 7.2/12.47Y - 120/240V SINGLE PHASE
52	4	SEIB	GMB17558	BOLTS: 5/8" X 1-3/4" GMB W/HN,LW
53	3	BY	OWNER	POTENTIAL TRANSFORMER
53	12	SEIB	GMB15038	BOLTS: 3/8" X 1-1/2" GMB W/HN,LW

ITEM	QTY	MFG	CAT. NO.	DESCRIPTION
61	960	WMWA		BUS: 4 X 4 X 1/4 UABC (14 PCS @ 40', 16 PCS @ 25')
63	380	WMWA		BUS: 1/2" X 4" AL BAR (19 PCS @ 20')
66	450	NEHR		CABLE: 750 MCM BARE COPPER
67	600	NEHR		CABLE: 500 MCM BARE COPPER
68	3000	NEHR		CABLE: 4/0 BARE COPPER
69	1200	NEHR		CABLE: 1/0 BARE COPPER
69A	600	NEHR		CABLE: #2 BARE COPPER SOLID TINNED
70	12			TEE CONN BOLTED 4" UABC MAIN TO 4" AL BAR TAP
70	96	SEIB	SSB175	BOLTS: 1/2" X 1-3/4" SSB W/HN,LW,2FW
70A	10			TEE CONN BOLTED 4" UABC MAIN & TAP
70A	40	SEIB	SSB175	BOLTS: 1/2" X 1-3/4" SSB W/HN,LW,2FW
70B	3	SEF	TCRCT-2020H	TEE CONN BOLTED 500 CU MAIN & TAP
70C	6	SEF	TDRDT-3434	TEE CONN BOLTED (2) 750 CU MAIN & TAP
70D	6	SEF	UNN-5361	TEE CONN BOLTED 750 CU TO LA PAD
70F	21			TEE CONN BOLTED UABC MAIN TO 4" AL BAR TAP
70F	84	SEIB	SSB175	BOLTS: 1/2" X 1-3/4" SSB W/HN,LW,2FW
70G	3	SEF	UN-4656T	TEE LUG CONN 500 CU TO LA PAD
71A	7			COUPLER STRAIGHT 4" UABC
71A	7	SMI	2SB1	SPLICE PLATES
71A	14	SMI	3SB1	SPLICE PLATES
71A	28	SEIB	SSB150	BOLTS: 1/2" X 1-1/2" SSB W/HN,LW,2FW
71A	56	SEIB	SSB175	BOLTS: 1/2" X 1-3/4" SSB W/HN,LW,2FW
72	123	SEF	FNCT-20H-4A-SS	TERM CONN BOLTED 500 CU TO 4-HOLE PAD

ITEM	QTY	MFG	CAT. NO.	DESCRIPTION
72	492	SEIB	SSB150	BOLTS: 1/2" X 1-1/2" SSB W/HN,LW,2FW
72B	30	SEF	FNCT2-34-4B-SS	TERM CONN BOLTED (2) 750 CU TO 4-HOLE PAD
72B	120	SEIB	SSB200	BOLTS: 1/2" X 2" SSB W/HN,LW,2FW
72C	2	SEF	FNCT-34-4A-SS	TERM CONN BOLTED 750 CU TO 4-HOLE PAD
72C	8	SEIB	SSB175	BOLTS: 1/2" X 1-3/4" SSB W/HN,LW,2FW
72D	3			TERM CONN 4" UABC TO 4-HOLE PAD AT 90 DEGREES
72D	3	SMI	5AC1	ANGLE CLIP, 4" UABC
72D	24	SEIB	SSB200	BOLTS: 1/2" X 2" SSB W/HN,LW,2FW
72E	39			TERM CONN 4" AL BAR TO 4-HOLE PAD
72E	156	SEIB	SSB200	BOLTS: 1/2" X 2" SSB W/HN,LW,2FW
72F	21	SEF	FNCT-12-2A-SS	TERM CONN BOLTED #2 CU TO 2-HOLE PAD
72F	42	SEIB	SSB175	BOLTS: 1/2" X 1-3/4" SSB W/HN,LW,2FW
72G	12	SEF	FNCT-20H-2B-SS	TERM CONN BOLTED 500 CU TO 2-HOLE PAD (FOR TERMINATOR)
72G	24	SEIB	SSB150	BOLTS: 1/2" X 1-1/2" SSB W/ HN, LW, 2FW
73	3	SEF	CJ-3	BUS SUPPORT 500 CU TO 3" B.C.
73A	68			BUS SUPPORT 4" UABC/AL BAR TO 3" B.C.
73A	49	SMI	SLP-3	LOCKING STRIPS, 3" B.C. (FOR SLIP-FIT ONLY)
73A	136	SEIB	GCS100	BOLTS: 1/2" X 1" GCS W/ SS LW, SS FW
74A	12	SMI	ST-100	HOTLINE STIRRUP 2-HOLE TO LOOP
74A	24	SEIB	SSB150	BOLTS: 1/2" X 1-1/2" SSB W/HN,LW,2FW
74B	12	LH	P1530AGP	HOT LINE CLAMP
75	22	SEF	GFCS-5050	PARALLEL CONN 1/0 CU
78	25	SMI	TP-C	TRANSITION PLATE 4-HOLE
78A	7	SMI	TP-B	TRANSITION PLATE 2-HOLE

ITEM	QTY	MFG	CAT. NO.	DESCRIPTION
78B	3	SMI	TP-D	TRANSITION PLATE 4-HOLE
79	18	SEF	GFCS-6262	CABLE SPACER, 750 CU
79A	7	SEF	SNFT-44-4A	STUD CONNECTOR, 1-1/2"-12 STUD TO 4-HOLE PAD
80	50	SEF	GTC2-14	GROUND CONN TWO PIECE DOUBLE GROOVE 4/0 CU TO FLAT
80A	150	SEF	GTC-14	GROUND CONN TWO PIECE SINGLE GROOVE 4/0 CU TO FLAT
80B	12	SEF	1-OC-2648	GROUND CLAMP 1-1/2" PIPE TO 1/0 CU
80D	16	SEF	FNCT-12-2A-SS	GROUND TERMINAL 1/0--4/0 CU TO 2-HOLE PAD
80D	32	SEIB	SSB175	BOLTS: 1/2" X 1-3/4" SSB W/HN,LW,2FW
81	2	SEF	GU1-6312	FENCE CLAMP 3-1/2" IPS GATE POST TO 4/0 CU
81A	4	SEF	1-OC-2648	FENCE CLAMP 1-1/2" IPS GATE FRAME TO #2--2/0 CU
81B	3	SEF	GU1-6012	FENCE CLAMP 2-1/2" IPS CORNER POST TO 4/0 CU
81C	14	SEF	GU1-5812	FENCE CLAMP 2" IPS LINE POST TO 4/0 CU
81D	22	SEF	1-OC-2548	FENCE CLAMP 1-1/4" IPS TOP RAIL TO #2 CU
81E	72	BURNDY	KSU23	FENCE CLAMP SPLIT BOLT #2 CU TO BARB WIRE
81G	2	BURNDY	BD24G203	GROUND BRAID
82	28	NEHR		GROUND ROD 3/4" X 8' COPPERWELD SECTIONAL
82A	16	PRI		GROUND ROD COUPLER 3/4"
82B	3	PRI		GROUND ROD DRIVING STUD
83	1	HARGER	GS344/0P	MOLD, 3/4" ROD TO 4/0 CU
83	20	HARGER	NUWTUBE150	WELD METAL
83A	1	HARGER	XO4/04/0Q	MOLD CROSS CONN 4/0 TO 4/0

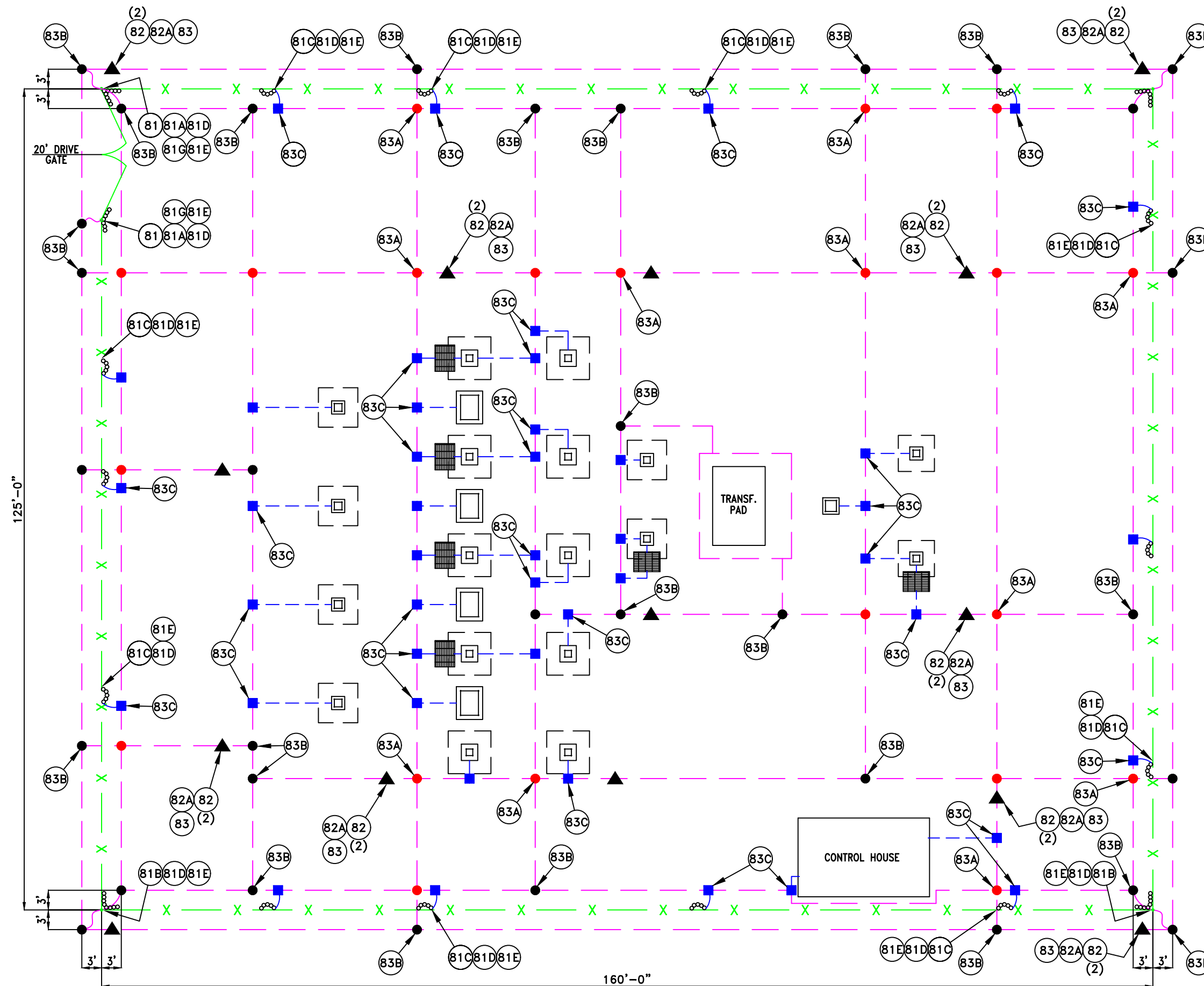
ITEM	QTY	MFG	CAT. NO.	DESCRIPTION
83A	30	HARGER	NUWTUBE250	WELD METAL
83B	1	HARGER	RT4/04/0B	MOLD, TEE CONN 4/0 TO 4/0 CU
83B	35	HARGER	NUWTUBE150	WELD METAL
83C	2	HARGER	RT4/01/0B	MOLD, TEE CONN 4/0 TO 1/0 CU
83C	60	HARGER	NUWTUBE90	WELD METAL
83E	3	HARGER	MH1	MOLD HANDLES
101	9	UTICOM	U1014D-G-U2200R	SIGN: "DANGER - HIGH VOLTAGE"
101A	2	UTICOM	U1014N-PPNT-U2200	SIGN: "NOTICE - NO TRESPASSING"
101B	17	UTICOM	U1014W-G-U2200R	SIGN: "WARNING HAZARDOUS VOLTAGE INSIDE - KEEP OUT"
101C	2	UTICOM	U7010D-S2-U2200R	SIGN: "DANGER" BATTERY SIGNS
102	1	HAST	3118	HOOKSTICK DISCONNECT STICK
102	1	V&W		CONTAINER
102	1	HAST	01-3200-41	FENCE MOUNTING KIT
102	1	HAST	01-3200	CANISTER KIT
103	1	KEN		DISCONNECT TYPE TEST SWITCH, STATES C3-403-D
103	1	KEN		ENCLOSURE, HOFFMAN A12R126HCR
103	1	KEN		BACK PANEL, HOFFMAN A12N12P
104	1	KEN		STATION SERVICE PANEL, OUTDOOR CIRCUIT BREAKER LOAD CENTER RATED SINGLE PHASE, THREE WIRE, 120/240 VOLTS AC, 200 AMPS, 10,000 AMPS SYMMETRICAL SHORT CIRCUIT RATING. WITH ONE 200 AMP MAIN BREAKER, (42) SINGLE-POLE 1" BREAKER POSITIONS, AN EQUIPMENT GROUNDING BAR, IN A NEMA 3R ENCLOSURE WITH PROVISION FOR GROUNDING AND A CIRCUIT DIRECTORY. LOAD CENTER FURNISHED WITH (1) TWO-POLE 60A BREAKER, (16) TWO-POLE 20A BREAKERS, AND (8) SINGLE POLE 20A BREAKERS AND WITH CONDUIT HUB FOR 2" RISER. RISER FURNISHED WITH WEATHERHEAD AND MOUNTING STRAPS TO REACH TO THE SECONDARY TERMINALS OF THE SS XFMR

ITEM	QTY	MFG	CAT. NO.	DESCRIPTION
105	1	KEN		MANUAL TRANSFER SWITCH
106	1	KEN		GALVANIZED METAL BOX, 12" X 12" X 20"
110	1	CONCAST		CABLE TRENCH SYSTEM TO INCLUDE THE FOLLOWING:
110	10	CONCAST	8820PT	PEDESTRIAN/TIER 8 CHANNEL, 96"
110	46	CONCAST	8021PTP	PED TRAFFIC POLYMER COVER, 24"
110	2	CONCAST	8022PT(0X20)	PED CHANNEL UNIVERSAL, 48"
110	3	CONCAST	8023PT	PED/TIER 8 TRAFFIC END PLATE
110	1	CONCAST	8020HT 12"	HEAVY TRAFFIC CHANNELL 12"
110	4	CONCAST	8820HT3	HEAVY TRAFFIC CHANNELL 96"
110	16	CONCAST	8021HT3P	HEAVY TRAFFIC COVER, 24"
110	1	CONCAST	8021HT3P 12"	HEAVY TRAFFIC COVER, 12"
110	1	CONCAST	8023HT3	HEAVY TRAFFIC END PLATE
110	2	CONCAST	8000	MANUAL LIFTING TOOL
110	25	CONCAST	8002R	CABLE CLIP
110	25	CONCAST	8002PT	CABLE CLIP
110	2	CONCAST	8006	CORNER PROTECTOR
110	4	CONCAST	9002	SWIVEL HOIST RING
110	1	CONCAST	9003	4-WAY LIFTING CHAIN
115		BY	OTHERS	TERMINATORS
116	6	TE	BCAC-G-IC-10.5D/20 (B6)	BUSHING CONNECTION INSPECTION COVER, TRANSFORMER LV BUSHING
117	3	TE	BCIC-G-13D/13-HO (B3)	BUSHING CONNECTION COVER, TRANSFORMER LA
118	142	MIDSUN	138-24-01G	BUS ISOLATION E/FLEX BARRIER
119	45	TE	BSIG-G-100/400 (B3)	ANGLE BUS SUPPORT COVER
120	18	TE	BCAC-G-4D/13-2(B18)	TERMINATION COVER

ITEM	QTY	MFG	CAT. NO.	DESCRIPTION
121	24	TE	BCAC-G-IC-7D/12 (B6)	BREAKER BUSHING COVER
122	6	TE	BCAC-G-IC-5D/6 (B6)	PT BUSHING COVER
123	24	TE	BCAC-G-AR-5D- 2(B24)	LIGHTNING ARRESTER COVER
124	200	TE	MVCC-G-10/.40 (B100)	MEDIUM VOLTAGE CONDUCTOR COVER (UP TO 0.45")
125	400	TE	MVCC-G-25/1.0 (B25)	MEDIUM VOLTAGE CONDUCTOR COVER (0.75" TO 1.125")
127	6	TE	BCAC-P-IC-5D/6 (B6)	STATION SERVICE TRANSFORMER BUSHING COVER
160		BY	OTHERS	LIGHTS, CONDUIT, CONTROL CABLE, JUNCTION BOXES, ETC

LEGEND

- x — x — CHAIN LINK FENCE
- #2 CU TINNED (69A)
- — — 4/0 COPPER (68)
- - - - - 1/0 COPPER (TAPS) (69)
- CROSS GROUND CONNECTION 4/0 TO 4/0 (83A)
- TEE GROUND CONNECTION 4/0 TO 4/0 (83B)
- TEE GROUND CONNECTION 4/0 TO 1/0 (83C)
- ▲ (2) 3/4" x 8'-0" GROUND ROD (82) (82A)
- ▤ 3'x4' GROUND MAT (8)
- FOUNDATIONS



GROUNDING PLAN

FOR APPROVAL
ONLY

DATE: 06-05-25 BY: LJW

**Substation
Enterprises, Inc.**

145 Commercial Court, P.O. Box 2010
Alabaster, AL 35007
Phone: (205)685-2755, Fax: (205)685-2753

TOWN OF PINEVILLE

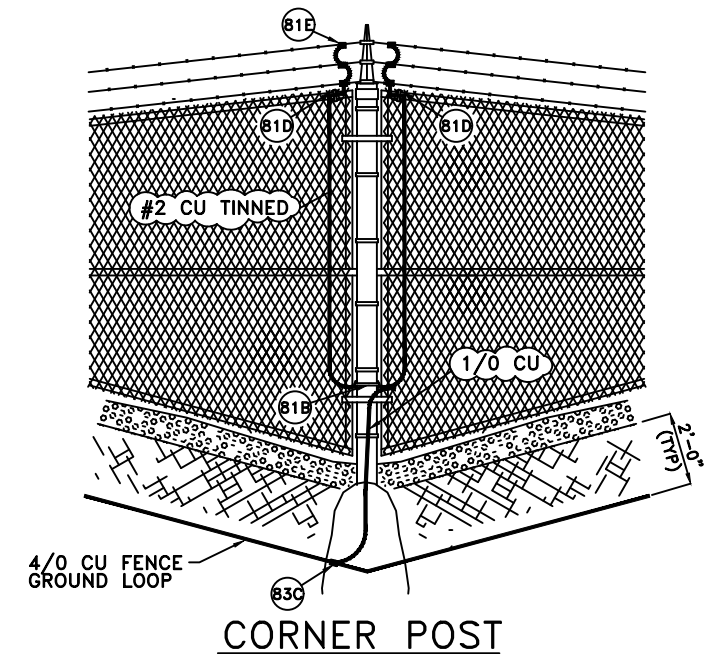
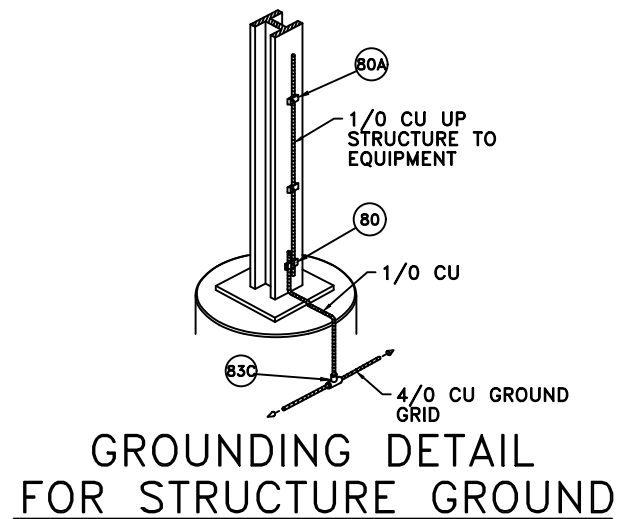
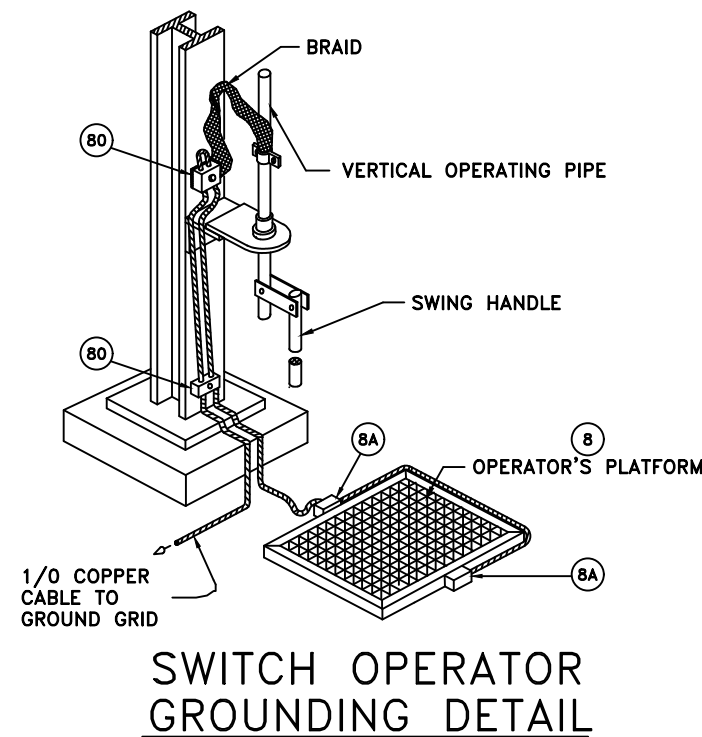
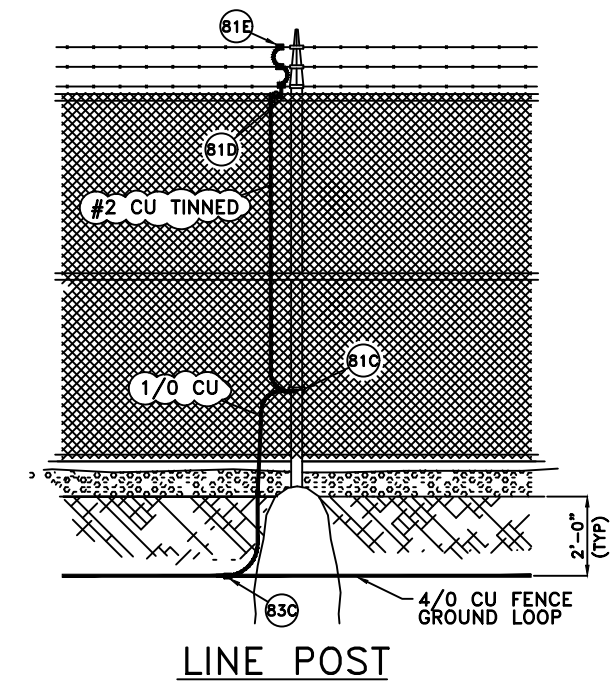
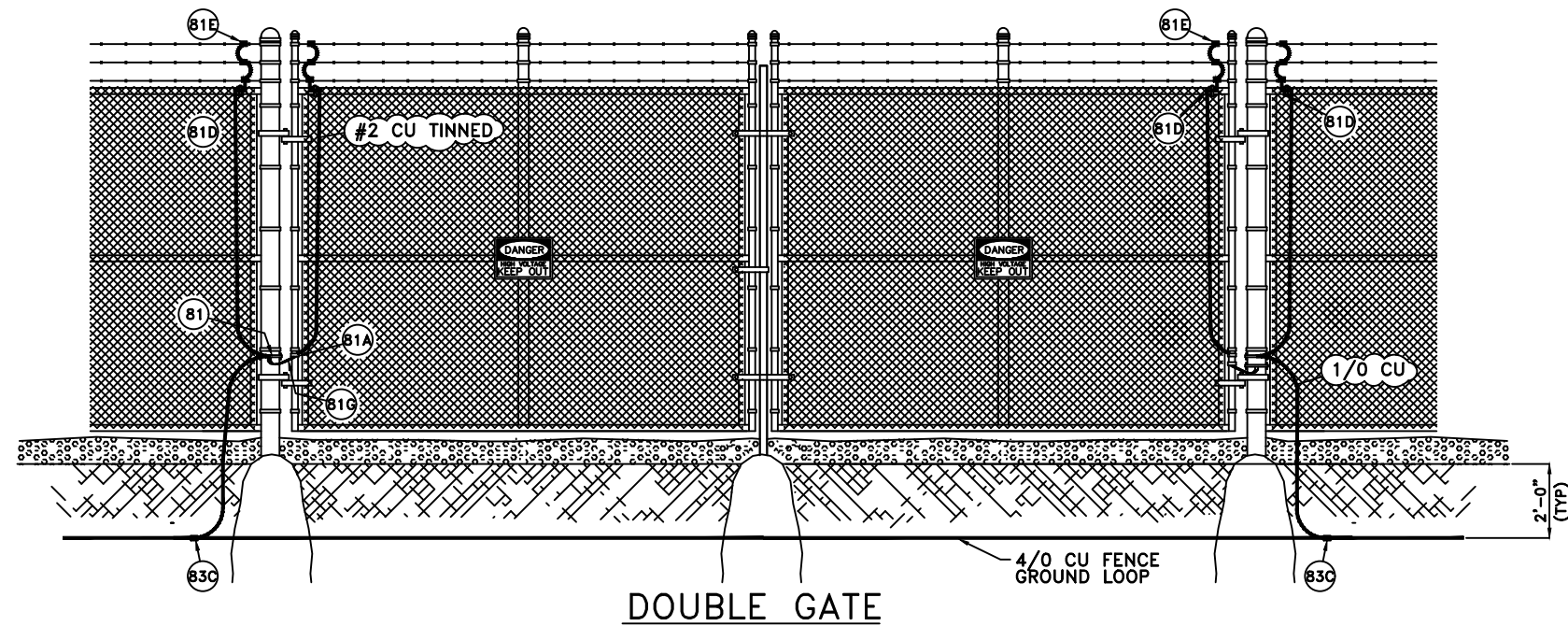
DELIVERY NO. 4 (46/15kV) SUBSTATION

GROUNDING PLAN

DATE: 06-04-25 DRAWN BY: LJW CHECKED BY: LJW DRAWING NUMBER:


SCALE: 1/8"=1'-0" APPROVED BY: HK-6855-GP1

REV	DATE	DESCRIPTION



ITEM #	DESCRIPTION
81	GROUND CONN: GATE POST TO 4/0 CU, #2 TINNED
81A	GROUND CONN: GATE FRAME TO #2 TINNED
81B	GROUND CONN: CORNER POST TO 4/0 CU AND (2) #2 TINNED
81C	GROUND CONN: LINE POST TO 4/0 CU AND #2 TINNED
81D	GROUND CONN: TOP RAIL TO #2 TINNED
81E	GROUND CONN: USED FOR #2 TINNED TO BARBED WIRE
81G	BRAID: GATE POST TO GATE FRAME

REV	DATE	DESCRIPTION



Substation Enterprises, Inc.

145 Commercial Court, P.O. Box 2010
Alabaster, AL 35007
Phone: (205)685-2755, Fax: (205)685-2753

TOWN OF PINEVILLE

DELIVERY NO. 4 (46/15kV) SUBSTATION

GROUNDING DETAILS

DATE: 06-04-25	DRAWN BY: LJW	CHECKED BY: LJW	DRAWING NUMBER:
SCALE: NONE	APPROVED BY:		HK-6855-GP2

EXHIBIT B2

ITEM III. **CONSTRUCTION SPECIFICATIONS** **FOR** **CABLE TRENCH, CONDUIT, AND** **OIL CONTAINMENT SYSTEM**

1.00 General

This section covers the work necessary to install complete an Owner furnished electrical precast concrete cable trench and a Contractor furnished conduit system and oil containment system.

1.01 Cable Trench

The precast concrete cable trench system installed in earth trenches with covers extending above the surrounding gravel rock surfacing shall be constructed at the locations shown on the construction drawings.

The trench system shall consist of precast concrete member or members and removable cover sections assembled to form a completely enclosed trench with open earth bottom having four inches of Contractor furnished sand bedding.

The trench system shall be constructed to grade as necessary for top of removal covers to be at an elevation approximately two (2) inches above the elevation of the finished rock surfacing of the area as required by the construction drawings, including all necessary excavation and backfill.

1.02 Installation

The trench system shall be installed on a mechanically compacted four inch sand and gravel bedding in accordance with the manufacturer's installation instructions.

All trenches shall be protected against entrance of construction debris, rock and earth during construction and after placing the sand and gravel bedding.

Trenches shall be cleaned out of any foreign material prior to placing cables and before placing covers.

Drainage for the cable trench shall be provided with Contractor furnished gravel, perforated drainage pipe, and geotextile filter cloth, as shown on the construction drawings. A

four inch drain shall be installed under total length of trench. The Contractor shall be responsible for extending the drainage system to the drainage area beyond the fence on the low side of the substation and to outlet to storm water system.

1.03 Material

The trench system shall be Owner furnished and Contractor installed in widths and lengths shown on Concast Drawing 40884-6855. Trench shall be 12" deep. The precast trench covers shall be furnished in section of lightweight construction, sized to permit removal by a single person. All covers shall have slots for lifting tools.

2.00 Conduits, Raceways, and Wireways

2.01 General

This section covers the work necessary to furnish and install, complete, ready for operation the electrical raceway systems. The Contractor shall submit approval drawings showing the material to be installed in the work, the details of hangers, sleeves, and inserts, and the locations of all pull and junction boxes.

2.02 Heavy Wall PVC Conduit

Use rigid PVC conduit, Schedule 40, UL listed for concrete-encased, underground direct burial, concealed and direct sunlight exposed use, and UL listed and marked for use with conductors having 90 degrees C insulation. Use conduits, couplings, bushings, elbows, nipples, and other fittings meeting the requirements of NEMA TC 2 and TC 3, Federal Specifications W-C-1094, UL, NEC, and ASTM specified tests for the intended use.

2.03 Fittings

Fittings for PVC conduit shall comply with Standard for PVC Fittings for use with Rigid PVC Conduit and Tubing, NEMA TC-2 and shall be NEMA Type IV. All couplings shall be of the long barrel type.

2.04 Installation

Rigid Polyvinyl chloride conduit, U.L. approved as non-metallic conduit for use above or below ground shall be used underground, in gravel or earth under concrete slab on grade, and in exposed corrosive locations indicated on the drawings.

Underground raceways shall be installed a minimum of 1'-6" below grade. Couplings in multiple conduit runs shall be staggered so that couplings in adjacent runs are not at the same location.

Underground raceways shall maintain a minimum separation of 12 inches vertical and horizontal from other piping systems.

Except as otherwise shown and specified, all conduit work runs shall be parallel to horizontal planes and shall be neatly aligned. Elbows and offsets shall be used wherever possible; for bends made in the field, an approved conduit bending machine shall be used. Field bends shall be symmetrical and carefully made so as to prevent damage or deformation of conduit. Any conduit which has been crushed or deformed in any way shall not be installed. Routing of conduits shall be of the shortest possible and compatible with good layout. the number of bends, offsets and crossovers shall be kept to a minimum. the Contractor shall exercise the necessary precautions to prevent lodgement of dirt in conduits, boxes and fittings during installation. A run of conduit which has become clogged shall be swabbed to remove all foreign matter or shall be replaced.

All conduit shall be made up watertight.

Where practicable, conduit runs shall be slightly pitched to facilitate draining the condensate or shall be otherwise installed to prevent trapping of condensation.

Contractor shall terminate and cap all control conduit runs one foot above grade where indicated on plans. Caps shall not be glued on.

2.05 Empty Raceways

All empty raceways shall be provided with manufactured removable caps and a nylon pull cord.

3.00 Oil Containment System

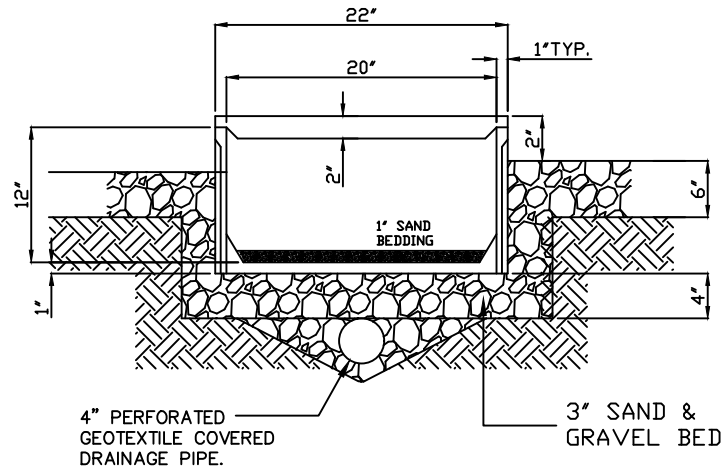
Contractor shall install a drainage system as shown on Drawing 24-40-28 which includes oil sump and drain lines. Drains shall be installed in a manner that provides consistent downward slope and water shall exit beyond station fence to storm water system. Oil sump shall be Vital Fuel Systems, (919) 303-7374, Model SOS-6 with stop valve. Only Engineer approved substitutions are acceptable.

Pineville Del 4 Substation - Conduit Schedule

<u>Conduit #</u>	<u>From</u>	<u>To</u>	<u>Size</u>	<u>Future Function</u>
TX-AC	Power Transformer	Cable Trench	1-1/2"	AC Power
TX-AC	Cable Trench	Station AC Panel	1-1/2"	AC Power
TX-DC	Power Transformer	Cable Trench	1-1/2"	DC Power
TX-1	Power Transformer	Cable Trench	1-1/2"	Control & Status
TX-CT1	Power Transformer	Cable Trench	1-1/2"	Current Transformers
TX-CT2	Power Transformer	Cable Trench	1-1/2"	Current Transformers
TX-FOC	Power Transformer	Cable Trench	1-1/2"	Fiber Communications
CSW-AC	Circuit Switcher	Cable Trench	1-1/2"	AC Power
CSW-AC	Cable Trench	Station AC Panel	1-1/2"	AC Power
CSW-DC	Circuit Switcher	Cable Trench	1-1/2"	DC Power
CSW-1	Circuit Switcher	Cable Trench	1-1/2"	Control
CSW-2	Circuit Switcher	Cable Trench	1-1/2"	Status
CSW-3	Circuit Switcher	Cable Trench	1-1/2"	Status
PT	PT Structure	Cable Trench	1-1/2"	PTs
BK1-AC	Bkr 1	Cable Trench	1-1/2"	AC Power
BK1-AC	Cable Trench	Station AC Panel	1-1/2"	AC Power
BK1-DC	Bkr 1	Cable Trench	1-1/2"	DC Power
BK1-1	Bkr 1	Cable Trench	1-1/2"	Control & Status
BK1-2	Bkr 4	Cable Trench	1-1/2"	Control
BK1-CT	Bkr 1	Cable Trench	1-1/2"	Current Transformers
BK2-AC	Bkr 2	Cable Trench	1-1/2"	AC Power
BK2-AC	Cable Trench	Station AC Panel	1-1/2"	AC Power
BK2-DC	Bkr 2	Cable Trench	1-1/2"	DC Power
BK2-1	Bkr 2	Cable Trench	1-1/2"	Control & Status
BK2-2	Bkr 4	Cable Trench	1-1/2"	Control
BK2-CT	Bkr 2	Cable Trench	1-1/2"	Current Transformers

Pineville Del 4 Substation - Conduit Schedule

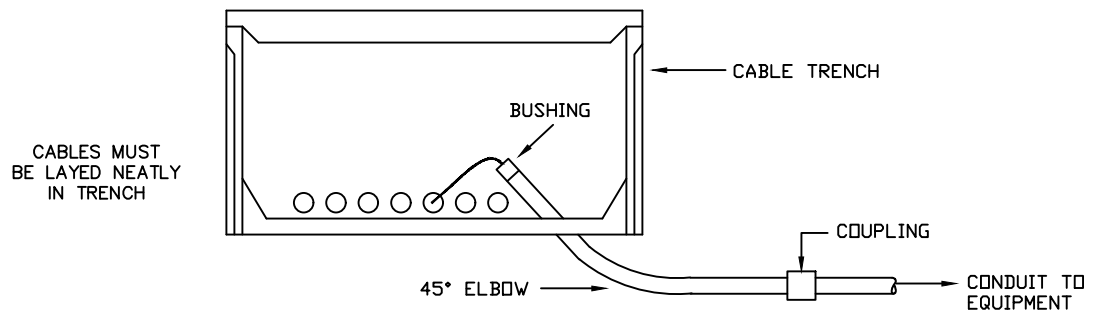
<u>Conduit #</u>	<u>From</u>	<u>To</u>	<u>Size</u>	<u>Future Function</u>
BK3- AC	Bkr 3	Cable Trench	1-1/2"	AC Power
BK3- AC	Cable Trench	Station AC Panel	1-1/2"	AC Power
BK3- DC	Bkr 3	Cable Trench	1-1/2"	DC Power
BK3-1	Bkr 3	Cable Trench	1-1/2"	Control & Status
BK3-2	Bkr 4	Cable Trench	1-1/2"	Control
BK3- CT	Bkr 3	Cable Trench	1-1/2"	Current Transformers
BK4- AC	Bkr 4	Cable Trench	1-1/2"	AC Power
BK4- AC	Cable Trench	Station AC Panel	1-1/2"	AC Power
BK4- DC	Bkr 4	Cable Trench	1-1/2"	DC Power
BK4-1	Bkr 4	Cable Trench	1-1/2"	Control & Status
BK4-2	Bkr 4	Cable Trench	1-1/2"	Control
BK4- CT	Bkr 4	Cable Trench	1-1/2"	Current Transformers
LT 1	Light 1	Cable Trench	2"	Light Source and Loads
LT 2	Light 2	Cable Trench	1"	Light
Cam 1	Light 2	Cable Trench	1"	Future Camera
LT 3	Light 3	Cable Trench	1"	Light
Cam 2	Light 3	Cable Trench	1"	Future Camera
LT 4	Light 4	Cable Trench	1"	Light
Cam 3	Light 4	Cable Trench	1"	Future Camera
LT 5	Light 5	Cable Trench	1"	Light
Cam 4	Light 5	Cable Trench	1"	Future Camera
House AC	Station AC Panel	Cable Trench	2"	House AC
Duke	CT Structure	PT Structure	2"	Duke Metering
Transm	Trans DE	Beyond Planting	4 x 4" (min. 36" deep)	Transmission
Dist Ckt 4	Riser #4	Beyond Planting	4 x 3" & 1-2" (min. 36" deep)	Distribution & Comm.
Dist Ckt 1	Riser #1	Beyond Planting	4 x 3" (min. 36" deep)	Distribution
Dist Ckt 2	Riser #2	Beyond Planting	4 x 3" (min. 36" deep)	Distribution
Dist Ckt 3	Riser #3	Beyond Planting	4 x 3" (min. 36" deep)	Distribution



TYPICAL TRENCH CROSS-SECTION
DRAIN DETAIL
N.T.S.

NOTES:

1. SAND AND GRAVEL BED TO BE MECHANICALLY COMPACTED.
2. CABLE TRENCH TO BE SLOPED AWAY FROM EQUIPMENT HOUSE AND FROM HIGH TO LOW POINT OF LOT TO PROVIDE DRAINAGE.
3. COVERS SHALL BE PLACED ON TRENCH BEFORE BACKFILLING AGAINST SIDEWALLS.
4. ALL BACKFILLING SHALL BE DONE BY HAND.
5. CABLE TRENCH AND LIDS TO BE PROVIDED BY OWNER. ALL OTHER MATERIAL TO BE FURNISHED BY CONTRACTOR.



TYPICAL TRENCH TO CONDUIT TRANSITION
N.T.S.

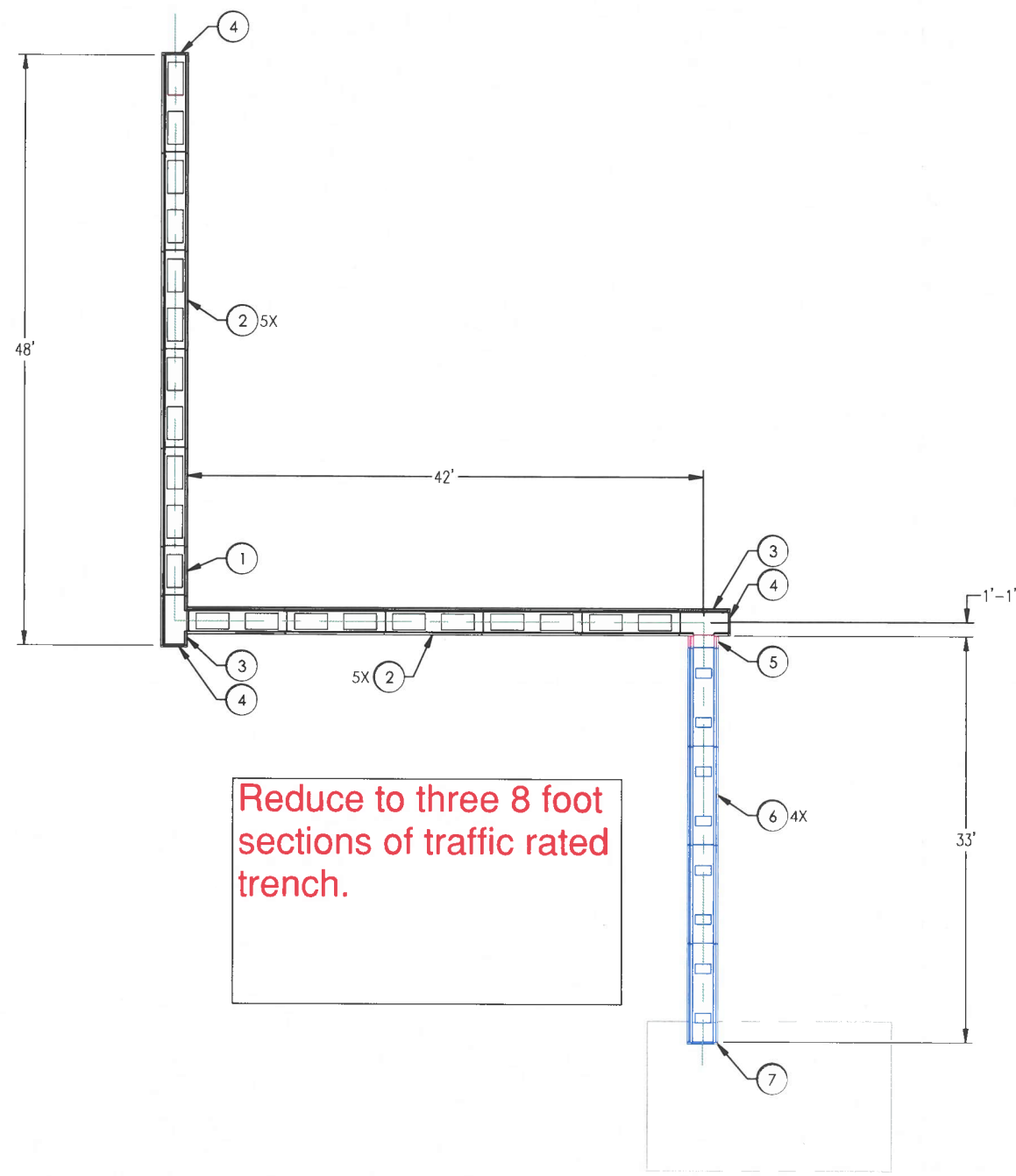
CABLE TRENCH DETAILS

SCALE: N.T.S.

SOUTHEASTERN CONSULTING ENGINEERS
CHARLOTTE, NORTH CAROLINA

24-40-26

NO. REVISION DATE DWN BY: K.V.C.



BILL OF MATERIALS			
ITEM NO.	QTY.	PART NUMBER	DESCRIPTION.
1	1	8020PT	CHANNEL PEDESTRIAN
2	10	8820PT	CHANNEL PEDESTRIAN
.	46	8021PTP	COVER PEDESTRIAN
3	2	8022PT (0X20)	UNIVERSAL PEDESTRIAN
4	3	8023PT	END PLATE PEDESTRIAN
5	1	8020HT3 12"	CHANNEL HEAVY TRAFFIC
6	4	8820HT3	CHANNEL HEAVY TRAFFIC
.	16	8021HT3P	COVER HEAVY TRAFFIC
.	1	8021HT3P 12"	COVER HEAVY TRAFFIC
7	1	8023HT3	END PLATE HEAVY TRAFFIC
.	2	8000	MANUAL LIFTING TOOL
.	25	8002R	CABLE CLIP - TRAFFIC
.	25	8002PT	CABLE CLIP - PEDESTRIAN
.	2	8006	CORNER PROTECTOR
.	4	9002	SWIVEL HOIST RING
.	1	9003	4-WAY LIFT CHAIN

- NOTES:
- 1. ALL CHANNELS ARE SHOWN W/O COVERS
 - 2. SEE CONCAST INSTALLATION GUIDELINES FOR MORE DETAILED INFORMATION
 - 3. PLACE THE PROPER NUMBER OF COVERS ON EACH CHANNEL, DO NOT SPAN CHANNEL JOINTS.
 - 4. 1/2" THREADED INSERTS ARE CAST INTO TRAFFIC RATED PARTS FOR MECHANICAL LIFTING. P/N: 9002 SWIVEL HOIST RINGS (RECOMMENDED) OR LIFTING EYES MUST BE THREADED COMPLETELY INTO INSERTS BEFORE ATTEMPTING TO LIFT PART.
 - 5. SEE CONCAST TRENCH & COVER DETAIL DRAWINGS FOR TRAFFIC RATING INFORMATION

A	BLT	12/18/2024	REPLACED 8' CHANNEL W/ UNIVERSAL + 4' CHANNEL TO CONNECT BOTH RUNS OF CHANNEL.
0	BLT	9/30/2024	RELEASED FOR CUSTOMER REVIEW
REV.	INITIALS	DATE	DESCRIPTION
REVISION TABLE			
DRAWN BY: BRIAN TOLLEFSON		<div><div><div></div><div>CONCAST</div><div>Fibercrete®</div></div><div>1010 NORTH STAR DRIVE P.O. BOX 69 ZUMBROTA, MN 55992-0069 PHONE: 507-732-4095 FAX 507-732-4094 EMAIL: Info@concastinc.com</div></div>	
DATE: 12/11/2024			
STATUS: FINAL			
FINALIZED: 12/19/2024			
PROJECT NAME: SUBSTATION ENTERPRISES		DRAWING NUMBER: 40094-0055	REV. A
REF QUOTE: #0050062		DELIVERY NO 4 SUB	SCALE: AS NOTED SHEET 1 OF 1

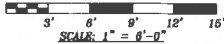


EXHIBIT B2

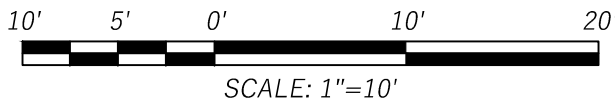
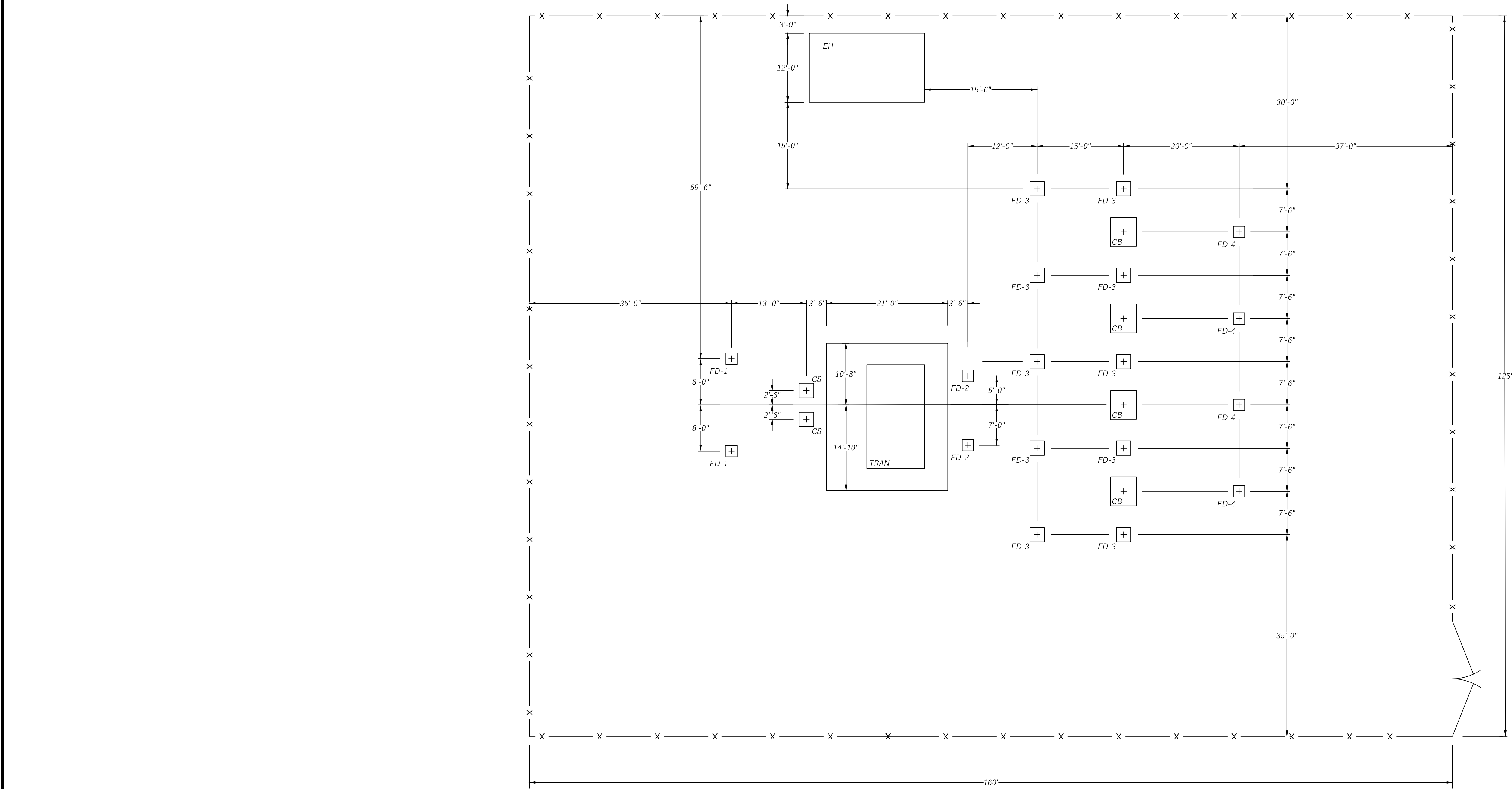
ITEM IV.

CONSTRUCTION SPECIFICATIONS FOR GRAVELLING

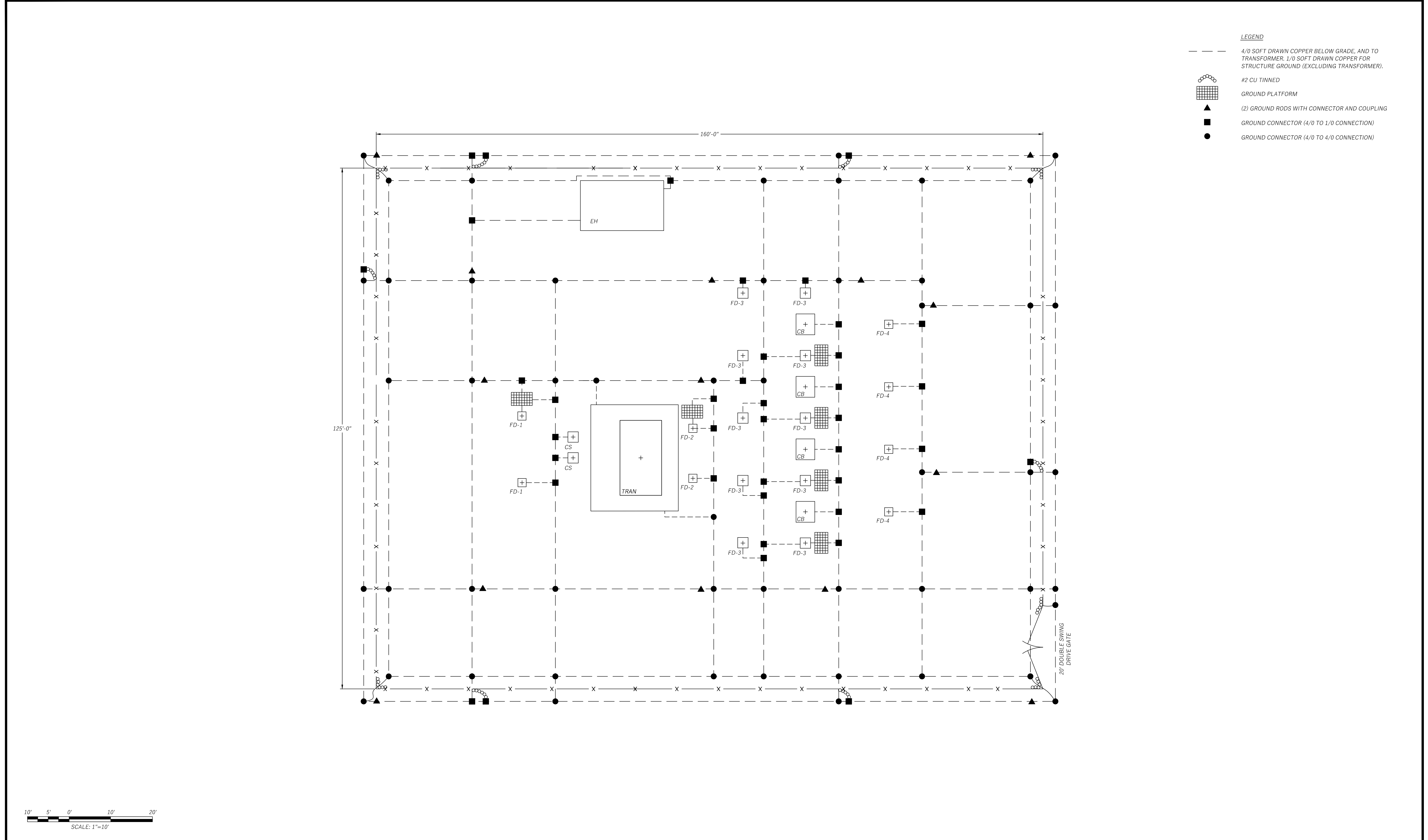
1.00 Grading and Gravel

1.01 General

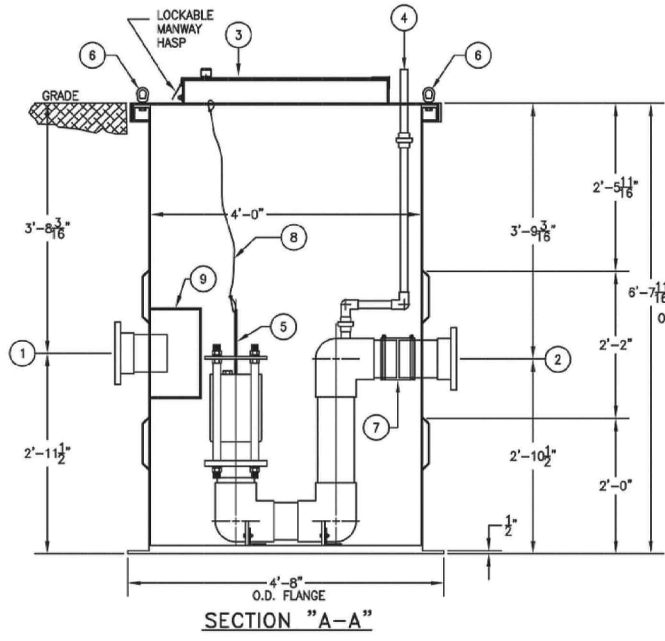
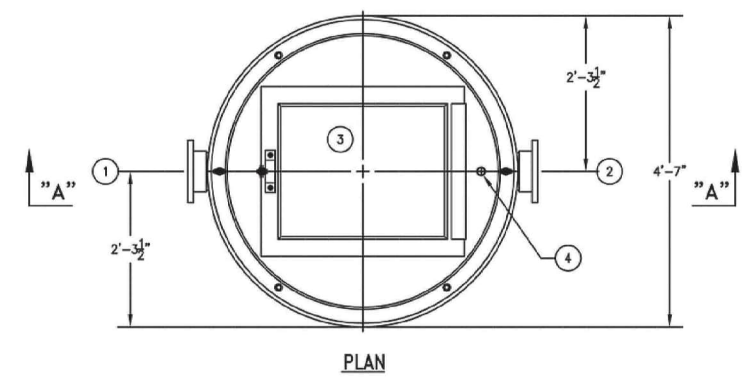
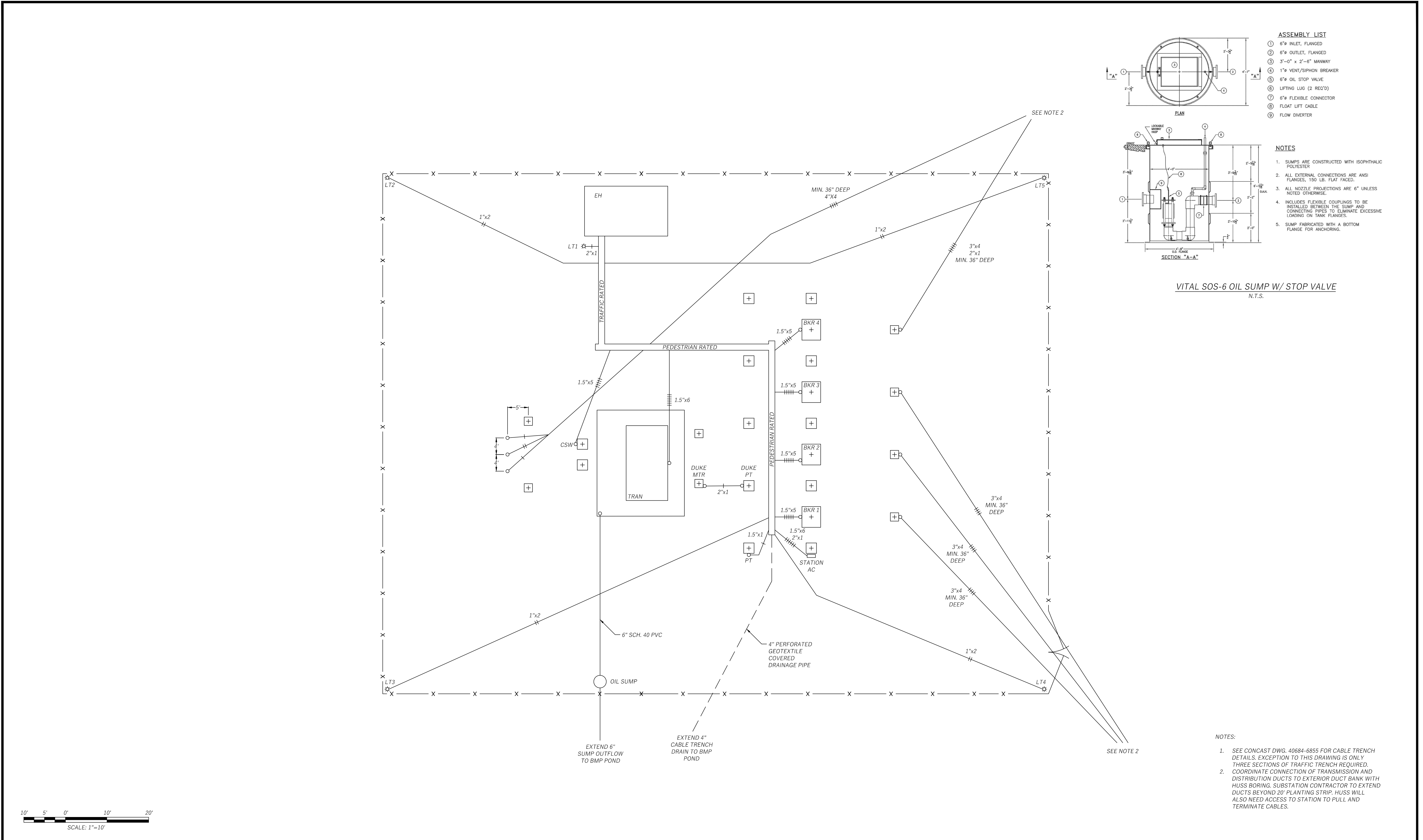
The Contractor shall perform fine grading after all construction excavation is completed to return the station lot to a smooth grade, and furnish and spread gravel over the entire fenced area to a depth of 6" above grade. Gravel cover shall consists of 3" of ABC and 3" of 67M stone top cover.



REVISIONS			REVISIONS			<div>SCALE: 1"=10'-0"</div> <div>DATE ISSUED: 5-13-24</div> <div>DESIGNED BY: A.J.M.</div> <div>DRAWN BY: K.V.C.</div> <div>CHECKED BY: A.J.M.</div> <div>APPROVED BY: A.J.M.</div>	<div><div></div><div></div><div>Electric Transmission, Distribution, & Substations</div><div>SCADA Systems; Load Management</div><div>Peak Generation; Utility Rates</div><div>GIS/Mapping</div></div> <div>SOUTHEASTERN</div> <div>Consulting Engineers, Inc.</div> <div>600 Minuet Lane, P.O. Box 240436, Charlotte, NC 28224</div> <div>TEL (704) 523-6045 FAX (704) 523-8317 License No.: F-0181</div>	<div></div>	TOWN OF PINEVILLE		DRAWING NO.:
NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION				PINEVILLE, NORTH CAROLINA		24-40-01
							DELIVERY NO. 4 SUBSTATION				
							FOUNDATION LOCATION PLAN	SHEET 1 OF 1			



REVISIONS			REVISIONS			<div><div></div><div></div></div> <div>Electric Transmission, Distribution, & Substations SCADA Systems; Load Management Peak Generation; Utility Rates GIS/Mapping</div> <div><div>SOUTHEASTERN</div><div>Consulting Engineers, Inc.</div><div>600 Minuet Lane, P.O. Box 240436, Charlotte, NC 28224 TEL (704) 523-6045 FAX (704) 523-8317 License No.: F-0181</div></div> <div><div><div></div><div>SEAL 22048</div><div>ENGINEER ALEXANDER J. MOLINA, II</div></div><div>6/2/25</div></div>	TOWN OF PINEVILLE PINEVILLE, NORTH CAROLINA		DRAWING NO.: 24-40-02
NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION		DELIVERY NO. 4 SUBSTATION GROUNDING PLAN	SHEET 1 OF 1	
1	3-5-25	MOVE EQUIPMENT HOUSE							
	</								

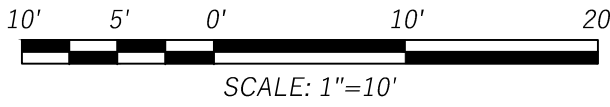


- ASSEMBLY LIST**
- ① 6" INLET, FLANGED
 - ② 6" OUTLET, FLANGED
 - ③ 3'-0" x 2'-6" MANWAY
 - ④ 1" VENT/SIPHON BREAKER
 - ⑤ 6" OIL STOP VALVE
 - ⑥ LIFTING LUG (2 REQ'D)
 - ⑦ 6" FLEXIBLE CONNECTOR
 - ⑧ FLOAT LIFT CABLE
 - ⑨ FLOW DIVERTER

- NOTES**
- SUMPS ARE CONSTRUCTED WITH ISOPHTHALIC POLYESTER
 - ALL EXTERNAL CONNECTIONS ARE ANSI FLANGES, 150 LB. FLAT FACED.
 - ALL NOZZLE PROJECTIONS ARE 6" UNLESS NOTED OTHERWISE.
 - INCLUDES FLEXIBLE COUPLINGS TO BE INSTALLED BETWEEN THE SUMP AND CONNECTING PIPES TO ELIMINATE EXCESSIVE LOADING ON TANK FLANGES.
 - SUMP FABRICATED WITH A BOTTOM FLANGE FOR ANCHORING.

VITAL SOS-6 OIL SUMP W/ STOP VALVE
N.T.S.

- NOTES:**
- SEE CONCAST DWG. 40684-6855 FOR CABLE TRENCH DETAILS. EXCEPTION TO THIS DRAWING IS ONLY THREE SECTIONS OF TRAFFIC TRENCH REQUIRED.
 - COORDINATE CONNECTION OF TRANSMISSION AND DISTRIBUTION DUCTS TO EXTERIOR DUCT BANK WITH HUSS BORING. SUBSTATION CONTRACTOR TO EXTEND DUCTS BEYOND 20' PLANTING STRIP. HUSS WILL ALSO NEED ACCESS TO STATION TO PULL AND TERMINATE CABLES.



REVISIONS			REVISIONS			<div>SCALE: 1" = 10' - 0"</div> <div>DATE ISSUED: 5-13-24</div> <div>DESIGNED BY: A.J.M.</div> <div>DRAWN BY: K.V.C.</div> <div>CHECKED BY: A.J.M.</div> <div>APPROVED BY: A.J.M.</div>	<div><div>Electric Transmission, Distribution, & Substations SCADA Systems; Load Management Peak Generation; Utility Rates GIS/Mapping</div><div>SOUTHEASTERN Consulting Engineers, Inc.</div><div>600 Minuet Lane, P.O. Box 240436, Charlotte, NC 28224 TEL (704) 523-6045 FAX (704) 523-8317 License No.: F-0181</div></div>	TOWN OF PINEVILLE		DRAWING NO.:
NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION			PINEVILLE, NORTH CAROLINA		24-40-28
						DELIVERY NO. 4 SUBSTATION				
						CABLE TRENCH, CONDUIT AND OIL CONTAINMENT PLAN		SHEET 1 OF 1		